

---

---

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**  
Washington, D.C. 20549

---

**FORM 8-K**

---

**CURRENT REPORT**

**Pursuant to Section 13 OR 15(d) of the Securities Exchange Act of 1934**

Date of Report (Date of earliest event reported): **December 21, 2016**

---

**ANTERO RESOURCES CORPORATION**

(Exact name of registrant as specified in its charter)

---

**Delaware**  
(State or other jurisdiction  
of incorporation)

**001-36120**  
(Commission File Number)

**80-0162034**  
(IRS Employer  
Identification No.)

**1615 Wynkoop Street**  
**Denver, Colorado 80202**  
(Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code: **(303) 357-7310**

---

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
  - Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
  - Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
  - Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))
- 
- 

**Item 1.01 Entry into a Material Definitive Agreement.**

***Indenture***

On December 21, 2016, Antero Resources Corporation (the "**Company**") completed the issuance and sale (the "**Offering**") of \$600,000,000 aggregate principal amount of its 5.0% Senior Notes due 2025 (the "**Notes**") to J.P. Morgan Securities LLC and the other initial purchasers (the "**Initial Purchasers**"). The Notes were issued pursuant to an indenture, dated as of December 21, 2016 (the "**Indenture**"), by and among the Company, the subsidiary guarantors named therein (the "**Guarantors**") and Wells Fargo Bank, National Association, as trustee (the "**Trustee**").

The Notes rank (i) senior in right of payment to all of the Company's future subordinated indebtedness, (ii) equal in right of payment with all of the Company's other existing and future senior indebtedness and (iii) effectively junior to any existing and future secured indebtedness of the Company, to the extent of the value of the collateral securing such indebtedness. The Guarantees (as defined in the Indenture) rank (i) senior in right of payment to all of the Guarantors' future subordinated indebtedness, (ii) equal in right of payment with all of the Guarantors' other existing and future senior indebtedness, (iii) effectively junior to any existing and future secured indebtedness of the Guarantors, to the extent of the collateral securing such indebtedness, and (iv) effectively junior to all future indebtedness of any non-guarantor subsidiary of the Guarantors.

Interest on the Notes accrues from December 21, 2016 at a rate of 5.0% per year. Interest on the Notes is payable semi-annually in arrears on March 1 and September 1 of each year, commencing on March 1, 2017.

The Indenture contains covenants that, among other things, limit the Company's ability and the ability of certain of its subsidiaries to:

- incur or guarantee additional indebtedness or issue certain preferred stock;
- pay dividends, repurchase equity securities, redeem subordinated debt or make investments or other restricted payments;
- transfer or sell assets;
- create or incur liens;
- change the Company's line of business;
- enter into certain transactions with affiliates; and
- merge, consolidate or transfer substantially all of the Company's assets.

These and other covenants that are contained in the Indenture are subject to important exceptions and qualifications.

On or after March 1, 2020, the Company may redeem all or part of the Notes at the following redemption prices, plus accrued and unpaid interest on the Notes, if any, to the applicable redemption date:

<b>Year</b>	<b>Percentage</b>
2020	103.750%
2021	102.500%
2022	101.250%
2023 and thereafter	100.000%

In addition, on or prior to March 1, 2020, the Company may, from time to time, redeem up to 35% of the aggregate principal amount of the Notes with the net cash proceeds of certain equity offerings at a redemption price of 105.0% of the principal amount of the Notes, plus any accrued and unpaid interest to the date of such redemption.

At any time prior to March 1, 2020, the Company may redeem the Notes, in whole or in part, at a redemption equal to 100% of the principal amount of the Notes, plus the Applicable Premium (as defined in the Indenture), together with any accrued and unpaid interest to the date of such redemption.

Upon the occurrence of a Change of Control (as defined in the Indenture), the holders of the Notes will have the right to require the Company to repurchase all or a portion of the Notes at a price equal to 101% of the principal amount of the Notes, plus any accrued and unpaid interest to the date of purchase.

A copy of the Indenture is filed as Exhibit 4.1 hereto and is incorporated herein by reference. The description of the Indenture and the Notes contained herein is qualified in entirety by the full text of such instruments.

#### ***Registration Rights Agreement***

Also on December 21, 2016, in connection with the closing of the Offering, the Company and each of the Guarantors (collectively, the "Issuers") entered into a Registration Rights Agreement (the "**Registration Rights Agreement**") with J.P. Morgan Securities LLC, as representative of the Initial Purchasers, pursuant to which the Issuers agreed (a) (i) to file with the Securities and Exchange Commission a registration statement (the "**Exchange Offer Registration Statement**") on an appropriate form under the Securities Act, with respect to a registered offer to exchange any and all of the Notes (including the guarantees with respect thereto) for a like aggregate principal amount of registered notes that are identical in all material respects to the Notes (except that the exchange notes will not contain restrictive legends, transfer restrictions or provide for any increase in annual interest rate for failure to comply with this should holders of the Notes suffer damage if the Issuers fail to fulfill their obligations under the Registration Rights Agreement) and/or (ii) under certain circumstances set forth in the Registration Rights Agreement, a shelf registration statement pursuant to Rule 415 under the Securities Act relating to the resale by certain holders of the Notes and the Guarantees thereof, (b) to use their reasonable best efforts to cause the (i) Exchange Offer Registration Statement to become and remain effective under the Securities Act until 180 days following the Exchange Date (as defined in the Registration Rights Agreement) or (ii) if applicable, the shelf registration statement to become and remain effective under the Securities Act until one year following effectiveness, and (c) to use their reasonable best efforts to commence the exchange offer not later than 60 days after the date on which the Exchange Offer Registration Statement is declared effective. If the Issuers fail to comply with certain obligations under the Registration Rights Agreement, including if the exchange offer is not completed or if the shelf registration statement is not declared effective by December 21, 2017, they will be required to pay additional interest of 1% to the holders of the Notes in accordance with the provisions of the Registration Rights Agreement.

A copy of the Registration Rights Agreement is filed as Exhibit 4.3 hereto and is incorporated herein by reference. The description of

the Registration Rights Agreement contained herein is qualified in its entirety by the full text of such exhibit.

### **Relationships**

Certain Initial Purchasers or their respective affiliates (collectively, the “**Banks**”), perform and have performed commercial and investment banking and advisory services for the Company from time to time for which they receive and have received customary fees and expenses. In particular, affiliates of certain of the Initial Purchasers are lenders under the Company’s Fourth Amended and Restated Credit Agreement with the lenders party thereto and JPMorgan Chase Bank, N.A., as administrative agent (the “**Company Credit Agreement**”) and therefore may receive their pro rata share of any proceeds from the sale of the Notes that are used to repay borrowings under the Company Credit Agreement. The Banks may, from time to time, engage in transactions with and perform services for the Company in the ordinary course of their business, for which they will receive fees and expenses.

### **Item 2.03 Creation of Direct Financial Obligation or an Obligation Under an Off-Balance Sheet Arrangement of Registrant.**

The information included under the heading “Indenture” in Item 1.01 of this Current Report on Form 8-K is incorporated by reference into this Item 2.03 of this Current Report on Form 8-K.

3

---

### **Item 9.01 Financial Statements and Exhibits.**

(d) Exhibits.

<b>EXHIBIT</b>	<b>DESCRIPTION</b>
4.1	Indenture, dated as of December 21, 2016, by and among Antero Resources Corporation, the subsidiary guarantors named therein and Wells Fargo Bank, National Association, as trustee.
4.2	Form of 5.0% Senior Note due 2025 (included in Exhibit 4.1).
4.3	Registration Rights Agreement, dated as of December 21, 2016, by and among Antero Resources Corporation, the subsidiary guarantors named therein and J.P. Morgan Securities LLC as representative of the initial purchasers named therein.

4

---

### **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 hereunto duly authorized.

#### **ANTERO RESOURCES CORPORATION**

By: /s/ Glen C. Warren, Jr.  
Glen C. Warren, Jr.  
President and Chief Financial Officer

Dated: December 29, 2016

5

---

### **EXHIBIT INDEX**

<b>EXHIBIT</b>	<b>DESCRIPTION</b>
4.1	Indenture, dated as of December 21, 2016, by and among Antero Resources Corporation, the subsidiary guarantors named therein and Wells Fargo Bank, National Association, as trustee.
4.2	Form of 5.0% Senior Note due 2025 (included in Exhibit 4.1).
4.3	Registration Rights Agreement, dated as of December 21, 2016 by and among Antero Resources Corporation, the subsidiary guarantors named therein and J.P. Morgan Securities LLC as representative of the initial purchasers named therein.

6

---

ANTERO RESOURCES CORPORATION,  
 THE SUBSIDIARY GUARANTORS PARTY HERETO  
 AND  
 WELLS FARGO BANK, NATIONAL ASSOCIATION,  
 AS TRUSTEE

INDENTURE

Dated as of December 21, 2016

5.0% Senior Notes due 2025

**Table of Contents**

	<u>Page</u>
ARTICLE I DEFINITIONS AND INCORPORATION BY REFERENCE	1
SECTION 1.1.    Definitions	1
SECTION 1.2.    Other Definitions	39
SECTION 1.3.    Incorporation by Reference of Trust Indenture Act	41
SECTION 1.4.    Rules of Construction	41
ARTICLE II THE SECURITIES	42
SECTION 2.1.    Form, Dating and Terms	42
SECTION 2.2.    Execution and Authentication	50
SECTION 2.3.    Registrar and Paying Agent	51
SECTION 2.4.    Paying Agent to Hold Money in Trust	52
SECTION 2.5.    Securityholder Lists	52
SECTION 2.6.    Transfer and Exchange	53
SECTION 2.7.    [Reserved]	56
SECTION 2.8.    Form of Certificate to be Delivered in Connection with Transfers to Institutional Accredited Investors	56
SECTION 2.9.    Form of Certificate to be Delivered in Connection with Transfers Pursuant to Regulation S	58
SECTION 2.10.   Mutilated, Destroyed, Lost or Stolen Securities	59
SECTION 2.11.   Outstanding Securities	60
SECTION 2.12.   Temporary Securities	61
SECTION 2.13.   Cancellation	61
SECTION 2.14.   Payment of Interest; Defaulted Interest	61
SECTION 2.15.   Computation of Interest	63
SECTION 2.16.   CUSIP, Common Code and ISIN Numbers	63
SECTION 2.17.   Trustee, Paying Agent, Registrar Not Responsible for Depository	63
ARTICLE III COVENANTS	63
SECTION 3.1.    Payment of Securities	63
SECTION 3.2.    Limitation on Indebtedness and Preferred Stock	64
SECTION 3.3.    Limitation on Restricted Payments	67
SECTION 3.4.    Limitation on Restrictions on Distributions from Restricted Subsidiaries	73
SECTION 3.5.    Limitation on Sales of Assets and Subsidiary Stock	76
SECTION 3.6.    Limitation on Liens	80
SECTION 3.7.    [Reserved]	80
SECTION 3.8.    Limitation on Affiliate Transactions	80
SECTION 3.9.    Purchase of Securities Upon a Change of Control	82
SECTION 3.10.   Provision of Financial Information	85

	<u>Page</u>
SECTION 3.12. Maintenance of Office or Agency	86
SECTION 3.13. Corporate Existence	86
SECTION 3.14. Payment of Taxes	86
SECTION 3.15. Compliance Certificate	87
SECTION 3.16. Further Instruments and Acts	87
SECTION 3.17. Statement by Officers as to Default	87
SECTION 3.18. Covenant Termination	87
 ARTICLE IV SUCCESSOR COMPANY	 88
SECTION 4.1. Merger and Consolidation	88
 ARTICLE V REDEMPTION OF SECURITIES	 89
SECTION 5.1. Redemption	89
SECTION 5.2. Applicability of Article	90
SECTION 5.3. Election to Redeem; Notice to Trustee	90
SECTION 5.4. Selection by Trustee of Securities to Be Redeemed	90
SECTION 5.5. Notice of Redemption	90
SECTION 5.6. Deposit of Redemption Price	92
SECTION 5.7. Securities Payable on Redemption Date	92
SECTION 5.8. Securities Redeemed in Part	92
 ARTICLE VI DEFAULTS AND REMEDIES	 93
SECTION 6.1. Events of Default	93
SECTION 6.2. Acceleration	95
SECTION 6.3. Other Remedies	96
SECTION 6.4. Waiver of Past Defaults	96
SECTION 6.5. Control by Majority	96
SECTION 6.6. Limitation on Suits	97
SECTION 6.7. Rights of Holders to Receive Payment	97
SECTION 6.8. Collection Suit by Trustee	97
SECTION 6.9. Trustee May File Proofs of Claim	97
SECTION 6.10. Priorities	98
SECTION 6.11. Undertaking for Costs	98
 ARTICLE VII TRUSTEE	 98
SECTION 7.1. Duties of Trustee	98
SECTION 7.2. Rights of Trustee	100
SECTION 7.3. Individual Rights of Trustee	101
SECTION 7.4. Trustee's Disclaimer	101
SECTION 7.5. Notice of Defaults	102
SECTION 7.6. Reports by Trustee to Holders	102
SECTION 7.7. Compensation and Indemnity	102
SECTION 7.8. Replacement of Trustee	103
SECTION 7.9. Successor Trustee by Merger	104

	<u>Page</u>
SECTION 7.10. Eligibility; Disqualification	104
SECTION 7.11. Preferential Collection of Claims Against the Issuer	104
SECTION 7.12. Trustee's Application for Instruction from the Issuer	104
 ARTICLE VIII DISCHARGE OF INDENTURE; DEFEASANCE	 105
SECTION 8.1. Discharge of Liability on Securities; Defeasance	105
SECTION 8.2. Conditions to Defeasance	107

SECTION 8.3.	Application of Trust Money	108
SECTION 8.4.	Repayment to the Issuer	108
SECTION 8.5.	Indemnity for U.S. Government Obligations	108
SECTION 8.6.	Reinstatement	108
ARTICLE IX AMENDMENTS		109
SECTION 9.1.	Without Consent of Holders	109
SECTION 9.2.	With Consent of Holders	110
SECTION 9.3.	Compliance with Trust Indenture Act	111
SECTION 9.4.	Revocation and Effect of Consents and Waivers	111
SECTION 9.5.	Notation on or Exchange of Securities	111
SECTION 9.6.	Trustee to Sign Amendments	112
ARTICLE X GUARANTEE		112
SECTION 10.1.	Guarantee	112
SECTION 10.2.	Limitation on Liability; Termination, Release and Discharge	114
SECTION 10.3.	Right of Contribution	114
SECTION 10.4.	No Subrogation	115
ARTICLE XI [RESERVED]		115
ARTICLE XII MISCELLANEOUS		115
SECTION 12.1.	Trust Indenture Act Controls	115
SECTION 12.2.	Notices	115
SECTION 12.3.	Communication by Holders with other Holders	117
SECTION 12.4.	Certificate and Opinion as to Conditions Precedent	117
SECTION 12.5.	Statements Required in Certificate or Opinion	117
SECTION 12.6.	When Securities Disregarded	118
SECTION 12.7.	Rules by Trustee, Paying Agent and Registrar	118
SECTION 12.8.	Legal Holidays	118
SECTION 12.9.	GOVERNING LAW	118
SECTION 12.10.	No Personal Liability of Directors, Officers, Employees and Stockholders	118
SECTION 12.11.	Successors	118
SECTION 12.12.	Multiple Originals	118
SECTION 12.13.	Qualification of Indenture	118
SECTION 12.14.	Force Majeure	118

iii

	<u>Page</u>	
SECTION 12.15.	Table of Contents; Headings	119
SECTION 12.16.	WAIVER OF JURY TRIAL	119

iv

EXHIBIT A	Form of the Series A Note
EXHIBIT B	Form of the Series B Note
EXHIBIT C	Form of Indenture Supplement to Add Subsidiary Guarantors

v

#### CROSS-REFERENCE TABLE

TIA Section	Indenture Section
310(a)(1)	7.10
(a)(2)	7.10
(a)(3)	N.A.
(a)(4)	N.A.
(a)(5)	7.10
(b)	7.8; 7.10

311(a)	7.11
(b)	7.11
312(a)	2.5
(b)	12.3
(c)	12.3
313(a)	7.6
(b)(1)	7.6
(b)(2)	7.6
(c)	7.6
(d)	7.6
314(a)	3.11; 3.15; 12.5
(b)	N.A.
(c)(1)	12.4
(c)(2)	12.4
(c)(3)	N.A.
(d)	N.A.
(e)	12.5
315(a)	7.1
(b)	7.5; 12.2
(c)	7.1
(d)	7.1
(e)	6.11
316(a)(last sentence)	12.6
(a)(1)(A)	6.5
(a)(1)(B)	6.4
(a)(2)	N.A.
(b)	6.7
(c)	2.14
317(a)(1)	6.8
(a)(2)	6.9
(b)	2.4
318(a)	12.1

Note: This Cross-Reference Table shall not, for any purpose, be deemed to be part of this Indenture.

This INDENTURE dated as of December 21, 2016, is among ANTERO RESOURCES CORPORATION, a Delaware corporation (the “Issuer”), the Subsidiary Guarantors (as defined herein) party hereto and WELLS FARGO BANK, NATIONAL ASSOCIATION (the “Trustee”), a national banking association, as trustee.

Each party agrees as follows for the benefit of the other parties and for the equal and ratable benefit of the Holders of (i) the Issuer’s 5.0% Senior Notes, Series A, due 2025, issued on the date hereof and the guarantees thereof by the Subsidiary Guarantors (the “Initial Securities”), (ii) if and when issued, an unlimited principal amount of additional 5.0% Senior Notes, Series A, due 2025 in a non-registered offering or 5.0% Senior Notes, Series B, due 2025 in a registered offering of the Issuer, and the guarantees thereof by the Subsidiary Guarantors that may be offered from time to time subsequent to the Issue Date, in each case subject to Section 2.1 (the “Additional Securities”) as provided in Section 2.1(a) and (iii) if and when issued, the Issuer’s 5.0% Senior Notes, Series B, due 2025 and the guarantees thereof by the Subsidiary Guarantors that may be issued from time to time in exchange for Initial Securities or any Additional Securities in an offer registered under the Securities Act as provided in a Registration Rights Agreement, as hereinafter defined (the “Exchange Securities,” and together with the Initial Securities and Additional Securities, the “Securities”):

## ARTICLE I

### DEFINITIONS AND INCORPORATION BY REFERENCE

#### SECTION 1.1. Definitions.

“Acquired Indebtedness” means Indebtedness (i) of a Person or any of its Subsidiaries existing at the time such Person becomes or is merged with and into a Restricted Subsidiary or (ii) assumed in connection with the acquisition of assets from such Person, in each case whether or not Incurred by such Person in connection with, or in anticipation or contemplation of, such Person becoming a Restricted Subsidiary or such acquisition. Acquired Indebtedness shall be deemed to have been Incurred, with respect to clause (i) of the preceding sentence, on the date such Person becomes or is merged with and into a Restricted Subsidiary and, with respect to clause (ii) of the preceding sentence, on the date of consummation of such acquisition of assets.

“Additional Assets” means:

- (1) any properties or assets to be used by the Issuer or a Restricted Subsidiary in the Oil and Gas Business;
- (2) capital expenditures by the Issuer or a Restricted Subsidiary in the Oil and Gas Business;

(3) the Capital Stock of a Person that becomes a Restricted Subsidiary as a result of the acquisition of such Capital Stock by the Issuer or a Restricted Subsidiary; or

(4) Capital Stock constituting a Minority Interest in any Person that at such time is a Restricted Subsidiary;

---

*provided, however*, that, in the case of clauses (3) and (4), such Restricted Subsidiary is primarily engaged in the Oil and Gas Business.

“Additional Interest” means the interest payable as a consequence of the failure to effectuate in a timely manner the exchange offer and/or shelf registration procedures set forth in the applicable Registration Rights Agreement.

“Additional Securities” has the meaning ascribed to it in the second introductory paragraph of this Indenture.

“Adjusted Consolidated Net Tangible Assets” of the Issuer means (without duplication), as of the date of determination, the remainder of:

(a) the sum of:

(i) discounted future net revenues from proved oil and gas reserves of the Issuer and its Restricted Subsidiaries calculated in accordance with SEC guidelines (but giving effect to applicable Commodity Agreements in place as of the date of determination (whether positive or negative)) before any state or federal income taxes, as estimated by the Issuer in a reserve report prepared as of the end of the Issuer’s most recently completed fiscal year for which audited financial statements are available, as increased by, as of the date of determination, the estimated discounted future net revenues from

(A) estimated proved oil and gas reserves acquired since such year end, which reserves were not reflected in such year-end reserve report, and

(B) estimated oil and gas reserves attributable to extensions, discoveries and other additions and upward revisions of estimates of proved oil and gas reserves since such year end due to exploration, development or exploitation, production or other activities, which would, in accordance with standard industry practice, cause such revisions (including the impact to proved reserves and future net revenues from estimated development costs incurred and the accretion of discount since such year end),

and decreased by, as of the date of determination, the estimated discounted future net revenues from

(C) estimated proved oil and gas reserves produced or disposed of since such year end to the extent such estimated discounted future net revenues were included in such year end reserve report or such estimated reserves under clauses (A) or (B) above, and

(D) estimated oil and gas reserves attributable to downward revisions of estimates of proved oil and gas reserves since such year end due to changes in geological conditions or other factors which would, in accordance with standard industry practice, cause such revisions,

in the case of clauses (A), (B) and (D) calculated on a pre-tax basis substantially in accordance with SEC guidelines utilizing prices and costs calculated in accordance with

SEC guidelines (but giving effect to applicable Commodity Agreements in place as of the date of determination (whether positive or negative)) as if the end of the most recent fiscal quarter preceding the date of determination for which such information is available to the Issuer were year end; *provided, however*, that in the case of each of the determinations made pursuant to clauses (A) through (D), such increases and decreases shall be as estimated by the Issuer’s petroleum engineers;

(ii) the capitalized costs that are attributable to oil and gas properties of the Issuer and its Restricted Subsidiaries to which no proved oil and gas reserves are attributable, based on the Issuer’s books and records as of a date no earlier than the date of the Issuer’s latest available annual or quarterly financial statements;

(iii) the Net Working Capital of the Issuer and its Restricted Subsidiaries on a date no earlier than the date of the Issuer’s latest annual or quarterly financial statements; and

(iv) the greater of

(A) the net book value of other tangible assets of the Issuer and its Restricted Subsidiaries, as of a date no earlier than the date of the Issuer’s latest annual or quarterly financial statements, and

(B) the appraised value, as estimated by independent appraisers, of other tangible assets of the Issuer and its Restricted Subsidiaries, as of a date no earlier than the date of the Issuer’s latest audited financial statements; *provided*, that, if no such appraisal has been performed, the Issuer shall not be required to obtain such an appraisal and only clause (iv)(A) of this



definition shall apply;

minus

(b) the sum of:

(i) Minority Interests;

(ii) any net gas balancing liabilities of the Issuer and its Restricted Subsidiaries reflected in the Issuer's latest annual or quarterly balance sheet (to the extent not deducted in calculating Net Working Capital of the Issuer in accordance with clause (a)(iii) above of this definition);

(iii) to the extent included in (a)(i) above, the discounted future net revenues, calculated in accordance with SEC guidelines (but utilizing prices and costs calculated in accordance with SEC guidelines as if the end of the most recent fiscal quarter preceding the date of determination for which such information is available to the Issuer were year end), attributable to reserves which are required to be delivered to third parties to fully satisfy the obligations of the Issuer and its Restricted Subsidiaries with respect to Volumetric Production Payments (determined, if applicable, using the schedules specified with respect thereto); and

3

---

(iv) the discounted future net revenues, calculated in accordance with SEC guidelines, attributable to reserves subject to Dollar-Denominated Production Payments which, based on the estimates of production and price assumptions included in determining the discounted future net revenues specified in (a)(i) above, would be necessary to fully satisfy the payment obligations of the Issuer and its Subsidiaries with respect to Dollar-Denominated Production Payments (determined, if applicable, using the schedules specified with respect thereto).

If the Issuer changes its method of accounting from the successful efforts method of accounting to the full cost or a similar method, Adjusted Consolidated Net Tangible Assets will continue to be calculated as if the Issuer were still using the successful efforts method of accounting.

"Affiliate" of any specified Person means any other Person, directly or indirectly, controlling or controlled by or under direct or indirect common control with such specified Person. For the purposes of this definition, "control" when used with respect to any Person means the power to direct the management and policies of such Person, directly or indirectly, whether through the ownership of voting securities, by contract or otherwise; and the terms "controlling" and "controlled" have meanings correlative to the foregoing

"Asset Disposition" means any direct or indirect sale, lease (including by means of Production Payments and Reserve Sales and a Sale/Leaseback Transaction but excluding an operating lease entered into in the ordinary course of the Oil and Gas Business), transfer, issuance or other disposition, or a series of related sales, leases, transfers, issuances or dispositions that are part of a common plan, of (A) any Capital Stock of a Restricted Subsidiary (other than Preferred Stock of Restricted Subsidiaries issued in compliance with Section 3.2 and directors' qualifying shares or shares required by applicable law to be held by a Person other than the Issuer or a Restricted Subsidiary), (B) all or substantially all the assets of any division or line of business of the Issuer or any Restricted Subsidiary (excluding any division or line of business the assets of which are owned by an Unrestricted Subsidiary) or (C) any other assets of the Issuer or any Restricted Subsidiary outside of the ordinary course of business of the Issuer or such Restricted Subsidiary (each referred to for the purposes of this definition as a "disposition"), in each case by the Issuer or any of its Restricted Subsidiaries, including any disposition by means of a merger, consolidation or similar transaction.

Notwithstanding the preceding, the following items shall not be deemed to be Asset Dispositions:

- (1) a disposition by a Restricted Subsidiary to the Issuer or by the Issuer or a Restricted Subsidiary to a Restricted Subsidiary;
- (2) a disposition of cash, Cash Equivalents or other financial assets in the ordinary course of business;
- (3) a disposition of Hydrocarbons or mineral products inventory in the ordinary course of business;

4

---

(4) a disposition of damaged, unserviceable, obsolete or worn out equipment or equipment that is no longer necessary for the proper conduct of the business of the Issuer and its Restricted Subsidiaries and that is disposed of in each case in the ordinary course of business;

(5) transactions in accordance with Section 4.1;

(6) an issuance of Capital Stock by a Restricted Subsidiary to the Issuer or to a Restricted Subsidiary;

(7) the making of a Permitted Investment or a Restricted Payment (or a disposition that would constitute a Restricted Payment but for the exclusions from the definition thereof) permitted by Section 3.3;

- (8) an Asset Swap;
- (9) dispositions of assets with a Fair Market Value of less than \$10.0 million;
- (10) Permitted Liens;
- (11) dispositions of receivables in connection with the compromise, settlement or collection thereof in the ordinary course of business or in bankruptcy or similar proceedings and exclusive of factoring or similar arrangements;
- (12) the licensing or sublicensing of intellectual property (including, without limitation, the licensing of seismic data) or other general intangibles and licenses, leases or subleases of other property in the ordinary course of business which do not materially interfere with the business of the Issuer and its Restricted Subsidiaries;
- (13) foreclosure on assets;
- (14) any Production Payments and Reserve Sales; *provided* that any such Production Payments and Reserve Sales, other than incentive compensation programs on terms that are reasonably customary in the Oil and Gas Business for geologists, geophysicists and other providers of technical services to the Issuer or a Restricted Subsidiary, shall have been created, Incurred, issued, assumed or guaranteed in connection with the financing of, and within 60 days after the acquisition of, the property that is subject thereto;
- (15) surrender or waiver of contract rights, oil and gas leases, or the settlement, release or surrender of contract, tort or other claims of any kind;
- (16) the abandonment, farmout, lease or sublease of developed or undeveloped oil and gas properties in the ordinary course of business; and
- (17) a disposition (whether or not in the ordinary course of business) of any oil and gas property or interest therein to which no proved reserves are attributable at the time of such disposition.

“Asset Swap” means any substantially contemporaneous (and in any event occurring within 180 days of each other) purchase and sale or exchange of any oil or natural gas properties or assets or interests therein between the Issuer or any of its Restricted Subsidiaries and another Person; *provided*, that any cash received must be applied in accordance with Section 3.5 as if the Asset Swap were an Asset Disposition.

“Average Life” means, as of the date of determination, with respect to any Indebtedness or Preferred Stock, the quotient obtained by dividing (1) the sum of the products of the numbers of years from the date of determination to the dates of each successive scheduled principal payment of such Indebtedness or redemption or similar payment with respect to such Preferred Stock multiplied by the amount of such payment by (2) the sum of all such payments.

“Bankruptcy Law” means Title 11 of the United States Code or similar federal or state law for the relief of debtors.

“Beneficial Owner” has the meaning assigned to such term in Rule 13d-3 and Rule 13d-5 under the Exchange Act, except that in calculating the beneficial ownership of any particular “person” (as that term is used in Section 13(d)(3) of the Exchange Act), such “person” will be deemed to have beneficial ownership of all securities that such “person” has the right to acquire by conversion or exercise of other securities, whether such right is currently exercisable or is exercisable only after the passage of time. The terms “Beneficially Owns” and “Beneficially Owned” have a corresponding meaning. For purposes of this definition, a Person shall not be deemed to Beneficially Own securities that are the subject of a stock purchase agreement, merger agreement or similar agreement until consummation of the transactions or, as applicable, series of related transactions contemplated thereby.

“Board of Directors” means, as to any Person that is a corporation, the board of directors of such Person or any duly authorized committee thereof or as to any Person that is not a corporation, the board of managers or such other individual or group serving a similar function.

“Board Resolution” means a copy of a resolution certified by the Secretary or an Assistant Secretary of a Person to have been duly adopted by the Board of Directors of such Person and to be in full force and effect on the date of such certification.

“Business Day” means each day that is not a Saturday, Sunday or other day on which commercial banking institutions in New York, New York are authorized or required by law to close.

“Capital Stock” of any Person means any and all shares, units, interests, rights to purchase, warrants, options, participations or other equivalents of or interests in (however designated) equity of such Person, including any Preferred Stock, but excluding any debt securities convertible into, or exchangeable for, such equity.

“Capitalized Lease Obligations” means an obligation that is required to be classified and accounted for as a capitalized lease for financial reporting purposes in accordance with GAAP, and the amount of Indebtedness represented by such obligation will be the capitalized amount of such obligation at the time any determination thereof is to be made as determined in accordance with GAAP,

payment of rent or any other amount due under such lease prior to the first date such lease may be terminated without penalty. Notwithstanding the preceding, any lease (whether entered into before or after the Issue Date) that would have been classified as an operating lease pursuant to GAAP as in effect on the Issue Date will be deemed not to represent a Capitalized Lease Obligation.

“Cash Equivalents” means:

- (1) securities issued or directly and fully guaranteed or insured by the United States Government or any agency or instrumentality of the United States (*provided* that the full faith and credit of the United States is pledged in support thereof), having maturities of not more than one year from the date of acquisition;
- (2) marketable general obligations issued by any state of the United States of America or any political subdivision of any such state or any public instrumentality thereof maturing within one year from the date of acquisition and, at the time of acquisition, having a credit rating of “A” (or the equivalent thereof) or better from either S&P or Moody’s;
- (3) certificates of deposit, time deposits, eurodollar time deposits, overnight bank deposits or bankers’ acceptances having maturities of not more than one year from the date of acquisition thereof issued by any commercial bank the short-term deposit of which is rated at the time of acquisition thereof at least “A-2” or the equivalent thereof by S&P, or “P-2” or the equivalent thereof by Moody’s, and having combined capital and surplus in excess of \$100.0 million;
- (4) repurchase obligations with a term of not more than seven days for underlying securities of the types described in clauses (1), (2) and (3) entered into with any bank meeting the qualifications specified in clause (3) above;
- (5) commercial paper rated at the time of acquisition thereof at least “A-2” or the equivalent thereof by S&P or “P-2” or the equivalent thereof by Moody’s, or carrying an equivalent rating by a nationally recognized rating agency, if both of the two named Rating Agencies cease publishing ratings of investments, and in any case maturing within one year after the date of acquisition thereof; and
- (6) interests in any investment company or money market fund which invests 95% or more of its assets in instruments of the type specified in clauses (1) through (5) above.

“Cash Management Obligations” means, with respect to the Issuer or any Subsidiary Guarantor, any obligations of such Person to U.S. Bank National Association or any other lender in respect of treasury management arrangements, depository or other cash management services, including any treasury management line of credit.

“Change of Control” means:

- (1) any “person” or “group” of related persons (as such terms are used in Sections 13(d) and 14(d) of the Exchange Act), other than a Permitted Holder, is or becomes the Beneficial Owner, directly or indirectly, of more than 50% of the total voting power of the Voting Stock of the Issuer (or its successor by merger, consolidation or purchase of all or substantially all of its assets) (for the purposes of this clause (1), such person or group shall be deemed to Beneficially Own any Voting Stock of the Issuer held by a parent entity, if such person or group Beneficially Owns, directly or indirectly, more than 50% of the total voting power of the Voting Stock of such parent entity), which occurrence is followed by a Rating Decline within 90 days;
- (2) the sale, lease, transfer, conveyance or other disposition (other than by way of merger or consolidation), in one or a series of related transactions, of all or substantially all of the assets of the Issuer and its Restricted Subsidiaries taken as a whole to any “person” (as such term is used in Sections 13(d) and 14(d) of the Exchange Act), which occurrence is followed by a Rating Decline within 90 days; or
- (3) the adoption by the Board of Directors of the Issuer of a plan or proposal for the liquidation or dissolution of the Issuer.

Notwithstanding the preceding, a conversion of the Issuer or any of its Restricted Subsidiaries from a limited liability company, corporation, limited partnership or other form of entity to a limited liability company, corporation, limited partnership or other form of entity or an exchange of all of the outstanding Capital Stock in one form of entity for Capital Stock for another form of entity shall not constitute a Change of Control, so long as following such conversion or exchange the “persons” (as that term is used in Section 13(d) (3) of the Exchange Act) who Beneficially Owned the Capital Stock of the Issuer immediately prior to such transactions continue to Beneficially Own in the aggregate more than 50% of the Voting Stock of such entity, or continue to Beneficially Own sufficient Equity Interests in such entity to elect a majority of its directors, managers, trustees or other persons serving in a similar capacity for such entity, and, in either case no “person” Beneficially Owns more than 50% of the Voting Stock of such entity.

“Code” means the Internal Revenue Code of 1986, as amended.

“Commodity Agreements” means, in respect of any Person, any forward contract, commodity swap agreement, commodity option agreement or other similar agreement or arrangement in respect of Hydrocarbons used, produced, processed or sold by such Person that are customary in the Oil and Gas Business and designed to protect such Person against fluctuation in Hydrocarbon prices.

8

---

“Common Stock” means with respect to any Person, any and all shares, interests or other participations in, and other equivalents (however designated and whether voting or nonvoting) of such Person’s common stock whether or not outstanding on the Issue Date, and includes, without limitation, all series and classes of such common stock.

“Consolidated Coverage Ratio” means as of any date of determination, the ratio of (x) the aggregate amount of Consolidated EBITDAX of the Issuer for the period of the most recent four consecutive fiscal quarters ending prior to the date of such determination for which financial statements are in existence to (y) Consolidated Interest Expense for such four fiscal quarters, *provided, however*, that:

(1) if the Issuer or any Restricted Subsidiary:

(a) has Incurred any Indebtedness since the beginning of such period that remains outstanding on such date of determination or if the transaction giving rise to the need to calculate the Consolidated Coverage Ratio is an Incurrence of Indebtedness, Consolidated EBITDAX and Consolidated Interest Expense for such period will be calculated after giving effect on a pro forma basis to such Indebtedness and the use of proceeds thereof as if such Indebtedness had been Incurred on the first day of such period and such proceeds had been applied as of such date (except that in making such computation, the amount of Indebtedness under any revolving Credit Facility outstanding on the date of such calculation will be deemed to be (i) the average daily balance of such Indebtedness during such four fiscal quarters or such shorter period for which such facility was outstanding or (ii) if such revolving Credit Facility was created after the end of such four fiscal quarters, the average daily balance of such Indebtedness during the period from the date of creation of such revolving Credit Facility to the date of such calculation, in each case, *provided* that such average daily balance shall take into account any repayment of Indebtedness under such revolving Credit Facility as provided in clause (b)); or

(b) has repaid, repurchased, defeased or otherwise discharged any Indebtedness since the beginning of the period, including with the proceeds of such new Indebtedness, that is no longer outstanding on such date of determination or if the transaction giving rise to the need to calculate the Consolidated Coverage Ratio involves a discharge of Indebtedness (in each case other than Indebtedness Incurred under any revolving Credit Facility unless such Indebtedness has been permanently repaid and the related commitment terminated), Consolidated EBITDAX and Consolidated Interest Expense for such period will be calculated after giving effect on a pro forma basis to such discharge of such Indebtedness as if such discharge had occurred on the first day of such period;

(2) if, since the beginning of such period, the Issuer or any Restricted Subsidiary has made any Asset Disposition or if the transaction giving rise to the need to calculate the Consolidated Coverage Ratio is such an Asset Disposition, the Consolidated EBITDAX for such period will be reduced by an amount equal to the Consolidated EBITDAX (if positive) directly attributable to the assets which are the subject of such Asset Disposition for such period or increased by an amount equal to the Consolidated

9

---

EBITDAX (if negative) directly attributable thereto for such period and Consolidated Interest Expense for such period shall be reduced by an amount equal to the Consolidated Interest Expense directly attributable to any Indebtedness of the Issuer or any Restricted Subsidiary repaid, repurchased, defeased or otherwise discharged with respect to the Issuer and its continuing Restricted Subsidiaries in connection with or with the proceeds from such Asset Disposition for such period (or, if the Capital Stock of any Restricted Subsidiary is sold, the Consolidated Interest Expense for such period directly attributable to the Indebtedness of such Restricted Subsidiary to the extent the Issuer and its continuing Restricted Subsidiaries are no longer liable for such Indebtedness after such sale);

(3) if, since the beginning of such period, the Issuer or any Restricted Subsidiary (by merger or otherwise) has made an Investment in any Restricted Subsidiary (or any Person which becomes a Restricted Subsidiary or is merged with or into the Issuer or a Restricted Subsidiary) or an acquisition (or will have received a contribution) of assets, including any acquisition or contribution of assets occurring in connection with a transaction causing a calculation to be made under this Indenture, which constitutes all or substantially all of a company, division, operating unit, segment, business, group of related assets or line of business, Consolidated EBITDAX and Consolidated Interest Expense for such period will be calculated after giving pro forma effect thereto (including the Incurrence of any Indebtedness) as if such Investment or acquisition or contribution had occurred on the first day of such period; and

(4) if, since the beginning of such period, any Person (that subsequently became a Restricted Subsidiary or was merged with or into the Issuer or any Restricted Subsidiary since the beginning of such period) made any Asset Disposition or any Investment or acquisition of assets that would have required an adjustment pursuant to clause (2) or (3) above if made by the Issuer or a Restricted Subsidiary during such period, Consolidated EBITDAX and Consolidated Interest Expense for such period

will be calculated after giving pro forma effect thereto as if such Asset Disposition or Investment or acquisition of assets had occurred on the first day of such period.

For purposes of this definition, whenever pro forma effect is to be given to any calculation under this definition, the pro forma calculations will be determined in good faith by a responsible financial or accounting officer of the Issuer; *provided* that such officer may in his or her discretion include any reasonably identifiable and factually supportable pro forma changes to Consolidated EBITDAX, including any pro forma expenses and cost reductions, that have occurred or in the judgment of such officer are reasonably expected to occur within 12 months of the date of the applicable transaction (regardless of whether such expense or cost reduction or any other operating improvements could then be reflected properly in pro forma financial statements prepared in accordance with Regulation S-X under the Securities Act or any other regulation or policy of the SEC). If any Indebtedness bears a floating rate of interest and is being given pro forma effect, the interest expense on such Indebtedness will be calculated as if the average rate in effect from the beginning of such period to the date of determination had been the applicable rate for the entire period (taking into account any Interest Rate Agreement applicable

to such Indebtedness, but if the remaining term of such Interest Rate Agreement is less than 12 months, then such Interest Rate Agreement shall only be taken into account for that portion of the period equal to the remaining term thereof). If any Indebtedness that is being given pro forma effect bears an interest rate at the option of the Issuer, the interest rate shall be calculated by applying such optional rate chosen by the Issuer. Interest on Indebtedness that may optionally be determined at an interest rate based upon a factor of a prime or similar rate, a eurocurrency interbank offered rate, or other rate, shall be deemed to have been based upon the rate actually chosen, or, if none, then based upon such optional rate chosen as the Issuer may designate.

“Consolidated EBITDAX” for any period means, without duplication, the Consolidated Net Income for such period, plus the following, without duplication and to the extent deducted (and not added back) in calculating such Consolidated Net Income:

- (1) Consolidated Interest Expense;
- (2) Consolidated Income Tax Expense;
- (3) consolidated depletion and depreciation expense of the Issuer and its Restricted Subsidiaries;
- (4) consolidated amortization expense or impairment charges of the Issuer and its Restricted Subsidiaries recorded in connection with the application of FASB Accounting Standards Codification (“ASC”) Topic No. 350, *Intangibles — Goodwill and Others*, and FASB ASC Topic No. 360, *Property, Plant and Equipment*”;
- (5) other non-cash charges of the Issuer and its Restricted Subsidiaries (excluding any such non-cash charge to the extent it represents an accrual of or reserve for cash charges in any future period or amortization of a prepaid cash expense that was paid in a prior period not included in the calculation); and
- (6) consolidated exploration and abandonment expense of the Issuer and its Restricted Subsidiaries,

if applicable for such period; and less, to the extent included in calculating such Consolidated Net Income and in excess of any costs or expenses attributable thereto that were deducted (and not added back) in calculating such Consolidated Net Income, the sum of (x) the amount of deferred revenues that are amortized during such period and are attributable to reserves that are subject to Volumetric Production Payments, (y) amounts recorded in accordance with GAAP as repayments of principal and interest pursuant to Dollar-Denominated Production Payments and (z) other non-cash gains (excluding any non-cash gain to the extent it represents the reversal of an accrual or reserve for a potential cash item that reduced Consolidated EBITDAX in any prior period).

Notwithstanding the preceding sentence, clauses (2) through (6) relating to amounts of a Restricted Subsidiary will be added to Consolidated Net Income to compute Consolidated EBITDAX of the Issuer only to the extent (and in the same proportion) that the net income (loss) of such Restricted Subsidiary was included in calculating the Consolidated Net Income of the Issuer and, to the extent the amounts set forth in clauses (2) through (6) are in

excess of those necessary to offset a net loss of such Restricted Subsidiary or if such Restricted Subsidiary has net income for such period included in Consolidated Net Income, only if a corresponding amount would be permitted at the date of determination to be dividended to the Issuer by such Restricted Subsidiary (unless it is a Subsidiary Guarantor) without prior approval (that has not been obtained), pursuant to the terms of its charter and all agreements, instruments, judgments, decrees, orders, statutes, rules and governmental regulations applicable to that Restricted Subsidiary or the holders of its Capital Stock.

“Consolidated Income Tax Expense” means, with respect to any period, the provision for federal, state, local and foreign income taxes (including state franchise taxes) of the Issuer and its Restricted Subsidiaries for such period as determined in accordance with GAAP.

“Consolidated Interest Expense” means, for any period, the total consolidated interest expense (less interest income) of the Issuer and its Restricted Subsidiaries, whether paid or accrued, plus, to the extent not included in such interest expense and without

duplication:

- (1) interest expense attributable to Capitalized Lease Obligations and the interest component of any deferred payment obligations;
- (2) amortization of debt discount and debt issuance cost (*provided* that any amortization of bond premium will be credited to reduce Consolidated Interest Expense unless, pursuant to GAAP, such amortization of bond premium has otherwise reduced Consolidated Interest Expense);
- (3) non-cash interest expense;
- (4) commissions, discounts and other fees and charges owed with respect to letters of credit and bankers' acceptance financing;
- (5) the interest expense on Indebtedness of another Person that is guaranteed by the Issuer or one of its Restricted Subsidiaries or secured by a Lien on assets of the Issuer or one of its Restricted Subsidiaries, to the extent such guarantee becomes payable or such Lien becomes subject to foreclosure;
- (6) cash costs associated with Interest Rate Agreements (including amortization of fees); *provided, however*, that if Interest Rate Agreements result in net cash benefits rather than costs, such benefits shall be credited to reduce Consolidated Interest Expense unless, pursuant to GAAP, such net benefits are otherwise reflected in Consolidated Net Income;
- (7) the consolidated interest expense of the Issuer and its Restricted Subsidiaries that was capitalized during such period; and
- (8) all dividends paid or payable in cash, Cash Equivalents or Indebtedness or accrued during such period on any series of Disqualified Stock of the Issuer or on Preferred Stock of its Restricted Subsidiaries payable to a party other than the Issuer or a Wholly-Owned Subsidiary,

12

---

minus, to the extent included above, any interest attributable to Dollar-Denominated Production Payments.

For the purpose of calculating the Consolidated Coverage Ratio in connection with the Incurrence of any Indebtedness described in the final paragraph of the definition of "Indebtedness," the calculation of Consolidated Interest Expense shall include all interest expense (including any amounts described in clauses (1) through (8) above) relating to any Indebtedness of the Issuer or any Restricted Subsidiary described in the final paragraph of the definition of "Indebtedness."

"Consolidated Net Income" means, for any period, the aggregate net income (loss) of the Issuer and its consolidated Subsidiaries determined in accordance with GAAP and before any reduction in respect of Preferred Stock dividends of such Person; *provided, however*, that there will not be included (to the extent otherwise included therein) in such Consolidated Net Income:

- that:
- (1) any net income (loss) of any Person (other than the Issuer) if such Person is not a Restricted Subsidiary, except that:
    - (a) subject to the limitations contained in clauses (3) and (4) below, the Issuer's equity in the net income of any such Person for such period will be included in such Consolidated Net Income up to the aggregate amount of cash actually distributed by such Person during such period to the Issuer or a Restricted Subsidiary as a dividend or other distribution (subject, in the case of a dividend or other distribution to a Restricted Subsidiary, to the limitations contained in clause (2) below); and
    - (b) the Issuer's equity in a net loss of any such Person for such period will be included in determining such Consolidated Net Income to the extent such loss has been funded with cash from the Issuer or a Restricted Subsidiary during such period;
  - (2) any net income (but not loss) of any Restricted Subsidiary (other than a Subsidiary Guarantor) if such Subsidiary is subject to restrictions, directly or indirectly, on the payment of dividends or the making of distributions by such Restricted Subsidiary, directly or indirectly, to the Issuer, except that:
    - (a) subject to the limitations contained in clauses (3), (4) and (5) below, the Issuer's equity in the net income of any such Restricted Subsidiary for such period will be included in such Consolidated Net Income up to the aggregate amount of cash that could have been distributed by such Restricted Subsidiary during such period to the Issuer or another Restricted Subsidiary as a dividend or other distribution (subject, in the case of a dividend or other distribution paid to another Restricted Subsidiary, to the limitation contained in this clause); and
    - (b) the Issuer's equity in a net loss of any such Restricted Subsidiary for such period will be included in determining such Consolidated Net Income;

13

---

- (3) any gain (loss) realized upon the sale or other disposition of any property, plant or equipment of the Issuer or its consolidated Subsidiaries (including pursuant to any Sale/Leaseback Transaction) which is not sold or otherwise disposed of in the ordinary course of business and any gain (loss) realized upon the sale or other disposition of any Capital Stock of any Person;
- (4) any extraordinary or nonrecurring gains or losses, together with any related provision for taxes on such gains or losses and all related fees and expenses;
- (5) the cumulative effect of a change in accounting principles;
- (6) any asset impairment writedowns on Oil and Gas Properties under GAAP or SEC guidelines;
- (7) any unrealized non-cash gains or losses or charges in respect of Hedging Obligations (including those resulting from the application of FASB ASC Topic No. 815, *Derivatives and Hedging*);
- (8) income or loss attributable to discontinued operations (including, without limitation, operations disposed of during such period whether or not such operations were classified as discontinued);
- (9) all deferred financing costs written off, and premiums paid, in connection with any early extinguishment of Indebtedness; and
- (10) any non-cash compensation charge arising from any grant of stock, stock options or other equity based awards; *provided* that the proceeds resulting from any such grant will be excluded from Section 3.3(c)(ii).

“Credit Facility” means, with respect to the Issuer or any Restricted Subsidiary, one or more debt facilities (including, without limitation, the Senior Secured Credit Agreement), indentures or commercial paper facilities providing for revolving credit loans, term loans, capital markets financings, receivables financing (including through the sale of receivables to such lenders or to special purpose entities formed to borrow from such lenders against such receivables) or letters of credit, in each case, as amended, restated, modified, renewed, refunded, replaced or refinanced in whole or in part from time to time (and whether or not with the original administrative agent and lenders or another administrative agent or agents or other lenders and whether provided under the Senior Secured Credit Agreement or any other credit or other agreement or indenture).

“Currency Agreement” means in respect of a Person any foreign exchange contract, currency swap agreement, futures contract, option contract or other similar agreement as to which such Person is a party or a beneficiary.

“Custodian” means any receiver, trustee, assignee, liquidator, custodian or similar official under any Bankruptcy Law.

“Customary Recourse Exceptions” means, with respect to any Non-Recourse Debt of an Unrestricted Subsidiary, exclusions from the exculpation provisions with respect to such Non-Recourse Debt for the voluntary bankruptcy of such Unrestricted Subsidiary, fraud, misapplication of cash, environmental claims, waste, willful destruction and other circumstances customarily excluded by lenders from exculpation provisions or included in separate indemnification agreements in non-recourse financings.

“Default” means any event which is, or after notice or passage of time or both would be, an Event of Default.

“Definitive Securities” means certificated Securities.

“Disqualified Stock” means, with respect to any Person, any Capital Stock of such Person which by its terms (or by the terms of any security into which it is convertible or for which it is exchangeable) at the option of the holder of the Capital Stock or upon the happening of any event:

- (1) matures or is mandatorily redeemable (other than redeemable only for Capital Stock of such Person which is not itself Disqualified Stock) pursuant to a sinking fund obligation or otherwise;
- (2) is convertible or exchangeable for Disqualified Stock or other Indebtedness (excluding Capital Stock which is convertible or exchangeable solely at the option of such Person or a Subsidiary thereof); or
- (3) is redeemable at the option of the holder of the Capital Stock in whole or in part,

in each case on or prior to the date that is 91 days after the earlier of the date (a) of the Stated Maturity of the Securities or (b) on which there are no Securities outstanding; *provided* that only the portion of Capital Stock which so matures or is mandatorily redeemable, is so convertible or exchangeable or is so redeemable at the option of the holder thereof prior to such date will be deemed to be Disqualified Stock; *provided further*, that any Capital Stock that would constitute Disqualified Stock solely because the holders thereof have the right to require the Issuer to repurchase such Capital Stock upon the occurrence of a change of control or asset sale (each defined in a substantially identical manner to the corresponding definitions in this Indenture) shall not constitute Disqualified Stock if the terms of such Capital Stock (and all such securities into which it is convertible or for which it is exchangeable) provide that (i) the Issuer may not repurchase or redeem any such Capital Stock (and all such securities into which it is convertible or for which it is ratable or exchangeable) pursuant to such provision prior to compliance by the Issuer with Section 3.5 and Section 3.9 and (ii) such repurchase or redemption will

be permitted solely to the extent also permitted in accordance with Section 3.3.

“Dollar-Denominated Production Payments” means production payment obligations recorded as liabilities in accordance with GAAP, together with all undertakings and obligations in connection therewith.

15

---

“Domestic Subsidiary” means any Restricted Subsidiary that is organized under the laws of the United States of America or any state thereof or the District of Columbia.

“DTC” means The Depository Trust Company, its nominees and their respective successors and assigns, or such other depository institution hereinafter appointed by the Issuer.

“Equity Interests” means Capital Stock and all warrants, options or other rights to acquire Capital Stock (but excluding any debt security that is convertible into, or exchangeable for, Capital Stock).

“Equity Offering” means a public or private offering for cash by the Issuer of Capital Stock (other than Disqualified Stock), other than public offerings registered on Form S-8.

“Exchange Act” means the Securities Exchange Act of 1934, as amended, and the rules and regulations of the SEC promulgated thereunder.

“Exchange Securities” has the meaning ascribed to it in the second introductory paragraph of this Indenture.

“Fair Market Value” means, with respect to any asset or property, the sale value that would be obtained in an arm’s-length free market transaction between an informed and willing seller under no compulsion to sell and an informed and willing buyer under no compulsion to buy. Fair Market Value of an asset or property in excess of \$10.0 million shall be determined by the Board of Directors of the Issuer acting in good faith, whose determination shall be conclusive and evidenced by a resolution of such Board of Directors, and any lesser Fair Market Value may be determined by an officer of the Issuer acting in good faith.

