Table of Contents

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 September 30, 2021

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	**80-0162034**
(State or other jurisdiction of incorporation or organization)	(IRS Employer Identification No.)
1615 Wynkoop Street, Denver, Colorado	**80202**
(Address of principal executive offices)	(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 313,929,992 shares of common stock outstanding as of October 22, 2021.

TABLE OF CONTENTS

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. 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 beliefs, 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;
- impacts of world health events, including the coronavirus ("COVID-19") pandemic;
- timing and amount of future production of natural gas, NGLs, and oil;
- our hedging strategy and results;
- 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 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;
- 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), cybersecurity risks and the other risks described or referenced under the heading "Item 1A. Risk Factors" herein, including the risk factors set forth in our Annual Report on Form 10-K for the year ended December 31, 2020 (the "2020 Form 10-K"), which is 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 or referenced in this Quarterly Report on Form 10-Q 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.

PART I—FINANCIAL INFORMATION
ANTERO RESOURCES CORPORATION
Condensed Consolidated Balance Sheets
(In thousands)

	December 31, 2020	(Unaudited) September 30, 2021
Assets		
Current assets:		
Accounts receivable	$ 28,457	34,768
Accrued revenue	425,314	652,521
Derivative instruments	105,130	627
Other current assets	15,238	20,937
Total current assets	574,139	708,853
Property and equipment:		
Oil and gas properties, at cost (successful efforts method):		
Unproved properties	1,175,178	1,052,543
Proved properties	12,260,713	12,559,146
Gathering systems and facilities	5,802	5,802
Other property and equipment	74,361	91,621
	13,516,054	13,709,112
Less accumulated depletion, depreciation, and amortization	(3,869,116)	(4,176,296)
Property and equipment, net	9,646,938	9,532,816
Operating leases right-of-use assets	2,613,603	2,969,642
Derivative instruments	47,293	14,834
Investment in unconsolidated affiliate	255,082	236,597
Other assets	13,790	8,796
Total assets	$ 13,150,845	13,471,538
Liabilities and Equity		
Current liabilities:		
Accounts payable	$ 26,728	60,409
Accounts payable, related parties	69,860	79,595
Accrued liabilities	343,524	501,132
Revenue distributions payable	198,117	315,936
Derivative instruments	31,242	1,436,292
Short-term lease liabilities	266,024	353,470
Deferred revenue, VPP	45,257	39,528
Other current liabilities	2,302	16,320
Total current liabilities	983,054	2,802,682
Long-term liabilities:		
Long-term debt	3,001,593	2,341,033
Deferred income tax liability	412,252	55,636
Derivative instruments	99,172	331,570
Long-term lease liabilities	2,348,785	2,616,889
Deferred revenue, VPP	156,024	127,844
Other liabilities	59,694	60,642
Total liabilities	7,060,574	8,336,296
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; 268,672 shares and 313,866 shares issued and outstanding as of December 31, 2020 and September 30, 2021, respectively	2,686	3,138
Additional paid-in capital	6,195,497	6,365,929
Accumulated deficit	(430,478)	(1,518,762)
Total stockholders' equity	5,767,705	4,850,305
Noncontrolling interests	322,566	284,937
Total equity	6,090,271	5,135,242
Total liabilities and equity	$ 13,150,845	13,471,538

See accompanying notes to unaudited condensed consolidated financial statements.

ANTERO RESOURCES CORPORATION
Condensed Consolidated Statements of Operations and Comprehensive Loss (Unaudited)
(In thousands, except per share amounts)

	Three Months Ended September 30,	
	2020	2021
Revenue and other:		
Natural gas sales	$ 436,304	884,669
Natural gas liquids sales	327,426	598,327
Oil sales	34,265	56,734
Commodity derivative fair value losses	(514,751)	(1,250,466)
Marketing	91,497	232,685
Amortization of deferred revenue, VPP	5,175	11,404
Gain on sale of assets	—	539
Other income	675	530
Total revenue	380,591	534,422
Operating expenses:		
Lease operating	21,450	25,363
Gathering, compression, processing, and transportation	656,615	628,225
Production and ad valorem taxes	25,790	52,219
Marketing	128,580	266,751
Exploration	454	235
Impairment of oil and gas properties	29,392	26,253
Depletion, depreciation, and amortization	238,418	182,810
Accretion of asset retirement obligations	1,115	828
General and administrative (including equity-based compensation expense of $5,699 and $5,298 in 2020 and 2021, respectively)	31,640	32,442
Contract termination and rig stacking	1,246	3,370
Total operating expenses	1,134,700	1,218,496
Operating loss	(754,109)	(684,074)
Other income (expense):		
Interest expense, net	(48,043)	(45,414)
Equity in earnings of unconsolidated affiliate	24,419	21,450
Gain (loss) on early extinguishment of debt	55,633	(16,567)
Transaction expense	(524)	(626)
Total other income (expense)	31,485	(41,157)
Loss before income taxes	(722,624)	(725,231)
Provision for income tax benefit	168,778	158,656
Net loss and comprehensive loss including noncontrolling interests	(553,846)	(566,575)
Less: net loss and comprehensive loss attributable to noncontrolling interests	(18,233)	(17,257)
Net loss and comprehensive loss attributable to Antero Resources Corporation	$ (535,613)	(549,318)
Loss per share—basic	$ (1.99)	(1.75)
Loss per share—diluted	$ (1.99)	(1.75)
Weighted average number of shares outstanding:		
Basic	268,511	313,790
Diluted	268,511	313,790

See accompanying notes to unaudited condensed consolidated financial statements.

ANTERO RESOURCES CORPORATION
Condensed Consolidated Statements of Operations and Comprehensive Loss (Unaudited)
(In thousands, except per share amounts)

	Nine Months Ended September 30,	
	2020	**2021**
Revenue and other:		
Natural gas sales	$ 1,214,801	2,231,558
Natural gas liquids sales	797,296	1,503,027
Oil sales	78,233	153,326
Commodity derivative fair value losses	(116,933)	(2,260,062)
Marketing	201,855	562,928
Amortization of deferred revenue, VPP	5,175	33,833
Gain on sale of assets	—	2,827
Other income	2,180	551
Total revenue	2,182,607	2,227,988
Operating expenses:		
Lease operating	71,836	71,555
Gathering, compression, processing, and transportation	1,877,084	1,874,664
Production and ad valorem taxes	71,481	130,610
Marketing	334,906	627,822
Exploration	895	6,092
Impairment of oil and gas properties	155,962	69,618
Depletion, depreciation, and amortization	652,130	564,166
Accretion of asset retirement obligations	3,330	2,947
General and administrative (including equity-based compensation expense of $17,001 and $15,189 in 2020 and 2021, respectively)	101,264	108,693
Contract termination and rig stacking	12,317	4,305
Total operating expenses	3,281,205	3,460,472
Operating loss	(1,098,598)	(1,232,484)
Other income (expense):		
Interest expense, net	(152,956)	(138,120)
Equity in earnings (loss) of unconsolidated affiliate	(83,408)	57,621
Gain (loss) on early extinguishment of debt	175,365	(82,836)
Loss on convertible note equitizations	—	(50,777)
Impairment of equity method investment	(610,632)	—
Transaction expense	(6,662)	(3,102)
Total other expense	(678,293)	(217,214)
Loss before income taxes	(1,776,891)	(1,449,698)
Provision for income tax benefit	421,167	337,568
Net loss and comprehensive loss including noncontrolling interests	(1,355,724)	(1,112,130)
Less: net loss and comprehensive loss attributable to noncontrolling interests	(17,997)	(23,846)
Net loss and comprehensive loss attributable to Antero Resources Corporation	$ (1,337,727)	(1,088,284)
Loss per share—basic	$ (4.89)	(3.55)
Loss per share—diluted	$ (4.89)	(3.55)
Weighted average number of shares outstanding:		
Basic	273,689	306,201
Diluted	273,689	306,201

See accompanying notes to unaudited condensed consolidated financial statements.

ANTERO RESOURCES CORPORATION

Condensed Consolidated Statements of Stockholders' Equity (Unaudited)

(In thousands)

	Common Stock		Additional Paid-in	Accumulated Earnings	Noncontrolling	Total
	Shares	Amount	Capital	(Deficit)	Interests	Equity
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
Issuance of common units in Martica Holdings, LLC	—	—	—	—	300,000	300,000
Issuance of common stock upon vesting of equity-based compensation awards, net of shares withheld for income taxes	464	5	(305)	—	—	(300)
Distributions to noncontrolling interest	—	—	—	—	(3,413)	(3,413)
Repurchases and retirements of common stock	(1,000)	(10)	(743)	—	—	(753)
Equity-based compensation	—	—	7,973	—	—	7,973
Net income (loss) and comprehensive income (loss)	—	—	—	(463,304)	236	(463,068)
Balances, June 30, 2020	268,390	2,684	6,098,167	35,305	296,823	6,432,979
Issuance of common units in Martica Holdings, LLC	—	—	—	—	51,000	51,000
Equity component of 2026 Convertible Notes, net	—	—	61,926	—	—	61,926
Issuance of common stock upon vesting of equity-based compensation awards, net of shares withheld for income taxes	159	1	(42)	—	—	(41)
Distributions to noncontrolling interest	—	—	—	—	(13,836)	(13,836)
Equity-based compensation	—	—	5,699	—	—	5,699
Net loss and comprehensive loss	—	—	—	(535,613)	(18,233)	(553,846)
Balances, September 30, 2020	268,549	$ 2,685	6,165,750	(500,308)	315,754	5,983,881

See accompanying notes to unaudited condensed consolidated financial statements.

ANTERO RESOURCES CORPORATION

Condensed Consolidated Statements of Stockholders' Equity (Unaudited) (Continued)

(In thousands)

	Common Stock		Additional Paid-in	Accumulated	Noncontrolling	Total
	Shares	Amount	Capital	Deficit	Interests	Equity
Balances, December 31, 2020	268,672	$ 2,686	6,195,497	(430,478)	322,566	6,090,271
Issuance of common shares	31,388	314	238,551	—	—	238,865
Issuance of common units in Martica Holdings, LLC	—	—	—	—	51,000	51,000
Equity component of 2026 Convertible Notes, net	—	—	(116,381)	—	—	(116,381)
Issuance of common stock upon vesting of equity-based compensation awards, net of shares withheld for income taxes	1,130	11	(5,656)	—	—	(5,645)
Distributions to noncontrolling interest	—	—	—	—	(24,699)	(24,699)
Equity-based compensation	—	—	5,642	—	—	5,642
Net income (loss) and comprehensive income (loss)	—	—	—	(15,499)	4,395	(11,104)
Balances, March 31, 2021	301,190	3,011	6,317,653	(445,977)	353,262	6,227,949
Issuance of common shares	11,588	116	125,262	—	—	125,378
Equity component of 2026 Convertible Notes, net	—	—	(79,497)	—	—	(79,497)
Issuance of common stock upon vesting of equity-based compensation awards, net of shares withheld for income taxes	749	8	(3,893)	—	—	(3,885)
Distributions to noncontrolling interest	—	—	—	—	(21,329)	(21,329)
Equity-based compensation	—	—	4,249	—	—	4,249
Net loss and comprehensive loss	—	—	—	(523,467)	(10,984)	(534,451)
Balances, June 30, 2021	313,527	3,135	6,363,774	(969,444)	320,949	5,718,414
Equity component of 2026 Convertible Notes, net	—	—	36	—	—	36
Issuance of common stock upon vesting of equity-based compensation awards, net of shares withheld for income taxes	339	3	(3,179)	—	—	(3,176)
Distributions to noncontrolling interest	—	—	—	—	(18,755)	(18,755)
Equity-based compensation	—	—	5,298	—	—	5,298
Net loss and comprehensive loss	—	—	—	(549,318)	(17,257)	(566,575)
Balances, September 30, 2021	313,866	$ 3,138	6,365,929	(1,518,762)	284,937	5,135,242

See accompanying notes to unaudited condensed consolidated financial statements.

ANTERO RESOURCES CORPORATION
Condensed Consolidated Statements of Cash Flows (Unaudited)
(In thousands)

	Nine Months Ended September 30,	
	2020	**2021**
Cash flows provided by (used in) operating activities:		
Net loss including noncontrolling interests	$ (1,355,724)	(1,112,130)
Adjustments to reconcile net loss to net cash provided by operating activities:		
Depletion, depreciation, amortization, and accretion	655,460	567,113
Impairments	766,594	69,618
Commodity derivative fair value losses	116,933	2,260,062
Gains (losses) on settled commodity derivatives	740,805	(481,083)
Proceeds from (payments for) derivative monetizations	18,073	(4,569)
Gain on sale of assets	—	(2,827)
Equity-based compensation expense	17,001	15,189
Deferred income tax benefit	(426,267)	(337,568)
Equity in (earnings) loss of unconsolidated affiliate	83,408	(57,621)
Dividends of earnings from unconsolidated affiliate	128,267	105,325
Amortization of deferred revenue	(5,175)	(33,833)
Amortization of debt issuance costs, debt discount, debt premium and other	7,391	10,122
(Gain) loss on early extinguishment of debt	(175,365)	82,836
Loss on convertible note equitizations	—	50,777
Changes in current assets and liabilities:		
Accounts receivable	(15,454)	(11,336)
Accrued revenue	(20,843)	(227,207)
Other current assets	(1,455)	(5,695)
Accounts payable including related parties	(2,198)	39,108
Accrued liabilities	15,522	124,382
Revenue distributions payable	(54,403)	117,819
Other current liabilities	(60)	16,470
Net cash provided by operating activities	492,510	1,184,952
Cash flows provided by (used in) investing activities:		
Additions to unproved properties	(31,136)	(48,960)
Drilling and completion costs	(693,920)	(447,899)
Additions to other property and equipment	(1,346)	(14,082)
Settlement of water earnout	125,000	—
Proceeds from asset sales	—	3,192
Proceeds from VPP sale, net	215,833	—
Change in other liabilities	—	(77)
Change in other assets	1,506	2,371
Net cash used in investing activities	(384,063)	(505,455)
Cash flows provided by (used in) financing activities:		
Repurchases of common stock	(43,443)	—
Issuance of senior notes	—	1,800,000
Issuance of convertible notes	287,500	—
Repayment of senior notes	(899,971)	(1,424,354)
Borrowings (repayments) on bank credit facilities, net	275,000	(919,500)
Payment of debt issuance costs	(8,907)	(22,814)
Sale of noncontrolling interest	300,000	51,000
Distributions to noncontrolling interests in Martica Holdings LLC	(17,249)	(64,783)
Employee tax withholding for settlement of equity compensation awards	(373)	(12,706)
Convertible note equitizations	—	(85,648)
Other	(1,004)	(692)
Net cash used in financing activities	(108,447)	(679,497)
Net increase 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	$ 135,494	130,947
Increase (decrease) in accounts payable and accrued liabilities for additions to property and equipment	$ (44,302)	33,547

See accompanying notes to unaudited condensed consolidated financial statements.

ANTERO RESOURCES CORPORATION

Notes to Unaudited Condensed Consolidated Financial Statements

(1) Organization

Antero Resources Corporation (individually referred to as "Antero" and together with its consolidated subsidiaries "Antero Resources," or the "Company,") is engaged in the development, production, exploration 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 is 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, 2020 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, 2020 consolidated financial statements were included in Antero Resources' 2020 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, 2020 and September 30, 2021 and its results of operations for the three and nine months ended September 30, 2020 and 2021 and cash flows for the nine months ended September 30, 2020 and 2021. 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 September 30, 2021 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, and its variable interest entity ("VIE"), Martica Holdings LLC, ("Martica"), for which the Company is the primary beneficiary. The noncontrolling interest reflected in the Company's unaudited condensed consolidated financial statements for the three and nine months ended September 30, 2020 and 2021 represents the Company's interest in Martica owned by third parties. See Note 3—Transactions to the unaudited condensed consolidated financial statements for more information on Martica.

(c) 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 condensed consolidated balance sheets, and classifies the change in accounts payable associated with book overdrafts as an operating activity within its unaudited condensed consolidated statements of cash flows. As of December 31, 2020, the book overdrafts included within accounts payable and revenue distributions payable were $11 million and $15 million, respectively. As of September 30, 2021, the book overdrafts included within accounts payable and revenue distributions payable were $37 million and $31 million, respectively.

(d) 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—diluted for each period is computed after giving consideration to the potential dilution from outstanding equity awards and shares of common stock

issuable upon conversion of the 2026 Convertible Notes (as defined below in Note 7—Long-Term Debt). The Company includes restricted stock unit ("RSU") awards, performance share unit ("PSU") awards and stock options 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. The potential dilutive effect of the 2026 Convertible Notes is calculated using the (i) treasury stock method for the three and nine months ended September 30, 2020 as a result of the Company's intent to settle the principal amount of such convertible notes in cash upon conversion during the nine months ended September 30, 2020, and (ii) if-converted method for the three and nine months ended September 30, 2021, as a result of the partial equitizations of the 2026 Convertible Notes during the nine months ended September 30, 2021. See Note 7—Long-Term Debt for further discussion on the equitization transactions. 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 effects of all equity awards and the 2026 Convertible Notes are 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 September 30,		Nine Months Ended September 30,	
	2020	2021	2020	2021
Basic weighted average number of shares outstanding	268,511	313,790	273,689	306,201
Add: Dilutive effect of RSUs	—	—	—	—
Add: Dilutive effect of PSUs	—	—	—	—
Add: Dilutive effect of outstanding stock options	—	—	—	—
Add: Dilutive effect of 2026 Convertible Notes	—	—	—	—
Diluted weighted average number of shares outstanding	268,511	313,790	273,689	306,201
Weighted average number of outstanding securities excluded from calculation of diluted earnings per common share [1]:				
RSUs	10,129	6,158	7,397	6,562
PSUs	1,988	2,748	1,808	2,706
Outstanding stock options	432	357	432	388
2026 Convertible Notes [2]	—	18,778	—	18,778

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

(2) Under the treasury stock method, only the amount by which the conversion value exceeds the aggregate principal amount of the 2026 Convertible Notes is considered in the diluted earnings per share computation. As of September 30, 2020, the conversion value did not exceed the principal amount of the notes, and accordingly, there was no impact to diluted earnings per share for the three and nine months ended September 30, 2020. Under the if-converted method, the weighted average number of shares outstanding for the three and nine months ended September 30, 2020, would have been 28 million and 10 million, respectively, all of which would have been anti-dilutive.

(e) Income Taxes

The Company recognizes deferred tax assets and liabilities for temporary differences resulting from net operating loss carryforwards for income tax purposes and the differences between the financial statement and tax basis of assets and liabilities. The effect of changes in tax laws or tax rates is recognized in income during the period such changes are enacted. Deferred tax assets are reduced by a valuation allowance when, in the opinion of management, it is more likely than not that some portion, or all, of the deferred tax assets will not be realized.

On April 9, 2021, West Virginia enacted new tax laws related to its apportionment and sourcing methodologies. The newly enacted laws are effective January 1, 2022 on a prospective basis and are expected to reduce the Company's net income or loss that is apportioned to West Virginia. As a result of this tax law change, the Company's net deferred income tax liability was reduced by $34

million as of September 30, 2021, which includes a $48 million increase in deferred tax assets, partially offset by a $14 million increase in valuation allowance.

(f) Recently Issued Accounting Standards

Convertible Instruments

In August 2020, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2020-06, *Accounting for Convertible Instruments and Contracts in an Entity's Own Equity*, which eliminates the cash conversion model in Accounting Standards Codification ("ASC") 470-20, *Debt with Conversion and Other Options*, that require separate accounting for conversion features, and instead, allows the debt instrument and conversion features to be accounted for as a single debt instrument. The new standard becomes effective for the Company on January 1, 2022, and early adoption is permitted. The Company is evaluating the transition method it plans to use for adoption on January 1, 2022. However, the Company has utilized the modified retrospective approach to quantify the expected impact of this standard on its financial statements.

Upon adoption of this new standard, the Company expects to reclassify between $15 million and $30 million, net of deferred income taxes and equity issuance costs, to long-term debt and deferred income tax liability, as applicable, from stockholders' equity, which amount is subject to adjustment for any conversions or other transactions until adoption of this new standard. Additionally, annual interest expense for the 2026 Convertible Notes will be based on an effective interest rate of 4.8% as compared to 15.1% for the three and nine months ended September 30, 2021. The Company does not believe that adoption of the standard will impact its operational strategies or development prospects.

Income Taxes

In December 2019, the FASB issued ASU No. 2019-12, *Simplifying the Accounting for Income Taxes*. This ASU removes certain exceptions to the general principles in ASC 740, *Income Taxes* ("ASC 740") and also simplifies portions of ASC 740 by clarifying and amending existing guidance. It is effective for interim and annual reporting periods after December 15, 2020. The Company adopted this ASU on January 1, 2021, and it did not have a material impact on the Company's unaudited condensed consolidated financial statements.

(3) Transactions

(a) Conveyance of Overriding Royalty Interest

On June 15, 2020, the Company announced the consummation of a transaction with an affiliate of Sixth Street Partners, LLC ("Sixth Street") relating to certain overriding royalty interests across the Company's existing asset base (the "ORRIs"). In connection with the transaction, the Company contributed the ORRIs to Martica and Sixth Street contributed $300 million in cash (subject to customary adjustments) and agreed to contribute up to an additional $102 million in cash if certain production thresholds attributable to the ORRIs are achieved in the third quarter of 2020 and first quarter of 2021. All cash contributed by Sixth Street at the initial closing was distributed to the Company. The Company met the applicable production thresholds related to the third quarter of 2020 and first quarter of 2021 as of September 31, 2020 and March 31, 2021, respectively. The Company received a $51 million cash distribution during each of the fourth quarter of 2020 and the second quarter of 2021.

The ORRIs include an overriding royalty interest of 1.25% of the Company's working interest in all of its proved operated developed properties in West Virginia and Ohio, subject to certain excluded wells (the "Initial PDP Override"), and an overriding royalty interest of 3.75% of the Company's working interest in all of its undeveloped properties in West Virginia and Ohio (the "Development Override"). Wells turned to sales after April 1, 2020 and prior to the later of (a) the date on which the Company turns to sales 2.2 million lateral feet (net to the Company's interest) of horizontal wells burdened by the Development Override and (b) the earlier of (i) April 1, 2023 and (ii) the date on which the Company turns to sales 3.82 million lateral feet (net to the Company's interest) of horizontal wells are subject to the Development Override.

The ORRIs also include an additional overriding royalty interest of 2.00% of the Company's working interest in the properties underlying the Initial PDP Override (the "Incremental Override"). The Incremental Override (or a portion thereof, as applicable) may be re-conveyed to the Company (at the Company's election) if certain production targets attributable to the ORRIs are achieved through March 31, 2023. Any portion of the Incremental Override that may not be re-conveyed to the Company based on the Company failing to achieve such production volumes through March 31, 2023 will remain with Martica.

ANTERO RESOURCES CORPORATION

Notes to Unaudited Condensed Consolidated Financial Statements

Prior to Sixth Street achieving an internal rate of return of 13% and 1.5x cash-on-cash return (the "Hurdle"), Sixth Street will receive all distributions in respect of the Initial PDP Override and the Development Override, and the Company will receive all distributions in respect of the Incremental Override, unless certain production targets are not achieved, in which case Sixth Street will receive some or all of the distributions in respect of the Incremental Override. Following Sixth Street achieving the Hurdle, the Company will receive 85% of the distributions in respect of the ORRIs to which Sixth Street was entitled immediately prior to the Hurdle being achieved.

The conveyance of the ORRIs from the Company to Martica was accounted for as a transaction between entities under common control. As a result, the contributed ORRIs have been recorded by Martica at their historical cost.

(b) Volumetric Production Payment Transaction

On August 10, 2020, the Company completed a volumetric production payment transaction and received net proceeds of approximately $216 million (the "VPP"). In connection with the VPP, the Company entered into a purchase and sale agreement, together with a conveyance agreement and production and marketing agreement, with J.P. Morgan Ventures Energy Corporation ("JPM-VEC") to convey, effective July 1, 2020, an overriding royalty interest in dry gas producing properties in West Virginia (the "VPP Properties") equal to 136,589,000 MMBtu over the expected seven-year term of the VPP.

The Company has accounted for the VPP as a conveyance under ASC 932, *Extractive Activities—Oil and Gas* ("ASC 932"), and the net proceeds were recorded as deferred revenue in the condensed consolidated balance sheet as of the transaction closing. Deferred revenue is recognized as volumes are delivered using the units-of-production method over the term of the VPP. Under the production and marketing agreement, Antero and its affiliates provide certain marketing services as JPM-VEC's agent, and any income or expenses related to these services will be recorded as marketing revenue or marketing expenses as appropriate.

Contemporaneously with the VPP, the Company executed a call option related to the production volumes associated with its retained interest in the VPP properties, which is collateralized by a mortgage on the VPP properties. Additionally, the production and marketing agreement contains an embedded put option related to the production volumes for the Company's retained interest in the VPP properties, which has been bifurcated from the production and marketing arrangement and accounted for as a derivative instrument recorded at fair value. See Note 11—Derivative Instruments to the unaudited condensed consolidated financial statements for more information on the Company's derivative instruments.

(c) Drilling Partnership

On February 17, 2021, Antero Resources announced the formation of a drilling partnership with QL Capital Partners ("QL"), an affiliate of Quantum Energy Partners, for the Company's 2021 through 2024 drilling program. Under the terms of the arrangement, each year in which QL participates represents an annual tranche, and QL will be conveyed a working interest in any wells spud by Antero Resources during such tranche year. For 2021, Antero Resources and QL agreed to a capital budget for such annual tranche, and for each subsequent year through 2024, Antero Resources will propose a capital budget and estimated internal rate of return ("IRR") for all wells to be spud during such year and, subject to the mutual agreement of the parties that the estimated IRR for the year exceeds a specified return, QL will be obligated to participate in such tranche. Antero Resources develops and manages the drilling program associated with each tranche, including the selection of wells. Additionally, for each annual tranche in which QL participates, Antero Resources and QL will enter into an assignment, bill of sale and conveyance pursuant to which QL will be conveyed a proportionate working interest percentage in each well spud in that year, which conveyance will not be subject to any reversion.

Under the terms of the arrangement, QL will fund 20% of development capital for wells spud in 2021 and is expected to fund between 15% and 20% of development capital for wells spud from 2022 through 2024, which funding amounts represent QL's proportionate working interest in such wells. Additionally, Antero Resources may receive a carry in the form of a one-time payment from QL for each annual tranche if the IRR for such tranche exceeds certain specified returns, which will be determined no earlier than December 31 following the end of each tranche year. Capital costs in excess of, and cost savings below, a specified percentage of budgeted amounts for each annual tranche will be for Antero Resources' account. Subject to the preceding sentence, for any wells included in a tranche, QL is obligated and responsible for its working interest share of costs and liabilities, and is entitled to its working interest share of revenues, associated with such wells for the life of such wells. If Antero Resources presents a capital budget for an annual tranche with an estimated IRR equal to or exceeding a specified return that QL in good faith believes is less than such specified return and QL elects not to participate, Antero Resources will not be obligated to offer QL the opportunity to participate in subsequent annual tranches.

ANTERO RESOURCES CORPORATION

Notes to Unaudited Condensed Consolidated Financial Statements

The Company has accounted for the drilling partnership as a conveyance under ASC 932 and such conveyances are recorded in the unaudited condensed consolidated financial statements as QL obtains its proportionate working interest in each well. No gain or loss was recognized for the interests conveyed during the three and nine months ended September 30, 2021.

(4) Revenue

(a) Disaggregation of Revenue

The table set forth below presents revenue disaggregated by type and the reportable segment to which it relates (in thousands). See Note 16—Reportable Segments for more information on reportable segments.

	Three Months Ended September 30,		Nine Months Ended September 30,		
	2020	2021	2020	2021	Reportable Segment
Revenues from contracts with customers:					
Natural gas sales	$ 436,304	884,669	1,214,801	2,231,558	Exploration and production
Natural gas liquids sales (ethane)	32,444	57,919	85,884	137,446	Exploration and production
Natural gas liquids sales (C3+ NGLs)	294,982	540,408	711,412	1,365,581	Exploration and production
Oil sales	34,265	56,734	78,233	153,326	Exploration and production
Marketing	91,497	232,685	201,855	562,928	Marketing
Total revenue from contracts with customers	889,492	1,772,415	2,292,185	4,450,839	
Loss from derivatives, deferred revenue and other sources, net	(508,901)	(1,237,993)	(109,578)	(2,222,851)	
Total revenue	$ 380,591	534,422	2,182,607	2,227,988	

(b) Transaction Price Allocated to Remaining Performance Obligations

For the Company's product sales that have a contract term greater than one year, the Company utilized the practical expedient in ASC 606, *Revenue from Contracts with Customers* ("ASC 606"), 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 the Company's 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 the Company's product sales that have a contract term of one year or less, the Company utilized the practical expedient in ASC 606, 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 the Company's sales contracts, the Company invoices customers after its performance obligations have been satisfied, at which point payment is unconditional. Accordingly, the Company's contracts do not give rise to contract assets or liabilities. As of December 31, 2020 and September 30, 2021, the Company's receivables from contracts with customers were $425 million and $653 million, respectively.

(5) Equity Method Investment

(a) Summary of Equity Method Investment

As of September 30, 2021, Antero owned approximately 29.1% of Antero Midstream Corporation's common stock, which is reflected in Antero's unaudited condensed consolidated financial statements using the equity method of accounting.

ANTERO RESOURCES CORPORATION

Notes to Unaudited Condensed Consolidated Financial Statements

The following table sets forth a reconciliation of Antero's investment in unconsolidated affiliate for the nine months ended September 30, 2021 (in thousands):

Balance as of December 31, 2020 [1]	$	255,082
Equity in earnings of unconsolidated affiliate		57,621
Dividends from unconsolidated affiliate		(105,325)
Elimination of intercompany profit		29,219
Balance as of September 30, 2021 [1]	$	236,597

(1) The Company's investment in Antero Midstream Corporation as of December 31, 2020 and September 30, 2021 was $1.1 billion and $1.4 billion, respectively, based on the quoted market share price of Antero Midstream Corporation.

(b) Summarized Financial Information of Antero Midstream Corporation

The tables set forth below present summarized financial information of Antero Midstream Corporation (in thousands).

Balance Sheet

		December 31, 2020		September 30, 2021
Current assets	$	93,931		87,490
Noncurrent assets		5,516,981		5,446,143
Total assets	$	5,610,912		5,533,633
Current liabilities	$	94,005		118,690
Noncurrent liabilities		3,098,621		3,102,350
Stockholders' equity		2,418,286		2,312,593
Total liabilities and stockholders' equity	$	5,610,912		5,533,633

Statement of Operations

		Nine Months Ended September 30,		
		2020		2021
Revenues	$	696,859		681,712
Operating expenses		929,480		254,905
Income (loss) from operations		(232,621)		426,807
Net income (loss)	$	(198,985)		252,991

(6) Accrued Liabilities

Accrued liabilities as of December 31, 2020 and September 30, 2021 consisted of the following items (in thousands):

		December 31, 2020		September 30, 2021
Capital expenditures	$	32,372		52,958
Gathering, compression, processing, and transportation expenses		152,724		158,443
Marketing expenses		68,193		115,317
Interest expense, net		25,645		34,693
Accrued production and ad valorem taxes		37,371		30,488
Derivative settlements payable		3,425		72,354
Other		23,794		36,879
Total accrued liabilities	$	343,524		501,132

ANTERO RESOURCES CORPORATION

Notes to Unaudited Condensed Consolidated Financial Statements

(7) Long-Term Debt

Long-term debt as of December 31, 2020 and September 30, 2021 consisted of the following items (in thousands):

	December 31, 2020	September 30, 2021
Credit Facility [(a)]	$ 1,017,000	97,500
5.125% senior notes due 2022 [(b)]	660,516	—
5.625% senior notes due 2023 [(c)]	574,182	—
5.00% senior notes due 2025 [(d)]	590,000	590,000
8.375% senior notes due 2026 [(e)]	—	325,000
7.625% senior notes due 2029 [(f)]	—	700,000
5.375% senior notes due 2030 [(g)]	—	600,000
4.25% convertible senior notes due 2026 [(h)]	287,500	81,570
Total principal	3,129,198	2,394,070
Unamortized premium (discount), net	(111,886)	(28,780)
Unamortized debt issuance costs	(15,719)	(24,257)
Long-term debt	$ 3,001,593	2,341,033

(a) Senior Secured Revolving Credit Facility

Antero Resources has a senior secured revolving credit facility with a consortium of bank lenders. On October 26, 2021, Antero Resources entered into an amended and restated senior secured revolving credit facility. References in the notes to the condensed consolidated financial statements to the (i) "Prior Credit Facility" refers to the senior secured revolving credit facility in effect for periods before October 26, 2021, (ii) "New Credit Facility" refers to the senior secured revolving credit facility in effect on or after October 26, 2021 and (iii) "Credit Facility" refers to Prior Credit Facility and New Credit Facility, collectively. 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. As of September 30, 2021, the borrowing base under the Prior Credit Facility was $2.85 billion and lender commitments were $2.64 billion. As of October 26, 2021, the New Credit Facility had a borrowing base of $3.5 billion and lender commitments were $1.5 billion. The next redetermination of the borrowing base is scheduled to occur in April 2022. The maturity date of the Credit Facility is the earlier of (i) October 26, 2026 and (ii) the date that is 180 days prior to the earliest stated redemption date of any series of the Company's senior notes.

The Credit Facility contains requirements with respect to leverage and current ratios, and certain covenants, including restrictions on our ability to incur debt and limitations on our ability to pay dividends unless certain customary conditions are met, in each case, subject to customary carve-outs and exceptions. Antero Resources was in compliance with all of the financial covenants under the Prior Credit Facility as of December 31, 2020 and September 30, 2021.

The Prior Credit Facility provides for borrowing under either an Alternate Base Rate or as a Eurodollar Loan (as each term is defined in the Prior Credit Facility), and the New Credit Facility provides for borrowing under either an Adjusted Term Secured Overnight Financing Rate ("SOFR"), an Adjusted Daily Simple SOFR or an Alternate Base Rate (each as defined in the New Credit Facility). The Credit Facility provides for interest only payments until maturity at which time all outstanding borrowings are due. Interest is payable at a variable rate based on (i) LIBOR or the prime rate, determined by Antero Resources' election at the time of borrowing, plus an applicable margin rate under the Prior Credit Facility and (ii) SOFR or prime rate, determined by Antero Resources' election at the time of borrowing, plus an applicable margin rate under the New Credit Facility. Interest at the time of borrowing is determined with reference to the Antero Resources' then-current leverage ratio subject to certain exceptions. Commitment fees on the unused portion of the Credit Facility are due quarterly at rates ranging from (i) 0.300% to 0.375% with respect to the Prior Credit Facility, determined with reference to borrowing base utilization and (ii) 0.375% to 0.500% with respect to the New Credit Facility, determined with reference to borrowing base utilization, both rates subject to certain exceptions based on the leverage ratio then in effect. The New Credit Facility includes fall away covenants, lower interest rates and reduced collateral requirements that Antero Resources may elect if Antero Resources is assigned an Investment Grade Rating (as defined in the New Credit Facility).

As of September 30, 2021, Antero Resources had an outstanding balance under the Credit Facility of $98 million, with a weighted average interest rate of 3.40%, and had outstanding letters of credit of $742 million. As of December 31, 2020, Antero

ANTERO RESOURCES CORPORATION

Notes to Unaudited Condensed Consolidated Financial Statements

Resources had an outstanding balance under the Credit Facility of $1.0 billion, with a weighted average interest rate of 3.26%, and outstanding letters of credit of $730 million.

(b) 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 Company repurchased or otherwise redeemed all of the 2022 Notes between 2019 and the first quarter of 2021. The 2022 Notes were unsecured and effectively subordinated to the Credit Facility to the extent of the value of the collateral securing the Credit Facility. The 2022 Notes ranked pari passu to Antero Resources' other outstanding senior notes. The 2022 Notes were guaranteed on a full and unconditional and joint and several senior unsecured basis by Antero Resources' existing subsidiaries that guarantee the Credit Facility and certain of its future restricted subsidiaries. Interest on the 2022 Notes was payable on June 1 and December 1 of each year. See "—Debt Repurchase Program" below for further details on 2022 Notes repurchases.

(c) 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 Company repurchased or otherwise fully redeemed all of the 2023 Notes between 2020 and the second quarter of 2021. The 2023 Notes were unsecured and effectively subordinated to the Credit Facility to the extent of the value of the collateral securing the Credit Facility. The 2023 Notes ranked pari passu to Antero Resources' other outstanding senior notes. The 2023 Notes were guaranteed on a full and unconditional and joint and several senior unsecured basis by Antero Resources' existing subsidiaries that guarantee the Credit Facility and certain of its future restricted subsidiaries. Interest on the 2023 Notes was payable on June 1 and December 1 of each year. See "—Debt Repurchase Program" below for further details on 2023 Notes repurchases and redemption.

(d) 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 Company repurchased $10 million of the 2025 Notes from time to time during 2020, and as of September 30, 2021, $590 million principal amount of the 2025 Notes remained outstanding. 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' existing subsidiaries that guarantee the Credit Facility 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 102.5% 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.

(e) 8.375% Senior Notes Due 2026

On January 4, 2021, Antero Resources issued $500 million of 8.375% senior notes due July 15, 2026 (the "2026 Notes") at par. The Company redeemed $175 million of the 2026 Notes on July 1, 2021, and as of September 30, 2021, $325 million principal amount of the 2026 Notes remained outstanding. See "—Debt Repurchase Program" below for further details on the 2026 Notes redemption. The 2026 Notes are unsecured and effectively subordinated to the Credit Facility to the extent of the value of the collateral securing the Credit Facility. The 2026 Notes rank pari passu to Antero Resources' other outstanding senior notes. The 2026 Notes are guaranteed on a full and unconditional and joint and several senior unsecured basis by Antero Resources' existing subsidiaries that guarantee the Credit Facility and certain of its future restricted subsidiaries. Interest on the 2026 Notes is payable on January 15 and July 15 of each year. Antero Resources may redeem all or part of the 2026 Notes at any time on or after January 15, 2024 at redemption prices ranging from 104.188% on or after January 15, 2024 to 100.00% on or after January 15, 2026. At any time prior to January 15, 2024, Antero Resources may also redeem the 2026 Notes, in whole or in part, at a price equal to 100% of the principal amount of the 2026 Notes plus a "make-whole" premium and accrued and unpaid interest. If Antero Resources undergoes a change of control followed by a rating decline, the holders of the 2026 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 2026 Notes, plus accrued and unpaid interest.

ANTERO RESOURCES CORPORATION

Notes to Unaudited Condensed Consolidated Financial Statements

(f) 7.625% Senior Notes Due 2029

On January 26, 2021, Antero Resources issued $700 million of 7.625% senior notes due February 1, 2029 (the "2029 Notes") at par. The 2029 Notes are unsecured and effectively subordinated to the Credit Facility to the extent of the value of the collateral securing the Credit Facility. The 2029 Notes rank pari passu to Antero Resources' other outstanding senior notes. The 2029 Notes are guaranteed on a full and unconditional and joint and several senior unsecured basis by Antero Resources' existing subsidiaries that guarantee the Credit Facility and certain of its future restricted subsidiaries. Interest on the 2029 Notes is payable on February 1 and August 1 of each year. Antero Resources may redeem all or part of the 2029 Notes at any time on or after February 1, 2024 at redemption prices ranging from 103.813% on or after February 1, 2024 to 100.00% on or after February 1, 2027. In addition, on or before February 1, 2024, Antero Resources may redeem up to 35% of the aggregate principal amount of the 2029 Notes, but in an amount not greater than the net cash proceeds of certain equity offerings, if certain conditions are met, at a redemption price of 107.625% of the principal amount of the 2029 Notes, plus accrued and unpaid interest, which option the Company partially exercised on October 18, 2021 with its notice to redeem $116 million aggregate principal amount of outstanding 2029 Notes. See "—Subsequent Event" below for further details on the 2029 Notes redemption. At any time prior to February 1, 2024, Antero Resources may also redeem the 2029 Notes, in whole or in part, at a price equal to 100% of the principal amount of the 2029 Notes plus a "make-whole" premium and accrued and unpaid interest. If Antero Resources undergoes a change of control followed by a rating decline, the holders of the 2029 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 2029 Notes, plus accrued and unpaid interest.

(g) 5.375% Senior Notes Due 2030

On June 1, 2021, Antero Resources issued $600 million of 5.375% senior notes due March 1, 2030 (the "2030 Notes") at par. The 2030 Notes are unsecured and effectively subordinated to the Credit Facility to the extent of the value of the collateral securing the Credit Facility. The 2030 Notes rank pari passu to Antero Resources' other outstanding senior notes. The 2030 Notes are guaranteed on a full and unconditional and joint and several senior unsecured basis by Antero Resources' existing subsidiaries that guarantee the Credit Facility and certain of its future restricted subsidiaries. Interest on the 2030 Notes is payable on March 1 and September 1 of each year. Antero Resources may redeem all or part of the 2030 Notes at any time on or after March 1, 2025 at redemption prices ranging from 102.688% on or after March 1, 2025 to 100.00% on or after March 1, 2028. In addition, on or before March 1, 2025, Antero Resources may redeem up to 35% of the aggregate principal amount of the 2030 Notes, but in an amount not greater than the net cash proceeds of certain equity offerings, if certain conditions are met, at a redemption price of 105.375% of the principal amount of the 2030 Notes, plus accrued and unpaid interest. At any time prior to March 1, 2025, Antero Resources may also redeem the 2030 Notes, in whole or in part, at a price equal to 100% of the principal amount of the 2030 Notes plus a "make-whole" premium and accrued and unpaid interest. If Antero Resources undergoes a change of control followed by a rating decline, the holders of the 2030 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 2030 Notes, plus accrued and unpaid interest.

(h) 4.25% Convertible Senior Notes Due 2026

On August 21, 2020, Antero Resources issued $250 million in aggregate principal amount of 4.25% convertible senior notes due 2026 (the " 2026 Convertible Notes"). On September 2, 2020, Antero Resources issued an additional $37.5 million of the 2026 Convertible Notes. During the nine months ended September 30, 2021, the Company completed the equitization transactions described below under "—Partial Equitizations of 2026 Convertible Notes," that extinguished $206 million principal amount of the 2026 Convertible Notes, and as of September 30, 2021, $82 million principal amount of the 2026 Convertible Notes remained outstanding. The 2026 Convertible Notes were issued pursuant to an indenture and are senior, unsecured obligations of Antero Resources. The 2026 Convertible Notes bear interest at a fixed rate of 4.25% per annum, payable semi-annually in arrears on March 1 and September 1 of each year, commencing on March 1, 2021. Proceeds from the issuance of the 2026 Convertible Notes totaled $278.5 million, net of initial purchasers' fees and issuance cost of $9 million. Each capitalized term used in this subsection but not otherwise defined in this Quarterly Report on Form 10-Q has the meaning as set forth in the indenture governing the 2026 Convertible Notes.

The initial conversion rate is 230.2026 shares of Antero Resources' common stock per $1,000 principal amount of 2026 Convertible Notes, subject to adjustment upon the occurrence of specified events. As of September 30, 2021, the if-converted value of the 2026 Convertible Notes was $353 million, which exceeded the principal amount of the 2026 Convertible Notes by $272 million. The 2026 Convertible Notes will mature on September 1, 2026, unless earlier repurchased, redeemed or converted. Before May 1, 2026, note holders will have the right to convert their 2026 Convertible Notes only upon the occurrence of the following events:

ANTERO RESOURCES CORPORATION

Notes to Unaudited Condensed Consolidated Financial Statements

- during any calendar quarter (and only during such calendar quarter) commencing after the calendar quarter ending on September 30, 2020, if the Last Reported Sale Price per share of Antero Resources' common stock exceeds 130% of the Conversion Price for each of at least 20 Trading Days (whether or not consecutive) during the 30 consecutive Trading Days ending on, and including, the last Trading Day of the immediately preceding calendar quarter (the "Stock Price Condition");

- during the five consecutive Business Days immediately after any 10 consecutive trading day period (such 10 consecutive Trading Day period, the "Measurement Period") if the trading Price per $1,000 principal amount of 2026 Convertible Notes, as determined following a request by a noteholder in accordance with the procedures set forth below, for each trading day of the Measurement Period was less than 98% of the product of the last reported sale price per share of common stock on such trading day and the conversion rate on such trading day;

- if Antero Resources calls any or all of the 2026 Convertible Notes for redemption, at any time prior to the close of business on the scheduled trading day immediately preceding the redemption date; or

- upon the occurrence of certain specified corporate events as set forth in the indenture governing the 2026 Convertible Notes.

From and after May 1, 2026, noteholders may convert their 2026 Convertible Notes at any time at their election until the close of business on the second scheduled trading day immediately before the maturity date.

Upon conversion, Antero Resources may satisfy its conversion obligation by paying and/or delivering, as the case may be, cash, shares of Antero Resources' common stock or a combination of cash and shares of Antero Resources' common stock, at Antero Resources' election, in the manner and subject to the terms and conditions provided in the indenture governing the 2026 Convertible Notes. The 2026 Convertible Notes have met the Stock Price Condition allowing holders of the 2026 Convertible Notes to exercise their conversion right as of September 30, 2021.

The conversion rate is subject to adjustment under certain circumstances in accordance with the terms of the indenture governing the 2026 Convertible Notes. In addition, following certain corporate events, as described in the indenture governing the 2026 Convertible Notes, that occur prior to the maturity date, Antero Resources will increase the conversion rate for a holder who elects to convert its 2026 Convertible Notes in connection with such a corporate event.

If certain corporate events that constitute a Fundamental Change occur, then noteholders may require Antero Resources to repurchase their 2026 Convertible Notes at a cash repurchase price equal to the principal amount of the 2026 Convertible Notes to be repurchased, plus accrued and unpaid interest, if any, to, but excluding, the fundamental change repurchase date. The definition of Fundamental Change includes certain business combination transactions involving Antero Resources and certain de-listing events with respect to Antero Resources' common stock.

Upon issuance, the Company separately accounted for the liability and equity components of the 2026 Convertible Notes. The liability component was recorded at the estimated fair value of a similar debt instrument without the conversion feature. The difference between the principal amount of the 2026 Convertible Notes and the estimated fair value of the liability component was recorded as a debt discount and will be amortized to interest expense, together with debt issuance costs, over the term of the 2026 Convertible Notes using the effective interest method, with an effective interest rate of 15.1% per annum. As of the issuance date, the fair value of the 2026 Convertible Notes was estimated at $172 million, resulting in a debt discount at inception of $116 million. The equity component, representing the value of the conversion option, was computed by deducting the fair value of the liability component from the initial proceeds of the 2026 Convertible Notes issuance. This equity component was recorded, net of deferred taxes and issuance costs, in additional paid-in capital within the condensed consolidated balance sheet and statement of stockholders' equity and will not be remeasured as long as it continues to meet the conditions for equity classification.

Transaction costs related to the 2026 Convertible Notes issuance were allocated to the liability and equity components based on their relative fair values. Issuance costs attributable to the liability component were recorded within debt issuance costs on the condensed consolidated balance sheet and are amortized over the term of the 2026 Convertible Notes using the effective interest method. Issuance costs attributable to the equity component were recorded as a charge to additional paid-in capital within the condensed consolidated balance sheet and statement of stockholders' equity.

ANTERO RESOURCES CORPORATION

Notes to Unaudited Condensed Consolidated Financial Statements

Partial Equitizations of 2026 Convertible Notes

On January 12, 2021, the Company completed a registered direct offering (the "January Share Offering") of an aggregate of 31.4 million shares of its common stock at a price of $6.35 per share to certain holders of the 2026 Convertible Notes. The Company used the proceeds from the January Share Offering and approximately $63 million of borrowings under the Credit Facility to repurchase from such holders $150 million aggregate principal amount of the 2026 Convertible Notes in privately negotiated transactions (the "January Convertible Note Repurchase," and, collectively with the January Share Offering, the "January Equitization Transactions"). The 2026 Convertible Notes have an initial conversion rate of 230.2026 shares of the Company's common stock per $1,000 principal amount, and the January Equitization Transactions had the effect of increasing this conversion rate to 275.3525 shares of common stock per $1,000 principal amount. The Company accounted for this transaction as an inducement of the 2026 Convertible Notes, and as a result, the Company recorded a $39 million loss on convertible note equitization in the unaudited condensed consolidated statements of operations and comprehensive loss for the nine months ended September 30, 2021 for the consideration paid in excess of the original terms of the 2026 Convertible Notes. Additionally, the January Equitization Transactions resulted in a loss on early extinguishment of debt of $41 million in the unaudited condensed consolidated statement of operations and comprehensive loss for the nine months ended September 30, 2021.

On May 13, 2021, the Company completed a registered direct offering (the "May Share Offering") of an aggregate of 11.6 million shares of its common stock at a price of $11.01 per share to certain holders of the 2026 Convertible Notes. The Company used the proceeds from the May Share Offering and approximately $26 million of borrowings under the Credit Facility to repurchase from such holders $56 million aggregate principal amount of the 2026 Convertible Notes in privately negotiated transactions (the "May Convertible Note Repurchase," and, collectively with the May Share Offering, the "May Equitization Transactions"). The 2026 Convertible Notes have an initial conversion rate of 230.2026 shares of the Company's common stock per $1,000 principal amount, and the May Equitization Transactions had the effect of increasing this conversion rate to 245.2802 shares of common stock per $1,000 principal amount. The Company accounted for this transaction as an inducement of the 2026 Convertible Notes, and as a result, the Company recorded a $12 million loss on convertible note equitization in the unaudited condensed consolidated statements of operations and comprehensive loss for the nine months ended September 30, 2021 for the consideration paid in excess of the original terms of the 2026 Convertible Notes. Additionally, the May Equitization Transactions resulted in a loss on early extinguishment of debt of $21 million in the unaudited condensed consolidated statement of operations and comprehensive loss for the nine months ended September 30, 2021.

The 2026 Convertible Notes consist of the following (in thousands):

	December 31, 2020	September 30, 2021
Liability component:		
Principal	$ 287,500	81,570
Less: unamortized note discount	(112,265)	(28,780)
Less: unamortized debt issuance costs	(5,852)	(1,665)
Net carrying value	$ 169,383	51,125
Equity component [1]	$ 115,601	32,799

(1) As of December 31, 2020, the equity component attributable to the outstanding 2026 Convertible Notes was recorded in additional paid-in capital, net of $3 million of issuance costs and $28 million of deferred taxes. As of September 30, 2021, the equity component attributable to the outstanding 2026 Convertible Notes was recorded in additional paid-in capital net of $1 million of issuance costs and $8 million of deferred taxes.

Interest expense recognized on the 2026 Convertible Notes related to the stated interest rate, amortization of the debt discount and debt issuance costs totaled $2.3 million and $1.5 million for the three months ended September 30, 2020 and 2021, respectively, and $2.3 million and $8.7 million for the nine months ended September 30, 2020 and 2021, respectively.

(i) Debt Repurchase Program

During the three and nine months ended September 30, 2020, Antero Resources repurchased $461 million and $1.1 billion, respectively, principal amount of debt at a weighted average discount of 13% and 17%, respectively. The Company recognized a gain of $56 million and $175 million for the three and nine months ended September 30, 2020 on the early extinguishment of the debt repurchased.

ANTERO RESOURCES CORPORATION

Notes to Unaudited Condensed Consolidated Financial Statements

During the first quarter of 2021, the Company redeemed the remaining $661 million of the 2022 Notes at par, plus accrued and unpaid interest, and as a result, the 2022 Notes were fully retired as of February 10, 2021. The Company redeemed the remaining $574 million of the 2023 Notes at par, plus accrued and unpaid interest, during the second quarter of 2021. The 2023 Notes were fully retired as of June 1, 2021. During the third quarter of 2021, the Company redeemed $175 million of the principal amount of its 2026 Notes at a redemption price of 108.375% of the principal amount thereof, plus accrued and unpaid interest, and recognized a loss on early debt extinguishment of $17 million during the three months ended September 30, 2021.

(j) Subsequent Event

On October 18, 2021, Antero Resources issued a notice of partial redemption with respect to the 2029 Notes. On November 2, 2021, the Company will redeemd $116 million of the aggregate principal amount of its 2029 Notes at a redemption price of 107.625% of the principal amount thereof, plus accrued and unpaid interest. Immediately following the redemption, there will be $584 million aggregate principal amount of 2029 Notes outstanding. The $9 million premium to the principal amount redeemed along with the write-off of a proportional amount of unamortized debt issuance costs will be included in the Company's loss on early debt extinguishment during the fourth quarter of 2021.

(8) Asset Retirement Obligations

The following table sets forth a reconciliation of the Company's asset retirement obligations for the nine months ended September 30, 2021 (in thousands):

Asset retirement obligations—December 31, 2020	$	54,452
Obligations incurred		2,359
Accretion expense		2,947
Settlement of obligations		(50)
Revisions to prior estimates		(549)
Asset retirement obligations—September 30, 2021	$	59,159

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

(9) Equity-Based Compensation and Cash Awards

On June 17, 2020, Antero Resources' stockholders approved the Antero Resources Corporation 2020 Long-Term Incentive Plan (the "2020 Plan"), which replaced the Antero Resources Corporation Long-Term Incentive Plan (the "2013 Plan"), and the 2020 Plan became effective as of such date. The 2020 Plan provides for grants of stock options (including incentive stock options), stock appreciation rights, restricted stock awards, RSU awards, vested stock awards, dividend equivalent awards, and other stock-based and cash awards. The terms and conditions of the awards granted are established by the Compensation Committee of Antero Resources' Board of Directors. Employees, officers, non-employee directors and other service providers of the Company and its affiliates are eligible to receive awards under the 2020 Plan. No further awards will be granted under the 2013 Plan on or after June 17, 2020.

The 2020 Plan provides for the reservation of 10,050,000 shares of the Company's common stock, plus the number of certain shares that become available again for delivery from the 2013 Plan in accordance with the share recycling provisions described below. The share recycling provisions allow for all or any portion of an award (including an award granted under the 2013 Plan that was outstanding as of June 17, 2020) that expires or is cancelled, forfeited, exchanged, settled for cash, or otherwise terminated without actual delivery of the shares to be considered not delivered and thus available for new awards under the 2020 Plan. Further, any shares withheld or surrendered in payment of any taxes relating to awards that were outstanding under either the 2013 Plan as of June 17, 2020 or are granted under the 2020 Plan (other than stock options and stock appreciation rights) will again be available for new awards under the 2020 Plan.

A total of 7,888,490 shares were available for future grant under the 2020 Plan as of September 30, 2021.

Antero Midstream Partners LP's ("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 include Antero Resources). Antero Resources deconsolidated Antero Midstream Partners on March 12, 2019, and on such date each outstanding phantom unit award under the AMP Plan, was

ANTERO RESOURCES CORPORATION

Notes to Unaudited Condensed Consolidated Financial Statements

assumed by Antero Midstream Corporation and converted into 1.8926 RSUs (all such RSUs, the "Converted AM RSU Awards") under the Antero Midstream Corporation Long Term Incentive Plan (the "AMC Plan"). Each RSU 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 and nine months ended September 30, 2020 and 2021 (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2021	2020	2021
RSU awards	$ 3,063	3,327	$ 9,021	9,957
PSU awards	1,827	1,452	5,380	3,211
Converted AM RSU Awards [1]	459	186	1,881	988
Equity awards issued to directors	350	333	719	1,033
Total expense	$ 5,699	5,298	$ 17,001	15,189

(1) Antero Resources recognized compensation expense for equity awards granted under both the 2013 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 deconsolidation of Antero Midstream Partners on March 12, 2019 to Antero Midstream Partners based on its proportionate share of Antero Resources' labor costs.

(a) Restricted Stock Unit Awards

A summary of RSU award activity for the nine months ended September 30, 2021 is as follows:

	Number of Shares	Weighted Average Grant Date Fair Value
Total awarded and unvested—December 31, 2020	8,432,397	$ 4.06
Granted	1,431,993	9.52
Vested	(3,546,654)	4.36
Forfeited	(293,338)	5.18
Total awarded and unvested—September 30, 2021	6,024,398	$ 5.12

As of September 30, 2021, there was approximately $24 million of unamortized equity-based compensation expense related to unvested RSUs. That expense is expected to be recognized over a weighted average period of approximately 2.6 years.

(b) Performance Share Unit Awards

PSU Awards Based on Absolute Total Shareholder Return ("TSR")

In April 2021, the Company granted PSU awards to certain of its executive officers that vest based on Antero Resources' absolute TSR determined as of the last day of each of three one-year performance periods ending on April 15, 2022, April 15, 2023, and April 15, 2024, and one cumulative three-year performance period ending on April 15, 2024, in each case, subject to the executive officer's continued employment through April 15, 2024. The number of shares of common stock that may ultimately be earned following the end of the cumulative three-year performance period with respect to the TSR PSUs ranges from zero to 200% of the target number of TSR PSUs originally granted. Expense related to these PSUs is recognized on a graded-vested basis over the term of each performance period. Forfeitures are accounted for as they occur by reversing the expense previously recognized for awards that were forfeited during the period.

PSU Awards Based on Leverage Ratio

In April 2021, the Company granted PSUs to certain of its executive officers that vest based on the Company's total debt less cash and cash equivalents divided by the Company's Adjusted EBITDAX (as defined and described in Item 2 below under "Non-GAAP Financial Measures") determined as of the last day of each of three one-year performance periods ending on December 31,

2021, December 31, 2022, and December 31, 2023, in each case, subject to the executive officer's continued employment through December 31, 2023 ("Leverage Ratio PSUs"). The number of shares of common stock that may ultimately be earned with respect to the Leverage Ratio PSUs ranges from zero to 200% of the target number of Leverage Ratio PSUs originally granted. Expense related to the Leverage Ratio PSUs is recognized based on the number of shares of common stock that are expected to be issued at the end of each measurement period, and such expense is reversed if the likelihood of achieving the performance condition becomes improbable. As of September 30, 2021, the likelihood of achieving the performance conditions related to the Leverage Ratio PSUs was probable.

A summary of PSU award activity for the nine months ended September 30, 2021 is as follows:

	Number of Units	Weighted Average Grant Date Fair Value
Total awarded and unvested—December 31, 2020	2,547,798	$ 12.66
Granted	479,120	9.71
Forfeited	(67,000)	2.97
Cancelled (unearned)	(1,112,639)	19.19
Total awarded and unvested—September 30, 2021	1,847,279	$ 8.31

The following table presents information regarding the weighted average fair values for market-based PSUs granted during the nine months ended September 30, 2021, and the assumptions used to determine the fair values:

Dividend yield	— %
Volatility	85 %
Risk-free interest rate	0.32 %
Weighted average fair value of awards granted—Absolute TSR	$ 11.99

As of September 30, 2021, there was approximately $8 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 2.0 years.

(c) Stock Options

A summary of stock option activity for the nine months ended September 30, 2021 is as follows:

	Stock Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life	Intrinsic Value (in thousands)
Outstanding—December 31, 2020	432,461	$ 50.64	4.1	$ —
Granted	—	—		
Exercised	—	—		
Forfeited	—	—		
Expired	(76,167)	50.00		
Outstanding—September 30, 2021	356,294	$ 50.78	3.2	$ —
Vested—September 30, 2021	356,294	$ 50.78	3.2	$ —
Exercisable—September 30, 2021	356,294	$ 50.78	3.2	$ —

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 September 30, 2021, all stock options were fully vested resulting in no unamortized equity-based compensation expense.

ANTERO RESOURCES CORPORATION

Notes to Unaudited Condensed Consolidated Financial Statements

(d) Converted AM RSU Awards

A summary of the Converted AM RSU Awards for the nine months ended September 30, 2021 is as follows:

	Number of Units	Weighted Average Grant Date Fair Value
Total awarded and unvested—December 31, 2020	296,390	$ 15.06
Granted	—	—
Vested	(209,964)	15.73
Forfeited	(3,444)	13.25
Total awarded and unvested—September 30, 2021	82,982	$ 13.46

As of September 30, 2021, there was less than $1.0 million of unamortized equity-based compensation expense related to unvested Converted AM RSU Awards. Such expense is expected to be recognized over a weighted average period of 0.6 years, and the Company's proportionate share will be allocated to it as it is recognized.

(e) Cash Awards

In January 2020, the Company granted cash awards of approximately $3.3 million to certain executives under the 2013 Plan, and compensation expense for these awards is recognized ratably over the vesting period for each of three tranches through January 20, 2023. In July 2020, the Company granted additional cash awards in the aggregate of $2.6 million to certain non-executive employees under the 2020 Plan that vest ratably over four years. As of December 31, 2020 and September 30, 2021, the Company has recorded approximately $3.2 million and $2.0 million, respectively, in Other liabilities in the condensed consolidated balance sheets related to unvested cash awards.

(10) Fair Value

The carrying values of accounts receivable and accounts payable as of December 31, 2020 and September 30, 2021 approximated market values because of their short-term nature. The carrying values of the amounts outstanding under the Prior Credit Facility as of December 31, 2020 and September 30, 2021 approximated fair value because the variable interest rates are reflective of current market conditions.

The fair value and carrying value of the senior notes and 2026 Convertible Notes as of December 31, 2020 and September 30, 2021 as follows (in thousands):

	December 31, 2020		September 30, 2021	
	Fair Value [1]	Carrying Value [2]	Fair Value [1]	Carrying Value [2]
2022 Notes	$ 658,468	658,400	—	—
2023 Notes	562,698	571,370	—	—
2025 Notes	560,500	585,440	601,800	586,191
2026 Notes	—	—	368,128	321,570
2029 Notes	—	—	782,600	691,575
2030 Notes	—	—	631,860	593,072
2026 Convertible Notes	430,963	169,383	356,689	51,125
Total	$ 2,212,629	1,984,593	2,741,077	2,243,533

(1) Fair values are based on Level 2 market data inputs.
(2) Carrying values are presented net of unamortized debt issuance costs and debt discounts or premiums.

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

ANTERO RESOURCES CORPORATION

Notes to Unaudited Condensed Consolidated Financial Statements

(11) Derivative Instruments

The Company is exposed to certain risks relating to its ongoing business operations, and it uses derivative instruments to manage its commodity price risk. In addition, the Company periodically enters into contracts that contain embedded features that are required to be bifurcated and accounted for separately as derivatives.

(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 and nine months ended September 30, 2020 and 2021. 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'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 September 30, 2021, the Company's fixed price natural gas, oil and NGL swap positions excluding Martica, the Company's consolidated VIE, were as follows:

Commodity / Settlement Period	Index	Contracted Volume	Weighted Average Price
Natural Gas			
October-December 2021	Henry Hub	2,160,000 MMBtu/day	$ 2.78 /MMBtu
January-December 2022	Henry Hub	1,155,486 MMBtu/day	2.50 /MMBtu
January-December 2023	Henry Hub	43,000 MMBtu/day	2.37 /MMBtu
Butane			
October-December 2021	Mont Belvieu Butane-OPIS Non-TET	2,600 Bbl/day	$ 33.77 /Bbl
October-December 2021	Mont Belvieu Butane-OPIS TET	1,500 Bbl/day	$ 32.24 /Bbl
Natural Gasoline			
October-December 2021	Mont Belvieu Natural Gasoline-OPIS Non-TET	8,300 Bbl/day	$ 49.70 /Bbl
Isobutane			
October-December 2021	Mont Belvieu Isobutane-OPIS Non-TET	2,800 Bbl/day	$ 35.75 /Bbl
Oil			
October-December 2021	West Texas Intermediate	3,000 Bbl/day	$ 55.16 /Bbl

In addition, the Company has 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.

