Atlas Barnett, LLC
Form S-4
October 06, 2014
Table of Contents

As filed with the Securities and Exchange Commission on October 3, 2014

Registration No. 333-

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-4

REGISTRATION STATEMENT

UNDER

THE SECURITIES ACT OF 1933

ATLAS RESOURCE PARTNERS, L.P.*

ATLAS ENERGY HOLDINGS OPERATING COMPANY, LLC

ATLAS RESOURCE FINANCE CORPORATION

(Exact name of registrant as specified in its charter)

Delaware	**1311**	**45-3591625**
Delaware	**1311**	**27-4735285**
Delaware	**1311**	**90-0812516**
(State or other jurisdiction of incorporation or organization)	**(Primary Standard Industrial Classification Code Number)**	**(I.R.S. Employer Identification No.)**

Park Place Corporate Center One

1000 Commerce Drive, 4th Floor

Pittsburgh, PA 15275-1011

(800) 251-0171

(Address, including zip code, and telephone number, including area code, of registrant s principal executive office)

Edward E. Cohen

Atlas Resource Partners GP, LLC

Park Place Corporate Center One

1000 Commerce Drive, 4th Floor

Pittsburgh, PA 15275-1011

(800) 251-0171

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Please send copies of communications to:

J. Baur Whittlesey, Esq.

Mark E. Rosenstein, Esq.

Ledgewood

1900 Market Street

Philadelphia, Pennsylvania 19103

(215) 731-9450

Approximate date of commencement of proposed sale to the public: As soon as practicable after this registration statement becomes effective.

If the securities being registered on this Form are being offered in connection with the formation of a holding company and there is compliance with General Instruction G, check the following box. ¨

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ¨

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ¨

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

Large accelerated filer x	Accelerated filer ¨
Non-accelerated filer ¨	Smaller reporting company ¨

If applicable, place an X in the box to designate the appropriate rule provision relied upon in conducting this transaction:

Exchange Act Rule 13e-4(i) (Cross-Border Issuer Tender Offer) ¨

Exchange Act Rule 14d-1(d) (Cross-Border Third-Party Tender Offer) ¨

Calculation of Registration Fee

Title of each class of securities to be registered	**Amount to be registered**	**Proposed maximum offering price for note**	**Proposed maximum aggregate offering price**	**Amount of registration fee[1]**
7.75% Senior Notes due 2021	$100,000,000	100%	$100,000,000	$11,620
Guarantees[2]				

(1) Determined in accordance with Rule 457(f)(2) under the Securities Act of 1933, as amended.
(2) No separate consideration will be received for the guarantees, and no separate fee is payable pursuant to Rule 457(n) of the Securities Act.

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until this registration statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

* See table of additional registrants.

Table of Contents

Exact name of registrant as specified in its charter	State or other jurisdiction of incorporation or organization	I.R.S. Employer Identification Number	Address, including zip code, and telephone number, including area code, of registrant s principal executive offices
Atlas Resources, LLC	Pennsylvania	20-4822875	Park Place Corporate Center One 1000 Commerce Drive, 4th Floor Pittsburgh, PA 15275-1011 (800) 251-0171
Viking Resources, LLC	Pennsylvania	20-5365124	Park Place Corporate Center One 1000 Commerce Drive, 4th Floor Pittsburgh, PA 15275-1011 (800) 251-0171
Resource Energy, LLC	Delaware	20-5365174	Park Place Corporate Center One 1000 Commerce Drive, 4th Floor Pittsburgh, PA 15275-1011 (800) 251-0171
ARP Barnett, LLC	Delaware	90-0812567	Park Place Corporate Center One 1000 Commerce Drive, 4th Floor Pittsburgh, PA 15275-1011 (800) 251-0171
ARP Barnett Pipeline, LLC	Delaware	61-1682295	Park Place Corporate Center One 1000 Commerce Drive, 4th Floor Pittsburgh, PA 15275-1011 (800) 251-0171
Atlas Barnett, LLC	Texas	26-2654688	Park Place Corporate Center One 1000 Commerce Drive, 4th Floor Pittsburgh, PA 15275-1011 (800) 251-0171
Atlas Noble, LLC	Delaware	20-5365139	Park Place Corporate Center One 1000 Commerce Drive, 4th Floor Pittsburgh, PA 15275-1011 (800) 251-0171
REI-NY, LLC	Delaware	20-5365147	Park Place Corporate Center One 1000 Commerce Drive, 4th Floor

			Pittsburgh, PA 15275-1011
Atlas Energy Indiana, LLC	Indiana	26-3210546	(800) 251-0171 Park Place Corporate Center One 1000 Commerce Drive, 4th Floor Pittsburgh, PA 15275-1011
Atlas Energy Tennessee, LLC	Pennsylvania	26-2770794	(800) 251-0171 Park Place Corporate Center One 1000 Commerce Drive, 4th Floor Pittsburgh, PA 15275-1011
Atlas Energy Ohio, LLC	Ohio	20-5365198	(800) 251-0171 Park Place Corporate Center One 1000 Commerce Drive, 4th Floor Pittsburgh, PA 15275-1011
ARP Oklahoma, LLC	Oklahoma	90-0815193	(800) 251-0171 Park Place Corporate Center One 1000 Commerce Drive, 4th Floor Pittsburgh, PA 15275-1011
Atlas Energy Colorado, LLC	Colorado	45-2120015	(800) 251-0171 Park Place Corporate Center One 1000 Commerce Drive, 4th Floor Pittsburgh, PA 15275-1011
Resource Well Services, LLC	Delaware	20-5365162	(800) 251-0171 Park Place Corporate Center One 1000 Commerce Drive, 4th Floor Pittsburgh, PA 15275-1011
ARP Production Company, LLC	Delaware	90-0999968	(800) 251-0171 Park Place Corporate Center One 1000 Commerce Drive, 4th Floor Pittsburgh, PA 15275-1011
ARP Mountaineer Production, LLC	Delaware	80-0959365	(800) 251-0171 Park Place Corporate Center One 1000 Commerce Drive, 4th Floor Pittsburgh, PA 15275-1011
ARP Rangely Production, LLC	Delaware	46-5641625	(800) 251-0171 Park Place Corporate Center One

			1000 Commerce Drive, 4th Floor Pittsburgh, PA 15275-1011 (800) 251-0171
ARP Eagle Ford, LLC	Texas	47-1846894	Park Place Corporate Center One 1000 Commerce Drive, 4th Floor Pittsburgh, PA 15275-1011 (800) 251-0171

Table of Contents

Subject to Completion, dated October 3, 2014

The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

Prospectus

ATLAS RESOURCE PARTNERS, L.P.

ATLAS ENERGY HOLDINGS OPERATING COMPANY, LLC

ATLAS RESOURCE FINANCE CORPORATION

Offer to Exchange

Registered 7.75% Senior Notes due 2021

for

All outstanding 7.75% Senior Notes due 2021 issued June 2, 2014

($100,000,000 in principal amount outstanding)

Terms of the exchange offer:

We are offering to exchange, upon the terms of and subject to the conditions set forth in this prospectus and the accompanying letter of transmittal, all of outstanding 7.75% Senior Notes due 2021 issued on June 2, 2014 by Atlas Energy Holdings Operating Company, LLC and Atlas Resource Finance Corporation, for registered 7.75% Senior Notes due 2021. In this prospectus, we refer to the notes originally issued on June 2, 2014 as the new issue notes and the registered notes the exchange notes.

The terms of the exchange notes will be identical in all material respects to the terms of the new issue notes, except that the transfer restrictions, registration rights and additional interest provisions of the new issue notes will not apply to the exchange notes.

The exchange offer expires at 5:00 p.m., New York City time, on [ ], [ ], 2014, unless extended.

You may withdraw your tender of new issue notes at any time before the expiration of the exchange offer. We will exchange all new issue notes validly tendered and not withdrawn.

The exchange offer is not subject to any condition other than that the exchange offer not violate applicable law or any applicable interpretation of the staff of the Securities and Exchange Commission.

There is no existing public market for the exchange notes. We do not intend to list the exchange notes on any securities exchange or seek approval for quotation through any automated trading system.

We will not receive any cash proceeds from the exchange offer.

Interest on the exchange notes will be paid at the rate of 7.75% per annum, semi-annually in arrears on each January 15 and July 15.

Please read Risk Factors beginning on page 9 for a discussion of factors you should consider before participating in the exchange offer.

These securities have not been approved or disapproved by the Securities and Exchange Commission or any state securities commission nor has the Securities and Exchange Commission passed upon the accuracy or adequacy of this prospectus. Any representation to the contrary is a criminal offense.

Each broker-dealer that receives the exchange notes for its own account pursuant to this exchange offer must acknowledge by way of the letter of transmittal that it will deliver a prospectus in connection with any resale of the notes. This prospectus, as it may be amended or supplemented from time to time, may be used by a broker-dealer in connection with resales of the exchange notes received in exchange for new issue notes where such new issue notes were acquired by such broker-dealer as a result of market-making activities or other trading activities. We have agreed to make this prospectus available for a period of 180 days from the expiration date of this exchange offer to any broker-dealer for use in connection with any such resale. See Plan of Distribution.

The date of this prospectus is [ ], 2014.

Table of Contents

TABLE OF CONTENTS

SUMMARY	1
RISK FACTORS	9
SELECTED HISTORICAL FINANCIAL DATA	37
USE OF PROCEEDS	42
RATIO OF EARNINGS TO FIXED CHARGES	42
CAPITALIZATION	43
EXCHANGE OFFER	44
DESCRIPTION OF OTHER INDEBTEDNESS	50
DESCRIPTION OF THE EXCHANGE NOTES	53
CERTAIN UNITED STATES FEDERAL INCOME TAX CONSEQUENCES	113
PLAN OF DISTRIBUTION	114
LEGAL MATTERS	116
EXPERTS	116
WHERE YOU CAN FIND MORE INFORMATION	117

This prospectus is part of a registration statement we filed with the Securities and Exchange Commission. In making your investment decision, you should rely only on the information contained in or incorporated by reference into this prospectus and in the letter of transmittal accompanying this prospectus. We have not authorized anyone to provide you with any other information. If you receive any unauthorized information, you must not rely on it. We are not making an offer to sell these securities in any state where the offer is not permitted. You should not assume that the information contained in this prospectus or in the documents incorporated by reference into this prospectus are accurate as of any date other than the date on the front cover of this prospectus or the date of such incorporated documents, as the case may be.

This prospectus incorporates by reference business and financial information about us that is not included in or delivered with this prospectus. This information is available without charge upon written or oral request directed to: Investor Relations, Atlas Resource Partners, L.P., Park Place Corporate Center One, 1000 Commerce Drive, 4th Floor, Pittsburgh, PA 15275-1011; telephone number: (877) 280-2857. To obtain timely delivery, you must request the information no later than [ ], 2014.

Table of Contents

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus includes statements that express our opinions, expectations, beliefs, plans, objectives, assumptions or projections regarding future events or future results and therefore are, or may be deemed to be, forward-looking statements. The forward-looking statements are based on our current expectations and projections about future events. Readers should consider the various factors, including those discussed in our annual report for the year ended December 31, 2013 and our quarterly reports for the quarters ended March 31, 2014 and June 30, 2014 under Risk Factors, Management s Discussion and Analysis of Financial Condition and Results of Operations and Critical Accounting Policies and Estimates, on file with the SEC for additional factors that may affect our performance. In some cases, you can identify forward-looking statements by terminology such as may, will, should, could, predicts, projects, potential, continue, expects, anticipates, futur believes, estimates, or the negative of those terms and other variations of them or by comparable terminology.

These forward-looking statements are only predictions, not historical facts, and involve certain risks and uncertainties, as well as assumptions. Actual results, levels of activity, performance, achievements and events could differ materially from those stated, anticipated or implied by such forward-looking statements. While we believe that our assumptions are reasonable, it is very difficult to predict the impact of known factors, and of course, it is impossible to anticipate all factors that could affect our actual results. Important factors that could cause actual results to differ materially from the forward-looking statements we make in this offering memorandum include, among others:

- future financial and operating results;
- resource potential;
- declines in natural gas and oil prices;
- success in efficiently developing and exploiting our reserves and economically finding or acquiring additional recoverable reserves;
- the accuracy of estimated natural gas and oil reserves;
- the financial and accounting impact of hedging transactions;
- the ability to fulfill our substantial capital investment needs;
- expectations with regard to acquisition activity, or difficulties encountered in connection with acquisitions, dispositions or similar transactions;
- restrictive covenants in indebtedness that may adversely affect operational flexibility;
- potential changes in tax laws which may impair the ability to obtain capital funds through investment partnerships;
- the ability to raise funds through investment or through access to the capital markets;

the ability to obtain adequate water to conduct drilling and production operations, and to dispose of the water used in and generated by these operations at a reasonable cost and within applicable environmental rules;

the costs of Pennsylvania s newly enacted drilling impact fees;

the effects of intense competition in the natural gas and oil industry;

general market, labor and economic conditions and related uncertainties;

the ability to retain certain key customers;

dependence on the gathering and transportation facilities of third parties;

Table of Contents

the availability of drilling rigs, equipment and crews;

potential incurrence of significant costs and liabilities in the future resulting from a failure to comply with new or existing environmental regulations or an accidental release of hazardous substances into the environment;

uncertainties with respect to the success of drilling wells at identified drilling locations;

expirations of undeveloped leasehold acreage;

uncertainty regarding leasing operating expenses, general and administrative expenses and funding and development costs;

exposure to financial and other liabilities of the managing general partners of the investment partnerships;

the ability to comply with, and the potential costs of compliance with, new and existing federal, state, local and other laws and regulations applicable to our business and operations; and

exposure to new and existing litigation.

TERMS USED IN THIS PROSPECTUS

Unless otherwise noted or indicated by the context, in this prospectus:

the terms the Partnership, we, our and us refer to Atlas Resource Partners, L.P. and its subsidiaries;

the term our general partner refers to Atlas Resource Partners GP, LLC, a wholly-owned subsidiary of Atlas Energy, L.P. (NYSE: ATLS);

The term Issuers means, collectively, Atlas Energy Holdings Operating Company, LLC and Atlas Resource Finance Corporation;

we refer to natural gas liquids, such as ethane, propane, normal butane, isobutane and natural gasoline, as NGLs ;

we refer to billion cubic feet as Bcf, million cubic feet as MMcf, thousand cubic feet as Mcf, million cubic feet per day as MMcfd, thousand cubic feet per day as Mcfd, barrels as Bbl, barrels per day as Bbld, British Thermal Unit as Btu and million British Therm Units as MMbtu ; and

the Issuers $250.0 million of 9.25% senior notes due 2021 are referred to as the 9.25% Senior Notes;

the $275.0 million of 7.75% senior notes due 2021 issued on January 23, 2013 are referred to as the January 2013 7.75% Notes;

the $100.0 million of unregistered 7.75% senior notes due 2021 issued on June 2, 2014 are referred to as the new issue notes, and the new issue notes and the January 2013 7.75% Notes are referred to as the 7.75% Notes; and

the $100.0 million of registered 7.75% senior notes due 2021 that are being offered hereby are referred to as the notes offered hereby or the exchange notes, and the new issue notes and the exchange notes together are referred to as the notes.

Table of Contents

SUMMARY

This summary highlights information included or incorporated by reference in this prospectus. It may not contain all of the information that is important to you. This prospectus includes information about the exchange offer and includes or incorporates by reference information about our business and our financial and operating data. Before deciding to participate in the exchange offers, you should read this entire prospectus carefully, including the financial data and related notes incorporated by reference in this prospectus and the Risk Factors section.

Atlas Resource Partners, L.P.

We are a publicly-traded master-limited partnership (NYSE: ARP) and an independent developer and producer of natural gas, crude oil and NGLs, with operations in basins across the United States. We are a leading sponsor and manager of tax-advantaged investment partnerships (Drilling Partnerships), in which we co-invest, to finance a portion of our natural gas, crude oil and natural gas liquids production activities.

We believe we have established a strong track record of growing our reserves, production and cash flows through a balanced mix of natural gas, oil and natural gas liquids exploitation and development, sponsorship of our Drilling Partnerships, and the acquisition of oil and gas properties. Our primary business objective is to generate growing yet stable cash flows through the development and acquisition of mature, long-lived natural gas, oil and natural gas liquids properties. As of December 31, 2013, our estimated proved reserves were 1,169 Bcfe, including the reserves net to our equity interest in our Drilling Partnerships. Of our estimated proved reserves, approximately 68% were proved developed and approximately 83% were natural gas.

Our general partner, Atlas Energy, L.P. (ATLS), a publicly traded master-limited partnership (NYSE: ATLS), manages our operations and activities through its ownership of our general partner interest. At June 30, 2014, ATLS owned 100% of our general partner Class A units, all of the incentive distribution rights through which it manages and effectively controls us, and an approximate 27.7% limited partner interest (20,962,485 common and 3,749,986 preferred limited partner units) in us.

Recent developments

Pending Eagle Ford Acquisition

On September 24, 2014, we, directly and through our wholly-owned subsidiary, ARP Eagle Ford, LLC, and our exploration and production, or E&P, development affiliate, a subsidiary of Atlas Energy, entered into a purchase and sale agreement (the Eagle Ford Purchase Agreement) to acquire interests in certain oil and gas assets in the Eagle Ford Shale located in South Central Atascosa County, Texas, for $340 million, of which $200 million will be paid upon closing of the acquisition and $140 million will be paid over a 12-month period following closing, subject to certain purchase price adjustments. We will provide a guaranty of timely payment of the deferred portion of the purchase price that is to be paid by our E&P development affiliate and will have the right to receive some or all of the assets acquired by our E&P development affiliate in the event of its failure to contribute its portion of the deferred payments.

The assets we are to acquire include the following:

- Approximately 4,000 operated gross acres, with an average working interest/net revenue interest of 100%/74%.
- Net reserves of approximately 12 million barrels of oil equivalent as of July 1, 2014, 86% of which is oil.

Table of Contents

Average net daily production for the past 12-months of approximately 2,947 barrels of oil equivalent.

Gas transportation and processing via the Regency pipeline.

The reserves and production information presented above is based solely on our internal evaluation and interpretation of reserve and other information provided to us by the third-party seller in the course of our due diligence with respect to the pending acquisition and has not been independently verified or estimated.

We expect the pending Eagle Ford acquisition to close in the fourth quarter of 2014, with an effective date of July 1, 2014. The acquisition is subject to adjustments and customary closing conditions, including purchase price and asset allocation adjustments. It is possible that the Eagle Ford acquisition, including the amount of assets acquired and the purchase price paid, could be smaller or larger than is currently contemplated.

Issuance of Class D Units

On October 2, 2014, we issued 3,200,000 of our newly-created 8.625% Class D Cumulative Redeemable Perpetual Preferred Units (Class D Units) to the public at an offering price of $25.00 per Class D Preferred Unit pursuant to an underwriting agreement dated September 25, 2014 with Morgan Stanley & Co. LLC, UBS Securities LLC and the several other underwriters named therein. Pursuant to the underwriting agreement, we granted the underwriters a 30-day option to purchase up to an additional 480,000 Class D Units to cover over-allotments.

We received aggregate net proceeds of approximately $77.2 million from the sale of the Class D Units. We intend to use the proceeds to fund a portion of the purchase price of the pending Eagle Ford acquisition. Before funding the pending Eagle Ford acquisition, we may use some or all of the net proceeds for general partnership purposes, which may include repayment of borrowings under our revolving credit facility.

Cash distributions on the Class D Units will be payable quarterly in arrears on January 15, April 15, July 15, and October 15 of each year, at an annual rate of $2.15625 per unit, or 8.625% of the liquidation preference, per year. At any time on or after October 15, 2019, or in the event of a liquidation or certain changes of control, we may redeem the Class D Units, in whole or in part, at a redemption price of $25.00 per unit plus an amount equal to all accumulated and unpaid distributions on the date of redemption, whether or not declared. If we do not exercise this redemption right upon a change of control, then the holders of the Class D Units will have the option to convert their Class D Units into a number of our common units, as set forth in the Certificate of Designation relating to the Class D Units.

Credit Agreement Amendment

On September 24, 2014, in connection with the Eagle Ford acquisition, we entered into an amendment to our second amended and restated credit agreement (see Description of Other Indebtedness Revolving Credit Facility).

Equity Distribution Agreement

On August 29, 2014, we entered into a Distribution Agreement (the Distribution Agreement) with Deutsche Bank Securities Inc., as representative of the several banks named therein (the Agents). Pursuant to the Distribution Agreement, we may sell from time to time through the Agents common units representing limited partner interests having an aggregate offering price of up to $100 million. Sales of common units, if any, may be made in negotiated transactions or transactions that are deemed to be at-the-market offerings as defined in Rule 415 of the Securities Act of 1933, as amended, including sales made directly on the New York Stock Exchange, the existing trading market for the common units, or sales made to or through a market maker other than on an exchange or through an electronic communications network. We will pay each of the Agents a commission, which in each case shall not be more than 2.0% of the gross sales price of common units sold

Table of Contents

through such Agent. Under the terms of the Distribution Agreement, we may also sell common units from time to time to any Agent as principal for its own account at a price to be agreed upon at the time of sale. Any sale of common units to an Agent as principal would be pursuant to the terms of a separate terms agreement between us and such Agent.

Distribution Information

On September 26, 2014, we declared a monthly cash distribution for the month of August 2014 of $0.1966 per common limited partner unit to holders of record on October 7, 2014, which is payable on October 15, 2014.

Our organizational structure

We were formed in October 2011 to own and operate substantially all of the Atlas Energy E&P Operations, which were transferred to us on March 5, 2012 by Atlas Energy (NYSE: ATLS), a publicly-traded master limited partnership which owns 100% of our general partner Class A units and incentive distribution rights and an approximate 27.7% limited partner interest (20,962,485 limited partner units and 3,749,986 preferred limited partner units) in us as of June 30, 2014. We conduct our operations through, and our operating assets are owned by, our subsidiaries. Our general partner has sole responsibility for conducting our business and managing our operations. Our general partner does not receive any management fee or other compensation in connection with its management of our business apart from its general partner interest and incentive distribution rights, but it is reimbursed for direct and indirect expenses incurred on our behalf. Our executive offices are located at Park Place Corporate Center One, 1000 Commerce Drive, Suite 400, Pittsburgh, Pennsylvania 15275, telephone number (877) 280-2857. Our website address is www.atlasresourcepartners.com. The information on our website is not part of this offering memorandum and you should rely only on the information contained or incorporated by reference in this offering memorandum when making a decision as to whether or not to invest in the notes.

Table of Contents

Summary of the Exchange Offer

On June 2, 2014, we completed a private offering of the new issue notes. As part of this private offering, we entered into a registration rights agreement with the initial purchasers of the new issue notes in which we agreed, among other things, to deliver this prospectus to you and to use our reasonable best efforts to complete the exchange offer within 270 days of the issue date. The following is a summary of the exchange offer.

New issue notes	$100.0 million aggregate principal amount of 7.75% Senior Notes due 2021 issued on June 2, 2014.
Exchange notes	7.75% Senior Notes due 2021. The terms of the exchange notes are substantially identical to those terms of the new issue notes, except that the transfer restrictions, registration rights and provisions for additional interest relating to the new issue notes do not apply to the exchange notes.
Exchange offer	We are offering to exchange up to $100.0 million principal amount of our 7.75% Senior Notes due 2021 that have been registered under the Securities Act of 1933 for an equal amount of our outstanding 7.75% Senior Notes due 2021 issued June 2, 2014 to satisfy our obligations under the registration rights agreement.
Expiration date	The exchange offer will expire at 5:00 p.m., New York City time, on [ ], 2014, unless we decide to extend it.
Conditions to the exchange offer	The registration rights agreement does not require us to accept new issue notes for exchange if the exchange offer or the making of any exchange by a holder of the new issue notes would violate any applicable law or interpretation of the staff of the SEC or if any legal action has been instituted or threatened that would impair our ability to proceed with the exchange offer. A minimum aggregate principal amount of new issue notes being tendered is not a condition to the exchange offer. Please read Exchange Offer Conditions to the Exchange Offer for more information about the conditions to the exchange offer.
Procedures for tendering new issue notes	To participate in the exchange offer, you must follow the automatic tender offer program, or ATOP, procedures established by The Depository Trust Company, or DTC, for tendering notes held in book-entry form. The ATOP procedures require that the exchange agent receive, before the expiration date of the exchange offer, a computer-generated message known as an agent s message that is transmitted through ATOP and that DTC confirms that: DTC has received instructions to exchange your notes; and you agree to be bound by the terms of the letter of transmittal. For more details, please read Exchange Offer Terms of the Exchange Offer and Exchange Offer Procedures for Tendering.

4

Table of Contents

Guaranteed delivery procedures	None.
Withdrawal of tenders	You may withdraw your tender of new issue notes at any time before the expiration date. To withdraw, you must submit a notice of withdrawal to the exchange agent using ATOP procedures before 5:00 p.m., New York City time, on the expiration date of the exchange offer. Please read Exchange Offer Withdrawal of Tenders.
Acceptance of new issue notes and delivery of exchange notes	If you fulfill all conditions required for proper acceptance of new issue notes, we will accept any and all new issue notes that you properly tender in the exchange offer before 5:00 p.m., New York City time, on the expiration date. We will return any new issue note that we do not accept for exchange to you without expense promptly after the expiration date. We will deliver the exchange notes promptly after the expiration date and acceptance of the new issue notes for exchange. Please read Exchange Offer Terms of the Exchange Offer.
Fees and expenses	We will bear all expenses related to the exchange offer. Please read Exchange Offer Fees and Expenses.
Use of proceeds	The issuance of the exchange notes will not provide us with any new proceeds. We are making the exchange offer solely to satisfy our obligations under the registration rights agreement.
Consequences of failure to exchange new issue notes	If you do not exchange your new issue notes in the exchange offer, your new issue notes will continue to be subject to the restrictions on transfer currently applicable to the new issue notes. In general, you may offer or sell your new issue notes only: • if they are registered under the Securities Act and applicable state securities laws; • if they are offered or sold under an exemption from registration under the Securities Act and applicable state securities laws; or • if they are offered or sold in a transaction not subject to the Securities Act and applicable state securities laws. We do not currently intend to register the new issue notes under the Securities Act. Under some circumstances, however, holders of the new issue notes, including holders who are not permitted to participate in the exchange offer or who may not freely resell exchange notes received in the exchange offer, may require us to file, and to cause to become effective, a shelf registration statement covering resales of new issue notes by these holders. For more information regarding the consequences of not tendering your new issue notes and our obligation to file a shelf registration statement, please read Exchange Offer Consequences of Failure to Exchange and Description of the Exchange Notes Registration Rights; Additional Interest.

Table of Contents

U.S. federal income tax consequences	The exchange of exchange notes for new issue notes in the exchange offer should not be a taxable event for U.S. federal income tax purposes. Please read Certain United States Federal Income Tax Consequences.
Exchange agent	We have appointed U.S. Bank National Association as the exchange agent for the exchange offer. You should direct questions and requests for assistance and requests for additional copies of this prospectus (including the letter of transmittal) to the exchange agent addressed as follows: Attn: William Diaz, U.S. Bank Corporate Trust Services, Specialized Finance Dept., 60 Livingston Avenue, St. Paul, Minnesota 55107; telephone number (651) 466-6781. Eligible institutions may make requests by facsimile at (651) 466-7372.

Summary of Terms of the Exchange Notes

The exchange notes will be identical to the new issue notes, except that the exchange notes are registered under the Securities Act and will not have restrictions on transfer, registration rights or provisions for additional interest. The exchange notes will evidence the same debt as the new issue notes, and the same indenture and supplemental indenture will govern the exchange notes and the new issue notes.

The following summary contains basic information about the exchange notes and is not intended to be complete. It does not contain all the information that is important to you. For a more complete understanding of the exchange notes, please read Description of the Exchange Notes.

Issuers	Atlas Energy Holdings Operating Company, LLC and Atlas Resource Finance Corporation
Notes offered	$100.0 million aggregate principal amount of 7.75% Senior Notes due 2021.
Maturity date	January 15, 2021.
Interest payment dates	January 15 and July 15 of each year.
Guarantees	The notes are unconditionally guaranteed on an unsecured senior basis by us and all of our current domestic restricted subsidiaries (other than Atlas Energy Securities, LLC and its subsidiary), and any future restricted subsidiary that guarantees our other indebtedness or that of any other subsidiary or incurs any indebtedness under any credit facility. Our non-guarantor subsidiaries accounted for none of our revenues or EBITDA for the three months ended June 30, 2014. In addition, as of June 30, 2014, they held less than 1% of our consolidated assets.
Ranking	The notes are senior unsecured obligations of the Issuers and will rank senior in right of payment to all of the Issuers existing and future debt that is expressly subordinated in right of payment to the notes. The notes will rank equal in right of payment with all of the Issuers existing and future senior debt and will be effectively subordinated to all of the Issuers secured debt to the extent of the

Table of Contents

	value of the collateral securing such debt and structurally subordinated to all of the liabilities of any of the Issuers subsidiaries that do not guarantee the notes.
	The guarantees are general unsecured obligations of the guarantors and will rank senior in right of payment to all their existing and future debt that is expressly subordinated in right of payment to the guarantees. The guarantees will rank equal in right of payment with all existing and future liabilities of such guarantors that are not so subordinated and will be effectively subordinated to all of such guarantors secured debt to the extent of the collateral securing such debt and structurally subordinated to all of the liabilities of any of our subsidiaries that do not guarantee the notes.
	As of June 30, 2014, we had $1.2 billion of debt outstanding, including $581.0 million outstanding under our senior secured revolving credit facility, $248.4 million outstanding of our 9.25% Senior Notes and $374.5 million outstanding of our 7.75% Senior Notes, and had borrowing capacity under our revolving credit facility of $244.0 million, excluding $4.4 million in outstanding letters of credit.
Optional redemption	At any time prior to August 15, 2016, the Issuers may redeem up to 35% of the notes with the net cash proceeds of certain equity offerings at the redemption price set forth under Description of Exchange Notes Optional Redemption.
	At any time prior to August 15, 2017, the Issuers may redeem the notes, in whole or in part, at a make whole redemption price, plus accrued and unpaid interest and additional interest, if any, to the date of redemption as set forth under Description of the Exchange Notes Optional Redemption. On and after August 15, 2017, the Issuers may redeem the notes, in whole or in part, at the redemption prices set forth under Description of the Exchange Notes Optional Redemption.
Basic covenants of the indentures	The indentures governing the notes restrict our ability and the ability of our restricted subsidiaries to, among other things:
	incur additional indebtedness and issue preferred stock;
	make certain distributions, investments and other restricted payments;
	sell certain assets
	agree to any restrictions on the ability of restricted subsidiaries to make payments to us;
	create certain liens;

merge, consolidate or sell substantially all of our assets; and

enter into transactions with affiliates.

Table of Contents

	These covenants are subject to important exceptions and qualifications described under the heading Description of the Exchange Notes Covenants.
Covenant suspension	Certain of these covenants will be suspended when the notes have investment grade ratings from both Standard & Poor s Rating Services (Standard & Poor s) and Moody s Investor Service, Inc. (Moody s). For more details, see Description of the Exchange Notes Covenant Suspension.
Transfer restrictions; absence of a public market for the exchange notes	The exchange notes generally will be freely transferable, but will also be securities for which there is not currently a public market. We do not intend to make a trading market in the exchange notes after the exchange offer. Therefore, we cannot assure you as to the development of an active market for the exchange notes or as to the liquidity of any such market.
Form of exchange notes	The exchange notes will be represented initially by one or more global notes. The global exchange notes will be deposited with the trustee, as custodian for DTC.
Same-day settlement	The global exchange notes will be shown on, and transfers of the global exchange notes will be effected only through, records maintained in book-entry form by DTC and its direct and indirect participants.
	The exchange notes are expected to trade in DTC s Same Day Funds Settlement System until maturity or redemption. Therefore, secondary market trading activity in the exchange notes will be settled in immediately available funds.
Trading	We do not expect to list the exchange notes for trading on any securities exchange.
Registrar and paying agent	U.S. Bank National Association
Governing law	The exchange notes and the indentures relating to the exchange notes will be governed by, and construed in accordance with, the laws of the State of New York.

Table of Contents

RISK FACTORS

In addition to the other information set forth elsewhere or incorporated by reference in this prospectus, you should consider carefully the risks described below before deciding whether to participate in the exchange offer.

Risks Related to the Exchange Offer

If you fail to exchange new issue notes, existing transfer restrictions will remain in effect and the notes may be more difficult to sell.

If you fail to exchange new issue notes for exchange notes under the exchange offer, then you will continue to be subject to the existing transfer restrictions on the new issue notes. In general, the new issue notes may not be offered or sold unless they are registered or exempt from registration under the Securities Act and applicable state securities laws. Except in connection with this exchange offer or as required by the registration rights agreement, we do not intend to register resales of the new issue notes.

The tender of new issue notes under the exchange offer will reduce the principal amount of the currently outstanding new issue notes. Due to the corresponding reduction in liquidity, this may decrease, and increase the volatility of, the market price of any currently outstanding new issue notes that you continue to hold following completion of the exchange offer.

You must comply with the exchange offer procedures in order to receive new, freely tradable exchange notes.

Delivery of exchange notes in exchange for new issue notes tendered and accepted for exchange pursuant to the exchange offer will be made only after timely receipt by the exchange agent of book-entry transfer of new issue notes into the exchange agent s account at DTC, as depositary, including an agent s message. We are not required to notify you of defects or irregularities in tenders of new issue notes for exchange. New issue notes that are not tendered or that are tendered but we do not accept for exchange will, following consummation of the exchange offer, continue to be subject to the existing transfer restrictions under the Securities Act and, upon consummation of the exchange offer, certain registration and other rights under the registration rights agreement will terminate. See Exchange Offer Procedures for Tendering and Exchange Offer Consequences of Failure to Exchange.

Some holders who exchange their new issue notes may be deemed to be underwriters, and these holders will be required to comply with the registration and prospectus delivery requirements in connection with any resale transaction.

If you exchange your new issue notes in the exchange offer for the purpose of participating in a distribution of the exchange notes, you may be deemed to have received restricted securities and, if so, will be required to comply with the registration and prospectus delivery requirements of the Securities Act in connection with any resale transaction.

Risks Related to the Notes

We distribute all of our available cash to our unitholders and are not required to accumulate cash for the purpose of meeting our future obligations to our noteholders, which may limit the cash available to service the notes.

Subject to the limitations on restricted payments contained in the indentures governing the 7.75% Senior Notes and the 9.25% Senior Notes and our credit facility, we distribute all of our available cash each quarter to our limited partners and our general partner. Available cash is defined in our partnership agreement, and it generally means, for each fiscal quarter:

all cash on hand at the end of the quarter;

less the amount of cash that our general partner determines in its reasonable discretion is necessary or appropriate to:

Table of Contents

provide for the proper conduct of our business;

comply with applicable law, any of our debt instruments, or other agreements; or

provide funds for distributions to our unitholders and to our general partner for any one or more of the next four quarters;

plus all cash on hand on the date of determination of available cash for the quarter resulting from working capital borrowings made after the end of the quarter. Working capital borrowings are generally borrowings that are made under a credit facility and in all cases are used solely for working capital purposes or to pay distributions to partners. We are unable to borrow under our revolving credit facility to pay distributions of available cash to unitholders because such borrowings would not constitute working capital borrowings pursuant to our partnership agreement.

As a result, we do not expect to accumulate significant amounts of cash. Depending on the timing and amount of our cash distributions, these distributions could significantly reduce the cash available to us in subsequent periods to make payments on the notes.

We may not be able to generate sufficient cash to service our debt obligations, including our obligations under the notes.

Our ability to make payments on and to refinance our indebtedness, including the notes, will depend on our financial and operating performance, which may fluctuate significantly from quarter to quarter, based on, among other things:

the amount of natural gas and oil we produce;

the price at which we sell our natural gas and oil;

the level of our operating costs;

our ability to acquire, locate, and produce new reserves;

results of our hedging activities;

the level of our interest expense, which depends on the level of our indebtedness and the interest payable on it; and

the level of our capital expenditures.

We cannot assure you that we will continue to generate sufficient cash flow or that we will be able to borrow funds in amounts sufficient to enable us to service our indebtedness, or to meet our working capital and capital expenditure requirements. If we are not able to generate sufficient cash flow from operations or to borrow sufficient funds to service our indebtedness, we may be required to sell assets or issue equity, reduce capital expenditures, refinance all or a portion of our existing indebtedness or obtain additional financing. We cannot assure you that we will be able to refinance our indebtedness, sell assets or equity, or borrow more funds on terms acceptable to us, if at all.

We have a holding company structure in which our subsidiaries conduct our operations and own our operating assets.

We are a holding company, and our operating partnership and its operating subsidiaries conduct all of our operations and own all of our operating assets. We have no significant assets other than our interest in our operating partnership. As a result, our ability to make required

payments on the notes depends on the performance of the operating partnership and its subsidiaries and their ability to distribute funds to us. If we are unable to obtain the funds necessary to pay the principal amount at maturity of the notes, or to repurchase the exchange notes upon the occurrence of a change of control, we may be required to adopt one or more

Table of Contents

alternatives, such as a refinancing of the notes or a sale of assets. They may not be able to refinance the exchange notes or sell assets on acceptable terms, or at all.

We have a substantial amount of indebtedness which could adversely affect our financial position and prevent us from fulfilling our obligations under the notes.

We currently have, and following this offering will continue to have, a substantial amount of indebtedness. As of June 30, 2014, we had $1.2 billion of debt outstanding, including $581.0 million outstanding under our senior secured revolving credit facility, $248.4 million outstanding of our 9.25% Senior Notes, $374.5 million outstanding of our 7.75% Senior Notes, and had borrowing capacity under our revolving credit facility of $244.0 million, excluding $4.4 million in outstanding letters of credit.

Our substantial indebtedness may:

- make it difficult for us to satisfy our financial obligations, including making scheduled principal and interest payments on the notes and our other indebtedness;
- limit our ability to borrow additional funds for working capital, capital expenditures, acquisitions or other general business purposes;
- limit our ability to use our cash flow or obtain additional financing for future working capital, capital expenditures, acquisitions or other general business purposes;
- require us to use a substantial portion of our cash flow from operations to make debt service payments;
- limit our flexibility to plan for, or react to, changes in our business and industry;
- place us at a competitive disadvantage compared to less leveraged competitors; and
- increase our vulnerability to the impact of adverse economic and industry conditions.

Despite our and our subsidiaries current level of indebtedness, we may still be able to incur substantially more indebtedness. This could further exacerbate the risks associated with our substantial indebtedness.

We and our subsidiaries may be able to incur substantial additional indebtedness in the future. The terms of the indentures governing the notes will not prohibit us or our subsidiaries from doing so if we meet applicable coverage tests. If we incur any additional indebtedness that ranks equally with the notes and the guarantees, the holders of that indebtedness will be entitled to share ratably with the holders of the notes and the guarantees in any proceeds distributed in connection with any insolvency, liquidation, reorganization, dissolution or other winding-up of us. This may have the effect of reducing the amount of proceeds paid to you. If we add new indebtedness to our current debt levels, the related risks that we and our subsidiaries now face could intensify.

The notes and the guarantees are unsecured and effectively subordinated to our and the guarantors existing and future secured indebtedness.

The notes and the guarantees are general unsecured obligations ranking effectively junior in right of payment to all of our existing and future secured indebtedness and that of each guarantor, respectively. As of June 30, 2014, we had $1.2 billion of debt outstanding, including $581.0 million outstanding under our senior secured revolving credit facility, $248.4 million outstanding of our 9.25% Senior Notes, $374.5 million outstanding of our 7.75% Senior Notes, and had borrowing capacity under our revolving credit facility of $244.0 million, excluding $4.4 million in outstanding letters of credit.

If we or a guarantor is declared bankrupt, becomes insolvent or is liquidated or reorganized, any indebtedness that ranks ahead of the notes and the guarantees will be entitled to be paid in full from our assets or the assets of the guarantor, as applicable, before any payment may be made with respect to the notes or the

Table of Contents

affected guarantees. Holders of the notes will participate ratably with all holders of our unsecured indebtedness that is deemed to be of the same class as the notes, and potentially with all of our other general creditors, based upon the respective amounts owed to each holder or creditor, in our remaining assets. In the event of the liquidation, dissolution, reorganization, bankruptcy or similar proceeding of the business of a subsidiary that is not a guarantor, creditors of that subsidiary would generally have the right to be paid in full before any distribution is made to us or the holders of the notes. In any of the foregoing events, we cannot assure you that there will be sufficient remaining assets to pay amounts due on the notes. As a result, holders of the notes may receive less, ratably, than holders of secured indebtedness.

Federal and state fraudulent transfer laws may permit a court to void the notes and the guarantees, and if that occurs, you may not receive any payments on the notes.