“Foreign Subsidiary” means any Restricted Subsidiary that is not organized under the laws of the United States of America or any state thereof or the District of Columbia.

“GAAP” means generally accepted accounting principles in the United States of America as in effect from time to time. All ratios and computations based on GAAP contained in this Indenture will be computed in conformity with GAAP.

“Guarantee” means, individually, any guarantee of payment of the Securities by a Subsidiary Guarantor pursuant to the terms of this Indenture and any supplemental indenture thereto, and, collectively, all such guarantees.

The term “guarantee” means any obligation, contingent or otherwise, of any Person directly or indirectly guaranteeing any Indebtedness of any other Person and any obligation, direct or indirect, contingent or otherwise, of such Person:

(i) to purchase or pay (or advance or supply funds for the purchase or payment of) such Indebtedness of such other Person (whether arising by virtue of partnership arrangements, or by agreement to keep-well, to purchase assets, goods, securities or services, to take-or-pay, or to maintain financial statement conditions or otherwise); or

16

---

(ii) entered into for purposes of assuring in any other manner the obligee of such Indebtedness of the payment thereof or to protect such obligee against loss in respect thereof (in whole or in part);

*provided, however*, that the term “guarantee” will not include endorsements for collection or deposit in the ordinary course of business or any obligation to the extent it is payable only in Capital Stock of the Subsidiary Guarantor that is not Disqualified Stock. The term “guarantee” used as a verb has a corresponding meaning.

“Guarantor Subordinated Obligation” means, with respect to a Subsidiary Guarantor, any Indebtedness of such Subsidiary Guarantor (whether outstanding on the Issue Date or thereafter Incurred) which is expressly subordinated in right of payment to the obligations of such Subsidiary Guarantor under its Guarantee pursuant to a written agreement.

“Hedging Obligations” of any Person means the obligations of such Person pursuant to any Interest Rate Agreement, Currency Agreement or Commodity Agreement.

“Holder” or “Securityholder” means a Person in whose name a Security is registered in the Securities Register.

“Hydrocarbons” means oil, natural gas, casing head gas, drip gasoline, natural gasoline, condensate, distillate, liquid hydrocarbons, gaseous hydrocarbons and all constituents, elements or compounds thereof and products refined or processed therefrom.

“IAI” means an institutional “accredited investor” as described in Rule 501(a)(1), (2), (3) or (7) under the Securities Act.



“Immaterial Subsidiary” means, as of any date, any Restricted Subsidiary whose total assets, as of the end of the most recent month for which financial statements are available, are less than \$1,000,000 and whose total revenues for the most recent 12-month period for which financial statements are available do not exceed \$1,000,000; *provided* that a Restricted Subsidiary will not be considered to be an Immaterial Subsidiary if it, directly or indirectly, guarantees or otherwise provides direct credit support for any Indebtedness of the Issuer.

“Incur” means issue, create, assume, guarantee, incur or otherwise become directly or indirectly liable for, contingently or otherwise; *provided, however*, that any Indebtedness or Capital Stock of a Person existing at the time such Person becomes a Restricted Subsidiary (whether by merger, consolidation, acquisition or otherwise) will be deemed to be Incurred by such Restricted Subsidiary at the time it becomes a Restricted Subsidiary; and the terms “Incurred” and “Incurrence” have meanings correlative to the foregoing.

“Indebtedness” means, with respect to any Person on any date of determination (without duplication, whether or not contingent):

- (1) the principal of and premium (if any) in respect of indebtedness of such Person for borrowed money;

17

---

- (2) the principal of and premium (if any) in respect of obligations of such Person evidenced by bonds, debentures, notes or other similar instruments;

- (3) the principal component of all obligations of such Person in respect of letters of credit, bankers’ acceptances or other similar instruments (including reimbursement obligations with respect thereto except to the extent such reimbursement obligation relates to a trade payable, and except to the extent such letters of credit are not drawn upon or, if and to the extent drawn upon, such obligation is satisfied within 30 days of payment on the letter of credit);

- (4) the principal component of all obligations of such Person (other than obligations payable solely in Capital Stock that is not Disqualified Stock) to pay the deferred and unpaid purchase price of property (except as described in clause (8) of the penultimate paragraph of this definition of “Indebtedness”), which purchase price is due more than six months after the date of placing such property in service or taking delivery and title thereto to the extent such obligations would appear as a liabilities upon the consolidated balance sheet of such Person in accordance with GAAP;

- (5) Capitalized Lease Obligations of such Person to the extent such Capitalized Lease Obligations would appear as liabilities on the consolidated balance sheet of such Person in accordance with GAAP;

- (6) the principal component or liquidation preference of all obligations of such Person with respect to the redemption, repayment or other repurchase of any Disqualified Stock or, with respect to any Subsidiary of such Person, any Preferred Stock (but excluding, in each case, any accrued dividends);

- (7) the principal component of all Indebtedness of other Persons secured by a Lien on any asset of such Person, whether or not such Indebtedness is assumed by such Person; *provided, however*, that the amount of such Indebtedness will be the lesser of (a) the Fair Market Value of such asset at such date of determination and (b) the amount of such Indebtedness of such other Persons;

- (8) the principal component of Indebtedness of other Persons to the extent guaranteed by such Person; and

- (9) to the extent not otherwise included in this definition, net obligations of such Person under Commodity Agreements, Currency Agreements and Interest Rate Agreements (the amount of any such obligations to be equal at any time to the termination value of such agreement or arrangement giving rise to such obligation that would be payable by such Person at such time);

*provided, however*, that any indebtedness which has been defeased in accordance with GAAP or defeased pursuant to the deposit of cash or Cash Equivalents (in an amount sufficient to satisfy all such indebtedness obligations at maturity or redemption, as applicable, and all payments of interest and premium, if any) in a trust or account created or pledged for the sole benefit of the holders of such indebtedness, and subject to no other Liens, shall not constitute “Indebtedness.”

18

---

The amount of Indebtedness of any Person at any date will be the outstanding balance at such date of all unconditional obligations as described above and the maximum liability, upon the occurrence of the contingency giving rise to the obligation, of any contingent obligations at such date.

Notwithstanding the preceding, “Indebtedness” of a Person shall not include:

- (1) Production Payments and Reserve Sales;
- (2) any obligation of such Person in respect of a farm-in agreement or similar arrangement whereby such Person

agrees to pay all or a share of the drilling, completion or other expenses of an exploratory or development well (which agreement may be subject to a maximum payment obligation, after which expenses are shared in accordance with the working or participation interest therein or in accordance with the agreement of the parties) or perform the drilling, completion or other operation on such well in exchange for an ownership interest in an oil or gas property;

(3) any obligations under Currency Agreements, Commodity Agreements and Interest Rate Agreements; *provided* that such Agreements are entered into for bona fide hedging purposes of such Person or its Subsidiaries (as determined in good faith by the Board of Directors or senior management of such Person, whether or not accounted for as a hedge in accordance with GAAP) and, in the case of Currency Agreements or Commodity Agreements, such Currency Agreements or Commodity Agreements are related to business transactions of such Person or its Subsidiaries entered into in the ordinary course of business and, in the case of Interest Rate Agreements, such Interest Rate Agreements substantially correspond in terms of notional amount, duration and interest rates, as applicable, to Indebtedness of such Person or its Subsidiaries Incurred without violation of this Indenture;

(4) any obligation arising from agreements of such Person or a Subsidiary providing for indemnification, guarantees, adjustment of purchase price, holdbacks, contingency payment obligations or similar obligations, in each case, Incurred or assumed in connection with the acquisition or disposition of any business, assets or Capital Stock of a Restricted Subsidiary, *provided* that such Indebtedness is not reflected on the face of the balance sheet of such Person or any Subsidiary;

(5) any obligation arising from the honoring by a bank or other financial institution of a check, draft or similar instrument (including daylight overdrafts) drawn against insufficient funds in the ordinary course of business, *provided* that such Indebtedness is extinguished within five Business Days of Incurrence;

(6) in-kind obligations relating to net oil or natural gas balancing positions arising in the ordinary course of business;

(7) all contracts and other obligations, agreements, instruments or arrangements described in clause (19), (20), (21) or (28)(a) of the definition of "Permitted Liens";

19

---

(8) accrued expenses and trade payables and other accrued liabilities arising in the ordinary course of business that are not overdue by 90 days past the invoice or billing date or more or are being contested in good faith by appropriate proceedings promptly instituted and diligently conducted; and

(9) any repayment or reimbursement obligation of such Person or any of its Subsidiaries with respect to Customary Recourse Exceptions, unless and until an event or circumstance occurs that triggers the Person's or such Subsidiary's direct repayment or reimbursement obligation (as opposed to contingent or performance obligations) to the lender or other Person to whom such obligation is actually owed, in which case the amount of such direct payment or reimbursement obligation shall constitute Indebtedness.

In addition, "Indebtedness" of any Person shall include Indebtedness described in the first paragraph of this definition of "Indebtedness" that would not appear as a liability on the balance sheet of such Person if:

(1) such Indebtedness is the obligation of a partnership or joint venture that is not a Subsidiary of such Person (a "Joint Venture");

(2) such Person or a Restricted Subsidiary of such Person is a general partner of the Joint Venture or otherwise liable for all or a portion of the Joint Venture's liabilities (a "General Partner"); and

(3) there is recourse, by contract or operation of law, with respect to the payment of such Indebtedness to property or assets of such Person or a Subsidiary of such Person; and then such Indebtedness shall be included in an amount not to exceed:

(a) the lesser of (i) the net assets of the General Partner and (ii) the amount of such obligations to the extent that there is recourse, by contract or operation of law, to the property or assets of such Person or a Subsidiary of such Person; or

(b) if less than the amount determined pursuant to clause (a) immediately above, the actual amount of such Indebtedness that is with recourse to such Person or a Subsidiary of such Person, if the Indebtedness is evidenced by a writing and is for a determinable amount and the related interest expense shall be included in Consolidated Interest Expense to the extent actually paid by such Person and its Subsidiaries.

"Indenture" means this Indenture as amended or supplemented from time to time.

"Initial Purchasers" means J.P. Morgan Securities LLC and the other initial purchasers listed in Schedule 1 of the Purchase Agreement dated December 7, 2016 among the Issuer, the Subsidiary Guarantors and J.P. Morgan Securities LLC, as representative of such initial purchasers relating to the Initial Securities.

20

---

“Initial Securities” has the meaning ascribed to it in the second introductory paragraph of this Indenture.

“Interest Rate Agreement” means with respect to any Person any interest rate protection agreement, interest rate future agreement, interest rate option agreement, interest rate swap agreement, interest rate cap agreement, interest rate collar agreement, interest rate hedge agreement or other similar agreement or arrangement as to which such Person is party or a beneficiary.

“Investment” means, with respect to any Person, all investments by such Person in other Persons (including Affiliates) in the form of any direct or indirect advance, loan or other extensions of credit (including by way of guarantee or similar arrangement, but excluding any debt or extension of credit represented by a bank deposit other than a time deposit and advances or extensions of credit to customers in the ordinary course of business) or capital contribution to (by means of any transfer of cash or other property to others or any payment for property or services for the account or use of others), or any purchase or acquisition of Capital Stock, Indebtedness or other similar instruments (excluding any interest in a crude oil or natural gas leasehold to the extent constituting a security under applicable law) issued by, such other Person and all other items that are or would be classified as investments on a balance sheet prepared in accordance with GAAP; *provided* that none of the following will be deemed to be an Investment:

- (1) Hedging Obligations entered into in the ordinary course of business and in compliance with this Indenture;
- (2) endorsements of negotiable instruments and documents in the ordinary course of business; and
- (3) an acquisition of assets, Capital Stock or other securities by such Person or a Subsidiary for consideration to the extent such consideration consists of Common Stock of such Person.

The amount of any Investment shall not be adjusted for increases or decreases in value, write-ups, write-downs or write-offs with respect to such Investment.

For purposes of the definition of “Unrestricted Subsidiary” and Section 3.3,

(1) “Investment” will include the portion (proportionate to the Issuer’s equity interest in a Restricted Subsidiary to be designated as an Unrestricted Subsidiary) of the Fair Market Value of the net assets of such Restricted Subsidiary at the time that such Restricted Subsidiary is designated an Unrestricted Subsidiary; *provided, however*, that upon a redesignation of such Subsidiary as a Restricted Subsidiary, the Issuer will be deemed to continue to have a permanent “Investment” in an Unrestricted Subsidiary in an amount (if positive) equal to

(a) the Issuer’s “Investment” in such Subsidiary at the time of such redesignation less (b) the portion (proportionate to the Issuer’s equity interest in such Subsidiary) of the Fair Market Value of the net assets of such Subsidiary at the time that such Subsidiary is so re-designated a Restricted Subsidiary; and

21

---

(2) any property transferred to or from an Unrestricted Subsidiary will be valued at its Fair Market Value at the time of such transfer; and

(3) if the Issuer or any Restricted Subsidiary sells or otherwise disposes of any Capital Stock of any Restricted Subsidiary such that, after giving effect to any such sale or disposition, such entity is no longer a Subsidiary of the Issuer, then the Issuer shall be deemed to have made an Investment on the date of any such sale or disposition equal to the Fair Market Value of the Capital Stock of such former Subsidiary not sold or disposed of.

“Investment Grade Rating” means a rating equal to or higher than:

- (1) Baa3 (or the equivalent) with a stable or better outlook by Moody’s; and
- (2) BBB— (or the equivalent) with a stable or better outlook by S&P,

or, if either such entity ceases to make a rating on the Securities publicly available for reasons outside of the Issuer’s control, the equivalent investment grade credit rating from any other Rating Agency.

“Investment Grade Rating Event” means the first day on which the Securities have an Investment Grade Rating from each Rating Agency, and no Default has occurred and is then continuing under this Indenture.

“Issue Date” means the first date on which the Securities are issued under this Indenture.

“Issuer” means, as applicable, (i) the Person named as the “Issuer” in the first introductory paragraph of this instrument until a successor Person shall have become such pursuant to the applicable provisions of this Indenture, and thereafter “Issuer” shall mean such successor Person, and (ii) Antero Resources LLC, a Delaware limited liability company and the predecessor in interest of the Person named as the “Issuer” in the first introductory paragraph of this instrument.

“Lien” means, with respect to any asset, any mortgage, lien (statutory or otherwise), pledge, hypothecation, charge, security interest, preference, priority or encumbrance of any kind in respect of such asset, whether or not filed, recorded or otherwise

perfected under applicable law, including any conditional sale or other title retention agreement, any lease in the nature thereof, any option or other agreement to sell or give a security interest in and any filing of or agreement to give any financing statement under the Uniform Commercial Code (or equivalent statutes) of any jurisdiction; *provided* that in no event shall an operating lease be deemed to constitute a Lien.

“Minority Interest” means the percentage interest represented by any class of Capital Stock of a Restricted Subsidiary that are not owned by the Issuer or a Restricted Subsidiary.

22

---

“Moody’s” means Moody’s Investors Service, Inc., or any successor to the rating agency business thereof.

“Net Available Cash” from an Asset Disposition means cash payments received (including any cash payments received by way of deferred payment of principal pursuant to a note or installment receivable or otherwise and net proceeds from the sale or other disposition of any securities received as consideration, but only as and when received, but excluding any other consideration received in the form of assumption by the acquiring Person of Indebtedness or other obligations relating to the properties or assets that are the subject of such Asset Disposition or received in any other non-cash form) therefrom, including consideration deemed to be cash pursuant to the seventh paragraph of Section 3.5, in each case net of:

- (1) all legal, accounting, investment banking, title and recording tax expenses, commissions and other fees and expenses Incurred, and all federal, state, provincial, foreign and local taxes required to be paid or accrued as a liability under GAAP (after taking into account any available tax credits or deductions and any tax sharing agreements), as a consequence of such Asset Disposition;
- (2) all payments made on any Indebtedness (including any Hedging Obligation) which is secured by any assets subject to such Asset Disposition, in accordance with the terms of any Lien upon such assets, or which must by its terms, or in order to obtain a necessary consent to such Asset Disposition, or by applicable law be repaid out of the proceeds from such Asset Disposition;
- (3) all distributions and other payments required to be made to minority interest holders in Subsidiaries or joint ventures or to holders of royalty or similar interests as a result of such Asset Disposition;
- (4) the deduction of appropriate amounts to be provided by the seller as a reserve, in accordance with GAAP, against any liabilities associated with the assets disposed of in such Asset Disposition and retained by the Issuer or any Restricted Subsidiary after such Asset Disposition; and
- (5) all relocation expenses incurred as a result thereof and all related severance and associated costs, expenses and charges of personnel related to assets and related operations disposed of;

*provided, however*, that if any consideration for an Asset Disposition (that would otherwise constitute Net Available Cash) is required to be held in escrow pending determination of whether or not a purchase price adjustment will be made, such consideration (or any portion thereof) shall become Net Available Cash only at such time as it is released to the Issuer or any of its Restricted Subsidiaries from escrow.

“Net Cash Proceeds” with respect to any issuance or sale of Capital Stock or any contribution to equity capital, means the cash proceeds of such issuance, sale or contribution net of attorneys’ fees, accountants’ fees, underwriters’ or placement agents’ fees, listing fees, discounts or commissions and brokerage, consultant and other fees and charges actually Incurred in connection with such issuance, sale or contribution and net of taxes paid or payable as a result

23

---

of such issuance or sale (after taking into account any available tax credit or deductions and any tax sharing arrangements).

“Net Working Capital” means (a) the sum of (i) all current assets of the Issuer and its Restricted Subsidiaries, except current assets from commodity price risk management activities arising in the ordinary course of the Oil and Gas Business, plus (ii) the amount of revolving credit borrowings available to be Incurred under the Senior Secured Credit Agreement, less (b) all current liabilities of the Issuer and its Restricted Subsidiaries, except current liabilities (i) associated with asset retirement obligations relating to oil and gas properties, (ii) included in Indebtedness and (iii) any current liabilities from commodity price risk management activities arising in the ordinary course of the Oil and Gas Business, in each case as set forth in the consolidated financial statements of the Issuer prepared in accordance with GAAP.

“Non-Recourse Debt” means Indebtedness of a Person:

- (1) as to which neither the Issuer nor any Restricted Subsidiary (a) provides any guarantee or credit support of any kind (including any undertaking, guarantee, indemnity, agreement or instrument that would constitute Indebtedness) or (b) is directly or indirectly liable (as a guarantor or otherwise), except for Customary Recourse Exceptions;
- (2) no default with respect to which (including any rights that the holders thereof may have to take enforcement

action against an Unrestricted Subsidiary) would permit (upon notice, lapse of time or both) any holder of any other Indebtedness of the Issuer or any Restricted Subsidiary to declare a default under such other Indebtedness or cause the payment thereof to be accelerated or payable prior to its stated maturity; and

(3) as to which the lenders have no recourse against any of the assets of the Issuer or its Restricted Subsidiaries, except for Customary Recourse Exceptions.

“Non-U.S. Person” means a Person who is not a U.S. Person (as defined in Regulation S).

“Obligations” means any principal, interest (including any interest accruing subsequent to the filing of a petition in bankruptcy, reorganization or similar proceeding at the rate provided for in the documentation with respect thereto, whether or not such interest is an allowed claim under applicable state, federal or foreign law), other monetary obligations, penalties, fees, indemnifications, reimbursements (including reimbursement obligations with respect to letters of credit and banker’s acceptances), damages and other liabilities, and guarantees of payment of such principal, interest, penalties, fees, indemnifications, reimbursements, damages and other liabilities, payable under the documentation governing any Indebtedness.

“Offering Memorandum” means the final offering memorandum, dated December 7, 2016, relating to the offering by the Issuer of the Initial Securities.

24

---

“Officer” means the Chairman of the Board, the Chief Executive Officer, the President, the Chief Financial Officer, any Vice President, the Treasurer or the Secretary of the Issuer. Officer of any Subsidiary Guarantor has a correlative meaning.

“Officers’ Certificate” means a certificate signed by two Officers of the Issuer.

“Oil and Gas Business” means:

- (1) the business of acquiring, exploring, exploiting, developing, producing, operating and disposing of interests in oil, natural gas, liquefied natural gas and other Hydrocarbon and mineral properties or products produced in association with any of the foregoing;
- (2) the business of gathering, marketing, distributing, treating, processing, storing, refining, selling and transporting of any production from such interests or properties and products produced in association therewith and the marketing of oil, natural gas, other Hydrocarbons and minerals obtained from unrelated Persons;
- (3) any other related energy business, including power generation and electrical transmission business, directly or indirectly, from oil, natural gas and other Hydrocarbons and minerals produced substantially from properties in which the Issuer or its Restricted Subsidiaries, directly or indirectly, participate;
- (4) any business relating to oil field sales and service; and
- (5) any business or activity relating to, arising from, or necessary, appropriate or incidental to the activities described in the foregoing clauses (1) through (4) of this definition.

“Oil and Gas Properties” means all properties, including equity or other ownership interests therein, owned by a Person which contain or are believed to contain oil and gas reserves.

“Opinion of Counsel” means a written opinion from legal counsel who is acceptable to the Trustee. The counsel may be an employee of or counsel to the Issuer, a Subsidiary Guarantor or the Trustee.

“Pari Passu Indebtedness” means any Indebtedness of the Issuer or any Subsidiary Guarantor that ranks equally in right of payment to the Securities or the Guarantees, as the case may be.

“Patriot Act” means the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001, Pub. L. 107-56, as amended, and signed into law October 26, 2001.

“Permitted Acquisition Indebtedness” means Indebtedness (including Disqualified Stock) of the Issuer or any of the Restricted Subsidiaries to the extent such Indebtedness was Indebtedness:

25

---

(1) of an acquired Person prior to the date on which such Person became a Restricted Subsidiary as a result of having been acquired and not incurred in contemplation of such acquisition; or

(2) of a Person that was merged, consolidated or amalgamated with or into the Issuer or a Restricted Subsidiary that was not incurred in contemplation of such merger, consolidation or amalgamation,

provided that on the date such Person became a Restricted Subsidiary or the date such Person was merged, consolidated and amalgamated with or into the Issuer or a Restricted Subsidiary, as applicable, after giving pro forma effect thereto,

(a) the Restricted Subsidiary or the Issuer, as applicable, would be permitted to incur at least \$1.00 of additional Indebtedness pursuant to Section 3.2(a) or

(b) the Consolidated Coverage Ratio for the Issuer would be greater than the Consolidated Coverage Ratio for the Issuer immediately prior to such transaction.

“Permitted Business Investment” means any Investment made in the ordinary course of, and of a nature that is or shall have become customary in, the Oil and Gas Business including investments or expenditures for actively exploiting, exploring for, acquiring, developing, producing, processing, gathering, marketing or transporting oil, natural gas or other Hydrocarbons and minerals through agreements, transactions, interests or arrangements which permit one to share risks or costs, comply with regulatory requirements regarding local ownership or satisfy other objectives customarily achieved through the conduct of the Oil and Gas Business jointly with third parties including:

(1) ownership interests in oil, natural gas, other Hydrocarbons and minerals properties, liquefied natural gas facilities, processing facilities, gathering systems, pipelines, storage facilities or related systems or ancillary real property interests;

(2) Investments in the form of or pursuant to operating agreements, working interests, royalty interests, mineral leases, processing agreements, farm-in agreements, farm-out agreements, contracts for the sale, transportation or exchange of oil, natural gas, other Hydrocarbons and minerals, production sharing agreements, participation agreements, development agreements, area of mutual interest agreements, unitization agreements, pooling agreements, joint bidding agreements, service contracts, joint venture agreements, partnership agreements (whether general or limited), subscription agreements, stock purchase agreements, stockholder agreements and other similar agreements (including for limited liability companies) with third parties; and

(3) direct or indirect ownership interests in drilling rigs and related equipment, including, without limitation, transportation equipment.

For the avoidance of doubt, any Investments by the Issuer pursuant to the Amended and Restated Contribution Agreement, dated as of November 10, 2014, by and between Antero Midstream Partners LP and the Issuer shall constitute Permitted Business Investments.

“Permitted Holder” means each of (i) Warburg Pincus & Co.; (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 (ii) 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 Investment” means an Investment by the Issuer or any Restricted Subsidiary in:

(1) the Issuer, a Restricted Subsidiary or a Person which will, upon the making of such Investment, become a Restricted Subsidiary; *provided, however*, that the primary business of such Restricted Subsidiary is the Oil and Gas Business;

(2) another Person whose primary business is the Oil and Gas Business if as a result of such Investment such other Person becomes a Restricted Subsidiary or is merged or consolidated with or into, or transfers or conveys all or substantially all its assets to, the Issuer or a Restricted Subsidiary and, in each case, any Investment held by such Person; *provided* that such Investment was not acquired by such Person in contemplation of such acquisition, merger, consolidation or transfer;

(3) cash and Cash Equivalents;

(4) receivables owing to the Issuer or any Restricted Subsidiary created or acquired in the ordinary course of business and payable or dischargeable in accordance with customary trade terms; *provided, however*, that such trade terms may include such concessionary trade terms as the Issuer or any such Restricted Subsidiary deems reasonable under the circumstances;

(5) payroll, commission, travel, relocation and similar advances to cover matters that are expected at the time of such advances ultimately to be treated as expenses for accounting purposes and that are made in the ordinary course of business;

(6) loans or advances to employees (other than executive officers) made in the ordinary course of business consistent with past practices of the Issuer or such Restricted Subsidiary;

(7) Capital Stock, obligations or securities received in settlement of debts (x) created in the ordinary course of business and owing to the Issuer or any Restricted

Subsidiary or in satisfaction of judgments or (y) pursuant to any plan of reorganization or similar arrangement in a bankruptcy or insolvency proceeding;

- (8) any Person as a result of the receipt of non-cash consideration from an Asset Disposition that was made pursuant to and in compliance with, Section 3.5;
- (9) Investments in existence on the Issue Date;
- (10) Commodity Agreements, Currency Agreements, Interest Rate Agreements and related Hedging Obligations, which transactions or obligations are Incurred in compliance with Section 3.2;
- (11) guarantees issued in accordance with Section 3.2;
- (12) Permitted Business Investments;
- (13) any Person where such Investment was acquired by the Issuer or any of its Restricted Subsidiaries (a) in exchange for any other Investment or accounts receivable held by the Issuer or any such Restricted Subsidiary in connection with or as a result of a bankruptcy, workout, reorganization or recapitalization of the issuer of such other Investment or accounts receivable or (b) as a result of a foreclosure by the Issuer or any of its Restricted Subsidiaries with respect to any secured Investment or other transfer of title with respect to any secured Investment in default;
- (14) any Person to the extent such Investments consist of prepaid expenses, negotiable instruments held for collection and lease, utility and workers' compensation, performance and other similar deposits made in the ordinary course of business by the Issuer or any Restricted Subsidiary;
- (15) guarantees of performance or other obligations (other than Indebtedness) arising in the ordinary course in the Oil and Gas Business, including obligations under oil and natural gas exploration, development, joint operating, and related agreements and licenses, concessions or operating leases related to the Oil and Gas Business;
- (16) Investments in the Securities; and
- (17) Investments by the Issuer or any of its Restricted Subsidiaries, together with all other Investments pursuant to this clause (17), in an aggregate amount outstanding at the time of such Investment not to exceed the greater of \$150.0 million and 1.5% of the Issuer's Adjusted Consolidated Net Tangible Assets (with the Fair Market Value of such Investment being measured at the time such Investment is made and without giving effect to subsequent changes in value) *provided, however*, that if any Investment pursuant to this clause (17) is made in any Person that is not a Restricted Subsidiary at the date of the making of such Investment and such Person becomes a Restricted Subsidiary after such date, such Investment shall thereafter be deemed to have been made pursuant to clause (1) of this definition and shall cease to have been made pursuant to this clause (17) for so long as such Person continues to be a Restricted Subsidiary.

"Permitted Liens" means, with respect to any Person:

- (1) Liens securing Indebtedness under a Credit Facility permitted to be Incurred under this Indenture;
- (2) pledges or deposits by such Person under workers' compensation laws, unemployment insurance laws, social security or old age pension laws or similar legislation, or good faith deposits in connection with bids, tenders, contracts (other than for the payment of Indebtedness) or leases to which such Person is a party, or deposits (which may be secured by a Lien) to secure public or statutory obligations of such Person including letters of credit and bank guarantees required or requested by the United States, any State thereof or any foreign government or any subdivision, department, agency, organization or instrumentality of any of the foregoing in connection with any contract or statute (including lessee or operator obligations under statutes, governmental regulations, contracts or instruments related to the ownership, exploration and production of oil, natural gas, other hydrocarbons and minerals on State, Federal or foreign lands or waters), or deposits of cash or United States government bonds to secure indemnity performance, surety or appeal bonds or other similar bonds to which such Person is a party, or deposits as security for contested taxes or import or customs duties or for the payment of rent, in each case Incurred in the ordinary course of business;
- (3) statutory and contractual Liens of landlords and Liens imposed by law, including carriers', warehousemen's, mechanics', materialmen's and repairmen's Liens, in each case for sums not yet due or being contested in good faith by appropriate proceedings if a reserve or other appropriate provisions, if any, as shall be required by GAAP shall have been made in respect thereof;
- (4) Liens for taxes, assessments or other governmental charges or claims not yet subject to penalties for non-payment or which are being contested in good faith by appropriate proceedings; *provided* that appropriate reserves, if any, required pursuant to GAAP have been made in respect thereof;
- (5) Liens in favor of issuers of surety or performance bonds or bankers' acceptances issued pursuant to the request of and for the account of such Person in the ordinary course of its business;

(6) survey exceptions, encumbrances, ground leases, easements or reservations of, or rights of others for, licenses, rights of way, sewers, electric lines, telegraph and telephone lines and other similar purposes, or zoning, building codes or other restrictions (including, without limitation, minor defects or irregularities in title and similar encumbrances) as to the use of real properties or Liens incidental to the conduct of the business of such Person or to the ownership of its properties which do not in the aggregate materially adversely affect the value of the assets of such Person and its Restricted Subsidiaries, taken as a whole, or materially impair their use in the operation of the business of such Person;

(7) Liens securing Hedging Obligations;

29

---

(8) leases, licenses, subleases and sublicenses of assets (including, without limitation, real property and intellectual property rights) which do not materially interfere with the ordinary conduct of the business of the Issuer or any of its Restricted Subsidiaries;

(9) prejudgment Liens and judgment Liens not giving rise to an Event of Default so long as such Lien is adequately bonded and any appropriate legal proceedings which may have been duly initiated for the review of such judgment have not been finally terminated or the period within which such proceedings may be initiated has not expired;

(10) Liens for the purpose of securing the payment of all or a part of the purchase price of, or Capitalized Lease Obligations, purchase money obligations or other payments Incurred to finance the acquisition, lease, improvement or construction of or repairs or additions to, assets or property acquired or constructed in the ordinary course of business; *provided* that:

(a) the aggregate principal amount of Indebtedness secured by such Liens is otherwise permitted to be Incurred under this Indenture and does not exceed the cost of the assets or property so acquired or constructed; and

(b) such Liens are created within 360 days of the later of the acquisition, lease, completion of improvements, construction, repairs or additions or commencement of full operation of the assets or property subject to such Lien and do not encumber any other assets or property of the Issuer or any Restricted Subsidiary other than such assets or property and assets affixed or appurtenant thereto;

(11) Liens arising solely by virtue of any statutory or common law provisions relating to banker's Liens, rights of set-off or similar rights and remedies as to deposit accounts or other funds maintained with a depository institution; *provided* that:

(a) such deposit account is not a dedicated cash collateral account and is not subject to restrictions against access by the Issuer in excess of those set forth by regulations promulgated by the Federal Reserve Board; and

(b) such deposit account is not intended by the Issuer or any Restricted Subsidiary to provide collateral to the depository institution;

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

(13) Liens existing on the Issue Date other than Liens securing the Senior Secured Credit Agreement;

30

---

(14) Liens on property or Capital Stock of a Person at the time such Person becomes a Subsidiary; *provided, however*, that such Liens are not created or Incurred in connection with, or in contemplation of, such other Person becoming a Subsidiary; *provided further*, however, that any such Lien may not extend to any other property owned by the Issuer or any Restricted Subsidiary (other than assets or property affixed or appurtenant thereto);

(15) Liens on property at the time the Issuer or any of its Subsidiaries acquired the property, including any acquisition by means of a merger or consolidation with or into the Issuer or any of its Subsidiaries; *provided, however*, that such Liens are not created or Incurred in connection with, or in contemplation of, such acquisition; *provided further, however*, that such Liens may not extend to any other property owned by the Issuer or any Restricted Subsidiary (other than assets or property affixed or appurtenant thereto);

(16) Liens securing the Securities, Guarantees and other obligations under this Indenture;

(17) Liens securing Refinancing Indebtedness Incurred to refinance Indebtedness that was previously so secured, *provided* that any such Lien is limited to all or part of the same property or assets (plus improvements, accessions, proceeds or dividends or distributions in respect thereof) that secured (or, under the written arrangements under which the original Lien arose, could secure) the Indebtedness being refinanced or is in respect of property or assets that is the security for a Permitted Lien



hereunder;

(18) any interest or title of a lessor under any Capitalized Lease Obligation or operating lease;

(19) Liens in respect of Production Payments and Reserve Sales, which Liens shall be limited to the property that is the subject of such Production Payments and Reserve Sales;

(20) Liens arising under farm-out agreements, farm-in agreements, division orders, contracts for the sale, purchase, exchange, transportation, gathering or processing of Hydrocarbons, unitizations and pooling designations, declarations, orders and agreements, development agreements, joint venture agreements, partnership agreements, operating agreements, royalties, working interests, net profits interests, joint interest billing arrangements, participation agreements, production sales contracts, area of mutual interest agreements, gas balancing or deferred production agreements, injection, repressuring and recycling agreements, salt water or other disposal agreements, seismic or geophysical permits or agreements, and other agreements which are customary in the Oil and Gas Business; *provided, however*, in all instances that such Liens are limited to the assets that are the subject of the relevant agreement, program, order or contract;

(21) Liens on pipelines or pipeline facilities that arise by operation of law;

31

---

(22) Liens securing Indebtedness in an aggregate principal amount outstanding at any one time, added together with all other Indebtedness secured by Liens Incurred pursuant to this clause (22), not to exceed the greater of \$100.0 million and 1.0% of the Issuer's Adjusted Consolidated Net Tangible Assets, as determined on the date of Incurrence of such Indebtedness after giving pro forma effect to such Incurrence and the application of the proceeds therefrom;

(23) Liens in favor of the Issuer or any Subsidiary Guarantor;

(24) deposits made in the ordinary course of business to secure liability to insurance carriers;

(25) Liens in favor of customs and revenue authorities arising as a matter of law to secure payment of customs duties in connection with the importation of goods in the ordinary course of business;

(26) Liens deemed to exist in connection with Investments in repurchase agreements permitted under Section 3.3; *provided* that such Liens do not extend to any assets other than those that are the subject of such repurchase agreement;

(27) Liens encumbering reasonable customary initial deposits and margin deposits and similar Liens attaching to commodity trading accounts or other brokerage accounts incurred in the ordinary course of business and not for speculative purposes;

(28) any (a) interest or title of a lessor or sublessor under any lease, liens reserved in oil, gas or other Hydrocarbons, minerals, leases for bonus, royalty or rental payments and for compliance with the terms of such leases; (b) restriction or encumbrance that the interest or title of such lessor or sublessor may be subject to (including, without limitation, ground leases or other prior leases of the demised premises, mortgages, mechanics' liens, tax liens, and easements); or (c) subordination of the interest of the lessee or sublessee under such lease to any restrictions or encumbrance referred to in the preceding clause (b);

(29) Liens upon specific items of inventory or other goods and proceeds of any Person securing such Person's obligations in respect of bankers' acceptances issued or created for the account of such Person to facilitate the purchase, shipment or storage of such inventory or other goods;

(30) Liens arising under this Indenture in favor of the Trustee for its own benefit and similar Liens in favor of other trustees, agents and representatives arising under instruments governing Indebtedness permitted to be incurred under this Indenture, *provided, however*, that such Liens are solely for the benefit of the trustees, agents or representatives in their capacities as such and not for the benefit of the holders of such Indebtedness;

(31) Liens arising from the deposit of funds or securities in trust for the purpose of decreasing or defeasing Indebtedness so long as such deposit of funds or

32

---

securities and such decreasing or defeasing of Indebtedness are permitted under Section 3.3; and

(32) Liens in favor of collecting or payer banks having a right of setoff, revocation, or charge back with respect to money or instruments of the Issuer or any Subsidiary of the Issuer on deposit with or in possession of such bank.

In each case set forth above, notwithstanding any stated limitation on the assets that may be subject to such Lien, a Permitted Lien on a specified asset or group or type of assets may include Liens on all improvements, additions and accessions thereto and all products and proceeds thereof (including dividends, distributions and increases in respect thereof).

“Permitted Tax Distributions” means, for any calendar year or portion thereof during which the Issuer was a pass-through entity for U.S. federal income tax purposes, any payments or distributions made by the Issuer to its members on or about each estimated tax payment date as well as each other applicable due date to enable the members of the Issuer (or, if any of them is itself a pass-through entity for U.S. federal income tax purposes, the owners of such member’s Capital Stock) to make payments of U.S. federal and state income taxes (including estimates thereof) as a result of the operations of the Issuer and its Subsidiaries during the current or any previous calendar year, not to exceed an amount equal to each such member’s (or in the case of a pass-through entity, the owners of its Capital Stock) U.S. federal and state income tax liability resulting solely from the pass-through tax treatment of such member’s (or its owners’) interest in the Issuer and as calculated pursuant to the terms of the limited liability company agreement of the Issuer as in effect on the Prior Issue Date and as it may have been amended thereafter in a manner that was not, considered as a whole, adverse to the Holders of the Notes.

“Person” means any individual, corporation, partnership, joint venture, association, joint-stock company, trust, unincorporated organization, limited liability company, government or any agency or political subdivision thereof or any other entity.

“Preferred Stock” as applied to the Capital Stock of any corporation or other Person, means Capital Stock of any class or classes (however designated) which is preferred as to the payment of dividends, or as to the distribution of assets upon any voluntary or involuntary liquidation or dissolution of such corporation or other Person, over Capital Stock of any other class of such corporation or other Person.

“Prior Issue Date” means November 19, 2012, the initial date of issuance of the Issuer’s 6.0% Senior Notes due 2020.

“Production Payments and Reserve Sales” means the grant or transfer by the Issuer or a Restricted Subsidiary to any Person of a royalty, overriding royalty, net profits interest, production payment (whether volumetric or dollar denominated), partnership or other interest in Oil and Gas Properties, reserves or the right to receive all or a portion of the production or the proceeds from the sale of production attributable to such properties where the holder of such interest has recourse solely to such production or proceeds of production, subject to the obligation of the grantor or transferor to operate and maintain, or cause the subject

33

---

interests to be operated and maintained, in a reasonably prudent manner or other customary standard or subject to the obligation of the grantor or transferor to indemnify for environmental, title or other matters customary in the Oil and Gas Business, including any such grants or transfers pursuant to incentive compensation programs on terms that are reasonably customary in the Oil and Gas Business for geologists, geophysicists or other providers of technical services to the Issuer or a Restricted Subsidiary.

“QIB” means any “qualified institutional buyer” as such term is defined in Rule 144A.

“Rating Agency” means each of S&P and Moody’s, or if S&P or Moody’s or both shall not make a rating on the Securities publicly available, a nationally recognized statistical rating agency or agencies, as the case may be, selected by the Issuer (as certified by a Board Resolution) which shall be substituted for S&P or Moody’s, or both, as the case may be.

“Rating Decline” means the occurrence of a decrease of one or more gradations (including gradations within rating categories as well as between rating categories) in the rating of the Securities by either Rating Agency.

“Redemption Date” means, with respect to any redemption of Securities, the date of redemption with respect thereto.

“Refinancing Indebtedness” means Indebtedness that is Incurred to refund, refinance, replace, exchange, renew, repay, extend, prepay, redeem or retire (including pursuant to any defeasance or discharge mechanism) (collectively, “refinance” and “refinances” and “refinanced” shall have correlative meanings) any Indebtedness (including Indebtedness of the Issuer that refinances Indebtedness of any Restricted Subsidiary and Indebtedness of any Restricted Subsidiary that refinances Indebtedness of another Restricted Subsidiary, but excluding Indebtedness of a Subsidiary that is not a Restricted Subsidiary that refinances Indebtedness of the Issuer or a Restricted Subsidiary), including Indebtedness that refinances Refinancing Indebtedness, *provided, however*, that:

- (1) (a) if the Stated Maturity of the Indebtedness being refinanced is the same as or earlier than the Stated Maturity of the Securities, the Refinancing Indebtedness has a Stated Maturity no earlier than the Stated Maturity of the Indebtedness being refinanced or (b) if the Stated Maturity of the Indebtedness being refinanced is later than the Stated Maturity of the Securities, the Refinancing Indebtedness has a Stated Maturity at least 91 days later than the Stated Maturity of the Securities;
- (2) the Refinancing Indebtedness has an Average Life at the time such Refinancing Indebtedness is Incurred that is equal to or greater than the Average Life of the Indebtedness being refinanced;
- (3) such Refinancing Indebtedness is Incurred in an aggregate principal amount (or if issued with original issue discount, an aggregate issue price) that is equal to or less than the sum of the aggregate principal amount (or if issued with original issue discount, the aggregate accreted value) then outstanding of the Indebtedness being refinanced (plus, without duplication, any additional Indebtedness Incurred to pay

34

---

interest, premiums or defeasance costs required by the instruments governing such existing Indebtedness and fees and expenses

Incurred in connection therewith); and

(4) if the Indebtedness being refinanced is subordinated in right of payment to the Securities or a Guarantee, such Refinancing Indebtedness is subordinated in right of payment to the Securities or the Guarantee on terms at least as favorable to the holders as those contained in the documentation governing the Indebtedness being refinanced.

“Registration Rights Agreement” means that certain registration rights agreement dated as of the Issue Date by and among the Issuer, the Subsidiary Guarantors and the Initial Purchasers and, with respect to any Additional Securities, one or more substantially similar registration rights agreements among the Issuer and the other parties thereto, as any such agreement may be amended from time to time.

“Reporting Failure” means the failure of the Issuer to file with the SEC and make available or otherwise deliver to the Trustee and each Holder of Securities, within the time periods specified in Section 3.10 (after giving effect to any grace period specified under Rule 12b-25 under the Exchange Act), the periodic reports, information, documents or other reports which the Issuer may be required to file with the SEC pursuant to such provision.

“Regulation S” means Regulation S under the Securities Act.

“Responsible Officer” when used with respect to the Trustee, means any officer within the Corporate Trust Administration of the Trustee (or any successor group of the Trustee) or any other officer of the Trustee customarily performing functions similar to those performed by any of the above designated officers and also means, with respect to a particular corporate trust matter, any other officer to whom such matter is referred because of his knowledge of and familiarity with the particular subject.

“Restricted Investment” means any Investment other than a Permitted Investment.

“Restricted Securities” means Initial Securities and Additional Securities bearing the Restricted Securities Legend.

“Restricted Securities Legend” means the legend set forth in Section 2.1(d)(1).

“Restricted Subsidiary” means any Subsidiary of the Issuer other than an Unrestricted Subsidiary.

“Rule 144A” means Rule 144A under the Securities Act.

“S&P” means S&P Global Ratings, a division of S&P Global, Inc., or any successor to the rating agency business thereof.

“Sale/Leaseback Transaction” means an arrangement relating to property now owned or hereafter acquired whereby the Issuer or a Restricted Subsidiary transfers such property to a Person and the Issuer or a Restricted Subsidiary leases it from such Person.

35

---

“SEC” means the United States Securities and Exchange Commission.

“Securities” has the meaning ascribed to it in the second introductory paragraph of this Indenture.

“Securities Act” means the Securities Act of 1933 (15 U.S.C. §§ 77a-77aa), as amended, and the rules and regulations of the SEC promulgated thereunder.

“Securities Custodian” means the custodian with respect to the Global Security (as appointed by DTC), or any successor Person thereto and shall initially be the Trustee.

“Senior Secured Credit Agreement” means the Fourth Amended and Restated Credit Agreement dated as of November 4, 2010 among the Issuer, as borrower, certain subsidiaries of the Issuer, as guarantors, JPMorgan Chase Bank, N.A., as administrative agent, and the lenders parties thereto from time to time, including any guarantees, collateral documents, instruments and agreements executed in connection therewith, and any amendments, supplements, modifications, extensions, renewals, restatements, refundings or refinancings thereof and any indentures or credit facilities or commercial paper facilities with banks or other institutional lenders or investors that replace, refund or refinance any part of the loans, notes, other credit facilities or commitments thereunder, including any such replacement, refunding or refinancing facility or indenture that increases the amount borrowable thereunder or alters the maturity thereof (*provided* that such increase in borrowings is permitted under Section 3.2).

“Shelf Registration Statement” shall have the meaning set forth in the applicable Registration Rights Agreement.

“Significant Subsidiary” means any Restricted Subsidiary that would be a “Significant Subsidiary” of the Issuer within the meaning of Rule 1-02 under Regulation S-X promulgated by the SEC, as in effect on the Issue Date.

“Stated Maturity” means, with respect to any security, the date specified in such security as the fixed date on which the payment of principal of such security is due and payable, including pursuant to any mandatory redemption provision, but shall not include any contingent obligations to repay, redeem or repurchase any such principal prior to the date originally scheduled for the payment thereof.

“Subordinated Obligation” means any Indebtedness of the Issuer (whether outstanding on the Issue Date or thereafter Incurred) which is expressly subordinated in right of payment to the Securities pursuant to a written agreement.

“Subsidiary” of any Person means (a) any corporation, association or other business entity (other than a partnership, joint venture, limited liability company or similar entity) of which more than 50% of the total ordinary voting power of Capital Stock entitled (without regard to the occurrence of any contingency) to vote in the election of directors, managers or trustees thereof (or Persons performing similar functions) or (b) any partnership, joint venture, limited liability company or similar entity of which more than 50% of the capital accounts, distribution rights, total equity and voting interests or general or limited partnership interests, as applicable, that is, in the case of clauses (a) and (b), at the time owned or controlled,

36

---

directly or indirectly, by (1) such Person, (2) such Person and one or more Subsidiaries of such Person or (3) one or more Subsidiaries of such Person. Unless otherwise specified herein or the context indicates otherwise, each reference to a Subsidiary (other than in this definition) will refer to a Subsidiary of the Issuer.

“Subsidiary Guarantor” means any Subsidiary of the Issuer that is a guarantor of the Securities, including any Person that is required after the Issue Date to guarantee the Securities pursuant to Section 3.11, in each case until a successor replaces such Person pursuant to the applicable provisions of this Indenture and, thereafter, means such successor.

“TIA” or “Trust Indenture Act” means the Trust Indenture Act of 1939 (15 U.S.C. §§ 77aaa-77bbb), as in effect on the date of this Indenture.

“Trustee” means the party named as such in this Indenture until a successor replaces it and, thereafter, means the successor.

“Trust Officer” means, when used with respect to the Trustee, any officer within the corporate trust department of the Trustee, including any vice president, assistant vice president, secretary, assistant treasurer, trust officer or any other officer of the Trustee who customarily performs functions similar to those performed by the Persons who at the time shall be such officers, respectively, or to whom any corporate trust matter is referred because of such person’s knowledge of and familiarity with the particular subject and who shall have direct responsibility for the administration of this Indenture.

“Unrestricted Subsidiary” means:

- (1) Antero Midstream Partners LP;
- (2) any Subsidiary of the Issuer that at the time of determination shall be designated an Unrestricted Subsidiary by the Board of Directors of the Issuer in the manner provided below; and
- (3) any Subsidiary of an Unrestricted Subsidiary.

The Board of Directors of the Issuer may designate any Subsidiary of the Issuer (including any newly acquired or newly formed Subsidiary or a Person becoming a Subsidiary through merger or consolidation or Investment therein) to be an Unrestricted Subsidiary only if:

- (1) such Subsidiary or any of its Subsidiaries does not own any Capital Stock or Indebtedness of or have any Investment in, or own or hold any Lien on any property of, any other Subsidiary of the Issuer which is not a Subsidiary of the Subsidiary to be so designated or otherwise an Unrestricted Subsidiary;
- (2) all the Indebtedness of such Subsidiary (and its Subsidiaries shall, at the date of designation, and will at all times thereafter, consist of Non-Recourse Debt;
- (3) on the date of such designation, such designation and the Investment of the Issuer or a Restricted Subsidiary in such Subsidiary complies with Section 3.3;

37

---

(4) such Subsidiary is a Person with respect to which neither the Issuer nor any of its Restricted Subsidiaries has any direct or indirect obligation to subscribe for additional Capital Stock of such Person;

(5) such Subsidiary, either alone or in the aggregate with all other Unrestricted Subsidiaries, does not operate, directly or indirectly, all or substantially all of the business of the Issuer and its Subsidiaries; and

(6) on the date such Subsidiary is designated an Unrestricted Subsidiary, such Subsidiary is not a party to any agreement, contract, arrangement or understanding with the Issuer or any Restricted Subsidiary with terms substantially less favorable to the Issuer or such Restricted Subsidiary than those that might have been obtained from Persons who are not Affiliates of the Issuer.

Any such designation by the Board of Directors of the Issuer shall be evidenced to the Trustee by filing with the Trustee a Board Resolution of the Issuer giving effect to such designation and an Officers' Certificate certifying that such designation complies with the foregoing conditions. If, at any time, any Unrestricted Subsidiary would fail to meet the foregoing requirements as an Unrestricted Subsidiary, it shall thereafter cease to be an Unrestricted Subsidiary for purposes of this Indenture and any Indebtedness of such Subsidiary shall be deemed to be Incurred as of such date.

The Board of Directors of the Issuer may designate any Unrestricted Subsidiary to be a Restricted Subsidiary; *provided* that immediately after giving effect to such designation, no Default or Event of Default shall have occurred and be continuing or would occur as a consequence thereof and the Issuer could Incur at least \$1.00 of additional Indebtedness under Section 3.2(a) on a pro forma basis taking into account such designation.

“U.S. Government Obligations” means securities that are (a) direct obligations of the United States of America for the timely payment of which its full faith and credit is pledged or (b) obligations of a Person controlled or supervised by and acting as an agency or instrumentality of the United States of America the timely payment of which is unconditionally guaranteed as a full faith and credit obligation of the United States of America, which, in either case, are not callable or redeemable at the option of the issuer thereof, and shall also include a depositary receipt issued by a bank (as defined in Section 3(a)(2) of the Securities Act), as custodian with respect to any such U.S. Government Obligations or a specific payment of principal of or interest on any such U.S. Government Obligations held by such custodian for the account of the holder of such depositary receipt; *provided* that (except as required by law) such custodian is not authorized to make any deduction from the amount payable to the holder of such depositary receipt from any amount received by the custodian in respect of the U.S. Government Obligations or the specific payment of principal of or interest on the U.S. Government Obligations evidenced by such depositary receipt.

“Volumetric Production Payments” means production payment obligations recorded as deferred revenue in accordance with GAAP, together with all undertakings and obligations in connection therewith.

38

“Voting Stock” of an entity means all classes of Capital Stock of such entity then outstanding and normally entitled to vote in the election of members of such entity’s Board of Directors.

“Wholly-Owned Subsidiary” means a Restricted Subsidiary, all of the Capital Stock of which (other than directors’ qualifying shares) is owned by the Issuer or another Wholly-Owned Subsidiary.

SECTION 1.2. Other Definitions.

<b>Term</b>	<b>Defined in Section</b>
“Additional Restricted Securities”	2.1(b)
“Affiliate Transaction”	3.8
“Agent Members”	2.1(e)(iii)
“Alternate Offer”	3.9
“Asset Disposition Offer Amount”	3.5
“Asset Disposition Offer Period”	3.5
“Asset Disposition Offer”	3.5
“Asset Disposition Purchase Date”	3.5
“Authenticating Agent”	2.2
“Change of Control Offer”	3.9
“Change of Control Payment”	3.9(1)
“Change of Control Payment Date”	3.9(2)
“Clearstream”	2.1(b)
“covenant defeasance option”	8.1(b)
“cross acceleration provision”	6.1(6)(b)
“Defaulted Interest”	2.14
“Euroclear”	2.1(b)
“Event of Default”	6.1

39

<b>Term</b>	<b>Defined in Section</b>
“Excess Proceeds”	3.5
“Exchange Global Note”	2.1(b)
“General Partner”	1.1
“Global Securities”	2.1(b)
“Initial Lien”	3.6
“Institutional Accredited Investor Global Notes”	2.1(b)
“Institutional Accredited Investor Notes”	2.1(b)
“Issuer Order”	2.2

“Joint Venture”	1.1
“judgment default provision”	6.1(9)
“legal defeasance option”	8.1(b)
“Legal Holiday”	12.8
“Notice of Default”	6.1(4); 6.1(5)
“Pari Passu Securities”	3.5
“Paying Agent”	2.3
“payment default”	6.1(6)(a)
“protected purchaser”	2.10
“Registrar”	2.3
“Regulation S Global Note”	2.1(b)
“Regulation S Notes”	2.1(b)
“Resale Restriction Termination Date”	2.6(b)
“Restricted Payment”	3.3(4)
“Restricted Period”	2.1(b)

40

<b>Term</b>	<b>Defined in Section</b>
“Rule 144A Global Note”	2.1(b)
“Rule 144A Notes”	2.1(b)
“Securities Register”	2.3
“Special Interest Payment Date”	2.14(a)
“Special Record Date”	2.14(a)
“Successor Company”	4.1(a)(1)

SECTION 1.3. Incorporation by Reference of Trust Indenture Act. This Indenture is subject to the mandatory provisions of the TIA which are incorporated by reference in and made a part of this Indenture. The following TIA terms have the following meanings:

“Commission” means the SEC.