ANTERO RESOURCES CORPORATION

Notes to Unaudited Condensed Consolidated Financial Statements

As of September 30, 2021, 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 were as follows:

Commodity / Settlement Period	Index to Basis Differential	Contracted Volume	Weighted Average Hedged Differential
Natural Gas			
October-December 2021	NYMEX to TCO	40,000 MMBtu/day	$ 0.414 /MMBtu
January-December 2022	NYMEX to TCO	60,000 MMBtu/day	0.515 /MMBtu
January-December 2023	NYMEX to TCO	50,000 MMBtu/day	0.525 /MMBtu
January-December 2024	NYMEX to TCO	50,000 MMBtu/day	0.530 /MMBtu

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. As of September 30, 2021, the Company had natural gas and NGL contracts that fix the Mont Belvieu index price for natural gasoline to percentages of WTI as follows:

Commodity / Settlement Period	Index to Basis Differential	Contracted Volume	Weighted Average Payout Ratio
Gas Liquids			
October-December 2021	Mont Belvieu Natural Gasoline to WTI	9,325 Bbl/day	77 %

As of September 30, 2021, the Company's fixed price natural gas, oil and NGL swap positions for Martica, the Company's consolidated VIE, were as follows:

Commodity / Settlement Period	Index	Contracted Volume	Weighted Average Price
Natural Gas			
October-December 2021	Henry Hub	46,384 MMBtu/day	$ 2.77 /MMBtu
January-December 2022	Henry Hub	38,356 MMBtu/day	2.39 /MMBtu
January-December 2023	Henry Hub	35,616 MMBtu/day	2.35 /MMBtu
January-December 2024	Henry Hub	23,885 MMBtu/day	2.33 /MMBtu
January-March 2025	Henry Hub	18,021 MMBtu/day	2.53 /MMBtu
Ethane			
October-December 2021	Mont Belvieu Purity Ethane-OPIS	990 Bbl/day	$ 7.01 /Bbl
January-March 2022	Mont Belvieu Purity Ethane-OPIS	521 Bbl/day	6.68 /Bbl
Propane			
October-December 2021	Mont Belvieu Propane-OPIS Non-TET	1,069 Bbl/day	$ 19.88 /Bbl
January-December 2022	Mont Belvieu Propane-OPIS Non-TET	934 Bbl/day	19.20 /Bbl
Natural Gasoline			
October-December 2021	Mont Belvieu Natural Gasoline-OPIS Non-TET	339 Bbl/day	$ 35.24 /Bbl
January-December 2022	Mont Belvieu Natural Gasoline-OPIS Non-TET	282 Bbl/day	34.37 /Bbl
January-December 2023	Mont Belvieu Natural Gasoline-OPIS Non-TET	247 Bbl/day	40.74 /Bbl
Oil			
October-December 2021	West Texas Intermediate	111 Bbl/day	$ 43.48 /Bbl
January-December 2022	West Texas Intermediate	112 Bbl/day	44.25 /Bbl
January-December 2023	West Texas Intermediate	99 Bbl/day	45.03 /Bbl
January-December 2024	West Texas Intermediate	43 Bbl/day	44.02 /Bbl
January-March 2025	West Texas Intermediate	39 Bbl/day	45.06 /Bbl

ANTERO RESOURCES CORPORATION

Notes to Unaudited Condensed Consolidated Financial Statements

(b) Embedded Derivatives

The VPP includes an embedded put option tied to NYMEX pricing for the production volumes associated with the Company's retained interest in the VPP properties of 94,544,000 MMBtu remaining through December 31, 2026 at a weighted average strike price of $2.57 per MMBtu. The embedded put option is not clearly and closely related to the host contract, and therefore, the Company bifurcated this derivative instrument and reflected it at fair value in the unaudited condensed consolidated financial statements.

(c) Summary

The table below presents a summary of the fair values of the Company's derivative instruments and where such values are recorded in the condensed consolidated balance sheets as of December 31, 2020 and September 30, 2021 (in thousands). None of the Company's derivative instruments are designated as hedges for accounting purposes.

	Balance Sheet Location	December 31, 2020	September 30, 2021
Asset derivatives not designated as hedges for accounting purposes:			
Commodity derivatives—current	Derivative instruments	$ 97,144	—
Embedded derivatives—current	Derivative instruments	7,986	627
Commodity derivatives—noncurrent	Derivative instruments	14,689	—
Embedded derivatives—noncurrent	Derivative instruments	32,604	14,834
Total asset derivatives		152,423	15,461
Liability derivatives not designated as hedges for accounting purposes:			
Commodity derivatives—current [1]	Derivative instruments	31,242	1,436,292
Commodity derivatives—noncurrent [1]	Derivative instruments	99,172	331,570
Total liability derivatives		130,414	1,767,862
Net derivatives assets (liabilities)		$ 22,009	(1,752,401)

(1) As of September 30, 2021, approximately $87 million of commodity derivative liabilities, including $53 million of current commodity derivatives and $34 million of noncurrent commodity derivatives, are attributable to the Company's consolidated VIE, Martica. As of December 31, 2020, approximately $14 million of commodity derivative liabilities, including $7 million of current commodity derivatives and $7 million of noncurrent commodity derivatives, are attributable to the Company's consolidated VIE, Martica.

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 condensed consolidated balance sheets as of the dates presented, all at fair value (in thousands):

	December 31, 2020			September 30, 2021		
	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	$ 181,375	(69,542)	111,833	$ 18,246	(18,246)	—
Embedded derivative assets	$ 40,590	—	40,590	$ 15,461	—	15,461
Commodity derivative liabilities	$ (199,956)	69,542	(130,414)	$ (1,786,108)	18,246	(1,767,862)

ANTERO RESOURCES CORPORATION

Notes to Unaudited Condensed Consolidated Financial Statements

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 and nine months ended September 30, 2020 and 2021 (in thousands):

	Statement of Operations Location	Three Months Ended September 30,		Nine Months Ended September 30,	
		2020	2021	2020	2021
Commodity derivative fair value losses [1]	Revenue	$ (558,979)	(1,238,384)	$ (161,161)	(2,228,076)
Embedded derivative fair value gains (losses) [1]	Revenue	$ 44,228	(12,082)	$ 44,228	(31,986)

(1) The fair value of derivative instruments was determined using Level 2 inputs.

(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 can extend the lease from one to 20 years or more. The exercise of the lease renewal options is 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

(a) Supplemental Balance Sheet Information Related to Leases

The Company's lease assets and liabilities as of December 31, 2020 and September 30, 2021 consisted of the following items (in thousands):

Leases	Balance Sheet Classification	December 31, 2020	September 30, 2021
Operating Leases			
Operating lease right-of-use assets:			
Processing plants	Operating lease right-of-use assets	$ 1,302,290	1,786,321
Drilling rigs and completion services	Operating lease right-of-use assets	29,894	10,812
Gas gathering lines and compressor stations [1]	Operating lease right-of-use assets	1,241,090	1,136,859
Office space	Operating lease right-of-use assets	36,879	34,032
Vehicles	Operating lease right-of-use assets	2,704	1,023
Other office and field equipment	Operating lease right-of-use assets	746	595
Total operating lease right-of-use assets		$ 2,613,603	2,969,642
Short-term operating lease obligation	Short-term lease liabilities	$ 265,178	352,939
Long-term operating lease obligation	Long-term lease liabilities	2,348,425	2,616,703
Total operating lease obligation		$ 2,613,603	2,969,642
Finance Leases			
Finance lease right-of-use assets:			
Vehicles	Other property and equipment	$ 1,206	717
Total finance lease right-of-use assets [2]		$ 1,206	717
Short-term finance lease obligation	Short-term lease liabilities	$ 845	531
Long-term finance lease obligation	Long-term lease liabilities	361	186
Total finance lease obligation		$ 1,206	717

(1) Gas gathering lines and compressor stations leases includes $1.1 billion and $1.0 billion related to Antero Midstream Corporation as of December 31, 2020 and September 30, 2021. See "—Related party lease disclosure" for additional discussion.

(2) Financing lease assets are recorded net of accumulated amortization of $3 million and $2 million as of December 31, 2020 and September 30, 2021, respectively. The processing plants, gathering lines and compressor stations that are classified as lease liabilities are classified as such under ASC 842, *Leases*, because Antero is the sole customer of the assets and because Antero makes the decisions that most impact the economic performance of the assets.

ANTERO RESOURCES CORPORATION

Notes to Unaudited Condensed Consolidated Financial Statements

(b) Supplemental Information Related to Leases

Costs associated with operating leases and finance leases were included in the unaudited condensed consolidated statement of operations and comprehensive loss for the three and nine months ended September 30, 2020 and 2021 (in thousands):

			Three Months Ended September 30,		Nine Months Ended September 30,	
Cost	**Classification**	**Location**	**2020**	**2021**	**2020**	**2021**
Operating lease cost	Statement of operations	Gathering, compression, processing, and transportation	$ 350,853	386,033	$ 1,112,502	1,147,985
Operating lease cost	Statement of operations	General and administrative	2,789	2,833	8,639	8,057
Operating lease cost	Statement of operations	Contract termination and rig stacking	5,841	3,369	6,387	4,213
Operating lease cost	Statement of operations	Lease operating	—	43	—	109
Operating lease cost	Balance sheet	Proved properties [1]	31,822	25,558	91,081	82,749
Total operating lease cost			$ 391,305	417,836	$ 1,218,609	1,243,113
Finance lease cost:						
Amortization of right-of-use assets	Statement of operations	Depletion, depreciation, and amortization	$ 168	132	$ 727	391
Total finance lease cost			$ 168	132	$ 727	391
Short-term lease payments			$ 15,871	21,030	$ 108,029	62,328

(1) Capitalized costs related to drilling and completion activities.

(c) Supplemental Cash Flow Information Related to Leases

The following is the Company's supplemental cash flow information related to leases for the nine months ended September 30, 2020 and 2021 (in thousands):

	Nine Months Ended September 30,	
	2020	**2021**
Cash paid for amounts included in the measurement of lease liabilities:		
Operating cash flows from operating leases	$ 1,147,489	1,042,684
Investing cash flows from operating leases	88,229	66,042
Financing cash flows from finance leases	1,004	692
Noncash activities:		
Right-of-use assets obtained in exchange for new operating lease obligations	$ 178,348	232,771
Increase (decrease) to existing right-of-use assets and lease obligations from operating lease modifications, net [1]	$ (174,880)	345,066

(1) During the nine months ended September 30, 2020, the weighted average discount rate for remeasured operating leases increased from 10.0% as of December 31, 2019 to 14.4% as of September 30, 2020. During the nine months ended September 30, 2021, the weighted average discount rate for remeasured operating leases decreased from 14.4% as of December 31, 2020 to 5.5% as of September 30, 2021.

ANTERO RESOURCES CORPORATION

Notes to Unaudited Condensed Consolidated Financial Statements

(d) Maturities of Lease Liabilities

The table below is a schedule of future minimum payments for operating and financing lease liabilities as of September 30, 2021 (in thousands):

	Operating Leases	Financing Leases	Total
Remainder of 2021	$ 158,056	174	158,230
2022	601,512	424	601,936
2023	595,852	76	595,928
2024	587,016	67	587,083
2025	514,963	22	514,985
2026	464,262	—	464,262
Thereafter	1,260,244	—	1,260,244
Total lease payments	4,181,905	763	4,182,668
Less: imputed interest	(1,212,263)	(46)	(1,212,309)
Total	$ 2,969,642	717	2,970,359

(e) Lease Term and Discount Rate

The following table sets forth the Company's weighted average remaining lease term and discount rate as of December 31, 2020 and September 30, 2021:

	December 31, 2020		September 30, 2021	
	Operating Leases	Finance Leases	Operating Leases	Finance Leases
Weighted average remaining lease term	8.0 years	1.5 years	7.8 years	1.9 years
Weighted average discount rate	13.7 %	6.2 %	9.1 %	5.7 %

(f) 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 annual adjustments based on the consumer price index. If and to the extent the Company requests 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% of the high pressure gathering capacity and 70% of the compression capacity 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 during each of the first, second and third quarters of 2020, and Antero Midstream Corporation provided a rebate of $12 million and $36 million for the three and nine months ended September 30, 2020, respectively. The Company did not achieve the volumetric target during either the first, second or third quarters of 2021.

For the three and nine months ended September 30, 2020, gathering and compression fees paid by Antero related to this agreement were $181 million and $503 million, respectively. For the three and nine months ended September 30, 2021, gathering and compression fees paid by Antero related to this agreement were $178 million and $539 million, respectively. As of December 31, 2020 and September 30, 2021, $55 million and $62 million were included within Accounts payable, related parties, respectively, on the condensed consolidated balance sheets as due to Antero Midstream Corporation related to this agreement.

ANTERO RESOURCES CORPORATION

Notes to Unaudited Condensed Consolidated Financial Statements

(13) Commitments

The following table sets forth 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 September 30, 2021 (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 2021	$ 264,307	13,597	1,905	91,149	67,081	438,039
2022	1,042,280	52,265	400	352,249	249,687	1,696,881
2023	1,072,523	59,140	—	377,308	218,620	1,727,591
2024	1,045,442	59,262	—	402,702	184,381	1,691,787
2025	1,024,783	47,960	—	366,353	148,632	1,587,728
2026	1,018,812	14,783	—	350,438	113,824	1,497,857
Thereafter	6,033,138	98,596	—	1,030,160	230,084	7,391,978
Total	$ 11,501,285	345,603	2,305	2,970,359	1,212,309	16,031,861

(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 unaudited condensed 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 unaudited condensed 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 Antero Resources is committed to pay; however, the Company will record in its financial statements its proportionate share of costs based on its working interests. Refer to Note 12—Leases to the unaudited condensed consolidated financial statements for more information on the Company's operating and finance leases.

ANTERO RESOURCES CORPORATION

Notes to Unaudited Condensed Consolidated Financial Statements

(14) Contingencies

Environmental

In June 2018, the Company 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. The NOV alleges that combustion devices at these facilities did not meet applicable air permitting requirements. Separately, in June 2018, the Company received an information request from the 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. Subsequently, the West Virginia Department of Environmental Protection ("WVDEP") and the EPA Region V (covering Ohio facilities) each conducted its own inspections, and the Company has separately received NOVs from WVDEP and the EPA Region V related to similar issues being investigated by the EPA Region III. The Company continues to negotiate with the EPA and WVDEP to resolve the issues alleged in the NOVs and the information request. The Company's operations at these facilities are not suspended, and management does not expect these matters to have a material adverse effect on the Company's 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 multiple contractual disputes involving firm gas sales contracts executed June 20, 2014 (the "Contracts") that the Company began delivering gas under in January 2016. In late 2015, WGL asserted that the natural gas index price specified in the Contracts was no longer appropriate and sought to invoke an alternative index clause in the Contracts. This dispute was referred to arbitration. In January 2017, the arbitration panel ruled in the Company's favor and found that the natural gas index price specified in the Contracts should remain.

In March of 2017, WGL filed a lawsuit against the Company in Colorado district court claiming that the Company breached contractual obligations by failing to deliver "TCO pool" gas, ultimately seeking damages of more than $40 million. Subsequently, after WGL failed to take certain volumes of gas required under the Contracts, the Company filed a separate lawsuit against WGL to recover damages that WGL refused to pay. These two lawsuits were consolidated and tried in June 2019. On June 20, 2019, the Company was awarded a jury verdict of approximately $96 million in damages against WGL. In addition, the jury rejected WGL's claim against the Company, finding that the Company did not breach the Contracts. On December 10, 2020, the Colorado Court of Appeals affirmed the judgment of the trial court in favor of the Company. In February 2021, the Company and its royalty owners received a gross payment of approximately $107 million from WGL, which was in full satisfaction and discharge of the June 2019 judgment entered in favor of the Company.

Other

The Company is party to various other legal proceedings and claims in the ordinary course of its business, including, but not limited to, royalty claims. 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 unaudited condensed consolidated financial position, results of operations, or cash flows.

(15) Related Parties

Substantially all of Antero Midstream Corporation's revenues were and are derived from transactions with Antero Resources. See Note 16—Reportable Segments to the unaudited condensed consolidated financial statements for the operating results of the Company's reportable segments.

(16) Reportable Segments

Management evaluated how the Company is organized and managed and identified the following segments: (i) the exploration, development, and production of natural gas, NGLs, and oil; (ii) marketing and utilization of excess firm transportation capacity and (iii) midstream services through the Company's equity method investment in Antero Midstream Corporation. All of the Company's assets are located in the United States and substantially all of its production revenues are attributable to customers located

ANTERO RESOURCES CORPORATION

Notes to Unaudited Condensed Consolidated Financial Statements

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.

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—Summary of Significant Accounting Policies to the unaudited condensed consolidated financial statements.

The operating results and assets of the Company's reportable segments were as follows for the three months ended September 30, 2020 and 2021 (in thousands):

	Three Months Ended September 30, 2020				
	Exploration and Production	Marketing	Equity Method Investment in Antero Midstream Corporation	Elimination of Intersegment Transactions and Unconsolidated Affiliates	Consolidated Total
Sales and revenues:					
Third-party	$ 288,419	91,497	—	—	379,916
Intersegment	675	—	233,415	(233,415)	675
Total revenue	$ 289,094	91,497	233,415	(233,415)	380,591
Operating expenses:					
Lease operating	$ 21,450	—	—	—	21,450
Gathering, compression, processing, and transportation	656,615	—	38,052	(38,052)	656,615
Impairment of oil and gas properties	29,392	—	—	—	29,392
Depletion, depreciation, and amortization	238,418	—	26,801	(26,801)	238,418
General and administrative	31,640	—	13,232	(13,232)	31,640
Other	28,605	128,580	3,513	(3,513)	157,185
Total operating expenses	1,006,120	128,580	81,598	(81,598)	1,134,700
Operating income (loss)	$ (717,026)	(37,083)	151,817	(151,817)	(754,109)
Equity in earnings of unconsolidated affiliates	$ 24,419	—	23,173	(23,173)	24,419
Investments in unconsolidated affiliates	$ 272,926	—	—	—	272,926
Segment assets	$ 13,349,739	—	5,673,504	(5,673,504)	13,349,739
Capital expenditures for segment assets	$ 151,269	—	41,851	(41,851)	151,269

ANTERO RESOURCES CORPORATION

Notes to Unaudited Condensed Consolidated Financial Statements

	Three Months Ended September 30, 2021				
	Exploration and Production	Marketing	Equity Method Investment in Antero Midstream Corporation	Elimination of Intersegment Transactions and Unconsolidated Affiliates	Consolidated Total
Sales and revenues:					
Third-party	$ 301,207	232,685	242,472	(242,472)	533,892
Intersegment	530	—	(17,668)	17,668	530
Total revenue	$ 301,737	232,685	224,804	(224,804)	534,422
Operating expenses:					
Lease operating	$ 25,363	—	—	—	25,363
Gathering, compression, processing, and transportation	628,225	—	39,499	(39,499)	628,225
Impairment of oil and gas properties	26,253	—	—	—	26,253
Depletion, depreciation, and amortization	182,810	—	27,487	(27,487)	182,810
General and administrative	32,442	—	14,810	(14,810)	32,442
Other	56,652	266,751	1,187	(1,187)	323,403
Total operating expenses	951,745	266,751	82,983	(82,983)	1,218,496
Operating income (loss)	$ (650,008)	(34,066)	141,821	(141,821)	(684,074)
Equity in earnings of unconsolidated affiliates	$ 21,450	—	24,088	(24,088)	21,450
Investments in unconsolidated affiliates	$ 236,597	—	703,780	(703,780)	236,597
Segment assets	$ 13,375,515	96,023	5,533,633	(5,533,633)	13,471,538
Capital expenditures for segment assets	$ 387,783	—	82,583	(82,583)	387,783

The operating results and assets of the Company's reportable segments were as follows for the nine months ended September 30, 2020 and 2021 (in thousands):

	Nine Months Ended September 30, 2020				
	Exploration and Production	Marketing	Equity Method Investment in Antero Midstream Corporation	Elimination of Intersegment Transactions and Unconsolidated Affiliates	Consolidated Total
Sales and revenues:					
Third-party	$ 1,978,572	201,855	—	—	2,180,427
Intersegment	2,180	—	696,859	(696,859)	2,180
Total revenue	$ 1,980,752	201,855	696,859	(696,859)	2,182,607
Operating expenses:					
Lease operating	$ 71,836	—	—	—	71,836
Gathering, compression, processing, and transportation	1,877,084	—	128,847	(128,847)	1,877,084
Impairment of oil and gas properties	155,962	—	—	—	155,962
Impairment of midstream assets	—	—	665,491	(665,491)	—
Depletion, depreciation, and amortization	652,130	—	81,889	(81,889)	652,130
General and administrative	101,264	—	39,191	(39,191)	101,264
Other	88,023	334,906	14,062	(14,062)	422,929
Total operating expenses	2,946,299	334,906	929,480	(929,480)	3,281,205
Operating loss	$ (965,547)	(133,051)	(232,621)	232,621	(1,098,598)
Equity in earnings (loss) of unconsolidated affiliates	$ (83,408)	—	63,197	(63,197)	(83,408)
Investments in unconsolidated affiliates	$ 272,926	—	—	—	272,926
Segment assets	$ 13,349,739	—	5,673,504	(5,673,504)	13,349,739
Capital expenditures for segment assets	$ 726,402	—	165,265	(165,265)	726,402

ANTERO RESOURCES CORPORATION

Notes to Unaudited Condensed Consolidated Financial Statements

	Nine Months Ended September 30, 2021				
	Exploration and Production	Marketing	Equity Method Investment in Antero Midstream Corporation	Elimination of Intersegment Transactions and Unconsolidated Affiliates	Consolidated Total
Sales and revenues:					
Third-party	$ 1,664,509	562,928	—	—	2,227,437
Intersegment	551	—	681,712	(681,712)	551
Total revenue	$ 1,665,060	562,928	681,712	(681,712)	2,227,988
Operating expenses:					
Lease operating	$ 71,555	—	—	—	71,555
Gathering, compression, processing, and transportation	1,874,664	—	118,368	(118,368)	1,874,664
Impairment of oil and gas properties	69,618	—	—	—	69,618
Depletion, depreciation, and amortization	564,166	—	80,956	(80,956)	564,166
General and administrative	108,693	—	46,991	(46,991)	108,693
Other	143,954	627,822	8,590	(8,590)	771,776
Total operating expenses	2,832,650	627,822	254,905	(254,905)	3,460,472
Operating income (loss)	$ (1,167,590)	(64,894)	426,807	(426,807)	(1,232,484)
Equity in earnings of unconsolidated affiliates	$ 57,621	—	66,347	(66,347)	57,621
Investments in unconsolidated affiliates	$ 236,597	—	703,780	(703,780)	236,597
Segment assets	$ 13,375,515	96,023	5,533,633	(5,533,633)	13,471,538
Capital expenditures for segment assets	$ 510,941	—	156,948	(156,948)	510,941

(17) Subsidiary Guarantors

Antero Resources' senior notes are fully and unconditionally guaranteed by Antero Resources' existing subsidiaries that guarantee the Credit Facility. 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 tables present summarized financial information of Antero and its guarantor subsidiaries (in thousands). 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

Balance Sheet

	December 31, 2020	September 30, 2021
	Parent (Antero) and Guarantor Subsidiaries	Parent (Antero) and Guarantor Subsidiaries
Accounts receivable, non-guarantor subsidiaries	$ —	—
Accounts receivable, related parties	—	—
Other current assets	543,841	665,111
Total current assets	543,841	665,111
Noncurrent assets	11,783,502	12,016,722
Total assets	$ 12,327,343	12,681,833
Accounts payable, non-guarantor subsidiaries	$ —	—
Accounts payable, related parties	69,860	79,595
Other current liabilities	906,348	2,674,603
Total current liabilities	976,208	2,754,198
Noncurrent liabilities	6,070,388	5,499,255
Total liabilities	$ 7,046,596	8,253,453

Statement of Operations

	Nine Months Ended September 30, 2021
	Parent (Antero) and Guarantor Subsidiaries
Revenues	$ 2,220,306
Operating expenses	3,428,943
Loss from operations	(1,208,637)
Net loss and comprehensive loss including noncontrolling interests	(1,088,283)
Net loss and comprehensive loss attributable to Antero Resources Corporation	$ (1,088,283)

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 development, production, exploration and acquisition 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 September 30, 2021, we held approximately 508,000 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.

2021 Developments and Highlights

COVID-19 Pandemic

In March 2020, the World Health Organization declared the COVID-19 outbreak a pandemic. Governments tried to slow the spread of the virus by imposing social distancing guidelines, travel restrictions and stay-at-home orders, among other actions, which caused a significant decrease in activity in the global economy and the demand for oil and, to a lesser extent, natural gas and NGLs. The imbalance between the supply of and demand for oil, as well as the uncertainty around the extent and timing of an economic recovery, caused extreme market volatility and a substantial adverse effect on commodity prices in 2020. As vaccines have become widely available, social distancing guidelines, travel restrictions and stay-at-home orders have eased, activity in the global economy has increased and demand for oil, natural gas and NGLs, and related commodity pricing, has improved. However, new variants of the virus could cause further commodity market volatility and resulting financial market instability, and these are variables beyond our control that may adversely impact our generation of funds from operating cash flows, distributions from unconsolidated affiliate, available borrowings under our Credit Facility (defined below in "—Capital Resources and Liquidity—Debt Agreements—Senior Secured Revolving Credit Facility") and our ability to access the capital markets.

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. As such, we have continued to operate throughout the pandemic as permitted under these regulations while taking steps to protect the health and safety of our employees and contract 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 operated in remote work from home arrangements through September 30, 2021, and due to the rise of COVID-19 cases as a result of new variants of the virus, our plans to return to in-

office arrangements during the third quarter of 2021 have been deferred in order to protect the health and safety of our employees and contract workers. 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.

Our natural gas, NGLs and oil producing properties are located in the liquids-rich Appalachian Basin. We have hedged through fixed price contracts the sale of 2.2 Bcf per day of natural gas at a weighted average price of $2.78 per MMBtu for the remainder of 2021. Our hedges cover a substantial majority of our expected natural gas production for the remainder of 2021. We also have fixed priced contracts for the sale of 3,000 barrels per day of oil at a weighted average price of $55.16 per barrel for the remainder of 2021. All of our hedges are financial hedges and do not have physical delivery requirements. As such, any decreases in anticipated production, such as a result of decreased development activity, will not impact our ability to realize the benefits of our hedges.

Our supply chain has not experienced any significant interruptions. The lack of a market or available storage for any one NGL product or oil could result in our having to delay or discontinue well completions and commercial production or shut in production for other products because we cannot curtail the production of individual products in a meaningful way without reducing 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 shut-ins or for how long they may last. However, because some of our wells produce rich gas, which is processed, and some produce dry gas, which does not require processing, we can 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. For example, we can 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. 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. As a result of the pandemic, we have expanded our customer base and our condensate storage capacity within the Appalachian Basin.

As of September 30, 2021, we had $98 million of borrowings under our Prior Credit Facility (defined below in "—Capital Resources and Liquidity—Debt Agreements—Senior Secured Revolving Credit Facility") and had outstanding letters of credit of $742 million. On October 26, 2021, we amended our Prior Credit Facility with a borrowing base of $3.5 billion and lender commitments of $1.5 billion. See Note 7—Long-Term Debt to the unaudited condensed consolidated financial statements and "—Capital Resources and Liquidity—Debt Agreements—Senior Secured Revolving Credit Facility."

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. The amount of financial assurance we provided has not increased during the COVID-19 pandemic and, thus far, we have not experienced any losses due to counterparty risk. However, our ability to limit any additional financial assurance we are required to provide, as well as to protect ourselves from the counterparty risk of our financial hedges, may be limited in the future. Since the onset of the COVID-19 pandemic, we have timely serviced our debt and other obligations, and we have not materially modified the terms of any agreements.

Financing and Asset Sales Program Highlights

Credit Facility

On October 26, 2021, we entered into an amended and restated senior secured revolving credit facility with a borrowing base of $3.5 billion and lender commitments of $1.5 billion. and matures on the earlier of (i) October 26, 2026 and (ii) the day that is 180 days prior to the earliest stated redemption date of any series of our senior notes. Lender commitments were reduced by $1.1 billion from the previous commitments of $2.64 billion to better align with our expected future liquidity needs. See Note 7—Long-Term Debt to the unaudited condensed consolidated financial statements and "—Capital Resources and Liquidity—Debt Agreements—Senior Secured Revolving Credit Facility" for more information.

Issuance of Senior Notes

On January 4, 2021, we issued $500 million of our 8.375% senior notes due July 15, 2026 (the "2026 Notes") at par. On January 26, 2021, we issued $700 million of 7.625% senior notes due February 1, 2029 (the "2029 Notes") at par. On June 1, 2021, we issued $600 million of 5.375% senior notes due March 1, 2030 (the "2030 Notes"). The 2026 Notes, 2029 Notes and 2030 Notes are unsecured and effectively subordinated to the Credit Facility to the extent of the value of the collateral securing the Credit Facility. The 2026 Notes, 2029 Notes and 2030 Notes rank pari passu to our other outstanding senior notes. The 2026 Notes, 2029 Notes and 2030 Notes are guaranteed on a full and unconditional and joint and several senior unsecured basis by our existing subsidiaries that guarantee the Credit Facility and certain of our future restricted subsidiaries. See Note 7—Long-Term Debt to the unaudited condensed consolidated financial statements for more information.

Redemption of Senior Notes

We fully redeemed all of our outstanding 5.125% senior notes due December 1, 2022 (the "2022 Notes") at par, plus accrued and unpaid interest in the first quarter of 2021. During the second quarter of 2021, we fully redeemed all of our outstanding 5.625% senior notes due June 1, 2023 (the "2023 Notes") at par, plus accrued and unpaid interest.

On July 1, 2021, we redeemed $175 million of the principal amount of our 2026 Notes at a redemption price of 108.375% of the principal amount thereof, plus accrued and unpaid interest. Immediately following the redemption, there were $325 million aggregate principal amount of 2026 Notes outstanding. See Note 7—Long-Term Debt to the unaudited condensed consolidated financial statements for more information.

On October 18, 2021, we issued a notice of partial redemption with respect to the 2029 Notes. On November 2, 2021, we will redeem $116 million aggregate principal amount of outstanding 2029 Notes at a redemption price of 107.625% of the principal amount thereof, plus accrued and unpaid interest. Immediately following the redemption, there will be $584 million aggregate principal amount of 2029 Notes outstanding. The $9 million premium to the principal amount to be redeemed along with the write off of a proportional amount of unamortized debt issuance costs will be included in our loss on early debt extinguishment during the fourth quarter of 2021.

Convertible Notes Equitizations

On January 12, 2021, we completed a registered direct offering (the "January Share Offering") of an aggregate of 31.4 million shares of our common stock at a price of $6.35 per share to certain holders of our 4.25% convertible senior notes due 2026 (the "2026 Convertible Notes"). We used the proceeds from the January Share Offering and approximately $63 million of borrowings under the Prior Credit Facility to repurchase from such holders $150 million aggregate principal amount of the 2026 Convertible Notes in privately negotiated transactions (the "January Convertible Note Repurchase," and, collectively with the January Share Offering, the "January Equitization Transactions").

On May 13, 2021, we completed a registered direct offering (the "May Share Offering") of an aggregate of 11.6 million shares of our common stock at a price of $11.01 per share to certain holders of our 2026 Convertible Notes. We used the proceeds from the May Share Offering and approximately $26 million of borrowings under the Prior Credit Facility to repurchase from such holders $56 million aggregate principal amount of the 2026 Convertible Notes in privately negotiated transactions (the "May Convertible Note Repurchase," and, collectively with the May Share Offering, the "May Equitization Transactions"). See Note 7—Long-Term Debt to the unaudited condensed consolidated financial statements for more information.

Drilling Partnership

On February 17, 2021, we announced the formation of a drilling partnership with QL Capital Partners ("QL"), an affiliate of Quantum Energy Partners, for our 2021 through 2024 drilling program. Under the terms of the arrangement, each year in which QL participates represents an annual tranche, and QL will be conveyed a working interest in any wells spud by us during such tranche year. For 2021, together with QL, we agreed to a capital budget for such annual tranche, and for each subsequent year through 2024, we will propose a capital budget and estimated internal rate of return ("IRR") for all wells to be spud during such year and, subject to the mutual agreement of the parties that the estimated IRR for the year exceeds a specified return, QL will be obligated to participate in such tranche. We develop and manage the drilling program associated with each tranche, including the selection of wells. Additionally, for each annual tranche in which QL participates, together with QL, we will enter into an assignment, bill of sale and conveyance pursuant to which QL will be conveyed a proportionate working interest percentage in each well spud in that year, which conveyance will not be subject to any reversion.

Under the terms of the arrangement, QL will fund 20% of development capital for wells spud in 2021 and is expected to fund between 15% and 20% of development capital for wells spud from 2022 through 2024, which funding amounts represent QL's proportionate working interest in such wells. Additionally, we may receive a carry in the form of a one-time payment from QL for each annual tranche if the IRR for such tranche exceeds certain specified returns, which will be determined no earlier than December 31 following the end of each tranche year. Capital costs in excess of, and cost savings below, a specified percentage of budgeted amounts for each annual tranche will be for our account. Subject to the preceding sentence, for any wells included in a tranche, QL is obligated and responsible for its working interest share of costs and liabilities, and is entitled to its working interest share of revenues, associated with such wells for the life of such wells. If we present a capital budget for an annual tranche with an estimated IRR equal to or exceeding a specified return that QL in good faith believes is less than such specified return and QL elects not to participate, we will not be obligated to offer QL the opportunity to participate in subsequent annual tranches. See Note 3—Transactions to the unaudited condensed consolidated financial statements for more information.

Overriding Royalty Interest Additional Contributions

On June 15, 2020, we announced the consummation of a transaction with an affiliate of Sixth Street Partners, LLC ("Sixth Street") relating to certain overriding royalty interests across our existing asset base (the "ORRIs"). In connection with the transaction, we contributed the ORRIs to a newly formed subsidiary, Martica Holdings LLC ("Martica"). At the initial closing, Sixth Street contributed $300 million in cash (subject to customary adjustments) and agreed to contribute up to an additional $102 million in cash if certain production thresholds attributable to the ORRIs were achieved in the third quarter of 2020 and first quarter of 2021. All cash contributed by Sixth Street was distributed to us. We met the applicable production thresholds related to the third quarter of 2020 and first quarter of 2021 as of September 31, 2020 and March 31, 2021, respectively. We received a $51 million cash distribution during each of the fourth quarter of 2020 and the second quarter of 2021. See Note 3—Transactions to the unaudited condensed consolidated financial statements for more information.

Hedge Position (Excluding Martica)

We are exposed to certain risks relating to our ongoing business operations, and we use derivative instruments to manage our commodity price risk. In addition, we periodically enter into contracts that contain embedded features that are required to be bifurcated and accounted for separately as derivatives. The table below excludes derivative instruments attributable to Martica, our consolidated variable interest entity ("VIE"), since all gains or losses from such contracts are fully attributable to the noncontrolling interests in Martica. As of September 30, 2021, our fixed price natural gas, oil and NGL swap positions excluding Martica, our consolidated VIE, were as follows:

Commodity / Settlement Period	Index	Contracted Volume	Weighted Average Price
Natural Gas			
October-December 2021	Henry Hub	199 Bcf	$ 2.78 /MMBtu
January-December 2022	Henry Hub	422 Bcf	2.50 /MMBtu
January-December 2023	Henry Hub	16 Bcf	2.37 /MMBtu
		637 Bcf	2.58 /MMBtu
Butane			
October-December 2021	Mont Belvieu Butane-OPIS Non-TET	239 MBbl	$ 33.77 /Bbl
October-December 2021	Mont Belvieu Butane-OPIS TET	138 MBbl	$ 32.24 /Bbl
Natural Gasoline			
October-December 2021	Mont Belvieu Natural Gasoline-OPIS Non-TET	764 MBbl	$ 49.70 /Bbl
Isobutane			
October-December 2021	Mont Belvieu Isobutane-OPIS Non-TET	258 MBbl	$ 35.75 /Bbl
Oil			
October-December 2021	West Texas Intermediate	276 MBbl	$ 55.16 /Bbl

In addition, we have a call option agreement, which entitles the holder, if exercised, to enter into a fixed price swap agreement for approximately 156 Bcf at a price of $2.77 per MMBtu in 2024.

As of September 30, 2021, our 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 were as follows:

Commodity / Settlement Period	Index to Basis Differential	Contracted Volume	Weighted Average Hedged Differential
Natural Gas			
October-December 2021	NYMEX to TCO	4 Bcf	$ 0.414 /MMBtu
January-December 2022	NYMEX to TCO	22 Bcf	0.515 /MMBtu
January-December 2023	NYMEX to TCO	18 Bcf	0.525 /MMBtu
January-December 2024	NYMEX to TCO	18 Bcf	0.530 /MMBtu
		62 Bcf	0.516 /MMBtu

As of September 30, 2021, we had natural gas and NGL contracts that fix the Mont Belvieu index price for natural gasoline to percentages of WTI as follows:

Commodity / Settlement Period	Index to Basis Differential	Contracted Volume	Weighted Average Payout Ratio
Gas Liquids			
October-December 2021	Mont Belvieu Natural Gasoline to WTI	858 MBbl	77 %

As of September 30, 2021, we also had an embedded put option tied to NYMEX pricing for the production volumes associated with our retained interest in the VPP (as defined below) properties of 95 Bcf remaining through December 31, 2026 at a weighted average strike price of $2.57 per MMBtu.

We believe our hedge position provides some certainty to cash flows supporting our future operations and capital spending plans. As of September 30, 2021, the estimated fair value of our commodity derivative contracts was a net liability of approximately $1.7 billion. See Note 11—Derivative Instruments to the unaudited condensed consolidated financial statements for more information.

Results of Operations

We have three operating segments: (i) the exploration, development and production of natural gas, NGLs, and oil; (ii) marketing and utilization of excess firm transportation capacity; and (iii) midstream services through our 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 LP ("Antero Midstream Partners"), which we capitalized as proved property development costs. 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. See Note 16—Reportable Segments to the unaudited condensed consolidated financial statements.

Three Months Ended September 30, 2020 Compared to Three Months Ended September 30, 2021

The operating results of our reportable segments were as follows for the three months ended September 30, 2020 and 2021 (in thousands):

	Three Months Ended September 30, 2020				
	Exploration and Production	Marketing	Equity Method Investment in Antero Midstream Corporation	Elimination of Intersegment Transactions and Unconsolidated Affiliates	Consolidated Total
Revenue and other:					
Natural gas sales	$ 436,304	—	—	—	436,304
Natural gas liquids sales	327,426	—	—	—	327,426
Oil sales	34,265	—	—	—	34,265
Commodity derivative fair value losses	(514,751)	—	—	—	(514,751)
Gathering, compression, water handling and treatment	—	—	251,215	(251,215)	—
Marketing	—	91,497	—	—	91,497
Amortization of deferred revenue, VPP	5,175	—	—	—	5,175
Other income (loss)	675	—	(17,800)	17,800	675
Total revenue	$ 289,094	91,497	233,415	(233,415)	380,591
Operating expenses:					
Lease operating	$ 21,450	—	—	—	21,450
Gathering and compression	221,004	—	38,052	(38,052)	221,004
Processing	244,888	—	—	—	244,888
Transportation	190,723	—	—	—	190,723
Production and ad valorem taxes	25,790	—	—	—	25,790
Marketing	—	128,580	—	—	128,580
Exploration	454	—	—	—	454
Impairment of oil and gas properties	29,392	—	—	—	29,392
Depletion, depreciation, and amortization	238,418	—	26,801	(26,801)	238,418
Accretion of asset retirement obligations	1,115	—	39	(39)	1,115
General and administrative (excluding equity-based compensation)	25,941	—	9,554	(9,554)	25,941
Equity-based compensation	5,699	—	3,678	(3,678)	5,699
Contract termination and rig stacking and other expenses	1,246	—	3,474	(3,474)	1,246
Total operating expenses	1,006,120	128,580	81,598	(81,598)	1,134,700
Operating income (loss)	$ (717,026)	(37,083)	151,817	(151,817)	(754,109)
Equity in earnings of unconsolidated affiliates	$ 24,419	—	23,173	(23,173)	24,419

	Three Months Ended September 30, 2021				
	Exploration and Production	Marketing	Equity Method Investment in Antero Midstream Corporation	Elimination of Intersegment Transactions and Unconsolidated Affiliates	Consolidated Total
Revenue and other:					
Natural gas sales	$ 884,669	—	—	—	884,669
Natural gas liquids sales	598,327	—	—	—	598,327
Oil sales	56,734	—	—	—	56,734
Commodity derivative fair value losses	(1,250,466)	—	—	—	(1,250,466)
Gathering, compression, water handling and treatment	—	—	242,472	(242,472)	—
Marketing	—	232,685	—	—	232,685
Amortization of deferred revenue, VPP	11,404	—	—	—	11,404
Gain on sale of assets	539	—	—	—	539
Other income (loss)	530	—	(17,668)	17,668	530
Total revenue	$ 301,737	232,685	224,804	(224,804)	534,422
Operating expenses:					
Lease operating	$ 25,363	—	—	—	25,363
Gathering and compression	218,815	—	39,499	(39,499)	218,815
Processing	207,093	—	—	—	207,093
Transportation	202,317	—	—	—	202,317
Production and ad valorem taxes	52,219	—	—	—	52,219
Marketing	—	266,751	—	—	266,751
Exploration	235	—	—	—	235
Impairment of oil and gas properties	26,253	—	—	—	26,253
Depletion, depreciation, and amortization	182,810	—	27,487	(27,487)	182,810
Accretion of asset retirement obligations	828	—	114	(114)	828
General and administrative (excluding equity-based compensation)	27,144	—	11,555	(11,555)	27,144
Equity-based compensation	5,298	—	3,255	(3,255)	5,298
Contract termination and rig stacking and other expenses	3,370	—	1,073	(1,073)	3,370
Total operating expenses	951,745	266,751	82,983	(82,983)	1,218,496
Operating income (loss)	$ (650,008)	(34,066)	141,821	(141,821)	(684,074)
Equity in earnings of unconsolidated affiliates	$ 21,450	—	24,088	(24,088)	21,450

Exploration and Production Segment

The following table sets forth selected operating data of the exploration and production segment for the three months ended September 30, 2020 compared to the three months ended September 30, 2021:

	Three Months Ended September 30,		Amount of Increase (Decrease)	Percent Change
	2020	2021		
Production data [1]:				
Natural gas (Bcf)	226	205	(21)	(9)%
C2 Ethane (MBbl)	5,459	4,372	(1,087)	(20)%
C3+ NGLs (MBbl)	13,400	10,258	(3,142)	(23)%
Oil (MBbl)	1,367	932	(435)	(32)%
Combined (Bcfe)	347	299	(48)	(14)%
Daily combined production (MMcfe/d)	3,772	3,247	(525)	(14)%
Average prices before effects of derivative settlements [2]:				
Natural gas (per Mcf)	$ 1.93	4.31	2.38	123 %
C2 Ethane (per Bbl)	$ 5.94	13.25	7.31	123 %
C3+ NGLs (per Bbl)	$ 22.01	52.68	30.67	139 %
Oil (per Bbl)	$ 25.07	60.87	35.80	143 %
Weighted Average Combined (per Mcfe)	$ 2.30	5.15	2.85	124 %
Average realized prices after effects of derivative settlements [2]:				
Natural gas (per Mcf)	$ 2.73	3.00	0.27	10 %
C2 Ethane (per Bbl)	$ 5.67	13.25	7.58	134 %
C3+ NGLs (per Bbl)	$ 23.81	38.67	14.86	62 %
Oil (per Bbl)	$ 34.96	56.31	21.35	61 %
Weighted Average Combined (per Mcfe)	$ 2.92	3.79	0.87	30 %
Average costs (per Mcfe):				
Lease operating	$ 0.06	0.08	0.02	33 %
Gathering and compression	$ 0.64	0.73	0.09	14 %
Processing	$ 0.71	0.69	(0.02)	(3)%
Transportation	$ 0.55	0.68	0.13	24 %
Production taxes	$ 0.07	0.17	0.10	143 %
Marketing, net	$ 0.11	0.11	—	— %
Depletion, depreciation, amortization and accretion	$ 0.69	0.61	(0.08)	(12)%
General and administrative (excluding equity-based compensation)	$ 0.07	0.09	0.02	29 %

(1) Production data excludes volumes related to the volumetric production payment transaction (the "VPP"). See Note 3— Transactions to the unaudited condensed consolidated financial statements for more information.

(2) 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 sales of natural gas increased from $436 million for the three months ended September 30, 2020 to $885 million for the three months ended September 30, 2021, an increase of $449 million, or 103%. Lower natural gas production volumes during the three months ended September 30, 2021 accounted for an approximate $39 million decrease in year-over-year natural gas sales revenue (calculated as the change in year-to-year volumes times the prior year average price), and increases in commodity prices (excluding the effects of derivative settlements) accounted for an approximate $488 million increase in year-over-year gas sales revenue (calculated as the change in the year-to-year average price excluding the net proceeds from the litigation times current year production volumes).

NGLs sales. Revenues from sales of NGLs increased from $327 million for the three months ended September 30, 2020 to $598 million for the three months ended September 30, 2021, an increase of $271 million, or 83% (calculated as the change in year-over-year volumes times the change in year-to-year average price). Lower NGLs production volumes accounted for an approximate $76 million decrease in year-over-year NGL revenues (calculated as the change in year-to-year volumes times the prior year average price), and increases in commodity prices, excluding the effects of derivative settlements, accounted for an approximate $347 million

increase 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 sales of oil increased from $34 million for the three months ended September 30, 2020 to $57 million for the three months ended September 30, 2021, an increase of $23 million, or 66% (calculated as the change in year-over-year volumes times the change in year-to-year average price). Lower oil production volumes accounted for an approximate $11 million decrease in year-over-year oil revenues (calculated as the change in year-to-year volumes times the prior year average price), and increases in commodity prices, excluding the effects of derivative settlements, accounted for an approximate $34 million increase 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 September 30, 2020 and 2021, our commodity hedges resulted in derivative fair value losses of $515 million and $1.3 billion, respectively. For the three months ended September 30, 2020, commodity derivative fair value losses included $234 million of cash proceeds for gains on settled derivatives. For the three months ended September 30, 2021, commodity derivative fair value losses included $416 million of cash payments on commodity settled derivatives losses.

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.

Amortization of deferred revenue, VPP. Amortization of deferred revenues associated with the VPP increased from $5 million for the three months ended September 30, 2020 to $11 million for the three months ended September 30, 2021 as a result of the VPP closing in August 2020. Under the terms of the agreement, the production volumes are delivered at approximately $1.61 per MMBtu over the contractual term. See Note 3—Transactions to the unaudited condensed consolidated financial statements for more information on this transaction.

Lease operating expense. Lease operating expense increased from $21 million for the three months ended September 30, 2020 to $25 million for the three months ended September 30, 2021, an increase of $4 million or 18%. On a per unit basis, lease operating expenses increased from $0.06 per Mcfe for the three months ended September 30, 2020 to $0.08 per Mcfe for the three months ended September 30, 2021 primarily due to decreased production and higher fixed costs partially offset by lower water disposal costs.

Gathering, compression, processing, and transportation expense. Gathering, compression, processing, and transportation expense decreased from $657 million for the three months ended September 30, 2020 to $628 million for the three months ended September 30, 2021, a decrease of $29 million or 4%. This decrease is primarily a result of lower production and decreased processing costs, partially offset by higher gathering and compression and transportation costs between periods. Gathering and compression costs increased from $0.64 per Mcfe for the three months ended September 30, 2020 to $0.73 per Mcfe for the three months ended September 30, 2021, primarily due to higher fuel costs as a result of increased natural gas prices and $12 million in incentive fee rebates from Antero Midstream Corporation received during the three months ended September 30, 2020 that were not received during the three months ended September 30, 2021. Processing costs decreased from $0.71 per Mcfe for the three months ended September 30, 2020 to $0.69 per Mcfe for the three months ended September 30, 2021, due to a decrease in C3+ NGL volumes as compared to total production volumes between periods, partially offset by increased NGL pipeline and terminaling fees from higher NGL volumes taken in-kind between periods. Transportation costs increased from $0.55 per Mcfe for the three months ended September 30, 2020 to $0.68 per Mcfe for the three months ended September 30, 2021 primarily due to increased utilization on higher tariff pipelines to the Midwest and Gulf Coast between periods.

Production and ad valorem tax expense. Production and ad valorem taxes increased from $26 million for the three months ended September 30, 2020 to $52 million for the three months ended September 30, 2021, an increase of $26 million, or 100% primarily due to higher commodity prices between periods. Production and ad valorem taxes as a percentage of natural gas revenues remained consistent at 6% in each of the three months ended September 30, 2020 and 2021.

Impairment of oil and gas properties. Impairment of oil and gas properties decreased from $29 million for the three months ended September 30, 2020 to $26 million for the three months ended September 30, 2021, a decrease of $3 million, or 11%, primarily related to lower impairments of expiring leases between periods. During both periods, we recognized impairments primarily related to expiring leases and initial costs related to pads we no longer plan to place into service.

Depletion, depreciation, and amortization expense. Depletion, depreciation and amortization ("DD&A") expense decreased from $238 million for the three months ended September 30, 2020 to $183 million for the three months ended September 30, 2021, a decrease of $55 million, or 23%, primarily as a result of increased proved reserve volumes due to higher commodity prices as well as lower production volumes between periods. DD&A expense decreased from $0.69 per Mcfe for the three months ended September 30, 2020 to $0.61 per Mcfe for the three months ended September 30, 2021, primarily as a result of increased proved reserve volumes between periods.

General and administrative expense. General and administrative expense (excluding equity-based compensation expense) increased from $26 million for the three months ended September 30, 2020 to $27 million for the three months ended September 30, 2021, an increase of $1 million, or 5%. The increase was primarily due to higher salary and wage expense between periods, which includes our annual incentive program that was significantly reduced during 2020, partially offset by lower employee headcount during 2021. We had 520 and 506 employees as of September 30, 2020 and 2021, respectively. On a per-unit basis, general and administrative expense excluding equity-based compensation increased from $0.07 per Mcfe for the three months ended September 30, 2020 to $0.09 per Mcfe for the three months ended September 30, 2021 primarily due to lower production between periods.

Equity-based compensation expense. Noncash equity-based compensation expense decreased from $6 million for the three months ended September 30, 2020 to $5 million for the three months ended September 30, 2021, primarily due to equity award forfeitures, partially offset by new awards granted to employees. When an equity award is forfeited, expense previously recognized for the award is reversed. See Note 9—Equity Based Compensation and Cash Awards to the unaudited condensed consolidated financial statements for more information on equity-based compensation awards.

Marketing Segment

Marketing. Where feasible, we purchase and sell third-party natural gas and NGLs and market our excess firm transportation capacity, or engage third parties to conduct these activities on our behalf, to optimize the revenues and mitigate costs from these transportation agreements. We have entered into long-term firm transportation agreements for a significant portion of our current and expected future production to secure guaranteed capacity to favorable markets.

Net marketing expenses decreased from $37 million, or $0.11 per Mcfe, for the three months ended September 30, 2020 to $34 million, or $0.11 per Mcfe, for the three months ended September 30, 2021. The decrease in net marketing expense was driven by higher marketing volumes and margins that mitigated some of our excess firm transportation expense.

Marketing revenues increased from $91 million for the three months ended September 30, 2020 to $233 million for the three months ended September 30, 2021, an increase of $142 million due to increased marketing volumes.

Marketing expenses increased from $129 million for the three months ended September 30, 2020 to $267 million for the three months ended September 30, 2021, an increase of $138 million, or 107%. 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 $32 million and $28 million for the three months ended September 30, 2020 and 2021, respectively.

Equity Method Investment in Antero Midstream Corporation

Antero Midstream Corporation. Revenue from the Antero Midstream Corporation segment decreased from $233 million for the three months ended September 30, 2020 to $225 million for the three months ended September 30, 2021, a decrease of $8 million, or 4%, primarily due to lower water handling revenue due to decreased well completions period-over-period and lower gathering and compression revenues as a result of reduced throughput between periods. Total operating expenses related to the segment remained relatively consistent between periods at $82 million and $83 million for the three months ended September 30, 2020 and 2021, respectively.

Items Not Allocated to Segments

Interest expense. Our interest expense decreased from $48 million for the three months ended September 30, 2020 to $45 million for the three months ended September 30, 2021, a decrease of $3 million or 5%, primarily due to the reduction in debt as a result of the repurchase of certain our unsecured senior notes, paydown of our Prior Credit Facility and increased interest income between periods, partially offset by interest that accrued on the 2026 Notes, 2029 Notes and 2030 Notes, each of which was issued after September 30, 2020.

Gain (loss) on early extinguishment of debt. During the three months ended September 30, 2020, we recognized a gain on early extinguishment of debt of $56 million related to $1.1 billion principal amount of debt that we repurchased at a weighted average discount of 13%. During the three months ended September 30, 2021, we redeemed $175 million of our 2026 Notes at a redemption price of 108.375% of par, plus accrued and unpaid interest, which resulted in a loss on early debt extinguishment of $17 million. See Note 7—Long-Term Debt to the unaudited condensed consolidated financial statements for more information.

Transaction expense. Transaction expense remained consistent between periods at less than $1 million for both the three months ended September 31, 2020 and 2021.

Income tax benefit. Income tax benefit decreased from $169 million, with an effective tax rate of 23%, for the three months ended September 30, 2020 to $159 million, with an effective tax rate of 22%, for the three months ended September 30, 2021, a decrease of $10 million. The decrease was primarily due to unfavorable adjustments related to the West Virginia law change effecting apportionment and sourcing methodologies resulting in lower income tax benefit for the period ending September 30, 2021.

Nine Months Ended September 30, 2020 Compared to Nine Months Ended September 30, 2021

The operating results of our reportable segments were as follows for the nine months ended September 30, 2020 and 2021 (in thousands):

	Nine Months Ended September 30, 2020				
	Exploration and Production	**Marketing**	**Equity Method Investment in Antero Midstream Corporation**	**Elimination of Intersegment Transactions and Unconsolidated Affiliates**	**Consolidated Total**
Revenue and other:					
Natural gas sales	$ 1,214,801	—	—	—	1,214,801
Natural gas liquids sales	797,296	—	—	—	797,296
Oil sales	78,233	—	—	—	78,233
Commodity derivative fair value losses	(116,933)	—	—	—	(116,933)
Gathering, compression, water handling and treatment	—	—	749,870	(749,870)	—
Marketing	—	201,855	—	—	201,855
Amortization of deferred revenue, VPP	5,175	—	—	—	5,175
Other income (loss)	2,180	—	(53,011)	53,011	2,180
Total revenue	$ 1,980,752	201,855	696,859	(696,859)	2,182,607
Operating expenses:					
Lease operating	71,836	—	—	—	71,836
Gathering and compression	616,785	—	128,847	(128,847)	616,785
Processing	697,716	—	—	—	697,716
Transportation	562,583	—	—	—	562,583
Production and ad valorem taxes	71,481	—	—	—	71,481
Marketing	—	334,906	—	—	334,906
Exploration	895	—	—	—	895
Impairment of oil and gas properties	155,962	—	—	—	155,962
Impairment of midstream assets	—	—	665,491	(665,491)	—
Depletion, depreciation, and amortization	652,130	—	81,889	(81,889)	652,130
Accretion of asset retirement obligations	3,330	—	142	(142)	3,330
General and administrative (excluding equity-based compensation)	84,263	—	29,478	(29,478)	84,263
Equity-based compensation	17,001	—	9,713	(9,713)	17,001
Contract termination and rig stacking and other expenses	12,317	—	13,920	(13,920)	12,317
Total operating expenses	2,946,299	334,906	929,480	(929,480)	3,281,205
Operating loss	$ (965,547)	(133,051)	(232,621)	232,621	(1,098,598)
Equity in earnings (loss) of unconsolidated affiliates	$ (83,408)	—	63,197	(63,197)	(83,408)

	Nine Months Ended September 30, 2021				
	Exploration and Production	Marketing	Equity Method Investment in Antero Midstream Corporation	Elimination of Intersegment Transactions and Unconsolidated Affiliates	Consolidated Total
Revenue and other:					
Natural gas sales	$ 2,231,558	—	—	—	2,231,558
Natural gas liquids sales	1,503,027	—	—	—	1,503,027
Oil sales	153,326	—	—	—	153,326
Commodity derivative fair value losses	(2,260,062)	—	—	—	(2,260,062)
Gathering, compression, water handling and treatment	—	—	734,716	(734,716)	—
Marketing	—	562,928	—	—	562,928
Amortization of deferred revenue, VPP	33,833	—	—	—	33,833
Gain on sale of assets	2,827		—	—	2,827
Other income (loss)	551	—	(53,004)	53,004	551
Total revenue	$ 1,665,060	562,928	681,712	(681,712)	2,227,988
Operating expenses:					
Lease operating	$ 71,555	—	—	—	71,555
Gathering and compression	663,176	—	118,368	(118,368)	663,176
Processing	601,040	—	—	—	601,040
Transportation	610,448	—	—	—	610,448
Production and ad valorem taxes	130,610	—	—	—	130,610
Marketing	—	627,822	—	—	627,822
Exploration	6,092	—	—	—	6,092
Impairment of oil and gas properties	69,618	—	—	—	69,618
Depletion, depreciation, and amortization	564,166	—	80,956	(80,956)	564,166
Accretion of asset retirement obligations	2,947	—	347	(347)	2,947
General and administrative (excluding equity-based compensation)	93,504	—	36,665	(36,665)	93,504
Equity-based compensation	15,189	—	10,326	(10,326)	15,189
Contract termination and rig stacking and other expenses	4,305	—	8,243	(8,243)	4,305
Total operating expenses	2,832,650	627,822	254,905	(254,905)	3,460,472
Operating income (loss)	$ (1,167,590)	(64,894)	426,807	(426,807)	(1,232,484)
Equity in earnings of unconsolidated affiliates	$ 57,621	—	66,347	(66,347)	57,621

Exploration and Production Segment

The following table sets forth selected operating data of the exploration and production segment for the nine months ended September 30, 2020 compared to the nine months ended September 30, 2021:

	Nine Months Ended September 30,		Amount of Increase (Decrease)	Percent Change
	2020	2021		
Production data [1] [2]:				
Natural gas (Bcf)	649	621	(28)	(4)%
C2 Ethane (MBbl)	14,686	13,132	(1,554)	(11)%
C3+ NGLs (MBbl)	36,167	30,624	(5,543)	(15)%
Oil (MBbl)	3,308	2,832	(476)	(14)%
Combined (Bcfe)	974	900	(74)	(8)%
Daily combined production (MMcfe/d)	3,554	3,297	(257)	(7)%
Average prices before effects of derivative settlements [3]:				
Natural gas (per Mcf)	$ 1.87	3.60	1.73	93 %
C2 Ethane (per Bbl)	$ 5.85	10.47	4.62	79 %
C3+ NGLs (per Bbl)	$ 19.67	44.59	24.92	127 %
Oil (per Bbl)	$ 23.65	54.14	30.49	129 %
Weighted Average Combined (per Mcfe)	$ 2.15	4.32	2.17	101 %
Average realized prices after effects of derivative settlements [3]:				
Natural gas (per Mcf)	$ 2.80	3.16	0.36	13 %
C2 Ethane (per Bbl)	$ 5.72	10.24	4.52	79 %
C3+ NGLs (per Bbl)	$ 22.25	38.11	15.86	71 %
Oil (per Bbl)	$ 38.00	51.34	13.34	35 %
Weighted Average Combined (per Mcfe)	$ 2.91	3.79	0.88	30 %
Average costs (per Mcfe):				
Lease operating	$ 0.07	0.08	0.01	14 %
Gathering and compression	$ 0.63	0.74	0.11	17 %
Processing	$ 0.72	0.67	(0.05)	(7)%
Transportation	$ 0.58	0.68	0.10	17 %
Production and ad valorem taxes	$ 0.07	0.15	0.08	114 %
Marketing expense, net	$ 0.14	0.07	(0.07)	(50)%
Depletion, depreciation, amortization, and accretion	$ 0.67	0.63	(0.04)	(6)%
General and administrative (excluding equity-based compensation)	$ 0.09	0.10	0.01	11 %

(1) Production data excludes volumes related to the VPP. See Note 3— Transactions to the unaudited condensed consolidated financial statements for more information.
(2) 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.
(3) The average realized price for the nine months ended September 30, 2021 includes $85 million of net litigation proceeds related to a favorable litigation judgment. See Note 14— Contingencies to the unaudited condensed consolidated financial statements for further discussion on the litigation proceeds. Excluding the effect of the litigation proceeds received, the average realized price would have been $3.46 per Mcf.

Natural gas sales. Revenues from sales of natural gas increased from $1.2 billion for the nine months ended September 30, 2020 to $2.2 billion, which included litigation proceeds of $85 million, for the nine months ended September 30, 2021, an increase of $1.0 billion, or 84%. See Note 14— Contingencies to the unaudited condensed consolidated financial statements for more information on the litigation proceeds.

Excluding net litigation proceeds, lower natural gas production volumes during the nine months ended September 30, 2021 accounted for an approximate $53 million decrease in year-over-year natural gas sales revenue (calculated as the change in year-to-year volumes times the prior year average price excluding the net proceeds from the litigation), and increases in commodity prices (excluding the effects of derivative settlements) accounted for an approximate $984 million increase in year-over-year gas sales revenue (calculated as the change in the year-to-year average price excluding the net proceeds from the litigation times current year production volumes).

NGLs sales. Revenues from sales of NGLs increased from $797 million for the nine months ended September 30, 2020 to $1.5 billion for the nine months ended September 30, 2021, an increase of $706 million, or 89% (calculated as the change in year-over-year volumes times the change in year-to-year average price). Lower NGLs production volumes accounted for an approximate $118 million decrease in year-over-year NGL revenues (calculated as the change in year-to-year volumes times the prior year average price), and increases in commodity prices, excluding the effects of derivative settlements, accounted for an approximate $824 million increase 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 sales of oil increased from $78 million for the nine months ended September 30, 2020 to $153 million for the nine months ended September 30, 2021, an increase of $75 million, or 96% (calculated as the change in year-over-year volumes times the change in year-to-year average price). Lower oil production volumes accounted for a $11 million decrease in year-over-year oil revenues (calculated as the change in year-to-year volumes times the prior year average price), and increases in commodity prices, excluding the effects of derivative settlements, accounted for an approximate $86 million increase 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 nine months ended September 30, 2020, our commodity hedges resulted in derivative fair value losses of $117 million. For the nine months ended September 30, 2021, our commodity hedges resulted in derivative fair value loss of $2.3 billion. Commodity derivative fair value losses included $759 million of cash proceeds for gains on settled derivatives for the nine months ended September 30, 2020. For the nine months ended September 30, 2021, commodity derivative fair value losses included $481 million of cash payments on commodity derivative losses as well as $5 million for payments on derivative monetizations.

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.

Amortization of deferred revenue, VPP. Amortization of deferred revenues associated with the VPP increased from $5 million for the nine months ended September 30, 2020 to $34 million for the nine months ended September 30, 2021 as a result of the VPP closing in August 2020. Under the terms of the agreement, the production volumes are delivered at approximately $1.61 per MMBtu over the contractual term. See Note 3—Transactions to the unaudited condensed consolidated financial statements for more information on this transaction.

Lease operating expense. Lease operating expense was $72 million for each of the nine months ended September 30, 2020 and 2021. On a per unit basis, lease operating expenses increased from $0.07 per Mcfe for the nine months ended September 30, 2020 to $0.08 per Mcfe for the three months ended September 30, 2021 primarily due to lower production volumes.