The issuance of the notes and the guarantees may be subject to review under federal and state fraudulent transfer and conveyance statutes. While the relevant laws may vary from state to state, under such laws the payment of consideration will be a fraudulent conveyance if (1) we paid the consideration with the intent of hindering, delaying or defrauding creditors or (2) we or any of the guarantors, as applicable, received less than reasonably equivalent value or fair consideration in return for issuing either the notes or a guarantee, and, in the case of (2) only, one of the following is also true:

- we or any of the guarantors were insolvent or rendered insolvent by reason of the incurrence of the indebtedness;
- payment of the consideration left us or any of the guarantors with an unreasonably small amount of capital to carry on the business;
- we or any of the guarantors intended to, or believed that it would, incur debts beyond our ability to pay as they mature; or
- we were a defendant in an action for money damages docketed against it if, in either case, after final judgment the judgment is unsatisfied.

If a court were to find that the issuance of the notes or a guarantee was a fraudulent conveyance, the court could void the payment obligations under the notes or such guarantee or further subordinate the notes or such guarantee to presently existing and future indebtedness of us or such guarantor, or require the holders of the notes to repay any amounts received with respect to the notes or such guarantee. In the event of a finding that a fraudulent conveyance occurred, you may not receive any repayment on the notes.

Further, the voiding of the notes could result in an event of default with respect to our and our subsidiaries other debt that could result in acceleration of such debt. Generally, an entity would be considered insolvent if, at the time it incurred indebtedness:

- the sum of its debts, including contingent liabilities, was greater than the fair salable value of all its assets;
- the present fair salable value of its assets was less than the amount that would be required to pay its probable liability on its existing debts and liabilities, including contingent liabilities, as they become absolute and mature; or
- it could not pay its debts as they become due.

We cannot be certain as to the standards a court would use to determine whether or not we or the guarantors were solvent at the relevant time or, regardless of the standard that a court uses, that the issuance of the notes and the guarantees would not be further subordinated to our or any of our guarantors other debt.

Table of Contents

We believe that at the time the notes are initially issued each issuer and each guarantor will be:

- neither insolvent nor rendered insolvent thereby;
- in possession of sufficient capital to run its businesses effectively;
- incurring indebtedness within its ability to pay as the same mature or become due; and
- will have sufficient assets to satisfy any probable money judgment against it in any pending action.

In reaching these conclusions, we have relied upon our analysis of internal cash flow projections, which, among other things, assume that we will in the future realize certain selling price and volume increases and favorable changes in business mix, and estimated values of assets and liabilities. We cannot assure you, however, that a court passing on such questions would reach the same conclusions. Further, to the extent that the notes are guaranteed in the future by any subsidiary, a court passing on such guarantor regarding any such guarantee could conclude that such guarantee constituted a fraudulent conveyance or transfer.

The indentures governing the notes contains a provision intended to limit each guarantor s liability to the maximum amount that it could incur without causing the incurrence of obligations under its guarantee to be a fraudulent transfer. This provision may not be effective to protect the guarantees from being voided under fraudulent transfer law, or may eliminate the guarantor s obligations or reduce the guarantor s obligations to an amount that effectively makes the guarantee worthless. In a recent Florida bankruptcy case, this kind of provision was found to be ineffective to protect the guarantees.

If the guarantees were legally challenged, any guarantee could also be subject to the claim that, since the guarantee was incurred for our benefit, and only indirectly for the benefit of the applicable guarantor, the obligations of the applicable guarantor were incurred for less than fair consideration. A court could thus void the obligations under the guarantees, subordinate them to the applicable guarantor s other debt or take other action detrimental to the holders of the notes.

We may not be able to repurchase the notes upon a change of control.

Upon the occurrence of specific kinds of change of control events, each holder of a note will have the right to require us to make an offer to repurchase such holder s note at a price equal to 101% of the principal amount thereof, together with accrued and unpaid interest and additional interest, if any, to the date of repurchase.

We may not have sufficient financial resources to purchase all of the notes that are tendered upon a change of control offer. The occurrence of a change of control could also constitute an event of default under our credit facility. Our bank lenders may have the right to prohibit any such purchase or redemption, in which event we will seek to obtain waivers from the required lenders under our credit facility, but may not be able to do so. See Description of the Exchange Notes Change of Control.

Our general partner will not have any liability for the notes.

The indentures governing the notes provides that our general partner will have no liability for our obligations under the notes. Accordingly, if we and the subsidiary guarantors are unable to make payments on the notes, you will not be able to recover against our general partner.

Claims of noteholders will be structurally subordinate to claims of creditors of our subsidiaries that do not guarantee the notes.

The notes are not be guaranteed by Atlas Energy Securities, LLC and its subsidiary or by certain future subsidiaries that we designate as unrestricted in accordance with the terms of the indentures. Accordingly, claims of holders of the notes will be structurally subordinated to the claims of creditors of these non-guarantor

13

Table of Contents

subsidiaries, including trade creditors. All obligations of our non-guarantor subsidiaries will have to be satisfied before any of the assets of these subsidiaries would be available for distribution, upon a liquidation or otherwise, to us or a guarantor of the notes. Although all of our subsidiaries, other than Atlas Energy Securities, LLC and Anthem Securities, guarantee the notes, the guarantees are subject to release under certain circumstances and we may have subsidiaries that are not guarantors. In the event of the liquidation, dissolution, reorganization, bankruptcy or similar proceeding of the business of a subsidiary that is not a guarantor, creditors of that subsidiary would generally have the right to be paid in full before any distribution is made to us or the holders of the notes. In any of these events, we may not have sufficient assets to pay amounts due on the notes with respect to the assets of that subsidiary.

Risks Relating to Our Business

If commodity prices decline significantly, our cash flow from operations will decline.

Our revenue, profitability and cash flow substantially depend upon the prices and demand for natural gas, NGLs and oil. The natural gas, NGLs and oil markets are very volatile, and a drop in prices can significantly affect our financial results and impede our growth. Changes in natural gas and oil prices will have a significant impact on the value of our reserves and on our cash flow. Prices for natural gas, NGLs and oil may fluctuate widely in response to relatively minor changes in the supply of and demand for natural gas, NGLs or oil, market uncertainty and a variety of additional factors that are beyond our control, such as:

- the level of domestic and foreign supply and demand;
- the price and level of foreign imports;
- the level of consumer product demand;
- weather conditions and fluctuating and seasonal demand;
- overall domestic and global economic conditions;
- political and economic conditions in natural gas and oil producing countries, including those in the Middle East and South America;
- the ability of members of the Organization of Petroleum Exporting Countries to agree to and maintain oil price and production controls;
- the impact of the U.S. dollar exchange rates on natural gas and oil prices;
- technological advances affecting energy consumption;
- domestic and foreign governmental relations, regulations and taxation;
- the impact of energy conservation efforts;

the cost, proximity and capacity of natural gas pipelines and other transportation facilities; and

the price and availability of alternative fuels.

In the past, the prices of natural gas, NGLs and oil have been extremely volatile, and we expect this volatility to continue. For example, during the year ended December 31, 2013, the NYMEX Henry Hub natural gas index price ranged from a high of $4.46 per MMBtu to a low of $3.11 per MMBtu, and West Texas Intermediate oil prices ranged from a high of $110.53 per Bbl to a low of $86.68 per Bbl. Between January 1, 2014 and February 25, 2014, the NYMEX Henry Hub natural gas index price ranged from a high of $6.15 per MMBtu to a low of $4.01 per MMBtu, and West Texas Intermediate oil prices ranged from a high of $103.31 per Bbl to a low of $91.66 per Bbl.

Table of Contents

Competition in the natural gas and oil industry is intense, which may hinder our ability to acquire natural gas and oil properties and companies and to obtain capital, contract for drilling equipment and secure trained personnel.

We operate in a highly competitive environment for acquiring properties and other natural gas and oil companies, attracting capital through our Drilling Partnerships, contracting for drilling equipment and securing trained personnel. Our competitors may be able to pay more for natural gas, NGLs and oil properties and drilling equipment and to evaluate, bid for and purchase a greater number of properties than our financial or personnel resources permit. Moreover, our competitors for investment capital may have better track records in their programs, lower costs or stronger relationships with participants in the oil and gas investment community than we do. All of these challenges could make it more difficult for us to execute our growth strategy. We may not be able to compete successfully in the future in acquiring leasehold acreage or prospective reserves or in raising additional capital.

Furthermore, competition arises not only from numerous domestic and foreign sources of natural gas and oil but also from other industries that supply alternative sources of energy. Competition is intense for the acquisition of leases considered favorable for the development of natural gas and oil in commercial quantities. Product availability and price are the principal means of competition in selling natural gas and oil. Many of our competitors possess greater financial and other resources than we do, which may enable them to identify and acquire desirable properties and market their natural gas and oil production more effectively than we can.

Shortages of drilling rigs, equipment and crews, or the costs required to obtain the foregoing in a highly competitive environment, could impair our operations and results.

Increased demand for drilling rigs, equipment and crews, due to increased activity by participants in our primary operating areas or otherwise, can lead to shortages of, and increasing costs for, drilling equipment, services and personnel. Shortages of, or increasing costs for, experienced drilling crews and oil field equipment and services could restrict our ability to drill the wells and conduct the operations that we currently have planned. Any delay in the drilling of new wells or significant increase in drilling costs could reduce our revenues.

Many of our leases are in areas that have been partially depleted or drained by offset wells.

Our key operated project areas are located in active drilling areas in the Mississippi Lime, Marble Falls, Utica Shale and Marcellus Shale, and many of our leases are in areas that have already been partially depleted or drained by earlier offset drilling. This may inhibit our ability to find economically recoverable quantities of natural gas in these areas.

Our operations require substantial capital expenditures to increase our asset base. If we are unable to obtain needed capital or financing on satisfactory terms, our asset base will decline, which could cause our revenues to decline and affect our ability to pay debt service.

The natural gas and oil industry is capital intensive. If we are unable to obtain sufficient capital funds on satisfactory terms with capital raised through equity and debt offerings, cash flow from operations, bank borrowings and the Drilling Partnerships, we may be unable to increase or maintain our inventory of properties and reserve base, or be forced to curtail drilling or other activities. This could cause our revenues to decline and diminish our ability to service any debt that we may have at such time. If we do not make sufficient or effective expansion capital expenditures, including with funds from third-party sources, we will be unable to expand our business operations, and may not generate sufficient revenue or have sufficient available cash to pay debt service.

Our cash distribution policy limits our ability to grow.

Because we distribute our available cash rather than reinvesting it in our business, our growth may not be as significant as businesses that reinvest their available cash to expand ongoing operations. If we issue additional common units or incur debt to fund acquisitions and expansion and investment capital expenditures, the payment

Table of Contents

of distributions on those additional units or interest on that debt could increase the risk that we will be unable to maintain or increase our per unit distribution level. There are no limitations in our partnership agreement on our ability to issue additional units, including units ranking senior to the common units.

Significant physical effects of climatic change have the potential to damage our facilities, disrupt our production activities and cause us to incur significant costs in preparing for or responding to those effects.

Climate change could have an effect on the severity of weather (including hurricanes and floods), sea levels, the arability of farmland, and water availability and quality. If such effects were to occur, our exploration and production operations have the potential to be adversely affected. Potential adverse effects could include damages to our facilities from powerful winds or rising waters in low lying areas, disruption of our production activities either because of climate-related damages to our facilities or our costs of operation potentially rising from such climatic effects, less efficient or non-routine operating practices necessitated by climate effects or increased costs for insurance coverage in the aftermath of such effects. Significant physical effects of climate change could also have an indirect effect on our financing and operations by disrupting the transportation or process-related services provided by midstream companies, service companies or suppliers with whom we have a business relationship. We may not be able to recover through insurance some or any of the damages, losses or costs that may result from potential physical effects of climate change.

We depend on certain key customers for sales of our natural gas, crude oil and natural gas liquids. To the extent these customers reduce the volumes of natural gas, crude oil and natural gas liquids they purchase from us, or cease to purchase natural gas, crude oil and natural gas liquids from us, our revenues and cash available for distribution could decline.

We market the majority of our natural gas production to gas utility companies, gas marketers, local distribution companies and industrial or other end-users. Crude oil produced from our wells flow directly into leasehold storage tanks where it is picked up by an oil company or a common carrier acting for an oil company. Natural gas liquids are extracted from the natural gas stream by processing and fractionation plants enabling the remaining dry gas (low Btu content) to meet pipeline specifications for transport to end users or marketers operating on the receiving pipeline. For the year ended December 31, 2013, Enterprise Products Operating, LLC, Chevron and Empire Pipeline Corporation accounted for approximately 19%, 11% and 10% of our total natural gas, crude oil and natural gas liquids production revenue, respectively, with no other single customer accounting for more than 10% for this period. To the extent these and other key customers reduce the amount of natural gas, crude oil and natural gas liquids they purchase from us, our revenues and cash available for distributions to unitholders could temporarily decline in the event we are unable to sell to additional purchasers.

An increase in the differential between the NYMEX or other benchmark prices of oil and natural gas and the wellhead price that we receive for our production could significantly reduce our cash available for debt service and adversely affect our financial condition.

The prices that we receive for our oil and natural gas production sometimes reflect a discount to the relevant benchmark prices, such as NYMEX. The difference between the benchmark price and the price that we receive is called a differential. Increases in the differential between the benchmark prices for oil and natural gas and the wellhead price that we receive could significantly reduce our cash available for debt service and adversely affect our financial condition. We use the relevant benchmark price to calculate our hedge positions, and in certain areas, we do not have any commodity derivative contracts covering the amount of the basis differentials we experience in respect of our production. As such, we will be exposed to any increase in such differentials, which could adversely affect our results of operations.

Some of our undeveloped leasehold acreage is subject to leases that may expire in the near future.

As of December 31, 2013, leases covering approximately 22,558 of our 911,354 net undeveloped acres, or 2.5%, are scheduled to expire on or before December 31, 2014. An additional 4.0% and 0.5% are scheduled to

Table of Contents

expire in each of the years 2015 and 2016, respectively. If we are unable to renew these leases or any leases scheduled for expiration beyond their expiration date, on favorable terms, we will lose the right to develop the acreage that is covered by an expired lease, which would reduce our cash flows from operations.

Drilling for and producing natural gas are high-risk activities with many uncertainties.

Our drilling activities are subject to many risks, including the risk that we will not discover commercially productive reservoirs. Drilling for natural gas can be uneconomic, not only from dry holes, but also from productive wells that do not produce sufficient revenues to be commercially viable. In addition, our drilling and producing operations may be curtailed, delayed or canceled as a result of other factors, including:

- the high cost, shortages or delivery delays of equipment and services;
- unexpected operational events and drilling conditions;
- adverse weather conditions;
- facility or equipment malfunctions;
- title problems;
- pipeline ruptures or spills;
- compliance with environmental and other governmental requirements;
- unusual or unexpected geological formations;
- formations with abnormal pressures;
- injury or loss of life;
- environmental accidents such as gas leaks, ruptures or discharges of toxic gases, brine or well fluids into the environment or oil leaks, including groundwater contamination;
- fires, blowouts, craterings and explosions; and
- uncontrollable flows of natural gas or well fluids.

Any one or more of the factors discussed above could reduce or delay our receipt of drilling and production revenues, thereby reducing our earnings, and could reduce revenues in one or more of our Drilling Partnerships, which may make it more difficult to finance our drilling operations through sponsorship of future partnerships. In addition, any of these events can cause substantial losses, including personal injury or loss of life, damage to or destruction of property, natural resources and equipment, pollution, environmental contamination, loss of wells and regulatory penalties.

Although we maintain insurance against various losses and liabilities arising from our operations, insurance against all operational risks are not available to us. Additionally, we may elect not to obtain insurance if we believe that the cost of available insurance is excessive relative to the perceived risks presented. Losses could, therefore, occur for uninsurable or uninsured risks or in amounts in excess of existing insurance coverage. The occurrence of an event that is not fully covered by insurance could reduce our results of operations.

Unless we replace our oil and natural gas reserves, our reserves and production will decline, which would reduce our cash flow from operations and income.

Producing natural gas reservoirs generally are characterized by declining production rates that vary depending upon reservoir characteristics and other factors. Our natural gas reserves and production and, therefore, our cash flow and income are highly dependent on our success in efficiently developing and exploiting our reserves and economically finding or acquiring additional recoverable reserves. Our ability to find and

Table of Contents

acquire additional recoverable reserves to replace current and future production at acceptable costs depends on our generating sufficient cash flow from operations and other sources of capital, principally from the sponsorship of new Drilling Partnerships, all of which are subject to the risks discussed elsewhere in this section.

A decrease in natural gas prices could subject our oil and gas properties to a non-cash impairment loss under U.S. generally accepted accounting principles.

U.S. generally accepted accounting principles require oil and gas properties and other long-lived assets to be reviewed for impairment whenever events or changes in circumstances indicate that their carrying amounts may not be recoverable. Long-lived assets are reviewed for potential impairments at the lowest levels for which there are identifiable cash flows that are largely independent of other groups of assets. We test our oil and gas properties on a field-by-field basis, by determining if the historical cost of proved properties less the applicable depletion, depreciation and amortization and abandonment is less than the estimated expected undiscounted future cash flows. The expected future cash flows are estimated based on our economic interests and our plans to continue to produce and develop proved reserves. Expected future cash flow from the sale of production of reserves is calculated based on estimated future prices. We estimate prices based on current contracts in place at the impairment testing date, adjusted for basis differentials and market related information, including published future prices. The estimated future level of production is based on assumptions surrounding future levels of prices and costs, field decline rates, market demand and supply, and the economic and regulatory climates. Accordingly, further declines in the price of natural gas may cause the carrying value of our oil and gas properties to exceed the expected future cash flows, and a non-cash impairment loss would be required to be recognized in the financial statements for the difference between the estimated fair market value (as determined by discounted future cash flows) and the carrying value of the assets.

Hedging transactions may limit our potential gains or cause us to lose money.

Pricing for natural gas, NGLs and oil has been volatile and unpredictable for many years. To limit exposure to changing natural gas and oil prices, we may use financial hedges and physical hedges for our production. Physical hedges are not deeded hedges for accounting purposes because they require firm delivery of natural gas and are considered normal sales of natural gas. We general limit these arrangements to smaller quantities than those project to be available at any delivery point.

In addition, we may enter into financial hedges, which may include purchases of regulated NYMEX futures and options contracts and non-regulated over-the-counter futures contracts with qualified counterparties in compliance with the Dodd-Frank Wall Street Reform and Consumer Protection Act. The futures contracts are commitments to purchase or sell natural gas at future dates and generally cover one-month periods for up to six years in the future. The over-the-counter derivative contracts are typically cash settled by determining the difference in financial value between the contract price and settlement price and do not require physical delivery of hydrocarbons.

These hedging arrangements may reduce, but will not eliminate, the potential effects of changing commodity prices on our cash flow from operations for the periods covered by these arrangements. Furthermore, while intended to help reduce the effects of volatile commodity prices, such transactions, depending on the hedging instrument used, may limit our potential gains if commodity prices were to rise substantially over the price established by the hedge. If, among other circumstances, production is substantially less than expected, the counterparties to our futures contracts fail to perform under the contracts or a sudden, unexpected event materially changes commodity prices, we may be exposed to the risk of financial loss. In addition, it is not always possible for us to engage in a derivative transaction that completely mitigates our exposure to commodity prices and interest rates. Our financial statements may reflect a gain or loss arising from an exposure to commodity prices and interest rates for which we are unable to enter into a completely effective hedge transaction.

Table of Contents

Due to the accounting treatment of derivative contracts, increases in prices for natural gas, crude oil and NGLs could result in non-cash balance sheet reductions and non-cash losses in our statement of operations.

We account for our derivative contracts by applying the mark-to-market accounting treatment required for these derivative contracts. We could recognize incremental derivative liabilities between reporting periods resulting from increases or decreases in reference prices for natural gas, crude oil and NGLs, which could result in us recognizing a non-cash loss in our combined statements of operations and a consequent non-cash decrease in our equity between reporting periods. Any such decrease could be substantial. In addition, we may be required to make cash payments upon the termination of any of these derivative contracts.

Regulations adopted by the Commodities Futures Trading Commission could have an adverse effect on our ability to use derivative instruments to reduce the effect of commodity price, interest rate and other risks associated with our business.

The Dodd-Frank Wall Street Reform and Consumer Protection Act is intended to change fundamentally the way swap transactions are entered into, transforming an over-the-counter market in which parties negotiate directly with each other into a regulated market in which most swaps are to be executed on registered exchanges or swap execution facilities and cleared through central counterparties. These statutory requirements must be implemented through regulation, primarily through rules adopted by the Commodities Futures Trading Commission (CFTC). Many market participants will be newly regulated as swap dealers or major swap participants, with new regulatory capital requirements and other regulations that impose business conduct rules and mandate how they hold collateral or margin for swap transactions. All market participants will be subject to new reporting and recordkeeping requirements. The new regulations may require us to comply with margin requirements and with certain clearing and trade-execution requirements in connection with our existing or future derivative activities. As a commercial end-user which uses swaps to hedge or mitigate commercial risk, rather than for speculative purposes, we are permitted to opt out of the clearing and exchange trading requirements. However, we could be exposed to greater liquidity and credit risk with respect to our hedging transactions if we do not use cleared and exchange-traded swaps. Counterparties to our derivative instruments which are federally insured depository institutions are required to spin off some of their derivatives activities to separate entities, which may not be as creditworthy as the current counterparties. The new regulations could significantly increase the cost of derivative contracts; materially alter the terms of derivative contracts; reduce the availability of derivatives to protect against risks we encounter; reduce our ability to monetize or restructure our derivative contracts in existence at that time; and increase our exposure to less creditworthy counterparties. If we reduce or change the way we use derivative instruments as a result of the legislation or regulations, our results of operations may become more volatile and cash flows may be less predictable, which could adversely affect our ability to plan for and fund capital expenditures. Finally, the legislation was intended, in part, to reduce the volatility of oil and natural gas prices, which some legislators attributed to speculative trading in derivatives and commodity instruments related to oil and natural gas. Our revenues could therefore be adversely affected if a consequence of the legislation and regulations is to lower commodity prices. Any of these consequences could have a material adverse effect on our combined financial position, results of operations and/or cash flows.

The scope and costs of the risks involved in making acquisitions may prove greater than estimated at the time of the acquisition.

Any acquisition involves potential risks, including, among other things:

- the validity of our assumptions about reserves, future production, revenues, capital expenditures and operating costs;
- an inability to successfully integrate the businesses we acquire;
- a decrease in our liquidity by using a portion of our available cash or borrowing capacity under our revolving credit facility to finance acquisitions;

Table of Contents

a significant increase in our interest expense or financial leverage if we incur additional debt to finance acquisitions;

the assumption of unknown environmental and other liabilities, losses or costs for which we are not indemnified or for which our indemnity is inadequate;

the diversion of management s attention from other business concerns and increased demand on existing personnel;

the incurrence of other significant charges, such as impairment of oil and natural gas properties, goodwill or other intangible assets, asset devaluation or restructuring charges;

unforeseen difficulties encountered in operating in new geographic areas;

customer or key employee losses at the acquired businesses; and

the failure to realize expected growth or profitability.

The scope and cost of these risks may be materially greater than estimated at the time of the acquisition. Further, our future acquisition costs may be higher than those we have achieved historically. Any of these factors could adversely affect our future growth.

We may be unsuccessful in integrating the operations from any future acquisitions with our operations and in realizing all of the anticipated benefits of these acquisitions.

The integration of previously independent operations, can be a complex, costly and time-consuming process. The difficulties of combining these systems, as well as any operations we may acquire in the future, include, among other things:

operating a significantly larger combined entity;

the necessity of coordinating geographically disparate organizations, systems and facilities;

integrating personnel with diverse business backgrounds and organizational cultures;

consolidating operational and administrative functions;

integrating internal controls, compliance under Sarbanes-Oxley Act of 2002 and other corporate governance matters;

the diversion of management s attention from other business concerns;

customer or key employee loss from the acquired businesses;

a significant increase in our indebtedness; and

potential environmental or regulatory liabilities and title problems.

Costs incurred and liabilities assumed in connection with an acquisition and increased capital expenditures and overhead costs incurred to expand our operations could harm our business or future prospects, and result in significant decreases in our gross margin and cash flows.

Properties that we acquired in the separation from Atlas Energy or afterward may not produce as projected and we may be unable to determine reserve potential, identify liabilities associated with the properties or obtain protection from sellers against such liabilities.

One of our growth strategies is to capitalize on opportunistic acquisitions of natural gas reserves. However, reviews of acquired properties are often incomplete because it generally is not feasible to review in depth every individual property involved in each acquisition. A detailed review of records and properties also may not

Table of Contents

necessarily reveal existing or potential problems, and may not permit a buyer to become sufficiently familiar with the properties to assess fully their deficiencies and potential. Inspections may not always be performed on every well that we acquire. Potential problems, such as deficiencies in the mechanical integrity of equipment or environmental conditions that may require significant remedial expenditures, are not necessarily observable even when we inspect a well. Any unidentified problems could result in material liabilities and costs that negatively affect our financial condition and results of operations.

Even if we are able to identify problems with an acquisition, the seller may be unwilling or unable to provide effective contractual protection or indemnity against all or part of these problems. Even if a seller agrees to provide indemnity, the indemnity may not be fully enforceable and may be limited by floors and caps on such indemnity.

Our acquisitions may prove to be worth less than we paid, or provide less than anticipated proved reserves, because of uncertainties in evaluating recoverable reserves, well performance, and potential liabilities as well as uncertainties in forecasting oil and natural gas prices and future development, production and marketing costs.

Successful acquisitions require an assessment of a number of factors, including estimates of recoverable reserves, development potential, well performance, future oil and natural gas prices, operating costs and potential environmental and other liabilities. Our estimates of future reserves and estimates of future production for our acquisitions are initially based on detailed information furnished by the sellers and subject to review, analysis and adjustment by our internal staff, typically without consulting independent petroleum engineers. Such assessments are inexact and their accuracy is inherently uncertain; our proved reserves estimates may thus exceed actual acquired proved reserves. In connection with our assessments, we perform a review of the acquired properties that we believe is generally consistent with industry practices. However, such a review may not permit us to become sufficiently familiar with the properties to fully assess their deficiencies and capabilities. We do not inspect every well. Even when we inspect a well, we do not always discover structural, subsurface and environmental problems that may exist or arise. As a result of these factors, the purchase price we pay to acquire oil and natural gas properties may exceed the value we realize.

Also, our reviews of the properties included in the acquisitions are inherently incomplete because it is generally not feasible to perform an in-depth review of the individual properties involved in each acquisition given the time constraints imposed by the applicable acquisition agreement. Even a detailed review of records and properties may not necessarily reveal existing or potential problems, nor will it permit a buyer to become sufficiently familiar with the properties to fully assess their deficiencies and potential.

We may not identify all risks associated with the acquisition of oil and natural gas properties, or existing wells, and any indemnifications we receive from sellers may be insufficient to protect us from such risks, which may result in unexpected liabilities and costs to us.

Our business strategy focuses on acquisitions of undeveloped oil and natural gas properties that we believe are capable of production. We have acquired and may make additional acquisitions of undeveloped oil and gas properties from time to time, subject to available resources. Any future acquisitions will require an assessment of recoverable reserves, title, future oil and natural gas prices, operating costs, potential environmental hazards, potential tax and other liabilities and other factors. Generally, it is not feasible for us to review in detail every individual property involved in a potential acquisition. In making acquisitions, we generally focus most of our title, environmental and valuation efforts on the properties that we believe to be more significant, or of higher-value. Even a detailed review of properties and records may not reveal all existing or potential problems, nor would it permit us to become sufficiently familiar with the properties to assess fully their deficiencies and capabilities. In addition, we do not inspect in detail every well that we acquire. Potential problems, such as deficiencies in the mechanical integrity of equipment or environmental conditions that may require significant remedial expenditures, are not necessarily observable even when we perform a detailed inspection. Any unidentified problems could result in material liabilities and costs that negatively impact our financial condition and results of operations.

Table of Contents

Even if we are able to identify problems with an acquisition, the seller may be unwilling or unable to provide effective contractual protection or indemnity against all or part of these problems. Even if a seller agrees to provide indemnity, the indemnity may not be fully enforceable or may be limited by floors and caps, and the financial wherewithal of such seller may significantly limit our ability to recover our costs and expenses. Any limitation on our ability to recover the costs related any potential problem could materially impact our financial condition and results of operations.

Any acquisitions we complete are subject to substantial risks that could adversely affect our financial condition and results of operations and reduce our ability to make distributions to unitholders.

Any acquisition involves potential risks, including, among other things:

- the validity of our assumptions about reserves, future production, revenues, capital expenditures and operating costs;
- an inability to successfully integrate the businesses we acquire;
- a decrease in our liquidity by using a portion of our available cash or borrowing capacity under our revolving credit facility to finance acquisitions;
- a significant increase in our interest expense or financial leverage if we incur additional debt to finance acquisitions;
- the assumption of unknown environmental and other liabilities, losses or costs for which we are not indemnified or for which our indemnity is inadequate;
- the diversion of management s attention from other business concerns;
- the incurrence of other significant charges, such as impairment of oil and natural gas properties, goodwill or other intangible assets, asset devaluation or restructuring charges;
- unforeseen difficulties encountered in operating in new geographic areas; and
- the loss of key purchasers of our production.

Our decision to acquire oil and natural gas properties depends in part on the evaluation of data obtained from production reports and engineering studies, geophysical and geological analyses, seismic data and other information, the results of which are often inconclusive and subject to various interpretations.

Our 2012, 2013 and 2014 acquisitions may prove to be worth less than we paid, or provide less than anticipated proved reserves, because of uncertainties in evaluating recoverable reserves, well performance, and potential liabilities as well as uncertainties in forecasting oil and natural gas prices and future development, production and marketing costs.

Successful acquisitions require an assessment of a number of factors, including estimates of recoverable reserves, development potential, well performance, future oil and natural gas prices, operating costs and potential environmental and other liabilities. Our estimates of future reserves and estimates of future production for our 2012, 2013 and 2014 acquisitions, are initially based on detailed information furnished by the sellers and subject to review, analysis and adjustment by our internal staff, typically without consulting independent petroleum engineers. Such

assessments are inexact and their accuracy is inherently uncertain; our proved reserves estimates may thus exceed actual acquired proved reserves. In connection with our assessments, we perform a review of the acquired properties that we believe is generally consistent with industry practices. However, such a review will not reveal all existing or potential problems. In addition, our review may not permit us to become sufficiently familiar with the properties to fully assess their deficiencies and capabilities. We do not inspect every well. Even when we inspect a well, we do not always discover structural, subsurface and environmental problems that may exist or arise. As a result of these factors, the purchase price we pay to acquire oil and natural gas properties may exceed the value we realize.

Table of Contents

Also, our reviews of acquired properties are inherently incomplete because it is generally not feasible to perform an in-depth review of the individual properties involved in each acquisition given the time constraints imposed by the applicable acquisition agreement. Even a detailed review of records and properties may not necessarily reveal existing or potential problems, nor would it necessarily permit a buyer to become sufficiently familiar with the properties to fully assess their deficiencies and potential.

Any production associated with the assets acquired in the in the Rangely Field in northwest Colorado in June 2014 will decline if the operator s access to sufficient amounts of carbon dioxide is limited.

Production associated with the assets we acquired in the Rangely acquisition is dependent on CO_2 tertiary recovery operations in the Rangely Field. The crude oil and NGL production from these tertiary recovery operations depends, in large part, on having access to sufficient amounts of CO_2. The ability to produce oil and NGLs from these assets would be hindered if the supply of CO_2 was limited due to, among other things, problems with the Rangely Field s current CO_2 producing wells and facilities, including compression equipment, or catastrophic pipeline failure. Any such supply limitation could have a material adverse effect on the results of operations and cash flows associated with these tertiary recovery operations. Our anticipated future crude oil and NGL production from tertiary operations is also dependent on the timing, volumes and location of CO_2 injections and, in particular, on the operator s ability to increase its combined purchased and produced volumes of CO_2 and inject adequate amounts of CO_2 into the proper formation and area within the Rangely Field.

Ownership of our oil, gas and NGLs production depends on good title to our property.

Good and clear title to our oil and gas properties is important. Although we will generally conduct title reviews before the purchase of most oil, gas and mineral producing properties or the commencement of drilling wells, such reviews do not assure that an unforeseen defect in the chain of title will not arise to defeat our claim, which could result in a reduction or elimination of the revenue received by us from such properties.

Federal legislation and state legislative and regulatory initiatives relating to hydraulic fracturing could result in increased costs and additional operating restrictions or delays.

Hydraulic fracturing is used to stimulate production of hydrocarbons, particularly natural gas, from tight formations. The process involves the injection of water, sand and chemicals under pressure into formations to fracture the surrounding rock and stimulate production. The process is typically regulated by state oil and natural gas commissions or by state environmental agencies.

Some states have adopted, and other states are considering adopting, regulations that could restrict hydraulic fracturing in certain circumstances. For example:

New York has imposed a de facto moratorium on the issuance of permits for high volume, horizontal hydraulic fracturing until state administered environmental and public health studies are finalized. The Department of Environmental Conservation (the NYDEC), accepted comments on its revised proposal to amend state regulations to address high-volume hydraulic fracturing through January 11, 2013, and NYDEC has not issued final regulations. In October 2012, the NYDEC asked the New York Department of Health (the NYDH), to assess the health impacts of high volume hydraulic fracturing. The NYDH has not completed its assessment, nor has a deadline been set by which it will complete its review. New York is not expected to take any final action or make any decision regarding hydraulic fracturing until after the health review is completed by NYDH and the NYDEC, through the environmental impact statement, is satisfied that hydraulic fracturing can be done safely in New York State.

Pennsylvania has adopted a variety of regulations limiting how and where fracturing can be performed. On February 14, 2012, legislation was passed in Pennsylvania (2012 Oil and Gas Act) requiring, among other things, disclosure of chemicals used in hydraulic fracturing. To implement the new

Table of Contents

legislative requirements, on December 14, 2013 the Pennsylvania Department of Environmental Protection (PADEP) proposed amendments to its environmental regulations at 25 PA. Code Chapter 78, Subchapter C, pertaining to environmental protection performance standards for surface activities at oil and gas well sites. According to PADEP, the conceptual changes would update existing requirements regarding containment of regulated substances, waste disposal, site restoration and reporting releases, and would establish new planning, notice, construction, operation, reporting and monitoring standards for surface activities associated with the development of oil and gas wells. PADEP has also proposed to add new requirements for addressing impacts to public resources, identifying and monitoring orphaned and abandoned wells during hydraulic fracturing activities, and submitting water withdrawal information necessary to secure a required Water Management Plan. The public comment period on the proposed amendments to PADEP s proposed amendments at 25 PA. Code Chapter 78, Subchapter C closed on March 14, 2014, and PADEP is in the process of reviewing and considering over 24,000 comments received during the comment period. Additionally, the PADEP announced in June 2014 that it also intends to propose amendments to its present environmental regulations at 25 PA. Code Chapter 78, Subchapters D (relating to well drilling, operation and plugging) and H (relating to underground gas storage). Lastly, PADEP is in the process of splitting its 25 Pa. Code Chapter 78 regulations, which apply to oil and gas well sites, into two parts as a result of a Pennsylvania General Assembly legislative bill that passed in July 2014 as a companion to Pennsylvania s budget for 2014 to 2015. 25 Pa. Code Chapter 78 will apply to conventional wells and 25 Pa. Code Chapter 78A will apply to unconventional wells.

Ohio has in recent years expanded its oil and gas regulatory program. In June 2012, Ohio passed legislation that made several significant amendments to the state s oil and gas laws, including additional permitting requirements, chemical disclosure requirements, and site investigation requirements for horizontal wells. In June 2013, legislation was adopted imposing sampling requirements and disposal restrictions on certain drilling wastes containing naturally occurring radioactive material and requiring the state regulatory authority to adopt rules on the design and operation of facilities that store, recycle, or dispose of brine or other oil and natural gas related waste materials. In February 2014, the regulatory authority proposed rules imposing detailed construction standards on well pads, and in April 2014, Ohio announced new standard drilling permit conditions to address concerns regarding seismic activity in certain parts of the state.

In September 2012, the Texas Railroad Commission approved new regulations relating to the commercial recycling of produced water and/or hydraulic fracturing flowback fluid. In June 2013, the Texas Railroad Commission adopted new rules regarding well casing, cementing, drilling, completion and well control for ensuring hydraulic fracturing operations do not contaminate nearby water resources.

On April 12, 2013, the West Virginia Legislature passed a legislative rule titled Rules Governing Horizontal Well Development, which became effective on July 1, 2013. The rule imposes more stringent regulation of horizontal drilling and was promulgated to provide further direction in the implementation and administration of the Natural Gas Horizontal Well Control Act that became effective on December 14, 2011.

In addition to state law, local land use restrictions, such as municipal ordinances, may restrict or prohibit the performance of well drilling in general and/or hydraulic fracturing in particular. Recent changes regarding local land use restrictions in Pennsylvania occurred because of decisions of the Pennsylvania Supreme and Commonwealth Courts. On December 19, 2013, when the Pennsylvania Supreme Court issued its Robinson Township v. Commonwealth of Pennsylvania ruling, which invalidated key sections of the 2012 Oil and Gas Act that placed limits on the regulatory authority of local governments. Additionally, the Pennsylvania Supreme Court remanded a number of issues to the Commonwealth Court for further decision. On July 17, 2014, the Commonwealth Court ruled on the remanded issues. The cumulative effect of the Supreme and Commonwealth Court rulings is that all of the challenged provisions relating to local ordinances contained in the 2012 Oil and

Table of Contents

Gas Act are invalid, except for the definitions section and most of the updated preemption language in the 2012 Oil and Gas Act that was included from the 1984 Oil and Gas Act. While the total impact of these rulings are not clear and will occur over an extended period of time, an immediate impact of the ruling may be increased regulatory impediments and disputes at the local government level. On June 30, 2014, the New York Court of Appeals issued its opinion in Wallach v. Town of Dryden affirming local zoning laws adopted by two upstate municipalities that prohibited oil and gas-related activities within their borders. Specifically, the Court of Appeals ruled that there was nothing within the plain language, statutory scheme and legislative history of the New York Oil, Gas and Solution Mining Law that manifested an intent by the legislature to preempt a municipality s home rule authority to regulate land use. If state, local or municipal legal restrictions are adopted in areas where we are currently conducting, or in the future plan to conduct operations, we may incur additional costs to comply with such requirements that may be significant in nature, experience delays or curtailment in the pursuit of exploration, development, or production activities, and perhaps even be precluded from the drilling of wells. Generally, Federal, state and local restrictions and requirements are applied consistently to similar types of producers (e.g., conventional, unconventional, etc.), regardless of size of the producing company.

Although, to date, the hydraulic fracturing process has not generally been subject to regulation at the federal level, there are certain governmental reviews either under way or being proposed that focus on environmental aspects of hydraulic fracturing practices, and some federal regulation has taken place. A few of these initiatives are listed here, although others may exist now or be implemented in the future. In April 2012, President Obama established an Interagency Working Group to Support Safe and Responsible Development of Unconventional Domestic Natural Gas Resources with the purpose of coordinating the policies and activities of agencies regarding unconventional gas development. The EPA has asserted federal regulatory authority over certain hydraulic fracturing activities involving diesel fuel as an additive under the Safe Drinking Water Act (SWDA). In May 2012, the EPA issued draft permitting guidance for oil and gas hydraulic fracturing activities using diesel fuel. After reviewing comments submitted on the draft guidance, which were due by August 23, 2012, the EPA submitted its draft guidance to the White House Office of Management and Budget in September 2013. In February 2014, the EPA released its revised final guidance document on SDWA underground injection control permitting for hydraulic fracturing using diesel fuels, along with responses to selected substantive public comments on the EPA s previous draft guidance, a fact sheet and a memorandum to the EPA s regional offices regarding implementation of the guidance. The process for implementing the EPA s final guidance document may vary across the states depending on the regulatory authority responsible for implementing the SDWA Underground Injection Control program in each state. Furthermore, a number of federal agencies are analyzing, or have been requested to review, a variety of environmental issues associated with hydraulic fracturing. For example, the EPA is currently studying the potential environmental effects of hydraulic fracturing on drinking water and groundwater. The EPA issued a progress report regarding the hydraulic fracturing study on December 21, 2012. However, the progress report did not provide any results or conclusions. On December 9, 2013, the EPA s Hydraulic Fracturing Study Technical Roundtable of subject-matter experts from a variety of stakeholder groups met to discuss the work underway to answer the hydraulic fracturing study s key research questions. Individual research projects associated with the EPA s study were recently published in July 2014. Research results are expected to be released in draft form in late 2014 for review by the public and the EPA Science Advisory Board. The EPA has not provided an anticipated date for completion of the report after peer review. In 2013, the EPA indicated that it intended to propose a draft water quality criteria document that would update the aquatic life water quality criteria for chloride by the summer of 2014. However, the EPA has yet to propose the draft water quality criteria document and it has not provided an updated timeframe for the proposal. The EPA announced in its September 2014 Final 2012 and Preliminary 2014 Effluent Guidelines Program Plans document that it intends to continue a rulemaking to potentially revise the effluent limitation guidelines for the Oil and Gas Extraction Point Source Category to address pretreatment standards for shale gas extraction. The EPA proposed in that same document a detailed study of centralized waste treatment facilities that accept oil and gas extraction wastewater. On May 4, 2012, the U.S. Department of the Interior, Bureau of Land Management proposed a rule that includes provisions requiring disclosure of chemicals used in hydraulic fracturing and construction standards for hydraulic fracturing on federal lands. On May 24, 2013, the Bureau of Land Management published a revised proposed rule to regulate hydraulic fracturing on federal and Indian lands.

