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[Table of Contents](#)

CALCULATION OF REGISTRATION FEE

| Title of each class of securities to be registered | Proposed maximum aggregate offering price | Amount of registration fee(1) |
|---|--|-------------------------------------|
| 7.00% Senior Notes due 2021 | \$250,000,000 | \$34,100 |
| Guarantees of Senior Notes | (2) | None |
| Total | \$250,000,000 | \$34,100 |

- (1) The filing fee, calculated in accordance with Rule 457(r), has been transmitted to the SEC in connection with the securities offered from Registration Statement File No. 333-174318 by means of this prospectus supplement.
- (2) No separate consideration will be received for such guarantees. Pursuant to Rule 457(n) under the Securities Act, no registration fee is required with respect to such guarantees.

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[Table of Contents](#)

Filed pursuant to Rule 424(b)(5)
SEC File No. 333-174318

Prospectus supplement
(To prospectus, dated May 18, 2011)



\$250,000,000
7.00% Senior Notes due 2021

Interest payable June 15 and December 15

Issue price: 100.00%

We are offering \$250,000,000 aggregate principal amount of our 7.00% Senior Notes due 2021 (the “notes”). The notes will mature on June 15, 2021. Interest will accrue from June 11, 2013, and the first interest payment date will be December 15, 2013.

We may redeem some or all of the notes at any time on or after June 15, 2016 at the redemption prices set forth herein, plus accrued and unpaid interest, if any, to the date of redemption. We may also redeem up to 35% of the notes using the proceeds of certain equity offerings completed before June 15, 2016. In addition, at any time prior to June 15, 2016, we may redeem some or all of the notes at a price equal to 100% of the principal amount, plus accrued and unpaid interest, if any, to the redemption date, plus a “make-whole” premium. If we sell certain of our assets or experience specific kinds of changes in control, we must offer to purchase the notes.

The notes will be guaranteed, jointly and severally, by certain of our existing and future domestic subsidiaries. The notes and guarantees will be our senior unsecured obligations and will rank equally in right of payment to all of our existing and future senior debt and senior in right of payment to all of our existing and future subordinated debt. The guarantees will rank equally in right of payment with all of our subsidiary guarantors’ existing and future senior debt and senior in right of payment to all of our subsidiary guarantors’ existing and future subordinated debt. The notes and guarantees will be effectively subordinated to any of our and the guarantors’ existing and future secured debt, including our senior secured credit facility, to the extent of the value of the assets securing such debt. In addition, the notes and guarantees will be structurally subordinated to the liabilities and preferred stock of our non-guarantor subsidiaries.

Investing in the notes involves risks. See “[Risk factors](#)” beginning on page S-15 of this prospectus supplement.

| | Per note | Total |
|-------------------------------------|----------|----------------|
| Public offering price(1) | 100.00% | \$ 250,000,000 |
| Underwriting discount | 2.25% | \$ 5,625,000 |
| Proceeds, before expenses, to us(1) | 97.75% | \$ 244,375,000 |

(1) Plus accrued interest, if any, from June 11, 2013.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus supplement or the accompanying prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The notes will not be listed on any securities exchange. Currently, there is no public market for the notes. We expect delivery of the notes will be made to investors in book-entry form only through the facilities of The Depository Trust Company for the accounts of its participants, including Clearstream Banking S.A., and Euroclear Bank S.A./N.V., as operator of the Euroclear System, on or about June 11, 2013.

Joint book-running managers

J.P. Morgan

RBC Capital Markets

KeyBanc Capital Markets

Co-Managers

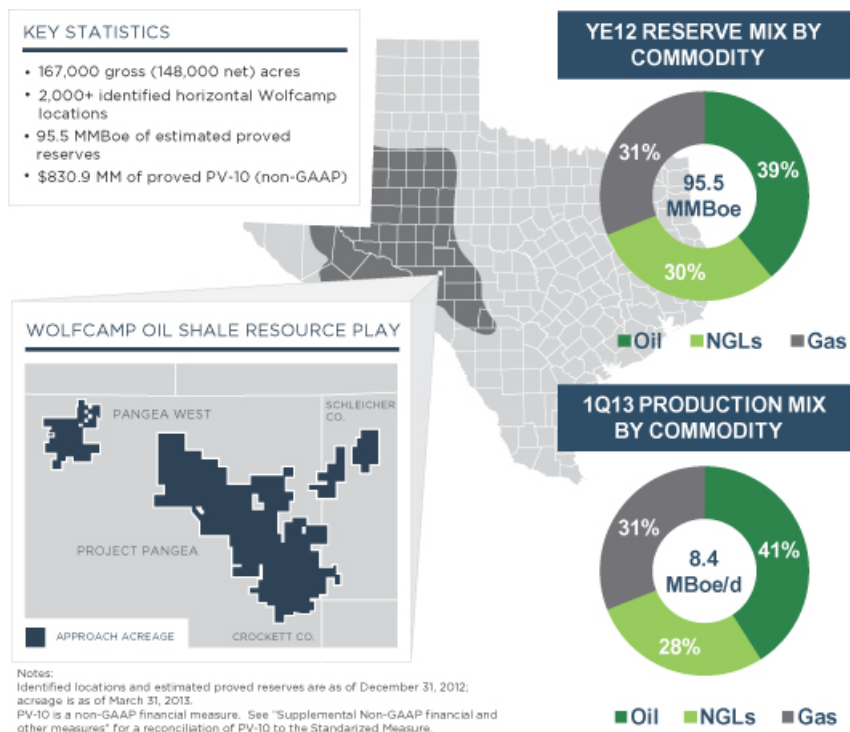
Wells Fargo Securities

BofA Merrill Lynch

Scotiabank

Tudor, Pickering, Holt & Co.

June 6, 2013

[Table of Contents](#)

[Table of Contents](#)

In making your investment decision, you should rely only on the information contained in this prospectus supplement and the accompanying prospectus. We and the underwriters have not authorized anyone to provide you with any other information. If you receive any other information, you should not rely on it. We and the underwriters are offering to sell the notes only in places where offers and sales are permitted. You should not assume that the information contained in this prospectus supplement and the accompanying prospectus is accurate as of any date other than the date on the front cover of this prospectus supplement and the front cover of the accompanying prospectus, respectively, or that the information contained in any document incorporated by reference is accurate as of any date other than the date of the document incorporated by reference.

Table of contents

| | <u>Page</u> | | <u>Page</u> |
|---|-------------|--|-------------|
| About this prospectus supplement | S-ii | Business | S-62 |
| Where you can find more information | S-ii | Management | S-87 |
| Non-GAAP financial measures | S-iv | Description of other indebtedness | S-91 |
| Market, ranking, industry data and forecasts | S-iv | Description of notes | S-93 |
| Cautionary statement regarding forward-looking statements | S-iv | Material U.S. federal income tax considerations | S-158 |
| Summary | S-1 | Underwriting: Conflicts of interest | S-164 |
| Risk factors | S-15 | Legal matters | S-168 |
| Ratio of earnings to fixed charges | S-34 | Experts | S-168 |
| Use of proceeds | S-35 | Glossary and selected abbreviations | S-169 |
| Capitalization | S-36 | Supplemental Non-GAAP financial and other measures | S-175 |
| Selected historical consolidated financial information | S-37 | Index to consolidated financial statements | F-1 |
| Management's discussion and analysis of financial condition and results of operations | S-39 | | |
| Prospectus | | | |
| About this prospectus | 1 | Description of capital stock | 6 |
| Approach Resources Inc. | 1 | Description of depositary shares | 11 |
| The subsidiary guarantors | 1 | Description of warrants | 14 |
| Where you can find more information | 2 | Description of rights | 15 |
| Cautionary statement regarding forward-looking statements | 3 | Description of debt securities | 16 |
| Risk factors | 5 | Plan of distribution | 29 |
| Ratios of earnings to fixed charges | 5 | Legal matters | 31 |
| Use of proceeds | 5 | Experts | 31 |

[Table of Contents](#)

About this prospectus supplement

This document is in two parts. The first part is the prospectus supplement and the documents incorporated by reference herein, which describes the specific terms of this offering of the notes. The second part is the accompanying prospectus, which gives more general information, some of which may not apply to the notes or this offering. If the information relating to the offering varies between the prospectus supplement and the accompanying prospectus, you should rely on the information in this prospectus supplement.

You should rely only on the information contained in or incorporated by reference into this prospectus supplement, the accompanying prospectus and any related free writing prospectus. We have not authorized anyone to provide you with additional or different information. If anyone provides you with different or inconsistent information, you should not rely on it. This prospectus supplement and the accompanying prospectus are not an offer to sell or the solicitation of an offer to buy any securities other than the securities to which they relate and are not an offer to sell or the solicitation of an offer to buy securities in any jurisdiction to any person to whom it is unlawful to make an offer or solicitation in that jurisdiction. You should not assume that the information contained in this prospectus supplement is accurate as of any date other than the date on the front cover of this prospectus supplement, or that the information contained in any document incorporated by reference is accurate as of any date other than the date of the document incorporated by reference, regardless of the time of delivery of this prospectus supplement or any sale of a security.

In this prospectus supplement, the “Company,” “we,” “us,” “our” or “ours” refer to Approach Resources Inc. and its subsidiaries, unless we state otherwise or the context indicates otherwise, and the term “Subsidiary Guarantor” refers to a guarantor of the notes.

Trademarks, service marks and copyrights

We have a registered service mark for “Approach Resources Inc.” Other products, services and company names mentioned in this prospectus supplement and the accompanying prospectus are the service marks/trademarks of their respective owners.

Where you can find more information

We file annual, quarterly and current reports and other information (File No. 001-33801) with the Securities and Exchange Commission, which we refer to as the “SEC,” pursuant to the Securities Exchange Act of 1934, as amended, which we refer to as the “Exchange Act.” You may read and copy any documents that are filed at the SEC’s public reference room at 100 F Street, N.E., Washington, D.C. 20549. You may also obtain copies of these documents at prescribed rates from the public reference section of the SEC at its Washington address. Please call the SEC at 1-800-SEC-0330 for further information.

Our filings are also available to the public through the SEC’s website at <http://www.sec.gov>.

The SEC allows us to “incorporate by reference” information that we file with it, which means that we can disclose important information to you by referring you to documents previously filed with the SEC. The information incorporated by reference is an important part of this prospectus

[Table of Contents](#)

supplement, and the information that we later file with the SEC will automatically update and supersede this information. The following documents we have filed with the SEC pursuant to the Exchange Act are incorporated herein by reference:

- our Annual Report on Form 10-K for the year ended December 31, 2012;
- our Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2013;
- our Current Reports on Form 8-K filed on May 3, 2013 and May 31, 2013; and
- our Definitive Proxy Statement on Schedule 14A filed on April 24, 2013 (those parts incorporated by reference in our Annual Report on Form 10-K for the year ended December 31, 2012).

These reports contain important information about us, our financial condition and our results of operations.

All future documents filed pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act (excluding any information furnished pursuant to Item 2.02 or Item 7.01 on any Current Report on Form 8-K) before the termination of each offering under this prospectus supplement shall be deemed to be incorporated in this prospectus supplement by reference and to be a part hereof from the date of filing of such documents. Any statement contained herein, or in a document incorporated or deemed to be incorporated by reference herein, shall be deemed to be modified or superseded for purposes of this prospectus supplement to the extent that a statement contained herein or in any subsequently filed document that also is or is deemed to be incorporated by reference herein, modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus supplement.

You may request a copy of these filings at no cost by writing or telephoning us at the following address or telephone number:

Approach Resources Inc.
One Ridgmar Centre
6500 West Freeway, Suite 800
Fort Worth, Texas 76116
Attention: Executive Vice President and General Counsel
(817) 989-9000

We also maintain a website at <http://www.approachresources.com>. The information on our website is not part of this prospectus supplement or the accompanying prospectus, and you should rely only on the information contained in this prospectus supplement, the accompanying prospectus and in the documents incorporated by reference when making a decision as to whether to buy the notes offered hereby.

S-iii

[Table of Contents](#)

Non-GAAP financial measures

The SEC has issued rules to regulate the use in filings with the SEC of “non-GAAP financial measures,” such as “EBITDAX,” “PV-10” and “drill-bit F&D” that are derived on the basis of methodologies other than in accordance with GAAP. Our presentation of these non-GAAP financial measures may not be comparable to those of other companies.

For a presentation of net income as calculated under GAAP and a reconciliation to our EBITDAX, see “Summary—Summary condensed consolidated financial data—Reconciliation of EBITDAX to net income (loss).”

See “Supplemental Non-GAAP Financial and Other Measures” for (i) a reconciliation of PV-10 to the Standardized Measure, and (ii) our calculation of drill-bit F&D and reconciliation to the information required by paragraphs 11 and 21 of ASC 932-235.

Market, ranking, industry data and forecasts

This prospectus supplement and the accompanying prospectus include market share, ranking, industry data and forecasts that we obtained from industry publications and surveys, public filings and internal company sources. Industry publications, surveys and forecasts generally state that the information contained therein has been obtained from sources believed to be reliable, but there can be no assurance as to the accuracy or completeness of such information included in this prospectus supplement and the accompanying prospectus. We have not independently verified any of the data from third-party sources, nor have we ascertained the underlying economic assumptions relied upon therein. Statements as to our market position and ranking are based on market data currently available to us, management’s estimates and assumptions we have made regarding the size of our markets within our industry. While we are not aware of any misstatements regarding our industry data presented herein, our estimates involve risks and uncertainties and are subject to change based on various factors, including those discussed under the heading “Risk factors” in this prospectus supplement and the accompanying prospectus. Neither we nor the underwriters can guarantee the accuracy or completeness of such third-party information contained in this prospectus supplement and the accompanying prospectus.

Cautionary statement regarding forward-looking statements

Various statements contained in or incorporated by reference into this prospectus supplement and the accompanying prospectus, including those that express a belief, expectation or intention, as well as those that are not statements of historical fact, are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, which we refer to as the “Securities Act,” and Section 21E of the Exchange Act. The forward-looking statements may include projections and estimates concerning the timing and success of specific projects, typical well economics and our future reserves, production, revenues, cost, income, capital spending, 3-D seismic, interpretations and results and obtaining permits and regulatory approvals. When we use the words “will,” “believe,” “intend,” “expect,” “may,” “should,” “anticipate,” “could,” “estimate,” “plan,” “predict,” “project,” “potential” or their negatives, other similar expressions or the statements that include those words, are intended to identify forward-looking statements, although not all forward-looking statements contain such identifying words.

S-iv

[Table of Contents](#)

These forward-looking statements are largely based on our expectations, which reflect estimates and assumptions made by our management. These estimates and assumptions reflect our best judgment based on currently known market conditions and other factors. Although we believe such estimates and assumptions to be reasonable, they are inherently uncertain and involve a number of risks and uncertainties that are beyond our control. In addition, management's assumptions about future events may prove to be inaccurate. We caution all readers that the forward-looking statements contained in this prospectus supplement and the accompanying prospectus are not guarantees of future performance, and we cannot assure any reader that such statements will be realized or the forward-looking events and circumstances will occur. Actual results may differ materially from those anticipated or implied in the forward-looking statements due to the known material factors detailed below and discussed in our Annual Report on Form 10-K for the year ended December 31, 2012, our Quarterly Report on Form 10-Q for the period ended March 31, 2013, and our subsequent SEC filings. All forward-looking statements contained in this prospectus supplement speak only as of the date of this prospectus supplement, and all forward-looking statements incorporated by reference into this prospectus supplement speak only as of the dates such statements were issued. We disclaim any obligation to publicly update or revise any forward-looking statements as a result of new information, future events or otherwise, unless required by law. These cautionary statements qualify all forward-looking statements attributable to us, or persons acting on our behalf. The risks, contingencies and uncertainties relate to, among other matters, the following:

- uncertainties in drilling, exploring for and producing oil and gas;
- uncertainty of commodity prices in oil, NGLs and gas;
- overall United States and global economic and financial market conditions;
- domestic and foreign demand and supply for oil, NGLs, gas and the products derived from such hydrocarbons;
- our inability to obtain additional financing necessary to fund our operations and capital expenditures and to meet our other obligations;
- the effects of government regulation and permitting and other legal requirements, including laws or regulations that could restrict or prohibit hydraulic fracturing;
- disruption of credit and capital markets;
- our financial position;
- our cash flows and liquidity;
- disruptions to, capacity constraints in or other limitations on the pipeline systems that deliver our oil, NGLs and gas and other processing and transportation considerations;
- marketing of oil, NGLs and gas;
- high costs, shortages, delivery delays or unavailability of drilling and completion equipment, materials, labor or other services;
- competition in the oil and gas industry;
- uncertainty regarding our future operating results;

S-v

[Table of Contents](#)

- interpretation of 3-D seismic data;
- replacing our oil, NGL and gas reserves;
- our ability to retain and attract key personnel;
- our business strategy, including our ability to recover oil, NGLs and gas in place associated with our Wolfcamp oil shale resource play in the Permian Basin;
- development of our current asset base or property acquisitions;
- estimated quantities of oil, NGL and gas reserves;
- plans objectives, expectations and intentions contained in this prospectus supplement, the accompanying prospectus and the documents we incorporate herein by reference that are not historical; and
- the other risks described in this prospectus supplement, the accompanying prospectus and the documents we incorporate herein by reference.

Certain figures included in this prospectus supplement and the accompanying prospectus have been subject to rounding adjustments. Accordingly, figures shown as totals in certain tables may not sum due to rounding.

S-vi

[Table of Contents](#)

Summary

This summary highlights selected information contained elsewhere in this prospectus supplement, the accompanying prospectus and the documents we incorporate by reference. It does not contain all of the information you should consider before making an investment decision. You should read the entire prospectus supplement, the accompanying prospectus, the documents incorporated by reference and the other documents to which we refer for a more complete understanding of our business and this offering. Please read the section entitled "Risk factors" beginning on page S-15 of this prospectus supplement and additional information contained in our Annual Report on Form 10-K for the year ended December 31, 2012, and our Quarterly Report on Form 10-Q for the period ended March 31, 2013, which are incorporated by reference in this prospectus supplement, for more information about known material factors you should consider before investing in the notes offered hereby. The estimate of our proved reserves as of December 31, 2012, included in this prospectus supplement is based on the reserve report prepared by DeGolyer and MacNaughton, our independent petroleum engineers, which report is filed as an exhibit to our Annual Report on Form 10-K for the year ended December 31, 2012, and is incorporated herein by reference. If you are not familiar with the oil and gas terms or abbreviations used in this prospectus supplement and the accompanying prospectus, please refer to the definitions of these terms and abbreviations under the caption "Glossary and selected abbreviations."

Our company

Approach Resources Inc. is an independent energy company engaged in the exploration, development, production and acquisition of oil and gas properties. We focus on oil and gas reserves in oil shale and tight gas sands in the southern Midland Basin of the greater Permian Basin in West Texas, where we lease approximately 148,000 net acres. This acreage provides us with a multi-year inventory of horizontal and vertical drilling opportunities. Our drilling targets include the Clearfork, Wolfcamp shale, Canyon Sands, Strawn and Ellenburger zones. We sometimes refer to the Clearfork and Wolfcamp zones together as the "Wolfork," and our development project in the Permian Basin as "Project Pangea," which includes the northwestern portion of Project Pangea that we refer to as "Pangea West."

Since our inception, we have grown production and reserves primarily through our drilling program. Our reserves and production compounded annual growth rates since 2004 have been 32% and 35%, respectively. As of March 31, 2013, we had working and net revenue interests of approximately 100% and 76%, respectively, across Project Pangea and Pangea West, and owned interests in approximately 667 wells. As the operator of all of our estimated proved reserves and production, we have a high degree of control over capital expenditures and other operating matters. In addition, our management and technical team have a proven track record of finding and developing reserves through advanced drilling and completion techniques. Driven primarily by our results in the Wolfcamp shale, our year-end 2012 proved reserves of 95.5 MMBoe were made up of 69% oil and NGLs (39% oil) and our production for first quarter 2013 was made up of 69% oil and NGLs (41% oil). For the twelve months ended December 31, 2012, we generated revenues, net income and EBITDAX (non-GAAP) of \$128.9 million, \$6.4 million and \$83 million, respectively. For a reconciliation of EBITDAX to net income (loss), see "—Summary condensed consolidated financial data—Reconciliation of EBITDAX to net income (loss)."

[Table of Contents](#)

In October 2010, we announced the discovery of the Wolfcamp oil shale resource play in the southern Midland Basin. Adjacent to our property, the southern Midland Basin is now being developed by large-scale, proven operators, such as Apache, BHP-Billiton, Conoco-Phillips, Devon, EP Energy and EOG.

The Wolfcamp shale is a source rock that we believe has significant potential for hydrocarbons. It is located in the oil-to-wet gas window across our Permian acreage position and is naturally fractured due to its proximity to the Ouachita-Marathon thrust belt and its mineralogy, specifically the carbonate and quartz minerals. The Wolfcamp shale has gross pay thickness of approximately 1,000 to 1,200 feet, whereas a typical shale formation ranges from 300 to 500 feet in thickness. The comparatively greater thickness for the Wolfcamp shale, relative to other oil shale plays, allows for stacked wellbores targeting varied zones, which we call "benches." We believe effectively developing the Wolfcamp shale may involve up to three lateral wellbores, each targeting a different bench, which we refer to as the Wolfcamp A, B and C.

We currently estimate that we have 2,983 identified drilling and recompletion locations targeting the horizontal Wolfcamp shale and the vertical Wolfork, 189 of which are proved, including:

- 2,096 horizontal Wolfcamp locations (approximately 700 locations per bench);
- 329 vertical Wolfork locations;
- 398 vertical Canyon Wolfork locations; and
- 160 Wolfork recompletions.

We also have identified 170 proved drilling locations targeting the Canyon Sands and deeper zones, and therefore our proved drilling locations total 359 in the Permian Basin.

In the Permian Basin, we consider the Wolfork interval to be a resource play. As such, the mapping of the gross interval for each of the producing formations under our acreage position is the main factor we considered in identifying our locations. Publicly available well data for the area surrounding our acreage position exists for a large number of vertical wells that have allowed us to define the areal extent of each of the producing intervals, whether the whole vertical Wolfork section or the targeted Clearfork and Wolfcamp shale.

Additionally, we have used internally generated information from cores, 3-D seismic, open-hole logging and reservoir engineering to estimate the extent of the targeted intervals, the ability of such intervals to produce commercial quantities of hydrocarbons and the viability of identified locations. The timing of drilling our identified locations will be influenced by several factors, including commodity prices, capital requirements, Railroad Commission of Texas ("RRC") well-spacing requirements and a continuation of the positive results from both our horizontal and vertical drilling and development activities.

As of December 31, 2012, we had estimated proved reserves of 95.5 MMBoe, made up of 39% oil, 30% NGLs and 31% natural gas. Our proved reserves increased 24%, and oil proved reserves increased 106%, over year-end 2011. Reserve growth in 2012 was driven primarily by results in our Wolfcamp oil shale resource play in Project Pangea.

[Table of Contents](#)

| Reserves category | Reserves | | | Total (MBoe) | Percent (%) |
|-----------------------|----------------|-----------------|-----------------------|-----------------|----------------|
| | Oil (MBbls) | NGLs (MBbls) | Natural gas (MMcf) | | |
| Proved developed | | | | | |
| Permian Basin | 8,816 | 11,761 | 72,359 | 32,637 | 34.2% |
| Other | — | — | 819 | 137 | 0.1% |
| Proved undeveloped | | | | | |
| Permian Basin | 28,436 | 17,339 | 101,582 | 62,705 | 65.7% |
| Total proved reserves | 37,252 | 29,100 | 174,760 | 95,479 | 100.0% |

Production for 2012 totaled 2.9 MMBoe (7.9 MBoe/d), compared to production of 2.3 MMBoe (6.4 MBoe/d) in 2011, a 24% increase. Production for 2012 was 34% oil, 31% NGLs and 35% natural gas. Our continued development of Project Pangea increased oil production 101% in 2012 compared to 2011. On average, we operated two horizontal rigs and one vertical rig in 2012, and drilled a total of 46 wells, of which 10 were waiting on completion at December 31, 2012. We also recompleted 18 wells in the Wolfork in 2012.

Production for the three months ended March 31, 2013, totaled 754 MBoe (8.4 MBoe/d), compared to production of 654 MBoe (7.2 MBoe/d) in first quarter 2012, a 15% increase. Oil production for the three months ended March 31, 2013, increased 63% compared to the prior year period. Production for the three months ended March 31, 2013, was 41% oil, 28% NGLs and 31% natural gas, compared to 29% oil, 33% NGLs and 38% natural gas in the prior year period.

2013 Capital expenditures

For the three months ended March 31, 2013, our capital expenditures totaled \$69.5 million, consisting of \$61.8 million for drilling and completion activities, \$6.7 million for pipeline, infrastructure projects and other equipment and \$1 million for acreage acquisitions and extensions and 3-D seismic data acquisition. Also, during the three months ended March 31, 2013, we made a capital contribution to our pipeline joint venture of \$6.3 million for oil pipeline and facilities construction.

Our drilling activity has been and will continue to be focused on our oil and liquids-rich opportunities in the Midland Basin. Our 2013 capital budget is \$260 million, which includes three rigs to drill horizontal wells targeting the Wolfcamp shale. We expect that our horizontal drilling in Project Pangea in 2013 will include pad drilling, which we believe will improve operating efficiencies and resource recoveries, while reducing facilities costs and surface impact. We also may drill vertical wells targeting the Wolfork or recomplete Canyon Sands wells in the Wolfork during 2013.

Our 2013 capital budget excludes acquisitions and is subject to change depending upon a number of factors, including additional data on our Wolfcamp oil shale resource play; results of horizontal and vertical drilling, completions and recompletions, including pad drilling, economic and industry conditions at the time of drilling; prevailing and anticipated prices for oil, NGLs and gas; the availability of sufficient capital resources for drilling prospects; our financial results and the availability of lease extensions and renewals on reasonable terms.

[Table of Contents](#)**Our business strategy**

We intend to enhance value by growing reserves and production in a cost-efficient manner by pursuing the following strategies:

- *Develop our Wolfcamp oil shale resource play.* We believe we have a large, multi-year inventory of identified drilling locations that provide us the ability to continue to increase production and reserves at a competitive cost. We plan to dedicate substantially all of our 2013 exploration and development drilling budget to the Wolfcamp oil shale resource play. Focusing on the Wolfcamp oil shale resource play allows us to develop operating, technical and regional expertise important to interpreting geological and operating trends, enhancing production rates and maximizing well recovery. Our objectives for 2013 include advancing our understanding of optimal well spacing and testing multi-zone potential, with the goal of enhancing hydrocarbon recovery in the Wolfcamp shale and improving our cost structure.
- *Operate our properties as a low-cost producer.* We strive to minimize our operating costs by concentrating our assets within geographic areas where we can consolidate operating control and, thus, create operating efficiencies. We operate 100% of our reserve base and plan to continue to operate a substantial portion of our producing properties in the future. Operating control allows us to better manage timing and risk as well as the cost of exploration and development, drilling and ongoing operations.
- *Acquire strategic and complementary assets.* We continually review opportunities to acquire producing properties, undeveloped acreage and drilling prospects in our existing core area in the Permian Basin. We focus particularly on opportunities where we believe our operational efficiency, reservoir management and geological expertise in unconventional oil and gas properties will enhance value and performance. We remain focused on unconventional resource opportunities, but will also look at conventional opportunities based on individual project economics.
- *Maintain financial flexibility.* We believe that our strong balance sheet and liquidity provide us with significant financial flexibility to pursue our strategic and financial objectives. Also, we enter into commodity price swaps and collars from time to time to partially mitigate the risk of commodity price volatility. Furthermore, during times of severe price declines, we may reduce capital expenditures and curtail drilling to preserve our financial flexibility and the net asset value of our existing proved reserves.

Our competitive strengths

We have a number of competitive strengths, which we believe will help us to successfully execute our business strategies:

- *Lower-risk, oil-rich asset base.* We believe we have assembled a strong asset base within the Midland Basin, where we have a long history of operating. We have drilled more than 600 wells in the area since 2004 with an average success rate of 94%. Our acreage position of 167,000 gross (148,000 net), primarily contiguous acres provides us with a multi-year inventory of repeatable, horizontal and vertical drilling opportunities. We believe our assets in the Midland Basin provide the potential for long-term reserve, production and cash flow growth.

[Table of Contents](#)

We plan to continue to develop our undeveloped acreage and optimize hydrocarbon recovery in the Wolfcamp shale by testing well spacing and multi-zone potential. Further, our proved reserves are 69% liquids (39% oil) and our production for first quarter 2013 was 69% liquids (41% oil).

- *High degree of operational control.* We operate 100% of our estimated proved reserves, and we have approximately 100% working interest in Project Pangea and Pangea West. This allow us to more effectively manage and control the timing of capital spending on our development activities, as well as maximize benefits from operating cost efficiencies and field infrastructure systems.
- *Track record of growth at competitive cost.* Our reserves and production compounded annual growth rates since 2004 have been 32% and 35%, respectively. Our three-year, average drill-bit finding and development ("drill-bit F&D") and lease operating expenses have been \$7.95 per Boe and \$5.35 per Boe, respectively. We believe these historical cost performance results are very competitive with our oily peers in the Midland Basin and other oil and liquids-focused basins. Drill-bit F&D is a non-GAAP financial measure. See "Supplemental Non-GAAP Financial and Other Measures" for our calculation of drill-bit F&D and reconciliation to the information required by paragraphs 11 and 21 of ASC 932-235.
- *Prudent financial management.* We are well capitalized with 72% pro forma equity capitalization and substantial pro forma liquidity of \$406 million as of March 31, 2013. Our capital budget is projected to be fully funded through 2014 and beyond with operating cash flow, credit facility borrowings and proceeds from this offering. We are committed to maintaining a conservative balance sheet and disciplined capital program, with a history of raising equity in order to maintain conservative leverage ratios. We also enter into commodity derivatives positions to manage our exposure to commodity price fluctuations.
- *Experienced executive management team with track record of growth.* Our executive management team has over 150 years of combined industry experience, including significant technical expertise. Our executive team has specific expertise in the Permian Basin and successfully executing multi-year development drilling programs creating stockholder value.

First quarter 2013 activity

During the three months ended March 31, 2013, we produced 754 MBoe, or 8.4 MBoe/d. We drilled 10 wells and completed five wells, including three wells that were waiting on completion at December 31, 2012. At March 31, 2013, 12 wells were in progress or waiting on completion, of which five wells were completed and turned to sales shortly after March 31, 2013. We currently have three horizontal rigs running in Project Pangea and Pangea West.

Recent developments

Amendment to Revolving Credit Agreement

On May 1, 2013, we entered into a fifteenth amendment to our credit agreement that, among other things, (i) increased the borrowing base to \$315 million, (ii) increased the lenders' aggregate maximum commitment to \$500 million and (iii) extended the maturity date by two years to July 31, 2016. Pro forma for the borrowing base increase, our liquidity was \$163 million at March 31, 2013.

[Table of Contents](#)***Temporary Curtailment of Production***

On May 23, 2013, we reported that our production had been curtailed due to a power outage at a third-party fractionation complex in Sweeny, Texas. Our NGLs currently flow to the Sweeny complex through DCP Midstream's processing plants in the Ozona, Texas area and through Chevron Pipe Line Company's EZ Pipeline. Power has been restored to the affected fractionation units at the Sweeny complex. We estimate that production of approximately 5.2 MBoe/d was curtailed for approximately two weeks during May 2013, due to downtime caused by the power outage. We expect that DCP Midstream's new Sand Hills NGL pipeline will provide market access for NGLs from the Permian Basin to Mont Belvieu in 2013. We believe the Sand Hills pipeline will improve the reliability of the Permian to Gulf Coast NGL network and mitigate future curtailments by providing additional takeaway capacity from the region.

Corporate information

Our principal executive offices are located at One Ridgmar Centre, 6500 West Freeway, Suite 800, Fort Worth, Texas 76116, and our telephone number is (817) 989-9000.

[Table of Contents](#)

The offering

The following summary contains basic information about the 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 notes, please refer to the section entitled "Description of notes."

| | |
|-------------------------------|--|
| Issuer | Approach Resources Inc. |
| Notes offered | \$250,000,000 aggregate principal amount of 7.00% senior notes due 2021. |
| Maturity date | June 15, 2021. |
| Interest payment dates | June 15 and December 15 of each year after the date of issuance of the notes, commencing December 15, 2013. Interest will accrue from June 11, 2013. |
| Guarantees | The notes will be guaranteed jointly and severally by certain of our existing subsidiaries and future subsidiaries. See "Description of notes—Guarantees." |
| Ranking | <p>The notes and guarantees will constitute senior debt of the issuer and the guarantors. They will rank:</p> <ul style="list-style-type: none"> • senior in right of payment to all of our and the guarantors' existing and future subordinated debt; • equally in right of payment with all of our and the guarantors' existing and future senior debt, including obligations under our senior secured credit facility; • effectively subordinated to all of our and the guarantors' indebtedness and obligations that are secured by liens, including obligations under our revolving credit facility, to the extent of the value of the collateral securing such indebtedness and obligations; and • structurally subordinated to all existing and future indebtedness and other liabilities, including preferred stock, of our non-guarantor subsidiaries (other than indebtedness and liabilities owed to us or one of our guarantor subsidiaries). <p>As of March 31, 2013, and after giving effect to the issuance of the notes and our application of the estimated net proceeds thereof, we and the guarantors would have had \$250 million of indebtedness outstanding, none of which would have been secured indebtedness.</p> |
| Optional redemption | <p>Except as described below, we cannot redeem the notes before June 15, 2016. Thereafter, we may redeem some or all of the notes at the redemption prices listed under "Description of notes—Optional redemption," plus accrued and unpaid interest, if any, to the redemption date.</p> <p>Prior to June 15, 2016, we may redeem the notes, in whole or in part, at a price equal to 100% of the principal amount thereof plus the make-whole premium described under "Description of notes—Optional redemption," plus accrued and unpaid interest to the redemption date.</p> |

[Table of Contents](#)

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| | <p>At any time (which may be more than once) before June 15, 2016, we may redeem up to 35% of the aggregate principal amount of notes issued with the net proceeds that we raise in one or more equity offerings, as long as:</p> <ul style="list-style-type: none"> • we pay 107.000% of the face amount of the notes, plus accrued interest to the date of redemption; • we redeem the notes within 180 days of completing the equity offering; and • at least 65% of the aggregate principal amount of notes issued remains outstanding afterwards. |
| Change of control | <p>If a change of control occurs, we must offer to purchase notes at 101% of their principal amount, plus accrued and unpaid interest.</p> <p>For more details, you should read “Description of notes—Repurchase at the option of holders—Change of control.”</p> |
| Asset sale proceeds | <p>If we or our subsidiaries engage in asset sales, we generally must either invest the net cash proceeds from such asset sales in our business within a specified period of time, repay certain senior debt or make an offer to purchase a principal amount of the notes equal to the excess net cash proceeds. The purchase price of the notes will be 100% of their principal amount, plus accrued and unpaid interest, if any, to the date of purchase. See “Description of notes—Repurchase at the option of holders—Asset sales.”</p> |
| Covenants | <p>The indenture governing the notes will, among other things, limit our ability and the ability of our restricted subsidiaries to:</p> <ul style="list-style-type: none"> • pay dividends or distributions, repurchase equity, prepay junior debt and make certain investments; • incur additional debt or issue certain disqualified stock and preferred stock; • incur liens on assets; • merge or consolidate with another company or sell all or substantially all assets; • enter into transactions with affiliates; and • allow to exist certain restrictions on the ability of subsidiaries to pay dividends or make other payments to us. <p>These covenants are subject to important exceptions and qualifications as described under “Description of notes—Certain covenants.”</p> |

[Table of Contents](#)

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|------------------------------|---|
| No prior market | The notes will be new securities for which there is currently no market. Although the underwriters have informed us that they intend to make a market in the notes, they are not obligated to do so and they may discontinue market making activities at any time without notice. Accordingly, we cannot assure you that a liquid market for the notes will develop or be maintained. |
| Use of proceeds | We intend to use the net proceeds from this offering to repay the outstanding indebtedness under our revolving credit facility, to fund our capital expenditures and for general working capital needs. See "Use of proceeds." |
| Risk factors | In evaluating an investment in the notes, prospective investors should carefully consider, along with other information in this prospectus supplement and the accompanying prospectus, the specific factors set forth under "Risk factors" beginning on page S-15 of this prospectus supplement for risks involved with an investment in the notes. |
| Conflicts of interest | Affiliates of certain of the underwriters are lenders under our revolving credit facility and will receive a portion of the proceeds from this offering pursuant to the repayment of indebtedness outstanding under our revolving credit facility. Because we intend to use a portion of the net proceeds from this offering to reduce indebtedness owed by us under our revolving credit facility, each of the underwriters whose affiliates will receive at least 5% of the net proceeds of this offering pursuant to the repayment of indebtedness outstanding under our revolving credit facility is considered by the Financial Industry Regulatory Authority, or FINRA, to have a conflict of interest in regards to this offering. As such, this offering is being conducted in accordance with FINRA Rule 5121, which requires that a qualified independent underwriter ("QIU") participate in the preparation of this prospectus supplement and perform the usual standards of due diligence with respect thereto. Tudor, Pickering, Holt & Co. Securities, Inc. is assuming the responsibilities of acting as QIU in connection with this offering. We have agreed to indemnify Tudor, Pickering, Holt & Co. Securities, Inc. against certain liabilities incurred in connection with it acting as QIU in this offering, including liabilities under the Securities Act. See "Underwriting; Conflicts of interest." |

[Table of Contents](#)

Summary condensed consolidated financial data

The following table shows selected financial information as of and for the periods indicated. This summary table should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and related notes included herein. The selected condensed consolidated financial data in this section is not intended to replace our consolidated financial statements.