Gathering, compression, processing, and transportation expense. Gathering, compression, processing, and transportation expense remained relatively flat at $1.9 billion for both the nine months ended September 30, 2020 and 2021. Gathering and compression costs increased from $0.63 per Mcfe for the nine months ended September 30, 2020 to $0.74 per Mcfe for the nine months ended September 30, 2021, primarily due to higher fuel costs as a result of increased natural gas prices and $36 million in incentive fee rebates from Antero Midstream Corporation received during the nine months ended September 30, 2020 that were not received during the nine months ended September 30, 2021. Processing costs decreased from $0.72 per Mcfe for the nine months ended September 30, 2020 to $0.67 per Mcfe for the nine months ended September 30, 2021, due to a decrease in C3+ NGL volumes as compared to total production volumes between periods, partially offset by increased NGL pipeline and terminaling fees from higher NGL volumes taken in-kind between periods. Transportation costs increased from $0.58 per Mcfe for the nine months ended September 30, 2020 to $0.68 per Mcfe for the nine months ended September 30, 2021 primarily due to increased utilization on higher tariff pipelines to the Midwest and Gulf Coast between periods.

Production and ad valorem tax expense. Production and ad valorem taxes increased from $71 million for the nine months ended September 30, 2020 to $131 million for the nine months ended September 30, 2021, an increase of $60 million, or 83% primarily due to higher commodity prices between periods and $5 million for the litigation judgment. Production and ad valorem

taxes as a percentage of natural gas revenues remained consistent at 6% in each of the nine months ended September 30, 2020 and 2021.

Impairment of oil and gas properties. Impairment of oil and gas properties decreased from $156 million for the nine months ended September 30, 2020 to $70 million for the nine months ended September 30, 2021, a decrease of $86 million, or 55%, primarily related to lower impairments of expiring leases between periods. During both periods, we recognized impairments primarily related to expiring leases as well as design and initial costs related to pads we no longer plan to place into service.

Depletion, depreciation, and amortization expense. DD&A expense decreased from $652 million for the nine months ended September 30, 2020 to $564 million for the nine months ended September 30, 2021, a decrease of $88 million, or 13%, primarily as a result of increased proved reserve volumes between periods due to higher commodity prices as well as lower production volumes between periods. DD&A per Mcfe remained relatively consistent at $0.67 per Mcfe and $0.63 per Mcfe during the nine months ended September 30, 2020 and 2021, respectively.

General and administrative expense. General and administrative expense (excluding equity-based compensation expense) increased from $84 million for the nine months ended September 30, 2020 to $94 million for the nine months ended September 30, 2021, an increase of $10 million, or 11%. The increase was primarily due to higher salary and wage expense between periods, which includes our annual incentive program that was significantly reduced during 2020. We had 520 and 506 employees as of September 30, 2020 and 2021, respectively. On a per-unit basis, general and administrative expense excluding equity-based compensation increased from $0.09 per Mcfe during the nine months ended September 30, 2020 to $0.10 per Mcfe during the nine months ended September 30, 2021 as a result of lower production volumes and higher overall costs between periods.

Equity-based compensation expense. Noncash equity-based compensation expense decreased from $17 million for the nine months ended September 30, 2020 to $15 million for the nine months ended September 30, 2021, primarily due to equity award forfeitures, partially offset by new awards granted to employees. When an equity award is forfeited, expense previously recognized for the award is reversed. See Note 9—Equity Based Compensation and Cash Awards to the unaudited condensed consolidated financial statements for more information on equity-based compensation awards.

Marketing Segment

Marketing. Where feasible, we purchase and sell third-party natural gas and NGLs and market our excess firm transportation capacity, or engage third parties to conduct these activities on our behalf, to optimize the revenues and mitigate costs from these transportation agreements. We have entered into long-term firm transportation agreements for a significant portion of our current and expected future production to secure guaranteed capacity to favorable markets.

Net marketing expenses decreased from $133 million, or $0.14 per Mcfe, for the nine months ended September 30, 2020 to $65 million, or $0.07 per Mcfe, for the nine months ended September 30, 2021. The decrease was driven by higher marketing volumes and margins that mitigated some of our excess firm transportation expense.

Marketing revenues increased from $202 million for the nine months ended September 30, 2020 to $563 million for the nine months ended September 30, 2021, an increase of $361 million due to increased marketing volumes.

Marketing expenses increased from $335 million for the nine months ended September 30, 2020 to $628 million for the nine months ended September 30, 2021, an increase of $293 million, or 87%. 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 $122 million and $81 million for the nine months ended September 30, 2020 and 2021, respectively.

Equity Method Investment in Antero Midstream Corporation

Antero Midstream Corporation. Revenue from the Antero Midstream Corporation segment decreased from $697 million for the nine months ended September 30, 2020 to $682 million for the nine months ended September 30, 2021, a decrease of $15 million, or 2%, primarily due to lower fresh water delivery revenue as a result of decreased well completions period-over-period and lower gathering volumes, partially offset by higher compression revenues as a result of increased throughput between periods. Total operating expenses related to the segment decreased from $929 million for the nine months ended September 30, 2020 to $255 million for the nine months ended September 30, 2021, primarily due to impairments by Antero Midstream Corporation during the nine months ended September 30, 2020 of $89 million on its freshwater pipelines and equipment and impairment of goodwill of $575 million. Antero Midstream Corporation's impairment expense was $2 million for the nine months ended September 30, 2021 due to a lower of cost or market adjustment for pipe inventory.

Items Not Allocated to Segments

Interest expense. Our interest expense decreased from $153 million for the nine months ended September 30, 2020 to $138 million for the nine months ended September 30, 2021 primarily due to the reduction in debt as a result of our debt repurchases of our unsecured senior notes, paydown of our Prior Credit Facility and increased interest income between periods, partially offset by interest that accrued on the (i) 2026 Convertible Notes, which were issued in August 2020 and (ii) 2026 Notes, 2029 Notes and 2030 Notes, each of which was issued after September 30, 2020.

Impairment of equity investment. As of 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 as of March 31, 2020. There was no such impairment for the nine months ended September 30, 2021.

Gain (loss) on early extinguishment of debt. During the nine months ended September 30, 2020, we recognized a gain on early extinguishment of debt of $175 million related to $1.1 billion principal amount of debt that we repurchased at a weighted average discount of 17%. During the nine months ended September 30, 2021, we equitized $206 million aggregate principal amount of our 2026 Convertible Notes in privately negotiated exchange transactions and as a result, we recognized a loss of $61 million which represents the difference between the fair value of the liability component of the 2026 Convertible Notes and the carrying value of such notes. Additionally, during the nine months ended September 30, 2021, we redeemed (i) the remaining balance of $661 million of our 2022 Notes at par, plus accrued and unpaid interest, (ii) the remaining balance of $574 million of our 2023 Notes at par, plus accrued and unpaid interest and (iii) $175 million of our 2026 Notes at a redemption price of 108.375% of par, plus accrued and unpaid interest and recognized a $22 million loss on early extinguishment of debt for such redemptions. See Note 7—Long-Term Debt to the unaudited condensed consolidated financial statements for more information.

Loss on convertible note equitization. During the nine months ended September 30, 2021, we recognized a loss of $51 million for the January Equitization Transactions and the May Equitization Transactions, which represents the consideration paid in excess of the original terms of the 2026 Convertible Notes. See Note 7—Long-Term Debt to the unaudited condensed consolidated financial statements for more information.

Transaction expense. Transaction expense decreased from $7 million for the nine months ended September 30, 2020 to $3 million for the nine months ended September 30, 2021, a decreased of $4 million or 53%. Transaction expense for the nine months ended September 30, 2020 included legal and transaction fees associated with the sale of our overriding royalty interest and the creation of Martica, as well as the VPP transaction. For the nine months ended September 30, 2021, transaction expense included legal and transaction fees associated with the drilling partnership. See Note 3—Transactions to the unaudited condensed consolidated financial statements for more information on these transactions.

Income tax benefit. Income tax benefit decreased from $421 million, with an effective tax rate of 24%, for the nine months ended September 30, 2020 to $338 million, with an effective tax rate of 23%, for the nine months ended September 30, 2021, a decrease of $83 million. The decrease was primarily due to lower loss before income taxes between periods.

Capital Resources and Liquidity

Sources and Uses of Cash

Our primary sources of liquidity have been through net cash provided by operating activities including borrowings under the Prior Credit Facility, issuances of debt and equity securities, and additional contributions from our asset sales program, including our drilling partnership. 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. For information about the impacts of COVID-19 on our capital resources and liquidity, see "—COVID-19 Pandemic."

Based on strip prices as of September 30, 2021, we believe that net cash provided by operating activities, distributions from unconsolidated affiliate, available borrowings under the Credit Facility, capital market transactions and the effects of the drilling partnership 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.

2021 Capital Budget and Capital Spending

On February 17, 2021, we announced our net capital budget for 2021 is $635 million, which includes: $590 million for drilling and completion and $45 million for leasehold expenditures. 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, and on July 28, 2021, we announced a $22.5 million increase for our leasehold expenditures for 2021 to reflect accelerated leasing activity focused on organically expanding our core liquids rich inventory. As a result, our total net capital budget for 2021 was revised to $657.5 million.

For the nine months ended September 30, 2021, our total consolidated capital expenditures, which excludes QL's working interest share of such costs, were approximately $542 million, including drilling and completion costs of $475 million, leasehold acquisitions of $48 million, and other capital expenditures of $19 million.

Cash Flows

The following table summarizes our cash flows for the nine months ended September 30, 2020 and 2021:

	Nine Months Ended September 30,	
	2020	**2021**
Net cash provided by operating activities	$ 492,510	1,184,952
Net cash used in investing activities	(384,063)	(505,455)
Net cash used in financing activities	(108,447)	(679,497)
Net increase in cash and cash equivalents	$ —	—

Operating Activities. Net cash provided by operating activities was $493 million and $1.2 billion for the nine months ended September 30, 2020 and 2021, respectively. Net cash provided by operating activities increased primarily due to increases in commodity prices both before and after the effects of settled commodity derivatives, decreased net marketing expense as well as decreased cash utilized for working capital, partially offset by increases in gathering, compression and transportation costs and production and ad valorem taxes between periods.

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.

Investing Activities. Cash flows used in investing activities increased from $384 million for the nine months ended September 30, 2020 to $505 million for the nine months ended September 30, 2021, primarily due to $216 million in proceeds from the VPP and $125 million in settlement of the water earnout impacting the nine months ended September 30, 2020, partially offset by a decrease in capital expenditures of $215 million during the nine months ended September 30, 2021 as compared to the same period in 2020.

Financing Activities. Net cash flows used in financing activities increased from $108 million for the nine months ended September 30, 2020 to $679 million for the nine months ended September 30, 2021. During the nine months ended September 30, 2021, we issued $500 million aggregate principal amount of 2026 Notes, $700 million aggregate principal amount of 2029 Notes and $600 million aggregate principal amount of 2030 Notes (net of $23 million of aggregate debt issuance costs), of which proceeds were used to (i) redeem $661 million of our 2022 Notes, which were fully retired, (ii) redeem $574 million of our 2023 Notes, which were fully retired (ii) redeem $175 million of our 2026 Notes and (iv) partially repay borrowings on our Prior Credit Facility. Also, during the nine months ended September 30, 2021, we completed the January Share Offering and the May Share Offering and used the proceeds and approximately $89 million of borrowings under the Prior Credit Facility to repurchase $206 million aggregate principal amount of the 2026 Convertible Notes in privately negotiated transactions. Additionally, during the nine months ended September 30, 2021, we received a $51 million payment from Martica and distributed $65 million to the noncontrolling interest in Martica. During the nine months ended September 30, 2020, we repurchased (i) $1.1 billion principal amount of debt at a weighted average discount of 17% for $900 million of cash and (ii) $43 million of our common stock at weighted average price of $1.54 per share.

Debt Agreements

Senior Secured Revolving Credit Facility

Antero Resources has a senior secured revolving credit facility with a consortium of bank lenders. On October 26, 2021, Antero Resources entered into an amended and restated senior secured revolving credit facility. References to the (i) "Prior Credit Facility" refers to the senior secured revolving credit facility in effect for periods before October 26, 2021, (ii) "New Credit Facility" refers to the senior secured revolving credit facility in effect on or after October 26, 2021 and (ii) "Credit Facility" refers to Prior Credit Facility and New Credit Facility collectively. Borrowings under the New Credit Facility are subject to borrowing base limitations based on the collateral value of our assets and are subject to regular semi-annual redeterminations. As of October 26, 2021, the borrowing base was $3.5 billion and lender commitments were $1.5 billion. The next redetermination of the borrowing base is scheduled to occur in April 2022. The maturity date of the New Credit Facility is the earlier of (i) October 26, 2026 and (ii) the date that is 180 days prior to the earliest stated redemption date of any series of Antero's senior notes.

As of September 30, 2021, we had $98 million borrowings and had $742 million of letters of credit outstanding under the Prior Credit Facility.

The New Credit Facility provides for borrowing under either an Adjusted Term Secured Overnight Financing Rate ("SOFR"), an Adjusted Daily Simple SOFR or an Alternate Base Rate (each as defined in the New Credit Facility).

The New Credit Facility contains restrictive covenants that may limit our ability to, among other things:

- incur additional indebtedness;
- sell assets;
- make loans to others;
- make investments;
- enter into mergers;
- pay dividends;
- hedge future production;
- incur liens; and
- engage in certain other transactions without the prior consent of the lenders.

The New Credit Facility also requires us to maintain the following financial ratios (subject to certain exceptions): The current ratio and the leverage ratio shall be tested quarterly commencing with the quarter ending December 31, 2021.

- a minimum consolidated current ratio of 1.0 to 1.0 at the end of each fiscal quarter; and
- a maximum leverage ratio of total debt to EBITDAX for the trailing four quarter period of 4.00 to 1.00 at the end of each fiscal quarter.

We were in compliance with the applicable covenants and ratios as of December 31, 2020 and September 30, 2021 under the Prior Credit Facility. As of September 30, 2021, our current ratio was 2.7 to 1.0 and our interest coverage ratio was 15.0 to 1.0.

See Note 7—Long Term Debt to the unaudited condensed consolidated financial statements included in this Quarterly Report on Form 10-Q for more information on our Credit Facility.

Senior Notes and Convertible Senior Notes

See Note 7—Long Term Debt 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 the 2020 Form 10-K for information on our senior notes.

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, amortization of deferred revenue, gain on sale of assets but including net cash receipts or payments on derivative instruments included in derivative gains or losses other than proceeds from and payments for derivative monetizations, income taxes, impairments, depletion, depreciation, amortization, and accretion, exploration expense, equity-based compensation, gain (loss) on early extinguishment of debt, contract termination and rig stacking costs, equity in earnings (loss) of unconsolidated affiliate, transaction fees and loss on convertible note equitization.

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 and nine months ended September 30, 2020 and 2021 (in thousands). Adjusted EBITDAX also excludes the noncontrolling interests in Martica and these adjustments are disclosed in the table below as Martica related adjustments.

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2021	2020	2021
Reconciliation of net loss to Adjusted EBITDAX:				
Net loss and comprehensive loss attributable to Antero Resources Corporation	$ (535,613)	(549,318)	(1,337,727)	(1,088,284)
Net loss and comprehensive loss attributable to noncontrolling interests	(18,233)	(17,257)	(17,997)	(23,846)
Unrealized commodity derivative losses	748,791	834,334	875,811	1,774,410
Payments for (proceeds from) derivative monetizations	(18,073)	—	(18,073)	4,569
Amortization of deferred revenue, VPP	(5,175)	(11,404)	(5,175)	(33,833)
Loss on sale of assets	—	(539)	—	(2,827)
Interest expense, net	48,043	45,414	152,956	138,120
Loss (gain) on early extinguishment of debt	(55,633)	16,567	(175,365)	82,836
Loss on convertible note equitizations	—	—	—	50,777
Provision for income tax benefit	(168,778)	(158,656)	(421,167)	(337,568)
Depletion, depreciation, amortization, and accretion	239,533	183,638	655,460	567,113
Impairment of oil and gas properties	29,392	26,253	155,962	69,618
Impairment of equity method investment	—	—	610,632	—
Exploration expense	454	235	895	6,092
Equity-based compensation expense	5,699	5,298	17,001	15,189
Equity in (earnings) loss of unconsolidated affiliate	(24,419)	(21,450)	83,408	(57,621)
Dividends from unconsolidated affiliate	42,755	31,285	128,267	105,325
Contract termination and rig stacking	1,246	3,370	12,317	4,305
Transaction expense	524	626	6,662	3,102
	290,513	388,396	723,867	1,277,477
Martica related adjustments [1]	(18,072)	(30,197)	(21,172)	(80,436)
Adjusted EBITDAX	$ 272,441	358,199	702,695	1,197,041
Reconciliation of our Adjusted EBITDAX to net cash provided by operating activities:				
Adjusted EBITDAX	$ 272,441	358,199	702,695	1,197,041
Martica related adjustments [1]	18,072	30,197	21,172	80,436
Interest expense, net	(48,043)	(45,414)	(152,956)	(138,120)
Exploration expense	(454)	(235)	(895)	(6,092)
Changes in current assets and liabilities	(80,308)	(28,316)	(78,891)	53,541
Transaction expense	(524)	(626)	(6,662)	(3,102)
Proceeds from (payments for) derivative monetizations	18,073	—	18,073	(4,569)
Other items	(3,387)	(1,125)	(10,026)	5,817
Net cash provided by operating activities	$ 175,870	312,680	492,510	1,184,952

(1) Adjustments reflect noncontrolling interests in Martica not otherwise adjusted in amounts above.

Critical Accounting Policies and Estimates

The discussion and analysis of our financial condition and results of operations are based upon our unaudited condensed consolidated financial statements, which have been prepared in accordance with GAAP. The preparation of our unaudited condensed consolidated 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 unaudited condensed 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 the 2020 Form 10-K. We believe these accounting policies reflect our more significant estimates and assumptions used in the preparation of our unaudited condensed consolidated financial statements. Also, see Note 2—Summary of Significant Accounting Policies to the consolidated financial statements, included in the 2020 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.

Based on future prices as of September 30, 2021, 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 and nine months ended September 30, 2020 and 2021.

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 from September 30, 2021, 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.

New Accounting Pronouncements

See Note 2—Summary of Significant Accounting Policies to the unaudited condensed consolidated financial statements for information on new accounting pronouncements.

Off-Balance Sheet Arrangements

As of September 30, 2021, 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 Note 13—Commitments to the unaudited condensed consolidated financial statements for further information on off balance sheet arrangements.

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, basis differential swaps or embedded options. These contracts are financial instruments and do not require or allow for physical delivery of the hedged commodity. As of September 30, 2021, our commodity derivatives included fixed price swaps and basis differential swaps at index-based pricing.

As of September 30, 2021, we had in place natural gas swaps covering portions of our projected production through 2023. Our commodity hedge position as of September 30, 2021 is summarized in Note 11—Derivative Instruments 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 and embedded put option that settled during the nine months ended September 30, 2021, our revenues would have decreased by approximately $22 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 as of September 30, 2021.

All derivative instruments, other than those that meet the normal purchase and normal sale scope exception or other derivative scope exceptions, 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. As of September 30, 2021, the estimated fair value of our commodity derivative instruments was a net liability of $1.7 billion comprised of current and noncurrent assets and liabilities. As of December 31, 2020, the estimated fair value of our commodity derivative instruments was a net asset of $22 million comprised of current and noncurrent assets and liabilities.

By removing price volatility from a portion of our expected production through December 2023, 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 ($15 million as of September 30, 2021); and the sale of our natural gas, NGLs and oil production ($556 million as of September 30, 2021), 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 17 different counterparties, 13 of which are lenders under our Prior Credit Facility. As of September 30, 2021, we did not have any derivative assets by bank counterparties under our Prior Credit Facility. 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) as of September 30, 2021 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 Prior 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 September 30, 2021, 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 Prior Credit Facility, which has a floating interest rate. The average annualized interest rate incurred on the Prior Credit Facility during the nine months ended September 30, 2021 was approximately 4.18%. We estimate that a 1.0% increase in the applicable average interest rates for the nine months ended September 30, 2021 would have resulted in an estimated $1.5 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 September 30, 2021 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 September 30, 2021 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—Contingencies 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 2020 Form 10-K. There have been no material changes to the risks described in such report. 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.

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	Average Price Paid Per Share	Total Number of Shares Repurchased as Part of Publicly Announced Plans	Approximate Dollar Value of Shares that May Yet be Purchased Under the Plan
July 1, 2021 - July 31, 2021 (1)	241,703	$ 13.12	—	$ —
August 1, 2021 - August 31, 2021	—	—	—	—
September 1, 2021 - September 30, 2021	—	—	—	—
Total	241,703	$ 13.12	—	$ —

(1) The total number of shares purchased represent shares of our common stock transferred to us in order to satisfy tax withholding obligations incurred upon the vesting of restricted stock and RSUs held by our employees.

ITEM 5. OTHER INFORMATION

Amended and Restated Credit Facility

On October 26, 2021, we entered into an amendment and restatement of the Prior Credit Facility. Refer to "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations—Capital Resources and Liquidity—Debt Agreements—Senior Secured Revolving Credit Facility" for a description of the New Credit Facility. The description of the New Credit Facility is a summary and is qualified in its entirety by the terms of the New Credit Facility. A copy of the New Credit Facility is filed as Exhibit 10.1 hereto, and is incorporated herein by reference.

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*	Sixth Amended and Restated Credit Facility, dated as of October 26, 2021, by and among Antero Resources Corporation, as Borrower, the lenders party thereto and JPMorgan Chase Bank, N.A., as Administrative Agent
22.1	List of Guarantor Subsidiaries (incorporated by reference to Exhibit 22.1 to the Company's Annual Report on Form 10-K (Commission File No. 001-36120) filed on February 17, 2021).
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 September 30, 2021 formatted in iXBRL (Inline eXtensible Business Reporting Language): (i) Condensed Consolidated Balance Sheets, (ii) Condensed Consolidated Statements of Operations and Comprehensive 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/ MICHAEL N. KENNEDY
Michael N. Kennedy
Chief Financial Officer and Senior Vice President–Finance

Date: October 27, 2021

Exhibit 10.1

Execution Version

SIXTH AMENDED AND RESTATED CREDIT AGREEMENT

dated as of

October 26, 2021

among

ANTERO RESOURCES CORPORATION,
as Borrower,

CERTAIN SUBSIDIARIES OF BORROWER,
as Guarantors,

THE LENDERS PARTY HERETO,

JPMORGAN CHASE BANK, N.A.,
as Administrative Agent,

JPMORGAN CHASE BANK, N.A. and
WELLS FARGO SECURITIES, LLC
as Joint Bookrunners, Joint Lead Arrangers
and Co-Syndication Agents

Senior Secured Credit Facility

J.P. MORGAN CHASE BANK, N.A.
as Lead Bookrunner

and

JPMORGAN CHASE BANK, N.A.,
BANK OF AMERICA, N.A.,
BARCLAYS BANK PLC,
CANADIAN IMPERIAL BANK OF COMMERCE, NEW YORK BRANCH,
CITIBANK, N.A.,
DNB BANK ASA, NEW YORK BRANCH,
MIZUHO BANK, LTD.,
ROYAL BANK OF CANADA, and
TRUIST BANK
as Co-Documentation Agents

ANTERO CREDIT AGREEMENT

TABLE OF CONTENTS

TABLE OF CONTENTS
(continued)

TABLE OF CONTENTS
(continued)

TABLE OF CONTENTS
(continued)

EXHIBITS:

SCHEDULES:

THIS SIXTH AMENDED AND RESTATED CREDIT AGREEMENT dated as of October 26, 2021, among ANTERO RESOURCES CORPORATION, a Delaware corporation, (the "Borrower") CERTAIN SUBSIDIARIES OF BORROWER, as Guarantors, the LENDERS party hereto, JPMORGAN CHASE BANK, N.A., as Administrative Agent, and JPMORGAN CHASE BANK, N.A. and WELLS FARGO SECURITIES, LLC, as Joint Bookrunners, Joint Lead Arrangers, and Co-Syndication Agents.

WHEREAS, the Borrower has heretofore entered into that certain Fifth Amended and Restated Credit Agreement dated as of October 26, 2017, by and among Borrower, certain affiliates of the Borrower, the lenders party thereto, and the Administrative Agent, as amended, supplemented, or otherwise modified prior to the Effective Date (the "Existing Credit Agreement");

WHEREAS, (i) the Borrower has requested that the Existing Credit Agreement be amended and restated in its entirety, (ii) the Borrower has requested that the Lenders extend credit in the form of Loans made available to the Borrower and at any time and from time to time after the Effective Date subject to the Aggregate Commitment, (iii) the Borrower has requested that each Issuing Bank issue Letters of Credit (subject to the Aggregate Commitment) at any time and from time to time prior to the LC Maturity Date;

WHEREAS, on and after the Effective Date, the proceeds of the Loans will be used by the Borrower to pay the fees, expenses and transaction costs of the Transactions, and finance the working capital needs of the Borrower, including capital expenditures, and for general corporate purposes of the Borrower and the Guarantors, in the ordinary course of business, including the exploration, development and/or acquisition of Oil and Gas Interests, together with ancillary transportation, gathering, compression and processing assets and the marketing and sale of Hydrocarbons produced; and

WHEREAS, the Lenders and each Issuing Bank are willing to make available to the Borrower such revolving credit and letter of credit facilities upon the terms and subject to the conditions set forth herein.

NOW, THEREFORE, in consideration of the premises and the covenants and agreements contained herein, the parties hereto hereby agree as follows:

ARTICLE I
Definitions

Section 1.01 Defined Terms. As used in this Agreement, the following terms have the meanings specified below:

"ABR", when used in reference to any Loan or Borrowing, refers to whether such Loan, or the Loans comprising such Borrowing, bear interest at a rate determined by reference to the Alternate Base Rate.

"Acquisition" means, the acquisition by any Credit Party or any Restricted Subsidiary, whether by purchase, merger (and, in the case of a merger with any such Person, with such Person being the surviving corporation) or otherwise, of all or substantially all of the Equity Interest of, or the business, property or fixed assets of or business line or unit or a division of, any other Person primarily engaged in the business of exploring for, producing, transporting, processing and storing Crude Oil or Natural Gas or the acquisition by any Credit Party or any Restricted Subsidiary of property or assets consisting of Oil and Gas Interests. "Acquiring" and "Acquired" have meanings correlative thereto.

"Additional Lender" has the meaning assigned to such term in Section 2.03.

"Adjusted Daily Simple SOFR" means an interest rate per annum equal to (a) the Daily Simple SOFR, *plus* (b) 0.10%; *provided that* if the Adjusted Daily Simple SOFR as so determined would be less than the Floor, such rate shall be deemed to be equal to the Floor for the purposes of this Agreement.

"Adjusted Term SOFR Rate" means, for any Interest Period, an interest rate per annum equal to (a) the Term SOFR Rate for such Interest Period, *plus* (b) 0.10%; *provided that* if the Adjusted Term SOFR Rate as so determined would be less than the Floor, such rate shall be deemed to be equal to the Floor for the purposes of this Agreement.

"Administrative Agent" means JPMorgan Chase Bank, N.A. (or any of its designated branch offices or affiliates), in its capacity as administrative agent for the Lenders hereunder.

"Administrative Questionnaire" means an Administrative Questionnaire in a form supplied by the Administrative Agent.

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

"Affiliate" means, with respect to a specified Person, another Person that directly, or indirectly through one or more intermediaries, Controls or is Controlled by or is under common Control with the Person specified.

"Agent Party" means the Administrative Agent or any of its Related Parties (collectively, the "Agent Parties").

"Aggregate Commitment" means, at any time, the sum of the Commitments of all the Lenders at such time, as such amount may be reduced or increased from time to time pursuant to Section 2.02 and Section 2.03; provided that (a) at any time that is not during an Investment Grade Period, such amount shall not exceed the lesser of (i) the Borrowing Base then in effect and (ii) the Maximum Facility Amount, and (b) at any time during an Investment Grade Period, such amount shall not exceed the Maximum Facility Amount. As of the Effective Date, the Aggregate Commitment is $1,500,000,000.

"Aggregate Credit Exposure" means, as of any date of determination, the sum of the outstanding principal amount of the Loans of all Lenders as of such date, plus the aggregate LC Exposure of all Lenders as of such date.

"Aggregate Unused Commitment" at any time shall equal the sum of the Unused Commitments of all the Lenders (except for any Defaulting Lenders) at such time.

"Agreement" means this Sixth Amended and Restated Credit Agreement, dated as of October 26, 2021, as it may be amended, supplemented or otherwise modified from time to time.

"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 Term SOFR Rate for a one month Interest Period as published two U.S. Government Securities Business Days prior to 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 Term SOFR Rate for any day shall be based on the Term SOFR Reference Rate at approximately 5:00 a.m. Chicago time on such day (or any amended publication time for the Term SOFR Reference Rate, as specified by the CME Term SOFR Administrator in the Term SOFR Reference Rate methodology). Any change in the Alternate Base Rate due to a change in the Prime Rate, the NYFRB Rate or the Adjusted Term SOFR Rate shall be effective

from and including the effective date of such change in the Prime Rate, the NYFRB Rate or the Adjusted Term SOFR 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 the Benchmark Replacement has been determined pursuant to Section 2.14), then the Alternate Base Rate shall be the greater of clauses (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 1.00%, such rate shall be deemed to be 1.00% for purposes of this Agreement.

"Antero Midstream" means Antero Midstream Corporation, a Delaware corporation.

"Anti-Corruption Laws" means all laws, rules, and regulations of any jurisdiction applicable to the Borrower or its Subsidiaries from time to time concerning or relating to bribery, money laundering or corruption.

"Applicable Percentage" means, with respect to any Lender at any time, the percentage of the Aggregate Commitment represented by such Lender's Commitment at such time; provided that in the case of Section 2.20(c) only, when a Defaulting Lender exists, "Applicable Percentage" shall mean the percentage of the Aggregate Commitment (disregarding any Defaulting Lender's Commitment) represented by such Lender's Commitment. The initial amount of each Lender's Applicable Percentage is as set forth on Schedule 1.01 or in the Assignment and Assumption pursuant to which such Lender shall have assumed or agreed to provide its Commitment, as applicable. If the Aggregate Commitment has terminated or expired, the Applicable Percentages shall be determined based upon the Aggregate Commitment most recently in effect, giving effect to any assignments.

"Applicable Rate" shall mean, for any day, with respect to any ABR Loan, Term Benchmark 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 Elected Commitment Utilization in effect on such day:

Elected Commitment Utilization Grid

Elected Commitment Utilization	X < 25%	≥ 25% X <50%	≥ 50% X <75%	≥ 75% X <90%	X ≥ 90%
Term Benchmark Loan and RFR Loan Rate	1.75%	2.00%	2.25%	2.50%	2.75%
ABR Loan Rate	0.75%	1.00%	1.25%	1.50%	1.75%
Unused Commitment Fee Rate	0.375%	0.375%	0.50%	0.50%	0.50%

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+
Term Benchmark Loan and RFR Loan Rate	1.25%	1.375%	1.625%	1.875%
ABR Loans Rate	0.25%	0.375%	0.625%	0.875%
Unused Commitment Fee Rate	0.15%	0.175%	0.225%	0.275%

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.

"Approved Counterparty" means, at any time and from time to time, (i) any Person engaged in the business of writing Hedging Contracts for commodity, interest rate or currency risk that has (or the credit support provider of such Person has), at the time Borrower or any Restricted Subsidiary enters into a Hedging Contract with such Person, a long term senior unsecured debt credit rating of A or better from S&P or A2 or better from Moody's or (ii) any Lender Counterparty.

"Approved Electronic Platform" has the meaning assigned to such term in Section 10.03.

"Approved Fund" has the meaning assigned to such term in Section 11.04.

"Approved Petroleum Engineer" means Ryder Scott Company, L.P., DeGolyer & MacNaughton or any other reputable firm of independent petroleum engineers selected by the Borrower and reasonably acceptable to the Administrative Agent.

"Assignment and Assumption" means an assignment and assumption entered into by a Lender and an Eligible Assignee (with the consent of any party whose consent is required by Section 11.04), in the form of Exhibit A or any other form approved by the Administrative Agent.

"Availability Period" means the period from and including the Effective Date to but excluding the earlier of the Maturity Date and the date of termination of the Aggregate Commitment.

"Available Tenor" means, as of any date of determination and with respect to the then-current Benchmark, as applicable, any tenor for such Benchmark (or component thereof) or payment period for interest calculated with reference to such Benchmark (or component thereof), as applicable, that is or may be used for determining the length of an Interest Period for any term rate or otherwise, for determining any frequency of making payments of interest calculated pursuant to this Agreement as of such date and not including, for the avoidance of doubt, any tenor for such Benchmark that is then-removed from the definition of "Interest Period" pursuant to clause (e) of Section 2.14.

"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).

"Bankruptcy Code" means Title 11 of the United States Code entitled "Bankruptcy".

"Bankruptcy Event" means, with respect to any Person, such Person becomes the subject of a bankruptcy or insolvency proceeding, or has had a receiver, conservator, trustee, administrator, custodian, assignee for the benefit of creditors or similar Person charged with the reorganization or liquidation of its business appointed for it, or, in the good faith determination of the Administrative Agent, has taken any action in furtherance of, or indicating its consent to, approval of, or acquiescence in, any such proceeding

or appointment, provided that a Bankruptcy Event shall not result solely by virtue of any ownership interest, or the acquisition of any ownership interest, in such Person by a Governmental Authority, provided, further, that such ownership interest does not result in or provide such Person with immunity from the jurisdiction of courts within the United States or from the enforcement of judgments or writs of attachment on its assets or permit such Person (or such Governmental Authority) to reject, repudiate, disavow or disaffirm any contracts or agreements made by such Person; provided, further, that the appointment of an administrator, provisional liquidator, conservator, receiver, trustee, custodian, or other similar official by a supervisory authority or regulator with respect to any Person under the Dutch Financial Supervision Act 2007 (as amended from time to time and including any successor legislation) shall not be deemed a Bankruptcy Event.

"Benchmark" means, initially, with respect to any (i) RFR Loan, the Daily Simple SOFR or (ii) Term Benchmark Loan, the Term SOFR Rate; *provided* that if a Benchmark Transition Event, and the related Benchmark Replacement Date have occurred with respect to the Daily Simple SOFR or Term SOFR Rate, as applicable, or the then-current Benchmark, then "Benchmark" means the applicable Benchmark Replacement to the extent that such Benchmark Replacement has replaced such prior benchmark rate pursuant to clause (b) of Section 2.14.

"Benchmark Replacement" means, for any Available Tenor, the first alternative set forth in the order below that can be determined by the Administrative Agent for the applicable Benchmark Replacement Date:

(1) the Adjusted Daily Simple SOFR;

(2) the sum of: (a) the alternate benchmark rate that has been selected by the Administrative Agent and the Borrower as the replacement for the then-current Benchmark for the applicable Corresponding Tenor giving due consideration to (i) any selection or recommendation of a replacement benchmark rate or the mechanism for determining such a rate by the Relevant Governmental Body or (ii) any evolving or then-prevailing market convention for determining a benchmark rate as a replacement for the then-current Benchmark for dollar-denominated syndicated credit facilities at such time in the United States and (b) the related Benchmark Replacement Adjustment;

If the Benchmark Replacement as determined pursuant to clause (1) or (2) above would be less than the Floor, the Benchmark Replacement will be deemed to be the Floor for the purposes of this Agreement and the other Loan Documents.

"Benchmark Replacement Adjustment" means, with respect to any replacement of the then-current Benchmark with an Unadjusted Benchmark Replacement for any applicable Interest Period and Available Tenor for any setting of such Unadjusted Benchmark Replacement, 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 for the applicable Corresponding Tenor 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 such Benchmark with the applicable Unadjusted Benchmark Replacement by the Relevant Governmental Body on the applicable Benchmark Replacement Date 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 such Benchmark with the applicable Unadjusted Benchmark Replacement for dollar-denominated syndicated credit facilities at such time.

"Benchmark Replacement Conforming Changes" means, with respect to any Benchmark Replacement and/or any Term Benchmark Revolving Loan, any technical, administrative or operational

changes (including changes to the definition of "Alternate Base Rate," the definition of "Business Day," the definition of "U.S. Government Securities Business Day," the definition of "Interest Period," timing and frequency of determining rates and making payments of interest, timing of borrowing requests or prepayment, conversion or continuation notices, length of lookback periods, the applicability of breakage provisions, and other technical, administrative or operational matters) that the Administrative Agent decides may be appropriate to reflect the adoption and implementation of such Benchmark 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 such Benchmark exists, in such other manner of administration as the Administrative Agent decides is reasonably necessary in connection with the administration of this Agreement and the other Loan Documents).

"Benchmark Replacement Date" means, with respect to any Benchmark, the earliest to occur of the following events with respect to such then-current Benchmark:

(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 such Benchmark (or the published component used in the calculation thereof) permanently or indefinitely ceases to provide all Available Tenors of such Benchmark (or such component thereof); or

(2) in the case of clause (3) of the definition of "Benchmark Transition Event," the first date on which such Benchmark (or the published component used in the calculation thereof) has been determined and announced by the regulatory supervisor for the administrator of such Benchmark (or such component thereof) to be no longer representative; provided, that such non-representativeness will be determined by reference to the most recent statement or publication referenced in such clause (c) and even if any Available Tenor of such Benchmark (or such component thereof) continues to be provided on such date.

For the avoidance of doubt, (i) if the event giving rise to the Benchmark Replacement Date occurs on the same day as, but earlier than, the Reference Time in respect of any determination, the Benchmark Replacement Date will be deemed to have occurred prior to the Reference Time for such determination and (ii) the "Benchmark Replacement Date" will be deemed to have occurred in the case of clause (1) or (2) with respect to any Benchmark upon the occurrence of the applicable event or events set forth therein with respect to all then-current Available Tenors of such Benchmark (or the published component used in the calculation thereof).

"Benchmark Transition Event" means, with respect to any Benchmark, the occurrence of one or more of the following events with respect to such then-current Benchmark:

(1) a public statement or publication of information by or on behalf of the administrator of such Benchmark (or the published component used in the calculation thereof) announcing that such administrator has ceased or will cease to provide all Available Tenors of such Benchmark (or such component thereof), permanently or indefinitely, provided that, at the time of such statement or publication, there is no successor administrator that will continue to provide any Available Tenor of such Benchmark (or such component thereof);

(2) a public statement or publication of information by the regulatory supervisor for the administrator of such Benchmark (or the published component used in the calculation thereof), the Federal Reserve Board, the NYFRB, the CME Term SOFR Administrator, an insolvency official with jurisdiction over the administrator for such Benchmark (or such component), a resolution authority with jurisdiction

over the administrator for such Benchmark (or such component) or a court or an entity with similar insolvency or resolution authority over the administrator for such Benchmark (or such component), in each case, which states that the administrator of such Benchmark (or such component) has ceased or will cease to provide all Available Tenors of such Benchmark (or such component thereof) permanently or indefinitely; *provided* that, at the time of such statement or publication, there is no successor administrator that will continue to provide any Available Tenor of such Benchmark (or such component thereof); or

(3) a public statement or publication of information by the regulatory supervisor for the administrator of such Benchmark (or the published component used in the calculation thereof) announcing that all Available Tenors of such Benchmark (or such component thereof) are no longer, or as of a specified future date will no longer be, representative.

For the avoidance of doubt, a "Benchmark Transition Event" will be deemed to have occurred with respect to any Benchmark if a public statement or publication of information set forth above has occurred with respect to each then-current Available Tenor of such Benchmark (or the published component used in the calculation thereof).

"Benchmark Unavailability Period" means, with respect to any Benchmark, the period (if any) (x) beginning at the time that a Benchmark Replacement Date pursuant to clauses (1) or (2) of that definition has occurred if, at such time, no Benchmark Replacement has replaced such then-current Benchmark for all purposes hereunder and under any Loan Document in accordance with Section 2.14 and (y) ending at the time that a Benchmark Replacement has replaced such then-current Benchmark for all purposes hereunder and under any Loan Document in accordance with Section 2.14.

"Benefit Plan" means any of (a) an "employee benefit plan" (as defined in ERISA) that is subject to Title I of ERISA, (b) a "plan" as defined in and subject to Section 4975 of the Code or (c) any Person whose assets include (for purposes of ERISA Section 3(42) or otherwise for purposes of Title I of ERISA or Section 4975 of the Code) the assets of any such "employee benefit plan" or "plan".

"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.

"Board" means the Board of Governors of the Federal Reserve System of the United States of America.

"Borrower" has the meaning assigned to such term in the recitals of this Agreement.

"Borrowing" means a Revolving Borrowing.

"Borrowing Base" means, (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, an amount equal to the amount determined in accordance with Section 3.02, as the same may be redetermined, adjusted or reduced from time to time pursuant to Section 3.03 and Section 3.04.

"Borrowing Base Deficiency" means, as of any date, the amount, if any, by which the Aggregate Credit Exposure on such date exceeds the Borrowing Base in effect on such date; provided, that, for purposes of determining the existence and amount of any Borrowing Base Deficiency, obligations under any Letter of Credit will not be deemed to be outstanding to the extent such obligations are secured by cash in the manner contemplated by Section 2.06(j).

"Borrowing Base Properties" 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.

"Borrowing Base Usage" means, as of any date and for all purposes, the quotient, expressed as a percentage, of (i) the Aggregate Credit Exposure as of such date, divided by (ii) the Borrowing Base as of such date.

"Borrowing Request" means a request by the Borrower for a Borrowing in accordance with Section 2.05.

"Business Day" means, any day (other than a Saturday or a Sunday) on which banks are open for business in New York City or Chicago; provided that, in relation to RFR Loans and any interest rate settings, fundings, disbursements, settlements or payments of any such RFR Loan, or any other dealings of such RFR Loan, any such day that is only an U.S. Government Securities Business Day.

"Capital Lease Obligations" of any Person means the obligations of such Person to pay rent or other amounts under any lease of (or other arrangement conveying the right to use) real or personal property, or a combination thereof, which obligations are required to be classified and accounted for as capital leases on a balance sheet of such Person under GAAP, and the amount of such obligations shall be the capitalized amount thereof determined in accordance with GAAP.

"Cash Collateral Account" means a deposit account with, and in the name of, the Administrative Agent, for the benefit of the Lenders, established and maintained for the deposit of cash collateral required under or in connection with this Agreement and the other Loan Documents.

"Cash Management Obligations" means, with respect to Borrower or Restricted Subsidiary, any obligations of such Person owed to any Lender or Affiliate of any Lender in respect of treasury management arrangements, depositary or other cash management services, including any treasury management line of credit, in each case, to the extent permitted under Section 7.01(d).

"Casualty Event" shall mean, with respect to any Collateral, (a) any damage to, destruction of, or other casualty or loss involving, any property or asset or (b) any seizure, condemnation, confiscation or taking under the power of eminent domain of, or any requisition of title or use of, or relating to, or any similar event in respect of, any property or asset.

"Change in Law" means (a) the adoption of any law, rule or regulation on the date of this Agreement, (b) any change in any law, rule or regulation or in the interpretation or application thereof by any Governmental Authority after the date of this Agreement or (c) compliance by any Lender (or, for purposes of Section 2.15(b), by any lending office of such Lender or by such Lender's holding company, if any) with any request, guideline or directive (whether or not having the force of law) of any Governmental Authority made or issued after the date of this Agreement; provided that, notwithstanding anything herein to the contrary, (x) the Dodd-Frank Wall Street Reform and Consumer Protection Act and all requests, rules, guidelines, requirements or directives thereunder or issued in connection therewith or in the implementation thereof, and (y) all requests, rules, guidelines, requirements or directives promulgated by the Bank for International Settlements, the Basel Committee on Banking Supervision (or any successor or similar authority) or the United States or foreign regulatory authorities, in each case pursuant to Basel III, shall in each case be deemed to be a "Change in Law", regardless of the date enacted, adopted, issued or implemented.

"Change of Control" means (a) the acquisition of ownership, directly or indirectly, beneficially or of record, by any Person or group (within the meaning of the Securities Exchange Act of 1934 and the rules of the SEC thereunder as in effect on the date hereof) other than the Permitted Holders, of Equity Interests representing more than 35% of the aggregate ordinary voting power represented by the issued and outstanding Equity Interests of the Borrower; (b) occupation of a majority of the seats (other than vacant seats) on the board of directors of the Borrower by Persons who were not directors of the Borrower on the date of this Agreement or nominated, elected or appointed (or approved for nomination, election or appointment) by the board of directors of the Borrower.

"Charges" has the meaning assigned to such term in Section 11.16.

"CME Term SOFR Administrator" means CME Group Benchmark Administration Limited as administrator of the forward-looking term Secured Overnight Financing Rate (SOFR) (or a successor administrator).

"Co-Documentation Agents" means, collectively, JPMorgan Chase Bank, N.A., Bank of America, N.A., Barclays Bank PLC, Canadian Imperial Bank of Commerce, New York Branch, Citibank, N.A., DNB Bank ASA, New York Branch, Mizuho Bank, Ltd., Royal Bank of Canada and Truist Bank, each, individually, a "Co-Documentation Agent".

"Code" means the Internal Revenue Code of 1986, as amended from time to time.

"Collateral" means all assets, whether now owned or hereafter acquired by any Credit Party, in which a Lien is granted or purported to be granted to any Secured Party as security for any Obligation.

"Commitment" means, with respect to each Lender, the commitment of such Lender to make Loans and to acquire participations in Letters of Credit hereunder, in an aggregate amount at any one time outstanding not to exceed the amount set forth opposite such Lender's name on Schedule 1.01, or in the Assignment and Assumption Agreement or Lender Certificate pursuant to which such Lender shall have assumed or agreed to provide its Commitment, as applicable, as such Commitment may be (a) reduced from time to time pursuant to Section 2.02, (b) increased from time to time as a result of such Lender delivering a Lender Certificate pursuant to Section 2.03, and (c) reduced or increased from time to time pursuant to assignments by or to such Lender pursuant to Section 11.04; provided that any Lender's Commitment shall not at any time exceed the least of (i) such Lender's Applicable Percentage of the Maximum Facility Amount, (ii) such Lender's Applicable Percentage of the Borrowing Base then in effect, and (iii) such Lender's Applicable Percentage of the Aggregate Commitment.

"Commodity Exchange Act" means the Commodity Exchange Act (7 U.S.C. § 1 et seq.), as amended from time to time, and any successor statute.

"Communications" has the meaning assigned to such term in Section 10.03.

"Connection Income Taxes" means Other Connection Taxes that are imposed on or measured by net income (however denominated) or that are franchise Taxes or branch profits Taxes.

"Consolidated" refers to the consolidation of any Person, in accordance with GAAP, with its properly consolidated Subsidiaries. References herein to a Person's consolidated financial statements, financial position, financial condition, liabilities, etc. refer to the consolidated financial statements, financial position, financial condition, liabilities, etc. of such Person and its properly consolidated Subsidiaries.

"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.

"Consolidated Current Assets" means, as of any date of determination, the total of (i) the Consolidated current assets of Borrower (excluding assets of any Consolidated Subsidiaries that are not Credit Parties), determined in accordance with GAAP as of such date and calculated on a Consolidated basis, plus, the Aggregate Unused Commitment as of such date (assuming that for purposes of this clause only, when calculating the Aggregate Unused Commitment as of any date not during an Investment Grade Period, each Lender's Commitment shall equal such Lender's Applicable Percentage of the Borrowing Base then in effect), (ii) less any non-cash assets required to be included in Consolidated current assets of Borrower and its Consolidated Subsidiaries that are Credit Parties as a result of the application of FASB Accounting Standards Codification 718, 815 or 410.

"Consolidated Current Liabilities" means, as of any date of determination, the total of (i) Consolidated current liabilities of Borrower (excluding liabilities of any Consolidated Subsidiaries that are not Credit Parties), as determined in accordance with GAAP as of such date and calculated on a Consolidated basis, (ii) less payments of principal on the Loans required to be repaid within one year from the time of calculation, (iii) less any non-cash obligations required to be included in Consolidated current liabilities of Borrower and its Consolidated Subsidiaries that are Credit Parties as a result of the application of FASB Accounting Standards Codification 718, 815 or 410, but shall expressly include any unpaid liabilities for cash charges or payments that have been incurred as a result of the termination of any Hedging Contract.

"Consolidated Current Ratio" means, as of any date of determination, the ratio of Consolidated Current Assets to Consolidated Current Liabilities as of such date.

"Consolidated EBITDAX" means for any period, EBITDAX of Borrower and its Restricted Subsidiaries that are Credit Parties on a Consolidated basis for such period.

"Consolidated Interest Expense" means for any period, without duplication, the aggregate of (a) all interest expense of Borrower and its Consolidated Subsidiaries that are Credit Parties as determined in accordance with GAAP, including (i) all interest, fees and costs payable with respect to the Indebtedness of such Persons to the extent treated as interest in accordance with GAAP (other than fees and costs which may be capitalized as transaction costs in accordance with GAAP) and (ii) the interest component of Capital Lease Obligations, to the extent treated as interest in accordance with GAAP, and (b) any interest paid in connection with the issuance or incurrence of any new Indebtedness permitted hereunder to the extent that, pursuant to Accounting Standards Codification 470-60, such payments are not accounted for as interest expense, minus, to the extent included in such amount, (i) fees, costs, and expenses incurred in connection with the consummation of this Agreement, any amendment or other modification hereto from time to time and/or the issuance, incurrence, or repayment of any Indebtedness permitted hereunder and (ii) any cash interest expense in respect of indebtedness that has been defeased and/or discharged by the deposit of cash and/or cash equivalents in accordance with its terms.

"Consolidated Net Income" means for any period, the Consolidated net income (or loss) of Borrower and its Consolidated Subsidiaries that are Credit Parties, determined in accordance with GAAP; provided that there shall be excluded (a) any gain or loss from the sale of assets other than in the ordinary course of business, (including any proceeds received from Dispositions in respect of any Production Payment), (b) any non-cash income, gains, losses or charges resulting from the application of FASB Accounting Standards Codifications 718, 815, 410, 360 and 350, but shall expressly include any cash

charges or payments that have been incurred as a result of the termination of any Hedging Contract, (c) the income (or deficit) of any Person accrued prior to the date it becomes a Credit Party, or is merged into or consolidated with a Borrower or any of its Consolidated Subsidiaries, as applicable, (d) the income (or deficit) of any Person in which any other Person (other than the Borrower or any Credit Party) has an Equity Interest, except to the extent of the amount of dividends or other distributions actually paid to the Borrower or any of the Credit Parties during such period (which amount will be included in the calculation of Consolidated Net Income) regardless of the amount of income (or deficit) of such Person for such period and (e) the undistributed earnings of any Consolidated Subsidiary of Borrower, to the extent that the declaration or payment of dividends or similar distributions by such Consolidated Subsidiary is not at the time permitted by the terms of any contractual obligation (other than under any Loan Document) or by any law applicable to such Consolidated Subsidiary.

"Consolidated Subsidiaries" means, for any Person, any Subsidiary or other entity the accounts of which would be Consolidated with those of such Person in its Consolidated financial statements in accordance with GAAP.

"Control" means the possession, directly or indirectly, of the power to direct or cause the direction of the management or policies of a Person, whether through the ability to exercise voting power, by contract or otherwise. "Controlling" and "Controlled" have meanings correlative thereto.

"Corresponding Tenor" with respect to any Available Tenor means, as applicable, either a tenor (including overnight) or an interest payment period having approximately the same length (disregarding business day adjustment) as such Available Tenor.

"Counterpart Agreement" means a Counterpart Agreement substantially in the form of Exhibit C delivered by a Guarantor pursuant to Section 6.12.

"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.

"Credit Exposure" means, with respect to any Lender at any time, the sum of the outstanding principal amount of such Lender's Loans and its LC Exposure at such time.

"Credit Parties" means collectively, Borrower and each Guarantor and each individually, a "Credit Party".

"Crude Oil" means all crude oil and condensate.

"Daily Simple SOFR" means, for any day (a "SOFR Rate Day"), a rate per annum equal SOFR for the day (such day "SOFR Determination Date") that is five (5) U.S. Government Securities Business Days prior to (i) if such SOFR Rate Day is a U.S. Government Securities Business Day, such SOFR Rate Day or

(ii) if such SOFR Rate Day is not a U.S. Government Securities Business Day, the U.S. Government Securities Business Day immediately preceding such SOFR Rate Day, in each case, as such SOFR is published by the SOFR Administrator on the SOFR Administrator's Website. Any change in Daily Simple SOFR due to a change in SOFR shall be effective from and including the effective date of such change in SOFR without notice to the Borrower.

"Default" means any event or condition which constitutes an Event of Default or which upon notice, lapse of time or both would, unless cured or waived, become an Event of Default.

"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.

"Defaulting Lender" means any Lender that (a) has failed, within two (2) Business Days of the date required to be funded or paid, to (i) fund any portion of its Loans, (ii) fund any portion of its participations in Letters of Credit or (iii) pay over to the Administrative Agent, the Issuing Bank or any Lender any other amount required to be paid by it hereunder, unless, in the case of clause (i) above, such Lender notifies the Administrative Agent in writing that such failure is the result of such Lender's good faith determination that a condition precedent to funding (specifically identified and including the particular default, if any) has not been satisfied, (b) has notified the Borrower, the Administrative Agent, the Issuing Bank or any Lender in writing, or has made a public statement to the effect, that it does not intend or expect to comply with any of its funding obligations under this Agreement (unless such writing or public statement indicates that such position is based on such Lender's good faith determination that a condition precedent (specifically identified and including the particular default, if any) to funding a Loan under this Agreement cannot be satisfied) or generally under other agreements in which it commits to extend credit, (c) has failed, within three (3) Business Days after request by the Administrative Agent, the Issuing Bank or any Lender, acting in good faith, to provide a certification in writing from an authorized officer of such Lender that it will comply with its obligations (and is financially able to meet such obligations) to fund prospective Loans and participations in then outstanding Letters of Credit under this Agreement, provided that such Lender shall cease to be a Defaulting Lender pursuant to this clause (c) upon receipt by the Administrative Agent, the Issuing Bank or such Lender of such certification in form and substance satisfactory to it and the Administrative Agent, or (d) has become the subject of (A) a Bankruptcy Event or (B) a Bail-In Action.

"Departing Lender" means each lender under the Existing Credit Agreement that does not have a Commitment hereunder and is identified on Schedule 5.01(a) hereto.

"Departing Lender Hedging Contracts" means, to the extent constituting "Lender Hedging Obligations" under the Existing Credit Agreement, the Hedging Contracts and trades thereunder entered into between any Credit Party and any Departing Lender prior to the Effective Date that are in effect on the Effective Date and set forth on Schedule 5.01(b) hereto.

"Disposition" or "Dispose" 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; provided 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.

"Disqualified Stock" means any Equity Interest that, by its terms (or by the terms of any security into which it is convertible or for which it is exchangeable) or upon the happening of any event, matures or is mandatorily redeemable for any consideration other than other Equity Interests (which would not constitute Disqualified Stock), pursuant to a sinking fund obligation or otherwise, or is convertible or

exchangeable for Debt or redeemable for any consideration other than other Equity Interests (which would not constitute Disqualified Stock) at the option of the holder thereof, in whole or in part, on or prior to the date that is one year after the earlier of (a) the Maturity Date and (b) the date on which there are no Loans, LC Exposure or other obligations hereunder outstanding and all of the Commitments are terminated. For the avoidance of doubt, any such Equity Interest redeemable solely by (a) the sale of assets or (b) a Change of Control does not constitute Disqualified Stock.

"Dollars" or "$" refers to lawful money of the United States of America.

"Domestic Subsidiary" means, with respect to any Person, a subsidiary of such Person that is incorporated or formed under the laws of the United States of America, any state thereof or the District of Columbia.

"EBITDAX" means, with respect to any Person for any period, Consolidated Net Income for such period; plus without duplication and to the extent deducted in the calculation of Consolidated Net Income for such period, the sum of (a) any provision for (or less any benefit for) income or franchise Taxes; (b) Consolidated Interest Expense; (c) amortization, depletion, depreciation and exploration expense; and (d) any non-cash losses, expenses, impairments or charges (including losses arising from ceiling test writedowns, non-cash losses or charges resulting from the requirements of FASB Accounting Standards Codifications 718, 815, 410, 360 and 350, but excluding accruals of or reserves for cash charges for any future period); provided that cash payments made during such period or in any future period in respect of non-cash charges, expenses or losses, other than any such excluded charge, expense or loss described in the parenthetical to this clause (d) shall be subtracted from Consolidated Net Income in calculating EBITDAX for the period in which such payments are made; minus, to the extent included in the calculation of Consolidated Net Income, the sum of (i) interest income, (ii) any extraordinary income or gains; and (iii) any other non-cash income or gain, including non-cash income or gains resulting from the requirements of FASB Accounting Standards Codifications 718, 815, 410, 360 and 350, but excluding any items that represent the reversal of any accrual of, or cash reserve for, anticipated cash charges in any prior period that are described in clause (d) above; provided that, with respect to the determination of Borrower's compliance with the Leverage Ratio set forth in Sections 7.11(b) and 7.12(b) for any period, EBITDAX for such period shall be adjusted to give effect, on a pro forma basis and consistent with GAAP, to any Qualified Acquisitions or Qualified Dispositions made during such period as if such Qualified Acquisition or Qualified Disposition, as the case may be, was made at the beginning of such period..

"EEA Financial Institution" means (a) any institution established in any EEA Member Country which is subject to the supervision of an EEA Resolution Authority, (b) any entity established in an EEA Member Country which is a parent of an institution described in clauses (a) of this definition, or (c) any institution established in an EEA Member Country which is a subsidiary of an institution described in clauses (a) or (b) of this definition and is subject to consolidated supervision with its parent.

"EEA Member Country" means any of the member states of the European Union, Iceland, Liechtenstein, and Norway.

"EEA Resolution Authority" means any public administrative authority or any Person entrusted with public administrative authority of any EEA Member Country (including any delegee) having responsibility for the resolution of any EEA Financial Institution.

"Effective Date" means the date on which the conditions specified in Section 5.01 are satisfied (or waived in accordance with Section 11.02).

"Elected Commitment Utilization" means, as of any date and for all purposes, the quotient, expressed as a percentage, of (i) the aggregate Credit Exposure as of such date, divided by (ii) the Aggregate Commitment as of such date.

"Electronic Signature" means an electronic sound, symbol, or process attached to, or associated with, a contract or other record and adopted by a Person with the intent to sign, authenticate or accept such contract or record.

"Electronic System" means any electronic system, including e-mail, e-fax, Intralinks®, ClearPar®, Debt Domain, Syndtrak and any other Internet or extranet-based site, whether such electronic system is owned, operated or hosted by the Administrative Agent or any Issuing Bank and any of its respective Related Parties or any other Person, providing for access to data protected by passcodes or other security system.

"Eligible Assignee" means any Person that qualifies as an assignee pursuant to Section 11.04(b)(i); provided that, notwithstanding the foregoing, "Eligible Assignee" shall not include (i) Borrower or any Affiliates or Subsidiaries of Borrower, or (ii) any Person organized outside the United States if Borrower would be required to pay withholding taxes on interest or principal owed to such Person.

"Eligible Contract Participant" means an "eligible contract participant" as defined in the Commodity Exchange Act and the regulations thereunder.

"Engineered Value" means, the value attributed to the Borrowing Base Properties for purposes of the most recent Redetermination of the Borrowing Base pursuant to Article III (or for purposes of determining the Initial Borrowing Base in the event no such Redetermination has occurred), based upon the discounted present value of the estimated net cash flow to be realized from the production of Hydrocarbons from the Borrowing Base Properties as set forth in the Reserve Report.

"Environmental Law" means all laws, rules, regulations, codes, ordinances, orders, decrees, judgments, injunctions, legally enforceable directives or binding agreements issued, promulgated or entered into by any Governmental Authority, relating in any way to the environment, preservation or reclamation of natural resources, the management, release or threatened release of any Hazardous Material or to human health and safety matters.

"Environmental Liability" means any liability, contingent or otherwise (including any liability for damages, costs of environmental remediation, fines or penalties), of any Credit Party directly or indirectly resulting from or arising out of (a) violation of any Environmental Law, (b) the generation, use, handling, transportation, storage, treatment or disposal of any Hazardous Materials, (c) exposure to any Hazardous Materials, (d) the release or threatened release of any Hazardous Materials into the environment or (e) any written contract or agreement pursuant to which liability is assumed or imposed with respect to any of the foregoing in clauses (a) through (d) above.

"Equity Interests" means shares of capital stock, partnership interests, membership interests in a limited liability company, beneficial interests in a trust or other equity ownership interests in a Person, and any warrants, options or other rights entitling the holder thereof to purchase or acquire any such equity interest.

"ERISA" means the Employee Retirement Income Security Act of 1974, as amended from time to time.

"ERISA Affiliate" means any trade or business (whether or not incorporated) that, together with any Credit Party, is treated as a single employer under Section 414(b) or (c) of the Code or, solely for purposes of Section 302 of ERISA and Section 412 of the Code, is treated as a single employer under Section 414 of the Code.

"ERISA Event" means (a) any "reportable event", as defined in Section 4043 of ERISA or the regulations issued thereunder with respect to a Plan (other than an event for which the 30 day notice period is waived); (b) the failure of any Plan to meet the minimum funding standards under Section 412 of the Code or Section 302 of ERISA; (c) the filing pursuant to Section 412(c) of the Code or Section 302(c) of ERISA of an application for a waiver of the minimum funding standard with respect to any Plan; (d) the incurrence by any Credit Party or any of its ERISA Affiliates of any liability under Title IV of ERISA with respect to the termination of any Plan; (e) the receipt by any Credit Party or any ERISA Affiliate from the PBGC or a plan administrator of any notice relating to an intention to terminate any Plan or Plans or to appoint a trustee to administer any Plan; (f) the incurrence by any Credit Party or any of its ERISA Affiliates of any liability with respect to the withdrawal or partial withdrawal from any Plan or Multiemployer Plan; or (g) the receipt by any Credit Party or any ERISA Affiliate of any notice, or the receipt by any Multiemployer Plan from any Credit Party or any ERISA Affiliate of any notice, concerning the imposition of Withdrawal Liability or a determination that a Multiemployer Plan to which any Credit Party or ERISA Affiliate is obligated to contribute is, or is expected to be, insolvent (within the meaning of Section 4245 of ERISA) or in endangered or critical status (within the meaning of Section 432 of the Code or Section 305 of ERISA).

"EU Bail-In Legislation Schedule" means the EU Bail-In Legislation Schedule published by the Loan Market Association (or any successor Person), as in effect from time to time.

"Event of Default" has the meaning assigned to such term in Article IX.

"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).

"Excluded Swap Obligation" means, with respect to any Guarantor individually determined on a Guarantor by Guarantor basis, any Swap Obligation if, and to the extent that, all or a portion of the Guarantee of such Guarantor of, or the grant by such Guarantor of a security interest to secure, such Swap Obligation (or any Guarantee thereof) is or becomes illegal under the Commodity Exchange Act or any rule, regulation or order of the Commodity Futures Trading Commission (or the application or official interpretation of any thereof) by virtue of such Guarantor's failure for any reason to constitute an Eligible Contract Participant at the time the Guarantee of such Guarantor or the grant of such security interest becomes effective with respect to such Swap Obligation. If a Swap Obligation arises under a master

agreement governing more than one swap, such exclusion shall apply only to the portion of such Swap Obligation that is attributable to swaps for which such Guarantee or security interest is or becomes illegal.