Table of Contents

The comment period closed on August 23, 2013 and the revised proposed rule drew more than 175,000 comments. A final rule is expected to be issued in 2014 or 2015.

Certain members of U.S. Congress have called upon the U.S. Government Accountability Office to investigate how hydraulic fracturing might adversely affect water resources, and Congress has asked the SEC to investigate the natural gas industry and any possible misleading of investors or the public regarding the economic feasibility of pursuing natural gas deposits in shales by means of hydraulic fracturing. In addition, Congress requested the U.S. Energy Information Administration to provide a better understanding of that agency s estimates regarding natural gas reserves, including reserves from shale formations, as well as uncertainties associated with those estimates. On December 16, 2013, the U.S. Energy Information Administration published an abridged version of its *Annual Energy Outlook 2014 with projections to 2040* report, with the full report released on May 7, 2014. These ongoing proposed studies, depending on their degree of pursuit and any meaningful results obtained, could result in initiatives to further regulate hydraulic fracturing under the Safe Drinking Water Act or one or more other regulatory mechanisms. If new laws or regulations that significantly restrict hydraulic fracturing are adopted at the state and local level, such laws could make it more difficult or costly for us to perform hydraulic fracturing to stimulate production from dense subsurface rock formations and, in the event of local prohibitions against commercial production of natural gas, may preclude our ability to drill wells. In addition, if hydraulic fracturing becomes regulated at the federal level as a result of federal legislation or regulatory initiatives by the EPA or other federal agencies, our fracturing activities could be significantly affected. Some of the potential effects of changes in Federal, state or local regulation of hydraulic fracturing operations could include, but are not limited to, the following: additional permitting requirements, permitting delays, increased costs, changes in the way operations, drilling and/or completion must be conducted, increased recordkeeping and reporting, and restrictions on the types of additives that can be used, among other potential effects that are not listed here. Restrictions on hydraulic fracturing could also reduce the amount of oil and natural gas that we are ultimately able to produce from our reserves.

Recently promulgated rules regulating air emissions from oil and natural gas operations could cause us to incur increased capital expenditures and operating costs.

In August 2012, the EPA published final rules that establish new air emission controls for oil and natural gas production and natural gas processing operations. Specifically, the EPA s rule package includes New Source Performance Standards, which we refer to as the NSPS, to address emissions of sulfur dioxide and volatile organic compounds, and a separate set of emission standards to address hazardous air pollutants frequently associated with oil and natural gas production and processing activities. The NSPS require operators, starting in 2015, to reduce VOC emissions from oil and natural gas production facilities by conducting green completions for hydraulic fracturing, that is, recovering rather than venting the gas and natural gas liquids that come to the surface during completion of the fracturing process. The NSPS also establish specific requirements regarding emissions from compressors, dehydrators, storage tanks, and other production equipment. In addition, effective in 2012, the rules establish new notification requirements before conducting hydraulic fracturing and more stringent leak detection requirements for natural gas processing plants. The NSPS became effective October 15, 2012 and will likely require a number of modifications to our operations, including the installation of new equipment. Compliance with the new rules could result in significant costs, including increased capital expenditures and operating costs, and could adversely impact our business.

States are also proposing more stringent requirements in air permits for well sites and compressor stations. For example, Pennsylvania recently revised its list of sources exempt from air permitting requirements such that previously exempted types of sources associated with oil and gas exploration and production now are required to: (1) obtain an air permit or (2) satisfy specific requirements (emission limits, monitoring and recordkeeping) in order to claim the permit exemption. In conjunction with this proposal, Pennsylvania has finalized revisions to its General Permit for Natural Gas Production Facilities to impose additional and more stringent requirements and emission limits. Ohio is also considering revising its current General Permit for Natural Gas Production Operations to cover emissions from completion activities.

Table of Contents

Climate change legislation or regulations restricting emissions of greenhouse gases could result in increased operating costs and reduced demand for our services.

Both houses of U.S. Congress have actively considered legislation to reduce emissions of greenhouse gases, and almost half of the states have already taken legal measures to reduce emissions of greenhouse gases, primarily through the planned development of greenhouse gas emission inventories and/or regional greenhouse gas cap and trade programs. Most of these cap and trade programs work by requiring either major sources of emissions or major producers of fuels to acquire and surrender emission allowances, with the number of allowances available for purchase reduced each year until the overall greenhouse gas emission reduction goal is achieved. The adoption of any legislation or regulations that limits emissions of greenhouse gases from our equipment and operations could require us to incur costs to reduce emissions of greenhouse gases associated with our operations, and such requirements also could adversely affect demand for the oil and natural gas that we produce.

In response to findings that emissions of carbon dioxide, methane, and other greenhouse gases may present a danger to public health and the environment because emissions of such gases are contributing to the warming of the earth s atmosphere and other climate changes, the EPA has adopted regulations under existing provisions of the Clean Air Act that require entities that produce certain gases to inventory, monitor and report such gases. On November 30, 2010, the EPA published a final greenhouse gas emissions reporting rule relating to natural gas processing, transmission, storage, and distribution activities, which requires reporting of emissions on an annual basis starting with emissions occurring in 2011. Additionally, in 2010, the EPA issued rules to regulate greenhouse gas emissions through traditional major source construction and operating permit programs. The EPA confirmed the permitting thresholds established in the 2010 rule in July 2012. These permitting programs require consideration of and, if deemed necessary, implementation of best available control technology to reduce greenhouse gas emissions. As a result, our operations could face additional costs for emissions control and higher costs of doing business.

The third parties on whom we rely for gathering and transportation services are subject to complex federal, state and other laws that could adversely affect the cost, manner or feasibility of conducting our business.

The operations of the third parties on whom we rely for gathering and transportation services are subject to complex and stringent laws and regulations that require obtaining and maintaining numerous permits, approvals and certifications from various federal, state and local government authorities. These third parties may incur substantial costs in order to comply with existing laws and regulation. If existing laws and regulations governing such third-party services are revised or reinterpreted, or if new laws and regulations become applicable to their operations, these changes may affect the costs that we pay for such services. Similarly, a failure to comply with such laws and regulations by the third parties on whom we rely could have a material adverse effect on our business, financial condition, results of operations and our ability to service our debt.

Our drilling and production operations require adequate sources of water to facilitate the fracturing process and the disposal of flowback and produced water. If we are unable to dispose of the flowback and produced water from the strata at a reasonable cost and within applicable environmental rules, our ability to produce gas economically and in commercial entities could be impaired.

A significant portion of our natural gas extraction activity utilizes hydraulic fracturing, which results in water that must be treated and disposed of in accordance with applicable regulatory requirements. Environmental regulations governing the withdrawal, storage and use of surface water or groundwater necessary for hydraulic fracturing may increase operating costs and cause delays, interruptions or termination of operations, the extent of which cannot be predicted, all of which could have an adverse effect on our operations and financial performance. For example, Pennsylvania requires the development, submission and approval of a Water Management Plan before hydraulically fracturing an unconventional well. The requirements of these plans continue to be modified

Table of Contents

by proposed amendments to state regulations and PADEP s policies and guidance. For Pennsylvania operations located in the Susquehanna River Basin, the Susquehanna River Basin Commission (SRBC) regulates consumptive water uses, water withdrawals, and the diversions of water into and out of the Susquehanna River Basin, and specific SRBC approvals are required prior to initiating drilling activities. In June 2012, Ohio passed legislation that established a water withdrawal and consumptive use permit program in the Lake Erie watershed. If certain withdrawal thresholds are triggered due to our water needs for a particular project, we will be required to develop a Water Conservation Plan and obtain a withdrawal permit for that project.

Our ability to collect and dispose of water will affect our production, and potential increases in the cost of water treatment and disposal may affect our profitability. The imposition of new environmental initiatives and regulations could include restrictions on our ability to conduct hydraulic fracturing or disposal of produced water, drilling fluids and other substances associated with the exploration, development and production of gas and oil. For example, in July 2012, the Ohio Department of Natural Resources promulgated amendments to the regulations governing disposal wells in Ohio. The rules provide the Department with the authority to require certain testing as part of the process for obtaining a permit for the underground injection of produced water, and require all new disposal wells to be equipped with continuous pressure monitors and automatic shut off devices.

Impact fees and severance taxes could materially increase our liabilities.

In an effort to offset budget deficits and fund state programs, many states have imposed impact fees and/or severance taxes on the natural gas industry. In February 2012, Pennsylvania implemented an impact fee for unconventional wells drilled in the Commonwealth. An unconventional gas well is a well that is drilled into an unconventional formation, which would include the Marcellus Shale. The impact fee, which changes from year to year, is computed using the prior year s trailing 12 month NYMEX natural gas price and is based upon a tiered pricing matrix. For example, based upon natural gas prices for 2013, the impact fee for qualifying unconventional horizontal wells spudded during 2013 was $50,000 per well and the impact fee for unconventional vertical wells was $10,000 per well. The impact fee is due by April 1 of the year following the year that a horizontal unconventional well is spudded or a vertical unconventional well is put into production. The fee will continue for 15 years for a horizontal unconventional well and 10 years for a vertical unconventional well. We estimate that the impact fee for our wells including the wells in our Drilling Partnerships will be in excess of $0.3 million for the year ended December 31, 2014.

Ohio Governor John Kasich has proposed a severance tax on gas, oil and natural gas liquids produced from high-volume producing formations that are recovered through hydraulic fracturing. Under the proposed tax plan, oil and natural gas liquids recovered through hydraulic fracturing in the Utica and Marcellus shales would be taxed at 1.5% of annual gross sales in the first year and 4% per year for each year thereafter. Natural gas would be taxed yearly at 1% of gross sales. The proposed plan also levies a $25,000 up front impact fee for each well drilled in the state. The Governor s proposal was rejected by the General Assembly, and not included in the State s biennial budget bill (H.B. 59) adopted on June 30, 2013. The General Assembly is considering an alternative bill, H.B.375, introduced on December 4, 2013, that would significantly change Ohio s severance tax on the production of oil and gas. The tax on the production of oil and gas from conventional wells would be lowered to $0.10/bbl oil and $0.015/mcf natural gas. The tax on the production of oil and gas from unconventional wells would become 1% of net proceeds at the wellhead for both oil and gas for the first five years of production, increasing to 2% thereafter, but dropping again to 1% when production falls below 17 barrels of oil per day per quarter or 100 mcf gas per day per quarter.

President Obama s budget proposals for 2015 included proposed provisions with significant tax consequences. If enacted, U.S. tax laws could be amended to eliminate certain deductions for drilling, exploration and development and the mandatory funding of certain public lands and research and development of transportation alternatives.

Table of Contents

Because we handle natural gas, NGLs and oil, we may incur significant costs and liabilities in the future resulting from a failure to comply with new or existing environmental regulations or an accidental release of substances into the environment.

How we plan, design, drill, install, operate and abandon natural gas wells and associated facilities are matters subject to stringent and complex federal, state and local environmental laws and regulations. These include, for example:

- The federal Clean Air Act and comparable state laws and regulations that impose obligations related to air emissions;
- The federal Clean Water Act and comparable state laws and regulations that impose obligations related to spills, releases, streams, wetlands and discharges of pollutants into regulated bodies of water;
- The federal Resource Conservation and Recovery Act, or RCRA, and comparable state laws that impose requirements for the handling and disposal of waste, including produced waters, from our facilities;
- The federal Comprehensive Environmental Response, Compensation, and Liability Act, or CERCLA, and comparable state laws that regulate the cleanup of hazardous substances that may have been released at properties currently or previously owned or operated by us or at locations to which we have sent waste for disposal; and
- Wildlife protection laws and regulations such as the Migratory Bird Treaty Act that requires operators to cover reserve pits during the cleanup phase of the pit, if the pit is open more than 90 days.

Complying with these requirements is expected to increase costs and prompt delays in natural gas production. There can be no assurance that we will be able to obtain all necessary permits and, if obtained, that the costs associated with obtaining such permits will not exceed those that previously had been estimated. It is possible that the costs and delays associated with compliance with such requirements could cause us to delay or abandon the further development of certain properties.

Failure to comply with these laws and regulations may trigger a variety of administrative, civil and criminal enforcement measures, including the assessment of monetary penalties, the imposition of remedial requirements and the issuance of orders enjoining future operations. These enforcement actions may be handled by the EPA and/or the appropriate state agency. In some cases, the EPA has taken a heightened role in oil and gas enforcement activities. For example, in 2011, EPA Region III requested the lead on all oil and gas related violations in the United States Army Corps of Engineers Pittsburgh District. The EPA, the United States Army Corps of Engineers and the United States Department of Justice have been actively pursuing instances of unpermitted stream and wetland impacts. We also understand that the EPA has taken an increased interest in assessing operator compliance with the Spill Prevention, Control and Countermeasures regulations, set forth at 40 CFR Part 112.

Certain environmental statutes, including RCRA, CERCLA, the federal Oil Pollution Act and analogous state laws and regulations, impose strict, joint and several liability for costs required to clean up and restore sites where certain substances have been disposed of or otherwise released, whether caused by our operations, the past operations of our predecessors or third parties. Moreover, it is not uncommon for neighboring landowners and other third parties to file claims for personal injury and property damage allegedly caused by the release of hazardous substances or other waste products into the environment.

There is an inherent risk that we may incur environmental costs and liabilities due to the nature of our business and the substances we handle. For example, an accidental release from one of our wells could subject us to substantial liabilities arising from environmental cleanup and restoration costs, claims made by neighboring landowners and other third parties for personal injury and property damage, and fines or penalties for related violations of environmental laws or regulations. Moreover, the possibility exists that stricter laws, regulations or

Table of Contents

enforcement policies may be enacted or adopted and could significantly increase our compliance costs and the cost of any remediation that may become necessary. We may not be able to recover remediation costs under our respective insurance policies.

We are subject to comprehensive federal, state, local and other laws and regulations that could increase the cost and alter the manner or feasibility of us doing business.

Our operations are regulated extensively at the federal, state and local levels. The regulatory environment in which we operate includes, in some cases, legal requirements for obtaining environmental assessments, environmental impact studies and/or plans of development before commencing drilling and production activities. In addition, our activities will be subject to the regulations regarding conservation practices and protection of correlative rights. These regulations affect our operations and limit the quantity of natural gas we may produce and sell. A major risk inherent in our drilling plans is the need to obtain drilling permits from state and local authorities. Delays in obtaining regulatory approvals or drilling permits, the failure to obtain a drilling permit for a well or the receipt of a permit with unreasonable conditions or costs could inhibit our ability to develop our respective properties. Additionally, the natural gas and oil regulatory environment could change in ways that might substantially increase the financial and managerial costs of compliance with these laws and regulations and, consequently, reduce our profitability. For example, Pennsylvania s General Assembly approved legislation in February 2012, known as the Oil and Gas Act, that imposes significant, costly requirements on the natural gas industry, including the imposition of increased bonding requirements and impact fees for gas wells, based on the price of natural gas and the age of the well. Proposed regulations associated with this legislation have been released for public comment by the PADEP and, if finalized, will impact how natural gas operations are conducted in Pennsylvania. Similarly, West Virginia has promulgated regulations associated with its existing Horizontal Well Control Act and is signaling that additional regulations are on the horizon. We may be put at a competitive disadvantage to larger companies in our industry that can spread these additional costs over a greater number of wells and these increased regulatory hurdles over a larger operating staff.

We may not be able to continue to raise funds through our investment partnerships at desired levels, which may in turn restrict our ability to maintain our drilling activity at recent levels.

We sponsor limited and general partnerships to finance certain of our development drilling activities. Accordingly, the amount of development activities that we will undertake depends in large part upon our ability to obtain investor subscriptions to invest in these partnerships. We raised $150.0 million, $127.1 million and $141.9 million in 2013, 2012 and 2011, respectively. In the future, we may not be successful in raising funds through these Drilling Partnerships at the same levels that it experienced, and we also may not be successful in increasing the amount of funds we raise. Our ability to raise funds through our Drilling Partnerships depends in large part upon the perception of investors of their potential return on their investment and their tax benefits from investing in them, which perception is influenced significantly by our historical track record of generating returns and tax benefits to the investors in our existing partnerships.

In the event that our Drilling Partnerships do not achieve satisfactory returns on investment or the anticipated tax benefits, we may have difficulty in maintaining or increasing the level of investment partnership fundraising relative to the levels achieved by us. In this event, we may need to seek financing for our drilling activities through alternative methods, which may not be available, or which may be available only on a less attractive basis than the financing we realized through these investment partnerships, or we may determine to reduce drilling activity.

Changes in tax laws may impair our ability to obtain capital funds through investment partnerships.

Under current federal tax laws, there are tax benefits to investing in Drilling Partnerships, including deductions for intangible drilling costs and depletion deductions. However, both the Obama Administration s budget proposal for fiscal year 2015 and other recently introduced legislation include proposals that would,

among other things, eliminate or reduce certain key U.S. federal income tax incentives currently available to oil and natural gas exploration and production companies. These changes include, but are not limited to, (i) the repeal of the percentage depletion allowance for oil and natural gas properties, (ii) the elimination of current deductions for intangible drilling and development costs and certain environmental clean-up costs, (iii) the elimination of the deduction for certain domestic production activities, and (iv) an extension of the amortization period for certain geological and geophysical expenditures. It is unclear whether these or similar changes will be enacted and, if enacted, how soon any such changes could become effective. The passage of any legislation as a result of these proposals or any other similar changes in U.S. federal income tax laws could eliminate or postpone certain tax deductions that are currently available with respect to oil and natural gas exploration and development. The repeal of these oil and gas tax benefits, if it happens, would result in a substantial decrease in tax benefits associated with an investment in our Drilling Partnerships. These or other changes to federal tax law may make investment in the Drilling Partnerships less attractive and, thus, reduce our ability to obtain funding from this significant source of capital funds.

Fee-based revenues may decline if we are unsuccessful in sponsoring new Drilling Partnerships.

Our fee-based revenues will be based on the number of Dilling Partnerships we sponsor and the number of partnerships and wells we manage or operate. If we are unsuccessful in sponsoring future Drilling Partnerships, our fee-based revenues may decline.

Our revenues may decrease if investors in our Drilling Partnerships do not receive a minimum return.

We have agreed to subordinate a portion of our share of production revenues, net of corresponding production costs, to specified returns to the investor partners in the Drilling Partnerships, typically 10% to 12% per year for the first five to eight years of distributions. Thus, our revenues from a particular partnership will decrease if we do not achieve the specified minimum return. For the years ended December 31, 2013, 2012 and 2011, $9.6 million, $6.3 million and $4.0 million, respectively, of our revenues, net of corresponding production costs, were subordinated, which reduced our cash distributions received from the Drilling Partnerships.

We or one of our subsidiaries may be exposed to financial and other liabilities as the managing general partner in Drilling Partnerships.

We or one of our subsidiaries serves as the managing general partner of the Drilling Partnerships and will be the managing general partner of new investment partnerships that we sponsor. As a general partner, we or one of our subsidiaries will be contingently liable for the obligations of the partnerships to the extent that partnership assets or insurance proceeds are insufficient. We have agreed to indemnify each investor partner in the Drilling Partnerships from any liability that exceeds such partner s share of the Drilling Partnership s assets.

Covenants in our credit facility restrict our business in many ways.

Our credit facility contains various restrictive covenants that limit our ability to, among other things:

- incur additional debt or liens or provide guarantees in respect of obligations of other persons;
- pay distributions or redeem or repurchase our securities;
- prepay, redeem or repurchase debt;
- make loans, investments and acquisitions;
- enter into hedging arrangements;
- sell assets;

enter into certain transactions with affiliates; and

consolidate or merge with or into, or sell substantially all of our assets to, another person.

Table of Contents

In addition, our credit facility requires us to maintain specified financial ratios. Our ability to meet those financial ratios can be affected by events beyond our control, and we may be unable to meet those tests. A breach of any of these covenants could result in a default under our credit facility. Upon the occurrence of an event of default, the lenders under the credit facility could elect to declare all amounts outstanding immediately due and payable and terminate all commitments to extend further credit. If we were unable to repay those amounts, the lenders could proceed against the collateral granted to them to secure that indebtedness. We have pledged a significant portion of our assets as collateral under our credit facility. If the lenders accelerate the repayment of borrowings, we may not have sufficient assets to repay our credit facility and our other liabilities. Our borrowings under our credit facility are, and are expected to continue to be, at variable rates of interest and expose us to interest rate risk. If interest rates increase, our debt service obligations on the variable rate indebtedness would increase even though the amount borrowed remained the same.

Economic conditions and instability in the financial markets could negatively impact our business which, in turn, could impact the cash we have to pay interest and principal on the notes.

Our operations are affected by the financial markets and related effects in the global financial system. The consequences of an economic recession and the effects of the financial crisis include a lower level of economic activity and increased volatility in energy prices. This may result in a decline in energy consumption and lower market prices for oil and natural gas and has previously resulted in a reduction in drilling activity in our service areas. Any of these events may adversely affect our revenues and ability to fund capital expenditures and, in the future, may impact the cash that we have available to fund our operations, pay required debt service on our credit facility and the notes.

Potential instability in the financial markets, as a result of recession or otherwise, can cause volatility in the markets and may affect our ability to raise capital and reduce the amount of cash available to fund operations. We cannot be certain that additional capital will be available to us to the extent required and on acceptable terms. Disruptions in the capital and credit markets could negatively impact our access to liquidity needed for our businesses and impact flexibility to react to changing economic and business conditions. We may be unable to execute our growth strategies, take advantage of business opportunities or to respond to competitive pressures, any of which could negatively impact our business.

A weakening of the current economic situation could have an adverse impact on producers, key suppliers or other customers, or on our lenders, causing them to fail to meet their obligations. Market conditions could also impact our derivative instruments. If a counterparty is unable to perform its obligations and the derivative instrument is terminated, our cash flow and ability to pay debt service could be impacted. The uncertainty and volatility surrounding the global financial system may have further impacts on our business and financial condition that we currently cannot predict or anticipate.

Our historical financial information may not be representative of the results we would have achieved as a stand-alone public company and may not be a reliable indicator of our future results.

Some of the historical financial information that we have included in this offering memorandum may not necessarily reflect what our financial position, results of operations or cash flows would have been had we been an independent, stand-alone entity during the periods presented or those that we will achieve in the future. The general and administrative expenses reflected in the financial statements for Atlas Energy E&P Operations include an allocation for certain corporate functions historically provided by Atlas Energy. These allocations were based on what we and Atlas Energy considered to be reasonable reflections of the historical utilization levels of these services required in support of the business. We have not adjusted the historical financial statements for Atlas Energy E&P Operations to reflect changes that occurred in our cost structure and operations as a result of our transition to becoming a stand-alone public company. Therefore, the financial statements of Atlas E&P Operations and our historical financial information may not necessarily be indicative of what our financial position, results of operations or cash flows will be in the future.

Table of Contents

Estimates of the reserves are based on many assumptions that may prove to be inaccurate. Any material inaccuracies in these reserve estimates or underlying assumptions will materially affect the quantities and present value of our reserves.

Underground accumulations of natural gas and oil cannot be measured in an exact way. Natural gas and oil reserve engineering requires subjective estimates of underground accumulations of natural gas and oil and assumptions concerning future natural gas prices, production levels and operating and development costs. As a result, estimated quantities of proved reserves and projections of future production rates and the timing of development expenditures may prove to be inaccurate. Our current estimates of our proved reserves are prepared by our internal engineers and our independent petroleum engineers. Over time, our internal engineers may make material changes to reserve estimates taking into account the results of actual drilling and production. Some of our reserve estimates were made without the benefit of a lengthy production history, which are less reliable than estimates based on a lengthy production history. Also, we make certain assumptions regarding future natural gas prices, production levels and operating and development costs that may prove incorrect. Any significant variance from these assumptions by actual figures could greatly affect our estimates of reserves, the economically recoverable quantities of natural gas and oil attributable to any particular group of properties, the classifications of reserves based on risk of recovery and estimates of the future net cash flows. Our standardized measure is calculated using natural gas prices that do not include financial hedges. Numerous changes over time to the assumptions on which our reserve estimates are based, as described above, often result in the actual quantities of natural gas and oil we ultimately recover being different from our reserve estimates.

The present value of future net cash flows from our proved reserves is not necessarily the same as the current market value of our estimated natural gas reserves. We base the estimated discounted future net cash flows from our proved reserves on historical prices and costs. However, actual future net cash flows from our natural gas properties also will be affected by factors such as:

actual prices we receive for natural gas;

the amount and timing of actual production;

the amount and timing of our capital expenditures;

the amount and timing of our capital expenditures;

changes in governmental regulations or taxation.

The timing of both our production and incurrence of expenses in connection with the development and production of natural gas properties will affect the timing of actual future net cash flows from proved reserves, and thus their actual present value. In addition, the 10% discount factor we use when calculating discounted future net cash flows may not be the most appropriate discount factor based on interest rates in effect from time to time and risks associated with us or the natural gas and oil industry in general.

Any significant variance in our assumptions could materially affect the quantity and value of reserves, the amount of standardized measure, and our financial condition and results of operations. In addition, our reserves or standardized measure may be revised downward or upward based upon production history, results of future exploitation and development activities, prevailing natural gas and oil prices and other factors. A material decline in prices paid for our production can reduce the estimated volumes of our reserves because the economic life of our wells could end sooner. Similarly, a decline in market prices for natural gas or oil may reduce our standardized measure.

If we were characterized as a corporation for U.S. federal income tax purposes under current law, or if we were to become subject to entity-level taxation for U.S. federal and/or state income or franchise tax purposes as a result of future changes in law, our ability to pay interest and principal on the notes could be materially and adversely impacted.

We believe that, since 2011, we have qualified as a partnership for U.S. federal income tax purposes, which requires that 90% or more of our gross income for every taxable year consist of qualifying income, as defined in

33

Table of Contents

Section 7704 of the Internal Revenue Code of 1986, as amended, or the Code. Qualifying income is defined as income and gains derived from the exploration, development, mining or production, processing, refining, transportation (including pipelines transporting gas, oil, or products thereof), or the marketing of any mineral or natural resource (including fertilizer, geothermal energy, and timber). We may in fact not meet this requirement under current law, and we have not requested, and do not plan to request, a ruling from the Internal Revenue Service, or the IRS, on this or any other matter affecting us. Moreover, current law may change so as to cause us to be treated as a corporation for U.S. federal income tax purposes or to subject us to state corporate income tax. For example, because of widespread state budget deficits, several states are evaluating ways to subject partnerships to entity level taxation through the imposition of state income, franchise or other forms of taxation.

If we were treated as a corporation for U.S. federal income tax purposes (or state income or franchise tax purposes) for any taxable year (including any prior taxable years for which the statute of limitations remains open), the resulting U.S. federal income tax and state income tax liability could result in a material reduction in our anticipated cash flow, which could adversely affect our ability to pay interest and principal on the notes.

Risks Relating to Our Ongoing Relationship with Atlas Energy and its Affiliates

Atlas Energy owns common and preferred limited partner units representing an approximate 27.7% limited partner ownership interest. Therefore, Atlas Energy possesses significant influence on all matters submitted to a vote of our unitholders.

As of June 30, 2014, Atlas Energy owns approximately 20.96 million common units and 3.75 million preferred limited partner units representing an approximate 27.7% limited partner ownership interest in us. Accordingly, Atlas Energy possesses significant influence over matters submitted to our unitholders for approval, and could exercise such influence in a manner that is not in the best interests of our other unitholders, including the ability to effectively prevent the approval of certain matters, such as removal of our general partner and other extraordinary transactions for which super-majority approval is required under applicable Delaware law. In addition, Atlas Energy owns all of the equity of our general partner and is able to control, subject to our partnership agreement and applicable law, all matters affecting us, including:

- any determination with respect to our business direction and policies, including the appointment and removal of officers;
- any determinations with respect to mergers, business combinations or disposition of assets;
- our financing;
- compensation and benefit programs and other human resources policy decisions;
- the payment of dividends on our units; and
- determinations with respect to our tax returns.

Atlas Energy owns and controls our general partner, which has the authority to conduct our business and manage our operations. Atlas Energy may have conflicts of interest, which may permit it to favor its own interests to our unitholders detriment.

Atlas Energy owns and controls our general partner. Conflicts of interest may arise between Atlas Energy and its affiliates, including our general partner, on the one hand, and us and our unitholders, on the other hand. In resolving these conflicts of interest, our general partner is permitted to favor its own interests and the interests of its owners over the interests of our unitholders. These conflicts include, among others, the following situations:

neither our partnership agreement nor any other agreement requires Atlas Energy or any of its affiliates to pursue a business strategy that favors us or to refer any business opportunity to us;

our general partner is expressly allowed to take into account the interests of parties other than us, such as Atlas Energy, in resolving conflicts of interest;

Table of Contents

our partnership agreement eliminates any fiduciary duties owed by our general partner to us, and restricts the remedies available to unitholders for actions that, without the limitations, might constitute breaches of fiduciary duty;

except in limited circumstances, our general partner has the power and authority to conduct our business without unitholder approval;

our general partner determines the amount and timing of our drilling programs and related capital expenditures, asset purchases and sales, borrowings, issuance of additional partnership securities and reserves;

our partnership agreement does not restrict our general partner from causing us to pay it or its affiliates for any services rendered to us or entering into additional contractual arrangements with any of these entities on our behalf;

our general partner determines the amount and timing of any capital expenditure and whether a capital expenditure is classified as a maintenance capital expenditure, which reduces operating surplus, or an expansion or investment capital expenditure, which does not reduce operating surplus. Our partnership agreement does not set a limit on the amount of maintenance capital expenditures that our general partner may estimate;

our general partner controls the enforcement of obligations owed to us by our general partner and its affiliates;

our general partner intends to limit its liability regarding our contractual and other obligations;

our general partner decides which costs incurred by it and its affiliates are reimbursable by us; and

our general partner decides whether to retain separate counsel, accountants or others to perform services for us.

Atlas Energy and other affiliates of our general partner may compete with us. This could cause conflicts of interest and limit our ability to acquire additional assets or businesses, which in turn could adversely affect our ability to replace reserves, results of operations and cash available for debt service.

Our partnership agreement provides that our general partner will be restricted from engaging in any business activities other than acting as our general partner and those activities incidental to its ownership interest in us. Affiliates of our general partner, however, are not prohibited from engaging in other businesses or activities, including those that might be in direct competition with us. Atlas Energy and its affiliates may make investments and acquisitions that may include entities or assets that we would have been interested in acquiring. In addition, members of management of Atlas Energy, some of whom may also participate in the management of our general partner, have substantial experience in the natural gas and oil business.

Therefore, Atlas Energy and its affiliates may compete with us for investment opportunities and Atlas Energy and its affiliates may own an interest in entities that compete with us.

Our partnership agreement provides that:

subject to any contractual provision to the contrary, Atlas Energy has no obligation to refrain from engaging in the same or similar business activities or lines of business we do, doing business with any of our customers or employing or otherwise engaging any of our officers or employees;

neither Atlas Energy nor any of its officers or directors will be liable to us or to our unitholders for breach of any duty, including any fiduciary duty, by reason of any of these activities; and

none of our general partner, its affiliates or any of their respective directors or officers is under any duty to present any corporate opportunity to us which may be a corporate opportunity for such person

Table of Contents

and us, and such person will not be liable to us or our unitholders for breach of any duty, including any fiduciary duty, by reason of the fact that such person pursues or acquires that corporate opportunity for itself, directs that corporate opportunity to another person or does not present that corporate opportunity to us.

Accordingly, Atlas Energy and its affiliates may acquire, develop or dispose of additional natural gas or oil properties or other assets in the future, without any obligation to offer us the opportunity to purchase or develop any of those assets. These factors may make it difficult for us to compete with Atlas Energy and its affiliates with respect to commercial activities as well as for acquisition candidates. As a result, competition from these entities could adversely impact our results of operations and accordingly cash available for debt service. This also may create actual and potential conflicts of interest between us and affiliates of our general partner and result in less than favorable treatment of us.

Certain of the officers and directors of our general partner may have actual or potential conflicts of interest because of their positions with Atlas Energy.

Certain of the directors and officers of our general partner, including our Chairman, Chief Executive Officer, Vice Chairman, President, Chief Financial Officer, Chief Accounting Officer and Chief Legal Officer, have positions with Atlas Energy or its general partner. In addition, such directors and officers may own Atlas Energy common units, options to purchase Atlas Energy common units or other Atlas Energy equity awards. The individual holdings of Atlas Energy common units, options to purchase common units of Atlas Energy or other equity awards may be significant for some of these persons compared to these persons total assets. Their position at Atlas Energy and the ownership of any Atlas Energy equity or equity awards creates, or may create the appearance of, conflicts of interest when these expected directors and officers are faced with decisions that could have different implications for Atlas Energy than the decisions have for us.

Table of Contents

SELECTED HISTORICAL FINANCIAL DATA

The following tables present summary historical condensed financial and operating data for us and our predecessor, Atlas Energy E&P Operations, as of and for the periods indicated. Atlas Energy E&P Operations consists of the subsidiaries of Atlas Energy that held its natural gas and oil development and production assets and liabilities and its partnership management business, substantially all of which Atlas Energy transferred to us on March 5, 2012.

The selected historical financial data for the six months ended June 30, 2014 and 2013 and the summary historical consolidated balance sheet data as of June 30, 2014 and 2013 have been derived from our unaudited consolidated financial statements included in our Quarterly Report on Form 10-Q for the quarter ended June 30, 2014, which has been incorporated by reference in this prospectus. The selected historical financial data for the fiscal years ended December 31, 2013 and 2012 and the summary historical consolidated balance sheet data as of December 31, 2013 and 2012 were derived from our audited financial statements incorporated by reference in this prospectus. The selected historical financial data for each of the fiscal years in the two-year period ended December 31, 2011 were derived from Atlas Energy E&P Operations audited combined financial statements included in our annual report on Form 10-K for the year ended December 31, 2012.

The following tables include the non-GAAP financial measures of EBITDA and Adjusted EBITDA. For a definition of these measures and reconciliation to their most directly comparable financial measure calculated and presented in accordance with GAAP, see the notes to the table.

The financial data below should be read together with, and are qualified in their entirety by reference to, our historical consolidated financial statements and the related notes, and Management s Discussion and Analysis of Financial Condition and Results of Operations and other financial information included elsewhere or incorporated by reference in this prospectus.

Table of Contents

	Historical						
	Year Ended December 31,					Six Months Ended June 30,	
	2009	2010	2011	2012	2013	2013	2014
	(amounts in thousands)						
Income Statement Data							
Revenues:							
Gas and oil production	$ 112,979	$ 93,050	$ 66,979	$ 92,901	$ 266,783	$ 93,158	$ 200,302
Well construction and completion	372,045	206,802	135,283	131,496	167,883	81,329	65,713
Gathering	18,839	14,087	17,746	16,267	15,676	8,048	8,226
Administration and oversight	15,554	9,716	7,741	11,810	12,277	4,476	5,895
Well services	17,859	20,994	19,803	20,041	19,492	9,680	11,844
Other			(30)	(4,886)	(14,456)	(1,317)	82
Total revenues	537,276	344,649	247,522	267,629	467,655	195,374	292,062
Expenses:							
Gas and oil production	25,557	23,323	17,100	26,624	97,237	34,251	78,555
Well construction and completion	315,546	175,247	115,630	114,079	145,985	70,721	57,142
Gathering	25,269	20,221	20,842	19,491	18,012	9,372	8,686
Well services	9,330	10,822	8,738	9,280	9,515	4,623	4,908
General and administrative	15,832	11,381	27,536	69,123	78,063	31,784	37,770
Chevron transaction expense				7,670			
Depreciation, depletion and amortization	43,712	40,758	30,869	52,582	136,763	43,405	108,238
Asset impairment	156,359	50,669	6,995	9,507	38,014		
Total operating expenses	591,605	332,421	227,710	308,356	523,589	194,156	295,299
Operating income (loss)	(54,329)	12,228	19,812	(40,727)	(55,934)	1,218	(3,237)
Interest expense				(4,195)	(34,324)	(11,397)	(26,451)
Gain (loss) on asset sales		(2,947)	87	(6,980)	(987)	(1,374)	(1,594)
Net Income (loss)	$ (54,329)	$ 9,281	$ 19,899	$ (51,902)	$ (91,245)	$ (11,553)	$ (31,282)
Balance sheet data (at period end):							
Total assets	$ 690,603	$ 649,232	$ 702,366	$ 1,498,952	$ 2,343,800	$ 1,624,895	$ 2,881,286
Property, plant and equipment, net	503,386	508,484	520,883	1,302,228	2,120,818	1,413,109	2,666,718
Long-term debt, including current maturities				351,425	942,334	275,000	1,203,973
Total equity	351,586	381,882	457,175	862,006	1,067,291	1,142,765	1,300,476
Cash flow data:							
Cash provided by (used in) operating activities	$ 192,201	$ 60,586	$ 71,437	$ 16,486	$ 122,900	$ (31,945)	$ 45,041
Cash used in investing activities	(98,393)	(92,423)	(47,509)	(644,278)	(984,554)	(134,108)	(612,156)
Cash provided by (used in) financing activities	(93,808)	31,837	30,780	596,272	840,294	185,818	569,280
Capital expenditures	99,302	93,608	47,324	127,226	263,537	130,052	94,555
Other financial data:							
EBITDA[1]	$ (10,617)	$ 50,039	$ 50,768	$ 4,875	$ 79,842	$ 43,249	$ 103,407
Adjusted EBITDA[1]	145,742	103,655	57,676	71,584	176,115	59,661	120,527
Operating data:							
Net Production							
Natural gas (Mcfd)	38,644	35,855	31,403	69,408	158,886	106,442	221,714
Oil (Bpd)	427	373	307	330	1,329	1,191	1,827
Natural gas liquids (Bpd)	101	499	444	974	3,473	3,292	3,556
Total (Mcfed)	41,814	41,090	35,912	77,232	187,701	133,341	254,016
Average sales price, excluding effects of subordination:							
Natural gas (per Mcf)[2]							
Realized price, after hedge	$ 7.54	$ 7.08	$ 4.98	$ 3.29	$ 3.47	$ 3.32	$ 3.92
Realized price, before hedge	$ 4.04	$ 4.60	$ 4.53	$ 2.60	$ 3.25	$ 3.18	$ 4.40
Oil (per Bbl)							
Realized price, after hedge	$ 71.34	$ 77.31	$ 89.70	$ 94.02	$ 91.01	$ 89.97	$ 89.12
Realized price before hedge	$ 57.41	$ 71.37	$ 89.07	$ 91.32	$ 95.88	$ 91.63	$ 96.49
Natural gas liquids (per Bbl)							
Realized price, after hedge	$ 36.19	$ 37.78	$ 48.26	$ 31.97	$ 28.71	$ 27.39	$ 29.57
Realized price, before hedge	$ 36.19	$ 37.78	$ 48.26	$ 31.97	$ 29.43	$ 27.60	$ 32.15

Production Costs (per Mcfe):														
Lease operating expenses[3]	$	1.10	$	1.27	$	1.09	$	0.82	$	1.09	$	1.09	$	1.21
Production taxes		0.03		0.04		0.10		0.12		0.18		0.23		0.26
Transportation and compression		0.68		0.65		0.43		0.24		0.24		0.20		0.28
Total	$	1.80	$	1.96	$	1.61	$	1.19	$	1.50	$	1.51	$	1.74

Table of Contents

(1) Although not prescribed under GAAP, we believe the presentation of EBITDA and Adjusted EBITDA is relevant and useful because it helps our investors understand our operating performance, allows for easier comparison of our results with other master limited partnerships (MLP), and is a critical component in the determination of quarterly cash distributions. EBITDA and Adjusted EBITDA should not be considered in isolation of, or as a substitute for, net income as an indicator of operating performance or cash flows from operating activities as a measure of liquidity. While our management believes that our methodology of calculating EBITDA and Adjusted EBITDA is generally consistent with the common practice of other MLPs, such metrics may not be consistent and, as such, may not be comparable to measures reported by other MLPs, who may use other adjustments related to their specific businesses. EBITDA and Adjusted EBITDA are supplemental financial measures used by our management and by external users of our financial statements such as investors, lenders under our credit facility, research analysts, rating agencies and others to assess:

- Our operating performance as compared to other publicly traded partnerships and other companies in the upstream energy sector, without regard to financing methods, historical cost basis or capital structure;
- Our ability to generate sufficient cash flows to support our distributions to unitholders;
- Our ability to incur and service debt and fund capital expansion;
- The viability of potential acquisitions and other capital expenditure projects; and
- Our ability to comply with financial covenants in our Amended Credit Facility, which are calculated based upon Adjusted EBITDA.