We derived the statement of operations data and statement of cash flows data for the years ended December 31, 2010, 2011 and 2012, and balance sheet data as of December 31, 2011 and 2012, from the audited consolidated financial statements included in this prospectus supplement. We derived the balance sheet data as of December 31, 2010, from our audited consolidated financial statements not included in this prospectus supplement. We derived the statement of operations data and statement of cash flows data for the three months ended March 31, 2012 and 2013, and the balance sheet data as of March 31, 2012 and 2013, from the unaudited consolidated financial statements included in this prospectus supplement.

| (in thousands) | Years ended December 31, | | | Three months ended March 31, | |
|--|--------------------------|-----------|-----------|------------------------------|----------|
| | 2010 | 2011 | 2012 | 2012 | 2013 |
| Operating results data | | | | | |
| Revenues | | | | | |
| Oil, NGL and gas sales | \$57,581 | \$108,387 | \$128,892 | \$30,618 | \$36,269 |
| Expenses | | | | | |
| Lease operating | 6,620 | 10,687 | 19,002 | 3,580 | 5,383 |
| Production and ad valorem taxes | 4,925 | 8,447 | 9,255 | 2,218 | 2,556 |
| Exploration | 2,589 | 9,546 | 4,550 | 1,287 | 260 |
| Impairment | 2,622 | 18,476 | — | — | — |
| General and administrative | 11,422 | 17,900 | 24,903 | 5,764 | 6,410 |
| Depletion, depreciation and amortization | 22,224 | 32,475 | 60,381 | 11,030 | 17,056 |
| Total expenses | 50,402 | 97,531 | 118,091 | 23,879 | 31,665 |
| Operating income | 7,179 | 10,856 | 10,801 | 6,739 | 4,604 |
| Other | | | | | |
| Interest expense, net | (2,189) | (3,402) | (4,737) | (887) | (1,229) |
| Equity in losses of investee | — | — | (108) | — | (116) |
| Realized gain (loss) on commodity derivatives | 5,784 | 3,375 | (108) | (484) | 307 |
| Unrealized gain (loss) on commodity derivatives | 788 | (347) | 3,874 | (2,672) | (4,100) |
| Gain on sale of oil and gas properties, net of foreign currency translation loss | — | 248 | — | — | — |
| Income (loss) before income tax provision (benefit) | 11,562 | 10,730 | 9,722 | 2,696 | (534) |
| Income tax provision (benefit) | 4,100 | 3,488 | 3,338 | 982 | (187) |
| Net income | \$ 7,462 | \$ 7,242 | \$ 6,384 | \$ 1,714 | \$ (347) |

[Table of Contents](#)

| (in thousands) | Years ended December 31, | | | Three months ended | |
|--|--------------------------|-------------------|-------------------|--------------------|------------------|
| | 2010 | 2011 | 2012 | 2012 | 2013 |
| Statement of cash flows data | | | | | |
| Net cash provided by (used in) | | | | | |
| Operating activities | \$ 42,377 | \$ 95,770 | \$ 90,585 | \$ 35,491 | \$ 29,638 |
| Investing activities | (91,346) | (284,758) | (307,414) | (77,665) | (75,986) |
| Financing activities | 69,748 | 165,843 | 217,295 | 42,348 | 46,175 |
| Balance sheet data (as of period end) | | | | | |
| Cash and cash equivalents | \$ 23,465 | \$ 301 | \$ 767 | \$ 475 | \$ 594 |
| Other current assets | 17,865 | 11,085 | 14,889 | 12,727 | 12,018 |
| Property, equipment, net, successful efforts method | 369,210 | 595,284 | 828,467 | 660,815 | 881,008 |
| Equity method investment | — | — | 9,892 | — | 16,056 |
| Other assets | 2,549 | 1,224 | 1,724 | 1,159 | 1,406 |
| Total assets | <u>\$413,089</u> | <u>\$ 607,894</u> | <u>\$ 855,739</u> | <u>\$675,176</u> | <u>\$911,082</u> |
| Current liabilities | \$ 29,240 | \$ 43,625 | \$ 60,247 | \$ 62,198 | \$ 66,289 |
| Long-term debt | — | 43,800 | 106,000 | 85,400 | 152,250 |
| Other long-term liabilities | 50,903 | 53,020 | 56,024 | 55,660 | 57,332 |
| Stockholders' equity | <u>332,946</u> | <u>467,449</u> | <u>633,468</u> | <u>471,918</u> | <u>635,211</u> |
| Total liabilities and stockholders' equity | <u>\$413,089</u> | <u>\$ 607,894</u> | <u>\$ 855,739</u> | <u>\$675,176</u> | <u>\$911,082</u> |
| Other financial data (as of period end) | | | | | |
| EBITDAX(1) | <u>\$ 43,026</u> | <u>\$ 79,411</u> | <u>\$ 82,981</u> | <u>\$ 20,804</u> | <u>\$ 24,368</u> |
| (1) EBITDAX is a non-GAAP financial measure. For a reconciliation of EBITDAX to net income (loss), see "—Reconciliation of EBITDAX to net income (loss)" below. | | | | | |
| Reconciliation of EBITDAX to net income (loss) | | | | | |
| We define EBITDAX as net income (loss), plus (1) exploration expense, (2) impairment expense, (3) depletion, depreciation and amortization expense, (4) share-based compensation expense, (5) unrealized (gain) loss on commodity derivatives, (6) gain on sale of oil and gas properties, (7) interest expense, and (8) income taxes. EBITDAX is not a measure of net income or cash flow as determined by GAAP. The amounts included in the calculation of EBITDAX were computed in accordance with GAAP. EBITDAX is presented herein and reconciled to the GAAP measure of net income because of its wide acceptance by the investment community as a financial indicator of a company's ability to internally fund development and exploration activities and to service debt. This measure is provided in addition to, and not as an alternative for, and should be read in conjunction with, the information contained in our financial statements prepared in accordance with GAAP (including the notes), included in this prospectus supplement and the accompanying prospectus, in our SEC filings and posted on our website. | | | | | |

[Table of Contents](#)

The following table provides a reconciliation of EBITDAX to net income (loss).

| (in thousands, unaudited) | Years ended December 31, | | | Three months ended | |
|--|--------------------------|-----------------|-----------------|--------------------|------------------|
| | 2010 | 2011 | 2012 | 2012 | March 31, 2013 |
| Net income (loss) | \$ 7,462 | \$ 7,242 | \$ 6,384 | \$ 1,714 | \$ (347) |
| Exploration | 2,589 | 9,546 | 4,550 | 1,287 | 260 |
| Impairment | 2,622 | 18,476 | — | — | — |
| Depletion, depreciation and amortization | 22,224 | 32,475 | 60,381 | 11,030 | 17,056 |
| Share-based compensation | 2,628 | 4,683 | 7,465 | 2,232 | 2,257 |
| Unrealized (gain) loss on commodity derivatives | (788) | 347 | (3,874) | 2,672 | 4,100 |
| Gain on sale of oil and gas properties, net of foreign currency translation loss | — | (248) | — | — | — |
| Interest expense, net | 2,189 | 3,402 | 4,737 | 887 | 1,229 |
| Income tax provision (benefit) | 4,100 | 3,488 | 3,338 | 982 | (187) |
| EBITDAX | \$43,026 | \$79,411 | \$82,981 | \$ 20,804 | \$ 24,368 |

S-12

[Table of Contents](#)**Summary production and reserve data**

The following table sets forth summary data with respect to our oil, NGL and natural gas revenues, production, average product prices and average production costs and expenses for the periods indicated. For additional information on price calculations, see the information set forth in "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in this prospectus supplement. We determine a barrel of oil equivalent using the ratio of six Mcf of natural gas to one Boe, and one barrel of NGLs to one Boe. The ratios of six Mcf of natural gas to one Boe and one barrel of NGLs to one Boe do not assume price equivalency and, given price differentials, the price for a Boe for natural gas or NGLs may differ significantly from the price for a barrel of oil.

| | Years ended December 31, | | | Three months ended March 31, | |
|--|--------------------------|------------|-----------|------------------------------|----------|
| | 2010 | 2011 | 2012 | 2012 | 2013 |
| Revenues (in thousands) | | | | | |
| Oil | \$18,640 | \$ 42,463 | \$ 82,087 | \$18,006 | \$25,462 |
| NGLs | 10,765 | 41,029 | 30,811 | 9,107 | 6,237 |
| Gas | 28,176 | 24,895 | 15,994 | 3,505 | 4,570 |
| Total oil, NGL and gas sales | 57,581 | 108,387 | 128,892 | 30,618 | 36,269 |
| Realized gain (loss) on commodity derivatives | 5,784 | 3,375 | (108) | (484) | 307 |
| Total oil, NGL and gas sales including derivative impact | \$63,365 | \$ 111,762 | \$128,784 | \$30,134 | \$36,576 |
| Production | | | | | |
| Oil (MBbls) | 246 | 482 | 969 | 191 | 310 |
| NGLs (MBbls) | 261 | 798 | 904 | 214 | 214 |
| Gas (MMcf) | 6,290 | 6,345 | 6,089 | 1,492 | 1,378 |
| Total (MBoe) | 1,556 | 2,338 | 2,888 | 654 | 754 |
| Total (MBoe/d) | 4.3 | 6.4 | 7.9 | 7.2 | 8.4 |
| Average prices | | | | | |
| Oil (per Bbl) | \$ 75.67 | \$ 88.18 | \$ 84.70 | \$ 94.39 | \$ 82.01 |
| NGLs (per Bbl) | 41.19 | 51.39 | 34.09 | 42.50 | 29.17 |
| Gas (per Mcf) | 4.48 | 3.92 | 2.63 | 2.35 | 3.32 |
| Total (per Boe) | \$ 37.00 | \$ 46.37 | \$ 44.63 | \$ 46.84 | \$ 48.10 |
| Realized gain (loss) on commodity derivatives (per Boe) | 3.72 | 1.44 | (0.03) | (0.74) | 0.41 |
| Total including derivative impact (per Boe) | \$ 40.72 | \$ 47.81 | \$ 44.60 | \$ 46.10 | \$ 48.51 |
| Costs and expenses (per Boe) | | | | | |
| Lease operating | \$ 4.25 | \$ 4.57 | \$ 6.58 | \$ 5.48 | \$ 7.14 |
| Production and ad valorem taxes | 3.17 | 3.61 | 3.20 | 3.39 | 3.39 |
| Exploration | 1.66 | 4.08 | 1.58 | 1.97 | 0.34 |
| Impairment | 1.68 | 7.90 | — | — | — |
| General and administrative | 7.34 | 7.66 | 8.62 | 8.82 | 8.50 |
| Depletion, depreciation and amortization | 14.28 | 13.89 | 20.91 | 16.87 | 22.62 |

[Table of Contents](#)
Proved reserves

At December 31, 2012, our estimated proved reserves were 95.5 MMBoe, made up of 39% oil, 30% NGLs and 31% gas. Substantially all of our estimated proved reserves are located in the Permian Basin in Crockett and Schleicher Counties, Texas.

The table below is a summary of our estimated proved reserves at December 31, 2012. Our reserve estimates are based on the 12-month average of the first-day-of-the-month pricing of \$94.71 per Bbl West Texas Intermediate posted oil price, \$37.88 per Bbl received for NGLs and \$2.74 per MMBtu Henry Hub spot natural gas price for 2012. All prices were adjusted for energy content, quality and basis differentials by area and were held constant through the lives of the properties.

| Reserves category | Reserves | | | | |
|-----------------------|----------------|-----------------|--------------------------|-----------------|----------------|
| | Oil (MBbls) | NGLs (MBbls) | Natural gas (MMcf) | Total (MBoe) | Percent (%) |
| Proved developed | | | | | |
| Permian Basin | 8,816 | 11,761 | 72,359 | 32,637 | 34.2% |
| Other | — | — | 819 | 137 | 0.1 |
| Proved undeveloped | | | | | |
| Permian Basin | 28,436 | 17,339 | 101,582 | 62,705 | 65.7 |
| Total proved reserves | 37,252 | 29,100 | 174,760 | 95,479 | 100.0% |

[Table of Contents](#)

Risk factors

An investment in the notes involves a high degree of risk. You should consider carefully the risk factors included below, together with all of the other information included in, or incorporated by reference into, this prospectus supplement and the accompanying prospectus, when evaluating an investment in the notes. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also impair our business operations. If any of the following risks actually occur, our business, financial condition and results of operations would suffer. In that event, our ability to fulfill our obligations under the notes could be materially affected, and you may lose all or part of your investment. The risks discussed below also include forward-looking statements and our actual results may differ substantially from those discussed in these forward-looking statements. See "Cautionary statement regarding forward-looking statements."

Risks related to the notes

We may not be able to generate enough cash flow to meet our debt obligations.

We expect our earnings and cash flow to vary significantly from year to year due to the nature of our industry. As a result, the amount of debt that we can manage in some periods may not be appropriate for us in other periods. Additionally, our future cash flow may be insufficient to meet our debt obligations and other commitments, including our obligations under the notes. Any insufficiency could negatively impact our business. A range of economic, competitive, business and industry factors will affect our future financial performance, and, as a result, our ability to generate cash flow from operations and to pay our debt, including our obligations under the notes. Many of these factors, such as oil and natural gas prices, economic and financial conditions in our industry and the global economy and initiatives of our competitors, are beyond our control. If we do not generate enough cash flow from operations to satisfy our debt obligations, we may have to undertake alternative financing plans, such as:

- selling assets;
- reducing or delaying capital investments;
- seeking to raise additional capital; or
- refinancing or restructuring our debt.

If for any reason we are unable to meet our debt service and repayment obligations, we would be in default under the terms of the agreements governing our debt, which would allow our creditors at that time to declare all outstanding indebtedness to be due and payable, which would in turn trigger cross-acceleration or cross-default rights between the relevant agreements. In addition, our lenders could compel us to apply all of our available cash to repay our borrowings or they could prevent us from making payments on the notes. If amounts outstanding under our revolving credit facility or the notes offered hereby were to be accelerated, we cannot be certain that our assets would be sufficient to repay in full the money owed to the lenders or to our other debt holders, including you as a noteholder.

We may be able to incur substantially more debt. This could exacerbate the risks associated with our indebtedness.

We and our subsidiaries may be able to incur substantial additional indebtedness in the future, including under our revolving credit facility. Our \$500 million revolving credit facility currently

[Table of Contents](#)

has a borrowing base of \$315 million for secured borrowings, subject to periodic borrowing base redeterminations. As of May 30, 2013, we had \$139.2 million of secured borrowing capacity available, and unused outstanding letters of credit under our revolving credit facility totaling \$0.3 million. Please see "Description of other indebtedness." Any borrowings under the revolving credit facility will be secured, and as a result, effectively senior to the notes and the guarantees of the notes by the guarantors, to the extent of the value of the collateral securing that indebtedness. In addition, the holders of any future debt we may incur that ranks equally with the notes will be entitled to share ratably with the holders of the notes in any proceeds distributed in connection with any insolvency, liquidation, reorganization, dissolution or other winding-up of us. This may reduce the amount of proceeds paid to you. If new debt is added to our current debt levels, the related risks that we and our subsidiaries now face could intensify.

Payment of principal and interest on the notes will be effectively subordinated to our senior secured debt to the extent of the value of the assets securing that debt and structurally subordinated to the liabilities of any of our subsidiaries that do not guarantee the notes.

The notes are not secured. Therefore, the notes will be effectively subordinated to claims of our secured creditors, and the subsidiary guarantees will be effectively subordinated to the claims of the secured creditors of our subsidiary guarantors, in each case, to the extent of the value of the assets securing such indebtedness. As of March 31, 2013, we and our subsidiary guarantors had \$152.3 million of outstanding indebtedness under our revolving credit facility and unused outstanding letters of credit under our revolving credit facility totaling \$0.3 million. Holders of our secured obligations, including obligations under the credit agreement that governs our revolving credit facility, will have claims that are prior to claims of the holders of the notes with respect to the assets securing those obligations. For more information on our revolving credit facility, please read "Description of other indebtedness." In the event of a liquidation, dissolution, reorganization, bankruptcy or any similar proceeding, our assets and those of our subsidiaries will be available to pay obligations on the notes and the guarantees only after holders of our senior secured debt have been paid the value of the assets securing such debt. Although all of our material subsidiaries will initially guarantee the notes, in the future, under certain circumstances, the guarantees are subject to release and we may have subsidiaries that are not guarantors. In that case, the notes would be structurally subordinated to the claims of all creditors, including trade creditors and tort claimants, of our 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. Accordingly, there may not be sufficient funds remaining to pay amounts due on all or any of the notes.

Our revolving credit facility contains, and the indenture governing the notes offered hereby will contain, operating and financial restrictions that may restrict our business and financing activities.

Our revolving credit facility contains, the indenture governing the notes offered hereby will contain, and any future indebtedness we incur may contain, a number of restrictive covenants that will impose significant operating and financial restrictions on us, including restrictions on our ability to, among other things:

- sell assets, including equity interests in our subsidiaries;

[Table of Contents](#)

- pay distributions on, redeem or repurchase our common stock or redeem or repurchase our subordinated debt;
- make investments;
- incur or guarantee additional indebtedness or issue preferred stock;
- create or incur certain liens;
- make certain acquisitions and investments;
- redeem or prepay other debt;
- enter into agreements that restrict distributions or other payments from our restricted subsidiaries to us;
- consolidate, merge or transfer all or substantially all of our assets;
- engage in transactions with affiliates;
- create unrestricted subsidiaries;
- enter into sale and leaseback transactions; and
- engage in certain business activities.

As a result of these covenants, we will be limited in the manner in which we conduct our business, and we may be unable to engage in favorable business activities or finance future operations or capital needs.

Our ability to comply with some of the covenants and restrictions contained in our revolving credit facility and the indenture governing the notes offered hereby may be affected by events beyond our control. If market or other economic conditions deteriorate, our ability to comply with these covenants may be impaired. A failure to comply with the covenants, ratios or tests in our revolving credit facility or any future indebtedness could result in an event of default under our revolving credit facility or our future indebtedness, which, if not cured or waived, could have a material adverse effect on our business, financial condition and results of operations. If an event of default under our revolving credit facility occurs and remains uncured, the lenders thereunder:

- would not be required to lend any additional amounts to us;
- could elect to declare all borrowings outstanding, together with accrued and unpaid interest and fees, to be due and payable;
- may have the ability to require us to apply all of our available cash to repay these borrowings; or
- may prevent us from making debt service payments under our other agreements.

A payment default or an acceleration under our revolving credit facility could result in an event of default.

If the indebtedness under the notes were to be accelerated, there can be no assurance that we would have, or be able to obtain, sufficient funds to repay such indebtedness in full. In addition,

[Table of Contents](#)

our obligations under our revolving credit facility are collateralized by perfected first priority liens and security interests on substantially all of our West Texas assets and a pledge of equity interests of certain subsidiaries, and if we are unable to repay our indebtedness under the revolving credit facility, the lenders could seek to foreclose on our assets. Please see "Description of notes" and "Description of other indebtedness."

Because all of our operations are conducted through our subsidiaries, our ability to service our debt is largely dependent on our receipt of distributions or other payments from our subsidiaries.

We are a holding company, and all of our operations are conducted through our subsidiaries. As a result, our ability to service our debt is largely dependent on the earnings of our subsidiaries and the payment of those earnings to us in the form of dividends, loans or advances and through repayment of loans or advances from us. Our subsidiaries are legally distinct from us and, except for our subsidiaries that have guaranteed our debt, have no obligation to pay amounts due on our debt or to make funds available to us for such payment. The ability of our subsidiaries to pay dividends, repay intercompany notes or make other advances to us is subject to restrictions imposed by applicable laws, tax considerations and the agreements governing our subsidiaries. In addition, such payment may be restricted by claims against our subsidiaries by their creditors, including suppliers, vendors, lessors and employees.

We may not be able to fund a change of control offer.

In the event of a change of control (as defined in the indenture for the notes), we will be required, subject to certain conditions, to offer to purchase all outstanding notes at a price equal to 101% of the principal amount thereof, plus accrued and unpaid interest thereon, if any, to the date of purchase. If a change of control were to occur, we would not have sufficient funds available to purchase all of the notes offered hereby were they to be tendered in response to an offer made as a result of a change of control. We cannot assure you that we will have sufficient funds available or that we will be permitted by our other debt instruments to fulfill these obligations upon a change of control in the future. Furthermore, certain change of control events would constitute an event of default under our credit agreement. If these change of control events occur at a time when we are prohibited from repurchasing the notes, we may seek the consent of our lenders to purchase the notes or could attempt to refinance the borrowings that contain these prohibitions or restrictions. If we do not obtain our lenders' consent or refinance these borrowings, we will not be able to repurchase the notes. Accordingly, the holders of the notes may not receive the change of control purchase price for their notes in the event of a sale or other change of control, which will give the trustee and the holders of the notes the right to declare an event of default and accelerate the repayment of the notes. Please see "Description of notes—Repurchase at the option of holders—Change of control."

In a published decision, the Chancery Court of Delaware has raised the possibility that a change of control put right occurring as a result of a failure to have "continuing directors" comprising a majority of a board of directors may be unenforceable on public policy grounds. Therefore, you may not be entitled to receive this protection under the indenture. The term "change of control" is limited to certain specified transactions and may not include other events that might adversely affect our financial condition. Our obligation to repurchase the notes upon a change of control would not necessarily afford holders of the notes protection in the event of a highly leveraged transaction, reorganization, merger or similar transaction involving us.

[Table of Contents](#)

Many of the covenants contained in the indenture will terminate if the notes are rated investment grade by both Standard & Poor's and Moody's and no default or event of default has occurred and is continuing.

Many of the covenants and certain events of default in the indenture governing the notes offered hereby will terminate if the notes are rated investment grade by both Standard & Poor's and Moody's, provided at such time no default with respect to the notes has occurred and is continuing. These covenants will restrict, among other things, our ability to pay dividends, incur debt and to enter into certain other transactions. There can be no assurance that the notes will ever be rated investment grade, or that if they are rated investment grade, that the notes will maintain such ratings. However, termination of these covenants would allow us to engage in certain transactions that would not be permitted while these covenants were in force. Please see "Description of notes—Covenant termination."

The guarantees by certain of our subsidiaries of the notes could be deemed fraudulent conveyances under certain circumstances, and a court may try to subordinate or void these subsidiary guarantees.

Under U.S. bankruptcy law and comparable provisions of state fraudulent transfer laws, a guarantee can be voided, or claims under a guarantee may be subordinated to all other debts of that guarantor if, among other things, the guarantor, at the time it incurred the indebtedness evidenced by its guarantee:

- intended to hinder, delay or defraud any present or future creditor or received less than reasonably equivalent value or fair consideration for the incurrence of the guarantee;
- was insolvent or rendered insolvent by reason of such incurrence;
- was engaged in a business or transaction for which the guarantor's remaining assets constituted unreasonably small capital; or
- intended to incur, or believed that it would incur, debts beyond its ability to pay those debts as they mature.

In addition, any payment by that guarantor under a guarantee could be voided and required to be returned to the guarantor or to a fund for the benefit of the creditors of the guarantor. The measures of insolvency for purposes of these fraudulent transfer laws will vary depending upon the law applied in any proceeding to determine whether a fraudulent transfer has occurred. Generally, however, a subsidiary guarantor would be considered insolvent if:

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

Your ability to transfer the notes may be limited by the absence of a trading market.

The notes will be new securities for which currently there is no trading market. Although the underwriters have informed us that they currently intend to make a market in the notes, they are

[Table of Contents](#)

not obligated to do so. In addition, they may discontinue any such market making at any time without notice. The liquidity of any market for the notes will depend on the number of holders of the notes, the interest of securities dealers in making a market in the notes and other factors. Accordingly, we cannot assure you as to the development or liquidity of any market for the notes. Historically, the market for noninvestment grade debt has been subject to disruptions that have caused substantial volatility in the prices of securities similar to the notes. We cannot assure you that the market, if any, for the notes will be free from similar disruptions. Any such disruption may adversely affect the noteholders' ability to transfer the notes.

Risks related to the oil and gas industry and our business

Drilling, exploring for and producing oil and gas are high risk activities with many uncertainties that could adversely affect our business, financial condition and results of operations.

Our future financial condition and results of operations will depend on the success of our drilling, exploration and production activities. These activities are subject to numerous risks beyond our control, including the risk that drilling will not result in economic oil and gas production or increases in reserves. Many factors may curtail, delay or cancel our scheduled development projects, including:

- decline in oil, NGL and gas prices;
- compliance with governmental regulations, which may include limitations on hydraulic fracturing, access to water or the discharge of greenhouse gases;
- inadequate capital resources;
- limited transportation services and infrastructure to deliver the oil and gas we produce to market;
- inability to attract and retain qualified personnel;
- unavailability or high cost of drilling and completion equipment, services or materials;
- unexpected drilling conditions, pressure or irregularities in formations, equipment failures or accidents;
- lack of acceptable prospective acreage;
- adverse weather conditions;
- surface access restrictions;
- title problems; and
- mechanical difficulties.

Oil, NGL and gas prices are volatile, and a decline in oil, NGL or gas prices could significantly affect our business, financial condition and results of operations and our ability to meet our capital expenditure requirements and financial commitments.

Our revenues, profitability and cash flow depend substantially upon the prices and demand for oil, NGLs and gas. The markets for these commodities are volatile, and even relatively modest

[Table of Contents](#)

drops in prices can affect significantly our financial results and impede our growth. Prices for oil, NGLs and gas fluctuate widely in response to relatively minor changes in the supply and demand for these commodities, market uncertainty and a variety of additional factors beyond our control, such as:

- domestic and foreign supply of oil, NGLs and gas;
- domestic and foreign consumer demand for oil, NGLs and gas;
- overall United States and global economic conditions;
- commodity processing, gathering and transportation availability and the availability of refining capacity;
- price and availability of alternative fuels;
- price and quantity of foreign imports;
- domestic and foreign governmental regulations;
- political conditions in or affecting other gas producing and oil producing countries;
- weather conditions, including unseasonably warm winter weather and tropical storms; and
- technological advances affecting oil, NGL and gas consumption.

Further, oil, NGL and gas prices do not necessarily fluctuate in direct relationship to each other, and these prices continued to be volatile in 2012. Advanced drilling and completion technologies, such as horizontal drilling and hydraulic fracturing, have resulted in increased investment by oil and gas producers in developing U.S. shale gas and, more recently, tight oil projects. The results of higher investment in the exploration for and production of oil and gas and other factors, such as global economic and financial conditions discussed below, may cause the price of oil and gas to fall. Lower oil and gas prices may not only cause our revenues to decrease but also may reduce the amount of oil and gas that we can produce economically. Substantial decreases in oil and gas prices would render uneconomic some or all of our drilling locations. This may result in our having to impair our estimated proved reserves and could have a material adverse effect on our business, financial condition and results of operations. Further, if oil, NGL or gas prices significantly decline for an extended period of time, we may, among other things, be unable to maintain or increase our borrowing capacity, repay current or future debt or obtain additional capital on attractive terms, all of which can affect the value of our common stock.

Future economic conditions in the U.S. and international markets could materially and adversely affect our business, financial condition and results of operations.

The U.S. and other world economies continue to experience the after-effects of a global recession and credit market crisis. More volatility may occur before a sustainable growth rate is achieved either domestically or globally. Even if such growth rate is achieved, such a rate may be lower than the U.S. and international economies have experienced in the past. Global economic growth drives demand for energy from all sources, including fossil fuels. A lower, future economic growth rate will result in decreased demand for our oil, NGL and gas production and lower commodity prices, and consequently reduce our revenues, cash flows from operations and our profitability.

[Table of Contents](#)

If gas prices remain low or decline further, or if oil and NGL prices decline, we may be required to write down the carrying values of our properties. Current SEC rules also could require us to write down our proved undeveloped reserves in the future.

Accounting rules require that we periodically review the carrying value of our properties for possible impairment. Based on prevailing commodity prices and specific market factors and circumstances at the time of impairment reviews, and the continuing evaluation of development plans, production data, economics and other factors, we may be required to write down the carrying value of our properties. A write-down is a non-cash charge to earnings. We may incur impairment charges in the future, which could have a material adverse effect on our results of operations for the periods in which such charges are taken. In addition, current SEC rules require that proved undeveloped reserves may only be booked if they relate to wells scheduled to be drilled within five years, unless specific circumstances justify a longer time. This rule may limit our potential to book additional proved undeveloped reserves as we pursue our development projects. Moreover, we may be required to write down our proved undeveloped reserves if we do not drill those wells within the required timeframe. For example, for the year ended December 31, 2012, we reclassified 8.9 MMBoe of proved undeveloped reserves as probable undeveloped. These reserves were attributable to vertical Canyon locations in southeast Project Pangea. We postponed development of these deeper locations beyond five years from initial booking to integrate their development with the shallower Wolfcamp and Wolfork target zones.

Changes in the differential between benchmark prices of oil and gas and the reference or regional index price used to price our actual oil and gas sales could have a material adverse effect on our financial condition and results of operations.

The reference or regional index prices that we use to price our oil and gas sales sometimes reflect a discount to other, relevant benchmark prices, such as WTI NYMEX or WTI Cushing. The difference between a benchmark price and the price we reference in our sales contracts is called a basis differential. For example, due to increasing oil production in the Permian Basin and shortage of takeaway capacity in the area, the average monthly difference between WTI Cushing and WTI Midland (which is typically subtracted from our crude oil sales price) reached a high of approximately \$14.00/Bbl in the first quarter of 2013. Although this differential narrowed in the latter part of the first quarter of 2013, we cannot accurately predict movement of oil and gas differentials and we may not be able to effectively manage this risk through derivatives or hedging transactions.

We engage in commodity derivative transactions which involve risks that can harm our business.

To manage our exposure to price risks in the marketing of our production, we enter into oil, NGL and gas price and basis differential commodity derivative agreements. While intended to reduce the effects of volatile commodity prices and basis differentials, such transactions may limit our potential gains and increase our potential losses if commodity prices were to rise substantially over the price established by the commodity derivative, or if the basis spread changes substantially from the basis differential established by the commodity derivative. In addition, such transactions may expose us to the risk of loss in certain circumstances, including instances in which our production is lower than expected, there is change of price differentials between delivery points for our production and the delivery point assumed in the commodity derivative arrangement or the counterparties to the commodity derivative agreements fail to perform under the contracts.

[Table of Contents](#)***We are subject to complex governmental laws and regulations that may adversely affect the cost, manner and feasibility of doing business.***

Our oil and gas drilling, production and gathering operations are subject to complex and stringent laws and regulations. To operate in compliance with these laws and regulations, we must obtain and maintain numerous permits and approvals from various federal, state and local governmental authorities. We may incur substantial costs to comply with these existing laws and regulations. In addition, our costs of compliance may increase if existing laws and regulations are revised or reinterpreted, or if new laws and regulations apply to our operations. Such costs could have a material adverse effect on our business, financial condition and results of operations. Failure to comply with laws and regulations applicable to our operations, including any evolving interpretation and enforcement by government authorities, could have a material adverse effect on our business, financial condition and results of operations. See “Business — Regulation” for a further description of the laws and regulations that affect us.

Federal and state legislation and regulatory initiatives and private litigation relating to hydraulic fracturing could stop or delay our development project and result in materially increased costs and additional operating restrictions.

All of our proved non-producing and proved undeveloped reserves associated with future drilling, completion and recompletion projects will require hydraulic fracturing. See “Business—Hydraulic fracturing” for a discussion of the importance of hydraulic fracturing to our business, and “Business —Regulation—Hydraulic fracturing” for a discussion of regulatory developments regarding hydraulic fracturing. If these or any other new laws or regulations that significantly restrict hydraulic fracturing are adopted, such laws could make it more difficult or costly for us to drill and produce from, as well as make it easier for third parties opposing hydraulic fracturing to initiate legal proceedings. In addition, if hydraulic fracturing is regulated at the federal level, fracturing activities could become subject to additional permitting and financial assurance requirements, more stringent construction specifications, increased monitoring, reporting and recordkeeping obligations, plugging and abandonment requirements and also to permitting delays and increases in costs. These developments, as well as new laws or regulations, could cause us to incur substantial compliance costs, and compliance or the consequences of our failure to comply could have a material adverse effect on our financial condition and results of operations. In addition, if we are unable to use hydraulic fracturing in completing our wells or hydraulic fracturing becomes prohibited or significantly regulated or restricted, we could lose the ability to drill and complete the projects for our proved reserves and maintain our current leasehold acreage, which would have a material adverse effect on our future business, financial condition and operating results.

Our operations substantially depend on the availability of water. Restrictions on our ability to obtain, dispose of or recycle water may impact our ability to execute our drilling and development plans in a timely or cost-effective manner.

Water is an essential component of our drilling and hydraulic fracturing processes. Historically, we have been able to secure water from local landowners and other sources for use in our operations. During the last two years, West Texas has experienced extreme drought conditions. As a result of the severe drought, some local water districts may begin restricting the use of water under their jurisdiction for drilling and hydraulic fracturing to protect the local water supply. If we are unable to obtain water to use in our operations from local sources, we may be

[Table of Contents](#)

unable to economically produce oil, NGLs and gas, which could have an adverse effect on our business, financial condition and results of operations.

Moreover, new environmental initiatives and regulations could include restrictions on disposal of waste, including, but not limited to, produced water, drilling fluids and other wastes associated with the exploration, development or production of oil and gas. Compliance with environmental regulations and permit requirements for the withdrawal, storage and use of surface water or ground water necessary for hydraulic fracturing of our wells may increase our operating costs and cause delays, interruptions or cessation of our operations, the extent of which cannot be predicted, and all of which would have an adverse effect on our business, financial condition, results of operations and cash flows.

Climate change legislation or regulations regulating emissions of GHGs and VOCs could result in increased operating costs and reduced demand for the oil and gas we produce.

Both houses of Congress have actively considered legislation to reduce emissions of GHGs, and some states have already taken measures to reduce emissions of GHGs, primarily through the planned development of GHG emission inventories and/or regional GHG cap-and-trade programs. Most of these cap-and-trade programs require 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 GHG emission reduction goal is achieved. These allowances are expected to escalate significantly in cost over time.

In addition, in December 2009, the EPA determined that emissions of carbon dioxide, methane and other GHGs present an endangerment to human health and the environment, because emissions of such gases are, according to the EPA, contributing to warming of the earth's atmosphere and other climatic changes. These findings by the EPA allow the agency to proceed with the adoption and implementation of regulations that would restrict emissions of GHGs under existing provisions of the federal Clean Air Act. The EPA has also issued final regulations under the NSPS and NESHAP designed to reduce VOCs. See "Business—Regulation—Environmental laws and regulations—Greenhouse gas emissions" and "—Air emissions" for a discussion of regulatory developments regarding GHG and VOC emissions.

The adoption of legislation or regulatory programs to reduce GHG or VOC emissions could require us to incur increased operating costs, such as costs to purchase and operate emissions control systems, to acquire emissions allowances or comply with new regulatory requirements. Any GHG emissions legislation or regulatory programs applicable to power plants or refineries could also increase the cost of consuming, and thereby reduce demand for, the oil and natural gas we produce. Consequently, legislation and regulatory programs to reduce GHG or VOC emissions could have a material adverse effect on our business, financial condition and results of operations.

Environmental laws and regulations may expose us to significant costs and liabilities.

There is inherent risk of incurring significant environmental costs and liabilities in our oil and gas operations due to the handling of petroleum hydrocarbons and generated wastes, the occurrence of air emissions and water discharges from work-related activities and the legacy of pollution from historical industry operations and waste disposal practices. We may incur joint and several or strict liability under these environmental laws and regulations in connection with spills,

[Table of Contents](#)

leaks or releases of petroleum hydrocarbons and wastes on, under or from our properties and facilities, some of which have been used for exploration, production or development activities for many years and by third parties not under our control. In particular, the number of private, civil lawsuits involving hydraulic fracturing has risen in recent years. Since late 2009, multiple private lawsuits alleging ground water contamination have been filed in the U.S. against oil and gas companies, primarily by landowners who leased oil and gas rights to defendants, or by landowners who live close to areas where hydraulic fracturing has taken place. In addition, changes in environmental laws and regulations occur frequently, and any such changes that result in more stringent and costly waste handling, storage, transport, disposal or remediation requirements could have a material adverse effect on our business, financial condition and results of operations. We may not be able to recover some or any of these costs from insurance.

Changes in tax laws may adversely affect our results of operations and cash flows.

The administration of President Obama has made budget proposals which, if enacted into law by Congress, would potentially increase and accelerate the payment of U.S. federal income taxes by independent producers of oil and natural gas. Proposals have included, but have not been limited to, repealing the enhanced oil recovery credit, repealing the credit for oil and natural gas produced from marginal wells, repealing the expensing of intangible drilling costs, repealing the deduction for the cost of qualified tertiary expenses, repealing the exception to the passive loss limitation for working interests in oil and natural gas properties, repealing the percentage depletion allowance, repealing the manufacturing tax deduction for oil and natural gas companies, and increasing the amortization period of geological and geophysical expenses. Legislation which would have implemented the proposed changes has been introduced but not enacted. It is unclear whether legislation supporting any of the above described proposals, or designed to accomplish similar objectives, will be introduced or, if introduced, would be enacted into law or, if enacted, how soon resulting changes would become effective. However, the passage of any legislation designed to implement changes in the U.S. federal income tax laws similar to the changes included in the budget proposals offered by the Obama administration could eliminate certain tax deductions currently available with respect to oil and natural gas exploration and development, and any such changes (i) could make it more costly for us to explore for and develop our oil and natural gas resources and (ii) could negatively affect our financial condition and results of operations.

Our business requires significant capital expenditures and we may not be able to obtain needed capital or financing on satisfactory terms or at all.

Our exploration, development and acquisition activities require substantial capital expenditures. For example, according to our year-end 2012 reserve report, the estimated capital required to develop our current proved oil and gas reserves is approximately \$1 billion. Historically, we have funded our capital expenditures through a combination of cash flows from operations, borrowings under our credit facility and public equity financings. Future cash flows are subject to a number of variables, including the production from existing wells, prices of oil, NGLs and gas and our success in developing and producing new reserves. We do not expect our cash flow from operations to be sufficient to cover our current expected capital expenditure budget and we may have limited ability to obtain the additional capital necessary to sustain our operations at current levels. We may not be able to obtain debt or equity financing on favorable terms or at all. The failure to obtain additional financing could cause us to scale back our exploration and

[Table of Contents](#)

development operations, which in turn could lead to a decline in our oil and gas production and reserves, and in some areas a loss of properties.

Our lenders can limit our borrowing capabilities, which may materially impact our operations.

At March 31, 2013, we had \$152.3 million outstanding under our revolving credit facility, and our borrowing base was \$280 million. On May 1, 2013, we entered into a fifteenth amendment to our credit agreement which, among other things, (i) increased the borrowing base to \$315 million, (ii) increased the lenders' aggregate maximum commitment to \$500 million and (iii) extended the maturity date by two years to July 31, 2016. The borrowing base under our revolving credit facility is redetermined semi-annually based upon a number of factors, including commodity prices and reserve levels. In addition to such semi-annual redeterminations, our lenders may request one additional redetermination during any 12-month period. Upon a redetermination, our borrowing base could be substantially reduced, and if the amount outstanding under our credit facility at any time exceeds the borrowing base at such time, we may be required to repay a portion of our outstanding borrowings. We use cash flow from operations and bank borrowings to fund our exploration, development and acquisition activities. A reduction in our borrowing base could limit those activities. In addition, we may significantly change our capital structure to make future acquisitions or develop our properties. Changes in capital structure may significantly increase our debt. If we incur additional debt for these or other purposes, the related risks that we now face could intensify. A higher level of debt also increases the risk that we may default on our debt obligations. Our ability to meet our debt obligations and to reduce our level of debt depends on our future performance, which is affected by general economic conditions and financial, business and other factors, many of which are beyond our control.

Our future reserve and production growth depends on the success of our Wolfcamp oil shale resource play, which has a limited operational history and is subject to change.

We began drilling wells in the Wolfcamp play relatively recently. The wells that have been drilled or recompleted in these areas represent a very small sample of our large acreage position, and we cannot assure you that our new horizontal or vertical wells or recompletions of existing Canyon wells will be successful. As of December 31, 2012, we had proved reserves of 60.1 MMBoe attributable to the Wolfcamp play. Accordingly, we have limited information on the amount of reserves that will ultimately be recovered from our Wolfcamp wells. We continue to gather data about our prospects in the Wolfcamp play, and it is possible that additional information may cause us to change our drilling schedule or determine that prospects in some portion of our acreage position should not be developed at all.

Failure to effectively execute and manage our single major development project, Project Pangea, could result in significant delays, cost overruns, limitation of our growth, damage to our reputation and a material adverse effect on our business, financial condition and results of operations.

We have an extensive inventory of identified drilling locations in our development project (Project Pangea) in the Wolfcamp oil shale resource play major; however, Project Pangea is our core asset and our only development project. As we achieve more results in Project Pangea, we have expanded our horizontal development project there. This level of development activity requires significant effort from our management and technical personnel and places additional

[Table of Contents](#)

requirements on our financial resources and internal operating and financial controls. Our ability to successfully develop and manage this project will depend on, among other things:

- the extent of our success in drilling and completing horizontal Wolfcamp wells;
- our ability to control costs and manage drilling and completion risks;
- our ability to finance development of the project;
- our ability to attract, retain and train qualified personnel with the skills required to develop the project in a timely and cost-effective manner; and
- our ability to implement and maintain effective operating and financial controls and reporting systems necessary to develop and operate the project.

We may not be able to compensate for, or fully mitigate, these risks.

Currently, substantially all of our producing properties are located in two counties in Texas, making us vulnerable to risks associated with having our production concentrated in a small area.

Substantially all of our producing properties and estimated proved reserves are concentrated in two counties in Texas: Crockett and Schleicher. As a result of this concentration, we are disproportionately exposed to the natural decline of production from these fields as well as the impact of delays or interruptions of production from these wells caused by significant governmental regulation, transportation capacity constraints, curtailments of production, service delays, natural disasters or other events that impact this area.

Because of our geographic concentration, our purchaser base is limited, and the loss of one of our key purchasers or their inability to take our oil, NGLs or gas or could adversely affect our financial results.

In 2012, Shell Trading (US) Company ("Shell"), BML, Inc. ("BML"), Belvan Partners, LP ("WTG"), DCP Midstream, LLC ("DCP") and Plains Marketing, LP ("Plains") collectively accounted for 87% of our total oil, NGL and gas sales, excluding realized commodity derivative settlements. As of December 31, 2012, we had dedicated all of our oil production from northern Project Pangea and Pangea West for 10 years to an oil pipeline joint venture in which we own a 50% equity interest. In addition, as of December 31, 2012, we had contracted to sell all of our NGL and natural gas production from Project Pangea to DCP through January 2016. To the extent that any of our major purchasers reduces their purchases of oil, NGLs or gas, is unable to take our oil, NGLs or gas due to infrastructure or capacity limitations or defaults on their obligations to us, we would be adversely affected unless we were able to make comparably favorable arrangements with other purchasers. These purchasers' default or non-performance could be caused by factors beyond our control. A default could occur as a result of circumstances relating directly to one or more of these customers, or due to circumstances related to other market participants with which the customer has a direct or indirect relationship.

[Table of Contents](#)

We depend on our management team and other key personnel. The loss of any of these individuals, or the inability to attract, train and retain additional qualified personnel, could adversely affect our business, financial condition and the results of operations and future growth.

Our success largely depends on the skills, experience and efforts of our management team and other key personnel and the ability to attract, train and retain additional qualified personnel. The loss of the services of one or more members of our senior management team or of our other employees with critical skills needed to operate our business could have a negative effect on our business, financial condition, results of operations and future growth. In January 2011, we entered into amended and restated employment agreements with J. Ross Craft, P.E., our President and Chief Executive Officer; and Steven P. Smart, our Executive Vice President and Chief Financial Officer; and new employment agreements with Qingming Yang, our Chief Operating Officer; J. Curtis Henderson, our Executive Vice President and General Counsel; and Ralph P. Manoushagian, our Executive Vice President—Land. If any of these officers or other key personnel resign or become unable to continue in their present roles and are not adequately replaced, our business operations could be materially adversely affected. In addition, our ability to manage our growth, if any, will require us to effectively train, motivate and manage our existing employees and to attract, motivate and retain additional qualified personnel. Competition for these types of personnel is intense, and we may not be successful in attracting, assimilating and retaining the personnel required to grow and operate our business profitably.

Market conditions or transportation and infrastructure impediments may hinder our access to oil, NGL and gas markets or delay our production or sales.

Market conditions or the unavailability of satisfactory oil, NGL and gas processing and transportation services and infrastructure may hinder our access to oil, NGL and gas markets or delay our production or sales. Although currently we control the gathering systems for our operations in the Permian Basin, we do not have such control over the regional or downstream pipelines in and out of the Permian Basin. The availability of a ready market for our oil, NGL and gas production depends on a number of factors, including market demand and the proximity of our reserves to pipelines or trucking and rail terminal facilities.

In addition, the amount of oil, NGLs and gas that can be produced and sold is subject to curtailment in certain circumstances, such as pipeline interruptions due to maintenance, excessive pressure, ability of downstream processing facilities to accept unprocessed gas or NGLs, physical damage or operational interruptions to the gathering or transportation system or downstream processing and fractionation facilities or lack of contracted capacity on such systems or facilities. For example, in March 2013, our production was curtailed as a result of third-party NGL fractionation facility repair and maintenance, and in May 2013, production was curtailed as the result of a power outage at the same facility. We have no assurance that such curtailment will not occur again in the future.

The curtailments arising from these and similar circumstances may last from a few days to several months, and in many cases, we are provided with limited, if any, notice as to when these circumstances will arise and their duration. As a result, we may not be able to sell, or may have to transport by more expensive means, the oil, NGL and gas that we produce, or we may be required to shut in oil or gas wells or delay initial production until the necessary gathering and transportation systems are available. Any significant curtailment in gathering system,

[Table of Contents](#)

transportation, pipeline capacity or significant delay in construction of necessary gathering and transportation facilities, could adversely affect our business, financial condition and results of operations.

The unavailability or high cost of drilling rigs, equipment, materials, personnel and oilfield services could adversely affect our ability to execute our drilling and development plans on a timely basis and within our budget.

Our industry is cyclical and, from time to time, there is a shortage of drilling rigs, equipment, supplies or qualified personnel. During these periods, the costs and delivery times of equipment, oilfield services and supplies are substantially greater. In addition, the demand for, and wage rates of, qualified drilling and completion crews rise as the number of active rigs in service increases. Increasing levels of exploration and production will increase the demand for oilfield services, and the costs of these services may increase, while the quality of these services may suffer. If the availability of equipment, crews, materials and services in the Permian Basin is particularly severe, our business, results of operations and financial condition could be materially and adversely affected because our operations and properties are concentrated in the Permian Basin.

Competition in the oil and gas industry is intense, and many of our competitors have resources that are greater than ours.

We operate in a highly competitive environment for acquiring prospects and productive properties, marketing oil and gas and securing equipment and skilled personnel. Many of our competitors are major and large independent oil and gas companies that have financial, technical and personnel resources substantially greater than ours. Those companies may be able to develop and acquire more prospects and productive properties than our financial or personnel resources permit. Our ability to develop and operate our current project, acquire additional prospects and discover reserves in the future will depend on our ability to hire and retain qualified personnel, evaluate and select suitable properties and consummate transactions and in a highly competitive environment. Also, there is substantial competition for capital available for investment in the oil and gas industry. Larger competitors may be better able to withstand sustained periods of unsuccessful drilling and absorb the burden of changes in laws and regulations more easily than we can, which would adversely affect our competitive position. We may not be able to compete successfully in the future in attracting and retaining qualified personnel, acquiring prospective reserves, developing reserves, marketing oil, NGLs and gas and raising additional capital.