"Excluded Taxes" means, with respect to a Recipient, (a) Taxes imposed on or measured by net income (however, denominated), franchise Taxes and branch profits Taxes, in each case (i) imposed as a result of such Recipient being organized under the Laws of, or having its principal office or, in the case of any Lender, its applicable lending office located in, the jurisdiction imposing such Tax (or any political subdivision thereof) or (ii) that are Other Connection Taxes (b) in the case of a Lender, any U.S. federal withholding Tax that is imposed on amounts payable to such Lender with respect to an applicable interest in a Loan or Commitment pursuant to a Law in effect on the date on which (i) such Lender acquires such interest in the Loan or Commitment (other than pursuant to an assignment request by Borrower under Section 2.19(b)) or (ii) such Lender changes its lending office, except in each case to the extent that, pursuant to Section 2.17, amounts with respect to such Taxes were payable either to such Lender's assignor immediately before such Lender became a party hereto or to such Lender immediately before it changed its lending office, (c) Taxes attributable to such Recipient's failure to comply with Section 2.17(f) and (d) any withholding Taxes imposed under FATCA.

"Existing Credit Agreement" has the meaning assigned to such term in the recitals of this Agreement.

"Existing Hedging Contracts" means any Hedging Contracts entered into between any Credit Party and any Lender Counterparty prior to the Effective Date and in effect on the Effective Date.

"Existing Loans" means the loans and other extensions of credit outstanding under the Existing Credit Agreement as of the Effective Date.

"Existing Senior Notes" means, collectively, the (a) $600,000,000 aggregate principal amount of 5.00% Senior Notes, due March 1, 2025, issued by Borrower pursuant to that certain Indenture dated December 21, 2016, (b) $500,000,000 aggregate principal amount of 8.375% Senior Notes, due July 15, 2026, issued by Borrower pursuant to that certain Indenture dated January 4, 2021, (c) $700,000,000 aggregate principal amount of 7.625% Senior Notes, due February 1, 2029, issued by Borrower pursuant to that certain Indenture dated January 26, 2021, (d) $600,000,000 aggregate principal amount of 5.375% Senior Notes, due March 1, 2030, issued by Borrower pursuant to that certain Indenture dated June 1, 2021, and (e) $81,570,000 aggregate principal amount of 4.250% convertible Senior Notes, due September 1, 2026, issued by Borrower pursuant to that certain Indenture dated August 21, 2020, and, in each case, Guaranteed by Borrower's wholly-owned subsidiaries and certain of its Restricted Subsidiaries.

"FASB" means Financial Accounting Standards Board.

"FATCA" means Sections 1471 through 1474 of the Code, as of the date of this Agreement (or any amended or successor version that is substantively comparable and not materially more onerous to comply with), any current or future regulations or official interpretations thereof, any agreements entered into pursuant to Section 1471(b)(1) of the Code and any fiscal or regulatory legislation, rules or practices adopted pursuant to any intergovernmental agreement, treaty or convention among Governmental Authorities entered into in connection with the implementation of the foregoing.

"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 NYFRB'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.

"Federal Reserve Board" means the Board of Governors of the Federal Reserve System of the United States of America.

"Fee Letter" means that certain fee letter, dated October 13, 2021, among the Borrower, the Administrative Agent and J.P. Morgan Securities LLC.

"Financial Officer" means the chief financial officer, principal accounting officer, treasurer or controller of any Credit Party. Any document delivered hereunder that is signed by a Financial Officer of a Credit Party shall be conclusively presumed to have been authorized by all necessary corporate, partnership and/or other action on the part of such Credit Party and such Financial Officer shall be conclusively presumed to have acted on behalf of such Credit Party.

"Flood Laws" has the meaning assigned to such term in Section 10.10.

"Floor" means the benchmark rate floor, if any, provided in this Agreement initially (as of the execution of this Agreement, the modification, amendment or renewal of this Agreement or otherwise) with respect to the Adjusted Term SOFR Rate or the Adjusted Daily Simple SOFR, as applicable. For the avoidance of doubt the initial Floor for each of Adjusted Term SOFR Rate or the Adjusted Daily Simple SOFR shall be 0.00%.

"Foreign Lender" means a Lender that is not a U.S. Person.

"GAAP" means generally accepted accounting principles in the United States of America.

"Governmental Authority" means the government of the United States of America, any other nation or any political subdivision thereof, whether state or local, and any agency, authority, instrumentality, regulatory body, court, central bank or other entity properly exercising executive, legislative, judicial, taxing, regulatory or administrative powers or functions of or pertaining to government.

"Guarantee" of or by any Person (in this definition, the "guarantor") means any obligation, contingent or otherwise, of the guarantor guaranteeing or having the economic effect of guaranteeing any Indebtedness of any other Person (the "primary obligor") in any manner, whether directly or indirectly, and including any obligation of the guarantor, direct or indirect, (a) to purchase or pay (or advance or supply funds for the purchase or payment of) such Indebtedness or other obligation or to purchase (or to advance or supply funds for the purchase of) any security for the payment thereof, (b) to purchase or lease property, securities or services for the purpose of assuring the owner of such Indebtedness or other obligation of the payment thereof, (c) to maintain working capital, equity capital or any other financial statement condition or liquidity of the primary obligor so as to enable the primary obligor to pay such Indebtedness or other obligation or (d) as an account party in respect of any letter of credit or letter of guaranty issued to support such Indebtedness or obligation; provided, that the term Guarantee shall not include endorsements for collection or deposit in the ordinary course of business.

"Guaranteed Liabilities" has the meaning assigned to such term in Section 8.01.

"Guarantor" means (a) each Restricted Subsidiary that is a party hereto or hereafter executes and delivers to the Administrative Agent and the Lenders, a Counterpart Agreement pursuant to Section 6.12 or otherwise and (b) the Borrower, with respect to the obligations of each other Credit Party.

"Hazardous Materials" means any substances regulated under any Environmental Law, whether as pollutants, contaminants, chemicals, industrial, toxic or hazardous substances or otherwise.

"Hedge Modification" means any amendment, modification, cancellation, sale, transfer, assignment, early termination, monetization or other disposition by any Credit Party of any Hedging Contract (including any Existing Hedging Contract) for Crude Oil, Natural Gas or Natural Gas Liquids.

"Hedging Contract" means any agreement with respect to any swap, forward, future or derivative transaction or option or similar agreement involving, or settled by reference to, one or more rates, currencies, commodities, equity or debt instruments or securities, or economic, financial or pricing indices or measures of economic, financial or pricing risk or value or any similar transaction or any combination of these transactions; provided that no phantom stock or similar plan providing for payments only on account of services provided by current or former directors, officers, employees or consultants of the Credit Parties shall be a Hedging Contract.

"Hydrocarbon Interests" means all rights, titles, interests and estates now or hereafter acquired in and to oil and gas leases, oil, gas and mineral leases, or other liquid or gaseous hydrocarbon leases, mineral fee interests, overriding royalty and royalty interests, net profit interests and production payment interests, including any reserved or residual interests of whatever nature.

"Hydrocarbons" means oil, gas, casinghead gas, drip gasoline, natural gasoline, condensate, distillate, liquid hydrocarbons, gaseous hydrocarbons, and all products refined or separated therefrom.

"Indebtedness" of any Person means, without duplication, (a) all obligations for borrowed money or evidenced by a bond, debenture, note or similar instrument; (b) all accounts payable and all accrued expenses, liabilities or other obligations to pay the deferred purchase price of property or services; (c) all obligations or liabilities which (i) would under GAAP be shown on such Person's balance sheet as a liability, and (ii) are payable more than one year from the date of creation or incurrence thereof (other than reserves for taxes and reserves for contingent obligations); (d) all obligations or liabilities arising under Hedging Contracts (on a net basis to the extent netting is provided for in the applicable Hedging Contract), including any deferred premium obligations with respect to floors; (e) all Capital Lease Obligations; (f) all obligations or liabilities arising under conditional sales or other title retention agreements; (g) all obligations or liabilities owing under direct or indirect guaranties of obligations of any other Person or otherwise constituting obligations to purchase or acquire or to otherwise protect or insure a creditor against loss in respect of obligations of any other Person (such as obligations under working capital maintenance agreements, agreements to keep-well, or agreements to purchase liabilities, assets, goods, securities or services), but excluding endorsements in the ordinary course of business of negotiable instruments in the course of collection; (h) all obligations (for example, repurchase agreements, mandatorily redeemable preferred stock (but not accrued dividends on preferred stock), and sale/leaseback agreements) consisting of an obligation to purchase or redeem securities or other property, if such obligations arise out of or in connection with the sale or issuance of the same or similar securities or property; (i) all obligations or liabilities with respect to letters of credit or applications or reimbursement agreements therefore; (j) all obligations or liabilities with respect to banker's acceptances; (k) all obligations or liabilities with respect to payments received in consideration of Hydrocarbons yet to be acquired or produced at the time of payment (including obligations under "take-or-pay" contracts to deliver gas in return for payments already received and the undischarged balance of any production payment created by such Person or for the creation of which such Person directly or indirectly received payment) or (l) all obligations or liabilities with respect to other obligations to deliver goods or services, including Hydrocarbons, in consideration of advance payments therefore; 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.

"Indemnified Taxes" means (a) Taxes, other than Excluded Taxes, imposed on or with respect to any payment made by or on account of any obligation of any Credit Party under any Loan Document and (b) to the extent not otherwise described in (a), Other Taxes.

"Indemnitee" has the meaning assigned to such term in Section 11.03(b).

"Indenture" means (a) any Indenture described in the definition of Existing Senior Notes and (b) any indenture by and among any Credit Party, as issuer, and a trustee, pursuant to which any Senior Notes are issued, as the same may be amended, restated, modified or otherwise supplemented from time to time to the extent permitted under Section 7.13.

"Ineligible Institution" has the meaning assigned to such term in Section 11.04.

"Information" has the meaning assigned to such term in Section 11.12.

"Initial Borrowing Base" has the meaning assigned to such term in Section 3.01.

"Interest Election Request" means a request by the Borrower to convert or continue a Borrowing in accordance with Section 2.08.

"Interest Payment Date" means (a) with respect to any ABR Loan, the last day of each March, June, September and December and the Maturity Date, (b) with respect to any RFR Loan, (1) each date that is on the numerically corresponding day in each calendar month that is one month after the Borrowing of such Loan (or, if there is no such numerically corresponding day in such month, then the last day of such month) and (2) the Maturity Date and (c) with respect to any Term Benchmark Loan, the last day of each Interest Period applicable to the Borrowing of which such Loan is a part and, in the case of a Term Benchmark Borrowing with an Interest Period of more than three months' duration, each day prior to the last day of such Interest Period that occurs at intervals of three months' duration after the first day of such Interest Period, and the Maturity Date.

"Interest Period" means with respect to any Term Benchmark Borrowing, the period commencing on the date of such Borrowing and ending on the numerically corresponding day in the calendar month that is one, three or six months thereafter (in each case, subject to the availability for the Benchmark applicable to the relevant Loan or Commitment), as the Borrower may elect; *provided*, that (i) if any Interest Period would end on a day other than a Business Day, such Interest Period shall be extended to the next succeeding Business Day unless such next succeeding Business Day would fall in the next calendar month, in which case such Interest Period shall end on the next preceding Business Day, (ii) any Interest Period that commences on the last Business Day of a calendar month (or on a day for which there is no numerically corresponding day in the last calendar month of such Interest Period) shall end on the last Business Day of the last calendar month of such Interest Period and (iii) no tenor that has been removed from this definition pursuant to Section 2.14(e) shall be available for specification in such Borrowing Request or Interest Election Request. For purposes hereof, the date of a Borrowing initially shall be the date on which such Borrowing is made and, in the case of a Revolving Borrowing, thereafter shall be the effective date of the most recent conversion or continuation of such Borrowing.

"Investment" has the meaning assigned to such term in Section 7.07.

"Investment Grade Period" shall mean any period commencing with the date the Borrower elects to enter into an Investment Grade Period pursuant to the provisions of Section 11.15(a) and ending with the earlier to occur of (i) the date the Borrower elects to exit such Investment Grade Period pursuant to the provisions of Section 11.15(b) and (ii) the first date following the beginning of such Investment Grade

Period on which the Borrower receives both (i) a corporate rating from Moody's that is lower than Ba1 and (ii) a corporate rating from S&P that is lower than BB+.

"Issuing Bank" means JPMorgan Chase Bank, N.A., Wells Fargo Bank, N.A., and any other Lender that agrees to act as an Issuing Bank, each in its capacity as the issuer of Letters of Credit hereunder, and its successors in such capacity as provided in Section 2.06(i). Any Issuing Bank may, in its discretion, arrange for one or more Letters of Credit to be issued by Affiliates of such Issuing Bank, in which case the term "Issuing Bank" shall include any such Affiliate with respect to Letters of Credit issued by such Affiliate. In the event more than one Lender has issued one or more Letters of Credit, each reference to "Issuing Bank" shall be deemed to refer to each Issuing Bank or a particular Issuing Bank, as context requires.

"Law" means any statute, law, regulation, ordinance, rule, treaty, judgment, order, decree, permit, concession, franchise, license, agreement or other governmental restriction of the United States or any state or political subdivision thereof or of any foreign country or any department, province or other political subdivision thereof. Any reference to a Law includes any amendment or modification to such Law, and all regulations, rulings, and other Laws promulgated under such Law.

"LC Disbursement" means a payment made by the Issuing Bank pursuant to a Letter of Credit.

"LC Exposure" means, at any time, the sum of (a) the aggregate undrawn amount of all outstanding Letters of Credit at such time plus (b) the aggregate amount of all LC Disbursements that have not yet been reimbursed by or on behalf of the Borrower at such time. The LC Exposure of any Lender at any time shall be its Applicable Percentage of the total LC Exposure at such time.

"LC Maturity Date" means the date that is thirty (30) days prior to the Maturity Date.

"LC Sublimit" means $950,000,000.

"Lender Certificate" has the meaning assigned to such term in Section 2.03.

"Lender Counterparty" means any Lender or any Affiliate of a Lender counterparty to a Hedging Contract with any Credit Party including any Person that was, but thereafter ceased to be, a Lender or Affiliate of a Lender but only to the extent of the obligations of any Credit Party to such Person pursuant to a Hedging Contract entered into at the time such Person was a Lender or an Affiliate of a Lender; provided that any Departing Lender that was a Lender Counterparty under the Existing Credit Agreement shall be deemed to be a Lender Counterparty hereunder solely with respect to the Existing Hedging Contracts to which such Departing Lender is a party.

"Lender Hedging Obligations" means all obligations arising from time to time under Hedging Contracts entered into from time to time between any Credit Party and a Lender Counterparty (including any such obligations under any Existing Hedging Contracts); provided that if such Lender Counterparty ceases to be a Lender hereunder or an Affiliate of a Lender hereunder, Lender Hedging Obligations shall only include such obligations to the extent arising from transactions entered into at the time such Lender Counterparty was a Lender hereunder or an Affiliate of a Lender hereunder; provided further, that obligations arising under Departing Lender Hedging Contracts in respect of the trades set forth on Schedule 5.01(b) shall only constitute Lender Hedging Obligations hereunder until the maturity or expiration of each such trade.

"Lenders" means the Persons listed on Schedule 1.01 and any other Person that shall have become a party hereto pursuant to an Assignment and Assumption, other than any such Person that ceases to be a party hereto pursuant to an Assignment and Assumption.

"Letter of Credit" means any letter of credit issued pursuant to this Agreement and, to the extent outstanding on the Effective Date, any letter of credit issued under the Existing Credit Agreement, including, without limitation, those Letters of Credit set forth in Schedule 2.06 hereof, and, in each case, any renewals thereof after the Effective Date.

"Letter of Credit Commitment" means, with respect to each Issuing Bank, the commitment of such Issuing Bank to issue Letters of Credit hereunder, in an aggregate amount at any one time outstanding not to exceed the lesser of (a) an amount equal to the portion of the aggregate LC Sublimit such that the amount of each Issuing Bank's Letter of Credit Commitment is the same and (b) the amount set forth opposite such Issuing Bank's name on Schedule 1.02 at such time, as such schedule may be supplemented from time to time by the Administrative Agent, notwithstanding Section 11.02, in connection with the replacement of any Issuing Bank as provided in Section 2.06(i), or if an Issuing Bank has entered into an Assignment and Assumption.

"Leverage Ratio" means the ratio of total Indebtedness to Consolidated EBITDAX for the trailing four fiscal quarter period ending on the last day of such fiscal quarter.

"Lien" means, with respect to any asset, (a) any mortgage, deed of trust, lien, pledge, hypothecation, encumbrance, charge or security interest in, on or of such asset, (b) the interest of a vendor or a lessor under any conditional sale agreement, capital lease or title retention agreement (or any financing lease having substantially the same economic effect as any of the foregoing) relating to such asset and (c) in the case of securities, any purchase option, call or similar right of a third party with respect to such securities.

"Liquidity" means, at any date of determination, the sum of (a) the Aggregate Unused Commitment (other than Commitments of any Defaulting Lenders) and (b) the Borrower's and its Restricted Subsidiaries that are Credit Parties unrestricted cash and cash equivalents (in each case, free and clear of all Liens other than Permitted Liens).

"Loan Documents" means this Agreement, any promissory notes executed in connection herewith, the Security Documents, the Letters of Credit (and any applications therefore and reimbursement agreements related thereto), the Fee Letter and any other agreements executed in connection with this Agreement.

"Loan Limit" means (a) at any time during an Investment Grade Period, the lesser of (i) the Maximum Facility Amount and (ii) the Aggregate Commitment at such time, and (b) at any time that is not during an Investment Grade Period, the least of (i) the Maximum Facility Amount, (ii) the Aggregate Commitment at such time, and (iii) the Borrowing Base then in effect.

"Loans" means the loans made by the Lenders to the Borrower pursuant to this Agreement.

"Majority Lenders" means, at any time, Lenders having Credit Exposures and Unused Commitments representing more than fifty percent (50.0%) of the sum of the Aggregate Credit Exposure and the Aggregate Unused Commitment at such time or, if the Aggregate Commitment has been terminated, Lenders having Credit Exposures representing more than fifty percent (50.0%) of the Aggregate Credit Exposure of all Lenders at such time.

"Material Adverse Effect" means (a) a material adverse change in, or a material adverse effect upon, the operations, business, assets or financial condition of the Borrower and its Restricted Subsidiaries, taken as a whole; (b) a material impairment of the rights and remedies of the Administrative Agent or the Lenders under any Loan Document, or of the ability of any Credit Party to perform its obligations under any Loan Document to which it is a party; or (c) a material adverse effect upon the legality, validity, binding effect or enforceability against any Credit Party of any Loan Document to which it is a party.

"Material Indebtedness" means the Senior Notes and any other Indebtedness (other than the Loans and Letters of Credit), or obligations in respect of one or more Hedging Contracts, of Borrower or any one or more of the Restricted Subsidiaries in an aggregate principal amount exceeding $125,000,000. For purposes of determining Material Indebtedness, the "principal amount" of the obligations of any Credit Party in respect of any Hedging Contract at any time shall be the maximum aggregate amount (giving effect to any netting agreements) that such Credit Party would be required to pay if such Hedging Contract were terminated at such time.

"Maturity Date" means, at any time a determination is to be made, the earlier of (i) the date that is one hundred eighty (180) days prior to the earliest stated redemption date of any Senior Note then outstanding, or (ii) October 26, 2026.

"Maximum Facility Amount" means $5,000,000,000.

"Maximum Liability" has the meaning assigned to such term in Section 8.09.

"Maximum Rate" has the meaning assigned to such term in Section 11.16.

"Minimum Collateral Amount" means eighty-five percent (85%) 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.

"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.

"Midstream Party" means Antero Midstream and each of its Subsidiaries, and collectively, the "Midstream Parties".

"Moody's" means Moody's Investors Service, Inc.

"Mortgaged Properties" means the Oil and Gas Interests described in one or more duly executed, delivered and filed Mortgages evidencing a first and prior Lien in favor of the Administrative Agent for the benefit of the Secured Parties and subject only to the Permitted Liens.

"Mortgages" means all mortgages, deeds of trust, amendments to mortgages, security agreements, assignments of production, pledge agreements, collateral assignments, financing statements and other documents, instruments and agreements evidencing, creating, perfecting or otherwise establishing the Liens required by Section 6.09. All Mortgages shall be in form and substance reasonably satisfactory to Administrative Agent.

"Multiemployer Plan" means a multiemployer plan as defined in Section 4001(a)(3) of ERISA.

"Natural Gas" means all natural gas, distillate or sulphur, and all products recovered in the processing of natural gas (other than condensate and Natural Gas Liquids) including coalbed methane gas and casinghead gas.

"Natural Gas Liquids" means all natural gas liquids including those recovered in the production and processing of natural gas, including natural gasoline and liquefied petroleum gas (including liquefied butane, propane, iso-butane, normal butane, and ethane (including such methane allowable in commercial ethane)).

"Net Cash Proceeds" means, (a) with respect to any Disposition of any Borrowing Base Properties (including any Disposition of Equity Interests of any Restricted Subsidiary) by Borrower or any Restricted Subsidiary, the cash proceeds received in connection with such sale net of (i) all federal, state and local Taxes required to be paid or accrued as a liability under GAAP, (ii) the deduction of appropriate amounts to be provided as a reserve, in accordance with GAAP, for liabilities associated with such Disposition and retained by the seller thereof, (iii) any amounts held in escrow pending determination of purchase price adjustment (such amounts to be become Net Cash Proceeds at the time such amounts are released to Borrower or Restricted Subsidiary), (iv) the net amount paid after giving effect to all Hedge Modifications effected in connection with such Disposition and corresponding to the notional volumes of the Borrowing Base Properties so Disposed and (v) brokerage fees, professional commissions and other costs and expenses associated therewith, including all legal, title and recording fees and expenses, (b) with respect to any Permitted Refinancings or issuance of Senior Notes, the cash proceeds received from such Permitted Refinancing or issuance of Senior Notes, as the case may be, net of underwriting discounts and commissions and other reasonable costs and expenses associated therewith, including reasonable legal fees and expenses, and (c) with respect to any Hedge Modification by any Credit Party, the excess, if any, of (i) the net amount of all cash and cash equivalents received in connection with all substantially contemporaneous Hedge Modifications (after giving effect to any netting arrangements), over (ii) the reasonable and documented out-of-pocket expenses incurred by such Credit Party in connection with such Hedge Modification.

"Non-Consenting Borrowing Base Lender" has the meaning assigned to such term in Section 2.19(c).

"Non-Consenting Lender" has the meaning assigned to such term in Section 2.19(c).

"Non-Defaulting Lender" means, at any time, each Lender that is not a Defaulting Lender at such time.

"NYFRB" means the Federal Reserve Bank of New York.

"NYFRB Rate" means, for any day, the greater of (a) the Federal Funds Effective Rate in effect on such day and (b) the Overnight Bank Funding Rate in effect on such day (or for any day that is not a Business Day, for the immediately preceding Business Day); *provided* that if none of such rates are published for any day that is a Business Day, the term "NYFRB Rate" means the rate for a federal funds transaction quoted at 11:00 a.m. on such day received by the Administrative Agent from a federal funds broker of recognized standing selected by it; *provided*, *further*, that if any of the aforesaid rates as so determined be less than zero, such rate shall be deemed to be zero for purposes of this Agreement.

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

"Obligations" means (a) any and all obligations of every nature, contingent or otherwise, whether now existing or hereafter arising, of any Credit Party from time to time owed to the Administrative Agent,

the Issuing Bank, the Lenders or any of them under any Loan Document, whether for principal, interest, reimbursement of amounts drawn under any Letter of Credit, funding indemnification amounts, fees, expenses, indemnification or otherwise, (b) Lender Hedging Obligations and (c) Cash Management Obligations; provided, however, that Obligations of a Credit Party shall not include any Excluded Swap Obligations of such Credit Party.

"Oil and Gas Interest(s)" means (a) Hydrocarbon Interests, (b) the properties now or hereafter pooled or unitized with Hydrocarbon Interests, (c) all presently existing or future unitization, pooling agreements and declarations of pooled units and the units created thereby (including all units created under orders, regulations and rules of any Governmental Authority) which may affect all or any portion of the Hydrocarbon Interests, (d) all operating agreements, contracts and other agreements, including production sharing contracts and agreements, which relate to any of the Hydrocarbon Interests or the production, sale, purchase, exchange or processing of Hydrocarbons from or attributable to such Hydrocarbon Interests, (e) all Hydrocarbons in and under and which may be produced and saved or attributable to the Hydrocarbon Interests, including all oil in tanks, and all rents, issues, profits, proceeds, products, revenues and other incomes from or attributable to the Hydrocarbon Interests, (f) all tenements, hereditaments, appurtenances and properties in any manner appertaining, belonging, affixed or incidental to the Hydrocarbon Interests and (g) all properties, rights, titles, interests and estates described or referred to above, including any and all property, real or personal, now owned or hereafter acquired and situated upon, used, held for use or useful in connection with the operating, working or development of any of such Hydrocarbon Interests or property (excluding drilling rigs, automotive equipment, rental equipment or other personal property which may be on such premises for the purpose of drilling a well or for other similar temporary uses) and including any and all oil wells, gas wells, injection wells or other wells, buildings, structures, fuel separators, liquid extraction plants, plant compressors, pumps, pumping units, field gathering systems, gas processing plants and pipeline systems and any related infrastructure to any thereof, tanks and tank batteries, fixtures, valves, fittings, machinery and parts, engines, boilers, meters, apparatus, equipment, appliances, tools, implements, cables, wires, towers, casing, tubing and rods, surface leases, rights-of-way, easements and servitudes together with all additions, substitutions, replacements, accessions and attachments to any and all of the foregoing.

"Organizational Documents" means (a) with respect to any corporation, its certificate or articles of incorporation or organization, as amended, and its by-laws, as amended, (b) with respect to any limited partnership, its certificate of limited partnership, as amended, and its partnership agreement, as amended, (c) with respect to any general partnership, its partnership agreement, as amended, and (d) with respect to any limited liability company, its certificate of formation or articles of organization, as amended, and its limited liability company agreement or operating agreement, as amended.

"Other Connection Taxes" means, with respect to any Recipient, Taxes imposed as a result of a present or former connection between such Recipient and the jurisdiction imposing such Tax (other than connections arising from such Recipient having executed, delivered, become a party to, performed its obligations under, received payments under, received or perfected a security interest under, engaged in any other transaction pursuant to or enforced any Loan Document, or sold or assigned an interest in any Loan or Loan Document).

"Other Taxes" means any and all present or future stamp, court or documentary, intangible, recording, filing or similar Taxes arising from any payment made hereunder or from the execution, delivery or enforcement or legally required registration of, from the receipt or perfection of a security interest under, or otherwise with respect to, any Loan Document, except any such Taxes that are Other Connection Taxes imposed with respect to an assignment (other than an assignment made pursuant to Section 2.19(b)).

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

"Parent" means, with respect to any Lender, any Person as to which such Lender is, directly or indirectly, a subsidiary.

"Participant" has the meaning assigned to such term in Section 11.04(c).

"Participant Register" has the meaning assigned to such term in Section 11.04(c).

"Patriot Act" has the meaning assigned to such term in Section 11.17.

"Payment" has the meaning assigned to such term in Section 10.06(d).

"Payment Notice" has the meaning assigned to such term in Section 10.06(d).

"PBGC" means the Pension Benefit Guaranty Corporation referred to and defined in ERISA and any successor entity performing similar functions.

"Permitted Holders" means each of (i) each member of the Yorktown Group, (ii) Paul M. Rady ("Rady"); (iii) Glen C. Warren, Jr. ("Warren"); (iv) Rady's wife or Warren's wife; (v) any lineal descendant of either Rady or Warren; (vi) the guardian or other legal representative of either Rady or Warren; (vii) the estate of either Rady or Warren; (viii) any trust of which at least one of the trustees is either Rady or Warren, or the principal beneficiaries of which are any one or more of the Persons referred to in the preceding clauses (i) through (vii); (ix) any Person that is controlled by any one or more of the Persons in the preceding clauses (i) through (viii); and (x) any group (within the meaning of the Exchange Act) that includes one or more of the Persons described in the preceding clauses (i) through (ix), provided that such Persons described in the preceding clauses (i) through (ix) control more than 50% of the total voting power of such group.

"Permitted Investments" means:

(a) U.S. Government Securities;

(i) investments in commercial paper maturing within 270 days from the date of acquisition thereof and having, at such date of acquisition, the highest credit rating obtainable from S&P or from Moody's;

(ii) investments in certificates of deposit, banker's acceptances and time deposits maturing within twelve (12) months from the date of acquisition thereof issued or guaranteed by or placed with, and money market deposit accounts issued or offered by, any domestic office of any commercial bank organized under the laws of the United States of America or any State thereof which has a combined capital and surplus and undivided profits of not less than $500,000,000 and whose long term certificates of deposit are rated at least Aa3 by Moody's or AA- by S&P;

(iii) fully collateralized repurchase agreements with a term of not more than thirty (30) days for securities described in paragraph (b) above and entered into with a financial institution satisfying the criteria described in paragraph (c) above; and

(iv) money market or other mutual funds substantially all of whose assets comprise securities of the type described in paragraph (b) through (d) above and that (i) comply with the criteria set forth in Securities and Exchange Commission Rule 2a-7 under the Investment Company Act of 1940, (ii) are rated AAA by S&P and Aaa by Moody's and (iii) have portfolio assets of at least $5,000,000,000.

"Permitted Liens" means:

(a) statutory Liens for Taxes, assessments or other governmental charges or levies which are not yet delinquent or which are being contested in good faith by appropriate action and for which adequate reserves have been maintained in accordance with GAAP;

(b) landlords', operators', carriers', warehousemen's, repairmen's, mechanics', materialmen's or other like Liens which do not secure Indebtedness, in each case only to the extent arising in the ordinary course of business and only to the extent securing obligations which are not delinquent or which are being contested in good faith by appropriate proceedings and for which adequate reserves have been maintained in accordance with GAAP;

(c) minor defects and irregularities in title to any property, so long as such defects and irregularities neither secure Indebtedness nor materially impair the value of such property or the use of such property for the purposes for which such property is held;

(d) deposits of cash or securities to secure the performance of bids, trade contracts, leases, statutory obligations and other obligations of a like nature (excluding appeal bonds) incurred in the ordinary course of business;

(e) Liens under the Security Documents;

(f) with respect only to property subject to any particular Security Document, Liens burdening such property which are expressly allowed by such Security Document;

(g) contractual Liens which arise in the ordinary course of business under operating agreements, joint venture agreements, oil and gas partnership agreements, oil and gas leases, farm-out agreements, division orders, contracts for the sale, transportation or exchange of oil and natural gas, unitization and pooling declarations and agreements, area of mutual interest agreements, overriding royalty agreements, marketing agreements, processing agreements, net profits agreements, development agreements, service agreements, gas balancing or deferred production agreements, injection, repressuring and recycling agreements, salt water or other disposal agreements, seismic or other geophysical permits or agreements, and other agreements which are usual and customary in the oil and gas business and are for claims which are not delinquent or which are being contested in good faith by appropriate action and for which adequate reserves have been maintained in accordance with GAAP, provided that any such Lien referred to in this clause does not materially impair the use of the property covered by such Lien for the purposes for which such property is held by Borrower or any Restricted Subsidiary or materially impair the value of such property subject thereto;

(h) Liens on any property or asset acquired, constructed or improved by any Credit Party, securing Indebtedness permitted under Section 7.01(f), which (a) are in favor of the seller of such property or assets, in favor of the Person developing, constructing, or improving such asset or property, or in favor of the Person that provided the funding for the acquisition, development, construction, repair or improvement cost, as the case may be, of such asset or property, (b) except for any Sale and Leaseback Transaction permitted under Section 7.05(f), are created within 90 days after the acquisition, development, construction, repair or improvement, (c) secure the purchase price or development, construction, repair or

improvement cost, as the case may be, of such asset or property in an amount up to 100% of the fair market value of such acquisition, construction or improvement of such asset or property, and (d) are limited to the asset or property so acquired, constructed or improved (including the proceeds thereof, accessions thereto, upgrades thereof and improvements thereto);

(i) Liens reserved in oil and gas mineral leases for bonus or rental payments and for compliance with the terms of such leases;

(j) Liens arising from Uniform Commercial Code financing statement filings regarding operating leases entered into by the Borrower and the Restricted Subsidiaries in the ordinary course of business;

(k) Liens arising solely by virtue of any statutory or common law provision relating to banker's liens, rights of set-off or similar rights and remedies and burdening only deposit accounts or other funds maintained with a creditor depository institution, provided that no such deposit account is a dedicated cash collateral account or is subject to restrictions against access by the depositor in excess of those set forth by regulations promulgated by the Board and no such deposit account is intended by Borrower or any Restricted Subsidiary to provide collateral to the depository institution;

(l) easements, restrictions, servitudes, permits, conditions, covenants, exceptions or reservations in any property of Borrower or any Restricted Subsidiary for the purpose of roads, pipelines, transmission lines, transportation lines, distribution lines for the removal of gas, oil, coal or other minerals or timber, and other like purposes, or for the joint or common use of real estate, rights of way, facilities and equipment, that do not secure any monetary obligations and which in the aggregate do not materially impair the use of such property for the purposes of which such property is held by Borrower or any Restricted Subsidiary or materially impair the value of such property subject thereto;

(m) judgment and attachment Liens not giving rise to an Event of Default, provided that any appropriate legal proceedings which may have been duly initiated for the review of such judgment shall not have been finally terminated or the period within which such proceeding may be initiated shall not have expired and no action to enforce such Lien has been commenced; and

(n) Liens on property that does not constitute Collateral securing obligations incurred in connection with any Production Payment and any Hedging Contract related thereto.

"Permitted Refinancing" means any Indebtedness of any Credit Party, and Indebtedness constituting Guarantees thereof by any Credit Party, incurred or issued in exchange for, or the Net Cash Proceeds of which are used solely (a) to extend, refinance, renew, replace, defease or refund, any Senior Notes or any Permitted Refinancing, in whole or in part, from time to time, or (b) to repay the Loans to the extent that the proceeds of any Borrowing that is made after the date of the incurrence of such Permitted Refinancing but prior to the date that is 120 days after the incurrence of such Permitted Refinancing is used to extend, refinance, renew, replace, defease or refund, any Senior Notes or any Permitted Refinancing, in whole or in part; provided, in each case, that (i) the principal amount of such Permitted Refinancing (or if such Permitted Refinancing is issued at a discount, the initial issuance price of such Permitted Refinancing) does not exceed the principal amount of the Indebtedness so extended, refinanced, renewed, replaced, defeased or refunded (plus the amount of any premiums, accrued and unpaid interest, fees and expenses incurred in connection therewith), (ii) such Permitted Refinancing does not provide for any scheduled repayment, mandatory redemption or payment of a sinking fund obligation prior to the date that is one year after the Maturity Date (except for any offer to redeem such notes required as a result of asset sales or the occurrence of a "Change of Control" or "Fundamental Change" under and as defined in the Indenture or to the extent such repayment, mandatory redemption or payment of a sinking fund obligation may be paid by

conversion or exchange into Equity Interests (other than Disqualified Stock) of the Borrower), (iii) the covenant, default and remedy provisions of such Permitted Refinancing, taken as a whole, are not materially more onerous to the Credit Parties and their respective Subsidiaries than those imposed by the Existing Senior Notes, (iv) the mandatory prepayment, repurchase and redemption provisions of such Permitted Refinancing, taken as a whole, are not materially more onerous to the Credit Parties and their respective Subsidiaries than those imposed by the Existing Senior Notes (except to the extent mandatory prepayment, repurchase and redemption provisions may be satisfied by conversion or exchange into Equity Interests (other than Disqualified Stock) of the Borrower), (v) the non-default cash interest rate on the outstanding principal balance of such Permitted Refinancing does not exceed the prevailing market rate then in effect for similarly situated credits at the time such Permitted Refinancing is incurred, (vi) such Permitted Refinancing is unsecured, (vii) no Subsidiary of Borrower is required to Guarantee such Permitted Refinancing unless such Subsidiary is (or concurrently with any such Guarantee becomes) a Guarantor hereunder, and (viii) to the extent such Permitted Refinancing is in the form of senior subordinated notes, the subordination provisions set forth therein are either (x) at least as favorable, taken as a whole, to the Secured Parties as the subordination provisions contained in the Senior Notes or Permitted Refinancing being refinanced in such Permitted Refinancing or (y) reasonably satisfactory to the Administrative Agent and the Majority Lenders.

"Person" means any natural person, corporation, limited liability company, trust, joint venture, association, company, partnership, Governmental Authority or other entity.

"Plan" means any employee pension benefit plan (other than a Multiemployer Plan) subject to the provisions of Title IV of ERISA or Section 412 of the Code or Section 302 of ERISA, and in respect of which any Credit Party or any ERISA Affiliate is (or, if such plan were terminated, would under Section 4069 of ERISA be deemed to be) an "employer" as defined in Section 3(5) of ERISA.

"Platform" means Debt Domain, Intralinks, Syndtrak or a substantially similar electronic transmission system.

"Pledge Agreement" means that certain Fifth Amended and Restated Pledge and Security Agreement, to be dated as of October 26, 2021, 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 Pledge Agreement) in the Equity Interests of each Restricted Subsidiary and otherwise in form and substance satisfactory to the Administrative Agent.

"Prime Rate" means the rate of interest last quoted by The Wall Street Journal as the "Prime Rate" in the U.S. or, if The Wall Street Journal ceases to quote such rate, the highest per annum interest rate published by the Federal Reserve Board in Federal Reserve Statistical Release H.15 (519) (Selected Interest Rates) as the "bank prime loan" rate or, if such rate is no longer quoted therein, any similar rate quoted therein (as determined by the Administrative Agent) or any similar release by the Federal Reserve Board (as determined by the Administrative Agent). Each change in the Prime Rate shall be effective from and including the date such change is publicly announced or quoted as being effective.

"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; provided that any Disposition or Hedge Modification in connection with any Production Payment will also be deemed to be a Disposition of all assets and Hedging Contracts on which a Lien is granted to secure obligations in connection with such Production Payment.

"Projected Oil and Gas Production" means, (a) as of the last day of each fiscal quarter, the forecasted production of Crude Oil, Natural Gas, and Natural Gas Liquids (measured by volume unit or BTU equivalent, not sales price) from Oil and Gas Interests owned by the Credit Parties as set forth in the production report delivered by the Borrower under Section 6.01(h) and (b) for purposes of Section 7.03(e) only, the projected production of Crude Oil, Natural Gas, or Natural Gas Liquids (measured by volume unit or BTU equivalent, not sales price) for the term of the contracts or a particular month, as applicable, from Oil and Gas Interests owned by the Credit Parties that are located in the United States and that have attributable to them proved Oil and Gas Interests, as such production is projected in the Reserve Report most recently delivered, after deducting projected production from any Oil and Gas Interests sold or under contract for sale that had been included in such report and after adding projected production from any Oil and Gas Interests that had not been reflected in such report but that are reflected in a separate or supplemental reports meeting the requirements of such Section 6.01(e) or (f) and otherwise are reasonably satisfactory to Administrative Agent.

"Proved Reserve" has the meaning assigned to such term in Section 1.04.

"PTE" means a prohibited transaction class exemption issued by the U.S. Department of Labor, as any such exemption may be amended from time to time.

"PV-9" means, with respect to any Proved Reserves expected to be produced from any Borrowing Base Properties, the net present value, discounted at 9% per annum, of the future net revenues expected to accrue to the Borrower's and the Credit Parties' collective interests in such reserves during the remaining expected economic lives of such reserves, calculated in accordance with the most recent Bank Price Deck provided to the Borrower by the Administrative Agent; provided that any PV-9 from proved developed non-producing reserves may not exceed 35% of the aggregate PV-9.

"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.

"Qualified Acquisition" means an Acquisition or a series of related Acquisitions in which the consideration paid by the Credit Parties is equal or greater than $100,000,000.

"Qualified Disposition" means a Disposition or a series of related Dispositions in which the consideration received by the Credit Parties is equal or greater than $100,000,000.

"Qualified ECP Guarantor" means, in respect of any Swap Obligation, each Credit Party that has total assets exceeding $10,000,000 at the time the relevant Guarantee or grant of the relevant security interest becomes effective with respect to such Swap Obligation or such other person as constitutes an Eligible Contract Participant and can cause another person to qualify as an Eligible Contract Participant at such time by entering into a keepwell under Section 1a(18)(A)(v)(II) of the Commodity Exchange Act.

"Recipient" means (a) the Administrative Agent, (b) any Lender, and (c) any Issuing Bank, as applicable.

"Redetermination" means any Scheduled Redetermination or Special Redetermination.

"Redetermination Date" 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, on or about April 15 and October 15 of each year, commencing April 15, 2022, (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.

"Reference Time" with respect to any setting of the then-current Benchmark means (1) if such Benchmark is the Term SOFR Rate, 5:00 a.m. (Chicago time) on the day that is two Business Days preceding the date of such setting, (2) if the RFR for such Benchmark is Daily Simple SOFR, then four (4) Business Days prior to such setting or (3) if such Benchmark is none of the Term SOFR Rate or Daily Simple SOFR, the time determined by the Administrative Agent in its reasonable discretion.

"Register" has the meaning assigned to such term in Section 11.04(b)(iv).

"Related Parties" means, with respect to any specified Person, such Person's Affiliates and the respective directors, officers, employees, agents and advisors of such Person and such Person's Affiliates.

"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.

"Relevant Rate" means (i) with respect to any Term Benchmark Borrowing, the Adjusted Term SOFR Rate or (ii) with respect to any RFR Borrowing, the Adjusted Daily Simple SOFR, as applicable.

"Required Lenders" means, at any time, Lenders having Credit Exposures and Unused Commitments representing at least sixty-six and two-thirds percent (66-2/3%) of the sum of the Aggregate Credit Exposure and the Aggregate Unused Commitment at such time or, if the Aggregate Commitment has been terminated, Lenders having Credit Exposures representing at least sixty-six and two-thirds percent (66-2/3%) of the Aggregate Credit Exposure of all Lenders at such time; provided that for the purpose of determining the Required Lenders needed for any waiver, amendment, modification or consent, any Lender that is the Borrower, or any Affiliate of the Borrower shall be disregarded.

"Reserve Report" means an unsuperseded engineering analysis of the Borrowing Base Properties, in form and substance reasonably acceptable to the Administrative Agent, prepared in accordance with customary and prudent practices in the petroleum engineering industry.

"Resolution Authority" means an EEA Resolution Authority or, with respect to any UK Financial Institution, a UK Resolution Authority.

"Restricted Payment" means any dividend or other distribution (whether in cash, securities or other property) with respect to any Equity Interests in any Credit Party, or any payment (whether in cash, securities or other property), including any sinking fund or similar deposit, on account of the purchase, redemption, retirement, acquisition, cancellation or termination of any such Equity Interests in any Credit Party or any option, warrant or other right to acquire any such Equity Interests in any Credit Party.

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

"RFR Borrowing" means, as to any Borrowing, the RFR Loans comprising such Borrowing.

"RFR Loan" means a Loan that bears interest at a rate based on the Adjusted Daily Simple SOFR.

"S&P" means Standard & Poor's Ratings Group, a division of The McGraw Hill Corporation.

"Sale and Leaseback Transaction" means any sale or other transfer of any property by any Person with the intent to lease such property as lessee.

"Sanctioned Country" means, at any time, a country or territory which is the subject or target of any Sanctions (at the time of this Agreement, Crimea, Cuba, Iran, North Korea, Sudan, and Syria).

"Sanctioned Person" means, at any time, (a) any Person listed in any Sanctions-related list of designated Persons maintained by the Office of Foreign Assets Control of the U.S. Department of the Treasury, the U.S. Department of State, (b) any Person operating, organized or resident in a Sanctioned Country or (c) any Person owned or controlled by any such Person or Persons described in the foregoing clauses (a) or (b).

"Sanctions" means economic or financial sanctions or trade embargoes imposed, administered or enforced from time to time by the U.S. government, including those administered by the Office of Foreign Assets Control of the U.S. Department of the Treasury or the U.S. Department of State.

"Scheduled Redetermination" means any redetermination of the Borrowing Base pursuant to Section 3.03.

"Secured Cash Management Agreement" means any agreement entered into for Cash Management Obligations.

"Secured Hedge Agreement" means any agreement entered into for Lender Hedging Obligations.

"Secured Indebtedness" has the meaning assigned to it in the Security Documents.

"Secured Obligations" has the meaning assigned to it in the Security Documents.

"Secured Party" means the Administrative Agent, any Lender and any Lender Counterparty and any other holder of Obligations including any Cash Management Obligations and Lender Hedging Obligations, to the extent that such Lender Hedging Obligations were incurred when such Person was a Lender Counterparty.

"Security Agreement" means that certain Seventh Amended and Restated Security Agreement, dated as of October 26, 2021, 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.

"Security Documents" means collectively, all Guarantees of the Obligations evidenced by the Loan Documents and all Mortgages, security agreements (including the Security Agreement), pledge agreements (including the Pledge Agreement), collateral assignments and other collateral documents covering the Oil and Gas Interests and the Equity Interests of the Restricted Subsidiaries and other personal property, equipment, oil and gas inventory and proceeds of the foregoing, all such documents to be in form and substance reasonably satisfactory to the Administrative Agent.

"Senior Notes" means (a) the Existing Senior Notes and (b) any senior, senior subordinated, or convertible notes issued by any Credit Party in one or more transactions; provided that (i) the terms of such notes do not provide for any scheduled repayment, mandatory redemption (including any required offer to redeem) or payment of a sinking fund obligation prior to the date that is one year after the Maturity Date

(except for any offer to redeem such notes required as a result of asset sales or the occurrence of a "Change of Control" or "Fundamental Change" under and as defined in the Indenture or to the extent such repayment, mandatory redemption or payment of a sinking fund obligation may be paid by conversion or exchange into Equity Interests (other than Disqualified Stock) of the Borrower), (ii) the covenant, default and remedy provisions of such notes, taken as a whole, are not materially more onerous to the Credit Parties and their respective Subsidiaries than those imposed by the Existing Senior Notes, (iii) the non-default interest rate on the outstanding principal balance of such notes does not exceed the prevailing market rate then in effect for similarly situated credits at the time such notes are issued, (iv) such notes are unsecured, (v) no Subsidiary of Borrower is required to Guarantee the Indebtedness evidenced by such notes unless such Subsidiary is (or concurrently with any such Guarantee becomes) a Guarantor hereunder, and (vi) the subordination provisions of any senior subordinated notes are reasonably satisfactory to the Administrative Agent and the Majority Lenders.

"Senior Notes Documents" means any Senior Notes, the related Indenture and any documents or instruments contemplated by or executed in connection with any of them, in each case, as amended, modified, supplemented or otherwise restated from time to time to the extent permitted under Section 7.13.

"SOFR" means a rate equal to the secured overnight financing rate as administered by the SOFR Administrator.

"SOFR Administrator" means the NYFRB (or a successor administrator of the secured overnight financing rate).

"SOFR Administrator's Website" means the NYFRB's website, currently at http://www.newyorkfed.org, or any successor source for the secured overnight financing rate identified as such by the SOFR Administrator from time to time.

"SOFR Determination Date" has the meaning specified in the definition of "Daily Simple SOFR".

"SOFR Rate Day" has the meaning specified in the definition of "Daily Simple SOFR".

"Special Redetermination" means any redetermination of the Borrowing Base made pursuant to Section 3.04.

"Subsidiary" means, with respect to any Person (the "parent") at any date, any corporation, limited liability company, partnership, association or other entity the accounts of which would be Consolidated with those of the parent in the parent's Consolidated financial statements if such financial statements were prepared in accordance with GAAP as of such date, as well as any other corporation, limited liability company, partnership, association or other entity (a) of which securities or other ownership interests representing more than fifty percent (50%) of the equity or more than fifty percent (50%) of the ordinary voting power or, in the case of a partnership, more than fifty percent (50%) of the general partnership interests are, as of such date, owned, controlled or held, or (b) that is, as of such date, otherwise Controlled, by the parent or one or more subsidiaries of the parent or by the parent and one or more subsidiaries of the parent. Unless the context otherwise clearly requires, references herein to a "Subsidiary" refer to a Subsidiary of Borrower.

"Super-Majority Lenders" means, at any time, Lenders having Credit Exposures and Unused Commitments representing at least eighty percent (80%) of the sum of the Aggregate Credit Exposure and all Unused Commitments at such time or, if the Aggregate Commitment has been terminated, Lenders having Credit Exposures representing at least eighty percent (80%) of the Aggregate Credit Exposure of all Lenders at such time.

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

"Swap Obligation" means, with respect to any Guarantor, any obligation to pay or perform under any agreement, contract or transaction that constitutes a "swap" within the meaning of section 1a(47) of the Commodity Exchange Act.

"Taxes" means all present or future taxes, levies, imposts, duties, deductions, withholdings (including backup withholding), assessments, fees or other charges imposed by any Governmental Authority, including any interest, additions to tax or penalties applicable thereto.

"Term Benchmark" when used in reference to any Loan or Borrowing, refers to whether such Loan, or the Loans comprising such Borrowing, are bearing interest at a rate determined by reference to the Adjusted Term SOFR Rate.

"Term SOFR Determination Day" has the meaning assigned to it under the definition of Term SOFR Reference Rate.

"Term SOFR Rate" means, with respect to any Term Benchmark Borrowing and for any tenor comparable to the applicable Interest Period, the Term SOFR Reference Rate at approximately 5:00 a.m., Chicago time, two U.S. Government Securities Business Days prior to the commencement of such tenor comparable to the applicable Interest Period, as such rate is published by the CME Term SOFR Administrator.

"Term SOFR Reference Rate" means, for any day and time (such day, the "Term SOFR Determination Day"), with respect to any Term Benchmark Borrowing denominated in Dollars and for any tenor comparable to the applicable Interest Period, the rate per annum determined by the Administrative Agent as the forward-looking term rate based on SOFR. If by 5:00 pm (New York City time) on such Term SOFR Determination Day, the "Term SOFR Reference Rate" for the applicable tenor has not been published by the CME Term SOFR Administrator and a Benchmark Replacement Date with respect to the Term SOFR Rate has not occurred, then the Term SOFR Reference Rate for such Term SOFR Determination Day will be the Term SOFR Reference Rate as published in respect of the first preceding U.S. Government Securities Business Day for which such Term SOFR Reference Rate was published by the CME Term SOFR Administrator, so long as such first preceding Business Day is not more than five (5) Business Days prior to such Term SOFR Determination Day.

"Test Period" shall mean, for any determination under this Agreement, the four consecutive fiscal quarters of the Borrower then last ended and for which financial statements have been delivered to the Administrative Agent pursuant to Section 6.01.

"Transactions" means the execution, delivery and performance by the Credit Parties of this Agreement and the Loan Documents, the borrowing of Loans, the use of the proceeds thereof and the issuance of Letters of Credit hereunder.

"Type", when used in reference to any Loan or Borrowing, refers to whether the rate of interest on such Loan, or on the Loans comprising such Borrowing, is determined by reference to the Adjusted Term SOFR Rate, the Alternate Base Rate or the Adjusted Daily Simple SOFR.

"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 applicable Benchmark Replacement excluding the related Benchmark Replacement Adjustment.

"Unrestricted Subsidiary" means (a) any Subsidiary of the Borrower that is formed or acquired after the Effective 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.

"Unused Commitment" means, with respect to each Lender at any time, such Lender's Commitment at such time minus such Lender's Credit Exposure at such time.

"Unused Commitment Fee" means the fee that the Borrower shall pay quarterly, in arrears, for the aggregate amount of Unused Commitments, at the rate per annum set forth next to the row heading "Unused Commitment Fee Rate" in the definition of "Applicable Rate" and based upon on the Borrowing Base Usage or the higher of the ratings assigned to the Borrower by Moody's or S&P, as applicable, in effect on such date.

"U.S. Government Securities" means direct obligations of, or obligations the principal of and interest on which are unconditionally guaranteed by, the United States of America (or by any agency or instrumentality thereof to the extent such obligations are entitled to the full faith and credit of the United States of America), in each case maturing within one year from the date of acquisition thereof.

"U.S. Government Securities Business Day" means any day except for (i) a Saturday, (ii) a Sunday or (iii) a day on which the Securities Industry and Financial Markets Association recommends that the fixed income departments of its members be closed for the entire day for purposes of trading in United States government securities.

"U.S. Person" means a "United States person" within the meaning of Section 7701(a)(30) of the Code.

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

"U.S. Tax Compliance Certificate" has the meaning assigned to such term Section 2.17(f)(ii)(B)(3).

"Withdrawal Liability" means the liability of any Credit Party or ERISA Affiliate to a Multiemployer Plan as a result of a complete or partial withdrawal from such Multiemployer Plan, as such terms are defined in Part I of Subtitle E of Title IV of ERISA.

"Withholding Agent" means any Credit Party and the Administrative Agent.

"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.

"Yorktown Funds" means, collectively, Yorktown Energy Partners V, L.P., a Delaware limited partnership, Yorktown Energy Partners VI, L.P., a Delaware limited partnership, Yorktown Energy Partners VII, L.P., a Delaware limited partnership, and Yorktown Energy Partners VIII, L.P., a Delaware limited partnership.

"Yorktown Group" means the Yorktown Funds and their respective Affiliates that are parties hereto, in each case for so long as such Person is Affiliated with Yorktown Partners LLC.

Section 1.02 Types of Loans and Borrowings. For purposes of this Agreement, Loans may be classified and referred to by Class (e.g., a "Revolving Loan") or by Type (e.g., a "Term Benchmark Loan" or an "RFR Loan") or by Class and Type (e.g., a "Term Benchmark Revolving Loan" or an "RFR Revolving Loan"). Borrowings also may be classified and referred to by Class (e.g., a "Revolving Borrowing") or by Type (e.g., a "Term Benchmark Borrowing" or an "RFR Borrowing") or by Class and Type (e.g., a "Term Benchmark Revolving Borrowing" or an "RFR Revolving Borrowing").

Section 1.03 Terms Generally. The definitions of terms herein shall apply equally to the singular and plural forms of the terms defined. Whenever the context may require, any pronoun shall include the corresponding masculine, feminine and neuter forms. The words "include", "includes" and "including" shall be deemed to be followed by the phrase "without limitation". The word "will" shall be construed to have the same meaning and effect as the word "shall". Unless the context requires otherwise (a) any definition of or reference to any agreement, instrument or other document herein shall be construed as referring to such agreement, instrument or other document as from time to time amended, supplemented

or otherwise modified (subject to any restrictions on such amendments, supplements or modifications set forth herein), (b) any reference herein to any Person shall be construed to include such Person's successors and assigns, (c) the words "herein", "hereof" and "hereunder", and words of similar import, shall be construed to refer to this Agreement in its entirety and not to any particular provision hereof, (d) all references herein to Articles, Sections, Exhibits and Schedules shall be construed to refer to Articles and Sections of, and Exhibits and Schedules to, this Agreement and (e) the words "asset" and "property" shall be construed to have the same meaning and effect and to refer to any and all tangible and intangible assets and properties, including cash, securities, accounts and contract rights.

(a) Accounting Terms; GAAP. Except as otherwise expressly provided herein, all terms of an accounting or financial nature shall be construed in accordance with GAAP, as in effect from time to time; provided that, if Borrower notifies the Administrative Agent that such Borrower requests an amendment to any provision hereof to eliminate the effect of any change occurring after the date hereof in GAAP or in the application thereof on the operation of such provision (or if the Administrative Agent notifies the Borrower that the Majority Lenders request an amendment to any provision hereof for such purpose), regardless of whether any such notice is given before or after such change in GAAP or in the application thereof, then such provision shall be interpreted on the basis of GAAP as in effect and applied immediately before such change shall have become effective until such notice shall have been withdrawn or such provision amended in accordance herewith. Notwithstanding the foregoing, with respect to the computation of Indebtedness, Consolidated EBITDAX or any financial ratio or similar requirement set forth in any Loan Documents, such computations shall at all times be made without regard to the lease accounting standard ASC 842 and for the avoidance of doubt, any cash payments made in respect of leases shall be deducted from EBITDAX to the extent such payments have not been deducted in the calculation of Consolidated Net Income pursuant to ASC 842.

Section 1.04 Oil and Gas Definitions. For purposes of this Agreement, the terms "Proved Reserves," "proved developed reserves," "proved undeveloped reserves," "proved developed nonproducing reserves" and "proved developed producing reserves," have the meaning given such terms from time to time and at the time in question by the Society of Petroleum Engineers of the American Institute of Mining Engineers.

Section 1.05 Time of Day. Unless otherwise specified, all references to times of day shall be references to Central time (daylight or standard, as applicable).

Section 1.06 Interest Rates; Benchmark Notification. The interest rate on a Loan denominated in dollars may be derived from an interest rate benchmark that may be discontinued or is, or may in the future become, the subject of regulatory reform. Upon the occurrence of a Benchmark Transition Event, Section 2.14(b) provides a mechanism for determining an alternative rate of interest. The Administrative Agent does not warrant or accept any responsibility for, and shall not have any liability with respect to, the administration, submission, performance or any other matter related to any interest rate used in this Agreement, or with respect to any alternative or successor rate thereto, or replacement rate thereof, 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 existing interest rate being replaced or have the same volume or liquidity as did any existing interest rate prior to its discontinuance or unavailability. The Administrative Agent and its affiliates and/or other related entities may engage in transactions that affect the calculation of any interest rate used in this Agreement or any alternative, successor or alternative rate (including any Benchmark Replacement) and/or any relevant adjustments thereto, in each case, in a manner adverse to the Borrower. The Administrative Agent may select information sources or services in its reasonable discretion to ascertain any interest rate used in this Agreement, any component thereof, or rates referenced in the definition thereof, in each case pursuant to the terms of this Agreement, and shall have no liability to the Borrower, any Lender or any other person or

entity for damages of any kind, including direct or indirect, special, punitive, incidental or consequential damages, costs, losses or expenses (whether in tort, contract or otherwise and whether at law or in equity), for any error or calculation of any such rate (or component thereof) provided by any such information source or service.

Section 1.07 Divisions. For all purposes under the Loan Documents, in connection with any division or plan of division under Delaware law (or any comparable event under a different jurisdiction's laws): (a) if any asset, right, obligation or liability of any Person becomes the asset, right, obligation or liability of a different Person, then it shall be deemed to have been transferred from the original Person to the subsequent Person, and (b) if any new Person comes into existence, such new Person shall be deemed to have been organized and acquired on the first date of its existence by the holders of its Equity Interests at such time.

ARTICLE II
The Credits

Section 2.01 Commitments. Subject to the terms and conditions set forth herein, each Lender, severally, but not jointly, agrees to make Loans denominated in Dollars to the Borrower from time to time on any Business Day during the Availability Period in an aggregate principal amount that will not result (after giving effect to any application of proceeds of such Borrowing pursuant to Section 2.09) in (a) such Lender's Credit Exposure exceeding such Lender's Commitment or Applicable Percentage of the Loan Limit, or (b) the Aggregate Credit Exposure exceeding the Loan Limit. Within the foregoing limits and subject to the terms and conditions set forth herein, the Borrower may borrow, prepay and reborrow Loans.

Section 2.02 Termination of the Aggregate Commitment and Reduction of the Maximum Facility Amount.

(a) Unless previously terminated, the Aggregate Commitment shall terminate on the Maturity Date.

(b) The Borrower may at any time terminate, or from time to time reduce, the Aggregate Commitment; provided that (i) each reduction of the Aggregate Commitment shall be in an amount that is an integral multiple of $1,000,000 and not less than $5,000,000 and (ii) the Borrower shall not terminate or reduce the Aggregate Commitment if, after giving effect to any concurrent prepayment of the Loans in accordance with Section 2.10 and Section 2.11, the Aggregate Credit Exposure would exceed the Aggregate Commitment.

(c) The Borrower shall notify the Administrative Agent of any election to terminate or reduce the Aggregate Commitment under paragraph (b) of this Section at least three (3) Business Days prior to the effective date of such termination or reduction, specifying such election and the effective date thereof. Promptly following receipt of any notice, the Administrative Agent shall advise the Lenders of the contents thereof. Each notice delivered by the Borrower pursuant to this Section shall be irrevocable; provided that a notice of termination of the Aggregate Commitments delivered by the Borrower may state that such notice is conditioned upon the effectiveness of other credit facilities, in which case such notice may be revoked by the Borrower (by notice to the Administrative Agent on or prior to the specified effective date) if such condition is not satisfied. Any termination of the Aggregate Commitment shall be permanent. Any reduction of the Aggregate Commitment shall be made ratably among the Lenders in accordance with each Lender's Applicable Percentage.

Section 2.03 Additional Lenders; Increases in the Aggregate Commitment.

(a) If (a) no Default exists as of the date of such increase or would be caused by such increase, (b) the Borrower concurrently pay any additional fees to each increasing Lender and each new Lender required as a result of such increase, and (c) immediately after giving effect to such increase, (i) the Aggregate Commitments do not exceed the Borrowing Base then in effect and (ii) the Aggregate Commitment does not exceed the Maximum Facility Amount, the Borrower may elect to increase the Aggregate Commitment in a minimum amount of $50,000,000 and integral multiples of $10,000,000 in excess thereof by providing written notice of such increase to the Administrative Agent. No Lender shall have any right or obligation to participate in any increase in the Aggregate Commitment. The Borrower may effect such increase, with the consent of the Administrative Agent, by increasing the Commitment of a Lender or by causing a Person that is acceptable to the Administrative Agent, that at such time is not a Lender, to become a Lender (an "Additional Lender"). Such Lender or Additional Lender shall evidence its obligation to provide such increase by executing and delivering to the Borrower and the Administrative Agent a certificate substantially in the form of Exhibit E hereto (a "Lender Certificate"). In the event that within 10 Business Days of the Administrative Agent's receipt of such written notice, the existing Lenders and/or Additional Lenders fail to provide increases in their respective Commitments sufficient to satisfy such requested increase in the Aggregate Commitment, the Borrower may adjust the previously requested increase to reflect the increased Commitments of existing Lenders and/or Additional Lenders received as of such date. Upon receipt by the Administrative Agent of Lender Certificates representing increases to existing Lender Commitments and/or Commitments from Additional Lenders as provided in this Section 2.03 in an aggregate amount equal to the requested increase (as the same may have been adjusted), (i) the Aggregate Commitment (including the Commitment of any Person that becomes an Additional Lender by delivery of a Lender Certificate) automatically without further action by the Borrower, the Administrative Agent or any Lender shall be increased on the effective date set forth in such Lender Certificates by the amount indicated in such Lender Certificates, (ii) the Register and Schedule 1.01 shall be amended to add the Commitment of each Additional Lender or to reflect the increase in the Commitment of each existing Lender, and the Applicable Percentages of the Lenders shall be adjusted accordingly to reflect each Additional Lender or the increase in the Commitment of each existing Lender, (iii) any such Additional Lender shall be deemed to be a party in all respects to this Agreement and any other Loan Documents to which the Lenders are a party, and (iv) upon the effective date set forth in such Lender Certificate, any such Lender party to the Lender Certificate shall purchase and each existing Lender shall assign to such Lender a ratable portion of the outstanding Credit Exposure of each of the existing Lenders such that the Lenders (including any Additional Lender, if applicable) shall have the appropriate portion of the Aggregate Credit Exposure of the Lenders (based in each case on such Lender's Applicable Percentage, as revised pursuant to this Section). To the extent requested by any Lender and in accordance with Section 2.16, the Borrower shall pay to such Lender, within the time period prescribed by Section 2.16, any amounts required to be paid by the Borrower under Section 2.16 in the event the payment of any principal of any Term Benchmark Loan or the conversion of any Term Benchmark Loan other than on the last day of an Interest Period applicable thereto is required in connection with the increase of the Aggregate Commitment contemplated by this Section 2.03.