We define EBITDA as net income (loss) plus the following adjustments:

- Interest expense;
- Income tax expense; and
- Depreciation, depletion and amortization.

We define Adjusted EBITDA as EBITDA plus the following adjustments:

- Asset impairments;
- Acquisition and related costs;
- Non-cash stock compensation;
- (Gains) losses on asset disposal;
- Cash proceeds received from monetization of derivative transactions;
- Premiums paid on swaption derivative contracts; and
- Other items.

We adjust Adjusted EBITDA for non-cash, non-recurring and other items for the sole purpose of evaluating our cash distribution for the applicable period.

Table of Contents

The following reconciles our net income to EBITDA and Adjusted EBITDA for the periods indicated:

	Historical						
	Year ended December 31,					Six months ended June 30,	
	2009	2010	2011	2012	2013	2013	2014
EBITDA Calculation							
Net income (loss)	$ (54,329)	$ 9,281	$ 19,899	$ (51,902)	$ (91,245)	$ (11,553)	$ (31,282)
Interest expense				4,195	34,324	11,397	26,451
Depreciation, depletion and amortization	43,712	40,758	30,869	52,582	136,763	43,405	108,238
EBITDA	(10,617)	50,039	50,768	4,875	79,842	43,249	103,407
Asset impairments[(a)]	156,359	50,669	6,995	9,507	38,014		
Acquisition and related costs				22,200	29,923	6,480	11,170
Non-cash stock compensation				10,833	12,679	7,249	4,354
Loss (gain) on asset disposal[(b)]		2,947	(87)	6,980	987	1,374	1,594
Chevron transaction expense[(c)]				7,670			
Adjustment to reflect cash impact of derivatives[(d)]				4,518			
Plus premiums paid on swaption derivative contacts[(e)]				5,001	14,480	1,309	
Other					190		2
Adjusted EBITDA	$ 145,742	$ 103,655	$ 57,676	$ 71,584	$ 176,115	$ 59,661	$ 120,527

(a) Asset impairments for the year ended December 31, 2012 consist of $9.5 million we recognized related to the carrying amount of Antrim and Niobrara Shale gas and oil properties, which we recognize in accordance with the successful efforts method of oil and gas accounting, being in excess of their estimated fair value at December 31, 2012. Our estimate of the fair value for the Antrim Niobrara Shale gas and oil properties was impacted by, among other factors, the deterioration of natural gas prices at the date of measurement. Please see further discussion of asset impairments for other historical financial statement periods in Management s Discussion and Analysis of Financial Condition and Results of Operations Results of Operations Other Costs and Expenses Asset Impairment in our Form 10-K for the year ended December 31, 2012. Asset impairments for the year ended December 31, 2013 consist of $38.0 million we recognized related primarily to our shallow natural gas wells in the New Albany Shale and unproved acreage in the Chattanooga and New Albany shales.

(b) Includes a loss on asset disposal related to management s decision to terminate a farm-out agreement with a third party for well drilling in the South Knox area of the New Albany Shale that was originally entered into in 2010. The farm-out agreement contained certain well drilling milestones which needed to be met in order for us to maintain ownership of the South Knox processing plant. During the year ended December 31, 2012, management decided not to continue progressing towards these milestones due to the current natural gas price environment. As a result, we forfeited our interest in the processing plant and recorded a loss related to the net book value of the assets during the year ended December 31, 2012. During the year ended December 31, 2013, we recognized $1.0 million of loss on asset disposal, primarily related to our loss on the sale of our Antrim assets in Michigan.

Table of Contents

(c) Includes a working capital adjustment recognized in September 2012 related to certain amounts included within the contractual cash transaction adjustment associated with the acquisition of assets from Chevron in February 2011.

(d) Includes $4.5 million of net cash proceeds received during the year ended December 31, 2012 related to the rebalancing of our hedge portfolio for production periods during 2015 and 2016.

(e) Swaption derivative contracts grant us the option to enter into a swap derivative transaction to hedge future production period sales prices for a stated option period, which generally have a duration of a few months and commences upon entering into the derivative contract, in return for an upfront premium. The amounts included within the reconciliation reflect the amortization of premiums we paid to enter into swaption derivative contracts for certain acquired volumes over the option period. Generally, we enter into swaption derivative contracts to hedge acquired volumes after the announcement of the signed definitive purchase and sale agreement to acquire the oil and gas properties, but before we close on the transaction, as our senior secured revolving credit agreement does not allow us to hedge production volume until we own such volumes. We exclude such costs in our determination of discounted cash flow, Adjusted EBITDA and cash distributions for the respective period as they are specific to the related transaction.

(2) Excludes the impact of subordination of our production revenue to investor partners within our investment partnerships for the years ended December 31, 2010, 2011, 2012 and 2013, and for the six months ended June 30 2013 and 2014. Including the effect of this subordination, the average realized natural gas sales price were $5.78 per Mcf ($3.30 per Mcf before the effects of financial hedging), $4.28 per Mcf ($3.83 per Mcf before the effects of financial hedging), $2.76 per Mcf ($2.08 per Mcf before the effects of financial hedging), and $3.21 per Mcf ($2.99 per Mcf before the effects of financial hedging) for the years ended December 31, 2010, 2011, 2012 and 2013, respectively, and $2.98 per Mcf ($2.85 per Mcf before the effects of financial hedging) and $3.78 per Mcf ($4.26 per Mcf before the effects of financial hedging) for the six months ended June 30, 2013 and 2014, respectively. Please see Risk factors Risks relating to our business.

(3) Excludes the effects of our proportionate share of lease operating expenses associated with subordination of our production revenue to investor partners within our investment partnerships. Including the effects of these costs, total lease operating expenses per Mcfe were $0.86 per Mcfe ($1.56 per Mcfe for total production costs), $0.77 per Mcfe ($1.33 per Mcfe for total production costs), $0.58 per Mcfe ($0.94 per Mcfe for total production costs), and $1.01 per Mcfe ($1.42 per Mcfe for total production costs) for the years ended December 31, 2010, 2011, 2012 and 2013, respectively, and $1.00 per Mcfe ($1.42 per Mcfe for total production costs) and $1.17 per Mcfe ($1.71 per Mcfe for total production costs) for the six months ended June 30, 2013 and 2014, respectively. Please see Risk factors Risks relating to our business.

Table of Contents

USE OF PROCEEDS

The exchange offer is intended to satisfy our obligations under the registration rights agreement. We will not receive any cash proceeds from the issuance of the exchange notes in the exchange offer. In consideration for issuing the exchange notes as contemplated by this prospectus, we will receive in exchange new issue notes in a like principal amount. We will cancel new issue notes surrendered in exchange for the exchange notes in the exchange offer. Accordingly, the issuance of the exchange notes will not result in any change in our outstanding indebtedness.

RATIO OF EARNINGS TO FIXED CHARGES

The table below sets forth our ratios of earnings to fixed charges and ratio of earnings to fixed charges and preferred dividends for the periods indicated.

	Six Months Ended June 30, 2014	Years Ended December 31, 2013	2012	2011	2010	2009
Ratio of earnings to fixed charges[1]	(2)	(4)	(6)	32.49x	20.68x	(8)
Ratio of earnings to fixed charges and preferred dividends	(3)	(5)	(7)	(9)	(9)	(9)

(1) Ratio of earnings to fixed charges means the ratio of income from continuing operations before income taxes and cumulative effect of accounting change, net, and fixed charges to fixed charges, where fixed charges are the interest on indebtedness, amortization of debt expense and estimated interest factor for rentals.
(2) Our earnings were insufficient to cover our fixed charges by $35.5 million for this period.
(3) Our earnings were insufficient to cover our fixed charges and preferred dividends by $44.3 million for this period.
(4) Our earnings were insufficient to cover our fixed charges by $103.7 million for this period.
(5) Our earnings were insufficient to cover our fixed charges and preferred dividends by $116.4 million for this period.
(6) Our earnings were insufficient to cover our fixed charges by $54.0 million for this period.
(7) Our earnings were insufficient to cover our fixed charges and preferred dividends by $57.5 million for this period.
(8) Our earnings were insufficient to cover our fixed charges by $54.3 million for this period.
(9) We did not have any preferred securities outstanding as of these periods.

Table of Contents

CAPITALIZATION

The following table sets forth our consolidated capitalization as of June 30, 2014.

You should read the following table in conjunction with our historical consolidated financial statements and related notes, Management s Discussion and Analysis of Financial Condition and Results of Operations and other financial information included elsewhere or incorporated by reference in this prospectus.

	As of June 30, 2014 (In thousands)
Cash and cash equivalents	$ 3,993
Total debt:	
Credit facility[(1)]	$ 581,000
Senior unsecured notes	622,973
Other	2,604
Total debt	1,206,577
Partners capital:	
Common limited partners interests	1,132,694
Preferred limited partners interests	180,566
Class C common limited partner warrants	1,176
General partner s interests	249
Accumulated other comprehensive loss	(14,209)
Total partners capital	1,300,476
Total capitalization	**$ 2,507,053**

(1) As of September 30, 2014, we had $666.0 million outstanding under our revolving credit facility, excluding $4.4 million in outstanding letters of credit.

Table of Contents

EXCHANGE OFFER

We sold the new issue notes on June 2, 2014 pursuant to the purchase agreement dated as of May 16, 2014 by and among us and the initial purchasers named therein. The new issue notes were subsequently offered by the initial purchasers to qualified institutional buyers pursuant to Rule 144A under the Securities Act and to non-U.S. persons pursuant to Regulation S under the Securities Act.

Purpose of the Exchange Offer

We sold the new issue notes in transactions that were exempt from or not subject to the registration requirements under the Securities Act. Accordingly, the new issue notes are subject to transfer restrictions. In general, you may not offer or sell the new issue notes unless either they are registered under the Securities Act or the offer or sale is exempt from or not subject to registration under the Securities Act and applicable state securities laws.

In connection with the sale of the new issue notes, we entered into a registration rights agreement with the initial purchasers of the new issue notes. We are offering the exchange notes under this prospectus in an exchange offer for the new issue notes to satisfy our obligations under the registration rights agreement. During the exchange offer period, we will exchange the exchange notes for all new issue notes properly surrendered and not withdrawn before the expiration date. We have registered the exchange notes; the transfer restrictions, registration rights and provisions for additional interest relating to the new issue notes will not apply to the exchange notes.

Resale of Exchange Notes

We have not requested, and do not intend to request, an interpretation by the staff of the SEC with respect to whether the exchange notes may be offered for sale, resold or otherwise transferred by any holder without compliance with the registration and prospectus delivery provisions of the Securities Act. Based on interpretations by the staff of the SEC set forth in no-action letters issued to third parties, including *Exxon Capital Holdings Corp.* (available May 13, 1988), *Morgan Stanley & Co. Incorporated* (available June 5, 1991) and *Shearman & Sterling* (available July 2, 1993), we believe that exchange notes may be offered for resale, resold and otherwise transferred by you without further compliance with the registration and prospectus delivery provisions of the Securities Act if:

- you are not an affiliate of ours within the meaning of Rule 405 under the Securities Act;
- such exchange notes are acquired in the ordinary course of your business; and
- you do not intend to participate in a distribution of the exchange notes.

The SEC, however, has not considered the exchange offer for the exchange notes in the context of a no-action letter, and the SEC may not make a similar determination as in the no-action letters issued to these third parties.

If you tender in the exchange offer with the intention of participating in any manner in a distribution of the exchange notes, you

- cannot rely on such interpretations by the SEC staff; and
- must comply with the registration and prospectus delivery requirements of the Securities Act in connection with a secondary resale transaction.

Unless an exemption from registration is otherwise available, any securityholder intending to distribute exchange notes should be covered by an effective registration statement under the Securities Act. The registration

Table of Contents

statement should contain the selling securityholder s information required by Item 507 of Regulation S-K under the Securities Act.

This prospectus may be used for an offer to resell, resale or other transfer of exchange notes only as specifically described in this prospectus. If you are a broker-dealer, you may participate in the exchange offer only if you acquired the new issue notes as a result of market-making activities or other trading activities. Each broker-dealer that receives exchange notes for its own account in exchange for new issue notes, where such new issue notes were acquired by such broker-dealer as a result of market-making activities or other trading activities, must acknowledge by way of the letter of transmittal that it will deliver this prospectus in connection with any resale of the exchange notes. Please read the section captioned Plan of Distribution for more details regarding the transfer of exchange notes.

Terms of the Exchange Offer

Subject to the terms and conditions described in this prospectus and in the accompanying letter of transmittal, we will accept for exchange any new issue notes properly tendered and not withdrawn before 5:00 p.m., New York City time, on the expiration date of the exchange offer. We will issue exchange notes in principal amount equal to the principal amount of new issue notes surrendered in the exchange offer. New issue notes may be tendered only for exchange notes and only in a minimum denomination of $2,000, and thereafter in integral multiples of $1,000.

The exchange offer is not conditioned upon any minimum aggregate principal amount of new issue notes being tendered in the exchange offer.

This prospectus is being sent to DTC, the sole registered holder of the new issue notes, and to all persons that we can identify as beneficial owners of the new issue notes. There will be no fixed record date for determining registered holders of new issue notes entitled to participate in the exchange offer.

We intend to conduct the exchange offer in accordance with the provisions of the registration rights agreement, the applicable requirements of the Securities Act and the Securities Exchange Act of 1934 and the rules and regulations of the SEC. New issue notes whose holders do not tender for exchange in the exchange offer will remain outstanding and continue to accrue interest. These new issue notes will be entitled to the rights and benefits such holders have under the indentures relating to the new issue notes and the registration rights agreement.

We will be deemed to have accepted for exchange properly tendered new issue notes when we have given oral or written notice of the acceptance to the exchange agent and complied with the applicable provisions of the registration rights agreement. The exchange agent will act as agent for the tendering holders for the purposes of receiving the exchange notes from us.

If you tender new issue notes in the exchange offer, you will not be required to pay brokerage commissions or fees or, subject to the letter of transmittal, transfer taxes with respect to the exchange of new issue notes. We will pay all charges and expenses, other than certain applicable taxes described below, in connection with the exchange offer. Please read Fees and Expenses for more details regarding fees and expenses incurred in connection with the exchange offer.

We will return any new issue notes that we do not accept for exchange for any reason without expense to their tendering holder promptly after the expiration or termination of the exchange offer.

Table of Contents

Expiration Date

The exchange offer will expire at 5:00 p.m., New York City time, on [ ], 2014, which is the 21st business day after the commencement of the exchange offer, unless, in our sole discretion, we extend it.

Extensions, Delays in Acceptance, Termination or Amendment

We expressly reserve the right to delay acceptance of any new issue notes in accordance with Rule 14e-1(c), and extend or terminate this exchange offer and not accept any new issue notes that we have not previously accepted if any of the conditions described below under Conditions to the Exchange Offer have not been satisfied or waived by us. We will notify the exchange agent of any extension by oral notice promptly confirmed in writing or by written notice. We will also notify the holders of the new issue notes by a press release or other public announcement communicated before 9:00 a.m., New York City time, on the next business day after the previously scheduled expiration date unless applicable laws require us to do otherwise, and we will disclose the number of new issue notes tendered as of the date of the notice.

We also expressly reserve the right to amend the terms of this exchange offer in any manner. If we make any material change, we will promptly disclose this change in a manner reasonably calculated to inform the holders of the new issue notes of the change, including providing public announcement or giving oral or written notice to these holders. A material change in the terms of this exchange offer could include a change in the timing of the exchange offer, a change in the exchange agent and other similar changes in the terms of this exchange offer. If we make any material change to this exchange offer, we will disclose this change by means of a post-effective amendment to the registration statement which includes this prospectus and will distribute an amended or supplemented prospectus to each registered holder of the new issue notes. In addition, we will extend this exchange offer for an additional five to ten business days as required by the Exchange Act, depending on the significance of the amendment, if the exchange offer would otherwise expire during that period. We will promptly notify the exchange agent by oral notice, promptly confirmed in writing, or written notice of any delay in acceptance, extension, termination or amendment of this exchange offer.

Conditions to the Exchange Offer

We will complete this exchange offer only if:

(1) there is no change in the laws and regulations which would reasonably be expected to impair our ability to proceed with this exchange offer;

(2) there is no change in the current interpretation of the staff of the SEC which permits resales of the exchange notes;

(3) there is no stop order issued by the SEC or any state securities authority suspending the effectiveness of the registration statement which includes this prospectus or the qualification of the indentures for our exchange notes under the Trust Indenture Act of 1939 and there are no proceedings initiated or, to our knowledge, threatened for that purpose;

(4) there is no action or proceeding instituted or threatened in any court or before any governmental agency or body that would reasonably be expected to prohibit, prevent or otherwise impair our ability to proceed with this exchange offer; and

(5) we obtain all governmental approvals that we deem in our sole discretion necessary to complete this exchange offer.

These conditions are for our sole benefit. We may assert any one of these conditions regardless of the circumstances giving rise to it and may also waive any one of them, in whole or in part, at any time and from

Table of Contents

time to time, if we determine in our reasonable discretion that it has not been satisfied, subject to applicable law. Notwithstanding the foregoing, all conditions to the exchange offer must be satisfied or waived before the expiration of this exchange offer. If we waive a condition to this exchange offer, the waiver will be applied equally to all note holders. We will not be deemed to have waived our rights to assert or waive these conditions if we fail at any time to exercise any of them. Each of these rights will be deemed an ongoing right which we may assert at any time and from time to time.

If we determine that we may terminate this exchange offer because any of these conditions is not satisfied, we may:

(1) refuse to accept and return to their holders any new issue notes that have been tendered;

(2) extend the exchange offer and retain all notes tendered before the expiration date, subject to the rights of the holders of these notes to withdraw their tenders; or

(3) waive any condition that has not been satisfied and accept all properly tendered notes that have not been withdrawn or otherwise amend the terms of this exchange offer in any respect as provided under the section in this prospectus entitled Extensions, Delays in Acceptance, Termination or Amendment.

Procedures for Tendering

To participate in the exchange offer, you must properly tender your new issue notes to the exchange agent as described below. We will only issue exchange notes in exchange for new issue notes that you timely and properly tender. Therefore, you should allow sufficient time to ensure timely delivery of the new issue notes, and you should follow carefully the instructions on how to tender your new issue notes. It is your responsibility to properly tender your new issue notes. We have the right to waive any defects. However, we are not required to waive defects, and neither we, nor the exchange agent is required to notify you of defects in your tender.

If you have any questions or need help in exchanging your new issue notes, please call the exchange agent whose address and phone number are described in the letter of transmittal.

We issued all of the new issue notes in book-entry form, and all of the new issue notes are currently represented by global certificates registered in the name of Cede & Co., the nominee of DTC. We have confirmed with DTC that the new issue notes may be tendered using ATOP. The exchange agent will establish an account with DTC for purposes of the exchange offer promptly after the commencement of the exchange offer, and DTC participants may electronically transmit their acceptance of the exchange offer by causing DTC to transfer their new issue notes to the exchange agent using the ATOP procedures. In connection with the transfer, DTC will send an agent s message to the exchange agent. The agent s message will state that DTC has received instructions from the participant to tender new issue notes and that the participant agrees to be bound by the terms of the letter of transmittal.

By using the ATOP procedures to exchange new issue notes, you will not be required to deliver a letter of transmittal to the exchange agent. However, you will be bound by its terms just as if you had signed it.

Guaranteed delivery. There is no procedure for guaranteed late delivery of the new issue notes.

Determinations under the exchange offer. We will determine in our sole discretion all questions as to the validity, form, eligibility, time of receipt, acceptance of tendered new issue notes and withdrawal of tendered new issue notes. Our determination will be final and binding. We reserve the absolute right to reject any new issue notes not properly tendered or any new issue notes our acceptance of which would, in the opinion of our counsel, be unlawful. We also reserve the right to waive any defect, irregularities or conditions of tender as to particular new issue notes. Our interpretation of the terms and conditions of the exchange offer, including the instructions in the letter of transmittal, will be final and binding on all parties. Unless waived, all defects or irregularities in connection with tenders of new issue notes must be cured within such time as we shall determine.

Table of Contents

Although we intend to notify holders of defects or irregularities with respect to tenders of new issue notes, neither we, the exchange agent nor any other person will incur any liability for failure to give such notification. Tenders of new issue notes will not be deemed made until such defects or irregularities have been cured or waived. Any new issue notes received by the exchange agent that are not properly tendered and as to which the defects or irregularities have not been cured or waived will be returned to the tendering holder as soon as practicable following the expiration date of the exchange.

When we will issue exchange notes. In all cases, we will issue exchange notes for new issue notes that we have accepted for exchange under the exchange offer only after the exchange agent receives, before 5:00 p.m., New York City time, on the expiration date,

a book-entry confirmation of such new issue notes into the exchange agent s account at DTC; and

a properly transmitted agent s message.

Return of new issue notes not accepted or exchanged. If we do not accept any tendered new issue notes for exchange or if new issue notes are submitted for a greater principal amount than the holder desires to exchange, we will return the unaccepted or non-exchanged new issue notes without charge to their tendering holder. Such non-exchanged new issue notes will be credited to an account maintained with DTC. These actions will occur as promptly as practicable after the expiration or termination of the exchange offer.

Your representations to us. By agreeing to be bound by the letter of transmittal, you will represent to us that, among other things:

any exchange notes that you receive will be acquired in the ordinary course of your business;

you have no arrangement or understanding with any person or entity to participate in the distribution of the exchange notes;

you are not engaged in and do not intend to engage in the distribution of the exchange notes;

if you are a broker-dealer that will receive exchange notes for your own account in exchange for new issue notes, you acquired those new issue notes as a result of market-making activities or other trading activities and you will deliver this prospectus, as required by law, in connection with any resale of the exchange notes; and

you are not an affiliate, as defined in Rule 405 under the Securities Act, of ours.

Withdrawal of Tenders

Except as otherwise provided in this prospectus, you may withdraw your tender at any time before 5:00 p.m., New York City time, on the expiration date of the exchange offer. For a withdrawal to be effective you must comply with the appropriate ATOP procedures. Any notice of withdrawal must specify the name and number of the account at DTC to be credited with withdrawn new issue notes and otherwise comply with the ATOP procedures.

We will determine all questions as to the validity, form, eligibility and time of receipt of a notice of withdrawal. Our determination shall be final and binding on all parties. We will deem any new issue notes so withdrawn not to have been validly tendered for exchange for purposes of the exchange offer.

Any new issue notes that have been tendered for exchange but that are not exchanged for any reason will be credited to an account maintained with DTC for the new issue notes. This return or crediting will take place as soon as practicable after withdrawal, rejection of tender, expiration or termination of the exchange offer. You may retender properly withdrawn new issue notes by following the procedures described under Procedures for Tendering above at any time on or before the expiration date of the exchange offer.

48

Table of Contents

Fees and Expenses

We will bear the expenses of soliciting tenders. The principal solicitation is being made by mail; however, we may make additional solicitation by telephone or in person by our officers and regular employees and those of our affiliates.

We have not retained any dealer-manager in connection with the exchange offer and will not make any payments to broker-dealers or others soliciting acceptances of the exchange offer. We will, however, pay the exchange agent reasonable and customary fees for its services and reimburse it for its related reasonable out-of-pocket expenses.

We will pay the cash expenses to be incurred in connection with the exchange offer. They include:

SEC registration fees;

fees and expenses of the exchange agent and trustee;

accounting and legal fees and printing costs; and

related fees and expenses.

Transfer Taxes

We will pay all transfer taxes, if any, applicable to the exchange of new issue notes under the exchange offer. The tendering holder, however, will be required to pay any transfer taxes, whether imposed on the registered holder or any other person, if a transfer tax is imposed for any reason other than the exchange of new issue notes under the exchange offer.

Consequences of Failure to Exchange

If you do not exchange your new issue notes for exchange notes under the exchange offer, the new issue notes you hold will continue to be subject to the existing restrictions on transfer. In general, you may not offer or sell the new issue notes except under an exemption from, or in a transaction not subject to, the Securities Act and applicable state securities laws. We do not intend to register new issue notes under the Securities Act unless the registration rights agreement requires us to do so.

Accounting Treatment

We will record the exchange notes in our accounting records at the same carrying value as the new issue notes. This carrying value is the aggregate principal amount of the new issue notes, as reflected in our accounting records on the date of exchange. Accordingly, we will not recognize any gain or loss for accounting purposes in connection with the exchange offer.

Other

Participation in the exchange offer is voluntary, and you should consider carefully whether to accept. You are urged to consult your financial and tax advisors in making your own decision on what action to take.

We may in the future seek to acquire untendered new issue notes in open market or privately negotiated transactions, through subsequent exchange offers or otherwise. We have no present plans to acquire any new issue notes that are not tendered in the exchange offer or to file a registration statement to permit resales of any untendered new issue notes.

Table of Contents

DESCRIPTION OF OTHER INDEBTEDNESS

Revolving credit facility

On September 24, 2014, in connection with the Eagle Ford acquisition, we entered into an amendment (the Amendment) to our Second Amended and Restated Credit Agreement (as amended, the Credit Agreement) with Wells Fargo Bank, National Association, as administrative agent, and the lenders party thereto, which, among other things:

- amends the investment covenant to permit our guarantee of certain deferred purchase price obligations and contingent indemnity obligations of our E&P development affiliate, its parent and its subsidiaries, in the Eagle Ford Purchase Agreement, provided (i) the aggregate amount of the deferred purchase price obligations shall not exceed $115,000,000, (ii) we receive, from the date of the Amendment through closing date of the Eagle Ford acquisition, either (A) net cash proceeds from the issuance of our equity interests and the issuance of unsecured senior notes in an aggregate amount not less than $125,000,000 (of which not less than $75,000,000 shall be net cash proceeds from the issuance of our equity interests) or (B) net cash proceeds from the issuance of our equity interests in an aggregate amount not less than $115,000,000, which net cash proceeds shall, in either case, be used to satisfy a portion of the non-deferred purchase price obligations in connection with the Eagle Ford acquisition, (iii) we may not make any cash payments in respect of any deferred purchase price or contingent indemnity obligations under the Eagle Ford Purchase Agreement unless we have unused availability under our Credit Agreement borrowing base in an amount not less than $75,000,000 after giving effect to any such payment, and (iv) certain other conditions are met; and

- amends the swap agreement covenant to permit, with certain constraints, swap agreements entered into by us and our restricted subsidiaries fixing prices on crude oil expected to be produced by us and our restricted subsidiaries from proved developed producing oil and gas properties to be acquired pursuant to the Eagle Ford Purchase Agreement.

The Credit Agreement provides for a senior secured revolving credit facility with a syndicate of banks with a current borrowing base of $825.0 million and a maximum facility amount of $1.5 billion scheduled to mature in July 2018. Our borrowing base under the revolving credit facility is scheduled for semi-annual redeterminations on May 1 and November 1 of each year. As of June 30, 2014, $581.0 million was outstanding under the revolving credit facility. Up to $20.0 million of the revolving credit facility may be in the form of standby letters of credit, of which $4.4 million was outstanding at June 30, 2014. Our obligations under the facility are secured by mortgages on our oil and gas properties and first priority security interests in substantially all of our assets. Additionally, obligations under the facility are guaranteed by certain of our material subsidiaries, and any of our non-guarantor subsidiaries are minor.

Borrowings under the revolving credit facility bear interest, at the our election, at either an adjusted LIBOR rate plus an applicable margin between 1.50% and 2.75% per annum or the base rate (which is the higher of the bank s prime rate, the Federal funds rate plus 0.5% or one-month LIBOR plus 1.00%) plus an applicable margin between 0.50% and 1.75% per annum. We are also required to pay a fee on the unused portion of the borrowing base at a rate of 0.375% if less than 50% of the borrowing base is utilized and 0.5% if 50% or more of the borrowing base is utilized, which is included within interest expense on our consolidated statements of operations. At June 30, 2014, the weighted average interest rate on outstanding borrowings under our revolving credit facility was 2.3%. The applicable margins used in determining our interest rate vary based on the utilization of the facility as follows:

Borrowing Base

Utilization Percentage	Eurodollar Loans	ABR Loans	Commitment Fee Rate
³ 90%	2.75%	1.75%	0.500%
³ 75% and < 90%	2.25%	1.25%	0.500%
³ 50% and < 75%	2.00%	1.00%	0.500%
³ 25% and < 50%	1.75%	0.75%	0.375%
< 25%	1.50%	0.50%	0.375%

Table of Contents

The Credit Agreement contains customary covenants that limit our ability to incur additional indebtedness, grant liens, make loans or investments, make distributions if a borrowing base deficiency or default exists or would result from the distribution, merger or consolidation with other persons, or engage in certain asset dispositions including a sale of all or substantially all of our assets. We were in compliance with these covenants as of June 30, 2014. The Credit Agreement also requires us to maintain a ratio of Total Funded Debt (as defined in the Credit Agreement) to EBITDA (as defined in the Credit Agreement) (actual or annualized, as applicable), calculated over a period of four consecutive fiscal quarters, of not greater than 4.50 to 1.0 as of the last day of the quarters ended through December 31, 2014, 4.25 to 1.0 as of the last day of the quarter ending March 31, 2015, and 4.00 to 1.0 as of the last day of fiscal quarters ending thereafter and a ratio of current assets (as defined in the Credit Agreement) to current liabilities (as defined in the Credit Agreement) of not less than 1.0 to 1.0 as of the last day of any fiscal quarter. Based on the definitions contained in the Credit Agreement, at June 30, 2014, our ratio of current assets to current liabilities was 1.4 to 1.0, and our ratio of Total Funded Debt to EBITDA was 3.7 to 1.0.

Senior Notes

As of June 30, 2014, we had $374.5 million outstanding of our 7.75% Senior Notes, which includes $100.0 million of our new issue notes. Interest on the 7.75% Senior Notes is payable semi-annually in arrears on January 15 and July 15. The 7.75% Senior Notes are redeemable at any time after January 15, 2017, at certain redemption prices, together with accrued and unpaid interest to the date of redemption.

The 7.75% Senior Notes are subject to repurchase by us at a price equal to 101% of their principal amount, plus accrued and unpaid interest, upon a change of control or upon certain asset sales if we do not reinvest the net proceeds within 360 days. The 7.75% Senior Notes are junior in right of payment to our secured debt, including our obligations under our existing credit facility.

At June 30, 2014, we had $248.4 million outstanding of our 9.25% Senior Notes. Interest on the 9.25% Senior Notes is payable semi-annually on February 15 and August 15. At any time on or after August 15, 2017, we may redeem some or all of the 9.25% Senior Notes at a redemption price of 104.625%. On or after August 15, 2018, we may redeem some or all of the 9.25% Senior Notes at the redemption price of 102.313% and on or after August 15, 2019, we may redeem some or all of the 9.25% Senior Notes at the redemption price of 100.0%. In addition, at any time prior to August 15, 2016, we may redeem up to 35% of the 9.25% Senior Notes with the proceeds received from certain equity offerings at a redemption price of 109.250%. Under certain conditions, including if we sell certain assets and do not reinvest the proceeds or repay senior indebtedness or if we experience specific kinds of changes of control, we must offer to repurchase the 9.25% Senior Notes.

Indentures governing the 7.75% Senior Notes and 9.25% Senior Notes contain covenants, including limitations of our ability to: incur certain liens; engage in sale/leaseback transactions; incur additional indebtedness; declare or pay distributions if an event of default has occurred; redeem, repurchase or retire equity interests or subordinated indebtedness; make certain investments; or merge, consolidate or sell substantially all our assets. We were in compliance with these covenants as of June 30, 2014.

Secured hedging facility

We have a secured hedge facility agreement with a syndicate of banks under which certain of our investment partnerships have the ability to enter into derivative contracts to manage their exposure to commodity price movements. Under our revolving credit facility, we are required to utilize this secured hedge facility for future commodity risk management activity for our equity production volumes within the investment partnerships. We, as general partner of the investment partnerships, will administer the commodity price risk management activity for the participating investment partnerships under the secured hedging facility. Before executing any hedge transaction, a participating investment partnership is required to, among other things, provide mortgages on its oil and gas properties and first priority security interests in substantially all of its assets

Table of Contents

to the collateral agent for the benefit of the counterparty. The secured hedging facility agreement contains covenants that limit each of the participating investment partnerships ability to incur indebtedness, grant liens, make loans or investments, make distributions if a default under the secured hedge facility agreement exists or would result from the distribution, merge into or consolidate with other persons, enter into commodity or interest rate swap agreements that do not conform to specified terms or that exceed specified amounts, or engage in certain asset dispositions including a sale of all or substantially all of its assets.

In addition, it will be an event of default under our credit facility if we, as general partner of the investment partnerships, breach an obligation governed by the secured hedging facility and the effect of such breach is to cause amounts owing under swap agreements governed by the secured hedging facility to become immediately due and payable.

Table of Contents

DESCRIPTION OF THE EXCHANGE NOTES

You will find the definitions of capitalized terms used in this description of notes under the heading Certain definitions. For purposes of this description, references to ARP refer only to Atlas Resource Partners, L.P. and not to any of its subsidiaries, the Company, we, our and us ref only to Atlas Energy Holdings Operating Company, LLC and not to any of its subsidiaries and the Issuers refers to the Company and Atlas Resource Finance Corporation and not to any of their respective subsidiaries.

The Issuers issued the Notes under the Indenture, dated as of January 23, 2013, as supplemented by the Supplemental Indenture, dated as of June 2, 2014 (together, the Indenture), each by and among the Issuers, the Partnership, the other Guarantors and U.S. Bank National Association. The terms of the Notes include those expressly set forth in the Indenture and those made part of the Indenture by reference to the Trust Indenture Act of 1939, as amended (the Trust Indenture Act). The Indenture is unlimited in aggregate principal amount, although the issuance of Notes in this offering will be limited to $100.0 million. We may issue an unlimited principal amount of additional notes having identical terms and conditions as the Notes (the Additional Notes). We will only be permitted to issue such Additional Notes in compliance with the covenant described under the subheading Certain covenants Limitation on Indebtedness and Preferred Stock. Any Additional Notes will be part of the same issue as the Notes that we are currently offering and will vote on all matters with the holders of the Notes. Unless the context otherwise requires, for all purposes of the Indenture and this description of notes, references to the Notes include any Additional Notes actually issued and the $275.0 million of 7.75% senior notes due 2021 issued on January 23, 2013.

This description of notes is intended to be a useful overview of the material provisions of the Notes and the Indenture. Since this description of notes is only a summary, you should refer to the Indenture for a complete description of the obligations of the Issuers and your rights.

General

The Notes. The Notes:

- are general unsecured, senior obligations of the Issuers;
- mature on January 15, 2021;
- are issued in denominations of $2,000 and integral multiples of $1,000 in excess of $2,000;
- are represented by one or more registered Notes in global form, but in certain circumstances may be represented by Notes in definitive form, see Book-entry, delivery and form ;
- rank senior in right of payment to all existing and future Subordinated Obligations of each of the Issuers;
- rank equally in right of payment with all existing and future senior Indebtedness of each of the Issuers, without giving effect to collateral arrangements;
- are initially unconditionally guaranteed on a senior basis by ARP and ARP Barnett, LLC, Atlas Energy Indiana, LLC, Atlas Energy Colorado, LLC, Atlas Energy Holdings Operating Company LLC, Atlas Energy Ohio, LLC, Atlas Energy Tennessee, LLC, Atlas Noble, LLC, Atlas Resources, LLC, REI-NY, LLC, Resource Energy, LLC, Resource Well Services, LLC, Viking Resources, LLC, Atlas Barnett, LLC, ARP Barnett Pipeline, LLC, ARP Oklahoma, LLC, ARP Production Company, LLC, ARP Mountaineer Production, LLC, ARP Rangely Production, LLC and ARP Eagle Ford, LLC representing each subsidiary of ARP that currently is a guarantor of the Senior Secured Credit Agreement, see Guarantees ; and

effectively rank junior to any existing or future secured Indebtedness of each of the Issuers, including amounts that may be borrowed under our Senior Secured Credit Agreement, to the extent of the value of the collateral securing such Indebtedness.

Table of Contents

Interest. Interest on the Notes compounds semi-annually and:

- accrues at the rate of 7.75% per annum;
- accrues from the Issue Date or, if interest has already been paid, from the most recent interest payment date;
- is payable in cash semi-annually in arrears on January 15 and July 15, commencing on July 15, 2013;
- is payable to the holders of record on the January 1 and July 1 immediately preceding the related interest payment dates; and
- is computed on the basis of a 360-day year comprised of twelve 30-day months.

If an interest payment date falls on a day that is not a Business Day, the interest payment to be made on such interest payment date will be made on the next succeeding Business Day with the same force and effect as if made on such interest payment date, and no additional interest will accrue as a result of such delayed payment. Additional Interest may accrue on the Notes in certain circumstances if we do not consummate the exchange offer, as provided in the Registration Rights Agreement. References herein to interest shall be deemed to include any such Additional Interest.

Payments on the notes; paying agent and registrar

We will pay principal of, premium, if any, and interest on the Notes at the office or agency designated by the Issuers in the City and State of New York, except that we may, at our option, pay interest on the Notes by check mailed to holders of the Notes at their registered addresses as they appear in the registrar s books. We have initially designated the corporate trust office of the Trustee in New York, New York to act as our paying agent and registrar. We may, however, change the paying agent or registrar without prior notice to the holders of the Notes, and either of the Issuers or any of their respective Restricted Subsidiaries may act as paying agent or registrar.

We will pay principal of, premium, if any, and interest on, Notes in global form registered in the name of or held by The Depository Trust Company or its nominee in immediately available funds to The Depository Trust Company or its nominee, as the case may be, as the registered holder of such global Note.

Transfer and exchange

A holder may transfer or exchange Notes in accordance with the Indenture. The registrar and the Trustee may require a holder, among other things, to furnish appropriate endorsements and transfer documents in connection with a transfer of Notes. No service charge will be imposed by the Issuers, the Trustee or the registrar for any registration of transfer or exchange of Notes, but the Issuers may require a holder to pay a sum sufficient to cover any transfer tax or other governmental taxes and fees required by law or permitted by the Indenture. The Issuers are not required to transfer or exchange any Note selected for redemption. Also, the Issuers are not required to transfer or exchange any Note for a period of 15 days before a selection of Notes to be redeemed.

The registered holder of a Note will be treated as the owner of it for all purposes.

Optional redemption

On and after January 15, 2017, we may redeem all or, from time to time, a part of the Notes upon not less than 30 nor more than 60 days notice, at the following redemption prices (expressed as a percentage of principal amount of the Notes) plus accrued and unpaid interest on the Notes, if any, to 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 twelve- month period beginning on January 15 of the years indicated below:

Year	Percentage
2017	103.875%
2018	101.938%
2019 and thereafter	100.000%

Table of Contents

Prior to January 15, 2016, we may, at our option, on any one or more occasions redeem up to 35% of the aggregate principal amount of the Notes (including Additional Notes) issued under the Indenture with the Net Cash Proceeds of one or more Equity Offerings at a redemption price of 107.750% of the principal amount thereof, plus 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); *provided* that

(1) at least 65% of the original principal amount of the Notes issued on the Issue Date remains outstanding after each such redemption; and

(2) the redemption occurs within 90 days after the closing of the related Equity

Offering. In addition, the Notes may be redeemed, in whole or in part, at any time prior to January 15, 2017 at the option of the Issuers upon not less than 30 nor more than 60 days prior notice mailed by first-class mail to each holder of Notes at its registered address, at a redemption price equal to 100% of the principal amount of the Notes redeemed plus the Applicable Premium as of, and accrued and unpaid interest to, 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).

Applicable Premium means, with respect to any Note on any applicable redemption date, the greater of:

(1) 1.0% of the principal amount of such Note; and

(2) the excess, if any, of:

(a) the present value at such redemption date of (i) the redemption price of such Note at January 15, 2017 (such redemption price being set forth in the table appearing above under the caption Optional redemption) plus (ii) all required interest payments (excluding accrued and unpaid interest to such redemption date) due on such Note through January 15, 2017, computed using a discount rate equal to the Treasury Rate as of such redemption date plus 50 basis points; over

(b) the principal amount of such Note.

Treasury Rate means, as of 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 January 15, 2017; *provided*, *however*, that if the period from the redemption date to January 15, 2017 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 January 15, 2017 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.

Selection and notice

If the Issuers are redeeming less than all of the outstanding Notes, the Trustee will select the Notes for redemption in compliance with the requirements of the principal national securities exchange, if any, on which the Notes are listed or, if the Notes are not listed, then on a pro rata basis, by lot or in accordance with the procedures of DTC, although no Note of $2,000 in original principal amount or less will be redeemed in part. If any Note is to be redeemed in part only, the notice of redemption relating to such Note will state the portion of the principal amount thereof to be redeemed. A new Note in principal amount equal to the unredeemed portion thereof will be issued in the name of the holder thereof upon cancellation of the partially redeemed Note.

On and after the redemption date, interest will cease to accrue on Notes or the portion of them called for redemption unless we default in the payment thereof.