Our identified drilling locations are scheduled to be drilled over many years, making them susceptible to uncertainties that could prevent them from being drilled or delay their drilling. In certain instances, this could prevent drilling and production before the expiration date of leases for such locations.

Our management team has identified drilling locations as an estimation of our future development activities on our existing acreage. These identified drilling locations represent a significant part of our growth strategy. Our ability to drill and develop these identified drilling locations depends on a number of uncertainties, including oil, NGL and gas prices, the availability and cost of capital, drilling and production costs, availability of drilling services and equipment, drilling results, lease expirations, gathering system, marketing and transportation constraints,

[Table of Contents](#)

regulatory approvals and other factors. Because of these uncertain factors, we do not know if the identified drilling locations we have identified will ever be drilled or if we will be able to produce oil or gas from these or any other identified drilling locations. In addition, unless production is established within the spacing units covering the undeveloped acres on which some of the identified locations are obtained, the leases for such acreage will expire. Therefore, our actual drilling activities may materially differ from those presently identified.

The use of geoscientific, petrophysical and engineering analyses and other technical or operating data to evaluate drilling prospects is uncertain and does not guarantee drilling success or recovery of economically producible reserves.

Our decisions to explore, develop and acquire prospects or properties targeting Wolfcamp and other zones in the Permian Basin and other areas depend on data obtained through geoscientific, petrophysical and engineering analyses, the results of which can be uncertain. Even when properly used and interpreted, data from whole cores, regional well log analyses, 3-D seismic and micro-seismic only assist our technical team in identifying hydrocarbon indicators and subsurface structures and estimating hydrocarbons in place. They do not allow us to know conclusively the amount of hydrocarbons in place and if those hydrocarbons are producible economically. In addition, the use of advanced drilling and completion technologies for our Wolfcamp development, such as horizontal drilling and multi-stage fracture stimulations, requires greater expenditures than our traditional development drilling strategies. Our ability to commercially recover and produce the hydrocarbons that we believe are in place and attributable to the Wolfcamp and other zones will depend on the effective use of advanced drilling and completion techniques, the scope of our development project (which will be directly affected by the availability of capital), drilling and production costs, availability of drilling and completion services and equipment, drilling results, lease expirations, regulatory approval and geological and mechanical factors affecting recovery rates. Our estimates of unproved reserves, estimated ultimate recoveries per well, hydrocarbons in place and resource potential may change significantly as development of our oil and gas assets provides additional data.

Unless we replace our oil and gas reserves, our reserves and production will decline.

Our future oil and gas production depends on our success in finding or acquiring additional reserves. If we fail to replace reserves through drilling or acquisitions, our production, revenues and cash flows will be adversely affected. In general, production from oil and gas properties declines as reserves are depleted, with the rate of decline depending on reservoir characteristics. Our total proved reserves will decline as reserves are produced, unless we conduct other successful exploration and development activities or acquire properties containing proved reserves, or both. Our ability to make the necessary capital investment to maintain or expand our asset base of oil and gas reserves would be limited to the extent cash flow from operations is reduced and external sources of capital become limited or unavailable. We may not be successful in exploring for, developing or acquiring additional reserves.

We have leases and options for undeveloped acreage that may expire in the near future.

As of December 31, 2012, we held mineral leases or options in each of our areas of operations that are still within their original lease term and are not currently held by production. Unless we establish commercial production on the properties subject to these leases, most of these leases will expire between 2013 and 2016. If these leases or options expire, we will lose our right to

[Table of Contents](#)

develop the related properties. See “Business—Properties—Undeveloped acreage expirations” for a table summarizing the expiration schedule of our undeveloped acreage over the next three years. Acreage set to expire over the next three years accounts for 95% of our net undeveloped acreage, 17.2% of our proved undeveloped reserves and 11.3% of our total proved reserves.

Our actual production, revenues and expenditures related to our reserves are likely to differ from our estimates of our proved reserves. We may experience production that is less than estimated and drilling costs that are greater than estimated in our reserve reports. These differences may be material.

The proved oil, NGL and gas reserves data included in this prospectus supplement and the accompanying prospectus are estimates. Petroleum engineering is a subjective process of estimating underground accumulations of oil and gas that cannot be measured in an exact manner. Estimates of economically recoverable oil, NGL and gas reserves and of future net cash flows necessarily depend upon a number of variable factors and assumptions, including:

- historical production from the area compared with production from other similar producing areas;
- the assumed effects of regulations by governmental agencies;
- assumptions concerning future oil, NGL and gas prices; and
- assumptions concerning future operating costs, severance and excise taxes, development costs and workover and remedial costs.

Because all reserves estimates are to some degree subjective, each of the following items may differ materially from those assumed in estimating proved reserves:

- the quantities of oil, NGL and gas that are ultimately recovered;
- the production and operating costs incurred;
- the amount and timing of future development expenditures; and
- future oil, NGL and gas prices.

As of December 31, 2012, approximately 66% of our proved reserves were proved undeveloped. Estimates of proved undeveloped reserves are even less reliable than estimates of proved developed reserves. Furthermore, different reserve engineers may make different estimates of reserves and future net revenues based on the same available data. Our actual production, revenues and expenditures with respect to reserves will likely be different from estimates and the differences may be material.

The PV-10 included in this prospectus supplement and the accompanying prospectus should not be considered as the current market value of the estimated oil and gas reserves attributable to our properties.

The non-GAAP financial measure, PV-10, is based on the average of the closing price on the first day of the month for the 12-month period prior to fiscal year end, while actual future prices and costs may be materially higher or lower. If oil, NGL and gas prices decline by 10% from \$94.71 per Bbl of oil, \$37.88 per Bbl of NGLs and \$2.74 per MMBtu of gas, to \$85.24 per Bbl of oil, \$34.09 per Bbl of NGLs and \$2.47 per MMBtu of gas, then our PV-10 as of December 31, 2012, would decrease from \$830.9 million to approximately \$633.7 million. The average market price received for our production for the month of December 2012 was \$76.47 per Bbl of oil, \$28.71 per Bbl of

[Table of Contents](#)

NGLs and \$3.22 per Mcf of gas (after basis differential and Btu adjustments). Actual future net revenues also will be affected by factors such as the amount and timing of actual production, prevailing operating and development costs, supply and demand for oil and gas, increases or decreases in consumption and changes in governmental regulations or taxation.

Severe weather could have a material adverse impact on our business.

Our business could be materially and adversely affected by severe weather. Repercussions of severe weather conditions may include:

- curtailment of services;
- weather-related damage to drilling rigs, resulting in suspension of operations;
- weather-related damage to our producing wells or facilities;
- inability to deliver materials to jobsites in accordance with contract schedules; and
- loss of production.

Operating hazards or other interruptions of our operations could result in potential liabilities, which may not be fully covered by our insurance.

The oil and gas business involves certain operating hazards such as well blowouts, cratering, explosions, uncontrollable flows of gas, oil or well fluids, fires, surface and subsurface pollution and contamination, and releases of toxic gas. The occurrence of one of the above may result in injury, loss of life, suspension of operations, environmental damage and remediation and/or governmental investigations and penalties. Consistent with insurance coverage generally available to the industry, our insurance policies provide limited coverage for losses or liabilities relating to pollution, with broader coverage for sudden and accidental occurrences. Our insurance might be inadequate to cover our liabilities. The insurance market in general and the energy insurance market in particular have been difficult markets over the past several years. Insurance costs are expected to continue to increase over the next few years, and we may decrease coverage and retain more risk to mitigate future cost increases. If we incur substantial liability and the damages are not covered by insurance or are in excess of policy limits, or if we incur liability at a time when we are not able to obtain liability insurance, then our business, results of operations and financial condition could be materially adversely affected.

Our results are subject to quarterly and seasonal fluctuations.

Our quarterly operating results have fluctuated in the past and could be negatively impacted in the future as a result of a number of factors, including seasonal variations in oil, NGL and gas prices, variations in levels of production and the completion of development projects.

We have renounced any interest in specified business opportunities, and certain members of our board of directors and certain of our stockholders generally have no obligation to offer us those opportunities.

In accordance with Delaware law, we have renounced any interest or expectancy in any business opportunity, transaction or other matter in which our outside directors and certain of our stockholders, each referred to as a Designated Party, participates or desires to participate in that involves any aspect of the exploration and production business in the oil and gas industry. If any such business opportunity is presented to a Designated Party who also serves as a member of our

[Table of Contents](#)

board of directors, the Designated Party has no obligation to communicate or offer that opportunity to us, and the Designated Party may pursue the opportunity as he sees fit, unless:

- it was presented to the Designated Party solely in that person's capacity as a director of our Company and with respect to which, at the time of such presentment, no other Designated Party has independently received notice of, or otherwise identified the business opportunity; or
- the opportunity was identified by the Designated Party solely through the disclosure of information by or on behalf of us.

As a result of this renunciation, our outside directors should not be deemed to have breached any fiduciary duty to us if they or their affiliates or associates pursue opportunities as described above and our future competitive position and growth potential could be adversely affected.

S-33

[Table of Contents](#)

Ratio of earnings to fixed charges

The following table contains our consolidated ratio of earnings to fixed charges for the periods indicated:

| | Years ended December 31, | | | | | Three months ended |
|---|--------------------------|------|-------|-------|-------|--------------------|
| | 2008 | 2009 | 2010 | 2011 | 2012 | March 31, 2013 |
| Ratio of earnings (loss) to fixed charges (1) | 28.77x | —(2) | 6.21x | 4.13x | 3.04x | —(2) |

(1) The ratio has been computed by dividing earnings (loss) by fixed charges. For purposes of computing the ratio, (i) earnings (loss) consist of income (loss) before income taxes, and (ii) fixed charges consist of interest expense and a portion of rentals representative of an implicit interest factor for such rentals.

(2) Due to our net loss for the year ended December 31, 2009, and for the three months ended March 31, 2013, the coverage ratio for each of these periods was less than 1:1. To achieve a coverage ratio of 1:1, we would have needed additional earnings of approximately \$4.2 million for the year ended December 31, 2009, and additional earnings of approximately \$0.5 million for the three months ended March 31, 2013.

We did not have any preferred stock outstanding and there were no preferred stock dividends paid or accrued during the periods presented above.

S-34

[Table of Contents](#)

Use of proceeds

We estimate that the net proceeds from this offering will be approximately \$243 million after deducting fees and expenses (including underwriting discounts and commissions). We intend to use the net proceeds from this offering to repay the outstanding indebtedness under our revolving credit facility, to fund our capital expenditures and for general working capital needs.

At May 30, 2013, we had a \$500 million revolving credit facility with a borrowing base of \$315 million. We had outstanding borrowings of \$175.5 million under our revolving credit facility at May 30, 2013, and the weighted average interest rate applicable to our revolving credit facility was 2.95%. Our revolving credit facility matures on July 31, 2016. Borrowings under our revolving credit facility were incurred primarily to fund our capital expenditures for the development of our Wolfcamp oil shale resource play and for general working capital needs. Any amounts repaid with the proceeds from this offering may be reborrowed in the future.

Affiliates of J.P. Morgan Securities LLC, RBC Capital Markets, LLC, KeyBanc Capital Markets Inc. and Wells Fargo Securities, LLC serve as lenders under our revolving credit facility and, in such capacity, will receive a portion of the net proceeds from this offering. Please read "Underwriting; Conflicts of interest."

S-35

[Table of Contents](#)

Capitalization

The following table sets forth our capitalization as of March 31, 2013:

- on a historical basis; and
- on an as adjusted basis to give effect to the completion of this offering after deducting fees and expenses (including underwriting discounts and commission), and our application of the estimated net proceeds thereof, in the manner described in "Use of proceeds," as if the offering had occurred on March 31, 2013.

You should read the information in this table together with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and the related notes included in the prospectus supplement.

| March 31, 2013 (in thousands) | Historical | As Adjusted |
|--|-------------------|------------------------|
| Cash and cash equivalents | \$ 594 | \$ 91,359 |
| Long-term debt | | |
| Revolving credit facility(1) | \$ 152,250 | \$ — |
| Notes offered hereby(2) | — | 250,000 |
| Total long-term debt | \$ 152,250 | \$250,000 |
| Total stockholders' equity | \$ 635,211 | \$635,211 |
| Total capitalization | \$ 787,461 | \$885,211 |

(1) As of May 30, 2013, outstanding borrowings under our revolving credit facility totaled approximately \$175.5 million.

(2) Represents the aggregate principal amount of the notes offered hereby issued at par.

[Table of Contents](#)

Selected historical consolidated financial information

The following table sets forth selected financial information for the five years ended December 31, 2012 and for the three months ended March 31, 2012 and 2013. This information should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations," and our consolidated financial statements, related notes and other financial information included in this prospectus supplement.

We derived the statement of operations data and statement of cash flows data for the years ended December 31, 2010, 2011 and 2012, and balance sheet data as of December 31, 2011 and 2012 from the audited consolidated financial statements included in this prospectus supplement. We derived the statement of operations data and statement of cash flows data for the years ended December 31, 2008 and 2009 and the balance sheet data as of December 31, 2008, 2009 and 2010, from our audited consolidated financial statements not included in this prospectus supplement. The statement of operations data and statement of cash flows data for the three months ended March 31, 2012 and 2013, and the balance sheet data as of March 31, 2012 and 2013, from the unaudited consolidated financial statements included in this prospectus supplement.

S-37

[Table of Contents](#)

| (In thousands) | Years ended December 31, | | | | | Three months ended March 31, | |
|--|--------------------------|------------|-----------|------------|------------|------------------------------|---------------------|
| | 2008 | 2009 | 2010 | 2011 | 2012 | 2012 (unaudited) | 2013 (unaudited) |
| Operating Results Data | | | | | | | |
| Revenues | | | | | | | |
| Oil, NGL and gas sales | \$ 79,869 | \$ 40,648 | \$ 57,581 | \$ 108,387 | \$ 128,892 | \$ 30,618 | \$ 36,269 |
| Expenses | | | | | | | |
| Lease operating(1) | 6,425 | 6,018 | 6,620 | 10,687 | 19,002 | 3,580 | 5,383 |
| Production and ad valorem taxes(1) | 5,398 | 3,755 | 4,925 | 8,447 | 9,255 | 2,218 | 2,556 |
| Exploration | 1,478 | 1,621 | 2,589 | 9,546 | 4,550 | 1,287 | 260 |
| Impairment | 6,379 | 2,964 | 2,622 | 18,476 | — | — | — |
| General and administrative | 8,881 | 10,617 | 11,422 | 17,900 | 24,903 | 5,764 | 6,410 |
| Depletion, depreciation and amortization | 23,710 | 24,660 | 22,224 | 32,475 | 60,381 | 11,030 | 17,056 |
| Total expenses | 52,271 | 49,635 | 50,402 | 97,531 | 118,091 | 23,879 | 31,665 |
| Operating income (loss) | \$ 27,598 | \$ (8,987) | \$ 7,179 | \$ 10,856 | \$ 10,801 | \$ 6,739 | \$ 4,604 |
| Other | | | | | | | |
| Impairment of investment | (917) | — | — | — | — | — | — |
| Interest expense, net | (1,269) | (1,787) | (2,189) | (3,402) | (4,737) | (887) | (1,229) |
| Equity in losses of investee | — | — | — | — | (108) | — | (116) |
| Realized gain (loss) on commodity derivatives | 2,936 | 14,659 | 5,784 | 3,375 | (108) | (484) | 307 |
| Unrealized gain (loss) on commodity derivatives | 7,149 | (9,899) | 788 | (347) | 3,874 | (2,672) | (4,100) |
| Gain on sale of oil and gas properties, net of foreign currency transaction loss | — | — | — | 248 | — | — | — |
| Income (loss) before provision (benefit) for income taxes | \$ 35,497 | \$ (6,014) | \$ 11,562 | \$ 10,730 | \$ 9,722 | \$ 2,696 | \$ (534) |
| Provision (benefit) for income taxes | 12,111 | (785) | 4,100 | 3,488 | 3,338 | 982 | (187) |
| Net income (loss) | \$ 23,386 | \$ (5,229) | \$ 7,462 | \$ 7,242 | \$ 6,384 | \$ 1,714 | \$ (347) |
| Statement of Cash Flows Data | | | | | | | |
| Net cash provided by (used in) | | | | | | | |
| Operating activities | \$ 56,381 | \$ 39,761 | \$ 42,377 | \$ 95,770 | \$ 90,585 | \$ 35,491 | 29,368 |
| Investing activities | (100,633) | (29,553) | (91,346) | (284,758) | (307,414) | (77,665) | (75,986) |
| Financing activities | 43,750 | (11,618) | 69,748 | 165,843 | 217,295 | 42,348 | 46,175 |
| Balance Sheet Data (as of period end) | | | | | | | |
| Cash and cash equivalents | \$ 4,077 | \$ 2,685 | \$ 23,465 | \$ 301 | \$ 767 | \$ 475 | \$ 594 |
| Other current assets | 30,760 | 9,318 | 17,865 | 11,085 | 14,889 | 12,727 | 12,018 |
| Property, equipment, net, successful efforts method | 303,404 | 304,483 | 369,210 | 595,284 | 828,467 | 660,815 | 881,008 |
| Equity method investment | — | — | — | — | 9,892 | — | 16,056 |
| Other assets | — | 2,440 | 2,549 | 1,224 | 1,724 | 1,159 | 1,406 |
| Total assets | \$ 338,241 | \$318,926 | \$413,089 | \$ 607,894 | \$ 855,739 | \$ 675,176 | \$ 911,082 |
| Current liabilities | \$ 30,775 | \$ 21,996 | \$ 29,240 | \$ 43,625 | \$ 60,247 | \$ 62,198 | \$ 66,289 |
| Long-term debt | 43,537 | 32,319 | — | 43,800 | 106,000 | 85,400 | 152,250 |
| Other long-term liabilities | 40,116 | 44,115 | 50,903 | 53,020 | 56,024 | 55,660 | 57,332 |
| Stockholders' equity | 223,813 | 220,496 | 332,946 | 467,449 | 633,468 | 471,918 | 635,211 |
| Total liabilities and stockholders equity | \$ 338,241 | \$318,926 | \$413,089 | \$ 607,894 | \$ 855,739 | \$ 675,176 | \$ 911,082 |

[Table of Contents](#)

Management's discussion and analysis of financial condition and results of operations

The following discussion is intended to assist in understanding our results of operations and our financial condition. Our consolidated financial statements and the accompanying notes included elsewhere in this prospectus supplement contain additional information that should be referred to when reviewing this material. Statements in this discussion may be forward-looking. These forward-looking statements involve risks and uncertainties, which could cause actual results to differ from those expressed. See "Cautionary Statement Regarding Forward-Looking Statements" and "Risk Factors" for additional discussion of some of these factors and risks.

Overview

Approach Resources Inc. is an independent energy company engaged in the exploration, development, production and acquisition of oil and gas properties. We focus on oil and gas reserves in oil shale and tight gas sands in the Permian Basin in West Texas, where we lease approximately 148,000 net acres. Our drilling targets include the Clearfork, Wolfcamp shale, Canyon Sands, Strawn and Ellenburger zones. We sometimes refer to the Clearfork and Wolfcamp zones together as the "Wolffork," and our development project in the Permian Basin as "Project Pangea," which includes "Pangea West." Our management and technical team have a proven track record of finding and developing reserves through advanced drilling and completion techniques. As the operator of all of our estimated proved reserves and production, we have a high degree of control over capital expenditures and other operating matters.

At December 31, 2012, our estimated proved reserves were 95.5 million barrels of oil equivalent ("MMBoe"). Substantially all of our proved reserves are located in Crockett and Schleicher Counties, Texas. Important characteristics of our proved reserves at December 31, 2012, include:

- 39% oil, 30% NGLs and 31% natural gas;
- 34% proved developed;
- 100% operated;
- Reserve life of more than 30 years based on 2012 production of 2.9 MMBoe;
- Standardized Measure of \$494.2 million; and
- PV-10 of \$830.9 million.

See "Supplemental Non-GAAP Financial and Other Measures" for our definition of PV-10 and reconciliation to standardized measure.

At March 31, 2013, we owned working interests in 667 producing oil and gas wells, and we had an estimated 2,983 identified drilling and recompletion locations, of which 359 were proved.

First quarter 2013 activity

During the three months ended March 31, 2013, we produced 754 MBoe, or 8.4 MBoe/d. We drilled 10 wells and completed five wells, including three wells that were waiting on completion at December 31, 2012. At March 31, 2013, 12 wells were in progress or waiting on completion, of which five wells were completed and turned to sales shortly after March 31, 2013. We currently have three horizontal rigs running in Project Pangea and Pangea West.

[Table of Contents](#)**2012 Activity**

Our operations in 2012 focused on horizontal drilling in our Wolfcamp oil shale resource play in the Permian Basin. We drilled 26 horizontal wells in 2012, compared to 13 horizontal wells in 2011. Our early results in the Wolfcamp play led us to invest in building an infrastructure system that we believe will reduce drilling and completion costs, improve drilling and completion efficiencies, reduce fresh water use and ensure transportation for our crude oil production to market. We plan to continue to develop the Wolfcamp shale in Project Pangea in 2013. Focusing on the Wolfcamp shale allows us to use our operating, technical and regional expertise that is important to interpreting geological and operating trends, enhancing production rates and maximizing well recovery.

Production growth

Production for 2012 totaled 2.9 MMBoe (7.9 MBoe/d), compared to 2.3 MMBoe (6.4 MBoe/d) in 2011, a 24% increase. Production for 2012 was 34% oil, 31% NGLs and 35% natural gas. Our continued development of Project Pangea increased oil production 101% in 2012, compared to 2011. On average, we operated two horizontal rigs and one vertical rig in 2012, and drilled a total of 46 wells, of which 10 were waiting on completion at December 31, 2012. We also recompleted 18 wells in the Wolffork in 2012.

Reserve growth

In 2012, our estimated proved reserves increased 24%, or 18.5 MMBoe, to 95.5 MMBoe from 77.0 MMBoe. Our proved reserves at year-end 2012 were 39% oil, 30% NGLs and 31% natural gas, compared to 23% oil, 38% NGLs and 39% natural gas at year-end 2011. During 2012, our proved oil reserves increased 19.2 MMBbls, or 106%, to 37.3 MMBbls from 18.1 MMBbls in 2011. Reserve growth, and especially our oil reserve growth, in 2012 was driven primarily by results in our Wolfcamp oil shale resource play.

2012 Equity offering

In September 2012, we sold 5 million shares of common stock in an underwritten public equity offering at \$30.50 per share (the "2012 Equity Offering"). In October 2012, the underwriters exercised their option and purchased an additional 325,000 shares. After deducting underwriting discounts and transaction costs of approximately \$8 million, we received net proceeds of approximately \$154.4 million. We used the proceeds of the 2012 Equity Offering to repay outstanding borrowings under our revolving credit facility, fund our capital expenditures for the development of our Wolfcamp oil shale resource play and for general working capital needs.

2013 Capital expenditures

For the three months ended March 31, 2013, our capital expenditures totaled \$69.5 million, consisting of \$61.8 million for drilling and completion activities, \$6.7 million for pipeline, infrastructure projects and other equipment and \$1 million for acreage acquisitions and 3-D seismic data acquisition. Also, during the three months ended March 31, 2013, we made a capital contribution to our pipeline joint venture of \$6.3 million for oil pipeline and facilities construction. Our 2013 capital budget is \$260 million, which includes three rigs to drill horizontal wells targeting the Wolfcamp shale. We expect that our horizontal drilling in Project Pangea in

[Table of Contents](#)

2013 will include pad drilling, which we believe will improve operating efficiencies and resource recoveries, while reducing facilities costs and surface impact. We also may drill vertical wells targeting the Wolffork or recomplete Canyon Sands wells in the Wolffork during 2013. Our objectives for 2013 include advancing our understanding of optimal well spacing, testing multi-zone potential, with the goal of enhancing hydrocarbon recovery in our Wolffork targets and improving our cost structure.

Our 2013 capital budget excludes acquisitions and is subject to change depending upon a number of factors, including additional data on our Wolfcamp oil shale resource play, results of horizontal and vertical drilling, completions and recompletions, including pad drilling, economic and industry conditions at the time of drilling, prevailing and anticipated prices for oil, NGLs and gas, the availability of sufficient capital resources for drilling prospects, our financial results and the availability of lease extensions and renewals on reasonable terms.

Critical accounting policies and estimates

The discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements, which have been prepared in accordance with GAAP. The preparation of our consolidated financial statements requires us to make estimates and assumptions that affect our reported results of operations and the amount of reported assets, liabilities and proved oil and gas reserves. Some accounting policies involve judgments and uncertainties to such an extent that there is reasonable likelihood that materially different amounts could have been reported under different conditions, or if different assumptions had been used. Actual results may differ from the estimates and assumptions used in the preparation of our consolidated financial statements. Described below are the most significant policies we apply in preparing our consolidated financial statements, some of which are subject to alternative treatments under GAAP. We also describe the most significant estimates and assumptions we make in applying these policies. See Note 1 to our consolidated financial statements.

Segment reporting is not applicable to us as we have a single, company-wide management team that administers all significant properties as a whole, rather than by discrete operating segments. We track only basic operational data by area. We do not maintain complete separate financial statement information by area. We measure financial performance as a single enterprise and not on an area-by-area basis. We use the successful efforts method of accounting for our oil and gas activities.

Successful efforts method of accounting

Accounting for oil and gas activities is subject to special, unique rules. We use the successful efforts method of accounting for our oil and gas activities. The significant principles for this method are:

- geological and geophysical evaluation costs are expensed as incurred;
- dry holes for exploratory wells are expensed and dry holes for development wells are capitalized; and
- capitalized costs related to proved oil and gas properties, including wells and related equipment and facilities, are evaluated for impairment based on an analysis of undiscounted future net cash flows in accordance with ASC 360. If undiscounted cash flows are insufficient to

Table of Contents

recover the net capitalized costs related to proved properties, then we recognize an impairment charge in income from operations equal to the difference between the net capitalized costs related to proved properties and their estimated fair values based on the present value of the related future net cash flows.

Proved reserves

For the year ended December 31, 2012, we engaged DeGolyer and MacNaughton, independent petroleum engineers, to prepare independent estimates of the extent and value of 100% of our reported proved reserves, in accordance with rules and guidelines established by the SEC.

Estimates of proved oil and gas reserves directly impact financial accounting estimates including depletion, depreciation and amortization expense, evaluation of impairment of properties and the calculation of plugging and abandonment liabilities. Proved oil and gas reserves are those quantities of oil and gas, which, by analysis of geoscience and engineering data, can be estimated with reasonable certainty to be economically producible from a given date forward, from known reservoirs, and under existing economic conditions, operating methods and government regulations. The process of estimating quantities of proved reserves is very complex, requiring significant subjective decisions in the evaluation of all geological, engineering and economic data for each reservoir. The data for any reservoir may change substantially over time due to results from operational activity. Proved reserve volumes at December 31, 2012, were estimated based on the average of the closing price on the first day of each month for the 12-month period prior to December 31, 2012, for oil, NGLs and gas in accordance with SEC rules. Changes in commodity prices and operations costs may increase or decrease estimates of proved oil, NGL and natural gas reserves. Depletion expense for our oil and gas properties is determined using our estimates of proved oil, NGL and gas reserves. A hypothetical 10% decline in our December 31, 2012, estimated proved reserves would have increased our depletion expense by approximately \$1.9 million for the year ended December 31, 2012.

See “Business—Properties—Proved oil and gas reserves” and Note 10 to our audited consolidated financial statements included in this prospectus supplement for additional information regarding our estimated proved reserves.

Derivative instruments and commodity derivative activities

Unrealized gains and losses, at fair value, are included on our consolidated balance sheets as current or non-current assets or liabilities based on the anticipated timing of cash settlements under the related contracts. Changes in the fair value of our commodity derivative contracts are recorded in earnings as they occur and included in other income (expense) on our consolidated statements of operations. We estimate the fair values of swap contracts based on the present value of the difference in exchange-quoted forward price curves and contractual settlement prices multiplied by notional quantities. We internally valued the option contracts using industry-standard option pricing models and observable market inputs. We use our internal valuations to determine the fair values of the contracts that are reflected on our consolidated balance sheets. Realized gains and losses are also included in other income (expense) on our consolidated statements of operations.

We are exposed to credit losses in the event of nonperformance by the counterparties on our commodity derivatives positions and have considered the exposure in our internal valuations. However, we do not anticipate nonperformance by the counterparties over the term of the commodity derivatives positions.

Table of Contents

Changes in the derivative's fair value are currently recognized in the statement of operations unless specific commodity derivative hedge accounting criteria are met and such strategies are designated. For qualifying cash-flow commodity derivatives, the gain or loss on the derivative is deferred in accumulated other comprehensive income to the extent the commodity derivative is effective. The ineffective portion of the commodity derivative is recognized immediately in the statement of operations. Gains and losses on commodity derivative instruments included in accumulated other comprehensive income are reclassified to oil and gas sales revenue in the period that the related production is delivered. Derivative contracts that do not qualify for commodity derivative accounting treatment are recorded as derivative assets and liabilities at fair value in the balance sheet, and the associated unrealized gains and losses are recorded as current income or expense in the statement of operations.

Historically, we have not designated our derivative instruments as cash-flow hedges. We record our open derivative instruments at fair value on our consolidated balance sheets as either unrealized gains or losses on commodity derivatives. We record changes in such fair value in earnings on our consolidated statements of operations under the caption entitled "unrealized gain (loss) on commodity derivatives."

Although we have not designated our derivative instruments as cash-flow hedges, we use those instruments to reduce our exposure to fluctuations in commodity prices related to our oil and gas production. Accordingly, we record realized gains and losses under those instruments in other revenues on our consolidated statements of operations.

For the year ended December 31, 2011, we recognized an unrealized loss of \$347,000 from the change in the fair value of commodity derivatives. For the years ended December 31, 2012 and 2010, we recognized an unrealized gain of \$3.9 million and \$788,000, respectively, from the change in the fair value of commodity derivatives. A hypothetical 10% increase in the NYMEX floating prices would have resulted in a \$5.4 million decrease in the December 31, 2012, fair value recorded on our balance sheet and a corresponding decrease to the gain on commodity derivatives in our statement of operations.

Asset retirement obligation

Our asset retirement obligation primarily represents the estimated present value of the amount we will incur to plug, abandon and remediate our producing properties at the end of their productive lives, in accordance with applicable federal, state and local laws. We determine our asset retirement obligation by calculating the present value of estimated cash flows related to the liability. The retirement obligation is recorded as a liability at its estimated present value as of the asset's inception, with an offsetting increase to proved properties. Periodic accretion of discount of the estimated liability is recorded as an expense in the income statement.

Our liability is determined using significant assumptions, including current estimates of plugging and abandonment costs, annual inflation of these costs, the productive lives of wells and our risk-adjusted interest rate. Changes in any of these assumptions can result in significant revisions to the estimated asset retirement obligation.

Impairment of long-lived assets

All of our long-lived assets are monitored for potential impairment when circumstances indicate that the carrying value of an asset may be greater than its future net cash flows. The evaluations involve a significant amount of judgment since the results are based on estimated future events,

[Table of Contents](#)

such as future sales prices for oil, NGLs and gas, future costs to produce these products, estimates of future oil and gas reserves to be recovered and the timing thereof, the economic and regulatory climates and other factors. The need to test an asset for impairment may result from significant declines in commodity prices or downward revisions to estimated quantities of oil and gas reserves. Any assets held for sale are reviewed for impairment when we approve the plan to sell. Estimates of anticipated sales prices are highly judgmental and subject to material revision in future periods. Because of the uncertainty inherent in these factors, we cannot predict when or if future impairment charges will be recorded.

Provision for income taxes

We estimate our provision for income taxes using historical tax basis information from prior years' income tax returns, along with the estimated changes to such bases from current period activity and enacted tax rates. Additionally, we compare liabilities to actual settlements of such assets or liabilities during the current period to identify considerations that might affect the current period's estimate.

Valuation of share-based compensation

Our 2007 Plan allows grants of stock and options to employees and outside directors. Granting of awards may increase our general and administrative expenses, subject to the size and timing of the grants. See Note 5 to our consolidated financial statements.

In accordance with GAAP, we calculate the fair value of share-based compensation using various valuation methods. The valuation methods require the use of estimates to derive the inputs necessary to determine fair value. We use (i) the Black-Scholes option price model to measure the fair value of stock options, (ii) the closing stock price on the date of grant for the fair value of restricted stock awards, including performance-based awards, and (iii) the Monte Carlo simulation method for the fair value of market-based awards.

Equity method investments

For investments in which we have the ability to exercise significant influence but do not have control, we follow the equity method of accounting. In September 2012, we entered into a joint venture to build an oil pipeline in Crockett and Reagan Counties, Texas, which will be used to transport our oil to market. In October 2012, we made an initial contribution of \$10 million to the joint venture for pipeline and facilities construction. This initial contribution was recorded at cost. Additionally, during the three months ended March 31, 2013, we made a \$6.3 million capital contribution to our pipeline joint venture for oil pipeline and facilities. Our equity investment is classified as a noncurrent asset on our consolidated balance sheet. Our share of the investee's income or losses are recorded on our consolidated statement of operations.

Effects of inflation

Inflation in the United States has been relatively low in recent years and did not have a material impact on our results of operations for the years ended December 31, 2012, 2011 or 2010. Although the impact of inflation has been insignificant in recent years, it is still a factor in the United States economy and may increase the cost to acquire or replace property and equipment. It may also increase the cost of labor or supplies.

[Table of Contents](#)**Results of operations****Comparison of the three months ended March 31, 2013 and 2012**

The following table sets forth summary information regarding oil, NGL and gas revenues, production, average product prices and average production costs and expenses for the three months ended March 31, 2013 and 2012. We determine a barrel of oil equivalent using the ratio of six Mcf of natural gas to one Boe, and one barrel of NGLs to one Boe. The ratios of six Mcf of natural gas to one Boe and one barrel of NGLs to one Boe do not assume price equivalency and, given price differentials, the price for a Boe for natural gas or NGLs may differ significantly from the price for a barrel of oil.

| | Three months ended March 31, | |
|--|---------------------------------|-----------|
| | 2013 | 2012 |
| Revenues (in thousands): | | |
| Oil | \$ 25,462 | \$ 18,006 |
| NGLs | 6,237 | 9,107 |
| Gas | 4,570 | 3,505 |
| Total oil, NGL and gas sales | 36,269 | 30,618 |
| Realized gain (loss) on commodity derivatives | 307 | (484) |
| Total oil, NGL and gas sales including derivative impact | \$ 36,576 | \$ 30,134 |
| Production: | | |
| Oil (MBbls) | 310 | 191 |
| NGLs (MBbls) | 214 | 214 |
| Gas (MMcf) | 1,378 | 1,492 |
| Total (MBoe) | 754 | 654 |
| Total (MBoe/d) | 8.4 | 7.2 |
| Average prices: | | |
| Oil (per Bbl) | \$ 82.01 | \$ 94.39 |
| NGLs (per Bbl) | 29.17 | 42.50 |
| Gas (per Mcf) | 3.32 | 2.35 |
| Total (per Boe) | 48.10 | 46.84 |
| Realized gain (loss) on commodity derivatives (per Boe) | 0.41 | (0.74) |
| Total including derivative impact (per Boe) | \$ 48.51 | \$ 46.10 |
| Costs and expenses (per Boe): | | |
| Lease operating | \$ 7.14 | \$ 5.48 |
| Production and ad valorem | 3.39 | 3.39 |
| Exploration | 0.34 | 1.97 |
| General and administrative | 8.50 | 8.82 |
| Depletion, depreciation and amortization | 22.62 | 16.87 |

Oil, NGL and gas sales. Oil, NGL and gas sales increased \$5.7 million, or 19%, for the three months ended March 31, 2013, to \$36.3 million, from \$30.6 million for the three months ended March 31, 2012. The increase in oil, NGL and gas sales was due to an increase in oil production volumes and gas price realizations (\$10.9 million), partially offset by a decrease in oil and NGL price realizations (\$5.2 million). Production volumes increased as a result of our development in Project Pangea. However, as previously disclosed, production volumes were negatively impacted

[Table of Contents](#)

by downtime resulting from third-party fractionation facility repair and maintenance. In addition, our oil price realization for the three months ended March 31, 2013, was negatively impacted by the regional Midland/Cushing differential.

Net income. Net loss for the three months ended March 31, 2013, was \$347,000, or \$0.01 per diluted share, compared to net income of \$1.7 million, or \$0.05 per diluted share, for the three months ended March 31, 2012. Net income for the three months ended March 31, 2013, decreased due to higher expenses and an unrealized loss on commodity derivatives of \$4.1 million, partially offset by higher revenues and a realized gain on commodity derivatives of \$307,000.

Oil, NGL and gas production. Production for the three months ended March 31, 2013, totaled 754 MBoe (8.4 MBoe/d), compared to production of 654 MBoe (7.2 MBoe/d) in the prior year period, a 15% increase. Production for the three months ended March 31, 2013, was 41% oil, 28% NGLs and 31% gas, compared to 29% oil, 33% NGLs and 38% gas in the 2012 period. Production volumes increased during the three months ended March 31, 2013, as a result of our development in Project Pangea. However, production from Project Pangea was negatively impacted by third-party NGL fractionation facility repair and maintenance during the three months ended March 31, 2013. As of April 6, 2013, substantially all production volumes were back online. Subject to future downtime at third-party facilities, we expect production to continue to increase during 2013 due to our development project in Project Pangea.

Commodity derivative activities. Our commodity derivative activity resulted in a realized gain of \$307,000 and a realized loss of \$484,000 for the three months ended March 31, 2013 and 2012, respectively. Our average realized price, including the effect of commodity derivatives, was \$48.51 per Boe for the three months ended March 31, 2013, compared to \$46.10 per Boe for the three months ended March 31, 2012. Realized gains and losses on commodity derivatives are derived from the relative movement of commodity prices in relation to the fixed pricing in our derivatives contracts for the respective periods. The unrealized loss on commodity derivatives was \$4.1 million and \$2.7 million for the three months ended March 31, 2013 and 2012, respectively. As commodity prices increase, the fair value of the open portion of those positions decreases. As commodity prices decrease, the fair value of the open portion of those positions increases. Historically, we have not designated our derivative instruments as cash-flow hedges. We record our open derivative instruments at fair value on our consolidated balance sheets as either unrealized gains or losses on commodity derivatives. We record changes in such fair value in net income on our consolidated statements of operations under the caption entitled "unrealized (loss) gain on commodity derivatives."

Lease operating. Our lease operating expenses ("LOE") increased \$1.8 million, or 50%, for the three months ended March 31, 2013, to \$5.4 million, or \$7.14 per Boe, from \$3.6 million, or \$5.48 per Boe, for the three months ended March 31, 2012. The increase in LOE for the three months ended March 31, 2013, was primarily due to an increase in well repairs, workovers, maintenance and water hauling and insurance expense, partially offset by decreases in compressor rental and repair and pumpers and supervision. The following table summarizes LOE per Boe.

| | Three months ended March 31, | | Change | % Change |
|---|---------------------------------|---------|---------|----------|
| | 2013 | 2012 | | |
| Well repairs, workovers and maintenance | \$ 2.67 | \$ 1.36 | \$ 1.31 | 96.3% |
| Water hauling, insurance and other | 1.89 | 1.18 | 0.71 | 60.2 |
| Compressor rental and repair | 1.60 | 1.70 | (0.10) | (5.9) |
| Pumpers and supervision | 0.98 | 1.24 | (0.26) | 21.0 |
| Total | \$ 7.14 | \$ 5.48 | \$ 1.66 | 30.3% |

[Table of Contents](#)

Production and ad valorem taxes. Our production and ad valorem taxes increased \$338,000, or 15%, for the three months ended March 31, 2013, to \$2.6 million from \$2.2 million for the three months ended March 31, 2012. The increase in production and ad valorem taxes was primarily a function of the increase in oil, NGL and gas sales between the two periods. Production and ad valorem taxes were \$3.39 per Boe and approximately 7.1% and 7.2% of oil, NGL and gas sales for the three months ended March 31, 2013 and 2012, respectively.

Exploration. We recorded \$260,000, or \$0.34 per Boe, and \$1.3 million, or \$1.97 per Boe, of exploration expense for the three months ended March 31, 2013 and 2012, respectively. Exploration expense for the respective periods resulted primarily from the acquisition of 3-D seismic data.

General and administrative. Our general and administrative expenses ("G&A") increased \$646,000, or 11%, to \$6.4 million, or \$8.50 per Boe, for the three months ended March 31, 2013, from \$5.8 million, or \$8.82 per Boe, for the three months ended March 31, 2012. The increase in G&A was primarily due to higher salaries and share-based compensation resulting from increased staffing. We expect G&A per Boe to decline due to production increases for the remainder of 2013. The following table summarizes G&A (in millions) and G&A per Boe.

| | Three months ended March 31, | | | | | | |
|--------------------------|---------------------------------|--------|--------|--------|--------|----------|----------|
| | 2013 | | 2012 | | Change | | |
| | \$MM | Boe | \$MM | Boe | \$MM | Boe | % Change |
| Share-based compensation | \$ 2.3 | \$2.99 | \$ 2.2 | \$3.42 | \$ 0.1 | \$(0.43) | (12.6)% |
| Salaries and benefits | 2.2 | 3.05 | 2.0 | 3.00 | 0.2 | 0.05 | 1.7 |
| Professional fees | 0.4 | 0.52 | 0.4 | 0.61 | — | (0.09) | (14.8) |
| Other | 1.5 | 1.94 | 1.2 | 1.79 | 0.3 | 0.15 | 8.4 |
| Total | \$ 6.4 | \$8.50 | \$ 5.8 | \$8.82 | \$ 0.6 | \$(0.32) | (3.6)% |

Depletion, depreciation and amortization. Our depletion, depreciation and amortization expense ("DD&A") increased \$6.1 million, or 55%, to \$17.1 million for the three months ended March 31, 2013, from \$11 million for the three months ended March 31, 2012. Our DD&A per Boe increased by \$5.75, or 34%, to \$22.62 per Boe for the three months ended March 31, 2013, compared to \$16.87 per Boe for the three months ended March 31, 2012. The increase in DD&A and DD&A per Boe over the prior year period was primarily due to higher production and oil and gas property carrying costs, relative to estimated proved developed reserves. The increase in oil and gas property carrying costs reflects our development of our oil-focused, Wolfcamp shale play.

Interest expense, net. Our interest expense, net, increased \$342,000, or 39%, to \$1.2 million for the three months ended March 31, 2013, from \$887,000 for the three months ended March 31, 2012. This increase was primarily the result of a higher average debt level in the 2013 period. We expect our interest expense to remain higher than the prior year period as a result of increased borrowings during 2013.