Section 2.04 Loans and Borrowings.

(a) Each Revolving Loan shall be made as part of a Borrowing consisting of Revolving Loans made by the Lenders ratably in accordance with their respective Commitments. The failure of any Lender to make any Loan required to be made by it shall not relieve any other Lender of its obligations hereunder; provided that the Commitments of the Lenders are several and no Lender shall be responsible for any other Lender's failure to make Loans as required.

(b) Subject to Section 2.14, each Borrowing shall be comprised entirely of ABR Loans, Term Benchmark Loans or RFR Loans, as the Borrower may request in accordance herewith. Each Lender at its option may make any Loan by causing any domestic or foreign branch or Affiliate of such Lender to make such Loan; *provided* that any exercise of such option shall not affect the obligation of the Borrower to repay such Loan in accordance with the terms of this Agreement.

(c) At the commencement of each Interest Period for any Term Benchmark Revolving Borrowing, such Borrowing shall be in an aggregate amount that is an integral multiple of $100,000 and not less than $1,000,000. At the time that each ABR Revolving Borrowing and/or RFR Borrowing is made, such Borrowing shall be in an aggregate amount that is an integral multiple of $100,000 and not less than $1,000,000; *provided* that an ABR Revolving Borrowing may be in an aggregate amount that is equal to the entire unused balance of the Aggregate Commitments or that is required to finance the reimbursement of an LC Disbursement as contemplated by Section 2.06(e). Borrowings of more than one Type and Class may be outstanding at the same time; *provided* that there shall not at any time be more than a total of 12 Term Benchmark Revolving Borrowings or RFR Borrowings outstanding.

(d) Notwithstanding any other provision of this Agreement, the Borrower shall not be entitled to request, or to elect to convert or continue, any Borrowing if the Interest Period requested with respect thereto would end after the Maturity Date.

Section 2.05 Requests for Borrowings. To request a Borrowing, the Borrower shall notify the Administrative Agent of such request by telephone (a) (i) in the case of a Term Benchmark Borrowing, not later than 12:00 noon three (3) Business Days before the date of the proposed Borrowing or (ii) in the case of an RFR Borrowing, not later than 12:00 noon five (5) Business Days before the date of the proposed Borrowing or (b) in the case of an ABR Borrowing, not later than 12:00 noon on the date of the proposed Borrowing (so long as such date is a Business Day). Each such telephonic Borrowing Request shall be irrevocable and shall be confirmed promptly by hand delivery or telecopy to the Administrative Agent of a written Borrowing Request in a form approved by the Administrative Agent and signed by the Borrower. Each such telephonic and written Borrowing Request shall specify the following information in compliance with Section 2.04:

(i) the aggregate amount of the requested Borrowing;

(ii) the date of such Borrowing, which shall be a Business Day;

(iii) whether such Borrowing is to be an ABR Borrowing, a Term Benchmark Borrowing or an RFR Borrowing;

(iv) in the case of a Term Benchmark Borrowing, the initial Interest Period to be applicable thereto, which shall be a period contemplated by the definition of the term "Interest Period"; and

(v) the location and number of the Borrower's account to which funds are to be disbursed, which shall comply with the requirements of Section 2.07.

If no election as to the Type of Revolving Borrowing is specified, then the requested Revolving Borrowing shall be an ABR Borrowing. If no Interest Period is specified with respect to any requested Term Benchmark Revolving Borrowing, then the Borrower shall be deemed to have selected an Interest Period of one month's duration. Promptly following receipt of a Borrowing Request in accordance with this Section, the Administrative Agent shall advise each Lender of the details thereof and of the amount of such Lender's Loan to be made as part of the requested Borrowing.

Section 2.06 Letters of Credit.

(a) General. Subject to the terms and conditions set forth herein, Borrower may request the issuance of Letters of Credit for its own or the account of any Restricted Subsidiary in a form reasonably acceptable to the Administrative Agent and the Issuing Bank, at any time and from time to time during the Availability Period. In the event of any inconsistency between the terms and conditions of this Agreement and the terms and conditions of any form of letter of credit application or other agreement submitted by Borrower to, or entered into by Borrower with, the Issuing Bank relating to any Letter of Credit, the terms and conditions of this Agreement shall control. Notwithstanding anything herein to the contrary, the Issuing Bank shall have no obligation hereunder to issue, and shall not issue, any Letter of Credit the proceeds of which would be made available to any Person (i) to fund any activity or business of or with any Sanctioned Person, or in any country or territory that, at the time of such funding, is the subject of any Sanctions or (ii) in any manner that would result in a violation of any Sanctions by any party to this Agreement.

(b) Notice of Issuance, Amendment, Renewal, Extension; Certain Conditions. To request the issuance of a Letter of Credit (or the amendment, renewal or extension of an outstanding Letter of Credit), the Borrower shall hand deliver or telecopy (or transmit by electronic communication, if arrangements for doing so have been approved by the Issuing Bank) to the Issuing Bank and the Administrative Agent (reasonably in advance of the requested date of issuance, amendment, renewal or extension, but in any event no less than three Business Days) a notice requesting the issuance of a Letter of Credit, or identifying the Letter of Credit to be amended, renewed or extended, and specifying the date of issuance, amendment, renewal or extension (which shall be a Business Day), the date on which such Letter of Credit is to expire (which shall comply with paragraph (c) of this Section), the amount of such Letter of Credit, the name and address of the beneficiary thereof and such other information as shall be necessary to prepare, amend, renew or extend such Letter of Credit. If requested by the Issuing Bank, the Borrower also shall submit a letter of credit application on the Issuing Bank's standard form in connection with any request for a Letter of Credit. A Letter of Credit shall be issued, amended, renewed or extended only if (and upon issuance, amendment, renewal or extension of each Letter of Credit Borrower shall be deemed to represent and warrant that), after giving effect to such issuance, amendment, renewal or extension, (i) the LC Exposure does not exceed the LC Sublimit, (ii) (x) the aggregate undrawn amount of all outstanding Letters of Credit issued by any Issuing Bank at such time plus (y) the aggregate amount of all LC Disbursements made by such Issuing Bank that have not yet been reimbursed by or on behalf of the Borrower at such time shall not exceed such Issuing Bank's Letter of Credit Commitment, (iii) no Lender's Revolving Credit Exposure shall exceed its Commitment and (iv) the Aggregate Credit Exposure does not exceed the Loan Limit.

(c) Expiration Date. Each Letter of Credit shall expire at or prior to the close of business on the earlier of (i) the date one year, or, with the consent of the Issuing Bank with respect to such Letter of Credit, fifteen (15) months, after the date of the issuance of such Letter of Credit (or, in the case of any renewal or extension thereof, one year after such renewal or extension), and (ii) the LC Maturity Date.

(d) Participations. By the issuance of a Letter of Credit (or an amendment to a Letter of Credit increasing the amount thereof) and without any further action on the part of the Issuing Bank or the Lenders, the Issuing Bank hereby grants to each Lender, and each Lender hereby acquires from the Issuing Bank, a participation in such Letter of Credit equal to such Lender's Applicable Percentage of the aggregate amount available to be drawn under such Letter of Credit. In consideration and in furtherance of the foregoing, each Lender hereby absolutely and unconditionally agrees to pay to the Administrative Agent, for the account of the Issuing Bank, such Lender's Applicable Percentage of each LC Disbursement made by the Issuing Bank and not reimbursed by the Borrower on the date due as provided in paragraph (e) of this Section, or of any reimbursement payment required to be refunded to the Borrower for any reason. Each Lender acknowledges and agrees that its obligation to acquire participations pursuant to this paragraph in respect of Letters of Credit is absolute and unconditional and shall not be affected by any circumstance

whatsoever, including any amendment, renewal or extension of any Letter of Credit or the occurrence and continuance of a Default or reduction or termination of the Aggregate Commitment, and that each such payment shall be made without any offset, abatement, withholding or reduction whatsoever.

(e) Reimbursement. If the Issuing Bank shall make any LC Disbursement in respect of a Letter of Credit, the Borrower shall reimburse such LC Disbursement by paying to the Administrative Agent an amount equal to such LC Disbursement not later than 12:00 noon on the date that such LC Disbursement is made, if the Borrower shall have received notice of such LC Disbursement prior to 10:00 a.m. on such date, or, if such notice has not been received by the Borrower prior to such time on such date, then not later than 12:00 noon on the Business Day immediately following the day that the Borrower receive such notice; provided that the Borrower may, subject to the conditions to borrowing set forth herein, request in accordance with Section 2.05 that such payment be financed with an ABR Borrowing in an equivalent amount and, to the extent so financed, the Borrower's obligation to make such payment shall be discharged and replaced by the resulting ABR Borrowing. If the Borrower fails to make such payment when due, the Administrative Agent shall notify each Lender of the applicable LC Disbursement, the payment then due from the Borrower in respect thereof and such Lender's Applicable Percentage thereof. Promptly following receipt of such notice, each Lender shall pay to the Administrative Agent its Applicable Percentage of the payment then due from the Borrower, in the same manner as provided in Section 2.07 with respect to Loans made by such Lender (and Section 2.07 shall apply, mutatis mutandis, to the payment obligations of the Lenders), and the Administrative Agent shall promptly pay to the Issuing Bank the amounts so received by it from the Lenders. Promptly following receipt by the Administrative Agent of any payment from the Borrower pursuant to this paragraph, the Administrative Agent shall distribute such payment to the Issuing Bank or, to the extent that Lenders have made payments pursuant to this paragraph to reimburse the Issuing Bank, then to such Lenders and the Issuing Bank as their interests may appear. Any payment made by a Lender pursuant to this paragraph to reimburse the Issuing Bank for any LC Disbursement (other than the funding of ABR Loans as contemplated above) shall not constitute a Loan and shall not relieve the Borrower of their obligation to reimburse such LC Disbursement.

(f) Obligations Absolute. The Borrower's obligation to reimburse LC Disbursements as provided in paragraph (e) of this Section shall be absolute, unconditional and irrevocable, and shall be performed strictly in accordance with the terms of this Agreement under any and all circumstances whatsoever and irrespective of (i) any lack of validity or enforceability of any Letter of Credit or this Agreement, or any term or provision therein, (ii) any draft or other document presented under a Letter of Credit proving to be forged, fraudulent or invalid in any respect or any statement therein being untrue or inaccurate in any respect, (iii) payment by the Issuing Bank under a Letter of Credit against presentation of a draft or other document that does not comply with the terms of such Letter of Credit, or (iv) any other event or circumstance whatsoever, whether or not similar to any of the foregoing, that might, but for the provisions of this Section, constitute a legal or equitable discharge of, or provide a right of setoff against, the Borrower's obligations hereunder. Neither the Administrative Agent, the Lenders nor the Issuing Bank, nor any of their Related Parties, shall have any liability or responsibility by reason of or in connection with the issuance or transfer of any Letter of Credit or any payment or failure to make any payment thereunder (irrespective of any of the circumstances referred to in the preceding sentence), or any error, omission, interruption, loss or delay in transmission or delivery of any draft, notice or other communication under or relating to any Letter of Credit (including any document required to make a drawing thereunder), any error in interpretation of technical terms or any consequence arising from causes beyond the control of the Issuing Bank; provided that the foregoing shall not be construed to excuse the Issuing Bank from liability to the Borrower to the extent of any direct damages (as opposed to consequential damages, claims in respect of which are hereby waived by the Borrower to the extent permitted by applicable law) suffered by the Borrower that are caused by the Issuing Bank's failure to exercise care when determining whether drafts and other documents presented under a Letter of Credit comply with the terms thereof. The parties hereto expressly agree that, in the absence of gross negligence or willful misconduct on the part of the Issuing

Bank (as finally determined by a court of competent jurisdiction), the Issuing Bank shall be deemed to have exercised care in each such determination. In furtherance of the foregoing and without limiting the generality thereof, the parties agree that, with respect to documents presented which appear on their face to be in substantial compliance with the terms of a Letter of Credit, the Issuing Bank may, in its sole discretion, either accept and make payment upon such documents without responsibility for further investigation, regardless of any notice or information to the contrary, or refuse to accept and make payment upon such documents if such documents are not in strict compliance with the terms of such Letter of Credit.

(g) Disbursement Procedures. The Issuing Bank shall, promptly following its receipt thereof, examine all documents purporting to represent a demand for payment under a Letter of Credit. The Issuing Bank shall promptly notify the Administrative Agent and the Borrower by telephone (confirmed by telecopy) of such demand for payment and whether the Issuing Bank has made or will make an LC Disbursement thereunder; provided that any failure to give or delay in giving such notice shall not relieve the Borrower of their obligation to reimburse the Issuing Bank and the Lenders with respect to any such LC Disbursement.

(h) Interim Interest. If the Issuing Bank shall make any LC Disbursement, then, unless the Borrower shall reimburse such LC Disbursement in full on the date such LC Disbursement is made, the unpaid amount thereof shall bear interest, for each day from and including the date such LC Disbursement is made to but excluding the date that the Borrower reimburse such LC Disbursement, at the rate per annum then applicable to ABR Loans, and such interest is due and payable on the date when such reimbursement is payable; provided that, if the Borrower fails to reimburse such LC Disbursement when due pursuant to paragraph (e) of this Section, then Section 2.13(c) shall apply. Interest accrued pursuant to this paragraph shall be for the account of the Issuing Bank, except that interest accrued on and after the date of payment by any Lender pursuant to paragraph (e) of this Section to reimburse the Issuing Bank shall be for the account of such Lender to the extent of such payment.

(i) Replacement of the Issuing Bank. Any Issuing Bank may be replaced at any time by written agreement among the Borrower, the Administrative Agent, the replaced Issuing Bank and the successor Issuing Bank. The Administrative Agent shall notify the Lenders of any such replacement of the Issuing Bank. At the time any such replacement shall become effective, the Borrower shall pay all unpaid fees accrued for the account of the replaced Issuing Bank pursuant to Section 2.12(b). From and after the effective date of any such replacement, (i) the successor Issuing Bank shall have all the rights and obligations of the Issuing Bank under this Agreement with respect to Letters of Credit to be issued thereafter and (ii) references herein to the term "Issuing Bank" shall be deemed to refer to such successor or to any previous Issuing Bank, or to such successor and all previous Issuing Banks, as the context shall require. After the replacement of an Issuing Bank hereunder, the replaced Issuing Bank shall remain a party hereto and shall continue to have all the rights and obligations of an Issuing Bank under this Agreement with respect to Letters of Credit issued by it prior to such replacement, but shall not be required to issue additional Letters of Credit.

(j) Cash Collateralization.

(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.

(ii) All cash collateral provided by Borrower or any other Credit Party pursuant to the request of the Administrative Agent in accordance with Section 2.20(c) shall be deposited in the Cash Collateral Account.

(iii) Deposits in the Cash Collateral Account made pursuant to either the foregoing paragraph (i) of this Section 2.06(j) or Section 2.20(c) shall be held by the Administrative Agent as collateral for the payment and performance of the Borrower's obligations under this Agreement corresponding to the LC Exposure and each Credit Party hereby grants a security interest in such cash and each deposit account (including the Cash Collateral Account) into which such cash is deposited to secure the Obligations under this Agreement. The Administrative Agent shall have exclusive dominion and control, including the exclusive right of withdrawal, over the Cash Collateral Account. Other than any interest earned on the investment of such deposits, which investments shall be made at the option and sole discretion of the Administrative Agent and at the Borrower's risk and expense, such deposits shall not bear interest. Interest or profits, if any, on such investments shall accumulate in such account. Moneys in such account shall be applied by the Administrative Agent to reimburse the Issuing Bank for LC Disbursements for which it has not been reimbursed and, to the extent not so applied, shall be held for the satisfaction of the reimbursement obligations of the Borrower for the LC Exposure at such time or, if the maturity of the Loans has been accelerated (but subject to the consent of Lenders with LC Exposure representing sixty-six and two-thirds percent (66⅔%) or more of the total LC Exposure), be applied to satisfy other Obligations under this Agreement and to the extent any excess remains after payment in full in cash of all Obligations and the termination of all Commitments, such excess shall be released to the Borrower.

(iv) If the Borrower is required to provide an amount of cash collateral pursuant to either paragraph (i) of this Section 2.06(j) or Section 2.20(c), such amount (to the extent not applied as aforesaid) shall be returned to the Borrower within one Business Day after (x) in the case of cash collateral provided pursuant to Section 2.20(c), the date on which such cash collateral is no longer required pursuant to Section 2.20(c) and (y) in the case of cash collateral provided pursuant to paragraph (i) above, all Events of Default have been cured or waived.

(k) Subject to the appointment and acceptance of a successor Issuing Bank, any Issuing Bank may resign as an Issuing Bank at any time upon thirty days' prior written notice to the Administrative Agent, the Borrower, and the Lenders, in which case such Issuing Bank shall be replaced in accordance with Section 2.06(i); provided that, if an Issuing Bank is no longer a Lender, such Issuing Bank may resign as an Issuing Bank upon thirty days' prior written notice to the Administrative Agent, the Lenders and the Borrower and such resigning Issuing Bank shall remain a party hereto to the extent that Letters of Credit issued by it (or reimbursement obligation with respect thereto) remain outstanding and shall continue to have all the rights and obligations of an Issuing Bank under this Agreement with respect to Letters of Credit issued by it prior to such resignation, but shall not be required to issue additional Letters of Credit or extend any outstanding Letters of Credit subsequent to such resignation.

Section 2.07 Funding of Borrowings.

(a) Each Lender shall make each Loan to be made by it hereunder on the proposed date thereof solely by wire transfer of immediately available funds by 2:00 p.m. to the account of the Administrative Agent most recently designated by it for such purpose by notice to the Lenders. Except in respect of the provisions of this Agreement covering the reimbursement of Letters of Credit, the

Administrative Agent will make such Loans available to the Borrower by promptly crediting the funds so received in the aforesaid account of the Administrative Agent to an account of the Borrower designated by the Borrower in the applicable Borrowing Request; provided that ABR Loans made to finance the reimbursement of an LC Disbursement as provided in Section 2.06(e) shall be remitted by the Administrative Agent to the Issuing Bank.

(b) Unless the Administrative Agent shall have received notice from a Lender prior to the proposed date of any Borrowing that such Lender will not make available to the Administrative Agent such Lender's share of such Borrowing, the Administrative Agent may assume that such Lender has made such share available on such date in accordance with paragraph (a) of this Section and may, in reliance upon such assumption, make available to the Borrower a corresponding amount. In such event, if a Lender has not in fact made its share of the applicable Borrowing available to the Administrative Agent, then the applicable Lender and the Borrower severally agree to pay to the Administrative Agent forthwith on demand such corresponding amount with interest thereon, for each day from and including the date such amount is made available to the Borrower to but excluding the date of payment to the Administrative Agent, at (i) in the case of such Lender, the greater of the Federal Funds Effective Rate and a rate determined by the Administrative Agent in accordance with banking industry rules on interbank compensation or (ii) in the case of the Borrower, the interest rate applicable to ABR Loans. If such Lender pays such amount to the Administrative Agent, then such amount shall constitute such Lender's Loan included in such Borrowing.

Section 2.08 Interest Elections.

(a) Each Revolving Borrowing initially shall be of the Type specified in the applicable Borrowing Request and, in the case of a Term Benchmark Revolving Borrowing, shall have an initial Interest Period as specified in such Borrowing Request. Thereafter, the Borrower may elect to convert such Borrowing to a different Type or to continue such Borrowing and, in the case of a Term Benchmark Revolving Borrowing, may elect Interest Periods therefor, all as provided in this Section. The Borrower may elect different options with respect to different portions of the affected Borrowing, in which case each such portion shall be allocated ratably among the Lenders holding the Loans comprising such Borrowing, and the Loans comprising each such portion shall be considered a separate Borrowing.

(b) To make an election pursuant to this Section, the Borrower shall notify the Administrative Agent of such election by telephone by the time that a Borrowing Request would be required under Section 2.05 if the Borrower were requesting a Revolving Borrowing of the Type resulting from such election to be made on the effective date of such election. Each such telephonic Interest Election Request shall be irrevocable and shall be confirmed promptly by hand delivery or telecopy to the Administrative Agent of a written Interest Election Request in a form approved by the Administrative Agent and signed by an authorized officer of the Borrower.

(c) Each telephonic and written Interest Election Request shall specify the following information in compliance with Section 2.04:

(i) the Borrowing to which such Interest Election Request applies and, if different options are being elected with respect to different portions thereof, the portions thereof to be allocated to each resulting Borrowing (in which case the information to be specified pursuant to clauses (iii) and (iv) below shall be specified for each resulting Borrowing);

(ii) the effective date of the election made pursuant to such Interest Election Request, which shall be a Business Day;

(iii) whether the resulting Borrowing is to be an ABR Borrowing or a Term Benchmark Borrowing or an RFR Borrowing; and

(iv) if the resulting Borrowing is a Term Benchmark Borrowing, the Interest Period to be applicable thereto after giving effect to such election, which shall be a period contemplated by the definition of the term "Interest Period".

If any such Interest Election Request requests a Term Benchmark Borrowing but does not specify an Interest Period, then the Borrower shall be deemed to have selected an Interest Period of one month's duration.

(d) Promptly following receipt of an Interest Election Request, the Administrative Agent shall advise each Lender of the details thereof and of such Lender's portion of each resulting Borrowing.

(e) If the Borrower fails to deliver a timely Interest Election Request with respect to a Term Benchmark Revolving Borrowing prior to the end of the Interest Period applicable thereto, then, unless such Borrowing is repaid as provided herein, at the end of such Interest Period such Borrowing shall be converted to an ABR Borrowing. Notwithstanding any contrary provision hereof, if an Event of Default has occurred and is continuing and the Administrative Agent, at the request of the Required Lenders, so notifies the Borrower, then, so long as an Event of Default is continuing (i) no outstanding Revolving Borrowing may be converted to or continued as a Term Benchmark Borrowing and (ii) unless repaid, (A) each Term Benchmark Borrowing and (B) each RFR Borrowing shall be converted to an ABR Borrowing at the end of the Interest Period applicable thereto.

Section 2.09 Repayment of Loans; Evidence of Debt.

(a) The Borrower hereby unconditionally promises to pay to the Administrative Agent for the account of each Lender the then unpaid principal amount of each Loan on the Maturity Date.

(b) Each Lender shall maintain in accordance with its usual practice an account or accounts evidencing the Indebtedness of the Borrower to such Lender resulting from each Loan made by such Lender, including the amounts of principal and interest payable and paid to such Lender from time to time hereunder.

(c) The Administrative Agent shall maintain accounts in which it shall record (i) the amount of each Loan made hereunder, the Type thereof and the Interest Period applicable thereto, (ii) the amount of any principal or interest due and payable or to become due and payable from the Borrower to each Lender hereunder and (iii) the amount of any sum received by the Administrative Agent hereunder for the account of the Lenders and each Lender's share thereof.

(d) The entries made in the accounts maintained pursuant to paragraph (b) or (c) of this Section shall be prima facie evidence of the existence and amounts of the obligations recorded therein; provided that the failure of any Lender or the Administrative Agent to maintain such accounts or any error therein shall not in any manner affect the obligation of the Borrower to repay the Loans in accordance with the terms of this Agreement.

(e) Any Lender may request that Loans made by it be evidenced by a promissory note. In such event, the Borrower shall prepare, execute and deliver to such Lender a promissory note payable to such Lender (or, if requested by such Lender, to such Lender and its registered assigns) and in the form attached hereto as Exhibit D. Thereafter, the Loans evidenced by such

promissory note and interest thereon shall at all times (including after assignment pursuant to Section 11.04) be represented by one or more promissory notes in such form.

(f) Borrower and each surety, endorser, guarantor and other party ever liable for payment of any sums of money payable under this Agreement, jointly and severally waive presentment and demand for payment, notice of intention to accelerate the maturity, protest, notice of protest and nonpayment, as to the payments due under this Agreement or any other Loan Document and as to each and all installments hereunder and thereunder, and agree that their liability under this Agreement or any other Loan Document shall not be affected by any renewal or extension in the time of payment hereof, or in any indulgences, or by any release or change in any security for the payment of the Obligations, and hereby consent to any and all such renewals, extensions, indulgences, releases or changes.

Section 2.10 Optional Prepayment of Loans.

(a) The Borrower shall have the right at any time and from time to time to prepay, without premium or penalty, any Borrowing in whole and or in part, in a minimum amount of $1,000,000 and integral multiples of $100,000 subject to prior notice in accordance with paragraph (b) of this Section 2.10.

(b) The Borrower shall notify the Administrative Agent by telephone (confirmed by telecopy) of any prepayment hereunder (i) in the case of prepayment of a Term Benchmark Borrowing, not later than 11:00 a.m. two (2) Business Days before the date of prepayment, (ii) in the case of prepayment of an RFR Borrowing, not later than 11:00 a.m. five (5) Business Days before the date of prepayment or (iii) in the case of prepayment of an ABR Borrowing, not later than 11:00 a.m. one Business Day before the date of prepayment. Each such notice shall be irrevocable and shall specify the prepayment date and the principal amount of each Borrowing or portion thereof to be prepaid; provided that, if a notice of prepayment is given in connection with a conditional notice of termination or reduction of the Aggregate Commitment as contemplated by Section 2.02, then such notice of prepayment may be revoked if such notice of termination or reduction is revoked in accordance with Section 2.02. Promptly following receipt of any such notice relating to a Borrowing, the Administrative Agent shall advise the Lenders of the contents thereof. Each prepayment of a Borrowing shall be applied ratably to the Loans included in the prepaid Borrowing. Prepayments shall be accompanied by accrued interest to the extent required by Section 2.13.

Section 2.11 Mandatory Prepayment of Loans.

(a) In the event a Borrowing Base Deficiency exists as a result of a Scheduled Redetermination or Special Redetermination of the Borrowing Base, the Borrower shall, within thirty (30) days after written notice from the Administrative Agent to the Borrower of such Borrowing Base Deficiency, take any of the following actions or a combination thereof to eliminate the Borrowing Base Deficiency:

(i) prepay, without premium or penalty, the principal amount of the Loans (and after all Loans are repaid in full, provide cash collateral in accordance with Section 2.06(j)) representing Borrower's Aggregate Credit Exposure in an amount sufficient to eliminate Borrower's Borrowing Base Deficiency, such prepayment to be made in full on or before the 30th day after the Borrower's receipt of notice of such Borrowing Base Deficiency;

(ii) notify the Administrative Agent that it intends to prepay, without premium or penalty (but subject to any funding indemnification amounts required by Section 2.16), an amount sufficient to eliminate Borrower's Borrowing Base Deficiency in not more than six (6) equal monthly installments plus accrued interest thereon and make the first such monthly payment on the 30th day after the Borrower's receipt of notice of such Borrowing Base Deficiency and the

subsequent installments to be due and payable at one month intervals thereafter until such Borrowing Base Deficiency has been eliminated; or

(iii) give notice to Administrative Agent that Borrower desire to provide Administrative Agent with deeds of trust, mortgages, security agreements, financing statements and other security documents in form and substance satisfactory to Administrative Agent, granting, confirming, and perfecting first and prior Liens or security interests in collateral acceptable to Required Lenders, to the extent needed to cover the Minimum Collateral Amount (as they in their reasonable discretion deem consistent with prudent oil and gas banking industry lending standards at the time) to an amount which eliminates the Borrower's Borrowing Base Deficiency, and then provide such security documents within thirty (30) days after the Borrower's receipt of notice of such Borrowing Base Deficiency. If Required Lenders determine that the giving of such security documents will not serve to eliminate such Borrowing Base Deficiency, then, within five (5) Business Days after receiving notice of such determination from Administrative Agent, Borrower will make the prepayments specified in paragraph (ii) of this clause (a), including the payments which would have previously been made but for its election under this paragraph (iii) on the preceding 30th day.

(b) If Borrower or any Restricted Subsidiary Disposes of any Borrowing Base Properties (whether pursuant to a Disposition of Equity Interests of a Restricted Subsidiary permitted pursuant to Section 7.05 or otherwise), the Borrower shall prepay the Loans (and after all Loans are repaid in full, provide cash collateral in accordance with Section 2.06(j)) to the extent necessary to eliminate Borrower's Borrowing Base Deficiency that may exist or that may have occurred as a result of such Disposition on the next Business Day following the day it or any Restricted Subsidiary receives the Net Cash Proceeds from such Disposition.

(c) If Borrower or any Restricted Subsidiary enters into a Hedge Modification, the Borrower shall prepay the Loans (and after all Loans are repaid in full, provide cash collateral in accordance with Section 2.06(j)) to the extent necessary to eliminate Borrower's Borrowing Base Deficiency that may exist or that may have occurred as a result of such Hedge Modification on the next Business Day following the day it or any Restricted Subsidiary receives the Net Cash Proceeds from such Hedge Modification (or in the case of any Hedge Modification entered into by any Credit Party pursuant to Section 7.03(d)(z), on the next Business Day following the day the Borrower receive notice from the Administrative Agent of the amount of any adjustment to the Borrowing Base made by the Administrative Agent or the Required Lenders, as applicable, pursuant to Section 7.03(d)(z)(ii)).

(d) If any Excess Cash exists as of the last Business Day of any calendar month, the Borrower shall prepay the Loans in an aggregate amount equal to the lesser of (i) such Excess Cash and (ii) the amount of the Loans then outstanding, if any. The Borrower shall be obligated to make such prepayment on the Business Day immediately following the last Business Day of each such calendar month.

(e) Each prepayment of principal under this section shall be accompanied by all interest then accrued and unpaid on the principal so prepaid. Any principal or interest prepaid pursuant to this section shall be in addition to, and not in lieu of, all payments otherwise required to be paid under the Loan Documents at the time of such prepayment.

Section 2.12 Fees.

(a) The Borrower agrees to pay to the Administrative Agent for the account of each Lender an amount equal to the applicable Unused Commitment Fees times the daily average of the Aggregate Unused Commitment. Such Unused Commitment Fee shall be calculated on the basis of a year consisting

of 360 days. The Unused Commitment Fee shall be payable in arrears on the last day of March, June, September and December of each year, commencing with the first such date to occur after the Effective Date, and on the Maturity Date for any period then ending for which the Unused Commitment Fee shall not have been theretofore paid. In the event the Aggregate Commitment terminates on any date other than the last day of March, June, September or December of any year, the Borrower agree to pay to the Administrative Agent, for the account of each Lender, on the date of such termination, the pro rata portion of the Unused Commitment Fee due for the period from the last day of the immediately preceding March, June, September or December, as the case may be, to the date such termination occurs.

(b) The Borrower agrees to pay (i) to the Administrative Agent for the account of each Lender a participation fee with respect to its participations in Letters of Credit, which shall accrue at the same Applicable Rate used to determine the interest rate applicable to Term Benchmark Loans on the average daily amount of each Lender's LC Exposure (excluding any portion thereof attributable to unreimbursed LC Disbursements) during the period from and including the Effective Date to but excluding the later of the date on which such Lender's Commitment terminates and the date on which such Lender ceases to have any LC Exposure, and (ii) to the Issuing Bank a fronting fee, which shall accrue at the rate equal to one-eighth percent (0.125%) per annum on the average daily amount of the LC Exposure (excluding any portion thereof attributable to unreimbursed LC Disbursements) during the period from and including the Effective Date to but excluding the later of the date of termination of the Aggregate Commitment and the date on which there ceases to be any LC Exposure (but in no event less than $150 per annum), as well as the Issuing Bank's standard fees with respect to the issuance, amendment, renewal or extension of any Letter of Credit or processing of drawings thereunder; provided that no such individual fee shall exceed $500. Participation fees and fronting fees accrued through and including the last day of March, June, September and December of each year shall be payable on the fifteenth (15th) day following such last day, commencing on the first such date to occur after the Effective Date; provided that all such fees shall be payable on the date on which the Aggregate Commitment terminates and any such fees accruing after the date on which the Aggregate Commitment terminates shall be payable on demand. Any other fees payable to the Issuing Bank pursuant to this paragraph shall be payable within ten (10) days after demand. All participation fees and fronting fees shall be computed on the basis of a year of 360 days and shall be payable for the actual number of days elapsed (including the first day but excluding the last day).

(c) The Borrower agrees to pay to the Administrative Agent, for its own account, the fees payable in the amounts and at the times separately agreed upon between the Borrower and the Administrative Agent.

(d) All fees payable hereunder shall be paid on the dates due, in immediately available funds, to the Administrative Agent (or to the Issuing Bank, in the case of fees payable to it) for distribution, in the case of Unused Commitment Fees and participation fees, to the Lenders. Fees paid shall not be refundable under any circumstances.

Section 2.13 Interest.

(a) The Loans comprising each ABR Borrowing shall bear interest at the Alternate Base Rate plus the Applicable Rate.

(b) The Loans comprising each Term Benchmark Borrowing shall bear interest in the case of a Term Benchmark Revolving Loan, at the Adjusted Term SOFR Rate for the Interest Period in effect for such Borrowing plus the Applicable Rate.

(c) Each RFR Loan shall bear interest at a rate per annum equal to the Adjusted Daily Simple SOFR plus the Applicable Rate.

(d) Notwithstanding the foregoing, if any principal of or interest on any Loan or any fee or other amount payable by the Borrower hereunder is not paid when due, whether at stated maturity, upon acceleration or otherwise, such overdue amount shall bear interest, after as well as before judgment, at a rate per annum equal to (i) in the case of overdue principal of any Loan, 2% plus the rate otherwise applicable to such Loan as provided in the preceding paragraphs of this Section or (ii) in the case of any other amount, 2% plus the rate applicable to ABR Loans as provided in paragraph (a) of this Section.

(e) Accrued interest on each Loan shall be payable in arrears on each Interest Payment Date for such Loan and, in the case of Revolving Loans, upon termination of the Commitments; *provided* that (i) interest accrued pursuant to paragraph (d) of this Section shall be payable on demand, (ii) in the event of any repayment or prepayment of any Loan (other than a prepayment of an ABR Revolving Loan prior to the end of the Availability Period), accrued interest on the principal amount repaid or prepaid shall be payable on the date of such repayment or prepayment and (iii) in the event of any conversion of any Term Benchmark Revolving Loan prior to the end of the current Interest Period therefor, accrued interest on such Loan shall be payable on the effective date of such conversion.

(f) Interest computed by reference to the Term SOFR Rate or Daily Simple SOFR hereunder shall be computed on the basis of a year of 360 days. Interest computed by reference to the Alternate Base Rate at times when the Alternate Base Rate is based on the Prime Rate shall be computed on the basis of a year of 365 days (or 366 days in a leap year). In each case interest shall be payable for the actual number of days elapsed (including the first day but excluding the last day). All interest hereunder on any Loan shall be computed on a daily basis based upon the outstanding principal amount of such Loan as of the applicable date of determination. The applicable Alternate Base Rate, Adjusted Term SOFR Rate, Term SOFR Rate, Adjusted Daily Simple SOFR or Daily Simple SOFR shall be determined by the Administrative Agent, and such determination shall be conclusive absent manifest error.

Section 2.14 Alternate Rate of Interest.

(a) Subject to clauses (b), (c), (d), (e) and (f) of this Section 2.14, if:

(i) the Administrative Agent determines (which determination shall be conclusive absent manifest error) (A) prior to the commencement of any Interest Period for a Term Benchmark Borrowing, that adequate and reasonable means do not exist for ascertaining the Adjusted Term SOFR Rate or the Term SOFR Rate (including because the Term SOFR Reference Rate is not available or published on a current basis), for such Interest Period or (B) at any time, that adequate and reasonable means do not exist for ascertaining the applicable Adjusted Daily Simple SOFR, Daily Simple SOFR; or

(ii) the Administrative Agent is advised by the Required Lenders that (A) prior to the commencement of any Interest Period for a Term Benchmark Borrowing, the Adjusted Term SOFR Rate 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 or (B) at any time, Adjusted Daily Simple SOFR 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;

then the Administrative Agent shall give notice thereof to the Borrower and the Lenders by telephone, telecopy or electronic mail as promptly as practicable thereafter and, until (x) the Administrative Agent notifies the Borrower and the Lenders that the circumstances giving rise to such notice no longer exist with respect to the relevant Benchmark and (y) the Borrower delivers a new Interest Election Request in accordance with the terms of Section 2.08 or a new Borrowing Request in accordance with the terms of

Section 2.05, (1) any Interest Election Request that requests the conversion of any Borrowing to, or continuation of any Borrowing as, a Term Benchmark Borrowing and any Borrowing Request that requests a Term Benchmark Borrowing shall instead be deemed to be an Interest Election Request or a Borrowing Request, as applicable, for (x) an RFR Borrowing so long as the Adjusted Daily Simple SOFR is not also the subject of Section 2.14(a)(i) or (ii) above or (y) an ABR Borrowing if the Adjusted Daily Simple SOFR also is the subject of Section 2.14(a)(i) or (ii) above and (2) any Borrowing Request that requests an RFR Borrowing shall instead be deemed to be a Borrowing Request, as applicable, for an ABR Borrowing; provided that if the circumstances giving rise to such notice affect only one Type of Borrowings, then all other Types of Borrowings shall be permitted. Furthermore, if any Term Benchmark Loan or RFR Loan is outstanding on the date of the Borrower's receipt of the notice from the Administrative Agent referred to in this Section 2.14(a) with respect to a Relevant Rate applicable to such Term Benchmark Loan or RFR Loan, then until (x) the Administrative Agent notifies the Borrower and the Lenders that the circumstances giving rise to such notice no longer exist with respect to the relevant Benchmark and (y) the Borrower delivers a new Interest Election Request in accordance with the terms of Section 2.08 or a new Borrowing Request in accordance with the terms of Section 2.05, (1) any Term Benchmark Loan shall on the last day of the Interest Period applicable to such Loan (or the next succeeding Business Day if such day is not a Business Day), be converted by the Administrative Agent to, and shall constitute, (x) an RFR Borrowing so long as the Adjusted Daily Simple SOFR is not also the subject of Section 2.14(a)(i) or (ii) above or (y) an ABR Loan if the Adjusted Daily Simple SOFR also is the subject of Section 2.14(a)(i) or (ii) above, on such day, and (2) any RFR Loan shall on and from such day be converted by the Administrative Agent to, and shall constitute an ABR Loan.

(b) Notwithstanding anything to the contrary herein or in any other Loan Document, if a Benchmark Transition Event and its related Benchmark Replacement Date have occurred prior to the Reference Time in respect of any setting of the then-current Benchmark, then (x) if a Benchmark Replacement is determined in accordance with clause (1) of the definition of "Benchmark Replacement" for such Benchmark Replacement Date, such Benchmark Replacement will replace such Benchmark for all purposes hereunder and under any Loan Document in respect of such Benchmark setting and subsequent Benchmark settings without any amendment to, or further action or consent of any other party to, this Agreement or any other Loan Document and (y) if a Benchmark Replacement is determined in accordance with clause (2) of the definition of "Benchmark Replacement" for such Benchmark Replacement Date, such Benchmark Replacement will replace such Benchmark for all purposes hereunder and under any Loan Document in respect of any Benchmark setting at or after 5:00 p.m. (New York City time) on the fifth (5th) Business Day after the date notice of such Benchmark Replacement is provided to the Lenders without any amendment to, or further action or consent of any other party to, this Agreement or any other Loan Document so long as the Administrative Agent has not received, by such time, written notice of objection to such Benchmark Replacement from Lenders comprising the Required Lenders.

(c) Notwithstanding anything to the contrary herein or in any other Loan Document, 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 or any other Loan Document.

(d) The Administrative Agent will promptly notify the Borrower and the Lenders of (i) any occurrence of a Benchmark Transition Event, (ii) the implementation of any Benchmark Replacement, (iii) the effectiveness of any Benchmark Replacement Conforming Changes, (iv) the removal or reinstatement of any tenor of a Benchmark pursuant to clause (e) below and (v) the commencement or conclusion of any Benchmark Unavailability Period. Any determination, decision or election that may be made by the Administrative Agent or, if applicable, any Lender (or group of 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 or any selection, 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 to this Agreement or any other Loan Document, except, in each case, as expressly required pursuant to this Section 2.14.

(e) Notwithstanding anything to the contrary herein or in any other Loan Document, at any time (including in connection with the implementation of a Benchmark Replacement), (i) if the then-current Benchmark is a term rate (including the Term SOFR Rate) and either (A) any tenor for such Benchmark is not displayed on a screen or other information service that publishes such rate from time to time as selected by the Administrative Agent in its reasonable discretion or (B) the regulatory supervisor for the administrator of such Benchmark has provided a public statement or publication of information announcing that any tenor for such Benchmark is or will be no longer representative, then the Administrative Agent may modify the definition of "Interest Period" for any Benchmark settings at or after such time to remove such unavailable or non-representative tenor and (ii) if a tenor that was removed pursuant to clause (i) above either (A) is subsequently displayed on a screen or information service for a Benchmark (including a Benchmark Replacement) or (B) is not, or is no longer, subject to an announcement that it is or will no longer be representative for a Benchmark (including a Benchmark Replacement), then the Administrative Agent may modify the definition of "Interest Period" for all Benchmark settings at or after such time to reinstate such previously removed tenor.

(f) Upon the Borrower's receipt of notice of the commencement of a Benchmark Unavailability Period, the Borrower may revoke any request for a Term Benchmark Borrowing or RFR Borrowing of, conversion to or continuation of Term Benchmark Loans to be made, converted or continued during any Benchmark Unavailability Period and, failing that, the Borrower will be deemed to have converted any request for a Term Benchmark Borrowing into a request for a Borrowing of or conversion to (A) an RFR Borrowing so long as the Adjusted Daily Simple SOFR is not the subject of a Benchmark Transition Event or (B) an ABR Borrowing if the Adjusted Daily Simple SOFR is the subject of a Benchmark Transition Event. During any Benchmark Unavailability Period or at any time that a tenor for the then-current Benchmark is not an Available Tenor, the component of ABR based upon the then-current Benchmark or such tenor for such Benchmark, as applicable, will not be used in any determination of ABR. Furthermore, if any Term Benchmark Loan or RFR Loan is outstanding on the date of the Borrower's receipt of notice of the commencement of a Benchmark Unavailability Period with respect to a Relevant Rate applicable to such Term Benchmark Loan or RFR Loan, then until such time as a Benchmark Replacement is implemented pursuant to this Section 2.14, any Term Benchmark Loan shall on the last day of the Interest Period applicable to such Loan (or the next succeeding Business Day if such day is not a Business Day), be converted by the Administrative Agent to, and shall constitute, (x) an RFR Borrowing so long as the Adjusted Daily Simple SOFR is not the subject of a Benchmark Transition Event or (y) an ABR Loan if the Adjusted Daily Simple SOFR is the subject of a Benchmark Transition Event, on such day.

Section 2.15 Increased Costs.

(a) If any Change in Law shall:

(i) impose, modify or deem applicable any reserve, special deposit, liquidity or similar requirement (including any compulsory loan requirement, insurance charge or other assessment) against assets of, deposits with or for the account of, or credit extended by, any Lender (except any such reserve requirement reflected in the Adjusted Term SOFR Rate) or Issuing Bank;

(ii) impose on any Lender or Issuing Bank or the applicable offshore interbank market any other condition, cost or expense (in each case, other than Taxes) affecting this Agreement or Loans made by such Lender or any Letter of Credit or participation therein; or

(iii) subject any Recipient to any Taxes (other than (A) Indemnified Taxes, (B) Taxes described in clauses (b) through (d) of the definition of Excluded Taxes and (C) Connection Income Taxes) on its loans, loan principal, letters of credit, commitments, or other obligations, or its deposits, reserves, other liabilities or capital attributable thereto;

and the result of any of the foregoing shall be to increase the cost to such Lender or such other Recipient of making, continuing, converting or maintaining any Loan (or of maintaining its obligation to make any such Loan) or to increase the cost to such Lender, such Issuing Bank or such other Recipient of participating in, issuing or maintaining any Letter of Credit or to reduce the amount of any sum received or receivable by such Lender, such Issuing Bank or such other Recipient hereunder (whether of principal, interest or otherwise), then the Borrower will pay to such Lender, such Issuing Bank or such other Recipient, as the case may be, such additional amount or amounts as will compensate such Lender, such Issuing Bank or such other Recipient, as the case may be, for such additional costs incurred or reduction suffered.

(b) If any Lender or Issuing Bank determines that any Change in Law regarding capital or liquidity requirements has or would have the effect of reducing the rate of return on such Lender's or the Issuing Bank's capital or on the capital of such Lender's or Issuing Bank's holding company, if any, as a consequence of this Agreement or the Loans made by, or participations in Letters of Credit held by, such Lender, or the Letters of Credit issued by such Issuing Bank, to a level below that which such Lender or Issuing Bank or such Lender's or Issuing Bank's holding company could have achieved but for such Change in Law (taking into consideration such Lender's or Issuing Bank's policies and the policies of such Lender's or Issuing Bank's holding company with respect to capital adequacy and liquidity), then from time to time the Borrower will pay to such Lender or Issuing Bank, as the case may be, such additional amount or amounts as will compensate such Lender or Issuing Bank or such Lender's or Issuing Bank's holding company for any such reduction suffered.

(c) A certificate of a Lender or Issuing Bank setting forth the amount or amounts necessary to compensate such Lender or Issuing Bank or its holding company, as the case may be, as specified in paragraph (a) or (b) of this Section shall be delivered to the Borrower and shall be conclusive absent manifest error. The Borrower shall pay such Lender or Issuing Bank, as the case may be, the amount shown as due on any such certificate within 10 days after receipt thereof.

(d) Failure or delay on the part of any Lender or Issuing Bank to demand compensation pursuant to this Section shall not constitute a waiver of such Lender's or Issuing Bank's right to demand such compensation; *provided* that the Borrower shall not be required to compensate a Lender or Issuing Bank pursuant to this Section for any increased costs or reductions incurred more than 270 days prior to the date that such Lender or Issuing Bank, as the case may be, notifies the Borrower of the Change in Law giving rise to such increased costs or reductions and of such Lender's or Issuing Bank's intention to claim compensation therefor; *provided further* that, if the Change in Law giving rise to such increased costs or reductions is retroactive, then the 270-day period referred to above shall be extended to include the period of retroactive effect thereof.

Section 2.16 Break Funding Payments(a) .

(a) With respect to Loans that are not RFR Loans, in the event of (i) the payment of any principal of any Term Benchmark Loan other than on the last day of an Interest Period applicable thereto (including as a result of an Event of Default or an optional or mandatory prepayment of Loans), (ii) the

conversion of any Term Benchmark Loan other than on the last day of the Interest Period applicable thereto, (iii) the failure to borrow, convert, continue or prepay any Term Benchmark Loan on the date specified in any notice delivered pursuant hereto (regardless of whether such notice may be revoked under Section 2.10(b) and is revoked in accordance therewith) or (iv) the assignment of any Term Benchmark Loan other than on the last day of the Interest Period applicable thereto as a result of a request by the Borrower pursuant to Section 2.19, then, in any such event, the Borrower shall compensate each Lender for the loss, cost and expense attributable to such event. A certificate of any Lender setting forth any amount or amounts that such Lender is entitled to receive pursuant to this Section shall be delivered to the Borrower and shall be conclusive absent manifest error. The Borrower shall pay such Lender the amount shown as due on any such certificate within 10 days after receipt thereof.

(b) With respect to RFR Loans, in the event of (i) the payment of any principal of any RFR Loan other than on the Interest Payment Date applicable thereto (including as a result of an Event of Default or an optional or mandatory prepayment of Loans), (ii) the failure to borrow or prepay any RFR Loan on the date specified in any notice delivered pursuant hereto (regardless of whether such notice may be revoked under Section 2.10(b) and is revoked in accordance therewith) or (iii) the assignment of any RFR Loan other than on the Interest Payment Date applicable thereto as a result of a request by the Borrower pursuant to Section 2.19, then, in any such event, the Borrower shall compensate each Lender for the loss, cost and expense attributable to such event. A certificate of any Lender setting forth any amount or amounts that such Lender is entitled to receive pursuant to this Section shall be delivered to the Borrower and shall be conclusive absent manifest error. The Borrower shall pay such Lender the amount shown as due on any such certificate within 10 days after receipt thereof.

Section 2.17 Taxes.

(a) Payments Free of Taxes. Any and all payments by or on account of any obligation of any Credit Party under any Loan Document shall be made without deduction or withholding for any Taxes, except as required by applicable Law. If any applicable Law (as determined in the good faith discretion of an applicable Withholding Agent) requires the deduction or withholding of any Tax from any such payment by a Withholding Agent, then the applicable Withholding Agent shall be entitled to make such deduction or withholding and shall timely pay the full amount deducted or withheld to the relevant Governmental Authority in accordance with applicable Law and, if such Tax is an Indemnified Tax, then the sum payable by the applicable Credit Party shall be increased as necessary so that after such deduction or withholding has been made (including such deductions and withholdings applicable to additional sums payable under this Section 2.17) the applicable Recipient receives an amount equal to the sum it would have received had no such deduction or withholding been made.

(b) Payment of Other Taxes by the Borrower. The Credit Parties shall timely pay to the relevant Governmental Authority in accordance with applicable Law, or at the option of the Administrative Agent timely reimburse it for the payment of, any Other Taxes.

(c) Evidence of Payments. As soon as practicable after any payment of Taxes by any Credit Party to a Governmental Authority pursuant to this Section 2.17, such Credit Party shall deliver to the Administrative Agent the original or a certified copy of a receipt issued by such Governmental Authority evidencing such payment, a copy of the return reporting such payment or other evidence of such payment reasonably satisfactory to the Administrative Agent.

(d) Indemnification by the Borrower. The Credit Parties shall jointly and severally indemnify each Recipient, within 10 days after demand therefor, for the full amount of any Indemnified Taxes (including Indemnified Taxes imposed or asserted on or attributable to amounts payable under this Section) payable or paid by such Recipient or required to be withheld or deducted from a payment to such Recipient

and any reasonable expenses arising therefrom or with respect thereto, whether or not such Indemnified Taxes were correctly or legally imposed or asserted by the relevant Governmental Authority. A certificate as to the amount of such payment or liability delivered to the Borrower by a Lender (with a copy to the Administrative Agent), or by the Administrative Agent on its own behalf or on behalf of a Lender, shall be conclusive absent manifest error.

(e) Indemnification by the Lenders. Each Lender shall severally indemnify the Administrative Agent, within 10 days after demand therefor, for (i) any Indemnified Taxes attributable to such Lender (but only to the extent that any Credit Party has not already indemnified the Administrative Agent for such Indemnified Taxes and without limiting the obligation of the Credit Parties to do so), (ii) any Taxes attributable to such Lender's failure to comply with the provisions of Section 11.04(c) relating to the maintenance of a Participant Register and (iii) any Excluded Taxes attributable to such Lender, in each case, that are payable or paid by the Administrative Agent in connection with any Loan Document, and any reasonable expenses arising therefrom or with respect thereto, whether or not such Taxes were correctly or legally imposed or asserted by the relevant Governmental Authority. A certificate as to the amount of such payment or liability delivered to any Lender by the Administrative Agent shall be conclusive absent manifest error. Each Lender hereby authorizes the Administrative Agent to set off and apply any and all amounts at any time owing to such Lender under any Loan Document or otherwise payable by the Administrative Agent to the Lender from any other source against any amount due to the Administrative Agent under this paragraph (e).

(f) Status of Lenders. (i) Any Lender that is entitled to an exemption from or reduction of withholding Tax with respect to payments made under any Loan Document shall deliver to the Borrower and the Administrative Agent, at the time or times reasonably requested by the Borrower or the Administrative Agent, such properly completed and executed documentation reasonably requested by the Borrower or the Administrative Agent as will permit such payments to be made without withholding or at a reduced rate of withholding. In addition, any Lender, if reasonably requested by the Borrower or the Administrative Agent, shall deliver such other documentation prescribed by applicable Law or reasonably requested by the Borrower or the Administrative Agent as will enable the Borrower or the Administrative Agent to determine whether or not such Lender is subject to backup withholding or information reporting requirements. Notwithstanding anything to the contrary in the preceding two sentences, the completion, execution and submission of such documentation (other than such documentation set forth in Section 2.17(f)(ii)(A), (ii)(B) and (ii)(D) below) shall not be required if in the Lender's reasonable judgment such completion, execution or submission would subject such Lender to any material unreimbursed cost or expense or would materially prejudice the legal or commercial position of such Lender.

(ii) Without limiting the generality of the foregoing,

(A) any Lender that is a U.S. Person shall deliver to the Borrower and the Administrative Agent on or prior to the date on which such Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of the Borrower or the Administrative Agent), executed copies of IRS Form W-9 certifying that such Lender is exempt from U.S. federal backup withholding tax;

(B) any Foreign Lender shall, to the extent it is legally entitled to do so, deliver to the Borrower and the Administrative Agent (in such number of copies as shall be requested by the recipient) on or prior to the date on which such Foreign Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of the Borrower or the Administrative Agent), whichever of the following is applicable:

(1) in the case of a Foreign Lender claiming the benefits of an income tax treaty to which the United States is a party (x) with respect to payments of interest under any Loan Document, executed copies of IRS Form W-8BEN-E or IRS Form W-8BEN establishing an exemption from, or reduction of, U.S. federal withholding Tax pursuant to the "interest" article of such tax treaty and (y) with respect to any other applicable payments under any Loan Document, IRS Form W-8BEN-E or IRS Form W-8BEN establishing an exemption from, or reduction of, U.S. federal withholding Tax pursuant to the "business profits" or "other income" article of such tax treaty;

(2) in the case of a Foreign Lender claiming that its extension of credit will generate U.S. effectively connected income, executed copies of IRS Form W-8ECI;

(3) in the case of a Foreign Lender claiming the benefits of the exemption for portfolio interest under Section 881(c) of the Code, (x) a certificate substantially in the form of Exhibit F-1 to the effect that such Foreign Lender is not a "bank" within the meaning of Section 881(c)(3)(A) of the Code, a "10 percent shareholder" of the Borrower within the meaning of Section 881(c)(3)(B) of the Code, or a "controlled foreign corporation" related to Borrower as described in Section 881(c)(3)(C) of the Code (a "U.S. Tax Compliance Certificate") and (y) executed copies of IRS Form W-8BEN-E or IRS Form W-8BEN; or

(4) to the extent a Foreign Lender is not the beneficial owner, executed copies of IRS Form W-8IMY, accompanied by IRS Form W-8ECI, IRS Form W-8BEN-E, IRS Form W-8BEN, a U.S. Tax Compliance Certificate substantially in the form of Exhibit F-2 or Exhibit F-3, IRS Form W-9, and/or other certification documents from each beneficial owner, as applicable; provided that if the Foreign Lender is a partnership and one or more direct or indirect partners of such Foreign Lender are claiming the portfolio interest exemption, such Foreign Lender may provide a U.S. Tax Compliance Certificate substantially in the form of Exhibit F-4 on behalf of each such direct and indirect partner;

(C) any Foreign Lender shall, to the extent it is legally entitled to do so, deliver to the Borrower and the Administrative Agent (in such number of copies as shall be requested by the recipient) on or prior to the date on which such Foreign Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of the Borrower or the Administrative Agent), executed copies of any other form prescribed by applicable Law as a basis for claiming exemption from or a reduction in U.S. federal withholding Tax, duly completed, together with such supplementary documentation as may be prescribed by applicable Law to permit the Borrower or the Administrative Agent to determine the withholding or deduction required to be made; and

(D) if a payment made to a Lender under any Loan Document would be subject to U.S. federal withholding Tax imposed by FATCA if such Lender were to fail to comply with the applicable reporting requirements of FATCA (including those contained in Section 1471(b) or 1472(b) of the Code, as applicable), such Lender shall deliver to the Borrower and the Administrative Agent at the time or times prescribed by Law and at such time or times reasonably requested by the Borrower or the Administrative Agent such documentation prescribed by applicable Law (including as prescribed by Section 1471(b)(3)(C)(i) of the Code) and such additional documentation reasonably requested by

the Borrower or the Administrative Agent as may be necessary for the Borrower and the Administrative Agent to comply with their obligations under FATCA and to determine that such Lender has complied with such Lender's obligations under FATCA or to determine the amount, if any, to deduct and withhold from such payment. Solely for purposes of this clause (D), "FATCA" shall include any amendments made to FATCA after the date of this Agreement.

Each Lender agrees that if any form or certification it previously delivered expires or becomes obsolete or inaccurate in any respect, it shall update such form or certification or promptly notify the Borrower and the Administrative Agent in writing of its legal inability to do so.

(g) Treatment of Certain Refunds. If any party determines, in its sole discretion exercised in good faith, that it has received a refund of any Taxes as to which it has been indemnified pursuant to this Section 2.17 (including by the payment of additional amounts pursuant to this Section 2.17), it shall pay to the indemnifying party an amount equal to such refund (but only to the extent of indemnity payments made under this Section 2.17 with respect to the Taxes giving rise to such refund), net of all out-of-pocket expenses (including Taxes) of such indemnified party and without interest (other than any interest paid by the relevant Governmental Authority with respect to such refund). Such indemnifying party, upon the request of such indemnified party, shall repay to such indemnified party the amount paid over pursuant to this paragraph (g) (plus any penalties, interest or other charges imposed by the relevant Governmental Authority) in the event that such indemnified party is required to repay such refund to such Governmental Authority. Notwithstanding anything to the contrary in this paragraph (g), in no event will the indemnified party be required to pay any amount to an indemnifying party pursuant to this paragraph (g) the payment of which would place the indemnified party in a less favorable net after-Tax position than the indemnified party would have been in if the Tax subject to indemnification and giving rise to such refund had not been deducted, withheld or otherwise imposed and the indemnification payments or additional amounts with respect to such Tax had never been paid. This paragraph shall not be construed to require any indemnified party to make available its Tax returns (or any other information relating to its Taxes that it deems confidential) to the indemnifying party or any other Person.

(h) Survival. Each party's obligations under this Section 2.17 shall survive the resignation or replacement of the Administrative Agent or any assignment of rights by, or the replacement of, a Lender, the termination of the Commitments and the repayment, satisfaction or discharge of all obligations under any Loan Document.

(i) Defined Terms. For purposes of this Section 2.17, the term "Lender" includes any Issuing Bank and the term "applicable Law" includes FATCA.

Section 2.18 Payments Generally; Pro Rata Treatment; Sharing of Set-offs.

(a) The Borrower shall make each payment required to be made by it hereunder (whether of principal, interest, fees or reimbursement of LC Disbursements, or of amounts payable under Section 2.15, Section 2.16 or Section 2.17, or otherwise) prior to 12:00 noon on the date when due, in immediately available funds, without set-off or counterclaim. Any amounts received after such time on any date may, in the discretion of the Administrative Agent, be deemed to have been received on the next succeeding Business Day for purposes of calculating interest thereon. All such payments shall be made to the Administrative Agent at its offices at Mail Code IL1-0010, 10 South Dearborn, Chicago, Illinois, 60603-2003, except payments to be made directly to the Issuing Bank as expressly provided herein and except that payments pursuant to Section 2.15, Section 2.16, Section 2.17 and Section 11.03 shall be made directly to the Persons entitled thereto. The Administrative Agent shall distribute any such payments received by it for the account of any other Person to the appropriate recipient promptly following receipt thereof. If any

payment hereunder shall be due on a day that is not a Business Day, the date for payment shall be extended to the next succeeding Business Day, and, in the case of any payment accruing interest, interest thereon shall be payable for the period of such extension. All payments hereunder shall be made in Dollars.

(b) If at any time insufficient funds are received by and available to the Administrative Agent to pay fully all amounts of principal, unreimbursed LC Disbursements, interest, fees and other Obligations then due hereunder, such funds shall be applied (i) first, towards payment of interest and fees then due hereunder, ratably among the parties entitled thereto in accordance with the amounts of interest and fees then due to such parties, and (ii) second, towards payment of principal and unreimbursed LC Disbursements then due hereunder, ratably among the parties entitled thereto in accordance with the amounts of principal and unreimbursed LC Disbursements then due to such parties; provided that, notwithstanding anything to the contrary contained in this Agreement or in any other Loan Document, in the event such funds are received by and available to the Administrative Agent as a result of the exercise of any rights and remedies with respect to any collateral under the Security Documents or as a result of any distribution made pursuant to a bankruptcy proceeding of any Credit Party or any plan of reorganization confirmed in any such proceeding, such funds shall be applied (A)first and ratably to any fees and reimbursements due to the Administrative Agent hereunder or under any other Loan Document, (B) then ratably to the payment of the Obligations (other than Cash Management Obligations), including unreimbursed LC Disbursements (in the manner set forth above) and the Lender Hedging Obligations, in each case, until such Obligations are paid in full, and (C) then ratably to the payment of Cash Management Obligations. Notwithstanding the foregoing, amounts received from any Credit Party that is not an Eligible Contract Participant shall not be applied to any Excluded Swap Obligations owing to a Lender Counterparty (it being understood, that in the event that any amount is applied to Obligations other than Excluded Swap Obligations as a result of this clause, the Administrative Agent shall make such adjustments as it determines are appropriate to distributions pursuant to the foregoing clause (B) from amounts received from Eligible Contract Participants to ensure, as nearly as possible, that the proportional aggregate recoveries with respect to Obligations described in the foregoing clause (B) above by Lender Counterparties that are the holders of any Excluded Swap Obligations are the same as the proportional aggregate recoveries with respect to other Obligations pursuant to the foregoing clause (B) above). The Administrative Agent shall have no responsibility to determine the existence or amount of Lender Hedging Obligations or Cash Management Obligations and may reserve from the application of amounts under this Section amounts distributable in respect of Lender Hedging Obligations or Cash Management Obligations until it has received evidence satisfactory to it of the existence and amount of such Lender Hedging Obligations or Cash Management Obligations.

(c) If any Lender shall, by exercising any right of set-off or counterclaim or otherwise, obtain payment in respect of any principal of or interest on any of its Loans or participations in LC Disbursements resulting in such Lender receiving payment of a greater proportion of the aggregate amount of its Loans and participations in LC Disbursements and accrued interest thereon than the proportion received by any other Lender, then the Lender receiving such greater proportion shall purchase (for cash at face value) participations in the Loans and participations in LC Disbursements of other Lenders to the extent necessary so that the benefit of all such payments shall be shared by the Lenders ratably in accordance with the aggregate amount of principal of and accrued interest on their respective Loans and participations in LC Disbursements; provided that (i) if any such participations are purchased and all or any portion of the payment giving rise thereto is recovered, such participations shall be rescinded and the purchase price restored to the extent of such recovery, without interest, and (ii) the provisions of this paragraph shall not be construed to apply to any payment made by the Borrower pursuant to and in accordance with the express terms of this Agreement or any payment obtained by a Lender as consideration for the assignment of or sale of a participation in any of its Loans or participations in LC Disbursements to any assignee or participant, other than to Borrower or any Subsidiary thereof (as to which the provisions of this paragraph shall apply). Borrower consents to the foregoing and agrees, to the extent it may effectively do so under

applicable law, that any Lender acquiring a participation pursuant to the foregoing arrangements may exercise against such Borrower rights of set-off and counterclaim with respect to such participation as fully as if such Lender were a direct creditor of such Borrower in the amount of such participation.

(d) Unless the Administrative Agent shall have received notice from the Borrower prior to the date on which any payment is due to the Administrative Agent for the account of the Lenders or the Issuing Bank hereunder that the Borrower will not make such payment, the Administrative Agent may assume that the Borrower have made such payment on such date in accordance herewith and may, in reliance upon such assumption, distribute to the Lenders or the Issuing Bank, as the case may be, the amount due. In such event, if the Borrower has not in fact made such payment, then each of the Lenders or the Issuing Bank, as the case may be, severally agrees to repay to the Administrative Agent forthwith on demand the amount so distributed to such Lender or Issuing Bank with interest thereon, for each day from and including the date such amount is distributed to it to but excluding the date of payment to the Administrative Agent, at the greater of the Federal Funds Effective Rate and a rate determined by the Administrative Agent in accordance with banking industry rules on interbank compensation.