Table of Contents

Mandatory redemption; offers to purchase; open market purchases

We are not required to make mandatory redemption payments or sinking fund payments with respect to the Notes. However, under certain circumstances, we may be required to offer to purchase Notes as described under the captions Change of control and Certain covenants Limitation on sales of assets and Subsidiary stock.

We may acquire Notes by means other than a redemption, 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. However, other existing or future agreements of ARP or its Subsidiaries may limit the ability of ARP, the Issuers or their respective Subsidiaries to purchase Notes prior to maturity.

Ranking

The Notes are general unsecured obligations of the Issuers that rank senior in right of payment to all existing and future Indebtedness that is expressly subordinated in right of payment to the Notes. The Notes rank equally in right of payment with all existing and future liabilities of each of the Issuers that are not so subordinated, and will be effectively subordinated to all of our secured Indebtedness, including Indebtedness Incurred under the Senior Secured Credit Agreement (to the extent of the value of the collateral securing such Indebtedness) and liabilities of any of our Subsidiaries that do not guarantee the Notes. In the event of bankruptcy, liquidation, reorganization or other winding up of the Issuers or the Guarantors or upon a default in payment with respect to, or the acceleration of, any Indebtedness under the Senior Secured Credit Agreement or other secured Indebtedness, the assets of the Issuers and the Guarantors that secure secured Indebtedness will be available to pay obligations on the Notes and the Guarantees only after all Indebtedness under such Credit Facility and other secured Indebtedness has been repaid in full from such assets. We advise you that there may not be sufficient assets remaining to pay amounts due on any or all the Notes and the Guarantees then outstanding.

As of June 30, 2014, we had $1.2 billion of debt outstanding, including $581.0 million outstanding under our senior secured revolving credit facility, $248.4 million outstanding of our 9.25% Senior Notes, $374.5 million outstanding of our 7.75% Senior Notes, and had borrowing capacity under our revolving credit facility of $244.0 million, excluding $4.4 million in outstanding letters of credit.

Guarantees

The Guarantors, as primary obligors and not merely as sureties, jointly and severally, fully and unconditionally guarantee on a senior unsecured basis our obligations under the Notes and all obligations under the Indenture. The obligations of Guarantors under the Guarantees rank equally in right of payment with other Indebtedness of such Guarantor, except to the extent such other Indebtedness is expressly subordinate to the obligations arising under the Guarantee.

As of September 30, 2013, outstanding Indebtedness of the Guarantors was $1.2 billion, of which $585.4 million was secured.

Although the Indenture limits the amount of Indebtedness that Restricted Subsidiaries may incur, such Indebtedness may be substantial and such limitation is subject to a number of significant qualifications. Moreover, the Indenture does not impose any limitation on the Incurrence by such Subsidiaries of liabilities that are not considered Indebtedness under the Indenture. See Certain covenants Limitation on Indebtedness and Preferred Stock.

The obligations of each Subsidiary Guarantor under its Subsidiary Guarantee are limited as necessary to prevent that Subsidiary Guarantee from constituting a fraudulent conveyance or fraudulent transfer under

Table of Contents

applicable law, although no assurance can be given that a court would give the holder the benefit of such provision. See Risk factors Risks relating to the notes Federal and state fraudulent transfer laws may permit a court to void the notes and the guarantees, and if that occurs, you may not receive any payments on the notes. If a Subsidiary Guarantee were rendered voidable, it could be subordinated by a court to all other indebtedness (including guarantees and other contingent liabilities) of the applicable Subsidiary Guarantor, and, depending on the amount of such indebtedness, a Subsidiary Guarantor s liability on its Subsidiary Guarantee could be reduced to zero.

If the obligations of a Subsidiary Guarantor under its Subsidiary Guarantee were avoided, holders of Notes would have to look to the assets of any remaining Subsidiary Guarantors for payment. There can be no assurance in that event that such assets would suffice to pay the outstanding principal and interest on the Notes.

In the event a Subsidiary Guarantor is sold or disposed of (whether by merger, consolidation, the sale of its Capital Stock 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 corporation in such transaction to a Person which is not ARP or a Restricted Subsidiary, such Subsidiary Guarantor will be released from its obligations under its Subsidiary Guarantee if the sale or other disposition does not violate the covenants described under Certain covenants Limitation on sales of assets and Subsidiary stock.

In addition, a Subsidiary Guarantor will be released from its obligations under the Indenture, its Subsidiary Guarantee upon the release or discharge of the Subsidiary Guarantee that resulted in the creation of such Guarantee pursuant to the covenant described under Future Guarantors, except a release or discharge by or as a result of payment under such Guarantee if the Issuers designate such Subsidiary as an Unrestricted Subsidiary and such designation complies with the other applicable provisions of the Indenture or in connection with any legal defeasance or satisfaction and discharge of the Notes as provided below under the captions Defeasance and Satisfaction and discharge.

Change of Control

If a Change of Control occurs, unless the Issuers have previously or concurrently exercised their right to redeem all of the Notes as described under Optional redemption, each holder will have the right to require the Issuers 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 Notes at a purchase price in cash equal to 101% of the principal amount of the Notes plus accrued and unpaid interest, if any, to 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 we have previously or concurrently exercised our right to redeem all of the Notes as described under Optional redemption, we will mail 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 us to purchase such holder s Notes at a purchase price in cash equal to 101% of the principal amount of such Notes plus accrued and unpaid interest, if any, to 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 mailed) (the Change of Control Payment Date);

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

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

Table of Contents

(5) that holders electing to have any Notes purchased pursuant to a Change of Control Offer will be required to surrender such Notes, with the form entitled Option of Holder to Elect Purchase on the reverse of such Notes 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 Notes and their election to require us to purchase such Notes; *provided* that the paying agent receives, not later than the close of business on the 30th day following the date of the Change of Control notice, a telegram, telex, facsimile transmission or letter setting forth the name of the holder of the Notes, the principal amount of Notes tendered for purchase, and a statement that such holder is withdrawing its tendered Notes and its election to have such Notes purchased;

(7) that if we are repurchasing less than all of the Notes, the holders of the remaining Notes will be issued new Notes and such new Notes will be equal in principal amount to the unpurchased portion of the Notes surrendered. The unpurchased portion of the Notes 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 us, consistent with the Indenture, that a holder must follow in order to have its Notes repurchased.

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

(1) accept for payment all Notes or portions of Notes (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;

(2) deposit with the paying agent an amount equal to the Change of Control Payment in respect of all Notes or portions of Notes properly tendered and not properly withdrawn; and

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

The paying agent will promptly mail to each holder of Notes properly tendered and not properly withdrawn the Change of Control Payment for such Notes, and the Trustee will promptly authenticate and mail (or cause to be transferred by book entry) to each holder a new Note equal in principal amount to any unpurchased portion of the Notes 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 Note 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 Change of Control provisions described above will be applicable whether or not any other provisions of the Indenture are applicable. Except as described above with respect to a Change of Control, the Indenture does not contain provisions that permit the holders to require that the Issuers repurchase or redeem the Notes in the event of a takeover, recapitalization or similar transaction.

We will not be required to make a Change of Control Offer upon a Change of Control if a third party makes the Change of Control Offer in the manner, at the times and otherwise in compliance with the requirements set forth in the Indenture applicable to a Change of Control Offer made by us and purchases all Notes validly tendered and not withdrawn under such Change of Control 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.

We 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 Notes as a result of a Change of Control.

Table of Contents

To the extent that the provisions of any securities laws or regulations conflict with provisions of the Indenture, or compliance with the Change of Control provisions of the Indenture would constitute a violation of any such laws or regulations, we will comply with the applicable securities laws and regulations and will not be deemed to have breached our obligations described in the Indenture by virtue of our compliance with such securities laws or regulations.

Our ability to repurchase Notes pursuant to a Change of Control Offer may be limited by a number of factors. The occurrence of certain of the events that constitute a Change of Control would constitute a default under the Senior Secured Credit Agreement. In addition, certain events that may constitute a change of control under the Senior Secured Credit Agreement and cause a default under that agreement will not constitute a Change of Control under the Indenture. Future Indebtedness of ARP and its Subsidiaries may also contain prohibitions of certain events that would constitute a Change of Control or require such Indebtedness to be repurchased upon a Change of Control. Moreover, the exercise by the holders of their right to require the Issuers to repurchase the Notes could cause a default under such Indebtedness, even if the Change of Control itself does not, due to the financial effect of such repurchase on the Issuers. Finally, the Issuers ability to pay cash to the holders upon a repurchase may be limited by the Issuers then existing financial resources. There can be no assurance that sufficient funds will be available when necessary to make any required repurchases.

Even if sufficient funds were otherwise available, the terms of the Senior Secured Credit Agreement will, and other and/or future Indebtedness may, prohibit the Issuers prepayment or repurchase of Notes before their scheduled maturity. Consequently, if the Issuers are not able to prepay the Indebtedness under the Senior Secured Credit Agreement and any such other Indebtedness containing similar restrictions or obtain requisite consents, the Issuers will be unable to fulfill their repurchase obligations if holders of Notes exercise their repurchase rights following a Change of Control, resulting in a default under the Indenture. A default under the Indenture may result in a cross-default under the Senior Secured Credit Agreement.

The Change of Control provisions described above may deter certain mergers, tender offers and other takeover attempts involving ARP. The Change of Control purchase feature is a result of negotiations between the initial purchasers and us. As of the Issue Date, we have no present intention to engage in a transaction involving a Change of Control, although it is possible that we could decide to do so in the future. Subject to the limitations discussed below, we could, in the future, enter into certain transactions, including acquisitions, refinancings or other recapitalizations, that would not constitute a Change of Control under the Indenture, but that could increase the amount of indebtedness outstanding at such time or otherwise affect our capital structure or credit ratings. Restrictions on our ability to incur additional Indebtedness are contained in the covenants described under Certain covenants Limitation on Indebtedness and Preferred Stock and Certain covenants Limitation on Liens. Such restrictions in the Indenture can be waived only with the consent of the holders of a majority in principal amount of the Notes then outstanding. Except for the limitations contained in such covenants, however, the Indenture will not contain any covenants or provisions that may afford holders of the Notes protection in the event of a highly leveraged transaction.

The definition of Change of Control includes a disposition of all or substantially all of the property and assets of ARP and the Restricted Subsidiaries taken as a whole to any Person. Although there is a limited body of case law interpreting the phrase substantially all, there is no precise established definition of the phrase under applicable law. Accordingly, in certain circumstances there may be a degree of uncertainty as to whether a particular transaction would involve a disposition of all or substantially all of the property or assets of a Person. As a result, it may be unclear as to whether a Change of Control has occurred and whether a holder of Notes may require the Issuers to make an offer to repurchase the Notes as described above. In a recent decision, the Chancery Court of Delaware raised the possibility that a change of control as a result of a failure to have continuing directors comprising a majority of the Board of Directors may be unenforceable on public policy grounds.

The provisions under the Indenture relative to our obligation to make an offer to repurchase the Notes as a result of a Change of Control may be waived or modified or terminated with the written consent of the holders of

Table of Contents

a majority in principal amount of the Notes then outstanding (including consents obtained in connection with a tender offer or exchange offer for the Notes) prior to the occurrence of such Change of Control.

Certain covenants

Limitation on Indebtedness and Preferred Stock

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

(1) the Consolidated Coverage Ratio for ARP and the 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 will have occurred or be continuing or would occur as a consequence of Incurring the Indebtedness or transactions relating to such Incurrence.

The first paragraph of this covenant will not prohibit the Incurrence of the following Indebtedness or issuance of the following Preferred Stock, as the case may be:

(1) Indebtedness of ARP Incurred pursuant to one or more Credit Facilities in an aggregate amount not to exceed the greater of (a) $500.0 million less the aggregate amount of all permanent principal repayments since the Issue Date under a Credit Facility that are made under clause 3(a) of the first paragraph of the covenant described under Certain covenants Limitation on sales of assets and Subsidiary stock, or (b) the sum of (x) $350.0 million less the aggregate amount of all permanent principal repayments since the Issue Date under a Credit Facility that are made under clause 3(a) of the first paragraph of the covenant described under Certain covenants Limitation on sales of assets and Subsidiary stock, plus (y) 35.0% of 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, in each case outstanding at any one time;

(2) Guarantees by ARP, the Company or Subsidiary Guarantors of Indebtedness of ARP, the Company or a Subsidiary Guarantor, as the case may be, Incurred in accordance with the provisions of the 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 Notes or the Guarantee to at least the same extent as the Indebtedness being Guaranteed, as the case may be;

(3) Indebtedness of ARP owing to and held by any Restricted Subsidiary or Indebtedness of a Restricted Subsidiary owing to and held by ARP or any Restricted Subsidiary; *provided*, *however*, that (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 ARP or a Restricted Subsidiary and (ii) any sale or other transfer of any such Indebtedness to a Person other than ARP or a Restricted Subsidiary shall be deemed, in each case, to constitute an Incurrence of such Indebtedness by ARP or such Restricted Subsidiary, as the case may be;

(4) Indebtedness represented by (a) the Notes issued on the Issue Date and any notes to be issued in exchange for the Notes pursuant to the Registration Rights Agreement, (b) any Indebtedness (other than the Indebtedness described in clauses (1) and, (2)) outstanding on the Issue Date, and (c) any Refinancing Indebtedness Incurred in respect of any Indebtedness described in this clause (4) or clause (5) or Incurred pursuant to the first paragraph of this covenant;

(5) Indebtedness of a Person that becomes a Restricted Subsidiary or is acquired by ARP or a Restricted Subsidiary or merged into ARP or a Restricted Subsidiary in accordance with the Indenture and outstanding on the date on which such Person became a Restricted Subsidiary or was acquired by or was

Table of Contents

merged into ARP or such Restricted Subsidiary (other than Indebtedness Incurred (a) to provide all or any portion of the funds utilized to consummate the transaction or series of related transactions pursuant to which such Person became a Restricted Subsidiary or was otherwise acquired by or was merged into ARP or a Restricted Subsidiary or (b) otherwise in connection with, or in contemplation of, such acquisition); *provided*, *however*, that at the time such Person becomes a Restricted Subsidiary or is acquired by or was merged into ARP or a Restricted Subsidiary, ARP would have been able to Incur $1.00 of additional Indebtedness pursuant to the first paragraph of this covenant after giving effect to the Incurrence of such Indebtedness pursuant to this clause (5);

(6) the Incurrence by ARP or any Restricted Subsidiary of Indebtedness represented by Capitalized Lease Obligations, mortgage financings or purchase money obligations, in each case Incurred for the purpose of financing all or any part of the purchase price or cost of construction or improvements or carrying costs of property used in the business of ARP or such Restricted Subsidiary, and Refinancing Indebtedness Incurred to Refinance any Indebtedness Incurred pursuant to this clause (6) in an aggregate outstanding principal amount which, when taken together with the principal amount of all other Indebtedness Incurred pursuant to this clause (6) and then outstanding, will not at any time outstanding exceed the greater of (a) $25.0 million and (b) 3.0% of Adjusted Consolidated Net Tangible Assets determined as of the date of such incurrence;

(7) the Incurrence by ARP or any of its Restricted Subsidiaries of Indebtedness in respect of workers compensation claims, payment obligations in connection with health or other types of social security benefits, unemployment or other insurance or self-insurance obligations, reclamation, statutory obligations, bankers acceptances and bid, performance, surety and appeal bonds or other similar obligations incurred in the ordinary course of business, including guarantees and obligations respecting standby letters of credit supporting such obligations, to the extent not drawn (in each case other than an obligation for money borrowed);

(8) Capital Stock (other than Disqualified Stock) of ARP, the Company or any of the Subsidiary Guarantors;

(9) the incurrence by ARP or any of its Restricted Subsidiaries of liability in respect of the Indebtedness of any Unrestricted Subsidiary or any Joint Venture but only to the extent that such liability is the result of ARP s or any such Restricted Subsidiary s being a general partner or member of, or owner of an Equity Interest in, such Unrestricted Subsidiary or Joint Venture and not as guarantor of such Indebtedness and provided that, after giving effect to any such incurrence, the aggregate principal amount of all Indebtedness incurred under this clause (9) and then outstanding does not exceed $25.0 million;

(10) Indebtedness owed to Parent not to exceed $50.0 million in the aggregate, *provided* that all such Indebtedness shall be unsecured and subordinated to the Notes;

(11) the incurrence by ARP or any of its Restricted Subsidiaries of Indebtedness in respect of self-insurance obligations or bid, plugging and abandonment, appeal, reimbursement, performance, surety and similar bonds and completion guarantees issued or provided for the account of ARP and any of its Restricted Subsidiaries in the ordinary course of business, including guarantees and obligations of ARP or any of its Restricted Subsidiaries with respect to letters of credit supporting such obligations (in each case other than an obligation for money borrowed);

(12) the issuance by any of the Restricted Subsidiaries to ARP or to any of its Restricted Subsidiaries of any Preferred Stock; *provided* that:

(a) any subsequent issuance or transfer of Equity Interests that results in any such Preferred Stock being held by a Person other than ARP or a Restricted Subsidiary; and

(b) any sale or other transfer of any such Preferred Stock to a Person that is neither ARP nor a Restricted Subsidiary,

will be deemed, in each case, to constitute an issuance of such Preferred Stock by such Restricted Subsidiary that was not permitted by this clause (12); and

Table of Contents

(13) in addition to the items referred to in clauses (1) through (12) above, Indebtedness of ARP, the Company and its Subsidiary Guarantors in an aggregate outstanding principal amount which, when taken together with the principal amount of all other Indebtedness Incurred pursuant to this clause (13) and then outstanding, will not exceed the greater of (a) $50.0 million and (b) 5.0% of Adjusted Consolidated Net Tangible Assets determined as of the date of such incurrence.

For purposes of determining compliance with, and the outstanding principal amount of any particular Indebtedness Incurred pursuant to and in compliance with, this covenant:

(1) in the event an item of that Indebtedness meets the criteria of more than one of the types of Indebtedness described in the first and second paragraphs of this covenant, the Issuers, in their sole discretion, will classify such item of Indebtedness on the date of Incurrence and, subject to clause (2) below may later reclassify such item of Indebtedness and only be required to include the amount and type of such Indebtedness in one of such clauses;

(2) all Indebtedness outstanding on the date of the Indenture under the Senior Secured Credit Agreement shall be deemed Incurred on the Issue Date under clause (1) of the second paragraph of this covenant;

(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 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 ARP or a Restricted Subsidiary, or Preferred Stock of a Restricted Subsidiary that is not an Issuer or a Subsidiary Guarantor, 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 covenant 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 covenant 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 shares of Preferred Stock or Disqualified Stock and unrealized losses or charges in respect of Hedging Obligations (including those resulting from the application of ASC 815) will not be deemed to be an Incurrence of Indebtedness for purposes of this covenant. The amount of any Indebtedness outstanding as of any date shall be (i) the accreted value thereof in the case of any Indebtedness issued with original issue discount and (ii) the principal amount or liquidation preference thereof, together with any interest thereon that is more than 30 days past due, in the case of any other Indebtedness.

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 Limitation on Indebtedness and Preferred Stock covenant, the Issuers shall be in Default of this covenant).

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,

Table of Contents

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 covenant, the maximum amount of Indebtedness that the Issuers may Incur pursuant to this covenant shall not be deemed to be exceeded solely as a result of fluctuations in the exchange rate 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.

The Indenture will 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.

Limitation on Restricted Payments

ARP will not, and will not permit any of the Restricted Subsidiaries, directly or indirectly, to:

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

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

(b) dividends or distributions payable to ARP 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 ARP or a Restricted Subsidiary receives at least its pro rata share of such dividend or distribution;

(2) purchase, redeem, defease, retire or otherwise acquire for value any Capital Stock of ARP or any direct or indirect parent of ARP held by Persons other than ARP or a Restricted Subsidiary (other than in exchange for Capital Stock of ARP (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 clause (3) of the second paragraph of the covenant Limitation on indebtedness and Preferred Stock or (y) the purchase, repurchase, redemption, defeasance or other acquisition or retirement 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); 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) shall be referred to herein as a Restricted Payment). Notwithstanding the foregoing, ARP or a Restricted Subsidiary may make a Restricted Payment if at the time of such Restricted Payment:

(a) no Default shall have occurred and be continuing (or would result therefrom); and either

(b) (1) if the Consolidated Coverage Ratio for ARP and the Restricted Subsidiaries on the last day of the immediately preceding fiscal quarter is at least 2.25 to 1.0, the aggregate amount of such Restricted

Table of Contents

Payment and all other Restricted Payments declared or made during the fiscal quarter in which such Restricted Payment is made does not exceed the result of:

(i) Available Cash; *plus*

(ii) without duplication of amounts included in Available Cash, 100% of the aggregate Net Cash Proceeds, and the fair market value (as determined by ARP s Board of Directors in good faith) of property or securities other than cash (including Capital Stock of Persons engaged primarily in the Energy Business or assets used in the Energy Business), in each case received by ARP from the substantially concurrent issue or sale of its Capital Stock (other than Disqualified Stock) or other substantially concurrent capital contributions subsequent to the 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 ARP, 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 ARP 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 ARP or any Restricted Subsidiary unless such loans have been repaid with cash on or prior to the date of determination)); *plus*

(iii) the amount by which Indebtedness of ARP or the Restricted Subsidiaries is reduced on ARP s balance sheet upon the conversion or exchange (other than by a Wholly-Owned Subsidiary of ARP) subsequent to the Issue Date of any Indebtedness of ARP or the Restricted Subsidiaries convertible or exchangeable for Capital Stock (other than Disqualified Stock) of ARP (less the amount of any cash, or the fair market value of any other property (other than such Capital Stock), distributed by ARP upon such conversion or exchange), together with the net proceeds, if any, received by ARP or any of the Restricted Subsidiaries upon such conversion or exchange; plus

(iv) without duplication of amounts included in Available Cash, the amount equal to the aggregate net reduction in Restricted Investments made by ARP or any of the Restricted Subsidiaries in any Person subsequent to the 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 ARP), repayments of loans or advances or other transfers of assets (including by way of dividend or distribution) by such Person to ARP 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 ARP 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; and

(C) the sale (other than to ARP or a Restricted Subsidiary) of the Capital Stock of an Unrestricted Subsidiary or a distribution from an Unrestricted Subsidiary or a dividend from an Unrestricted Subsidiary (items (ii), (iii) and (iv) being referred to as Incremental Funds and for purposes of clause (2)(ii) below, items (ii) and (iv) above being referred to as Special Incremental Funds); minus

(v) the aggregate amount of Incremental Funds previously expended pursuant to this clause (b)(1) or clause (b)(2) below; or

(2) if the Consolidated Coverage Ratio for ARP and the Restricted Subsidiaries as of the last day of the immediately preceding fiscal quarter is less than 2.25 to 1.0, the aggregate amount of such Restricted Payment and all other Restricted Payments declared or made during the fiscal quarter in which such Restricted Payment and other Restricted Payments is made (such Restricted Payments for purposes of this

Table of Contents

clause (2) meaning only distributions on the Capital Stock of ARP plus the related distributions to the General Partner) does not exceed:

(i) $125.0 million less the aggregate amount of Restricted Payments made since the Issue Date pursuant to this clause (b)(2); plus

(ii) the aggregate amount of Special Incremental Funds not previously expended pursuant to clause (b)(1) above or this clause (b)(2).

The Company paid aggregate distributions of $55.9 million in respect of the period ending June 30, 2014, including $3.9 million and $4.4 million to the Company s general partner and preferred limited partners, respectively. Under the terms of ARP s Partnership Agreement, Available Cash not applied to pay a distribution after any fiscal quarter is reset to $0.

The preceding provisions 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 ARP (other than Disqualified Stock and other than Capital Stock issued or sold to a Subsidiary 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 ARP 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 ARP; 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 Available Cash and clause (b) (1) (ii) of the preceding paragraph and the definition of Incremental Funds;

(2) any purchase, repurchase, redemption, defeasance or other acquisition or retirement of Subordinated Obligations of ARP or the Company or Guarantor Subordinated Obligations of any Guarantor made by exchange for, or out of the proceeds of the substantially concurrent sale of, Subordinated Obligations of ARP or the Company or any purchase, repurchase, redemption, defeasance or other acquisition or retirement 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 the covenant described under Limitation on Indebtedness and Preferred Stock ; provided, however, that such purchase, repurchase, redemption, defeasance, acquisition or retirement will be excluded from subsequent calculations of the amount of Restricted Payments;

(3) any purchase, repurchase, redemption, defeasance or other acquisition or retirement of Disqualified Stock of ARP or a Restricted Subsidiary made by exchange for or out of the proceeds of the substantially concurrent sale of Disqualified Stock of ARP or such Restricted Subsidiary, as the case may be, that, in each case, is permitted to be Incurred pursuant to the covenant described under Limitation on Indebtedness and Preferred Stock ; *provided further, however*, that such purchase, repurchase, redemption, defeasance, acquisition or retirement 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 covenant; *provided, however*, that such dividends and distributions will be included (without duplication) in subsequent calculations of the amount of Restricted Payments (to the extent the declaration thereof has not been previously included); and *provided* however that for purposes of clarification, this clause (4) shall not include cash payments in lieu of the issuance of fractional shares included in clause (9) below;

(5) (a) so long as no Default has occurred and is continuing, the purchase of Capital Stock, or options, warrants, equity appreciation rights or other rights to purchase or acquire Capital Stock of Parent, ARP or any Restricted Subsidiary held by any existing or former employees, management or directors of Parent, ARP or any Subsidiary of ARP or their assigns, estates or heirs, in each case in connection with the repurchase provisions under employee stock option or stock purchase agreements or other agreements to

Table of Contents

compensate management, employees or directors; *provided* that such redemptions or repurchases since the Issue Date pursuant to this subclause (a) during any calendar year will not exceed $3.0 million in the aggregate (with unused amounts in any calendar year being carried over to the next succeeding calendar year); *provided*, *further,* that such amount in any calendar year may be increased by an amount not to exceed (A) the cash proceeds received by ARP from the sale of Capital Stock of ARP to members of management or directors of ARP and the Restricted Subsidiaries that occurs after the 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 the clause (b) of the preceding paragraph), plus (B) the cash proceeds of key man life insurance policies received by ARP and the Restricted Subsidiaries after the Issue Date (to the extent the cash proceeds of key man life insurance policies have not otherwise been applied to the payment of Restricted Payments by virtue of the clause (b) of the preceding paragraph), less (C) the amount of any Restricted Payments made pursuant to clauses (A) and (B) of this clause (5)(a) since the Issue Date; *provided further, however,* that the amount of any such repurchase or redemption under this subclause (a) will be excluded in subsequent calculations of the amount of Restricted Payments and the proceeds received from any such sale will be excluded from clause (b) of the preceding paragraph (including the definition of Incremental Funds); and

(b) the cancellation of loans or advances to employees or directors of ARP or any Subsidiary of ARP the proceeds of which are used to purchase Capital Stock of ARP, in an aggregate amount not in excess of $2.0 million at any one time outstanding; *provided*, *however*, that ARP and its Subsidiaries will comply in all material respects with all applicable provisions of the Sarbanes-Oxley Act of 2002 and the rules and regulations promulgated in connection therewith in connection with such loans or advances; *provided, further*, that the amount of such cancelled loans and advances will be included in subsequent calculations of the amount of Restricted Payments;

(6) 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 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 repurchases 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 the covenant described under Change of control or (ii) at a purchase price not greater than 100% of the principal amount thereof in accordance with provisions similar to the covenant described under Limitation on sales of assets and Subsidiary stock ; *provided* that, prior to or simultaneously with such purchase, repurchase, redemption, defeasance or other acquisition or retirement, the Issuers have made the Change of Control Offer or Asset Disposition Offer, as applicable, as provided in such covenant with respect to the Notes and have completed the repurchase or redemption of all Notes validly tendered for payment in connection with such Change of Control Offer or Asset Disposition Offer; *provided*, *however*, that such repurchases will be included in subsequent calculations of the amount of Restricted Payments;

(8) payments or distributions to dissenting stockholders of acquired businesses 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 otherwise permitted under the Indenture; *provided, however*, that any payment pursuant to this clause (8) shall be excluded from 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) shall be excluded from the calculation of the amount of Restricted Payments;

Table of Contents

(10) so long as no Default has occurred and is continuing, other Restricted Payments made pursuant to this clause (10) in an aggregate amount not to exceed of $5.0 million, *provided* that any payment pursuant to this clause (10) shall be excluded from the calculation of the amount of Restricted Payments; and

(11) Permitted 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 ARP or such Restricted Subsidiary, as the case may be, pursuant to such Restricted Payment. The fair market value of any cash Restricted Payment shall be its face amount. The fair market value of any non-cash Restricted Payment that is less than $20.0 million shall be determined conclusively by an Officer of the ARP and the fair market value of any noncash Restricted Payment that is more than $20.0 million shall be determined conclusively by the Board of Directors of the ARP acting in good faith whose resolution with respect thereto shall be delivered to the Trustee. Not later than the date of making any Restricted Payment, the Issuers 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 the covenant described under Restricted Payments were computed, together with a copy of any fairness opinion or appraisal required by the Indenture.

As of the Issue Date, all of ARP s wholly-owned Subsidiaries other than Anthem Securities, Inc., and Atlas Energy Securities, Inc. will be Restricted Subsidiaries (including the Issuers). We will 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 ARP and the Restricted Subsidiaries (except to the extent repaid) 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 covenant or pursuant to the definition of Permitted Investments, and if such Subsidiary otherwise meets the definition of an Unrestricted Subsidiary. Unrestricted Subsidiaries will not be subject to any of the restrictive covenants set forth in the Indenture.

Limitation on Liens

ARP will not, and will not permit any of the 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 the Indenture or acquired after that date, which Lien is securing any Indebtedness, unless contemporaneously with the Incurrence of such Liens effective provision is made to secure the Indebtedness due under the Notes or, in respect of Liens on ARP s or any Restricted Subsidiary s property or assets, any Guarantee of ARP or such Restricted Subsidiary, as the case may be, 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 Notes 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.

Limitation on restrictions on distributions from Restricted Subsidiaries

ARP 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 Restricted Subsidiary to:

(1) pay dividends or make any other distributions on its Capital Stock or pay any Indebtedness or other obligations owed to ARP 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);

Table of Contents

(2) make any loans or advances to ARP or any Restricted Subsidiary (it being understood that the subordination of loans or advances made to ARP or any Restricted Subsidiary to other Indebtedness Incurred by ARP 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 ARP or any Restricted Subsidiary. The preceding provisions will not prohibit:

(i) any encumbrance or restriction pursuant to or by reason of (a) an agreement in effect at or entered into on the Issue Date and (b) the Indenture;

(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 ARP 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 ARP or 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 ARP or any 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 ARP and the Restricted Subsidiaries to realize the value of, property or assets of ARP or any Restricted Subsidiary in any manner material to ARP or any Restricted Subsidiary;

(iv) any encumbrance or restriction with respect to an 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 ARP or any 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:

(a) 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 Issuers determine that any such encumbrance or restriction will not materially affect the Issuers ability to make principal or interest payments on the Notes, as determined in good faith by the Board of Directors of the Company, whose determination shall be conclusive; and

(b) the encumbrance or restriction is not materially more disadvantageous to the holders of the Notes than is customary in comparable financing (as determined by the Company);

(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*, *however*, 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 Notes than the encumbrances and restrictions contained in such agreements referred to in clauses (i) through (v) or clause (xii) of this paragraph on the Issue Date or the date such Restricted Subsidiary became a Restricted Subsidiary or was merged into a Restricted Subsidiary, whichever is applicable;

Table of Contents

(vii) in the case of clause (3) of the first paragraph of this covenant, 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 or other contract;

(b) arising from Permitted Liens securing Indebtedness of ARP 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) pursuant to customary provisions restricting dispositions of real property interests set forth in any reciprocal easement agreements of ARP or any Restricted Subsidiary;

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

(e) provisions with respect to the disposition or distribution of assets or property in joint venture agreements, asset sale agreements, stock sale agreements and other similar agreements entered into in the ordinary course of business that solely affect the assets or property that is the subject of such agreements and provided that in the case of joint venture agreements such provisions solely affect assets or property of the joint venture; or

(f) any agreement or instrument relating to any property or assets acquired after the Issue Date, so long as such encumbrance or restriction relates only to the property or assets so acquired and is not and was not created in anticipation of such acquisitions.

(viii)(a) purchase money obligations for property acquired in the ordinary course of business and (b) Capitalized Lease Obligations permitted under the Indenture, in each case, that impose encumbrances or restrictions of the nature described in clause (3) of the first paragraph of this covenant 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 substantially all 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; and

(xii) the Senior Secured Credit Agreement as in effect as of the Issue Date, and 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.

Limitation on sales of assets and Subsidiary stock

ARP will not, and will not permit any of the Restricted Subsidiaries to, make any Asset Disposition unless:

(1) ARP or such Restricted Subsidiary, as the case may be, 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

Table of Contents

contractually agreeing to such Asset Disposition), as determined in good faith by the Board of Directors (including as to the value of all noncash consideration), of the shares and assets subject to such Asset Disposition;

(2) at least 75% of the consideration received by ARP or such Restricted Subsidiary, as the case may be, from such Asset Disposition 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 18 months from the later of the date of such Asset Disposition or the receipt of such Net Available Cash, by ARP or such Restricted Subsidiary, as the case may be:

(a) to the extent ARP or any Restricted Subsidiary, as the case may be, elects not to invest in Additional Assets and (or is required by the terms of any Indebtedness) to prepay, repay, redeem or purchase Indebtedness of ARP or the Restricted Subsidiaries under the Senior Secured Credit Agreement, any other Indebtedness of ARP, an Issuer or a Subsidiary Guarantor that is secured by a Lien permitted to be Incurred under the Indenture or Indebtedness (other than Disqualified Stock) of any Wholly-Owned Subsidiary that is not an Issuer or a Subsidiary Guarantor *provided, however*, that, in connection with any prepayment, repayment, redemption or purchase of Indebtedness pursuant to this clause (a), ARP 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 or purchased; or

(b) to invest in Additional Assets;

provided that pending the final application of any such Net Available Cash in accordance with this covenant, ARP and the Restricted Subsidiaries may temporarily reduce Indebtedness or otherwise invest such Net Available Cash in any manner not prohibited by the 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 day following the date that is 18 months 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 $25.0 million, the Issuers will be required to make an offer (Asset Disposition Offer) to all holders of Notes 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 ARP or a Restricted Subsidiary to make an offer to purchase such Pari Passu Indebtedness with the proceeds from any Asset Disposition (Pari Passu Notes), to purchase the maximum principal amount of Notes and any such Pari Passu Notes 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 of ARP or a Restricted Subsidiary was issued with significant original issue discount, 100% of the accreted value thereof) of the Notes and Pari Passu Notes 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 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 the Indenture or the agreements governing the Pari Passu Notes, 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 Notes surrendered by holders thereof and other Pari Passu Notes surrendered by holders or lenders, collectively, exceeds the amount of Excess Proceeds, the Trustee shall select the Notes to be purchased on a pro rata basis on the basis of the aggregate principal amount of tendered Notes and Pari Passu Notes. To the extent that the aggregate amount of Notes and Pari Passu Notes so validly tendered and not properly withdrawn pursuant to an Asset Disposition Offer is less than the Excess Proceeds, the Issuers may use any remaining Excess Proceeds for general company purposes, subject to the other covenants contained in the Indenture. Upon completion of such Asset Disposition Offer, the amount of Excess Proceeds shall be reset at zero.

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

Table of Contents

Offer Period). No later than five Business Days after the termination of the Asset Disposition Offer Period (the Asset Disposition Purchase Date), the Issuers will purchase the principal amount of Notes and Pari Passu Notes required to be purchased pursuant to this covenant (the Asset Disposition Offer Amount) or, if less than the Asset Disposition Offer Amount has been so validly tendered, all Notes and Pari Passu Notes validly tendered 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 Notes pursuant to the Asset Disposition Offer.

On or before the Asset Disposition Purchase Date, the Issuers will, to the extent lawful, accept for payment, on a pro rata basis to the extent necessary, the Asset Disposition Offer Amount of Notes and Pari Passu Notes or portions of Notes and Pari Passu Notes 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 Notes and Pari Passu Notes so validly tendered and not properly withdrawn, in each case in a minimum principal amount of $2,000 and integral multiples of $1,000 in excess of $2,000. The Issuers will deliver to the Trustee an Officers Certificate stating that such Notes or portions thereof were accepted for payment by the Issuers in accordance with the terms of this covenant and, in addition, the Issuers will deliver all certificates and notes required, if any, by the agreements governing the Pari Passu Notes. The Issuers 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 Notes or holder or lender of Pari Passu Notes, as the case may be, an amount equal to the purchase price of the Notes or Pari Passu Notes so validly tendered and not properly withdrawn by such holder or lender, as the case may be, and accepted by the Issuers for purchase, and the Issuers will promptly issue a new Note, and the Trustee, upon delivery of an Officers Certificate from the Issuers, will authenticate and mail or deliver such new Note to such holder, in a principal amount equal to any unpurchased portion of the Note surrendered; *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. In addition, the Issuers will take any and all other actions required by the agreements governing the Pari Passu Notes. Any Note not so accepted will be promptly mailed or delivered by the Issuers to the holder thereof. The Issuers will publicly announce the results of the Asset Disposition Offer on the Asset Disposition Purchase Date.

The Issuers 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 Notes pursuant to the Indenture. To the extent that the provisions of any securities laws or regulations conflict with provisions of this covenant, the Issuers will comply with the applicable securities laws and regulations and will not be deemed to have breached its obligations under the Indenture by virtue of its compliance with such securities laws or regulations.

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

(1) the assumption by the transferee of Indebtedness (other than Subordinated Obligations, Guarantor Subordinated Obligations or Disqualified Stock) of ARP or a Restricted Subsidiary and the release of ARP or such Restricted Subsidiary from all liability on such Indebtedness in connection with such Asset Disposition (or in lieu of such a release, the agreement of the acquirer or its parent company to indemnify and hold ARP or such Restricted Subsidiary harmless from and against any loss, liability or cost in respect of such assumed Indebtedness; *provided, however*, that such indemnifying party (or its long term debt securities) shall have an Investment Grade Rating (with no indication of a negative outlook or credit watch with negative implications, in any case, that contemplates such indemnifying party (or its long term debt securities) failing to have an Investment Grade Rating), in which case ARP 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 covenant; and

Table of Contents

(2) securities, notes or other obligations received by ARP or any Restricted Subsidiary from the transferee that are converted by ARP 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 covenant 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 covenant above 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 ARP or the 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.

Limitation on Affiliate Transactions

ARP will not, and will not permit any of the 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 ARP (an Affiliate Transaction) *unless*:

(1) the terms of such Affiliate Transaction are no less favorable to ARP or such Restricted Subsidiary, as the case may be, than those that could 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 or, if in the good faith judgment of the independent members of the Board of Directors of ARP no comparable transaction with an unrelated Person would be available, such independent directors determine in good faith that such Affiliate Transaction is fair to ARP or such Restricted Subsidiary from a financial point of view;

(2) if such Affiliate Transaction involves aggregate consideration in excess of $20.0 million, ARP delivers to the Trustee an Officers Certificate certifying that such Affiliate Transactions complies with this covenant; and

(3) if such Affiliate Transaction involves aggregate consideration in excess of $35.0 million, the terms of such transaction have been approved by a majority of the members of the Board of Directors of ARP and by a majority of the members of such Board having no personal stake in such transaction, if any (and such majority or majorities, as the case may be, determines that such Affiliate Transaction satisfies the criteria in clause (1) above).