Income taxes. Our income taxes decreased \$1.2 million to an income tax benefit of \$187,000 for the three months ended March 31, 2013, from a provision of \$982,000 for the three months ended March 31, 2012. The decrease in income taxes was primarily due to a decrease in the (loss) income before income tax provision in the 2013 period. Our effective income tax rate for the three months ended March 31, 2013, was 35.1%, compared to 36.4% for the three months ended March 31, 2012.

[Table of Contents](#)**Comparison of the three years ended December 31, 2012, 2011 and 2010**

The following table sets forth summary information regarding oil, NGL and gas revenues, production, average product prices and average production costs and expenses for the last three years. We determined the Boe using the ratio of six Mcf of natural gas to one Boe, and one barrel of NGLs to one Boe. The ratios of six Mcf of natural gas to one Boe and one barrel of NGLs to one Boe do not assume price equivalency and, given price differentials, the price for a Boe for natural gas or NGLs may differ significantly from the price for a barrel of oil.

| | Years ended December 31, | | |
|--|--------------------------|------------------|-----------------|
| | 2012 | 2011 | 2010 |
| Revenues (in thousands) | | | |
| Oil | \$ 82,087 | \$ 42,463 | \$18,640 |
| NGLs | 30,811 | 41,029 | 10,765 |
| Gas | 15,994 | 24,895 | 28,176 |
| Total oil, NGL and gas sales | 128,892 | 108,387 | 57,581 |
| Realized (loss) gain on commodity derivatives | (108) | 3,375 | 5,784 |
| Total oil, NGL and gas sales including derivative impact | <u>\$128,784</u> | <u>\$111,762</u> | <u>\$63,365</u> |
| Production | | | |
| Oil (MBbls) | 969 | 482 | 246 |
| NGLs (MBbls) | 904 | 798 | 261 |
| Gas (MMcf) | 6,089 | 6,345 | 6,290 |
| Total (MBoe) | 2,888 | 2,338 | 1,556 |
| Total (MBoe/d) | 7.9 | 6.4 | 4.3 |
| Average prices | | | |
| Oil (per Bbl) | \$ 84.70 | \$ 88.18 | \$ 75.67 |
| NGLs (per Bbl) | 34.09 | 51.39 | 41.19 |
| Gas (per Mcf) | 2.63 | 3.92 | 4.48 |
| Total (per Boe) | \$ 44.63 | \$ 46.37 | \$ 37.00 |
| Realized (loss) gain on commodity derivatives (per Boe) | (0.03) | 1.44 | 3.72 |
| Total including derivative impact (per Boe) | <u>\$ 44.60</u> | <u>\$ 47.81</u> | <u>\$ 40.72</u> |
| Costs and expenses (per Boe) | | | |
| Lease operating | \$ 6.58 | \$ 4.57 | \$ 4.25 |
| Production and ad valorem taxes(1) | 3.20 | 3.61 | 3.17 |
| Exploration | 1.58 | 4.08 | 1.66 |
| Impairment | — | 7.90 | 1.68 |
| General and administrative | 8.62 | 7.66 | 7.34 |
| Depletion, depreciation and amortization | 20.91 | 13.89 | 14.28 |

(1) Amounts related to ad valorem taxes have been reclassified from lease operating to production and ad valorem taxes for all years presented. This reclassification has no impact on net income (loss) reported herein.

Oil, NGL and gas sales. Oil, NGL and gas sales increased \$20.5 million, or 19%, to \$128.9 million from \$108.4 million in 2011. The increase in oil, NGL and gas sales was due to an increase in production volumes, partially offset by a decrease in average prices received. Production volumes increased as a result of our development of Project Pangea in the Permian Basin. In 2012, the average price we received for our production, before the effect of commodity derivatives,

[Table of Contents](#)

decreased to \$44.63 per Boe from \$46.37 per Boe, or a 4% decrease. Subject to commodity prices, we expect oil, NGL and gas sales to increase in 2013 due to increased production volumes from our development project in the Permian Basin.

Oil, NGL and gas sales increased \$50.8 million, or 88%, in 2011 to \$108.4 million from \$57.6 million in 2010. Of the \$50.8 million increase in oil, NGL and gas sales, approximately \$48.6 million was attributable to an increase in production volumes and \$2.2 million was attributable to an increase in prices. In 2011, the average price we received for our production, before the effect of commodity derivatives, increased to \$46.37 per Boe from \$37.00 per Boe, or a 25% increase.

The following table summarizes our oil, NGL and gas sales for each of the last three years (in thousands).

| Revenues | Years ended December 31, | | |
|--|--------------------------|------------|----------|
| | 2012 | 2011 | 2010 |
| Oil | \$ 82,087 | \$ 42,463 | \$18,640 |
| NGLs | 30,811 | 41,029 | 10,765 |
| Gas | 15,994 | 24,895 | 28,176 |
| Total oil, NGL and gas sales | 128,892 | 108,387 | 57,581 |
| Realized (loss) gain on commodity derivatives | (108) | 3,375 | 5,784 |
| Total oil, NGL and gas sales including derivative impact | \$128,784 | \$ 111,762 | \$63,365 |

The following table summarizes the prices we received for oil, NGLs and gas for each of the last three years.

| Average prices | Years ended December 31, | | |
|---|--------------------------|----------|----------|
| | 2012 | 2011 | 2010 |
| Oil (per Bbl) | \$ 84.70 | \$ 88.18 | \$ 75.67 |
| NGLs (per Bbl) | 34.09 | 51.39 | 41.19 |
| Gas (per Mcf) | 2.63 | 3.92 | 4.48 |
| Total (per Boe) | \$ 44.63 | \$ 46.37 | \$ 37.00 |
| Realized (loss) gain on commodity derivatives (per Boe) | (0.03) | 1.44 | 3.72 |
| Total including derivative impact (per Boe) | \$ 44.60 | \$ 47.81 | \$ 40.72 |

Net income. Net income for 2012 was \$6.4 million, or \$0.18 per diluted share, compared to net income of \$7.2 million, or \$0.25 per diluted share for 2011 and net income of \$7.5 million, or \$0.34 per diluted share for 2010. Net income decreased slightly over the three-year period due to higher expenses, partially offset by higher revenues. Net income per share decreased over the three-year period due to higher weighted average shares outstanding resulting from equity financings in 2011 and 2012.

Oil, NGL and gas production. Production for 2012 totaled 2,888 MBoe (7.9 MBoe/d), compared to 2,338 MBoe (6.4 MBoe/d) produced in 2011, an increase of 24%. Production for 2012 was 34% oil, 31% NGLs and 35% natural gas, compared to 21% oil, 34% NGLs and 45% natural gas in 2011. The increase in production in 2012 is the result of our continued development of our Permian Basin properties. We expect 2013 production will increase over 2012 due to our planned drilling and development activities in the Permian Basin.

[Table of Contents](#)

Production for 2011 totaled 2,338 MBoe (6.4 MBoe/d), compared to 1,556 MBoe (4.3 MBoe/d) produced in 2010, an increase of 50%. Production for 2011 was 21% oil, 34% NGLs and 45% natural gas, compared to 16% oil, 17% NGLs and 67% natural gas in 2010. The increase in production in 2011 is the result of our continued development of our Permian Basin properties, the acquisition of the remaining 38% working interest in Project Pangea and NGL processing in the southeast portion of Project Pangea; however, production was impacted during the second half of 2011 by oil takeaway constraints due to increased industry activity in the Permian Basin and a shortage of oil trucking capacity.

The following table summarizes our production for each of the last three years.

| Production | Years ended December 31, | | |
|----------------|--------------------------|-------|-------|
| | 2012 | 2011 | 2010 |
| Oil (MBbls) | 969 | 482 | 246 |
| NGLs (MBbls) | 904 | 798 | 261 |
| Gas (MMcf) | 6,089 | 6,345 | 6,290 |
| Total (MBoe) | 2,888 | 2,338 | 1,556 |
| Total (MBoe/d) | 7.9 | 6.4 | 4.3 |

Commodity derivative activities. Realized loss from our commodity derivative activity decreased our earnings by \$108,000 for 2012, compared to realized gains in 2011 and 2010 that increased our earnings by \$3.4 million and \$5.8 million, respectively. Realized gains and losses are derived from the relative movement of commodity prices in relation to the fixed notional pricing of our commodity derivatives positions or the range of prices in our collars for the respective years. The unrealized loss on commodity derivatives was \$347,000 for 2011, and the unrealized gain on commodity derivatives was \$3.9 million and \$788,000 for 2012 and 2010, respectively. As commodity prices increase or decrease, the fair value of the open portion of those positions decreases or increases.

Historically, we have not designated our derivative instruments as cash-flow hedges. We record our open derivative instruments at fair value on our consolidated balance sheets as either unrealized gains or losses on commodity derivatives. We record changes in such fair value in earnings on our consolidated statements of operations under the caption entitled "unrealized gain (loss) on commodity derivatives."

Lease operating. Our LOE increased \$8.3 million, or 78%, for 2012, to \$19.0 million (\$6.58 per Boe) from \$10.7 million (\$4.57 per Boe) for 2011. The increase in LOE per Boe in 2012 over 2011 was primarily due to an increase in workover, compression, water hauling and well repair and maintenance expenses.

Our LOE for 2011 was \$10.7 million (\$4.57 per Boe), compared to \$6.6 million (\$4.25 per Boe) for 2010. The increase in LOE for 2011 was primarily attributable to the acquisition of the remaining 38% working interest in Project Pangea, which increased our working interest to approximately 100%. The increase in LOE per Boe in 2011 over 2010 was primarily due to an increase in well repair and maintenance, partially offset by a decrease in compressor rental and repair and water hauling, insurance and other LOE.

[Table of Contents](#)

The following table summarizes LOE per Boe.

| | Year ended December 31, | | | | Year ended December 31, | | | |
|------------------------------------|-------------------------|--------|---------|----------|-------------------------|--------|-----------|----------|
| | 2012 | 2011 | Change | % Change | 2011 | 2010 | Change | % Change |
| Compressor rental and repair | \$1.91 | \$1.36 | \$ 0.55 | 40.4% | \$1.36 | \$1.45 | \$ (0.09) | (6.2)% |
| Water hauling, insurance and other | 1.61 | 1.08 | 0.53 | 49.1 | 1.08 | 1.06 | 0.02 | 1.9 |
| Well repair and maintenance | 1.31 | 1.00 | 0.31 | 31.0 | 1.00 | 0.64 | 0.36 | 56.3 |
| Pumpers and supervision | 1.00 | 1.05 | (0.05) | (4.8) | 1.05 | 1.01 | 0.04 | 4.0 |
| Workovers | 0.75 | 0.08 | 0.67 | 837.5 | 0.08 | 0.09 | (0.01) | (11.1) |
| Total | \$6.58 | \$4.57 | \$ 2.01 | 44.0% | \$4.57 | \$4.25 | \$ 0.32 | 7.5% |

Production and ad valorem taxes. Our 2012 production and ad valorem taxes increased approximately \$808,000, or 9.6%, to \$9.3 million from \$8.4 million for 2011. The increase in production and ad valorem taxes was primarily the result of an increase in oil, NGL and gas sales over 2011. Production and ad valorem taxes were approximately 7.2% and 7.8% of oil, NGL and gas sales for the respective periods. Ad valorem taxes were reclassified from LOE to production and ad valorem taxes in 2012 for all periods presented.

Our production and ad valorem taxes increased \$3.5 million, or 71.4%, for 2011 to \$8.4 million from \$4.9 million for 2010. The increase in production and ad valorem taxes was primarily the result of an increase in oil, NGL and gas sales over 2010. Production and ad valorem taxes were approximately 7.8% and 8.6% of oil, NGL and gas sales for the respective periods.

Exploration. We recorded \$4.6 million of exploration expense for 2012. Exploration expense for 2012 resulted primarily from the acquisition of 3-D seismic data and lease extensions in the Permian Basin. We recorded \$9.5 million and \$2.6 million of exploration expense for 2011 and 2010, respectively. Exploration expense for 2011 resulted primarily from lease extensions and expirations in the Permian Basin and the acquisition of 3-D seismic data in Pangea West. During 2011, we extended the acreage terms for an additional four years for approximately 9,200 acres in the northwest area of Project Pangea for \$3.2 million, or approximately \$350 per acre. Further, approximately 5,000 acres in the southeast area of Project Pangea expired during 2011 resulting in approximately \$1.2 million of exploration expense. Exploration expense for 2010 resulted primarily from 3-D seismic acquisition in northwest Project Pangea and lease renewals in Project Pangea and Kentucky.

Impairment. We review our long-lived assets, including proved and unproved oil and gas properties, accounted for under the successful efforts method of accounting. We recorded no impairment expense during the twelve months ended December 31, 2012. We recorded an impairment of oil and gas properties of \$18.5 million and \$2.6 million in 2011 and 2010, respectively. Due to ongoing, low natural gas prices and to the further decline in natural gas prices during the twelve months ended December 31, 2011, we recorded an impairment expense to our oil and gas properties in the East Texas Basin of \$15.2 million in 2011. At December 31, 2011, we had \$2.7 million recorded for our properties in the East Texas Basin, which is the estimated fair value at December 31, 2011. We also recorded an impairment expense of \$3.3 million, which was all of our remaining carrying costs associated with our unproved properties in Northern New Mexico. The 2010 impairment resulted from a write-off of \$2.6 million in costs in our Southwest Kentucky project, and represented the remaining carrying value we had recorded for the project.

[Table of Contents](#)

General and administrative. Our G&A increased \$7.0 million, or 39%, to \$24.9 million (\$8.62 per Boe) for 2012 from \$17.9 million (\$7.66 per Boe) for 2011. The increase in G&A in 2012 over 2011 was primarily due to higher share-based compensation, professional fees and salaries and benefits. For 2013, we expect G&A to be higher, compared to 2012, as a result of higher share-based compensation and staffing increases. However, we expect G&A to be consistent on a per Boe basis.

Our G&A increased \$6.5 million, or 57%, to \$17.9 million (\$7.66 per Boe) for 2011 from \$11.4 million (\$7.34 per Boe) for 2010. The increase in G&A in 2011 over 2010 was primarily due to higher salaries and benefits, and share-based compensation.

The following table summarizes G&A (in millions).

| | Year ended December 31, | | | | Year ended December 31, | | | |
|--------------------------|-------------------------|--------|--------|----------|-------------------------|--------|--------|----------|
| | 2012 | 2011 | Change | % Change | 2011 | 2010 | Change | % Change |
| Salaries and benefits | \$10.5 | \$ 8.1 | \$ 2.4 | 29.6% | \$ 8.1 | \$ 5.3 | \$ 2.8 | 52.8% |
| Share-based compensation | 7.5 | 4.7 | 2.8 | 59.6 | 4.7 | 2.6 | 2.1 | 80.8 |
| Professional fees | 2.1 | 1.4 | 0.7 | 50.0 | 1.4 | 1.3 | 0.1 | 7.7 |
| Other | 4.8 | 3.7 | 1.1 | 29.7 | 3.7 | 2.2 | 1.5 | 68.2 |
| Total | \$24.9 | \$17.9 | \$ 7.0 | 39.1 % | \$17.9 | \$11.4 | \$ 6.5 | 57.0% |

Depletion, depreciation and amortization. Our DD&A increased \$27.9 million, or 86%, to \$60.4 million for 2012, from \$32.5 million for 2011. Our DD&A per Boe increased by \$7.02, or 51%, to \$20.91 per Boe for 2012, compared to \$13.89 per Boe for 2011. The increase in DD&A and DD&A per Boe in 2012 over 2011 was primarily attributable to increases in production and oil and gas property carrying costs, relative to estimated proved developed reserves. The increase in oil and gas property carrying costs reflects our drilling and development program of the Wolfcamp oil shale resource play.

DD&A increased \$10.3 million, or 46%, to \$32.5 million for 2011, from \$22.2 million for 2010. Our DD&A per Boe decreased by \$0.39, or 3%, to \$13.89 per Boe for 2011, compared to \$14.28 per Boe for 2010. The increase in DD&A was primarily attributable to higher capitalized costs over 2010, partially offset by an increase in estimated proved developed reserves.

Interest expense, net. The following table sets forth interest expense, weighted average interest rates and weighted average debt balances for the years ended December 31, 2012, 2011 and 2010 (dollars in thousands). Interest expense below includes amortization of loan origination fees.

| | Year ended December 31, | | |
|--------------------------------|-------------------------|----------|----------|
| | 2012 | 2011 | 2010 |
| Interest expense | \$ 4,737 | \$ 3,402 | \$ 2,189 |
| Weighted average interest rate | 3.2 % | 3.1 % | 3.4 % |
| Weighted average debt balance | \$108,296 | \$78,810 | \$41,374 |

Income taxes. Our effective income tax rate for 2012 and 2011 was 34.3% and 32.5%, respectively. The higher income tax rate in 2012 was a result of a decrease in permanent differences from book and taxable income.

Our income taxes decreased \$612,000 to \$3.5 million for 2011, from \$4.1 million for 2010. The decrease in income taxes was due to lower pre-tax income in 2011 and a lower effective income

[Table of Contents](#)

tax rate. Our effective income tax rate for 2011 and 2010 was 32.5% and 35.5%, respectively. The lower income tax rate in 2011 was a result of an increase in the impact of permanent differences from book and taxable income.

Liquidity and capital resources

We generally will rely on cash generated from operations, borrowings under our revolving credit facility and, to the extent that credit and capital market conditions will allow, future public equity and debt offerings to satisfy our liquidity needs. Our ability to fund planned capital expenditures and to make acquisitions depends upon our future operating performance, availability of borrowings under our revolving credit facility, and more broadly, on the availability of equity and debt financing, which is affected by prevailing economic conditions in our industry and financial, business and other factors, some of which are beyond our control. We cannot predict whether additional liquidity from equity or debt financings beyond our revolving credit facility will be available on acceptable terms, or at all, in the foreseeable future.

Our cash flow from operations is driven by commodity prices, production volumes and the effect of commodity derivatives. Prices for oil and gas are affected by national and international economic and political environments, national and global supply and demand for hydrocarbons, seasonal influences of weather and other factors beyond our control. Cash flows from operations are primarily used to fund exploration and development of our oil and gas properties.

We believe we have adequate liquidity from cash generated from operations and unused borrowing capacity under our revolving credit facility for current working capital needs and maintenance of our current development project. However, we may determine to use various financing sources, including the issuance of common stock, preferred stock, debt, convertible securities and other securities for future development of reserves, acquisitions, additional working capital or other liquidity needs, if such financing is available on acceptable terms. We cannot guarantee that such financing will be available on acceptable terms or at all. Using some of these financing sources may require approval from the lenders under our revolving credit facility.

Liquidity

We define liquidity as funds available under our revolving credit facility plus year-end net cash and cash equivalents. At March 31, 2013, and December 31, 2012, we had \$152.3 million and \$106 million in long-term debt outstanding, respectively, and liquidity of \$128 million and \$174.4 million, respectively. We had \$43.8 million in long-term debt outstanding under our revolving credit facility at December 31, 2011, and no long-term debt outstanding under our revolving credit facility at December 31, 2010.

The following table summarizes our liquidity position at March 31, 2013 and at December 31, 2012, 2011 and 2010 (in thousands).

| | Three months ended March 31, 2013 | 2012 | Year ended December 31, 2011 2010 | |
|---------------------------|---|------------|--------------------------------------|-----------|
| Borrowing base | \$ 280,000 | \$ 280,000 | \$260,000 | \$150,000 |
| Cash and cash equivalents | 594 | 767 | 301 | 23,465 |
| Long-term debt | (152,250) | (106,000) | (43,800) | — |
| Undrawn letters of credit | (325) | (325) | (350) | (350) |
| Liquidity | \$ 128,019 | \$ 174,442 | \$216,151 | \$173,115 |

S-53

[Table of Contents](#)**Working capital**

Our working capital is affected primarily by our cash and cash equivalents balance and our capital spending program. We had a working capital deficit of \$53.7 million at March 31, 2013, compared to a working capital deficit of \$44.6 million at December 31, 2012. The primary reason for the change in working capital was an increase in accounts payable from an increase in our capital expenditures. At December 31, 2011 and 2010, we had a working capital deficit of \$32.2 million and a working capital surplus of \$12.1 million, respectively. The change in working capital during 2012 and 2011 is primarily attributable to increases in accounts payable and accrued liabilities to fund capital expended on our development project. Our working capital deficits have been historically attributable to accounts payable and accrued liabilities and have been more than offset by liquidity available under our revolving credit facility. To the extent we operate or end 2013 with a working capital deficit, we expect such deficit to be more than offset by liquidity available under our revolving credit facility.

Cash flows

The following table summarizes our sources and uses of funds for the periods noted (in thousands).

| | Three months ended | Year ended December 31, | | |
|--|--------------------|-------------------------|-------------|-----------|
| | March 31, 2013 | 2012 | 2011 | 2010 |
| Cash flows provided by operating activities | \$ 29,638 | \$ 90,585 | \$ 95,770 | \$ 42,377 |
| Cash flows used in investing activities | (75,986) | (307,414) | (284,758) | (91,346) |
| Cash flows provided by financing activities | 46,175 | 217,295 | 165,843 | 69,748 |
| Effect of Canadian exchange rate | — | — | (19) | 1 |
| Net (decrease) increase in cash and cash equivalents | \$ (173) | \$ 466 | \$ (23,164) | \$ 20,780 |

For the three months ended March 31, 2013, our primary sources of cash were from operating activities and financing activities. Approximately \$29.6 million of cash from operations and \$46.2 million of cash from financing activities were used to fund our development project in the Permian Basin.

For 2012, our primary sources of cash were from operating activities and financing activities. Approximately \$90.6 million of cash from operations and \$217.3 million of cash from financing activities were used to fund our development project in the Permian Basin. In September, we sold 5 million shares of common stock, and in October 2012, the underwriters exercised their option and purchased an additional 325,000 shares. After deducting underwriting discounts and estimated transaction costs of approximately \$8 million, we received net proceeds of approximately \$154.4 million. We used the proceeds of the offering to repay outstanding borrowings under our revolving credit facility, fund our capital expenditures for the development of our Wolfcamp oil shale resource play and for general working capital needs.

For 2011, our primary sources of cash were from operating activities and financing activities. Approximately \$95.8 million of cash from operations and \$165.8 million of cash from financing activities were used to fund a portion of our development project and the Working Interest

[Table of Contents](#)

Acquisition. In November 2011, we sold 4.6 million shares of common stock. After deducting underwriting discounts and estimated transaction costs of approximately \$6.6 million, we received net proceeds of approximately \$122.2 million. We used the proceeds of the offering to repay outstanding borrowings under our revolving credit facility, fund our capital expenditures for the Wolfcamp oil shale resource play, fund working interest and leasehold acquisitions in the Permian Basin and for general working capital needs.

For 2010, our primary sources of cash were from operating activities and financing activities. Approximately \$42.4 million of cash from operations was used to fund a portion of our development project and pay down our long-term debt. In November 2010, we sold 6.6 million shares of common stock. After deducting underwriting discounts and estimated transaction costs of approximately \$5.7 million, we received net proceeds of approximately \$101.8 million. We used a portion of the proceeds of the offering to repay all outstanding borrowings under our revolving credit facility, and to fund our capital expenditures for the Wolfcamp oil shale resource play, working interest and leasehold acquisitions in the Permian Basin and general working capital needs.

Operating activities

For the three months ended March 31, 2013, our cash flows from operations, borrowings under our revolving credit facility and available cash were used primarily for drilling activities in the Permian Basin. Cash flows from operating activities decreased by 16%, or \$5.9 million, to \$29.6 million primarily due to timing of payments and receipts of working capital components.

For 2012, our cash flows from operations, borrowings under our revolving credit facility and available cash were used primarily for drilling and development activities and leasehold acquisitions in the Permian Basin. Cash flows from operating activities decreased by \$5.2 million, or 5%, to \$90.6 million in 2012 from \$95.8 million in 2011. The decrease in cash flows from operating activities in 2012 versus 2011 was primarily due to a decrease in cash flows provided by working capital, lower average realized NGL and gas prices, partially offset by higher production volumes in 2012 due to our development project in the Wolfcamp oil shale resource play.

For 2011, our cash flows from operations, borrowings under our revolving credit facility and available cash were used primarily for drilling and development activities and leasehold acquisitions in the Permian Basin and the acquisition of 38% working interest in Project Pangea from non-operating partners for \$70.8 million, after post-closing adjustments. Cash flows from operating activities increased by \$53.4 million, or 126%, to \$95.8 million from \$42.4 million in 2010, primarily due to an 88% increase in oil, NGL and gas sales in 2011.

For 2010, our cash flows from operations, borrowings under our revolving credit facility and available cash were used primarily for drilling and development activities in Project Pangea, leasehold acquisitions and a 3-D seismic program in our Permian Basin operations. Cash flows from operating activities increased by 6.8%, or \$2.7 million, to \$42.4 million from 2009 partially due to a 42% increase in oil and gas sales in 2010. Cash flows provided by operating activities also were affected by an increase in cash flows used by working capital during 2010.

Investing activities

Cash flows used in investing activities decreased by \$1.7 million for the three months ended March 31, 2013, compared to the 2012 period. Cash flows used in investing activities for the three months ended March 31, 2013, were primarily attributable to drilling and development (\$61.8

[Table of Contents](#)

million), infrastructure projects, equipment and 3-D seismic data acquisition (\$6.7 million) and lease acquisitions and extensions (\$1 million), all in Project Pangea. Additionally, during the three months ended March 31, 2013, included a \$6.3 million capital contribution to our pipeline joint venture for oil pipeline and facilities. During the three months ended March 31, 2013, we drilled a total of nine wells and completed five wells, compared to 15 wells drilled and 22 wells completed during the 2012 period.

During the years ended December 31, 2012, 2011 and 2010, we invested \$296.9 million, \$284.6 million and \$91 million, respectively, for capital expenditures on oil and natural gas properties. Cash flows used in investing activities were higher during the year ended December 31, 2012 over 2011, primarily due to drilling and development (\$240.4 million), infrastructure projects, equipment and 3-D seismic data acquisition (\$47.5 million) and lease acquisitions and extensions (\$9 million), all in Project Pangea. Cash flows used in investing activities were substantially higher during the year ended December 31, 2011 over 2010, primarily due to the acquisition of 38% working interest in Project Pangea from non-operating partners for \$70.8 million, after post-closing adjustments, and expenditures for drilling and lease acquisitions and extensions in the Permian Basin.

The following table is a summary of capital expenditures related to our oil and gas properties (in thousands).

| | Years ended December 31, | | |
|--|--------------------------|-----------|----------|
| | 2012 | 2011 | 2010 |
| Permian Basin | \$240,357 | \$172,077 | \$56,211 |
| Permian Basin acquisitions | — | 70,827 | 21,179 |
| Subtotal | 240,357 | 242,904 | 77,390 |
| East Texas Basin | — | 560 | 101 |
| Exploratory projects | — | 445 | 285 |
| Infrastructure projects, equipment and inventory | 44,278 | 8,695 | 1,636 |
| Lease acquisition, geological and geophysical | 12,292 | 31,970 | 11,604 |
| Total | \$296,927 | \$284,574 | \$91,016 |

Additionally, in September 2012, we entered into a joint venture to build an oil pipeline in Crockett and Reagan Counties, Texas, which will be used to transport our oil to market. In October 2012, we made an initial contribution of \$10 million to the joint venture for pipeline and facilities construction, we made an additional \$6.3 million capital contribution during the three months ended March 31, 2013. Future capital contributions are discretionary.

Financing activities

The following is a description of our financing activities.

During the three months ended March 31, 2013 and the years ended December 31, 2012, 2011 and 2010 we completed the following capital markets activities:

- In September 2012, we completed a public offering of 5 million shares of our common stock at \$30.50 per share, and in October 2012, the underwriters exercised their option and purchased an additional 325,000 shares. We received net proceeds of approximately \$154.4 million, and used the proceeds to repay outstanding borrowings under our revolving credit facility, fund our capital expenditures for the development of our Wolfcamp oil shale resource play and for general working capital needs.

[Table of Contents](#)

- In November 2011, we completed an equity offering and issued an aggregate of 4.6 million shares of our common stock at \$28 per share, and we received net proceeds of approximately \$122.2 million. We used the proceeds of the 2011 equity offering to repay outstanding borrowings under our revolving credit facility, fund our capital expenditures for the Wolfcamp oil shale resource play, fund working interest and leasehold acquisitions in the Permian Basin and for general working capital needs.
- In November 2010, we issued 6.6 million shares of our common stock at \$16.25 per share, and we received net proceeds of approximately \$101.8 million. We used the proceeds of the 2010 equity offering to repay all outstanding borrowings under our revolving credit facility, and to fund our capital expenditures for the Wolfcamp oil shale resource play, working interest and leasehold acquisitions in the Permian Basin and general working capital needs.

We borrowed \$80 million and \$60.7 million under our revolving credit facility during the three months ended March 31, 2013 and 2012, respectively. We repaid a total of \$33.8 million and \$19.1 million of amounts outstanding under our revolving credit facility during the three months ended March 31, 2013 and 2012, respectively. In addition, in the three months ended March 31, 2012, we realized proceeds of \$798,000 from the exercise of stock options.

We borrowed \$304.6 million under our revolving credit facility in 2012, compared to \$246.8 million and \$121.8 million in 2011 and 2010, respectively. We repaid a total of \$242.4 million, \$203 million and \$154.1 million of amounts outstanding under our revolving credit facility for 2012, 2011 and 2010, respectively. Our current goal is to manage our borrowings to help us maintain financial flexibility and liquidity, and to avoid the problems associated with highly-leveraged companies with large interest costs and possible debt reductions restricting ongoing operations.

Revolving credit facility

At March 31, 2013, we had a \$300 million revolving credit facility with a borrowing base set at \$280 million. The borrowing base is redetermined semi-annually on or before each April 1 and October 1 based on our oil, NGL and gas reserves. We or the lenders can each request one additional borrowing base redetermination each calendar year.

The maturity date of our revolving credit facility at March 31, 2013 was July 31, 2014. Borrowings bear interest based on the agent bank's prime rate plus an applicable margin ranging from 0.75% to 1.75%, or the sum of the Eurodollar rate plus an applicable margin ranging from 1.75% to 2.75%. Margins vary based on the borrowings outstanding compared to the borrowing base. In addition, we pay an annual commitment of 0.50% of unused borrowings available under our revolving credit facility.

On May 1, 2013, we entered into a fifteenth amendment to our credit agreement, that, among other things, (i) increased the borrowing base under the credit agreement to \$315 million from \$280 million, (ii) increased the lenders' aggregate maximum commitment to \$500 million from \$300 million, and (iii) extended the maturity date of the credit agreement by two years to July 31, 2016.

We had outstanding borrowings of \$152.3 million and \$106 million under our revolving credit facility at March 31, 2013, and December 31, 2012, respectively. The interest rate applicable to our revolving credit facility at March 31, 2013 and December 31, 2012, was 2.7%. We also had

Table of Contents

outstanding unused letters of credit under our revolving credit facility totaling \$0.3 million at March 31, 2013, which reduce amounts available for borrowing under our revolving credit facility.

Loans under our revolving credit facility are secured by first priority liens on substantially all of our West Texas assets and are guaranteed by certain of our subsidiaries.

Covenants

Our credit agreement contains two principal financial covenants:

- a consolidated modified current ratio covenant that requires us to maintain a ratio of not less than 1.0 to 1.0 at all times. The consolidated modified current ratio is calculated by dividing Consolidated Current Assets (as defined in the credit agreement) by Consolidated Current Liabilities (as defined in the credit agreement). As defined more specifically in the credit agreement, the consolidated modified current ratio is calculated as current assets less current unrealized gains on commodity derivatives plus the available borrowing base at the respective balance sheet date, divided by current liabilities less current unrealized losses on commodity derivatives at the respective balance sheet date.
- a consolidated funded debt-to-consolidated EBITDAX ratio covenant that requires us to maintain a ratio of not more than 4.0 to 1.0 at the end of each fiscal quarter. The consolidated funded debt to consolidated EBITDAX ratio is calculated by dividing Consolidated Funded Debt (as defined in the credit agreement) by Consolidated EBITDAX (as defined in the credit agreement). As defined more specifically in the credit agreement, consolidated EBITDAX is calculated as net income (loss), plus (1) exploration expense, (2) depletion, depreciation and amortization expense, (3) share-based compensation expense, (4) unrealized loss on commodity derivatives, (5) interest expense, (6) income and franchise taxes and (7) certain other noncash expenses, less (1) gains or losses from sales or dispositions of assets, (2) unrealized gain on commodity derivatives and (3) extraordinary or nonrecurring gains. For purposes of calculating this ratio, consolidated EBITDAX for a fiscal quarter is annualized pursuant to the credit agreement.

Our credit agreement also restricts cash dividends and other restricted payments, transactions with affiliates, incurrence of other debt, consolidations and mergers, the level of operating leases, asset sales, investments in other entities and liens on properties.

In addition, our credit agreement contains customary events of default that would permit our lenders to accelerate the debt under our credit agreement if not cured within applicable grace periods, including, among others, failure to make payments of principal or interest when due, materially incorrect representations and warranties, failure to make mandatory prepayments in the event of borrowing base deficiencies, breach of covenants, defaults upon other obligations in excess of \$500,000, events of bankruptcy, the occurrence of one or more unstayed judgments in excess of \$500,000 not covered by an acceptable policy of insurance, failure to pay any obligation in excess of \$500,000 owed under any derivatives transaction or in any amount if the obligation under the derivatives transaction is secured by collateral under the credit agreement, any event of default by the Company occurs under any agreement entered into in connection with a derivatives transaction, liens securing the loans under the credit agreement cease to be in place, a Change in Control (as defined in the credit agreement) of the Company occurs and dissolution of the Company.

[Table of Contents](#)

At March 31, 2013 and December 31, 2012, we were in compliance with all of our covenants and there were no existing defaults or events of default under the credit agreement.

To date we have experienced no disruptions in our ability to access our revolving credit facility. However, our lenders have substantial ability to reduce our borrowing base on the basis of subjective factors, including the loan collateral value that each lender, in its discretion and using the methodology, assumptions and discount rates as such lender customarily uses in evaluating oil and gas properties, assigns to our properties.

Contractual obligations

As of December 31, 2012, our contractual obligations include long-term debt, daywork drilling contracts, operating lease obligations, asset retirement obligations and employment agreements with our executive officers.

We periodically enter into contractual arrangements under which we are committed to expend funds to drill wells in the future, including agreements to secure drilling rig services, which require us to make future minimum payments to the rig operators. We record drilling commitments in the periods in which well capital expenditures are incurred or rig services are provided. Our commitment under daywork drilling contracts was \$5.4 million at December 31, 2012.

In April 2007, we signed a five-year lease for approximately 13,000 square feet of office space in Fort Worth, Texas. In August 2008, we expanded our office space under an amendment to the lease to approximately 18,000 square feet. In December 2010, we expanded our office space under an amendment to the lease to approximately 23,400 square feet. In August 2012, we further expanded our office space under a third amendment to the lease to approximately 27,000 square feet and extended the term of the lease to December 31, 2017. In December 2012, we began rent payments under the third amendment, bringing our total office lease payment to approximately \$51,000 per month.

Our asset retirement obligation primarily represents the estimated present value of the amount we will incur to plug, abandon and remediate our producing properties at the end of their productive lives, in accordance with applicable federal, state and local laws. We determine our asset retirement obligation by calculating the present value of estimated cash flows related to the liability. The retirement obligation is recorded as a liability at its estimated present value as of the asset's inception, with an offsetting increase to proved properties. Periodic accretion of discount of the estimated liability is recorded as an expense in the income statement.

At December 31, 2012, we had outstanding employment agreements with each of our five executive officers that contained automatic renewal provisions providing that such agreements may be automatically renewed for successive terms of one year unless the employment is terminated at the end of the term by written notice given to the employee not less than 60 days prior to the end of such term. Our maximum commitment under the employment agreements, which would apply if the employees covered by these agreements were each terminated without cause, was approximately \$4.9 million at December 31, 2012.

[Table of Contents](#)

The following table summarizes these commitments as of December 31, 2012 (in thousands).

| | Payments due by period | | | | |
|---|------------------------|---------------------|------------------|---------------|-------------------------|
| | Total | Less than 1 year | 1-3 years | 3-5 years | More than 5 years |
| Contractual obligations | | | | | |
| Long-term debt(1) | \$106,000 | \$ — | \$106,000 | \$ — | \$ — |
| Daywork drilling contracts(2) | 5,443 | 5,443 | — | — | — |
| Operating lease obligations(3) | 3,221 | 633 | 1,949 | 639 | — |
| Asset retirement obligations(4) | 7,431 | — | — | — | 7,431 |
| Employment agreements with executive officers | 4,908 | 4,908 | — | — | — |
| Total | \$127,003 | \$ 10,984 | \$107,949 | \$ 639 | \$7,431 |

(1) Borrowings under our credit agreement.

(2) At December 31, 2012, daywork drilling contracts related to four drilling rigs were contracted through January 4, 2013, February 28, 2013, April 18, 2013 and July 6, 2013, respectively.

(3) Operating lease obligations are for office space and equipment.

(4) See Note 1 to our audited consolidated financial statements included herein for a discussion of our asset retirement obligations.

Since December 31, 2012, there have been no material changes to our contractual obligations, other than an increase in long-term debt. See Note 3. "Revolving Credit Facility" of our unaudited financial statements included herein for a discussion of outstanding borrowings under our credit agreement at March 31, 2013, and December 31, 2012.

Off-balance sheet arrangements

From time to time, we enter into off-balance sheet arrangements and transactions that can give rise to off-balance sheet obligations. As of March 31, 2013, the off-balance sheet arrangements and transactions that we have entered into include undrawn letters of credit, operating lease agreements and gas delivery commitments. We do not believe that these arrangements have or are reasonably likely to have a current or future material effect on our financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources.

General trends and outlook

Our financial results depend upon many factors, particularly the price of oil and gas. Commodity prices are affected by changes in market demand, which is impacted by domestic and foreign supply of oil and gas, overall domestic and global economic conditions, commodity processing, gathering and transportation availability and the availability of refining capacity, price and availability of alternative fuels, price and quantity of foreign imports, domestic and foreign governmental regulations, political conditions in or affecting other gas producing and oil producing countries, weather and technological advances affecting oil and gas consumption. As a result, we cannot accurately predict future oil and gas prices, and therefore, we cannot determine what effect increases or decreases will have on our capital program, production volumes and future revenues. A substantial or extended decline in oil and gas prices could have a material adverse effect on our business, financial condition, results of operations, quantities of oil and gas reserves that may be economically produced and liquidity that may be accessed through our borrowing base under our revolving credit facility and through capital markets.

[Table of Contents](#)

In addition to production volumes and commodity prices, finding and developing sufficient amounts of oil and gas reserves at economical costs are critical to our long-term success. Future finding and development costs are subject to changes in the industry, including the costs of acquiring, drilling and completing our projects. We focus our efforts on increasing oil and gas reserves and production while controlling costs at a level that is appropriate for long-term operations. Our future cash flow from operations will depend on our ability to manage our overall cost structure.

Like all oil and gas production companies, we face the challenge of natural production declines. Oil and gas production from a given well naturally decreases over time. Additionally, our reserves have a rapid initial decline. We attempt to overcome this natural decline by drilling to develop and identify additional reserves, farm-ins or other joint drilling ventures, and by acquisitions. However, during times of severe price declines, we may from time to time reduce current capital expenditures and curtail drilling operations in order to preserve liquidity. A material reduction in capital expenditures and drilling activities could materially reduce our production volumes and revenues and increase future expected costs necessary to develop existing reserves.

We also face the challenge of financing exploration, development and future acquisitions. We believe we have adequate liquidity from cash generated from operations and unused borrowing capacity under our revolving credit facility for current working capital needs and maintenance of our current development project. However, we may determine to use various financing sources, including the issuance of common stock, preferred stock, debt, convertible securities and other securities for future development of reserves, acquisitions, additional working capital or other liquidity needs, if such financing is available on acceptable terms. We cannot guarantee that such financing will be available on acceptable terms or at all. Using some of these financing sources may require approval from the lenders under our revolving credit facility.

[Table of Contents](#)

Business

General

Approach Resources Inc. is an independent energy company engaged in the exploration, development, production and acquisition of oil and gas properties. We focus on oil and gas reserves in oil shale and tight gas sands in the Midland Basin of the greater Permian Basin in West Texas, where we lease approximately 148,000 net acres. This acreage provides us with a multi-year inventory of horizontal and vertical drilling opportunities. Our drilling targets include the Clearfork, Wolfcamp shale, Canyon Sands, Strawn and Ellenburger zones. We sometimes refer to the Clearfork and Wolfcamp zones together as the "Wolffork," and our development project in the Permian Basin as "Project Pangea," which includes the northwestern portion of Project Pangea that we refer to as "Pangea West." Our management and technical team have a proven track record of finding and developing reserves through advanced drilling and completion techniques. As the operator of all of our estimated proved reserves and production, we have a high degree of control over capital expenditures and other operating matters.

At December 31, 2012, our estimated proved reserves were 95.5 MMBoe. Substantially all of our proved reserves are located in the Permian Basin in Crockett and Schleicher Counties, Texas. Important characteristics of our proved reserves at December 31, 2012, include:

- 39% oil, 30% NGLs and 31% natural gas;
- 34% proved developed;
- 100% operated;
- Reserve life of more than 30 years based on 2012 production of 2.9 MMBoe;
- Standardized measure of discounted future net cash flows ("Standardized Measure") of \$494.2 million; and
- PV-10 of \$830.9 million.

PV-10 is our estimate of the present value of future net revenues from proved oil, NGL and gas reserves after deducting estimated production and ad valorem taxes, future capital costs and operating expenses, but before deducting any estimates for future income taxes. Estimated future net revenues are discounted at an annual rate of 10% to determine their present value. PV-10 is a financial measure that is not determined in accordance with accounting principles generally accepted in the United States ("GAAP"), and generally differs from the Standardized Measure, the most directly comparable GAAP financial measure, because it does not include the effects of income taxes on future cash flows. PV-10 should not be considered as an alternative to the Standardized Measure, as computed under GAAP. See "Supplemental Non-GAAP Financial and Other Measures" for our definition of PV-10 and reconciliation to standardized measure.

At March 31, 2013, we owned working interests in 667 producing oil and gas wells, and we had an estimated 2,983 identified drilling and recompletion locations, of which 359 were proved.

We were incorporated in 2002. Our common stock began trading on the NASDAQ Global Market in the United States under the symbol "AREX" on November 8, 2007, and is now listed on the NASDAQ Global Select Market ("NASDAQ"). Our principal executive offices are located at One Ridgmar Centre, 6500 West Freeway, Suite 800, Fort Worth, Texas 76116. Our telephone number is (817) 989-9000.

[Table of Contents](#)

Our business strategy

Our objectives for 2013 include advancing our understanding of optimal well spacing, testing multi-zone potential, with the goal of enhancing hydrocarbon recovery in our Wolfcamp targets and improving our cost structure.