(e) Notwithstanding anything to the contrary herein, if any Lender shall fail to make any payment required to be made by it pursuant to Section 2.06(d) or Section 2.06(e), Section 2.07(b), Section 2.18(d) or Section 11.03(c), then the Administrative Agent may, in its discretion (notwithstanding any contrary provision hereof), (i) apply any amounts thereafter received by the Administrative Agent for the account of such Lender to satisfy such Lender's obligations under such Sections until all such unsatisfied obligations are fully paid, and/or (ii) hold any such amounts in a segregated account as cash collateral for, and application to, any funding obligations of such Lender under any such Section, in the case of each of clauses (i) and (ii) above, in any order as determined by the Administrative Agent in its discretion.

Section 2.19 Mitigation Obligations; Replacement of Lenders.

(a) If any Lender requests compensation under Section 2.15, or if Borrower is required to pay any additional amount to any Lender or any Governmental Authority for the account of any Lender pursuant to Section 2.17, then such Lender shall use reasonable efforts to designate a different lending office for funding or booking its Loans hereunder or to assign its rights and obligations hereunder to another of its offices, branches or affiliates, if, in the judgment of such Lender, such designation or assignment (i) would eliminate or reduce amounts payable pursuant to Section 2.15 or Section 2.17, as the case may be, in the future and (ii) would not subject such Lender to any unreimbursed cost or expense and would not otherwise be disadvantageous to such Lender. The Borrower hereby agree to pay all reasonable costs and expenses incurred by any Lender in connection with any such designation or assignment.

(b) If any Lender requests compensation under Section 2.15, or if the Borrower is required to pay any additional amount to any Lender or any Governmental Authority for the account of any Lender pursuant to Section 2.17, then the Borrower may, at their sole expense and effort, upon notice to such Lender and the Administrative Agent, require such Lender to assign and delegate, without recourse (in accordance with and subject to the restrictions contained in Section 11.04), all its interests, rights and obligations under this Agreement to an assignee that shall assume such obligations (which assignee may be another Lender, if a Lender accepts such assignment); provided that (i) the Borrower shall have received the prior written consent of the Administrative Agent (and if a Commitment is being assigned, the Issuing Bank), which consent shall not unreasonably be withheld, (ii) such Lender shall have received payment of an amount equal to the outstanding principal of its Loans and participations in LC Disbursements, accrued interest thereon, accrued fees and all other amounts payable to it hereunder, from the assignee (to the extent of such outstanding principal and accrued interest and fees) or the Borrower (in the case of all other amounts) and (iii) in the case of any such assignment resulting from a claim for compensation under Section 2.15 or payments required to be made pursuant to Section 2.17, such assignment will result in a reduction

in such compensation or payments. A Lender shall not be required to make any such assignment and delegation if, prior thereto, as a result of a waiver by such Lender or otherwise, the circumstances entitling the Borrower to require such assignment and delegation cease to apply.

(c) If (i) in connection with any proposed amendment, modification, termination, waiver or consent with respect to any of the provisions of this Agreement or any other Loan Document that requires approval of all of the Lenders, each Lender or each Lender affected thereby under Section 11.02, the consent of the Required Lenders shall have been obtained but the consent of one or more such other Lenders (each a "Non-Consenting Lender") whose consent is required has not been obtained, (ii) notwithstanding anything to the contrary contained in Section 3.03, in connection with any increase in the Borrowing Base, the consent of the Super-Majority Lenders shall have been obtained but the consent of all of the Lenders has not been obtained (any non-consenting Lender, a "Non-Consenting Borrowing Base Lender"), or (iii) any Lender becomes a Defaulting Lender; then the Borrower may, at its sole expense and effort, upon notice to such Lender and the Administrative Agent, elect to replace such Non-Consenting Lender, Non-Consenting Borrowing Base Lender or Defaulting Lender, as the case may be, as a Lender party to this Agreement in accordance with and subject to the restrictions contained in, and consents required by Section 11.04; provided that (x) the Borrower shall have received the prior written consent of the Administrative Agent (and if a Commitment is being assigned, the Issuing Bank), which consent shall not unreasonably be withheld, and (y) such Lender shall have received payment of an amount equal to the outstanding principal of its Loans and participations in LC Disbursements, accrued interest thereon, accrued fees and all other amounts payable to it hereunder, from the assignee (to the extent of such outstanding principal and accrued interest and fees) or the Borrower (in the case of all other amounts). A Lender shall not be required to make any such assignment and delegation if, prior thereto, as a result of a consent by such Lender or otherwise, the circumstances entitling the Borrower to require such assignment and delegation cease to apply or, in the case of a Defaulting Lender, such Lender is no longer a Defaulting Lender.

Section 2.20 Defaulting Lenders. Notwithstanding any provision of this Agreement to the contrary, if any Lender becomes a Defaulting Lender, then the following provisions shall apply for so long as such Lender is a Defaulting Lender.

(a) Fees shall cease to accrue on the unfunded portion of the Commitment of such Defaulting Lender pursuant to Section 2.12(a).

(b) The Commitment and Credit Exposure of such Defaulting Lender shall not be included in determining whether all Lenders, the Super-Majority Lenders, the Required Lenders or the Majority Lenders have taken or may take any action hereunder (including any consent to any amendment, waiver or other modification pursuant to Section 11.02), provided that (i) any waiver, consent, amendment or modification requiring the consent of such Lender or each affected Lender shall require the consent of such Defaulting Lender, (ii) any waiver, consent, amendment or modification requiring the consent of each Lender shall require the consent of such Defaulting Lender (except in respect of any increases in the Borrowing Base or the Maximum Facility Amount), and (iii) the Commitment of such Defaulting Lender may not be increased or extended without the consent of such Defaulting Lender.

(c) If any LC Exposure exists at the time a Lender becomes a Defaulting Lender then:

(i) all or any part of such LC Exposure of such Defaulting Lender shall be reallocated among the Non-Defaulting Lenders in accordance with their respective Applicable Percentages but only to the extent (x) the sum (without duplication) of all Non-Defaulting Lenders' Credit Exposures plus such Defaulting Lender's LC Exposure does not exceed the total of all Non-Defaulting Lenders' Commitments, (y) the sum of each Non-Defaulting Lender's Credit Exposure plus its reallocated share of such Defaulting Lender's LC Exposure does not exceed such Non-

Defaulting Lender's Commitment, and (z) the conditions set forth in Section 5.02 are satisfied at that time;

(ii) if the reallocation described in clause (i) above cannot, or can only partially, be effected, then the Borrower shall, within one (1) Business Day following notice by the Administrative Agent, cash collateralize for the benefit of the Issuing Bank only the Borrower's obligations corresponding to such Defaulting Lender's LC Exposure (after giving effect to any partial reallocation pursuant to clause (i) above) in accordance with the procedures set forth in Section 2.06(j) for so long as such LC Exposure is outstanding;

(iii) if the Borrower cash collateralizes any portion of such Defaulting Lender's LC Exposure pursuant to clause (ii) above, then the Borrower shall not be required to pay any fees to such Defaulting Lender pursuant to Section 2.12(b) with respect to such Defaulting Lender's LC Exposure during the period such Defaulting Lender's LC Exposure is cash collateralized;

(iv) if the LC Exposure of the Non-Defaulting Lenders is reallocated pursuant to clause (i) above, then the fees payable to the Lenders pursuant to Section 2.12(a) and Section 2.12(b) shall be adjusted in accordance with such Non-Defaulting Lenders' Applicable Percentages; and

(v) if all or any portion of such Defaulting Lender's LC Exposure is neither cash collateralized nor reallocated pursuant to clause (i) or (ii) above, then, without prejudice to any rights or remedies of the Issuing Bank or any Lender hereunder, all letter of credit fees payable under Section 2.12(b) with respect to such Defaulting Lender's LC Exposure shall be payable to the Issuing Bank until and to the extent that such LC Exposure is cash collateralized and/or reallocated.

(d) So long as such Lender is a Defaulting Lender, the Issuing Bank shall not be required to issue, amend or increase any Letter of Credit, unless it is satisfied that the related exposure of such Letter of Credit and the Defaulting Lender's then outstanding LC Exposure will be 100% covered by the Commitments of the Non-Defaulting Lenders and/or cash collateral will be provided by the Borrower in accordance with Section 2.20(c), and participating interests in any such newly issued or increased Letter of Credit shall be allocated among Non-Defaulting Lenders in a manner consistent with Section 2.20(c)(i) (and Defaulting Lenders shall not participate therein).

If (i) a Bankruptcy Event or Bail-In Action with respect to a Parent of any Lender shall occur following the date hereof and for so long as such event shall continue or (ii) the Issuing Bank has a good faith belief that any Lender has defaulted in fulfilling its obligations under one or more other agreements in which such Lender commits to extend credit, the Issuing Bank shall not be required to issue, amend, or increase any Letter of Credit, unless the Issuing Bank shall have entered into arrangements with the Borrower or such Lender, satisfactory to the Issuing Bank to defease any risk to it in respect of such Lender hereunder.

In the event that the Administrative Agent, the Borrower and the Issuing Bank each agrees that a Defaulting Lender has adequately remedied all matters that caused such Lender to be a Defaulting Lender, then the LC Exposure of the Lenders shall be readjusted to reflect the inclusion of such Lender's Commitment and on such date, such Lender shall purchase at par such of the Loans of the other Lenders as the Administrative Agent shall determine may be necessary in order for such Lender to hold such Loans in accordance with its Applicable Percentage.

ARTICLE III
Borrowing Base

Section 3.01 Initial Borrowing Base. During the period from the Effective Date until the first Redetermination after the Effective Date, the Borrowing Base shall be $3,500,000,000 (the "Initial Borrowing Base"). Notwithstanding the foregoing, the Borrowing Base may be subject to further adjustments from time to time pursuant to Sections 7.03 and 7.05.

Section 3.02 Reserve Report. As soon as available and in any event by March 15 and September 15 of each calendar year, commencing March 15, 2022, 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.

Section 3.03 Scheduled Redeterminations of the Borrowing Base; Procedures and Standards. Unless the Borrower is in an Investment Grade Period, and based in part on the Reserve Report made available to the Administrative Agent and the Lenders pursuant to Section 3.02, the Lenders shall redetermine the Borrowing Base on or prior to the next Redetermination Date (or such date promptly thereafter as reasonably possible based on the engineering and other information available to the Lenders). Any Borrowing Base which becomes effective as a result of any Redetermination of the Borrowing Base shall be subject to the following restrictions: (a) such Borrowing Base shall not exceed the amount of the Borrowing Base requested by the Borrower, (b) to the extent such Borrowing Base represents an increase in the Borrowing Base in effect prior to such Redetermination, such Borrowing Base must be approved by all Lenders, and (c) to the extent such Borrowing Base represents a decrease in the Borrowing Base in effect prior to such Redetermination or a reaffirmation of such prior Borrowing Base, such Borrowing Base must be approved by the Administrative Agent and Required Lenders. If a redetermined Borrowing Base is not approved by the Administrative Agent and Required Lenders within fifteen (15) days after the submission to the Lenders by the Administrative Agent of its recommended Borrowing Base pursuant to Section 3.02, or by all Lenders within such fifteen (15) day period in the case of any increase in the Borrowing Base, the Administrative Agent shall notify each Lender that the recommended Borrowing Base has not been approved and request that each Lender submit to the Administrative Agent within ten (10) days thereafter its proposed Borrowing Base. Promptly following the tenth day after the Administrative Agent's request for each Lender's proposed Borrowing Base, the Administrative Agent shall determine the Borrowing Base for such Redetermination by calculating the highest Borrowing Base then acceptable to the Administrative Agent and a number of Lenders sufficient to constitute Required Lenders (or all Lenders in the case of an increase in the Borrowing Base). Each Redetermination shall be made by the Lenders in their sole discretion, but based on the Administrative Agent's and such Lender's usual and customary procedures for evaluating Oil and Gas Interests as such exist at the time of such Redetermination, and including adjustments to reflect the effect of any Hedging Contracts of the Borrower and the Restricted Subsidiaries as such exist at the time of such Redetermination. The Borrower acknowledges and agrees that each

Redetermination shall be based upon the loan collateral value which the Administrative Agent and each Lender in its sole discretion (using such methodology, assumptions and discount rates as the Administrative Agent and such Lender customarily uses in assigning collateral value to Oil and Gas Interests) assigns to the Borrowing Base Properties at the time in question and based upon such other credit factors (including, without limitation, the assets, liabilities, cash flow, interest note changes, business, properties, prospects, management and ownership of the Credit Parties) as the Administrative Agent and such Lender customarily considers in evaluating similar oil and gas credits. If the Borrower does not furnish all information, reports and data required to be delivered by any date specified in this Article III, unless such failure is not the fault of the Borrower, the Administrative Agent and Lenders may nonetheless designate the Borrowing Base at any amounts which the Administrative Agent and Lenders in their reasonable discretion determine and may redesignate the Borrowing Base from time to time thereafter until the Administrative Agent and Lenders receive all such information, reports and data, whereupon the Administrative Agent and Lenders shall designate a new Borrowing Base, as described above. **IT IS EXPRESSLY UNDERSTOOD THAT THE ADMINISTRATIVE AGENT AND LENDERS HAVE NO OBLIGATION TO DESIGNATE THE BORROWING BASE AT ANY PARTICULAR AMOUNTS, EXCEPT IN THE EXERCISE OF THEIR DISCRETION, WHETHER IN RELATION TO THE MAXIMUM FACILITY AMOUNT OR OTHERWISE.**

Section 3.04 Special Redeterminations. In addition to Scheduled Redeterminations and any adjustments made by the Required Lenders to the Borrowing Base pursuant to Section 7.03 and Section 7.05, (a) the Borrower may request a Special Redetermination of the Borrowing Base once between each Scheduled Redetermination, (b) the Required Lenders may request a Special Redetermination once between each Scheduled Redetermination, and (c) the Borrower may request a Special Redetermination of the Borrowing Base if the aggregate PV-9 of all Acquisitions since the most recent Redetermination Date or Special Redetermination exceeds 10% of the Borrowing Base then in effect. Any request by Borrower pursuant to this Section 3.04 shall be submitted to the Administrative Agent and each Lender and at the time of such request (or within fifteen (15) days thereafter in the case of the Reserve Report) Borrower shall (1) deliver to the Administrative Agent and each Lender a Reserve Report prepared as of a date prior to the date of such request that is reasonably acceptable to the Administrative Agent and such other information which the Administrative Agent shall reasonably request, and (2) notify the Administrative Agent and each Lender of the Borrowing Base requested by Borrower in connection with such Special Redetermination. Any request by Required Lenders pursuant to this Section 3.04 shall be submitted to the Administrative Agent and the Borrower. Any Special Redetermination shall be made by the Administrative Agent and Lenders in accordance with the procedures and standards set forth in Section 3.03; provided that no Reserve Report is required to be delivered to the Administrative Agent or the Lenders in connection with any Special Redetermination requested by the Required Lenders pursuant to this Section 3.04.

Section 3.05 Notice of Redetermination. Promptly following any Redetermination of the Borrowing Base, the Administrative Agent shall notify the Borrower of the amount of the redetermined Borrowing Base, which Borrowing Base shall be effective as of the date specified in such notice, and such Borrowing Base shall remain in effect for all purposes of this Agreement until the next Redetermination Date, subject to further adjustments from time to time pursuant to Section 7.03(d) and Section 7.05(h).

Section 3.06 Borrowing Base During Investment Grade Period. Notwithstanding anything in this Article to the contrary, during any Investment Grade Period, (a) the provisions of Section 2.11, Section 3.01, Section 3.03, Section 3.04, and Section 3.05 will be deemed to be inapplicable and shall be disregarded for all purposes, and (b) the Borrower is not required to comply with Section 3.02 so long as the Borrower has either (i) an unsecured rating from Moody's of Baa3 or better or (ii) an unsecured rating from S&P of BBB- or better. Upon the end of any Investment Grade Period, the Borrowing Base will be the most recent Borrowing Base in effect until the next Redetermination Date, subject to further adjustments from time to time pursuant to Section 3.04.

ARTICLE IV
Representations and Warranties

Borrower represents and warrants to the Lenders that:

Section 4.01 Organization; Powers. Each Credit Party and each Restricted Subsidiary is duly organized, validly existing and in good standing under the laws of the jurisdiction of its organization, has all requisite power and authority to carry on its business as now conducted and is qualified to do business in, and is in good standing in, every jurisdiction where the character of the properties owned or held by it or the nature of the business transacted by it makes such qualification necessary.

Section 4.02 Authorization; Enforceability. The Transactions are within each Credit Party's corporate, limited liability company or partnership powers and have been duly authorized by all necessary corporate, limited liability company or partnership and, if required, stockholder action. This Agreement has been duly executed and delivered by each Credit Party and this Agreement and the other Loan Documents, when duly executed are delivered, constitute the legal, valid and binding obligations of each Credit Party, enforceable in accordance with their terms, subject to applicable bankruptcy, insolvency, reorganization, moratorium or other laws affecting creditors' rights generally and subject to general principles of equity, regardless of whether considered in a proceeding in equity or at law.

Section 4.03 Governmental Approvals; No Conflicts. The Transactions (a) do not require any consent or approval of, registration or filing with, or any other action by, any Governmental Authority, except such as have been obtained or made and are in full force and effect or have been made or to be made in connection with the filing of the Security Documents to secure the Obligations, (b) will not violate any applicable law or regulation or the charter, by-laws or other Organizational Documents of Borrower or any Restricted Subsidiary or any order of any Governmental Authority, (c) will not violate or result in a default under any material indenture, agreement, instrument, license, order or permit binding upon Borrower or any Restricted Subsidiary or any of their respective assets, or give rise to a right thereunder to require any payment to be made by Borrower or any Restricted Subsidiary, and (d) will not result in the creation or imposition of any Lien on any asset of Borrower or, any Restricted Subsidiary other than Permitted Liens.

Section 4.04 Financial Condition; No Material Adverse Change.

(a) The Borrower has heretofore furnished to the Lenders (i) the audited Consolidated balance sheet and related statements of income, members' equity and cash flows of Borrower and its Restricted Subsidiaries as of and for the fiscal year ended December 31, 2016, reported on by KMPG, LLP, independent public accountants, and (ii) the unaudited Consolidated balance sheet and related statements of income, members' equity and cash flows of Borrower and its Restricted Subsidiaries as of and for the fiscal quarter ended June 30, 2017, certified by its Financial Officer to the effect that such financial statements present fairly, in all material respects, the financial position and results of operations and cash flows of Borrower and its Restricted Subsidiaries as of such dates and for such periods in accordance with GAAP, subject to year-end audit adjustments and the absence of footnotes in the case of the statements referred to in paragraph (ii) above.

(b) Since December 31, 2016, no event or circumstance which has had or could reasonably be expected to have a Material Adverse Effect has occurred.

Section 4.05 Intellectual Property. Borrower and each Restricted Subsidiary owns, or is licensed to use, all trademarks, tradenames, copyrights, patents and other intellectual property material to its business, and the use thereof by such Borrower and such Restricted Subsidiaries, as the case may be,

does not infringe upon the rights of any other Person, except for any such infringements that, individually or in the aggregate, could not reasonably be expected to result in a Material Adverse Effect.

Section 4.06 Litigation and Environmental Matters.

(a) There are no actions, suits, investigations or proceedings by or before any arbitrator or Governmental Authority pending against or, to the knowledge of the Borrower, threatened against or affecting Borrower or any Restricted Subsidiary, (i) as to which there is a reasonable possibility of an adverse determination and that, if adversely determined, could reasonably be expected, individually or in the aggregate, to result in a Material Adverse Effect or (ii) that involve this Agreement or the Transactions.

(b) Except with respect to any matters that, individually or in the aggregate, could not reasonably be expected to result in a Material Adverse Effect, no Borrower nor any Restricted Subsidiary, to Borrower's knowledge, (i) has failed to comply with any Environmental Law or to obtain, maintain or comply with any permit, license or other approval required under any Environmental Law, (ii) has become subject to any Environmental Liability, (iii) has received written notice of any claim with respect to any Environmental Liability or (iv) knows of any basis for any claim with respect to any Environmental Liability.

Section 4.07 Compliance with Laws and Agreements. Borrower and each Restricted Subsidiary is in compliance with all Laws, regulations and orders of any Governmental Authority applicable to it or its property and all indentures, agreements and other instruments binding upon it or its property, except where the failure to do so, individually or in the aggregate, could not reasonably be expected to result in a Material Adverse Effect.

Section 4.08 Investment Company Status. No Borrower and no Restricted Subsidiary is an "investment company" as defined in, or subject to regulation under, the Investment Company Act of 1940.

Section 4.09 Taxes. Borrower and each Restricted Subsidiary has timely filed or caused to be filed all Tax returns and reports required to have been filed and has paid or caused to be paid all Taxes required to have been paid by it, except (a) Taxes that are being contested in good faith by appropriate proceedings and for which such Borrower or such Restricted Subsidiary, as applicable, has set aside on its books adequate reserves or (b) to the extent that the failure to do so, individually or in the aggregate, could not reasonably be expected to result in a Material Adverse Effect.

Section 4.10 ERISA. No ERISA Event has occurred or is reasonably expected to occur that, when taken together with all other such ERISA Events for which liability is reasonably expected to occur, could reasonably be expected to result in a Material Adverse Effect. The present value of all accumulated benefit obligations under each Plan did not, as of the date of the most recent financial statements reflecting such amounts, exceed by more than $500,000 the fair market value of the assets of such Plan, and the present value of all accumulated benefit obligations of all underfunded Plans did not, as of the date of the most recent financial statements reflecting such amounts, exceed by more than $500,000 the fair market value of the assets of all such underfunded Plans.

Section 4.11 Disclosure. Borrower has disclosed to the Lenders all agreements, instruments and corporate or other restrictions to which it or any Restricted Subsidiary is subject, and all other matters known to it, that, individually or in the aggregate, could reasonably be expected to result in a Material Adverse Effect. None of the other reports, financial statements, certificates or other information furnished by or on behalf of Borrower or any Restricted Subsidiary to the Administrative Agent or any Lender in connection with the negotiation of this Agreement or delivered hereunder (as modified or supplemented by other information so furnished) when taken as a whole contains any material misstatement of fact or omits

to state any material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading as of the date made or deemed made; provided that, with respect to projected financial information, Borrower represents only that such information was prepared in good faith based on assumptions believed to be reasonable at the time.

Section 4.12 Labor Matters. There are no strikes, lockouts or slowdowns against Borrower or any of its Restricted Subsidiaries pending or, to the knowledge of Borrower, threatened that could reasonably be expected to have a Material Adverse Effect. The hours worked by and payments made to employees of Borrower and its Restricted Subsidiaries have not been in violation of the Fair Labor Standards Act or any other Law dealing with such matters to the extent that such violation could reasonably be expected to have a Material Adverse Effect.

Section 4.13 Capitalization. Schedule 4.13 lists (a) each Subsidiary that is an Unrestricted Subsidiary, (b) for Borrower, its full legal name, its jurisdiction of organization and its federal tax identification number, and (c) for each Restricted Subsidiary, its full legal name, its jurisdiction of organization, its federal tax identification number and the number of shares of capital stock or other Equity Interests outstanding and the owner(s) of such shares or Equity Interests.

Section 4.14 Margin Stock. No Borrower and no Restricted Subsidiary is engaged principally, or as one of its important activities, in the business of extending credit for the purpose of purchasing or carrying margin stock (within the meaning of Regulation U issued by the Board), and no part of the proceeds of any Loan will be used to purchase or carry any margin stock or to extend credit to others for the purpose of purchasing or carrying margin stock.

Section 4.15 Title to Properties; Licenses. Each Credit Party and each Restricted Subsidiary has good and defensible title to, or valid leasehold interests in or rights to exploit under farmout agreements, all of the Collateral owned or leased by such Person. All of each Credit Party and each Restricted Subsidiary's other material properties and assets necessary or used in the ordinary conduct of its business, are free and clear of all Liens, encumbrances, or adverse claims other than Permitted Liens and free of all impediments to the use of such properties and assets in the ordinary course of such Person's business, except that no representation or warranty, express, implied or statutory, is made with respect to any Hydrocarbon Interest which is not included in Borrowing Base Properties. Each Credit Party and each Restricted Subsidiary owns the net revenue interests in production attributable to the wells and units evaluated in the most recently delivered Reserve Report. The ownership of such properties does not in the aggregate in any material respect obligate such Credit Party or such Restricted Subsidiary to bear the costs and expenses relating to the maintenance, development and operations of such properties in an amount materially in excess of the working interest of such properties set forth in the most recently delivered Reserve Report. Upon delivery of each Reserve Report furnished to the Lenders pursuant to Section 6.01(g), the statements made in the preceding sentences of this section and in Section 4.19 shall be true in all material respects with respect to such Reserve Report.

Section 4.16 Insurance. The certificate signed by the Financial Officer that attests to the existence and adequacy of, and summarizes, the property and casualty insurance program maintained by the Credit Parties that has been furnished by the Borrower to the Administrative Agent and the Lenders as of the Effective Date, is complete and accurate in all material respects as of the Effective Date and demonstrates the Borrower's and the Restricted Subsidiaries' compliance with Section 6.05.

Section 4.17 Solvency.

(a) Immediately after the consummation of the Transactions and as of the date of any Borrowing, after giving effect to the application of the proceeds thereof, (1) the fair value of the assets of

the Credit Parties on a combined basis, at a fair valuation, will exceed the debts and liabilities, subordinated, contingent or otherwise, of the Credit Parties on a combined basis; (2) the present fair saleable value of the real and personal property of the Credit Parties on a combined basis will be greater than the amount that will be required to pay the probable liability of the Credit Parties on a combined basis on their debts and other liabilities, subordinated, contingent or otherwise, as such debts and other liabilities become absolute and matured; (3) the Credit Parties on a combined basis will be able to pay their debts and liabilities, subordinated, contingent or otherwise, as such debts and liabilities become absolute and matured; and (4) the Credit Parties on a combined basis will not have unreasonably small capital with which to conduct the businesses in which they are engaged as such businesses are now conducted and are proposed to be conducted after the date hereof.

(b) The Credit Parties do not intend to, and do not believe that they will, incur debts beyond their ability to pay such debts as they mature, taking into account the timing of and amounts of cash to be received by it and the timing of the amounts of cash to be payable on or in respect of its Indebtedness.

Section 4.18 Leases and Contracts; Performance of Obligations. To the best of Borrower's knowledge, the leases, contracts, servitudes and other agreements forming a part of the Borrowing Base Properties are in full force and effect. No Borrower has received a written notice of default under any such contracts or agreements that remains uncured that could reasonably be expected to result in a Material Adverse Effect. Except for any rents, royalties and other payments that in the aggregate do not exceed $1,000,000 or are being contested in compliance with Section 6.04, all rents, royalties and other payments due and payable under such leases, contracts, servitudes and other agreements, or under any Permitted Liens, or otherwise attendant to the ownership or operation of any Oil and Gas Interests, have been properly and timely paid. No Credit Party has received written notice of a default that remains uncured with respect to its obligations (and no Credit Party has received written notice of any default by any third party with respect to such third party's obligations) under any such leases, contracts, servitudes and other agreements, or under any Permitted Liens, or otherwise attendant to the ownership or operation of any part of the Borrowing Base Properties, where such default could reasonably be expected to materially and adversely affect the ownership or operation of such Borrowing Base Properties. No Credit Party is currently accounting for any royalties, or overriding royalties or other payments out of production, on a basis (other than delivery in kind) less favorable to such Credit Party than proceeds received by such Credit Party (calculated at the well) from sale of production, and no Credit Party has any liability (or alleged liability) to account for the same on any such less favorable basis that could reasonably be expected to result in a Material Adverse Effect.

Section 4.19 Sale of Production. Except (a) as required by law, (b) offsetting, netting and other similar arrangements entered into in the ordinary course of business and (c) as set forth in Schedule 4.19, (i) no Oil and Gas Interest is subject to any contractual or other arrangement whereby payment for production is or can be deferred for a substantial period after the month in which such production is delivered (in the case of Crude Oil, not in excess of sixty (60) days, and in the case of Natural Gas, not in excess of ninety (90) days) and (ii) no Oil and Gas Interest is subject to any contractual or other arrangement whereby payments are made to a Credit Party or Restricted Subsidiary other than by checks, drafts, wire transfer advises or other similar writings, instruments or communications for the immediate payment of money. Except for production sales contracts and other agreements relating to the marketing of production that are listed on Schedule 4.19, no Oil and Gas Interest is subject to any long-term contract or any other arrangement for the sale of production (or otherwise related to the marketing of production) which provides for fixed prices which cannot be canceled on 120 days' (or less) notice without material penalty. Except as set forth in Schedule 4.19, no Credit Party, has received prepayments (including payments for gas not taken pursuant to "take or pay" or other similar arrangements) for any Hydrocarbons produced or to be produced from any Oil and Gas Interests after the date hereof. Except as set forth in Schedule 4.19, no Oil and Gas Interest is subject to any "take or pay" or other similar arrangement (A) which can be satisfied in whole or

in part by the production or transportation of gas from other properties or (B) as a result of which production from any Oil and Gas Interest may be required to be delivered to one or more third parties without payment (or without full payment) therefor as a result of payments made, or other actions taken, with respect to other properties. No Oil and Gas Interest is subject to a gas balancing arrangement under which one or more third parties may take a portion of the production attributable to such Oil and Gas Interest without payment (or without full payment) therefor as a result of production having been taken from, or as a result of other actions or inactions with respect to, other properties. No Oil and Gas Interest is subject at the present time to any regulatory refund obligation and, to the best of each Credit Party's knowledge, no facts exist which might cause the same to be imposed.

Section 4.20 Operation of Oil and Gas Interests. The Oil and Gas Interests (and all properties unitized therewith) are being (and, to the extent the same could adversely affect the ownership or operation of the Oil and Gas Interests after the date hereof, have in the past been) maintained, operated and developed in a good and workmanlike manner, in accordance with prudent industry standards and in compliance with (a) all applicable Laws, (b) all oil, gas or other mineral leases and other material contracts and agreements forming a part of the Oil and Gas Interests and (c) the Permitted Liens, except with respect to clauses (a), (b) and (c) above, where the failure to so comply, individually or in the aggregate, could not reasonably be expected to result in a Material Adverse Effect. To the best of Borrower's knowledge, no Oil and Gas Interest is subject to having allowable production after the date hereof reduced below the full and regular allowable (including the maximum permissible tolerance) because of any overproduction (whether or not the same was permissible at the time) prior to the date hereof. There are no dry holes, or otherwise inactive wells, located on the Borrowing Base Properties, except for wells that have been or are in the process of being properly plugged and abandoned. Each Credit Party and each Restricted Subsidiary has all governmental licenses and permits necessary or appropriate to own and operate its material Oil and Gas Interests. No Credit Party nor any Restricted Subsidiary has received written notice of any violations in respect of any such licenses or permits that could reasonably be expected to result in a Material Adverse Effect.

Section 4.21 Ad Valorem and Severance Taxes; Title Litigation. No Credit Party has received a written notice of a material default with respect to any ad valorem taxes assessed against its Oil and Gas Interests or any part thereof and all production, severance and other taxes assessed against, or measured by, the production or the value, or proceeds, of the production therefrom. There are no suits, actions, written claims, investigations, written inquiries, proceedings or demands pending (or, to any Credit Party's knowledge, threatened in writing) which might affect the Oil and Gas Interests, including any which challenge or otherwise pertain to any Credit Party's title to any Borrowing Base Property or rights to produce and sell Crude Oil and Natural Gas therefrom that could reasonably be expected to result in a Material Adverse Effect.

Section 4.22 Anti-Corruption Laws and Sanctions. The Borrower has implemented and maintains in effect policies and procedures designed to ensure compliance by the Borrower, its Subsidiaries and their respective directors, officers, employees and agents with Anti-Corruption Laws and applicable Sanctions, and the Borrower, its Subsidiaries and their respective officers and directors and, to the knowledge of the Borrower, its employees and agents, are in compliance with Anti-Corruption Laws and applicable Sanctions in all material respects. None of (a) the Borrower, any Subsidiary or any of their respective directors, officers or employees, or (b) to the knowledge of the Borrower, any agent of the Borrower or any Subsidiary that will act in any capacity in connection with or benefit from the credit facility established hereby, is a Sanctioned Person. No Borrowing, Letter of Credit, use of proceeds, Transaction or other transaction contemplated by this Agreement or the other Loan Documents will violate Anti-Corruption Laws or applicable Sanctions.

Section 4.23 EEA Financial Institutions. No Credit Party is an EEA Financial Institution.

ARTICLE V
Conditions

Section 5.01 Effective Date. The obligations of the Lenders to make Loans and of each Issuing Bank to permit the Letters of Credit issued under the Existing Credit Agreement to remain outstanding and to issue Letters of Credit hereunder shall not become effective until the date on which each of the following conditions is satisfied (or waived in accordance with Section 11.02):

(a) The Administrative Agent (or its counsel) shall have received from each party hereto either (i) a counterpart of this Agreement signed on behalf of such party or (ii) written evidence reasonably satisfactory to the Administrative Agent (which may include telecopy transmission of a signed signature page of this Agreement) that such party has signed a counterpart of this Agreement.

(b) The Administrative Agent shall have received a favorable written opinion (addressed to the Administrative Agent and the Lenders and dated the Effective Date) of Vinson & Elkins LLP, counsel for the Credit Parties, substantially in the form of Exhibit B, and covering such other matters relating to the Credit Parties, this Agreement or the Transactions as the Majority Lenders shall reasonably request. The Credit Parties hereby request such counsel to deliver such opinion.

(c) 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 the Transactions and any other legal matters relating to the Credit Parties, this Agreement or the Transactions, all in form and substance satisfactory to the Administrative Agent and its counsel.

(d) The Administrative Agent shall have received a certificate, dated the Effective Date and signed by the President, a Vice President or a Financial Officer of Borrower, confirming that the Credit Parties have (i) complied with the conditions set forth in paragraphs (a), (b) and (d) of Section 5.02, (ii) complied with the conditions set forth in paragraph (k) of this Section 5.01, and (iii) complied with the covenants set forth in Section 6.05 (and demonstrating such compliance by the attachment of an insurance summary and insurance certificates evidencing the coverage described in such summary).

(e) The Administrative Agent shall have received the Security Agreement, Pledge Agreement, and all other Loan Documents duly executed by all parties thereto and in each case in form and substance satisfactory to the Administrative Agent.

(f) The Administrative Agent and the Lenders shall have received all fees and other amounts due and payable on or prior to the Effective Date under this Agreement and the Fee Letter, and, to the extent invoiced, reimbursement or payment of all out-of-pocket expenses required to be reimbursed or paid by the Borrower hereunder, including all reasonable fees, expenses and disbursements of counsel for the Administrative Agent to the extent invoiced on or prior to the Effective Date, together with such additional amounts as shall constitute such counsel's reasonable estimate of expenses and disbursements to be incurred by such counsel in connection with the recording and filing of Mortgages (and/or amendments to existing Mortgages) and financing statements; provided, that, such estimate shall not thereafter preclude further settling of accounts between the Borrower and the Administrative Agent.

(g) The Administrative Agent shall have received promissory notes duly executed by Borrower for each Lender that has requested the delivery of a promissory note pursuant to and in accordance with Section 2.09(e).

(h) In the event any Loans are made on the Effective Date, the Administrative Agent shall have received a Borrowing Request acceptable to the Administrative Agent and in accordance with Section 2.05 setting forth the Loans requested by the Borrower on the Effective Date, the Type and amount of each Loan and the accounts to which such Loans are to be funded; provided that all Borrowings on the Effective Date shall be ABR Borrowings.

(i) If the initial Borrowing includes the issuance of a Letter of Credit, the Administrative Agent shall have received a written request in accordance with Section 2.06 of this Agreement.

(j) [reserved].

(k) The Administrative Agent shall have received evidence reasonably satisfactory to the Administrative Agent, that effective upon the consummation of the Transactions, Aggregate Credit Exposure will not exceed the Loan Limit.

(l) The Administrative Agent shall have received Mortgages and title information, in each case, reasonably satisfactory to the Administrative Agent with respect to the Borrowing Base Properties, or the portion thereof, as required by Sections 6.09 and 6.10.

(m) The Administrative Agent shall have received such financing statements as Administrative Agent shall specify to fully evidence and perfect all Liens contemplated by the Loan Documents, all of which shall be filed of record in such jurisdictions as the Administrative Agent shall require in its sole discretion.

(n) The Administrative Agent shall have received such other instruments and documents incidental and appropriate to the transaction provided for herein as the Administrative Agent or its special counsel may reasonably request prior to the Effective Date, and all such documents shall be in form and substance satisfactory to the Administrative Agent.

(o) Each Departing Lender shall have received payment in full of all its outstanding "Obligations" owing under the Existing Credit Agreement (other than contingent obligations arising under any Departing Lender Hedging Contracts, obligations to pay contingent indemnity obligations and other contingent obligations owing to it under the "Loan Documents," as defined in the Existing Credit Agreement).

The Administrative Agent shall notify the Borrower and the Lenders of the Effective Date, and such notice shall be conclusive and binding. Notwithstanding the foregoing, the obligations of the Lenders (other than the Departing Lenders) to continue the Existing Loans and the obligations of the Lenders to make Loans and of the Issuing Bank to permit the Letters of Credit issued under the Existing Credit Agreement to remain outstanding and to issue Letters of Credit hereunder shall not become effective unless each of the foregoing conditions is satisfied (or waived pursuant to Section 11.02) at or prior to 3:00 p.m. on the Effective Date (and, in the event such conditions are not so satisfied or waived, the Aggregate Commitment shall terminate at such time).

Section 5.02 Each Credit Event. The obligation of each Lender to make a Loan on the occasion of any Borrowing, and of the Issuing Bank to issue, amend, renew or extend any Letter of Credit, is subject to the satisfaction of the following conditions:

(a) The representations and warranties of each Credit Party set forth in this Agreement and the other Loan Documents shall be true and correct in all material respects (without duplication of any materiality qualifier contained therein) on and as of the date of such Borrowing or the date of issuance,

amendment, renewal or extension of such Letter of Credit, as applicable except to the extent that such representations and warranties specifically refer to an earlier date, in which case they shall be true and correct as of such earlier date.

(b) 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, no Default shall have occurred and be continuing.

(c) 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, no Borrowing Base Deficiency exists or would be caused thereby.

(d) 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, no event or circumstance which could reasonably be expected to have a Material Adverse Effect shall have occurred.

(e) Solely with respect to a Borrowing (and excluding, for the avoidance of doubt, any issuance, amendment, renewal or extension of any Letter of Credit), at the time of and immediately after giving effect to such Borrowing 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, as applicable.

ARTICLE VI
Affirmative Covenants

Until the Aggregate Commitment has expired or been terminated and the principal of and interest on each Loan and all fees payable hereunder shall have been paid in full and all Letters of Credit shall have expired or terminated and all LC Disbursements shall have been reimbursed, each Credit Party covenants and agrees with the Lenders that:

Section 6.01 Financial Statements; Other Information. The Borrower will furnish to the Administrative Agent and each Lender:

(a) as soon as available and in any event within five days after the date on which such financial statements are required to be filed with the SEC (after giving effect to permitted extensions) (or, if such financial statements are not required to be filed with the SEC, on or before the date that is 90 days after the end of each such fiscal year), the audited Consolidated balance sheet and related statements of operations, shareholders' equity and cash flows of Borrower and its Subsidiaries as of the end of and for such year, setting forth in each case in comparative form the figures for the previous fiscal year, all reported on by an independent public accounting firm reasonably acceptable to Administrative Agent (without a "going concern" or like qualification or exception (other than with respect to, or resulting from the occurrence of the Maturity Date within one year from the date such opinion is delivered) and without any qualification or exception as to the scope of such audit) to the effect that such Consolidated financial statements present fairly in all material respects the financial condition and results of operations of Borrower and its Subsidiaries on a Consolidated basis in accordance with GAAP consistently applied. Such consolidated financial statements shall include condensed consolidating schedules showing the balance sheets, statements of operations, and statements of cash flows showing the separate accounts of the Borrower, the Restricted Subsidiaries, and the Unrestricted Subsidiaries for the same periods presented for the consolidated financial statements of the Borrower and its Subsidiaries;

(b) as soon as available and in any event within five days after the date on which such financial statements are required to be filed with the SEC (after giving effect to any permitted extensions) with respect to each of the first three quarterly accounting periods in each fiscal year of the Borrower (or, if such financial statements are not required to be filed with the SEC, on or before the date that is forty-five (45) days after the end of each such quarterly accounting period), (i) the Consolidated balance sheet and related statements of operations, shareholders' equity and cash flows of Borrower and its Subsidiaries as of the end of and for such fiscal quarter and the then elapsed portion of the fiscal year, such Consolidated financial statements shall be certified by Borrower's Financial Officer as presenting fairly in all material respects the financial condition and results of operations of Borrower and its Subsidiaries on a Consolidated basis in accordance with GAAP consistently applied, subject to normal year-end audit adjustments and the absence of footnotes. Such consolidated financial statements shall include condensed consolidating schedules showing the balance sheets, statements of operations, and statements of cash flows showing the separate accounts of the Borrower, the Restricted Subsidiaries, and the Unrestricted Subsidiaries for the same periods presented for the consolidated financial statements of the Borrower and its Subsidiaries;

(c) concurrently with any delivery of financial statements under paragraph (a) or (b) above, a certificate in a form reasonably acceptable to Administrative Agent signed by a Financial Officer of Borrower (i) certifying (A) that he or she has reviewed the Loan Documents and (B) as to whether a Default has occurred and, if a Default has occurred, specifying the details thereof and any action taken or proposed to be taken with respect thereto and (ii) setting forth reasonably detailed calculations demonstrating compliance with Section 7.11 or Section 7.12, as applicable;

(d) [reserved;]

(e) as soon as available, and in any event no later than March 15 of each calendar year, a report describing by lease or unit the gross volume of production and sales attributable to production during such previous fiscal year from the properties described in the most recent Reserve Report and describing the related severance taxes, other taxes, leasehold operating expenses, and capital costs attributable thereto and incurred during such previous fiscal year;

(f) if requested by Administrative Agent, within sixty (60) days after the end of each fiscal quarter, a list, by name and address, of those Persons who have purchased production during such fiscal quarter from the Oil and Gas Interests, giving each such purchaser's owner number for the Credit Parties and each such purchaser's property number for each such Oil and Gas Interest;

(g) 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. The Reserve Report shall be reasonably satisfactory to Administrative Agent, shall take into account any "over-produced" status under gas balancing arrangements, and shall contain information and analysis comparable in scope to that contained in the Reserve Report used to determine the Initial Borrowing Base. The Reserve Report shall distinguish (or shall be delivered together with a certificate from an appropriate officer of Borrower which distinguishes) those properties treated in the report which are Mortgaged Properties from those properties treated in the report which are not Mortgaged Properties;

(h) as soon as available, and in any event within forty-five (45) days after the end of each fiscal quarter, a certificate of a Financial Officer of Borrower setting forth as of the end of such fiscal quarter, (i) a complete list of all Hedging Contracts of the Borrower and its Subsidiaries, the material terms thereof (including the type, term, effective date, termination date and notional amounts or volumes), the net mark to market value thereof, any margin required or supplied under any credit support document, and the

counterparty to each such Hedging Contract, and (ii) the aggregate Projected Oil and Gas Production for the forthcoming five (5) year period;

(i) as soon as available, and in any event within ninety (90) days after the end of each fiscal year, a business and financial plan for Borrower, together with a capital expenditure schedule for Borrower (in form consistent with previous business and financial plans previously provided to Administrative Agent under the Existing Credit Agreement), setting forth for the first year thereof, monthly or quarterly financial projections and budgets for such Borrower, and thereafter yearly financial projections and budgets during the Availability Period;

(j) if Borrower or any of their respective Restricted Subsidiaries makes an Qualified Acquisition or Qualified Disposition of assets during any fiscal quarter and such assets are included in the calculation of Consolidated EBITDAX for such fiscal quarter, the Borrower shall deliver to Administrative Agent and Lenders, together with the financial statements described in Section 6.01(a) or (b), as applicable, pro forma financial statements of Borrower for such period prepared on a Consolidated basis as if such assets had been Acquired or Disposed of, as applicable, on the first day of such fiscal quarter;

(k) concurrently with the delivery of the Reserve Report required under paragraph (g) above and from time to time at the Borrower's election; supplements to Schedule 4.19 to the extent necessary to ensure any such representations and warranties relating to Schedule 4.19 are true and correct in all material respects; provided that such supplements shall not include disclosure of any contract, agreement, arrangement, event, occurrence, condition or other information which, individually or in the aggregate, could reasonably be expected to result in a Material Adverse Effect; provided further that the delivery or receipt of such subsequent disclosure shall not constitute a waiver by the Administrative Agent or any Lender or a cure of any Default or Event of Default resulting in connection with the matters disclosed on such supplement;

(l) promptly following any request therefor, such other information regarding the operations, business affairs and financial condition of any Credit Party, or compliance with the terms of this Agreement, as the Administrative Agent or any Lender may reasonably request, including, without limitation, the delivery of consolidating financial statements of Borrower and its Subsidiaries; and

(m) together with the Reserve Reports required under paragraph (g) above, a complete list of all Hedging Contracts of the Borrower and its Subsidiaries then in effect, the material terms thereof (including the type, term, effective date, termination date and notional amounts or volumes), the net mark to market value thereof, any margin required or supplied under any credit support document, and the counterparty to each such Hedging Contract.

Section 6.02 Notices of Material Events. The Borrower will furnish to the Administrative Agent and each Lender prompt written notice of the following:

(a) as soon as possible, but in any event within five (5) days of obtaining knowledge thereof, the occurrence of any Default;

(b) as soon as possible, but in any event within thirty (30) days after the filing or commencement of any action, suit or proceeding by or before any arbitrator or Governmental Authority against or affecting any Credit Party or any Affiliate thereof that, if adversely determined, could reasonably be expected to result in a Material Adverse Effect;

(c) as soon as possible, but in any event within thirty (30) days after becoming aware of the occurrence of any ERISA Event that, alone or together with any other ERISA Events that have occurred,

could reasonably be expected to result in liability of the Borrower and the Restricted Subsidiaries in an aggregate amount exceeding $25,000,000;

(d) as soon as possible, but in any event within thirty (30) days after any notice or claim to the effect that any Credit Party is or may be liable to any Person as a result of the release by any Credit Party, or any other Person of any Hazardous Material into the environment, which could reasonably be expected to have a Material Adverse Effect;

(e) as soon as possible, but in any event within thirty (30) days after any notice alleging any violation of any Environmental Law by any Credit Party, which could reasonably be expected to result in liability in excess of $25,000,000;

(f) as soon as possible, but in any event within thirty (30) days after the receipt by Borrower or any Restricted Subsidiary of any management letter or comparable analysis prepared by the auditors for Borrower or any such Restricted Subsidiary;

(g) as soon as possible, but in any event within thirty (30) days after any other development that results in, or could reasonably be expected to result in, a Material Adverse Effect; and

(h) at least twenty (20) Business Days prior to any changes of any Credit Party's type of organization or state of formation under the Uniform Commercial Code (or such shorter period as permitted by the Administrative Agent in its discretion).

Each notice delivered under this Section shall be accompanied by a statement of a Financial Officer or other executive officer of Borrower setting forth the details of the event or development requiring such notice and any action taken or proposed to be taken with respect thereto.

Section 6.03 Existence; Conduct of Business. Borrower will, and will cause each Restricted Subsidiary to, do or cause to be done all things necessary to preserve, renew and keep in full force and effect its legal existence and the rights, licenses, permits, privileges and franchises material to the conduct of its business and will qualify to do business in all states or jurisdictions where required by law, except where the failure to so qualify could not reasonably be expected to result in a Material Adverse Effect; provided that the foregoing shall not prohibit any merger, consolidation, liquidation or dissolution permitted under Section 7.04 or any sale, conveyance or other transfer permitted under Section 7.05.

Section 6.04 Payment of Obligations. Borrower will, and will cause each Restricted Subsidiary to, timely pay its obligations, including Tax liabilities before the same shall become delinquent or in default, except where (a) the validity or amount thereof is being contested in good faith by appropriate proceedings, and such Borrower or such Restricted Subsidiary, as applicable, has set aside on its books adequate reserves with respect thereto in accordance with GAAP or (b) the failure to make payment, individually or in the aggregate, could not reasonably be expected to result in a Material Adverse Effect.

Section 6.05 Maintenance of Properties; Insurance. Borrower will, and will cause each Restricted Subsidiary and use commercially reasonable efforts to cause each operator of Borrowing Base Properties to, (a) keep and maintain all property material to the conduct of its business in good working order and condition, ordinary wear and tear excepted, in accordance with prudent industry standards in the surrounding area and in compliance in all material respects with all laws and all applicable contracts, servitudes, leases and agreements, and from time make all appropriate repairs, renewals and replacements needed to enable the business and operations carried on in connection therewith to be promptly and advantageously conducted at all times consistent with such Person's past practices and (b) maintain, with financially sound and reputable insurance companies, insurance in such amounts and against such risks as

are customarily maintained by companies engaged in the same or similar businesses operating in the same or similar locations. On or prior to the Effective Date and thereafter, upon request of the Administrative Agent, the Borrower will furnish or cause to be furnished to the Administrative Agent from time to time a summary of the respective insurance coverage of Borrower and its Restricted Subsidiaries in form and substance reasonably satisfactory to the Administrative Agent, and, if requested, will furnish the Administrative Agent copies of the applicable policies. The Borrower will cause any insurance policies covering any such property to be endorsed (x) to provide that such policies may not be cancelled, reduced or affected in any manner for any reason without ten (10) days prior notice to Administrative Agent, (y) to name the Administrative Agent as an additional insured (in the case of all liability insurance policies) and loss payee (in the case of all casualty and property insurance policies), and (z) to provide for such other matters as the Lenders may reasonably require.

Section 6.06 Books and Records; Inspection Rights. Borrower will, and will cause each Restricted Subsidiary to, keep proper books of record and account in which full, true and correct entries are made of all dealings and transactions in relation to its business and activities. Borrower will, and will cause each Restricted Subsidiary to, permit any representatives designated by the Administrative Agent or any Lender, upon reasonable prior notice, to visit and inspect its properties, to examine and make extracts from its books and records, and to discuss its affairs, finances and condition with its officers and independent accountants, all at such reasonable times and as often as reasonably requested. If no Event of Default exists at the time of any such visit and inspection, the Administrative Agent will give forty-eight (48) hours written notice to such Borrower or Restricted Subsidiary prior to such visit and inspection.

Section 6.07 Compliance with Laws. Borrower will, and will cause each Restricted Subsidiary to comply in all material respects with all Laws, rules, regulations and orders of any Governmental Authority applicable to it or its property. Each Credit Party will maintain in effect and enforce policies and procedures designed to ensure compliance by such Credit Party, its Subsidiaries and their respective directors, officers, employees and agents with Anti-Corruption Laws and applicable Sanctions.

Section 6.08 Use of Proceeds and Letters of Credit. The proceeds of the Loans will be used only to (a) pay the fees, expenses and transaction costs of the Transactions, and (b) finance the working capital needs of the Borrower, including capital expenditures, and for general corporate purposes of the Borrower and the Guarantors, in the ordinary course of business, including the exploration, development and/or acquisition of Oil and Gas Interests (including the associated production and completion operations associated with the foregoing), together with ancillary transportation, gathering, compression and processing assets and the marketing and sale of Hydrocarbons produced. No part of the proceeds of any Loan will be used, whether directly or indirectly, for any purpose that entails a violation of any of the Regulations of the Board, including Regulations T, U and X. Letters of Credit will be issued only to support general corporate purposes of the Borrower and the Restricted Subsidiaries. The Borrower will not request any Borrowing or Letter of Credit, and the Borrower shall not use, and shall procure that its Subsidiaries and its and their respective directors, officers, employees and agents shall not use, the proceeds of any Borrowing or Letter of Credit (a) in furtherance of an offer, payment, promise to pay, or authorization of the payment or giving of money, or anything else of value, to any Person in violation of any Anti-Corruption Laws, (b) for the purpose of funding, financing or facilitating any activities, business or transaction of or with any Sanctioned Person, or in any Sanctioned Country, to the extent such activities, business, or transaction would be prohibited by Sanctions if conducted by a corporation incorporated in the United States, or (c) in any manner that would result in the violation of any Sanctions applicable to any party hereto.

Section 6.09 Security. Subject to Section 6.17, on any date that is not during an Investment Grade Period, Borrower will, and will cause each Guarantor to, execute and deliver to the Administrative Agent, for the benefit of the Secured Parties, (a) Mortgages (or amendments to Mortgages) together with

such other assignments, conveyances, amendments, agreements and other writings, including, without limitation, UCC-1 financing statements (each duly authorized and executed, as applicable) as the Administrative Agent shall deem necessary or appropriate to grant, evidence and perfect Liens in Oil and Gas Interests having an Engineered Value equal to or greater than the Minimum Collateral Amount and (b) security agreements in form and substance reasonably acceptable to the Administrative Agent (or amendments to security Agreements) together with such other assignments, conveyances, amendments, agreements and other writings, including, without limitation, UCC-1 financing statements (each duly authorized and executed, as applicable) and control agreements as the Administrative Agent shall deem necessary or appropriate to grant, evidence and perfect Liens in certain personal property of Borrower or such Restricted Subsidiary, as the case may be, subject only to Permitted Liens. Within 60 days after the Effective Date (or such longer time as acceptable to the Administrative Agent in its sole discretion, but not to exceed 90 days), the Borrower agrees to execute and deliver, or cause to be executed and delivered, Mortgages, amendments to Mortgages, or amendments and restatements of the 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 and related title information required to comply with Section 6.10.

Section 6.10 Title Data. Subject to Section 6.19, 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 Oil and Gas Interests having an Engineered Value equal to or greater than eighty-five present (85%) 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.

Section 6.11 Operation of Oil and Gas Interests.

(a) Borrower will, and will cause each Restricted Subsidiary to, maintain, develop and operate its Oil and Gas Interests in a good and workmanlike manner, and observe and comply in all material respects with all of the terms and provisions, express or implied, of all oil and gas leases relating to such Oil and Gas Interests so long as such Oil and Gas Interests are capable of producing Hydrocarbons and accompanying elements in paying quantities.

(b) Borrower will, and will cause each Restricted Subsidiary to, comply in all material respects with all contracts and agreements applicable to or relating to its Oil and Gas Interests or the production and sale of Hydrocarbons and accompanying elements therefrom.

Section 6.12 Restricted Subsidiaries. In the event any Person is or becomes a Restricted Subsidiary, the Borrower will (a) promptly take all action necessary to comply with Section 6.13, (b) promptly take all such action and execute and deliver, or cause to be executed and delivered, to the Administrative Agent all such opinions, documents, instruments, agreements, and certificates similar to those described in Section 5.01(b) and Section 5.01(c) that the Administrative Agent may reasonably request, and (c) promptly cause any such Restricted Subsidiary to (i) become a party to this Agreement, the Security Agreement and the Pledge Agreement and Guarantee the Obligations by executing and delivering to the Administrative Agent a Counterpart Agreement in the form of Exhibit C, (ii) grant to the Administrative Agent, for the benefit of the Lenders, a Lien on and security interest in all Oil and Gas Interests of such Restricted Subsidiary, if any, required to comply with Section 6.09 and (iii) deliver all title opinions and other information, if any, required to comply with Section 6.10. Upon delivery of any such Counterpart Agreement to the Administrative Agent, notice of which is hereby waived by each Credit Party, such Restricted Subsidiary shall be a Guarantor and shall be as fully a party hereto as if such Restricted Subsidiary were an original signatory hereto. Each Credit Party expressly agrees that its

obligations arising hereunder shall not be affected or diminished by the addition or release of any other Credit Party hereunder. This Agreement shall be fully effective as to any Credit Party that is or becomes a party hereto regardless of whether any other Person becomes or fails to become or ceases to be a Credit Party hereunder. With respect to each such Restricted Subsidiary, the Borrower shall promptly send to the Administrative Agent written notice setting forth with respect to such Person the date on which such Person became a Restricted Subsidiary of such Borrower, and supplement the data required to be set forth in the Schedules to this Agreement as a result of the acquisition or creation of such Restricted Subsidiary; provided that such supplemental data must be reasonably acceptable to the Administrative Agent and Required Lenders.

Section 6.13 Pledged Equity Interests. On the date hereof and at the time hereafter that any Restricted Subsidiary of Borrower is created or acquired or any Unrestricted Subsidiary becomes a Restricted Subsidiary, the Borrower and the Subsidiaries (as applicable) shall execute and deliver to the Administrative Agent for the benefit of the Secured Parties, a pledge agreement (or an amendment or amendment and restatement of the existing Pledge Agreement), in form and substance reasonably acceptable to the Administrative Agent, from the Borrower and/or the Subsidiaries (as applicable) covering all Equity Interests owned by the Borrower or such Restricted Subsidiaries in such Restricted Subsidiaries, together with all certificates (or other evidence acceptable to Administrative Agent) evidencing the issued and outstanding Equity Interests of each such Restricted Subsidiary of every class owned by such Credit Party (as applicable) which, if certificated, shall be duly endorsed or accompanied by stock powers executed in blank (as applicable), as Administrative Agent shall deem necessary or appropriate to grant, evidence and perfect a first priority security interest in the issued and outstanding Equity Interests owned by Borrower or any Restricted Subsidiary in each Restricted Subsidiary; provided that in no event shall Borrower or any Restricted Subsidiary be required to pledge more than sixty-five percent (65%) of the voting Equity Interests of any Subsidiary that is not a Domestic Subsidiary.

Section 6.14 Further Assurances. Borrower agrees to deliver and to cause each of its Subsidiaries to deliver, to further secure the Obligations whenever requested by Administrative Agent in its sole and absolute discretion, deeds of trust, mortgages, chattel mortgages, security agreements, financing statements and other Security Documents in form and substance satisfactory to Administrative Agent for the purpose of granting, confirming, and perfecting first and prior liens or security interests in any real or personal property which is at such time Collateral or which was intended to be Collateral pursuant to any Security Document previously executed and not then released by Administrative Agent.

Section 6.15 Production Proceeds. Notwithstanding that, by the terms of the various Security Documents, the Credit Parties are and will be granting a security interest to Administrative Agent in all as-extracted collateral (referred to as the "Production Proceeds" in the Security Documents) accruing to the Oil and Gas Interest mortgaged thereby, the Credit Parties may continue to receive from the purchasers of production all such Production Proceeds until such time as an Event of Default has occurred and is continuing and the Administrative Agent gives written notice to operators and/or purchasers of production to pay the Administrative Agent. Upon the occurrence of an Event of Default, Administrative Agent may exercise all rights and remedies granted under the Security Documents, including the right to obtain possession of all Production Proceeds then held by the Credit Parties or to receive directly from the purchasers of production all other Production Proceeds. In no case shall any failure, whether purposed or inadvertent, by Administrative Agent or Lenders to collect directly any such Production Proceeds constitute in any way a waiver, remission or release of any of their rights under the Security Documents, nor shall any release of any Production Proceeds by Administrative Agent or Lenders to the Credit Parties constitute a waiver, remission, or release of any other Production Proceeds or of any rights of Administrative Agent or Lenders to collect other Production Proceeds thereafter.

Section 6.16 Leases and Contracts; Performance of Obligations. Each Credit Party will, and will cause each Restricted Subsidiary to, maintain in full force and effect all oil, gas or mineral leases, contracts, servitudes and other agreements forming a part of any Oil and Gas Interests, to the extent the same cover or otherwise relate to such Oil and Gas Interest, and each Credit Party and each Restricted Subsidiary will timely perform all of its obligations thereunder. Each Credit Party and each Restricted Subsidiary will properly and timely pay all rents, royalties and other payments due and payable under any such leases, contracts, servitudes and other agreements, or under the Permitted Liens, or otherwise attendant to its ownership or operation of any Oil and Gas Interest. Each Credit Party and each Restricted Subsidiary will promptly notify Administrative Agent of any material claim (or any conclusion by such Credit Party or such Restricted Subsidiary) that such Credit Party or such Restricted Subsidiary is obligated to account for any royalties, or overriding royalties or other payments out of production, on a basis (other than delivery in kind) less favorable to such Credit Party or such Restricted Subsidiary than proceeds received by such Credit Party or such Restricted Subsidiary (calculated at the well) from sale of production.

Section 6.17 Investment Grade Period Covenants.

(a) Notwithstanding anything in this Agreement to the contrary, during any Investment Grade Period, (a) Borrower is not required to comply with Section 6.09, Section 6.12, Section 6.13, Section 6.14, and Section 6.15, and (b) Borrower is not required to comply with Section 6.10 so long as Borrower has either (i) an unsecured rating from Moody's of Baa3 or better, or (ii) an unsecured rating from S&P of BBB- or better.

(b) Subject to any applicable limitations set forth in the Security Documents or the Pledge Agreement, the Borrower will, within sixty (60) days of the end of any Investment Grade Period (or such longer period as the Administrative Agent may agree to), execute and cause its Restricted Subsidiaries to execute: (i) the Pledge Agreement, (ii) the Security Agreement and (iii) any Mortgages, such that after giving effect thereto the Borrower will meet the Minimum Collateral Amount.

Section 6.18 Consolidated Cash Balance Information. Upon the request of the Administrative Agent, and on the last Business Day of any calendar month (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.

Section 6.19 Post-Closing Covenant. On or before the date that is thirty (30) days following the Effective Date (or such later date as the Administrative Agent may agree), the Borrower shall and shall cause each other Credit Party to deliver title information required to comply with Section 6.10.

ARTICLE VII
Negative Covenants

Until the Aggregate Commitment has expired or terminated and the principal of and interest on each Loan and all fees payable hereunder shall have been paid in full and all Letters of Credit have expired or terminated and all LC Disbursements shall have been reimbursed, each Credit Party covenants and agrees with the Lenders that:

Section 7.01 Limitation on Indebtedness. No Credit Party will, nor will it permit any of its Restricted Subsidiaries to, create, incur, assume or permit to exist any Indebtedness except:

(a) the Obligations;

(b) unsecured Indebtedness among the Credit Parties arising in the ordinary course of business and, if requested by the Administrative Agent, subordinated to the Obligations on terms and conditions reasonably acceptable to the Administrative Agent;

(c) Indebtedness arising under Hedging Contracts permitted under Section 7.03;

(d) Cash Management Obligations; provided that the aggregate outstanding amount of all Cash Management Obligations does not exceed at any time the amount of Cash Management Obligations permitted under the Indenture;

(e) Guarantees by any Credit Party or any Restricted Subsidiary of the Indebtedness permitted under paragraphs (g) and (i) of this Section 7.01;

(f) Indebtedness of the Credit Parties incurred to finance the acquisition, construction or improvement of any fixed or capital assets, including Capital Lease Obligations and any Indebtedness assumed in connection with the acquisition of any such assets or secured by a Lien on any such assets prior to the acquisition thereof, and extensions, renewals and replacements of any such Indebtedness that do not increase the outstanding principal amount thereof; provided that the aggregate principal amount of Indebtedness permitted by this paragraph (g) shall not exceed $30,000,000 at any time outstanding;

(g) Indebtedness of any Credit Party resulting from the issuance of Senior Notes and any Permitted Refinancing thereof; provided that at the time of and immediately after giving effect to each issuance of such Senior Notes or any Permitted Refinancing thereof, (x) no Default shall have occurred and be continuing and (y) the Borrower is in pro forma compliance 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 issuance (and any concurrent repayment of Indebtedness) had occurred on such day;

(h) Indebtedness in respect of performance bonds, bid bonds, appeal bonds, surety bonds and completion guarantees and similar obligations not in connection with money borrowed, in each case provided in the ordinary course of business or consistent with past practice, including those incurred to secure health, safety and environmental obligations in the ordinary course of business or consistent with past practice; and

(i) miscellaneous items of unsecured Indebtedness of the Credit Parties not described in paragraphs (a) through (i), including obligations to pay the financing for the purchase price or deferred premiums with respect to certain Hedging Contracts permitted under Section 7.03(a)(ii), which do not in the aggregate (taking into account all such Indebtedness of the Credit Parties) exceed $30,000,000 at any one time outstanding.