The preceding paragraph will not apply to:

(1) any Restricted Payment permitted to be made pursuant to the covenant described under Limitation on Restricted Payments 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 ARP, restricted stock plans, long-term incentive plans, stock appreciation rights plans, participation plans or similar employee benefits plans and/or indemnity provided on behalf of directors, officers and employees in the ordinary course of business;

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

Table of Contents

(4) any transaction between ARP and a Restricted Subsidiary or between Restricted Subsidiaries and Guarantees issued by ARP or a Restricted Subsidiary for the benefit of ARP or a Restricted Subsidiary, as the case may be, in accordance with Limitation on Indebtedness and Preferred Stock ;

(5) any transaction with a joint venture or similar entity which would constitute an Affiliate Transaction solely because ARP or a Restricted Subsidiary owns, directly or indirectly, an equity interest in or otherwise controls such joint venture or similar entity;

(6) the issuance or sale of any Capital Stock (other than Disqualified Stock) of ARP or the receipt by ARP of any capital contribution from its unitholders;

(7) indemnities of officers, directors and employees of ARP or any of the 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 ARP or any of the Restricted Subsidiaries;

(8) the payment of customary compensation and fees paid to, and benefits and indemnity provided on behalf of, officers or directors of ARP or any Restricted Subsidiary;

(9) the performance of obligations of ARP or any of the Restricted Subsidiaries under the terms of any agreement to which ARP or any of the 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 to the extent that its terms are not materially more disadvantageous, taken as a whole, to the holders of the Notes than the terms of the agreements in effect on the Issue Date;

(10) 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 the Indenture which are fair to ARP and the Restricted Subsidiaries, in the reasonable determination of the Board of Directors of ARP or the senior management thereof, or are on terms at least as favorable as might reasonably have been obtained at such time from an unaffiliated party;

(11) guarantees of performance by ARP, the Company and its Restricted Subsidiaries of the Unrestricted Subsidiaries in the ordinary course of business, except for guarantees of Indebtedness in respect of borrowed money;

(12) if such Affiliate Transaction is with a Person in its capacity as a holder of Indebtedness or Equity Interests of ARP, the Company or any Restricted Subsidiary where such Person is treated no more favorably than the holders of such Indebtedness or Equity Interests who are unaffiliated with ARP, the Company and the Restricted Subsidiaries;

(13) transactions between ARP or any of its subsidiaries and any Person that would not otherwise constitute an Affiliate Transaction except for the fact that one director of such other Person is also a director of ARP or its subsidiary, as applicable; *provided* that such director abstains from voting as a director of ARP or its subsidiary, as applicable on any matter involving such other Person;

(14) any transaction in which ARP or any of its Restricted Subsidiaries, as the case may be, delivers to the Trustee opinion from an accounting, appraisal or investment banking firm of national standing stating that such transaction is fair to ARP or such Restricted Subsidiary from a financial point of view or that such transaction meets the requirements of clause (1) of the first paragraph; and

(15) gas purchase, gathering, transportation, marketing, hedging, production handling, operating, construction, terminalling, storage, lease, platform use, or other operational contracts, entered into in the ordinary course of business on terms substantially similar to those contained in similar contracts entered into by ARP or any Restricted Subsidiary with third parties, or if neither ARP nor any Restricted Subsidiary has entered into a similar contract with a third party, on terms that are no less favorable than those available from third parties on an arm s-length basis, as determined by the Board of Directors of ARP.

Table of Contents

SEC reports

The Indenture provides that, whether or not the Company is subject to the reporting requirements of Section 13 or 15(d) of the Exchange Act, to the extent not prohibited by the Exchange Act, the Company will file with the SEC, and make available to the Trustee and the registered holders of the Notes 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 Company is not permitted to file such reports, documents and information with the SEC pursuant to the Exchange Act, the Company will nevertheless make available such Exchange Act information to the Trustee and the holders of the Notes without cost to any holder as if the Company 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 Issuers have designated any of their respective Subsidiaries as Unrestricted Subsidiaries, then, to the extent material, the quarterly and annual financial information required by the preceding paragraph shall include a reasonably detailed presentation, either on the face of the financial statements or in the footnotes to the financial statements and in Management s Discussion and Analysis of Results of Operations and Financial Condition, of the financial condition and results of operations of ARP and the Restricted Subsidiaries.

In the event that the rules and regulations of the SEC permit the Company and any direct or indirect parent of the Company to report at such parent entity s level on a consolidated basis and such parent entity is not engaged in any business in any material respect other than incidental to its ownership, directly or indirectly, of the Capital Stock of the Company, the Indenture will permit the Company to satisfy its obligations in this covenant with respect to financial information relating to the Company by furnishing financial information relating to any parent entity of the Company (including ARP) as long as such parent entity of the Company provides a Guarantee of the Notes; *provided* that the same is accompanied by consolidating information that explains in reasonable detail the material differences between the information relating to such parent entity, on the one hand, and the information relating to the Restricted Subsidiaries on a standalone basis, on the other hand.

In addition, the Issuers and the Guarantors have agreed that they will make available to the holders and to prospective investors, upon the request of such holders, the information required to be delivered pursuant to Rule 144A(d)(4) under the Securities Act so long as the Notes are not freely transferable under the Securities Act to the extent not satisfied by the foregoing. For purposes of this covenant, the Issuers and the Guarantors will be deemed to have furnished the reports to the Trustee and the holders of Notes as required by this covenant if they have filed such reports with the SEC via the EDGAR filing system and such reports are publicly available.

Merger and consolidation

Neither Issuer will consolidate with or merge with or into or wind up into (whether or not such Issuer is the surviving corporation) and ARP may not convey, transfer or lease all or substantially all of its and the Restricted Subsidiaries 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 Company) will expressly assume, by supplemental indenture, executed and delivered to the Trustee, in form reasonably satisfactory to the Trustee, all the obligations of the Company under the Notes and the Indenture;

(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 shall have occurred and be continuing;

Table of Contents

(3) immediately after giving effect to such transaction, the Successor Company would be able to Incur at least an additional $1.00 of Indebtedness pursuant to the first paragraph of the covenant described under Limitation on Indebtedness and Preferred Stock ;

(4) each Guarantor (unless it is the other party to the transactions above, in which case clause (1) shall apply) shall have by supplemental indenture confirmed that its Guarantee shall apply to such Person s obligations in respect of the Indenture and the Notes; and

(5) the Issuers shall have delivered to the Trustee an Officers Certificate and an Opinion of Counsel, each stating that such consolidation, merger or transfer and such supplemental indenture (if any) comply with the Indenture.

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

The Successor Company will succeed to, and be substituted for, and may exercise every right and power of, the Company under the Indenture; and its predecessor company, except in the case of a lease of all or substantially all its assets, will be released from the obligation to pay the principal of and interest on the Notes.

Although there is a limited body of case law interpreting the phrase substantially all, there is no precise established definition of the phrase under applicable law. Accordingly, in certain circumstances there may be a degree of uncertainty as to whether a particular transaction would involve all or substantially all of the property or assets of a Person.

Notwithstanding the preceding clause (3), (x) any Restricted Subsidiary (other than an Issuer) may consolidate with, merge into or transfer all or part of its properties and assets to ARP or the Company and the Company may consolidate with, merge into or transfer all or part of its properties and assets to a Wholly-Owned Subsidiary and (y) the Company may merge with an Affiliate formed solely for the purpose of reforming the Company in another jurisdiction; *provided* that, in the case of a Restricted Subsidiary (other than an Issuer) that consolidates with, merges into or transfers all or part of its properties and assets to the Company, the Company will not be required to comply with the preceding clause (5).

Notwithstanding anything herein to the contrary, in the event the Company becomes a corporation or the Company or the Person formed by or surviving any consolidation or merger (permitted in accordance with the terms of the Indenture) is a corporation, Atlas Resource Finance Corporation may be dissolved in accordance with the Indenture and may cease to be an Issuer; *provided* that, to the extent the Company or any Person formed by or surviving any such consolidation or merger is not a corporation, Atlas Resource Finance Corporation shall not be dissolved and shall not cease to be an Issuer.

In addition, the Issuers will not permit any Subsidiary Guarantor to consolidate with or merge with or into, and will not permit the conveyance, transfer or lease of substantially all of the assets of any Subsidiary Guarantor to, any Person (other than the Company 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

Table of Contents

(2) the transaction is made in compliance with the covenants described under Guarantees and Certain covenants Limitation on sales of assets and Subsidiary stock.

Future Guarantors

If, after the Issue Date, any Restricted Subsidiary that is not already a Subsidiary Guarantor guarantees any other Indebtedness of either of the Issuers or any of the Guarantors under any Credit Facility, then such Subsidiary must become a Subsidiary Guarantor by executing a supplemental indenture satisfactory to the Trustee and delivering an Opinion of Counsel to the Trustee within 30 days of the date on which it became a Restricted Subsidiary or such other guarantee was executed or such Indebtedness incurred, as applicable. Notwithstanding the foregoing, (i) any Guarantee of a Restricted Subsidiary that was incurred pursuant to this paragraph shall provide by its terms that it shall be automatically and unconditionally released upon the release or discharge of the guarantee which resulted in the creation of such Restricted Subsidiary s Guarantee, except a discharge or release by, or as a result of payment under, such guarantee and except if, at such time, such Restricted Subsidiary is then a guarantor under any other Indebtedness of the Issuers or another Subsidiary and (ii) any Guarantee of a Restricted Subsidiary shall be automatically released if such Restricted Subsidiary is designated an Unrestricted Subsidiary in accordance with the Indenture.

Limitation on lines of business

ARP will not, and will not permit any Restricted Subsidiary to, engage in any business other than the Energy Business (which includes certain energy businesses involving minerals and natural resources within the parameters of Section 7704(d)(1)(E) of the Code), except to the extent as would not be material to ARP and the Restricted Subsidiaries taken as a whole.

Limitations on Atlas Resource Finance Corporation

Atlas Resource Finance Corporation will not hold any material assets, become liable for any material obligations, engage in any trade or business, or conduct any business activity, other than the issuance of Capital Stock to ARP, the incurrence of Indebtedness as a co-obligor or guarantor of Indebtedness incurred by the Company, including the Notes, that is permitted to be incurred by the Company under Certain covenants Limitation on Indebtedness and Preferred Stock (*provided* that the net proceeds of such indebtedness are retained by ARP or loaned to or contributed as capital to one or more Restricted Subsidiaries other than Atlas Resource Finance Corporation), and activities incidental thereto. Neither the Company nor any Restricted Subsidiary shall engage in any transactions with Atlas Resource Finance Corporation in violation of the immediately preceding sentence.

Covenant suspension

If at any time (a) the rating assigned to the Notes by both S&P and Moody s is an Investment Grade Rating, (b) no Default has occurred and is continuing, and (c) the Issuers have delivered to the trustee an officer s certificate certifying to the foregoing provisions of this sentence, ARP and its Restricted Subsidiaries will not be subject to the provisions of the Indenture described under the following headings under the caption Certain covenants :

Limitation on Restricted Payments (other than the provisions set forth in the last paragraph of such covenant permitting a Restricted Subsidiary to be designated as an Unrestricted Subsidiary),

Limitation on Indebtedness and Preferred Stock,

Limitation on restrictions on distributions from Restricted Subsidiaries,

Limitation on sales of assets and Subsidiary stock,

Limitation on Affiliate Transactions,

Table of Contents

Limitation on lines of business, and

Limitations on Atlas Resource Finance Corporation

(collectively, the Suspended Covenants); however, ARP and its Restricted Subsidiaries will remain subject to the provisions of the indenture described above under the caption Change of Control, and the following provisions of the indenture described under the following headings:

Limitation on Liens,

Merger and consolidation (other than the financial test set forth in clause (3) of such covenant),

Future Guarantors, and

SEC reports ;

and *provided further*, that if ARP and its Restricted Subsidiaries are not subject to the Suspended Covenants for any period of time as a result of the preceding portion of this sentence and, subsequently, either S&P or Moody s withdraws its ratings or downgrades the ratings assigned to the Notes below the Investment Grade Ratings so that the Notes do not have an Investment Grade Rating from both S&P and Moody s, or a Default (other than with respect to the Suspended Covenants) occurs and is continuing, ARP and its Restricted Subsidiaries will thereafter again be subject to the Suspended Covenants, subject to the terms, conditions and obligations set forth in the Indenture (each such date of reinstatement being the Reinstatement Date). As a result, during any period in which ARP and its Restricted Subsidiaries are not subject to the Suspended Covenants, the Notes will be entitled to substantially reduced covenant protection. Compliance with the Suspended Covenants with respect to Restricted Payments made after the Reinstatement Date will be calculated in accordance with the terms of the covenant described under Limitation on Restricted Payments as though such covenant had been in effect during the entire period of time from which the Notes are issued. However, all Restricted Payments made, Indebtedness incurred and other actions effected during any period in which covenants are suspended will not cause a default under the Indenture on any Reinstatement Date.

Events of Default

Each of the following is an Event of Default:

(1) default in any payment of interest on any Note when due, continued for 30 days;

(2) default in the payment of principal of or premium, if any, on any Note when due at its Stated Maturity, upon optional redemption or upon required repurchase;

(3) failure by an Issuer or any Guarantor to comply with its obligations under Certain covenants Merger and consolidation ;

(4) failure by an Issuer to comply for 30 days after notice as provided below with any of its obligations under the covenant described under Change of Control above or under the covenant described under Certain covenants Limitation on sale of assets and Subsidiary stock ;

(5) failure by an Issuer or a Guarantor to comply for 60 days after notice as provided below with their other agreements contained in the Indenture;

(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 ARP or any of the Restricted Subsidiaries (or the payment of which is guaranteed by ARP or any of the Restricted Subsidiaries), other than Indebtedness owed to ARP or a Restricted Subsidiary, whether such Indebtedness or guarantee now exists, or is created after the date of the Indenture, 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 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) certain events of bankruptcy, insolvency or reorganization of ARP, an Issuer or a Significant Subsidiary or group of Restricted Subsidiaries that, taken together (as of the latest audited consolidated financial statements for ARP and the Restricted Subsidiaries), would constitute a Significant Subsidiary (the bankruptcy provisions);

(8) failure by ARP, an Issuer or any Significant Subsidiary or group of Restricted Subsidiaries that, taken together (as of the latest audited consolidated financial statements for ARP and the 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, discharged or stayed for any period of 60 consecutive days following entry of such final judgment (the judgment default provision); or

(9) any Guarantee of ARP or a Significant Subsidiary or group of Restricted Subsidiaries that, taken together (as of the latest audited consolidated financial statements for ARP and the 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 ARP 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 ARP and the Restricted Subsidiaries) would constitute a Significant Subsidiary denies or disaffirms (in a manner having legal effect) its obligations under the Indenture or its Guarantee.

However, a default under clauses (4) and (5) of this paragraph will not constitute an Event of Default until the Trustee or the holders of 25% in principal amount of the outstanding Notes notify the Issuers in writing and, in the case of a notice given by the holders, the Trustee of the default and the Issuers do not cure such default within the time specified in clauses (4) and (5) of this paragraph after receipt of such notice.

If an Event of Default (other than an Event of Default described in clause (7) above) occurs and is continuing, the Trustee by notice to the Issuers, or the holders of at least 25% in principal amount of the outstanding Notes by notice to the Issuers 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 Notes to be due and payable. If an Event of Default described in clause (7) above occurs and is continuing, the principal of, premium, if any, accrued and unpaid interest, if any, on all the Notes will become and be immediately due and payable without any declaration or other act on the part of the Trustee or any holders. The holders of a majority in principal amount of the outstanding Notes may waive all past defaults (except with respect to nonpayment of principal, premium, or interest, if any) and rescind any such acceleration with respect to the Notes and its consequences if (1) 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 on the Notes that have become due solely by such declaration of acceleration, have been cured or waived.

Subject to the provisions of the Indenture relating to the duties of the Trustee, if an Event of Default occurs and is continuing, the Trustee will be under no obligation to exercise any of the rights or powers under the Indenture at the request or direction of any of the holders unless such holders have offered to the Trustee reasonable indemnity or security against any loss, liability or expense. Except to enforce the right to receive payment of principal, premium, if any, or interest when due, no holder may pursue any remedy with respect to the Indenture or the Notes *unless*:

(1) such holder has previously given the Trustee notice that an Event of Default is continuing;

(2) holders of at least 25% in principal amount of the outstanding Notes have requested the Trustee to pursue the remedy;

Table of Contents

(3) such holders have offered the Trustee reasonable security or indemnity against any loss, liability or expense;

(4) the Trustee has not complied with such request within 60 days after the receipt of the request and the offer of security or indemnity; and

(5) the holders of a majority in principal amount of the outstanding Notes 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 within such 60-day period.

Subject to certain restrictions, the holders of a majority in principal amount of the outstanding Notes are given the right to 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. The Indenture provides that in the event an Event of Default has occurred and is continuing, the Trustee will be required in the exercise of its powers to use the degree of care that a prudent person would use in the conduct of its own affairs. The Trustee, however, may refuse to follow any direction that conflicts with law or the Indenture or that the Trustee determines is unduly prejudicial to the rights of any other holder or that would involve the Trustee in personal liability. Prior to taking any action under the Indenture, the Trustee will be entitled to indemnification satisfactory to it in its sole discretion against all losses and expenses caused by taking or not taking such action.

The Trustee may withhold notice if and so long as a committee of trust officers of the Trustee in good faith determines that withholding notice is in the interests of the holders. In addition, the Issuers are required to deliver to the Trustee, within 120 days after the end of each fiscal year, a certificate indicating whether the signers thereof know of any Default that occurred during the previous year. The Issuers also are required to deliver to the Trustee, within 30 days after the occurrence thereof, written notice of any events which would constitute certain Defaults, their status and what action the Issuers are taking or proposing to take in respect thereof.

Amendments and waivers

Subject to certain exceptions, the Indenture and the Notes may be amended or supplemented with the consent of the holders of a majority in principal amount of the Notes then outstanding (including without limitation, consents obtained in connection with a purchase of, or tender offer or exchange offer for, Notes) and, subject to certain exceptions, any past default or compliance with any provisions may be waived with the consent of the holders of a majority in principal amount of the Notes then outstanding (including, without limitation, consents obtained in connection with a purchase of, or tender offer or exchange offer for, Notes). However, without the consent of each holder of an outstanding Note affected, no amendment may, among other things:

(1) reduce the principal amount of Notes whose holders must consent to an amendment, supplement or waiver;

(2) reduce the stated rate of or extend the stated time for payment of interest on any Note;

(3) reduce the principal of or extend the Stated Maturity of any Note;

(4) reduce the premium payable upon the redemption of any Note as described above under Optional redemption, or change the time at which any Note may be redeemed as described above under Optional redemption, or make any change to the covenants described above under Change of control after the occurrence of a Change of Control, or make any change to the provisions relating to an Asset Disposition Offer that has been made, in each case whether through an amendment or waiver of provisions in the covenants, definitions or otherwise;

(5) make any Note payable in money other than that stated in the Note;

(6) impair the right of any holder to receive payment of, premium, if any, principal of and interest on such holder s Notes 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 Notes (except a rescission of acceleration of the Notes by the holders of

Table of Contents

at least a majority in aggregate principal amount of the Notes and a waiver of the payment default that resulted from such acceleration);

(7) make any change in the amendment provisions which require each holder s consent or in the waiver provisions;

(8) modify the Guarantees in any manner adverse to the holders of the Notes; or

(9) make any change to or modify the ranking of the Notes that would adversely affect the holders.

Notwithstanding the foregoing, without the consent of any holder, the Issuers, the Subsidiary Guarantors and the Trustee may amend the Indenture and the Notes to: (1) cure any ambiguity, omission, defect, mistake or inconsistency;

(2) provide for the assumption by a successor corporation of the obligations of the Issuers or any Guarantor under the Indenture;

(3) provide for uncertificated Notes in addition to or in place of certificated Notes (*provided* that the uncertificated Notes are issued in registered form for purposes of Section 163(f) of the Code, or in a manner such that the uncertificated Notes are described in Section 163(f) (2) (B) of the Code);

(4) add Guarantees with respect to the Notes, including Subsidiary Guarantees, or release a Subsidiary Guarantor from its Subsidiary Guarantee and terminate such Subsidiary Guarantee; *provided, however*, that the release and termination is in accord with the applicable provisions of the Indenture;

(5) secure the Notes or Guarantees;

(6) add to the covenants of the Issuers or a Subsidiary Guarantor for the benefit of the holders or surrender any right or power conferred upon the Issuers or a Subsidiary Guarantor;

(7) make any change that does not adversely affect the rights of any holder;

(8) comply with any requirement of the SEC in connection with the qualification of the Indenture under the Trust Indenture Act; or

(9) provide for the succession of a successor Trustee.

The consent of the holders is not necessary under the Indenture to approve the particular form of any proposed amendment. It is sufficient if such consent approves the substance of the proposed amendment. A consent to any amendment or waiver under the Indenture by any holder of Notes given in connection with a tender of such holder s Notes will not be rendered invalid by such tender. After an amendment under the Indenture becomes effective, the Issuers are required to mail to the holders a notice briefly describing such amendment. However, the failure to give such notice to all the holders, or any defect in the notice will not impair or affect the validity of the amendment.

Defeasance

The Issuers at any time may terminate all their obligations under the Notes and the Indenture (legal defeasance), except for certain obligations, including those respecting the defeasance trust and obligations to register the transfer or exchange of the Notes, to replace mutilated, destroyed, lost or stolen Notes and to maintain a registrar and paying agent in respect of the Notes. If the Issuers exercise their legal defeasance option, the Guarantees in effect at such time will terminate.

The Issuers at any time may terminate their obligations described under Change of control and under covenants described under Certain covenants (other than clauses (1), (2), (4) and (5) of Merger and consolidation), the operation of the cross default upon a payment default, cross acceleration provisions, the bankruptcy provisions with respect to Significant Subsidiaries of the Company, the judgment default provision and the Guarantee provision described under Events of default above and the limitations contained in clause (3) under Merger and consolidation above (covenant defeasance).

80

Table of Contents

The Issuers may exercise their legal defeasance option notwithstanding their prior exercise of their covenant defeasance option. If the Issuers exercise their legal defeasance option, payment of the Notes may not be accelerated because of an Event of Default with respect to the Notes. If the Issuers exercise their covenant defeasance option, payment of the Notes may not be accelerated because of an Event of Default specified in clause (4), (5), (6), (7) (with respect only to Significant Subsidiaries of the Company), (8) or (9) under Events of default above or because of the failure of the Issuers to comply with clause (3) under Merger and consolidation above.

In order to exercise either defeasance option, the Issuers must, among other things, irrevocably deposit in trust (the defeasance trust) with the Trustee money or U.S. Government Obligations for the payment of principal, premium, if any, and interest on the Notes to redemption or maturity, as the case may be, and must comply with certain other conditions, including delivery to the Trustee of an Opinion of Counsel (subject to customary exceptions and exclusions) to the effect that holders of the Notes will not recognize income, gain or loss for federal income tax purposes as a result of such deposit and defeasance and will be subject to Federal income tax on the same amount and in the same manner and at the same times as would have been the case if such deposit and defeasance had not occurred. In the case of legal defeasance only, such Opinion of Counsel must be based on a ruling of the Internal Revenue Service or other change in applicable federal income tax law.

Satisfaction and discharge

The Indenture will be discharged and will cease to be of further effect as to all Notes issued thereunder, when either:

(1) all Notes that have been authenticated (except lost, stolen or destroyed Notes that have been replaced or paid and Notes for whose payment money has theretofore been deposited in trust or segregated and held in trust by the Issuers and thereafter repaid to the Issuers or discharged from such trust) have been delivered to the Trustee for cancellation, or

(2) all Notes that have not been delivered to the Trustee for cancellation have become due and payable or will become due and payable within one year by reason of the giving of a notice of redemption or otherwise and the Issuers or any Guarantor has irrevocably deposited or caused to be irrevocably deposited with the Trustee as trust funds in trust solely for such purpose, cash in U.S. dollars, U.S. Government Obligations, or a combination thereof, in such amounts as will be sufficient without consideration of any reinvestment of interest, to pay and discharge the entire indebtedness on the Notes not delivered to the Trustee for cancellation for principal and accrued interest to the date of maturity or redemption, and in each case certain other requirements set forth in the Indenture are satisfied.

No personal liability of directors, officers, employees and stockholders

No director, officer, employee, incorporator or stockholder of an Issuer or any Guarantor, as such, shall have any liability for any obligations of the Issuers or any Guarantor under the Notes, 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 Note waives and releases all such liability. The waiver and release are part of the consideration for issuance of the Notes.

Concerning the trustee

U.S. Bank National Association will be the Trustee under the Indenture and has been appointed by the Issuers as registrar and paying agent with regard to the Notes.

Governing law

The Indenture provides that it and the Notes will be governed by, and construed in accordance with, the laws of the State of New York.

Table of Contents

Certain 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 ARP or a Restricted Subsidiary in the Energy Business;

(2) capital expenditures by ARP or a Restricted Subsidiary in the Energy Business;

(3) the Capital Stock of a Person that becomes a Restricted Subsidiary as a result of the acquisition of such Capital Stock by ARP 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 Energy Business.

Additional Interest means such additional interest payable pursuant to the Registration Rights Agreement.

Adjusted Consolidated Net Tangible Assets of a Person 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 such Person and its Restricted Subsidiaries calculated in accordance with SEC guidelines before any state or federal income taxes, as estimated by ARP in a reserve report prepared as of the end of ARP 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, in the case of clauses (A) and (B) calculated in accordance with SEC guidelines (utilizing the prices for the fiscal quarter ending prior to the date of determination), 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, 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 each case calculated on a pre-tax basis and substantially in accordance with SEC

guidelines in the case of clauses (C) and (D) utilizing the prices for the fiscal quarter ending prior to the date of determination, *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 Company s petroleum engineers;

Table of Contents

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

(iii) the Net Working Capital of such Person on a date no earlier than the date of such Person s latest annual or quarterly financial statements; and

(iv) the greater of

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

(B) the appraised value, as estimated by independent appraisers, of other tangible assets of such Person and its Restricted Subsidiaries, as of a date no earlier than the date of such Person s latest audited financial statements; *provided*, that, if no such appraisal has been performed the Company 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 such Person and its Restricted Subsidiaries reflected in such Person s latest audited balance sheet;

(iii) to the extent included in (a)(i) above, the discounted future net revenues, calculated in accordance with SEC guidelines (utilizing the prices utilized in such Person s year end reserve report), attributable to reserves which are required to be delivered to third parties to fully satisfy the obligations of ARP and the Restricted Subsidiaries with respect to Volumetric Production Payments (determined, if applicable, using the schedules specified with respect thereto); and

(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 such Person and its Subsidiaries with respect to Dollar-Denominated Production Payments (determined, if applicable, using the schedules specified with respect thereto).

If ARP 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 ARP 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 (other than an operating lease entered into in the ordinary course of the Energy 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) shares of Capital Stock of a Restricted Subsidiary (other than Preferred Stock of Restricted Subsidiaries issued in compliance with the covenant described under the heading Certain covenants Limitation on Indebtedness and Preferred Stock, and

Table of Contents

directors qualifying shares or shares required by applicable law to be held by a Person other than ARP or a Restricted Subsidiary), (B) all or substantially all the assets of any division or line of business of ARP or any Restricted Subsidiary, or (C) any other assets of ARP or any Restricted Subsidiary outside of the ordinary course of business of ARP or such Restricted Subsidiary (each referred to for the purposes of this definition as a disposition), in each case by ARP or any of the 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 ARP or by ARP or a Restricted Subsidiary to a Restricted Subsidiary;

(2) the sale or other disposition of cash or Cash Equivalents, the early termination of Hedging Obligations or other financial instruments in the ordinary course of business;

(3) a disposition of Hydrocarbons or mineral products inventory in the ordinary course of business;

(4) a disposition of damaged, unserviceable, obsolete or worn out equipment or equipment that is no longer used or useful in the business of ARP and the Restricted Subsidiaries;

(5) transactions in accordance with the covenant described under Certain covenants Merger and consolidation ;

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

(7) for purposes of Certain covenants Limitation on sales of assets and Subsidiary stock only, 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 the covenant described under Certain covenants Limitation on Restricted Payments ;

(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 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 ARP and the 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 Energy Business for geologists, geophysicists and other providers of technical services to ARP 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) a disposition of oil and natural gas properties in connection with tax credit transactions complying with Section 29 or any successor or analogous provisions of the Code;

(16) 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;

(17) the abandonment, farmout, lease or sublease of developed or undeveloped oil and gas properties in the ordinary course of business; and

(18) the sale or transfer (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 sale or transfer.

84

Table of Contents

Asset Swap means any concurrent purchase and sale or exchange of any oil or natural gas property or interest therein between ARP or any of the Restricted Subsidiaries and another Person; *provided*, that any cash received must be applied in accordance with Certain covenants Limitation on sales of assets and Subsidiary stock as if the Asset Swap were an Asset Disposition.

Available Cash has the meaning assigned to such term in the Partnership Agreement, as in effect on the Issue Date.

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.

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.

Board of Directors means:

(1) with respect to Atlas Resource Finance Corporation, the board of directors of such corporation;

(2) with respect to ARP, the board of directors of the General Partner or any authorized committee thereof; and

(3) with respect to any other Person, the board or committee of such Person serving a similar function.

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, participation or other equivalents of or interests in (however designated) equity of such Person, including any Preferred Stock, but excluding any debt securities convertible into 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, and the Stated Maturity thereof will be the date of the last payment of rent or any other amount due under such lease prior to the first date such lease may be terminated without penalty.

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 (*provided* that the full faith and credit of the United States is pledged in support thereof) and, at the time of acquisition, having a credit rating of A (or the equivalent thereof) or better from either Standard & Poor s Ratings Services or Moody s Investors Service, Inc.;

Table of Contents

(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 long-term debt of which is rated at the time of acquisition thereof at least A2 or the equivalent thereof by Standard & Poor s Ratings Services, or P2 or the equivalent thereof by Moody s Investors Service, Inc., 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 Standard & Poor s Ratings Services or P-2 or the equivalent thereof by Moody s Investors Service, Inc., 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.

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, to the extent a Parent Change of Control has not occurred, Parent or its Subsidiaries), is or becomes the Beneficial Owner, directly or indirectly, of more than 50% of the total voting power of the Voting Stock of ARP (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 ARP 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), *provided* that a Change of Control shall not be deemed to occur solely as a result of a transfer of the general partner interests of ARP or the Capital Stock in the General Partner to a new entity in contemplation of the initial public offering of such new entity, or as a result of any further offering of Capital Stock of such new entity (or securities convertible into such Capital Stock) so long as the persons or entities that Beneficially Own the general partner interests of ARP or the Capital Stock in the General Partner on the Issue Date continue to hold the general partner interests in such new entity (or, in the case of a new entity that is not a partnership, no other Person or group Beneficially Owns more than 50% of the Voting Stock of such new entity); or

(2) the first day on which a majority of the members of the Board of Directors of ARP are not (i) nominated by the Board of Directors or (ii) appointed by directors so nominated; or

(3) 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 ARP and the 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); or

(4) the adoption by the members of ARP of a plan or proposal for the liquidation or dissolution of ARP; or

(5) ARP ceases to be the Beneficial Owner, directly or indirectly, of more than 75% of the total voting power of the Voting Stock of the Company; or

(6) the consummation of any transaction (including, without limitation, any merger or consolidation) the result of which is that any person or group of related persons (as such terms are used in Sections 13(d) and 14(d) of the Exchange Act), is or becomes the Beneficial Owner, directly or indirectly, of more than 50% of the total voting power of the Voting Stock of the General Partner; *provided* that a Change of Control shall not be deemed to occur solely as a result of a transfer of the Capital Stock in the

General Partner to a new entity in contemplation of the initial public offering of such new entity, or as a result of any further offering of Capital Stock of such new entity (or securities convertible into such Capital Stock) so long as the persons or entities that are the Beneficial Owners of the Capital Stock in the General Partner on the Issue Date hold more than 50% of the Voting Stock of such new entity; or

(7) for so long as ARP is a limited partnership, the removal of the General Partner by the limited partners of ARP. Notwithstanding the preceding, a conversion of the General Partner, ARP or any of its Restricted Subsidiaries from a limited partnership, corporation, limited liability company 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 Equity Interests in one form of entity for Equity Interests in 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 General Partner, ARP or any Restricted Subsidiary, as applicable, immediately prior to such transactions continue to Beneficially Own in the aggregate more than 50% of the Voting Stock of such entity, or Beneficially Own sufficient Equity Interests in such entity or its general partner, as applicable, to elect a majority of its directors, managers, trustees or other persons serving in a similar capacity for such entity or its general partner, as applicable, and, in either case no person Beneficially Owns more than 50% of the Voting Stock of such entity or its general partner, as applicable.

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 Energy Business and designed to protect such Person against fluctuation in Hydrocarbon prices.

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 EBITDA of such Person 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 ARP 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 EBITDA 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 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 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 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

Table of Contents

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 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, ARP or any Restricted Subsidiary will have 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 EBITDA for such period will be reduced by an amount equal to the Consolidated EBITDA (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 EBITDA (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 ARP or any Restricted Subsidiary repaid, repurchased, defeased or otherwise discharged with respect to ARP and the 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 ARP and the continuing Restricted Subsidiaries are no longer liable for such Indebtedness after such sale);

(3) if since the beginning of such period ARP or any Restricted Subsidiary (by merger or otherwise) will have made an Investment in any Restricted Subsidiary (or any Person which becomes a Restricted Subsidiary or is merged with or into ARP 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 hereunder, which constitutes all or substantially all of a company, division, operating unit, segment, business, group of related assets or line of business, Consolidated EBITDA 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 ARP 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 ARP or a Restricted Subsidiary during such period, Consolidated EBITDA 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 ARP (including pro forma expense and cost reductions; *provided* that (i) such expense and cost reductions are reasonably identifiable and factually supportable (as detailed in an Officer s Certificate from a financial officer) and (ii) the actions required to attain such expense and cost reductions have been completed or are to be completed no later than 6 months after the consummation of the transaction for which pro forma effect is being given). 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 by applying such optional rate chosen by ARP or such Restricted Subsidiary. 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 ARP may designate.

Consolidated EBITDA 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 Taxes of ARP and the Restricted Subsidiaries;

(3) consolidated depletion and depreciation expense of ARP and the Restricted Subsidiaries;

(4) consolidated amortization expense or impairment charges of ARP and the Restricted Subsidiaries recorded in connection with the application of Accounting Standards Codification No. 350, Intangibles-Goodwill and Other and Accounting Standards Codification No. 360, Property, Plant and Equipment ;

(5) reasonable and customary fees and expenses incurred or paid in connection with the consummation of acquisition transactions not prohibited by the terms of the Indenture; and

(6) other non-cash charges of ARP and the 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);

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 EBITDA in any prior period).

Notwithstanding the preceding sentence, clauses (2) through (5) relating to amounts of a Restricted Subsidiary of a Person will be added to Consolidated Net Income to compute Consolidated EBITDA of such Person 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 such Person and, to the extent the amounts set forth in clauses (2) through (5) 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 ARP by such Restricted Subsidiary 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 its stockholders.

Consolidated Income Taxes means, with respect to any Person for any period and without duplication, (a) Permitted Payments made and (b) taxes imposed upon such Person or other payments required to be made by such Person by any governmental authority which taxes or other payments are calculated by reference to the income, profits or capital of such Person or such Person and its Restricted Subsidiaries (to the extent such income or profits were included in computing Consolidated Net Income for such period), regardless of whether such taxes or payments are required to be remitted to any governmental authority.

Consolidated Interest Expense means, for any period, the total consolidated interest expense of ARP and the 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);

89

Table of Contents

(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 ARP or one of the Restricted Subsidiaries or secured by a Lien on assets of ARP or one of the Restricted Subsidiaries;

(6) costs associated with Interest Rate Agreements (including amortization of fees); *provided*, *however*, that if Interest Rate Agreements result in net 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 such Person and its Restricted Subsidiaries that was capitalized during such period;

(8) all dividends paid or payable in cash, Cash Equivalents or Indebtedness or accrued during such period on any series of Disqualified Stock of ARP or on Preferred Stock of its Restricted Subsidiaries payable to a party other than ARP or a Wholly-Owned Subsidiary; and

(9) the cash contributions to any employee stock ownership plan or similar trust to the extent such contributions are used by such plan or trust to pay interest or fees to any Person (other than ARP) in connection with Indebtedness Incurred by such plan or trust;

minus, to the extent included above, write-off of deferred financing costs (and 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 (9) above) relating to any Indebtedness of ARP 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 ARP and the 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 in such Consolidated Net Income:

(1) any net income (loss) of any Person (other than ARP) if such Person is not a Restricted Subsidiary, except that:

(a) subject to the limitations contained in clauses (3), (4) and (5) below, ARP 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 ARP 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) ARP 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 ARP or a Restricted Subsidiary during such period;

(2) any net income (but not loss) of any Restricted Subsidiary 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 ARP, except that:

(a) subject to the limitations contained in clauses (3), (4) and (5) below, ARP 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

Table of Contents

Subsidiary during such period to ARP 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) ARP s equity in a net loss of any such Restricted Subsidiary for such period will be included in determining such Consolidated Net Income;

(3) any gain (loss) realized upon the sale or other disposition of any property, plant or equipment of ARP 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 ASC 815);

(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); and

(9) any non-cash compensation charge arising from any grant of stock, stock options or other equity based awards (including stock based compensation under ASC 718); *provided* that the proceeds resulting from any such grant will be excluded from clause (b)(1)(ii) of the first paragraph of the covenant described under Limitations on Restricted Payments and the definition of Incremental Funds.

Consolidated Net Income will be reduced by the amount of Permitted Payments paid during such period to the extent that the related taxes have not reduced Consolidated Net Income by at least such amount.

Credit Facility means, with respect to ARP, the Company or any Subsidiary Guarantor, 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, 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 original 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.

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

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;

Table of Contents

(2) is convertible or exchangeable for Indebtedness or Disqualified Stock (excluding Capital Stock which is convertible or exchangeable solely at the option of ARP or a Restricted Subsidiary); 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 Notes or (b) on which there are no Notes 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 ARP to repurchase such Capital Stock upon the occurrence of a change of control or asset sale 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 ratable or exchangeable) provide that (i) ARP 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 ARP with the provisions of the Indenture described under the captions Change of control and Certain covenants Limitation on sales of assets and Subsidiary stock and (ii) such repurchase or redemption will be permitted solely to the extent also permitted in accordance with the provisions of the Indenture described under the caption Certain covenants Restricted Payments.

The amount of any Disqualified Stock that does not have a fixed redemption, repayment or repurchase price will be calculated in accordance with the terms of such Disqualified Stock as if such Disqualified Stock were redeemed, repaid or repurchased on any date on which the amount of such Disqualified Stock is to be determined pursuant to the Indenture; *provided*, *however*, that if such Disqualified Stock could not be required to be redeemed, repaid or repurchased at the time of such determination, the redemption, repayment or repurchase price will be the book value of such Disqualified Stock as reflected in the most recent financial statements of such Person.

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

Energy Business means: (1) the business of acquiring, exploring, exploiting, developing, producing, operating and disposing of interests in oil, natural gas, liquid 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 ARP or the Restricted Subsidiaries, directly or indirectly, participates; (4) any business relating to oil field sales and service; (5) any other energy business that generates gross income at least 90% of which constitutes qualifying income under Section 7704(d)(1)(E) of the Code; and (6) any business or activity relating to, arising from, or necessary, appropriate or incidental to the activities described in the foregoing clauses (1) through (5) of this definition.

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 (i) a public offering for cash by the Company of Capital Stock (other than Disqualified Stock) made pursuant to a registration statement, other than public offerings registered on Form S-4 or S-8 and (ii) a private offering for cash by the Company of its Capital Stock (other than Disqualified Stock).

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

Table of Contents

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 the Indenture will be computed in conformity with GAAP.

General Partner means Atlas Resource Partners GP, LLC, a Delaware limited liability company, and its successors and permitted assigns that are admitted to ARP as general partner of ARP, in its capacity as general partner of ARP.

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:

(1) 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

(2) 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 means ARP and each of the Subsidiary Guarantors, and collectively, the Guarantors.

Guarantor Subordinated Obligation means, with respect to a Guarantor, any Indebtedness of such Guarantor (whether outstanding on the Issue Date or thereafter Incurred) which is expressly subordinate in right of payment to the obligations of such 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 means a Person in whose name a Note is registered on the registrar s books.

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.

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;

(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) reimbursement obligations in respect of letters of credit, bankers acceptances and contingent obligations of such Person;

(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 accrued expenses and trade payables and other accrued liabilities arising in the ordinary course of business that are not overdue by 90 days or more or are being contested in good faith by appropriate proceedings promptly instituted and diligently conducted), 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 that is not a Subsidiary Guarantor, 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 (as determined in the good faith by the Board of Directors) 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.

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 shall not include: (1) Production Payments and Reserve Sales;

(2) any obligation of a 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 ARP or the Restricted Subsidiaries (as determined in good faith by the Board of Directors or senior management of

Table of Contents

ARP, 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 ARP or its Restricted 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 ARP or the Restricted Subsidiaries Incurred without violation of the Indenture;

(4) any obligation arising from agreements of ARP or a Restricted Subsidiary providing for indemnification, Guarantees, adjustment of purchase price, holdbacks, contingency payment obligations or similar obligations (other than Guarantees of Indebtedness), 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 ARP or any Restricted Subsidiary;

(5) any obligation arising from the honoring by a bank or other financial institution of a check, draft or similar instrument (except in the case of daylight overdrafts) drawn against insufficient funds in the ordinary course of business; *provided, however*, 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; and

(7) all contracts and other obligations, agreements instruments or arrangements described in clauses (20), (21), (22), (29)(a) or (30) of the definition of Permitted Liens.

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 Restricted Subsidiary (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 GP); 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 Restricted 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 GP and (ii) the entire 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 Restricted 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 recourse to such Person or a Restricted Subsidiary of such Person, if the Indebtedness is evidenced by a writing and is for a determinable amount.

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 the 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 ARP or a Subsidiary for consideration to the extent such consideration consists of Common Stock of ARP.

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 the covenant described under Certain covenants Limitation on Restricted Payments,

(1) Investment will include the portion (proportionate to ARP 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, ARP will be deemed to continue to have a permanent Investment in an Unrestricted Subsidiary in an amount (if positive) equal to (a) ARP s Investment in such Subsidiary at the time of such redesignation less (b) the portion (proportionate to ARPs equity interest in such Subsidiary) of the fair market value of the net assets of such Subsidiary (as conclusively determined by the Board of Directors of ARP in good faith) at the time that such Subsidiary is so re-designated a Restricted Subsidiary; and

(2) any property transferred to or from an Unrestricted Subsidiary will be valued at its fair market value at the time of such transfer, in each case as determined in good faith by the Board of Directors of ARP.