- *Develop our Wolfcamp oil shale resource play.* We believe we have a large, multi-year inventory of identified drilling locations that provide us the ability to continue to increase production and reserves at a competitive cost. We plan to dedicate substantially all of our 2013 exploration and development drilling budget to the Wolfcamp oil shale resource play. Focusing on the Wolfcamp oil shale resource play allows us to develop operating, technical and regional expertise important to interpreting geological and operating trends, enhancing production rates and maximizing well recovery. Our objectives for 2013 include advancing our understanding of optimal well spacing and testing multi-zone potential, with the goal of enhancing hydrocarbon recovery in the Wolfcamp shale and improving our cost structure.
- *Operate our properties as a low-cost producer.* We strive to minimize our operating costs by concentrating our assets within geographic areas where we can consolidate operating control and, thus, create operating efficiencies. We operate 100% of our reserve base and plan to continue to operate a substantial portion of our producing properties in the future. Operating control allows us to better manage timing and risk as well as the cost of exploration and development, drilling and ongoing operations.
- *Acquire strategic and complementary assets.* We continually review opportunities to acquire producing properties, undeveloped acreage and drilling prospects in our existing core area in the Permian Basin. We focus particularly on opportunities where we believe our operational efficiency, reservoir management and geological expertise in unconventional oil and gas properties will enhance value and performance. We remain focused on unconventional resource opportunities, but will also look at conventional opportunities based on individual project economics.
- *Maintain financial flexibility.* We believe that our strong balance sheet and liquidity provide us with significant financial flexibility to pursue our strategic and financial objectives. Also, we enter into commodity price swaps and collars from time to time to partially mitigate the risk of commodity price volatility. Furthermore, during times of severe price declines, we may reduce capital expenditures and curtail drilling to preserve our financial flexibility and the net asset value of our existing proved reserves.

Our competitive strengths

We have a number of competitive strengths, which we believe will help us to successfully execute our business strategies:

- *Lower-risk, oil-rich asset base.* We believe we have assembled a strong asset base within the Midland Basin, where we have a long history of operating. We have drilled more than 600 wells in the area since 2004 with an average success rate of 94%. Our acreage position of 167,000 gross (148,000 net), primarily contiguous acres provides us with a multi-year inventory of repeatable, horizontal and vertical drilling opportunities. We believe our assets in the Midland Basin provide the potential for long-term reserve, production and cash flow growth. We plan to continue to develop our undeveloped acreage and optimize hydrocarbon recovery in the Wolfcamp shale by testing well spacing and multi-zone potential. Further, our proved reserves are 69% liquids (39% oil) and our production for first quarter 2013 was 69% liquids (41% oil).

Table of Contents

- *High degree of operational control.* We operate 100% of our estimated proved reserves, and we have approximately 100% working interest in Project Pangea and Pangea West. This allows us to more effectively manage and control the timing of capital spending on our development activities, as well as maximize benefits from operating cost efficiencies and field infrastructure systems.
- *Track record of growth at competitive cost.* Our reserves and production compounded annual growth rates since 2004 have been 32% and 35%, respectively. Our three-year, average drill-bit F&D and lease operating expenses have been \$7.95 per Boe and \$5.35 per Boe, respectively. We believe these historical cost performance results are very competitive with our oily peers in the Midland Basin and other oil and liquids-focused basins. Drill-bit F&D is a non-GAAP financial measure. See "Supplemental Non-GAAP Financial and Other Measures" below for our calculation of drill-bit F&D and reconciliation to the information required by paragraphs 11 and 21 of ASC 932-235.
- *Prudent financial management.* We are well capitalized with 72% pro forma equity capitalization and substantial pro forma liquidity of \$406 million as of March 31, 2013. Our capital budget is projected to be fully funded through 2014 and beyond with operating cash flow, credit facility borrowings and proceeds from this offering. We are committed to maintaining a conservative balance sheet and disciplined capital program, with a history of raising equity in order to maintain conservative leverage ratios. We also enter into commodity derivatives positions to manage our exposure to commodity price fluctuations.
- *Experienced executive management team with track record of growth.* Our executive management team has over 150 years of combined industry experience, including significant technical expertise. Our executive team has specific expertise in the Permian Basin and successfully executing multi-year development drilling programs creating stockholder value.

First quarter 2013 activity

During the three months ended March 31, 2013, we produced 754 MBoe, or 8.4 MBoe/d. We drilled ten wells and completed five wells, including three wells that were waiting on completion at December 31, 2012. At March 31, 2013, 12 wells were in progress or waiting on completion, of which five wells were completed and turned to sales shortly after March 31, 2013. We currently have three horizontal rigs running in Project Pangea and Pangea West.

2012 Activity

Our operations in 2012 focused on horizontal drilling in our Wolfcamp oil shale resource play in the Permian Basin. We drilled 26 horizontal wells in 2012, compared to 13 horizontal wells in 2011. Our early results in the Wolfcamp play led us to invest in building an infrastructure system that we believe will reduce drilling and completion costs, improve drilling and completion efficiencies, reduce fresh water use and ensure transportation for our crude oil production to market. We plan to continue to develop the Wolfcamp shale in Project Pangea in 2013. Focusing on the Wolfcamp shale allows us to use our operating, technical and regional expertise that is important to interpreting geological and operating trends, enhancing production rates and maximizing well recovery.

Production growth

Production for 2012 totaled 2.9 MMBoe (7.9 MBoe/d), compared to 2.3 MMBoe (6.4 MBoe/d) in 2011, a 24% increase. Production for 2012 was 34% oil, 31% NGLs and 35% natural gas. Our continued development of Project Pangea increased oil production 101% in 2012, compared to

[Table of Contents](#)

2011. On average, we operated two horizontal rigs and one vertical rig in 2012, and drilled a total of 46 wells, of which 10 were waiting on completion at December 31, 2012. We also recompleted 19 wells in the Wolffork in 2012.

Reserve growth

In 2012, our estimated proved reserves increased 24%, or 18.5 MMBoe, to 95.5 MMBoe from 77.0 MMBoe. Our proved reserves at year-end 2012 were 39% oil, 30% NGLs and 31% natural gas, compared to 23% oil, 38% NGLs and 39% natural gas at year-end 2011. During 2012, our proved oil reserves increased 19.2 MMBbls, or 106%, to 37.3 MMBbls from 18.1 MMBbls in 2011. Reserve growth, and especially our oil reserve growth, in 2012 was driven primarily by results in our Wolfcamp oil shale resource play.

2012 Equity offering

In September 2012, we sold 5 million shares of common stock in the 2012 Equity Offering at \$30.50 per share. In October 2012, the underwriters exercised their option and purchased an additional 325,000 shares. After deducting underwriting discounts and transaction costs of approximately \$8 million, we received net proceeds of approximately \$154.4 million. We used the proceeds of the 2012 Equity Offering to repay outstanding borrowings under our revolving credit facility, fund our capital expenditures for the development of our Wolfcamp oil shale resource play and for general working capital needs.

2013 Capital expenditures

For the three months ended March 31, 2013, our capital expenditures totaled \$69.5 million, consisting of \$61.8 million for drilling and completion activities, \$6.7 million for pipeline, infrastructure projects and other equipment and \$1 million for acreage acquisitions and 3-D seismic data acquisition. Also, during the three months ended March 31, 2013, we made a capital contribution to our pipeline joint venture of \$6.3 million for oil pipeline and facilities construction. Our 2013 capital budget is \$260 million, which includes three rigs to drill horizontal wells targeting the Wolfcamp shale. We expect that our horizontal drilling in Project Pangea in 2013 will include pad drilling, which we believe will improve operating efficiencies and resource recoveries, while reducing facilities costs and surface impact. We also may drill vertical wells targeting the Wolffork or recomplete Canyon Sands wells in the Wolffork during 2013. Our objectives for 2013 include advancing our understanding of optimal well spacing, testing multi-zone potential, with the goal of enhancing hydrocarbon recovery in our Wolffork targets and improving our cost structure.

Our 2013 capital budget excludes acquisitions and is subject to change depending upon a number of factors, including additional data on our Wolfcamp oil shale resource play, results of horizontal and vertical drilling, completions and recompletions, including pad drilling, economic and industry conditions at the time of drilling, prevailing and anticipated prices for oil, NGLs and gas, the availability of sufficient capital resources for drilling prospects, our financial results and the availability of lease extensions and renewals on reasonable terms.

Markets and customers

The revenues generated by our operations are highly dependent upon the prices of, and supply and demand for, oil, NGLs and gas. The price we receive for our oil, NGL and gas production depends on numerous factors beyond our control, including seasonality, the condition of the

[Table of Contents](#)

domestic and global economies, particularly in the manufacturing sectors, political conditions in other oil and gas producing countries, the extent of domestic production and imports of oil, NGLs and gas, the proximity and capacity of gas pipelines and other transportation facilities, supply and demand for oil, NGLs and gas, the marketing of competitive fuels and the effects of federal, state and local regulation. The oil and gas industry also competes with other industries in supplying the energy and fuel requirements of industrial, commercial and individual consumers.

The following table summarizes the top five purchasers of our oil, NGL and gas sales for 2012, excluding realized commodity derivative settlements.

| Purchaser | Percent of Oil, NGL and Gas sales |
|--------------------------------------|--|
| Shell Trading (US) Company ("Shell") | 22% |
| BML, Inc. ("BML") | 22 |
| Belvan Partners, LP ("WTG") | 20 |
| DCP Midstream, LLC ("DCP") | 17 |
| Plains Marketing, LP ("Plains") | 6 |
| Total | 87% |

As of December 31, 2012, we had dedicated all of our oil production from northern Project Pangea and Pangea West for 10 years to an oil pipeline joint venture in which we own a 50% equity interest. In addition, as of December 31, 2012, we had contracted to sell all of our NGLs and natural gas production from Project Pangea to DCP through January 2016.

Commodity derivative activity

We enter into financial swaps and options to mitigate portions of the risk of market price fluctuations related to future oil and gas production. All derivative instruments are recorded on the balance sheet at fair value. Changes in the derivative's fair value are currently recognized in the statement of operations unless specific commodity derivative accounting criteria are met and contracts have been designated as cash flow hedge instruments. For qualifying cash-flow commodity derivatives, the gain or loss on the derivative is deferred in accumulated other comprehensive income to the extent the commodity derivative is effective. The ineffective portion of the commodity derivative is recognized immediately in the statement of operations. Gains and losses on commodity derivative instruments included in accumulated other comprehensive income are reclassified to oil and gas sales revenue in the period that the related production is delivered. Derivative contracts that do not qualify for commodity derivative accounting treatment are recorded as derivative assets and liabilities at fair value in the balance sheet, and the associated unrealized gains and losses are recorded as current income or expense in the statement of operations.

Historically, we have not designated our derivative instruments as cash-flow commodity derivatives. We record our open derivative instruments at fair value on our consolidated balance sheets as either unrealized gains or losses on commodity derivatives. We record changes in such fair value in earnings on our consolidated statements of operations under the caption entitled "unrealized gain (loss) on commodity derivatives."

[Table of Contents](#)

Employees

As of February 15, 2013, we had 95 full-time employees, 53 of whom are field personnel. We regularly use independent contractors and consultants to perform various field and other services. None of our employees are represented by a labor union or covered by any collective bargaining agreement. We believe that our relations with our employees are excellent.

Insurance matters

As is common in the oil and gas industry, we will not insure fully against all risks associated with our business either because such insurance is not available or because premium costs are considered prohibitive. A loss not fully covered by insurance could have a material adverse effect on our business, financial condition and results of operations.

Properties

Our operations are focused on the Wolfcamp oil shale resource play in the Permian Basin in West Texas. We also have minor operations in the East Texas Basin in East Texas. The following table is a summary of data for our operating areas for the year ended December 31, 2012.

| Operating Area | Total gross acres | Total net acres | Average daily production (MBoe/d) | Percentage of production | Proved reserves (MBoe) | Percentage of proved reserves |
|----------------|-------------------------|-----------------------|--|--------------------------------|------------------------------|-------------------------------------|
| Permian Basin | 167,407 | 147,537 | 7.84 | 99.4% | 95,342 | 99.9% |
| Other | 6,194 | 3,389 | 0.05 | 0.6 % | 137 | 0.1 % |
| Total | 173,601 | 150,926 | 7.89 | 100.0% | 95,479 | 100.0% |

Permian Basin—Project Pangea and Pangea West

Our properties in the Permian Basin are located in Crockett and Schleicher Counties, Texas. We began operations in the Permian Basin through a farm-in agreement for 27,000 net acres in 2004 and have since increased our total acreage position to approximately 167,000 gross (148,000 net) acres as of year-end 2012. At December 31, 2012, we owned interests in 594 wells, all of which we operate. As of December 31, 2012, we had working and net revenue interests of approximately 100% and 76%, respectively, across Project Pangea and Pangea West.

Our acreage position in the Permian Basin is characterized by several commercial hydrocarbon zones. Our drilling targets include the Clearfork, Wolfcamp shale, Canyon Sands, Strawn and Ellenburger zones. Since we began drilling our Permian Basin properties in 2004, we have primarily produced our reserves from the Canyon Sands, Strawn and Ellenburger formations at depths ranging from 7,250 feet to 8,900 feet. The Canyon Sands were deposited in submarine fan and are tight sandstone reservoirs characterized by low permeability. We use a specialized foamed fracture stimulation treatment to increase permeability, which enhances production rates and well recovery. The Strawn formation is a fractured carbonate reservoir between the Canyon Sands and Ellenburger zones. The Ellenburger formation is a fractured carbonate and dolomite reservoir that does not require a specialized fracture stimulation treatment.

In 2010, we performed a detailed geological and petrophysical evaluation of the Clearfork, Dean and Wolfcamp shale formations, or “Wolfork,” above the Canyon Sands, Strawn and Ellenburger. In our evaluation we used logs, 3-D seismic, whole core data and regional mapping.

[Table of Contents](#)

The Wolfork is made up of three stacked pay zones, the Clearfork, Dean and Wolfcamp Shale formations with combined gross pay thickness of approximately 2,500 feet, which were deposited across Project Pangea and Pangea West by a combination of suspension, debris flow and turbidite processes. The Clearfork formation across our acreage position is a siltstone, shale and carbonate reservoir approximately 1,400 feet thick. Similarly, the Dean formation, which is approximately 150 feet thick, is a siltstone, shale and carbonate reservoir.

The Wolfcamp shale has gross pay thickness of approximately 1,000 to 1,200 feet across our acreage position. The Wolfcamp shale is a source rock that we believe has significant potential for hydrocarbons. The Wolfcamp shale is located in the oil-to-wet gas window across our Permian acreage position and is naturally fractured due to its proximity to the Ouachita-Marathon thrust belt and mineralogy, specifically the carbonate and quartz minerals. To better define and study this extensive column of rock, we have classified the Wolfcamp into four zones or "benches," which we refer to as the Wolfcamp A, B, C and D. Effectively developing the Wolfcamp shale may involve up to three lateral wellbores, each targeting a different interval, the Wolfcamp A, B and C.

We currently estimate that we have 2,983 drilling and recompletion locations targeting the horizontal Wolfcamp shale and the vertical Wolfork, 189 of which are proved, including:

- 2,096 horizontal Wolfcamp locations (approximately 700 locations per bench);
- 329 vertical Wolfork locations;
- 398 vertical Canyon Wolfork locations; and
- 160 Wolfork recompletions.

We also have identified 170 proved drilling locations targeting the Canyon Sands and deeper zones, and therefore our proved drilling locations total 359 in the Permian Basin. The timing of drilling our identified locations is subject to a number of uncertainties and will be influenced by several factors, including commodity prices, capital requirements, well-spacing requirements and a continuation of the results from both our horizontal and vertical drilling.

In the Permian Basin, we consider the Wolfork interval to be a resource play. As such, the mapping of the gross interval for each of the producing formations under our acreage position is the main factor we considered in identifying our locations. In the general region and immediately around our acreage position, publicly available well data exists from a large number of vertical wells that have allowed us to define the areal extent of each of the producing intervals, whether the whole vertical Wolfork section or the targeted Clearfork and Wolfcamp shale. In addition to this publicly available well data, we have also used internally generated information from cores, 3-D seismic, open-hole logging and reservoir engineering to estimate the extent of the targeted intervals, the ability of such intervals to produce commercial quantities of hydrocarbons and the viability of identified locations. The timing of drilling our identified locations will be influenced by several factors, including commodity prices, capital requirements, RRC well-spacing requirements and a continuation of the positive results from both our horizontal and vertical drilling and development activities.

As of December 31, 2012, we had estimated proved reserves of 95.5 MMBoe, made up of 39% oil, 30% NGLs and 31% natural gas. Our proved reserves increased 24%, and oil proved reserves increased 106%, over year-end 2011. Reserve growth in 2012 was driven primarily by results in our Wolfcamp oil shale resource play in Project Pangea.

[Table of Contents](#)

During 2012 in the Permian Basin, we incurred \$240.8 million to drill 46 wells, of which 10 wells were waiting on completion at December 31, 2012.

Other

As of December 31, 2012, we had a 50% working interest and approximately 40% net revenue interest in approximately 6,200 gross (3,400 net) acres in the East Texas Basin. As of December 31, 2012, we had estimated proved reserves of 820 MMcf in East Texas. Average daily production in 2012 was 320 Mcf/d, or a total of 117 MMcf.

Proved oil and gas reserves

The following table sets forth summary information regarding our estimated proved reserves as of December 31, 2012. See Note 10 to our consolidated financial statements in this report for additional information. Our estimated total proved reserves of oil, NGLs and natural gas as of December 31, 2012, were 95.5 MMBoe, made up of 39% oil, 30% NGLs and 31% natural gas. The proved developed portion of total proved reserves at year end 2012 was 34%. Natural gas is converted at a rate of six Mcf of gas to one barrel of oil equivalent ("Boe"). NGLs are converted at a rate of one barrel of NGLs to one Boe. The ratios of six Mcf of gas to one Boe and one barrel of NGLs to one Boe do not assume price equivalency and, given price differentials, the price for a Boe of natural gas or NGLs may differ significantly from the price of a barrel of oil.

**Summary of oil and gas reserves as of fiscal-year end
based on average fiscal-year prices**

| Reserves category | Reserves | | | Total (MBoe) | Percent (%) |
|-----------------------|----------------|-----------------|--------------------------|-----------------|----------------|
| | Oil (MBbls) | NGLs (MBbls) | Natural gas (MMcf) | | |
| Proved developed | | | | | |
| Permian Basin | 8,816 | 11,761 | 72,359 | 32,637 | 34.2% |
| Other | — | — | 819 | 137 | 0.1 |
| Proved undeveloped | | | | | |
| Permian Basin | 28,436 | 17,339 | 101,582 | 62,705 | 65.7 |
| Total proved reserves | 37,252 | 29,100 | 174,760 | 95,479 | 100.0% |

The following table sets forth our estimated proved reserves, PV-10 and a reconciliation of PV-10 to the Standardized Measure at December 31, 2012. Our reserve estimates and our calculation of Standardized Measure and PV-10 are based on the 12-month average of the first-day-of-the-month pricing of \$94.71 per Bbl West Texas Intermediate posted oil price, \$37.88 per Bbl received for NGLs and \$2.74 per MMBtu Henry Hub spot natural gas price during 2012. All prices were adjusted for energy content, quality and basis differentials by area and were held constant through the lives of the properties.

| Operating area | December 31, 2012 | | | | |
|--|-------------------|-----------------|--------------------------|-----------------|------------------------|
| | Oil (MBbls) | NGLs (MBbls) | Natural gas (MMcf) | Total (MBoe) | PV-10 (in millions) |
| Permian Basin | 37,252 | 29,100 | 173,940 | 95,342 | \$ 830,435 |
| Other | — | — | 820 | 137 | 487 |
| Total | 37,252 | 29,100 | 174,760 | 95,479 | 830,922 |
| Present value of future income tax discounted at 10% | | | | | (336,702) |
| Standardized measure of discounted future net cash flows | | | | | \$ 494,220 |

[Table of Contents](#)

PV-10 is our estimate of the present value of future net revenues from proved oil and gas reserves after deducting estimated production and ad valorem taxes, future capital costs and operating expenses, but before deducting any estimates of future income taxes. PV-10 is a non-GAAP, financial measure and generally differs from the Standardized Measure, the most directly comparable GAAP financial measure, because it does not include the effects of income taxes on future cash flows. PV-10 should not be considered as an alternative to the Standardized Measure as computed under GAAP.

We believe PV-10 to be an important measure for evaluating the relative significance of our oil and gas properties and that the presentation of PV-10 provides useful information to investors because it is widely used by professional analysts and sophisticated investors in evaluating oil and gas companies. Because there are many unique factors that can impact an individual company when estimating the amount of future income taxes to be paid, we believe the use of a pre-tax measure is valuable for evaluating our company. We believe that most other companies in the oil and gas industry calculate PV-10 on the same basis.

Changes to proved reserves

The following table sets forth the changes in our proved reserve volumes by operating area during the year ended December 31, 2012 (in MBoe).

| Operating area | Production | Extensions and discoveries | Revisions to previous estimates |
|-----------------------|-------------------|-----------------------------------|--|
| Permian Basin | (2,868) | 38,861 | (17,413) |
| Other | (20) | — | (56) |
| Total | (2,888) | 38,861 | (17,469) |

We produced 2.9 MMBoe during 2012, 99% of which is attributable to our assets in the Permian Basin. Extensions and discoveries for 2012 of 38.9 MMBoe were primarily attributable to our development project in the Wolfcamp oil shale resource play in the Permian Basin. During 2012, we recorded downward revisions totaling 17.5 MMBoe, including the reclassification of 8.9 MMBoe of proved undeveloped reserves to probable undeveloped. These reserves were attributable to vertical Canyon locations in southeast Project Pangea. Due to our horizontal Wolfcamp development project, including pad drilling, postponement of these deeper locations beyond five years from initial booking is necessary to integrate their development with the shallower Wolfcamp and Wolffork target zones. We expect this integrated development to minimize surface impact and maximize reservoir recoveries. Revisions also include 3.3 MMBoe of performance revisions primarily related to vertical Canyon wells in Project Pangea, 2.9 MMBoe of revisions resulting from technical evaluations and revisions of 2.4 MMBoe due to lower natural gas and NGL prices.

Preparation of proved reserves estimates*Internal controls over preparation of proved reserves estimates*

Our policies regarding internal controls over the recording of reserve estimates require reserve estimates to be in compliance with SEC rules, regulations and guidance and prepared in accordance with "Standards Pertaining to the Estimating and Auditing of Oil and Gas Reserves

[Table of Contents](#)

Information (Revision as of February 19, 2007)" promulgated by the Society of Petroleum Engineers ("SPE standards"). Our proved reserves are estimated at the property level and compiled for reporting purposes by our corporate reservoir engineering staff, all of whom are independent of our operations team. We maintain our internal evaluations of our reserves in a secure reserve engineering database. The corporate reservoir engineering staff interacts with our internal staff of operations engineers and geoscience professionals and with accounting employees to obtain the necessary data for the reserves estimation process. Our internal professional staff works closely with our external engineers to ensure the integrity, accuracy and timeliness of data that is furnished to them for their reserve estimation process. All of the reserve information maintained in our secure reserve engineering database is provided to the external engineers. In addition, other pertinent data is provided such as seismic information, geologic maps, well logs, production tests, material balance calculations, well performance data, operating procedures and relevant economic criteria. We make available all information requested, including our pertinent personnel, to the external engineers as part of their evaluation of our reserves.

Our Manager of Reservoir Engineering, Brandon L. Hudson, is the individual responsible for overseeing the preparation of our reserve estimates and for internal compliance of our reserve estimates with SEC rules, regulations and SPE standards at December 31, 2012. Mr. Hudson has a Bachelor of Science degree in Mechanical Engineering from University of Texas at Austin and a Master of Science degree in Petroleum Engineering from Louisiana State University and 10 years of industry experience. Mr. Hudson reports directly to our Chief Executive Officer. Our senior management, including our Chief Executive Officer and Chief Financial Officer, reviews and approves our reserves estimates, including future development costs, before these estimates are finalized and disclosed in a public filing or presentation. Our Chief Executive Officer, J. Ross Craft, P.E., is a licensed Professional Engineer with a Bachelor of Science Degree in Petroleum Engineering from Texas A&M University and more than 30 years of industry experience. Our Chief Financial Officer, Steven P. Smart, is a licensed Certified Public Accountant with more than 30 years of industry experience.

For the years ended December 31, 2012, 2011, and 2010, we engaged DeGolyer and MacNaughton, independent petroleum engineers, to prepare independent estimates of the extent and value of the proved reserves associated with certain of our oil and gas properties. In 2012, DeGolyer and MacNaughton reported to the Audit Committee of our Board of Directors and to our Manager of Reservoir Engineering. The Audit Committee meets with the independent engineering firm before the preparation of the firm's final report to, among other things, review and consider the processes used by the engineers in the preparation of the report and any matters of importance that arose in the preparation of the report, including whether the independent engineering firm encountered any material problems or difficulties in the preparation of their report. The Audit Committee's review specifically includes difficulties with the scope or timeliness of the information furnished to them by the Company or any restrictions or access to information placed upon them by any Company personnel, any other difficulties in dealing with any Company personnel in the preparation of the report and any other matters of concern relating to the preparation of the report. The Audit Committee also determines whether the Company or its management or senior engineering personnel had similar or other problems or concerns regarding the independent engineering firm and the preparation of their report. See *Third Party Reports* below for further information regarding DeGolyer and MacNaughton's report.

[Table of Contents](#)*Technologies used in preparation of proved reserves estimates*

Estimates of reserves were prepared in compliance with SEC rules, regulations and guidance and SPE standards. The method or combination of methods used in the analysis of each reservoir was tempered by experience with similar reservoirs, stage of development, quality and completeness of basic data and production history. For our properties, structure and isopach maps were constructed to delineate each reservoir. Electrical logs, radioactivity logs, seismic data and other available data were used to prepare these maps. Parameters of area, porosity and water saturation were estimated and applied to the isopach maps to obtain estimates of original oil in place or original gas in place. For developed producing wells whose performance disclosed a reliable decline in producing-rate trends or other diagnostic characteristics, reserves were determined using decline curve analysis. Reserves for producing wells whose performance was not yet established and for undeveloped locations were estimated using type curves. The parameters needed to develop these type curves such as initial decline rate, "b" factor and final decline rate were based on nearby wells producing from the same reservoir and with a similar completion for which more data were available.

Reporting of natural gas liquids ("NGLs")

We produce NGLs as part of the processing of our natural gas. The extraction of NGLs in the processing of natural gas reduces the volume of natural gas available for sale. At December 31, 2012, NGLs represented approximately 30% of our total proved reserves on a Boe basis. NGLs are products sold by the gallon. In reporting proved reserves and production of NGLs, we include these volumes and production as Boe. The prices we received for a standard barrel of NGLs in 2012 averaged approximately 60% lower than the average prices for equivalent volumes of oil. We report all production information related to natural gas net of the effect of any reduction in natural gas volumes resulting from the processing of NGLs.

Third-party reports

For the years ended December 31, 2012, 2011 and 2010, we engaged DeGolyer and MacNaughton, independent, third-party reserves engineers, to prepare estimates of the extent and value of the proved reserves of certain of our oil and gas properties, including 100% of our total reported proved reserves. DeGolyer and MacNaughton's report for 2012 is included as Exhibit 99.1 to our annual report on Form 10-K for the year ended December 31, 2012.

Proved undeveloped reserves

As of December 31, 2012, we had 62.7 MMBoe of proved undeveloped ("PUD") reserves, which is an increase of 19.3 MMBoe or 44%, compared with 43.4 MMBoe of PUD reserves at December 31, 2011. All of our PUD reserves at December 31, 2012, were associated with our core development project, Project Pangea. As a percent of our total proved reserves, our PUD reserves increased from 56% in 2011 to 66% in 2012 due to our ongoing development of our Wolfcamp oil shale resource play.

[Table of Contents](#)

The following table summarizes the changes in our PUD reserves during 2012.

| | Oil (MBbls) | NGLs (MBbls) | Natural gas (MMcf) | Total (MBoe) |
|---|----------------|-----------------|--------------------------|-----------------|
| Balance—December 31, 2011 | 12,509 | 15,178 | 94,064 | 43,364 |
| Extensions and discoveries | 18,514 | 7,349 | 41,781 | 32,827 |
| Revisions to previous estimates | (1,301) | (4,520) | (30,581) | (10,918) |
| Conversion to proved developed reserves | (1,286) | (668) | (3,682) | (2,568) |
| Balance—December 31, 2012 | 28,436 | 17,339 | 101,582 | 62,705 |

The following table sets forth our PUD reserves converted to proved developed reserves during 2012, 2011 and 2010 and the net investment required to convert PUD reserves to proved developed reserves during the year.

| Year ended December 31, | Proved undeveloped reserves converted to proved developed reserves | | | | Investment in conversion of proved undeveloped reserves to proved developed reserves |
|-------------------------|--|-----------------|--------------------------|-----------------|--|
| | Oil (MBbls) | NGLs (MBbls) | Natural gas (MMcf) | Total (MBoe) | (in thousands) |
| 2010 | 589 | 2,134 | 12,728 | 4,845 | \$ 37,070 |
| 2011 | 263 | 660 | 3,583 | 1,520 | 33,783 |
| 2012 | 1,286 | 668 | 3,682 | 2,568 | 52,008 |
| Total | 2,138 | 3,462 | 19,993 | 8,933 | \$ 122,861 |

Estimated future development costs relating to the development of PUD reserves are projected to be approximately \$239.6 million in 2013, \$291.2 million in 2014 and \$335.5 million in 2015. We monitor fluctuations in commodity prices, drilling and completion costs, operating expenses and drilling success to determine adjustments to our drilling and development program. Based on current expectations for cash flows, commodity prices and operating costs and expenses, all PUD reserves are scheduled to be drilled before the end of 2017.

At December 31, 2012, we had 4.5 MMBoe of PUD reserves, or 4.7% of our total proved reserves and 7.2% of our total PUD reserves, that have been booked for five years or longer. Substantially all of the PUD reserves that have been booked for five years or longer are associated with our deep, tight sandstone (Canyon Sands) locations in Project Pangea. This tight sandstone reservoir is approximately 7,250 to 8,500 feet deep and lies under approximately 100,000 gross acres across Project Pangea.

We have a historical record of drilling our deep, tight sandstone reserves in Project Pangea. From 2004 through December 31, 2012, we have drilled and completed more than 500 tight sands wells in the Permian Basin since 2004. According to IHS, a provider of global market and economic information, this makes us the second most active driller of tight sands (Canyon Sands) wells in West Texas since we began drilling in the area in 2004.

Based on our more recent Wolfcamp and Wolfork drilling activity in Project Pangea since 2010, we believe that the PUD reserves that have been booked for five years or longer have additional reserves above the tight sands. To maximize wellbore utility and reservoir potential, our objective

[Table of Contents](#)

is to develop these multi-zone reserves together as part of Project Pangea. Developing these reserves on an integrated basis should allow us to maximize reservoir potential, prevent waste and minimize surface impact and use of other critical resources such as fresh water for fracture stimulation.

To prepare for larger scale development of Project Pangea, in 2012 we accelerated our investment in infrastructure in Project Pangea, spending \$44.3 million on infrastructure, projects and equipment, plus an additional \$10 million in equity investment in a joint venture for pipeline and facilities construction, for a total of \$54.3 million. This represents 18% of total capital costs and equity investment in Project Pangea in 2012.

Oil and gas production, production prices and production costs

The following table sets forth summary information regarding oil, NGL and gas production, average sales prices and average production costs for the last three years. We determined the Boe using the ratio of six Mcf of natural gas to one Boe, and one barrel of NGLs to one Boe. The ratios of six Mcf of natural gas to one Boe and one barrel of NGLs to one Boe do not assume price equivalency and, given price differentials, the price for a Boe for natural gas or NGLs may differ significantly from the price for a barrel of oil.

| | Years ended December 31, | | |
|--|-----------------------------|---------|---------|
| | 2012 | 2011 | 2010 |
| Production | | | |
| Oil (MBbls) | 969 | 482 | 246 |
| NGLs (MBbls) | 904 | 798 | 261 |
| Gas (MMcf) | 6,089 | 6,345 | 6,290 |
| Total (MBoe) | 2,888 | 2,338 | 1,556 |
| Total (MBoe/d) | 7.9 | 6.4 | 4.3 |
| Average prices | | | |
| Oil (per Bbl) | \$84.70 | \$88.18 | \$75.67 |
| NGLs (per Bbl) | 34.09 | 51.39 | 41.19 |
| Gas (per Mcf) | 2.63 | 3.92 | 4.48 |
| Total (per Boe) | 44.63 | 46.37 | 37.00 |
| Realized gain on commodity derivatives (per Boe) | (0.03) | 1.44 | 3.72 |
| Total including derivative impact (per Boe) | \$44.60 | \$47.81 | \$40.72 |
| Production costs (per Boe)(1) | \$ 6.58 | \$ 4.57 | \$ 4.25 |

(1) Production cost per Boe is made up of lease operating expenses. Production cost per Boe excludes production and ad valorem taxes.

[Table of Contents](#)

Drilling activity—prior three years

The following table sets forth information on our drilling activity for the last three years. The information should not be considered indicative of future performance, nor should it be assumed that there is necessarily any correlation between the number of productive wells drilled, quantities of reserves found or economic value.

| | Years ended December 31, | | | | | |
|--------------------|--------------------------|------|-------|------|-------|------|
| | 2012 | | 2011 | | 2010 | |
| | Gross | Net | Gross | Net | Gross | Net |
| Development wells: | | | | | | |
| Productive | 46.0 | 45.8 | 69.0 | 64.2 | 91.0 | 56.2 |
| Dry | — | — | 2.0 | 2.0 | — | — |
| Exploratory wells: | | | | | | |
| Productive | — | — | — | — | — | — |
| Dry | — | — | — | — | — | — |
| Total wells: | | | | | | |
| Productive | 46.0 | 45.8 | 69.0 | 64.2 | 91.0 | 56.2 |
| Dry | — | — | 2.0 | 2.0 | — | — |

Of the 46 wells drilled in 2012, 10 wells were waiting on completion at December 31, 2012. Of the two dry wells drilled in 2011, one was completed as a salt water disposal well and one replacement well was drilled during the first three months of 2012.

Although a well may be classified as productive upon completion, future changes in oil, NGL and gas prices, operating costs and production may result in the well becoming uneconomical.

Drilling activity — current

As of the date of this prospectus supplement, we had three horizontal rigs running in Project Pangea and Pangea West.

Delivery commitments

We are not committed to provide a fixed and determinable quantity of oil, NGLs or gas in the near future under existing agreements. However, as of December 31, 2012, we had (1) dedicated all of our oil production from northern Project Pangea and Pangea West for 10 years to an oil pipeline joint venture in which we own a 50% equity interest, and (2) contracted to sell all of our NGLs and natural gas production from Project Pangea to DCP through January 2016.

Producing wells

The following table sets forth the number of producing wells in which we owned a working interest at December 31, 2012. Wells are classified as natural gas or oil according to their predominant production stream.

| | Natural gas wells | | Oil wells | | Total wells | | Average working interest |
|---------------|-------------------|-------|-----------|------|-------------|-------|--------------------------|
| | Gross | Net | Gross | Net | Gross | Net | |
| Permian Basin | 525.0 | 514.7 | 69.0 | 68.5 | 594.0 | 583.2 | 98.2 % |
| Other | 5.0 | 2.5 | — | — | 5.0 | 2.5 | 50.0 % |
| Total | 530.0 | 517.2 | 69.0 | 68.5 | 599.0 | 585.7 | 97.8 % |

[Table of Contents](#)

Acreage

The following table summarizes our developed and undeveloped acreage as of December 31, 2012.

| | Developed acres | | Undeveloped acres | | Total acres | |
|---------------|-----------------|--------|-------------------|--------|-------------|---------|
| | Gross | Net | Gross | Net | Gross | Net |
| Permian Basin | 75,371 | 66,977 | 92,036 | 80,560 | 167,407 | 147,537 |
| Other | 3,504 | 1,682 | 2,690 | 1,707 | 6,194 | 3,389 |
| Total | 78,875 | 68,659 | 94,726 | 82,267 | 173,601 | 150,926 |

Undeveloped acreage expirations

The following table sets forth the number of gross and net undeveloped acres as of December 31, 2012, that will expire over the next three years by project area unless production is established before lease expiration dates. Gross amounts may be more than net amounts in a particular year due to timing of expirations.

| | 2013 | | 2014 | | 2015 | |
|---------------|--------|--------|--------|--------|--------|--------|
| | Gross | Net | Gross | Net | Gross | Net |
| Permian Basin | 21,157 | 17,028 | 41,018 | 35,250 | 26,143 | 24,461 |
| Other | 393 | 274 | 2,298 | 1,428 | — | 4 |
| Total | 21,550 | 17,302 | 43,316 | 36,678 | 26,143 | 24,465 |

The expiring acreage set forth in the table above accounts for 95% of our net undeveloped acreage, 17.2% of our PUD reserves and 11.3% of our total proved reserves. We are continually engaged in a combination of drilling and development and discussions with mineral lessors for lease extensions, renewals, new drilling and development units and new leases to address the expiration of undeveloped acreage that occurs in the normal course of our business.

Title to properties

Our properties are subject to customary royalty interests, liens incident to operating agreements, liens for current taxes and other burdens, including other mineral encumbrances and restrictions. We do not believe that any of these burdens materially interfere with our use of the properties in the operation of our business.

We believe that we have generally satisfactory title to or rights in all of our producing properties. As is customary in the oil and gas industry, we make a general investigation of title at the time we acquire undeveloped properties. We receive title opinions of counsel before we commence drilling operations. We believe that we have satisfactory title to all of our other assets. Although title to our properties is subject to encumbrances in certain cases, we believe that none of these burdens will materially detract from the value of our properties or from our interest therein or will materially interfere with our use of the properties in the operation of our business.

Oil and gas leases

The typical oil and natural gas lease agreement covering our properties provides for the payment of royalties to the mineral owner for all oil, NGLs and natural gas produced from any wells drilled on the leased premises. The lessor royalties and other leasehold burdens on our properties generally range from 20% to 25%, resulting in a net revenue interest to us generally ranging from 80% to 75%.

[Table of Contents](#)**Seasonality**

Demand for oil, NGLs and natural gas generally decreases during the spring and fall months and increases during the summer and winter months. However, seasonal anomalies such as mild winters or mild summers sometimes lessen this fluctuation. In addition, certain natural gas users utilize storage facilities and purchase some of their anticipated winter requirements during the summer. This can also lessen seasonal demand fluctuations. These seasonal anomalies can increase competition for equipment, supplies and personnel during the spring and summer months, which could lead to shortages and increase costs or delay our operations.

Competition

The oil and gas industry is highly competitive, and we compete for personnel, prospective properties, producing properties and services with a substantial number of other companies that have greater resources. Many of these companies explore for, produce and market oil and gas, carry on refining operations and market the end products on a worldwide basis. We also face competition from alternative fuel sources, including coal, heating oil, imported LNG, nuclear and other nonrenewable fuel sources, and renewable fuel sources such as wind, solar, geothermal, hydropower and biomass. Competitive conditions may also be substantially affected by various forms of energy legislation and/or regulation considered from time-to-time by the United States government. It is not possible to predict whether such legislation or regulation may ultimately be adopted or its precise effects upon our future operations. Such laws and regulations may, however, substantially increase the costs of exploring for, developing or producing oil, NGLs and gas and may prevent or delay the commencement or continuation of our operations.

Hydraulic fracturing

Hydraulic fracturing is an important process and has been commonly used in the completion of unconventional oil and gas wells in shale and tight sand formations since the 1950s. Hydraulic fracturing involves the injection of water, sand and chemical additives under pressure into rock formations to stimulate oil and gas production. It is important to us because it provides access to oil and gas reserves that previously were uneconomical to produce.

We currently use hydraulic fracturing to complete both horizontal and vertical wells in the Permian Basin. We engage third parties to provide hydraulic fracturing services to us for completion of these wells. While hydraulic fracturing is not required to maintain our leasehold acreage that is currently held by production from existing wells, it will be required in the future to develop the proved non-producing and proved undeveloped reserves associated with this acreage. All of our proved non-producing and proved undeveloped reserves associated with future drilling, completion and recompletion projects will require hydraulic fracturing.

We believe we have followed, and intend to continue to follow, applicable industry standard practices and legal requirements for groundwater protection in our operations that are subject to supervision by state regulators. These protective measures include setting surface casing at a depth sufficient to protect fresh water zones as determined by applicable state regulatory agencies, and cementing the well to create a permanent isolating barrier between the casing pipe and surrounding geological formations. This aspect of well design is intended to prevent contact between the fracturing fluid and any aquifers during the hydraulic fracturing operations. For recompletions of existing wells, the production casing is pressure-tested before perforating the new completion interval.

[Table of Contents](#)

Injection rates and pressures are monitored at the surface during our hydraulic fracturing operations. Pressure is monitored on both the injection string and the immediate annulus to the injection string. We believe we have adequate procedures in place to address abrupt changes to the injection pressure or annular pressure.

Texas regulations currently require disclosure of the components in the solutions used in hydraulic fracturing operations. Over 99% (by mass) of the ingredients we use in hydraulic fracturing are water and sand. The remainder of the ingredients are chemical additives that are managed and used in accordance with applicable requirements.

Hydraulic fracturing requires the use of a significant amount of water. Upon flowback of the water, we dispose of it in a way that we believe minimizes the impact to nearby surface water by disposing into approved disposal facilities or injection wells. Currently our primary sources of water in Project Pangea are the nonpotable Santa Rosa and potable Edwards-Trinity (Plateau) aquifers. We use water from on-lease water wells that we have drilled, and we purchase water from off-lease water wells. We also plan to reuse and recycle flow-back and produced water in 2013.

For information regarding existing and proposed governmental regulations regarding hydraulic fracturing and related environmental matters, please read “—Regulation—Environmental laws and regulation” and “—Hydraulic fracturing.” For related risks to our stockholders, please read “Risk factors —Federal and state legislation and regulatory initiatives and private litigation relating to hydraulic fracturing could stop or delay our development project and result in materially increased costs and additional operating restrictions.”

Regulation

The oil and gas industry in the United States is subject to extensive regulation by federal, state and local authorities. At the federal level, various federal rules, regulations and procedures apply, including those issued by the U.S. Department of Interior, the U.S. Department of Transportation (the “DOT”) (Office of Pipeline Safety) and the U.S. Environmental Protection Agency (the “EPA”). At the state and local level, various agencies and commissions regulate drilling, production and midstream activities. These federal, state and local authorities have various permitting, licensing and bonding requirements. Various remedies are available for enforcement of these federal, state and local rules, regulations and procedures, including fines, penalties, revocation of permits and licenses, actions affecting the value of leases, wells or other assets, and suspension of production. As a result, there can be no assurance that we will not incur liability for fines, penalties or other remedies that are available to these federal, state and local authorities. However, we believe that we are currently in material compliance with federal, state and local rules, regulations and procedures, and that continued substantial compliance with existing requirements will not have a material adverse effect on our financial position, cash flows or results of operations.