Section 7.02 Limitation on Liens. Except for Permitted Liens, no Credit Party will, nor will it permit any of its Restricted Subsidiaries to, create, assume or permit to exist any Lien upon any of the properties or assets which it now owns or hereafter acquires.

Section 7.03 Hedging Contracts. No Credit Party will, nor will it permit any of its Restricted Subsidiaries to, be a party to or in any manner be liable on any Hedging Contract except:

(a) Swaps and collars entered into in the ordinary course of business, and not for speculative purposes, with the purpose and effect of fixing prices or reducing or fixing basis or transportation price differentials on Crude Oil, Natural Gas or Natural Gas Liquids expected to be produced by the Credit Parties (measured by volume unit or BTU equivalent, not sales price); provided that at all times: (i) no such contract shall have a term of more than sixty (60) months; (ii) except for the Liens granted under the Security Documents to secure Lender Hedging Obligations, no such contract requires any Credit Party to put up money, assets, or other security (other than letters of credit) against the event of its nonperformance prior to actual default by such Credit Party in performing its obligations thereunder, (iii) each such contract is with a counterparty or has a guarantor of the obligation of the counterparty which at the time the contract is made is an Approved Counterparty, and (iv) the aggregate production of Crude Oil, Natural Gas and Natural Gas Liquids, calculated collectively and measured by volume unit or BTU equivalent, not sales price, covered by all such contracts (other than basis or transportation price differential swaps for volumes of Natural Gas included under other Hedging Contracts permitted under this clause (a)) to which any Credit Party is a party does not at any time exceed 75% of the Credit Parties' aggregate Projected Oil and Gas Production for the forthcoming five (5) year period calculated collectively and measured by volume unit or BTU equivalent, not sales price.

(b) puts or floors entered into by a Credit Party in the ordinary course of business, and not for speculative purposes, with the purpose and effect of establishing minimum prices on Crude Oil, Natural Gas or Natural Gas Liquids expected to be produced by the Credit Parties (measured by volume unit or BTU equivalent, not sales price); provided that at all times: (i) no such contract shall have a term of more than sixty (60) months, (ii) except for the Liens granted under the Security Documents to secure Lender Hedging Obligations, no such contract requires any Credit Party to put up money, assets, or other security (other than letters of credit) against the event of its nonperformance prior to actual default by such Credit Party in performing its obligations thereunder, (iii) each such contract is with a counterparty or has a guarantor of the obligation of the counterparty who at the time the contract is made is an Approved Counterparty, (iv) there exists no deferred obligation to pay the related premium or other purchase price for such floor or the only deferred obligation is to pay the financing for such premium or other purchase price and such deferred obligation is permitted under Section 7.01(i), and (v) the aggregate production for Crude Oil, Natural Gas and Natural Gas Liquids, calculated collectively and measured by volume unit or BTU equivalent, not sales price, covered by all such contracts to which any Credit Party is a party does not in the aggregate exceed one hundred percent (100%) of the Credit Parties' aggregate Projected Oil and Gas Production for the forthcoming five (5) year period calculated collectively and measured by volume unit or BTU equivalent, not sales price.

(c) contracts entered into by a Credit Party in the ordinary course of business, and not for speculative purposes, with the purpose and effect of fixing interest rates on a principal amount of Indebtedness of such Credit Party that is accruing interest at a variable rate, provided that (i) the aggregate notional amount of such contracts never exceeds one hundred percent (100%) of the anticipated outstanding principal balance of the Indebtedness to be hedged by such contracts or an average of such principal balances calculated using a generally accepted method of matching interest swap contracts to declining principal balances, (ii) the floating rate index of each such contract generally matches the index used to determine the floating rates of interest on the corresponding Indebtedness to be hedged by such contract and (iii) each such contract is with an Approved Counterparty.

(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, or (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.

(e) Notwithstanding anything to the contrary contained in this Section 7.03, the Borrower may enter into Hedging Contracts for Crude Oil, Natural Gas and Natural Gas Liquids with a term longer than 60 months; provided that (i) any Hedging Contract with a term longer than 60 months at the time such Hedging Contract is entered into shall in any event have a term no longer than 72 months, (ii) except for the term of such Hedging Contract exceeding 60 months at the time it is entered into, such Hedging Contract is otherwise permitted under the terms of this Section 7.03 and (iii) the volumes of Crude Oil, Natural Gas and Natural Gas Liquids covered by all such Hedging Contracts for the period beyond 60 months (other than basis or transportation price differential swaps for volumes of Natural Gas) does not, for any single month in such period, exceed 65% of the Credit Parties' aggregate Projected Oil and Gas Production anticipated to be sold during such month in the ordinary course of business.

(f) Notwithstanding anything to the contrary contained in this Agreement, any Credit Party may enter into Hedging Contracts not relating to commodities or governed by Section 7.03(a), (b), (c), or (e), entered into to hedge or mitigate risks to which the Borrower or any Restricted Subsidiary is exposed in the conduct of its business or the management of its liabilities or equity dilution related to Indebtedness permitted under this Agreement.

Section 7.04 Limitation on Mergers, Issuances of Securities. No Credit Party will, nor will it permit any of its Restricted Subsidiaries to, merge or consolidate with or into any other Person, except that any Restricted Subsidiary or Borrower may be merged into or Consolidated with another Restricted Subsidiary or Borrower, so long as a Borrower or Guarantor, as applicable, is the surviving business entity, and at least one Borrower exists. No Restricted Subsidiary of Borrower will issue any additional Equity

Interests except to such Borrower or a Restricted Subsidiary of such Borrower and only to the extent not otherwise forbidden under the terms hereof.

Section 7.05 Limitation on Dispositions of Property. No Credit Party will, nor will it permit any of its Restricted Subsidiaries to, Dispose of any of the Borrowing Base Properties or the Equity Interests of any Restricted Subsidiary or any material interest therein, or discount, sell, pledge or assign any notes payable to it, accounts receivable or future income, or enter into any Sale and Leaseback Transaction except:

(a) equipment which is worthless or obsolete or which is replaced by equipment of equal suitability and similar value;

(b) inventory (including Crude Oil and Natural Gas sold as produced and seismic data) which is replaced and/or sold in the ordinary course of business on ordinary trade terms;

(c) Equity Interests of any Subsidiary of Borrower transferred to any Credit Party;

(d) acreage-swap agreements; provided that (x) such acreage swap agreement provides for such Credit Party or Restricted Subsidiary, as the case may be, to receive good and defensible title to acreage having a reasonable equivalent value to the value of the acreage exchanged by such Credit Party or Restricted Subsidiary, (y) the Administrative Agent shall have received from such Credit Party or Restricted Subsidiary at least ten (10) days' prior notice of the closing of any such acreage swap agreement and (z) such Credit Party or Restricted Subsidiary and the Administrative Agent shall have made mutually satisfactory arrangements for the release of the Liens granted under the Security Documents and for the grant of a Lien on the Proved Reserves associated with the properties under the Security Documents upon the closing of such exchange to the extent required to comply with Section 6.09;

(e) assets of any Credit Party to another Credit Party;

(f) Sale and Leaseback Transactions in which the liability for any lease incurred by any Credit Party is a Capital Lease Obligation permitted under Section 7.01(f);

(g) Hedge Modifications to the extent permitted under Section 7.03;

(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.

(i) the Disposition or settlement of notes or accounts receivable from insolvent account debtors;

(j) the Disposition of logistics assets and other master limited partnership qualifying assets by Borrower or any or its Subsidiaries (whether pursuant to a Disposition of all, but not less than all, of the Equity Interests of any Subsidiary or otherwise) to any Midstream Party in exchange for common and subordinated Equity Interests in Antero Midstream, cash or a combination of such Equity Interests and cash; provided that (i) at the time of such Disposition, no Default shall have occurred and be continuing or would be caused thereby, (ii) on a pro forma basis, the Aggregate Unused Commitment shall not be less than the greater of (A) $200,000,000 and (B) an amount equal to 10% of the Borrowing Base then in effect, and (iii) the Borrower shall be in compliance on a pro forma basis with the covenant in Section 7.11(b);

(k) Dispositions constituting like-kind exchanges of Borrowing Base Properties to the extent that (i) such property is exchanged for credit against the purchase price of similar replacement property or (ii) the proceeds of such Disposition are applied to the purchase price of such replacement property, in each case under Section 1031 of the Code or otherwise, and (iii) after giving effect to such Disposition, the difference between (x) the Borrowing Base in effect immediately prior to such Disposition minus (y) the PV-9 (calculated at the time of such Disposition) of the Borrowing Base Properties Disposed of since the later of the most recent determination or adjustment of the Borrowing Base exceeds the Loan Limit in effect immediately prior to such Disposition;

(l) Dispositions of Hydrocarbon Interests to which no Proved Reserves are attributable, farm-outs of undeveloped acreage to which no Proved Reserves are attributable and assignments in connection with such farm-outs and other Properties not included in or not given value for purposes of establishing the Borrowing Base and that would not otherwise constitute Oil and Gas Interests applicable to Borrowing Base Properties;

(m) Dispositions of investments in joint ventures (regardless of the form of legal entity) to the extent required by, or made pursuant to, customary buy/sell arrangements between the joint venture parties set forth in joint venture arrangements and similar binding arrangements to the extent the same would be permitted under Section 7.07;

(n) transfers of property subject to a (i) Casualty Event or in connection with any condemnation proceeding with respect to Collateral upon receipt of the net cash proceeds of such Casualty Event or condemnation proceeding or (ii) in connection with any Casualty Event or any condemnation proceeding, in each case with respect to property that does not constitute Collateral; and

(o) On any date during an Investment Grade Period, any Disposition provided that after pro forma effect to such Disposition no Default or Event of Default would result therefrom (including that the Borrower shall be in compliance with Section 7.12 on a pro forma basis after giving effect to such Disposition, as such covenants are recomputed as at the last day of the most recently ended Test Period as if such Disposition had occurred on the first day of such Test Period).

Section 7.06 Limitation on Dividends and Redemptions. No Credit Party will, nor will it permit any of its Restricted Subsidiaries to, declare or make any Restricted Payment, other than Restricted Payments payable to Borrower or to Guarantors that are Subsidiaries of a Borrower; provided that (a) Borrower may repurchase employee stock options issued under stock option plans then being terminated in an aggregate amount not to exceed $4,500,000 during the thirty day period following the one year anniversary of the termination of such stock option plans, (b) the Borrower may make one or more Restricted Payments in respect of the holders of Borrower's Equity Interests so long as on the date of and after giving effect to any such Restricted Payment (i) no Default has occurred and is continuing or would be caused by such Restricted Payment, (ii) the Borrower's Leverage Ratio on a pro forma basis both before and after giving effect to such Restricted Payment shall not exceed 3.00 to 1.00, and (iii) the Aggregate Credit Exposure is less than 80% of the Aggregate Commitment, (c) the Borrower may make one or more Restricted Payments in respect of the holders of Borrower's Equity Interests to the extent payable in Equity Interests (other than Disqualified Stock) of the Borrower, and (d) to the extent constituting a Restricted Payment, the Borrower or any Credit Party may make a Restricted Payment as consideration for the entry into any Hedging Contract permitted pursuant to Section 7.03(f).

Section 7.07 Limitation on Investments and New Businesses. No Credit Party will, nor will it permit any of its Restricted Subsidiaries to, (a) make any expenditure or commitment or incur any obligation or enter into or engage in any transaction except in the ordinary course of business, (b) engage directly or indirectly in any business or conduct any operations except in connection with or incidental to its present businesses and operations, or (c) make any acquisitions of or capital contributions to or other investments in any Person (any such action set forth in clause (a), clause (b) or clause (c) of this Section 7.07, an "Investment"), other than (i) Permitted Investments, (ii) investments in the Equity Interests of any Credit Party, (iii) investments in any Midstream Party consisting of Dispositions permitted under Section 7.05(j) and (iv) other Investments; provided that with respect to investments made pursuant to this clause (iv), at the time of each such investment and after giving effect thereto (A) no Default shall have occurred and be continuing or would be caused thereby, (B) the Borrower's Leverage Ratio on a pro forma basis both before and after giving effect to such investment shall not exceed 3.00 to 1.00, and (C) on a pro forma basis, the Aggregate Credit Exposure is less than 80% of the Aggregate Commitment.

Section 7.08 Limitation on Credit Extensions. Except for Permitted Investments and intercompany Indebtedness permitted under Section 7.01(b), no Credit Party will, nor will it permit any of its Restricted Subsidiaries to, extend credit, make advances or make loans to any Person, other than credit extensions, advances or loans to any Person; provided that, at the time of each such credit extension, advance or loan, after giving effect thereto and for so long as such credit extension, advance or loan is

outstanding (a) no Default shall have occurred and be continuing or would be caused thereby, (b) the Borrower's Leverage Ratio on a pro forma basis both before and after giving effect to such credit extension, advance or loan shall not exceed 3.00 to 1.00, and (c) on a pro forma basis, the Aggregate Credit Exposure is less than 80% of the Aggregate Commitment.

Section 7.09 Transactions with Affiliates. No Credit Party will, nor will it permit any of its Restricted Subsidiaries to, engage in any material transaction with any of its Affiliates on terms which are less favorable to it than those which would have been obtainable at the time in arm's-length dealing with Persons other than such Affiliates, provided that such restriction shall not apply to transactions among Credit Parties.

Section 7.10 Prohibited Contracts; Negative Pledge. Except as expressly provided for in the Loan Documents and the Senior Notes Documents (or any documents evidencing or relating to any Permitted Refinancing), no Credit Party will, nor will it permit any of its Restricted Subsidiaries to, directly or indirectly, enter into, create, or otherwise allow to exist any contract or other consensual restriction on the ability of any Credit Party or any Restricted Subsidiary to: (a) pay dividends or make other distributions to another Credit Party or any Restricted Subsidiary, (b) redeem Equity Interests held in it by another Restricted Subsidiary, (c) repay loans and other Indebtedness owing by it to another Credit Party or any Restricted Subsidiary, (d) transfer any of its assets to another Credit Party, or (e) grant Liens to Administrative Agent to secure the Obligations. Except as otherwise disclosed on Schedule 4.19, the Credit Parties will not, and will not permit any Restricted Subsidiary to, enter into any "take-or-pay" contract or other contract or arrangement for the purchase of goods or services which obligates it to pay for such goods or service regardless of whether they are delivered or furnished to it (for the avoidance of doubt, firm transportation contracts entered into in the ordinary course of business shall not constitute prohibited contracts under this Section 7.10). The Credit Parties will not, and will not permit any Restricted Subsidiary to, amend or permit any amendment to any contract or lease which releases, qualifies, limits, makes contingent or otherwise detrimentally affects, in any material respect, the rights and benefits of Administrative Agent or any Lender under or acquired pursuant to any Security Documents.

Section 7.11 Financial Covenants not During any Investment Grade Period. At all times other than during any Investment Grade Period, beginning at the end of each fiscal quarter ending on or after December 31, 2021,

(a) Borrower will not permit the Consolidated Current Ratio to be less than 1.00 to 1.00; and

(b) Borrower will not permit the Leverage Ratio to exceed 4.00 to 1.00.

Section 7.12 Financial Covenants During any Investment Grade Period. During any Investment Grade Period, beginning at the end of each fiscal quarter ending on or after December 31, 2021,

(a) Borrower will not permit the Consolidated Current Ratio to be less than 1.00 to 1.00;

(b) Borrower will not permit its Leverage Ratio for any Test Period to exceed 4.25 to 1.00; and

(c) Borrower will not permit the ratio of PV-9 reflected in the most recently delivered Reserve Report to its total Indebtedness for any Test Period ending on the last day of any fiscal quarter to be less than 1.50 to 1.00, if, as of such date, the Borrower 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;

provided that, notwithstanding Section 7.11 and this Section 7.12, the Consolidated Current Ratio and the Leverage Ratio shall be calculated (but not tested) for the fiscal quarter ended September 30, 2021.

Section 7.13 Senior Notes Restrictions. No Credit Party will, nor will any Credit Party permit any Restricted Subsidiary to:

(a) except for the regularly scheduled payments of interest required under the Senior Notes Documents, directly or indirectly, retire, redeem, defease, repurchase or prepay prior to the scheduled due date thereof any part of the principal of, or interest on, the Senior Notes (or any Permitted Refinancing thereof); provided that so long as no Default has occurred and is continuing or would be caused thereby:

(i) the Borrower may retire, redeem, defease, repurchase or prepay the Senior Notes (A) with the proceeds of any Permitted Refinancing permitted pursuant to Section 7.01(i), (B) with the net cash proceeds of any issuance of Equity Interests of the Borrower within one hundred twenty (120) days of the receipt of such net cash proceeds, (C) pursuant to an asset sale tender offer with the Net Cash Proceeds of any Disposition to the extent required by the terms of the Indenture, but in any event subject to compliance by the Credit Parties with (x) any prepayment of the Obligations required by any consent of the Lenders to such Disposition and (y) any mandatory prepayment of the Obligations required under Section 2.11 after giving effect to any adjustments made by the Required Lenders to the Borrowing Base pursuant to Section 7.05, (D) by converting or exchanging Senior Notes to Equity Interests (other than Disqualified Stock) of the Borrower, or (E) so long as, on a pro forma basis after giving effect to such retirement, redemption, defeasance, repurchase or prepayment, the Aggregate Credit Exposure is not greater than 80% of the Aggregate Commitment and

(ii) the Senior Notes may be redeemed to the extent of the amount of proceeds of an equity issuance received by the Borrower following the Effective Date (other than disqualified stock), minus the sum, without duplication, of: (A) Permitted Investments made by the Borrower or any Restricted Subsidiary after the Effective Date, (B) the amount of any restricted payments made by the Borrower after the Effective Date and (C) the amount of prepayments, repurchases, redemptions and defeasances of Senior Notes made by the Borrower or any restricted subsidiaries; provided that (1) no Event of Default shall have occurred and is continuing, (2) Liquidity is not less than 20% of the then effective maximum amount of (on a pro forma basis after giving effect to such Investment) (a) at any time during an Investment Grade Period, the lesser of (i) the Maximum Facility Amount and (ii) the aggregate commitments at such time and (b) at any time that is not an Investment Grade Period, the least of (i) the Maximum Facility Amount, (ii) the aggregate commitments at such time and (iii) the Borrowing Base at such time, or

(b) enter into or permit any supplement, modification or amendment of, or waive any right or obligation of any Person under, any Senior Notes Document or any document governing any Permitted Refinancing of the Senior Notes if the effect thereof would be to (i) shorten its average life or maturity, (ii) increase the rate or shorten any period for payment of interest thereon, (iii) cause any covenant, default or remedy provisions contained therein to be materially more onerous on any Credit Party or any Restricted Subsidiary, (iv) cause any mandatory prepayment, repurchase or redemption provisions contained therein to be materially more onerous on any Credit Party or any Restricted Subsidiary, (v) alter the subordination provisions, if any, with respect to any of the Senior Notes Documents, or (vi) result in any Subsidiary of any Borrower Guaranteeing the Senior Notes unless such Subsidiary is (or concurrently with any such Guarantee becomes) a Guarantor hereunder.

ARTICLE VIII
Guarantee of Obligations

Section 8.01 Guarantee of Payment. Each Guarantor unconditionally and irrevocably guarantees to the Administrative Agent for the benefit of the Secured Parties, the punctual payment of all Obligations now or which may in the future be owing by any Credit Party (the "Guaranteed Liabilities"). This Guarantee is a guaranty of payment and not of collection only. The Administrative Agent shall not be required to exhaust any right or remedy or take any action against the Borrower or any other Person or any collateral. The Guaranteed Liabilities include interest accruing after the commencement of a proceeding under bankruptcy, insolvency or similar laws of any jurisdiction at the rate or rates provided in the Loan Documents, or the Hedging Contracts between any Credit Party and any Secured Party, as the case may be, regardless of whether such interest is an allowed claim. Each Guarantor agrees that, as between the Guarantor and the Administrative Agent, the Guaranteed Liabilities may be declared to be due and payable for the purposes of this Guarantee notwithstanding any stay, injunction or other prohibition which may prevent, delay or vitiate any declaration as regards Borrower or any other Guarantor and that in the event of a declaration or attempted declaration, the Guaranteed Liabilities shall immediately become due and payable by each Guarantor for the purposes of this Guarantee.

Section 8.02 Guarantee Absolute. Each Guarantor guarantees that the Guaranteed Liabilities shall be paid strictly in accordance with the terms of this Agreement and the Hedging Contracts. The liability of each Guarantor hereunder is absolute and unconditional irrespective of: (a) any change in the time, manner or place of payment of, or in any other term of, all or any of the Loan Documents or the Guaranteed Liabilities, or any other amendment or waiver of or any consent to departure from any of the terms of any Loan Document or Guaranteed Liability, including any increase or decrease in the rate of interest thereon; (b) any release or amendment or waiver of, or consent to departure from, any other guaranty or support document, or any exchange, release or non-perfection of any collateral, for all or any of the Loan Documents or Guaranteed Liabilities; (c) any present or future law, regulation or order of any jurisdiction (whether of right or in fact) or of any agency thereof purporting to reduce, amend, restructure or otherwise affect any term of any Loan Document or Guaranteed Liability; (d) without being limited by the foregoing, any lack of validity or enforceability of any Loan Document or Guaranteed Liability; and (e) any other setoff, defense or counterclaim whatsoever (in any case, whether based on contract, tort or any other theory) with respect to the Loan Documents or the transactions contemplated thereby which might constitute a legal or equitable defense available to, or discharge of, the Borrower or a Guarantor.

Section 8.03 Guarantee Irrevocable. This Guarantee is a continuing guaranty of the payment of all Guaranteed Liabilities now or hereafter existing under this Agreement and the Hedging Contracts and shall remain in full force and effect until payment in full of all Guaranteed Liabilities and other amounts payable hereunder and until this Agreement and the Hedging Contracts are no longer in effect or, if earlier, when the Guarantor has given the Administrative Agent written notice that this Guarantee has been revoked; provided that any notice under this Section shall not release the revoking Guarantor from any Guaranteed Liability, absolute or contingent, existing prior to the Administrative Agent's actual receipt of the notice at its branches or departments responsible for this Agreement and the Hedging Contracts and reasonable opportunity to act upon such notice.

Section 8.04 Reinstatement. This Guarantee shall continue to be effective or be reinstated, as the case may be, if at any time any payment of any of the Guaranteed Liabilities is rescinded or must otherwise be returned by any Secured Party on the insolvency, bankruptcy or reorganization of Borrower or any other Credit Party, or otherwise, all as though the payment had not been made.

Section 8.05 Subrogation. No Guarantor shall exercise any rights which it may acquire by way of subrogation, by any payment made under this Guarantee or otherwise, until all the Guaranteed Liabilities

have been paid in full and this Agreement and the Hedging Contracts are no longer in effect. If any amount is paid to the Guarantor on account of subrogation rights under this Guarantee at any time when all the Guaranteed Liabilities have not been paid in full, the amount shall be held in trust for the benefit of the Secured Parties and shall be promptly paid to the Administrative Agent to be credited and applied to the Guaranteed Liabilities, whether matured or unmatured or absolute or contingent, in accordance with the terms of this Agreement and the Hedging Contracts. If any Guarantor makes payment to any Secured Party of all or any part of the Guaranteed Liabilities and all the Guaranteed Liabilities are paid in full and this Agreement and the Hedging Contracts are no longer in effect, such Secured Party shall, at such Guarantor's request, execute and deliver to such Guarantor appropriate documents, without recourse and without representation or warranty, necessary to evidence the transfer by subrogation to such Guarantor of an interest in the Guaranteed Liabilities resulting from the payment.

Section 8.06 Subordination. Without limiting the rights of the Secured Parties under any other agreement, any liabilities owed by Borrower to any Guarantor in connection with any extension of credit or financial accommodation by any Guarantor to or for the account of the Borrower, including but not limited to interest accruing at the agreed contract rate after the commencement of a bankruptcy or similar proceeding, are hereby subordinated to the Guaranteed Liabilities, and such liabilities of the Borrower to such Guarantor, if the Administrative Agent so requests, shall be collected, enforced and received by any Guarantor as trustee for the Administrative Agent and shall be paid over to the Administrative Agent on account of the Guaranteed Liabilities but without reducing or affecting in any manner the liability of the Guarantor under the other provisions of this Guarantee.

Section 8.07 Setoff. Each Guarantor agrees that, in addition to (and without limitation of) any right of setoff, banker's lien or counterclaim the Administrative Agent, any Lender or any Lender Counterparty may otherwise have, the Administrative Agent, such Lender or such Lender Counterparty shall be entitled, at its option, to offset balances (general or special, time or demand, provisional or final) held by it for the account of any Guarantor at any office of the Administrative Agent, such Lender or such Lender Counterparty, in Dollars or in any other currency, against any amount payable by such Guarantor under this Guarantee which is not paid when due (regardless of whether such balances are then due to such Guarantor), in which case it shall promptly notify such Guarantor thereof; provided that the failure of the Administrative Agent, such Lender, or such Lender Counterparty to give such notice shall not affect the validity thereof.

Section 8.08 Formalities. Each Guarantor waives presentment, notice of dishonor, protest, notice of acceptance of this Guarantee or incurrence of any Guaranteed Liability and any other formality with respect to any of the Guaranteed Liabilities or this Guarantee.

Section 8.09 Limitations on Guarantee. The provisions of the Guarantee under this Article VIII are severable, and in any action or proceeding involving any state corporate law, or any state, federal or foreign bankruptcy, insolvency, reorganization or other law affecting the rights of creditors generally, if the obligations of any Guarantor under this Guarantee would otherwise be held or determined to be avoidable, invalid or unenforceable on account of the amount of such Guarantor's liability under this Guarantee, then, notwithstanding any other provision of this Guarantee to the contrary, the amount of such liability shall, without any further action by the Guarantors, the Administrative Agent, any Lender or any Lender Counterparty, be automatically limited and reduced to the highest amount that is valid and enforceable as determined in such action or proceeding (such highest amount determined hereunder being the relevant Guarantor's "Maximum Liability"). This Section 8.09 with respect to the Maximum Liability of the Guarantors is intended solely to preserve the rights of the Administrative Agent, Lenders and Lender Counterparties hereunder to the maximum extent not subject to avoidance under applicable law, and no Guarantor nor any other Person shall have any right or claim under this Section 8.09 with respect to the

Maximum Liability, except to the extent necessary so that none of the obligations of any Guarantor hereunder shall not be rendered voidable under applicable law.

Section 8.10 Keepwell.

(a) Each Qualified ECP Guarantor hereby jointly and severally absolutely, unconditionally and irrevocably undertakes to provide such funds or other support as may be needed from time to time by each other Credit Party to honor all of its obligations under this Agreement in respect of Swap Obligations (provided, however, that each Qualified ECP Guarantor shall only be liable under this Section 8.10 for the maximum amount of such liability that can be hereby incurred without rendering its obligations under this Section 8.10, or otherwise under this Agreement, voidable under applicable law relating to fraudulent conveyance or fraudulent transfer, and not for any greater amount). The obligations of each Qualified ECP Guarantor under this Section 8.10 shall remain in full force and effect until this Agreement is terminated, all Obligations are paid in full (other than contingent obligations for which no claim has been made) and all of the Lenders' Commitments are terminated. Each Qualified ECP Guarantor intends that this Section 8.10 constitute, and this Section 8.10 shall be deemed to constitute, a "keepwell, support, or other agreement" for the benefit of each other Credit Party for all purposes of Section 1a(18)(A)(v)(II) of the Commodity Exchange Act.

(b) Notwithstanding any other provisions of this Agreement or any other Loan Document, Obligations guaranteed by any Guarantor, or secured by the grant of any Lien by such Guarantor under any Security Document, shall exclude all Excluded Swap Obligations of such Guarantor.

ARTICLE IX
Events of Default

If any of the following events ("Events of Default") shall occur:

(a) the Borrower shall fail to pay any principal of any Loan (including any payments required under Section 2.11) or any reimbursement obligation in respect of any LC Disbursement when and as the same shall become due and payable, whether at the due date thereof or at a date fixed for prepayment thereof or otherwise;

(b) the Borrower shall fail to pay any interest on any Loan or any fee or any other amount (other than an amount referred to in paragraph (a) of this Article) payable under this Agreement, when and as the same shall become due and payable, and such failure shall continue unremedied for a period of three (3) Business Days;

(c) any representation or warranty made or deemed made by or on behalf of Borrower, any Restricted Subsidiary in or in connection with this Agreement or any amendment or modification hereof or waiver hereunder, or in any report, certificate, financial statement or other document furnished pursuant to or in connection with this Agreement or any amendment or modification hereof or waiver hereunder or in any Loan Document furnished pursuant to or in connection with this Agreement or any amendment or modification thereof or waiver hereunder, shall prove to have been incorrect in any material respect (without duplication of any materiality qualifier contained therein) when made or deemed made;

(d) Borrower or any Restricted Subsidiary shall fail to observe or perform any covenant, condition or agreement contained in Section 6.02, Section 6.03 (with respect to Borrower or any Restricted Subsidiary's existence), Section 6.05 (with respect to insurance), Section 6.08, or in Article VII;

(e) Borrower or any Restricted Subsidiary shall fail to observe or perform any covenant, condition or agreement contained in (i) this Agreement (other than those specified in paragraph (a), (b) or (d) of this Article) and such failure shall continue unremedied for a period of thirty (30) days after receipt of written notice thereof from the Administrative Agent to the Borrower (which notice will be given at the request of any Lender) or (ii) any other Loan Document and such failure continues beyond the applicable period of grace (if any) provided in such Loan Document;

(f) Borrower or any Restricted Subsidiary shall fail to make any payment (whether of principal or interest and regardless of amount) in respect of any Material Indebtedness, when and as the same shall become due and payable and such failure shall continue beyond the applicable grace period, if any;

(g) any event or condition occurs that results in any Material Indebtedness becoming due prior to its scheduled maturity or that enables or permits (with or without the giving of notice, the lapse of time or both) the holder or holders of any Material Indebtedness or any trustee or agent on its or their behalf to cause such Indebtedness to become due, or to require the prepayment, repurchase, redemption or defeasance thereof, prior to its scheduled maturity; provided that this paragraph (g) shall not apply to (i) Indebtedness that becomes due as a result of the voluntary sale or transfer of the property or assets securing such Indebtedness, (ii) Indebtedness that becomes due as a result of a change in law, tax regulation or accounting treatment so long as such Indebtedness is paid when due or (iii) to the extent such prepayment, repayment or redemption obligations may be satisfied with the payment of Equity Interests (other than Disqualified Stock) of the Borrower;

(h) an involuntary proceeding shall be commenced or an involuntary petition shall be filed seeking (i) liquidation, reorganization or other relief in respect of Borrower or any Restricted Subsidiary or its debts, or of a substantial part of its assets, under any Federal, state or foreign bankruptcy, insolvency, receivership or similar law now or hereafter in effect or (ii) the appointment of a receiver, trustee, custodian, sequestrator, conservator or similar official for Borrower or any Restricted Subsidiary or for a substantial part of its assets, and, in any such case, such proceeding or petition shall continue undismissed for thirty (30) days or an order or decree approving or ordering any of the foregoing shall be entered;

(i) Borrower or, any Restricted Subsidiary shall (i) voluntarily commence any proceeding or file any petition seeking liquidation, reorganization or other relief under any Federal, state or foreign bankruptcy, insolvency, receivership or similar law now or hereafter in effect, (ii) consent to the institution of, or fail to contest in a timely and appropriate manner, any proceeding or petition described in paragraph (g) of this Article, (iii) apply for or consent to the appointment of a receiver, trustee, custodian, sequestrator, conservator or similar official for Borrower or any Restricted Subsidiary or for a substantial part of its assets, (iv) file an answer admitting the material allegations of a petition filed against it in any such proceeding, (v) make a general assignment for the benefit of creditors or (vi) take any action for the purpose of effecting any of the foregoing;

(j) Borrower or any Restricted Subsidiary shall become unable, admit in writing its inability or fail generally to pay its debts as they become due;

(k) one or more judgments for the payment of money in an aggregate amount in excess of $125,000,000 (not covered by insurance reasonably expected to provide payment therefor) shall be rendered against Borrower or any Restricted Subsidiary or any combination thereof and the same shall remain undischarged or unsatisfied for a period of thirty (30) consecutive days during which execution shall not be effectively stayed, or any action shall be legally taken by a judgment creditor to attach or levy upon any assets of Borrower or any Restricted Subsidiary to enforce any such judgment;

(l) an ERISA Event shall have occurred that, in the opinion of the Majority Lenders, when taken together with all other ERISA Events that have occurred, could reasonably be expected to result in a liability of Borrower or any Restricted Subsidiary in excess of $125,000,000;

(m) the delivery by any Guarantor to the Administrative Agent of written notice that a Guarantee under Article VIII has been revoked or is otherwise declared invalid or unenforceable;

(n) the Liens granted by any Credit Party under the Security Documents shall become invalid in any material respect or any obligation of any Credit Party under any Loan Document shall become invalid in any material respect and, with respect to both of the foregoing, the same remains unremedied for thirty (30) days after an executive officer of such Credit Party has actual knowledge thereof, or the validity of such Liens or obligation shall be challenged by any Credit Party in writing; or

(o) a Change of Control shall occur;

then, and in every such event (other than an event with respect to Borrower or any Restricted Subsidiary described in paragraph (h) or (i) of this Article), and at any time thereafter during the continuance of such event, the Administrative Agent may, and at the request of the Majority Lenders shall, by notice to the Borrower, take either or both of the following actions, at the same or different times: (i) terminate the Aggregate Commitment, and thereupon the Aggregate Commitment shall terminate immediately, and (ii) declare the Loans then outstanding to be due and payable in whole (or in part, in which case any principal not so declared to be due and payable may thereafter be declared to be due and payable), and thereupon the principal of the Loans so declared to be due and payable, together with accrued interest thereon and all fees and other obligations of the Borrower accrued hereunder, shall become due and payable immediately, without presentment, demand, protest or other notice of any kind, all of which are hereby waived by the Borrower; and in case of any event with respect to the Borrower described in paragraph (h) or (i) of this Article, the Aggregate Commitment shall automatically terminate and the principal of the Loans then outstanding, together with accrued interest thereon and all fees and other obligations of the Borrower accrued hereunder, shall automatically become due and payable, without presentment, demand, protest or other notice of any kind, all of which are hereby waived by the Borrower. Without limiting the foregoing, upon the occurrence and during the continuance of an Event of Default, the Administrative Agent, the Issuing Bank and each Lender may protect and enforce its rights under this Agreement and the other Loan Documents by any appropriate proceedings, including proceedings for specific performance of any covenant or agreement contained in this Agreement or any other Loan Document, and the Administrative Agent, the Issuing Bank and each Lender may enforce payment of any Obligations due and payable hereunder or enforce any other legal or equitable right which it may have under this Agreement, any other Loan Document, or under applicable law or in equity.

In addition to any other rights and remedies granted to the Administrative Agent and the Lenders in the Loan Documents, the Administrative Agent on behalf of the Lenders may exercise all rights and remedies of a secured party under the New York Uniform Commercial Code or any other applicable law. Without limiting the generality of the foregoing, the Administrative Agent, without demand of performance or other demand, presentment, protest, advertisement or notice of any kind (except any notice required by law referred to below) to or upon any Credit Party or any other Person (all and each of which demands, defenses, advertisements and notices are hereby waived), may in such circumstances forthwith collect, receive, appropriate and realize upon the Collateral, or any part thereof, or consent to the use by the Credit Parties of any cash collateral arising in respect of the Collateral on such terms as the Administrative Agent deems reasonable, and/or may forthwith sell, lease, assign give an option or options to purchase or otherwise dispose of and deliver, or acquire by credit bid on behalf of the Lenders, the Collateral or any part thereof (or contract to do any of the foregoing), in one or more parcels at public or private sale or sales, at any exchange, broker’s board or office of the Administrative Agent or any Lender or elsewhere, upon such

terms and conditions as it may deem advisable and at such prices as it may deem best, for cash or on credit or for future delivery, all without assumption of any credit risk. The Administrative Agent or any Lender shall have the right upon any such public sale or sales, and, to the extent permitted by law, upon any such private sale or sales, to purchase the whole or any part of the Collateral so sold, free of any right or equity of redemption in any Grantor (as defined in the Pledge Agreement and the Security Agreement), which right or equity is hereby waived and released. Each Grantor (as defined in the Pledge Agreement and the Security Agreement) further agrees, at the Administrative Agent's request, to assemble the Collateral and make it available to the Administrative Agent at places which the Administrative Agent shall reasonably select, whether at such Grantor's (as defined in the Pledge Agreement or the Security Agreement) premises or elsewhere. The Administrative Agent shall apply the net proceeds of any action taken by it pursuant to this Article IX, after deducting all reasonable costs and expenses of every kind incurred in connection therewith or incidental to the care or safekeeping of any of the Collateral or in any other way relating to the Collateral or the rights of the Administrative Agent and the Lenders hereunder, including reasonable attorneys' fees and disbursements, to the payment in whole or in part of the obligations of the Credit Parties under the Loan Documents, in such order as the Administrative Agent may elect, and only after such application and after the payment by the Administrative Agent of any other amount required by any provision of law, including Section 9-615(a)(3) of the New York Uniform Commercial Code, need the Administrative Agent account for the surplus, if any, to any Credit Party. To the extent permitted by applicable law, each Credit Party waives all claims, damages and demands it may acquire against the Administrative Agent or any Lender arising out of the exercise by them of any rights hereunder. If any notice of a proposed sale or other disposition of Collateral shall be required by law, such notice shall be deemed reasonable and proper if given at least ten (10) days before such sale or other disposition.

ARTICLE X
The Administrative Agent

Section 10.01 Authorization and Action.

(a) Each Lender, on behalf of itself and any of its Affiliates that are Secured Parties and each Issuing Bank hereby irrevocably appoints the entity named as Administrative Agent in the heading of this Agreement and its successors and assigns to serve as the administrative agent and collateral agent under the Loan Documents and each Lender and each Issuing Bank authorizes the Administrative Agent to take such actions as agent on its behalf and to exercise such powers under this Agreement and the other Loan Documents as are delegated to the Administrative Agent under such agreements and to exercise such powers as are reasonably incidental thereto. In addition, to the extent required under the laws of any jurisdiction other than within the United States, each Lender and each Issuing Bank hereby grants to the Administrative Agent any required powers of attorney to execute and enforce any Security Document governed by the laws of such jurisdiction on such Lender's or such Issuing Bank's behalf. Without limiting the foregoing, each Lender and each Issuing Bank hereby authorizes the Administrative Agent to execute and deliver, and to perform its obligations under, each of the Loan Documents to which the Administrative Agent is a party, and to exercise all rights, powers and remedies that the Administrative Agent may have under such Loan Documents.

(b) As to any matters not expressly provided for herein and in the other Loan Documents (including enforcement or collection), the Administrative Agent shall not be required to exercise any discretion or take any action, but shall be required to act or to refrain from acting (and shall be fully protected in so acting or refraining from acting) upon the written instructions of the Required Lenders (or such other number or percentage of the Lenders as shall be necessary, pursuant to the terms in the Loan Documents), and, unless and until revoked in writing, such instructions shall be binding upon each Lender and each Issuing Bank; provided, however, that the Administrative Agent shall not be required to take any action that (i) the Administrative Agent in good faith believes exposes it to liability unless the

Administrative Agent receives an indemnification and is exculpated in a manner satisfactory to it from the Lenders and the Issuing Banks with respect to such action or (ii) is contrary to this Agreement or any other Loan Document or applicable law, including any action that may be in violation of the automatic stay under any requirement of law relating to bankruptcy, insolvency or reorganization or relief of debtors or that may effect a forfeiture, modification or termination of property of a Defaulting Lender in violation of any requirement of law relating to bankruptcy, insolvency or reorganization or relief of debtors; provided, further, that the Administrative Agent may seek clarification or direction from the Required Lenders prior to the exercise of any such instructed action and may refrain from acting until such clarification or direction has been provided. Except as expressly set forth in the Loan Documents, the Administrative Agent shall not have any duty to disclose, and shall not be liable for the failure to disclose, any information relating to the Borrower, any other Credit Party, any Subsidiary or any Affiliate of any of the foregoing that is communicated to or obtained by the Person serving as Administrative Agent or any of its Affiliates in any capacity. Nothing in this Agreement shall require the Administrative Agent to expend or risk its own funds or otherwise incur any financial liability in the performance of any of its duties hereunder or in the exercise of any of its rights or powers if it shall have reasonable grounds for believing that repayment of such funds or adequate indemnity against such risk or liability is not reasonably assured to it.

(c) In performing its functions and duties hereunder and under the other Loan Documents, the Administrative Agent is acting solely on behalf of the Lenders and the Issuing Banks (except in limited circumstances expressly provided for herein relating to the maintenance of the Register), and its duties are entirely mechanical and administrative in nature. Without limiting the generality of the foregoing:

(i) the Administrative Agent does not assume and shall not be deemed to have assumed any obligation or duty or any other relationship as the agent, fiduciary or trustee of or for any Lender, Issuing Bank, any other Secured Party or holder of any other obligation other than as expressly set forth herein and in the other Loan Documents, regardless of whether a Default or an Event of Default has occurred and is continuing (and it is understood and agreed that the use of the term "agent" (or any similar term) herein or in any other Loan Document with reference to the Administrative Agent is not intended to connote any fiduciary duty or other implied (or express) obligations arising under agency doctrine of any applicable law, and that such term is used as a matter of market custom and is intended to create or reflect only an administrative relationship between contracting parties); additionally, each Lender agrees that it will not assert any claim against the Administrative Agent based on an alleged breach of fiduciary duty by the Administrative Agent in connection with this Agreement and/or the transactions contemplated hereby;

(ii) where the Administrative Agent is required or deemed to act as a trustee in respect of any Collateral over which a security interest has been created pursuant to a Loan Document expressed to be governed by the laws of the U.S., or is required or deemed to hold any Collateral "on trust" pursuant to the foregoing, the obligations and liabilities of the Administrative Agent to the Secured Parties in its capacity as trustee shall be excluded to the fullest extent permitted by applicable law; and

(iii) nothing in this Agreement or any Loan Document shall require the Administrative Agent to account to any Lender for any sum or the profit element of any sum received by the Administrative Agent for its own account.

(d) The Administrative Agent may perform any of its duties and exercise its rights and powers hereunder or under any other Loan Document by or through any one or more sub-agents appointed by the Administrative Agent. The Administrative Agent and any such sub-agent may perform any of their respective duties and exercise their respective rights and powers through their respective Related Parties.

The exculpatory provisions of this Article shall apply to any such sub-agent and to the Related Parties of the Administrative Agent and any such sub-agent, and shall apply to their respective activities pursuant to this Agreement. The Administrative Agent shall not be responsible for the negligence or misconduct of any sub agent except to the extent that a court of competent jurisdiction determines in a final and non-appealable judgment that the Administrative Agent acted with gross negligence or willful misconduct in the selection of such sub-agent.

(e) None of any syndication agent, any Co-Documentation Agent or any arranger shall have obligations or duties whatsoever in such capacity under this Agreement or any other Loan Document and shall incur no liability hereunder or thereunder in such capacity, but all such persons shall have the benefit of the indemnities provided for hereunder.

(f) In case of the pendency of any proceeding with respect to any Credit Party under any Federal, state or foreign bankruptcy, insolvency, receivership or similar law now or hereafter in effect, the Administrative Agent (irrespective of whether the principal of any Loan or any reimbursement obligation in respect of any LC Disbursement shall then be due and payable as herein expressed or by declaration or otherwise and irrespective of whether the Administrative Agent shall have made any demand on the Borrower) shall be entitled and empowered (but not obligated) by intervention in such proceeding or otherwise:

(i) to file and prove a claim for the whole amount of the principal and interest owing and unpaid in respect of the Loans, LC Disbursements and all other Obligations that are owing and unpaid and to file such other documents as may be necessary or advisable in order to have the claims of the Lenders, the Issuing Banks and the Administrative Agent (including any claim under Sections 2.12, 2.13, 2.15, 2.17 and 11.03) allowed in such judicial proceeding; and

(ii) to collect and receive any monies or other property payable or deliverable on any such claims and to distribute the same;

and any custodian, receiver, assignee, trustee, liquidator, sequestrator or other similar official in any such proceeding is hereby authorized by each Lender, each Issuing Bank and each other Secured Party to make such payments to the Administrative Agent and, in the event that the Administrative Agent shall consent to the making of such payments directly to the Lenders, the Issuing Banks or the other Secured Parties, to pay to the Administrative Agent any amount due to it, in its capacity as the Administrative Agent, under the Loan Documents (including under Section 11.03). Nothing contained herein shall be deemed to authorize the Administrative Agent to authorize or consent to or accept or adopt on behalf of any Lender or Issuing Bank any plan of reorganization, arrangement, adjustment or composition affecting the Obligations or the rights of any Lender or Issuing Bank or to authorize the Administrative Agent to vote in respect of the claim of any Lender or Issuing Bank in any such proceeding.

(g) The provisions of this Article are solely for the benefit of the Administrative Agent, the Lenders and the Issuing Banks, and, except solely to the extent of the Borrower's right to consent pursuant to and subject to the conditions set forth in this Article, neither the Borrower nor any Subsidiary, or any of their respective Affiliates, shall have any rights as a third party beneficiary under any such provisions. Each Secured Party, whether or not a party hereto, will be deemed, by its acceptance of the benefits of the Collateral and of the Guarantees of the Secured Obligations provided under the Loan Documents, to have agreed to the provisions of this Article.

Section 10.02 Administrative Agent's Reliance, Limitation of Liability, Etc..

(a) Neither the Administrative Agent nor any of its Related Parties shall be (i) liable for any action taken or omitted to be taken by such party, the Administrative Agent or any of its Related Parties under or in connection with this Agreement or the other Loan Documents (x) with the consent of or at the request of the Required Lenders (or such other number or percentage of the Lenders as shall be necessary, or as the Administrative Agent shall believe in good faith to be necessary, under the circumstances as provided in the Loan Documents) or (y) in the absence of its own gross negligence or willful misconduct (such absence to be presumed unless otherwise determined by a court of competent jurisdiction by a final and non-appealable judgment) or (ii) responsible in any manner to any of the Lenders for any recitals, statements, representations or warranties made by any Credit Party or any officer thereof contained in this Agreement or any other Loan Document or in any certificate, report, statement or other document referred to or provided for in, or received by the Administrative Agent under or in connection with, this Agreement or any other Loan Document or for the value, validity, effectiveness, genuineness, enforceability or sufficiency of this Agreement or any other Loan Document (including, for the avoidance of doubt, in connection with the Administrative Agent's reliance on any Electronic Signature transmitted by facsimile, emailed pdf. or any other electronic means that reproduces an image of an actual executed signature page) or for any failure of any Credit Party to perform its obligations hereunder or thereunder.

(b) The Administrative Agent shall be deemed not to have knowledge of any (i) notice of any of the events or circumstances set forth or described in Section 6.02 unless and until written notice thereof stating that it is a "notice under Section 6.02" in respect of this Agreement and identifying the specific clause under said Section is given to the Administrative Agent by the Borrower, or (ii) notice of any Default or Event of Default unless and until written notice thereof (stating that it is a "notice of Default" or a "notice of an Event of Default") is given to the Administrative Agent by the Borrower, a Lender or the Issuing Bank. Further, the Administrative Agent shall not be responsible for or have any duty to ascertain or inquire into (i) any statement, warranty or representation made in or in connection with any Loan Document, (ii) the contents of any certificate, report or other document delivered thereunder or in connection therewith, (iii) the performance or observance of any of the covenants, agreements or other terms or conditions set forth in any Loan Document or the occurrence of any Default or Event of Default, (iv) the sufficiency, validity, enforceability, effectiveness or genuineness of any Loan Document or any other agreement, instrument or document, (v) the satisfaction of any condition set forth in Article IV or elsewhere in any Loan Document, other than to confirm receipt of items (which on their face purport to be such items) expressly required to be delivered to the Administrative Agent or satisfaction of any condition that expressly refers to the matters described therein being acceptable or satisfactory to the Administrative Agent, or (vi) the creation, perfection or priority of Liens on the Collateral.

(c) Without limiting the foregoing, the Administrative Agent (i) may treat the payee of any promissory note as its holder until such promissory note has been assigned in accordance with Section 11.04, (ii) may rely on the Register to the extent set forth in Section 11.04(b), (iii) may consult with legal counsel (including counsel to the Borrower), independent public accountants and other experts selected by it, and shall not be liable for any action taken or omitted to be taken in good faith by it in accordance with the advice of such counsel, accountants or experts, (iv) makes no warranty or representation to any Lender or Issuing Bank and shall not be responsible to any Lender or Issuing Bank for any statements, warranties or representations made by or on behalf of any Credit Party in connection with this Agreement or any other Loan Document, (v) in determining compliance with any condition hereunder to the making of a Loan, or the issuance of a Letter of Credit, that by its terms must be fulfilled to the satisfaction of a Lender or an Issuing Bank, may presume that such condition is satisfactory to such Lender or Issuing Bank unless the Administrative Agent shall have received notice to the contrary from such Lender or Issuing Bank sufficiently in advance of the making of such Loan or the issuance of such Letter of Credit and (vi) shall be entitled to rely on, and shall incur no liability under or in respect of this Agreement or any other Loan Document by acting upon, any notice, consent, certificate or other instrument or writing (which writing may be a fax, any electronic message, Internet or intranet website posting or other distribution) or

any statement made to it orally or by telephone and believed by it to be genuine and signed or sent or otherwise authenticated by the proper party or parties (whether or not such Person in fact meets the requirements set forth in the Loan Documents for being the maker thereof).

Section 10.03 Posting of Communication.

(a) The Borrower agrees that the Administrative Agent may, but shall not be obligated to, make any Communications available to the Lenders and the Issuing Bank by posting the Communications on IntraLinks™, DebtDomain, SyndTrak, ClearPar or any other electronic system chosen by the Administrative Agent to be its electronic transmission system (the "Approved Electronic Platform").

(b) Although the Approved Electronic Platform and its primary web portal are secured with generally-applicable security procedures and policies implemented or modified by the Administrative Agent from time to time (including, as of the Effective Date, a user ID/password authorization system) and the Approved Electronic Platform is secured through a per-deal authorization method whereby each user may access the Approved Electronic Platform only on a deal-by-deal basis, each of the Lenders, the Issuing Bank and the Borrower acknowledges and agrees that the distribution of material through an electronic medium is not necessarily secure, that the Administrative Agent is not responsible for approving or vetting the representatives or contacts of any Lender that are added to the Approved Electronic Platform, and that there may be confidentiality and other risks associated with such distribution. Each of the Lenders, the Issuing Bank and the Borrower hereby approves distribution of the Communications through the Approved Electronic Platform and understands and assumes the risks of such distribution.

(c) THE APPROVED ELECTRONIC PLATFORM AND THE COMMUNICATIONS ARE PROVIDED "AS IS" AND "AS AVAILABLE". THE APPLICABLE PARTIES (AS DEFINED BELOW) DO NOT WARRANT THE ACCURACY OR COMPLETENESS OF THE COMMUNICATIONS, OR THE ADEQUACY OF THE APPROVED ELECTRONIC PLATFORM AND EXPRESSLY DISCLAIM LIABILITY FOR ERRORS OR OMISSIONS IN THE APPROVED ELECTRONIC PLATFORM AND THE COMMUNICATIONS. NO WARRANTY OF ANY KIND, EXPRESS, IMPLIED OR STATUTORY, INCLUDING ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT OF THIRD PARTY RIGHTS OR FREEDOM FROM VIRUSES OR OTHER CODE DEFECTS, IS MADE BY THE APPLICABLE PARTIES IN CONNECTION WITH THE COMMUNICATIONS OR THE APPROVED ELECTRONIC PLATFORM. IN NO EVENT SHALL THE ADMINISTRATIVE AGENT, ANY ARRANGER, ANY CO-DOCUMENTATION AGENT, ANY SYNDICATION AGENT OR ANY OF THEIR RESPECTIVE RELATED PARTIES (COLLECTIVELY, "APPLICABLE PARTIES") HAVE ANY LIABILITY TO ANY CREDIT PARTY, ANY LENDER, ANY ISSUING BANK OR ANY OTHER PERSON OR ENTITY FOR DAMAGES OF ANY KIND, INCLUDING DIRECT OR INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES, LOSSES OR EXPENSES (WHETHER IN TORT, CONTRACT OR OTHERWISE) ARISING OUT OF ANY CREDIT PARTY'S OR THE ADMINISTRATIVE AGENT'S TRANSMISSION OF COMMUNICATIONS THROUGH THE INTERNET OR THE APPROVED ELECTRONIC PLATFORM.

"Communications" means, collectively, any notice, demand, communication, information, document or other material provided by or on behalf of any Credit Party pursuant to any Loan Document or the transactions contemplated therein which is distributed by the Administrative Agent, any Lender or Issuing Bank by means of electronic communications pursuant to this Section, including through an Approved Electronic Platform.

(d) Each Lender and Issuing Bank agrees that notice to it (as provided in the next sentence) specifying that Communications have been posted to the Approved Electronic Platform shall constitute

effective delivery of the Communications to such Lender for purposes of the Loan Documents. Each Lender and Issuing Bank agrees (i) to notify the Administrative Agent in writing (which could be in the form of electronic communication) from time to time of such Lender's or Issuing Bank's (as applicable) email address to which the foregoing notice may be sent by electronic transmission and (ii) that the foregoing notice may be sent to such email address.

(e) Each of the Lenders, Issuing Bank and the Borrower agrees that the Administrative Agent may, but (except as may be required by applicable law) shall not be obligated to, store the Communications on the Approved Electronic Platform in accordance with the Administrative Agent's generally applicable document retention procedures and policies.

(f) Nothing herein shall prejudice the right of the Administrative Agent, any Lender or Issuing Bank to give any notice or other communication pursuant to any Loan Document in any other manner specified in such Loan Document.

Section 10.04 The Administrative Agent Individually. With respect to its Commitment, Loans and Letters of Credit, the Person serving as the Administrative Agent shall have and may exercise the same rights and powers hereunder and is subject to the same obligations and liabilities as and to the extent set forth herein for any other Lender or Issuing Bank, as the case may be. The terms "Issuing Bank", "Lenders", "Required Lenders" and any similar terms shall, unless the context clearly otherwise indicates, include the Administrative Agent in its individual capacity as a Lender, Issuing Bank or as one of the Required Lenders, as applicable. The Person serving as the Administrative Agent and its Affiliates may accept deposits from, lend money to, own securities of, act as the financial advisor or in any other advisory capacity for and generally engage in any kind of banking, trust or other business with, any Credit Party, any Subsidiary or any Affiliate of any of the foregoing as if such Person was not acting as the Administrative Agent and without any duty to account therefor to the Lenders or the Issuing Bank.

Section 10.05 Successor Administrative Agent.

(a) The Administrative Agent may resign at any time by giving 30 days' prior written notice thereof to the Lenders, the Issuing Bank and the Borrower, whether or not a successor Administrative Agent has been appointed. Upon any such resignation, the Required Lenders shall have the right to appoint a successor Administrative Agent. If no successor Administrative Agent shall have been so appointed by the Required Lenders, and shall have accepted such appointment, within 30 days after the retiring Administrative Agent's giving of notice of resignation, then the retiring Administrative Agent may, on behalf of the Lenders and the Issuing Bank, appoint a successor Administrative Agent, which shall be a bank with an office in New York, New York or an Affiliate of any such bank. In either case, such appointment shall be subject to the prior written approval of the Borrower (which approval may not be unreasonably withheld and shall not be required while an Event of Default has occurred and is continuing). Upon the acceptance of any appointment as Administrative Agent by a successor Administrative Agent, such successor Administrative Agent shall succeed to, and become vested with, all the rights, powers, privileges and duties of the retiring Administrative Agent. Upon the acceptance of appointment as Administrative Agent by a successor Administrative Agent, the retiring Administrative Agent shall be discharged from its duties and obligations under this Agreement and the other Loan Documents (and, for avoidance of doubt, any Hedging Contract shall be deemed not to be a "Loan Document" for purposes of this Section 10.05(a)). Prior to any retiring Administrative Agent's resignation hereunder as Administrative Agent, the retiring Administrative Agent shall take such action as may be reasonably necessary to assign to the successor Administrative Agent its rights as Administrative Agent under the Loan Documents.

(b) Notwithstanding paragraph (a) of this Section, in the event no successor Administrative Agent shall have been so appointed and shall have accepted such appointment within 30 days after the retiring Administrative Agent gives notice of its intent to resign, the retiring Administrative Agent may give notice of the effectiveness of its resignation to the Lenders, the Issuing Bank and the Borrower, whereupon, on the date of effectiveness of such resignation stated in such notice, (i) the retiring Administrative Agent shall be discharged from its duties and obligations hereunder and under the other Loan Documents (and, for avoidance of doubt, any Hedging Contract shall be deemed not to be a "Loan Document" for purposes of this Section 10.05(b)); provided that, solely for purposes of maintaining any security interest granted to the Administrative Agent under any Security Document for the benefit of the Secured Parties, the retiring Administrative Agent shall continue to be vested with such security interest as collateral agent for the benefit of the Secured Parties and continue to be entitled to the rights set forth in such Security Document and Loan Document, and, in the case of any Collateral in the possession of the Administrative Agent, shall continue to hold such Collateral, in each case until such time as a successor Administrative Agent is appointed and accepts such appointment in accordance with this Section (it being understood and agreed that the retiring Administrative Agent shall have no duty or obligation to take any further action under any Security Document, including any action required to maintain the perfection of any such security interest), and (ii) the Required Lenders shall succeed to and become vested with all the rights, powers, privileges and duties of the retiring Administrative Agent; provided that (A) all payments required to be made hereunder or under any other Loan Document to the Administrative Agent for the account of any Person other than the Administrative Agent shall be made directly to such Person and (B) all notices and other communications required or contemplated to be given or made to the Administrative Agent shall directly be given or made to each Lender and Issuing Bank. Following the effectiveness of the Administrative Agent's resignation from its capacity as such, the provisions of this Article, Section 2.17(d) and Section 11.03, as well as any exculpatory, reimbursement and indemnification provisions set forth in any other Loan Document, shall continue in effect for the benefit of such retiring Administrative Agent, its sub-agents and their respective Related Parties in respect of any actions taken or omitted to be taken by any of them while the retiring Administrative Agent was acting as Administrative Agent and in respect of the matters referred to in the proviso under clause (a) above.

Section 10.06 Acknowledgements of Lenders and Issuing Bank.

(a) Each Lender and each Issuing Bank represents and warrants that (i) the Loan Documents set forth the terms of a commercial lending facility, (ii) it is engaged in making, acquiring or holding commercial loans and in providing other facilities set forth herein as may be applicable to such Lender or Issuing Bank, in each case in the ordinary course of business, and not for the purpose of purchasing, acquiring or holding any other type of financial instrument (and each Lender and each Issuing Bank agrees not to assert a claim in contravention of the foregoing), (iii) it has, independently and without reliance upon the Administrative Agent, any arranger, any syndication agent, any Co-Documentation Agent, or any other Lender or Issuing Bank, or any of the Related Parties of any of the foregoing, and based on such documents and information as it has deemed appropriate, made its own credit analysis and decision to enter into this Agreement as a Lender, and to make, acquire or hold Loans hereunder and (iv) it is sophisticated with respect to decisions to make, acquire and/or hold commercial loans and to provide other facilities set forth herein, as may be applicable to such Lender or such Issuing Bank, and either it, or the Person exercising discretion in making its decision to make, acquire and/or hold such commercial loans or to provide such other facilities, is experienced in making, acquiring or holding such commercial loans or providing such other facilities. Each Lender and each Issuing Bank also acknowledges that it will, independently and without reliance upon the Administrative Agent, any arranger, any Syndication Agent, any Co-Documentation Agent, or any other Lender or Issuing Bank, or any of the Related Parties of any of the foregoing, and based on such documents and information (which may contain material, non-public information within the meaning of the United States securities laws concerning the Borrower and its Affiliates) as it shall from time to time deem appropriate, continue to make its own decisions in taking or

not taking action under or based upon this Agreement, any other Loan Document or any related agreement or any document furnished hereunder or thereunder.

(b) Each Lender, by delivering its signature page to this Agreement on the Effective Date, or delivering its signature page to an Assignment and Assumption or any other Loan Document pursuant to which it shall become a Lender hereunder, shall be deemed to have acknowledged receipt of, and consented to and approved, each Loan Document and each other document required to be delivered to, or be approved by or satisfactory to, the Administrative Agent or the Lenders on the Effective Date or the effective date of any such Assignment and Assumption or any other Loan Document pursuant to which it shall have become a Lender hereunder.

(c) [Reserved].

(d) (i) Each Lender and each Issuing Banks hereby agrees that (x) if the Administrative Agent notifies such Lender or Issuing Bank that the Administrative Agent has determined in its sole discretion that any funds received by such Lender or Issuing Bank from the Administrative Agent or any of their respective Affiliates (whether as a payment, prepayment or repayment of principal, interest, fees or otherwise; individually and collectively, a "Payment") were erroneously transmitted to such Lender or Issuing Bank (whether or not known to such Lender or Issuing Bank), and demands the return of such Payment (or a portion thereof), such Lender or Issuing Bank shall promptly, but in no event later than one (1) Business Day thereafter, return to the Administrative Agent the amount of any such Payment (or portion thereof) as to which such a demand was made in same day funds, together with interest thereon in respect of each day from and including the date such Payment (or portion thereof) was received by such Lender to the date such amount is repaid to the Administrative Agent at the greater of the NYFRB Rate and a rate determined by the Administrative Agent in accordance with banking industry rules on interbank compensation from time to time in effect, and (y) to the extent permitted by applicable law, such Lender or Issuing Bank shall not assert, and hereby waives, as to the Administrative Agent, any claim, counterclaim, defense or right of set-off or recoupment with respect to any demand, claim or counterclaim by the Administrative Agent for the return of any Payments received, including without limitation any defense based on "discharge for value" or any similar doctrine. A notice of the Administrative Agent to any Lender under this Section 10.06(d) shall be conclusive, absent manifest error.

(ii) Each Lender hereby further agrees that if it receives a Payment from the Administrative Agent or any of its Affiliates (x) that is in a different amount than, or on a different date from, that specified in a notice of payment sent by the Administrative Agent (or any of its Affiliates) with respect to such Payment (a "Payment Notice") or (y) that was not preceded or accompanied by a Payment Notice, it shall be on notice, in each such case, that an error has been made with respect to such Payment. Each Lender and each Issuing Bank agrees that, in each such case, or if it otherwise becomes aware a Payment (or portion thereof) may have been sent in error, such Lender or Issuing Bank shall promptly notify the Administrative Agent of such occurrence and, upon demand from the Administrative Agent, it shall promptly, but in no event later than one (1) Business Day thereafter, return to the Administrative Agent the amount of any such Payment (or portion thereof) as to which such a demand was made in same day funds, together with interest thereon in respect of each day from and including the date such Payment (or portion thereof) was received by such Lender or Issuing Bank to the date such amount is repaid to the Administrative Agent at the greater of the NYFRB Rate and a rate determined by the Administrative Agent in accordance with banking industry rules on interbank compensation from time to time in effect.