“indenture securities” means the Securities and the Guarantees.

“indenture security holder” means a Securityholder.

“indenture to be qualified” means this Indenture.

“indenture trustee” or “institutional trustee” means the Trustee.

“obligor” on the indenture securities means the Issuer, the Subsidiary Guarantors and any other obligor on the indenture securities.

All other TIA terms used in this Indenture that are defined by the TIA, defined in the TIA by reference to another statute or defined by SEC rule have the meanings assigned to them by such definitions.

SECTION 1.4. Rules of Construction. Unless the context otherwise requires:

- (1) a term has the meaning assigned to it;
- (2) an accounting term not otherwise defined has the meaning assigned to it in accordance with GAAP;
- (3) “or” is not exclusive;
- (4) “including” means including without limitation;

41

(5) words in the singular include the plural and words in the plural include the singular;

(6) all amounts expressed in this Indenture or in any of the Securities in terms of money refer to the lawful currency of the United States of America; and

(7) the words “herein,” “hereof” and “hereunder” and other words of similar import refer to this Indenture as a whole and not to any particular Article, Section or other subdivision.

## THE SECURITIES

### SECTION 2.1. Form, Dating and Terms.

(a) The aggregate principal amount of Securities that may be authenticated and delivered under this Indenture is unlimited. The Initial Securities issued on the date hereof shall be in an aggregate principal amount of \$600,000,000. In addition, the Issuer may issue, from time to time in accordance with the provisions of this Indenture, Additional Securities (as provided herein) and Exchange Securities. Furthermore, Securities may be authenticated and delivered upon registration of transfer, exchange or in lieu of, other Securities pursuant to Section 2.2, 2.6, 2.10, 2.12, 5.8 or 9.5, in connection with an Asset Disposition Offer pursuant to Section 3.5 or in connection with a Change of Control Offer pursuant to Section 3.9.

The Initial Securities shall be known and designated as “5.0% Senior Notes, Series A, due 2025” of the Issuer. Additional Securities issued as Restricted Securities shall be known and designated as “5.0% Senior Notes, Series A, due 2025” of the Issuer. Additional Securities issued other than as Restricted Securities shall be known and designated as “5.0% Senior Notes, Series B, due 2025” of the Issuer, and Exchange Securities shall be known and designated as “5.0% Senior Notes, Series B, due 2025” of the Issuer.

With respect to any Additional Securities, the Issuer shall set forth in (a) a Board Resolution and (b) (i) an Officers’ Certificate or (ii) one or more indentures supplemental hereto, the following information:

- (1) the aggregate principal amount of such Additional Securities to be authenticated and delivered pursuant to this Indenture;
- (2) the issue price and the issue date of such Additional Securities, including the date from which interest shall accrue; and
- (3) whether such Additional Securities shall be Restricted Securities issued in the form of Exhibit A hereto and/or shall be issued in the form of Exhibit B hereto.

In authenticating and delivering Additional Securities, the Trustee shall be entitled to receive and shall be fully protected in relying upon, in addition to the Opinion of

Counsel and Officers’ Certificate required by Section 12.4, an Opinion of Counsel as to the due authorization, execution, delivery, validity and enforceability of such Additional Securities.

The Initial Securities, any Additional Securities and the Exchange Securities shall be considered collectively as a single class for all purposes of this Indenture. Holders of the Initial Securities, any Additional Securities and the Exchange Securities will vote and consent together on all matters to which such Holders are entitled to vote or consent as one class, and none of the Holders of the Initial Securities, any Additional Securities or the Exchange Securities shall have the right to vote or consent as a separate class on any matter to which such Holders are entitled to vote or consent.

If any of the terms of any Additional Securities are established by action taken pursuant to Board Resolutions of the Issuer, a copy of an appropriate record of such action shall be certified by the Secretary or any Assistant Secretary of the Issuer and delivered to the Trustee at or prior to the delivery of the Officers’ Certificate or the indenture supplemental hereto setting forth the terms of the Additional Securities.

(b) The Initial Securities are being offered and sold by the Issuer pursuant to a Purchase Agreement, dated December 7, 2016, among the Issuer, the Subsidiary Guarantors and J.P. Morgan Securities LLC, as representative of the Initial Purchasers. The Initial Securities and any Additional Securities (if issued as Restricted Securities) (the “Additional Restricted Securities”) shall be resold initially only to (A) QIBs in reliance on Rule 144A and (B) Non-U.S. Persons in reliance on Regulation S. Such Initial Securities and Additional Restricted Securities may thereafter be transferred to, among others, QIBs, purchasers in reliance on Regulation S and IAs in accordance with Rule 501 of the Securities Act, in each case, in accordance with the procedure described herein. Additional Securities offered after the date hereof may be offered and sold by the Issuer from time to time pursuant to one or more purchase agreements in accordance with applicable law.

Initial Securities and Additional Restricted Securities offered and sold to QIBs in the United States of America in reliance on Rule 144A (the “Rule 144A Notes”) shall be issued in the form of a permanent global Security substantially in the form of Exhibit A, which is hereby incorporated by reference and made a part of this Indenture, including appropriate legends as set forth in Section 2.1(d) (the “Rule 144A Global Note”), deposited with the Trustee, as Securities Custodian, duly executed by the Issuer and authenticated by the Trustee as hereinafter provided. The Rule 144A Global Note may be represented by more than one certificate, if so required by DTC’s rules regarding the maximum principal amount to be represented by a single certificate. The aggregate principal amount of the Rule 144A Global Note may from time to time be increased or decreased by adjustments made on the records of the Trustee, as Securities Custodian, as hereinafter provided.

Initial Securities and any Additional Restricted Securities offered and sold outside the United States of America (the “Regulation S Notes”) in reliance on Regulation S shall initially be issued in the form of a permanent global Security substantially in the form of Exhibit A including appropriate legends as set forth in Section 2.1(d) (the “Regulation S Global Note”) deposited upon issuance with, or on behalf of, the Trustee as Securities Custodian in the manner described in this Article II for credit to the respective accounts of

---

accounts as they may direct), including, but not limited to, accounts at Euroclear Bank S.A./N.V. (“Euroclear”) or Clearstream Banking, société anonyme (“Clearstream”). Prior to the 40<sup>th</sup> day after the later of the commencement of the offering of the Initial Securities and the Issue Date (such period through and including such 40<sup>th</sup> day, the “Restricted Period”), interests in the Regulation S Global Note may only be transferred to Non-U.S. Persons pursuant to Regulation S, unless exchanged for interests in another Global Security in accordance with the transfer and certification requirements described herein. Investors may hold their interests in the Regulation S Global Note through organizations other than Euroclear or Clearstream that are participants in DTC’s system or directly through Euroclear or Clearstream, if they are participants in such systems, or indirectly through organizations which are participants in such systems. If such interests are held through Euroclear or Clearstream, Euroclear and Clearstream shall hold such interests in the applicable Regulation S Global Note on behalf of their participants through customers’ securities accounts in their respective names on the books of their respective depositories. Such depositories, in turn, shall hold such interests in the applicable Regulation S Global Note in customers’ securities accounts in the depositories’ names on the books of DTC.

The Regulation S Global Note may be represented by more than one certificate, if so required by DTC’s rules regarding the maximum principal amount to be represented by a single certificate. The aggregate principal amount of the Regulation S Global Note may from time to time be increased or decreased by adjustments made on the records of the Trustee, as custodian for DTC or its nominee, as hereinafter provided.

Initial Securities and Additional Restricted Securities resold to IAs (the “Institutional Accredited Investor Notes”) in the United States of America shall be issued in the form of a permanent global Security substantially in the form of Exhibit A including appropriate legends as set forth in Section 2.1(d) (the “Institutional Accredited Investor Global Note”) deposited with the Trustee, as Securities Custodian, duly executed by the Issuer and authenticated by the Trustee as hereinafter provided. The Institutional Accredited Investor Global Note may be represented by more than one certificate, if so required by DTC’s rules regarding the maximum principal amount to be represented by a single certificate. The aggregate principal amount of the Institutional Accredited Investor Global Note may from time to time be increased or decreased by adjustments made on the records of the Trustee, as custodian for DTC or its nominee, as hereinafter provided.

Exchange Securities exchanged for interests in the Rule 144A Notes, the Regulation S Notes and the Institutional Accredited Investor Notes shall be issued in the form of a permanent global Security, substantially in the form of Exhibit B, which is hereby incorporated by reference and made a part of this Indenture, deposited with the Trustee as hereinafter provided, including the appropriate legend set forth in Section 2.1(d) (the “Exchange Global Note”). The Exchange Global Note shall be deposited upon issuance with, or on behalf of, the Trustee as Securities Custodian, duly executed by the Issuer and authenticated by the Trustee as hereinafter provided. The Exchange Global Note may be represented by more than one certificate, if so required by DTC’s rules regarding the maximum principal amount to be represented by a single certificate.

---

The Rule 144A Global Note, the Regulation S Global Note, the Institutional Accredited Investor Global Note and the Exchange Global Note are sometimes collectively herein referred to as the “Global Securities.”

The principal of (and premium, if any) and interest (including Additional Interest, if any) on the Securities shall be payable at the office or agency of the Issuer maintained for such purpose pursuant to Section 2.3; provided, however, that, at the option of the Issuer, each installment of interest may be paid by (i) check mailed to addresses of the Persons entitled thereto as such addresses shall appear on the Securities Register or (ii) wire transfer to an account located in the United States maintained by the payee, subject to the last sentence of this paragraph. Payments in respect of Securities represented by a Global Security (including principal, premium, if any, and interest) will be made by wire transfer of immediately available funds to the accounts specified by DTC. At the Issuer’s option, payments in respect of Securities represented by Definitive Securities (including principal, premium, if any, and interest) may be made by wire transfer to a U.S. dollar account maintained by the payee with a bank in the United States if the Holder elects payment by wire transfer by giving written notice to the Trustee or the Paying Agent to such effect designating such account no later than 15 days immediately preceding the relevant due date for payment (or such other date as the Trustee may accept in its discretion).

The Securities may have notations, legends or endorsements required by law, stock exchange rule or usage, in addition to those set forth on Exhibit A and Exhibit B and in Section 2.1(d). The Issuer shall approve any notation, endorsement or legend on the Securities. Each Security shall be dated the date of its authentication, and the Trustee’s certificate of authentication shall be substantially in the form set forth on Exhibit A and Exhibit B. The terms of the Securities set forth in Exhibit A and Exhibit B are part of the terms of this Indenture and, to the extent applicable, the Issuer, the Subsidiary Guarantors and the Trustee, by their execution and delivery of this Indenture, expressly agree to be bound by such terms.

(c) **Denominations.** The Securities shall be issuable only in fully registered form, without coupons, and only in denominations of \$2,000 and any integral multiple of \$1,000 in excess thereof.

(d) **Restrictive Legends.** Unless and until (i) an Initial Security or an Additional Security issued as a Restricted Security is sold under an effective registration statement or (ii) an Initial Security or an Additional Security issued as a Restricted Security is exchanged for an Exchange Security in connection with an effective registration statement, in each case pursuant to a Registration Rights Agreement or a similar agreement:



(1) the Rule 144A Global Note, the Regulation S Global Note and the Institutional Accredited Investor Global Note shall bear the following legend on the face thereof:

THIS SECURITY HAS NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), OR THE SECURITIES LAWS OF ANY STATE OR OTHER JURISDICTION. NEITHER THIS SECURITY NOR ANY INTEREST OR PARTICIPATION HEREIN MAY BE REOFFERED, SOLD,

45

---

ASSIGNED, TRANSFERRED, PLEDGED, ENCUMBERED, OR OTHERWISE DISPOSED OF IN THE ABSENCE OF SUCH REGISTRATION UNLESS SUCH TRANSACTION IS EXEMPT FROM, OR NOT SUBJECT TO, SUCH REGISTRATION.

THE HOLDER OF THIS SECURITY, BY ITS ACCEPTANCE HEREOF, AGREES ON ITS OWN BEHALF AND ON BEHALF OF ANY INVESTOR ACCOUNT FOR WHICH IT HAS PURCHASED SECURITIES, TO OFFER, SELL, OR OTHERWISE TRANSFER SUCH SECURITY, PRIOR TO THE DATE (THE "RESALE RESTRICTION TERMINATION DATE") THAT IS ONE YEAR (IN THE CASE OF RULE 144A SECURITIES) AFTER THE LATER OF THE ISSUE DATE HEREOF AND THE LAST DATE ON WHICH THE ISSUER OR ANY AFFILIATE OF THE ISSUER WAS THE OWNER OF THIS SECURITY (OR ANY PREDECESSOR OF SUCH SECURITY) OR 40 DAYS (IN THE CASE OF REGULATION S SECURITIES) AFTER THE LATER OF THE ORIGINAL ISSUE DATE HEREOF AND THE DATE ON WHICH THIS SECURITY (OR ANY PREDECESSOR OF SUCH SECURITY) WAS FIRST OFFERED TO PERSONS OTHER THAN DISTRIBUTORS (AS DEFINED IN RULE 902 OF REGULATION S) IN RELIANCE ON REGULATION S, ONLY (A) TO THE ISSUER OR ANY SUBSIDIARY THEREOF, (B) PURSUANT TO A REGISTRATION STATEMENT THAT HAS BEEN DECLARED EFFECTIVE UNDER THE SECURITIES ACT, (C) FOR SO LONG AS THE SECURITIES ARE ELIGIBLE FOR RESALE PURSUANT TO RULE 144A UNDER THE SECURITIES ACT, TO A PERSON IT REASONABLY BELIEVES IS A "QUALIFIED INSTITUTIONAL BUYER" AS DEFINED IN RULE 144A UNDER THE SECURITIES ACT THAT PURCHASES FOR ITS OWN ACCOUNT OR FOR THE ACCOUNT OF A QUALIFIED INSTITUTIONAL BUYER TO WHOM NOTICE IS GIVEN THAT THE TRANSFER IS BEING MADE IN RELIANCE ON RULE 144A, (D) PURSUANT TO OFFERS AND SALES THAT OCCUR OUTSIDE THE UNITED STATES WITHIN THE MEANING OF REGULATION S UNDER THE SECURITIES ACT, (E) TO AN INSTITUTIONAL "ACCREDITED INVESTOR" WITHIN THE MEANING OF RULE 501(a)(1), (2), (3), OR (7) UNDER THE SECURITIES ACT THAT IS AN INSTITUTIONAL ACCREDITED INVESTOR ACQUIRING THE SECURITY FOR ITS OWN ACCOUNT OR FOR THE ACCOUNT OF SUCH AN INSTITUTIONAL ACCREDITED INVESTOR, IN EACH CASE IN A MINIMUM PRINCIPAL AMOUNT OF THE SECURITIES OF \$250,000, FOR INVESTMENT PURPOSES AND NOT WITH A VIEW TO OR FOR OFFER OR SALE IN CONNECTION WITH ANY DISTRIBUTION IN VIOLATION OF THE SECURITIES ACT, OR (F) PURSUANT TO ANOTHER AVAILABLE EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT, SUBJECT TO THE ISSUER'S AND THE TRUSTEE'S RIGHT PRIOR TO ANY SUCH OFFER, SALE, OR TRANSFER PURSUANT TO CLAUSE (D), (E), OR (F) TO REQUIRE THE DELIVERY OF AN OPINION OF COUNSEL, CERTIFICATION, AND/OR OTHER INFORMATION SATISFACTORY TO EACH OF THEM. THE HOLDER AGREES THAT IT WILL DELIVER TO EACH PERSON TO WHOM THIS SECURITY OR AN INTEREST HEREIN IS TRANSFERRED A NOTICE SUBSTANTIALLY TO THE EFFECT OF THIS LEGEND. THIS LEGEND WILL BE REMOVED UPON THE REQUEST OF THE HOLDER OR THE ISSUER ON OR AFTER THE RESALE

46

---

RESTRICTION TERMINATION DATE.

BY ITS ACQUISITION AND HOLDING OF THIS SECURITY, THE HOLDER THEREOF WILL BE DEEMED TO HAVE REPRESENTED, WARRANTED AND AGREED THAT EITHER (1) NO PORTION OF THE ASSETS USED BY SUCH HOLDER TO ACQUIRE OR HOLD THIS SECURITY (OR ANY INTEREST IN THIS SECURITY) CONSTITUTES THE ASSETS OF AN EMPLOYEE BENEFIT PLAN THAT IS SUBJECT TO TITLE I OF THE U.S. EMPLOYEE RETIREMENT INCOME SECURITY ACT OF 1974, AS AMENDED ("ERISA"), A PLAN, INDIVIDUAL RETIREMENT ACCOUNT OR OTHER ARRANGEMENT THAT IS SUBJECT TO SECTION 4975 OF THE U.S. INTERNAL REVENUE CODE OF 1986, AS AMENDED (THE "CODE"), OR ANY GOVERNMENTAL PLAN, CHURCH PLAN, NON-U.S. PLAN, OR OTHER PLAN SUBJECT TO OTHER FEDERAL, STATE, LOCAL, NON-U.S. OR OTHER LAWS OR REGULATIONS THAT ARE SIMILAR TO SUCH PROVISIONS OF ERISA OR THE CODE ("SIMILAR LAWS"), OR AN ENTITY WHOSE UNDERLYING ASSETS ARE CONSIDERED TO INCLUDE "PLAN ASSETS" OF SUCH PLAN, ACCOUNT OR ARRANGEMENT, OR (2) THE ACQUISITION, HOLDING AND DISPOSITION OF THIS SECURITY (OR ANY INTEREST IN THIS SECURITY) WILL NOT CONSTITUTE A NON-EXEMPT PROHIBITED TRANSACTION UNDER SECTION 406 OF ERISA OR SECTION 4975 OF THE CODE OR A SIMILAR VIOLATION UNDER ANY APPLICABLE SIMILAR LAWS.

IN THE CASE OF REGULATION S NOTES: BY ITS ACQUISITION HEREOF, THE HOLDER HEREOF REPRESENTS THAT IT IS NOT A U.S. PERSON NOR IS IT PURCHASING FOR THE ACCOUNT OF A U.S. PERSON AND IS ACQUIRING THIS SECURITY IN AN OFFSHORE TRANSACTION IN ACCORDANCE WITH REGULATION S UNDER THE SECURITIES ACT.

(2) Each Global Security, whether or not an Initial Security, shall bear the following legend on the face thereof:

UNLESS THIS CERTIFICATE IS PRESENTED BY AN AUTHORIZED REPRESENTATIVE OF THE DEPOSITORY TRUST COMPANY, A NEW YORK CORPORATION (“DTC”), NEW YORK, NEW YORK, TO THE ISSUER OR ITS AGENT FOR REGISTRATION OF TRANSFER, EXCHANGE OR PAYMENT, AND ANY CERTIFICATE ISSUED IS REGISTERED IN THE NAME OF CEDE & CO. OR IN SUCH OTHER NAME AS IS REQUESTED BY AN AUTHORIZED REPRESENTATIVE OF DTC (AND ANY PAYMENT IS MADE TO CEDE & CO. OR TO SUCH OTHER ENTITY AS IS REQUESTED BY AN AUTHORIZED REPRESENTATIVE OF DTC), ANY TRANSFER, PLEDGE OR OTHER USE HEREOF FOR VALUE OR OTHERWISE BY OR TO ANY PERSON IS WRONGFUL INASMUCH AS THE REGISTERED OWNER HEREOF, CEDE & CO., HAS AN INTEREST HEREIN.

TRANSFERS OF THIS GLOBAL SECURITY SHALL BE LIMITED TO TRANSFERS IN WHOLE, BUT NOT IN PART, TO DTC, TO NOMINEES OF DTC OR TO A

47

---

SUCCESSOR THEREOF OR SUCH SUCCESSOR’S NOMINEE AND TRANSFERS OF PORTIONS OF THIS GLOBAL SECURITY SHALL BE LIMITED TO TRANSFERS MADE IN ACCORDANCE WITH THE RESTRICTIONS SET FORTH IN THE INDENTURE REFERRED TO ON THE REVERSE HEREOF.

(3) Each Security issued hereunder that has more than a de minimis amount of original issue discount for U.S. federal income tax purposes shall bear a legend in substantially the following form:

THE FOLLOWING INFORMATION IS SUPPLIED SOLELY FOR U.S. FEDERAL INCOME TAX PURPOSES. THIS SECURITY IS ISSUED WITH ORIGINAL ISSUE DISCOUNT UNDER SECTIONS 1272, 1273 AND 1275 OF THE INTERNAL REVENUE CODE OF 1986, AS AMENDED. A HOLDER MAY OBTAIN THE ISSUE PRICE, AMOUNT OF ORIGINAL ISSUE DISCOUNT, ISSUE DATE AND YIELD TO MATURITY FOR THIS SECURITY BY SUBMITTING A REQUEST FOR SUCH INFORMATION TO THE ISSUER AT THE FOLLOWING ADDRESS: ANTERO RESOURCES CORPORATION, 1615 WYNKOOP STREET, DENVER, COLORADO 80202, ATTENTION: CHIEF FINANCIAL OFFICER.

(e) Book-Entry Provisions.

(i) This Section 2.1(e) shall apply only to Global Securities deposited with the Trustee, as Securities Custodian.

(ii) Each Global Security initially shall (x) be registered in the name of Cede & Co. as the nominee of DTC, (y) be delivered to the Trustee as Securities Custodian and (z) bear legends as set forth in Section 2.1(d). Transfers of a Global Security (but not a beneficial interest therein) will be limited to transfers thereof in whole, but not in part, to the Depository, its successors or their respective nominees, except as set forth in Section 2.1(e)(v) and 2.1(f). If a beneficial interest in a Global Security is transferred or exchanged for a beneficial interest in another Global Security, the Trustee will (x) record a decrease in the principal amount of the Global Security being transferred or exchanged equal to the principal amount of such transfer or exchange and (y) record a like increase in the principal amount of the other Global Security. Any beneficial interest in one Global Security that is transferred to a Person who takes delivery in the form of an interest in another Global Security, or exchanged for an interest in another Global Security, will, upon transfer or exchange, cease to be an interest in such Global Security and become an interest in the other Global Security and, accordingly, will thereafter be subject to all transfer and exchange restrictions, if any, and other procedures applicable to beneficial interests in such other Global Security for as long as it remains such an interest.

(iii) Members of, or participants in, DTC (“Agent Members”) shall have no rights under this Indenture with respect to any Global Security held on their behalf by DTC or by the Trustee as the Securities Custodian or under such Global Security, and DTC may be treated by the Issuer, the Subsidiary Guarantors, the Trustee and any agent of the Issuer, the Subsidiary Guarantors or the Trustee as the absolute owner of such Global Security for all purposes whatsoever. Notwithstanding the foregoing, nothing herein shall prevent the Issuer, the Subsidiary Guarantors, the Trustee or any agent of the Issuer, the Subsidiary Guarantors or the

48

---

Trustee from giving effect to any written certification, proxy or other authorization furnished by DTC or impair, as between DTC and its Agent Members, the operation of customary practices of DTC governing the exercise of the rights of a Holder of a beneficial interest in any Global Security.

(iv) In connection with any transfer of a portion of the beneficial interest in a Global Security pursuant to Section 2.1(f) to beneficial owners who are required to hold Definitive Securities, the Securities Custodian shall reflect on its books and records the date and a decrease in the principal amount of such Global Security in an amount equal to the principal amount of the beneficial interest in the Global Security to be transferred, and the Issuer shall execute, and the Trustee shall authenticate and make available for delivery, one or more Definitive Securities of like tenor and amount.

(v) In connection with the transfer of an entire Global Security to beneficial owners pursuant to Section 2.1(f), such Global Security shall be deemed to be surrendered to the Trustee for cancellation, and the Issuer shall execute, and the Trustee shall authenticate and make available for delivery, to each beneficial owner identified by DTC in exchange for its beneficial interest in such Global Security, an equal aggregate principal amount of Definitive Securities of authorized denominations.

(vi) The registered Holder of a Global Security may grant proxies and otherwise authorize any person, including

Agent Members and persons that may hold interests through Agent Members, to take any action which a Holder is entitled to take under this Indenture or the Securities.

(vii) Any Holder of a Global Security shall, by acceptance of such Global Security, agree that transfers of beneficial interests in such Global Security may be effected only through a book-entry system maintained by (a) the Holder of such Global Security (or its agent) or (b) any holder of a beneficial interest in such Global Security, and that ownership of a beneficial interest in such Global Security shall be required to be reflected in a book entry.

(f) Definitive Securities.

(i) Except as provided below, owners of beneficial interests in Global Securities will not be entitled to receive Definitive Securities. If required to do so pursuant to any applicable law or regulation, beneficial owners may obtain Definitive Securities in exchange for their beneficial interests in a Global Security upon written request in accordance with DTC's and the Registrar's procedures. In addition, Definitive Securities shall be transferred to all beneficial owners in exchange for their beneficial interests in a Global Security if (A) DTC notifies the Issuer that it is unwilling or unable to continue as depositary for such Global Security or DTC ceases to be a clearing agency registered under the Exchange Act, at a time when DTC is required to be so registered in order to act as depositary, and in each case a successor depositary is not appointed by the Issuer within 90 days of such notice or (B) the Issuer, in its sole discretion, executes and delivers to the Trustee and Registrar an Officers' Certificate stating that such Global Security shall be so exchangeable. In the event of the occurrence of any of the events specified in the preceding sentence or in clause (A) or (B) of the preceding sentence, Definitive Securities delivered in exchange for any Global Note or beneficial interests therein

49

---

will be registered in the names, and issued in any approved denominations, requested by or on behalf of DTC (in accordance with its customary procedures).

(ii) Any Definitive Security delivered in exchange for an interest in a Global Security pursuant to Section 2.1(e) shall, except as otherwise provided by Section 2.6(d), bear the Restricted Securities Legend.

(iii) If a Definitive Security is transferred or exchanged for a beneficial interest in a Global Security, the Trustee will (x) cancel such Definitive Security, (y) record an increase in the principal amount of such Global Security equal to the principal amount of such transfer or exchange and (z) in the event that such transfer or exchange involves less than the entire principal amount of the canceled Definitive Security, the Issuer shall execute, and the Trustee shall authenticate and make available for delivery, to the transferring Holder a new Definitive Security representing the principal amount not so transferred.

(iv) If a Definitive Security is transferred or exchanged for another Definitive Security, (x) the Trustee will cancel the Definitive Security being transferred or exchanged, (y) the Issuer shall execute, and the Trustee shall authenticate and make available for delivery, one or more new Definitive Securities in authorized denominations having an aggregate principal amount equal to the principal amount of such transfer or exchange to the transferee (in the case of a transfer) or the Holder of the canceled Definitive Security (in the case of an exchange), registered in the name of such transferee or Holder, as applicable, and (z) if such transfer or exchange involves less than the entire principal amount of the canceled Definitive Security, the Issuer shall execute, and the Trustee shall authenticate and make available for delivery to the Holder thereof, one or more Definitive Securities in authorized denominations having an aggregate principal amount equal to the untransferred or unexchanged portion of the canceled Definitive Securities, registered in the name of the Holder thereof.

SECTION 2.2. Execution and Authentication. One Officer shall sign the Securities for the Issuer by manual or facsimile signature. If the Officer whose signature is on a Security no longer holds that office at the time the Trustee authenticates the Security, the Security shall be valid nevertheless.

A Security shall not be valid until an authorized officer of the Trustee manually authenticates the Security. The signature of the Trustee on a Security shall be conclusive evidence that such Security has been duly and validly authenticated and issued under this Indenture. A Security shall be dated the date of its authentication.

At any time and from time to time after the execution and delivery of this Indenture, the Trustee shall authenticate and make available for delivery: (1) Initial Securities for original issue on the Issue Date in an aggregate principal amount of \$600,000,000, (2) subject to the terms of this Indenture, Additional Securities for original issue in an unlimited principal amount, (3) Exchange Securities for issue only in an exchange offer pursuant to a Registration Rights Agreement or upon resale under an effective Shelf Registration Statement, and only in exchange for Initial Securities or Additional Securities of an equal principal amount and (4) when sold in connection with an effective registration statement, Initial Securities in the form of an Unrestricted Global Note, in each case upon a written order of the Issuer signed by one

50

---

Officer of the Issuer (the "Issuer Order"). Such Issuer Order shall specify whether the Securities will be in the form of Definitive Securities or Global Securities, the amount of the Securities to be authenticated and the date on which the original issue of Securities is to be authenticated and whether the Securities are to be Initial Securities, Additional Securities or Exchange Securities.

The Trustee may appoint an agent (the "Authenticating Agent") reasonably acceptable to the Issuer to authenticate the

Securities. Any such instrument shall be evidenced by an instrument signed by a Trust Officer, a copy of which shall be furnished to the Issuer. Unless limited by the terms of such appointment, any such Authenticating Agent may authenticate Securities whenever the Trustee may do so. Each reference in this Indenture to authentication by the Trustee includes authentication by the Authenticating Agent. An Authenticating Agent has the same rights as any Registrar, Paying Agent or agent for service of notices and demands.

In case the Issuer or any Subsidiary Guarantor, pursuant to Article IV or Section 10.2, as applicable, shall be consolidated or merged with or into any other Person or shall convey, transfer, lease or otherwise dispose of its properties and assets substantially as an entirety to any Person, and the successor Person resulting from such consolidation, or surviving such merger, or into which the Issuer or any Subsidiary Guarantor shall have been merged, or the Person which shall have received a conveyance, transfer, lease or other disposition as aforesaid, shall have executed an indenture supplemental hereto with the Trustee pursuant to Article IV or Section 10.2, as applicable, any of the Securities authenticated or delivered prior to such consolidation, merger, conveyance, transfer, lease or other disposition may, from time to time, at the request of the successor Person, be exchanged for other Securities executed in the name of the successor Person with such changes in phraseology and form as may be appropriate, but otherwise in substance of like tenor as the Securities surrendered for such exchange and of like principal amount; and the Trustee, upon Issuer Order of the successor Person, shall authenticate and make available for delivery Securities as specified in such order for the purpose of such exchange. If Securities shall at any time be authenticated and delivered in any new name of a successor Person pursuant to this Section 2.2 in exchange or substitution for or upon registration of transfer of any Securities, such successor Person, at the option of the Holders but without expense to them, shall provide for the exchange of all Securities at the time outstanding for Securities authenticated and delivered in such new name.

**SECTION 2.3. Registrar and Paying Agent.** The Issuer shall maintain in the continental United States an office or agency where Securities may be presented for registration of transfer or for exchange (the "Registrar"), and an office or agency where Securities may be presented for payment (the "Paying Agent"). The Registrar shall keep a register of the Securities and of their transfer and exchange (the "Securities Register"). The Issuer or any of its Restricted Subsidiaries may act as Registrar or Paying Agent. The Issuer may have one or more co-registrars and one or more additional paying agents. The term "Paying Agent" includes any additional paying agent and the term "Registrar" includes any co-registrar.

The Issuer shall enter into an appropriate agency agreement with any Registrar or Paying Agent not a party to this Indenture, which shall incorporate the terms of the TIA. The agreement shall implement the provisions of this Indenture that relate to such agent. The Issuer shall notify the Trustee of the name and address of each such agent. If the Issuer fails to

51

---

maintain a Registrar or Paying Agent, the Trustee shall act as such and shall be entitled to appropriate compensation therefor pursuant to Section 7.7. The Issuer or any of its wholly owned Subsidiaries organized in the United States may act as Paying Agent, Registrar or transfer agent.

The Issuer initially appoints the Trustee as Registrar for the Securities at its corporate trust office in Dallas, Texas, and as Paying Agent for the Securities at its corporate trust office in Minneapolis, Minnesota. The Issuer may remove any Registrar or Paying Agent upon written notice to such Registrar or Paying Agent and to the Trustee; *provided, however*, that no such removal shall become effective until (i) acceptance of any appointment by a successor as evidenced by an appropriate agreement entered into by the Issuer and such successor Registrar or Paying Agent, as the case may be, and delivered to the Trustee or (ii) notification to the Trustee that the Trustee shall serve as Registrar or Paying Agent until the appointment of a successor in accordance with clause (i) above. The Registrar or Paying Agent may resign at any time upon written notice to the Issuer and the Trustee.

**SECTION 2.4. Paying Agent to Hold Money in Trust.** By no later than 11:00 a.m. (New York City time) on the date on which any principal of, premium, if any, or interest on any Security is due and payable, the Issuer shall deposit with the Paying Agent a sum sufficient in immediately available funds to pay such principal, premium or interest when due. The Issuer shall require each Paying Agent (other than the Trustee) to agree in writing that such Paying Agent shall hold in trust for the benefit of Securityholders or the Trustee all money held by such Paying Agent for the payment of principal of, premium, if any, or interest on the Securities (whether such assets have been distributed to it by the Issuer or other obligors on the Securities), shall notify the Trustee in writing of any default by the Issuer or any Subsidiary Guarantor in making any such payment and shall during the continuance of any default by the Issuer (or any other obligor upon the Securities) in the making of any payment in respect of the Securities, upon the written request of the Trustee, forthwith deliver to the Trustee all sums held in trust by such Paying Agent for payment in respect of the Securities together with a full accounting thereof. If the Issuer or a Restricted Subsidiary acts as Paying Agent, it shall segregate the money held by it as Paying Agent and hold it as a separate trust fund. The Issuer at any time may require a Paying Agent (other than the Trustee) to pay all money held by it to the Trustee and to account for any funds or assets disbursed by such Paying Agent. Upon complying with this Section 2.4, the Paying Agent (if other than the Issuer or a Restricted Subsidiary) shall have no further liability for the money delivered to the Trustee. Upon any bankruptcy, reorganization or similar proceeding with respect to the Issuer, the Trustee shall serve as Paying Agent for the Securities.

**SECTION 2.5. Securityholder Lists.** The Trustee shall preserve in as current a form as is reasonably practicable the most recent list available to it of the names and addresses of Securityholders and shall otherwise comply with TIA § 312(a). If the Trustee is not the Registrar, or to the extent otherwise required under the TIA, the Issuer, on its own behalf and on behalf of each of the Subsidiary Guarantors, shall furnish or cause the Registrar to furnish to the Trustee, in writing at least five Business Days before each interest payment date and at such other times as the Trustee may request in writing, a list in such form and as of such date as the Trustee may reasonably require of the names and addresses of Securityholders and the Issuer shall otherwise comply with TIA § 312(a).

52

---

SECTION 2.6. Transfer and Exchange.

(a) A Holder may transfer a Security (or a beneficial interest therein) to another Person or exchange a Security (or a beneficial interest therein) for another Security or Securities of any authorized denomination by presenting to the Trustee a written request therefor stating the name of the proposed transferee or requesting such an exchange, accompanied by any certification, opinion or other document required by this Section 2.6. The Trustee shall promptly register any transfer or exchange that meets the requirements of this Section 2.6 by noting the same in the register maintained by the Trustee for the purpose, and no transfer or exchange shall be effective until it is registered in such register. The transfer or exchange of any Security (or a beneficial interest therein) may only be made in accordance with this Section 2.6 and Section 2.1(e) and 2.1(f), as applicable, and, in the case of a Global Security (or a beneficial interest therein), the applicable rules and procedures of DTC, Euroclear and Clearstream. The Trustee shall refuse to register any requested transfer or exchange that does not comply with this paragraph.

(b) Transfers of Rule 144A Notes and Institutional Accredited Investor Notes. The following provisions shall apply with respect to any proposed registration of transfer of a Rule 144A Note or an Institutional Accredited Investor Note prior to the date which is one year after the later of the date of its original issue and the last date on which the Issuer or any Affiliate of Issuer was the owner of such Securities (or any predecessor thereto) (the "Resale Restriction Termination Date"):

(i) a registration of transfer of a Rule 144A Note or an Institutional Accredited Investor Note or a beneficial interest therein to a QIB shall be made upon the representation of the transferee in the form as set forth on the reverse of the Security that it is purchasing for its own account or an account with respect to which it exercises sole investment discretion and that it and any such account is a "qualified institutional buyer" within the meaning of Rule 144A, and is aware that the sale to it is being made in reliance on Rule 144A and acknowledges that it has received such information regarding the Issuer as the undersigned has requested pursuant to Rule 144A or has determined not to request such information and that it is aware that the transferor is relying upon its foregoing representations in order to claim the exemption from registration provided by Rule 144A; *provided* that no such written representation or other written certification shall be required in connection with the transfer of a beneficial interest in the Rule 144A Global Note to a transferee in the form of a beneficial interest in that Rule 144A Global Note in accordance with this Indenture and the applicable procedures of DTC.

(ii) a registration of transfer of a Rule 144A Note or an Institutional Accredited Investor Note or a beneficial interest therein to an IAI shall be made upon receipt by the Trustee or its agent of a certificate substantially in the form set forth in Section 2.8 from the proposed transferee and, if requested by the Issuer, the delivery of an opinion of counsel, certification and/or other information satisfactory to it; and

(iii) a registration of transfer of a Rule 144A Note or an Institutional Accredited Investor Note or a beneficial interest therein to a Non-U.S. Person shall be made upon receipt by the Trustee or its agent of a certificate substantially in the form set

---

forth in Section 2.9 from the proposed transferee and, if requested by the Issuer, the delivery of an opinion of counsel, certification and/or other information satisfactory to it.

(c) Transfers of Regulation S Notes. The following provisions shall apply with respect to any proposed transfer of a Regulation S Note prior to the expiration of the Restricted Period:

(i) a transfer of a Regulation S Note or a beneficial interest therein to a QIB shall be made upon the representation of the transferee, in the form of assignment on the reverse of the certificate, that it is purchasing the Security for its own account or an account with respect to which it exercises sole investment discretion and that it and any such account is a "qualified institutional buyer" within the meaning of Rule 144A, is aware that the sale to it is being made in reliance on Rule 144A and acknowledges that it has received such information regarding the Issuer as the undersigned has requested pursuant to Rule 144A or has determined not to request such information and that it is aware that the transferor is relying upon its foregoing representations in order to claim the exemption from registration provided by Rule 144A;

(ii) a transfer of a Regulation S Note or a beneficial interest therein to an IAI shall be made upon receipt by the Trustee or its agent of a certificate substantially in the form set forth in Section 2.8 from the proposed transferee and, if requested by the Issuer or the Trustee, the delivery of an opinion of counsel, certification and/or other information satisfactory to each of them; and

(iii) a transfer of a Regulation S Note or a beneficial interest therein to a Non-U.S. Person shall be made upon receipt by the Trustee or its agent of a certificate substantially in the form set forth in Section 2.9 hereof from the proposed transferee and, if requested by the Issuer, receipt by the Trustee or its agent of an opinion of counsel, certification and/or other information satisfactory to the Issuer.

After the expiration of the Restricted Period, interests in the Regulation S Note may be transferred in accordance with applicable law without requiring the certification set forth in Section 2.8, Section 2.9 or any additional certification.

(d) Restricted Securities Legend. Upon the transfer, exchange or replacement of Securities not bearing a Restricted Securities Legend, the Registrar shall deliver Securities that do not bear a Restricted Securities Legend. Upon the transfer, exchange or replacement of Securities bearing a Restricted Securities Legend, the Registrar shall deliver only Securities that bear a

Restricted Securities Legend unless (i) Initial Securities are being exchanged for Exchange Securities in an exchange offer pursuant to a Registration Rights Agreement, in which case the Exchange Securities shall not bear a Restricted Securities Legend, (ii) an Initial Security is being transferred pursuant to a Shelf Registration Statement or other effective registration statement or (iii) there is delivered to the Registrar an Opinion of Counsel reasonably satisfactory to the Issuer and the Trustee to the effect that neither such legend nor the related restrictions on transfer are required in order to maintain compliance with the provisions of the Securities Act. Any Additional Securities sold in a registered offering shall not be required to bear the Restricted Securities Legend.

(e) [Reserved].

(f) Retention of Written Communications. The Registrar shall retain copies of all letters, notices and other written communications received pursuant to Section 2.1 or this Section 2.6. The Issuer shall have the right to inspect and make copies of all such letters, notices or other written communications at any reasonable time upon the giving of reasonable prior written notice to the Registrar.

(g) Obligations with Respect to Transfers and Exchanges of Securities.

(i) To permit registrations of transfers and exchanges, the Issuer shall, subject to the other terms and conditions of this Article II, execute and the Trustee shall authenticate Definitive Securities and Global Securities at the Registrar's request.

(ii) No service charge shall be made to a Holder for any registration of transfer or exchange, but the Issuer may require the Holder to pay a sum sufficient to cover any transfer tax assessments or similar governmental charge payable in connection therewith (other than any such transfer taxes, assessments or similar governmental charges payable upon exchange or transfer pursuant to Sections 2.2, 2.6, 2.10, 2.12, 3.5, 3.9, 5.8 or 9.5).

(iii) The Issuer (and the Registrar) shall not be required to register the transfer of or exchange of any Security (A) for a period (1) of 15 days before a selection of Securities to be redeemed or (2) beginning 15 days before an interest payment date and ending on such interest payment date or (B) selected for redemption, except the unredeemed portion of any Security being redeemed in part.

(iv) Prior to the due presentation for registration of transfer of any Security, the Issuer, any Subsidiary Guarantor, the Trustee, the Paying Agent or the Registrar may deem and treat the person in whose name a Security is registered as the owner of such Security for the purpose of receiving payment of principal of, premium, if any, and (subject to paragraph 2 of the forms of Securities attached hereto as Exhibits A and B) interest on such Security and for all other purposes whatsoever, including without limitation the transfer or exchange of such Security, whether or not such Security is overdue, and none of the Issuer, any Subsidiary Guarantor, the Trustee, the Paying Agent or the Registrar shall be affected by notice to the contrary.

(v) Any Definitive Security delivered in exchange for an interest in a Global Security pursuant to Section 2.1(f) shall, except as otherwise provided by Section 2.6(d), bear the Restricted Securities Legend.

(vi) All Securities issued upon any transfer or exchange pursuant to the terms of this Indenture shall evidence the same debt and shall be entitled to the same benefits under this Indenture as the Securities surrendered upon such transfer or exchange.

(h) No Obligation of the Trustee. The Trustee shall have no responsibility or obligation to any beneficial owner of a Global Security, Agent Member or other Person with

respect to the accuracy of the records of DTC or its nominee or of any participant or member thereof, with respect to any ownership interest in the Securities or with respect to the delivery to any participant, member, beneficial owner or other Person (other than DTC) of any notice (including any notice of redemption or purchase) or the payment of any amount or delivery of any Securities (or other security or property) under or with respect to such Securities. All notices and communications to be given to the Holders and all payments to be made to Holders in respect of the Securities shall be given or made only to or upon the order of the registered Holders (which shall be DTC or its nominee in the case of a Global Security). The rights of beneficial owners in any Global Security shall be exercised only through DTC subject to the applicable rules and procedures of DTC. The Trustee may rely and shall be fully protected in relying upon information furnished by DTC with respect to its Agent Members and any beneficial owners. The Trustee shall have no obligation or duty to monitor, determine or inquire as to compliance with any restrictions on transfer imposed under this Indenture or under applicable law with respect to any transfer of any interest in any Security (including any transfers between or among Agent Members or beneficial owners in any Global Security) other than to require delivery of such certificates and other documentation or evidence as are expressly required by, and to do so if and when expressly required by, the terms of this Indenture, and to examine the same to determine substantial compliance as to form with the express requirements hereof.

(i) Affiliate Holders. By accepting a beneficial interest in a Global Security, any Person that is an Affiliate of the Issuer agrees to give notice to the Issuer, the Trustee and the Registrar of the acquisition and its Affiliate status.

SECTION 2.7. [Reserved].

SECTION 2.8. Form of Certificate to be Delivered in Connection with Transfers to Institutional Accredited Investors.

[Date]

Antero Resources Corporation  
c/o Wells Fargo Bank, National Association  
750 N. Saint Paul Place, Suite 1750  
MAC T9263-170  
Dallas, TX 75202  
Attention: Corporate, Municipal & Escrow Services

Ladies and Gentlemen:

This certificate is delivered to request a transfer of \$[ ] principal amount of the 5.0% Senior Notes due 2025 (the "Securities") of Antero Resources Corporation (the "Issuer").

Upon transfer, the Securities would be registered in the name of the new beneficial owner as follows:

56

---

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Taxpayer ID Number: \_\_\_\_\_

The undersigned represents and warrants to you that:

1. We are an institutional "accredited investor" (as defined in Rule 501(a)(1), (2), (3) or (7) under the Securities Act of 1933, as amended (the "Securities Act")) purchasing for our own account or for the account of such an institutional "accredited investor" at least \$250,000 principal amount of the Securities, and we are acquiring the Securities not with a view to, or for offer or sale in connection with, any distribution in violation of the Securities Act. We have such knowledge and experience in financial and business matters as to be capable of evaluating the merits and risk of our investment in the Securities and we invest in or purchase securities similar to the Securities in the normal course of our business. We and any accounts for which we are acting are each able to bear the economic risk of our or its investment.

2. We understand that the Securities have not been registered under the Securities Act and, unless so registered, may not be sold except as permitted in the following sentence. We agree on our own behalf and on behalf of any investor account for which we are purchasing Securities to offer, sell or otherwise transfer such Securities prior to the date that is one year after the later of the date of original issue and the last date on which the Issuer or any affiliate of the Issuer was the owner of such Securities (or any predecessor thereto) (the "Resale Restriction Termination Date") only (a) to the Issuer or any Subsidiary thereof, (b) pursuant to an effective registration statement under the Securities Act, (c) in a transaction complying with the requirements of Rule 144A under the Securities Act, to a person we reasonably believe is a "qualified institutional buyer" under Rule 144A of the Securities Act (a "QIB") that is purchasing for its own account or for the account of a QIB and to whom notice is given that the transfer is being made in reliance on Rule 144A, (d) pursuant to offers and sales to non-U.S. persons that occur outside the United States within the meaning of Regulation S under the Securities Act, (e) to an institutional "accredited investor" within the meaning of Rule 501(a)(1), (2), (3) or (7) under the Securities Act that is purchasing for its own account or for the account of such an institutional "accredited investor," in each case in a minimum principal amount of Securities of \$250,000 for investment purposes and not with a view to or for offer or sale in connection with any distribution in violation of the Securities Act or (f) pursuant to any other available exemption from the registration requirements of the Securities Act, subject in each of the foregoing cases to any requirement of law that the disposition of our property or the property of such investor account or accounts be at all times within our or their control and in compliance with any applicable state securities laws. The foregoing restrictions on resale will not apply subsequent to the Resale Restriction Termination Date. If any resale or other transfer of the Securities is proposed to be made pursuant to clause (e) above prior to the Resale Restriction Termination Date, the transferor shall deliver a letter from the transferee substantially in the form of this letter to the Issuer and the Trustee, which shall provide, among other things, that the transferee is an institutional "accredited investor" (within the meaning of Rule 501(a)(1), (2), (3) or (7) under the Securities Act) and that it is acquiring such Securities for investment purposes and not for distribution in violation of the Securities Act. Each purchaser acknowledges that the

57

---

Issuer and the Trustee reserve the right prior to any offer, sale or other transfer prior to the Resale Termination Date of the Securities pursuant to clauses (d), (e) or (f) above to require the delivery of an opinion of counsel, certifications and/or other information satisfactory to the Issuer and the Trustee.

3. We [are][are not] an Affiliate of the Issuer.

TRANSFEREE: \_\_\_\_\_

BY: \_\_\_\_\_

SECTION 2.9. Form of Certificate to be Delivered in Connection with Transfers Pursuant to Regulation S

[Date]

Antero Resources Corporation  
c/o Wells Fargo Bank, National Association  
750 N. Saint Paul Place, Suite 1750  
MAC T9263-170  
Dallas, TX 75202  
Attention: Corporate, Municipal & Escrow Services

Re: Antero Resources Corporation (the "Issuer")  
5.0% Senior Notes due 2025 (the "Securities")

Ladies and Gentlemen:

In connection with our proposed sale of \$[ ] aggregate principal amount of the Securities, we confirm that such sale has been effected pursuant to and in accordance with Regulation S under the United States Securities Act of 1933, as amended (the "Securities Act"), and, accordingly, we represent that:

- (a) the offer of the Securities was not made to a person in the United States;
- (b) either (i) at the time the buy order was originated, the transferee was outside the United States or we and any person acting on our behalf reasonably believed that the transferee was outside the United States or (ii) the transaction was executed in, on or through the facilities of a designated off-shore securities market and neither we nor any person acting on our behalf knows that the transaction has been pre-arranged with a buyer in the United States;
- (c) no directed selling efforts have been made in the United States in contravention of the requirements of Rule 903(a)(2) or Rule 904(a)(2) of Regulation S, as applicable; and

58

- 
- (d) the transaction is not part of a plan or scheme to evade the registration requirements of the Securities Act.

In addition, if the sale is made during a restricted period and the provisions of Rule 903(b)(2), Rule 903(b)(3) or Rule 904(b)(1) of Regulation S are applicable thereto, we confirm that such sale has been made in accordance with the applicable provisions of Rule 903(b)(2), Rule 903(b)(3) or Rule 904(b)(1), as the case may be.

We also hereby certify that we [are][are not] an Affiliate of the Issuer and, to our knowledge, the transferee of the Securities [is][is not] an Affiliate of the Issuer.

You and the Issuer are entitled to rely upon this letter and are irrevocably authorized to produce this letter or a copy hereof to any interested party in any administrative or legal proceedings or official inquiry with respect to the matters covered hereby. Terms used in this certificate have the meanings set forth in Regulation S.

Very truly yours,

[Name of Transferor]

By: \_\_\_\_\_  
Authorized Signature

SECTION 2.10. Mutilated, Destroyed, Lost or Stolen Securities. If a mutilated Security is surrendered to the Registrar or if the Holder of a Security claims that the Security has been lost, destroyed or wrongfully taken, the Issuer shall issue and the Trustee shall authenticate a replacement Security if the requirements of Section 8-405 of the Uniform Commercial Code are met, such that the Securityholder (a) satisfies the Issuer or the Trustee that such Security has been lost, destroyed or wrongfully taken within a reasonable time after such Securityholder has notice of such loss, destruction or wrongful taking and the Registrar has not registered a transfer prior to receiving such notification, (b) makes such request to the Issuer or Trustee prior to the Security being acquired by a protected purchaser as defined in Section 8-303 of the Uniform Commercial Code (a "protected purchaser") and (c) satisfies any other reasonable requirements of the Trustee; *provided, however*, if after the delivery of such replacement Security, a protected purchaser of the Security for which such replacement Security was issued presents for payment or registration such replaced Security, the Trustee or the Issuer shall be entitled to recover such replacement Security from the Person to whom it was issued and delivered or any Person taking therefrom, except a protected purchaser, and shall be entitled to recover upon the security or indemnity provided therefor to the extent of



any loss, damage, cost or expense incurred by the Issuer or the Trustee in connection therewith. If required by the Trustee or the Issuer, such Holder shall furnish an indemnity bond sufficient in the judgment of the Issuer and the Trustee to protect the Issuer, the Trustee, the Paying Agent and the Registrar from any loss which any of them may suffer if a Security is replaced, and, in the absence of notice to the Issuer, any Subsidiary Guarantor or the Trustee that such Security has been acquired by a protected purchaser, the Issuer shall execute, and upon receipt of an Issuer Order the Trustee shall authenticate and make available for delivery, in exchange for any such mutilated Security or in

lieu of any such destroyed, lost or wrongfully taken Security, a new Security of like tenor and principal amount, bearing a number not contemporaneously outstanding.

In case any such mutilated, destroyed, lost or wrongfully taken Security has become or is about to become due and payable, the Issuer in its discretion may, instead of issuing a new Security, pay such Security.