Transportation and sale of oil

Sales of crude oil and condensate are not currently regulated and are made at negotiated prices. Our sales of crude oil are affected by the availability, terms and cost of transportation. Interstate transportation of oil by pipeline is regulated by the Federal Energy Regulation Commission (“FERC”) pursuant to the Interstate Commerce Act (“ICA”), Energy Policy Act of 1992 (“EPA 1992”), and the rules and regulations promulgated under those laws. The ICA and its regulations

[Table of Contents](#)

require that tariff rates for interstate service on oil pipelines, including interstate pipelines that transport crude oil and refined products, be just and reasonable and non-discriminatory and that such rates, terms and conditions of service be filed with FERC.

Intrastate oil pipeline transportation rates are also subject to regulation by state regulatory commissions. The basis for intrastate oil pipeline regulation, and the degree of regulatory oversight and scrutiny given to intrastate oil pipeline rates, varies from state-to-state. Insofar as effective interstate and intrastate rates are equally applicable to all comparable shippers, we believe that the regulation of oil transportation rates will not affect our operations in any way that is of material difference from those of our competitors who are similarly situated.

Further, interstate and intrastate common carrier oil pipelines must provide service on a non-discriminatory basis. Under this open access standard, common carriers must offer service to all similarly situated shippers requesting service on the same terms and under the same rates. When oil pipelines operate at full capacity, access is governed by prorationing provisions set forth in the pipelines' published tariffs. Accordingly, we believe that access to oil pipeline transportation services generally will be available to us to the same extent as to our similarly situated competitors.

The transportation of oil by truck is also subject to federal, state and local rules and regulations, including the Federal Motor Carrier Safety Act and the Homeland Security Act of 2002. Regulations under these statutes cover the security and transportation of hazardous materials and are administered by the DOT.

Transportation and sale of natural gas and NGLs

FERC regulates interstate gas pipeline transportation rates and service conditions under the Natural Gas Act of 1938, the Natural Gas Policy Act of 1978 and regulations issued under those statutes. FERC also regulates interstate NGL pipelines under various federal laws and regulations. Although FERC does not regulate oil and gas producers such as us, FERC's actions are intended to facilitate increased competition within all phases of the oil and gas industry and its regulation of third-party pipelines and facilities could indirectly affect our ability to transport or market our production. To date, FERC's policies have not materially affected our business or operations.

Regulation of production

Oil, NGL and gas production is regulated under a wide range of federal and state statutes, rules, orders and regulations. State and federal statutes and regulations require permits for drilling operations, drilling bonds and reports concerning operations. The state in which we operate, Texas, has regulations governing conservation matters, including provisions for the unitization or pooling of oil and gas properties, the establishment of maximum rates of production from oil and gas wells, the regulation of spacing, and requirements for plugging and abandonment of wells. Also, Texas imposes a severance tax on production and sales of oil, NGLs and gas within its jurisdiction. The failure to comply with these rules and regulations can result in substantial penalties. Our competitors in the oil and gas industry are subject to the same regulatory requirements and restrictions that affect our operations.

Environmental laws and regulations

In the United States, the exploration for and development of oil and gas and the drilling and operation of wells, fields and gathering systems are subject to extensive federal, state and local

[Table of Contents](#)

laws and regulations governing environmental protection as well as discharge of materials into the environment. These laws and regulations may, among other things:

- require the acquisition of various permits before drilling begins;
- require the installation of expensive pollution controls or emissions monitoring equipment;
- restrict the types, quantities and concentration of various substances that can be released into the environment in connection with oil and gas drilling, completion, production, transportation and processing activities;
- suspend, limit or prohibit construction, drilling and other activities in certain lands lying within wilderness, wetlands, endangered species habitat, and other protected areas; and
- require remedial measures to mitigate and remediate pollution from historical and ongoing operations, such as the closure of waste pits and plugging of abandoned wells.

These laws, rules and regulations may also restrict the rate of oil and gas production below the rate that would otherwise be possible. The regulatory burden on the oil and gas industry increases the cost of doing business in the industry and consequently affects profitability.

Governmental authorities have the power to enforce compliance with environmental laws, regulations and permits, and violations are subject to injunction, as well as administrative, civil and criminal penalties. The effects of existing and future laws and regulations could have a material adverse impact on our business, financial condition and results of operations. The clear trend in environmental regulation is to place more restrictions and limitations on activities that may affect the environment. Any changes in environmental laws and regulations or re-interpretations of enforcement policies that result in more stringent and costly waste handling, storage, transport, disposal or remediation requirements could have a material adverse effect on our business, financial condition or results of operations. Moreover, accidental releases or spills and ground water contamination may occur in the course of our operations, and we may incur significant costs and liabilities as a result of such releases, spills or contamination, including any third-party claims for damage to property, natural resources or persons. We maintain insurance against costs of clean-up operations, but we are not fully insured against all such risks. While we believe that we are in substantial compliance with existing environmental laws and regulations and that continued compliance with current requirements would not have a material adverse effect on us, there is no assurance that this will continue in the future.

The following is a summary of some of the existing environmental laws, rules and regulations that apply to our business operations.

Hazardous substance release

The Comprehensive Environmental Response, Compensation and Liability Act of 1980 ("CERCLA"), also known as the Superfund law, and comparable state statutes impose strict liability, and under certain circumstances, joint and several liability, on classes of persons who are considered to be responsible for the release of a hazardous substance into the environment. These persons include the owner or operator of the site where the release occurred, and anyone who disposed or arranged for the disposal of a hazardous substance released at the site. Under CERCLA, such persons may be subject to strict, joint and several liabilities for the costs of investigating releases of hazardous substances, cleaning up the hazardous substances that have been released into the environment, for damages to natural resources and for the costs of certain

[Table of Contents](#)

health studies. In addition, it is not uncommon for neighboring landowners and other third-parties to file claims for personal injury and property damage allegedly caused by the hazardous substances released into the environment. While we generate materials in the course of our operations that may be regulated as hazardous substances, we have not received notification that we may be potentially responsible for cleanup costs under CERCLA.

Waste handling

The Resource Conservation and Recovery Act ("RCRA") and comparable state statutes regulate the generation, transportation, treatment, storage, disposal and cleanup of hazardous and non-hazardous wastes. Under the auspices of the EPA, the individual states administer some or all of the provisions of RCRA, sometimes in conjunction with their own, more stringent requirements. Drilling fluids, produced water and most of the other wastes associated with the exploration, development and production of oil or gas are currently regulated under RCRA's non-hazardous waste provisions. However, it is possible that certain oil and gas exploration and production wastes now classified as non-hazardous could be classified as hazardous wastes in the future. Any such change could increase our operating expenses, which could have a material adverse effect on our business, financial condition and results of operations.

We currently own or lease properties that for many years have been used for oil and gas exploration, production and development activities. Although we used operating and disposal practices that were standard in the industry at the time, petroleum hydrocarbons or wastes may have been disposed of or released on, under or from the properties owned or leased by us or on, under or from other locations where such wastes have been taken for disposal. In addition, some of these properties have been operated by third parties whose treatment and disposal or release of petroleum hydrocarbons and wastes was not under our control. These properties and the materials disposed or released on, at, under or from them may be subject to CERCLA, RCRA and analogous state laws. Under such laws, we could be required to remove or remediate previously disposed wastes or contamination, or to perform remedial activities to prevent future contamination.

Air emissions

The federal Clean Air Act and comparable state laws regulate emissions of various air pollutants through air emissions permitting programs and other requirements. In addition, the EPA has developed, and continues to develop, stringent regulations governing emissions at specified sources. In particular, on April 18, 2012, the EPA issued new regulations under the New Source Performance Standards ("NSPS") and National Emission Standards for Hazardous Air Pollutants ("NESHAP"). The new regulations are designed to reduce volatile organic compound ("VOC") emissions from hydraulically-fractured natural gas wells, storage tanks and other equipment. The regulations established a phase-in period that extends until January 2015. During the phase-in period, owners and operators of hydraulically-fractured natural gas wells (wells drilled principally for the production of natural gas) must either flare their emissions or use so-called "green completion" technology. Green completions allow for the recovery of natural gas that formerly would have been vented or flared. After January 2015, all newly fractured natural gas wells must use green completion technology. We do not expect that the NSPS or NESHAP will have a material adverse effect on our business, financial condition or results of operations. However, any future laws and their implementing regulations, may require us to obtain pre-approval for the expansion or modification of existing facilities or the construction of new facilities expected

[Table of Contents](#)

to produce air emissions, impose stringent air permit requirements or use specific equipment or technologies to control emissions. Our failure to comply with these requirements could subject us to monetary penalties, injunctions, conditions or restrictions on operations and, potentially, criminal enforcement actions. We believe that we currently are in substantial compliance with all air emissions regulations and that we hold all necessary and valid construction and operating permits for our current operations.

Greenhouse gas emissions

Congress has, from time-to-time, considered legislation to reduce emissions of GHGs. The current Congress is likely to continue to consider similar bills. Moreover, almost half of the states have already taken legal measures to reduce emissions of GHGs through the planned development of GHG emission inventories and/or regional GHG cap-and-trade programs or other mechanisms. Most cap-and-trade programs work by requiring major sources of emissions, such as electric power plants, or major producers of fuels such as refineries and gas processing plants, to acquire and surrender emission allowances corresponding with their annual emissions of GHGs. The number of allowances available for purchase is reduced each year until the overall GHG emission reduction goal is achieved. As the number of GHG emission allowances declines each year, the cost or value of allowances is expected to escalate significantly. Many states have enacted renewable portfolio standards, which require utilities to purchase a certain percentage of their energy from renewable fuel sources.

In addition, in December 2009, the EPA determined that emissions of carbon dioxide, methane and other GHGs present an endangerment to human health and the environment, because emissions of such gases are, according to the EPA, contributing to warming of the earth's atmosphere and other climatic changes. These findings by the EPA allow the agency to adopt and implement regulations that would restrict emissions of GHGs under existing provisions of the federal Clean Air Act. In response to its endangerment finding, the EPA has adopted two sets of rules regarding possible future regulation of GHG emissions under the Clean Air Act, one of which purports to regulate emissions of GHGs from motor vehicles and the other of which would regulate emissions of GHGs from large stationary sources of emissions such as power plants or industrial facilities. The motor vehicle rule was finalized in April 2010 and became effective in January 2011, but it does not require immediate reductions in GHG emissions. In March 2012, the EPA proposed GHG emissions standards for fossil fuel-powered electric utility generating units that would require new plants to meet an output-based standard of 1,000 pounds of carbon dioxide equivalent per megawatt-hour. If the proposed regulation is adopted, it could have a significant impact on the electrical generation industry and may favor the use of natural gas over other fossil fuels such as coal in new plants. The EPA has also indicated that it will propose new GHG emissions standards for refineries, but specific proposed regulations are not expected to be issued until mid-2013.

In December 2010, the EPA enacted final rules on mandatory reporting of GHGs. In November and December 2011, the EPA published amendments to the rule containing technical and clarifying changes to certain GHG reporting requirements and a six-month extension for reporting GHG emissions from petroleum and natural gas industry sources. Under the amended rule, certain onshore oil and natural gas production, processing, transmission, storage and distribution facilities are required to report their GHG emissions on an annual basis beginning on September 28, 2012. Our operations in the Permian Basin are subject to the EPA's mandatory

[Table of Contents](#)

reporting rules and we believe that we are in substantial compliance with such rules. We do not expect that the EPA's mandatory GHG reporting requirements will have a material adverse effect on our business, financial condition or results of operations.

The adoption of additional legislation or regulatory programs to monitor or reduce GHG emissions could require us to incur increased operating costs, such as costs to purchase and operate emissions control systems, acquire emissions allowances or comply with new regulatory requirements. In addition, the EPA has stated that the data collected from GHG emissions reporting programs may be the basis for future regulatory action to establish substantive GHG emissions factors. Any GHG emissions legislation or regulatory programs applicable to power plants or refineries could increase the cost of consuming, and thereby reduce demand for, the oil and natural gas we produce. Consequently, legislation and regulatory programs to reduce GHG emissions could have an adverse effect on our future business, financial condition and results of operations.

Water discharges

The Federal Water Pollution Control Act (the "Clean Water Act") and analogous state laws, impose restrictions and strict controls on the discharge of pollutants and fill material, including spills and leaks of oil and other substances into regulated waters, including wetlands. The discharge of pollutants into regulated waters is prohibited, except in accordance with the terms of a permit issued by the EPA, an analogous state agency, or, in the case of fill material, the United States Army Corps of Engineers. Federal and state regulatory agencies can impose administrative, civil and criminal penalties for non-compliance with discharge permits or other requirements of the Clean Water Act and analogous state laws and regulations.

In October 2011, the EPA announced that it intends to develop national standards for wastewater discharges produced by natural gas extraction from shale and coalbed methane formations. The EPA is expected to issue proposed regulations establishing wastewater discharge standards for coalbed methane wastewater in 2013 and for shale gas wastewater in 2014. For shale gas wastewater, the EPA will consider imposing pre-treatment standards for discharges to a wastewater treatment facility. Produced and other flowback water from our current operations in the Permian Basin is typically re-injected into underground formations that do not contain potable water. To the extent that re-injection is not available for our operations and discharge to wastewater treatment facilities is required, new standards from the EPA could increase the cost of disposing wastewater in connection with our operations.

The Safe Drinking Water Act, groundwater protection and the Underground Injection Control Program

The federal Safe Drinking Water Act ("SDWA") and the Underground Injection Control program (the "UIC program") promulgated under the SDWA and state programs regulate the drilling and operation of salt water disposal wells. The EPA has delegated administration of the UIC program in Texas to the Railroad Commission of Texas ("RRC"). Permits must be obtained before drilling salt water disposal wells, and casing integrity monitoring must be conducted periodically to ensure the casing is not leaking saltwater to groundwater. Contamination of groundwater by oil and gas drilling, production and related operations may result in fines, penalties and remediation costs, among other sanctions and liabilities under the SDWA and state laws. In addition, third-party claims may be filed by landowners and other parties claiming damages for alternative water supplies, property damages and bodily injury.

[Table of Contents](#)*Hydraulic fracturing*

Hydraulic fracturing is the subject of significant focus among some environmentalists, regulators and the general public. Concerns over potential hazards associated with the use of hydraulic fracturing and its impact on the environment have been raised at all levels, including federal, state and local, as well as internationally. There have been claims that hydraulic fracturing may contaminate groundwater, reduce air quality or cause earthquakes. Hydraulic fracturing requires the use and disposal of water, and public concern has been growing over its possible effects on drinking water supplies, as well as the adequacy of water supply.

The Energy Policy Act of 2005, which exempts hydraulic fracturing from regulation under the SDWA, prohibits the use of diesel fuel in the fracturing process without a UIC permit. In the past, legislation has been introduced in, but not passed by, Congress that would amend the SDWA to repeal this exemption. If similar legislation were enacted, it could require hydraulic fracturing operations to meet permitting and financial assurance requirements, adhere to certain construction specifications, fulfill monitoring, reporting and recordkeeping obligations and meet plugging and abandonment requirements. Future federal legislation could also require the reporting and public disclosure of chemical additives used in the fracturing process, which could make it easier for third parties opposing the hydraulic fracturing process to initiate legal proceedings based on allegations that specific chemical additives used in the fracturing process could adversely affect groundwater. If federal legislation regulating hydraulic fracturing is adopted in the future, it could lead to operational delays or increased operating costs and could result in additional regulatory burdens that could make it more difficult to perform hydraulic fracturing and increase our costs of compliance and doing business.

In 2010, the EPA asserted federal regulatory authority over hydraulic fracturing involving diesel additives under the UIC program by posting a requirement on its website that requires facilities to obtain permits to use diesel fuel in hydraulic fracturing operations. Industry groups filed suit challenging the EPA's decision as a "final agency action" and, therefore, a violation of the notice-and-comment rulemaking procedures of the Administrative Procedures Act. In February 2012, the EPA and industry reached a settlement under which the EPA will modify the informal policy posted on its website concerning the need for permits under the UIC program. However, the settlement does not reflect agreement on the issue of hydraulic fracturing regulation under the SDWA, and the EPA's continued assertion of its regulatory authority under the SDWA could result in extensive requirements that could cause additional costs and delays in the hydraulic fracturing process.

In addition to the above actions of the EPA, certain members of the Congress have called upon (i) the Government Accountability Office to investigate how hydraulic fracturing might adversely affect water resources; (ii) the Securities and Exchange Commission (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 shale by means of hydraulic fracturing; and (iii) the 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. The SEC has issued subpoenas to certain shale gas producers requesting information on proved reserve estimates from shale gas wells and the actual productivity of producing shale gas wells. The media has also reported that the New York attorney general has issued subpoenas to certain oil and gas companies seeking information regarding shale gas wells.

Table of Contents

There are also certain governmental reviews either underway or being proposed that focus on environmental aspects of hydraulic fracturing. The White House Council on Environmental Quality is coordinating an administration-wide review of hydraulic fracturing, and a committee of the United States House of Representatives has conducted an investigation of hydraulic fracturing. Furthermore, a number of federal agencies are analyzing, or have been requested to review, a variety of environmental issues associated with hydraulic fracturing. The EPA has also begun a study of the potential environmental impacts of hydraulic fracturing. The EPA issued a progress report in December 2012, and final results are expected in 2014. In addition, the U.S. Department of Energy conducted an investigation into practices the agency could recommend to better protect the environment from using hydraulic fracturing. The Shale Gas Subcommittee of the Secretary of Energy Advisory Board released its "90-day" report on August 18, 2011, and its final report on November 18, 2011, proposing recommendations to reduce the potential environmental impacts from shale gas production. Also, the U.S. Department of the Interior is considering disclosure requirements or other mandates for hydraulic fracturing on federal lands. These ongoing or proposed investigations and studies, depending on their degree of pursuit and any meaningful results obtained, could spur initiatives to further regulate hydraulic fracturing.

Some states have adopted, and other states are considering adopting, regulations that could restrict hydraulic fracturing in certain circumstances or otherwise require the public disclosure of chemicals used in hydraulic fracturing. For example, pursuant to legislation adopted by the State of Texas in June 2011, the RRC enacted a rule in December 2011, requiring disclosure to the RRC and the public of certain information regarding additives, chemical ingredients, concentrations and water volumes used in hydraulic fracturing. In addition to state law, local land use restrictions, such as city ordinances, may restrict or prohibit drilling in general and hydraulic fracturing in particular.

If these or any other new laws or regulations that significantly restrict hydraulic fracturing are adopted, it could become more difficult or costly for us to drill and produce oil and gas from shale and tight sands formations and become easier for third parties opposing hydraulic fracturing to initiate legal proceedings. In addition, if hydraulic fracturing is regulated at the federal level, fracturing activities could become subject to delays, additional permitting and financial assurance requirements, more stringent construction specifications, increased monitoring, reporting and recordkeeping obligations, plugging and abandonment requirements and higher costs. These new laws or regulations could cause us to incur substantial delays or suspensions of operations and compliance costs and could have a material adverse effect on our business, financial condition and results of operations.

Compliance

We believe that we are in substantial compliance with all existing environmental laws and regulations that apply to our current operations and that our ongoing compliance with existing requirements will not have a material adverse effect on our business, financial condition or results of operations. We did not incur any material capital expenditures for remediation or pollution control activities for the year ended December 31, 2012. In addition, as of the date of this report, we are not aware of any environmental issues or claims that will require material capital or operating expenditures during 2013. However, the passage of additional or more stringent laws or regulations in the future could have a negative effect on our business, financial condition and results of operations, including our ability to develop our undeveloped acreage.

[Table of Contents](#)***Threatened and endangered species, migratory birds and natural resources***

Various state and federal statutes prohibit certain actions that adversely affect endangered or threatened species and their habitat, migratory birds, wetlands and natural resources. These statutes include the Endangered Species Act, the Migratory Bird Treaty Act, the Clean Water Act and CERCLA. The United States Fish and Wildlife Service may designate critical habitat and suitable habitat areas that it believes are necessary for survival of threatened or endangered species. A critical habitat or suitable habitat designation could result in further material restrictions to federal land use and private land use and could delay or prohibit land access or development. Where takings of, or harm to, species or damages to wetlands, habitat or natural resources occur or may occur, government entities or at times private parties may act to prevent oil and gas exploration activities or seek damages for harm to species, habitat or natural resources resulting from drilling or construction or releases of oil, wastes, hazardous substances or other regulated materials, and may seek natural resources damages and, in some cases, criminal penalties.

OSHA and other laws and regulations

We are subject to the requirements of the federal Occupational Safety and Health Act ("OSHA") and comparable state statutes. The OSHA hazard communication standard, the EPA community right-to-know regulations under Title III of CERCLA and similar state statutes require that we organize and/or disclose information about hazardous materials used or produced in our operations. We believe that we are in substantial compliance with these applicable requirements and with other OSHA and comparable requirements.

Available Information

We maintain an internet website under the name www.approachresources.com. The information on our website is not a part of this report. We make available, free of charge, on our website, our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports, as soon as reasonably practicable after providing such reports to the SEC. Also, the charters of our Audit Committee and Compensation and Nominating Committee, and our Code of Conduct, are available on our website and in print to any stockholder who provides a written request to the Corporate Secretary at One Ridgmar Centre, 6500 West Freeway, Suite 800, Fort Worth, Texas 76116. We file annual reports on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K, proxy statements and other documents with the SEC under the Exchange Act. The public may read and copy any materials that we file with the SEC at the SEC's Public Reference Room at 100 F Street, NE, Washington DC 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. Also, the SEC maintains an internet website that contains reports, proxy and information statements, and other information regarding issuers, including Approach, that file electronically with the SEC. The public can obtain any document we file with the SEC at www.sec.gov. Information contained on or connected to our website is not incorporated by reference into this Form 10-K and should not be considered part of this report or any other filing that we make with the SEC.

[Table of Contents](#)

Management

The following table sets forth the names, ages and positions of our executive officers and directors as of June 3, 2013. All of our directors are members of the National Association of Corporate Directors.

| Name | Age | Position |
|-----------------------|-----|---|
| J. Ross Craft, P.E. | 56 | President, Chief Executive Officer and Class III Director |
| Qingming Yang, PhD | 49 | Chief Operating Officer |
| J. Curtis Henderson | 50 | Executive Vice President, General Counsel and Secretary |
| Steven P. Smart | 58 | Executive Vice President and Chief Financial Officer |
| Ralph P. Manoushagian | 61 | Executive Vice President – Land |
| Bryan H. Lawrence | 70 | Chairman of the Board and Class III Director |
| Alan D. Bell | 67 | Class I Director |
| James H. Brandi | 64 | Class II Director |
| James C. Crain | 64 | Class II Director |
| Sheldon B. Lubar | 84 | Class I Director |
| Christopher J. Whyte | 56 | Class I Director |

J. Ross Craft, P.E. has been our President and Chief Executive Officer and a member of our Board since our inception in September 2002. Before Approach, Mr. Craft co-founded Athanor Resources Inc., an international exploration and production company with operations in the United States and Tunisia, in 1998 and was its Executive Vice President from 1998 until its merger with Nuevo Energy Company in September 2002. From 1988 to 1997, Mr. Craft served in various positions with American Cometra Inc., an independent exploration and production company with operations in the United States, including as Vice President – Operations from 1995 to 1997. American Cometra was sold in two parts, to Range Resources in 1995 and Pioneer Natural Resources in 1997. Mr. Craft has over 30 years of experience in the oil and gas industry. Mr. Craft holds a B.S. in Petroleum Engineering from Texas A&M University and is a registered Professional Engineer licensed in Texas. Mr. Craft is a member of the Society of Petroleum Engineers, the Texas Oil & Gas Association, the Permian Basin Petroleum Association and the Independent Petroleum Association of America. Mr. Craft has served on the Board of the Fort Worth Chapter of the Society of Petroleum Engineers and on the Board of the Fort Worth Petroleum Engineers Club, where his last position was President. Mr. Craft is also an Eagle Scout. Mr. Craft is the brother-in-law of J. Curtis Henderson, our Executive Vice President, General Counsel and Secretary.

Qingming Yang, PhD joined us in July 2009 as Vice President – Exploration. In November 2010, Dr. Yang was named Executive Vice President – Business Development and Geosciences and, in December 2012, Dr. Yang was named Chief Operating Officer. Dr. Yang has over 25 years of domestic and international exploration, technical and operating experience in the oil and gas industry. Before joining Approach, Dr. Yang was employed by Pioneer Natural Resources for 12 years in a variety of positions, including Exploration Manager for Worldwide Exploration and Business Development, Geosciences Advisor and Technical Lead for Pioneer's Eagle Ford Shale team. Dr. Yang is a member of American Association of Petroleum Geologists (AAPG) and served as an Associate Editor for the AAPG Bulletin from 2003-2009. In addition, Dr. Yang was Chairman of Dallas Geological Society International Committee in 2002. Dr. Yang earned his B.S. in Petroleum Geology from Chengdu University of Technology in the People's Republic of China, his M.A. in Geology from George Washington University and his Ph.D. in Structural Geology from the University of Texas at Dallas.

[Table of Contents](#)

J. Curtis Henderson joined us in February 2007 as Executive Vice President, General Counsel and Secretary. From 2005 to 2007, Mr. Henderson served as President and Chief Executive Officer of Coterie Capital Partners, Ltd., a private equity partnership in Dallas, Texas. From 1996 to 2005, Mr. Henderson served as General Counsel of Nucentrix Broadband Networks, Inc., a public, broadband wireless telecommunications company based in Dallas. While he was at Nucentrix, Mr. Henderson oversaw its sale to an affiliate of Nextel Communications Inc. under Section 363 of the United States Bankruptcy Code in 2004. Mr. Henderson began his career as a lawyer in the corporate and securities section of Locke Lord Bissell & Liddell (formerly Locke Purnell Rain Harrell). Mr. Henderson has over 25 years of experience in public and private securities, mergers and acquisitions, corporate finance and regulatory affairs. Mr. Henderson holds a B.A. in Political Science from Austin College and a J.D. from Washington and Lee University School of Law, where he served as Articles Editor of the Washington and Lee Law Review. Mr. Henderson is the brother-in-law of J. Ross Craft, our CEO and President.

Steven P. Smart joined us as Treasurer at our inception in September 2002. Mr. Smart was named Vice President—Finance in August 2005, and promoted to Executive Vice President and Chief Financial Officer (“CFO”) in June 2007. From 2000 to 2002, Mr. Smart was Controller and Treasurer of Prize Energy Corp., a public exploration and production company. From 1998 to 2000, Mr. Smart was a Senior Manager in the Energy Industry group at Arthur Andersen LLP. Prior to 1998, Mr. Smart served in senior executive financial positions with several public and private oil and gas companies, including Magnum Hunter Resources Inc. and Saxon Oil Co. Mr. Smart began his career in public accounting with Deloitte & Touche (formerly Touche Ross). Mr. Smart has over 30 years of experience with both public and private companies in the oil and gas industry. Mr. Smart holds a B.B.A. in Accounting from Angelo State University and is a licensed Certified Public Accountant in the State of Texas.

Ralph P. Manoushagian joined us in February 2004 as Land Manager. Mr. Manoushagian was named Senior Vice President – Land in June 2007 and Executive Vice President – Land in June 2008. In 2003, Mr. Manoushagian worked as an independent landman. From 2001 to 2003, Mr. Manoushagian was the President of Hudco Fuels, a privately-owned fuel distributorship. Mr. Manoushagian has been an active landman and oil and gas operator for over 30 years. Mr. Manoushagian holds a B.B.A. in Finance from the University of North Texas and has been a Certified Professional Landman since 1988. Mr. Manoushagian is a director of the First Financial Bank of Southlake, Texas. He previously served as a director and Vice President of the Texas Independent Producers and Royalty Owners and as a director of the Texas Alliance of Energy Producers.

Alan D. Bell was appointed to our Board in August 2010 and is Chairman of our Audit Committee and a member of our Compensation Committee. Mr. Bell's prior experience includes 33 years in various capacities at Ernst & Young LLP from 1973 until his retirement in 2006, when he was Director of Ernst & Young's Energy Practice in the Southwest United States. Before joining Ernst & Young, Mr. Bell was a production engineer with Chevron Oil Company in the Gulf of Mexico. During the past five years, Mr. Bell has also been a director of Toreador Resources Corporation, an independent energy company, and Chairman of the Board of Dune Energy Inc., an independent energy company based in Houston. In 2009, Mr. Bell served as the Chief Restructuring Officer of Energy Partners Ltd., a New Orleans-based exploration and development company that emerged from Chapter 11 in September 2009. Mr. Bell also serves on the Board of Directors of the North Texas chapter of the NACD. Mr. Bell earned a degree in Petroleum Engineering from the Colorado School of Mines and an M.B.A. from Tulane University. He is a

[Table of Contents](#)

current member of the American Institute of Certified Public Accountants, the Texas Society of Certified Public Accountants and is a licensed Certified Public Accountant in Texas. Mr. Bell is also a member of the Institute of Certified Management Accountants, Association of Certified Fraud Examiners and the Society of Petroleum Engineers and is a NACD Board Leadership Fellow. Mr. Bell is also an Eagle Scout.

James H. Brandi joined us as a director in June 2007 and is Chairman of our Compensation Committee and a member of our Audit Committee. Mr. Brandi's prior work experience includes serving as Managing Director in investment banking at BNP Paribas, a global bank and financial services company, from May 2010, when BNP Paribas acquired Hill Street Capital, until November 2011. From November 2005 to May 2010, Mr. Brandi was a partner at Hill Street Capital, a financial advisory and private investment firm. From 2000 until November 2005, Mr. Brandi was a Managing Director at UBS Securities, LLC, where he was the Deputy Global Head of the Energy and Power Groups. Before 2000, Mr. Brandi was a Managing Director at Dillon, Read & Co. Inc. and later its successor firm, UBS Warburg, concentrating on transactions in the energy and consumer goods areas. Mr. Brandi is a director of OGE Energy Corp., which operates electric utility and midstream natural gas businesses, and Chairman of the Board of Carbon Natural Gas Company, an independent oil and gas company. During the past five years, Mr. Brandi also has been a director of Energy East Corp., a utility holding company. Mr. Brandi is a trustee of The Kenyon Review and a former trustee of Kenyon College. Mr. Brandi holds a B.A. in History from Yale University and an M.B.A. from Harvard Business School and attended Columbia Law School as a Harlan Fiske Stone Scholar.

James C. Crain joined us as a director in June 2007 and is a member of our Audit Committee and our Compensation Committee. Mr. Crain has been in the energy industry for over 30 years, both as an attorney and as an executive officer. Since 1984, Mr. Crain has been an officer of Marsh Operating Company, an investment management company focusing on energy investing, including his current position as President, which he has held since 1989. Mr. Crain has served as general partner of Valmora Partners, L.P., a private investment partnership that invests in the oil and gas sector, among others, since 1997. Before joining Marsh in 1984, Mr. Crain was a partner in the law firm of Jenkins & Gilchrist, where he headed the firm's energy section. Mr. Crain is a director of Crosstex Energy, Inc., a midstream natural gas company, and GeoMet, Inc., a natural gas exploration and production company. During the past five years, Mr. Crain has also been a director of Crosstex Energy GP, LLC, the general partner of a midstream natural gas company, and Crusader Energy Group Inc., an oil and gas exploration and production company. Mr. Crain holds a B.B.A., M.P.A. and J.D. from the University of Texas at Austin.

Bryan H. Lawrence has been a member of our Board since 2002 and is the Chairman of our Board. Mr. Lawrence is a founder and Senior Manager of Yorktown Partners LLC, the manager of the Yorktown group of investment partnerships, which make investments in companies in the energy industry. The Yorktown group of investment partnerships was formerly affiliated with the investment firm of Dillon, Read & Co. Inc., where Mr. Lawrence had been employed since 1966, serving as a Managing Director until the merger of Dillon Read with SBC Warburg in 1997. Mr. Lawrence is a director of Crosstex Energy, Inc. and Crosstex Energy GP, LLC, midstream natural gas companies, Hallador Energy Company, an independent company engaged in the production of coal and the exploration and production of oil and gas, Carbon Natural Gas Company, an independent oil and gas company, the general partner of Star Gas Partners, L.P., a home heating oil distributor and services provider, Winstar Resources Ltd., a Canadian oil and gas company, and certain non-public companies in the energy industry in which the Yorktown group

[Table of Contents](#)

of investment partnerships holds equity interests. During the past five years, Mr. Lawrence has also been a director of Compass Petroleum, Ltd., a Canadian oil and gas company. Mr. Lawrence is a graduate of Hamilton College and holds an M.B.A. from Columbia University.

Sheldon B. Lubar joined us as a director in June 2007 and is a member of our Compensation Committee. Mr. Lubar has been Chairman of the Board of Lubar & Co. Incorporated, a private investment and venture capital firm he founded, since 1977. He was Chairman of the Board of Christiana Companies, Inc., a logistics and manufacturing company, from 1987 until its merger with Weatherford International in 1995. Mr. Lubar is a director of Hallador Energy Company, an independent company engaged in the production of coal and the exploration and production of oil and gas, and the general partner of Star Gas Partners, L.P., a home heating oil distributor and services provider. During the past five years, Mr. Lubar has also been a director of Crosstex Energy, Inc. and Crosstex Energy GP, LLC, midstream natural gas companies, and Grant Prideco, a provider of drill pipe and drill bits. Mr. Lubar previously held governmental appointments under three United States Presidents, including Commissioner of the White House Conference on Small Business from 1979 to 1980 under President Carter, Assistant Secretary, Housing Production and Mortgage Credit, Department of Housing and Urban Development and Commissioner of the Federal Housing Administration and Director of the Federal National Mortgage Association from 1973 to 1974 under Presidents Nixon and Ford. Mr. Lubar is a past president of the Board of Regents of the University of Wisconsin System. Mr. Lubar holds a B.B.A., J.D. and honorary Doctor of Humane Letters degree from the University of Wisconsin – Madison, an honorary Doctor of Commercial Science degree from the University of Wisconsin – Milwaukee and an Honorary Doctors degree from the Medical College of Wisconsin.

Christopher J. Whyte joined our Board in June 2007 and is a member of our Audit Committee. Mr. Whyte has been President, Chief Executive Officer and a director of PetroSantander Inc., which owns and operates oil and gas producing properties in the United States, Colombia, Romania and Brazil, since 1995. Mr. Whyte is a director of Winstar Resources Ltd., a public Canadian oil and gas company. During the past five years, Mr. Whyte has also been a director of Compass Petroleum, Ltd., a Canadian oil and gas company. Mr. Whyte holds a B.A. from the University of Pittsburgh. Mr. Whyte has over 25 years of experience in various operating, executive and finance positions, including as a Chief Executive and Chief Financial Officer, in the E&P and energy businesses.

[Table of Contents](#)

Description of other indebtedness

At March 31, 2013, we had a \$300 million revolving credit facility with a borrowing base set at \$280 million. The borrowing base is redetermined semi-annually on or before each April 1 and October 1 based on our oil, NGL and gas reserves. We or the lenders can each request one additional borrowing base redetermination each calendar year.

The maturity date of our revolving credit facility at March 31, 2013 was July 31, 2014. Borrowings bear interest based on the agent bank's prime rate plus an applicable margin ranging from 0.75% to 1.75%, or the sum of the Eurodollar rate plus an applicable margin ranging from 1.75% to 2.75%. Margins vary based on the borrowings outstanding compared to the borrowing base. In addition, we pay an annual commitment of 0.50% of unused borrowings available under our revolving credit facility.

On May 1, 2013, we entered into a fifteenth amendment to our credit agreement, which, among other things, (i) increased the borrowing base under the credit agreement by \$35 million to \$315 million from \$280 million, (ii) increased the lenders' aggregate maximum commitment to \$500 million from \$300 million, and (iii) extended the maturity date of the credit agreement by two years to July 31, 2016.

We had outstanding borrowings of \$152.3 million and \$106 million under our revolving credit facility at March 31, 2013, and December 31, 2012, respectively. The interest rate applicable to our revolving credit facility at March 31, 2013 and December 31, 2012, was 2.7%. We also had outstanding unused letters of credit under our revolving credit facility totaling \$0.3 million at March 31, 2013, which reduce amounts available for borrowing under our revolving credit facility.

Loans under our revolving credit facility are secured by first priority liens on substantially all of our West Texas assets and are guaranteed by certain of our subsidiaries.

Our credit agreement contains two principal financial covenants:

- a consolidated modified current ratio covenant that requires us to maintain a ratio of not less than 1.0 to 1.0 at all times. The consolidated modified current ratio is calculated by dividing Consolidated Current Assets (as defined in the credit agreement) by Consolidated Current Liabilities (as defined in the credit agreement). As defined more specifically in the credit agreement, the consolidated modified current ratio is calculated as current assets less current unrealized gains on commodity derivatives plus the available borrowing base at the respective balance sheet date, divided by current liabilities less current unrealized losses on commodity derivatives at the respective balance sheet date.
- a consolidated funded debt-to-consolidated EBITDAX ratio covenant that requires us to maintain a ratio of not more than 4.0 to 1.0 at the end of each fiscal quarter. The consolidated funded debt to consolidated EBITDAX ratio is calculated by dividing Consolidated Funded Debt (as defined in the credit agreement) by Consolidated EBITDAX (as defined in the credit agreement). As defined more specifically in the credit agreement, consolidated EBITDAX is calculated as net income (loss), plus (1) exploration expense, (2) depletion, depreciation and amortization expense, (3) share-based compensation expense, (4) unrealized loss on commodity derivatives, (5) interest expense, (6) income and franchise taxes and (7) certain other noncash expenses, less (1) gains or losses from sales or dispositions of assets, (2) unrealized gain on commodity derivatives and (3) extraordinary or nonrecurring gains. For purposes of calculating this ratio, consolidated EBITDAX for a fiscal quarter is annualized pursuant to the credit agreement.

[Table of Contents](#)

Our credit agreement also restricts cash dividends and other restricted payments, transactions with affiliates, incurrence of other debt, consolidations and mergers, the level of operating leases, asset sales, investments in other entities and liens on properties.

In addition, our credit agreement contains customary events of default that would permit our lenders to accelerate the debt under our credit agreement if not cured within applicable grace periods, including, among others, failure to make payments of principal or interest when due, materially incorrect representations and warranties, failure to make mandatory prepayments in the event of borrowing base deficiencies, breach of covenants, defaults upon other obligations in excess of \$500,000, events of bankruptcy, the occurrence of one or more unstayed judgments in excess of \$500,000 not covered by an acceptable policy of insurance, failure to pay any obligation in excess of \$500,000 owed under any derivatives transaction or in any amount if the obligation under the derivatives transaction is secured by collateral under the credit agreement, any event of default by the Company occurs under any agreement entered into in connection with a derivatives transaction, liens securing the loans under the credit agreement cease to be in place, a Change in Control (as defined in the credit agreement) of the Company occurs, and dissolution of the Company.

At March 31, 2013, we were in compliance with all of our covenants, and there were no existing defaults or events of default under the credit agreement.

To date we have experienced no disruptions in our ability to access our revolving credit facility. However, our lenders have substantial ability to reduce our borrowing base on the basis of subjective factors, including the loan collateral value that each lender, in its discretion and using the methodology, assumptions and discount rates as such lender customarily uses in evaluating oil and gas properties, assigns to our properties.

[Table of Contents](#)

Description of notes

The notes offered by this prospectus supplement will be issued under an indenture dated as of June 11, 2013 (the “base indenture”), among the Issuer, the Subsidiary Guarantors party thereto and Wells Fargo Bank, National Association, as trustee, as supplemented by the first supplemental indenture to be dated as of June 11, 2013 (the “first supplemental indenture”). In this prospectus supplement, we refer to the base indenture, as supplemented by the first supplemental indenture, as the “indenture.” The terms of the notes include those stated in the indenture and those made part of the indenture by reference to the Trust Indenture Act of 1939, as amended. The indenture will permit us to issue Additional Notes (as defined below) of the same series as the notes and other senior debt securities in different series from time to time in an unlimited aggregate principal amount, although the issuance of notes in this offering will be limited to \$250 million.

This description of notes, together with the “Description of Debt Securities” included in the accompanying base prospectus, is intended to be a useful overview of the material provisions of the notes and the indenture. Since this description of notes and such “Description of Debt Securities” are only summaries, you should refer to the indenture for a complete description of our obligations and your rights. This description of notes supersedes the “Description of Debt Securities” in the accompanying base prospectus to the extent it is inconsistent with such “Description of Debt Securities.”

You can find the definitions of terms used in this description of notes below under the caption “—Definitions.” Capitalized terms used in this description but not defined below under the caption “—Definitions” have the meanings assigned to them in the indenture. In this description, the words the “Company,” “we,” “us,” and “our” refer only to Approach Resources Inc., and not to any of its Subsidiaries or Affiliates.

The registered holder of a note will be treated as the owner of it for all purposes. Only registered holders will have rights under the indenture.

Brief description of the notes and the subsidiary guarantees

The notes

The notes will:

- be general unsecured, senior obligations of the Company;
- rank senior in right of payment to any future subordinated indebtedness of the Company;
- rank *pari passu* in right of payment with any existing and future senior indebtedness of the Company;
- rank effectively junior in right of payment to the Company’s existing and future secured indebtedness, including indebtedness under the Senior Credit Agreement, to the extent of the assets of the Company constituting collateral securing that indebtedness; and
- be unconditionally guaranteed by the Subsidiary Guarantors on a senior unsecured basis.

As of March 31, 2013, on an as adjusted basis after giving effect to the sale of the notes, the application of the net proceeds therefrom as described under “Use of proceeds” in this

[Table of Contents](#)

prospectus supplement, the Company would have had no indebtedness outstanding, other than the notes offered hereby and the Company would have had \$280 million of secured borrowing capacity available under the Senior Credit Agreement.

The subsidiary guarantees

The notes will be guaranteed on the Issue Date on a senior unsecured basis by each of our domestic consolidated Subsidiaries; however, in the future, we will not be required to cause any Subsidiary to guarantee the notes, except in the circumstances described below under “—Covenants—Subsidiary guarantees.”

Each Subsidiary Guarantee will:

- be a general unsecured, senior obligation of the applicable Subsidiary Guarantor;
- rank senior in right of payment to any future subordinated indebtedness of such Subsidiary Guarantor;
- rank *pari passu* in right of payment with any existing and future senior indebtedness of such Subsidiary Guarantor; and
- rank effectively junior in right of payment to all existing and future secured indebtedness of such Subsidiary Guarantor (including any Indebtedness under the Senior Credit Agreement), to the extent of the assets of such Subsidiary Guarantor constituting collateral securing that indebtedness.