(iii) The Borrower and each other Credit Party hereby agrees that (x) in the event an erroneous Payment (or portion thereof) are not recovered from any Lender or any Issuing Bank that has received such Payment (or portion thereof) for any reason, the Administrative Agent shall

be subrogated to all the rights of such Lender or Issuing Bank with respect to such amount and (y) an erroneous Payment shall not pay, prepay, repay, discharge or otherwise satisfy any Obligations owed by the Borrower or any other Credit Party.

(iv) Each party's obligations under this Section 10.06(d) shall survive the resignation or replacement of the Administrative Agent or any transfer of rights or obligations by, or the replacement of, a Lender, the termination of the Commitments or the repayment, satisfaction or discharge of all Obligations under any Loan Document.

Section 10.07 Collateral Matters.

(a) Except with respect to the exercise of setoff rights in accordance with Section 11.08 or with respect to a Secured Party's right to file a proof of claim in an insolvency proceeding, no Secured Party shall have any right individually to realize upon any of the Collateral or to enforce any Guarantee of the Secured Obligations, it being understood and agreed that all powers, rights and remedies under the Loan Documents may be exercised solely by the Administrative Agent on behalf of the Secured Parties in accordance with the terms thereof. In its capacity, the Administrative Agent is a "representative" of the Secured Parties within the meaning of the term "secured party" as defined in the UCC. In the event that any Collateral is hereafter pledged by any Person as collateral security for the Secured Obligations, the Administrative Agent is hereby authorized, and hereby granted a power of attorney, to execute and deliver on behalf of the Secured Parties any Loan Documents necessary or appropriate to grant and perfect a Lien on such Collateral in favor of the Administrative Agent on behalf of the Secured Parties.

(b) In furtherance of the foregoing and not in limitation thereof, no arrangements in respect of cash management services the obligations under which constitute Secured Obligations and no swap agreement the obligations under which constitute Secured Obligations, will create (or be deemed to create) in favor of any Secured Party that is a party thereto any rights in connection with the management or release of any Collateral or of the obligations of any Credit Party under any Loan Document. By accepting the benefits of the Collateral, each Secured Party that is a party to any such arrangement in respect of cash management services or swap agreement, as applicable, shall be deemed to have appointed the Administrative Agent to serve as administrative agent and collateral agent under the Loan Documents and agreed to be bound by the Loan Documents as a Secured Party thereunder, subject to the limitations set forth in this paragraph.

(c) The Secured Parties irrevocably authorize the Administrative Agent, at its option and in its discretion, to subordinate any Lien on any property granted to or held by the Administrative Agent under any Loan Document to the holder of any Lien on such property that is permitted by Section 7.02. The Administrative Agent shall not be responsible for or have a duty to ascertain or inquire into any representation or warranty regarding the existence, value or collectability of the Collateral, the existence, priority or perfection of the Administrative Agent's Lien thereon or any certificate prepared by any Credit Party in connection therewith, nor shall the Administrative Agent be responsible or liable to the Lenders or any other Secured Party for any failure to monitor or maintain any portion of the Collateral.

Section 10.08 Credit Bidding.

(a) The Secured Parties hereby irrevocably authorize the Administrative Agent, at the direction of the Required Lenders, to credit bid all or any portion of the Obligations (including by accepting some or all of the Collateral in satisfaction of some or all of the Obligations pursuant to a deed in lieu of foreclosure or otherwise) and in such manner purchase (either directly or through one or more acquisition vehicles) all or any portion of the Collateral (a) at any sale thereof conducted under the provisions of the Bankruptcy Code, including under Sections 363, 1123 or 1129 of the Bankruptcy Code, or any similar

laws in any other jurisdictions to which a Credit Party is subject, or (b) at any other sale, foreclosure or acceptance of collateral in lieu of debt conducted by (or with the consent or at the direction of) the Administrative Agent (whether by judicial action or otherwise) in accordance with any applicable law. In connection with any such credit bid and purchase, the Obligations owed to the Secured Parties shall be entitled to be, and shall be, credit bid by the Administrative Agent at the direction of the Required Lenders on a ratable basis (with Obligations with respect to contingent or unliquidated claims receiving contingent interests in the acquired assets on a ratable basis that shall vest upon the liquidation of such claims in an amount proportional to the liquidated portion of the contingent claim amount used in allocating the contingent interests) for the asset or assets so purchased (or for the equity interests or debt instruments of the acquisition vehicle or vehicles that are issued in connection with such purchase). In connection with any such bid (i) the Administrative Agent shall be authorized to form one or more acquisition vehicles and to assign any successful credit bid to such acquisition vehicle or vehicles, (ii) each of the Secured Parties' ratable interests in the Obligations which were credit bid shall be deemed without any further action under this Agreement to be assigned to such vehicle or vehicles for the purpose of closing such sale, (iii) the Administrative Agent shall be authorized to adopt documents providing for the governance of the acquisition vehicle or vehicles (provided that any actions by the Administrative Agent with respect to such acquisition vehicle or vehicles, including any disposition of the assets or equity interests thereof, shall be governed, directly or indirectly, by, and the governing documents shall provide for, control by the vote of the Required Lenders or their permitted assignees under the terms of this Agreement or the governing documents of the applicable acquisition vehicle or vehicles, as the case may be, irrespective of the termination of this Agreement and without giving effect to the limitations on actions by the Required Lenders contained in Section 11.02 of this Agreement), (iv) the Administrative Agent on behalf of such acquisition vehicle or vehicles shall be authorized to issue to each of the Secured Parties, ratably on account of the relevant Obligations which were credit bid, interests, whether as equity, partnership interests, limited partnership interests or membership interests, in any such acquisition vehicle and/or debt instruments issued by such acquisition vehicle, all without the need for any Secured Party or acquisition vehicle to take any further action, and (v) to the extent that Obligations that are assigned to an acquisition vehicle are not used to acquire Collateral for any reason (as a result of another bid being higher or better, because the amount of Obligations assigned to the acquisition vehicle exceeds the amount of Obligations credit bid by the acquisition vehicle or otherwise), such Obligations shall automatically be reassigned to the Secured Parties pro rata with their original interest in such Obligations and the equity interests and/or debt instruments issued by any acquisition vehicle on account of such Obligations shall automatically be cancelled, without the need for any Secured Party or any acquisition vehicle to take any further action. Notwithstanding that the ratable portion of the Obligations of each Secured Party are deemed assigned to the acquisition vehicle or vehicles as set forth in clause (ii) above, each Secured Party shall execute such documents and provide such information regarding the Secured Party (and/or any designee of the Secured Party which will receive interests in or debt instruments issued by such acquisition vehicle) as the Administrative Agent may reasonably request in connection with the formation of any acquisition vehicle, the formulation or submission of any credit bid or the consummation of the transactions contemplated by such credit bid.

Section 10.09 Certain ERISA Matters.

(a) Each Lender (x) represents and warrants, as of the date such Person became a Lender party hereto, to, and (y) covenants, from the date such Person became a Lender party hereto to the date such Person ceases being a Lender party hereto, for the benefit of, the Administrative Agent and its respective Affiliates, and not, for the avoidance of doubt, to or for the benefit of the Borrower or any other Credit Party, that at least one of the following is and will be true:

(i) such Lender is not using "plan assets" (within the meaning of Section 3(42) of ERISA or otherwise) of one or more Benefit Plans in connection with the Loans, the Letters of Credit or the Commitments,

(ii) the transaction exemption set forth in one or more PTEs, such as PTE 84-14 (a class exemption for certain transactions determined by independent qualified professional asset managers), PTE 95-60 (a class exemption for certain transactions involving insurance company general accounts), PTE 90-1 (a class exemption for certain transactions involving insurance company pooled separate accounts), PTE 91-38 (a class exemption for certain transactions involving bank collective investment funds) or PTE 96-23 (a class exemption for certain transactions determined by in-house asset managers), is applicable with respect to such Lender's entrance into, participation in, administration of and performance of the Loans, the Letters of Credit, the Commitments and this Agreement,

(iii) (A) such Lender is an investment fund managed by a "Qualified Professional Asset Manager" (within the meaning of Part VI of PTE 84-14), (B) such Qualified Professional Asset Manager made the investment decision on behalf of such Lender to enter into, participate in, administer and perform the Loans, the Letters of Credit, the Commitments and this Agreement, (C) the entrance into, participation in, administration of and performance of the Loans, the Letters of Credit, the Commitments and this Agreement satisfies the requirements of sub-sections (b) through (g) of Part I of PTE 84-14 and (D) to the best knowledge of such Lender, the requirements of subsection (a) of Part I of PTE 84-14 are satisfied with respect to such Lender's entrance into, participation in, administration of and performance of the Loans, the Letters of Credit, the Commitments and this Agreement, or

(iv) such other representation, warranty and covenant as may be agreed in writing between the Administrative Agent, in its sole discretion, and such Lender.

(b) In addition, unless sub-clause (i) in the immediately preceding clause (a) is true with respect to a Lender or such Lender has provided another representation, warranty and covenant as provided in sub-clause (iv) in the immediately preceding clause (a), such Lender further (x) represents and warrants, as of the date such Person became a Lender party hereto, to, and (y) covenants, from the date such Person became a Lender party hereto to the date such Person ceases being a Lender party hereto, for the benefit of, the Administrative Agent and each arranger, and their respective Affiliates, and not, for the avoidance of doubt, to or for the benefit of the Borrower or any other Credit Party, that none of the Administrative Agent, any Arranger, any syndication agent, any Co-Documentation Agent, or any of their respective Affiliates is a fiduciary with respect to the Collateral or the assets of such Lender involved in such Lender's entrance into, participation in, administration of and performance of the Loans, the Letters of Credit, the Commitments and this Agreement (including in connection with the reservation or exercise of any rights by the Administrative Agent under this Agreement, any Loan Document or any documents related hereto or thereto).

(c) The Administrative Agent and each arranger, syndication agent and Co-Documentation Agent hereby informs the Lenders that each such Person is not undertaking to provide investment advice or to give advice in a fiduciary capacity, in connection with the transactions contemplated hereby, and that such Person has a financial interest in the transactions contemplated hereby in that such Person or an Affiliate thereof (i) may receive interest or other payments with respect to the Loans, the Letters of Credit, the Commitments, this Agreement and any other Loan Documents, (ii) may recognize a gain if it extended the Loans, the Letters of Credit or the Commitments for an amount less than the amount being paid for an interest in the Loans, the Letters of Credit or the Commitments by such Lender or (iii) may receive fees or

other payments in connection with the transactions contemplated hereby, the Loan Documents or otherwise, including structuring fees, commitment fees, arrangement fees, facility fees, upfront fees, underwriting fees, ticking fees, agency fees, administrative agent or collateral agent fees, utilization fees, minimum usage fees, letter of credit fees, fronting fees, deal-away or alternate transaction fees, amendment fees, processing fees, term out premiums, banker's acceptance fees, breakage or other early termination fees or fees similar to the foregoing.

Section 10.10 Flood Laws. The Administrative Agent has adopted internal policies and procedures that address requirements placed on federally regulated lenders under the National Flood Insurance Reform Act of 1994 and related legislation (the "Flood Laws"). The Administrative Agent, as administrative agent or collateral agent on a syndicated facility, will post on the applicable electronic platform (or otherwise distribute to each Lender in the syndicate) documents that it receives in connection with the Flood Laws. However, Administrative Agent reminds each Lender and Participant in the facility that, pursuant to the Flood Laws, each federally regulated Lender (whether acting as a Lender or Participant in the facility) is responsible for assuring its own compliance with the flood insurance requirements.

ARTICLE XI
Miscellaneous

Section 11.01 Notices.

(a) Except in the case of notices and other communications expressly permitted to be given by telephone (and subject to paragraph (b) below), all notices and other communications provided for herein shall be in writing and shall be delivered by hand or overnight courier service, mailed by certified or registered mail or sent by telecopy, as follows:

(i) if to the Borrower or any other Credit Party, to Antero Resources Corporation, 1615 Wynkoop St., Denver, Colorado 80202, Attention: Michael N. Kennedy, Chief Financial Officer, Telecopy No. (303) 357-7315;

(ii) if to the Administrative Agent or Issuing Bank, to JPMorgan Chase Bank, N.A., 712 Main Street, 5th Floor, Houston, Texas, 77002, Telecopy No.: (713) 216-8870, Attention: Anca Loghin, with a copy to JPMorgan Chase Bank, N.A., Mail Code TX2-S038, 1125 17th Street, Floor 2, Denver, Colorado 80202, Telecopy No. (832) 487-1765, Attention: Ryan Fuessel;

(iii) if to a syndication agent or Co-Documentation Agent, to it at its address (or telecopy number) set forth in its Administrative Questionnaire; and

(iv) if to any other Lender, to it at its address (or telecopy number) set forth in its Administrative Questionnaire.

Notices sent by hand or overnight courier service, or mailed by certified or registered mail, shall be deemed to have been given when received; notices sent by facsimile shall be deemed to have been given when sent (except that, if not given during normal business hours for the recipient, shall be deemed to have been given at the opening of business on the next business day for the recipient). Notices delivered through Electronic Systems, to the extent provided in paragraph (b) below, shall be effective as provided in said paragraph (b).

(b) Notices and other communications to the Lenders and any Issuing Bank hereunder may be delivered or furnished by using Electronic Systems pursuant to procedures approved by the Administrative Agent; provided that the foregoing shall not apply to notices pursuant to Article II unless otherwise agreed by the Administrative Agent and the applicable Lender. The Administrative Agent or the

Borrower may, in its discretion, agree to accept notices and other communications to it hereunder by electronic communications pursuant to procedures approved by it; provided that approval of such procedures may be limited to particular notices or communications.

Unless the Administrative Agent otherwise prescribes, (i) notices and other communications sent to an e-mail address shall be deemed received upon the sender's receipt of an acknowledgement from the intended recipient (such as by the "return receipt requested" function, as available, return e-mail or other written acknowledgement), and (ii) notices or communications posted to an Internet or intranet website shall be deemed received upon the deemed receipt by the intended recipient, at its e-mail address as described in the foregoing clause (i), of notification that such notice or communication is available and identifying the website address therefor; provided that, for both clauses (i) and (ii) above, if such notice, email or other communication is not sent during the normal business hours of the recipient, such notice or communication shall be deemed to have been sent at the opening of business on the next business day for the recipient.

(c) Any party hereto may change its address or telecopy number for notices and other communications hereunder by notice to the other parties hereto. All notices and other communications given to any party hereto in accordance with the provisions of this Agreement shall be deemed to have been given on the date of receipt.

(d) Electronic Systems.

(i) Borrower agrees that the Administrative Agent may, but shall not be obligated to, make Communications (as defined below) available to the Issuing Banks and the other Lenders by posting the Communications on Debt Domain, Intralinks, Syndtrak, ClearPar or a substantially similar Electronic System.

(ii) Any Electronic System used by the Administrative Agent is provided "as is" and "as available." The Agent Parties do not warrant the adequacy of such Electronic Systems and expressly disclaim liability for errors or omissions in the Communications. No warranty of any kind, express, implied or statutory, including any warranty of merchantability, fitness for a particular purpose, non-infringement of third-party rights or freedom from viruses or other code defects, is made by any Agent Party in connection with the Communications or any Electronic System. In no event shall the Agent Parties have any liability to the Borrower or the other Credit Parties, any Lender, the Issuing Bank or any other Person or entity for damages of any kind, including direct or indirect, special, incidental or consequential damages, losses or expenses (whether in tort, contract or otherwise) arising out of the Borrower's, any Credit Party's, or the Administrative Agent's transmission of communications through an Electronic System. "Communications" means, collectively, any notice, demand, communication, information, document or other material provided by or on behalf of any Credit Party pursuant to any Loan Document or the transactions contemplated therein which is distributed by the Administrative Agent, any Lender or any Issuing Bank by means of electronic communications pursuant to this Section, including through an Electronic System.

Section 11.02 Waivers; Amendments.

(a) No failure or delay by the Administrative Agent, the Issuing Bank or any Lender in exercising any right or power hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any such right or power, or any abandonment or discontinuance of steps to enforce such a right or power, preclude any other or further exercise thereof or the exercise of any other right or power. The rights and remedies of the Administrative Agent, the Issuing Bank and the Lenders hereunder are

cumulative and are not exclusive of any rights or remedies that they would otherwise have. No waiver of any provision of this Agreement or consent to any departure by the Borrower therefrom shall in any event be effective unless the same shall be permitted by paragraph (b) of this Section, and then such waiver or consent shall be effective only in the specific instance and for the purpose for which given. Without limiting the generality of the foregoing, the making of a Loan or issuance of a Letter of Credit shall not be construed as a waiver of any Default, regardless of whether the Administrative Agent, any Lender or the Issuing Bank may have had notice or knowledge of such Default at the time.

(b) Subject to paragraph (c) below, neither this Agreement nor any provision hereof may be waived, amended or modified except pursuant to an agreement or agreements in writing entered into by the Credit Parties and the Majority Lenders or by the Credit Parties and the Administrative Agent with the consent of the Majority Lenders; provided that no such agreement shall (1) amend or waive any of the conditions specified in Article V without the written consent of each Lender (provided that the Administrative Agent may in its discretion withdraw any request it has made under Section 5.01(n)), (2) increase the Borrowing Base without the written consent of each Lender, (3) increase the Applicable Percentage of any Lender or increase the Commitment of any Lender without the written consent of such Lender, (4) increase the Maximum Facility Amount without the written consent of each Lender, (5) reduce the principal amount of any Loan or LC Disbursement or reduce the rate of interest thereon, or reduce any fees payable hereunder, without the written consent of each Lender affected thereby, (6) postpone the scheduled date of payment of the principal amount of any Loan or LC Disbursement, or any interest thereon, or any fees payable hereunder, or reduce the amount of, waive or excuse any such payment, or postpone the scheduled date of expiration of the Aggregate Commitment, without the written consent of each Lender affected thereby (it being understood that any waiver of a mandatory prepayment of the Loans or a mandatory reduction of the Commitments shall not constitute a postponement or waiver of a scheduled payment or date of expiration), (7) change Section 2.18(b) or Section 2.18(c) in a manner that would alter the pro rata sharing of payments required thereby, without the written consent of each Lender, (8) except in connection with any Dispositions permitted in Section 7.05, release any Credit Party from its obligations under the Loan Documents or release any of the Collateral without the written consent of each Lender, (9) change any of the provisions of this Section or the definition of "Majority Lenders", "Super-Majority Lenders" or "Required Lenders" or any other provision hereof specifying the number or percentage of Lenders required to waive, amend or modify any rights hereunder or make any determination or grant any consent hereunder, without the written consent of each Lender, or (10) amend this Section 11.02 without the consent of each Lender; provided further that no such agreement shall (x) amend, modify or otherwise affect the rights or duties of the Administrative Agent or the Issuing Bank hereunder without the prior written consent of the Administrative Agent or the Issuing Bank, as the case may be or (y) change any of the provisions of Section 2.20 without the prior written consent of the Administrative Agent and the Issuing Bank.

(c) if the Administrative Agent and the Borrower acting together identify any ambiguity, omission, mistake, typographical error or other defect in any provision of this Agreement or any other Loan Document, then the Administrative Agent and the Borrower shall be permitted to amend, modify or supplement such provision to cure such ambiguity, omission, mistake, typographical error or other defect, and such amendment shall become effective without any further action or consent of any other party to this Agreement.

Section 11.03 Expenses; Indemnity; Damage Waiver.

(a) The Borrower shall pay (i) all reasonable out-of-pocket expenses incurred by the Administrative Agent and its Affiliates, including the reasonable fees, charges and disbursements of counsel (but limited to one outside counsel and one local counsel in each applicable jurisdiction) for the Administrative Agent, in connection with the syndication of the credit facilities provided for herein, the

preparation and administration of this Agreement and the other Loan Documents or any amendments, modifications or waivers of the provisions hereof or thereof (whether or not the transactions contemplated hereby or thereby shall be consummated), (ii) all reasonable out-of-pocket expenses incurred by the Issuing Bank in connection with the issuance, amendment, renewal or extension of any Letter of Credit or any demand for payment thereunder and (iii) all reasonable out-of-pocket expenses incurred by the Administrative Agent, the Issuing Bank or any Lender, including the fees, charges and disbursements of any counsel for the Administrative Agent, the Issuing Bank or any Lender, in connection with the enforcement or protection of its rights in connection with the Loan Documents, including its rights under this Section, or in connection with the Loans made or Letters of Credit issued hereunder, including all such out-of-pocket expenses incurred during any workout, restructuring or negotiations in respect of such Loans or Letters of Credit.

(b) **THE CREDIT PARTIES SHALL INDEMNIFY THE ADMINISTRATIVE AGENT, THE ISSUING BANK AND EACH LENDER, AND EACH RELATED PARTY OF ANY OF THE FOREGOING PERSONS (EACH SUCH PERSON BEING CALLED AN "INDEMNITEE") AGAINST, AND HOLD EACH INDEMNITEE HARMLESS FROM, ANY AND ALL LOSSES, CLAIMS, DAMAGES, PENALTIES, LIABILITIES AND RELATED EXPENSES, INCLUDING THE FEES, CHARGES AND DISBURSEMENTS OF ANY COUNSEL FOR ANY INDEMNITEE, INCURRED BY OR ASSERTED AGAINST ANY INDEMNITEE ARISING OUT OF, IN CONNECTION WITH, OR AS A RESULT OF (I) THE EXECUTION OR DELIVERY OF THIS AGREEMENT OR ANY AGREEMENT OR INSTRUMENT CONTEMPLATED HEREBY, THE PERFORMANCE BY THE PARTIES HERETO OF THEIR RESPECTIVE OBLIGATIONS HEREUNDER OR THE CONSUMMATION OF THE TRANSACTIONS OR ANY OTHER TRANSACTIONS CONTEMPLATED HEREBY, (II) ANY LOAN OR LETTER OF CREDIT OR THE USE OF THE PROCEEDS THEREFROM (INCLUDING ANY REFUSAL BY THE ISSUING BANK TO HONOR A DEMAND FOR PAYMENT UNDER A LETTER OF CREDIT IF THE DOCUMENTS PRESENTED IN CONNECTION WITH SUCH DEMAND DO NOT STRICTLY COMPLY WITH THE TERMS OF SUCH LETTER OF CREDIT), (III) ANY ACTUAL OR ALLEGED PRESENCE OR RELEASE OF HAZARDOUS MATERIALS ON OR FROM ANY PROPERTY OWNED OR OPERATED BY THE BORROWER OR ANY SUBSIDIARY, OR ANY ENVIRONMENTAL LIABILITY RELATED IN ANY WAY TO THE BORROWER OR ANY SUBSIDIARY, OR (IV) ANY ACTUAL OR PROSPECTIVE CLAIM, LITIGATION, INVESTIGATION OR PROCEEDING RELATING TO ANY OF THE FOREGOING, WHETHER BASED ON CONTRACT, TORT OR ANY OTHER THEORY AND REGARDLESS OF WHETHER ANY INDEMNITEE IS A PARTY THERETO. THE FOREGOING INDEMNIFICATION SHALL APPLY WHETHER OR NOT SUCH LOSSES, CLAIMS, DAMAGES, LIABILITIES OR RELATED EXPENSES ARE IN ANY WAY OR TO ANY EXTENT OWED, IN WHOLE OR IN PART, UNDER ANY CLAIM OR THEORY OF STRICT LIABILITY OR CAUSED, IN WHOLE OR IN PART BY ANY NEGLIGENT ACT OR OMISSION OF ANY KIND BY ANY INDEMNITEE; PROVIDED THAT SUCH INDEMNITY SHALL NOT, AS TO ANY INDEMNITEE, BE AVAILABLE TO THE EXTENT THAT SUCH LOSSES, CLAIMS, DAMAGES, LIABILITIES OR RELATED EXPENSES ARE DETERMINED BY A COURT OF COMPETENT JURISDICTION BY FINAL AND NONAPPEALABLE JUDGMENT TO HAVE RESULTED FROM THE GROSS NEGLIGENCE OR WILLFUL MISCONDUCT OF SUCH INDEMNITEE. FOR THE AVOIDANCE OF DOUBT, WITH RESPECT TO THE FOREGOING PROVISO "ANY INDEMNITEE" MEANS ONLY THE INDEMNITEE OR INDEMNITEES, AS THE CASE MAY BE, THAT ARE DETERMINED BY SUCH COURT TO HAVE BEEN GROSSLY NEGLIGENT OR TO HAVE ENGAGED IN WILLFUL MISCONDUCT AND NOT ANY OTHER INDEMNITEE. THIS SECTION SHALL NOT APPLY WITH RESPECT TO TAXES OTHER THAN ANY TAXES THAT REPRESENT LOSSES, CLAIMS, DAMAGES, ETC. ARISING FROM ANY NON-TAX CLAIM.**

(c) To the extent that any Credit Party fails to pay any amount required to be paid by it to the Administrative Agent or the Issuing Bank under paragraph (a) or (b) of this Section, each Lender severally agrees to pay to the Administrative Agent or the Issuing Bank, as the case may be, such Lender's Applicable Percentage of such unpaid amount with respect to amounts to be paid to the Issuing Bank and such Lender's Applicable Percentage of such unpaid amount with respect to amounts to be paid to the Administrative Agent (in each case, determined as of the time that the applicable unreimbursed expense or indemnity payment is sought); provided that the unreimbursed expense or indemnified loss, claim, damage, liability or related expense, as the case may be, was incurred by or asserted against the Administrative Agent or the Issuing Bank in its capacity as such.

(d) TO THE EXTENT PERMITTED BY APPLICABLE LAW, THE CREDIT PARTIES SHALL NOT ASSERT, AND HEREBY WAIVE, ANY CLAIM AGAINST ANY INDEMNITEE, ON ANY THEORY OF LIABILITY, FOR SPECIAL, INDIRECT, CONSEQUENTIAL OR PUNITIVE DAMAGES (AS OPPOSED TO DIRECT OR ACTUAL DAMAGES) ARISING OUT OF, IN CONNECTION WITH, OR AS A RESULT OF, THIS AGREEMENT OR ANY AGREEMENT OR INSTRUMENT CONTEMPLATED HEREBY, THE TRANSACTIONS, ANY LOAN OR LETTER OF CREDIT OR THE USE OF THE PROCEEDS THEREOF.

(e) All amounts due under this Section shall be payable not later than ten (10) days after written demand therefor.

Section 11.04 Successors and Assigns.

(a) The provisions of this Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns permitted hereby (including any Affiliate of the Issuing Bank that issues any Letter of Credit), except that (i) no Credit Party may assign or otherwise transfer any of its rights or obligations hereunder without the prior written consent of each Lender (and any attempted assignment or transfer by such Credit Party without such consent shall be null and void) and (ii) no Lender may assign or otherwise transfer its rights or obligations hereunder except in accordance with this Section. Nothing in this Agreement, expressed or implied, shall be construed to confer upon any Person (other than the parties hereto, their respective successors and assigns permitted hereby (including any Affiliate of the Issuing Bank that issues any Letter of Credit), Participants (to the extent provided in paragraph (c) of this Section) and, to the extent expressly contemplated hereby, the Related Parties of each of the Administrative Agent, the Issuing Bank and the Lenders) any legal or equitable right, remedy or claim under or by reason of this Agreement.

(b) (i) Subject to the conditions set forth in paragraph (ii) below, any Lender may assign to one or more assignees (other than an Ineligible Institution) all or a portion of its rights and obligations under this Agreement (including all or a portion of its Commitment and the Loans at the time owing to it) with the prior written consent (such consent not to be unreasonably withheld) of:

(A) the Borrower; provided that no consent of the Borrower shall be required for an assignment to a Lender, an Affiliate of a Lender, a Federal Reserve Bank or any other central bank, an Approved Fund or, if any Event of Default has occurred and is continuing, any other assignee;

(B) the Administrative Agent; and

(C) the Issuing Bank.

(ii) Assignments shall be subject to the following additional conditions:

(A) except in the case of an assignment to a Lender, an Affiliate of a Lender, an Approved Fund or an assignment of the entire remaining amount of the assigning Lender's Commitment or Loans, the amount of the Commitment or Loans of the assigning Lender subject to each such assignment (determined as of the date the Assignment and Assumption with respect to such assignment is delivered to the Administrative Agent) shall not be less than $5,000,000 unless each of the Borrower and the Administrative Agent otherwise consent; provided that no such consent of the Borrower shall be required if any Event of Default has occurred and is continuing;

(B) each partial assignment shall be made as an assignment of a proportionate part of all the assigning Lender's rights and obligations in respect of such Lender's Commitment and such Lender's Loans under this Agreement;

(C) the parties to each assignment shall execute and deliver to the Administrative Agent (x) an Assignment and Assumption or (y) to the extent applicable, an agreement incorporating an Assignment and Assumption by reference pursuant to a Platform as to which the Administrative Agent and the parties to the Assignment and Assumption are participants), together with a processing and recordation fee of $3,500; and

(D) the assignee, if it shall not be a Lender, shall deliver to the Administrative Agent an Administrative Questionnaire in which the assignee designates one or more credit contacts to whom all syndicate-level information (which may contain material non-public information about the Borrower, the Credit Parties and their related parties or their respective securities) will be made available and who may receive such information in accordance with the assignee's compliance procedures and applicable laws, including Federal and state securities laws.

For the purposes of this Section 11.04(b), the terms "Approved Fund" and "Ineligible Institution" have the following meanings:

"Approved Fund" means any Person (other than a natural person) that is engaged in making, purchasing, holding or investing in bank loans and similar extensions of credit in the ordinary course of its business and that is administered or managed by (a) a Lender, (b) an Affiliate of a Lender or (c) an entity or an Affiliate of an entity that administers or manages a Lender.

"Ineligible Institution" means (a) a natural person, (b) a Defaulting Lender or its Lender Parent, (c) a holding company, investment vehicle or trust for, or owned and operated for the primary benefit of, a natural person or relative(s) thereof or (d) the Borrower or any of its Affiliates; provided that, such holding company, investment vehicle or trust shall not constitute an Ineligible Institution if it (x) has not been established for the primary purpose of acquiring any Loans or Commitments, (y) is managed by a professional advisor, who is not such natural person or a relative thereof, having significant experience in the business of making or purchasing commercial loans, and (z) has assets greater than $25,000,000 and a significant part of its activities consist of making or purchasing commercial loans and similar extensions of credit in the ordinary course of its business.

(iii) Subject to acceptance and recording thereof pursuant to paragraph (b)(iv) of this Section, from and after the effective date specified in each Assignment and Assumption the assignee thereunder shall be a party hereto and, to the extent of the interest assigned by such Assignment and Assumption, have the rights and obligations of a Lender under this Agreement, and the assigning Lender thereunder shall, to the extent of the interest assigned by such Assignment

and Assumption, be released from its obligations under this Agreement (and, in the case of an Assignment and Assumption covering all of the assigning Lender's rights and obligations under this Agreement, such Lender shall cease to be a party hereto but shall continue to be entitled to the benefits of Sections 2.15, 2.16, 2.17 and 11.03). Any assignment or transfer by a Lender of rights or obligations under this Agreement that does not comply with this Section 11.04 shall be treated for purposes of this Agreement as a sale by such Lender of a participation in such rights and obligations in accordance with paragraph (c) of this Section.

(iv) The Administrative Agent, acting for this purpose as a non-fiduciary agent of the Borrower, shall maintain at one of its offices a copy of each Assignment and Assumption delivered to it and a register for the recordation of the names and addresses of the Lenders, and the Commitment of, and principal amount (and stated interest) of the Loans and LC Disbursements owing to, each Lender pursuant to the terms hereof from time to time (the "Register"). The entries in the Register shall be conclusive, and the Borrower, the Administrative Agent, the Issuing Bank and the Lenders shall treat each Person whose name is recorded in the Register pursuant to the terms hereof as a Lender hereunder for all purposes of this Agreement, notwithstanding notice to the contrary. The Register shall be available for inspection by the Borrower, the Issuing Bank and any Lender, at any reasonable time and from time to time upon reasonable prior notice.

(v) Upon its receipt of (x) a duly completed Assignment and Assumption executed by an assigning Lender and an assignee or (y) to the extent applicable, an agreement incorporating an Assignment and Assumption by reference pursuant to a Platform as to which the Administrative Agent and the parties to the Assignment and Assumption are participants), the assignee's completed Administrative Questionnaire (unless the assignee shall already be a Lender hereunder), the processing and recordation fee referred to in paragraph (b) of this Section and any written consent to such assignment required by paragraph (b) of this Section, the Administrative Agent shall accept such Assignment and Assumption and record the information contained therein in the Register; provided that if either the assigning Lender or the assignee shall have failed to make any payment required to be made by it pursuant to Section 2.05(c), 2.06(d) or (e), 2.07(b), 2.18(d) or 11.03(c), the Administrative Agent shall have no obligation to accept such Assignment and Assumption and record the information therein in the Register unless and until such payment shall have been made in full, together with all accrued interest thereon. No assignment shall be effective for purposes of this Agreement unless it has been recorded in the Register as provided in this paragraph.

(c) Any Lender may, without the consent of the Borrower, the Administrative Agent, or an Issuing Bank, sell participations to one or more banks or other entities (a "Participant"), other than an Ineligible Institution, in all or a portion of such Lender's rights and obligations under this Agreement (including all or a portion of its Commitment and the Loans owing to it); provided that (A) such Lender's obligations under this Agreement shall remain unchanged; (B) such Lender shall remain solely responsible to the other parties hereto for the performance of such obligations; and (C) the Borrower, the Administrative Agent, the Issuing Bank and the other Lenders shall continue to deal solely and directly with such Lender in connection with such Lender's rights and obligations under this Agreement. Any agreement or instrument pursuant to which a Lender sells such a participation shall provide that such Lender shall retain the sole right to enforce this Agreement and to approve any amendment, modification or waiver of any provision of this Agreement; provided that such agreement or instrument may provide that such Lender will not, without the consent of the Participant, agree to any amendment, modification or waiver described in the first proviso to Section 11.02(b) that affects such Participant. The Borrower agrees that each Participant shall be entitled to the benefits of Section 2.15, Section 2.16, and Section 2.17 (subject to the requirements and limitations therein, including the requirements under Section 2.17(f) and (g) (it being understood that the documentation required under Section 2.17(f) shall be delivered to the participating Lender and the information and documentation required under Section 2.17(g) will be delivered to the

Borrower and the Administrative Agent)) to the same extent as if it were a Lender and had acquired its interest by assignment pursuant to paragraph (b) of this Section; provided that such Participant (A) agrees to be subject to the provisions of Section 2.19 as if it were an assignee under paragraph (b) of this Section; and (B) shall not be entitled to receive any greater payment under Section 2.15 or Section 2.17, with respect to any participation, than its participating Lender would have been entitled to receive, except to the extent such entitlement to receive a greater payment results from a Change in Law that occurs after the Participant acquired the applicable participation. Each Lender that sells a participation agrees, at the Borrower's request and expense, to use reasonable efforts to cooperate with the Borrower to effectuate the provisions of Section 2.19(b) with respect to any Participant. To the extent permitted by law, each Participant also shall be entitled to the benefits of Section 11.08 as though it were a Lender; provided that such Participant agrees to be subject to Section 2.18(c) as though it were a Lender. Each Lender that sells a participation shall, acting solely for this purpose as a non-fiduciary agent of the Borrower, maintain a register on which it enters the name and address of each Participant and the principal amounts (and stated interest) of each Participant's interest in the Loans or other obligations under the Loan Documents (the "Participant Register"); provided that no Lender shall have any obligation to disclose all or any portion of the Participant Register (including the identity of any Participant or any information relating to a Participant's interest in any Commitments, Loans, Letters of Credit or its other obligations under any Loan Document) to any Person except to the extent that such disclosure is necessary to establish that such Commitment, Loan, Letter of Credit or other obligation is in registered form under Section 5f.103-1(c) of the United States Treasury Regulations. The entries in the Participant Register shall be conclusive absent manifest error, and such Lender shall treat each Person whose name is recorded in the Participant Register as the owner of such participation for all purposes of this Agreement notwithstanding any notice to the contrary. For the avoidance of doubt, the Administrative Agent (in its capacity as Administrative Agent) shall have no responsibility for maintaining a Participant Register.

(d) Any Lender may at any time pledge or assign a security interest in all or any portion of its rights under this Agreement to secure obligations of such Lender, including any pledge or assignment to secure obligations to a Federal Reserve Bank, and this Section shall not apply to any such pledge or assignment of a security interest; provided that no such pledge or assignment of a security interest shall release a Lender from any of its obligations hereunder or substitute any such pledgee or assignee for such Lender as a party hereto.

Section 11.05 Survival. All covenants, agreements, representations and warranties made by the Credit Parties herein and in the certificates or other instruments delivered in connection with or pursuant to this Agreement shall be considered to have been relied upon by the other parties hereto and shall survive the execution and delivery of this Agreement and the making of any Loans and issuance of any Letters of Credit, regardless of any investigation made by any such other party or on its behalf and notwithstanding that the Administrative Agent, the Issuing Bank or any Lender may have had notice or knowledge of any Default or incorrect representation or warranty at the time any credit is extended hereunder, and shall continue in full force and effect as long as the principal of or any accrued interest on any Loan or any fee or any other amount payable under this Agreement is outstanding and unpaid or any Letter of Credit is outstanding and so long as the Aggregate Commitment has not expired or terminated. The provisions of Section 2.15, Section 2.16, Section 2.17, Section 11.03, Section 11.12 and Article X shall survive and remain in full force and effect regardless of the consummation of the transactions contemplated hereby, the repayment of the Loans, the expiration or termination of the Letters of Credit and the Aggregate Commitment or the termination of this Agreement or any provision hereof.

Section 11.06 Counterparts; Integration; Effectiveness, Electronic Execution.

(a) This Agreement may be executed in counterparts (and by different parties hereto on different counterparts), each of which shall constitute an original, but all of which when taken together shall

constitute a single contract. This Agreement and any separate letter agreements with respect to fees payable to the Administrative Agent constitute the entire contract among the parties relating to the subject matter hereof and supersede any and all previous agreements and understandings, oral or written, relating to the subject matter hereof. **THIS AGREEMENT AND THE OTHER LOAN DOCUMENTS REPRESENT THE FINAL AGREEMENT BETWEEN THE PARTIES AND MAY NOT BE CONTRADICTED BY EVIDENCE OF PRIOR, CONTEMPORANEOUS, OR SUBSEQUENT ORAL AGREEMENTS OF THE PARTIES. THERE ARE NO UNWRITTEN ORAL AGREEMENTS BETWEEN THE PARTIES.** Except as provided in Section 5.01, this Agreement shall become effective when it shall have been executed by the Administrative Agent and when the Administrative Agent shall have received counterparts hereof which, when taken together, bear the signatures of each of the other parties hereto, and thereafter shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns. Delivery of an executed counterpart of a signature page of this Agreement by telecopy or other electronic means shall be effective as delivery of a manually executed counterpart of this Agreement.

(b) Delivery of an executed counterpart of a signature page of this Agreement by telecopy, emailed pdf. or any other electronic means that reproduces an image of the actual executed signature page shall be effective as delivery of a manually executed counterpart of this Agreement. The words "execution," "signed," "signature," "delivery," and words of like import in or relating to any document to be signed in connection with this Agreement and the transactions contemplated hereby shall be deemed to include Electronic Signatures, deliveries or the keeping of records in electronic form, each of which shall be of the same legal effect, validity or enforceability as a manually executed signature, physical delivery thereof or the use of a paper-based recordkeeping system, as the case may be, to the extent and as provided for in any applicable law, including the Federal Electronic Signatures in Global and National Commerce Act, the New York State Electronic Signatures and Records Act, or any other similar state laws based on the Uniform Electronic Transactions Act; provided that nothing herein shall require the Administrative Agent to accept electronic signatures in any form or format without its prior written consent.

Section 11.07 Severability. Any provision of this Agreement held to be invalid, illegal or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such invalidity, illegality or unenforceability without affecting the validity, legality and enforceability of the remaining provisions hereof; and the invalidity of a particular provision in a particular jurisdiction shall not invalidate such provision in any other jurisdiction.

Section 11.08 Right of Setoff. If an Event of Default shall have occurred and be continuing, each Lender and each of its Affiliates is hereby authorized at any time and from time to time, to the fullest extent permitted by law, to set off and apply any and all deposits (general or special, time or demand, provisional or final) at any time held and other obligations at any time owing by such Lender or Affiliate to or for the credit or the account of the Borrower against any of and all the obligations of any Credit Party now or hereafter existing under this Agreement held by such Lender, irrespective of whether or not such Lender shall have made any demand under this Agreement and although such obligations may be unmatured. The rights of each Lender under this Section and Section 8.07 are in addition to other rights and remedies (including other rights of setoff) which such Lender may have.

Section 11.09 GOVERNING LAW; JURISDICTION; CONSENT TO SERVICE OF PROCESS.

(a) THIS AGREEMENT SHALL BE CONSTRUED IN ACCORDANCE WITH AND GOVERNED BY THE INTERNAL LAWS OF THE STATE OF NEW YORK, BUT GIVING EFFECT TO FEDERAL LAWS APPLICABLE TO NATIONAL BANKS.

(b) EACH PARTY HEREBY IRREVOCABLY AND UNCONDITIONALLY SUBMITS, FOR ITSELF AND ITS PROPERTY, TO THE NONEXCLUSIVE JURISDICTION OF ANY UNITED STATES FEDERAL OR NEW YORK STATE COURT SITTING IN THE BOROUGH OF MANHATTAN, CITY OF NEW YORK, NEW YORK IN ANY ACTION OR PROCEEDING ARISING OUT OF OR RELATING TO THIS AGREEMENT, OR FOR RECOGNITION OR ENFORCEMENT OF ANY JUDGMENT, AND EACH OF THE PARTIES HERETO HEREBY IRREVOCABLY AND UNCONDITIONALLY AGREES THAT ALL CLAIMS IN RESPECT OF ANY SUCH ACTION OR PROCEEDING MAY BE HEARD AND DETERMINED IN SUCH NEW YORK STATE OR, TO THE EXTENT PERMITTED BY LAW, IN SUCH FEDERAL COURT. EACH OF THE PARTIES HERETO AGREES THAT A FINAL JUDGMENT IN ANY SUCH ACTION OR PROCEEDING SHALL BE CONCLUSIVE AND MAY BE ENFORCED IN OTHER JURISDICTIONS BY SUIT ON THE JUDGMENT OR IN ANY OTHER MANNER PROVIDED BY LAW. NOTHING IN THIS AGREEMENT SHALL AFFECT ANY RIGHT THAT THE ADMINISTRATIVE AGENT, THE ISSUING BANK OR ANY LENDER MAY OTHERWISE HAVE TO BRING ANY ACTION OR PROCEEDING RELATING TO THIS AGREEMENT AGAINST ANY CREDIT PARTY OR ITS PROPERTIES IN THE COURTS OF ANY JURISDICTION.

(c) EACH PARTY HEREBY IRREVOCABLY AND UNCONDITIONALLY WAIVES, TO THE FULLEST EXTENT IT MAY LEGALLY AND EFFECTIVELY DO SO, ANY OBJECTION WHICH IT MAY NOW OR HEREAFTER HAVE TO THE LAYING OF VENUE OF ANY SUIT, ACTION OR PROCEEDING ARISING OUT OF OR RELATING TO THIS AGREEMENT IN ANY COURT REFERRED TO IN PARAGRAPH (B) OF THIS SECTION. EACH OF THE PARTIES HERETO HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY LAW, THE DEFENSE OF AN INCONVENIENT FORUM TO THE MAINTENANCE OF SUCH ACTION OR PROCEEDING IN ANY SUCH COURT.

(d) EACH PARTY TO THIS AGREEMENT IRREVOCABLY CONSENTS TO SERVICE OF PROCESS IN THE MANNER PROVIDED FOR NOTICES IN SECTION 11.01. NOTHING IN THIS AGREEMENT WILL AFFECT THE RIGHT OF ANY PARTY TO THIS AGREEMENT TO SERVE PROCESS IN ANY OTHER MANNER PERMITTED BY LAW.

Section 11.10 WAIVER OF JURY TRIAL. EACH PARTY HERETO HEREBY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN ANY LEGAL PROCEEDING DIRECTLY OR INDIRECTLY ARISING OUT OF OR RELATING TO THIS AGREEMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY (WHETHER BASED ON CONTRACT, TORT OR ANY OTHER THEORY). EACH PARTY HERETO (A) CERTIFIES THAT NO REPRESENTATIVE, AGENT OR ATTORNEY OF ANY OTHER PARTY HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PARTY WOULD NOT, IN THE EVENT OF LITIGATION, SEEK TO ENFORCE THE FOREGOING WAIVER AND (B) ACKNOWLEDGES THAT IT AND THE OTHER PARTIES HERETO HAVE BEEN INDUCED TO ENTER INTO THIS AGREEMENT BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS AND CERTIFICATIONS IN THIS SECTION.

Section 11.11 Headings. Article and Section headings and the Table of Contents used herein are for convenience of reference only, are not part of this Agreement and shall not affect the construction of, or be taken into consideration in interpreting, this Agreement.

Section 11.12 Confidentiality. Each of the Administrative Agent, the Issuing Bank and the Lenders agrees to maintain the confidentiality of the Information (as defined below), except that Information may be disclosed (a) to its and its Affiliates' directors, officers, employees and agents, including accountants, legal counsel and other advisors (it being understood that the Persons to whom such

disclosure is made will be informed of the confidential nature of such Information and instructed to keep such Information confidential), (b) to the extent requested by any regulatory authority having jurisdiction over any Lender or any self-regulatory authority or agency possessing investigative powers and the ability to sanction members for non-compliance, (c) to the extent required by applicable laws or regulations or by any subpoena or similar legal process, (d) to any other party to this Agreement, (e) in connection with the exercise of any remedies hereunder or any suit, action or proceeding relating to this Agreement or the enforcement of rights hereunder, (f) subject to an agreement containing provisions substantially the same as those of this Section, to (i) any assignee of or Participant in, or any prospective assignee of or Participant in, any of its rights or obligations under this Agreement or (ii) any actual or prospective counterparty (or its advisors) to any swap or derivative transaction or other transaction (under which payments are to be made) relating to the Credit Parties and their obligations, (g) with the consent of the Borrower or (h) to the extent such Information (i) becomes publicly available other than as a result of a breach of this Section or (ii) becomes available to the Administrative Agent, the Issuing Bank or any Lender on a nonconfidential basis from a source other than a Credit Party. For the purposes of this Section, "Information" means all information received from any Credit Party relating to any Credit Party or its business, other than any such information that is available to the Administrative Agent, the Issuing Bank or any Lender on a nonconfidential basis prior to disclosure by any Credit Party and other information pertaining to this Agreement routinely provided by arrangers to data service providers, including league table providers, that serve the lending industry; provided that, in the case of information received from any Credit Party after the date hereof, such information is clearly identified at the time of delivery as confidential. Any Person required to maintain the confidentiality of Information as provided in this Section shall be considered to have complied with its obligation to do so if such Person has exercised the same degree of care to maintain the confidentiality of such Information as such Person would accord to its own confidential information.

Section 11.13 Material Non-Public Information.

(a) **EACH LENDER ACKNOWLEDGES THAT INFORMATION AS DEFINED IN SECTION 11.12 FURNISHED TO IT PURSUANT TO THIS AGREEMENT MAY INCLUDE MATERIAL NON-PUBLIC INFORMATION CONCERNING THE BORROWER AND ITS RELATED PARTIES OR THEIR RESPECTIVE SECURITIES, AND CONFIRMS THAT IT HAS DEVELOPED COMPLIANCE PROCEDURES REGARDING THE USE OF MATERIAL NON-PUBLIC INFORMATION AND THAT IT WILL HANDLE SUCH MATERIAL NON-PUBLIC INFORMATION IN ACCORDANCE WITH THOSE PROCEDURES AND APPLICABLE LAW, INCLUDING FEDERAL AND STATE SECURITIES LAWS.**

(b) **ALL INFORMATION, INCLUDING REQUESTS FOR WAIVERS AND AMENDMENTS, FURNISHED BY THE BORROWER OR THE ADMINISTRATIVE AGENT PURSUANT TO, OR IN THE COURSE OF ADMINISTERING, THIS AGREEMENT WILL BE SYNDICATE-LEVEL INFORMATION, WHICH MAY CONTAIN MATERIAL NON-PUBLIC INFORMATION ABOUT THE BORROWER, THE CREDIT PARTIES AND THEIR RELATED PARTIES OR THEIR RESPECTIVE SECURITIES. ACCORDINGLY, EACH LENDER REPRESENTS TO THE BORROWER AND THE ADMINISTRATIVE AGENT THAT IT HAS IDENTIFIED IN ITS ADMINISTRATIVE QUESTIONNAIRE A CREDIT CONTACT WHO MAY RECEIVE INFORMATION THAT MAY CONTAIN MATERIAL NON-PUBLIC INFORMATION IN ACCORDANCE WITH ITS COMPLIANCE PROCEDURES AND APPLICABLE LAW.**

Section 11.14 Release of Collateral and Guarantee Obligations.

(a) The Lenders hereby irrevocably agree that the Liens granted to the Administrative Agent by the Credit Parties on any Collateral shall be automatically released (i) in full, as set forth in clauses (b) or (c) below, (ii) upon the Disposition of such Collateral (including as part of or in connection with any

other Disposition permitted hereunder) to any Person other than another Credit Party, to the extent such Disposition is made in compliance with the terms of this Agreement (and the Administrative Agent may rely conclusively on a certificate to that effect provided to it by any Credit Party upon its reasonable request without further inquiry), (iii) to the extent such Collateral is comprised of property leased to a Credit Party, upon termination or expiration of such lease, (iv) if the release of such Lien is approved, authorized or ratified in writing by the Majority Lenders (or such other percentage of the Lenders whose consent may be required in accordance with Section 11.02), (v) to the extent the property constituting such Collateral is owned by any Guarantor, upon the release of such Guarantor from its obligations under any Guarantee and (vi) as required by the Administrative Agent to effect any Disposition of Collateral in connection with any exercise of remedies of the Administrative Agent pursuant to the Security Documents. Any such release shall not in any manner discharge, affect, or impair the Obligations or any Liens (other than those being released) upon (or obligations (other than those being released) of the Credit Parties in respect of) all interests retained by the Credit Parties, including the proceeds of any Disposition, all of which shall continue to constitute part of the Collateral except to the extent otherwise released in accordance with the provisions of the Loan Documents. Additionally, the Lenders hereby irrevocably agree that the Guarantors shall be released from the Guarantees upon consummation of any transaction permitted hereunder resulting in such Subsidiary ceasing to constitute a Restricted Subsidiary. The Lenders hereby authorize the Administrative Agent to execute and deliver any instruments, documents, and agreements necessary or desirable to evidence and confirm

(b) Notwithstanding anything to the contrary contained herein or any other Loan Document, when all Obligations (other than any (i) Lender Hedging Obligations, (ii) Cash Management Obligations, and (iii) any contingent or indemnification obligations not then due) have been paid in full, all Commitments have terminated or expired and no Letter of Credit shall be outstanding that is not cash collateralized or back-stopped, upon request of the Borrower, the Administrative Agent shall (without notice to, or vote or consent of, any Secured Party) take such actions as shall be required to release its security interest in all Collateral, and to release all obligations under any Loan Document, whether or not on the date of such release there may be any (i) Lender Hedging Obligations, (ii) Cash Management Obligations, and (iii) any contingent or indemnification obligations not then due. Any such release of Obligations shall be deemed subject to the provision that such Obligations shall be reinstated if after such release any portion of any payment in respect of the Obligations guaranteed thereby shall be rescinded or must otherwise be restored or returned upon the insolvency, bankruptcy, dissolution, liquidation or reorganization of the Borrower or any Guarantor, or upon or as a result of the appointment of a receiver, intervenor or conservator of, or trustee or similar officer for, the Borrower or any Guarantor or any substantial part of its property, or otherwise, all as though such payment had not been made.

(c) Notwithstanding anything to the contrary contained herein or any other Loan Document, upon the Borrower's election to enter into an Investment Grade Period pursuant to Section 11.15 and delivery of the written notice contemplated therein, the Administrative Agent shall (without notice to, or vote or consent of, any Secured Party) take such actions as shall be required to release its security interest in all Collateral, and to release all obligations under any Security Document.

Section 11.15 Investment Grade Election.

(a) At any time that is not an Investment Grade Period, on any date on which the Borrower has either (i) an unsecured rating from Moody's of Baa3 or better or (ii) an unsecured rating from S&P of BBB- or better, the Borrower may provide written notice to the Administrative Agent of its election to enter into an Investment Grade Period, together with a certificate of an authorized officer of the Borrower confirming that (A) no Event of Default exists, (B) the release of the applicable Security Documents securing the Obligations does not violate the terms of any Secured Hedge Agreement or Secured Cash Management Agreement, and (C) no Hedging Contracts (including the Secured Hedge Agreements) or

agreements for Cash Management Obligations (including any Secured Cash Management Agreements) of the Borrower and its Restricted Subsidiaries are otherwise secured (except to the extent secured by a Permitted Lien), which Investment Grade Period will commence upon the Administrative Agent's receipt of such notice.

(b) At any time during an Investment Grade Period, the Borrower may provide notice to the Administrative Agent of its election to exit such Investment Grade Period, which Investment Grade Period will end upon the Administrative Agent's receipt of such notice.

Section 11.16 Interest Rate Limitation. Notwithstanding anything herein to the contrary, if at any time the interest rate applicable to any Loan, together with all fees, charges and other amounts which are treated as interest on such Loan under applicable law (collectively the "Charges"), shall exceed the maximum lawful rate (the "Maximum Rate") which may be contracted for, charged, taken, received or reserved by the Lender holding such Loan in accordance with applicable law, the rate of interest payable in respect of such Loan hereunder, together with all Charges payable in respect thereof, shall be limited to the Maximum Rate and, to the extent lawful, the interest and Charges that would have been payable in respect of such Loan but were not payable as a result of the operation of this Section shall be cumulated and the interest and Charges payable to such Lender in respect of other Loans or periods shall be increased (but not above the Maximum Rate therefor) until such cumulated amount, together with interest thereon at the Federal Funds Effective Rate to the date of repayment, shall have been received by such Lender.

Section 11.17 USA PATRIOT Act. Each Lender that is subject to the requirements of the USA PATRIOT Act of 2001 (the "Patriot Act") hereby notifies the Borrower that pursuant to the requirements of the Patriot Act, it is required to obtain, verify and record information that identifies the Borrower, which information includes the name and address of the Borrower and other information that will allow such Lender to identify the Borrower in accordance with the Patriot Act.

Section 11.18 Existing Credit Agreement. Upon the Effective Date: (i) all loans, letters of credit, and other Indebtedness, obligations and liabilities outstanding under the Existing Credit Agreement on such date shall continue to constitute Loans, Letters of Credit and other Indebtedness, obligations and liabilities under this Agreement, (ii) the execution and delivery of this Agreement or any of the Loan Documents hereunder shall not constitute a novation, refinancing or any other fundamental change in the relationship among the parties and (iii) the Loans, Letters of Credit, and other Indebtedness, obligations and liabilities outstanding hereunder, to the extent outstanding under the Existing Credit Agreement immediately prior to the date hereof, shall constitute the same loans, letters of credit, and other Indebtedness, obligations and liabilities as were outstanding under the Existing Credit Agreement. Notwithstanding the foregoing, each of the Credit Parties hereby acknowledges that any Indebtedness, obligations and liabilities which by the terms of the Existing Credit Agreement expressly survive the termination, cancellation or replacement of the Existing Credit Agreement constitute Indebtedness, obligations and liabilities of the Credit Parties under this Agreement.

Section 11.19 Reaffirmation and Grant of Security Interest. Each Credit Party hereby (i) confirms that each Security Document (as defined in the Existing Credit Agreement) to which it is a party or is otherwise bound and all assets, property and interests encumbered thereby will continue to guarantee or secure, as the case may be, to the fullest extent possible in accordance with the Loan Documents, the payment and performance of all Obligations and Guaranteed Liabilities under this Agreement and the Secured Obligations and Secured Indebtedness under the Security Documents, and (ii) grants to the Administrative Agent for the benefit of the Secured Parties a continuing Lien on and security interest in and to such Credit Party's right, title and interest in, to and under all Collateral as collateral security for the prompt payment and performance in full when due of the Obligations and Guaranteed Liabilities under this

Agreement and the Secured Obligations and Secured Indebtedness under the Security Documents (whether at stated maturity, by acceleration or otherwise) in accordance with the terms thereof.

Section 11.20 Reallocation of Commitments and Loans. The Lenders (including the Departing Lenders) party to the Existing Credit Agreement have agreed among themselves to reallocate their respective Commitments (as defined in the Existing Credit Agreement) as contemplated by this Agreement. On the Effective Date and after giving effect to such reallocation and adjustment of the Aggregate Commitment, the Commitment and Applicable Percentage of each Lender shall be as set forth on Schedule 1.01 and each Lender shall own its Applicable Percentage of the outstanding Loans. The reallocation and adjustment to the Commitments of each Lender as contemplated by this Section 11.18 shall be deemed to have been consummated pursuant to the terms of the Assignment and Assumption attached as Exhibit A hereto as if each of the Lenders had executed an Assignment and Assumption with respect to such reallocation and adjustment. Borrower and the Administrative Agent hereby consent to such reallocation and adjustment of the Commitments. The Administrative Agent hereby waives the $3,500 processing and recordation fee set forth in Section 11.04(b)(ii)(C) with respect to the assignments and reallocations of the Commitments contemplated by this Section 11.18. To the extent requested by any Lender, and in accordance with Section 2.16, the Borrower shall pay to such Lender, within the time period prescribed by Section 2.16, any amounts required to be paid by the Borrower under Section 2.16 in the event the payment of any principal of any Term Benchmark Loan or the conversion of any Term Benchmark Loan other than on the last day of an Interest Period applicable thereto is required in connection with the reallocation contemplated by this Section 11.20.

Section 11.21 Flood Insurance Regulation. Notwithstanding any provision in any Mortgage to the contrary, in no event is any Building (as defined in the applicable Flood Insurance Regulation) or Manufactured (Mobile) Home (as defined in the applicable Flood Insurance Regulation) included in the definition of "Mortgaged Properties" and no such Building or Manufactured (Mobile) Home shall be encumbered by any Mortgage. As used herein, "Flood Insurance Regulations" shall mean (i) the National Flood Insurance Act of 1968 as now or hereafter in effect or any successor statute thereto, (ii) the Flood Disaster Protection Act of 1973 as now or hereafter in effect or any successor statue thereto, (iii) the National Flood Insurance Reform Act of 1994 (amending 42 USC 4001, et seq.), as the same may be amended or recodified from time to time, and (iv) the Flood Insurance Reform Act of 2004 and any regulations promulgated thereunder.

Section 11.22 Acknowledgement and Consent to Bail-In of Affected Financial Institutions. Notwithstanding anything to the contrary in any Loan Document or in any other agreement, arrangement or understanding among any such parties, each party hereto acknowledges that any liability of any Affected Financial Institution arising under any Loan Document may be subject to the write-down and conversion powers of the applicable Resolution Authority and agrees and consents to, and acknowledges and agrees to be bound by:

(a) the application of any Write-Down and Conversion Powers by the applicable Resolution Authority to any such liabilities arising hereunder which may be payable to it by any party hereto that is an Affected Financial Institution; and

(b) the effects of any Bail-In Action on any such liability, including, if applicable:

(i) a reduction in full or in part or cancellation of any such liability;

(ii) a conversion of all, or a portion of, such liability into shares or other instruments of ownership in such Affected Financial Institution, its parent entity, or a bridge institution that may be issued to it or otherwise conferred on it, and that such shares

or other instruments of ownership will be accepted by it in lieu of any rights with respect to any such liability under this Agreement or any other Loan Document; or

(iii) the variation of the terms of such liability in connection with the exercise of the Write-Down and Conversion Powers of the applicable Resolution Authority.

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.

[*Signature pages follow*]

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed by their respective authorized officers as of the day and year first above written.

BORROWER:

ANTERO RESOURCES CORPORATION

By: /s/ Michael N. Kennedy
Name: Michael N. Kennedy
Title: Chief Financial Officer and Senior Vice President – Finance

GUARANTOR:

ANTERO SUBSIDIARY HOLDINGS LLC
MONROE PIPELINE LLC
ANTERO MINERALS LLC
MU MARKETING LLC

By: /s/ Michael N. Kennedy
Name: Michael N. Kennedy
Title: Chief Financial Officer and Senior Vice President – Finance

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

By: /s/ Dalton Harris
Name: Dalton Harris
Title: Authorized Officer

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

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

BANK OF AMERICA, N.A.,
as a Lender

By: /s/ Kimberly Miller
Name: Kimberly Miller
Title: Director

BARCLAYS BANK PLC

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

CAPITAL ONE, NATIONAL ASSOCIATION,
as a Lender

By: /s/ Christopher Kuna
Name: Christopher Kuna
Title: Senior Director

CITIBANK, N.A.,
as a Lender

By: /s/ Cliff Vaz
Name: Cliff Vaz
Title: Vice President

CANADIAN IMPERIAL BANK OF COMMERCE, NEW YORK BRANCH,
as a Lender

By: /s/ Trudy Nelson
Name: Trudy Nelson
Title: Authorized Signatory

By: /s/ Scott W. Danvers
Name: Scott W. Danvers
Title: Authorized Signatory

CREDIT SUISSE AG, CAYMAN ISLANDS BRANCH,
as a Lender

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

By: /s/ Daniel Kogan
Name: Daniel Kogan
Title: Authorized Signatory

DNB CAPITAL LLC,
as a Lender

By: /s/ Kevin Utsey
Name: Kevin Utsey
Title: Senior Vice President

By: /s/ Scott Joyce
Name: Scott Joyce
Title: Senior Vice President

SUMITOMO MITSUI BANKING CORPORATION,
as a Lender

By: /s/ Jeffrey Cobb
Name: Jeffrey Cobb
Title: Director

TRUIST BANK, formerly known as BRANCH BANKING AND TRUST COMPANY and successor by merger to SUNTRUST BANK,
as a Lender

By: /s/ James Giordano
Name: James Giordano
Title: Managing Director

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/ Michael King
Name: Michael King
Title: Authorized Signatory

ROYAL BANK OF CANADA,
as a Lender

By: /s/ Kristan Spivey
Name: Kristan Spivey
Title: Authorized Signatory

MIZUHO BANK, LTD.,
as a Lender

By: /s/ Edward Sacks
Name: Edward Sacks
Title: Authorized Signatory

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, President 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 September 30, 2021 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: October 27, 2021

/s/ Paul M. Rady
Paul M. Rady
President and 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, Michael N. Kennedy, 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 September 30, 2021 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: October 27, 2021

/s/ Michael N. Kennedy
Michael N. Kennedy
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 September 30, 2021, I, Paul M. Rady, President and 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 September 30, 2021 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 September 30, 2021 fairly presents, in all material respects, the financial condition and results of operations of Antero Resources Corporation for the periods presented therein.

Date: October 27, 2021

/s/ Paul M. Rady
Paul M. Rady
President and 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 September 30, 2021, I, Michael N. Kennedy, 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 September 30, 2021 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 September 30, 2021 fairly presents, in all material respects, the financial condition and results of operations of Antero Resources Corporation for the periods presented therein.

Date: October 27, 2021

/s/ Michael N. Kennedy
Michael N. Kennedy
Chief Financial Officer