Upon the issuance of any new Security under this Section 2.10, the Issuer may require that such Holder pay a sum sufficient to cover any transfer tax or other governmental charge that may be imposed in relation thereto and any other expenses (including the fees and expenses of counsel and of the Trustee) in connection therewith.

Subject to the proviso in the initial paragraph of this Section 2.10, every new Security issued pursuant to this Section in lieu of any mutilated, destroyed, lost or wrongfully taken Security shall constitute an original additional contractual obligation of the Issuer, any Subsidiary Guarantor and any other obligor upon the Securities, whether or not the mutilated, destroyed, lost or wrongfully taken Security shall be at any time enforceable by anyone, and shall be entitled to all benefits of this Indenture equally and proportionately with any and all other Securities duly issued hereunder.

The provisions of this Section 2.10 are exclusive and shall preclude (to the extent lawful) all other rights and remedies with respect to the replacement or payment of mutilated, destroyed, lost or wrongfully taken Securities.

SECTION 2.11. Outstanding Securities. Securities outstanding at any time are all Securities authenticated by the Trustee except for those cancelled by it, those delivered to it for cancellation and those described in this Section as not outstanding. A Security does not cease to be outstanding in the event the Issuer or an Affiliate of the Issuer holds the Security; *provided, however*, that (i) for purposes of determining which are outstanding for consent or voting purposes hereunder, the provisions of Section 12.6 shall apply and (ii) in determining whether the Trustee shall be protected in making a determination whether the Holders of the requisite principal amount of outstanding Securities are present at a meeting of Holders of Securities for quorum purposes or have consented to or voted in favor of any request, demand, authorization, direction, notice, consent, waiver, amendment or modification hereunder, or relying upon any such quorum, consent or vote, only Securities which a Trust Officer of the Trustee actually knows to be held by the Issuer or an Affiliate of the Issuer shall not be considered outstanding.

If a Security is replaced pursuant to Section 2.10 (other than a mutilated Security surrendered for replacement), it ceases to be outstanding unless the Trustee and the Issuer receive proof satisfactory to them that the replaced Security is held by a protected purchaser. A mutilated Security ceases to be outstanding upon surrender of such Security and replacement pursuant to Section 2.10.

If the Paying Agent segregates and holds in trust, in accordance with this Indenture, by 11:00 a.m. (New York City time) on a Redemption Date or other maturity date money sufficient to pay all principal, premium, if any, and accrued interest payable on that date with respect to the Securities (or portions thereof) to be redeemed or otherwise maturing, as the

case may be, then on and after that date such Securities (or portions thereof) cease to be outstanding and interest on them ceases to accrue.

SECTION 2.12. Temporary Securities. In the event that Definitive Securities are to be issued under the terms of this Indenture, until such Definitive Securities are ready for delivery, the Issuer may prepare and the Trustee shall authenticate temporary Securities. Temporary Securities shall be substantially in the form, and shall carry all rights, of Definitive Securities but may have variations that the Issuer consider appropriate for temporary Securities. Without unreasonable delay, the Issuer shall prepare and the Trustee shall authenticate Definitive Securities. After the preparation of Definitive Securities, the temporary Securities shall be exchangeable for Definitive Securities upon surrender of the temporary Securities at any office or agency maintained by the Issuer for that purpose and such exchange shall be without charge to the Holder. Upon surrender for cancellation of any one or more temporary Securities, the Issuer shall execute, and the Trustee shall authenticate and make available for delivery in exchange therefor, one or more Definitive Securities representing an equal principal amount of Securities. Until so exchanged, the Holder of temporary Securities shall in all respects be entitled to the same benefits under this Indenture as a Holder of Definitive Securities.

SECTION 2.13. Cancellation. The Issuer at any time may deliver Securities to the Trustee for cancellation. The Registrar and the Paying Agent shall forward to the Trustee any Securities surrendered to them for registration of transfer, exchange or payment. The Trustee and no one else shall cancel all Securities surrendered for registration of transfer, exchange, payment or cancellation and dispose of such Securities in accordance with its internal policies and customary procedures including delivery of a certificate describing such Securities disposed (subject to the record retention requirements of the Exchange Act) or deliver canceled Securities to the Issuer pursuant to written direction by one Officer of the Issuer. If the Issuer or any Subsidiary Guarantor acquires any of the Securities, such acquisition shall not operate as a redemption or satisfaction of the Indebtedness represented by such Securities

unless and until the same are surrendered to the Trustee for cancellation pursuant to this Section 2.13. The Issuer may not issue new Securities to replace Securities they have paid or delivered to the Trustee for cancellation for any reason other than in connection with a transfer or exchange.

At such time as all beneficial interests in a Global Security have either been exchanged for Definitive Securities, transferred, redeemed, repurchased or canceled, such Global Security shall be returned by DTC or the Securities Custodian to the Trustee for cancellation or retained and canceled by the Trustee. At any time prior to such cancellation, if any beneficial interest in a Global Security is exchanged for Definitive Securities, transferred in exchange for an interest in another Global Security, redeemed, repurchased or canceled, the principal amount of Securities represented by such Global Security shall be reduced and an adjustment shall be made on the books and records of the Trustee (if it is then the Securities Custodian for such Global Security) with respect to such Global Security, by the Trustee or the Securities Custodian, to reflect such reduction.

SECTION 2.14. Payment of Interest; Defaulted Interest. Interest on any Security which is payable, and is punctually paid or duly provided for, on any interest payment date shall be paid to the Person in whose name such Security (or one or more predecessor

61

---

Securities) is registered at the close of business on the regular record date for such payment at the office or agency of the Issuer maintained for such purpose pursuant to Section 2.3.

Any interest on any Security which is payable, but is not paid when the same becomes due and payable and such nonpayment continues for a period of 30 days shall forthwith cease to be payable to the Holder on the regular record date, and such defaulted interest and (to the extent lawful) interest on such defaulted interest at the rate borne by the Securities (such defaulted interest and interest thereon herein collectively called "Defaulted Interest") shall be paid by the Issuer, at its election in each case, as provided in clause (a) or (b) below:

(a) The Issuer may elect to make payment of any Defaulted Interest to the Persons in whose names the Securities (or their respective predecessor Securities) are registered at the close of business on a Special Record Date (as defined below) for the payment of such Defaulted Interest, which shall be fixed in the following manner. The Issuer shall notify the Trustee in writing of the amount of Defaulted Interest proposed to be paid on each Security and the date of the proposed payment (the "Special Interest Payment Date"), and at the same time the Issuer shall deposit with the Trustee an amount of money equal to the aggregate amount proposed to be paid in respect of such Defaulted Interest or shall make arrangements satisfactory to the Trustee for such deposit prior to the date of the proposed payment, such money when deposited to be held in trust for the benefit of the Persons entitled to such Defaulted Interest as in this clause provided. Thereupon the Issuer shall fix a record date (the "Special Record Date") for the payment of such Defaulted Interest, which date shall be not more than 15 days and not less than 10 days prior to the Special Interest Payment Date and not less than 10 days after the receipt by the Trustee of the notice of the proposed payment. The Issuer shall promptly notify the Trustee of such Special Record Date, and in the name and at the expense of the Issuer, the Trustee shall cause notice of the proposed payment of such Defaulted Interest and the Special Record Date and Special Interest Payment Date therefor to be given in the manner provided for in Section 12.2, not less than 10 days prior to such Special Record Date. Notice of the proposed payment of such Defaulted Interest and the Special Record Date and Special Interest Payment Date therefor having been so given, such Defaulted Interest shall be paid on the Special Interest Payment Date to the Persons in whose names the Securities (or their respective predecessor Securities) are registered at the close of business on such Special Record Date and shall no longer be payable pursuant to the following clause (b).

(b) The Issuer may make payment of any Defaulted Interest in any other lawful manner not inconsistent with the requirements of any securities exchange on which the Securities may be listed, and upon such notice as may be required by such exchange, if, after notice given by the Issuer to the Trustee of the proposed payment pursuant to this clause, such manner of payment shall be deemed practicable by the Trustee.

Subject to the foregoing provisions of this Section 2.14, each Security delivered under this Indenture upon registration of, transfer of or in exchange for or in lieu of any other Security shall carry the rights to interest accrued and unpaid, and to accrue, which were carried by such other Security.

62

---

SECTION 2.15. Computation of Interest. Interest on the Securities shall be computed on the basis of a 360-day year of twelve 30-day months.

SECTION 2.16. CUSIP, Common Code and ISIN Numbers. The Issuer in issuing the Securities may use "CUSIP", "Common Code" and "ISIN" numbers and, if so, the Trustee shall use "CUSIP", "Common Code" and "ISIN" numbers in notices of redemption or purchase as a convenience to Holders; *provided, however*, that any such notice may state that no representation is made as to the correctness of such numbers either as printed on the Securities or as contained in any notice of a redemption or purchase and that reliance may be placed only on the other identification numbers printed on the Securities, and any such redemption or purchase shall not be affected by any defect in or omission of such CUSIP, Common Code and ISIN numbers. The Issuer shall promptly notify the Trustee in writing of any change in the CUSIP, Common Code and ISIN numbers.

SECTION 2.17. Trustee, Paying Agent, Registrar Not Responsible for Depository. None of the Trustee, any

Paying Agent or the Registrar shall have any responsibility or liability for any aspect of the records relating to or payments made on account of beneficial ownership interests in any Global Security or for maintaining, supervising or reviewing any records relating to such beneficial ownership interests. The Trustee, any Paying Agent and the Registrar shall be entitled to deal with any Depository, and any nominee thereof, that is the Holder of any Global Security for all purposes of this Indenture relating to such Global Security (including the payment of principal, premium, if any, and interest, the giving of instructions or directions by or to the owner or holder of a beneficial ownership interest in such Global Security) as the sole Holder of such Global Security and shall have no obligations to the beneficial owners thereof. None of the Trustee, any Paying Agent or the Registrar shall have any responsibility or liability for any acts or omissions of any such Depository with respect to any Global Security, for the records of any Depository, including records in respect of beneficial ownership interests in respect of any Global Security, for any transactions between such Depository and any participant in such Depository or between or among any such Depository, any such participant or any holder or owner of a beneficial interest in any Global Security or for any transfers of beneficial interests in any Global Security.

### ARTICLE III

#### COVENANTS

SECTION 3.1. Payment of Securities. The Issuer shall promptly pay the principal of, premium, if any, and interest (including Additional Interest, if any) on the Securities on the dates and in the manner provided in the Securities and in this Indenture. Principal, premium, if any, and interest (including Additional Interest, if any) shall be considered paid on the date due if by 11:00 a.m. (New York City time) on such date the Trustee or the Paying Agent holds in accordance with this Indenture money sufficient to pay all principal, premium, if any, and interest (including Additional Interest) then due and the Trustee or the Paying Agent, as the case may be, is not prohibited from paying such money to the Securityholders on that date pursuant to the terms of this Indenture.

63

---

The Issuer shall pay interest on overdue principal at the rate specified therefor in the Securities, and it shall pay interest on overdue installments of interest (including Additional Interest) at the same rate to the extent lawful.

Notwithstanding anything to the contrary contained in this Indenture, the Issuer may, to the extent it is required to do so by law, deduct or withhold income or other similar taxes imposed by the United States of America from principal or interest payments hereunder.

SECTION 3.2. Limitation on Indebtedness and Preferred Stock.

(a) The Issuer will not, and will not permit any of its Restricted Subsidiaries to, directly or indirectly, Incur any Indebtedness (including Acquired Indebtedness), and the Issuer will not permit any of its Restricted Subsidiaries to issue Preferred Stock; *provided, however*, that the Issuer may Incur Indebtedness and the Issuer and any of the Subsidiary Guarantors may Incur Indebtedness and issue Preferred Stock if on the date thereof:

(1) the Consolidated Coverage Ratio for the Issuer and its Restricted Subsidiaries is at least 2.25 to 1.00, determined on a pro forma basis (including a pro forma application of proceeds); and

(2) no Default would occur as a consequence of, and no Event of Default would be continuing following, Incurring the Indebtedness or its application.

(b) Section 3.2(a) will not prohibit the Incurrence of the following Indebtedness:

(1) Indebtedness under one or more Credit Facilities of (a) the Issuer or any Subsidiary Guarantor Incurred pursuant to this Section 3.2(b)(1) in an aggregate amount not to exceed the greater of (i) \$4.0 billion or (ii) the sum of \$400.0 million and 30.0% of the Issuer's Adjusted Consolidated Net Tangible Assets determined as of the date of the Incurrence of such Indebtedness after giving effect to the application of the proceeds therefrom and (b) any Foreign Subsidiary Incurred pursuant to this Section 3.2(b)(1) in an aggregate amount not to exceed \$50.0 million, in each case outstanding at any one time;

(2) guarantees of Indebtedness Incurred in accordance with the provisions of this Indenture; *provided* that in the event such Indebtedness that is being guaranteed is a Subordinated Obligation or a Guarantor Subordinated Obligation, then the related guarantee shall be subordinated in right of payment to the Securities or the Guarantee to at least the same extent as the Indebtedness being guaranteed, as the case may be;

(3) Indebtedness of the Issuer owing to and held by any Restricted Subsidiary or Indebtedness of a Restricted Subsidiary owing to and held by the Issuer or any other Restricted Subsidiary; *provided, however*, that (a)(i) if the Issuer is the obligor on such Indebtedness and the obligee is not a Subsidiary Guarantor, such Indebtedness must be expressly subordinated to the prior payment in full in cash of all obligations with respect to the Securities and (ii) if a Subsidiary Guarantor is the obligor of such Indebtedness and the obligee is neither the Issuer nor another Subsidiary Guarantor, such Indebtedness

64

---

must be expressly subordinated to the prior payment in full in cash of all obligations of such Subsidiary Guarantor with respect to its Guarantee and (b)(i) any subsequent issuance or transfer of Capital Stock or any other event which results in any such

Indebtedness being held by a Person other than the Issuer or a Restricted Subsidiary and (ii) any sale or other transfer of any such Indebtedness to a Person other than the Issuer or a Restricted Subsidiary shall be deemed, in each case, to constitute an Incurrence of such Indebtedness by the Issuer or such Restricted Subsidiary, as the case may be, that was not permitted by this Section 3.2(b)(3):

(4) Indebtedness represented by (a) the Securities issued on the Issue Date and all Guarantees, (b) any Indebtedness (other than the Indebtedness described in Section 3.2(b)(1), (2) and 4(a)) outstanding on the Issue Date, (c) any Exchange Securities and related guarantees issued pursuant to a Registration Rights Agreement and (d) any Refinancing Indebtedness Incurred in respect of any Indebtedness described in this Section 3.2(b)(4) or Section 3.2(b)(5) or (7) or Incurred pursuant to Section 3.2(a);

(5) Permitted Acquisition Indebtedness;

(6) Indebtedness Incurred in respect of (a) self-insurance obligations, bid, appeal, reimbursement, performance, surety and similar bonds and completion guarantees provided by the Issuer or a Restricted Subsidiary in the ordinary course of business and any guarantees or letters of credit functioning as or supporting any of the foregoing bonds or obligations and (b) obligations represented by letters of credit for the account of the Issuer or a Restricted Subsidiary in order to provide security for workers' compensation claims (in the case of clauses (a) and (b) other than for an obligation for money borrowed);

(7) Indebtedness of the Issuer or any Restricted Subsidiary represented by Capitalized Lease Obligations (whether or not incurred pursuant to Sale/Leaseback Transactions) or other Indebtedness Incurred in connection with the acquisition, construction, improvement or development of real or personal, movable or immovable, property, in each case Incurred for the purpose of financing, refinancing, renewing, defeasing or refunding all or any part of the purchase price or cost of acquisition, construction, improvement or development of property used in the business of the Issuer or its Restricted Subsidiaries; *provided* that the aggregate principal amount Incurred by the Issuer or any Restricted Subsidiary pursuant to this Section 3.2(b)(7) outstanding at any time shall not exceed 2.0% of the Issuer's Adjusted Consolidated Net Tangible Assets; and *provided further* that the principal amount of any Indebtedness permitted under this Section 3.2(b)(7) did not in each case at the time of incurrence exceed the Fair Market Value, as determined in accordance with the definition of such term, of the acquired or constructed asset or improvement or development so financed;

(8) Preferred Stock (other than Disqualified Stock) of any Restricted Subsidiary;

(9) Cash Management Obligations of the Issuer or any Subsidiary Guarantor in an aggregate amount not to exceed \$50.0 million outstanding at any one time; and

65

---

(10) in addition to the items referred to in Sections 3.2(b)(1) through (9) above, Indebtedness of the Issuer and its Restricted Subsidiaries in an aggregate outstanding principal amount which, when taken together with the principal amount of all other Indebtedness Incurred pursuant to this Section 3.2(b)(10) and then outstanding, will not exceed the greater of \$250.0 million or 2.5% of the Issuer's Adjusted Consolidated Net Tangible Assets, determined as of the date of Incurrence of such Indebtedness after giving effect to such Incurrence and the application of the proceeds therefrom.

(c) For purposes of determining compliance with, and the outstanding principal amount of any particular Indebtedness Incurred pursuant to and in compliance with, this Section 3.2:

(1) in the event an item of that Indebtedness meets the criteria of more than one of the types of Indebtedness described in Section 3.2(a) and (b), the Issuer, in its sole discretion, will classify such item of Indebtedness on the date of Incurrence and, subject to Section 3.2(c)(2) below may later classify, reclassify or redivide all or a portion of such item of Indebtedness, in any manner that complies with this Section 3.2;

(2) all Indebtedness outstanding on the date of this Indenture under the Senior Secured Credit Agreement shall be deemed Incurred on the Issue Date under Section 3.2(b)(1);

(3) guarantees of, or obligations in respect of letters of credit supporting, Indebtedness which is otherwise included in the determination of a particular amount of Indebtedness shall not be included;

(4) if obligations in respect of letters of credit are Incurred pursuant to a Credit Facility and are being treated as Incurred pursuant to Section 3.2(b)(1) and the letters of credit relate to other Indebtedness, then such other Indebtedness shall not be included;

(5) the principal amount of any Disqualified Stock of the Issuer, or Preferred Stock of a Restricted Subsidiary, will be equal to the greater of the maximum mandatory redemption or repurchase price (not including, in either case, any redemption or repurchase premium) or the liquidation preference thereof;

(6) Indebtedness permitted by this Section 3.2 need not be permitted solely by reference to one provision permitting such Indebtedness but may be permitted in part by one such provision and in part by one or more other provisions of this Section 3.2 permitting such Indebtedness; and

(7) the amount of Indebtedness issued at a price that is less than the principal amount thereof will be equal to the

amount of the liability in respect thereof determined in accordance with GAAP.

Accrual of interest, accrual of dividends, the amortization of debt discount or the accretion of accreted value, the payment of interest in the form of additional Indebtedness, the payment of dividends in the form of additional Preferred Stock or Disqualified Stock and

66

---

unrealized losses or charges in respect of Hedging Obligations (including those resulting from the application of FASB ASC Topic No. 815, *Derivatives and Hedging*) will not be deemed to be an Incurrence of Indebtedness for purposes of this Section 3.2.

The Issuer will not permit any of its Unrestricted Subsidiaries to Incur any Indebtedness (including to issue any Disqualified Stock) other than Non-Recourse Debt. If at any time an Unrestricted Subsidiary becomes a Restricted Subsidiary, any Indebtedness of such Subsidiary shall be deemed to be Incurred by a Restricted Subsidiary as of such date (and, if such Indebtedness is not permitted to be Incurred as of such date under this Section 3.2, the Issuer shall be in Default of this Section 3.2).

For purposes of determining compliance with any U.S. dollar-denominated restriction on the Incurrence of Indebtedness, the U.S. dollar-equivalent principal amount of Indebtedness denominated in a foreign currency shall be calculated based on the relevant currency exchange rate in effect on the date such Indebtedness was Incurred, in the case of term Indebtedness, or first committed, in the case of revolving credit Indebtedness; *provided* that if such Indebtedness is Incurred to refinance other Indebtedness denominated in a foreign currency, and such refinancing would cause the applicable U.S. dollar-denominated restriction to be exceeded if calculated at the relevant currency exchange rate in effect on the date of such refinancing, such U.S. dollar-denominated restriction shall be deemed not to have been exceeded so long as the principal amount of such refinancing Indebtedness does not exceed the principal amount of such Indebtedness being refinanced. Notwithstanding any other provision of this Section 3.2, the maximum amount of Indebtedness that any Person may Incur pursuant to this Section 3.2 shall not be deemed to be exceeded solely as a result of fluctuations in the exchange rates of currencies. The principal amount of any Indebtedness Incurred to refinance other Indebtedness, if Incurred in a different currency from the Indebtedness being refinanced, shall be calculated based on the currency exchange rate applicable to the currencies in which such Refinancing Indebtedness is denominated that is in effect on the date of such refinancing.

This Indenture shall not treat (1) unsecured Indebtedness as subordinated or junior to secured Indebtedness merely because it is unsecured or (2) senior Indebtedness as subordinated or junior to any other senior Indebtedness merely because it has a junior priority with respect to the same collateral.

SECTION 3.3. Limitation on Restricted Payments. The Issuer will not, and will not permit any of its Restricted Subsidiaries, directly or indirectly, to:

(1) declare or pay any dividend or make any payment or distribution on or in respect of the Issuer's Capital Stock (including any payment or distribution in connection with any merger or consolidation involving the Issuer or any of its Restricted Subsidiaries) except:

(a) dividends or distributions by the Issuer payable solely in Capital Stock of the Issuer (other than Disqualified Stock but including options, warrants or other rights to purchase such Capital Stock of the Issuer); and

67

---

(b) dividends or distributions payable to the Issuer or a Restricted Subsidiary and if such Restricted Subsidiary is not a Wholly-Owned Subsidiary, to minority stockholders (or owners of an equivalent interest in the case of a Subsidiary that is an entity other than a corporation) so long as the Issuer or a Restricted Subsidiary receives at least its pro rata share of such dividend or distribution;

(2) purchase, repurchase, redeem, defease or otherwise acquire or retire for value any Capital Stock of the Issuer or any direct or indirect parent of the Issuer held by Persons other than the Issuer or a Restricted Subsidiary (other than in exchange for Capital Stock of the Issuer (other than Disqualified Stock));

(3) purchase, repurchase, redeem, defease or otherwise acquire or retire for value, prior to scheduled maturity, scheduled repayment or scheduled sinking fund payment, any Subordinated Obligations or Guarantor Subordinated Obligations (other than (x) Indebtedness permitted under Section 3.2(b)(3) or (y) the purchase, repurchase, redemption, defeasance or other acquisition or retirement for value of Subordinated Obligations or Guarantor Subordinated Obligations purchased in anticipation of satisfying a sinking fund obligation, principal installment or final maturity, in each case due within one year of the date of purchase, repurchase, redemption, defeasance or other acquisition or retirement for value); or

(4) make any Restricted Investment in any Person;

(any such dividend, distribution, purchase, redemption, repurchase, defeasance, other acquisition, retirement or Restricted Investment referred to in clauses (1) through (4) is referred to herein as a "Restricted Payment"), if at the time the Issuer or such Restricted Subsidiary makes such Restricted Payment:

(a) a Default shall have occurred and be continuing (or would result therefrom);

(b) the Issuer is not able to Incur an additional \$1.00 of Indebtedness pursuant to Section 3.2(a) after giving effect, on a pro forma basis, to such Restricted Payment; or

(c) the aggregate amount of such Restricted Payment and all other Restricted Payments declared or made subsequent to the Prior Issue Date would exceed the sum of:

(i) 50% of Consolidated Net Income for the period (treated as one accounting period) from January 1, 2013 to the end of the most recent fiscal quarter ending prior to the date of such Restricted Payment for which internal financial statements are in existence (or, in case such Consolidated Net Income is a deficit, minus 100% of such deficit);

(ii) 100% of the aggregate Net Cash Proceeds and the Fair Market Value of property or securities other than cash (including Capital

68

---

Stock of Persons engaged primarily in the Oil and Gas Business or assets used in the Oil and Gas Business), in each case received by the Issuer from the issue or sale of its Capital Stock (other than Disqualified Stock) or other capital contributions subsequent to the Prior Issue Date (other than Net Cash Proceeds received from an issuance or sale of such Capital Stock to (x) management, employees, directors or any direct or indirect parent of the Issuer, to the extent such Net Cash Proceeds have been used to make a Restricted Payment pursuant to clause (5)(a) of the next succeeding paragraph, (y) a Subsidiary of the Issuer or (z) an employee stock ownership plan, option plan or similar trust (to the extent such sale to an employee stock ownership plan, option plan or similar trust is financed by loans from or guaranteed by the Issuer or any Restricted Subsidiary unless such loans have been repaid with cash on or prior to the date of determination));

(iii) the amount by which Indebtedness of the Issuer or its Restricted Subsidiaries is reduced on the Issuer's balance sheet upon the conversion or exchange (other than by a Subsidiary of the Issuer) subsequent to the Prior Issue Date of any Indebtedness of the Issuer or its Restricted Subsidiaries convertible or exchangeable for Capital Stock (other than Disqualified Stock) of the Issuer (less the amount of any cash, or the Fair Market Value of any other property (other than such Capital Stock), distributed by the Issuer upon such conversion or exchange), together with the net proceeds, if any, received by the Issuer or any of its Restricted Subsidiaries upon such conversion or exchange; and

(iv) the amount equal to the aggregate net reduction in Restricted Investments made by the Issuer or any of its Restricted Subsidiaries in any Person after the Prior Issue Date resulting from:

(A) repurchases, repayments or redemptions of such Restricted Investments by such Person, proceeds realized upon the sale of such Restricted Investment (other than to a Subsidiary of the Issuer), repayments of loans or advances or other transfers of assets (including by way of dividend or distribution) by such Person to the Issuer or any Restricted Subsidiary;

(B) the redesignation of Unrestricted Subsidiaries as Restricted Subsidiaries (valued in each case as provided in the definition of "Investment") not to exceed, in the case of any Unrestricted Subsidiary, the amount of Investments previously made by the Issuer or any Restricted Subsidiary in such Unrestricted Subsidiary, which amount in each case under this clause (iv) was included in the calculation of the amount of Restricted Payments; *provided, however*, that no amount will be included under this clause (iv) to the extent it is already included in Consolidated Net Income; and

69

---

(C) the sale by the Issuer or any Restricted Subsidiary (other than to the Issuer or a Restricted Subsidiary) of all or a portion of the Capital Stock of an Unrestricted Subsidiary or a distribution from an Unrestricted Subsidiary or a dividend from an Unrestricted Subsidiary (whether any such distribution or dividend is made with proceeds from the issuance by such Unrestricted Subsidiary of its Capital Stock or otherwise).

The provisions of the preceding paragraph will not prohibit:

(1) any Restricted Payment made by exchange for, or out of the proceeds of the substantially concurrent sale of, Capital Stock of the Issuer (other than Disqualified Stock and other than Capital Stock issued or sold to a Subsidiary of the Issuer or an employee stock ownership plan or similar trust to the extent such sale to an employee stock ownership plan or similar trust is financed by loans from or guaranteed by the Issuer or any Restricted Subsidiary unless such loans have been repaid with cash on or prior to the date of determination) or a substantially concurrent cash capital contribution received by the Issuer from its shareholders; *provided, however*, that (a) such Restricted Payment will be excluded from subsequent calculations of the amount of Restricted Payments and (b) the Net Cash Proceeds from such sale of Capital Stock or capital contribution will be excluded from clause (c)(ii) of the preceding paragraph;

(2) any purchase, repurchase, redemption, defeasance or other acquisition or retirement for value of Subordinated Obligations of the Issuer or Guarantor Subordinated Obligations of any Subsidiary Guarantor made by exchange for, or out of the proceeds of the substantially concurrent sale of, Subordinated Obligations of the Issuer or any purchase, repurchase, redemption, defeasance or other acquisition or retirement for value of Guarantor Subordinated Obligations made by exchange for or out of the proceeds of the substantially concurrent sale of Guarantor Subordinated Obligations that, in each case, is permitted to be Incurred pursuant to Section 3.2; *provided, however*, that such purchase, repurchase, redemption, defeasance, acquisition or retirement for value will be excluded from subsequent calculations of the amount of Restricted Payments;

(3) any purchase, repurchase, redemption, defeasance or other acquisition or retirement for value of Disqualified Stock of the Issuer or a Restricted Subsidiary made by exchange for, or out of the proceeds of the substantially concurrent sale of, Disqualified Stock of the Issuer or such Restricted Subsidiary, as the case may be, that, in each case, is permitted to be Incurred pursuant to Section 3.2; *provided, however*, that such purchase, repurchase, redemption, defeasance, acquisition or retirement for value will be excluded from subsequent calculations of the amount of Restricted Payments;

(4) dividends paid or distributions made within 60 days after the date of declaration if at such date of declaration such dividend or distribution would have complied with this Section 3.3; *provided, however*, that such dividends and distributions will be included in subsequent calculations of the amount of Restricted Payments; and *provided further, however*, that for purposes of clarification, this clause (4) shall not

70

---

include cash payments in lieu of the issuance of fractional shares included in clause (9) below;

(5) so long as no Default has occurred and is continuing, (a) the repurchase or other acquisition of Capital Stock (including options, warrants, equity appreciation rights or other rights to purchase or acquire Capital Stock) of the Issuer held by any existing or former employees, management or directors of the Issuer or any Restricted Subsidiary or their assigns, estates or heirs, in each case pursuant to the repurchase or other acquisition provisions under employee stock option or stock purchase plans or agreements or other agreements to compensate management, employees or directors, in each case approved by the Issuer's Board of Directors; *provided* that such repurchases or other acquisitions pursuant to this subclause (a) during any calendar year will not exceed \$2.0 million in the aggregate (with unused amounts in any calendar year being carried over to succeeding calendar years); *provided further*, that such amount in any calendar year may be increased by an amount not to exceed (A) the cash proceeds received by the Issuer from the sale of Capital Stock of the Issuer to members of management or directors of the Issuer and its Restricted Subsidiaries that occurs after the Prior Issue Date (to the extent the cash proceeds from the sale of such Capital Stock have not otherwise been applied to the payment of Restricted Payments by virtue of clause (c) of the preceding paragraph), plus (B) the cash proceeds of key man life insurance policies received by the Issuer and its Restricted Subsidiaries after the Prior Issue Date, less (C) the amount of any Restricted Payments made pursuant to clauses (A) and (B) of this clause (5)(a); *provided further*, however, that the amount of any such repurchase or other acquisition under this subclause (a) will be excluded in subsequent calculations of the amount of Restricted Payments and the proceeds received from any such transaction will be excluded from clause (c)(ii) of the preceding paragraph; and (b) loans or advances to employees or directors of the Issuer or any Subsidiary of the Issuer, in each case as permitted by Section 402 of the Sarbanes-Oxley Act of 2002, the proceeds of which are used to purchase Capital Stock of the Issuer, or to refinance loans or advances made pursuant to this clause (5)(b), in an aggregate principal amount not in excess of \$2.0 million at any one time outstanding; *provided, however*, that the amount of such loans and advances will be included in subsequent calculations of the amount of Restricted Payments;

(6) purchases, repurchases, redemptions or other acquisitions or retirements for value of Capital Stock deemed to occur upon the exercise of stock options, warrants, rights to acquire Capital Stock or other convertible securities if such Capital Stock represents a portion of the exercise or exchange price thereof, and any purchases, repurchases, redemptions or other acquisitions or retirements for value of Capital Stock made in lieu of withholding taxes in connection with any exercise or exchange of warrants, options or rights to acquire Capital Stock; *provided, however*, that such acquisitions or retirements will be excluded from subsequent calculations of the amount of Restricted Payments;

(7) the purchase, repurchase, redemption, defeasance or other acquisition or retirement for value of any Subordinated Obligation (i) at a purchase price not greater than 101% of the principal amount of such Subordinated Obligation in the event of a Change of Control in accordance with provisions similar to Section 3.9 or (ii) at a

71

---

purchase price not greater than 100% of the principal amount thereof in accordance with provisions similar to Section 3.5; *provided* that, prior to or simultaneously with such purchase, repurchase, redemption, defeasance or other acquisition or retirement, the Issuer has made the Change of Control Offer or Asset Disposition Offer, as applicable, as provided in such Section with respect to the Securities and has completed the repurchase or redemption of all Securities validly tendered for payment in connection with such Change of Control Offer or Asset Disposition Offer; *provided, however*, that such acquisitions or retirements will be included in subsequent calculations of the amount of Restricted Payments;

(8) payments or distributions to dissenting stockholders pursuant to applicable law or in connection with the settlement or other satisfaction of legal claims made pursuant to or in connection with a consolidation, merger or transfer of assets; *provided, however*, that any payment pursuant to this clause (8) will be included in the calculation of the amount of Restricted

Payments;

(9) cash payments in lieu of the issuance of fractional shares; *provided, however*, that any payment pursuant to this clause (9) will be excluded in the calculation of the amount of Restricted Payments;

(10) the declaration and payment of scheduled or accrued dividends to holders of any class of or series of Disqualified Stock of the Issuer issued after the Issue Date in accordance with Section 3.2, to the extent such dividends are included in Consolidated Interest Expense; *provided, however*, that any payment pursuant to this clause (10) will be excluded in the calculation of the amount of Restricted Payments;

(11) Permitted Tax Distributions, if any, prior to October 16, 2013; and

(12) Restricted Payments in an amount not to exceed \$25 million in the aggregate since the Prior Issue Date; *provided, however*, that the amount of such Restricted Payments will be included in subsequent calculations of the amount of Restricted Payments.

The amount of all Restricted Payments (other than cash) shall be the Fair Market Value on the date of such Restricted Payment of the asset(s) or securities proposed to be paid, transferred or issued by the Issuer or such Restricted Subsidiary, as the case may be, pursuant to such Restricted Payment, except that the Fair Market Value of any non-cash dividend or distribution made within 60 days after the date of declaration shall be determined as of such date. The Fair Market Value of any cash Restricted Payment shall be its face amount and the Fair Market Value of any non-cash Restricted Payment shall be determined in accordance with the definition of that term. Not later than the date of making any Restricted Payment in excess of \$15.0 million that will be included in subsequent calculations of the amount of Restricted Payments, the Issuer shall deliver to the Trustee an Officers' Certificate stating that such Restricted Payment is permitted and setting forth the basis upon which the calculations required by this Section 3.3 were computed.

72

---

In the event that a Restricted Payment meets the criteria of more than one of the exceptions described in (1) through (12) above or is entitled to be made pursuant to the first paragraph above, the Issuer shall, in its sole discretion, classify such Restricted Payment.

The Issuer shall not permit any Unrestricted Subsidiary to become a Restricted Subsidiary except pursuant to the last sentence of the definition of "Unrestricted Subsidiary." For purpose of designating any Restricted Subsidiary as an Unrestricted Subsidiary, all outstanding Investments by the Issuer and its Restricted Subsidiaries (except to the extent such Investments (i) are repaid or (ii) represent Permitted Investments) in the Subsidiary so designated will be deemed to be Restricted Payments in an amount determined as set forth in the last sentence of the definition of "Investment." Such designation will be permitted only if a Restricted Payment in such amount would be permitted at such time, whether pursuant to the first paragraph of this Section 3.3 or under clause (12) of the second paragraph of this Section 3.3, or pursuant to the definition of "Permitted Investments," and if such Subsidiary otherwise meets the definition of an Unrestricted Subsidiary.

**SECTION 3.4. Limitation on Restrictions on Distributions from Restricted Subsidiaries.** The Issuer will not, and will not permit any Restricted Subsidiary to, create or otherwise cause or permit to exist or become effective any consensual encumbrance or consensual restriction on the ability of any such Restricted Subsidiary to:

(1) pay dividends or make any other distributions on its Capital Stock or pay any Indebtedness or other obligations owed to the Issuer or any Restricted Subsidiary (it being understood that the priority of any Preferred Stock in receiving dividends or liquidating distributions prior to dividends or liquidating distributions being paid on Common Stock shall not be deemed a restriction on the ability to make distributions on Capital Stock);

(2) make any loans or advances to the Issuer or any Restricted Subsidiary (it being understood that the subordination of loans or advances made to the Issuer or any Restricted Subsidiary to other Indebtedness Incurred by the Issuer or any Restricted Subsidiary shall not be deemed a restriction on the ability to make loans or advances); or

(3) sell, lease or transfer any of its property or assets to the Issuer or any Restricted Subsidiary.

The preceding provisions will not prohibit:

(i) any encumbrance or restriction pursuant to or by reason of an agreement in effect at or entered into on the Issue Date, including, without limitation, this Indenture as in effect on such date;

(ii) any encumbrance or restriction with respect to a Person pursuant to or by reason of an agreement relating to any Capital Stock or Indebtedness Incurred by a Person on or before the date on which such Person was acquired by the Issuer or another Restricted Subsidiary (other than Capital Stock or Indebtedness Incurred as consideration in, or to provide all or any portion of the funds utilized to consummate, the transaction or series of related transactions pursuant to which such Person was acquired by the Issuer or

73

---



a Restricted Subsidiary or in contemplation of the transaction) and outstanding on such date; *provided* that any such encumbrance or restriction shall not extend to any assets or property of the Issuer or any other Restricted Subsidiary other than the assets and property so acquired;

(iii) encumbrances and restrictions contained in contracts entered into in the ordinary course of business, not relating to any Indebtedness, and that do not, individually or in the aggregate, detract from the value of, or from the ability of the Issuer and the Restricted Subsidiaries to realize the value of, property or assets of the Issuer or any Restricted Subsidiary in any manner material to the Issuer or any Restricted Subsidiary;

(iv) any encumbrance or restriction with respect to a Unrestricted Subsidiary pursuant to or by reason of an agreement that the Unrestricted Subsidiary is a party to entered into before the date on which such Unrestricted Subsidiary became a Restricted Subsidiary; *provided* that such agreement was not entered into in anticipation of the Unrestricted Subsidiary becoming a Restricted Subsidiary and any such encumbrance or restriction shall not extend to any assets or property of the Issuer or any other Restricted Subsidiary other than the assets and property so acquired;

(v) with respect to any Foreign Subsidiary, any encumbrance or restriction contained in the terms of any Indebtedness or any agreement pursuant to which such Indebtedness was Incurred if either (1) the encumbrance or restriction applies only in the event of a payment default or a default with respect to a financial covenant in such Indebtedness or agreement or (2) the Issuer determines that any such encumbrance or restriction will not materially affect the Issuer's ability to make principal or interest payments on the Securities, as determined in good faith by the Board of Directors of the Issuer, whose determination shall be conclusive;

(vi) any encumbrance or restriction with respect to a Restricted Subsidiary pursuant to an agreement effecting a refunding, replacement or refinancing of Indebtedness Incurred pursuant to an agreement referred to in clauses (i) through (v) or clause (xii) of this paragraph or this clause (vi) or contained in any amendment, restatement, modification, renewal, supplemental, refunding, replacement or refinancing of an agreement referred to in clauses (i) through (v) or clause (xii) of this paragraph or this clause (vi); *provided* that the encumbrances and restrictions with respect to such Restricted Subsidiary contained in any such agreement taken as a whole are no less favorable in any material respect to the holders of the Securities than the encumbrances and restrictions contained in the agreements governing the Indebtedness being refunded, replaced or refinanced;

(vii) in the case of clause (3) of the first paragraph of this Section 3.4, any encumbrance or restriction:

(a) that restricts in a customary manner the subletting, assignment or transfer of any property or asset that is subject to a lease (including leases governing leasehold interests or farm-in agreements or farm-out agreements

relating to leasehold interests in oil and gas properties), license or similar contract, or the assignment or transfer of any such lease (including leases governing leasehold interests or farm-in agreements or farm-out agreements relating to leasehold interests in oil and gas properties), license (including, without limitation, licenses of intellectual property) or other contract;

(b) contained in mortgages, pledges or other security agreements permitted under this Indenture securing Indebtedness of the Issuer or a Restricted Subsidiary to the extent such encumbrances or restrictions restrict the transfer of the property subject to such mortgages, pledges or other security agreements;

(c) contained in any agreement creating Hedging Obligations permitted from time to time under this Indenture;

(d) pursuant to customary provisions restricting dispositions of real property interests set forth in any reciprocal easement agreements of the Issuer or any Restricted Subsidiary;

(e) restrictions on cash or other deposits imposed by customers under contracts entered into in the ordinary course of business; or

(f) provisions with respect to the disposition or distribution of assets or property in operating agreements, joint venture agreements, development agreements, area of mutual interest agreements and other agreements that are customary in the Oil and Gas Business and entered into in the ordinary course of business;

(viii) any encumbrance or restriction contained in (a) purchase money obligations for property acquired in the ordinary course of business and (b) Capitalized Lease Obligations permitted under this Indenture, in each case, that impose encumbrances or restrictions of the nature described in clause (3) of the first paragraph of this Section 3.4 on the property so acquired;

(ix) any encumbrance or restriction with respect to a Restricted Subsidiary (or any of its property or assets) imposed pursuant to an agreement entered into for the direct or indirect sale or disposition of all or a portion of the Capital Stock or assets of such Restricted Subsidiary (or the property or assets that are subject to such restriction) pending the closing of such sale or disposition;

(x) any customary encumbrances or restrictions imposed pursuant to any agreement of the type described in the definition of “Permitted Business Investment”;

(xi) encumbrances or restrictions arising or existing by reason of applicable law or any applicable rule, regulation or order;

(xii) encumbrances or restrictions contained in agreements governing Indebtedness of the Issuer or any of its Restricted Subsidiaries permitted to be Incurred pursuant to an agreement entered into subsequent to the Issue Date in accordance with

75

---

Section 3.2; *provided* that the provisions relating to such encumbrance or restriction contained in such Indebtedness are not materially less favorable to the Issuer taken as a whole, as determined by the Board of Directors of the Issuer in good faith, than the provisions contained in the Senior Secured Credit Agreement and in this Indenture as in effect on the Issue Date;

(xiii) the issuance of Preferred Stock by a Restricted Subsidiary or the payment of dividends thereon in accordance with the terms thereof; *provided* that issuance of such Preferred Stock is permitted pursuant to Section 3.2 and the terms of such Preferred Stock do not expressly restrict the ability of a Restricted Subsidiary to pay dividends or make any other distributions on its Capital Stock (other than requirements to pay dividends or liquidation preferences on such Preferred Stock prior to paying any dividends or making any other distributions on such other Capital Stock);

(xiv) supermajority voting requirements existing under corporate charters, bylaws, stockholders agreements and similar documents and agreements;

(xv) restrictions on cash or other deposits or net worth imposed by customers under contracts entered into in the ordinary course of business; and

(xvi) any encumbrance or restriction contained in the Senior Secured Credit Agreement as in effect as of the Issue Date, and in any amendments, modifications, restatements, renewals, increases, supplements, refundings, replacements or refinancings thereof; *provided* that such amendments, modifications, restatements, renewals, increases, supplements, refundings, replacements or refinancings are no more restrictive with respect to such dividend and other payment restrictions than those contained in the Senior Secured Credit Agreement as in effect on the Issue Date.

#### SECTION 3.5. Limitation on Sales of Assets and Subsidiary Stock.

The Issuer will not, and will not permit any of its Restricted Subsidiaries to, make any Asset Disposition unless:

(1) the Issuer or any of its Restricted Subsidiaries receives consideration at the time of such Asset Disposition at least equal to the Fair Market Value (such Fair Market Value to be determined on the date of contractually agreeing to such Asset Disposition) of the Capital Stock or other assets subject to such Asset Disposition;

(2) at least 75% of the aggregate consideration received by the Issuer or any of its Restricted Subsidiaries from such Asset Disposition and all other Asset Dispositions since the Issue Date, on a cumulative basis, is in the form of cash or Cash Equivalents or Additional Assets, or any combination thereof; and

(3) except as provided in the next paragraph, an amount equal to 100% of the Net Available Cash from such Asset Disposition is applied, within 365 days from the later of the date of such Asset Disposition or the receipt of such Net Available Cash, by the Issuer or such Restricted Subsidiary, as the case may be:

76

---

(a) to prepay, repay, redeem or purchase Pari Passu Indebtedness of the Issuer (including the Securities) or a Subsidiary Guarantor or any Indebtedness (other than Disqualified Stock) of a Restricted Subsidiary that is not a Subsidiary Guarantor (in each case, excluding Indebtedness owed to the Issuer or an Affiliate of the Issuer); *provided, however,* that, in connection with any prepayment, repayment, redemption or purchase of Indebtedness pursuant to this clause (a), the Issuer or such Restricted Subsidiary will retire such Indebtedness and will cause the related commitment (if any) to be permanently reduced in an amount equal to the principal amount so prepaid, repaid, redeemed or purchased; or

(b) to invest in Additional Assets;

*provided* that pending the final application of any such Net Available Cash in accordance with clause (a) or clause (b) above, the Issuer and its Restricted Subsidiaries may temporarily reduce Indebtedness or otherwise invest such Net Available Cash in any manner not prohibited by this Indenture.

Any Net Available Cash from Asset Dispositions that is not applied or invested as provided in the preceding paragraph will be deemed to constitute “Excess Proceeds.” Not later than the 366<sup>th</sup> day from the later of the date of such Asset Disposition or the

receipt of such Net Available Cash, if the aggregate amount of Excess Proceeds exceeds \$20.0 million, the Issuer will make an offer (“Asset Disposition Offer”) to all Holders of Securities and, to the extent required by the terms of other Pari Passu Indebtedness, to all holders of other Pari Passu Indebtedness outstanding with similar provisions requiring the Issuer to make an offer to purchase such Pari Passu Indebtedness with the proceeds from any Asset Disposition (“Pari Passu Securities”) to purchase the maximum principal amount of Securities and any such Pari Passu Securities to which the Asset Disposition Offer applies that may be purchased out of the Excess Proceeds, at an offer price in cash in an amount equal to 100% of the principal amount (or, in the event such Pari Passu Indebtedness was issued with significant original issue discount, 100% of the accreted value thereof) of the Securities and Pari Passu Securities plus accrued and unpaid interest, if any (or in respect of such Pari Passu Indebtedness, such lesser price, if any, as may be provided for by the terms of such Indebtedness), to, but excluding, the date of purchase (subject to the right of Holders of record on the relevant record date to receive interest due on the relevant interest payment date), in accordance with the procedures set forth in this Section 3.5 or the agreements governing the Pari Passu Securities, as applicable, in each case in minimum principal amount of \$2,000 and integral multiples of \$1,000 in excess of \$2,000. If the aggregate principal amount of Securities surrendered by Holders thereof and other Pari Passu Securities surrendered by holders or lenders, collectively, exceeds the amount of Excess Proceeds, the Trustee shall select the Securities to be purchased on a pro rata basis on the basis of the aggregate principal amount of tendered Securities and Pari Passu Securities. To the extent that the aggregate principal amount of Securities and Pari Passu Securities so validly tendered and not properly withdrawn pursuant to an Asset Disposition Offer is less than the Excess Proceeds, the Issuer and its Restricted Subsidiaries may use any remaining Excess Proceeds for general corporate purposes, subject to the other covenants contained in this Indenture. Upon completion of such Asset Disposition Offer, the amount of Excess Proceeds shall be reset at zero.

77

---

The Asset Disposition Offer will remain open for a period of 20 Business Days following its commencement, except to the extent that a longer period is required by applicable law (the “Asset Disposition Offer Period”). No later than five Business Days after the termination of the Asset Disposition Offer Period (the “Asset Disposition Purchase Date”), the Issuer will purchase the principal amount of Securities and Pari Passu Securities required to be purchased pursuant to this Section 3.5 (the “Asset Disposition Offer Amount”) or, if less than the Asset Disposition Offer Amount has been so validly tendered and not properly withdrawn, all Securities and Pari Passu Securities validly tendered and not properly withdrawn in response to the Asset Disposition Offer.

If the Asset Disposition Purchase Date is on or after an interest record date and on or before the related interest payment date, any accrued and unpaid interest, if any, will be paid to the Person in whose name a Note is registered at the close of business on such record date, and no further interest will be payable to Holders who tender Securities pursuant to the Asset Disposition Offer.

On or before the Asset Disposition Purchase Date, the Issuer will, to the extent lawful, accept for payment, on a pro rata basis to the extent necessary, the Asset Disposition Offer Amount of Securities and Pari Passu Securities or portions of Securities and Pari Passu Securities so validly tendered and not properly withdrawn pursuant to the Asset Disposition Offer, or if less than the Asset Disposition Offer Amount has been validly tendered and not properly withdrawn, all Securities and Pari Passu Securities so validly tendered and not properly withdrawn, in each case in minimum principal amount of \$2,000 and integral multiples of \$1,000 in excess of \$2,000. The Issuer will deliver to the Trustee an Officers’ Certificate stating that such Securities or portions thereof were accepted for payment by the Issuer in accordance with the terms of this Section 3.5 and, in addition, the Issuer will deliver all certificates and notes required, if any, by the agreements governing the Pari Passu Securities. The Issuer or the paying agent, as the case may be, will promptly (but in any case not later than five Business Days after the termination of the Asset Disposition Offer Period) mail or deliver to each tendering Holder of Securities or holder or lender of Pari Passu Securities, as the case may be, an amount equal to the purchase price of the Securities or Pari Passu Securities so validly tendered and not properly withdrawn by such holder or lender, as the case may be, and accepted by the Issuer for purchase, and the Issuer will promptly issue a new Security, and the Trustee, upon delivery of an Officers’ Certificate from the Issuer, will authenticate and mail or deliver such new Security to such Holder, in a principal amount equal to any unpurchased portion of the Security surrendered; *provided* that each such new Security will be in a minimum principal amount of \$2,000 or an integral multiple of \$1,000 in excess of \$2,000. In addition, the Issuer will take any and all other actions required by the agreements governing the Pari Passu Securities. Any Security not so accepted will be promptly mailed or delivered by the Issuer to the Holder thereof. The Issuer will publicly announce the results of the Asset Disposition Offer on the Asset Disposition Purchase Date.

The Issuer will comply, to the extent applicable, with the requirements of Rule 14e-1 of the Exchange Act and any other securities laws or regulations in connection with the repurchase of Securities pursuant to an Asset Disposition Offer. To the extent that the provisions of any securities laws or regulations conflict with provisions of this Section 3.5, the Issuer will comply with the applicable securities laws and regulations and will not be deemed to have

78

---

breached its obligations under this Indenture by virtue of its compliance with such securities laws or regulations.

For the purposes of clause (2) of the first paragraph of this Section 3.5, the following will be deemed to be cash:

- (1) the assumption by the transferee of Indebtedness (other than Guarantor Subordinated Obligations or Disqualified Stock) of the Issuer or Indebtedness of a Restricted Subsidiary (other than Subordinated Obligations or Disqualified Stock of the Issuer and Guarantor Subordinated Obligations or Disqualified Stock of any Restricted Subsidiary that is a Subsidiary Guarantor) and the release of the Issuer or such Restricted Subsidiary from all liability on such Indebtedness in connection with such Asset Disposition (in which case the Issuer will, without further action, be deemed to have applied such deemed cash to Indebtedness in accordance with clause (3)(a) of the first paragraph of this Section 3.5;

(2) with respect to any Asset Disposition of oil and gas properties by the Issuer or any of its Restricted Subsidiaries in which the Issuer or such Restricted Subsidiary still retains an interest, any agreement by the transferee (or any Affiliate thereof) to pay all or a portion of the costs and expenses related to the exploration, development, completion or production of such properties and activities related thereto; and

(3) securities, notes or other obligations received by the Issuer or any Restricted Subsidiary from the transferee that are converted by the Issuer or such Restricted Subsidiary into cash within 180 days after receipt thereof.

Notwithstanding the foregoing, the 75% limitation referred to in clause (2) of the first paragraph of this Section 3.5 shall be deemed satisfied with respect to any Asset Disposition in which the cash or Cash Equivalents portion of the consideration received therefrom, determined in accordance with the foregoing provision on an after-tax basis, is equal to or greater than what the after-tax proceeds would have been had such Asset Disposition complied with the aforementioned 75% limitation.

The requirement of clause (3)(b) of the first paragraph of this Section 3.5 shall be deemed to be satisfied if an agreement (including a lease, whether a capital lease or an operating lease) committing to make the acquisitions or expenditures referred to therein is entered into by the Issuer or its Restricted Subsidiary within the specified time period and such Net Available Cash is subsequently applied in accordance with such agreement within six months following such agreement.

The Issuer will not, and will not permit any Restricted Subsidiary to, engage in any Asset Swaps, unless:

(1) at the time of entering into such Asset Swap and immediately after giving effect to such Asset Swap, no Default or Event of Default shall have occurred and be continuing or would occur as a consequence thereof; and

79

---

(2) in the event such Asset Swap involves the transfer by the Issuer or any Restricted Subsidiary of assets having an aggregate Fair Market Value in excess of \$20.0 million, the terms of such Asset Swap have been approved by a majority of the members of the Board of Directors of the Issuer.