The Company has no independent assets or operations. The Subsidiary Guarantees will be full and unconditional and joint and several, and any subsidiaries of the Company other than the Subsidiary Guarantors are minor. There are no significant restrictions on the Company's ability, or the ability of any Subsidiary Guarantor, to obtain funds from its subsidiaries through dividends, loans, advances or otherwise.

As of March 31, 2013, on an as adjusted basis after giving effect to this offering and the application of the net proceeds therefrom as described under “Use of proceeds” and “Capitalization,” the Subsidiary Guarantors would have had \$250 million of Indebtedness outstanding, consisting of unsecured guarantees of the notes.

As of the Issue Date, all of the Company's Subsidiaries will be Restricted Subsidiaries and will be Subsidiary Guarantors. However, the Company may designate Subsidiaries as Unrestricted Subsidiaries under the circumstances described below under the caption “—Covenants—Designation of restricted and unrestricted subsidiaries.” None of the Unrestricted Subsidiaries will be subject to the restrictive covenants in the indenture and none will guarantee the notes.

Principal, maturity and interest

On the Issue Date, we will issue \$250 million in aggregate principal amount of notes in this offering. We may issue additional notes (“*Additional Notes*”) under the indenture from time to time after this offering. Any Additional Notes will have the same terms as the notes in this offering, except in some cases for the issue price and the first interest payment date. Any issuance of Additional Notes is subject to all of the covenants in the indenture, including the covenant described below under the caption “—Covenants—Incurrence of indebtedness and issuance of preferred stock.” The notes, together with any Additional Notes subsequently issued under the indenture, will be treated as a single class for all purposes under the indenture,

[Table of Contents](#)

including, without limitation, waivers, amendments, redemptions and offers to purchase. We may also issue other debt securities (other than Additional Notes) under the base indenture. If issued, such other debt securities will constitute a separate series of debt securities and will not vote together with the notes offered hereby. The notes will mature on June 15, 2021 and will be issued in denominations of \$2,000 and integral multiples of \$1,000 in excess of \$2,000.

Interest on the notes will accrue at the rate of 7.00% per annum and will be payable semi-annually in arrears on June 15 and December 15, beginning on December 15, 2013. Interest on overdue principal, premium, if any, and interest will accrue at the applicable interest rate on the notes. The Company will make each interest payment to the holders of record of the notes on the immediately preceding June 1 and December 1. Interest on the notes will accrue from the date of original issuance or, if interest has already been paid, from the date it was most recently paid. Interest will be computed on the basis of a 360-day year comprised of twelve 30-day months. If a payment date is a Legal Holiday at a place of payment, payment may be made at that place on the next succeeding day that is not a Legal Holiday, and no interest shall accrue on such payment for the intervening period.

Methods of receiving payments on the notes

If a holder of notes has given wire transfer instructions to the Company, the Company will pay all principal, interest and premium, if any, on that holder's notes in accordance with those instructions. All other payments on the notes will be made at the office or agency of the paying agent and registrar in New York, New York, unless we elect to make interest payments by check mailed to the noteholders at their address set forth in the register of holders.

Paying agent and registrar

The trustee will initially act as paying agent and registrar for the notes. The Company may change the paying agent or registrar without prior notice to the holders of the notes, and the Company or any of the Restricted Subsidiaries may act as paying agent or registrar.

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 the notes, and the Company may require a holder to pay any taxes and fees required by law or permitted by the indenture. The Company will not be required to transfer or exchange any note (or portion of a note) selected for redemption. Also, the Company will not be required to transfer or exchange any note for a period of 15 days before a selection of notes to be redeemed.

Subsidiary guarantees of the notes

Our payment obligations with respect to the notes will be jointly and severally guaranteed on a senior, unsecured basis by the Subsidiary Guarantors. Initially, each of our domestic consolidated Subsidiaries will be a Subsidiary Guarantor. Additional Subsidiaries will be required to become Subsidiary Guarantors under the circumstances described under "—Covenants—Subsidiary guarantees." The Subsidiary Guarantees will be joint and several obligations of the Subsidiary Guarantors and limited to the maximum amount the Subsidiary Guarantors are permitted to

Table of Contents

guarantee under applicable law without creating a fraudulent conveyance. See “Risk factors—Risks related to the notes—The guarantees by certain of our subsidiaries of the notes could be deemed fraudulent conveyances under certain circumstances, and a court may try to subordinate or void these subsidiary guarantees.”

A Subsidiary Guarantor may not sell or otherwise dispose of all or substantially all of its properties or assets to, or consolidate with or merge with or into (regardless of whether such Subsidiary Guarantor is the surviving Person), another Person, other than the Company or another Subsidiary Guarantor, unless:

- (1) immediately after giving effect to that transaction, no Default or Event of Default exists; and
- (2) either:
 - (a) (i) such Subsidiary Guarantor is the surviving Person or (ii) the Person acquiring the properties or assets in any such sale or other disposition or the Person formed by or surviving any such consolidation or merger (if other than such Subsidiary Guarantor) assumes all the obligations of such Subsidiary Guarantor under the indenture (including its Subsidiary Guarantee) pursuant to a supplemental indenture satisfactory to the trustee; or
 - (b) such transaction at the date thereof does not violate the provisions of the indenture described under the caption “—Repurchase at the option of holders—Asset sales.”

The Subsidiary Guarantee of a Subsidiary Guarantor will be released immediately:

- (1) upon any sale or other disposition of all or substantially all of the properties or assets of such Subsidiary Guarantor (including by way of merger or consolidation) to a Person that is not (either before or after giving effect to such transaction) the Company or a Subsidiary Guarantor, if the sale or other disposition at the date thereof does not violate the provisions of the indenture described below under the caption “—Repurchase at the option of holders—Asset sales”;
- (2) upon any sale or other disposition of the Capital Stock of such Subsidiary Guarantor to a Person that is not (either before or after giving effect to such transaction) the Company or a Subsidiary Guarantor, if the sale or other disposition at the date thereof does not violate the provisions of the indenture described under “—Repurchase at the option of holders—Asset sales” and such Subsidiary Guarantor no longer qualifies as a Subsidiary of the Company as a result of such disposition;
- (3) upon designation of such Subsidiary Guarantor as an Unrestricted Subsidiary, in accordance with the provisions of the indenture described below under the caption “—Covenants—Designation of restricted and unrestricted subsidiaries;”
- (4) upon legal defeasance, covenant defeasance or satisfaction and discharge of the indenture as provided pursuant to the defeasance or satisfaction and discharge provisions of the indenture as described below under the captions “—Legal defeasance and covenant defeasance” and “—Satisfaction and discharge;”
- (5) upon the liquidation or dissolution of such Subsidiary Guarantor, *provided* no Default or Event of Default occurs as a result thereof or has occurred or is continuing; or
- (6) in the case of any Restricted Subsidiary which after the Issue Date is required to guarantee the notes pursuant to the covenant described under “—Covenants—Future subsidiary

[Table of Contents](#)

guarantors,” upon the release or discharge in full from its (x) guarantee of such Indebtedness or (y) obligation under such Credit Facility, in each case, which resulted in such Restricted Subsidiary’s obligation to guarantee the notes.

Optional redemption

Except as described below in this section or in the next-to-last paragraph of “—Repurchase at the option of holders—Change of control,” the notes are not redeemable until June 15, 2016. From and after June 15, 2016, the Company may redeem all or a part of the notes, from time to time, at the following redemption prices (expressed as a percentage of principal amount) *plus* accrued and unpaid interest, if any, on the notes redeemed to the applicable redemption date (subject to the rights of holders of notes on the relevant record date to receive interest due on the relevant interest payment date), if redeemed during the twelve-month period beginning on June 15 of the years indicated below:

| Years | Redemption price |
|---------------------|------------------|
| 2016 | 105.250% |
| 2017 | 103.500% |
| 2018 | 101.750% |
| 2019 and thereafter | 100.000% |

At any time or from time to time prior to June 15, 2016, the Company may also redeem all or a part of the notes, at a redemption price equal to the Make-Whole Price, subject to the rights of holders of notes on the relevant record date to receive interest due on the relevant interest payment date.

“*Make-Whole Price*” with respect to any notes to be redeemed, means an amount equal to the greater of:

- (1) 100% of the principal amount of such notes; and
- (2) the sum of the present values of (a) the redemption price of such notes at June 15, 2016 (as set forth above) and (b) the remaining scheduled payments of interest from the redemption date to June 15, 2016 (not including any portion of such payments of interest accrued as of the redemption date) discounted back to the redemption date on a semi-annual basis (assuming a 360-day year consisting of twelve 30-day months) at the Treasury Rate (as defined below) *plus* 50 basis points;

plus, in the case of both (1) and (2), accrued and unpaid interest on such notes, if any, to the redemption date.

“*Comparable Treasury Issue*” means, with respect to notes to be redeemed, the U.S. Treasury security selected by an Independent Investment Banker as having a maturity most nearly equal to the period from the redemption date to June 15, 2016 that would be utilized at the time of selection and in accordance with customary financial practice, in pricing new issues of corporate debt securities of a comparable maturity; *provided* that if such period is less than one year, then the U.S. Treasury security having a maturity of one year shall be used.

“*Comparable Treasury Price*” means, with respect to any redemption date, (1) the average of the Reference Treasury Dealer Quotations for such redemption date, after excluding the highest and

[Table of Contents](#)

lowest of such Reference Treasury Dealer Quotations, or (2) if the trustee obtains fewer than five such Reference Treasury Dealer Quotations, the average of all such Reference Treasury Dealer Quotations.

“Independent Investment Banker” means J.P. Morgan Securities LLC or one of its successors, or, if such firm or its successors, if any, as the case may be, are unwilling or unable to select the Comparable Treasury Issue, an independent investment banking institution of national standing appointed by the Company.

“Reference Treasury Dealer” means each of J.P. Morgan Securities LLC, a primary Government Securities dealer in New York City (each a *“Primary Treasury Dealer”*) designated by J.P. Morgan Securities, LLC and two additional Primary Treasury Dealers selected by the Company, and their respective successors; *provided, however*, that if any such firm or any such successor, as the case may be, shall cease to be a Primary Treasury Dealer, the Company shall substitute therefor another Primary Treasury Dealer.

“Reference Treasury Dealer Quotations” means, with respect to each Reference Treasury Dealer and any redemption date, the average, as determined by the trustee, of the bid and asked prices for the Comparable Treasury Issue (expressed in each case as a percentage of its principal amount) quoted in writing to the trustee by such Reference Treasury Dealer at 5:00 p.m., New York City time, on the third Business Day preceding such redemption date.

“Treasury Rate” means, with respect to any redemption date, (1) the yield, under the heading which represents the average for the immediately preceding week, appearing in the most recently published statistical release designated “H.15(159)” or any successor publication that is published weekly by the Board of Governors of the Federal Reserve System and that establishes yields on actively traded U.S. Treasury securities adjusted to constant maturity under the caption “Treasury Constant Maturities,” for the maturity corresponding to the Comparable Treasury Issue (if no maturity is within three months before or after the stated maturity, yields for the two published maturities most closely corresponding to the Comparable Treasury Issue shall be determined, and the Treasury Rate shall be interpolated or extrapolated from such yields on a straight-line basis, rounding to the nearest month) or (2) if such release (or any successor release) is not published during the week preceding the calculation date or does not contain such yields, the rate per annum equal to the semi-annual equivalent yield to maturity of the Comparable Treasury Issue, calculated using a price for the Comparable Treasury Issue (expressed as a percentage of its principal amount) equal to the Comparable Treasury Price for such redemption date. The Treasury Rate shall be calculated on the third Business Day preceding the redemption date.

The notice of redemption with respect to the foregoing redemption need not set forth the Make-Whole Price but only the manner of calculation thereof. The Company will notify the trustee of the Make-Whole Price with respect to any redemption promptly after the calculation, and the trustee shall not be responsible for such calculation.

Prior to June 15, 2016, the Company may on any one or more occasions redeem up to 35% of the principal amount of the notes with all or a portion of the net cash proceeds of one or more Equity Offerings at a redemption price equal to 107.000% of the principal amount thereof, plus accrued and unpaid interest, if any, on the notes redeemed 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*

Table of Contents

- (1) at least 65% of the aggregate principal amount of the notes issued on the Issue Date (excluding notes held by the Company and its Subsidiaries) remains outstanding after each such redemption; and
- (2) the redemption occurs within 180 days after the closing of such Equity Offering.

Notice of any redemption upon an Equity Offering may be given prior to the completion of the related Equity Offering, and any such redemption or notice may at the Company's discretion be subject to one or more conditions precedent, including, but not limited to completion of the related Equity Offering.

Unless the Company defaults in the payment of the redemption price, interest, if any, will cease to accrue on the notes or portions thereof called for redemption on the applicable redemption date.

Selection and notice

If less than all of the notes are to be redeemed at any time, the trustee will select notes for redemption on a pro rata basis (or, in the case of notes in global form, the trustee will select notes for redemption based on DTC's method that most nearly approximates a pro rata selection), unless otherwise required by law or applicable stock exchange requirements.

No notes of \$2,000 or less can be redeemed in part. Notices of redemption will be sent at least 30 but not more than 60 days before the redemption date to each holder of notes to be redeemed at its registered address, except that redemption notices may be sent more than 60 days prior to a redemption date if the notice is issued in connection with a defeasance of the notes or a satisfaction and discharge of the indenture.

If any note is to be redeemed in part only, the notice of redemption that relates to such note shall 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 original note. Notes called for redemption become due on the date fixed for redemption, unless the redemption is subject to a condition precedent that is not satisfied or waived. On and after the redemption date, interest ceases to accrue on notes or portions of notes called for redemption, unless the Company defaults in making the redemption payment. Any redemption or notice of redemption may, at our discretion, be subject to one or more conditions precedent and, in the case of a redemption with the net cash proceeds of an Equity Offering, be given prior to the completion of the related Equity Offering.

Open market purchases; no mandatory redemption or sinking fund

We may at any time and from time to time purchase notes in the open market or otherwise. We are not required to make mandatory redemption or sinking fund payments with respect to the notes. However, under certain circumstances, we may be required to offer to purchase notes pursuant to the covenants described under the caption "—Repurchase at the option of holders."

Repurchase at the option of holders

Change of control

If a Change of Control occurs, each holder of notes will have the right to require the Company to repurchase all or any part (equal to \$2,000 or an integral multiple of \$1,000 in excess of \$2,000) of that holder's notes pursuant to an offer (a "*Change of Control Offer*") on the terms set forth

[Table of Contents](#)

in the indenture. In the Change of Control Offer, the Company will offer a payment in cash (the "*Change of Control Payment*") equal to not less than 101% of the aggregate principal amount of notes repurchased plus accrued and unpaid interest, if any, on the notes repurchased to the date of purchase (the "*Change of Control Payment Date*"), subject to the rights of holders of notes on the relevant record date to receive interest due on the relevant interest payment date. Within 30 days following any Change of Control, the Company will send a notice to each holder describing the transaction or transactions that constitute the Change of Control and offering to repurchase notes on the Change of Control Payment Date specified in the notice, which date will be no earlier than 30 days and no later than 60 days from the date such notice is sent, pursuant to the procedures required by the indenture and described in such notice. The Company will comply with the requirements of Rule 14e-1 under the Exchange Act and any other securities laws and regulations thereunder to the extent those laws and regulations are applicable in connection with the repurchase of the notes as a result of a Change of Control. To the extent that the provisions of any securities laws or regulations conflict with the Change of Control provisions of the indenture, the Company will comply with the applicable securities laws and regulations and will not be deemed to have breached its obligations under the Change of Control provisions of the indenture by virtue of such compliance.

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

- (1) accept for payment all notes or portions of notes 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
- (3) deliver or cause to be delivered to the trustee the notes properly accepted together with an Officers' Certificate stating the aggregate principal amount of notes or portions of notes being purchased by the Company.

The paying agent will promptly mail or wire transfer to each holder of notes properly tendered the Change of Control Payment for such notes (or, if all the notes are then in global form, make such payment through the facilities of DTC), 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 principal amount of \$2,000 or an integral multiple of \$1,000 in excess of \$2,000. Any note so accepted for payment will cease to accrue interest on and after the Change of Control Payment Date unless the Company defaults in making the Change of Control Payment. The Company will publicly announce the results of the Change of Control Offer on or as soon as practicable after the Change of Control Payment Date.

The provisions described herein that require the Company to make a Change of Control Offer following a Change of Control will be applicable regardless of whether any other provisions of the indenture are applicable. Except as described above with respect to a Change of Control, the indenture will not contain provisions that permit the holders of the notes to require that the Company repurchase or redeem the notes in the event of a takeover, recapitalization or similar transaction.

The Company will not be required to make a Change of Control Offer upon a Change of Control if (1) a third party makes the Change of Control Offer in the manner, at the price, at the times and otherwise in compliance with the requirements set forth in the indenture applicable to a

Table of Contents

Change of Control Offer made by the Company and purchases all notes properly tendered and not withdrawn under the Change of Control Offer, or (2) notice of redemption has been given pursuant to the indenture as described above under “—Optional redemption” unless and until there is a default in payment of the applicable redemption price.

A Change of Control Offer may be made in advance of a Change of Control, and conditioned upon the occurrence of such 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. Notes repurchased by the Company pursuant to a Change of Control Offer will have the status of notes issued but not outstanding or will be retired and cancelled, at the Company's option. Notes purchased by a third party pursuant to the preceding paragraph will have the status of notes issued and outstanding.

The definition of Change of Control includes a phrase relating to the direct or indirect sale, lease, transfer, conveyance or other disposition of “all or substantially all” of the properties or assets of the Company and its Restricted Subsidiaries taken as a whole. 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, the ability of a holder of notes to require the Company to repurchase its notes as a result of a sale, lease, transfer, conveyance or other disposition of less than all of the properties or assets of the Company and its Restricted Subsidiaries taken as a whole to another Person or group may be uncertain. Also, in a recent decision, the Chancery Court of Delaware raised the possibility that a Change of Control occurring 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.

In the event that holders of at least 90% of the aggregate principal amount of the outstanding notes accept a Change of Control Offer and the Company (or any third party making such Change of Control Offer, in lieu of the Company, as described above) purchases all of the notes held by such holders, the Company will have the right, upon not less than 30 nor more than 60 days' prior notice, given not more than 30 days following a Change of Control Payment Date, to redeem all, but not less than all, of the notes that remain outstanding at a redemption price equal to the Change of Control Payment *plus*, to the extent not included in the Change of Control Payment, accrued and unpaid interest, if any, on the notes that remain outstanding, to the date of redemption (subject to the right of holders on the relevant record date to receive interest due on the relevant interest payment date).

Asset sales

The Company will not, and will not permit any of its Restricted Subsidiaries to, consummate an Asset Sale unless:

- (1) the Company (or the Restricted Subsidiary, as the case may be) receives consideration at the time of such Asset Sale at least equal to the Fair Market Value of the assets or Equity Interests issued or sold or otherwise disposed of; and
- (2) at least 75% of the aggregate consideration received in respect of such Asset Sale and all other Asset Sales since the Issue Date by the Company and its Restricted Subsidiaries is in the form of cash or Cash Equivalents, provided that, for purposes of this provision, each of the following will be deemed to be cash:
 - (a) any liabilities, as shown on the Company's most recent consolidated balance sheet, of the Company or any Restricted Subsidiary (other than contingent liabilities, Subordinated Debt and any obligations in respect of preferred stock) that are assumed

Table of Contents

by the transferee of any such assets or Equity Interests pursuant to customary agreements (or other legal documentation with the same effect) that includes a full release of the Company or such Restricted Subsidiary from any and all liability therefor;

- (b) any securities, notes or other obligations received by the Company or any such Restricted Subsidiary from such transferee that are converted by the Company or such Restricted Subsidiary into cash within 180 days after the date of the Asset Sale, to the extent of the cash received in that conversion; and

- (c) Additional Assets.

Notwithstanding the foregoing, the 75% limitation referred to above shall be deemed satisfied with respect to any Asset Sale 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 Sale complied with the aforementioned 75% limitation.

Within 365 days after the receipt of any Net Proceeds from an Asset Sale, the Company (or the applicable Restricted Subsidiary, as the case may be) may apply such Net Proceeds, at its option:

- (1) to repay, prepay, redeem or purchase (x) Indebtedness and other Obligations under a Credit Facility; *provided* that, in the case of any such action with respect to a revolving Credit Facility shall be accompanied by a reduction of the related commitments or facility amount, (y) any Indebtedness and other Obligations that were secured by the assets sold in such Asset Sale or (z) other *pari passu* Indebtedness and Obligations with respect thereto; *provided*, that in the case of this clause (z), the Company shall also equally and ratably reduce Indebtedness under the notes by making an offer (in accordance with the procedures set forth below for an Asset Sale) to all holders to purchase at a purchase price equal to 100% of the principal amount thereof, plus accrued and unpaid interest, if any, the *pro rata* principal amount of notes;
- (2) to invest in Additional Assets; or
- (3) to make capital expenditures in respect of a Related Business of the Company or any Restricted Subsidiary;

provided that the Company and its Restricted Subsidiaries will be deemed to have complied with this paragraph if and to the extent that, within 365 days after the Asset Sale that generated the Net Proceeds, the Company or such Restricted Subsidiary has entered into and not abandoned or rejected a binding agreement to consummate any such investment described in this paragraph with the good faith expectation that such Net Proceeds will be applied to satisfy such commitment within 180 days after the end of such 365-day period; *provided further* that if such commitment is later canceled or terminated before such Net Proceeds are applied or otherwise not applied within such 180 day period, then such Net Proceeds shall constitute "Excess Proceeds."

However, pending application or investment of such Net Proceeds as provided in clauses (1) through (3), such Net Proceeds may be applied to temporarily reduce revolving credit Indebtedness. An amount equal to any Net Proceeds from Asset Sales that are not applied or invested as provided in clauses (1) through (3) above will constitute "*Excess Proceeds*."

Within ten Business Days after the aggregate amount of Excess Proceeds exceeds \$20.0 million, the Company will make an offer (an "*Asset Sale Offer*") to all holders of notes and all holders of

[Table of Contents](#)

other Indebtedness that is *pari passu* with the notes containing provisions similar to those set forth in the indenture with respect to offers to purchase or redeem with the proceeds of sales of assets, to purchase the maximum principal amount of notes and such other *pari passu* Indebtedness that may be purchased out of the Excess Proceeds. The offer price for the notes in any Asset Sale Offer will be equal to 100% of the principal amount plus accrued and unpaid interest, if any, to the date of purchase, and will be payable in cash. If any Excess Proceeds remain after consummation of an Asset Sale Offer, the Company or any Restricted Subsidiary may use those Excess Proceeds for any purpose not otherwise prohibited by the indenture. If the aggregate principal amount of notes and other *pari passu* Indebtedness tendered into such Asset Sale Offer exceeds the amount of Excess Proceeds, the Company will use the Excess Proceeds to purchase the notes and such other *pari passu* Indebtedness on a pro rata basis. Upon completion of each Asset Sale Offer, the amount of Excess Proceeds will be reset at zero.

Notwithstanding the foregoing, the sale, conveyance or other disposition of all or substantially all of the properties or assets of the Company and its Restricted Subsidiaries, taken as a whole, will be governed by the provisions of the indenture described under the caption “—Repurchase at the option of holders—Change of control” and/or the provisions described under the caption “—Covenants—Merger, consolidation or sale of substantially all assets” and not by the provisions of the Asset Sales covenant.

The Company will comply with the requirements of Rule 14e-1 under the Exchange Act and any other securities laws and regulations thereunder to the extent those laws and regulations are applicable in connection with each repurchase of notes pursuant to an Asset Sale Offer. To the extent that the provisions of any securities laws or regulations conflict with the Asset Sales provisions of the indenture, or compliance with the Asset Sales provisions of the indenture would constitute a violation of any such laws or regulations, the Company will comply with the applicable securities laws and regulations and will not be deemed to have breached its obligations under the Asset Sales provisions of the indenture by virtue of such compliance.

The Senior Credit Agreement contains, or future agreements may contain, prohibitions of certain events, including events that would constitute a Change of Control or an Asset Sale and including repurchases of or other prepayments in respect of the notes. The exercise by the holders of notes of their right to require the Company to repurchase the notes upon a Change of Control or an Asset Sale could cause a default under these other agreements, even if the Change of Control or Asset Sale itself does not, due to the financial effect of such repurchases on the Company or otherwise. In the event a Change of Control or Asset Sale occurs at a time when the Company is prohibited from purchasing notes, the Company could seek the consent of the applicable lenders to the purchase of notes or could attempt to refinance the Indebtedness that contain such prohibitions. If the Company does not obtain a consent or repay that Indebtedness, the Company will remain prohibited from purchasing notes. In that case, the Company's failure to purchase tendered notes would constitute an Event of Default under the indenture which could, in turn, constitute a default under other Indebtedness. Finally, the Company's ability to pay cash to the holders of notes upon a repurchase may be limited by the Company's then-existing financial resources. See “Risk factors—Risks related to the notes—We may not be able to fund a change of control offer.”

[Table of Contents](#)**Covenants*****Restricted payments***

The Company will not, and will not permit any of its Restricted Subsidiaries to, directly or indirectly:

- (1) declare or pay any dividend or make any other payment or distribution on account of the Company's or any Restricted Subsidiary's Equity Interests (including, without limitation, any payment by the Company or any Restricted Subsidiary in connection with any merger or consolidation involving the Company or any Restricted Subsidiary) or to the direct or indirect holders of the Company's or any Restricted Subsidiary's Equity Interests in their capacity as such (other than dividends or distributions payable in Equity Interests (other than Disqualified Stock) of the Company and other than dividends or distributions payable to the Company or any Restricted Subsidiary);
- (2) purchase, redeem or otherwise acquire or retire for value (including, without limitation, any such purchase, redemption, acquisition or retirement made in connection with any merger or consolidation involving the Company) any Equity Interests of the Company or any direct or indirect parent company of the Company (other than any such Equity Interests owned by any Restricted Subsidiary);
- (3) make any payment on or with respect to, or purchase, redeem, defease or otherwise acquire or retire for value any Subordinated Debt, except a payment of interest or principal at the Stated Maturity thereof (excluding (a) any intercompany Indebtedness between or among the Company and any of its Restricted Subsidiaries or (b) the purchase or other acquisition of Subordinated Debt acquired in anticipation of satisfying a sinking fund obligation, principal installment or final maturity, in each case due within one year of the date of such purchase or other acquisition); or
- (4) make any Restricted Investment;

(all such payments and other actions set forth in clauses (1) through (4) above being collectively referred to as "*Restricted Payments*"), unless, at the time of and after giving effect to such Restricted Payment:

- (1) no Default or Event of Default has occurred and is continuing or would occur as a consequence of such Restricted Payment;
- (2) the Company would, at the time of such Restricted Payment and after giving pro forma effect thereto as if such Restricted Payment had been made at the beginning of the applicable four-quarter period, have been permitted to incur at least \$1.00 of additional Indebtedness pursuant to the Fixed Charge Coverage Ratio test set forth in the first paragraph of the covenant described below under the caption "—Incurrence of indebtedness and issuance of preferred stock"; and
- (3) such Restricted Payment, together with the aggregate amount of all other Restricted Payments made by the Company and its Restricted Subsidiaries since the Issue Date (excluding Restricted Payments permitted by clauses (2), (3), (4), (5), (6), (7), (8), (9) and (13) of the next succeeding paragraph), is equal to or less than the sum, without duplication, of:
 - (a) 50% of the Consolidated Net Income of the Company for the period (taken as one accounting period) from April 1, 2013 to the end of the Company's most recently ended

Table of Contents

fiscal quarter for which internal financial statements are available at the time of such Restricted Payment (or, if such Consolidated Net Income for such period is a deficit, less 100% of such deficit); *plus*

- (b) 100% of (A) (i) the aggregate net cash proceeds and (ii) the Fair Market Value of (x) marketable securities (other than marketable securities of the Company or an Affiliate of the Company), (y) Capital Stock of a Person (other than the Company or an Affiliate of the Company) engaged primarily in any Related Business and (z) other assets used or useful in any Related Business, in each case received by the Company since the Issue Date as a contribution to its common equity capital or from the issue or sale of Equity Interests of the Company (other than Disqualified Stock) or from the issue or sale of convertible or exchangeable Disqualified Stock or convertible or exchangeable debt securities of the Company since the Issue Date that have been converted into or exchanged for such Equity Interests (other than Equity Interests (or Disqualified Stock or debt securities) sold to a Subsidiary of the Company), (B) with respect to Indebtedness that is incurred on or after the Issue Date, the amount by which such Indebtedness of the Company or any Restricted Subsidiary is reduced on the Company's consolidated balance sheet upon the conversion or exchange after the Issue Date of any such Indebtedness into or for Equity Interests of the Company (other than Disqualified Stock), and (C) the aggregate net cash proceeds, if any, received by the Company or any Restricted Subsidiary upon any conversion or exchange described in clause (A) or (B) above; *plus*
- (c) with respect to Restricted Investments made by the Company and its Restricted Subsidiaries after the Issue Date, an amount equal to the sum, without duplication, of (A) the net reduction in such Restricted Investments in any Person resulting from (i) repayments of loans or advances, or other transfers of assets, in each case to the Company or any Restricted Subsidiary, (ii) other repurchases, repayments or redemptions of such Restricted Investments, (iii) the sale of any such Restricted Investment to a purchaser other than the Company or a Subsidiary of the Company or (iv) the release of any Guarantee (except to the extent any amounts are paid under such Guarantee) that constituted a Restricted Investment plus (B) with respect to any Unrestricted Subsidiary designated as such after the Issue Date that is redesignated as a Restricted Subsidiary after the Issue Date, the lesser of (i) the Fair Market Value of the Company's Investment in such Subsidiary held by the Company or any Restricted Subsidiary at the time of such redesignation and (ii) the aggregate amount of Investments made by the Company or any Restricted Subsidiary in such Subsidiary upon or after designation of such Subsidiary as an Unrestricted Subsidiary and prior to the redesignation of such Subsidiary as a Restricted Subsidiary; *plus*
- (d) 100% of any dividends received by the Company or a Restricted Subsidiary after the Issue Date from an Unrestricted Subsidiary (other than to the extent such Investment constituted a Permitted Investment or a Restricted Payment made pursuant to clause (13) of the second paragraph of this covenant), to the extent such dividends were not otherwise included in the Consolidated Net Income of the Company for such period; *plus*
- (e) any amount that previously qualified as a Restricted Investment made after the Issue Date on account of any guarantee entered into by the Company or any Restricted Subsidiary, to the extent that such guarantee has not been called upon and the obligation arising thereunder no longer exists.

[Table of Contents](#)

The preceding provisions will not prohibit:

- (1) the payment of any dividend or the consummation of an irrevocable redemption within 60 days after the date of declaration of the dividend or giving of notice of the redemption if, at the date of declaration or notice, such dividend or redemption would have complied with the provisions of the indenture (assuming in the case of a redemption payment, the giving of such notice would have been deemed a Restricted Payment at such time and such deemed Restricted Payment would have been permitted at such time);
- (2) the making of any Restricted Payment in exchange for, or out of the net cash proceeds from the substantially concurrent sale (other than to a Subsidiary of the Company) of, Equity Interests of the Company (other than Disqualified Stock and other than Equity Interests issued or sold to an employee stock ownership plan, option plan or similar trust to the extent such sale to an employee stock ownership plan, option plan or similar trust is financed by loans from or Guaranteed by the Company or any Restricted Subsidiary unless such loans have been repaid with cash on or prior to the date of determination) or from the substantially concurrent contribution of common equity capital to the Company; *provided* that the amount of any such net cash proceeds that are utilized for any such Restricted Payment will be excluded from clause (3)(b) of the preceding paragraph and clause (7) of this paragraph;
- (3) the purchase, redemption, defeasance or other acquisition or retirement for value of Subordinated Debt (including the payment of any required premium and any fees and expenses incurred in connection with such purchase, redemption, defeasance or other acquisition or retirement) with the net cash proceeds from a substantially concurrent incurrence of Permitted Refinancing Indebtedness;
- (4) repurchases or other acquisitions for value of Equity Interests deemed to occur upon the vesting, exercise or exchange of equity compensation (including without limitation restricted stock awards or stock options, warrants or other convertible securities or phantom stock), if such Equity Interests represents a portion or all of the purchase, exercise or exchange price thereof or made in lieu of withholding taxes in connection with any such vesting, exercise or exchange;
- (5) payments to fund the purchase, redemption or other acquisition or retirement for value by the Company of fractional Equity Interests arising out of stock dividends, splits or combinations, business combinations or other transactions permitted by the indenture;
- (6) as long as no Default has occurred and is continuing or would be caused thereby, the purchase, redemption or other acquisition or retirement for value of any Equity Interests of the Company or any Restricted Subsidiary held by any of the Company's (or any Restricted Subsidiary) current or former directors or employees; *provided* that the aggregate price paid for all such purchased, redeemed, acquired or retired Equity Interests may not exceed the sum of (a) \$5.0 million in any fiscal year (with unused amounts in any fiscal year to be carried over to the next succeeding fiscal year) *plus* (b) the aggregate amount of cash proceeds received by the Company from the sale of the Company's Equity Interests (other than Disqualified Stock) to any such directors or employees that occurs after the Issue Date; *provided* that the amount of such cash proceeds utilized for any such purchase, redemption or other acquisition or retirement will be excluded from clause (3)(b) of the immediately preceding paragraph and clause (2) of this paragraph *plus* (c) the cash proceeds of key man life insurance policies received by the Company and any Restricted Subsidiary after the Issue Date;

Table of Contents

- (7) as long as no Default has occurred and is continuing or would be caused thereby, the declaration and payment of regularly scheduled or accrued dividends to holders of any class or series of Disqualified Stock of the Company or any class or series of preferred stock of any Restricted Subsidiary issued on or after the Issue Date in accordance with the Fixed Charge Coverage Ratio test described below under the caption “Incurrence of indebtedness and issuance of preferred stock”;
- (8) the payment of any dividend (or, in the case of any partnership or limited liability company, any similar distribution) by a Restricted Subsidiary to the holders of Equity Interests (other than Disqualified Stock) of such Restricted Subsidiary; provided that such dividend or similar distribution is paid to all holders of such Equity Interests on a pro rata basis based on their respective holdings of such Equity Interests;
- (9) purchases of Subordinated Debt at a purchase price not greater than (a) 101% of the principal amount of such Subordinated Debt and accrued and unpaid interest thereon in the event of a Change of Control or (b) 100% of the principal amount of such Subordinated Debt and accrued and unpaid interest thereon in the event of an Asset Sale in connection with any change of control offer or asset sale offer required by the terms of such Subordinated Debt, but only if:
 - (i) in the case of a Change of Control, the Company has first complied or is simultaneously complying with and fully satisfied its obligations under the covenant described under “Repurchase at the option of holders—Change of control”; or
 - (ii) in the case of an Asset Sale, the Company has complied with and fully satisfied its obligations under the covenant described under “Repurchase at the option of holders—Asset sales”;
- (10) in the case of a Change of Control, the repurchase, retirement or other acquisition for value of Equity Interests of the Company held by any future, present or former employee, or director, of the Company or any of its Subsidiaries pursuant to the 2007 Plan, but only if, the Company has first complied with and fully satisfied its obligations under the covenant described under “Repurchase at the option of holders—Change of control”; *provided* that all such repurchases, retirement or other acquisitions pursuant to this clause (11) will not exceed the greater of (a) 5% of Adjusted Consolidated Net Tangible Assets of the Company and (b) \$50.0 million;
- (11) payments or distributions to dissenting stockholders pursuant to applicable law in connection with a merger, consolidation or transfer of all or substantially all of the assets of the Company that complies with the provisions described under the caption “Merger, consolidation or sale of substantially all assets”;
- (12) redemptions for nominal value of securities issued to stockholders of the Company in connection with any rights offering; and
- (13) other Restricted Payments since the Issue Date in an aggregate amount at any time outstanding not to exceed \$35.0 million.

The amount of all Restricted Payments (other than cash) shall be the Fair Market Value, on the date of such Restricted Payment, of the Restricted Investment proposed to be made or the asset(s) or securities proposed to be paid, transferred or issued by the Company or such Restricted Subsidiary, as the case may be, pursuant to such Restricted Payment, except that the Fair Market Value of any non-cash dividend made within 60 days after the date of declaration shall be

[Table of Contents](#)

determined as of such date. The Fair Market Value of any cash Restricted Payment shall be its face amount, and the Fair Market Value of any non-cash Restricted Payment shall be determined in accordance with the definition of that term.

For purposes of determining compliance with this covenant, if a Restricted Payment meets the criteria of more than one of the types of Restricted Payments described in clauses (1) - (13) above, the Company, in its sole discretion, may order and classify, and subsequently re-order and re-classify, such Restricted Payment in any manner in compliance with this covenant.

In computing Consolidated Net Income under this covenant, (1) the Company shall use audited financial statements for the portions of the relevant period for which audited financial statements are available on the date of determination and unaudited financial statements and other current financial data based on the books and records of the Company for the remaining portion of such period and (2) the Company shall be permitted to rely in good faith on the financial statements and other financial data derived from the books and records of the Company that are available on the date of determination.

Incurrence of indebtedness and issuance of preferred stock

The Company will not, and will not permit any of its Restricted Subsidiaries to directly or indirectly create, incur, issue, assume, Guarantee or otherwise become directly or indirectly liable, contingently or otherwise, with respect to (collectively, "*incur*"; with "*incurrence*" having a correlative meaning) any Indebtedness (including Acquired Debt), and the Company will not issue any Disqualified Stock and will not permit any of its Restricted Subsidiaries to issue any preferred stock; *provided, however*, that the Company may incur Indebtedness (including Acquired Debt) and issue Disqualified Stock, and Subsidiary Guarantors may incur Indebtedness (including Acquired Debt) and issue preferred stock, if (a) the Fixed Charge Coverage Ratio for the Company's most recently ended four full fiscal quarters for which internal financial statements are available immediately preceding the date on which such additional Indebtedness is incurred or such Disqualified Stock or preferred stock is issued, as the case may be, would have been at least 2.25 to 1.0, determined on a pro forma basis (including a pro forma application of the net proceeds therefrom), as if the additional Indebtedness had been incurred or the Disqualified Stock or preferred stock had been issued, as the case may be, at the beginning of such four-quarter period and (b) no Default would occur as a consequence of, and no Event of Default would be continuing following, the incurrence of the Indebtedness or the transactions relating to such incurrence, including any related application of the proceeds thereof.

Notwithstanding the foregoing, the first paragraph of this covenant will not prohibit the incurrence or issuance of any of the following items of Indebtedness or the issuance of any Disqualified Stock or preferred stock described in clauses (5) and (7) below (collectively, "*Permitted Debt*"):

- (1) the incurrence by the Company and any Restricted Subsidiary of Indebtedness under Credit Facilities in an aggregate principal amount at any one time outstanding under this clause (1) (with letters of credit being deemed to have a principal amount equal to the maximum potential liability of the Company and its Restricted Subsidiaries thereunder) not to exceed the greater of (i) \$500.0 million and (ii) the sum of \$200.0 million *plus* an amount equal to 35% of Adjusted Consolidated Net Tangible Assets of the Company, determined as of the date of the incurrence of such Indebtedness after giving pro forma effect to such incurrence and the application of the proceeds therefrom;

Table of Contents

- (2) the incurrence by the Company or any Restricted Subsidiary of Existing Indebtedness;
- (3) the incurrence by the Company of Indebtedness represented by the notes to be issued on the Issue Date and by any Subsidiary Guarantor of the Subsidiary Guarantees;
- (4) the incurrence by the Company or any Restricted Subsidiaries of Indebtedness represented by Capital 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 design, construction, installation, improvement, deployment, refurbishment or modification of property, plant or equipment or furniture, fixtures and equipment, in each case, used in the business of the Company or any Restricted Subsidiary, in an aggregate principal amount at any time outstanding, including all Permitted Refinancing Indebtedness incurred to extend, renew, refund, refinance, replace, defease, discharge or otherwise retire for value any Indebtedness incurred pursuant to this clause (4), not to exceed the greater of (a) \$25.0 million and (b) 2% of Adjusted Consolidated Net Tangible Assets of the Company, determined as of the date of the incurrence of such Indebtedness;
- (5) the incurrence or issuance by the Company or any Restricted Subsidiary of Permitted Refinancing Indebtedness in exchange for, or the net proceeds of which are used to extend, renew, refund, refinance, replace, defease, discharge or otherwise retire for value any Indebtedness (other than intercompany Indebtedness) or Disqualified Stock of the Company, or Indebtedness (other than intercompany Indebtedness) or preferred stock of any Restricted Subsidiary, in each case that was permitted by the indenture to be incurred or issued under the first paragraph of this covenant or clause (2), (3), (4), (10), (14), or (16) of this paragraph or this clause (5);
- (6) the incurrence by the Company or any Restricted Subsidiary of intercompany Indebtedness between or among the Company and any of its Restricted Subsidiaries; *provided, however*, that (a) if the Company or any Subsidiary Guarantor is the obligor on such Indebtedness and the payee is not the Company or a Subsidiary Guarantor, such Indebtedness must be expressly subordinated to the prior payment in full in cash of all obligations then due with respect to the notes, in the case of the Company, or the Subsidiary Guarantee, in the case of a Subsidiary Guarantor; and (b) (i) any subsequent issuance or transfer of Equity Interests that results in any such Indebtedness being held by a Person other than the Company or a Restricted Subsidiary and (ii) any sale or other transfer of any such Indebtedness to a Person that is not either the Company or a Restricted Subsidiary will be deemed, in each case, to constitute an incurrence of such Indebtedness by the Company or such Restricted Subsidiary, as the case may be, that was not permitted by this clause (6);
- (7) the issuance by any Restricted Subsidiary to the Company or to any Restricted Subsidiary of any preferred stock; *provided, however*, that:
 - (a) any subsequent issuance or transfer of Equity Interests that results in any such preferred stock being held by a Person other than the Company or a Restricted Subsidiary; and
 - (b) any sale or other transfer of any such preferred stock to a Person that is not either the Company or 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 (7);

Table of Contents

- (8) the incurrence of obligations of the Company or any Restricted Subsidiary pursuant to Hedging Obligations, in each case entered into for the non-speculative purpose of limiting risks that arise in the business of the Company and its Restricted Subsidiaries;
- (9) the Guarantee by the Company or any Subsidiary Guarantor of Indebtedness of the Company or a Restricted Subsidiary that was permitted to be incurred by another provision of this covenant; *provided* that if the Indebtedness being Guaranteed is subordinated to or *pari passu* with the notes, then the Guarantee shall be subordinated or *pari passu*, as applicable, to the same extent as the Indebtedness Guaranteed;
- (10) the incurrence by the Company or any Restricted Subsidiary of Permitted Acquisition Indebtedness;
- (11) the incurrence by the Company or any Restricted Subsidiary of Indebtedness arising from the honoring by a bank or other financial institution of a check, draft or similar instrument drawn against insufficient funds, so long as such Indebtedness is covered within five Business Days;
- (12) the incurrence by the Company or any Restricted Subsidiary of Indebtedness consisting of the financing of insurance premiums in customary amounts consistent with the operations and business of the Company and its Restricted Subsidiaries;
- (13) the incurrence by the Company or any Restricted Subsidiary of Indebtedness constituting reimbursement obligations with respect to letters of credit; *provided* that upon the drawing of such letters of credit, such obligations are reimbursed within 30 days following such drawing;
- (14) the incurrence by the Company or any Restricted Subsidiary of Indebtedness arising from Guarantees of Indebtedness of joint ventures at any time outstanding not to exceed the greater of (a) \$35.0 million and (b) 4% of Adjusted Consolidated Net Tangible Assets of the Company, in each case, determined as of the date of incurrence of such Indebtedness after giving pro forma effect to such incurrence and the application of proceeds thereof;
- (15) the incurrence of Indebtedness arising from agreements of the Company or any Restricted Subsidiary providing for indemnification, adjustment of purchase price, earn-outs or similar obligations, in each case incurred or assumed in connection with the disposition or acquisition of any business, assets or a Subsidiary in accordance with this Indenture, other than guarantees of Indebtedness incurred or assumed by any Person acquiring all or any portion of such business, assets or Subsidiary for the purpose of financing such acquisition; and
- (16) the incurrence by the Company or any Restricted Subsidiary of Indebtedness in an aggregate principal amount that, when taken together with all other Indebtedness of the Company and its Restricted Subsidiaries outstanding on the date of such incurrence (other than Indebtedness permitted by clauses (1) through (15) above or the first paragraph of this covenant) and any Permitted Refinancing Indebtedness incurred to extend, renew, refund, refinance, replace, defease, discharge or otherwise retire for value any Indebtedness incurred pursuant to this clause (16) does not exceed the greater of (a) \$50 million and (b) 5% of Adjusted Consolidated Net Tangible Assets of the Company, determined as of the date of the incurrence of such Indebtedness after giving pro forma effect to such incurrence and the application of the proceeds therefrom.