Investment Grade Rating means a rating equal to or higher than Baa3 (or the equivalent) by Moody s and BBB- (or the equivalent) by S&P.

Issue Date means the first date on which the Notes are issued under the Indenture. 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 shares of any class of Capital Stock of a Restricted Subsidiary that are not owned by ARP or a Restricted Subsidiary.

Moody s means Moody s Investor 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, 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 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; and

(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 ARP or any Restricted Subsidiary after such Asset Disposition.

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 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) all current assets of ARP and the Restricted Subsidiaries except current assets from commodity price risk management activities arising in the ordinary course of the Energy Business, less (b) all current liabilities of ARP and the Restricted Subsidiaries, except current liabilities included in Indebtedness and any current liabilities from commodity price risk management activities arising in the ordinary course of the Energy Business, in each case as set forth in the consolidated financial statements of ARP prepared in accordance with GAAP.

Non-Recourse Debt means Indebtedness of a Person:

(1) as to which neither ARP 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);

(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 ARP 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) the explicit terms of which provide there is no recourse against any of the assets of the Company or its Restricted Subsidiaries.

Officer means any person who is authorized by the Board of Directors of ARP to execute documents binding on ARP, either directly or as an officer of a general partner, manager or other business entity with the ultimate authority to manage the business and operations of ARP.

Officers Certificate means a certificate signed by an Officer of ARP.

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 Issuers or the Trustee. Parent means Atlas Energy, L.P.

Parent 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), is or becomes the Beneficial Owner, directly or indirectly, of more than 50% of the total

Table of Contents

voting power of the Voting Stock of Parent (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 Parent 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); or

(2) the first day on which a majority of the members of the Board of Directors of Parent are not (i) nominated by the Board of Directors or (ii) appointed by directors so nominated; or

(3) 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 Parent and its Subsidiaries taken as a whole to any person (as such term is used in Sections 13(d) and 14(d) of the Exchange Act); or

(4) the adoption by the members of Parent of a plan or proposal for the liquidation or dissolution of Parent.

Pari Passu Indebtedness means Indebtedness that ranks equally in right of payment to the Notes.

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 Energy 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 Energy Business jointly with third parties, including:

(1) ownership interests in oil, natural gas, other hydrocarbons and minerals properties, liquid 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 (including Unrestricted Subsidiaries); and

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

Partnership Agreement means the Amended and Restated Limited Partnership Agreement of the Company dated March 13, 2012, as such may be amended, modified or supplemented from time to time.

Permitted Investment means an Investment by ARP or any Restricted Subsidiary in:

(1) ARP, 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 Energy Business;

(2) another Person whose primary business is the Energy 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, ARP 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;

Table of Contents

(4) receivables owing to ARP 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 ARP 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 made in the ordinary course of business consistent with past practices of ARP or such Restricted Subsidiary;

(7) Capital Stock, obligations or securities received in settlement of debts created in the ordinary course of business and owing to ARP or any Restricted Subsidiary or in satisfaction of judgments;

(8) Investments made as a result of the receipt of non-cash consideration from an Asset Disposition that was made pursuant to and in compliance with the covenant described under Certain covenants Limitation on sales of assets and Subsidiary stock ;

(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 Certain covenants Limitation on Indebtedness and Preferred Stock ;

(11) Guarantees issued in accordance with the covenant described under Certain covenants Limitation on Indebtedness and Preferred Stock ;

(12) any Asset Swap or acquisition of Additional Assets made in accordance with the covenant described under Certain covenants Limitation on sales of assets and Subsidiary stock ;

(13) Permitted Business Investments;

(14) any Person where such Investment was acquired by ARP or any of the Restricted Subsidiaries (a) in exchange for any other Investment or accounts receivable held by ARP 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 ARP or any of the Restricted Subsidiaries with respect to any secured Investment or other transfer of title with respect to any secured Investment in default;

(15) 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 ARP or any Restricted Subsidiary;

(16) Guarantees of performance or other obligations (other than Indebtedness) arising in the ordinary course in the Energy Business, including obligations under oil and natural gas exploration, development, joint operating, and related agreements and licenses or concessions related to the Energy Business;

(17) acquisitions of assets, Equity Interests or other securities by ARP for consideration consisting of Capital Stock (other than Disqualified Stock) of ARP;

(18) Investments in the Notes; and

(19) Investments by ARP or any of the Restricted Subsidiaries, together with all other Investments pursuant to this clause (19), in an aggregate amount outstanding at the time of such Investment not to exceed the greater of (a) $50.0 million and (b) 5.0% of Adjusted

Consolidated Net Tangible Assets determined as of the date of such Investment, in each case outstanding at any one time (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).

99

Table of Contents

Permitted Liens means, with respect to any Person:

(1) Liens securing Indebtedness and other obligations under, and related Hedging Obligations and Liens on assets of Restricted Subsidiaries securing Guarantees of Indebtedness and other obligations of ARP under, any Credit Facility permitted to be Incurred under the Indenture under the provisions described in clause (1) of the second paragraph under Certain covenants Limitation on Indebtedness and Preferred Stock ;

(2) pledges or deposits by such Person under workmen s 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 operators , vendors , suppliers , workers , construction 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 letters of credit 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;

(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 ARP or any of the Restricted Subsidiaries;

(9) prejudgment Liens and judgment Liens not giving rise to an Event of Default so long as 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 the Indenture and does not exceed the cost of the assets or property so acquired or constructed; and

Table of Contents

(b) such Liens are created within 180 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 ARP 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 depositary institution; *provided* that:

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

(b) such deposit account is not intended by ARP 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 ARP and the Restricted Subsidiaries in the ordinary course of business;

(13) Liens existing on the Issue Date;

(14) Liens on property or shares of Capital Stock of a Person at the time such Person becomes a Subsidiary; *provided, however*, that such Liens are not created, Incurred or assumed 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 ARP or any Restricted Subsidiary (other than assets or property affixed or appurtenant thereto);

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

(16) Liens securing Indebtedness or other obligations of a Subsidiary owing to ARP, the Company or a Wholly-Owned Subsidiary;

(17) Liens securing the Notes, Guarantees and other obligations under the Indenture;

(18) 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;

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

(20) 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;

(21) Liens arising under farm-out agreements, farm-in agreements, oil and gas leases, division orders, marketing agreements, processing agreements, development agreements, 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 Energy Business;

Table of Contents

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

(23) Liens securing Indebtedness (other than Subordinated Obligations and Guarantor Subordinated Obligations) in an aggregate principal amount outstanding at any one time, added together with all other Indebtedness secured by Liens Incurred pursuant to this clause (23), not to exceed the greater of (a) $25.0 million and (b) 3.0% of Adjusted Consolidated Net Tangible Assets determined as of the date of such incurrence;

(24) Liens in favor of the Issuers or any Guarantor;

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

(26) 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;

(27) Liens deemed to exist in connection with Investments in repurchase agreements permitted under Certain covenants Limitation on Indebtedness and Preferred Stock ; *provided* that such Liens do not extend to any assets other than those that are the subject of such repurchase agreement;

(28) 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;

(29) 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);

(30) Liens (other than Liens securing Indebtedness) on, or related to, assets to secure all or part of the costs incurred in the ordinary course of the Energy Business for the exploration, drilling, development, production, processing, transportation, marketing, storage or operation thereof;

(31) 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;

(32) Liens arising under the 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 the 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;

(33) 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 securities and such decreasing or defeasing of Indebtedness are permitted under the covenant described under Certain covenants Limitation on Restricted Payments ; and

(34) Liens in favor of collecting or payor banks having a right of setoff, revocation, or charge back with respect to money or instruments of ARP or any Subsidiary of ARP 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).

Table of Contents

Permitted Payments means, so long as ARP is an entity taxable as a partnership or a disregarded entity for federal income tax purposes, distributions to the direct or indirect owners of ARP in amounts, with respect to any period, not to exceed the Tax Amount for each such Person for such period; *provided* that such distributions shall not exceed the excess of income taxes (computed as if ARP and its Subsidiaries were a single entity) over income taxes payable directly by ARP or its Subsidiaries.

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 hereof or any other entity.

Preferred Stock, as applied to the Capital Stock of any corporation, 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, over shares of Capital Stock of any other class of such corporation.

Production Payments and Reserve Sales means the grant or transfer by ARP 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 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 Energy Business, including any such grants or transfers pursuant to incentive compensation programs on terms that are reasonably customary in the Energy Business for geologists, geophysicists or other providers of technical services to ARP or a Restricted Subsidiary.

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, refinances and refinanced shall have correlative meanings) any Indebtedness (including Indebtedness of ARP 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 ARP 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 earlier than the Stated Maturity of the Notes, 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 Notes, the Refinancing Indebtedness has a Stated Maturity at least 91 days later than the Stated Maturity of the Notes

(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 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 Notes or the Guarantee, such Refinancing Indebtedness is subordinated in right of payment to the Notes 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 related to the Notes dated the Issue Date by and among the Issuers, the Subsidiary Guarantors Wells Fargo Securities, LLC and Deutsche Bank Securities Inc.

Restricted Investment means any Investment other than a Permitted Investment.

Restricted Subsidiary means any Subsidiary of ARP (including, for the avoidance of doubt, the Issuers) other than an Unrestricted Subsidiary.

S&P means Standard & Poor s Ratings Services, a division of the The McGraw-Hill Companies, 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 ARP or a Restricted Subsidiary transfers such property to a Person and ARP or a Restricted Subsidiary leases it from such Person.

SEC means the United States Securities and Exchange Commission.

Senior Secured Credit Agreement means the Second Amended and Restated Credit Agreement dated as of July 31, 2013, as amended from time to time, among ARP, as Borrower, Wells Fargo 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 Certain covenants Limitations on Indebtedness and Preferred Stock above).

Significant Subsidiary means any Restricted Subsidiary (other than an Issuer) that would be a Significant Subsidiary of ARP 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 an Issuer (whether outstanding on the original Issue Date or thereafter Incurred) that is subordinate or junior in right of payment to the Notes pursuant to a written agreement.

Subsidiary of any Person means:

(1) any corporation, association or other business entity (other than an entity referred to in clause (2) below) of which more than 50% of the total Voting Stock is at the time owned or controlled, directly or indirectly, by such Person or one or more of the other Subsidiaries of that Person (or a combination thereof); and

(2) any partnership (whether general or limited), limited liability company or joint venture

(a) the sole general partner or the managing general partner or managing member of which is such Person or a Subsidiary of such Person, or (b) if there are more than a single general partner or member, either (i) the only general partners or managing members of which are such Person and/or one or more Subsidiaries of such Person (or any combination thereof) or (ii) such Person owns or controls, directly or indirectly, a majority of the outstanding general partner interests, member interests or other Voting Stock of such partnership, limited liability company or joint venture, respectively.

Subsidiary Guarantee means, individually, any Guarantee of payment of the Notes by a Subsidiary Guarantor pursuant to the terms of the Indenture and any supplemental indenture thereto, and, collectively, all such Subsidiary Guarantees. Each such Subsidiary Guarantee will be in the form prescribed by the Indenture.

Subsidiary Guarantor means ARP Barnett, LLC, Atlas Energy Indiana, LLC, Atlas Energy Colorado, LLC, Atlas Energy Holdings Operating Company LLC, Atlas Energy Ohio, LLC, Atlas Energy Tennessee, LLC, Atlas Noble, LLC, Atlas Resources, LLC, REI-NY, LLC, Resource Energy, LLC, Resource Well Services, LLC, Viking Resources, LLC, Atlas Barnett, LLC, ARP Barnett Pipeline, LLC, ARP Production Company, LLC, ARP Oklahoma, LLC, ARP Mountaineer Production LLC ARP Rangely Production, LLC and ARP Eagle Ford, LLC and any Restricted Subsidiary created or acquired by ARP after the Issue Date (other than a Foreign Subsidiary and any Unrestricted Subsidiary) that is required to provide a guarantee as described under the heading Future Subsidiary Guarantors .

Tax Amount means, with respect to any Person for any period, the combined federal, state and local income taxes that would be paid by such Person if it were a New York corporation located in New York City filing separate tax returns with respect to its Taxable Income for such period; *provided*, *however*, that in determining the Tax Amount, the effect thereon of any net operating loss carryforwards or other carryforwards or tax attributes, such as alternative minimum tax carryforwards, that would have arisen if such Person were a New York corporation located in New York City shall be taken into account. Notwithstanding anything to the contrary, Tax Amount should not include taxes resulting from such Person s reorganization as or change in the status of a corporation.

Taxable Income means, with respect to any Person for any period, such Person s distributive share of ARP s or ARP s Subsidiaries taxable income or loss for such period for federal, state or local income tax purposes; *provided* that (1) all items of income, gain, loss or deduction required to be stated separately pursuant to Section 703(a)(1) of the Code shall be included in taxable income or loss, (2) any basis adjustment made in connection with an election under Section 754 of the Code shall be disregarded and (3) such taxable income shall be increased or such taxable loss shall be decreased by the amount of any interest expense incurred by ARP that is not treated as deductible for federal income tax purposes by a partner or member of ARP.

Unrestricted Subsidiary means:

(1) any Subsidiary of ARP that at the time of determination shall be designated an Unrestricted Subsidiary by the Board of Directors of ARP in the manner provided below; and

(2) any Subsidiary of an Unrestricted Subsidiary.

The Board of Directors of ARP may designate any Subsidiary of ARP (including any newly acquired or newly formed Subsidiary or a Person becoming a Subsidiary through merger or consolidation or Investment therein but excluding the Issuers) 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 ARP 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 either (a) Non-Recourse Debt or (b) any such Indebtedness of such

Unrestricted Subsidiary that is recourse to ARP or any of its Restricted Subsidiaries (which shall include all Indebtedness of such Unrestricted Subsidiary for which ARP or any of its Restricted Subsidiaries may be directly or indirectly, contingently or otherwise, obligated to pay, whether pursuant to the terms of such Indebtedness, by law or pursuant to any guarantee, including any claw-back, make-well or keep-well arrangement) could, at the time such Investment is made, be incurred at that time by ARP and its Restricted Subsidiaries under the Consolidated Coverage Ratio test set forth in the first paragraph of the covenant described under Certain covenants Limitation on Indebtedness and Preferred Stock ;

(3) on the date of such designation, such designation and the Investment of ARP or a Restricted Subsidiary in such Subsidiary complies with Certain covenants Limitation on Restricted Payments ;

(4) such Subsidiary is a Person with respect to which neither ARP nor any of the Restricted Subsidiaries has any direct or indirect obligation:

(a) to subscribe for additional Capital Stock of such Person; or

(b) to maintain or preserve such Person s financial condition or to cause such Person to achieve any specified levels of operating results; and

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

In addition, without further designation, Anthem Securities, Inc. and Atlas Energy Securities, Inc. will be Unrestricted Subsidiaries.

Any such designation by the Board of Directors of ARP shall be evidenced to the Trustee by filing with the Trustee a resolution of the Board of Directors of the General Partner 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 the Indenture and any Indebtedness of such Subsidiary shall be deemed to be Incurred as of such date.

The Board of Directors of ARP 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 ARP could Incur at least $1.00 of additional Indebtedness under the first paragraph of the covenant described under Certain covenants Limitation on Indebtedness and Preferred Stock 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.

Table of Contents

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 ARP or another Wholly-Owned Subsidiary.

Book entry, delivery and form

The certificates representing the notes will be issued in fully registered form without interest coupons. Notes sold in reliance on Rule 144A under the Securities Act initially will be represented by permanent global notes in fully registered form without interest coupons (each, a Restricted Global Note) and will be deposited with the Trustee as a custodian for The Depository Trust Company (DTC), as depositary, and registered in the name of a nominee of such depositary.

Notes sold in offshore transactions in reliance on Regulation S under the Securities Act initially will be represented by permanent global notes in fully registered form without interest coupons (the Regulation S Global Notes). Each Regulation S Global Note will be deposited with the Trustee as custodian for DTC, as depositary, and registered in the name of a nominee of such depositary. Prior to the 40th day after the later of the commencement of this offering and the closing of this offering (such period through and including such 40th day, the distribution compliance period), a beneficial interest in the Regulation S Global Note may be transferred to a person who takes delivery in the form of an interest in the Restricted Global Note only upon receipt by the Trustee of a written certification from the transferor to the effect that such transfer is being made to a person whom the transferor reasonably believes is a qualified institutional buyer, or QIB, in a transaction meeting the requirements of Rule 144A. Beneficial interests in a Restricted Global Note may be transferred to a person who takes delivery in the form of an interest in a Regulation S Global Note whether before, on or after such time, only upon receipt by the Trustee of a written certification to the effect that such transfer is being made in accordance with Regulation S.

The Global Notes (and any notes issued in exchange therefor) will be subject to certain restrictions on transfer set forth therein and in the applicable Indenture and will bear the legend regarding such restrictions set forth under the heading Transfer restrictions herein. QIBs or non-U.S. purchasers may elect to take a Certificated Security (as defined below under Certificated Securities) instead of holding their interests through the Global Notes, which certificated notes will be ineligible to trade through DTC (collectively referred to herein as the Non-Global Purchasers) only in the limited circumstances described below. Upon the transfer to a QIB of any Certificated Security initially issued to a Non-Global Purchaser, such Certificated Security will, unless the transferee requests otherwise or the Global Notes have previously been exchanged in whole for Certificated Securities, be exchanged for an interest in the Global Notes. For a description of the restrictions on transfer of Certificated Securities and any interest in the Global Notes, see Transfer restrictions.

The Global Notes

We expect that, pursuant to procedures established by DTC, (i) upon the issuance of the Global Notes, DTC or its custodian will credit, on its internal system, the principal amount at maturity of the individual beneficial interests represented by such Global Notes to the respective accounts of persons who have accounts with such depositary (participants) and (ii) ownership of beneficial interests in the Global Notes will be shown on, and the transfer of such ownership will be effected only through, records maintained by DTC or its nominee (with respect to interests of participants) and the records of participants (with respect to interests of persons other than participants). Such accounts initially will be designated by or on behalf of the initial purchasers and ownership of beneficial interests in the Global Notes will be limited to participants or persons who hold interests through participants. Holders may hold their interests in the Global Notes directly through DTC if they are participants in such system, or indirectly through organizations that are participants in such system.

Table of Contents

So long as DTC or its nominee is the registered owner or holder of the notes, DTC or such nominee, as the case may be, will be considered the sole owner or holder of the notes represented by such Global Notes for all purposes under the Indenture. No beneficial owner of an interest in the Global Notes will be able to transfer that interest except in accordance with DTC s procedures, in addition to those provided for under the Indenture with respect to the notes.

Payments of the principal of, and premium (if any) and interest (including additional interest, if any) on, the Global Notes will be made to DTC or its nominee, as the case may be, as the registered owner thereof. None of the Issuers, the Trustee or any paying agent will have any responsibility or liability for any aspect of the records relating to or payments made on account of beneficial ownership interests in the Global Notes or for maintaining, supervising or reviewing any records relating to such beneficial ownership interest.

We expect that DTC or its nominee, upon receipt of any payment of principal of, and premium (if any) and interest (including additional interest, if any) on the Global Notes, will credit participants accounts with payments in amounts proportionate to their respective beneficial interests in the principal amount of the Global Notes as shown on the records of DTC or its nominee. We also expect that payments by participants to owners of beneficial interests in the Global Notes held through such participants will be governed by standing instructions and customary practice, as is now the case with securities held for the accounts of customers registered in the names of nominees for such customers. Such payments will be the responsibility of such participants.

Transfers between participants in DTC will be effected in the ordinary way through DTC s same-day funds system in accordance with DTC rules and will be settled in same-day funds. If a holder requires physical delivery of a Certificated Security, such holder must transfer its interest in a Global Note, in accordance with the normal procedures of DTC and with the procedures set forth in the Indenture.

DTC has advised us that it will take any action permitted to be taken by a holder of notes (including the presentation of notes for exchange as described below) only at the direction of one or more participants to whose account the DTC interests in the Global Notes are credited and only in respect of such portion of the aggregate principal amount of notes as to which such participant or participants has or have given such direction. However, if there is an event of default under the Indenture, DTC will exchange the Global Notes for Certificated Securities, which it will distribute to its participants and which will be legended as set forth under the heading Transfer restrictions.

DTC has advised us as follows: DTC is a limited-purpose trust company organized under New York banking law, a banking organization within the meaning of the New York banking law, a member of the Federal Reserve System, a clearing corporation within the meaning of the New York Uniform Commercial Code and a clearing agency registered pursuant to the provisions of Section 17A of the Exchange Act. DTC holds and provides asset servicing for issues of U.S. and non-U.S. equity, corporate and municipal debt issues that participants deposit with DTC. DTC also facilitates the post-trade settlement among participants of sales and other securities transactions in deposited securities through electronic computerized book-entry transfers and pledges between participants accounts. This eliminates the need for physical movement of securities certificates. Participants include both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, clearing corporations and certain other organizations. Access to the DTC system is also available to indirect participants such as both U.S. and non-U.S. securities brokers and dealers, banks, trust companies and clearing corporations that clear through or maintain a custodial relationship with a participant, either directly or indirectly.

Although DTC has agreed to the foregoing procedures in order to facilitate transfers of interests in the Global Notes among participants of DTC, it is under no obligation to perform such procedures, and such procedures may be discontinued at any time. None of us, the Trustee or any paying agent will have any responsibility for the performance by DTC or its participants or indirect participants of their respective obligations under the rules and procedures governing their operations.

Table of Contents

Certificated Securities

A Global Note is exchangeable for certificated notes in fully registered form without interest coupons (Certificated Securities) only in the following limited circumstances:

DTC notifies us that it is unwilling or unable to continue as depositary for the Global Note and we fail to appoint a successor depositary within 90 days of such notice;

we, at our option, notify the Trustee that we elect to cause the issuance of Certificated Securities; or

there shall have occurred and be continuing an event of default with respect to the Notes under the Indenture and DTC shall have requested the issuance of Certificated Securities.

Certificated Securities may not be exchanged for beneficial interests in any Global Note unless the transferor first delivers to the Trustee a written certificate (in the form provided in the Indenture) to the effect that such transfer will comply with the appropriate transfer restrictions applicable to such notes. See Transfer restrictions. In no event shall the Regulation S Global Note be exchanged for Certificated Securities prior to (a) the expiration of the distribution compliance period and (b) the receipt of any certificates required under the provisions of Regulation S.

The laws of some states require that certain persons take physical delivery in definitive form of securities that they own. Consequently, the ability to transfer the notes will be limited to such extent.

Exchanges between Regulation S Notes and Restricted Global Notes

Prior to the expiration of the distribution compliance period, beneficial interests in the Regulation S Global Note may be exchanged for beneficial interests in the Restricted Global Note only if:

1. such exchange occurs in connection with a transfer of the notes pursuant to Rule 144A; and

2. the transferor first delivers to the Registrar a written certificate (in the form provided in the Indenture) to the effect that the notes are being transferred to a person:

(a) who the transferor reasonably believes to be a qualified institutional buyer within the meaning of Rule 144A;

(b) purchasing for its own account or the account of a qualified institutional buyer in a transaction meeting the requirements of Rule 144A; and

(c) in accordance with all applicable securities laws of the states of the United States and other jurisdictions.

Beneficial interests in a Restricted Global Note may be transferred to a person who takes delivery in the form of an interest in the Regulation S Global Note, whether before or after the expiration of the distribution compliance period, only if the transferor first delivers to the Registrar a written certificate (in the form provided in the Indenture) to the effect that such transfer is being made in accordance with Rule 903 or 904 of Regulation S or Rule 144 (if available).

Transfers involving exchanges of beneficial interests between the Regulation S Global Notes and the Restricted Global Notes will be effected by DTC by means of an instruction originated by the DTC participants through the DTC deposit/withdrawal at custodian system. Accordingly, in connection with any such transfer, appropriate adjustments will be made to reflect a decrease in the principal amount of the Regulation S Global Note and a corresponding increase in the principal amount of the Restricted Global Note or vice versa, as applicable. Any beneficial interest in one of the Global Notes that is transferred to a person who takes delivery in the form of an interest in the other Global Note will, upon transfer, cease to be an interest in such Global Note and will become an interest in the other Global Note and, accordingly, will thereafter be subject to all transfer

109

Table of Contents

restrictions and other procedures applicable to beneficial interests in such other Global Note for so long as it remains such an interest. The policies and practices of DTC may prohibit transfers of beneficial interests in the Regulation S Temporary Global Note prior to the expiration of the distribution compliance period.

Exchange offer; registration rights

If the Issuers have not exchanged the exchange notes for all new issue notes validly tendered in accordance with the terms of an exchange offer, referred to herein as an exchange offer, on or before the 365th day following the original issue date of the new issue notes, or the Exchange Date, or if required, a shelf registration statement covering resales of the new issue notes has not been declared effective by the SEC within 90 days after the Exchange Date, each referred to herein as a notes registration default , then additional interest will accrue on the aggregate principal amount of the new issue notes from and including the date on which any such notes registration default has occurred to but excluding the date on which all of the notes registration defaults have been cured. Additional interest will accrue at a rate of 0.25% for the first 90 day period after such date and thereafter it will be increased by an additional 0.25% for each subsequent 90 day period that elapses, provided that the aggregate increase in such annual interest rate may in no event exceed 1.0% per annum over the rate shown on the cover page of this prospectus.

This is a summary only. Please read the full Registration Rights Agreement for more information.

Transfer restrictions

Purchasers are advised to consult legal counsel prior to making any offer, resale, pledge or transfer of any of the notes. See Description of notes.

None of the notes have been registered under the Securities Act and they may not be offered or sold within the United States or to, or for the account or benefit of, U.S. persons except pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the Securities Act. Accordingly, the notes are being offered and sold only to (A) qualified institutional buyers, or QIBs, in compliance with Rule 144A and (B) outside the United States to non-U.S. persons in reliance upon Regulation S. As used herein, the terms United States and U.S. person have the meanings given to them in Regulation S.

Each purchaser of notes will be deemed to have represented and agreed as follows:

1. It is purchasing the notes for its own account or an account with respect to which it exercises sole investment discretion and that it and any such account is either (A) a QIB, and is aware that the sale to it is being made in reliance on Rule 144A or (B) a non-U.S. person that is outside the United States (and is not purchasing for the account of a U.S. person) within the meaning of Regulation S.

2. It acknowledges that the notes have not been registered under the Securities Act and may not be offered or sold within the United States or to, or for the account or benefit of, U.S. persons except as set forth below.

3. It shall not resell or otherwise transfer any of such notes within one year after the original issuance of the notes except (A) to the Issuers or any of their subsidiaries, (B) inside the United States to a QIB in a transaction complying with Rule 144A, (C) inside the United States to institutional accredited investors (as defined in Rule 501(a)(1), (2), (3) or (7) under the Securities Act) (an Accredited Investor), that, prior to such transfer, furnishes (or has furnished on its behalf by a U.S. broker-dealer) to the Trustee a signed letter containing certain representations and agreements relating to the restrictions on transfer of the notes (the form of which letter can be obtained from such Trustee), (D) outside the United States in compliance with Rule 904 under the Securities Act, (E) pursuant to the exemption from registration provided by Rule 144 under the Securities Act (if available), (F) in accordance with another exemption from the registration requirements of the Securities Act (and based upon an opinion of counsel if the Issuers so request), or (G) pursuant to an effective registration statement under the Securities Act.

Table of Contents

4. It agrees that it will give to each person to whom it transfers the notes notice of any restrictions on transfer of such notes.

5. It acknowledges that prior to any proposed transfer of notes in certificated form or of beneficial interests in a note in global form (a Global Note) (in each case other than pursuant to an effective registration statement) the holder of notes or the holder of beneficial interests in a Global Note, as the case may be, may be required to provide certifications and other documentation relating to the manner of such transfer and submit such certifications and other documentation as provided in the Indenture.

6. It understands that all of the notes will bear a legend substantially to the following effect unless otherwise agreed by the Issuers and the holder thereof;

THIS SECURITY HAS NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE SECURITIES ACT), AND, ACCORDINGLY, MAY NOT BE OFFERED OR SOLD WITHIN THE UNITED STATES OR TO, OR FOR THE ACCOUNT OR BENEFIT OF, U.S. PERSONS EXCEPT AS SET FORTH BELOW. BY ITS ACQUISITION HEREOF, THE HOLDER (1) REPRESENTS THAT (A) IT IS A QUALIFIED INSTITUTIONAL BUYER (AS DEFINED IN RULE 144A UNDER THE SECURITIES ACT), (B) IT IS NOT A U.S. PERSON AND IS ACQUIRING THIS SECURITY IN AN OFFSHORE TRANSACTION IN COMPLIANCE WITH RULE 904 UNDER THE SECURITIES ACT OR (C) IT IS AN ACCREDITED INVESTOR (AS DEFINED IN RULE 501(a)(1), (2), (3), OR (7) UNDER THE SECURITIES ACT) (AN ACCREDITED INVESTOR), (2) AGREES THAT IT WILL NOT WITHIN ONE YEAR AFTER THE ORIGINAL ISSUANCE OF THIS SECURITY RESELL OR OTHERWISE TRANSFER THIS SECURITY EXCEPT (A) TO THE ISSUERS OR ANY SUBSIDIARY THEREOF, (B) INSIDE THE UNITED STATES TO A QUALIFIED INSTITUTIONAL BUYER IN COMPLIANCE WITH RULE 144A UNDER THE SECURITIES ACT, (C) INSIDE THE UNITED STATES TO AN ACCREDITED INVESTOR THAT, PRIOR TO SUCH TRANSFER, FURNISHES (OR HAS FURNISHED ON ITS BEHALF BY A U.S. BROKER-DEALER) TO THE TRUSTEE A SIGNED LETTER CONTAINING CERTAIN REPRESENTATIONS AND AGREEMENTS RELATING TO THE RESTRICTIONS ON TRANSFER OF THIS SECURITY (THE FORM OF WHICH LETTER CAN BE OBTAINED FROM THE TRUSTEE FOR THIS SECURITY), (D) OUTSIDE THE UNITED STATES IN AN OFFSHORE TRANSACTION IN COMPLIANCE WITH RULE 904 UNDER THE SECURITIES ACT (IF AVAILABLE), (E) PURSUANT TO THE EXEMPTION FROM REGISTRATION PROVIDED BY RULE 144 UNDER THE SECURITIES ACT (IF AVAILABLE), (F) IN ACCORDANCE WITH ANOTHER EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT (AND BASED UPON AN OPINION OF COUNSEL IF THE ISSUERS SO REQUEST), OR (G) PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT AND (3) AGREES THAT IT WILL GIVE TO EACH PERSON TO WHOM THIS SECURITY IS TRANSFERRED A NOTICE SUBSTANTIALLY TO THE EFFECT OF THIS LEGEND. IN CONNECTION WITH ANY TRANSFER OF THIS SECURITY WITHIN ONE YEAR AFTER THE ORIGINAL ISSUANCE OF THIS SECURITY, IF THE PROPOSED TRANSFEREE IS AN ACCREDITED INVESTOR, THE HOLDER MUST, PRIOR TO SUCH TRANSFER, FURNISH TO THE TRUSTEE AND THE ISSUERS SUCH CERTIFICATIONS, LEGAL OPINIONS OR OTHER INFORMATION AS EITHER OF THEM MAY REASONABLY REQUIRE 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. AS USED HEREIN, THE TERMS OFFSHORE TRANSACTION, UNITED STATES AND U.S. PERSON HAVE THE MEANING GIVEN TO THEM BY REGULATION S UNDER THE SECURITIES ACT.

7. It is relying on the information contained in this prospectus in making its investment decision with respect to the notes. It acknowledges that no representation or warranty is made by the initial purchasers as to the accuracy or completeness of such materials. It further acknowledges that neither we nor the initial purchasers nor any person representing us or the initial purchasers has made any representation to it with respect to us or the offering or sale of any notes other than the information contained in this prospectus. It

Table of Contents

has had access to such financial and other information concerning us and the notes as it has deemed necessary in connection with its decision to purchase any of the notes, including any opportunity to ask questions of and request information from us and the initial purchasers.

8. If it is a purchaser in a sale that occurs outside the United States within the meaning of Regulation S, it acknowledges that until the expiration of the 40-day distribution compliance period within the meaning of Rule 903 of Regulation S, any offer or sale of the notes shall not be made by it to a U.S. person or for the account or benefit of a U.S. person within the meaning of Rule 902 of Regulation S.

9. Either (i) the purchaser is not acquiring or holding such note or an interest therein with the assets of (A) an employee benefit plan (as defined in Section 3(3) of ERISA) that is subject to ERISA, (B) a plan described in Section 4975 of the Code, (C) any entity deemed to hold plan assets of any of the foregoing by reason of an employee benefit plan s investment in such entity or (D) a governmental plan or church plan subject to such provisions that are similar to such provisions of ERISA or the Code (collectively, Similar Laws) or (ii) the acquisition and holding of such note by the purchaser, throughout the period that it holds such note and the disposition of such note or an interest therein will not constitute or result in a non-exempt prohibited transaction under Section 406 of ERISA or Section 4975 of the Code or a breach of any applicable Similar Law.

10. It acknowledges that the Trustee will not be required to accept for registration of transfer any notes acquired by it, except upon presentation of evidence satisfactory to us and the Trustee that the restrictions set forth herein have been complied with.

It acknowledges that the Issuers, the initial purchasers and others will rely upon the truth and accuracy of the foregoing acknowledgments, representations and agreements and agrees that if any of the acknowledgments, representations or agreements deemed to have been made by its purchase of the notes are no longer accurate, it shall promptly notify us and the initial purchasers. If it is acquiring the notes as a fiduciary or agent for one or more investor accounts, it represents that it has sole investment discretion with respect to each such account and it has full power to make the foregoing acknowledgments, representations, and agreements on behalf of each account.

Any such resale may be made directly to purchasers or to or through brokers or dealers who may receive compensation in the form of commissions or concessions from any such broker-dealer or the purchasers of any such exchange notes. Any broker-dealer that resells exchange notes of any series that were received by it for its own account pursuant to the exchange offer and any broker or dealer that participates in a distribution of such exchange notes may be deemed to be an underwriter within the meaning of the Securities Act. Each letter of transmittal states that by acknowledging that it will deliver and by delivering this prospectus, a broker-dealer will not be deemed to admit that it is an underwriter within the meaning of the Securities Act.

For the period described in Section 4(3) of and Rule 174 under the Securities Act that is applicable to transactions by brokers or dealers with respect to the exchange notes, we will promptly send additional copies of this prospectus and any amendment or supplement to this prospectus to any broker-dealer that requests such documents in the applicable letter of transmittal. We have agreed to pay all reasonable expenses incident to the exchange offers (including the expenses of one counsel for the holders of the new issue notes) other than commissions or concessions of any broker-dealers and will indemnify the holders of the new issue notes (including any broker-dealers) against certain liabilities, including liabilities under the Securities Act.

Table of Contents

CERTAIN UNITED STATES FEDERAL INCOME TAX CONSEQUENCES

The following is a summary of certain United States federal income tax considerations relating to the exchange of new issue notes for exchange notes in the exchange offer. It does not contain a complete analysis of all the potential tax considerations relating to the exchange. This summary is limited to holders of new issue notes who hold them as capital assets (in general, assets held for investment). Special situations, such as the following, are not addressed:

- tax consequences to holders who may be subject to special tax treatment, such as tax-exempt entities, dealers in securities or currencies, banks, other financial institutions, insurance companies, regulated investment companies, traders in securities that elect to use a mark-to-market method of accounting for their securities holdings or corporations that accumulate earnings to avoid United States federal income tax;

- tax consequences to persons holding notes as part of a hedging, integrated, constructive sale or conversion transaction or a straddle or other risk reduction transaction;

- tax consequences to holders whose functional currency is not the United States dollar;

- tax consequences to persons who hold notes through a partnership or similar pass-through entity;

- United States federal gift tax, estate tax or alternative minimum tax consequences, if any; or

- any state, local or non-United States tax consequences.

The discussion below is based upon the provisions of the United States Internal Revenue Code of 1986, as amended, existing and proposed Treasury regulations promulgated thereunder, and rulings, judicial decisions and administrative interpretations thereunder, as of the date hereof. Those authorities may be changed, perhaps retroactively, so as to result in United States federal income tax consequences different from those discussed below.

Consequences of Tendering New Issue Notes

The exchange of your new issue notes for exchange notes in the exchange offer should not constitute an exchange for United States federal income tax purposes because the exchange notes should not be considered to differ materially in kind or extent from the new issue notes. Accordingly, the exchange offer should have no United States federal income tax consequences to you if you exchange your new issue notes for exchange notes. For example, there should be no change in your tax basis and your holding period should carry over to the exchange notes. In addition, the United States federal income tax consequences of holding and disposing of your exchange notes should be the same as those applicable to your new issue notes.

The preceding discussion of certain United States federal income tax considerations of the exchange offer is for general information only and is not tax advice. Accordingly, each investor should consult its own tax advisor as to particular tax consequences to it of exchanging new issue notes for exchange notes, including the applicability and effect of any state, local or foreign tax laws, and of any proposed changes in applicable laws.

Table of Contents

PLAN OF DISTRIBUTION

Based on interpretations by the staff of the SEC in no-action letters issued to third parties, we believe that you may transfer exchange notes issued under the exchange offer in exchange for the new issue notes if:

- you acquire the exchange notes in the ordinary course of your business; and
- you are not engaged in, and do not intend to engage in, and have no arrangement or understanding with any person to participate in, a distribution of such exchange notes.

You may not participate in the exchange offer if you are:

- an affiliate within the meaning of Rule 405 under the Securities Act of ours; or
- a broker-dealer that acquired new issue notes directly from us.

Each broker-dealer that receives exchange notes for its own account pursuant to the exchange offer must acknowledge that it will deliver this prospectus in connection with any resale of such exchange notes. To date, the staff of the SEC has taken the position that broker-dealers may fulfill their prospectus delivery requirements with respect to transactions involving an exchange of securities such as this exchange offer, other than a resale of an unsold allotment from the original sale of the new issue notes, with this prospectus. This prospectus, as it may be amended or supplemented from time to time, may be used by a broker-dealer in connection with resales of exchange notes received in exchange for new issue notes where such new issue notes were acquired as a result of market-making activities or other trading activities. We have agreed that, during the period described in Section 4(3) of and Rule 174 under the Securities Act that is applicable to transactions by brokers or dealers with respect to the exchange notes, we will make this prospectus, as amended or supplemented, available to any broker-dealer for use in connection with any such resale. In addition, until such date, all dealers effecting transactions in exchange notes may be required to deliver this prospectus.

If you wish to exchange notes for your new issue notes in the exchange offer, you will be required to make representations to us as described in Exchange Offers Procedures for Tendering Your Representations to Us in this prospectus. As indicated in the letter of transmittal, you will be deemed to have made these representations by tendering your new issue notes in the exchange offer. In addition, if you are a broker-dealer who receives exchange notes for your own account in exchange for new issue notes that were acquired by you as a result of market- making activities or other trading activities, you will be required to acknowledge, in the same manner, that you will deliver this prospectus in connection with any resale by you of such exchange notes.

We will not receive any proceeds from any sale of exchange notes by broker-dealers. Exchange notes received by broker-dealers for their own account pursuant to the exchange offer may be sold from time to time in one or more transactions:

- in the over-the-counter market;
- in negotiated transactions;
- through the writing of options on the exchange notes; or
- a combination of such methods of resale;

at market prices prevailing at the time of resale, at prices related to such prevailing market prices or at negotiated prices.

Any such resale may be made directly to purchasers or to or through brokers or dealers who may receive compensation in the form of commissions or concessions from any such broker-dealer or the purchasers of any such exchange notes. Any broker-dealer that resells exchange notes of any series that were received by it for its

Table of Contents

own account pursuant to the exchange offer and any broker or dealer that participates in a distribution of such exchange notes may be deemed to be an underwriter within the meaning of the Securities Act. Each letter of transmittal states that by acknowledging that it will deliver and by delivering this prospectus, a broker-dealer will not be deemed to admit that it is an underwriter within the meaning of the Securities Act.

For the period described in Section 4(3) of and Rule 174 under the Securities Act that is applicable to transactions by brokers or dealers with respect to the exchange notes, we will promptly send additional copies of this prospectus and any amendment or supplement to this prospectus to any broker-dealer that requests such documents in the applicable letter of transmittal. We have agreed to pay all reasonable expenses incident to the exchange offers (including the expenses of one counsel for the holders of the new issue notes) other than commissions or concessions of any broker-dealers and will indemnify the holders of the new issue notes (including any broker-dealers) against certain liabilities, including liabilities under the Securities Act.

Table of Contents

LEGAL MATTERS

Ledgewood has issued an opinion about the legality of the exchange notes.