**SECTION 3.6. Limitation on Liens.** The Issuer will not, and will not permit any of its Restricted Subsidiaries to, directly or indirectly, create, incur or suffer to exist any Lien (the "Initial Lien") other than Permitted Liens upon any of its property or assets (including Capital Stock of Restricted Subsidiaries), including any income or profits therefrom, whether owned on the date of this Indenture or acquired after that date, which Lien is securing any Indebtedness, unless contemporaneously with the Incurrence of such Lien effective provision is made to secure the Securities or, in respect of Liens on any Restricted Subsidiary's property or assets, any Guarantee of such Restricted Subsidiary, equally and ratably with (or senior in priority to in the case of Liens with respect to Subordinated Obligations or Guarantor Subordinated Obligations, as the case may be) the Indebtedness secured by such Lien for so long as such Indebtedness is so secured.

Any Lien created for the benefit of the holders of the Securities pursuant to the preceding paragraph shall provide by its terms that such Lien shall be automatically and unconditionally released and discharged upon the release and discharge of the Initial Lien.

**SECTION 3.7. [Reserved].**

**SECTION 3.8. Limitation on Affiliate Transactions.** The Issuer will not, and will not permit any of its Restricted Subsidiaries to, directly or indirectly, enter into, make, amend or conduct any transaction (including making a payment to, the purchase, sale, lease or exchange of any property or the rendering of any service), contract, agreement or understanding with or for the benefit of any Affiliate of the Issuer (an "Affiliate Transaction") unless:

(1) the terms of such Affiliate Transaction are not materially less favorable to the Issuer or such Restricted Subsidiary, as the case may be, than those that could reasonably be expected to be obtained in a comparable transaction at the time of such transaction in arm's-length dealings with a Person who is not such an Affiliate; and

(2) either:

(a) if such Affiliate Transaction involves an aggregate consideration in excess of \$20.0 million but not greater than \$50.0 million, the Issuer delivers to the Trustee an Officers' Certificate certifying that such Affiliate Transaction satisfies the criteria in clause (1) above; or

(b) if such Affiliate Transaction involves an aggregate consideration in excess of \$50.0 million, the Issuer delivers to the Trustee a Board Resolution adopted by a majority of the members of the Board of Directors of the Issuer having no personal stake in such transaction approving the terms of such transaction and set forth in an Officers' Certificate certifying that such Affiliate Transaction satisfies the criteria in clause (1) above.

80

---

The preceding paragraph will not apply to:

(1) any Restricted Payment permitted to be made pursuant to Section 3.3 or any Permitted Investment;

(2) any issuance of Capital Stock (other than Disqualified Stock), or other payments, awards or grants in cash, Capital Stock (other than Disqualified Stock) or otherwise pursuant to, or the funding of, employment or severance agreements and other compensation arrangements, options to purchase Capital Stock (other than Disqualified Stock) of the Issuer, restricted stock plans, long-term incentive plans, stock appreciation rights plans, participation plans or similar employee benefits plans and/or insurance and indemnification arrangements provided to or for the benefit of directors and employees approved by the Board of Directors of the Issuer;

(3) loans or advances to employees, officers or directors in the ordinary course of business of the Issuer or any of its Restricted Subsidiaries;

(4) advances to or reimbursements of employees for moving, entertainment and travel expenses, drawing accounts and similar expenditures in the ordinary course of business of the Issuer or any of its Restricted Subsidiaries;

(5) any transaction between the Issuer and a Restricted Subsidiary or between Restricted Subsidiaries, and guarantees issued by the Issuer or a Restricted Subsidiary for the benefit of the Issuer or a Restricted Subsidiary, as the case may be, in accordance with Section 3.2;

(6) any transaction with a joint venture or similar entity which would constitute an Affiliate Transaction solely because the Issuer or a Restricted Subsidiary owns, directly or indirectly, an Equity Interest in or otherwise controls such joint venture or similar entity;

(7) the issuance or sale of any Capital Stock (other than Disqualified Stock) of the Issuer to an Affiliate, or the receipt by the Issuer of any capital contribution from its shareholders;

(8) indemnities of officers, directors and employees of the Issuer or any of its Restricted Subsidiaries permitted by bylaw or statutory provisions and any employment agreement or other employee compensation plan or arrangement entered into in the ordinary course of business by the Issuer or any of its Restricted Subsidiaries;

(9) the payment of reasonable compensation and fees paid to, and indemnity provided on behalf of, officers or directors of the Issuer or any Restricted Subsidiary;

(10) the performance of obligations of the Issuer or any of its Restricted Subsidiaries under the terms of any agreement to which the Issuer or any of its Restricted Subsidiaries is a party as of or on the Issue Date, as these agreements may be amended, modified, supplemented, extended or renewed from time to time; *provided, however*, that any future amendment, modification, supplement, extension or renewal entered into after

the Issue Date will be permitted only to the extent that its terms are not materially more disadvantageous, taken as a whole, to the holders of the Securities than the terms of the agreements in effect on the Issue Date;

(11) transactions with customers, clients, suppliers, or purchasers or sellers of goods or services, in each case in the ordinary course of business and otherwise in compliance with the terms of this Indenture, *provided* that in the reasonable determination of the Board of Directors of the Issuer or the senior management of the Issuer, such transactions are on terms not materially less favorable to the Issuer or the relevant Restricted Subsidiary than those that could reasonably be expected to be obtained in a comparable transaction at such time on an arm's-length basis from a Person that is not an Affiliate of the Issuer;

(12) transactions with a Person (other than an Unrestricted Subsidiary) that is an Affiliate of the Issuer solely because the Issuer owns, directly or through a Restricted Subsidiary, an Equity Interest in such Person; and

(13) transactions between the Issuer or any Restricted Subsidiary and any Person, a director of which is also a director of the Issuer or any direct or indirect parent of the Issuer, and such director is the sole cause for such Person to be deemed an Affiliate of the Issuer or any Restricted Subsidiary; *provided, however*, that such director shall abstain from voting as a director of the Issuer or such direct or indirect parent, as the case may be, on any matter involving such other Person.

#### SECTION 3.9. Purchase of Securities Upon a Change of Control.

If a Change of Control occurs, unless the Issuer has previously or concurrently exercised its right to redeem all of the Securities pursuant to Section 5.1 and paragraph 5 of the Securities or one of the other two exceptions described below in the fifth paragraph of this Section 3.9 applies, each Holder will have the right to require the Issuer to repurchase all or any part (equal to \$2,000 or an integral multiple of \$1,000 in excess of \$2,000) of such Holder's Securities at a purchase price in cash equal to 101% of the principal amount of the Securities plus accrued and unpaid interest, if any, to, but excluding, the date of purchase (subject to the right of Holders of record on the relevant record date to receive interest due on the relevant interest payment date).

Within 30 days following any Change of Control, unless the Issuer has previously or concurrently exercised its right to redeem all of the Securities pursuant to Section 5.1 and paragraph 5 of the Securities or one of the other two exceptions described below in the fifth paragraph of this Section 3.9 applies, the Issuer will send a notice (the "Change of Control Offer") to each Holder, with a copy to the Trustee, stating:

(1) that a Change of Control has occurred and that such Holder has the right to require the Issuer to purchase such Holder's Securities at a purchase price in cash equal to 101% of the principal amount of such Securities plus accrued and unpaid interest, if any, to, but excluding, the date of purchase (subject to the right of Holders of record on a

record date to receive interest on the relevant interest payment date) (the "Change of Control Payment");

(2) the repurchase date (which shall be no earlier than 30 days nor later than 60 days from the date such notice is sent) (the "Change of Control Payment Date");

(3) that any Security not properly tendered will remain outstanding and continue to accrue interest;

(4) that unless the Issuer defaults in the payment of the Change of Control Payment, all Securities accepted for payment pursuant to the Change of Control Offer will cease to accrue interest on the Change of Control Payment Date;

(5) that Holders electing to have any Definitive Securities purchased pursuant to a Change of Control Offer will be required to surrender such Securities, with the form entitled "Option of Holder to Elect Purchase" on the reverse of such Securities in certificated form completed, to the Paying Agent specified in the notice at the address specified in the notice prior to the close of business on the third Business Day preceding the Change of Control Payment Date;

(6) that Holders will be entitled to withdraw their tendered Securities and their election to require the Issuer to purchase such Securities, *provided* that the Paying Agent receives, not later than the close of business on the third Business Day preceding the Change of Control Payment Date, a telegram, telex, facsimile transmission or letter setting forth the name of the Holder of the Securities, the principal amount of Securities tendered for purchase, and a statement that such Holder is withdrawing its tendered Securities and its election to have such Securities purchased;

(7) that if the Issuer is repurchasing a portion of the Security of any Holder, the Holder will be issued a new Note equal in principal amount to the unpurchased portion of the Note surrendered, *provided* that the unpurchased portion of the Note must be equal to a minimum principal amount of \$2,000 and an integral multiple of \$1,000 in excess of \$2,000; and

(8) the procedures determined by the Issuer, consistent with this Indenture, that a Holder must follow in order to have its Securities repurchased.

On the Change of Control Payment Date, the Issuer will, to the extent lawful:

(1) accept for payment all Securities or portions of Securities (in a minimum principal amount of \$2,000 and integral multiples of \$1,000 in excess of \$2,000) properly tendered pursuant to the Change of Control Offer and not properly withdrawn;

(2) deposit with the Paying Agent an amount equal to the Change of Control Payment in respect of all Securities or portions of Securities accepted for payment; and

(3) deliver or cause to be delivered to the Trustee the Securities so accepted together with an Officers' Certificate stating the aggregate principal amount of Securities or portions of Securities being purchased by the Issuer.

The Paying Agent will promptly mail or deliver to each Holder of Securities accepted for payment the Change of Control Payment for such Securities, and the Trustee will promptly authenticate and mail (or cause to be transferred by book entry) to each Holder a new Security equal in principal amount to any unpurchased portion of the Securities surrendered, if any; *provided* that each such new Note will be in a minimum principal amount of \$2,000 or an integral multiple of \$1,000 in excess of \$2,000.

If the Change of Control Payment Date is on or after an interest record date and on or before the related interest payment date, any accrued and unpaid interest, will be paid to the Person in whose name a Security is registered at the close of business on such record date, and no further interest will be payable to Holders who tender pursuant to the Change of Control Offer.

The Issuer is not required to make a Change of Control Offer upon a Change of Control if (i) any other Person makes the Change of Control Offer in the manner, at the times and otherwise in compliance with this Section 3.9 applicable to a Change of Control Offer made by the Issuer and purchases all Securities validly tendered and not properly withdrawn under such Change of Control Offer, (ii) notice of redemption of all outstanding Securities has been given pursuant to Section 5.5 of this Indenture, unless and until there is a default in payment of the applicable redemption price or (iii) in connection with or in contemplation of any Change of Control, the Issuer has made an offer to purchase (an "Alternate Offer") any and all Securities validly tendered at a cash price equal to or higher than the Change of Control Payment and has purchased all Securities properly tendered in accordance with the terms of such Alternate Offer.

A Change of Control Offer may be made in advance of a Change of Control, and conditioned upon the occurrence of a Change of Control, if a definitive agreement is in place for the Change of Control at the time of making the Change of Control Offer.

The Issuer will comply, to the extent applicable, with the requirements of Rule 14e-1 of the Exchange Act and any other securities laws or regulations in connection with the repurchase of Securities as a result of a Change of Control. To the extent that the provisions of any securities laws or regulations conflict with provisions of this Section 3.9, the Issuer will comply with the applicable securities laws and regulations and will not be deemed to have breached its obligations under this Section 3.9 by virtue of its compliance with such securities laws or regulations.

If Holders of not less than 90% in aggregate principal amount of the outstanding Securities validly tender and do not withdraw such Securities in a Change of Control Offer or Alternate Offer and the Issuer, or any other Person making a Change of Control Offer in lieu of the Issuer as described above, purchases all of the Securities validly tendered and not withdrawn by such Holders, the Issuer will have the right, upon not less than 30 nor more than 60 days' prior notice, given not more than 30 days following such purchase pursuant to the Change of Control Offer or Alternate Offer, as applicable, to redeem all Securities that remain outstanding

---

84

following such purchase at a redemption price in cash equal to the applicable Change of Control Payment plus, to the extent not included in the Change of Control Payment, accrued and unpaid interest, if any, to the Redemption Date (subject to the right of Holders of record on the relevant record date to receive interest due on the relevant interest payment date).

The Issuer's obligation to make a Change of Control Offer pursuant to this Section 3.9 may be waived or modified or terminated with the consent of the Holders of a majority in principal amount of the Securities then outstanding (including consents obtained in connection with a tender offer or exchange offer for the Securities) prior to the occurrence of such Change of Control.

**SECTION 3.10. Provision of Financial Information.** Whether or not the Issuer is subject to the reporting requirements of Section 13 or Section 15(d) of the Exchange Act, to the extent not prohibited by the Exchange Act, the Issuer will file with the SEC, and make available to the Trustee and the Holders of the Securities without cost to any Holder, the annual reports and the information, documents and other reports (or copies of such portions of any of the foregoing as the SEC may by rules and regulations prescribe) that are specified in Sections 13 and 15(d) of the Exchange Act and applicable to a U.S. corporation within the time periods specified therein with respect to a non-accelerated filer. In the event that the Issuer is not permitted to file such reports, documents and information with the SEC pursuant to the Exchange Act, the Issuer will nevertheless make available such Exchange Act information to the Trustee and the Holders of the Securities without cost to any Holder as if the Issuer were subject to the reporting requirements of Section 13 or 15(d) of the Exchange Act within the time periods specified therein with respect to a non-accelerated filer.

If the Issuer has designated any of its Subsidiaries as Unrestricted Subsidiaries, then the financial information required will include a reasonably detailed presentation, either on the face of the financial statements or in the footnotes thereto, and in any accompanying Management's Discussion and Analysis of Financial Condition and Results of Operations, of the financial condition and results of operations of the Issuer and its Restricted Subsidiaries separate from the financial condition and results of operations of the Unrestricted Subsidiaries.

The availability of the foregoing materials on the SEC's website or on the Issuer's website shall be deemed to satisfy the foregoing delivery obligations.

For so long as any Securities remain outstanding and constitute "restricted securities" under Rule 144, the Issuer will furnish to the holders of the Securities, and to securities analysts and prospective investors, upon their request, the information required to be delivered pursuant to Rule 144A(d)(4) under the Securities Act.

The Trustee shall have no obligation to determine if and when the reports, information and documents of the Issuer are filed with the Commission via the EDGAR system and available on the Commission's EDGAR website.

Delivery of such reports, information and documents to the Trustee is for informational purposes only and the Trustee's receipt of such shall not constitute constructive notice of any information contained therein or determinable from information contained therein,

---

85

including the Issuer's compliance with any of its covenants hereunder (as to which the Trustee is entitled to rely conclusively on Officers' Certificates). The Trustee is under no duty to examine such reports, information or documents to ensure compliance with the provision of this Indenture or to ascertain the correctness or otherwise of the information or the statements contained therein.

**SECTION 3.11. Future Subsidiary Guarantors.** The Issuer will cause (a) each of its Wholly-Owned Subsidiaries (other than a Foreign Subsidiary) formed or acquired after the Issue Date and (b) any other Domestic Subsidiary that is not already a Subsidiary Guarantor that guarantees any of the Issuer's Indebtedness or any Indebtedness of a Subsidiary Guarantor, in each case to execute and deliver to the Trustee within 30 days a supplemental indenture (in substantially the form specified in Exhibit C to this Indenture) pursuant to which such Subsidiary will unconditionally guarantee, on a joint and several basis, the full and prompt payment of the principal of, premium, if any, and interest on the Securities on a senior basis; *provided* that any Restricted Subsidiary that constitutes an Immaterial Subsidiary need not become a Subsidiary Guarantor until such time as it ceases to be an Immaterial Subsidiary.

**SECTION 3.12. Maintenance of Office or Agency.** The Issuer will maintain an office or agency where the Securities may be presented or surrendered for payment, where, if applicable, the Securities may be surrendered for registration of transfer

or exchange and where notices and demands to or upon the Issuer in respect of the Securities and this Indenture may be served. The corporate trust office of the Trustee indicated in Section 2.3 shall be such office or agency of the Issuer, unless the Issuer shall designate and maintain some other office or agency for one or more of such purposes. The Issuer will give prompt written notice to the Trustee of any change in the location of any such office or agency. If at any time the Issuer shall fail to maintain any such required office or agency or shall fail to furnish the Trustee with the address thereof, such presentations, surrenders, notices and demands may be made or served at the corporate trust office of the Trustee indicated in Section 12.2, and the Issuer hereby appoint the Trustee as its agent to receive all such presentations, surrenders, notices and demands.

The Issuer may also from time to time designate one or more other offices or agencies where the Securities may be presented or surrendered for any or all such purposes and may from time to time rescind any such designation. The Issuer will give prompt written notice to the Trustee of any such designation or rescission and any change in the location of any such other office or agency.

SECTION 3.13. Corporate Existence. Except as otherwise provided in Article IV, the Issuer shall do or cause to be done all things necessary to preserve and keep in full force and effect its existence, rights (charter and statutory), licenses and franchises; *provided, however*, that the Issuer shall not be required to preserve any such right, license or franchise if it shall determine that the preservation thereof is no longer desirable in the conduct of the business of the Issuer.

SECTION 3.14. Payment of Taxes. The Issuer shall pay or discharge or cause to be paid or discharged, before the same shall become delinquent, all material taxes, assessments and governmental charges levied or imposed upon the Issuer or any Subsidiary or upon the income, profits or property of the Issuer or any Subsidiary; *provided, however*, that the

86

---

Issuer shall not be required to pay or discharge or cause to be paid or discharged any such tax, assessment or charge the amount, applicability or validity of which is being contested in good faith by appropriate proceedings.

SECTION 3.15. Compliance Certificate. The Issuer and the Subsidiary Guarantors shall deliver to the Trustee within 120 days after the end of each fiscal year of the Issuer ending after the Issue Date a statement (which need not be an Officers' Certificate) signed by the principal executive officer, the principal accounting officer or the principal financial officer of each of the Issuer and the Subsidiary Guarantors, stating that a review of the activities of the Issuer and its Restricted Subsidiaries during the preceding fiscal year has been made under the supervision of the signing Officers with a view to determining whether each of the Issuer and the Subsidiary Guarantors has performed its obligations under this Indenture, and further stating whether or not the signers know of any Default or Event of Default that occurred during such period. If they do, the certificate shall describe such Default or Event of Default, its status and what action the Issuer is taking or proposes to take with respect thereto. The Issuer also shall comply with TIA § 314(a)(4).

SECTION 3.16. Further Instruments and Acts. Upon request of the Trustee, the Issuer will execute and deliver such further instruments and do such further acts as may be reasonably necessary or proper to carry out more effectively the purpose of this Indenture.

SECTION 3.17. Statement by Officers as to Default. The Issuer shall, so long as any Security is outstanding, deliver to the Trustee within thirty days after the occurrence of a Default, a written notice setting forth the details of such Default, and what action the Issuer is taking or proposing to take with respect thereto.

SECTION 3.18. Covenant Termination. From and after the occurrence of an Investment Grade Rating Event, the Issuer and its Restricted Subsidiaries will no longer be subject to the provisions of this Indenture described above in Sections 3.2, 3.3, 3.4, 3.5, 3.8 and Section 4.1(a)(3) hereof.

After the foregoing covenants have been terminated, the Issuer may not designate any of its Subsidiaries as Unrestricted Subsidiaries pursuant to the second sentence of the definition of "Unrestricted Subsidiary." The Issuer shall deliver an Officers' Certificate to the Trustee, specifying (i) if a termination of the foregoing covenants under this Section 3.18 has occurred and (iii) the date of the commencement of any termination of the foregoing covenants under this Section 3.18. The Trustee shall not have any duty to monitor whether or not a termination of the foregoing covenants has occurred, nor any duty to notify the Securityholders of any of the foregoing.

87

---

## ARTICLE IV

### SUCCESSOR COMPANY

SECTION 4.1. Merger and Consolidation.

(a) The Issuer will not consolidate with or merge with or into or wind up into (whether or not it is the surviving Person), or sell, lease, transfer, convey or otherwise dispose of all or substantially all its assets in one or more related transactions to, any Person, unless:



(1) the resulting, surviving or transferee Person (the “Successor Company”) will be a corporation, partnership, trust or limited liability company organized and existing under the laws of the United States of America, any State of the United States or the District of Columbia and the Successor Company (if not the Issuer) will expressly assume, by supplemental indenture, executed and delivered to the Trustee, in form reasonably satisfactory to the Trustee, all the obligations of the Issuer under this Indenture and the Securities;

(2) immediately after giving effect to such transaction (and treating any Indebtedness that becomes an obligation of the Successor Company or any Subsidiary of the Successor Company as a result of such transaction as having been Incurred by the Successor Company or such Subsidiary at the time of such transaction), no Default or Event of Default shall have occurred and be continuing;

(3) immediately after giving effect to such transaction on a pro forma basis and any related financing transactions as if the same had occurred at the beginning of the applicable four quarter period, either (A) the Successor Company would be able to Incur at least an additional \$1.00 of Indebtedness pursuant to Section 3.2(a) or (B) the Consolidated Coverage Ratio of the Issuer is equal to or greater than the Consolidated Coverage Ratio of the Issuer immediately before such transaction;

(4) if the Issuer is not the Successor Company, each Subsidiary Guarantor (unless it is the other party to the transactions, in which case clause (1) shall apply) shall have by supplemental indenture confirmed that its Guarantee shall apply to the Successor Company’s obligations in respect of this Indenture and the Securities and that its Guarantee shall continue to be in effect; and

(5) the Issuer shall have delivered to the Trustee an Officers’ Certificate and an Opinion of Counsel, each stating that such transaction and such supplemental indenture (if any) comply with this Indenture.

For purposes of this Section 4.1, the sale, lease, transfer, conveyance or other disposition of all or substantially all of the assets of one or more Subsidiaries of the Issuer, which assets, if held by the Issuer instead of such Subsidiaries, would constitute all or substantially all of the assets of the Issuer on a consolidated basis, shall be deemed to be the disposition of all or substantially all of the assets of the Issuer.

88

---

The Successor Company will succeed to, and be substituted for, and may exercise every right and power of, the Issuer under this Indenture; and its predecessor, except in the case of a lease of all or substantially all its assets, will be released from all obligations under this Indenture and the Securities.

Notwithstanding the preceding clause (3), (x) any Restricted Subsidiary may consolidate with, merge into or wind up into, or dispose of all or part of its assets to, the Issuer, and the Issuer may consolidate with, merge into or wind up into, or dispose of all or part of its assets to, a Subsidiary Guarantor and (y) the Issuer may merge with or into an Affiliate incorporated solely for the purpose of reorganizing the Issuer in another jurisdiction; and *provided further* that, in the case of a Restricted Subsidiary that consolidates with, merges into, winds up into or disposes of all or part of its assets to, the Issuer, the Issuer will not be required to comply with the preceding clause (5).

(b) In addition, the Issuer will not permit any Subsidiary Guarantor to consolidate with, merge with or into or wind up into, and will not permit the disposition of all or substantially all of the assets of any Subsidiary Guarantor to, any Person (other than the Issuer or another Subsidiary Guarantor) unless:

(1) (a) the resulting, surviving or transferee Person will be a corporation, partnership, trust or limited liability company organized and existing under the laws of the United States of America, any State of the United States or the District of Columbia and such Person (if not such Subsidiary Guarantor) will expressly assume, by supplemental indenture, executed and delivered to the Trustee, all the obligations of such Subsidiary Guarantor under its Guarantee; and (b) immediately after giving effect to such transaction (and treating any Indebtedness that becomes an obligation of the resulting, surviving or transferee Person or any Restricted Subsidiary as a result of such transaction as having been Incurred by such Person or such Restricted Subsidiary at the time of such transaction), no Default shall have occurred and be continuing; or

(2) the transaction results in the release of the Subsidiary Guarantor from its obligations under this Indenture and its Guarantee after and upon compliance with the provisions of Section 10.2 and

(3) the Issuer will have delivered to the Trustee an Officers’ Certificate and an Opinion of Counsel, each stating that such transaction and such supplemental indenture (if any) comply with this Indenture.

## ARTICLE V

### REDEMPTION OF SECURITIES

SECTION 5.1. Redemption. The Securities may be redeemed (a) as a whole or from time to time in part, subject to the conditions and at the redemption prices specified in paragraph 5 of the form of Securities set forth in Exhibit A and Exhibit B hereto, which are hereby incorporated by reference and made a part of this Indenture, or (b) as a whole, and not less than as a whole, subject to the conditions and at the redemption price specified in the

89

---

---

penultimate paragraph of Section 3.9, in each case together with accrued and unpaid interest (including Additional Interest) to the Redemption Date.

SECTION 5.2. Applicability of Article. Redemption of Securities at the election of the Issuer, as permitted by any provision of this Indenture, shall be made in accordance with such provision and this Article.

SECTION 5.3. Election to Redeem; Notice to Trustee. The election of the Issuer to redeem any Securities pursuant to Section 5.1 shall be evidenced by an Officers' Certificate of the Issuer. In case of any redemption at the election of the Issuer, the Issuer shall, not later than five Business Days prior to giving notice of any redemption pursuant to Section 5.5 (unless a shorter notice shall be satisfactory to the Trustee), notify the Trustee in writing of such Redemption Date and of the principal amount of Securities to be redeemed and, in the case of any redemption of less than all Securities, shall deliver to the Trustee such documentation and records as shall enable the Trustee to select the Securities to be redeemed pursuant to Section 5.4. Any such notice may be cancelled at any time prior to notice of such redemption being sent to any Holder and shall thereby be void and of no effect.

SECTION 5.4. Selection by Trustee of Securities to Be Redeemed. If less than all the Securities are to be redeemed at any time pursuant to an optional redemption, the particular Securities to be redeemed shall be selected not more than 60 days prior to the Redemption Date by the Trustee, from the outstanding Securities not previously called for redemption, in compliance with the requirements, as set forth in an Officers' Certificate delivered by the Issuer to the Trustee, of the principal national securities exchange, if any, on which such Securities are listed, or, if such Securities are not so listed, then on a pro rata basis, by lot or by such other method as the Trustee in its sole discretion shall deem to be fair and appropriate (or, in the case of Global Securities, the Trustee will select Securities for redemption based on such method as DTC may prescribe) and which may provide for the selection for redemption of portions of the principal of the Securities in denominations of \$2,000 or larger integral multiples of \$1,000; *provided, however*, that no such partial redemption shall reduce the portion of the principal amount of a Security not redeemed to less than \$2,000.

The Trustee shall promptly notify the Issuer in writing of the Securities selected for redemption and, in the case of any Securities selected for partial redemption, the method it has chosen for the selection of Securities and the principal amount thereof to be redeemed.

For all purposes of this Indenture, unless the context otherwise requires, all provisions relating to redemption of Securities shall relate, in the case of any Security redeemed or to be redeemed only in part, to the portion of the principal amount of such Security which has been or is to be redeemed.

SECTION 5.5. Notice of Redemption.

(a) Notice of redemption shall be given in the manner provided for in Section 12.2, not less than 30 nor more than 60 days prior to the Redemption Date, to each Holder of Securities to be redeemed, except that that redemption notices may be sent more than 60 days prior to a Redemption Date if the notice is issued in connection with a legal defeasance

or covenant defeasance of the Securities or a satisfaction and discharge of this Indenture pursuant to Article VIII. At the Issuer's request, the Trustee shall give notice of redemption in the Issuer's name and at the Issuer's expense; *provided, however*, that the Issuer shall deliver to the Trustee, at least five Business Days prior to the giving of such notice (unless a shorter period shall be satisfactory to the Trustee), an Issuer Order requesting that the Trustee give such notice at the Issuer's expense and setting forth the information to be stated in such notice as provided in the following items.

All notices of redemption shall state:

- (1) the Redemption Date,
- (2) the redemption price, if then determinable, and otherwise the method for its determination and the amount of accrued interest (including Additional Interest) to the Redemption Date payable as provided in Section 5.7, if any,
- (3) if less than all outstanding Securities are to be redeemed, the identification of the particular Securities (or portion thereof) to be redeemed, as well as the aggregate principal amount of Securities to be redeemed and the aggregate principal amount of Securities to be outstanding after such partial redemption,
- (4) in case any Security is to be redeemed in part only, the notice which relates to such Security shall state that on and after the Redemption Date, upon surrender of such Security, the Holder will receive, without charge, a new Security or Securities of authorized denominations for the principal amount thereof remaining unredeemed,
- (5) that on the Redemption Date, the redemption price (and accrued interest (including Additional Interest), if any, to the Redemption Date payable as provided in Section 5.7) will become due and payable upon each such Security, or the portion thereof, to be redeemed, and, unless the Issuer defaults in making the redemption payment, that interest on Securities called for redemption (or the portion thereof) will cease to accrue on and after said date,
- (6) the place or places where such Securities are to be surrendered for payment of the redemption price and accrued

interest, if any,

- (7) the name and address of the Paying Agent,
- (8) that Securities called for redemption must be surrendered to the Paying Agent to collect the redemption price,
- (9) the CUSIP, Common Code and ISIN numbers, if applicable, and that no representation is made as to the accuracy or correctness of the CUSIP, Common Code and ISIN numbers, if applicable, if any, listed in such notice or printed on the Securities,
- (10) the Section of this Indenture or the paragraph of the Securities pursuant to which the Securities are to be redeemed, and

91

---

(11) if in connection with any conditional notice of redemption pursuant to the Issuer's right to redeem all of the Securities upon a Change of Control, and in compliance with Section 5.5(b), that such redemption is conditional upon such Change of Control occurring.

(b) Any redemption or notice of redemption may, at the Issuer's discretion, be subject to one or more conditions precedent and, in the case of a redemption with the Net Cash Proceeds of an Equity Offering, be given prior to the completion of the related Equity Offering.

SECTION 5.6. Deposit of Redemption Price. Prior to 11:00 a.m., New York City time, on any Redemption Date, the Issuer shall deposit with the Trustee or with a Paying Agent (or, if the Issuer or any of the Issuer's Restricted Subsidiaries is acting as its own Paying Agent, segregate and hold in trust as provided in Section 2.4) an amount of money sufficient (as determined by the Issuer) to pay the redemption price of and accrued interest (including Additional Interest) on, all the Securities which are to be redeemed on that date, other than Securities or portions of Securities called for redemption that are beneficially owned by the Issuer and have been delivered by the Issuer to the Trustee for cancellation.

SECTION 5.7. Securities Payable on Redemption Date. Notice of redemption having been given as aforesaid, the Securities or portions of Securities so to be redeemed without a condition precedent shall, on the Redemption Date, become due and payable at the redemption price therein specified (together with accrued interest, if any, to the Redemption Date), and from and after such date (unless the Issuer shall default in the payment of the redemption price and accrued interest) such Securities shall cease to bear interest and the only right of the Holders thereof will be to receive payment of the redemption price and, subject to the next sentence, unpaid interest on such Securities to the Redemption Date. Upon surrender of any such Security for redemption in accordance with said notice, such Security shall be paid by the Issuer at the redemption price, together with accrued interest, if any, to the Redemption Date, *provided, however,* that installments of interest whose Stated Maturity is on or prior to the Redemption Date will be payable to the Holder of such Security, or one or more predecessor Securities, registered as such as of the relevant record date.

If any Security called for redemption shall not be so paid upon surrender thereof for redemption, the unpaid principal (and premium, if any) shall, until paid, bear interest from the Redemption Date at the rate borne by the Securities.

SECTION 5.8. Securities Redeemed in Part. Any Security which is to be redeemed only in part (pursuant to the provisions of this Article) shall be surrendered at the office or agency of the Issuer maintained for such purpose pursuant to Section 3.12 (with, if the Issuer or the Trustee so require, due endorsement by, or a written instrument of transfer in form satisfactory to the Issuer and the Trustee duly executed by, the Holder thereof or such Holder's attorney duly authorized in writing), and the Issuer shall execute, and the Trustee shall authenticate and make available for delivery to the Holder of such Security at the expense of the Issuer, a new Security or Securities, of any authorized denomination as requested by such Holder, in an aggregate principal amount equal to and in exchange for the unredeemed portion of the principal of the Security so surrendered; *provided,* that each such new Security will be in a principal amount of \$2,000 or larger integral multiple of \$1,000.

92

---

## ARTICLE VI

### DEFAULTS AND REMEDIES

SECTION 6.1. Events of Default. An "Event of Default" wherever used herein, means any one of the following events in relation to the Securities (whatever the reason for such Event of Default and whether it shall be voluntary or involuntary or be effected by operation of law or pursuant to any judgment, decree or order of any court or any order, rule or regulation of any administrative or governmental body):

- (1) default in any payment of interest or Additional Interest, if any, on any Security when due, continued for 30 days;
- (2) default in the payment of principal of or premium, if any, on any Security when due at its Stated Maturity, upon optional redemption, upon required repurchase, upon declaration of acceleration or otherwise;

(3) failure by the Issuer or any Subsidiary Guarantor to comply with its obligations Section 4.1;

(4) failure by the Issuer to comply for 30 days (or 180 days in the case of a Reporting Failure) after notice has been given, by registered or certified mail, to the Issuer by the Trustee or to the Issuer and the Trustee by the Holders of at least 25% in principal amount of the Outstanding Securities a written notice specifying such default or breach and requiring it to be remedied and stating that such notice is a “Notice of Default” hereunder with Sections 3.2, 3.3, 3.4, 3.5, 3.6, 3.8, 3.9, 3.10 and 3.11 (in each case, other than a failure to purchase Securities which will constitute an Event of Default under clause (2) above and other than a failure to comply with Section 4.1 which is covered by clause (3));

(5) failure by the Issuer to comply with any agreement in this Indenture (other than an agreement, a default in or failure to comply with that is elsewhere in this Section specifically dealt with) and continuance of such default or breach for a period of 60 days after there has been given, by registered or certified mail, to the Issuer by the Trustee or to the Issuer and the Trustee by the Holders of at least 25% in principal amount of the Outstanding Securities a written notice specifying such default or breach and requiring it to be remedied and stating that such notice is a “Notice of Default” hereunder;

(6) default under any mortgage, indenture or instrument under which there may be issued or by which there may be secured or evidenced any Indebtedness for money borrowed by the Issuer or any of its Restricted Subsidiaries (or the payment of which is guaranteed by the Issuer or any of its Restricted Subsidiaries), other than Indebtedness owed to the Issuer or a Restricted Subsidiary, whether such Indebtedness or guarantee existed at the Issue Date, or was created thereafter, which default:

(a) is caused by a failure to pay principal of, or interest or premium, if any, on such Indebtedness prior to the expiration of the grace period provided in

93

---

such Indebtedness (and any extensions of any grace period) (“payment default”); or

(b) results in the acceleration of such Indebtedness prior to its Stated Maturity (the “cross acceleration provision”);

and, in each case, the principal amount of any such Indebtedness, together with the principal amount of any other such Indebtedness under which there has been a payment default or the maturity of which has been so accelerated, aggregates \$10.0 million or more;

(7) the entry by a court having jurisdiction in the premises of (A) a decree or order for relief in respect of the Issuer or a Significant Subsidiary or group of Restricted Subsidiaries that, taken together (as of the last audited consolidated financial statements for the Issuer and its Restricted Subsidiaries) would constitute a Significant Subsidiary in an involuntary case or proceeding under any applicable Federal or State bankruptcy, insolvency, reorganization or other similar law or (B) a decree or order adjudging the Issuer bankrupt or insolvent, or approving as properly filed a petition seeking reorganization, arrangement, adjustment or composition of or in respect of the Issuer or a Significant Subsidiary or group of Restricted Subsidiaries that, taken together (as of the last audited consolidated financial statements for the Issuer and its Restricted Subsidiaries) would constitute a Significant Subsidiary, under any applicable Federal or State law, or appointing a custodian, receiver, liquidator, assignee, trustee, sequestrator or other similar official of the Issuer or a Significant Subsidiary or group of Restricted Subsidiaries that, taken together (as of the last audited consolidated financial statements for the Issuer and its Restricted Subsidiaries) would constitute a Significant Subsidiary, or of any substantial part of its or their property, or ordering the winding up or liquidation of its or their affairs, and the continuance of any such decree or order for relief or any such other decree or order unstayed and in effect for a period of 60 consecutive days; or

(8) the commencement by the Issuer or a Significant Subsidiary or group of Restricted Subsidiaries that, taken together (as of the last audited consolidated financial statements for the Issuer and its Restricted Subsidiaries) would constitute a Significant Subsidiary of a voluntary case or proceeding under any applicable Federal or State bankruptcy, insolvency, reorganization or other similar law or of any other case or proceeding to be adjudicated a bankrupt or insolvent, or the consent by it or them to the entry of a decree or order for relief in respect of the Issuer or in an involuntary case or proceeding under any applicable Federal or State bankruptcy, insolvency, reorganization or other similar law or to the commencement of any bankruptcy or insolvency case or proceeding against it or them, or the filing by it or them of a petition or answer or consent seeking reorganization or relief under any applicable Federal or State law, or the consent by it or them to the filing of such petition or to the appointment of or taking possession by a custodian, receiver, liquidator, assignee, trustee, sequestrator or other similar official of the Issuer or a Significant Subsidiary or group of Restricted Subsidiaries that, taken together (as of the last audited consolidated financial statements for the Issuer and its Restricted Subsidiaries) would constitute a Significant Subsidiary or of any substantial part of its or their property, or the making by it or them of an assignment for the benefit

94

---

of creditors, or the admission by it or them in writing of its or their inability to pay its or their debts generally as they become due, or the taking of corporate action by the Issuer or a Significant Subsidiary or group of Restricted Subsidiaries that, taken together (as of the last audited consolidated financial statements for the Issuer and its Restricted Subsidiaries) would constitute a Significant Subsidiary in furtherance of any such action; or

(9) failure by the Issuer or any Significant Subsidiary or group of Restricted Subsidiaries that, taken together (as of the latest audited consolidated financial statements for the Issuer and its Restricted Subsidiaries), would constitute a Significant Subsidiary to pay final judgments aggregating in excess of \$10.0 million (to the extent not covered by insurance by a reputable and creditworthy insurer as to which the insurer has not disclaimed coverage), which judgments are not paid or discharged, and there shall be any period of 60 consecutive days following entry of such final judgment or decree during which a stay of enforcement of such final judgment or decree, by reason of pending appeal or otherwise, shall not be in effect (the “judgment default provision”); or

(10) any Guarantee of a Significant Subsidiary or group of Restricted Subsidiaries that, taken together (as of the latest audited consolidated financial statements for the Issuer and its Restricted Subsidiaries) would constitute a Significant Subsidiary, ceases to be in full force and effect (except as contemplated by the terms of this Indenture) or is declared null and void in a judicial proceeding or the Issuer or any Subsidiary Guarantor that is a Significant Subsidiary or group of Subsidiary Guarantors that, taken together (as of the latest audited consolidated financial statements of the Issuer and its Restricted Subsidiaries) would constitute a Significant Subsidiary, denies or disaffirms its obligations under this Indenture or its Guarantee.

However, a default under clauses (4) and (5) of this Section 6.1 will not constitute an Event of Default until the Trustee or the Holders of at least 25% in principal amount of the outstanding Securities notify the Issuer in writing and, in the case of a notice given by the Holders, the Trustee of the default and the Issuer does not cure such default within the time specified in clauses (4) and (5) of this Section 6.1 after receipt of such notice.

SECTION 6.2. Acceleration. If an Event of Default (other than an Event of Default described in Section 6.1 (7) and (8)) occurs and is continuing, the Trustee by notice to the Issuer, or the Holders of at least 25% in principal amount of the outstanding Securities by notice to the Issuer and the Trustee, may, and the Trustee at the request of such Holders shall, declare the principal of, premium, if any, accrued and unpaid interest, if any, on all the Securities to be due and payable. If an Event of Default described in Section 6.1 (7) and (8) occurs and is continuing, the principal of, premium, if any, accrued and unpaid interest, if any, on all the Securities will become and be immediately due and payable without any declaration or other act on the part of the Trustee or any Holders. Notwithstanding the foregoing, if an Event of Default specified in Section 6.1 (6) shall have occurred and be continuing, such Event of Default and any consequential acceleration (to the extent not in violation of any applicable law or in conflict with any judgment or decree of a court of competent jurisdiction) shall be automatically rescinded if (i) the Indebtedness that is the subject of such Event of Default has been repaid or (ii) if the default relating to such Indebtedness is waived by the holders of such Indebtedness or

95

---

cured and if such Indebtedness has been accelerated, then the holders thereof have rescinded their declaration of acceleration in respect of such Indebtedness, in each case within 20 days after the declaration of acceleration with respect thereto, and (iii) any other existing Events of Default, except nonpayment of principal, premium or interest on the Securities that became due solely because of the acceleration of the Securities, have been cured or waived.

SECTION 6.3. Other Remedies. If an Event of Default occurs and is continuing, the Trustee may pursue any available remedy by proceeding at law or in equity to collect the payment of principal of (or premium) or interest (including Additional Interest) on the Securities or to enforce the performance of any provision of the Securities, this Indenture or the Guarantees.

The Trustee may maintain a proceeding even if it does not possess any of the Securities or does not produce any of them in the proceeding. A delay or omission by the Trustee or any Securityholder in exercising any right or remedy accruing upon an Event of Default shall not impair the right or remedy or constitute a waiver of or acquiescence in the Event of Default. No remedy is exclusive of any other remedy. All available remedies are cumulative.

SECTION 6.4. Waiver of Past Defaults. The Holders of a majority in principal amount of the outstanding Securities by notice to the Trustee (with a copy to the Issuer, but the applicable waiver or rescission shall be effective when the notice is given to the Trustee) may (a) waive, by their consent (including, without limitation, consents obtained in connection with a purchase of, or tender offer or exchange offer for, Securities), an existing Default or Event of Default and its consequences except (i) a Default or Event of Default in the payment of the principal of, or premium, if any, or interest (including Additional Interest) on a Security or (ii) a Default or Event of Default in respect of a provision that under Section 9.2 cannot be amended without the consent of each Securityholder affected and (b) rescind any acceleration with respect to the Securities and its consequences if (1) such rescission would not conflict with any judgment or decree of a court of competent jurisdiction and (2) all existing Events of Default, other than the nonpayment of the principal of, premium, if any, and interest (including Additional Interest) on the Securities that have become due solely by such declaration of acceleration, have been cured or waived. When a Default or Event of Default is waived, it is deemed cured, but no such waiver shall extend to any subsequent or other Default or Event of Default or impair any consequent right.

SECTION 6.5. Control by Majority. The Holders of a majority in principal amount of the outstanding Securities may direct the time, method and place of conducting any proceeding for any remedy available to the Trustee or of exercising any trust or power conferred on the Trustee. However, the Trustee may refuse to follow any direction that conflicts with law or this Indenture, the Securities or the Guarantees or, subject to Sections 7.1 and 7.2, that the Trustee determines is unduly prejudicial to the rights of other Securityholders or would involve the Trustee in personal liability; *provided, however*, that the Trustee may take any other action deemed proper by the Trustee that is not inconsistent with such direction. Prior to taking any such action hereunder, the Trustee shall be entitled to indemnification or security reasonably satisfactory to it in its sole discretion against all losses and expenses caused by taking or not taking such action.

96

---

---

SECTION 6.6. Limitation on Suits. Subject to Section 6.7, a Securityholder may not pursue any remedy with respect to this Indenture or the Securities unless:

- (1) such Holder has previously given to the Trustee written notice stating that an Event of Default is continuing;
- (2) Holders of at least 25% in principal amount of the outstanding Securities have requested that the Trustee pursue the remedy;
- (3) such Holders have offered to the Trustee reasonable security or indemnity, satisfactory to the Trustee, against any loss, liability or expense;
- (4) the Trustee has not complied with such request within 60 days after receipt of the request and the offer of security or indemnity; and
- (5) the Holders of a majority in principal amount of the outstanding Securities have not waived such Event of Default or otherwise given the Trustee a direction that, in the opinion of the Trustee, is inconsistent with such request during such 60-day period.

A Securityholder may not use this Indenture to prejudice the rights of another Securityholder or to obtain a preference or priority over another Securityholder.

SECTION 6.7. Rights of Holders to Receive Payment. Notwithstanding any other provision of this Indenture (including, without limitation, Section 6.6), the right of any Holder to receive payment of principal of, premium (if any) or interest (including Additional Interest) on the Securities held by such Holder, on or after the respective due dates expressed or provided for in the Securities, or to bring suit for the enforcement of any such payment on or after such respective dates, shall not be impaired or affected without the consent of such Holder.

SECTION 6.8. Collection Suit by Trustee. If an Event of Default specified in clauses (1) or (2) of Section 6.1 occurs and is continuing, the Trustee may recover judgment in its own name and as trustee of an express trust against the Issuer for the whole amount then due and owing (together with interest on any unpaid interest to the extent lawful) and the amounts provided for in Section 7.7.

SECTION 6.9. Trustee May File Proofs of Claim. The Trustee may file such proofs of claim and other papers or documents as may be necessary or advisable in order to have the claims of the Trustee (including any claim for the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel) and the Securityholders allowed in any judicial proceedings relative to the Issuer or the Subsidiaries of the Issuer or its or their respective creditors or properties and, unless prohibited by law or applicable regulations, may be entitled and empowered to participate as a member of any official committee of creditors appointed in such matter and may vote on behalf of the Holders in any election of a trustee in bankruptcy or other Person performing similar functions, and any Custodian in any such judicial proceeding is hereby authorized by each Holder to make payments to the Trustee and, in the event that the Trustee shall consent to the making of such payments directly to the Holders, to pay to the Trustee any amount due it for the reasonable compensation, expenses, disbursements

and advances of the Trustee, its agents and its counsel, and any other amounts due the Trustee under Section 7.7.

No provision of this Indenture shall be deemed to authorize the Trustee to authorize or consent to or accept or adopt on behalf of any Holder any plan of reorganization, arrangement, adjustment or composition affecting the Securities or the rights of any Holder thereof or to authorize the Trustee to vote in respect of the claim of any Holder in any such proceeding.

SECTION 6.10. Priorities. If the Trustee collects any money or property pursuant to this Article VI, it shall pay out the money in the following order:

FIRST: to the Trustee for amounts due to it under Section 7.7, including payment of all compensation, expense and liabilities incurred, and all advances made, by the Trustee and the costs and expenses of collection;

SECOND: to Holders of Securities for amounts due and unpaid on the Securities for principal, premium, if any, and interest, ratably, without preference or priority of any kind, according to the amounts due and payable on the Securities for principal, premium, if any, and interest (including Additional Interest), respectively; and

THIRD: to the Issuer or to such party as a court of competent jurisdiction shall direct.

The Trustee may fix a record date and payment date for any payment to Holders of Securities pursuant to this Section 6.10.

SECTION 6.11. Undertaking for Costs. In any suit for the enforcement of any right or remedy under this Indenture or in any suit against the Trustee for any action taken or omitted by it as Trustee, a court in its discretion may require the filing

by any party litigant in the suit of an undertaking to pay the costs of the suit, and the court in its discretion may assess reasonable costs, including reasonable attorneys' fees and expenses, against any party litigant in the suit, having due regard to the merits and good faith of the claims or defenses made by the party litigant. This Section does not apply to a suit by the Trustee, a suit by the Issuer, a suit by a Holder pursuant to Section 6.7 or a suit by Holders of more than 10% in outstanding principal amount of the Securities.

## ARTICLE VII

### TRUSTEE

#### SECTION 7.1. Duties of Trustee.

(a) If an Event of Default has occurred and is continuing, the Trustee shall exercise the rights and powers vested in it by this Indenture and use the same degree of care and skill in its exercise as a prudent person would exercise or use under the circumstances in the conduct of such person's own affairs.

(b) Except during the continuance of an Event of Default:

98

---

(1) the Trustee undertakes to perform such duties and only such duties as are specifically set forth in this Indenture and no implied covenants or obligations shall be read into this Indenture against the Trustee; and

(2) in the absence of bad faith on its part, the Trustee may conclusively rely, as to the truth of the statements and the correctness of the opinions expressed therein, upon certificates, opinions or orders furnished to the Trustee and conforming to the requirements of this Indenture, the Securities or the Guarantees, as applicable. However, in the case of any such certificates or opinions which by any provisions hereof are specifically required to be furnished to the Trustee, the Trustee shall examine such certificates and opinions to determine whether or not they conform to the requirements of this Indenture, the Securities or the Guarantees, as the case may be (but need not confirm or investigate the accuracy of mathematical calculations or other facts stated therein).

(c) The Trustee may not be relieved from liability for its own negligent action, its own negligent failure to act or its own willful misconduct, except that:

(1) this paragraph does not limit the effect of paragraph (b) of this Section;

(2) the Trustee shall not be liable for any error of judgment made in good faith by a Trust Officer unless it is proved that the Trustee was negligent in ascertaining the pertinent facts;

(3) the Trustee shall not be liable with respect to any action it takes or omits to take in good faith in accordance with a direction received by it pursuant to Section 6.5; and

(4) no provision of this Indenture, the Securities or the Guarantees shall require the Trustee to expend or risk its own funds or otherwise incur financial liability in the performance of any of its duties hereunder or thereunder or in the exercise of any of its rights or powers, if it shall have reasonable grounds to believe that repayment of such funds or adequate indemnity or security against such risk or liability is not reasonably assured to it.

(d) Every provision of this Indenture that in any way relates to the Trustee is subject to paragraphs (a), (b) and (c) of this Section.

(e) The Trustee shall not be liable for interest on any money received by it except as the Trustee may agree in writing with the Issuer.

(f) Money held in trust by the Trustee need not be segregated from other funds except to the extent required by law.

(g) Every provision of this Indenture relating to the conduct or affecting the liability of or affording protection to the Trustee shall be subject to the provisions of this Section and to the provisions of the TIA.

99

---

(h) Unless otherwise specifically provided in this Indenture, any demand, request, direction or notice from the Issuer shall be sufficient if signed by one Officer of the Issuer.

#### SECTION 7.2. Rights of Trustee. Subject to Section 7.1:

(a) The Trustee may conclusively rely on any document (whether in its original or facsimile form) reasonably believed by it to be genuine and to have been signed or presented by the proper person. The Trustee need not investigate any fact or matter stated in the document. The Trustee shall receive and retain financial reports and statements of the Issuer as provided herein, but

shall have no duty to review or analyze such reports or statements to determine compliance with covenants or other obligations of the Issuer.

(b) Before the Trustee acts or refrains from acting, it may require an Officers' Certificate and/or an Opinion of Counsel. The Trustee shall not be liable for any action it takes or omits to take in good faith in reliance on an Officers' Certificate or Opinion of Counsel.

(c) The Trustee may act through its attorneys and agents and shall not be responsible for the misconduct or negligence of any agent appointed with due care.

(d) The Trustee shall not be liable for any action it takes or omits to take in good faith which it believes to be authorized or within its rights or powers, unless the Trustee's conduct constitutes willful misconduct or negligence.

(e) The Trustee may consult with counsel of its selection, and the advice or opinion of counsel with respect to legal matters relating to this Indenture, the Securities or the Guarantees shall be full and complete authorization and protection from liability in respect of any action taken, omitted or suffered by it hereunder or under the Securities or the Guarantees in good faith and in accordance with the advice or opinion of such counsel.

(f) The Trustee shall not be deemed to have notice of any Default or Event of Default or whether any entity or group of entities constitutes a Significant Subsidiary unless a Trust Officer of the Trustee has actual knowledge thereof or unless written notice of any event which is in fact such a Default or of any such Significant Subsidiary is received by the Trustee at the corporate trust office of the Trustee specified in Section 12.2, and such notice references the Securities and this Indenture.

(g) The rights, privileges, protections, immunities and benefits given to the Trustee, including, without limitation, its right to be indemnified, are extended to, and shall be enforceable by, the Trustee in each of its capacities hereunder, and to each agent, custodian and other Person employed to act hereunder.

(h) The Trustee shall be under no obligation to exercise any of the rights or powers vested in it by this Indenture, the Securities or the Guarantees at the request, order or direction of any of the Holders pursuant to the provisions of this Indenture, unless such Holders shall have offered to the Trustee security or indemnity satisfactory to the Trustee against the costs, expenses and liabilities which may be incurred therein or thereby.

100

---

(i) The Trustee shall not be deemed to have notice of a Default or an Event of Default unless a Responsible Officer of the Trustee (i) receives written notice of such Default or Event of Default or (ii) has actual knowledge of such Default or Event of Default.

(j) Whenever in the administration of this Indenture, the Securities or the Guarantees the Trustee shall deem it desirable that a matter be proved or established prior to taking, suffering or omitting any action hereunder or thereunder, the Trustee (unless other evidence be herein specifically prescribed) may request and in the absence of bad faith or willful misconduct on its part, rely upon an Officers' Certificate.

(k) In no event shall the Trustee be responsible or liable for any special, indirect or consequential loss or damage of any kind whatsoever (including, but not limited to, loss of profit), irrespective of whether the Trustee has been advised of the likelihood of such loss or damage and regardless of the form of action.

(l) The parties hereto acknowledge, in accordance with Section 326 of the Patriot Act, that the Trustee, like all financial institutions and in order to help fight the funding of terrorism and money laundering, is required to obtain, verify and record information that identifies each person or legal entity that establishes a relationship or opens an account with the Trustee. The Issuers and the Subsidiary Guarantors agree that they will provide the Trustee with all such information as it may reasonably request in order to satisfy the requirements or its obligations under the Patriot Act.

(m) The Trustee will be under no obligation to exercise any of the rights or powers under this Indenture, the Securities or the Guarantees at the request or direction of any of the Holders unless such Holders have offered the Trustee indemnity or security reasonably satisfactory to the Trustee in its sole discretion against loss or expense.

(n) Any discretion, permissive right or privilege in favor of the Trustee, if any, shall not be construed as a duty or obligation.

**SECTION 7.3. Individual Rights of Trustee.** The Trustee in its individual or any other capacity may become the owner or pledgee of Securities and may otherwise deal with the Issuer, the Subsidiary Guarantors or their Affiliates with the same rights it would have if it were not Trustee. Any Paying Agent or Registrar may do the same with like rights. However, the Trustee must comply with Sections 7.10 and 7.11. In addition, the Trustee shall be permitted to engage in transactions with the Issuer; *provided, however,* that if the Trustee acquires any conflicting interest under the TIA, the Trustee must (i) eliminate such conflict within 90 days of acquiring such conflicting interest, (ii) apply to the SEC for permission to continue acting as Trustee or (iii) resign.

**SECTION 7.4. Trustee's Disclaimer.** The Trustee shall not be responsible for and makes no representation as to the validity or adequacy of this Indenture, the Guarantees or the Securities, shall not be accountable for the Issuer's use of the proceeds from the sale of the Securities, shall not be responsible for the use or application of any money received by any Paying Agent other than



document issued in connection with the sale of the Securities or in the Securities other than the Trustee's certificate of authentication.

SECTION 7.5. Notice of Defaults. If a Default or Event of Default occurs and is continuing and if a Trust Officer has knowledge thereof, the Trustee shall send to each Securityholder at the address set forth in the Securities Register notice of the Default or Event of Default within 90 days after it occurs. Except in the case of a Default or Event of Default in payment of principal of, premium (if any), or interest on any Security (including payments pursuant to the optional redemption or required repurchase provisions of such Security), the Trustee may withhold the notice if and so long as a committee of its Trust Officers in good faith determines that withholding the notice is in the interests of Securityholders.

SECTION 7.6. Reports by Trustee to Holders. Within 60 days after each October 15 beginning October 15, 2017 the Trustee shall send to each Securityholder a brief report dated as of such October 15 that complies with TIA § 313(a) if and to the extent required thereby. The Trustee also shall comply with TIA § 313(b) and TIA § 313(c).

A copy of each report at the time it is sent to Securityholders shall be filed with the SEC and each stock exchange (if any) on which the Securities are listed. The Issuer agrees to notify promptly the Trustee whenever the Securities become listed on any stock exchange and of any delisting thereof and the Trustee shall comply with TIA § 313(d).

SECTION 7.7. Compensation and Indemnity. The Issuer shall pay to the Trustee from time to time reasonable compensation for its services hereunder and under the Securities and the Guarantees as the Issuer and the Trustee shall from time to time agree in writing. The Trustee's compensation shall not be limited by any law on compensation of a trustee of an express trust. The Issuer shall reimburse the Trustee upon request for all reasonable out-of-pocket expenses incurred or made by it, including, but not limited to, costs of collection, costs of preparing reports, certificates and other documents, costs of preparation and sending of notices to Securityholders. Such expenses shall include the reasonable compensation and expenses, disbursements and advances of the Trustee's agents, counsel, accountants and experts. The Issuer shall indemnify the Trustee (including its officers, directors, agents and employees) against any and all loss, liability, damages, claims or expense (including reasonable attorneys' fees and expenses) incurred by it without willful misconduct or negligence on its part in connection with the administration of this trust and the performance of its duties hereunder and under the Securities and the Guarantees, including the costs and expenses of enforcing this Indenture (including this Section 7.7), the Securities and the Guarantees and of defending itself against any claims (whether asserted by any Securityholder, the Issuer or otherwise). The Trustee shall notify the Issuer promptly of any claim for which it may seek indemnity of which it has received written notice. Failure by the Trustee to so notify the Issuer shall not relieve the Issuer of its obligations hereunder except to the extent the Issuer is prejudiced thereby. The Issuer shall defend the claim and the Trustee shall provide reasonable cooperation at the Issuer's expense in the defense. The Trustee may have separate counsel and the Issuer shall pay the fees and expenses of such counsel; *provided* that the Issuer shall not be required to pay the fees and expenses of such separate counsel if it assumes the Trustee's defense, and, in the reasonable judgment of outside counsel to the Trustee, there is no conflict of interest between the Issuer and the Trustee in connection with such defense.

To secure the Issuer's payment obligations in this Section 7.7, the Trustee shall have a lien prior to the Securities on all money or property held or collected by the Trustee other than money or property held in trust to pay principal of, premium, if any, and interest on particular Securities. Such lien shall survive the satisfaction and discharge of this Indenture or the earlier resignation or removal of the Trustee. The Trustee's right to receive payment of any amounts due under this Section 7.7 shall not be subordinate to any other liability or Indebtedness of the Issuer.

The Issuer's payment obligations pursuant to this Section shall survive the discharge of this Indenture or the earlier resignation or removal of the Trustee. Without prejudice to any other rights available to the Trustee under applicable law, when the Trustee incurs expenses after the occurrence of a Default specified in clause (7) or clause (8) of Section 6.1, the expenses are intended to constitute expenses of administration under any Bankruptcy Law.

SECTION 7.8. Replacement of Trustee. The Trustee may resign at any time by so notifying the Issuer in writing. The Holders of a majority in principal amount of the Securities may remove the Trustee by so notifying the removed Trustee in writing and may appoint a successor Trustee with the Issuer's written consent, which consent will not be unreasonably withheld. The Issuer shall remove the Trustee if:

- (1) the Trustee fails to comply with Section 7.10 hereof or TIA §310;
- (2) the Trustee is adjudged bankrupt or insolvent;
- (3) a receiver or other public officer takes charge of the Trustee or its property; or
- (4) the Trustee otherwise becomes incapable of acting.

If the Trustee resigns or is removed by the Issuer or by the Holders of a majority in principal amount of the Securities

and such Holders do not reasonably promptly appoint a successor Trustee as described in the preceding paragraph, or if a vacancy exists in the office of the Trustee for any other reason (the Trustee in such event being referred to herein as the retiring Trustee), the Issuer shall promptly appoint a successor Trustee.

A successor Trustee shall deliver a written acceptance of its appointment to the retiring Trustee and to the Issuer. Thereupon the resignation or removal of the retiring Trustee shall become effective, and the successor Trustee shall have all the rights, powers and duties of the Trustee under this Indenture. The successor Trustee shall send a notice of its succession to Securityholders. The retiring Trustee shall promptly transfer all property held by it as Trustee to the successor Trustee, subject to the lien provided for in Section 7.7.

If a successor Trustee does not take office within 60 days after the retiring Trustee resigns or is removed, the retiring Trustee or the Holders of at least 10% in principal amount of the Securities may petition, at the Issuer's expense, any court of competent jurisdiction for the appointment of a successor Trustee.

103

---

If the Trustee fails to comply with Section 7.10, unless the Trustee's duty to resign is stayed as provided in TIA § 310(b), any Securityholder, who has been a bona fide holder of a Security for at least six months, may petition any court of competent jurisdiction for the removal of the Trustee and the appointment of a successor Trustee.

Notwithstanding the replacement of the Trustee pursuant to this Section 7.8, the Issuer's obligations under Section 7.7 shall continue for the benefit of the retiring Trustee.

**SECTION 7.9. Successor Trustee by Merger.** If the Trustee consolidates with, merges or converts into, or transfers all or substantially all its corporate trust business or assets to, another corporation or banking association, the resulting, surviving or transferee corporation without any further act shall be the successor Trustee.

In case at the time such successor or successors by merger, conversion or consolidation to the Trustee shall succeed to the trusts created by this Indenture, any of the Securities shall have been authenticated but not delivered, any such successor to the Trustee may adopt the certificate of authentication of any predecessor trustee, and deliver such Securities so authenticated; and in case at that time any of the Securities shall not have been authenticated, any successor to the Trustee may authenticate such Securities either in the name of any predecessor hereunder or in the name of the successor to the Trustee; *provided* that the right to adopt the certificate of authentication of any predecessor Trustee or authenticate Securities in the name of any predecessor Trustee shall only apply to its successor or successors by merger, consolidation or conversion.

**SECTION 7.10. Eligibility; Disqualification.** This Indenture shall always have a Trustee that satisfies the requirements of TIA § 310(a)(1), (2) and (5) in every respect. The Trustee shall have a combined capital and surplus of at least \$100 million as set forth in its most recent published annual report of condition. The Trustee shall comply with TIA § 310(b); *provided, however*, that there shall be excluded from the operation of TIA § 310(b)(1) (i) the indenture dated as of May 6, 2014 among the parties thereto relating to the Issuer's 5.125% Senior Notes due 2022, (ii) the indenture dated as of November 5, 2013 among the parties thereto relating to the Issuer's 5.375% Senior Notes due 2021, (iii) the indenture dated as of November 19, 2012 among the parties thereto relating to the Issuer's 6.0% Senior Notes due 2020, (iv) the indenture dated as of March 17, 2015 among the parties thereto relating to the Issuer's 5.625% Senior Notes due 2023 and (v) any other indenture or indentures under which other securities or certificates of interest or participation in other securities of the Issuer are outstanding if the requirements for such exclusion set forth in TIA § 310(b)(1) are met.

**SECTION 7.11. Preferential Collection of Claims Against the Issuer.** The Trustee shall comply with TIA § 311(a), excluding any creditor relationship listed in TIA § 311(b). A Trustee who has resigned or been removed shall be subject to TIA § 311(a) to the extent indicated.

**SECTION 7.12. Trustee's Application for Instruction from the Issuer.** Any application by the Trustee for written instructions from the Issuer may, at the option of the Trustee, set forth in writing any action proposed to be taken or omitted by the Trustee under this Indenture and the date on and/or after which such action shall be taken or such omission shall be

104

---

effective. The Trustee shall not be liable for any action taken by, or omission of, the Trustee in accordance with a proposal included in such application on or after the date specified in such application (which date shall not be less than three Business Days after the date any Officer of the Issuer actually receives such application, unless any such Officer shall have consented in writing to any earlier date) unless prior to taking any such action (or the effective date in the case of an omission), the Trustee shall have received written instructions in response to such application specifying the action to be taken or omitted.

## ARTICLE VIII

### DISCHARGE OF INDENTURE; DEFEASANCE

**SECTION 8.1. Discharge of Liability on Securities; Defeasance.**

(a) Subject to Section 8.1(c), when (i) either (x) all Securities that have been authenticated (other than Securities

replaced or paid pursuant to Section 2.10 and Securities for whose payment money has been deposited in trust or segregated and held in trust by the Issuer and thereafter repaid to the Issuer or discharged from such trust), have been delivered to the Trustee for cancellation or (y) all outstanding Securities not theretofore delivered to the Trustee for cancellation have become due and payable by reason of the making of a notice of redemption or otherwise, will become due and payable within one year or may be called for redemption within one year under arrangements satisfactory to the Trustee for the giving of notice of redemption by the Trustee in the name, and at the expense, of the Issuer, and the Issuer or any Subsidiary Guarantor has irrevocably deposited or caused to be deposited with the Trustee, as trust funds in trust solely for the benefit of the Holders, cash in U.S. dollars, U.S. Government Obligations, or a combination thereof, in such amounts as will be sufficient (as determined by the Issuer) without consideration of any reinvestment of interest, to pay and discharge the entire Indebtedness on the Securities not theretofore delivered to the Trustee for cancellation for principal, premium, if any, and accrued interest to the date of final maturity or redemption (*provided* that if such redemption is made as provided in the sixth paragraph of paragraph 5 of the Securities, (1) the amount of cash in U.S. dollars, U.S. Government Obligations, or a combination thereof, that must be irrevocably deposited will be determined using an assumed Applicable Premium calculated as of the date of such deposit and (2) the depositor must irrevocably deposit or cause to be deposited additional money in trust on the redemption date as necessary to pay the Applicable Premium as determined by such date); (ii) in respect of clause (i)(y), no Event of Default has occurred and is continuing on the date of the deposit (other than an Event of Default resulting from the borrowing of funds to be applied to such deposit and any similar deposit relating to other Indebtedness and, in each case, the granting of Liens to secure such borrowings) and the deposit will not result in a breach or violation of, or constitute a default under, any other instrument to which either the Issuer or any Subsidiary Guarantor is a party or by which either the Issuer or any Subsidiary Guarantor is bound (other than with respect to the borrowing of funds to be applied concurrently to make the deposit required to effect such satisfaction and discharge and any similar concurrent deposit relating to other Indebtedness, and in each case the granting of Liens to secure such borrowings); (iii) the Issuer has paid or caused to be paid all sums payable by it under this Indenture; and (iv) the Issuer has delivered irrevocable instructions to the Trustee under this Indenture to apply the deposited money toward the payment of such Securities at final maturity or the Redemption Date, as the case may be, then

the Trustee shall acknowledge satisfaction and discharge of this Indenture on demand of the Issuer (accompanied by an Officers' Certificate and an Opinion of Counsel stating that all conditions precedent specified herein relating to the satisfaction and discharge of this Indenture have been complied with) and at the cost and expense of the Issuer. If U.S. Government Obligations shall have been deposited in connection with such satisfaction and discharge, then as a further condition to such satisfaction and discharge, the Trustee shall have received a certificate from a nationally recognized firm of independent accountants to the effect set forth in Section 8.2(1).

(b) Subject to Sections 8.1(c) and 8.2, the Issuer at any time may terminate (i) all of its obligations under the Securities and this Indenture ("legal defeasance option"), and after giving effect to such legal defeasance, any omission to comply with such obligations shall no longer constitute a Default or Event of Default or (ii) its obligations under Sections 3.2, 3.3, 3.4, 3.5, 3.6, 3.8, 3.9, 3.10 and 3.11 and Section 4.1 (other than Sections 4.1(a)(1), (2), (4) and (5)), and the Issuer may omit to comply with and shall have no liability in respect of any term, condition or limitation set forth in any such covenant, whether directly or indirectly, by reason of any reference elsewhere herein to any such covenant or by reason of any reference in any such covenant to any other provision herein or in any other document and such omission to comply with such covenants shall no longer constitute a Default or an Event of Default under Section 6.1(3) (as it relates to Section 4.1(a)(3)), Section 6.1(4) (to the extent applicable to such other defeased covenants), Section 6.1(6), Section 6.1(7) (with respect to Significant Subsidiaries), Section 6.1(8) (with respect to Significant Subsidiaries) and Section 6.1(9), and the events specified in such Sections shall no longer constitute an Event of Default (clause (ii) being referred to as the "covenant defeasance option"), but except as specified above, the remainder of this Indenture and the Securities shall be unaffected thereby. The Issuer may exercise its legal defeasance option notwithstanding its prior exercise of its covenant defeasance option. If the Issuer exercises its legal defeasance or its covenant defeasance option, the Guarantees in effect at such time shall terminate.

If the Issuer exercises its legal defeasance option, payment of the Securities may not be accelerated because of an Event of Default. If the Issuer exercises its covenant defeasance option, payment of the Securities may not be accelerated because of an Event of Default specified in Section 6.1(4) (to the extent applicable to Sections 3.2, 3.3, 3.4, 3.5, 3.6, 3.8, 3.9, 3.10 and 3.11), Section 6.1(5), Section 6.1(6), Section 6.1(7) (with respect only to Significant Subsidiaries), Section 6.1(8) (with respect only to Significant Subsidiaries), Section 6.1(9) or Section 6.1(10) or because of the failure of the Issuer to comply with Section 4.1(a)(3).

Upon satisfaction of the conditions set forth herein and upon request and expense of the Issuer, the Trustee shall acknowledge in writing the discharge of those obligations that the Issuer terminates.

(c) Notwithstanding the provisions of Sections 8.1(a) and (b) to the extent relating to a satisfaction and discharge or a legal defeasance, the Issuer's obligations in Sections 2.2, 2.3, 2.4, 2.5, 2.6, 2.10, 2.11, 2.12, 2.13, 7.7 and 7.8 and in this Article VIII shall survive until the Securities have been paid in full. Thereafter, the Issuer's obligations in Sections 7.7, 8.4 and 8.5 shall survive.

**SECTION 8.2. Conditions to Defeasance.** The Issuer may exercise its legal defeasance option or its covenant defeasance option only if:

(1) the Issuer irrevocably deposits with the Trustee, in trust, for the benefit of the Holders, cash in U.S. dollars, U.S. Government Obligations, or a combination of cash in U.S. dollars and U.S. Government Obligations, in amounts as will be sufficient, in the opinion of an accounting, appraisal or investment banking firm of national standing, to pay the principal of, and premium, if any, and interest, including Additional Interest, if any, due on the outstanding Securities on the Stated Maturity or on the applicable Redemption Date, as the case may be, and the Issuer must specify whether the Securities are being defeased to

Stated Maturity or to a particular Redemption Date (*provided* that if such redemption is made as provided in the sixth paragraph of paragraph 5 of the Securities, (x) the amount of cash in U.S. dollars, U.S. Government Obligations, or a combination thereof, that must be irrevocably deposited will be determined using an assumed Applicable Premium calculated as of the date of such deposit and (y) the depositor must irrevocably deposit or cause to be deposited additional money in trust on the Redemption Date as necessary to pay the Applicable Premium as determined on such date);

(2) in the case of legal defeasance, the Issuer has delivered to the Trustee an Opinion of Counsel (subject to customary assumptions and exclusions) reasonably acceptable to the Trustee confirming that (a) the Issuer has received from, or there has been published by, the Internal Revenue Service a ruling or (b) since the Issue Date, there has been a change in the applicable federal income tax law, in either case to the effect that, and based thereon such Opinion of Counsel will confirm that, the Holders of the respective outstanding Securities will not recognize income, gain or loss for federal income tax purposes as a result of such legal defeasance and will be subject to federal income tax on the same amounts, in the same manner and at the same times as would have been the case if such legal defeasance had not occurred;

(3) in the case of covenant defeasance, the Issuer has delivered to the Trustee an Opinion of Counsel (subject to customary assumptions and exclusions) reasonably acceptable to the Trustee confirming that the Holders of the respective outstanding Securities will not recognize income, gain or loss for federal income tax purposes as a result of such covenant defeasance and will be subject to federal income tax on the same amounts, in the same manner and at the same times as would have been the case if such covenant defeasance had not occurred;

(4) no Default or Event of Default has occurred and is continuing on the date of such deposit (other than a Default or Event of Default resulting from the borrowing of funds to be applied to such deposit (and any similar concurrent deposit relating to other Indebtedness), and the grant of any Lien securing such borrowings);

(5) such legal defeasance or covenant defeasance will not result in a breach or violation of, or constitute a default under, any material agreement or instrument (other than this Indenture and the agreements governing any other Indebtedness being defeased,

107

---

discharged or replaced) to which the Issuer or any of its Subsidiaries is a party or by which the Issuer or any of its Subsidiaries are bound;

(6) the Issuer must deliver to the Trustee an Officers' Certificate stating that the deposit was not made by the Issuer with the intent of preferring the Holders of the respective outstanding Securities over the creditors of the Issuer with the intent of defeating, hindering, delaying or defrauding creditors of the Issuer or others; and

(7) the Issuer must deliver to the Trustee an Officers' Certificate and an Opinion of Counsel (which Opinion of Counsel may be subject to customary assumptions and exclusions), each stating that all conditions precedent relating to the legal defeasance or the covenant defeasance have been complied with; *provided*, that the Opinion of Counsel required by this clause (7) with respect to a legal defeasance need not be delivered if all Securities not theretofore delivered to the Trustee for cancellation (x) have become due and payable or (y) will become due and payable at their Stated Maturity within one year or may be called for redemption within one year under arrangements satisfactory to the Trustee for the giving of notice of redemption by the Trustee in the name, and at the expense, of the Issuer.

SECTION 8.3. Application of Trust Money. The Trustee shall hold in trust all money or U.S. Government Obligations (including proceeds thereof) deposited with it pursuant to this Article VIII. It shall apply the deposited money and the money from U.S. Government Obligations through the Paying Agent and in accordance with this Indenture and the Securities to the Holders of the Securities of all sums due in respect of the payment of principal of, premium, if any, and accrued interest on the Securities.

SECTION 8.4. Repayment to the Issuer. The Trustee and the Paying Agent shall promptly turn over to the Issuer upon request any excess money, U.S. Government Obligations or other securities held by them upon payment of all the Obligations under this Indenture.

Subject to any applicable abandoned property law, the Trustee and the Paying Agent shall pay to the Issuer upon request any money held by them for the payment of principal of or premium, if any, or interest on the Securities that remains unclaimed by the Holders thereof for two years, and, thereafter, Securityholders entitled to the money must look to the Issuer for payment as unsecured general creditors unless an abandoned property law designates another Person and the Trustee and the Paying Agent shall have no further liability with respect to such money.

SECTION 8.5. Indemnity for U.S. Government Obligations. The Issuer shall pay and shall indemnify the Trustee against any tax, fee or other charge imposed on or assessed against deposited U.S. Government Obligations or the principal and interest received on such U.S. Government Obligations.

SECTION 8.6. Reinstatement. If the Trustee or Paying Agent is unable to apply any money or U.S. Government Obligations in accordance with this Article VIII by reason of any legal proceeding or by reason of any order or judgment of any court or governmental

108

---

authority enjoining, restraining or otherwise prohibiting such application, the obligations of the Issuer and each Subsidiary Guarantor under this Indenture, the Securities and the Guarantees shall be revived and reinstated as though no deposit had occurred pursuant to this Article VIII until such time as the Trustee or Paying Agent is permitted to apply all such money or U.S. Government Obligations in accordance with this Article VIII; *provided, however*, that, if the Issuer or the Subsidiary Guarantors have made any payment of principal, premium, if any, or interest (including Additional Interest) on any Securities because of the reinstatement of their obligations, the Issuer or Subsidiary Guarantors, as the case may be, shall be subrogated to the rights of the Holders of such Securities to receive such payment from the money or U.S. Government Obligations held by the Trustee or Paying Agent.

The Trustee's rights under this Article VIII shall survive termination of this Indenture.

## ARTICLE IX

### AMENDMENTS

SECTION 9.1. Without Consent of Holders. The Issuer, the Subsidiary Guarantors and the Trustee may amend or supplement this Indenture, the Securities and the Guarantees without notice to or consent of any Securityholder:

- (1) to cure any ambiguity, omission, defect, mistake or inconsistency;
- (2) to provide for the assumption by a successor corporation, partnership, trust or limited liability company of the obligations of the Issuer or any Subsidiary Guarantor under this Indenture and the Securities;
- (3) to provide for or facilitate the issuance of uncertificated Securities in addition to or in place of certificated Securities; *provided, however*, that the uncertificated Securities are issued in registered form for purposes of Section 163(f) of the Code;
- (4) to add Subsidiary Guarantors with respect to the Securities, or release a Subsidiary Guarantor from its Guarantee and terminate such Guarantee; *provided* that the release and termination is in accordance with the applicable provisions of this Indenture;
- (5) to secure the Securities or the Guarantees;
- (6) to add covenants of the Issuer or a Subsidiary Guarantor for the benefit of, or to make changes that would provide additional rights to, the Holders or to surrender any right or power herein conferred upon the Issuer or a Subsidiary Guarantor;
- (7) to make any change that does not adversely affect the legal rights under this Indenture of any Securityholder, *provided, however*, that any change made to conform this Indenture to the "Description of Notes" contained in the Offering Memorandum shall not be deemed to adversely affect such legal rights;

109

---

- (8) to comply with any requirement of the SEC in connection with any required qualification of this Indenture under the TIA;
- (9) to evidence and provide for the acceptance of an appointment under this Indenture of a successor Trustee; *provided* that the successor Trustee is otherwise qualified and eligible to act as such under the terms of this Indenture; or
- (10) to provide for the issuance of Additional Securities in accordance with limitations set forth in this Indenture.

SECTION 9.2. With Consent of Holders. The Issuer, the Subsidiary Guarantors and the Trustee may amend or supplement this Indenture, the Securities and the Guarantees without notice to any Securityholder but with the consent of the Holders of a majority in principal amount of the Securities then outstanding (including, without limitation, consents obtained in connection with a purchase of, or tender offer or exchange offer for, Securities). Except as provided in Section 6.4, any past default or compliance with the provisions of this Indenture, the Securities or the Guarantees may be waived with the consent of the Holders of a majority in principal amount of the Securities then outstanding (including, without limitation, consents obtained in connection with a purchase of, or tender offer or exchange offer for, Securities). However, without the consent of each Securityholder affected, an amendment, supplement or waiver may not:

- (1) reduce the principal amount of Securities whose Holders must consent to an amendment or waiver;
- (2) reduce the stated rate of interest or extend the stated time for payment of interest or Additional Interest on any Security;
- (3) reduce the principal of or extend the Stated Maturity of any Security;
- (4) reduce the premium payable upon the redemption of any Security as described in Section 3.9, Article V hereof or paragraph 5 of any Security, change the time at which any Security may be redeemed as described in Section 3.9, Article V

hereof or paragraph 5 of any Security (except provisions relating to minimum required notice of optional redemption) or make any change relative to the Issuer's obligation to make an offer to repurchase the Securities as a result of a Change of Control as described in Section 3.9 after (but not before) the occurrence of such Change of Control;

- (5) make any Security payable in money other than that stated in the Security;
- (6) impair the right of any Holder to receive payment of principal of, premium, if any, and interest (including Additional Interest) on such Holder's Securities on or after the due dates therefor or to institute suit for the enforcement of any payment on or with respect to such Holder's Securities;
- (7) make any change to this Section 9.2;
- (8) modify the Guarantees in any manner adverse to the Holders; or

110

---

- (9) make any change to or modify the ranking of the Securities that would adversely affect the Holders.

It shall not be necessary for the consent of the Holders under this Section to approve the particular form of any proposed amendment or supplement, but it shall be sufficient if such consent approves the substance thereof. A consent to any amendment, supplement or waiver under this Indenture by any Holder of the Securities given in connection with a tender or exchange of such Holder's Securities will not be rendered invalid by such tender or exchange.

After an amendment or supplement under this Section becomes effective, the Issuer shall send to Securityholders a notice briefly describing such amendment. The failure to give such notice to all Securityholders, or any defect therein, shall not impair or affect the validity of an amendment under this Section.

**SECTION 9.3. Compliance with Trust Indenture Act.** Every amendment or supplement to this Indenture, the Securities or the Guarantees shall comply with the TIA as then in effect.

**SECTION 9.4. Revocation and Effect of Consents and Waivers.** A consent to an amendment, supplement or a waiver by a Holder of a Security shall bind the Holder and every subsequent Holder of that Security or portion of the Security that evidences the same debt as the consenting Holder's Security, even if notation of the consent or waiver is not made on the Security. Any such Holder or subsequent Holder may revoke the consent or waiver as to such Holder's Security or portion of the Security if the Trustee receives the notice of revocation before the date the amendment, supplement or waiver becomes effective or otherwise in accordance with any related solicitation documents. After an amendment, supplement or waiver becomes effective, it shall bind every Securityholder unless it makes a change described in any of clauses (1) through (9) of Section 9.2, and in that case the amendment, supplement, waiver or other action shall bind each Securityholder who has consented to it and every subsequent Securityholder that evidences the same debt as the consenting Holder's Securities. An amendment, supplement or waiver under Section 9.2 shall become effective upon receipt by the Trustee of the requisite number of consents, and in relation to any Securities evidenced by Global Securities, such consents need not be in written form and may be evidenced by any electronic transmissions that comport with the applicable procedures of DTC.

The Issuer may, but shall not be obligated to, fix a record date for the purpose of determining the Securityholders entitled to give their consent or take any other action described above or required or permitted to be taken pursuant to this Indenture. If a record date is fixed, then notwithstanding the immediately preceding paragraph, those Persons who were Securityholders at such record date (or their duly designated proxies), and only those Persons, shall be entitled to give such consent or to revoke any consent previously given or to take any such action, whether or not such Persons continue to be Holders after such record date. No such consent shall become valid or effective more than 120 days after such record date.

**SECTION 9.5. Notation on or Exchange of Securities.** If an amendment, supplement or waiver changes the terms of a Security, the Trustee may require the Holder of the Security to deliver it to the Trustee. The Trustee may place an appropriate notation on the

111

---

Security regarding the changed terms and return it to the Holder. Alternatively, if the Issuer or the Trustee so determine, the Issuer in exchange for the Security shall issue and the Trustee shall authenticate a new Security that reflects the changed terms. Failure to make the appropriate notation or to issue a new Security shall not affect the validity of such amendment.

**SECTION 9.6. Trustee to Sign Amendments.** The Trustee shall sign any amendment, supplement or waiver authorized pursuant to this Article IX if the amendment, supplement or waiver does not adversely affect the rights, duties, liabilities or immunities of the Trustee. If it does, the Trustee may but need not sign it. In signing any amendment, supplement or waiver the Trustee shall be entitled to receive indemnity reasonably satisfactory to it and shall be provided with, and (subject to Sections 7.1 and 7.2) shall be fully protected in relying upon, an Officers' Certificate and an Opinion of Counsel stating that such amendment, supplement or waiver is authorized or permitted by this Indenture and that such amendment, supplement or waiver is the legal, valid and binding obligation of the Issuer and any Subsidiary Guarantors, enforceable against them in accordance with its terms, subject to customary exceptions, and complies with the provisions hereof (including Section 9.3).

ARTICLE X

GUARANTEE

SECTION 10.1. Guarantee. Subject to the provisions of this Article X, each Subsidiary Guarantor hereby fully, unconditionally and irrevocably guarantees, as primary obligor and not merely as surety, jointly and severally with each other Subsidiary Guarantor, to each Holder of the Securities, to the extent lawful, and the Trustee the full and punctual payment when due, whether at final maturity, by acceleration, by redemption or otherwise, of the Obligations. Each Subsidiary Guarantor agrees that the Obligations will rank equally in right of payment with other Indebtedness of such Subsidiary Guarantor, except to the extent such other Indebtedness is subordinate to the Obligations. Each Subsidiary Guarantor further agrees (to the extent permitted by law) that the Obligations may be extended or renewed, in whole or in part, without notice or further assent from it, and that it will remain bound under this Article X notwithstanding any extension or renewal of any Obligation.

Each Subsidiary Guarantor waives presentation to, demand of payment from and protest to the Issuer of any of the Obligations and also waives notice of protest for nonpayment. Each Subsidiary Guarantor waives notice of any default under the Securities or the Obligations.

Each Subsidiary Guarantor further agrees that its Guarantee herein constitutes a guarantee of payment when due (and not a guarantee of collection) and waives any right to require that any resort be had by any Holder to any security held for payment of the Obligations.

Except as set forth in Section 10.2, the obligations of each Subsidiary Guarantor hereunder shall not be subject to any reduction, limitation, impairment or termination for any reason (other than payment of the Obligations in full), including any claim of waiver, release, surrender, alteration or compromise, and shall not be subject to any defense of setoff, counterclaim, recoupment or termination whatsoever or by reason of the invalidity, illegality or unenforceability of the Obligations or otherwise. Without limiting the generality of the

112

---

foregoing, the obligations of each Subsidiary Guarantor herein shall not be discharged or impaired or otherwise affected by (a) the failure of any Holder to assert any claim or demand or to enforce any right or remedy against the Issuer or any other person under this Indenture, the Securities or any other agreement or otherwise; (b) any extension or renewal of any thereof; (c) any rescission, waiver, amendment or modification of any of the terms or provisions of this Indenture, the Securities or any other agreement; (d) the release of any security held by any Holder for the Obligations or any of them; (e) the failure of any Holder to exercise any right or remedy against any other Subsidiary Guarantor; (f) any change in the ownership of the Issuer; (g) any default, failure or delay, willful or otherwise, in the performance of the Obligations; or (h) any other act or thing or omission or delay to do any other act or thing which may or might in any manner or to any extent vary the risk of any Subsidiary Guarantor or would otherwise operate as a discharge of such Subsidiary Guarantor as a matter of law or equity.

Each Subsidiary Guarantor agrees that its Guarantee herein shall remain in full force and effect until payment in full of all the Obligations or such Subsidiary Guarantor is released from its Guarantee upon the merger or the sale of all the Capital Stock or assets of the Subsidiary Guarantor or otherwise in compliance with Section 4.1, Section 10.2 or Article VIII, as applicable. Each Subsidiary Guarantor further agrees that its Guarantee herein shall continue to be effective or be reinstated, as the case may be, if at any time payment, or any part thereof, of principal of, premium, if any, or interest on any of the Obligations is rescinded or must otherwise be restored by any Holder upon the bankruptcy or reorganization of the Issuer or otherwise.

In furtherance of the foregoing and not in limitation of any other right which any Holder has at law or in equity against any Subsidiary Guarantor by virtue hereof, upon the failure of the Issuer to pay any of the Obligations when and as the same shall become due, whether at final maturity, by acceleration, by redemption or otherwise, each Subsidiary Guarantor hereby promises to and will, upon receipt of written demand by the Trustee, forthwith pay, or cause to be paid, in cash, to the Trustee or the Trustee on behalf of the Holders an amount equal to the sum of (i) the unpaid amount of such Obligations then due and owing and (ii) accrued and unpaid interest (including Additional Interest) on such Obligations then due and owing (but only to the extent not prohibited by law).

Each Subsidiary Guarantor further agrees that, as between such Subsidiary Guarantor, on the one hand, and the Holders, on the other hand, (x) the maturity of the Obligations guaranteed hereby may be accelerated as provided in this Indenture for the purposes of its Guarantee herein, notwithstanding any stay, injunction or other prohibition preventing such acceleration in respect of the Obligations guaranteed hereby and (y) in the event of any such declaration of acceleration of such Obligations, such Obligations (whether or not due and payable) shall forthwith become due and payable by the Subsidiary Guarantor for the purposes of this Guarantee.

Each Subsidiary Guarantor also agrees to pay any and all reasonable costs and expenses (including reasonable attorneys' fees) incurred by the Trustee or the Holders in enforcing any rights under this Section.

113

---

Neither the Issuer nor the Subsidiary Guarantors shall be required to make a notation on the Securities to reflect any Guarantee or any release, termination or discharge thereof and any such notation shall not be a condition to the validity of any Guarantee.

SECTION 10.2. Limitation on Liability: Termination, Release and Discharge.

(a) Any term or provision of this Indenture to the contrary notwithstanding, the obligations of each Subsidiary Guarantor hereunder will be limited to the maximum amount as will, after giving effect to all other contingent and fixed liabilities of such Subsidiary Guarantor (including, without limitation, any guarantees under the Senior Secured Credit Agreement) and after giving effect to any collections from or payments made by or on behalf of any other Subsidiary Guarantor in respect of the obligations of such other Subsidiary Guarantor under its Guarantee or pursuant to its contribution obligations under this Indenture, result in the obligations of such Subsidiary Guarantor under its Guarantee not constituting a fraudulent conveyance or fraudulent transfer under federal or state law and not otherwise being void or voidable under any similar laws affecting the rights of creditors generally.

(b) Upon the sale or disposition of a Subsidiary Guarantor (by merger, consolidation, the sale of a sufficient amount of its Capital Stock so that it no longer qualifies as a "Subsidiary" of the Issuer 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 which is not the Issuer or a Restricted Subsidiary, such Subsidiary Guarantor will be released from all its obligations under this Indenture and its Guarantee if the sale or other disposition does not violate Section 3.5.

(c) Each Subsidiary Guarantor will be released from its obligations under this Indenture and its Guarantee upon the release or discharge of such Subsidiary Guarantor from its guarantee of the other Indebtedness that resulted in the obligation of such Subsidiary Guarantor to guarantee the Securities pursuant to Section 3.11(b), except a discharge or release by or as a result of payment under such guarantee.

(d) Each Subsidiary Guarantor will be released from its obligations under this Indenture and its Guarantee if the Issuer designates such Subsidiary Guarantor as an Unrestricted Subsidiary and such designation complies with the other applicable provisions of this Indenture.

(e) Each Subsidiary Guarantor will be deemed released from all its obligations under this Indenture and its Guarantee, and such Guarantee will terminate, upon the legal defeasance or covenant defeasance of the Securities or upon satisfaction and discharge of this Indenture, in each case pursuant to the provisions of Article VIII hereof.

(f) The release of any Subsidiary Guarantor from its obligations pursuant to this Section 10.2 shall be conditioned upon such Subsidiary Guarantor delivering to the Trustee an Officers' Certificate and an Opinion of Counsel stating that all conditions precedent provided for in this Indenture relating to the transactions specified in clauses (b), (c), (d) or (e) of this Section 10.2 have been complied with.

SECTION 10.3. Right of Contribution. Each Subsidiary Guarantor hereby agrees that to the extent that any Subsidiary Guarantor shall have paid more than its

114

---

proportionate share of any payment made on the obligations under the Guarantees, such Subsidiary Guarantor shall be entitled to seek and receive contribution from and against the Issuer or any other Subsidiary Guarantor who has not paid its proportionate share of such payment. The provisions of this Section 10.3 shall in no respect limit the obligations and liabilities of each Subsidiary Guarantor to the Trustee and the Holders and each Subsidiary Guarantor shall remain liable to the Trustee and the Holders for the full amount guaranteed by such Subsidiary Guarantor hereunder.

SECTION 10.4. No Subrogation. Notwithstanding any payment or payments made by each Subsidiary Guarantor hereunder, no Subsidiary Guarantor shall be entitled to be subrogated to any of the rights of the Trustee or any Holder against the Issuer or any other Subsidiary Guarantor or guarantee or right of offset held by the Trustee or any Holder for the payment of the Obligations, nor shall any Subsidiary Guarantor seek or be entitled to seek any contribution or reimbursement from the Issuer or any other Subsidiary Guarantor in respect of payments made by such Subsidiary Guarantor hereunder, until all amounts owing to the Trustee and the Holders by the Issuer on account of the Obligations are paid in full. If any amount shall be paid to any Subsidiary Guarantor on account of such subrogation rights at any time when all of the Obligations shall not have been paid in full, such amount shall be held by such Subsidiary Guarantor in trust for the Trustee and the Holders, segregated from other funds of such Subsidiary Guarantor, and shall, forthwith upon receipt by such Subsidiary Guarantor, be turned over to the Trustee in the exact form received by such Subsidiary Guarantor (duly indorsed by such Subsidiary Guarantor to the Trustee, if required), to be applied against the Obligations.

ARTICLE XI

[RESERVED]

ARTICLE XII

MISCELLANEOUS

SECTION 12.1. Trust Indenture Act Controls. If and to the extent that any provision of this Indenture limits, qualifies or conflicts with another provision which is required to be included in this Indenture by the TIA, the provision required by the TIA shall control. Each Subsidiary Guarantor in addition to performing its obligations under its Guarantee shall perform such other obligations as may be imposed upon it with respect to this Indenture under the TIA.

SECTION 12.2. Notices. Any notice or communication shall be in writing in the English language and delivered in person, sent by facsimile, other electronic means, delivered by commercial courier service or mailed by first-class mail, postage



if to the Issuer or to any Subsidiary Guarantor:

Antero Resources Corporation  
1615 Wynkoop Street  
Denver, Colorado 80202  
Attention: Chief Financial Officer  
Telecopy: (303) 357-7299

with a copy (which shall not constitute notice) to:

Vinson & Elkins L.L.P.  
1001 Fannin Street, Suite 2500  
Houston, Texas 77002-6760  
Attention: W. Matthew Strock  
Telecopy: (713) 615-5650

if to the Trustee, at its corporate trust office in Dallas,  
Texas, which corporate trust office for purposes of this  
Indenture is at the date hereof located at:

Wells Fargo Bank, National Association  
750 N. Saint Paul Place, Suite 1750  
MAC T9263-170  
Dallas, TX 75202  
Attention: Corporate, Municipal & Escrow Services  
Telecopy: (214) 756-7401

The Issuer, any Subsidiary Guarantor or the Trustee by written notice to the others may designate additional or different addresses for subsequent notices or communications.

Any notice or communication to the Issuer or the Subsidiary Guarantors shall be deemed to have been given or made as of the date so delivered if personally delivered; when receipt is acknowledged, if telecopied; and five calendar days after mailing if sent by U.S. Postal Service registered or certified mail, postage prepaid (except that a notice of change of address shall not be deemed to have been given until actually received by the addressee). Any notice or communication to the Trustee shall be deemed delivered upon receipt by a Trust Officer. Notices given by publication will be deemed given on the first date on which publication is made.

Any notice or communication sent to a Securityholder shall be mailed to the Securityholder at the Securityholder's address as it appears in the Securities Register and shall be sufficiently given if so mailed within the time prescribed; *provided, however*, that in any case where DTC or its nominee is the Securityholder, any notice or communication sent to it shall be given in accordance with the applicable procedures of DTC, notwithstanding any contrary indication in this Indenture.

Failure to send a notice or communication to a Securityholder or any defect in it shall not affect its sufficiency with respect to other Securityholders. If a notice or communication is sent in the manner provided above, it is duly given, whether or not the addressee receives it, except that notices to the Trustee shall be effective only upon receipt.

In case by reason of the suspension of regular mail service or by reason of any other cause it shall be impracticable to give such notice by mail, then such notification as shall be made with the approval of the Trustee shall constitute a sufficient notification for every purpose hereunder.

SECTION 12.3. Communication by Holders with other Holders. Securityholders may communicate pursuant to TIA § 312(b) with other Securityholders with respect to their rights under this Indenture or the Securities. The Issuer, the Trustee, the Registrar and anyone else shall have the protection of TIA § 312(c).

SECTION 12.4. Certificate and Opinion as to Conditions Precedent. Upon any request or application by the Issuer to the Trustee to take or refrain from taking any action under this Indenture (except in connection with the original issuance of Securities on the date hereof), the Issuer shall furnish to the Trustee:

- (1) an Officers' Certificate in form reasonably satisfactory to the Trustee stating that, in the opinion of the signers, all conditions precedent, if any, provided for in this Indenture relating to the proposed action have been complied with; and
- (2) an Opinion of Counsel in form reasonably satisfactory to the Trustee stating that, in the opinion of such counsel,

all such conditions precedent have been complied with.

SECTION 12.5. Statements Required in Certificate or Opinion. Each certificate or opinion with respect to compliance with a covenant or condition provided for in this Indenture shall include:

- (1) a statement that the individual making such certificate or opinion has read such covenant or condition;
- (2) a brief statement as to the nature and scope of the examination or investigation upon which the statements or opinions contained in such certificate or opinion are based;
- (3) a statement that, in the opinion of such individual, he has made such examination or investigation as is necessary to enable him to express an informed opinion as to whether or not such covenant or condition has been complied with; and
- (4) a statement as to whether or not, in the opinion of such individual, such covenant or condition has been complied with.

In giving such Opinion of Counsel, counsel may rely as to factual matters on an Officers' Certificate or on certificates of public officials.

117

---

SECTION 12.6. When Securities Disregarded. In determining whether the Holders of the required aggregate principal amount of Securities have concurred in any direction, waiver or consent, Securities owned by the Issuer, any Subsidiary Guarantor or any Affiliate of them shall be disregarded and deemed not to be outstanding, except that, for the purpose of determining whether the Trustee shall be protected in relying on any such direction, waiver or consent, only Securities which the Trustee actually knows are so owned shall be so disregarded. Also, subject to the foregoing, only Securities outstanding at the time shall be considered in any such determination.

SECTION 12.7. Rules by Trustee, Paying Agent and Registrar. The Trustee may make reasonable rules for action by, or at meetings of, Securityholders. The Registrar and the Paying Agent may make reasonable rules for their functions.

SECTION 12.8. Legal Holidays. A "Legal Holiday" is a Saturday, a Sunday or other day on which commercial banking institutions are authorized or required to be closed in New York, New York. If a payment date is a Legal Holiday, payment shall be made on the next succeeding day that is not a Legal Holiday, and no interest shall accrue for the intervening period. If a regular record date is a Legal Holiday, the record date shall not be affected.

SECTION 12.9. GOVERNING LAW. THIS INDENTURE, THE SECURITIES AND THE GUARANTEES SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK.

SECTION 12.10. No Personal Liability of Directors, Officers, Employees and Stockholders. No director, officer, employee, incorporator, stockholder, member, partner or trustee of the Issuer or any Subsidiary Guarantor, as such, shall have any liability for any obligations of the Issuer or any Subsidiary Guarantor under the Securities, this Indenture or the Guarantees or for any claim based on, in respect of, or by reason of, such obligations or their creation. Each Holder by accepting a Security waives and releases all such liability. The waiver and release are part of the consideration for issuance of the Securities.

SECTION 12.11. Successors. All agreements of the Issuer and each Subsidiary Guarantor in this Indenture and the Securities shall bind their respective successors. All agreements of the Trustee in this Indenture shall bind its successors.

SECTION 12.12. Multiple Originals. The parties may sign any number of copies of this Indenture. Each signed copy shall be an original, but all of them together represent the same agreement. One signed copy is enough to prove this Indenture.

SECTION 12.13. Qualification of Indenture. The Issuer has agreed to qualify this Indenture under the TIA in accordance with the terms and conditions of the initial Registration Rights Agreement, and the Trustee shall be entitled to receive from the Issuer such evidence as it may reasonably request of such qualification.

SECTION 12.14. Force Majeure. In no event shall the Trustee be responsible or liable for any failure or delay in the performance of its obligations hereunder arising out of or caused by, directly or indirectly, forces beyond its control, including, without limitation, strikes, work stoppages, accidents, acts of war or terrorism, civil or military disturbances, nuclear or

118

---

natural catastrophes or acts of God, and interruptions, loss or malfunctions of utilities, communications or computer (software and hardware) services; it being understood that the Trustee shall use reasonable efforts which are consistent with accepted practices in the banking industry to resume performance as soon as practicable under the circumstances.

SECTION 12.15. Table of Contents; Headings. The table of contents, cross-reference sheet and headings of the Articles and Sections of this Indenture have been inserted for convenience of reference only, are not intended to be considered a part

hereof and shall not modify or restrict any of the terms or provisions hereof.

SECTION 12.16. WAIVER OF JURY TRIAL. EACH OF THE ISSUER AND THE TRUSTEE HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY AND ALL RIGHT TO TRIAL BY JURY IN ANY LEGAL PROCEEDING ARISING OUT OF OR RELATING TO THIS INDENTURE, THE NOTES OR THE TRANSACTION CONTEMPLATED HEREBY.

119

---

IN WITNESS WHEREOF, the parties have caused this Indenture to be duly executed all as of the date and year first written above.

**ANTERO RESOURCES CORPORATION**

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

Subsidiary Guarantors:

**AR OHIO LLC  
MONROE PIPELINE LLC**

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

**ANTERO EXCHANGE PROPERTIES LLC**

By /s/ Alvyn A. Schopp  
Name: Alvyn A. Schopp  
Title: Authorized Signatory

**WELLS FARGO BANK, NATIONAL ASSOCIATION,  
as Trustee**

By: /s/ Patrick Giordano  
Name: Patrick Giordano  
Title: Vice President

---

EXHIBIT A

[FORM OF FACE OF INITIAL SECURITY]

[Restricted Securities Legend]  
[Depository Legend, if applicable]  
[Original Issue Discount Legend, if applicable]

No. [ ]

Principal Amount \$[ ], as revised by the Schedule of Increases and Decreases in Global Security attached hereto CUSIP NO(1).  
ISIN(2):

5.0% Senior Notes, Series A, due 2025

Antero Resources Corporation, a Delaware corporation, promises to pay to CEDE & CO., or registered assigns, the

principal sum of [ ] Dollars, as revised by the Schedule of Increases and Decreases in Global Security attached hereto, on March 1, 2025.

Interest Payment Dates: March 1 and September 1  
Record Dates: February 15 and August 15

Additional provisions of this Security are set forth on the other side of this Security.

ANTERO RESOURCES CORPORATION

By: \_\_\_\_\_

TRUSTEE'S CERTIFICATE OF AUTHENTICATION

(1) to be inserted as appropriate: 144A Note - 03674X AG1; Reg S Note - U0018L AD2; IAI Note - 03674X AH9

(2) to be inserted as appropriate: 144A Note - US03674XAG16; Reg S Note - USU0018LAD20; IAI Note - US03674XAH98

A-1

This is one of the Securities described in the within-mentioned Indenture.

WELLS FARGO BANK, NATIONAL ASSOCIATION,  
as Trustee

By: \_\_\_\_\_  
Authorized Officer

Dated: \_\_\_\_\_

A-2

[FORM OF REVERSE SIDE OF NOTE]

ANTERO RESOURCES CORPORATION

5.0% Senior Notes, Series A, due 2025

## 1. Interest

Antero Resources Corporation, a Delaware corporation (such corporation, and its successors and assigns under the Indenture hereinafter referred to, being herein called the "Issuer"), promises to pay interest on the principal amount of this Security at the rate per annum shown above.

The Issuer will pay interest semiannually on March 1 and September 1 of each year commencing March 1, 2017. Interest on the Securities will accrue from the most recent date to which interest has been paid on the Securities or, if no interest has been paid, from December 21, 2016. The Issuer shall pay interest on overdue principal, and on overdue premium (plus interest on such interest to the extent lawful), at the rate borne by the Securities to the extent lawful. Interest will be computed on the basis of a 360-day year of twelve 30-day months.

If an exchange offer (the "Exchange Offer") registered under the Securities Act is not consummated or a shelf registration statement (the "Shelf Registration Statement") under the Securities Act with respect to resales of the Securities is not declared effective by the SEC or does not become automatically effective on or before the date that is 365 days after the Issue Date (the "Target Registration Date") in accordance with the terms of the Registration Rights Agreement, dated as of December 21, 2016 (the "Registration Rights Agreement"), among the Issuer, the Subsidiary Guarantors and the initial purchasers named therein, the annual interest rate borne by the Securities shall be increased from the rate shown above by 1.00% per annum thereafter, until the Exchange Offer is completed or the Shelf Registration Statement is declared effective or becomes automatically effective. The Holder of this Note is entitled to the benefits of such Registration Rights Agreement. Additional Interest shall be paid to the same Persons, in the same manner and at the same times as regular interest.

## 2. Method of Payment

By no later than 11:00 a.m. (New York City time) on the date on which any principal of, premium, if any, or interest on any Security is due and payable, the Issuer shall irrevocably deposit with the Trustee or the Paying Agent money sufficient to pay such principal, premium, if any, and/or interest (including Additional Interest). The Issuer will pay interest (except Defaulted Interest) to the Persons who are registered Holders of Securities at the close of business on the February 15 and August 15 next preceding the interest payment date even if Securities are cancelled, repurchased or redeemed after the record date and on or before the interest payment date.

Holders must surrender Securities to a Paying Agent to collect principal payments. The Issuer will pay principal, premium, if any, and interest in money of the United States that at the time of payment is legal tender for payment of public and private debts. Payments in respect of Securities represented by a Global Security (including principal, premium, if any, and interest) will be made by the transfer of immediately available funds to the

accounts specified by The Depository Trust Company or any successor depository. The Issuer will make all payments in respect of a Definitive Security (including principal, premium, if any, and interest) by mailing a check to the registered address of each Holder thereof; *provided, however*, that payments on the Securities may also be made, at the Issuer's option, by wire transfer to a U.S. dollar account maintained by the payee with a bank in the United States if the Holder elects payment by wire transfer by giving written notice to the Trustee or the Paying Agent to such effect designating such account no later than 15 days immediately preceding the relevant due date for payment (or such other date as the Trustee may accept in its discretion).

### 3. Paying Agent and Registrar

Initially, Wells Fargo Bank, National Association (the "Trustee") will act as Trustee, Paying Agent and Registrar. The Issuer may appoint and change any Paying Agent, Registrar or co-registrar without notice to any Securityholder. The Issuer or any of its Restricted Subsidiaries may act as Paying Agent or Registrar.