EXPERTS

The consolidated financial statements as of December 31, 2013 and 2012 and for each of the three years in the period ended December 31, 2013, and management s assessment of the effectiveness of internal control over financial reporting incorporated by reference in this prospectus and elsewhere in the registration statement, have been so incorporated by reference in reliance upon the reports of Grant Thornton LLP, independent registered public accountants, upon the authority of said firm as experts in accounting and auditing.

The Statements of Combined Revenues and Direct Operating Expenses of Oil and Gas Properties Acquired by Atlas Resource Partners, L.P. for each of the years in the three-year period ended December 31, 2011, have been incorporated by reference herein in reliance upon the report of KPMG LLP, independent auditors, incorporated by reference herein, and upon the authority of said firm as experts in accounting and auditing.

The balance sheets of Titan Operating, LLC as of December 31, 2011 and 2010, and the related statements of operations, members equity, and cash flows for the years then ended, and the balance sheets of Titan Operating, LLC as of December 31, 2010 and 2009, and the related statements of operations, members equity, and cash flows for the years then ended, incorporated by reference in this prospectus, have been audited by Rylander, Clay & Opitz LLP, independent registered public accounting firm, as indicated in their reports with respect thereto.

The Statements of Combined Revenues and Direct Expenses of Oil and Gas Properties acquired by Atlas Resource Partners, L.P. from EP Energy for the period January 1, 2012 to May 24, 2012, the period May 25, 2012 to December 31, 2012, and the year ended December 31, 2011, incorporated by reference in this prospectus and elsewhere in the registration statement, have been so incorporated by reference in reliance upon the report of Grant Thornton LLP, independent public accountants, upon the authority of said firm as experts in accounting and auditing.

The Statements of Revenues and Direct Operating Expenses of the Oil and Gas Properties under Contract for Purchase by ARP Rangely Production, LLC from Merit Energy for the year ended December 31, 2013, have been incorporated by reference herein in reliance upon the report of KPMG LLP, independent registered public accounting firm, incorporated by reference herein and upon the authority of said firm as experts in account and auditing.

Certain estimates of our net natural gas and oil reserves and the present value of such reserves incorporated by reference in this prospectus have been derived from engineering reports prepared by Wright and Company, Inc.

Table of Contents

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC s web site at http://www.sec.gov or at our website at www.atlasresourcepartners.com. You may also read and copy any document we file at the SEC s public reference room at 100 F. Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for additional information on the public reference room.

We have agreed that, for so long as the notes remain outstanding, if we are no longer subject to the informational requirements of Section 13 or 15(d) of the Exchange Act, we will furnish to holders and beneficial owners of the notes and to prospective purchasers designated by such holders the information required to be delivered pursuant to Rule 144A(d)(4) under the Securities Act to permit compliance with Rule 144A in connection with resales of the notes.

The SEC allows us to incorporate by reference the information we file with it. This means that we can disclose important information to you by referring to these documents. The information incorporated by reference is an important part of this prospectus, and information that we file later with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, including filings made after the date of the initial registration statement of which this prospectus forms a part and before effectiveness of the registration statement, will automatically update and supersede this information.

We are incorporating by reference the following documents that we have previously filed with the SEC, other than any portions of the respective filings that were furnished, pursuant to Item 2.02 or Item 7.01 of Current Reports on Form 8-K or other applicable SEC rules, rather than filed:

- our Annual Report on Form 10-K for the fiscal year ended December 31, 2013;
- our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2014 and June 30, 2014;
- our Current Reports on Forms 8-K and 8-K/A filed on February 18, 2014, March 7, 2014 May 7, 2014, May 14, 2014, June 3, 2014, July 2, 2014, August 8, 2014, August 29, 2014, September 30, 2014 and October 2, 2014 and
- our Current Reports on Form 8-K/A filed on July 10, 2012, August 24, 2012 and October 9, 2013.

You may request a copy of any document incorporated by reference in this prospectus without charge by writing or calling us at:

Atlas Resource Partners, L.P.

Park Place Corporate Center One

1000 Commerce Drive, Suite 400

Pittsburgh, PA 15275

(877) 280-2857

Attn: Brian Begley

Except as set forth herein, information contained on our website is not incorporated by reference into this prospectus and you should not consider information contained on our website as part of this prospectus.

Table of Contents

ATLAS RESOURCE PARTNERS, L.P.

ATLAS ENERGY HOLDINGS OPERATING COMPANY, LLC

ATLAS RESOURCE FINANCE CORPORATION

Offer to Exchange

Registered

$100,000,000 7.75% Senior Notes due 2021

for

Outstanding

$100,000,000 7.75% Senior Notes due 2021 issued June 2, 2014

Table of Contents

PART II.

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 20. ***Indemnification of Directors and Officers.***

Atlas Resource Partners, L.P.

Atlas Resource Partners, L.P. is organized under the laws of the State of Delaware.

Subject to any terms, conditions or restrictions set forth in the partnership agreement, Section 17-108 of the Delaware Revised Uniform Limited Partnership Act empowers a Delaware limited partnership to indemnify and hold harmless any partner or other persons from and against all claims and demands whatsoever. Our partnership agreement provides that we will indemnify the following persons, by reason of their status as such, to the fullest extent permitted by law, in most circumstances, from and against all losses, claims, damages or similar events:

our general partner;

any departing general partner;

any person who is or was an affiliate of a general partner or any departing general partner;

any person who is or was a member, partner, officer, director employee, agent or trustee of our general partner or any departing general partner or any affiliate of a general partner or any departing general partner;

any person who is or was serving as an officer, director, employee, agent, fiduciary or trustee of the Registrant or any of its subsidiaries, the general partner or any departing general partner, or any affiliate of the Registrant, any of its subsidiaries, the general partner or any departing general partner;

any person who is or was serving at the request of the general partner, any departing general partner, or any affiliate of the foregoing as a manager, managing member, officer, director, employee, agent, fiduciary or trustee of another person; and

any person designated by our general partner as an indemnitee for purposes of our partnership agreement.

Unless we otherwise agree, our general partner will not be personally liable for, or have any obligation to contribute or loan funds or assets to the registrant to enable us to effectuate, indemnification. We may purchase insurance against liabilities asserted against and expenses incurred by persons for our activities, regardless of whether we would have the power to indemnify the person against liabilities under our partnership agreement.

To the fullest extent permitted by law, expenses (including legal fees and expenses) incurred by an indemnitee in appearing at, participating in or defending any claim, demand, action, suit or proceeding will, from time to time, be advanced by us, subject to certain conditions.

Atlas Resource Partners, L.P. maintains directors and officers liability insurance for itself and its subsidiaries.

Atlas Resource Finance Corporation, Atlas Energy Holdings Operating Company, LLC and Delaware Guarantors

Each of Atlas Resource Finance Corporation, Atlas Energy Holdings Operating Company, LLC, Resource Energy, LLC, ARP Barnett, LLC, ARP Barnett Pipeline, LLC, Atlas Noble, LLC, REI-NY, LLC, Resource Well Services, LLC, ARP Production Company, LLC, ARP Mountaineer Production, LLC and ARP Rangely Production, LLC are organized under the laws of the State of Delaware.

Table of Contents

Section 18-108 of the Delaware Limited Liability Company Act provides that, subject to such standards and restrictions, if any, as are set forth in its limited liability company agreement, a Delaware limited liability company may, and shall have the power to, indemnify and hold harmless any member or manager or other person from and against any and all claims and demands whatsoever.

Section 145 of the Delaware General Corporation Law provides that a corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation) by reason of the fact that the person is or was a director, officer, employee, or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against expenses (including attorneys fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by him in connection with such action, suit, or proceeding if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe the person s conduct was unlawful.

Section 145 of the Delaware General Corporation Law also provides that a corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending, or completed action or suit by or in the right of the corporation to procure a judgment in its favor by reason of the fact that he is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against expenses (including attorneys fees) actually and reasonably incurred by the person in connection with the defense or settlement of such action or suit if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the corporation and except that no indemnification shall be made in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery of Delaware or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery of Delaware or such other court shall deem proper.

To the extent that a present or former director or officer of a corporation has been successful on the merits or otherwise in defense of any action, suit or proceeding referred to above, or in defense of any claim, issue or matter therein, such person shall be indemnified against expenses (including attorneys fees) actually and reasonably incurred by such person in connection therewith; provided that indemnification provided for by Section 145 or granted pursuant thereto shall not be deemed exclusive of any other rights to which the indemnified party may be entitled; and a corporation shall have power to purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against such person and incurred by such person in any such capacity or arising out of such person s status as such whether or not the corporation would have the power to indemnify such person against such liabilities under Section 145.

In addition, Section 102(b)(7) of the Delaware General Corporation Law permits Delaware corporations to include a provision in their certificates of incorporation eliminating or limiting the personal liability of a director to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, provided that such provisions shall not eliminate or limit the liability of a director: (i) for any breach of the director s duty of loyalty to the corporation or its stockholders; (ii) for acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law; (iii) for unlawful payment of dividends or unlawful stock purchases or redemptions; or (iv) for any transactions from which the director derived an improper personal benefit.

The limited liability company agreements of each of Atlas Energy Holdings Operating Company, LLC, ARP Barnett, LLC, ARP Barnett Pipeline, LLC, ARP Production Company, LLC, ARP Mountaineer Production,

Table of Contents

LLC and ARP Rangely Production, LLC provide that the company s member shall, and any employee or agent of the company or employee or agent of the member in connection with services to the company may, in the member s absolute discretion, be indemnified by the company to the fullest extent permitted by applicable law.

The limited liability company agreements of each of Resource Energy, LLC, Atlas Noble, LLC, REI-NY, LLC and Resource Well Services, LLC provide that subject to any limitations and conditions set forth in the limited liability company agreement, the company shall, to the fullest extent permitted by applicable law (as such law may be amended), indemnify any person involved with any proceeding or investigation by reason of the fact that such person is or was a member or officer of the company, against all damages, expenses and liabilities (including punitive damages and reasonable attorneys fees) actually incurred by such person. Each limited liability company agreement acknowledges that the indemnification provided could involve indemnification for negligence or under theories of strict liability, and prohibits indemnification of any officer to the extent any proceeding, damages, expenses or liabilities result from Improper Conduct (as defined in the applicable agreement) on the part of such officer.

The bylaws of Atlas Resource Finance Corporation provide that the company shall indemnify any person who was or is party or is threatened to be made a party to action, suit or proceeding, by reason of the fact that such person is or was a director or officer of the company or a predecessor corporation, or serving at the request of the company or such predecessor corporation, as a director or officer of another entity or as administrator, trustee or other fiduciary of an employee benefit plan, against actual and reasonable expenses (including attorneys fees), liability and loss incurred by the person in connection with such proceeding, except to the extent prohibited by applicable law. The bylaws also require that the company advance expenses incurred by a director or officer in defending a proceeding. The indemnification and advance of expenses under the bylaws are not exclusive of any other rights to which an indemnitee may be entitled. The bylaws also empower the board to authorize the company to (1) purchase insurance on behalf of the company and others to the extent not prohibited by statute, (2) create any fund of any nature to secure indemnification obligations and (3) give other indemnification to the extent permitted by statute.

Pennsylvania Guarantors

Each of Atlas Energy Tennessee, LLC, Atlas Resources, LLC and Viking Resources, LLC is organized under the laws of the Commonwealth of Pennsylvania.

Section 8945 of the Pennsylvania Limited Liability Company Law of 1994 provides that a Pennsylvania limited liability company may and shall have the power to indemnify and hold harmless any member or manager or other person from and against any and all claims and demands whatsoever; provided, however, that a limited liability company may not indemnify a manager, member or other person for an act that is determined by a court to constitute willful misconduct or recklessness. Further, subsection (d) provides that a limited liability company may pay expenses incurred by a member, manager or other person in advance of disposition of any claim if such person makes an undertaking to repay the company if it is determined that such person is not entitled to indemnification. Finally, under subsection (f), a limited liability company must indemnify its members and managers for payments made, and personal liabilities reasonably incurred, in the ordinary and proper conduct of its business or for the preservation of its business or property.

The operating agreement of Atlas Energy Tennessee, LLC provides that the company shall indemnify its member and such other persons identified by the member as entitled to indemnification, for all costs, losses, liabilities and damages paid or accrued by the member or any such other person in connection with the business of the company, to the fullest extent provided by the laws of the Commonwealth of Pennsylvania. In addition, the company may advance costs of defense of any proceeding to its member or any such other person upon receipt by the company of an undertaking to repay such amount if it is ultimately determined that the member or such other person is not entitled to indemnification by the company.

Table of Contents

The operating agreements of each of Atlas Resources, LLC and Viking Resources, LLC each provide that subject to any limitations and conditions set forth in the operating agreement, the company shall, to the fullest extent permitted by applicable law (as such law may be amended), indemnify any person involved with any proceeding or investigation by reason of the fact that such person is or was a member or officer of the company, against all damages, expenses and liabilities (including punitive damages and reasonable attorneys fees) actually incurred by such person. Each operating agreement acknowledges that the indemnification provided could involve indemnification for negligence or under theories of strict liability, and prohibits indemnification of any officer to the extent any proceeding, damages, expenses or liabilities result from Improper Conduct (as defined in the applicable agreement) on the part of such officer.

Oklahoma Guarantors

ARP Oklahoma LLC is organized under the laws of the State of Oklahoma.

Section 2003 of the Oklahoma Limited Liability Company Act provides that an Oklahoma limited liability company may indemnify and hold harmless any member, agent, or employee from and against any and all claims and demands whatsoever, except in the case of action or failure to act by the member, agent, or employee which constitutes willful misconduct or recklessness, and subject to the standards and restrictions, if any, set forth in the articles of organization or operating agreement. Section 2017 of the Oklahoma Limited Liability Company Act provides that the articles of organization or operating agreement of a Oklahoma limited liability company may eliminate or limit the personal liability of a member or manager for monetary damages for breach of any fiduciary duty, and provide for indemnification of a member or manager for judgments, settlements, penalties, fines or expenses incurred in any proceeding because the person is or was a member or manager, except that any such provisions may not limit or eliminate the liability of a manager for (1) any breach of the manager s duty of loyalty to the limited liability company or its members; (2) acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law; or (3) any transaction from which the manager derived an improper personal benefit.

The limited liability company agreement of ARP Oklahoma LLC provides that the company s member shall, and any employee or agent of the company or employee or agent of the member in connection with services to the company may, in the member s absolute discretion, be indemnified by the company to the fullest extent permitted by applicable law.

Texas Guarantors

Atlas Barnett, LLC and ARP Eagle Ford, LLC are organized under the laws of the State of Texas.

Chapter 8 Texas Business Organizations Code (the TBOC) sets forth general indemnification provisions generally applicable to entities formed under the laws of the State of Texas. Section 8.002 of the TBOC provides, however, that unless a Texas limited liability company adopts the general indemnification provisions of Chapter 8 of the TBOC, described below, those provisions are not applicable to a Texas limited liability company.

Pursuant to Section 8.051 of the TBOC, an enterprise must indemnify a governing person, former governing person or delegate against reasonable expenses actually incurred by the person in connection with a proceeding in which the person was a respondent because the person is or was a governing person if the person is wholly successful, on the merits or otherwise, in the defense of the proceeding. Pursuant to Sections 8.101 and 8.102 of the TBOC, any governing person, former governing person or delegate of a Texas enterprise may be indemnified against judgments and reasonable expenses actually incurred by the person in connection with a proceeding, in which such person was a respondent if it is determined, in accordance with Section 8.103 of the TBOC, that: (i) the person acted in good faith, (ii) reasonably believed (a) in the case of conduct in the person s official capacity, that the person s conduct was in the enterprise s best interests or (b) in any other case, that the person s conduct was not opposed to the enterprise s best interests, (iii) in the case of a criminal proceeding, such person did not have a reasonable cause to believe that the person s conduct was unlawful and (iv) that the

Table of Contents

indemnification should be paid. Indemnification of a person who is found to be liable to the enterprise is limited to reasonable expenses actually incurred by the person in connection with the proceeding and does not include judgments, penalties or fines, except for certain circumstances where indemnification cannot be given at all. Pursuant to Section 8.105 of the TBOC, an enterprise may indemnify an officer, employee or agent to the same extent that indemnification is required under the TBOC for a governing person or as provided in the enterprise s governing documents, general or specific action of the enterprise s governing authority, contract or by other means.

For Texas limited liability companies, in addition to the provisions cited above, Section 101.402 of the TBOC provides Texas limited liability companies with broad authority to (1) indemnify any person, including a member, manager, officer of, or assignee of a limited liability interest in, a limited liability company, (2) pay in advance or reimburse expenses incurred by any such person and (3) establish and maintain insurance or another arrangement to indemnify or hold harmless any such person.

The operating agreements of each of Atlas Barnett, LLC and ARP Eagle Ford, LLC each provide that, subject to any limitations of applicable law and set forth in the operating agreement, the company s member and any manager, director, officer, employee or agent will not be liable to the company for, and will be indemnified against, any loss, liability, damage, claim or reasonable expense (including attorneys fees) arising from proceedings in which such person may be involved by reason of being or having been a member or manager, director, officer, employee or agent of the company, or by reason of its involvement in the management of the company s affairs, provided that such liabilities do not arise out of bad faith, fraud, intentional misconduct or knowing and willful breach of obligations under the operating agreement. The company shall advance expenses (including attorneys fees) incurred in defending such proceedings, subject to certain conditions and upon receipt by the company of an undertaking to repay such amount if it is ultimately determined that the member or such other person is not entitled to indemnification by the company.

Any indemnification under the operating agreements will only be out of the company s assets. The operating agreements also provide that the company may purchase insurance against liabilities asserted against and expenses incurred by persons for its activities, regardless of whether it would have the power to indemnify the person against liabilities under the agreement. Finally, the operating agreements provide that, if the member or any officer exercises powers or performs duties under the operating agreement through agents, the member or officer shall not be responsible for misconduct or negligence on the part of any such agent appointed in good faith.

Indiana Guarantors

Atlas Energy Indiana, LLC is organized under the laws of the state of Indiana.

Section 23-18-2-2 of the Indiana Business Flexibility Act provides that, unless the limited liability company s articles of organization provide otherwise, every limited liability company has power to indemnify and hold harmless any member, manager, agent, or employee from and against any and all claims and demands, except in the case of action or failure to act by the member, agent, or employee which constitutes willful misconduct or recklessness and subject to any standards and restrictions set forth in a written operating agreement. Section 23-18-4-4 of the Indiana Business Flexibility Act provides that a written operating agreement may provide for indemnification of a member or manager for monetary damages for judgments, settlements, penalties, fines, or expenses incurred in a proceeding to which a person is a party because the person is or was a member or manager. Section 23-18-4-2(a) of the Indiana Business Flexibility Act provides that, unless otherwise provided in a written operating agreement, a member or manager cannot be liable for damages to the limited liability company or to the members of the limited liability company for any action taken or failure to act on behalf of the limited liability company, unless the act or omission constitutes willful misconduct or recklessness.

The operating agreement of Atlas Energy Indiana, LLC provides that the company shall indemnify any person involved with any proceeding or investigation by reason of the fact that such person is or was a member,

Table of Contents

officer, manager, employee or agent of the company, or serving at the request of the company, against all damages, expenses and liabilities (including attorneys fees) actually and reasonably incurred by such person if the member determines that such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interest of the company, and with respect to any criminal action proceeding, has no reasonable cause to believe such person s conduct was unlawful.

Ohio Guarantors

Atlas Energy Ohio, LLC is organized under the laws of the state of Ohio.

Under Section 1705.32 of the Ohio Revised Code, an Ohio limited liability company may indemnify a manager, member, partner, officer, employee, agent or certain other persons against expenses, including attorney s fees, judgments, fines, and amounts paid in settlement, actually and reasonably incurred in connection with an action, suit or proceeding, if such manager, member, partner, officer, employee, agent or other person acted in good faith and in a manner reasonably believed to be in, or not opposed to, the best interests of the company and, in connection with any criminal action or proceeding, had no reasonable cause to believe his conduct was unlawful. A limited liability company may also indemnify a manager, officer, employee, agent or certain other persons against expenses, including attorney s fees, actually and reasonably incurred in connection with an action or suit by or in the right of such company, if such manager, officer, employee, agent or other person acted in good faith and in a manner reasonably believed to be in, or not opposed to, the best interests of the company.

The operating agreement of Atlas Energy Ohio, LLC provides that subject to any limitations and conditions set forth in the operating agreement, the company shall, to the fullest extent permitted by applicable law (as such law may be amended), indemnify any person involved with any proceeding or investigation by reason of the fact that such person is or was a member or officer of the company, against all damages, expenses and liabilities (including punitive damages and reasonable attorneys fees) actually incurred by such person. The operating agreement acknowledges that the indemnification provided could involve indemnification for negligence or under theories of strict liability, and prohibits indemnification of any officer to the extent any proceeding, damages, expenses or liabilities result from Improper Conduct (as defined in the applicable agreement) on the part of such officer.

Colorado Guarantors

Atlas Energy Colorado, LLC is organized under the laws of the state of Colorado.

Section 7-80-407 of the Colorado Limited Liability Company Act provides that a limited liability company shall reimburse a person who is or was a member or manager for payments made, and indemnify a person who is or was a person or manager for liabilities incurred by the person, in the ordinary course of business of the limited liability company or for the preservation of its business or property, if such payments were made or liabilities incurred without violation of the person s duties to the limited liability company.

The limited liability company agreement of Atlas Energy Colorado, LLC is silent regarding indemnification.

Item 21. ***Exhibits and Financial Statement Schedules.***

(a) Exhibits:

Reference is made to the Index to Exhibits following the signature pages hereto, which Index to Exhibits is hereby incorporated into this item.

(b) Financial Statement Schedules:

None.

Table of Contents

Item 22. ***Undertakings.***

(a) Each undersigned registrant hereby undertakes:

(1) to file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) to include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;

(ii) to reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more that a 20 percent change in the maximum aggregate offering price set forth in the Calculation of Registration Fee table in the effective registration statement; and

(iii) to include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

(2) that, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof;

(3) to remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering;

(5) that, for the purpose of determining liability under the Securities Act of 1933 to any purchaser, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. *Provided, however,* that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use; and

(6) That, for the purpose of determining liability of the registrant under the Securities Act to any purchaser in the initial distribution of the securities: The undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

(i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;

(ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;

(iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and

(iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

Table of Contents

(b) Each undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant s annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan s annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in this registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(h) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of any registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933 and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of any registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act of 1933 and will be governed by the final adjudication of such issue.

Each undersigned registrant hereby undertakes to respond to requests for information that is incorporated by reference into the prospectus pursuant to Item 4, 10(b), 11 or 13 of this form, within one business day of receipt of such request, and to send the incorporated documents by first class mail or other equally prompt means. This includes information contained in documents filed subsequent to the effective date of the registration statement through the date of responding to the request.

Each undersigned registrant hereby undertakes to supply by means of a post-effective amendment all information concerning a transaction, and the company being acquired involved therein, that was not the subject of and included in the registration statement when it became effective.

Table of Contents

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in Philadelphia, Pennsylvania, on October 3, 2014.

ATLAS RESOURCE PARTNERS, L.P.

By: ATLAS RESOURCE PARTNERS GP, LLC,

its General Partner

By: /s/ Sean P. McGrath
Sean P. McGrath

Chief Financial Officer

KNOW ALL PERSONS BY THESE PRESENTS, that the persons whose signatures appear below, constitute and appoint Sean P. McGrath, Matthew A. Jones and Lisa Washington, and each of them, as their true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for them and in their names, places and steads, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this registration statement, and any subsequent registration statement filed pursuant to Rule 462(b) under the Securities Act of 1933, as amended, and to file the same, with all exhibits thereto, and the other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as they might or could do in person, hereby ratifying and conforming all that said attorneys-in-fact and agents, or any of them, or their or his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed below by the following persons on behalf of the registrant and in the capacities indicated on October 3, 2014.

Signature	**Title at Atlas Resource Partners GP, LLC**
/s/ Edward E. Cohen	Chairman and Chief Executive Officer
Edward E. Cohen	(principal executive officer)
/s/ Jonathan Z. Cohen	Vice Chairman
Jonathan Z. Cohen	
/s/ Matthew A. Jones	President and Director
Matthew A. Jones	
/s/ Sean P. McGrath	Chief Financial Officer
Sean P. McGrath	(principal financial officer)
/s/ Jeffrey M. Slotterback	Chief Accounting Officer
Jeffrey M. Slotterback	(principal accounting officer)

/s/ Mark D. Schumacher	Chief Operating Officer
Mark D. Schumacher	
/s/ Jeffrey C. Key	Director
Jeffrey C. Key	

Table of Contents

Signature	Title at Atlas Resource Partners GP, LLC
/s/ Bruce M. Wolf	Director
Bruce M. Wolf	
/s/ DeAnn Craig	Director
DeAnn Craig	
/s/ Harvey G. Magarick	Director
Harvey G. Magarick	

Table of Contents

Pursuant to the requirements of the Securities Act of 1933, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in Philadelphia, Pennsylvania, on October 3, 2014.

ATLAS RESOURCE FINANCE CORPORATION

By: /s/ Sean P. McGrath
Sean P. McGrath

Chief Financial Officer

KNOW ALL PERSONS BY THESE PRESENTS, that the persons whose signatures appear below, constitute and appoint Sean P. McGrath, Matthew A. Jones and Lisa Washington, and each of them, as their true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for them and in their names, places and steads, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this registration statement, and any subsequent registration statement filed pursuant to Rule 462(b) under the Securities Act of 1933, as amended, and to file the same, with all exhibits thereto, and the other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as they might or could do in person, hereby ratifying and conforming all that said attorneys-in-fact and agents, or any of them, or their or his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed below by the following persons on behalf of the registrant and in the capacities indicated on October 3, 2014.

Signature	**Title**
/s/ Edward E. Cohen	Chief Executive Officer and President
Edward E. Cohen	(principal executive officer)
/s/ Jonathan Z. Cohen	Chairman of the Board
Jonathan Z. Cohen	
/s/ Sean P. McGrath	Chief Financial Officer and Director
Sean P. McGrath	(principal financial and accounting officer)
/s/ Matthew A. Jones	Senior Vice President and Director
Matthew A. Jones	

Table of Contents

Pursuant to the requirements of the Securities Act of 1933, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in Philadelphia, Pennsylvania, on October 3, 2014.

ATLAS ENERGY HOLDINGS

OPERATING COMPANY, LLC

By: Atlas Resource Partners, L.P., its sole member

By: Atlas Resource Partners GP, LLC, its general partner

ATLAS RESOURCES, LLC

By: Atlas Energy Holdings Operating Company, LLC, its sole member

By: Atlas Resource Partners, L.P., its sole member

By: Atlas Resource Partners GP, LLC, its general partner

VIKING RESOURCES, LLC

By: Atlas Energy Holdings Operating Company, LLC, its sole member

By: Atlas Resource Partners, L.P., its sole member

By: Atlas Resource Partners GP, LLC, its general partner

RESOURCE ENERGY, LLC

By: Atlas Energy Holdings Operating Company, LLC, its sole member

By: Atlas Resource Partners, L.P., its sole member

By: Atlas Resource Partners GP, LLC, its general partner

ATLAS NOBLE, LLC

By: Atlas Energy Holdings Operating Company, LLC, its sole member

By: Atlas Resource Partners, L.P., its sole member

By: Atlas Resource Partners GP, LLC, its general partner

Table of Contents

REI-NY, LLC

By: Atlas Energy Holdings Operating Company, LLC, its sole member

By: Atlas Resource Partners, L.P., its sole member

By: Atlas Resource Partners GP, LLC, its general partner

ATLAS ENERGY INDIANA, LLC

By: Atlas Energy Holdings Operating Company, LLC, its sole member

By: Atlas Resource Partners, L.P., its sole member

By: Atlas Resource Partners GP, LLC, its general partner

ATLAS ENERGY TENNESSEE, LLC

By: Atlas Energy Holdings Operating Company, LLC, its sole member

By: Atlas Resource Partners, L.P., its sole member

By: Atlas Resource Partners GP, LLC, its general partner

ATLAS ENERGY OHIO, LLC

By: Atlas Energy Holdings Operating Company, LLC, its sole member

By: Atlas Resource Partners, L.P., its sole member

By: Atlas Resource Partners GP, LLC, its general partner

ATLAS ENERGY COLORADO, LLC

By: Atlas Energy Holdings Operating Company, LLC, its sole member

By: Atlas Resource Partners, L.P., its sole member

By: Atlas Resource Partners GP, LLC, its general partner

Table of Contents

RESOURCE WELL SERVICES, LLC

By: Atlas Energy Holdings Operating Company, LLC, its sole member

By: Atlas Resource Partners, L.P., its sole member

By: Atlas Resource Partners GP, LLC, its general partner

ARP BARNETT, LLC

By: Atlas Energy Holdings Operating Company, LLC, its sole member

By: Atlas Resource Partners, L.P., its sole member

By: Atlas Resource Partners GP, LLC, its general partner

ARP BARNETT PIPELINE, LLC

By: ARP Barnett LLC, its sole member

By: Atlas Energy Holdings Operating Company, LLC, its sole member

By: Atlas Resource Partners, L.P., its sole member

By: Atlas Resource Partners GP, LLC, its general partner

ATLAS BARNETT, LLC

By: Atlas Energy Holdings Operating Company, LLC, its sole member

By: Atlas Resource Partners, L.P., its sole member

By: Atlas Resource Partners GP, LLC, its general partner

ARP PRODUCTION COMPANY, LLC

By: Atlas Energy Holdings Operating Company, LLC, its sole member

By: Atlas Resource Partners, L.P., its sole member

By: Atlas Resource Partners GP, LLC, its general partner

Table of Contents

ARP MOUNTAINEER PRODUCTION, LLC

By: Atlas Energy Holdings Operating Company, LLC, its sole member

By: Atlas Resource Partners, L.P., its sole member

By: ATLAS RESOURCE PARTNERS GP, LLC, its general partner

ARP OKLAHOMA, LLC

By: Atlas Energy Holdings Operating Company, LLC, its sole member

By: Atlas Resource Partners, L.P., its sole member

By: Atlas Resource Partners GP, LLC, its general partner

ARP RANGELY PRODUCTION, LLC

By: Atlas Energy Holdings Operating Company, LLC, its sole member

By: Atlas Resource Partners, L.P., its sole member

By: Atlas Resource Partners GP, LLC, its general partner

ARP EAGLE FORD, LLC

By: Atlas Energy Holdings Operating Company, LLC, its sole member

By: Atlas Resource Partners, L.P., its sole member

By: Atlas Resource Partners GP, LLC, its general partner

By: /s/ Sean P. McGrath
Sean P. McGrath

Chief Financial Officer

KNOW ALL PERSONS BY THESE PRESENTS, that the persons whose signatures appear below, constitute and appoint Sean P. McGrath, Matthew A. Jones and Lisa Washington, and each of them, as their true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for them and in their names, places and steads, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this registration statement, and any subsequent registration statement filed pursuant to Rule 462(b) under the Securities Act of 1933, as amended, and to file the same, with all exhibits thereto, and the other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as they might or could do in person, hereby ratifying and conforming all that said attorneys-in-fact and agents, or any of them, or their or his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Table of Contents

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed below by the following persons on behalf of the registrant and in the capacities indicated on October 3, 2014.

Signature	**Title at Atlas Resource Partners GP, LLC**
/s/ Edward E. Cohen	Chairman and Chief Executive Officer
Edward E. Cohen	(principal executive officer)
/s/ Jonathan Z. Cohen	Vice Chairman
Jonathan Z. Cohen	
/s/ Matthew A. Jones	President and Director
Matthew A. Jones	
/s/ Sean P. McGrath	Chief Financial Officer
Sean P. McGrath	(principal financial officer)
/s/ Jeffrey M. Slotterback	Chief Accounting Officer
Jeffrey M. Slotterback	(principal accounting officer)
/s/ Mark D. Schumacher	Chief Operating Officer
Mark D. Schumacher	
/s/ Jeffrey C. Key	Director
Jeffrey C. Key	
/s/ Bruce M. Wolf	Director
Bruce M. Wolf	
/s/ DeAnn Craig	Director
DeAnn Craig	
/s/ Harvey G. Magarick	Director
Harvey G. Magarick	

Table of Contents

INDEX TO EXHIBITS

1.1	Distribution Agreement dated as of August 29, 2014, between Atlas Resource Partners, L.P. and Deutsche Bank Securities Inc., as representative of the several agents (13)
1.2	Underwriting Agreement, dated September 25, 2014, among Atlas Resource Partners, L.P. and the underwriters named therein (9)
2.1	Purchase and Sale Agreement, dated as of May 6, 2014. The schedules to the Purchase and Sale Agreement have been omitted pursuant to Item 601(b) of Regulation S-K. A copy of the omitted schedules will be furnished to the U.S. Securities and Exchange Commission supplementally upon request (1)
2.2	Purchase and Sale Agreement, dated September 24, 2014. The schedules to the Purchase and Sale Agreement have been omitted pursuant to Item 601(b) of Regulation S-K. A copy of the omitted schedules will be furnished to the U.S. Securities and Exchange Commission supplementally upon request (9)
2.3	Shared Acquisition and Operating Agreement, dated September 24, 2014, by and among ARP Eagle Ford, LLC and Atlas Growth Eagle Ford, LLC. The schedules to the Shared Acquisition and Operating Agreement have been omitted pursuant to Item 601(b) of Regulation S-K. A copy of the omitted schedules will be furnished to the U.S. Securities and Exchange Commission supplementally upon request (9)
3.1	Atlas Resources, LLC Certificate of Organization, as amended (2)
3.2	Atlas Resources, LLC Amended and Restated Operating Agreement (2)
3.3	Atlas Resource Finance Corporation Bylaws (2)
3.4	Atlas Resource Finance Corporation Certificate of Incorporation (2)
3.5	ARP Barnett Pipeline, LLC Certificate of Formation (2)
3.6	ARP Barnett Pipeline, LLC Limited Liability Company Agreement (2)
3.7	ARP Barnett, LLC Certificate of Formation (2)
3.8	ARP Barnett, LLC Limited Liability Company Agreement (2)
3.9	ARP Oklahoma, LLC Articles of Organization (2)
3.10	ARP Oklahoma, LLC Limited Liability Company Agreement (2)
3.11	ARP Production Company, LLC Certificate of Formation (2)
3.12	ARP Production Company, LLC Limited Liability Company Agreement (2)
3.13	Atlas Barnett, LLC Certificate of Formation, as amended (2)
3.14	Atlas Barnett, LLC Second Amended and Restated Operating Agreement (2)
3.15	Atlas Energy Colorado, LLC Articles of Organization (2)
3.16	Atlas Energy Colorado, LLC Operating Arrangement (2)
3.17	Atlas Energy Holdings Operating Company, LLC Certificate of Formation (2)
3.18	Atlas Energy Holdings Operating Company, LLC Limited Liability Company Agreement (2)
3.19	Atlas Energy Indiana, LLC Certificate of Organization (2)
3.20	Atlas Energy Indiana, LLC Operating Agreement (2)
3.21	Atlas Energy Ohio, LLC Certificate of Organization, as amended (2)
3.22	Atlas Energy Ohio, LLC Amended and Restated Operating Agreement (2)

Table of Contents

3.23	Atlas Energy Tennessee, LLC Certificate of Organization, as amended (2)
3.24	Atlas Energy Tennessee, LLC Operating Agreement (2)
3.25	Atlas Noble, LLC Certificate of Formation, as amended (2)
3.26	Atlas Noble, LLC Amended and Restated Limited Liability Company Agreement (2)
3.27	REI NY, LLC Certificate of Formation (2)
3.28	REI NY, LLC Amended and Restated Limited Liability Company Agreement (2)
3.29	Resource Energy, LLC Certificate of Formation (2)
3.30	Resource Energy, LLC Amended and Restated Limited Liability Company Agreement (2)
3.31	Resource Well Services, LLC Certificate of Formation (2)
3.32	Resource Well Services, LLC Amended and Restated Limited Liability Company Agreement (2)
3.33	Viking Resources, LLC Certificate of Organization, as amended (2)
3.34	Viking Resources, LLC Amended and Restated Operating Agreement (2)
3.35	ARP Mountaineer Production, LLC Certificate of Formation (11)
3.36	ARP Mountaineer Production, LLC Limited Liability Company Agreement (2)
3.37	ARP Rangely Production, LLC Certificate of Formation
3.38	ARP Rangely Production, LLC Limited Liability Company Agreement
3.39	ARP Eagle Ford, LLC Certificate of Formation
3.40	ARP Eagle Ford, LLC Operating Agreement
4.1	Registration Rights Agreement, dated as of May 16, 2012, between Atlas Resource Partners, L.P., Wells Fargo Bank, National Association and the lenders named in the Credit Agreement dated May 16, 2012 by and among Atlas Energy, L.P. and the lenders named therein (5)
4.2(a)	Indenture dated as of January 23, 2013 among Atlas Energy Holdings Operating Company, LLC, Atlas Resource Finance Corporation, Atlas Resource Partners, L.P., the subsidiaries named therein and U.S. Bank National Association (6)
4.2(b)	First Supplemental Indenture dated as of June 2, 2014 among Atlas Energy Holdings Operating Company, LLC, Atlas Resource Finance Corporation, Atlas Resource Partners, L.P., the subsidiaries named therein and U.S. Bank National Association (3)
4.3	Registration Rights Agreement dated as of June 2, 2014 among Atlas Resource Partners, L.P. and the various parties listed therein (3)
4.4(a)	Indenture dated as of July 30, 2013, by and between Atlas Resource Escrow Corporation and Wells Fargo Bank, National Association (7)
4.4(b)	Supplemental Indenture dated as of July 31, 2013, by and among Atlas Resource Partners, L.P., Atlas Energy Holdings Operating Company, LLC, Atlas Resource Finance Corporation, the guarantors named therein and Wells Fargo Bank, National Association (7)
4.5	Registration Rights Agreement dated as of July 31, 2013, by and among Atlas Resource Partners, L.P., Atlas Energy Holdings Operating Company, LLC, Atlas Resource Finance Corporation, the guarantors named therein and Deutsche Bank Securities, Inc., for itself and on behalf of the Initial Purchasers (7)
4.6	Certificate of Designation of the Powers, Preferences and Relative, Participating, Optional and Other Special Rights and Qualifications, Limitations and Restrictions thereof of Class B Preferred Units, dated as of July 25, 2012 (4)

Table of Contents

4.7	Certificate of Designation of the Powers, Preferences and Relative, Participating, Optional and Other Special Rights and Qualifications, Limitations and Restrictions thereof of Class C Convertible Preferred Units, dated as of July 31, 2013 (8)
4.8	Warrant to Purchase Common Units (8)
4.9	Certificate of Designation of the Powers, Preferences and Relative, Participating, Optional, and Other Special Rights and Qualifications, Limitations and Restrictions thereof of Class D Cumulative Redeemable Perpetual Preferred Units (12)
5.1	Opinion of Ledgewood, P.C. as to the legality of the securities being registered
8.1	Opinion of Ledgewood, P.C. as to tax matters (included in Exhibit 5.1)
12.1	Statement of Computation of Ratio of Earnings to Fixed Charges (10)
21.1	List of Subsidiaries
23.1	Consent of Grant Thornton LLP
23.2	Consent of Grant Thornton LLP
23.3	Consent of Wright and Company, Inc.
23.4	Consent of Rylander, Clay & Opitz LLP
23.5	Consent of KPMG LLP
23.6	Consent of KPMG LLP
23.7	Consent of Ledgewood (contained in Exhibit 5.1)
24.1	Power of Attorney (included on the signature page hereto)
25.1	Form T-1 Statement of Eligibility and Qualification under the Trust Indenture Act of 1939 of the Trustee under the Indenture
99.1	Form of Letter to Brokers, Dealers, Commercial Banks, Trust Companies and other Nominees
99.2	Form of Letter to Clients
99.3	Form of Letter of Transmittal

(1) Previously filed as an exhibit to our Current Report on Form 8-K filed on May 7, 2014.

(2) Previously filed as an exhibit to our Registration Statement on Form S-4 (File No. 333-189741).

(3) Previously filed as an exhibit to our Current Report on Form 8-K filed on June 3, 2014.

(4) Previously filed as an exhibit to our Current Report on Form 8-K filed on July 26, 2012.

(5) Previously filed as an exhibit to our Quarterly Report on Form 10-Q for the quarter ended June 30, 2012.

(6) Previously filed as an exhibit to our Current Report on Form 8-K filed on January 25, 2013.

(7) Previously filed as an exhibit to our Current Report on Form 8-K filed on August 2, 2013.

(8) Previously filed as an exhibit to our Current Report on Form 8-K filed on August 6, 2013.

(9) Previously filed as an exhibit to our Current Report on Form 8-K filed on September 30, 2014.

(10) Previously filed as an exhibit to our Quarterly Report on Form 10-Q for the quarter ended June 30, 2014.

(11) Previously filed as an exhibit to our Registration Statement on Form S-4 (File No. 333-194595).

(12) Previously filed as an exhibit to our Current Report on Form 8-K filed on October 2, 2014.

(13) Previously filed as an exhibit to our Current Report on Form 8-K filed on August 29, 2014.