### 4. Indenture

The Issuer issued the Securities under an Indenture dated as of December 21, 2016 (as it may be amended or supplemented from time to time in accordance with the terms thereof, the "Indenture"), among the Issuer, the Subsidiary Guarantors and the Trustee. The terms of the Securities include those stated in the Indenture and those made part of the Indenture by reference to the Trust Indenture Act of 1939 (15 U.S.C. §§ 77aaa-77bbb) as in effect on the date of the Indenture (the "Act"). Capitalized terms used herein and not defined herein have the meanings ascribed thereto in the Indenture. The Securities are subject to all terms and provisions of the Indenture, and Securityholders are referred to the Indenture and the Act for a statement of those terms.

The Securities are senior obligations of the Issuer. The aggregate principal amount of Securities that may be authenticated and delivered under the Indenture is unlimited. This Security is one of the 5.0% Senior Notes, Series A, due 2025 referred to in the Indenture. The Securities include (i) \$600,000,000 aggregate principal amount of the Issuer's 5.0% Senior Notes, Series A, due 2025 issued under the Indenture on December 21, 2016 (herein called "Initial Securities"), (ii) if and when issued, additional 5.0% Senior Notes, Series A, due 2025 or 5.0% Senior Notes, Series B, due 2025 of the Issuer that may be issued from time to time under the Indenture subsequent to December 21, 2016 (herein called "Additional Securities") as provided in Section 2.1(a) of the Indenture and (iii) if and when issued, the Issuer's 5.0% Senior Notes, Series B, due 2025 that may be issued from time to time under the Indenture in exchange for Initial Securities or Additional Securities in an offer registered under the Securities Act as provided in a Registration Rights Agreement (herein called "Exchange Securities"). The Initial Securities, Additional Securities and Exchange Securities are treated as a single class of securities under the Indenture. The Indenture imposes certain limitations on the incurrence of indebtedness, the making of restricted payments, the sale of assets and subsidiary stock, the incurrence of certain liens, the entering into of affiliate transactions, the entering into of agreements that restrict distribution from restricted subsidiaries and the consummation of mergers and consolidations. The Indenture also imposes requirements with respect to the

provision of financial information and the provision of guarantees of the Securities by certain subsidiaries.

To guarantee the due and punctual payment of the principal, premium, if any, and interest (including post-filing or post-petition interest) on the Securities and all other amounts payable by the Issuer under the Indenture, the Securities and the Registration Rights Agreement when and as the same shall be due and payable, whether at maturity, by acceleration or otherwise, according to the terms of the Securities and the Indenture, the Subsidiary Guarantors have unconditionally guaranteed (and future guarantors, together with the Subsidiary Guarantors, will unconditionally Guarantee), jointly and severally, such obligations on a senior basis pursuant to the terms of the Indenture.

### 5. Redemption

Except as set forth below or in the penultimate paragraph of Section 3.9 of the Indenture, the Securities will not be redeemable at the option of the Issuer prior to March 1, 2020. On and after such date, the Securities will be redeemable, at the Issuer's option, in whole or in part, at any time upon notice as provided in the Indenture, at the following redemption prices (expressed in percentages of principal amount), plus accrued and unpaid interest (including Additional Interest) to, but excluding, the applicable Redemption Date (subject to the right of Holders of record on the relevant record date to receive interest due on the relevant interest payment date), if redeemed during the 12-month period commencing on March 1 of the years set forth below:

<u>Period</u>	<u>Redemption Price</u>
2020	103.750 %
2021	102.500 %
2022	101.250 %
2023 and thereafter	100.000 %

In addition, at any time and from time to time on or prior to March 1, 2020, upon notice as provided in the Indenture, the Issuer may redeem in the aggregate up to 35% of the original principal amount of the Securities (calculated after giving effect to any issuance of Additional Notes), but in an amount not greater than the Net Cash Proceeds of one or more Equity Offerings at a redemption price (expressed as a percentage of principal amount) of 105.0% of the principal amount thereof, plus accrued and unpaid interest (including Additional Interest), if any, to, but excluding, the Redemption Date (subject to the right of Holders of record on the relevant record date to receive interest due on the relevant interest payment date); *provided*, that:

- (1) at least 65% of the original principal amount of the Securities (calculated after giving effect to any issuance of Additional Securities) must remain outstanding after each such redemption; and
- (2) each such redemption occurs within 180 days of the date of closing of such Equity Offering.

A-5

---

If the Redemption Date is on or after an interest record date and on or before the related interest payment date, the accrued and unpaid interest (including Additional Interest), if any, will be paid on such Redemption Date to the Person in whose name the Security is registered at the close of business on such record date, and no Additional Interest will be payable to Holders whose Securities will be subject to redemption by the Issuer.

In the case of any partial redemption, selection of the Securities for redemption will be made by the Trustee in compliance with the requirements of the principal national securities exchange, if any, on which such Securities are listed, or, if such Securities are not so listed, by lot or by such other method as the Trustee in its sole discretion shall deem to be fair and appropriate (or, in the case of Global Securities, the Trustee will select Securities for redemption based on such method as DTC may prescribe), although no Security of \$2,000 in original principal amount or less will be redeemed in part. If any Security is to be redeemed in part only, the notice of redemption relating to such Security shall state the portion of the principal amount thereof to be redeemed. A new Security in principal amount equal to the unredeemed portion thereof will be issued in the name of the Holder thereof upon cancellation of the original Security. On and after the Redemption Date, interest will cease to accrue on Securities or portions thereof called for redemption without any condition precedent as long as the Issuer has deposited with the Paying Agent funds in satisfaction of the applicable redemption price pursuant to the Indenture.

In addition, at any time prior to March 1, 2020, upon notice as provided in the Indenture, the Issuer may redeem the Securities, in whole or in part, at a redemption price equal to 100% of the principal amount thereof plus the Applicable Premium plus accrued and unpaid interest, if any, to, but excluding, the Redemption Date (subject to the right of Holders of record on the relevant record date to receive interest due on the relevant interest payment date).

“Applicable Premium” means, with respect to a Security at any time, the greater of (i) 1.0% of the principal amount of such Security or (ii) the excess, if any, of (A) the present value at such time of (1) the redemption price of such Security on March 1, 2020 (such redemption price being described in this [paragraph 5](#)) plus (2) all required interest payments (excluding accrued and unpaid interest to such Redemption Date) due on such Security through March 1, 2020, computed using a discount rate equal to the Treasury Rate as of such Redemption Date plus 50 basis points discounted to the Redemption Date on a semi-annual basis (assuming a 360-day year consisting of twelve 30-day calendar months), over (B) the principal amount of such Security.

“Treasury Rate” means, with respect to any Redemption Date, the yield to maturity at the time of computation of United States Treasury securities with a constant maturity (as compiled and published in the most recent Federal Reserve Statistical Release H.15 (519) which has become publicly available at least two Business Days prior to the Redemption Date (or, if such Statistical Release is no longer published, any publicly available source of similar market data)) most nearly equal to the period from the Redemption Date to March 1, 2020; *provided, however*, that if the period from the Redemption Date to March 1, 2020 is not equal to the constant maturity of a United States Treasury security for which a weekly average yield is given, the Treasury Rate shall be obtained by linear interpolation (calculated to the nearest one-twelfth of a year) from the weekly average yields of United States Treasury securities for which

A-6

---

such yields are given, except that if the period from the Redemption Date to March 1, 2020 is less than one year, the weekly average yield on actually traded United States Treasury securities adjusted to a constant maturity of one year shall be used.

The Issuer will (a) calculate the Treasury Rate as of a date no later than the fourth Business Day preceding the applicable Redemption Date and (b) prior to such Redemption Date file with the Trustee an Officers’ Certificate setting forth the Applicable Premium and the Treasury Rate and showing the calculation of each in reasonable detail.

Notice of any redemption shall be given pursuant to [Section 5.5](#) of the Indenture not less than 30 nor more than 60 days prior to the Redemption Date, to each Holder of Securities to be redeemed, except that that redemption notices may be sent more than 60 days prior to a Redemption Date if the notice is issued in connection with a legal defeasance or covenant defeasance of the Securities or a satisfaction and discharge of the Indenture pursuant to [Article VIII](#).

Any redemption or notice of redemption may, at the Issuer’s discretion, be subject to one or more conditions precedent and, in the case of a redemption with the Net Cash Proceeds of an Equity Offering, be given prior to the completion of the related Equity Offering.

Once notice of redemption has been given, the Securities or portions of Securities so to be redeemed without a condition precedent shall, on the Redemption Date, become due and payable at the redemption price therein specified (together with accrued interest, if any, to the Redemption Date).

The Issuer is not required to make any mandatory redemption payments or sinking fund payments with respect to the Securities.

The Issuer and its Subsidiaries may acquire Securities by means other than a redemption or required repurchase, whether by tender offer, open market purchases, negotiated transactions or otherwise, in accordance with applicable securities laws, so long as such acquisition does not otherwise violate the terms of the Indenture.

#### 6. Repurchase Provisions

(a) If a Change of Control occurs, unless the Issuer has exercised its right to redeem all of the Securities as described under paragraph 5 of the Securities or one of the other two exceptions described in the fifth paragraph of Section 3.9 of the Indenture applies, each Holder will have the right to require the Issuer to repurchase from each Holder all or any part (equal to \$2,000 or an integral multiple of \$1,000 in excess thereof) of such Holder's Securities at a purchase price in cash equal to 101% of the principal amount thereof, plus accrued and unpaid interest, if any, to, but excluding, the date of purchase (subject to the right of Holders of record on the relevant record date to receive interest due on the relevant interest payment date) as provided in, and subject to the terms of, the Indenture.

(b) If the Issuer or any Restricted Subsidiary consummates an Asset Disposition, the Issuer may be obligated to make an Asset Disposition Offer to all Holders and

A-7

---

all holders of certain other Pari Passu Indebtedness, on the terms and subject to the conditions in Section 3.5 of the Indenture.

#### 7. Denominations; Transfer; Exchange

The Securities are in registered form without coupons in denominations of principal amount of \$2,000 and whole multiples of \$1,000 in excess thereof. A Holder may transfer or exchange Securities in accordance with the Indenture. The Registrar may require a Holder, among other things, to furnish appropriate endorsements or transfer documents and to pay a sum sufficient to cover any taxes and fees required by law or permitted by the Indenture. The Registrar need not register the transfer of or exchange any Security (A) for a period (1) of 15 days before a selection of Securities to be redeemed or (2) beginning 15 days before an interest payment date and ending on such interest payment date or (B) selected for redemption, except the unredeemed portion of any Security being redeemed in part.

#### 8. Persons Deemed Owners

The registered Holder of this Security shall be treated as the owner of it for all purposes.

#### 9. Unclaimed Money

If money for the payment of principal, premium, if any, or interest remains unclaimed for two years, the Trustee or Paying Agent shall pay the money back to the Issuer at its request unless an abandoned property law designates another Person. After any such payment, Holders entitled to the money must look only to the Issuer for payment as unsecured general creditors unless an abandoned property law designates another Person and not to the Trustee for payment.

#### 10. Defeasance

Subject to certain exceptions and conditions set forth in the Indenture, the Issuer at any time may terminate some or all of its obligations under the Securities and the Indenture if the Issuer deposits with the Trustee money or U.S. Government Obligations for the payment of principal, premium, if any, and interest on the Securities to redemption or final maturity, as the case may be.

#### 11. Amendment, Supplement, Waiver

Subject to certain exceptions set forth in the Indenture, (i) the Indenture, the Securities or the Guarantees may be amended or supplemented by the Issuer, the Subsidiary Guarantors and the Trustee with the consent of the Holders of a majority in principal amount of the then outstanding Securities and (ii) any default (other than with respect to nonpayment or in respect of a provision that cannot be amended without the consent of each Securityholder affected) or noncompliance with any provision may be waived with the consent of the Holders of a majority in principal amount of the then outstanding Securities. Without the consent of any Securityholder, the Issuer, the Subsidiary Guarantors and the Trustee may amend or supplement the Indenture, the Securities or the Guarantees to cure any ambiguity, omission, defect, mistake

A-8

---

or inconsistency, to comply with Article IV of the Indenture, to provide for uncertificated Securities in addition to, or in place of, certificated Securities, to add Subsidiary Guarantors with respect to the Securities, or release a Subsidiary Guarantor from its Guarantee and terminate such Guarantee, *provided* that the release and termination is in accordance with the Indenture, to secure the Securities or the Guarantees, to add additional covenants of the Issuer or a Subsidiary Guarantor for the benefit of the Holders or to surrender any right or power conferred on the Issuer or a Subsidiary Guarantor, to comply with any requirement of the SEC in connection with qualifying the Indenture under the Act, to make any change that does not adversely affect the rights of any Securityholder, to evidence and provide for the appointment of a successor Trustee or to provide for the issuance of Additional Securities in accordance with limitations set forth in the Indenture.

## 12. Defaults and Remedies

Under the Indenture, Events of Default include (each of which is described in greater detail in the Indenture): (i) default in any payment of interest or Additional Interest, if any (as required by the Registration Rights Agreement), on any Security when due, continued for 30 days; (ii) default in the payment of principal of or premium, if any, on any Security when due at its Stated Maturity, upon optional redemption, upon required repurchase, upon declaration of acceleration or otherwise; (iii) failure by the Issuer or any Subsidiary Guarantor to comply with its obligations under Section 4.1 of the Indenture; (iv) failure by the Issuer to comply for 30 days (or 180 days in the case of a Reporting Failure) after notice as provided with Section 3.9 or under Sections 3.2, 3.3, 3.4, 3.5, 3.6, 3.8, 3.10 and 3.11 of the Indenture (in each case, other than a failure to purchase Securities which will constitute an Event of Default under clause (ii) above and other than a failure to comply with Section 4.1 of the Indenture which is covered by clause (iii)); (v) failure by the Issuer to comply for 60 days after written notice with its other agreements contained in the Indenture; (vi) default under any mortgage, indenture or instrument under which there may be issued or by which there may be secured or evidenced any Indebtedness for money borrowed by the Issuer or any of its Restricted Subsidiaries (or the payment of which is guaranteed by the Issuer or any of its Restricted Subsidiaries), other than Indebtedness owed to the Issuer or a Restricted Subsidiary, whether such Indebtedness or guarantee existed at the Issue Date, or was created thereafter, which default: (a) is caused by a failure to pay principal of, or interest or premium, if any, on such Indebtedness prior to the expiration of the grace period provided in such Indebtedness (and any extensions of any grace period) ("payment default"); or (b) results in the acceleration of such Indebtedness prior to its Stated Maturity; and, in each case, the principal amount of any such Indebtedness, together with the principal amount of any other such Indebtedness under which there has been a payment default or the maturity of which has been so accelerated, aggregates \$10.0 million or more; (vii) certain events of bankruptcy, insolvency or reorganization of the Issuer or a Significant Subsidiary or group of Restricted Subsidiaries that, taken together (as of the latest audited consolidated financial statements for the Issuer and its Restricted Subsidiaries), would constitute a Significant Subsidiary; (viii) failure by the Issuer or any Significant Subsidiary or group of Restricted Subsidiaries that, taken together (as of the latest audited consolidated financial statements for the Issuer and its Restricted Subsidiaries), would constitute a Significant Subsidiary to pay final judgments aggregating in excess of \$10.0 million (to the extent not covered by insurance by a reputable and creditworthy insurance company as to which the insurer has not disclaimed coverage), which judgments are not paid or discharged, and there shall be a period of 60 consecutive days following entry of such

A-9

---

final judgment or decree during which a stay of enforcement of such final judgment or decree, by reason of pending appeal or otherwise, shall not be in effect; or (ix) any Guarantee of a Significant Subsidiary or group of Restricted Subsidiaries that, taken together (as of the latest audited consolidated financial statements for the Issuer and its Restricted Subsidiaries) would constitute a Significant Subsidiary, ceases to be in full force and effect (except as contemplated by the terms of the Indenture) or is declared null and void in a judicial proceeding or the Issuer or any Subsidiary Guarantor that is a Significant Subsidiary or group of Subsidiary Guarantors that, taken together (as of the latest audited consolidated financial statements of the Issuer and its Restricted Subsidiaries) would constitute a Significant Subsidiary, denies or disaffirms its obligations under the Indenture or its Guarantee.

If an Event of Default (other than an Event of Default described in (vii) hereof) occurs and is continuing, the Trustee by notice to the Issuer, or the Holders of at least 25% in principal amount of the outstanding Securities by notice to the Issuer and the Trustee, may, and the Trustee at the request of such Holders shall, declare all the Securities to be due and payable immediately. If an Event of Default described in clause (vii) of the foregoing paragraph occurs and is continuing, the principal of, premium, if any, and accrued and unpaid interest (including Additional Interest) on all the Securities will become and be immediately due and payable without any declaration or other act on the part of the Trustee or any Holders.

Securityholders may not enforce the Indenture or the Securities except as provided in the Indenture. Subject to the provisions of the Indenture relating to the duties of the Trustee if an Event of Default exists, the Trustee may refuse to enforce the Indenture or the Securities unless it receives reasonable indemnity or security. Subject to certain limitations, Holders of a majority in principal amount of the Securities may direct the Trustee in its exercise of any trust or power. The Trustee may withhold from Securityholders notice of any continuing Default or Event of Default (except a Default or Event of Default in payment of principal, premium, if any, or interest) if it determines that withholding notice is in their interest.

## 13. Trustee Dealings with the Issuer

Subject to certain limitations set forth in the Indenture, the Trustee under the Indenture, in its individual or any other capacity, may become the owner or pledgee of Securities and may otherwise deal with and collect obligations owed to it by the Issuer or its Affiliates and may otherwise deal with the Issuer or its Affiliates with the same rights it would have if it were not Trustee.

## 14. No personal liability of directors, officers, employees and stockholders

No director, officer, employee, incorporator, stockholder, member, partner or trustee of the Issuer or any Subsidiary Guarantor, as such, shall have any liability for any obligations of the Issuer or any Subsidiary Guarantor under the Securities, the



Indenture or the Guarantees or for any claim based on, in respect of, or by reason of, such obligations or their creation. Each Holder by accepting a Security waives and releases all such liability. The waiver and release are part of the consideration for issuance of the Securities.

A-10

---

15. Authentication

This Security shall not be valid until an authorized officer of the Trustee (or an Authenticating Agent acting on its behalf) manually signs the certificate of authentication on the other side of this Security.

16. Abbreviations

Customary abbreviations may be used in the name of a Securityholder or an assignee, such as TEN COM (= tenants in common), TEN ENT (= tenants by the entirety), JT TEN (= joint tenants with rights of survivorship and not as tenants in common), CUST (= custodian) and U/G/M/A (= Uniform Gift to Minors Act).

17. CUSIP, Common Code and ISIN Numbers

The Issuer has caused CUSIP, Common Code and ISIN numbers, if applicable, to be printed on the Securities and has directed the Trustee to use CUSIP, Common Code and ISIN numbers, if applicable, in notices of redemption or purchase as a convenience to Securityholders. No representation is made as to the accuracy of such numbers either as printed on the Securities or as contained in any notice of redemption or purchase and reliance may be placed only on the other identification numbers placed thereon.

18. Governing Law

This Security shall be governed by, and construed in accordance with, the laws of the State of New York.

The Issuer will furnish to any Securityholder upon written request and without charge to the Securityholder a copy of the Indenture, which has in it the text of this Security in larger type. Requests may be made to:

Antero Resources Corporation  
1615 Wynkoop Street  
Denver, Colorado 80202  
Attention: Chief Financial Officer

19. Patriot Act

The parties hereto acknowledge that in accordance with Section 326 of the Patriot Act, the Trustee is required to obtain, verify, and record information that identifies each person or legal entity that establishes a relationship or opens an account with the Trustee. The parties to the Indenture agree that they will provide the Trustee with such information as it may request in order for the Trustee to satisfy the requirements of the Patriot Act.

A-11

---

ASSIGNMENT FORM

To assign this Security, fill in the form below:

I or we assign and transfer this Security to:

---

(Print or type assignee's name, address and zip code)

---

(Insert assignee's Social Security or Tax I.D. No.)

and irrevocably appoint  
for him.

agent to transfer this Security on the books of the Issuer. The agent may substitute another to act

Date: \_\_\_\_\_ Your Signature: \_\_\_\_\_

Signature Guarantee: \_\_\_\_\_  
(Signature must be guaranteed)

Sign exactly as your name appears on the other side of this Security.

The signature(s) should be guaranteed by an eligible guarantor institution (banks, stockbrokers, savings and loan associations and credit unions with membership in an approved signature guarantee medallion program), pursuant to S.E.C. Rule 17Ad-15.

The undersigned hereby certifies that it  is /  is not an Affiliate of the Issuer and that, to its knowledge, the proposed transferee  is /  is not an Affiliate of the Issuer.

In connection with any transfer or exchange of any of the Securities evidenced by this certificate occurring prior to the date that is one year (or 40 days in the case of any Regulation S Notes) after the later of the date of original issuance of such Securities and the last date, if any, on which such Securities were owned by the Issuer or any Affiliate of the Issuer, the undersigned confirms that such Securities are being:

CHECK ONE BOX BELOW:

- (1)  acquired for the undersigned's own account, without transfer; or
- (2)  transferred to the Issuer; or
- (3)  transferred pursuant to and in compliance with Rule 144A under the Securities Act of 1933, as amended (the "Securities Act"); or
- (4)  transferred pursuant to an effective registration statement under the Securities Act; or

A-12

- (5)  transferred pursuant to and in compliance with Regulation S under the Securities Act; or
- (6)  transferred to an institutional "accredited investor" (as defined in Rule 501(a)(1), (2), (3) or (7) under the Securities Act), that has furnished to the Trustee a signed letter containing certain representations and agreements (the form of which letter appears as Section 2.8 of the Indenture); or
- (7)  transferred pursuant to another available exemption from the registration requirements of the Securities Act of 1933, as amended.

Unless one of the boxes is checked, the Trustee will refuse to register any of the Securities evidenced by this certificate in the name of any person other than the registered Holder thereof; *provided, however*, that if box (5), (6) or (7) is checked, the Issuer may require, prior to registering any such transfer of the Securities, in its sole discretion, such legal opinions, certifications and other information as the Issuer may reasonably request to confirm that such transfer is being made pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the Securities Act of 1933, as amended, such as the exemption provided by Rule 144 under such Act.

\_\_\_\_\_  
Signature

Signature Guarantee:

\_\_\_\_\_  
(Signature must be guaranteed)

\_\_\_\_\_  
Signature

The signature(s) should be guaranteed by an eligible guarantor institution (banks, stockbrokers, savings and loan associations and credit unions with membership in an approved signature guarantee medallion program), pursuant to S.E.C. Rule 17Ad-15.

TO BE COMPLETED BY PURCHASER IF BOX (1) OR (3) ABOVE IS CHECKED.

The undersigned represents and warrants that it is purchasing this Security for its own account or an account with respect to which it exercises sole investment discretion and that it and any such account is a "qualified institutional buyer" within the meaning of Rule 144A under the Securities Act of 1933, as amended, and is aware that the sale to it is being made in reliance on Rule 144A and acknowledges that it has received such information regarding the Issuer as the undersigned has requested pursuant to Rule 144A or has determined not to request such information and that it is aware that the transferor is relying upon the undersigned's foregoing representations in order to claim the exemption from registration provided by Rule 144A.

\_\_\_\_\_  
Dated:

A-13

SCHEDULE OF INCREASES AND DECREASES IN GLOBAL SECURITY

The following increases or decreases in this Global Security have been made:

Date of increase/decrease	Amount of decrease in Principal Amount of this Global Security	Amount of increase in Principal Amount of this Global Security	Principal Amount of this Global Security following such decrease or increase	Signature of authorized signatory of Trustee or Securities Custodian

A-14

OPTION OF HOLDER TO ELECT PURCHASE

If you elect to have this Security purchased by the Issuer pursuant to Section 3.5 or 3.9 of the Indenture, check either box:

       
 3.5      3.9

If you want to elect to have only part of this Security purchased by the Issuer pursuant to Section 3.5 or Section 3.9 of the Indenture, state the amount in principal amount (must be in denominations of \$2,000 or an integral multiple of \$1,000 in excess thereof): \$ \_\_\_\_\_ and specify the denomination or denominations (which shall not be less than the minimum authorized denomination) of the Securities to be issued to the Holder for the portion of the within Security not being repurchased (in the absence of any such specification, one such Security will be issued for the portion not being repurchased): \$ \_\_\_\_\_.

Date: \_\_\_\_\_ Your Signature: \_\_\_\_\_  
 (Sign exactly as your name appears on the other side of the Security)

Signature Guarantee: \_\_\_\_\_  
 (Signature must be guaranteed)

The signature(s) should be guaranteed by an eligible guarantor institution (banks, stockbrokers, savings and loan associations and credit unions with membership in an approved signature guarantee medallion program), pursuant to S.E.C. Rule 17Ad-15.

A-15

EXHIBIT B

[FORM OF FACE OF SERIES B NOTE]

[Depository Legend, if applicable]  
 [Original Issue Discount Legend, if applicable]

No. [      ] Principal Amount \$[                      ], as revised by the Schedule of Increases and Decreases in Global Security attached hereto

CUSIP NO. 03674X AJ5  
 ISIN: US03674XAJ54

5.0% Senior Notes, Series B, due 2025

Antero Resources Corporation, a Delaware corporation, promises to pay to CEDE & CO., or registered assigns, the principal sum of [                      ] Dollars, as revised by the Schedule of Increases and Decreases in Global Security attached hereto, on March 1, 2025.

Interest Payment Dates: March 1 and September 1  
 Record Dates: February 15 and August 15

Additional provisions of this Security are set forth on the other side of this Security.

By: \_\_\_\_\_

TRUSTEE'S CERTIFICATE OF AUTHENTICATION

This is one of the Securities described in the within-mentioned Indenture.

WELLS FARGO BANK, NATIONAL ASSOCIATION,  
as Trustee

By: \_\_\_\_\_  
Authorized Officer

Dated: \_\_\_\_\_

B-1

---

[FORM OF REVERSE SIDE OF SERIES B NOTE]

ANTERO RESOURCES CORPORATION

5.0% Senior Notes, Series B, due 2025

1. Interest

Antero Resources Corporation, a Delaware corporation (such corporation, and its successors and assigns under the Indenture hereinafter referred to, being herein called the "Issuer"), promises to pay interest on the principal amount of this Security at the rate per annum shown above.

The Issuer will pay interest semiannually on March 1 and September 1 of each year commencing March 1, 2017. Interest on the Securities will accrue from the most recent date to which interest has been paid on the Securities or, if no interest has been paid, from December 21, 2016. The Issuer shall pay interest on overdue principal, and on overdue premium (plus interest on such interest to the extent lawful), at the rate borne by the Securities to the extent lawful. Interest will be computed on the basis of a 360-day year of twelve 30-day months.

2. Method of Payment

By no later than 11:00 a.m. (New York City time) on the date on which any principal of, premium, if any, or interest on any Security is due and payable, the Issuer shall irrevocably deposit with the Trustee or the Paying Agent money sufficient to pay such principal, premium, if any, and/or interest (including Additional Interest). The Issuer will pay interest (except Defaulted Interest) to the Persons who are registered Holders of Securities at the close of business on the February 15 and August 15 next preceding the interest payment date even if Securities are cancelled, repurchased or redeemed after the record date and on or before the interest payment date. Holders must surrender Securities to a Paying Agent to collect principal payments. The Issuer will pay principal, premium, if any, and interest in money of the United States that at the time of payment is legal tender for payment of public and private debts. Payments in respect of Securities represented by a Global Security (including principal, premium, if any, and interest) will be made by the transfer of immediately available funds to the accounts specified by The Depository Trust Company or any successor depository. The Issuer will make all payments in respect of a Definitive Security (including principal, premium, if any, and interest) by mailing a check to the registered address of each Holder thereof; *provided, however*, that payments on the Securities may also be made, at the Issuer's option, by wire transfer to a U.S. dollar account maintained by the payee with a bank in the United States if the Holder elects payment by wire transfer by giving written notice to the Trustee or the Paying Agent to such effect designating such account no later than 15 days immediately preceding the relevant due date for payment (or such other date as the Trustee may accept in its discretion).

B-2

---

3. Paying Agent and Registrar

Initially, Wells Fargo Bank, National Association (the "Trustee") will act as Trustee, Paying Agent and Registrar. The Issuer may appoint and change any Paying Agent, Registrar or co-registrar without notice to any Securityholder. The Issuer or any of its Restricted Subsidiaries may act as Paying Agent or Registrar.

4. Indenture

The Issuer issued the Securities under an Indenture dated as of December 21, 2016 (as it may be amended or supplemented from time to time in accordance with the terms thereof, the "Indenture"), among the Issuer, the Subsidiary Guarantors and the Trustee. The terms of the Securities include those stated in the Indenture and those made part of the Indenture by reference to the Trust Indenture Act of 1939 (15 U.S.C. §§ 77aaa-77bbb) as in effect on the date of the Indenture (the "Act"). Capitalized terms used

herein and not defined herein have the meanings ascribed thereto in the Indenture. The Securities are subject to all terms and provisions of the Indenture, and Securityholders are referred to the Indenture and the Act for a statement of those terms.

The Securities are senior obligations of the Issuer. The aggregate principal amount of Securities that may be authenticated and delivered under the Indenture is unlimited. This Security is one of the 5.0% Senior Notes, Series B, due 2025 referred to in the Indenture. The Securities include (i) \$600,000,000 aggregate principal amount of the Issuer's 5.0% Senior Notes, Series A, due 2025 issued under the Indenture on December 21, 2016 (herein called "Initial Securities"), (ii) if and when issued, additional 5.0% Senior Notes, Series A, due 2025 or 5.0% Senior Notes, Series B, due 2025 of the Issuer that may be issued from time to time under the Indenture subsequent to December 21, 2016 (herein called "Additional Securities") as provided in Section 2.1(a) of the Indenture and (iii) if and when issued, the Issuer's 5.0% Senior Notes, Series B, due 2025 that may be issued from time to time under the Indenture in exchange for Initial Securities or Additional Securities in an offer registered under the Securities Act as provided in a Registration Rights Agreement (herein called "Exchange Securities"). The Initial Securities, Additional Securities and Exchange Securities are treated as a single class of securities under the Indenture. The Indenture imposes certain limitations on the incurrence of indebtedness, the making of restricted payments, the sale of assets and subsidiary stock, the incurrence of certain liens, the entering into of affiliate transactions, the entering into of agreements that restrict distribution from restricted subsidiaries and the consummation of mergers and consolidations. The Indenture also imposes requirements with respect to the provision of financial information and the provision of guarantees of the Securities by certain subsidiaries.

To guarantee the due and punctual payment of the principal, premium, if any, and interest (including post-filing or post-petition interest) on the Securities and all other amounts payable by the Issuer under the Indenture, the Securities and the Registration Rights Agreement when and as the same shall be due and payable, whether at maturity, by acceleration or otherwise, according to the terms of the Securities and the Indenture, the Subsidiary Guarantors have unconditionally guaranteed (and future guarantors, together with the Subsidiary Guarantors,

B-3

---

will unconditionally Guarantee), jointly and severally, such obligations on a senior basis pursuant to the terms of the Indenture.

#### 5. Redemption

Except as set forth below or in the penultimate paragraph of Section 3.9 of the Indenture, the Securities will not be redeemable at the option of the Issuer prior to March 1, 2020. On and after such date, the Securities will be redeemable, at the Issuer's option, in whole or in part, at any time upon notice as provided in the Indenture, at the following redemption prices (expressed in percentages of principal amount), plus accrued and unpaid interest (including Additional Interest) to, but excluding, the applicable Redemption Date (subject to the right of Holders of record on the relevant record date to receive interest due on the relevant interest payment date), if redeemed during the 12-month period commencing on March 1 of the years set forth below:

<u>Period</u>	<u>Redemption Price</u>
2020	103.750%
2021	102.500%
2022	101.250%
2023 and thereafter	100.000%

In addition, at any time and from time to time on or prior to March 1, 2020, upon notice as provided in the Indenture, the Issuer may redeem in the aggregate up to 35% of the original principal amount of the Securities (calculated after giving effect to any issuance of Additional Notes), but in an amount not greater than the Net Cash Proceeds of one or more Equity Offerings at a redemption price (expressed as a percentage of principal amount) of 105.0% of the principal amount thereof, plus accrued and unpaid interest (including Additional Interest), if any, to, but excluding, the Redemption Date (subject to the right of Holders of record on the relevant record date to receive interest due on the relevant interest payment date); *provided*, that:

- (1) at least 65% of the original principal amount of the Securities (calculated after giving effect to any issuance of Additional Securities) must remain outstanding after each such redemption; and
- (2) each such redemption occurs within 180 days of the date of closing of such Equity Offering.

If the Redemption Date is on or after an interest record date and on or before the related interest payment date, the accrued and unpaid interest (including Additional Interest), if any, will be paid on such Redemption Date to the Person in whose name the Security is registered at the close of business on such record date, and no Additional Interest will be payable to Holders whose Securities will be subject to redemption by the Issuer.

In the case of any partial redemption, selection of the Securities for redemption will be made by the Trustee in compliance with the requirements of the of the principal national securities exchange, if any, on which such Securities are listed, or, if such Securities are not so

B-4

---

listed, by lot or by such other method as the Trustee in its sole discretion shall deem to be fair and appropriate (or, in the case of Global Securities, the Trustee will select Securities for redemption based on such method as DTC may prescribe), although no Security of

\$2,000 in original principal amount or less will be redeemed in part. If any Security is to be redeemed in part only, the notice of redemption relating to such Security shall state the portion of the principal amount thereof to be redeemed. A new Security in principal amount equal to the unredeemed portion thereof will be issued in the name of the Holder thereof upon cancellation of the original Security. On and after the Redemption Date, interest will cease to accrue on Securities or portions thereof called for redemption without any condition precedent, as long as the Issuer has deposited with the Paying Agent funds in satisfaction of the applicable redemption price pursuant to the Indenture.

In addition, at any time prior to March 1, 2020, upon notice as provided in the Indenture, the Issuer may redeem the Securities, in whole or in part, at a redemption price equal to 100% of the principal amount thereof plus the Applicable Premium plus accrued and unpaid interest, if any, to, but excluding, the Redemption Date (subject to the right of Holders of record on the relevant record date to receive interest due on the relevant interest payment date).

“Applicable Premium” means, with respect to a Security at any time, the greater of (i) 1.0% of the principal amount of such Security or (ii) the excess, if any, of (A) the present value at such time of (1) the redemption price of such Security on March 1, 2020 (such redemption price being described in this [paragraph 5](#)) plus (2) all required interest payments (excluding accrued and unpaid interest to such Redemption Date) due on such Security through March 1, 2020, computed using a discount rate equal to the Treasury Rate as of such Redemption Date plus 50 basis points discounted to the Redemption Date on a semi-annual basis (assuming a 360-day year consisting of twelve 30-day calendar months), over (B) the principal amount of such Security.

“Treasury Rate” means, with respect to any Redemption Date, the yield to maturity at the time of computation of United States Treasury securities with a constant maturity (as compiled and published in the most recent Federal Reserve Statistical Release H.15 (519) which has become publicly available at least two Business Days prior to the Redemption Date (or, if such Statistical Release is no longer published, any publicly available source of similar market data)) most nearly equal to the period from the Redemption Date to March 1, 2020; *provided, however*, that if the period from the Redemption Date to March 1, 2020 is not equal to the constant maturity of a United States Treasury security for which a weekly average yield is given, the Treasury Rate shall be obtained by linear interpolation (calculated to the nearest one-twelfth of a year) from the weekly average yields of United States Treasury securities for which such yields are given, except that if the period from the Redemption Date to March 1, 2020 is less than one year, the weekly average yield on actually traded United States Treasury securities adjusted to a constant maturity of one year shall be used.

The Issuer will (a) calculate the Treasury Rate as of a date no later than the fourth Business Day preceding the applicable Redemption Date and (b) prior to such Redemption Date file with the Trustee an Officers’ Certificate setting forth the Applicable Premium and the Treasury Rate and showing the calculation of each in reasonable detail.

B-5

---

Notice of any redemption shall be given pursuant to [Section 5.5](#) of the Indenture not less than 30 nor more than 60 days prior to the Redemption Date, to each Holder of Securities to be redeemed, except that that redemption notices may be sent more than 60 days prior to a Redemption Date if the notice is issued in connection with a legal defeasance or covenant defeasance of the Securities or a satisfaction and discharge of the Indenture pursuant to [Article VIII](#).

Any redemption or notice of redemption may, at the Issuer’s discretion, be subject to one or more conditions precedent and, in the case of a redemption with the Net Cash Proceeds of an Equity Offering, be given prior to the completion of the related Equity Offering.

Once notice of redemption has been given, the Securities or portions of Securities so to be redeemed without a condition precedent shall, on the Redemption Date, become due and payable at the redemption price therein specified (together with accrued interest, if any, to the Redemption Date).

The Issuer is not required to make any mandatory redemption payments or sinking fund payments with respect to the Securities.

The Issuer and its Subsidiaries may acquire Securities by means other than a redemption or required repurchase, whether by tender offer, open market purchases, negotiated transactions or otherwise, in accordance with applicable securities laws, so long as such acquisition does not otherwise violate the terms of the Indenture.

## 6. [Repurchase Provisions](#)

(a) If a Change of Control occurs, unless the Issuer has exercised its right to redeem all of the Securities as described under [paragraph 5](#) of the Securities or one of the other two exceptions described in the fifth paragraph of [Section 3.9](#) of the Indenture applies, each Holder will have the right to require the Issuer to repurchase from each Holder all or any part (equal to \$2,000 or an integral multiple of \$1,000 in excess thereof) of such Holder’s Securities at a purchase price in cash equal to 101% of the principal amount thereof, plus accrued and unpaid interest, if any, to, but excluding, the date of purchase (subject to the right of Holders of record on the relevant record date to receive interest due on the relevant interest payment date) as provided in, and subject to the terms of, the Indenture.

(b) If the Issuer or any Restricted Subsidiary consummates an Asset Disposition, the Issuer may be obligated to make an Asset Disposition Offer to all Holders and all holders of certain other Pari Passu Indebtedness, on the terms and subject to the conditions in [Section 3.5](#) of the Indenture.

## 7. [Denominations; Transfer; Exchange](#)

The Securities are in registered form without coupons in denominations of principal amount of \$2,000 and whole multiples of \$1,000 in excess thereof. A Holder may transfer or exchange Securities in accordance with the Indenture. The Registrar may require a Holder, among other things, to furnish appropriate endorsements or transfer documents and to pay a sum sufficient to cover any taxes and fees required by law or permitted by the Indenture.

B-6

---

The Registrar need not register the transfer of or exchange any Security (A) for a period (1) of 15 days before a selection of Securities to be redeemed or (2) beginning 15 days before an interest payment date and ending on such interest payment date or (B) selected for redemption, except the unredeemed portion of any Security being redeemed in part.

8. Persons Deemed Owners

The registered Holder of this Security shall be treated as the owner of it for all purposes.

9. Unclaimed Money

If money for the payment of principal, premium, if any, or interest remains unclaimed for two years, the Trustee or Paying Agent shall pay the money back to the Issuer at its request unless an abandoned property law designates another Person. After any such payment, Holders entitled to the money must look only to the Issuer for payment as unsecured general creditors unless an abandoned property law designates another Person and not to the Trustee for payment.

10. Defeasance

Subject to certain exceptions and conditions set forth in the Indenture, the Issuer at any time may terminate some or all of its obligations under the Securities and the Indenture if the Issuer deposits with the Trustee money or U.S. Government Obligations for the payment of principal, premium, if any, and interest on the Securities to redemption or final maturity, as the case may be.

11. Amendment, Supplement, Waiver

Subject to certain exceptions set forth in the Indenture, (i) the Indenture, the Securities or the Guarantees may be amended or supplemented by the Issuer, the Subsidiary Guarantors and the Trustee with the consent of the Holders of a majority in principal amount of the then outstanding Securities and (ii) any default (other than with respect to nonpayment or in respect of a provision that cannot be amended without the consent of each Securityholder affected) or noncompliance with any provision may be waived with the consent of the Holders of a majority in principal amount of the then outstanding Securities. Without the consent of any Securityholder, the Issuer, the Subsidiary Guarantors and the Trustee may amend or supplement the Indenture, the Securities or the Guarantees to cure any ambiguity, omission, defect, mistake or inconsistency, to comply with Article IV of the Indenture, to provide for uncertificated Securities in addition to, or in place of, certificated Securities, to add Subsidiary Guarantors with respect to the Securities, or release a Subsidiary Guarantor from its Guarantee and terminate such Guarantee, *provided* that the release and termination is in accordance with the Indenture, to secure the Securities or the Guarantees, to add additional covenants of the Issuer or a Subsidiary Guarantor for the benefit of the Holders or to surrender any right or power conferred on the Issuer or a Subsidiary Guarantor, to comply with any requirement of the SEC in connection with qualifying the Indenture under the Act, to make any change that does not adversely affect the rights of any Securityholder, to evidence and provide for the appointment of a successor Trustee

B-7

---

or to provide for the issuance of Additional Securities in accordance with limitations set forth in the Indenture.

12. Defaults and Remedies

Under the Indenture, Events of Default include (each of which is described in greater detail in the Indenture): (i) default in any payment of interest on any Security when due, continued for 30 days; (ii) default in the payment of principal of or premium, if any, on any Security when due at its Stated Maturity, upon optional redemption, upon required repurchase, upon declaration of acceleration or otherwise; (iii) failure by the Issuer or any Subsidiary Guarantor to comply with its obligations under Section 4.1 of the Indenture; (iv) failure by the Issuer to comply for 30 days (or 180 days in the case of a Reporting Failure) after notice as provided with Section 3.9 or under Sections 3.2, 3.3, 3.4, 3.5, 3.6, 3.8, 3.10 and 3.11 of the Indenture (in each case, other than a failure to purchase Securities which will constitute an Event of Default under clause (ii) above and other than a failure to comply with Section 4.1 of the Indenture which is covered by clause (iii)); (v) failure by the Issuer to comply for 60 days after written notice with its other agreements contained in the Indenture; (vi) default under any mortgage, indenture or instrument under which there may be issued or by which there may be secured or evidenced any Indebtedness for money borrowed by the Issuer or any of its Restricted Subsidiaries (or the payment of which is guaranteed by the Issuer or any of its Restricted Subsidiaries), other than Indebtedness owed to the Issuer or a Restricted Subsidiary, whether such Indebtedness or guarantee existed at the Issue Date, or was created thereafter, which default: (a) is caused by a failure to pay principal of, or interest or premium, if any, on such Indebtedness prior to the expiration of the grace period provided in such Indebtedness (and any extensions of any grace period) ("payment default"); or (b) results in the acceleration of such Indebtedness prior to its Stated Maturity; and, in each case, the principal amount of any such Indebtedness, together with the principal amount of any other such Indebtedness under which there has been a payment default or the maturity of which has been so accelerated, aggregates \$10.0 million or more; (vii) certain events of bankruptcy, insolvency or reorganization of the Issuer or a Significant Subsidiary or group of Restricted

Subsidiaries that, taken together (as of the latest audited consolidated financial statements for the Issuer and its Restricted Subsidiaries), would constitute a Significant Subsidiary; (viii) failure by the Issuer or any Significant Subsidiary or group of Restricted Subsidiaries that, taken together (as of the latest audited consolidated financial statements for the Issuer and its Restricted Subsidiaries), would constitute a Significant Subsidiary to pay final judgments aggregating in excess of \$10.0 million (to the extent not covered by insurance by a reputable and creditworthy insurance company as to which the insurer has not disclaimed coverage), which judgments are not paid or discharged, and there shall be a period of 60 consecutive days following entry of such final judgment or decree during which a stay of enforcement of such final judgment or decree, by reason of pending appeal or otherwise, shall not be in effect; or (ix) any Guarantee of a Significant Subsidiary or group of Restricted Subsidiaries that, taken together (as of the latest audited consolidated financial statements for the Issuer and its Restricted Subsidiaries) would constitute a Significant Subsidiary, ceases to be in full force and effect (except as contemplated by the terms of the Indenture) or is declared null and void in a judicial proceeding or the Issuer or any Subsidiary Guarantor that is a Significant Subsidiary or group of Subsidiary Guarantors that, taken together (as of the latest audited consolidated financial statements of the Issuer and its Restricted

B-8

---

Subsidiaries) would constitute a Significant Subsidiary, denies or disaffirms its obligations under the Indenture or its Guarantee.

If an Event of Default (other than an Event of Default described in (vii) hereof) occurs and is continuing, the Trustee by notice to the Issuer, or the Holders of at least 25% in principal amount of the outstanding Securities by notice to the Issuer and the Trustee, may, and the Trustee at the request of such Holders shall, declare all the Securities to be due and payable immediately. If an Event of Default described in clause (vii) of the foregoing paragraph occurs and is continuing, the principal of, premium, if any, and accrued and unpaid interest (including Additional Interest) on all the Securities will become and be immediately due and payable without any declaration or other act on the part of the Trustee or any Holders.

Securityholders may not enforce the Indenture or the Securities except as provided in the Indenture. Subject to the provisions of the Indenture relating to the duties of the Trustee if an Event of Default exists, the Trustee may refuse to enforce the Indenture or the Securities unless it receives reasonable indemnity or security. Subject to certain limitations, Holders of a majority in principal amount of the Securities may direct the Trustee in its exercise of any trust or power. The Trustee may withhold from Securityholders notice of any continuing Default or Event of Default (except a Default or Event of Default in payment of principal, premium, if any, or interest) if it determines that withholding notice is in their interest.

### 13. Trustee Dealings with the Issuer

Subject to certain limitations set forth in the Indenture, the Trustee under the Indenture, in its individual or any other capacity, may become the owner or pledgee of Securities and may otherwise deal with and collect obligations owed to it by the Issuer or its Affiliates and may otherwise deal with the Issuer or its Affiliates with the same rights it would have if it were not Trustee.

### 14. No personal liability of directors, officers, employees and stockholders

No director, officer, employee, incorporator, stockholder, member, partner or trustee of the Issuer or any Subsidiary Guarantor, as such, shall have any liability for any obligations of the Issuer or any Subsidiary Guarantor under the Securities, the Indenture or the Guarantees or for any claim based on, in respect of, or by reason of, such obligations or their creation. Each Holder by accepting a Security waives and releases all such liability. The waiver and release are part of the consideration for issuance of the Securities.

### 15. Authentication

This Security shall not be valid until an authorized officer of the Trustee (or an Authenticating Agent acting on its behalf) manually signs the certificate of authentication on the other side of this Security.

### 16. Abbreviations

Customary abbreviations may be used in the name of a Securityholder or an assignee, such as TEN COM (= tenants in common), TEN ENT (= tenants by the entirety), JT

B-9

---

TEN (= joint tenants with rights of survivorship and not as tenants in common), CUST (= custodian) and U/G/M/A (= Uniform Gift to Minors Act).

### 17. CUSIP, Common Code and ISIN Numbers

The Issuer has caused CUSIP, Common Code and ISIN numbers, if applicable, to be printed on the Securities and has directed the Trustee to use CUSIP, Common Code and ISIN numbers, if applicable, in notices of redemption or purchase as a convenience to Securityholders. No representation is made as to the accuracy of such numbers either as printed on the Securities or as contained in any notice of redemption or purchase and reliance may be placed only on the other identification numbers placed thereon.

### 18. Governing Law



This Security shall be governed by, and construed in accordance with, the laws of the State of New York.

The Issuer will furnish to any Securityholder upon written request and without charge to the Securityholder a copy of the Indenture, which has in it the text of this Security in larger type. Requests may be made to:

Antero Resources Corporation  
1615 Wynkoop Street  
Denver, Colorado 80202  
Attention: Chief Financial Officer

19. Patriot Act

The parties hereto acknowledge that in accordance with Section 326 of the Patriot Act, the Trustee is required to obtain, verify, and record information that identifies each person or legal entity that establishes a relationship or opens an account with the Trustee. The parties to the Indenture agree that they will provide the Trustee with such information as it may request in order for the Trustee to satisfy the requirements of the Patriot Act.

B-10

ASSIGNMENT FORM

To assign this Security, fill in the form below:

I or we assign and transfer this Security to:

\_\_\_\_\_  
(Print or type assignee's name, address and zip code)

\_\_\_\_\_  
(Insert assignee's Social Security or Tax I.D. No.)

and irrevocably appoint \_\_\_\_\_ agent to transfer this Security on the books of the Issuer. The agent may substitute another to act for him.

Date: \_\_\_\_\_ Your Signature: \_\_\_\_\_

Signature Guarantee: \_\_\_\_\_  
(Signature must be guaranteed)

Sign exactly as your name appears on the other side of this Security.

The signature(s) should be guaranteed by an eligible guarantor institution (banks, stockbrokers, savings and loan associations and credit unions with membership in an approved signature guarantee medallion program), pursuant to S.E.C. Rule 17Ad-15.

B-11

[TO BE ATTACHED TO GLOBAL SECURITIES]

SCHEDULE OF INCREASES AND DECREASES IN GLOBAL SECURITY

The following increases or decreases in this Global Security have been made:

Date of increase/decrease	Amount of decrease in Principal Amount of this Global Security	Amount of increase in Principal Amount of this Global Security	Principal Amount of this Global Security following such decrease or increase	Signature of authorized signatory of Trustee or Securities Custodian

B-12

OPTION OF HOLDER TO ELECT PURCHASE

If you elect to have this Security purchased by the Issuer pursuant to Section 3.5 or 3.9 of the Indenture, check either box:

3.5       3.9

If you want to elect to have only part of this Security purchased by the Issuer pursuant to Section 3.5 or Section 3.9 of the Indenture, state the amount in principal amount (must be in denominations of \$2,000 or an integral multiple of \$1,000 in excess thereof): \$ \_\_\_\_\_ and specify the denomination or denominations (which shall not be less than the minimum authorized denomination) of the Securities to be issued to the Holder for the portion of the within Security not being repurchased (in the absence of any such specification, one such Security will be issued for the portion not being repurchased): \$ \_\_\_\_\_.

Date: \_\_\_\_\_ Your Signature: \_\_\_\_\_  
(Sign exactly as your name appears on the other side of the Security)

Signature Guarantee: \_\_\_\_\_  
(Signature must be guaranteed)

The signature(s) should be guaranteed by an eligible guarantor institution (banks, stockbrokers, savings and loan associations and credit unions with membership in an approved signature guarantee medallion program), pursuant to S.E.C. Rule 17Ad-15.

FORM OF INDENTURE SUPPLEMENT TO ADD SUBSIDIARY GUARANTORS

This Supplemental Indenture, dated as of [ \_\_\_\_\_ ], 20 (this "Supplemental Indenture" or "Guarantee"), is among [name of future Subsidiary Guarantor] (the "Subsidiary Guarantor"), Antero Resources Corporation (together with its successors and assigns, the "Issuer"), each other then existing Subsidiary Guarantor under the Indenture referred to below, and Wells Fargo Bank, National Association, as Trustee under the Indenture referred to below.

W I T N E S S E T H:

WHEREAS, the Issuer, the Subsidiary Guarantors and the Trustee have heretofore executed and delivered an Indenture, dated as of December 21, 2016 (as amended, supplemented, waived or otherwise modified, the "Indenture"), providing for the issuance of an aggregate principal amount of \$750 million of 5.0% Senior Notes due 2025 of the Issuer (the "Securities");

WHEREAS, Section 3.11 of the Indenture provides that after the Issue Date the Issuer is required to cause (a) each Wholly-Owned Subsidiary of the Issuer (other than a Foreign Subsidiary) formed or acquired after the Issue Date and (b) any other Domestic Subsidiary that is not already a Subsidiary Guarantor that guarantees any Indebtedness of the Issuer or a Subsidiary Guarantor, in each case to execute and deliver to the Trustee a supplemental indenture pursuant to which such Subsidiary will unconditionally guarantee, on a joint and several basis with the other Subsidiary Guarantors, the full and prompt payment of the principal of, premium, if any, and interest on the Securities; and

WHEREAS, pursuant to Section 9.1 of the Indenture, the Trustee, the Subsidiary Guarantors and the Issuer are authorized to execute and deliver this Supplemental Indenture to amend or supplement the Indenture, without the consent of any Securityholder;

NOW, THEREFORE, in consideration of the foregoing and for other good and valuable consideration, the receipt of which is hereby acknowledged, the Subsidiary Guarantor, the Issuer, the other Subsidiary Guarantors and the Trustee mutually covenant and agree for the equal and ratable benefit of the Holders of the Securities as follows:

ARTICLE I

Definitions

SECTION 1.1 Defined Terms. As used in this Supplemental Indenture, terms defined in the Indenture or in the preamble or recital hereto are used herein as therein defined. The words "herein," "hereof" and "hereby" and other words of similar import used in this Supplemental Indenture refer to this Supplemental Indenture as a whole and not to any particular section hereof.

Agreement to Be Bound: Guarantee

SECTION 2.1 Agreement to Be Bound. The Subsidiary Guarantor hereby becomes a party to the Indenture as a Subsidiary Guarantor and as such will have all of the rights and be subject to all of the obligations and agreements of a Subsidiary Guarantor under the Indenture. The Subsidiary Guarantor agrees to be bound by all of the provisions of the Indenture applicable to a Subsidiary Guarantor and to perform all of the obligations and agreements of a Subsidiary Guarantor under the Indenture.

SECTION 2.2 Guarantee. The Subsidiary Guarantor agrees, on a joint and several basis with all the existing Subsidiary Guarantors, to fully, unconditionally and irrevocably guarantee to each Holder of the Securities and the Trustee the Obligations pursuant to Article X of the Indenture.

ARTICLE III

Miscellaneous

SECTION 3.1 Notices. All notices and other communications to the Subsidiary Guarantor shall be given as provided in the Indenture to the Subsidiary Guarantor, at its address set forth below, with a copy to the Issuer as provided in the Indenture for notices to the Issuer.

SECTION 3.2 Parties. Nothing expressed or mentioned herein is intended or shall be construed to give any Person, firm or corporation, other than the Holders and the Trustee, any legal or equitable right, remedy or claim under or in respect of this Supplemental Indenture or the Indenture or any provision herein or therein contained.

SECTION 3.3 Governing Law. This Supplemental Indenture shall be governed by, and construed in accordance with, the laws of the State of New York.

SECTION 3.4 Severability Clause. In case any provision in this Supplemental Indenture shall be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby and such provision shall be ineffective only to the extent of such invalidity, illegality or unenforceability.

SECTION 3.5 Ratification of Indenture; Supplemental Indentures Part of Indenture. Except as expressly amended hereby, the Indenture is in all respects ratified and confirmed and all the terms, conditions and provisions thereof shall remain in full force and effect. This Supplemental Indenture shall form a part of the Indenture for all purposes, and every Holder of Securities heretofore or hereafter authenticated and delivered shall be bound hereby. The Trustee makes no representation or warranty as to the validity or sufficiency of this Supplemental Indenture or with respect to the recitals contained herein, all of which recitals are made solely by the other parties hereto.

C-2

---

SECTION 3.6 Counterparts. The parties hereto may sign one or more copies of this Supplemental Indenture in counterparts, all of which together shall constitute one and the same agreement.

SECTION 3.7 Headings. The headings of the Articles and the Sections in this Supplemental Indenture are for convenience of reference only and shall not be deemed to alter or affect the meaning or interpretation of any provisions hereof.

C-3

---

IN WITNESS WHEREOF, the parties hereto have caused this Supplemental Indenture to be duly executed as of the date first above written.

[SUBSIDIARY GUARANTOR],  
as a Subsidiary Guarantor

By: \_\_\_\_\_  
Name:  
Title:  
  
[Address]

WELLS FARGO BANK, NATIONAL ASSOCIATION, as Trustee

By: \_\_\_\_\_  
Name:  
Title:

ANTERO RESOURCES CORPORATION

By: \_\_\_\_\_  
Name:  
Title:

AR OHIO LLC  
MONROE PIPELINE LLC  
ANTERO EXCHANGE PROPERTIES LLC

By: \_\_\_\_\_  
Name:  
Title:

## REGISTRATION RIGHTS AGREEMENT

This REGISTRATION RIGHTS AGREEMENT dated December 21, 2016 (this “Agreement”) is entered into by and among Antero Resources Corporation, a Delaware corporation (the “Company”), the guarantors listed in Schedule 1 hereto (the “Initial Guarantors”), and J.P. Morgan Securities LLC (“J.P. Morgan”), as representative of the several initial purchasers listed in Schedule 1 of the Purchase Agreement (collectively, the “Initial Purchasers”).

The Company, the Initial Guarantors and the Initial Purchasers are parties to the Purchase Agreement, dated December 7, 2016 (the “Purchase Agreement”), which provides for the sale by the Company to the Initial Purchasers of \$600,000,000 aggregate principal amount of the Company’s 5.0% Senior Notes due 2025 (the “Securities”) which will be guaranteed on an unsecured senior basis by each of the Guarantors (as defined below).

As an inducement to the Initial Purchasers to enter into the Purchase Agreement, the Company and the Initial Guarantors have agreed to provide to the Initial Purchasers and their direct and indirect transferees the registration rights set forth in this Agreement. The execution and delivery of this Agreement is a condition to the closing under the Purchase Agreement.

In consideration of the foregoing, the parties hereto agree as follows:

1. Definitions. As used in this Agreement, the following terms shall have the following meanings:

“Additional Guarantor” shall mean any subsidiary of the Company that provides a Guarantee of the Securities under the Indenture after the date of this Agreement.

“Agreement” shall have the meaning set forth in the preamble.

“Business Day” shall mean any day that is not a Saturday, Sunday or other day on which commercial banks in New York City are authorized or required by law to remain closed.

“Company” shall have the meaning set forth in the preamble and shall also include the Company’s successors.

“Exchange Act” shall mean the Securities Exchange Act of 1934, as amended from time to time, and the rules and regulations of the SEC promulgated thereunder.

“Exchange Dates” shall have the meaning set forth in Section 2(a)(ii) hereof.

“Exchange Offer” shall mean the exchange offer by the Company and the Guarantors of Exchange Securities for Registrable Securities pursuant to Section 2(a) hereof.

“Exchange Offer Registration” shall mean a registration under the Securities Act effected pursuant to Section 2(a) hereof.

“Exchange Offer Registration Statement” shall mean an exchange offer registration statement on Form S-4 (or, if applicable, on another appropriate form) under the Securities Act with respect to the Exchange Offer and all amendments and supplements to such registration statement, in each case including the Prospectus contained therein or deemed a part thereof, all exhibits thereto and any document incorporated by reference therein.

“Exchange Securities” shall mean senior notes issued by the Company, and guaranteed by the Guarantors under the Indenture containing terms identical to the Securities (except that the Exchange Securities will not be subject to restrictions on transfer or to any increase in annual interest rate for failure to comply with this Agreement) and to be offered to Holders of Securities in exchange for Securities pursuant to the Exchange Offer.

“FINRA” means the Financial Industry Regulatory Authority, Inc.

“Free Writing Prospectus” means each free writing prospectus (as defined in Rule 405 under the Securities Act) prepared by or on behalf of the Company or used or referred to by the Company in connection with the sale of the Securities or the Exchange Securities.

“Guarantees” shall mean, collectively, the guarantees of the Securities and guarantees of the Exchange Securities by the Guarantors under the Indenture.

“Guarantors” shall mean, collectively, the Initial Guarantors, any successors thereof and any Additional Guarantors.

“Holders” shall mean the Initial Purchasers, for so long as they own any Registrable Securities, and each of their successors, assigns and direct and indirect transferees who become owners of Registrable Securities under the Indenture; provided that for purposes of Section 4 and Section 5 hereof, the term “Holders” shall include Participating Broker-Dealers.

“Indemnified Person” shall have the meaning set forth in Section 5(c) hereof.

“Indemnifying Person” shall have the meaning set forth in Section 5(c) hereof.

“Indenture” shall mean the Indenture relating to the Securities dated as of December 21, 2016, among the Company, the Initial Guarantors and Wells Fargo Bank, National Association, as trustee, and as the same may be amended from time to time in accordance with the terms thereof.

“Initial Guarantors” shall have the meaning set forth in the preamble.

“Initial Purchasers” shall have the meaning set forth in the preamble.

“Inspector” shall have the meaning set forth in Section 3(a)(xiv) hereof.

“Issuer Information” shall have the meaning set forth in Section 5(a) hereof.

“J.P. Morgan” shall have the meaning set forth in the preamble.

2

---

“Majority Holders” shall mean the Holders of a majority of the aggregate principal amount of the outstanding Registrable Securities; provided that whenever the consent or approval of Holders of a specified percentage of Registrable Securities is required hereunder, any Registrable Securities owned directly or indirectly by the Company or any of its affiliates shall not be counted in determining whether such consent or approval was given by the Holders of such required percentage or amount; and provided, further, that if the Company shall issue any additional Securities under the Indenture prior to consummation of the Exchange Offer or, if applicable, the effectiveness of any Shelf Registration Statement, such additional Securities and the Registrable Securities to which this Agreement relates shall be treated together as one class for purposes of determining whether the consent or approval of Holders of a specified percentage of Registrable Securities has been obtained.

“Notice and Questionnaire” shall mean a notice of registration statement and selling security holder questionnaire distributed to a Holder by the Company upon receipt of a Shelf Request from such Holder.

“Participating Broker-Dealers” shall have the meaning set forth in Section 4(a) hereof.

“Participating Holder” shall mean any Holder of Registrable Securities that has returned a completed and signed Notice and Questionnaire to the Company in accordance with Section 2(b) hereof.

“Person” shall mean an individual, partnership, limited liability company, corporation, trust or unincorporated organization, or other legal entity or a government or agency or political subdivision thereof.

“Prospectus” shall mean the prospectus included in, or, pursuant to the rules and regulations of the Securities Act, deemed a part of, a Registration Statement, including any preliminary prospectus, and any such prospectus as amended or supplemented by any prospectus supplement, including a prospectus supplement with respect to the offering of any portion of the Registrable Securities covered by a Shelf Registration Statement, and by all other amendments and supplements to such prospectus, and in each case including any document incorporated by reference therein.

“Purchase Agreement” shall have the meaning set forth in the preamble.

“Registrable Securities” shall mean the Securities; provided that the Securities shall cease to be Registrable Securities (i) when a Registration Statement with respect to such Securities has become effective under the Securities Act and such Securities have been exchanged or disposed of pursuant to such Registration Statement, (ii) when such Securities cease to be outstanding, or (iii) except in the case of Securities that otherwise remain Registrable Securities and that are held by an Initial Purchaser and that are ineligible to be exchanged in the Exchange Offer, when the Exchange Offer is consummated.

“Registration Expenses” shall mean any and all expenses incident to performance of or compliance by the Company and the Guarantors with this Agreement, including without limitation: (i) all SEC, stock exchange or FINRA registration and filing fees, (ii) all fees and expenses incurred in connection with compliance with state securities or blue sky laws

3

---

(including reasonable fees and disbursements of counsel for any Underwriters or Holders in connection with blue sky qualification of any Exchange Securities or Registrable Securities), (iii) all expenses of any Persons in preparing or assisting in preparing, word processing, printing and distributing any Registration Statement, any Prospectus, any Free Writing Prospectus and any amendments or supplements thereto, any underwriting agreements, securities sales agreements or other similar agreements and any other documents relating to the performance of and compliance with this Agreement (other than the fees of counsel to the Initial Purchasers incurred in connection with the preparation and review of the Exchange Offer Registration Statement or in connection with the Exchange Offer), (iv) all rating agency fees, (v) all fees and disbursements relating to the qualification of the Indenture under applicable securities laws, (vi) the fees and disbursements of the Trustee and its counsel, (vii) the fees and disbursements of counsel for the Company and the Guarantors and, in the case of a Shelf Registration Statement, the fees and disbursements of one counsel for the Holders (which counsel shall be selected by the Majority Holders and which counsel may also be counsel for the Initial Purchasers) and (viii) the fees and disbursements of the independent registered public accountants of the Company and the Guarantors, including the expenses of any special audits or “comfort”

letters required by or incident to the performance of and compliance with this Agreement, but excluding fees and expenses of counsel to the Underwriters (other than fees and expenses set forth in clause (ii) above) or the Holders and underwriting discounts and commissions, brokerage commissions and transfer taxes, if any, relating to the sale or disposition of Registrable Securities by a Holder.

“Registration Statement” shall mean any registration statement of the Company and the Guarantors filed under the Securities Act that covers any of the Exchange Securities or Registrable Securities pursuant to the provisions of this Agreement and all amendments and supplements to any such registration statement, including post-effective amendments, in each case including the Prospectus contained therein or deemed a part thereof, all exhibits thereto and any document incorporated by reference therein.

“SEC” shall mean the United States Securities and Exchange Commission.

“Securities” shall have the meaning set forth in the preamble.

“Securities Act” shall mean the Securities Act of 1933, as amended from time to time, and the rules and regulations of the SEC promulgated thereunder.

“Shelf Effectiveness Period” shall have the meaning set forth in Section 2(b) hereof.

“Shelf Registration” shall mean a registration effected pursuant to Section 2(b) hereof.

“Shelf Registration Statement” shall mean a “shelf” registration statement of the Company and the Guarantors that covers all or a portion of the Registrable Securities (but no other securities unless approved by a majority in aggregate principal amount of the Registrable Securities held by the Participating Holders) on an appropriate form under Rule 415 under the Securities Act, or any similar rule that may be adopted by the SEC, and all amendments and supplements to such registration statement, including post-effective amendments, in each case including the Prospectus contained therein or deemed a part thereof, all exhibits thereto and any document incorporated by reference therein.

4

---

“Shelf Request” shall have the meaning set forth in Section 2(b) hereof.

“Staff” shall mean the staff of the SEC.

“Target Registration Date” shall have the meaning set forth in Section 2(d) hereof.

“Trust Indenture Act” shall mean the Trust Indenture Act of 1939, as amended from time to time.

“Trustee” shall mean the trustee with respect to the Securities under the Indenture.

“Underwriter” shall have the meaning set forth in Section 3(e) hereof.

“Underwritten Offering” shall mean an offering in which Registrable Securities are sold to an Underwriter for reoffering to the public.

2. Registration Under the Securities Act. (a) To the extent not prohibited by any applicable law or applicable interpretations of the Staff, the Company and the Guarantors shall use their commercially reasonable efforts to (i) cause to be filed an Exchange Offer Registration Statement covering an offer to the Holders to exchange all the Registrable Securities for Exchange Securities and (ii) have such Registration Statement become and remain effective until 180 days after the last Exchange Date for use by one or more Participating Broker-Dealers. The Company and the Guarantors shall commence the Exchange Offer promptly after the Exchange Offer Registration Statement is declared effective by the SEC and use their commercially reasonable efforts to complete the Exchange Offer not later than 60 days after such effective date.

The Company and the Guarantors shall commence the Exchange Offer by mailing the related Prospectus, appropriate letters of transmittal and other accompanying documents to each Holder stating, in addition to such other disclosures as are required by applicable law, substantially the following:

- (i) that the Exchange Offer is being made pursuant to this Agreement and that all Registrable Securities validly tendered and not properly withdrawn will be accepted for exchange;
- (ii) the dates of acceptance for exchange (which shall be a period of at least 20 Business Days from the date such notice is mailed) (the “Exchange Dates”);
- (iii) that any Registrable Security not tendered will remain outstanding and continue to accrue interest but will not retain any rights under this Agreement, except as otherwise specified herein;
- (iv) that any Holder electing to have a Registrable Security exchanged pursuant to the Exchange Offer will be required to (A) surrender such Registrable Security, together with the appropriate letters of transmittal, to the institution and at the address and in the manner specified in the notice,

5

---

---

or (B) effect such exchange otherwise in compliance with the applicable procedures of the depository for such Registrable Security, in each case prior to the close of business on the last Exchange Date; and

- (v) that any Holder will be entitled to withdraw its election, not later than the close of business on the last Exchange Date, by (A) sending to the institution and at the address specified in the notice, a telegram, telex, facsimile transmission or letter setting forth the name of such Holder, the principal amount of Registrable Securities delivered for exchange and a statement that such Holder is withdrawing its election to have such Registrable Securities exchanged or (B) effecting such withdrawal in compliance with the applicable procedures of the depository for the Registrable Securities.

As a condition to participating in the Exchange Offer, a Holder will be required to represent to the Company and the Guarantors that (i) any Exchange Securities to be received by it will be acquired in the ordinary course of its business, (ii) at the time of the commencement of the Exchange Offer it has no arrangement or understanding with any Person to participate in the distribution (within the meaning of the Securities Act) of the Exchange Securities in violation of the provisions of the Securities Act, (iii) it is not an "affiliate" (within the meaning of Rule 405 under the Securities Act) of the Company or any Guarantor and (iv) if such Holder is a broker-dealer that will receive Exchange Securities for its own account in exchange for Registrable Securities that were acquired as a result of market-making or other trading activities, then such Holder will deliver a Prospectus (or, to the extent permitted by law, make available a Prospectus to purchasers) in connection with any resale of such Exchange Securities.

As soon as practicable after the last Exchange Date, the Company and the Guarantors shall:

- (i) accept for exchange Registrable Securities or portions thereof validly tendered and not properly withdrawn pursuant to the Exchange Offer; and
- (ii) deliver, or cause to be delivered, to the Trustee for cancellation all Registrable Securities or portions thereof so accepted for exchange by the Company and issue, and cause the Trustee to promptly authenticate and deliver to each Holder, Exchange Securities equal in principal amount to the principal amount of the Registrable Securities tendered by such Holder.

The Company and the Guarantors shall use their commercially reasonable efforts to complete the Exchange Offer as provided above and shall comply with the applicable requirements of the Securities Act, the Exchange Act and other applicable laws and regulations in connection with the Exchange Offer. The Exchange Offer shall not be subject to any conditions, other than that the Exchange Offer does not violate any applicable law or applicable interpretations of the Staff.

(b) In the event that (i) the Company and the Guarantors determine that the Exchange Offer Registration provided for in Section 2 (a) hereof is not available or the Exchange Offer may not be completed as soon as practicable after the last Exchange Date because it would violate any applicable law or applicable interpretations of the Staff, (ii) the Exchange Offer is not for any other reason completed by December 21, 2017 or (iii) upon receipt of a written request (a "Shelf Request") from any Initial Purchaser representing that it holds Registrable Securities that are or were ineligible to be exchanged in the Exchange Offer (which Shelf Request must be made to the Company and the Guarantors on or before September 18, 2017), the Company and the Guarantors shall use their commercially reasonable efforts to cause to be filed as soon as practicable after such determination date or Shelf Request, as the case may be, a Shelf Registration Statement providing for the sale of all the Registrable Securities by the Holders thereof and to have such Shelf Registration Statement become effective; provided that no Holder will be entitled to have any Registrable Securities included in any Shelf Registration Statement, or entitled to use the prospectus forming a part of such Shelf Registration Statement, until such Holder shall have delivered a completed and signed Notice and Questionnaire and provided such other information regarding such Holder to the Company as is contemplated by Section 3(b) hereof.

In the event that the Company and the Guarantors are required to file a Shelf Registration Statement pursuant to clause (iii) of the preceding sentence, the Company and the Guarantors shall use their commercially reasonable efforts to file and have become effective both an Exchange Offer Registration Statement pursuant to Section 2(a) hereof with respect to all Registrable Securities and a Shelf Registration Statement (which may be a combined Registration Statement with the Exchange Offer Registration Statement) with respect to offers and sales of Registrable Securities held by the Initial Purchasers after completion of the Exchange Offer.

In the event that the Company and the Guarantors are required to file a Shelf Registration Statement pursuant to this Section 2(b), the Company and the Guarantors agree to use their commercially reasonable efforts to keep the Shelf Registration Statement continuously effective until the earlier of (i) one year following the effective date of such Shelf Registration Statement or (ii) such shorter period that will terminate when all the Registrable Securities covered by the Shelf Registration Statement have been sold pursuant to the Shelf Registration Statement or otherwise cease to be Registrable Securities (the "Shelf Effectiveness Period"). The Company and the Guarantors further agree to supplement or amend the Shelf Registration Statement, the related Prospectus and any Free Writing Prospectus if required by the rules, regulations or instructions applicable to the registration form used by the Company for such Shelf Registration Statement or by the Securities Act or by any other rules and regulations thereunder or if reasonably requested by a Holder of Registrable Securities with respect to information relating to such Holder, and to use their commercially reasonable efforts to cause any such amendment to become effective, if required, and such Shelf Registration Statement, Prospectus or Free Writing Prospectus, as the case may be, to become usable as soon as thereafter practicable. The Company and the Guarantors agree to furnish to the Participating Holders copies of any such supplement or amendment promptly after its being used or filed with the SEC.



(c) The Company and the Guarantors shall pay all Registration Expenses in connection with any registration pursuant to Section 2(a) or Section 2(b) hereof. Each Holder

7

---

shall pay all underwriting discounts and commissions, brokerage commissions and transfer taxes, if any, relating to the sale or disposition of such Holder's Registrable Securities pursuant to the Shelf Registration Statement.

(d) An Exchange Offer Registration Statement pursuant to Section 2(a) hereof will not be deemed to have become effective unless it has been declared effective by the SEC. A Shelf Registration Statement pursuant to Section 2(b) hereof will not be deemed to have become effective unless it has been declared effective by the SEC or is automatically effective upon filing with the SEC as provided by Rule 462 under the Securities Act.

In the event that either the Exchange Offer is not completed or the Shelf Registration Statement, if required pursuant to Section 2(b)(i), 2 (b)(ii) or 2(b)(iii) hereof, does not become effective on or prior to December 21, 2017 (the "Target Registration Date"), the interest rate on the Registrable Securities will be increased by 1.00% per annum until the Exchange Offer is completed or the Shelf Registration Statement, if required hereby, becomes effective.

If the Shelf Registration Statement, if required hereby, has become effective and thereafter either ceases to be effective or the Prospectus contained therein ceases to be usable, in each case whether or not permitted by this Agreement, at any time during the Shelf Effectiveness Period, and such failure to remain effective or usable exists for more than 30 days (whether or not consecutive) in any 12-month period, then the interest rate on the Registrable Securities will be increased by 1.00% per annum commencing on the 31st day in such 12-month period and ending on such date that the Shelf Registration Statement has again become effective or the Prospectus again becomes usable.

(e) The provisions for the payment of additional interest set forth in Section 2(d) shall be the only monetary remedy available to Holders for the Company's and the Guarantors' failure to cause the Exchange Offer Registration Statement or the Shelf Registration Statement to become effective, or continue to be effective, as the case may be, in accordance with the provisions of this Agreement.

3. Registration Procedures. (a) In connection with their obligations pursuant to Section 2(a) and Section 2(b) hereof, the Company and the Guarantors shall as expeditiously as possible:

- (i) prepare and file with the SEC a Registration Statement on the appropriate registration form under the Securities Act, which form (x) shall be selected by the Company and the Guarantors, (y) shall, in the case of a Shelf Registration, be available for the sale of the Registrable Securities by the Holders thereof and (z) shall comply as to form in all material respects with the requirements of the applicable form and include all financial statements required by the SEC to be filed therewith; and use their commercially reasonable efforts to cause such Registration Statement to become effective and remain effective for the applicable period in accordance with Section 2 hereof;
- 
- (ii) prepare and file with the SEC such amendments and post-effective amendments to each Registration Statement as may be necessary to keep such Registration Statement effective for the applicable period in accordance with Section 2 hereof and cause each Prospectus to be supplemented by any required prospectus supplement and, as so supplemented, to be filed pursuant to Rule 424 under the Securities Act; and keep each Prospectus current during the period described in Section 4(a)(3) of and Rule 174 under the Securities Act that is applicable to transactions by brokers or dealers with respect to the Registrable Securities or Exchange Securities;
  - (iii) to the extent any Free Writing Prospectus is used, file with the SEC any Free Writing Prospectus that is required to be filed by the Company or the Guarantors with the SEC in accordance with the Securities Act and to retain any Free Writing Prospectus not required to be filed;
  - (iv) in the case of a Shelf Registration, furnish to each Participating Holder, to counsel for the Initial Purchasers, to counsel for such Participating Holders and to each Underwriter of an Underwritten Offering of Registrable Securities, if any, without charge, as many copies of each Prospectus, preliminary prospectus or Free Writing Prospectus, and any amendment or supplement thereto, as such Participating Holder, counsel or Underwriter may reasonably request in order to facilitate the sale or other disposition of the Registrable Securities thereunder; and, subject to Section 3(c) hereof, the Company and the Guarantors consent to the use of such Prospectus, preliminary prospectus or such Free Writing Prospectus and any amendment or supplement thereto in accordance with applicable law by each of the Participating Holders and any such Underwriters in connection with the offering and sale of the Registrable Securities covered by and in the manner described in such Prospectus, preliminary prospectus or such Free Writing Prospectus or any amendment or supplement thereto in accordance with applicable law;
  - (v) use their commercially reasonable efforts to register or qualify the Registrable Securities under all applicable

state securities or blue sky laws of such jurisdictions as any Participating Holder covered by a Registration Statement shall reasonably request in writing by the time the applicable Registration Statement becomes effective; cooperate with such Participating Holders in connection with any filings required to be made with FINRA; and do any and all other acts and things that may be reasonably necessary or advisable to enable each Participating Holder to complete the disposition in each such jurisdiction of the Registrable Securities owned by such Participating Holder; provided that neither the Company nor any Guarantor shall be required to (1) qualify as a foreign corporation or other entity or as a dealer in securities in any such jurisdiction where it would not otherwise be required to so qualify, (2) file

9

---

any general consent to service of process in any such jurisdiction or (3) subject itself to taxation in any such jurisdiction if it is not so subject;

- (vi) notify counsel for the Initial Purchasers and, in the case of a Shelf Registration, notify each Participating Holder and counsel for such Participating Holders promptly and, if requested by any such Participating Holder or counsel, confirm such advice in writing (1) when a Registration Statement has become effective, when any post-effective amendment thereto has been filed and becomes effective, when any Free Writing Prospectus has been filed or any amendment or supplement to the Prospectus or any Free Writing Prospectus has been filed, (2) of any request by the SEC or any state securities authority for amendments and supplements to a Registration Statement, Prospectus or any Free Writing Prospectus or for additional information after the Registration Statement has become effective, (3) of the issuance by the SEC or any state securities authority of any stop order suspending the effectiveness of a Registration Statement or the initiation of any proceedings for that purpose, including the receipt by the Company of any notice of objection of the SEC to the use of a Shelf Registration Statement or any post-effective amendment thereto pursuant to Rule 401(g)(2) under the Securities Act, (4) if, between the applicable effective date of a Shelf Registration Statement and the closing of any sale of Registrable Securities covered thereby, the representations and warranties of the Company or any Guarantor contained in any underwriting agreement, securities sales agreement or other similar agreement, if any, relating to an offering of such Registrable Securities cease to be true and correct in all material respects or if the Company or any Guarantor receives any notification with respect to the suspension of the qualification of the Registrable Securities for sale in any jurisdiction or the initiation of any proceeding for such purpose, (5) of the happening of any event during the period a Registration Statement is effective that makes any statement made in such Registration Statement or the related Prospectus or any Free Writing Prospectus untrue in any material respect or that requires the making of any changes in such Registration Statement or Prospectus or any Free Writing Prospectus in order to make the statements therein not misleading and (6) of any determination by the Company or any Guarantor that a post-effective amendment to a Registration Statement or any amendment or supplement to the Prospectus or any Free Writing Prospectus would be appropriate;
- (vii) use their commercially reasonable efforts to obtain the withdrawal of any order suspending the effectiveness of a Registration Statement or, in the case of a Shelf Registration, the resolution of any objection of the SEC pursuant to Rule 401(g)(2) under the Securities Act, including by filing an amendment to such Registration Statement on the proper form, at the earliest possible moment and provide immediate notice to each Holder or Participating Holder of the withdrawal of any such order or such resolution;

10

---

- (viii) in the case of a Shelf Registration, furnish to each Participating Holder, without charge, at least one conformed copy of each Registration Statement and any post-effective amendment thereto (without any documents incorporated therein by reference or exhibits thereto, unless requested);
- (ix) in the case of a Shelf Registration, cooperate with the Participating Holders to facilitate the timely preparation and delivery of certificates representing Registrable Securities to be sold and not bearing any restrictive legends and enable such Registrable Securities to be issued in such denominations and registered in such names (consistent with the provisions of the Indenture) as such Participating Holders may reasonably request at least one Business Day prior to the closing of any sale of Registrable Securities;
- (x) upon the occurrence of any event contemplated by Section 3(a)(vi)(5) hereof, use their commercially reasonable efforts to prepare and file with the SEC a supplement or post-effective amendment to the applicable Exchange Offer Registration Statement or Shelf Registration Statement or the related Prospectus or any Free Writing Prospectus or any document incorporated therein by reference or file any other required document so that, as thereafter delivered (or, to the extent permitted by law, made available) to purchasers of the Registrable Securities, such Prospectus or Free Writing Prospectus, as the case may be, will not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading; and the Company and the Guarantors shall notify the Participating Holders (in the case of a Shelf Registration Statement) and the Initial Purchasers and any Participating Broker-Dealers known to the Company (in the case of an Exchange Offer Registration Statement) to suspend use of the Prospectus or any Free Writing Prospectus as promptly as practicable after the occurrence of such an event, and such Participating Holders, such Participating Broker-Dealers and the Initial Purchasers, as

applicable, hereby agree to suspend use of the Prospectus or any Free Writing Prospectus, as the case may be, until the Company and the Guarantors have amended or supplemented the Prospectus or the Free Writing Prospectus, as the case may be, to correct such misstatement or omission;

- (xi) a reasonable time prior to the filing of any Registration Statement, any Prospectus, any Free Writing Prospectus, any amendment to a Registration Statement or amendment or supplement to a Prospectus or a Free Writing Prospectus or of any document that is to be incorporated by reference into a Registration Statement, a Prospectus or a Free Writing Prospectus after initial filing of a Registration Statement, provide copies of such document to the Initial Purchasers and their counsel (and, in the case of a Shelf Registration Statement, to the Participating Holders and their counsel) and

11

---

make such of the representatives of the Company and the Guarantors as shall be reasonably requested by the Initial Purchasers or their counsel (and, in the case of a Shelf Registration Statement, the Participating Holders or their counsel) available for discussion of such document; and the Company and the Guarantors shall not, at any time after initial filing of a Registration Statement, use or file any Prospectus, any Free Writing Prospectus, any amendment of or supplement to a Registration Statement or a Prospectus or a Free Writing Prospectus, or any document that is to be incorporated by reference into a Registration Statement, a Prospectus or a Free Writing Prospectus, of which the Initial Purchasers and their counsel (and, in the case of a Shelf Registration Statement, the Participating Holders and their counsel) shall not have previously been advised and furnished a copy or to which the Initial Purchasers or their counsel (and, in the case of a Shelf Registration Statement, the Participating Holders or their counsel) shall object;

- (xii) obtain a CUSIP number for all Exchange Securities or Registrable Securities, as the case may be, not later than the initial effective date of a Registration Statement;
- (xiii) cause the Indenture to be qualified under the Trust Indenture Act in connection with the registration of the Exchange Securities or Registrable Securities, as the case may be; cooperate with the Trustee and the Holders to effect such changes to the Indenture as may be required for the Indenture to be so qualified in accordance with the terms of the Trust Indenture Act; and execute, and use their commercially reasonable efforts to cause the Trustee to execute, all documents as may be required to effect such changes and all other forms and documents required to be filed with the SEC to enable the Indenture to be so qualified in a timely manner;
- (xiv) in the case of a Shelf Registration, make available for inspection by a representative of the Participating Holders (an "Inspector"), any Underwriter participating in any disposition pursuant to such Shelf Registration Statement, any attorneys and accountants designated by a majority in aggregate principal amount of the Securities held by the Participating Holders and any attorneys and accountants designated by such Underwriter, at reasonable times and in a reasonable manner, all pertinent financial and other records, documents and properties of the Company and its subsidiaries, and cause the respective officers, directors and employees of the Company and the Guarantors to supply all information reasonably requested by any such Inspector, Underwriter, attorney or accountant in connection with a Shelf Registration Statement; provided that if any such information is identified by the Company or any Guarantor as being confidential or proprietary, each Person receiving such information shall take such actions as are reasonably necessary to protect the confidentiality of such information to the extent such action is

12

---

otherwise not inconsistent with, an impairment of or in derogation of the rights and interests of any Inspector, Holder or Underwriter;

- (xv) in the case of a Shelf Registration, use their commercially reasonable efforts to cause all Registrable Securities to be listed on any securities exchange or any automated quotation system on which similar securities issued or guaranteed by the Company or any Guarantor are then listed if requested by the Majority Holders, to the extent such Registrable Securities satisfy applicable listing requirements;
- (xvi) if reasonably requested by any Participating Holder, promptly include in a Prospectus supplement or post-effective amendment such information with respect to such Participating Holder as such Participating Holder reasonably requests to be included therein and make all required filings of such Prospectus supplement or such post-effective amendment as soon as the Company has received notification of the matters to be so included in such filing;
- (xvii) in the case of an Underwritten Offering pursuant to a Shelf Registration Statement, enter into such customary agreements and take all such other actions in connection therewith (including those requested by the Holders of a majority in principal amount of the Registrable Securities covered by the Shelf Registration Statement) in order to expedite or facilitate the disposition of such Registrable Securities and in such connection, (1) to the extent possible, make such representations and warranties to the Participating Holders and any Underwriters of such Registrable Securities with respect to the business of the Company and its subsidiaries and the Registration

Statement, Prospectus, any Free Writing Prospectus and documents incorporated by reference or deemed incorporated by reference, if any, in each case, in form, substance and scope as are customarily made by issuers to underwriters in underwritten offerings and confirm the same if and when requested, (2) obtain opinions of counsel to the Company and the Guarantors (which counsel and opinions, in form, scope and substance, shall be reasonably satisfactory to the Participating Holders and such Underwriters and their respective counsel) addressed to each Participating Holder and Underwriter of Registrable Securities, covering the matters customarily covered in opinions requested in underwritten offerings, (3) obtain “comfort” letters from the independent registered public accountants of the Company and the Guarantors (and, if necessary, any other registered public accountant of any subsidiary of the Company or any Guarantor, or of any business acquired by the Company or any Guarantor for which financial statements and financial data are or are required to be included in the Registration Statement) addressed to each Participating Holder (to the extent permitted by applicable professional standards) and Underwriter of Registrable Securities, such letters to be in customary form and covering matters of the type customarily covered in “comfort” letters in connection with underwritten

offerings, including but not limited to financial information contained in any preliminary prospectus, Prospectus or Free Writing Prospectus, (4) reserve report confirmation letters, addressed to each Underwriter and Participating Holder, from the independent reserve engineers of the Company and the Guarantors in the customary form and covering matters of the type customarily included in such letters to underwriters in connection with underwritten offerings and (5) deliver such documents and certificates as may be reasonably requested by the Holders of a majority in principal amount of the Registrable Securities being sold or the Underwriters, and which are customarily delivered in underwritten offerings, to evidence the continued validity of the representations and warranties of the Company and the Guarantors made pursuant to clause (1) above and to evidence compliance with any customary conditions contained in an underwriting agreement; and

- (xviii) so long as any Registrable Securities remain outstanding, cause each Additional Guarantor upon the creation or acquisition by the Company of such Additional Guarantor, to execute a counterpart to this Agreement in the form attached hereto as Annex A and to deliver such counterpart, together with an opinion of counsel as to the enforceability thereof against such entity, to the Initial Purchasers no later than five Business Days following the execution thereof.

(b) In the case of a Shelf Registration Statement, the Company may require each Holder of Registrable Securities to furnish to the Company a Notice and Questionnaire and such other information regarding such Holder and the proposed disposition by such Holder of such Registrable Securities as the Company and the Guarantors may from time to time reasonably request in writing.

(c) Each Participating Holder agrees that, upon receipt of any notice from the Company and the Guarantors of the happening of any event of the kind described in Section 3(a)(vi)(3) or Section 3(a)(vi)(5) hereof, such Participating Holder will forthwith discontinue disposition of Registrable Securities pursuant to the Shelf Registration Statement until such Participating Holder’s receipt of the copies of the supplemented or amended Prospectus and any Free Writing Prospectus contemplated by Section 3(a)(x) hereof and, if so directed by the Company and the Guarantors, such Participating Holder will deliver to the Company and the Guarantors all copies in its possession, other than permanent file copies then in such Participating Holder’s possession, of the Prospectus and any Free Writing Prospectus covering such Registrable Securities that is current at the time of receipt of such notice.

(d) If the Company and the Guarantors shall give any notice to suspend the disposition of Registrable Securities pursuant to a Registration Statement, the Company and the Guarantors shall extend the period during which such Registration Statement shall be maintained effective pursuant to this Agreement by the number of days during the period from and including the date of the giving of such notice to and including the date when the Holders of such Registrable Securities shall have received copies of the supplemented or amended Prospectus or any Free Writing Prospectus necessary to resume such dispositions. The Company and the

Guarantors may give any such notice only twice during any 365-day period and any such suspensions shall not exceed 30 days for each suspension and there shall not be more than two suspensions in effect during any 365-day period.

(e) The Participating Holders who desire to do so may sell such Registrable Securities in an Underwritten Offering. In any such Underwritten Offering, the investment bank or investment banks and manager or managers (each an “Underwriter”) that will administer the offering will be selected by the Holders of a majority in principal amount of the Registrable Securities included in such offering.

4. Participation of Broker-Dealers in Exchange Offer. (a) The Staff has taken the position that any broker-dealer that receives Exchange Securities for its own account in the Exchange Offer in exchange for Securities that were acquired by such broker-dealer as a result of market-making or other trading activities (a “Participating Broker-Dealer”) may be deemed to be an “underwriter” within the meaning of the Securities Act and must deliver a prospectus meeting the requirements of the Securities Act in connection with any resale of such Exchange Securities.

The Company and the Guarantors understand that it is the Staff’s position that if the Prospectus contained in the Exchange Offer Registration Statement includes a plan of distribution containing a statement to the above effect and the means by which Participating

Broker-Dealers may resell the Exchange Securities, without naming the Participating Broker-Dealers or specifying the amount of Exchange Securities owned by them, such Prospectus may be delivered by Participating Broker-Dealers (or, to the extent permitted by law, made available to purchasers) to satisfy their prospectus delivery obligation under the Securities Act in connection with resales of Exchange Securities for their own accounts, so long as the Prospectus otherwise meets the requirements of the Securities Act.

(b) In light of the above, and notwithstanding the other provisions of this Agreement, the Company and the Guarantors, upon request, agree to amend or supplement the Prospectus contained in the Exchange Offer Registration Statement for a period of up to 180 days after the last Exchange Date (as such period may be extended pursuant to Section 3(d) hereof), in order to expedite or facilitate the disposition of any Exchange Securities by Participating Broker-Dealers consistent with the positions of the Staff recited in Section 4(a) above. The Company and the Guarantors further agree that Participating Broker-Dealers shall be authorized to deliver such Prospectus (or, to the extent permitted by law, make available) during such period in connection with the resales contemplated by this Section 4.

(c) The Initial Purchasers shall have no liability to the Company, any Guarantor or any Holder with respect to any request that they may make pursuant to Section 4(b) hereof.

5. Indemnification and Contribution. (a) The Company and each Guarantor, jointly and severally, agree to indemnify and hold harmless each Initial Purchaser and each Holder, their respective affiliates, directors and officers and each Person, if any, who controls any Initial Purchaser or any Holder within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act, from and against any and all losses, claims, damages and liabilities (including, without limitation, legal fees and other expenses incurred in connection with any suit, action or proceeding or any claim asserted, as such fees and expenses are incurred), joint or several, that

15

---

arise out of, or are based upon, (1) any untrue statement or alleged untrue statement of a material fact contained in any Registration Statement or any omission or alleged omission to state therein a material fact required to be stated therein or necessary in order to make the statements therein not misleading, or (2) any untrue statement or alleged untrue statement of a material fact contained in any Prospectus, any Free Writing Prospectus or any "issuer information" ("Issuer Information") filed or required to be filed pursuant to Rule 433(d) under the Securities Act, or any omission or alleged omission to state therein a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading, in each case except insofar as such losses, claims, damages or liabilities arise out of, or are based upon, any untrue statement or omission or alleged untrue statement or omission made in reliance upon and in conformity with any information relating to any Initial Purchaser or information relating to any Holder furnished to the Company in writing through J.P. Morgan or any selling Holder, respectively, expressly for use therein. In connection with any Underwritten Offering permitted by Section 3, the Company and the Guarantors, jointly and severally, will also indemnify the Underwriters, their affiliates and each Person who controls such Underwriters (within the meaning of the Securities Act and the Exchange Act) to the same extent as provided above with respect to the indemnification of the Holders, if requested in connection with any Registration Statement, any Prospectus, any Free Writing Prospectus or any Issuer Information.

(b) Each Holder agrees, severally and not jointly, to indemnify and hold harmless the Company, the Guarantors, the Initial Purchasers and the other selling Holders, the directors of the Company and the Guarantors, each officer of the Company and the Guarantors who signed the Registration Statement and each Person, if any, who controls the Company, the Guarantors, any Initial Purchaser and any other selling Holder within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act to the same extent as the indemnity set forth in paragraph (a) above, but only with respect to any losses, claims, damages or liabilities that arise out of, or are based upon, any untrue statement or omission or alleged untrue statement or omission made in reliance upon and in conformity with any information relating to such Holder furnished to the Company in writing by such Holder expressly for use in any Registration Statement, any Prospectus and any Free Writing Prospectus.

(c) If any suit, action, proceeding (including any governmental or regulatory investigation), claim or demand shall be brought or asserted against any Person in respect of which indemnification may be sought pursuant to either paragraph (a) or (b) above, such Person (the "Indemnified Person") shall promptly notify the Person against whom such indemnification may be sought (the "Indemnifying Person") in writing; provided that the failure to notify the Indemnifying Person shall not relieve it from any liability that it may have under paragraph (a) or (b) above except to the extent that it has been materially prejudiced (through the forfeiture of substantive rights or defenses) by such failure; and provided, further, that the failure to notify the Indemnifying Person shall not relieve it from any liability that it may have to an Indemnified Person otherwise than under paragraph (a) or (b) above. If any such proceeding shall be brought or asserted against an Indemnified Person and it shall have notified the Indemnifying Person thereof, the Indemnifying Person shall retain counsel reasonably satisfactory to the Indemnified Person to represent the Indemnified Person and any others entitled to indemnification pursuant to this Section 5 that the Indemnifying Person may designate in such proceeding and shall pay the fees and expenses of such proceeding and shall pay the fees and expenses of such counsel related to such proceeding, as incurred. In any such proceeding, any Indemnified Person shall have the

16

---

right to retain its own counsel, but the fees and expenses of such counsel shall be at the expense of such Indemnified Person unless (i) the Indemnifying Person and the Indemnified Person shall have mutually agreed to the contrary; (ii) the Indemnifying Person has failed within a reasonable time to retain counsel reasonably satisfactory to the Indemnified Person; (iii) the Indemnified Person shall have reasonably concluded that there may be legal defenses available to it that are different from or in addition to those available to the Indemnifying Person; or (iv) the named parties in any such proceeding (including any impleaded parties) include both the Indemnifying Person and the Indemnified Person and representation of both parties by the same counsel would be inappropriate due to actual or

potential differing interests between them. It is understood and agreed that the Indemnifying Person shall not, in connection with any proceeding or related proceeding in the same jurisdiction, be liable for the fees and expenses of more than one separate firm (in addition to any local counsel) for all Indemnified Persons, and that all such fees and expenses shall be reimbursed as they are incurred. Any such separate firm (x) for any Initial Purchaser, its affiliates, directors and officers and any control Persons of such Initial Purchaser shall be designated in writing by J.P. Morgan, (y) for any Holder, its directors and officers and any control Persons of such Holder shall be designated in writing by the Majority Holders and (z) in all other cases shall be designated in writing by the Company. The Indemnifying Person shall not be liable for any settlement of any proceeding effected without its written consent, but if settled with such consent or if there be a final judgment for the plaintiff, the Indemnifying Person agrees to indemnify each Indemnified Person from and against any loss or liability by reason of such settlement or judgment. No Indemnifying Person shall, without the written consent of the Indemnified Person, effect any settlement of any pending or threatened proceeding in respect of which any Indemnified Person is or could have been a party and indemnification could have been sought hereunder by such Indemnified Person, unless such settlement (A) includes an unconditional release of such Indemnified Person, in form and substance reasonably satisfactory to such Indemnified Person, from all liability on claims that are the subject matter of such proceeding and (B) does not include any statement as to or any admission of fault, culpability or a failure to act by or on behalf of any Indemnified Person.

(d) If the indemnification provided for in paragraphs (a) and (b) above is unavailable to an Indemnified Person or insufficient in respect of any losses, claims, damages or liabilities referred to therein, then each Indemnifying Person under such paragraph, in lieu of indemnifying such Indemnified Person thereunder, shall contribute to the amount paid or payable by such Indemnified Person as a result of such losses, claims, damages or liabilities (i) in such proportion as is appropriate to reflect the relative benefits received by the Company and the Guarantors from the offering of the Securities and the Exchange Securities, on the one hand, and by the Holders from receiving Securities or Exchange Securities registered under the Securities Act, on the other hand, or (ii) if the allocation provided by clause (i) is not permitted by applicable law, in such proportion as is appropriate to reflect not only the relative benefits referred to in clause (i) but also the relative fault of the Company and the Guarantors on the one hand and the Holders on the other in connection with the statements or omissions that resulted in such losses, claims, damages or liabilities, as well as any other relevant equitable considerations. The relative fault of the Company and the Guarantors on the one hand and the Holders on the other shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission or alleged omission to state a material fact relates to information supplied by the Company and the Guarantors or by the Holders and the parties'

17

---

relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission.

(e) The Company, the Guarantors and the Holders agree that it would not be just and equitable if contribution pursuant to this Section 5 were determined by pro rata allocation (even if the Holders were treated as one entity for such purpose) or by any other method of allocation that does not take account of the equitable considerations referred to in paragraph (d) above. The amount paid or payable by an Indemnified Person as a result of the losses, claims, damages and liabilities referred to in paragraph (d) above shall be deemed to include, subject to the limitations set forth above, any legal or other expenses incurred by such Indemnified Person in connection with any such action or claim. Notwithstanding the provisions of this Section 5, in no event shall a Holder be required to contribute any amount in excess of the amount by which the total price at which the Securities or Exchange Securities sold by such Holder exceeds the amount of any damages that such Holder has otherwise been required to pay by reason of such untrue or alleged untrue statement or omission or alleged omission. No Person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any Person who was not guilty of such fraudulent misrepresentation. The Holders' obligations to contribute pursuant to this Section 5 are several and not joint.

(f) The remedies provided for in this Section 5 are not exclusive and shall not limit any rights or remedies that may otherwise be available to any Indemnified Person at law or in equity.

(g) The indemnity and contribution provisions contained in this Section 5 shall remain operative and in full force and effect regardless of (i) any termination of this Agreement, (ii) any investigation made by or on behalf of the Initial Purchasers or any Holder or any Person controlling any Initial Purchaser or any Holder, or by or on behalf of the Company or the Guarantors or the officers or directors of or any Person controlling the Company or the Guarantors, (iii) acceptance of any of the Exchange Securities and (iv) any sale of Registrable Securities pursuant to a Shelf Registration Statement.

## 6. General.

(a) *No Inconsistent Agreements.* The Company and the Guarantors represent, warrant and agree that (i) the rights granted to the Holders hereunder do not in any way conflict with and are not inconsistent with the rights granted to the holders of any other outstanding securities issued or guaranteed by the Company or any Guarantor under any other agreement and (ii) neither the Company nor any Guarantor has entered into, or on or after the date of this Agreement will enter into, any agreement that is inconsistent with the rights granted to the Holders of Registrable Securities in this Agreement or otherwise conflicts with the provisions hereof.

(b) *Amendments and Waivers.* The provisions of this Agreement, including the provisions of this sentence, may not be amended, modified or supplemented, and waivers or consents to departures from the provisions hereof may not be given unless the Company and the Guarantors have obtained the written consent of Holders of at least a majority in aggregate principal amount of the outstanding Registrable Securities affected by such amendment,

18

---

modification, supplement, waiver or consent; provided that no amendment, modification, supplement, waiver or consent to any departure from the provisions of Section 5 hereof shall be effective as against any Holder of Registrable Securities unless consented to in writing by such Holder. Any amendments, modifications, supplements, waivers or consents pursuant to this Section 6(b) shall be by a writing executed by each of the parties hereto.

(c) *Notices.* All notices and other communications provided for or permitted hereunder shall be made in writing by hand-delivery, registered first-class mail, telex, telecopier, or any courier guaranteeing overnight delivery (i) if to a Holder, at the most current address given by such Holder to the Company by means of a notice given in accordance with the provisions of this Section 6(c), which address initially is, with respect to the Initial Purchasers, the address set forth in the Purchase Agreement; (ii) if to the Company and the Guarantors, initially at the Company's address set forth in the Purchase Agreement and thereafter at such other address, notice of which is given in accordance with the provisions of this Section 6(c); and (iii) to such other persons at their respective addresses as provided in the Purchase Agreement and thereafter at such other address, notice of which is given in accordance with the provisions of this Section 6(c). All such notices and communications shall be deemed to have been duly given: at the time delivered by hand, if personally delivered; five Business Days after being deposited in the mail, postage prepaid, if mailed; when answered back, if telexed; when receipt is acknowledged, if telecopied; and on the next Business Day if timely delivered to an air courier guaranteeing overnight delivery. Copies of all such notices, demands or other communications shall be concurrently delivered by the Person giving the same to the Trustee, at the address specified in the Indenture.

(d) *Successors and Assigns.* This Agreement shall inure to the benefit of and be binding upon the successors, assigns and transferees of each of the parties, including, without limitation and without the need for an express assignment, subsequent Holders; provided that nothing herein shall be deemed to permit any assignment, transfer or other disposition of Registrable Securities in violation of the terms of the Purchase Agreement or the Indenture. If any transferee of any Holder shall acquire Registrable Securities in any manner, whether by operation of law or otherwise, such Registrable Securities shall be held subject to all the terms of this Agreement, and by taking and holding such Registrable Securities such Person shall be conclusively deemed to have agreed to be bound by and to perform all of the terms and provisions of this Agreement and such Person shall be entitled to receive the benefits hereof. The Initial Purchasers (in their capacity as Initial Purchasers) shall have no liability or obligation to the Company or the Guarantors with respect to any failure by a Holder to comply with, or any breach by any Holder of, any of the obligations of such Holder under this Agreement.

(e) *Third Party Beneficiaries.* Each Holder shall be a third party beneficiary to the agreements made hereunder between the Company and the Guarantors, on the one hand, and the Initial Purchasers, on the other hand, and shall have the right to enforce such agreements directly to the extent it deems such enforcement necessary or advisable to protect its rights or the rights of other Holders hereunder.

(f) *Counterparts.* This Agreement may be executed in any number of counterparts and by the parties hereto in separate counterparts, each of which when so executed shall be

19

---

deemed to be an original and all of which taken together shall constitute one and the same agreement.

(g) *Headings.* The headings in this Agreement are for convenience of reference only, are not a part of this Agreement and shall not limit or otherwise affect the meaning hereof.

(h) *Governing Law.* This Agreement, and any claim, controversy or dispute arising under or related to this Agreement, shall be governed by and construed in accordance with the laws of the State of New York.

(i) *Entire Agreement; Severability.* This Agreement contains the entire agreement between the parties relating to the subject matter hereof and supersedes all oral statements and prior writings with respect thereto. If any term, provision, covenant or restriction contained in this Agreement is held by a court of competent jurisdiction to be invalid, void or unenforceable or against public policy, the remainder of the terms, provisions, covenants and restrictions contained herein shall remain in full force and effect and shall in no way be affected, impaired or invalidated. The Company, the Guarantors and the Initial Purchasers shall endeavor in good faith negotiations to replace the invalid, void or unenforceable provisions with valid provisions the economic effect of which comes as close as possible to that of the invalid, void or unenforceable provisions.

20

---

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

ANTERO RESOURCES CORPORATION

By /s/ Alvyn A. Schopp

Name: Alvyn A. Schopp

Title: Chief Administrative Officer, Regional  
Senior Vice President and Treasurer

Initial Guarantors:

AR OHIO LLC  
MONROE PIPELINE LLC

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

ANTERO EXCHANGE PROPERTIES LLC

By /s/ Alvyn A. Schopp  
Name: Alvyn A. Schopp  
Title: Authorized Signatory

[Signature page to Registration Rights Agreement]

---

Confirmed and accepted as of the date first above written:

J.P. MORGAN SECURITIES LLC

For itself and on behalf of the  
several Initial Purchasers

By /s/ Catherine O'Donnell  
Authorized Signatory

[Signature page to Registration Rights Agreement]

---

**Schedule 1**

Guarantors

AR OHIO LLC  
Monroe Pipeline LLC  
Antero Exchange Properties LLC

---

**Annex A**

Counterpart to Registration Rights Agreement

The undersigned hereby absolutely, unconditionally and irrevocably agrees as a Guarantor (as defined in the Registration Rights Agreement, dated as of December 21, 2016 by and among Antero Resources Corporation, a Delaware corporation, the initial guarantors party thereto and J.P. Morgan Securities LLC, on behalf of itself and the other Initial Purchasers) to be bound by the terms and provisions of such Registration Rights Agreement.

IN WITNESS WHEREOF, the undersigned has executed this counterpart as of \_\_\_\_\_, 20 .

[GUARANTOR]

By: \_\_\_\_\_  
Name:  
Title:

---