[Table of Contents](#)

The Company will not incur, and will not permit any Subsidiary Guarantor to incur, any Indebtedness (including Permitted Debt) that is contractually subordinated in right of payment to any other Indebtedness of the Company or such Subsidiary Guarantor unless such Indebtedness is also contractually subordinated in right of payment to the notes and the applicable Subsidiary Guarantee, on substantially identical terms; *provided, however*, that no Indebtedness will be deemed to be contractually subordinated in right of payment to any other Indebtedness of the Company solely by virtue of being unsecured or by virtue of being secured on a first or junior Lien basis.

For purposes of determining compliance with this “—Incurrence of indebtedness and issuance of preferred stock” covenant, (a) in the event that an item of proposed Indebtedness, Disqualified Stock or preferred stock meets the criteria of more than one of the categories of Permitted Debt described in clauses (1) through (16) of the second paragraph of this covenant, or is entitled to be incurred or issued pursuant to the first paragraph of this covenant, the Company will be permitted to divide and classify such item, in whole or in part, on the date of its incurrence or issuance, or later divide and reclassify all or a portion of such item, in any manner that complies with this covenant and (b) all Indebtedness outstanding on the Issue Date or committed to on or prior to the Issue Date, in each case, under the Senior Credit Agreement shall be deemed incurred on the Issue Date under clause (1) of the second paragraph of this covenant. The accrual of interest, the accretion or amortization of original issue discount, the payment of interest on any Indebtedness in the form of additional Indebtedness with the same terms, the reclassification of preferred stock as Indebtedness due to a change in accounting principles, fluctuations in the termination value of hedging Obligations and the payment of dividends on Disqualified Stock or preferred stock in the form of additional Disqualified Stock or preferred stock of the same class will be deemed not to be an incurrence of Indebtedness or an issuance of Disqualified Stock or preferred stock for purposes of this covenant; *provided*, in each such case, that the amount of any such accrual, accretion or payment is included in Fixed Charges of the Company as accrued. The amount of any Indebtedness outstanding as of any date shall be (a) the accreted value thereof in the case of any Indebtedness issued with original issue discount and (b) the principal amount or liquidation preference thereof, in the case of any other Indebtedness. If obligations in respect of letters of credit are incurred pursuant to a Credit Facility and are being treated as incurred pursuant to clause (1) of the second paragraph of this covenant and the letters of credit relate to other Indebtedness, then such other Indebtedness shall not be included.

For purposes of determining compliance with any U.S. dollar-denominated restriction on the incurrence of Indebtedness, the U.S. dollar-equivalent principal amount of Indebtedness denominated in a foreign currency shall be calculated based on the relevant currency exchange rate in effect on the date such Indebtedness was incurred, in the case of term Indebtedness, or first committed, in the case of revolving credit Indebtedness; *provided* that if such Indebtedness is incurred to refinance other Indebtedness denominated in a foreign currency, and such refinancing would cause the applicable U.S. dollar-denominated restriction to be exceeded if calculated at the relevant currency exchange rate in effect on the date of such refinancing, such U.S. dollar-denominated restriction shall be deemed not to have been exceeded so long as the principal amount of such refinancing Indebtedness does not exceed the principal amount of such Indebtedness being refinanced. Notwithstanding any other provision of this covenant, the maximum amount of Indebtedness that the Company or any Restricted Subsidiary 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 Permitted Refinancing Indebtedness incurred to refinance other Indebtedness, if incurred in a different currency from

[Table of Contents](#)

the Indebtedness being refinanced, shall be calculated based on the currency exchange rate applicable to the currencies in which such Permitted Refinancing Indebtedness is denominated that is in effect on the date of such refinancing.

Limitation on liens

The Company will not, and will not permit any of its Restricted Subsidiaries to, directly or indirectly, create, incur or permit to exist any Lien (the "*Initial Lien*"), other than Permitted Liens, upon any of its property or assets (including Capital Stock and Indebtedness of any Subsidiaries of the Company and including any income or profits from such property or assets), whether owned on the Issue Date or thereafter acquired, which Lien secures any Subordinated Debt or other Indebtedness, unless:

- (1) in the case of Liens securing Subordinated Debt of the Company or a Subsidiary Guarantor, the notes or Subsidiary Guarantee, as applicable, are secured by a Lien on such property or assets on a senior basis to the Subordinated Debt so secured with the same priority as the notes or such Subsidiary Guarantee, as applicable, has to such Subordinated Debt until such time as such Subordinated Debt is no longer so secured by a Lien; and
- (2) in the case of Liens securing other Indebtedness of the Company or a Subsidiary Guarantor, the notes or Subsidiary Guarantees, as applicable, are secured by a Lien on such property or assets on an equal and ratable basis with the other Indebtedness so secured until such time as such other Indebtedness is no longer so secured by a Lien.

Any Lien securing the notes or Subsidiary Guarantees created pursuant to the preceding paragraph shall provide by its terms that such Lien shall be automatically and unconditionally released and discharged upon the unconditional release and discharge of the Initial Lien.

Dividend and other payment restrictions affecting restricted subsidiaries

The Company will not, and will not permit any of its Restricted Subsidiaries to, directly or indirectly, create or permit to exist or become effective any consensual encumbrance or restriction on the ability of any Restricted Subsidiary to:

- (a) pay dividends or make any other distributions on its Capital Stock to Company or any Restricted Subsidiary, or pay any Indebtedness owed to Company or any Restricted Subsidiary;
- (b) make loans or advances to the Company or any Restricted Subsidiary; or
- (c) sell, lease or transfer any of its properties or assets to the Company or any Restricted Subsidiary.

However, the preceding restrictions will not apply to encumbrances or restrictions existing under, by reason of or with respect to:

- (1) the Senior Credit Agreement, any Existing Indebtedness, Capital Stock or any other agreements or instruments, in each case in effect on the Issue Date and any amendments, restatements, modifications, renewals, extensions, supplements, increases, refundings, replacements or refinancings thereof; provided that the encumbrances and restrictions in any such amendments, restatements, modifications, renewals, extensions, supplements, increases, refundings, replacements or refinancings are, in the reasonable good faith judgment of the

Table of Contents

Chief Executive Officer and the Chief Financial Officer of the Company, not materially more restrictive, taken as a whole, than those contained in the applicable agreements or instruments as in effect on the Issue Date;

- (2) the indenture, the notes and the Subsidiary Guarantees;
- (3) applicable law, rule, regulation, order, approval, permit or similar restriction;
- (4) any instrument governing Indebtedness or Capital Stock of a Person acquired by the Company or any Restricted Subsidiary as in effect at the time of such acquisition (except to the extent such Indebtedness or Capital Stock was incurred in connection with or in contemplation of such acquisition), which encumbrance or restriction is not applicable to any Person, or the properties or assets of any Person, other than the Person, or the property or assets of the Person, so acquired and any amendments, restatements, modifications, renewals, extensions, supplements, increases, refundings, replacements or refinancings thereof; provided, that the encumbrances and restrictions in any such amendments, restatements, modifications, renewals, extensions, supplements, increases, refundings, replacements or refinancings are, in the reasonable good faith judgment of the Chief Executive Officer and Chief Financial Officer of the Company, not materially more restrictive, taken as a whole, than those in effect on the date of the acquisition; provided, further, that, in the case of Indebtedness, such Indebtedness was permitted by the terms of the indenture to be incurred;
- (5) customary non-assignment provisions in contracts, leases, licenses and sublicenses (including, without limitation, licenses of intellectual property) and provisions restricting subletting or assignment of any lease governing a leasehold interest (including leases governing leasehold interests or Farm-In Agreements or Farm-Out Agreements) relating to leasehold interests in oil and gas properties) of the Company or any Restricted Subsidiary;
- (6) any agreement for the sale or other disposition of the Equity Interests in, or all or substantially all of the properties or assets of, a Restricted Subsidiary, that restricts distributions by the applicable Restricted Subsidiary pending the sale or other disposition;
- (7) Permitted Refinancing Indebtedness; *provided* that the restrictions contained in the agreements governing such Permitted Refinancing Indebtedness are not in the reasonable good faith judgment of the Chief Executive Officer and Chief Financial Officer of the Company materially more restrictive, taken as a whole, than those contained in the agreements governing the Indebtedness being refinanced;
- (8) Liens permitted to be incurred under the provisions of the covenant described above under the caption “—Limitation on liens” that limit the right of the debtor to dispose of the assets subject to such Liens and the security documents relating thereto;
- (9) the issuance of preferred stock by a Restricted Subsidiary or the payment of dividends thereon in accordance with the terms thereof; provided that issuance of such preferred stock is permitted pursuant to the covenant described under the caption “—Incurrence of indebtedness and issuance of preferred stock” and the terms of such preferred stock do not expressly restrict the ability of a Restricted Subsidiary to pay dividends or make any other distributions on its Capital Stock (other than requirements to pay dividends or liquidation preferences on such preferred stock prior to paying any dividends or making any other distributions on such other Capital Stock);

Table of Contents

- (10) other Indebtedness of the Company or any Restricted Subsidiary permitted to be incurred pursuant to an agreement entered into subsequent to the Issue Date in accordance with the covenant described under the caption “—Incurrence of indebtedness and issuance of preferred stock”; *provided* that the provisions relating to such encumbrance or restriction contained in such Indebtedness are not materially less favorable to the Company and its Restricted Subsidiaries, taken as a whole, in the reasonable good faith judgment of the Chief Executive Officer and Chief Financial Officer of the Company, than the provisions contained in the Senior Credit Agreement or any other agreement described in clause (1) above as in effect on the Issue Date;
- (11) Indebtedness incurred or Capital Stock issued by any Restricted Subsidiary, provided that the restrictions contained in the agreements or instruments governing such Indebtedness or Capital Stock (a) apply only in the event of a payment default or a default with respect to a financial covenant in such agreement or instrument or (b) will not materially affect the Company's ability to pay all principal, interest and premium, if any, on the notes, in the reasonable good-faith judgment of the Chief Executive Officer and Chief Financial Officer of the Company;
- (12) Hedging Obligations permitted from time to time under the indenture;
- (13) restrictions on cash or other deposits or net worth or similar requirements imposed by customers , suppliers and landlords or surety, insurance or bonding companies;
- (14) customary restrictions on the disposition or distribution of assets or property in agreements entered into in the ordinary course of the oil and gas business of the types described in the definition of Permitted Business Investments;
- (15) provisions limiting the disposition or distribution of assets or property in, or transfer of assets (including Capital Stock) in, joint venture agreements, asset sale agreements, sale-leaseback agreements, stock sale agreements, operating agreements, development agreements, area of mutual interest agreements and other agreements that are customary in the oil and gas business and other similar agreements entered into (i) in the ordinary course of business, or (ii) with the approval of the Company's Board of Directors, which limitations are applicable only to the assets, property or Capital Stock that are the subject of such agreements;
- (16) any agreement or other instrument of a Unrestricted Subsidiary that is designated a Restricted Subsidiary, in each case that is in existence at the time of such designation (but not created in contemplation of or in connection thereof); and
- (17) Capital Lease Obligations, security agreements, mortgages, purchase money agreements or similar instruments to the extent such encumbrance or restriction restricts the transfer of the property (including Capital Stock) subject to such Capital Lease Obligations, security agreements, mortgages, purchase money agreements or similar instruments.

Transactions with affiliates

The Company will not, and will not permit any of its Restricted Subsidiaries to, make any payment to, or sell, lease, transfer or otherwise dispose of any of its properties or assets to, or purchase any property or assets from, or enter into or make or amend any transaction, contract, agreement, understanding, loan, advance or Guarantee with, or for the benefit of, any Affiliate

Table of Contents

of the Company (each, an "*Affiliate Transaction*") involving aggregate consideration to or from the Company or a Restricted Subsidiary in excess of \$1.0 million, unless:

- (1) the Affiliate Transaction is on terms that are no less favorable to the Company or the relevant Restricted Subsidiary than those that would have been obtained in a comparable transaction by the Company or such Restricted Subsidiary with a Person that is not an Affiliate of the Company; and
- (2) the Company delivers to the trustee:
 - (a) with respect to any Affiliate Transaction or series of related Affiliate Transactions involving aggregate consideration in excess of \$15.0 million to or from the Company or a Restricted Subsidiary, an Officers' Certificate certifying that such Affiliate Transaction or series of related Affiliate Transactions complies with this covenant; and
 - (b) with respect to any Affiliate Transaction or series of related Affiliate Transactions involving aggregate consideration to or from the Company or a Restricted Subsidiary in excess of \$30.0 million, a majority of the Disinterested Members of the Board of Directors (or, if there is only one Disinterested Member, such Disinterested Member) have determined that the criteria set forth in clause (1) above are satisfied with respect to such Affiliate Transaction(s) and have approved such Affiliate Transaction(s), as evidenced by a resolution of the Company's Board of Directors delivered to the trustee and certified by an Officers' Certificate as having been adopted by such Disinterested Member on behalf of the Board of Directors.

The following items will not be deemed to be Affiliate Transactions and, therefore, will not be subject to the provisions of the prior paragraph:

- (1) any employment, consulting, severance, termination or similar agreement or arrangement, stock option or stock ownership plan, employee benefit plan, officer or director compensation or indemnification agreement, restricted stock agreement, severance agreement or other compensation plan or arrangement entered into by the Company or any Restricted Subsidiary in the ordinary course of business and payments, awards, grants or issuances of securities pursuant thereto;
- (2) transactions between or among the Company and/or its Restricted Subsidiaries and the issuance of Guarantees for the benefit of the Company or a Restricted Subsidiary;
- (3) transactions with a Person (other than an Unrestricted Subsidiary) that is an Affiliate of the Company solely because the Company owns, directly or through a Subsidiary, an Equity Interest in, or controls, such Person;
- (4) fees and expenses and compensation paid to, and indemnification or insurance provided on behalf of, officers, directors or employees of the Company or any Restricted Subsidiary;
- (5) any issuance of Equity Interests (other than Disqualified Stock) of the Company to, or receipt of a capital contribution from, Affiliates of the Company;
- (6) Restricted Payments that do not violate the provisions of the indenture described above under the caption "—Restricted payments" and any Permitted Investments;
- (7) loans or advances to employees in the ordinary course of business or consistent with past practice;

Table of Contents

- (8) advances to or reimbursements of employees for moving, entertainment and travel expenses, drawing accounts and similar expenditures in the ordinary course of business;
- (9) the performance of obligations of the Company or any Restricted Subsidiary under the terms of any written agreement to which the Company or any Restricted Subsidiary was a party on the Issue Date, as these agreements may be amended, modified or supplemented from time to time; *provided, however*, that any future amendment, modification or supplement entered into after the Issue Date will be permitted to the extent that its terms do not materially and adversely affect the rights of any holders of the notes (as determined in good faith by the Board of Directors of the Company) as compared to the terms of the agreements in effect on the Issue Date;
- (10) (a) guarantees of performance by the Company and its Restricted Subsidiaries of Unrestricted Subsidiaries in the ordinary course of business, except for Guarantees of Indebtedness in respect of borrowed money, and (b) pledges of Equity Interests of Unrestricted Subsidiaries for the benefit of lenders of Unrestricted Subsidiaries;
- (11) transactions between the Company or any Restricted Subsidiary and any Person, a director of which is also a director of the Company or any direct or indirect parent company of the Company and such director is the sole cause for such Person to be deemed an Affiliate of the Company or any Restricted Subsidiary; *provided, however*, that such director abstains from voting as director of the Company or such direct or indirect parent company of the Company, as the case may be, on any matter involving such other Person;
- (12) (i) contracts for (A) drilling or other oil-field services or supplies, (B) the sale, storage, gathering or transport of hydrocarbons or (C) the lease or rental of office or storage space or (ii) transactions with customers, clients, suppliers, or purchasers or sellers of assets or services, in each case, entered into in the ordinary course of business and otherwise in compliance with the terms of the indenture, provided that in the reasonable determination of the Board of Directors of the Company or the senior management of the Company, such transactions are on terms not materially less favorable to the Company or the relevant Restricted Subsidiary than those that could reasonably be expected to be obtained in a comparable transaction at such time on an arm's-length basis from a Person that is not an Affiliate of the Company; and
- (13) any transaction with a joint venture or similar entity that would constitute an Affiliate Transaction solely because the Company or a Restricted Subsidiary owns, directly or indirectly, an Equity Interest in or otherwise controls such joint venture or similar entity.

Designation of restricted and unrestricted subsidiaries

The Board of Directors of the Company may designate any Restricted Subsidiary to be an Unrestricted Subsidiary if that designation would not cause a Default. If a Restricted Subsidiary is designated as an Unrestricted Subsidiary, the aggregate Fair Market Value of all outstanding Investments owned by the Company and its Restricted Subsidiaries in the Subsidiary designated as an Unrestricted Subsidiary will be deemed to be an Investment made as of the time of the designation. That designation will only be permitted if the applicable Restricted Subsidiary meets the definition of an Unrestricted Subsidiary and if such Investment would be permitted at that time, either pursuant to (a) the covenant described above under the caption “—Restricted payments” or (b) the definition of Permitted Investment.

[Table of Contents](#)

Any designation of a Subsidiary of the Company as an Unrestricted Subsidiary will be evidenced to the trustee by filing with the trustee a certified copy of a resolution of the Board of Directors of the Company giving effect to such designation and an Officers' Certificate certifying that such designation complied with the preceding conditions and was permitted by the covenant described above under the caption "—Restricted payments." If, at any time, any Unrestricted Subsidiary would fail to meet the requirements of the definition of "Unrestricted Subsidiary" set forth below under "—Definitions," it will thereafter cease to be an Unrestricted Subsidiary for purposes of the indenture and any Indebtedness of such Subsidiary will 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 the covenant described under the caption "—Incurrence of indebtedness and issuance of preferred stock," the Company will be in Default of such covenant.

The Board of Directors of the Company may at any time designate any Unrestricted Subsidiary to be a Restricted Subsidiary; *provided* that such designation will be deemed to be an incurrence of Indebtedness by a Restricted Subsidiary of any outstanding Indebtedness of such Unrestricted Subsidiary, and such designation will only be permitted if (1) such Indebtedness is permitted under the covenant described under the caption "—Incurrence of indebtedness and issuance of preferred stock," calculated on a pro forma basis as if such designation had occurred at the beginning of the four-quarter reference period; and (2) no Default or Event of Default would be in existence following such designation.

Reports

Regardless of whether required by the rules and regulations of the SEC, so long as any notes are outstanding, the Company will file with the SEC for public availability, within the time periods specified in the SEC's rules and regulations (unless the SEC will not accept such a filing, in which case the Company will comply with the requirements described in the second succeeding paragraph):

- (1) all quarterly and annual reports that would be required to be filed with the SEC on Forms 10-Q and 10-K if the Company were required to file such reports; and
- (2) all current reports that would be required to be filed with the SEC on Form 8-K if the Company were required to file such reports.

All such reports will be prepared in all material respects in accordance with all of the rules and regulations applicable to such reports. Each annual report on Form 10-K will include a report on the Company's consolidated financial statements by the Company's certified independent accountants.

If, at any time, the Company is no longer subject to the periodic reporting requirements of the Exchange Act for any reason, the Company will nevertheless continue filing the reports specified in the preceding paragraphs of this covenant with the SEC within the time periods specified above unless the SEC will not accept such a filing. The Company will not take any action for the purpose of causing the SEC not to accept any such filings. If, notwithstanding the foregoing, the SEC will not accept the Company's filings for any reason, the Company will post the reports referred to in the preceding paragraphs on its website within the time periods that would apply if the Company were required to file those reports with the SEC.

If the Company has designated any of its Subsidiaries as Unrestricted Subsidiaries, then the quarterly and annual financial information required by the preceding paragraphs will include a reasonably detailed presentation, either on the face of the financial statements or in the

[Table of Contents](#)

footnotes thereto, and in Management's Discussion and Analysis of Financial Condition and Results of Operations, of the financial condition and results of operations of the Company and its Restricted Subsidiaries separate from the financial condition and results of operations of the Unrestricted Subsidiaries.

In the event any direct or indirect parent company of the Company becomes a guarantor of the notes, the Company may satisfy its obligations in this covenant with respect to financial information relating to the Company by furnishing financial information relating to such parent company; *provided* that the same is accompanied by consolidating information that explains in reasonable detail the differences between the information relating to such parent, on the one hand, and the information relating to the Company and its Subsidiaries on a standalone basis, on the other hand.

The availability of the foregoing materials on the SEC's website or on a freely accessible page on the Company's website shall be deemed to satisfy the foregoing delivery obligations.

Future subsidiary guarantees

The indenture will provide that the Company will cause each Restricted Subsidiary that (x) Guarantees any Indebtedness or becomes an obligor under a Credit Facility, in either case in excess of a De Minimis Amount (other than a Foreign Subsidiary created or acquired by the Company or one or more of its Restricted Subsidiaries) or (y) issues any preferred stock, to become a Subsidiary Guarantor by executing and delivering a supplemental indenture, in the form provided for in the indenture, to the trustee within 30 days of the date on which it incurred such Indebtedness or issued such preferred stock.

Each Subsidiary Guarantee shall be released in accordance with the provisions of the Indenture described under "Subsidiary guarantees of the notes."

Merger, consolidation or sale of substantially all assets

The Company will not (1) consolidate or merge with or into another Person (regardless of whether the Company is the surviving corporation), convert into another form of entity or continue in another jurisdiction; or (2), directly or indirectly, sell, assign, transfer, lease, convey or otherwise dispose of all or substantially all of its properties or assets, in one or more related transactions, to another Person, unless:

- (1) either: (a) the Company is the surviving corporation; or (b) the Person formed by or surviving any such consolidation or merger or resulting from such conversion (if other than the Company) or to which such sale, assignment, transfer, lease, conveyance or other disposition has been made is a corporation, limited liability company or limited partnership organized or existing under the laws of the United States, any state of the United States or the District of Columbia;
- (2) the Person formed by or surviving any such conversion, consolidation or merger (if other than the Company) or the Person to which such sale, assignment, transfer, lease, conveyance or other disposition has been made assumes all the obligations of the Company under the notes, and the indenture pursuant to a supplemental indenture reasonably satisfactory to the trustee;
- (3) immediately after such transaction or transactions, no Default or Event of Default exists;

Table of Contents

- (4) the Company or the Person formed by or surviving any such consolidation or merger (if other than the Company), or to which such sale, assignment, transfer, lease, conveyance or other disposition has been made, would (on the date of such transaction after giving pro forma effect thereto and to any related financing transactions as if the same had occurred at the beginning of the applicable four-quarter period) either (a) be permitted to incur at least \$1.00 of additional Indebtedness pursuant to the Fixed Charge Coverage Ratio test set forth in the first paragraph of the covenant described above under the caption “—Incurrence of indebtedness and issuance of preferred stock”; or (b) have a Fixed Charge Coverage Ratio that is not less than the Fixed Charge Coverage Ratio of the Company and its Restricted Subsidiaries immediately before such transaction; and
- (5) the Company shall have delivered to the trustee an Officers’ certificate and an opinion of counsel, each stating that such consolidation, merger, conveyance, transfer or lease and such supplemental indenture (if any) comply with the indenture.

provided that, unless such Person is a corporation, a corporate co-issuer of the notes will be added to the indenture by a supplement reasonably satisfactory to the trustee.

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

The surviving entity will succeed to, and be substituted for, and may exercise every right and power of, the Company under the indenture and the predecessor Company shall be discharged and released from all obligations under the indenture and the notes; provided, however, that the Company will not be released from the obligation to pay the principal of, premium, if any, and interest on the notes in the case of a lease of all or substantially all of the Company’s properties or assets in a transaction that is subject to, and that complies with the provisions of, this covenant.

Notwithstanding the restrictions described in the foregoing clause (4), any Restricted Subsidiary may consolidate with, merge into or dispose of all or part of its properties or assets to the Company, the Company may merge into a Restricted Subsidiary for the purpose of reincorporating the Company in another jurisdiction, and any Restricted Subsidiary may consolidate with, merge into or dispose of all or part of its properties or assets to another Restricted Subsidiary.

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 properties or assets of a Person.

Covenant termination

From and after the time when (i) the notes have Investment Grade Ratings from both Rating Agencies and (ii) no Default or Event of Default has occurred and is continuing under the Indenture (the occurrence of the events described in the foregoing clauses (i) and (ii) being

[Table of Contents](#)

collectively referred to as a "*Covenant Termination Event*"), the Company and the Restricted Subsidiaries will not be subject to the following provisions of the indenture:

- (a) clause (4) of the covenant described under "Covenants—Merger, consolidation or sale of substantially all assets" and
- (b) the provisions of the indenture described above under the following headings:
 - (1) "—Repurchase at the option of holders—Asset sales";
 - (2) "—Covenants—Restricted payments";
 - (3) "—Covenants—Incurrence of indebtedness and issuance of preferred stock";
 - (4) "—Covenants—Dividend and other payment restrictions affecting restricted subsidiaries"; and
 - (5) "—Covenants—Transactions with affiliates."

Upon the occurrence of a Covenant Termination Event (the date of such occurrence, the "*Covenant Termination Date*"), the amount of Excess Proceeds from Net Proceeds shall be set at zero under the indenture. As a result, after the Covenant Termination Date, the notes will be entitled to substantially reduced covenant protection.

There can be no assurance that the notes will ever achieve or maintain Investment Grade Ratings.

Events of default

Under the indenture, each of the following will constitute an "Event of Default" with respect to the notes:

- (1) default for 30 days in the payment when due of interest on the notes;
- (2) default in the payment when due of the principal of, or premium, if any, on the notes;
- (3) failure by the Company to comply with its obligations under "—Covenants—Merger, consolidation or sale of substantially all assets" or to consummate a purchase of notes when required pursuant to the covenants described under the caption "—Repurchase at the option of holders";
- (4) failure by the Company or any Restricted Subsidiary for 30 days after written notice from the trustee or the holders of at least 25% in aggregate principal amount of the then outstanding notes to comply with the provisions described under the captions "—Covenants—Restricted payments" or "—Covenants—Incurrence of indebtedness and issuance of preferred stock" or to comply with the provisions described under the captions "—Repurchase at the option of holders" to the extent not described in clause (3) above;
- (5) failure by the Company or any Restricted Subsidiary for 60 days (or 180 days in the case of a Reporting Failure) after written notice from the trustee or the holders of at least 25% in aggregate principal amount of the then outstanding notes to comply with any of the other agreements in the indenture or the notes;
- (6) default under any mortgage, indenture or instrument under which there may be issued or by which there may be secured or evidenced any Indebtedness for money borrowed by the Company or any Restricted Subsidiary (or the payment of which is Guaranteed by the

Table of Contents

Company or any Restricted Subsidiary), whether such Indebtedness or Guarantee now exists, or is created after the Issue Date, if that 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 (a "*Payment Default*"); or
- (B) results in the acceleration of such Indebtedness prior to its Stated Maturity;

and, in each case, the principal amount of any such Indebtedness, together with the principal amount of any other such Indebtedness under which there has been a Payment Default or the maturity of which has been so accelerated, aggregates \$15.0 million or more;

- (7) failure by the Company or any Significant Subsidiary or group of the Company's Restricted Subsidiaries that, taken together (as of the latest audited consolidated financial statements for the Company and its Restricted Subsidiaries), would constitute a Significant Subsidiary to pay final judgments aggregating in excess of \$15.0 million (net of any amounts covered by a reputable and creditworthy insurance company that has not disclaimed coverage), which judgments are not paid, discharged or stayed for a period of 60 days;
- (8) except as permitted by the indenture, any Subsidiary Guarantee is held in a judicial proceeding to be unenforceable or invalid or ceases for any reason to be in full force and effect, or any Subsidiary Guarantor, or any Person acting on behalf of any Subsidiary Guarantor, denies or disaffirms its obligations under its Subsidiary Guarantee; or
- (9) certain events of bankruptcy, insolvency or reorganization with respect to the Company or a Significant Subsidiary or group of Restricted Subsidiaries that, taken together (as of the latest audited consolidated financial statements for the Company and its Restricted Subsidiaries), would constitute a Significant Subsidiary.

The indenture will provide that in the case of an Event of Default arising from certain events of bankruptcy or insolvency with respect to the Company, any Restricted Subsidiary that is a Significant Subsidiary or any group of Restricted Subsidiaries that, taken together, would constitute a Significant Subsidiary, all then outstanding notes will become due and payable immediately without further action or notice. However, the effect of such provision may be limited by applicable law. If any other Event of Default occurs and is continuing, the trustee or the holders of at least 25% in aggregate principal amount of the then outstanding notes may declare all of the notes to be due and payable immediately by notice in writing to the Company and, in case of a notice by holders, also to the trustee specifying the respective Event of Default and that it is a notice of acceleration.

Subject to certain limitations, holders of at least a majority in aggregate principal amount of the then outstanding notes may direct the trustee in its exercise of any trust or power with respect to the notes. The trustee may withhold from holders of the notes notice of any continuing Default or Event of Default if it determines that withholding notice is in their interest, except a Default or Event of Default relating to the payment of principal, interest or premium, if any.

Subject to the provisions of the indenture relating to the duties of the trustee in case 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 holders of notes unless such holders have offered to the trustee reasonable indemnity or security against any loss,

Table of Contents

liability or expense. Except to enforce the right to receive payment of principal, premium, if any, or interest, when due, no holder of a note may pursue any remedy with respect to the indenture or the notes unless:

- (a) such holder has previously given the trustee notice of a continuing Event of Default;
- (b) holders of at least 25% in aggregate principal amount of the then outstanding notes have made a written request to the trustee to pursue the remedy;
- (c) such holders have offered the trustee security or indemnity satisfactory to the trustee against any loss, liability or expense;
- (d) 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
- (e) holders of at least a majority in aggregate principal amount of the then outstanding notes have not given the trustee a direction that is inconsistent with such request within such 60-day period.

The holders of at least a majority in aggregate principal amount of the then outstanding notes by notice to the trustee may, on behalf of the holders of all of the notes, rescind an acceleration or waive any existing Default or Event of Default and its consequences under the indenture except a continuing Default or Event of Default in the payment of interest or premium, if any, on, or the principal of, the notes.

Notwithstanding the foregoing, if an Event of Default specified in clause (6) above shall have occurred and be continuing, such Event of Default and any consequential acceleration (to the extent not in violation of any applicable law or in conflict with any judgment or decree of a court of competent jurisdiction) shall be automatically rescinded if (a) (i) the Indebtedness that is the subject of such Event of Default has been repaid or (ii) if the default relating to such Indebtedness is waived by the holders of such Indebtedness or cured and if such Indebtedness has been accelerated, then the holders thereof have rescinded their declaration of acceleration in respect of such Indebtedness, in each case, within 30 days after the declaration of acceleration with respect thereto, and (b) any other existing Events of Default, except nonpayment of principal, premium, if any, or interest on the notes that became due solely because of the acceleration of the Notes, have been cured or waived.

The Company is required to deliver to the trustee annually an Officers' Certificate regarding compliance with the indenture. Upon becoming aware of any Default or Event of Default, the Company is required within five Business Days to deliver to the trustee a statement specifying such Default or Event of Default.

No personal liability of directors, officers, employees and stockholders

No director, officer, employee, incorporator, stockholder, member, manager or partner of the Company or any Subsidiary Guarantor, as such, will have any liability for any obligations of the Company or the Subsidiary Guarantors under the notes, the indenture, the Subsidiary Guarantees or for any claim based on, in respect of, or by reason of, such obligations or their creation. Each holder of notes by accepting a note waives and releases all such liability. The waiver and release are part of the consideration for issuance of the notes. The waiver may not be effective to waive liabilities under the federal securities laws.

[Table of Contents](#)**Legal defeasance and covenant defeasance**

The Company may, at any time, at the option of its Board of Directors evidenced by a resolution set forth in an Officers' Certificate, elect to have all of its obligations discharged with respect to the outstanding notes and all obligations of the Subsidiary Guarantors discharged with respect to their Subsidiary Guarantees ("*Legal Defeasance*") except for:

- (1) the rights of holders of outstanding notes to receive payments in respect of the principal of, or interest or premium, if any, on such notes when such payments are due from the trust referred to below;
- (2) the Company's obligations with respect to the notes concerning issuing temporary notes, registration of notes, mutilated, destroyed, lost or stolen notes and the maintenance of an office or agency for payment and money for security payments held in trust;
- (3) the rights, powers, trusts, duties and immunities of the trustee, and the Company's and the Subsidiary Guarantors' obligations in connection therewith; and
- (4) the Legal Defeasance and Covenant Defeasance provisions of the indenture.

In addition, the Company may, at its option and at any time, elect to have the obligations of the Company and the Subsidiary Guarantors released with respect to the provisions of the indenture described above under "—Repurchase at the option of holders" and under "—Covenants" (other than the covenant described under "—Covenants—Merger, consolidation or sale of substantially all assets," except to the extent described below) and the limitation imposed by clause (4) under "—Covenants—Merger, consolidation or sale of substantially all assets" (such release and termination being referred to as "*Covenant Defeasance*"), and thereafter any omission to comply with such obligations or provisions will not constitute a Default or Event of Default with respect to the notes. In the event Covenant Defeasance occurs in accordance with the indenture, the Events of Default described under clauses (3) through (7) under the caption "—Events of default" and the Event of Default described under clause (9) under the caption "—Events of default" (but only with respect to Subsidiaries of the Company), in each case, will no longer constitute an Event of Default with respect to the notes. In addition, upon the occurrence of Covenant Defeasance all obligations of the Subsidiary Guarantors with respect to their Subsidiary Guarantees will be discharged.

In order to exercise either Legal Defeasance or Covenant Defeasance:

- (1) the Company must irrevocably deposit with the trustee, in trust, for the benefit of the holders of the notes, cash in U.S. dollars, non-callable Government Securities, or a combination of cash in U.S. dollars and non-callable Government Securities, in amounts as will be sufficient, in the opinion of a nationally recognized investment bank, appraisal firm or firm of independent public accountants to pay the principal of, or interest and premium, if any, on the outstanding notes on the stated date for payment thereof or on the applicable redemption date, as the case may be, and the Company must specify whether the notes are being defeased to such stated date for payment or to a particular redemption date;
- (2) in the case of Legal Defeasance, the Company must deliver to the trustee an opinion of counsel reasonably acceptable to the trustee confirming that (a) the Company has received from, or there has been published by, the Internal Revenue Service a ruling or (b) since the Issue Date, there has been a change in the applicable U.S. federal income tax law, in either case to the effect that, and based thereon such opinion of counsel will confirm that, the

[Table of Contents](#)

holders of the outstanding notes will not recognize income, gain or loss for U.S. federal income tax purposes as a result of such Legal Defeasance and will be subject to U.S. federal income tax on the same amounts, in the same manner and at the same times as would have been the case if such Legal Defeasance had not occurred;

- (3) in the case of Covenant Defeasance, the Company has delivered to the trustee an opinion of counsel reasonably acceptable to the trustee confirming that the holders of the outstanding notes will not recognize income, gain or loss for U.S. federal income tax purposes as a result of such Covenant Defeasance and will be subject to U.S. federal income tax on the same amounts, in the same manner and at the same times as would have been the case if such Covenant Defeasance had not occurred;
- (4) no Default or Event of Default has occurred and is continuing on the date of such deposit (other than a Default or Event of Default resulting from the borrowing of funds to be applied to such deposit or the grant of Liens securing such borrowing);
- (5) such Legal Defeasance or Covenant Defeasance and the related deposit will not result in a breach or violation of, or constitute a default under, any material agreement or instrument (other than the indenture) to which the Company or any of its Subsidiaries is a party or by which the Company or any of its Subsidiaries is bound;
- (6) the Company must deliver to the trustee an Officers' Certificate stating that the deposit was not made by the Company with the intent of preferring the holders of notes over the other creditors of the Company with the intent of defeating, hindering, delaying or defrauding any creditors of the Company or others;
- (7) the Company must deliver to the trustee an Officers' Certificate, stating that all conditions precedent set forth in clauses (1) through (6) of this paragraph have been complied with; and
- (8) the Company must deliver to the trustee an opinion of counsel, stating that all conditions precedent set forth in clause (5) of this paragraph has been complied with.

Amendment, supplement and waiver

Except as provided in the next two succeeding paragraphs, the indenture, the debt securities issued thereunder (including the notes and any Additional Notes) or any Guarantee thereof may be amended or supplemented with the consent of the holders of at least a majority in aggregate principal amount of the then-outstanding debt securities of each series affected by such amendment or supplemental indenture, with each such series voting as a separate class (including, without limitation, consents obtained in connection with a purchase of, or tender offer or exchange offer for, debt securities) and, subject to certain exceptions relating to waivers of past Defaults and rights of holders of debt securities to receive payment, any existing Default or Event of Default or compliance with any provision of the indenture or the debt securities issued thereunder (including the notes and any Additional Notes) or any Guarantee thereof may be waived with respect to each series of debt securities with the consent of the holders of at least a majority in aggregate principal amount of the then-outstanding debt securities of such series voting as a separate class (including, without limitation, consents obtained in connection with a purchase of, or tender offer or exchange offer for, debt securities).

[Table of Contents](#)

Without the consent of each holder of the outstanding debt securities affected thereby, an amendment, supplement or waiver may not (with respect to any notes held by a non-consenting holder):

- (1) change the Stated Maturity of the principal of, or any installment of principal of or interest on, any debt security, or reduce the principal amount thereof or the rate of interest thereon or any premium payable upon the redemption thereof, or reduce the amount of the principal of an original issue discount security that would be due and payable upon a declaration of acceleration of the maturity thereof pursuant to the indenture, or change any place of payment where, or the coin or currency in which, any debt security or any premium or the interest thereon is payable, or impair the right to institute suit for the enforcement of any such payment on or after the Stated Maturity thereof (or, in the case of redemption, on or after the redemption date therefor);
- (2) reduce the percentage in principal amount of the then-outstanding debt securities of any series, the consent of whose holders is required for any such amendment, supplement or waiver;
- (3) modify the provisions of such indenture related to (i) the holder's unconditional right to receive principal, premium, if any, and interest on any debt security or (ii) the waiver of past Defaults under such indenture, except to increase any such percentage or to provide that certain other provisions of the indenture cannot be modified or waived without the consent of each holder of the then-outstanding debt securities affected thereby;
- (4) waive a redemption payment with respect to any debt security; *provided, however*, that any purchase or repurchase of debt securities shall not be deemed a redemption of debt securities;
- (5) release any Subsidiary Guarantor from any of its obligations under its Subsidiary Guarantee or the indenture, except in accordance with the terms of such indenture (as supplemented by any supplemental indenture); or
- (6) make any change in the foregoing amendment and waiver provisions of the indenture.

Notwithstanding the foregoing, without the consent of any holder of debt securities, the Company, the Subsidiary Guarantors (if any) and the trustee may amend or supplement the indenture or the debt securities or the Guarantees thereof issued thereunder to:

- (1) cure any ambiguity, omission, mistake or defect or to correct or supplement any provision therein that may be inconsistent with any other provision therein;
- (2) evidence the succession of another Person to the Company and the assumption by any such successor of the covenants of the Company therein and, to the extent applicable, to the debt securities;
- (3) provide for uncertificated notes in addition to or in place of certificated notes;
- (4) add a Subsidiary Guarantee and cause any Person to become a Subsidiary Guarantor, and/or to evidence the succession of another Person to a Subsidiary Guarantor and the assumption by any such successor of the Subsidiary Guarantee of such Subsidiary Guarantor therein or to release a Subsidiary Guarantor in compliance with the indenture;

[Table of Contents](#)

- (5) secure the notes or the Subsidiary Guarantees;
- (6) add to the covenants of the Company such further covenants, restrictions, conditions or provisions as the Company shall consider to be appropriate for the benefit of the holders of all or any series of debt securities (and if such covenants, restrictions, conditions or provisions are to be for the benefit of less than all series of debt securities, stating that such covenants are expressly being included solely for the benefit of such series) or to surrender any right or power therein conferred upon the Company or to make the occurrence, or the occurrence and continuance, of a Default in any such additional covenants, restrictions, conditions or provisions an Event of Default permitting the enforcement of all or any of the several remedies provided in the indenture as set forth therein; *provided*, that in respect of any such additional covenant, restriction, condition or provision, such supplemental indenture may provide for a particular period of grace after Default (which period may be shorter or longer than that allowed in the case of other Defaults) or may provide for an immediate enforcement upon such an Event of Default or may limit the remedies available to the trustee upon such an Event of Default or may limit the right of the holders of at least a majority in aggregate principal amount of the notes to waive such an Event of Default;
- (7) make any change to any provision of the indenture that would provide any additional rights or benefits to the holders of the debt securities issued thereunder or that does not adversely affect the rights or interests of any such holder;;
- (8) provide for the issuance of Additional Notes in accordance with the provisions set forth in the indenture on the date of the indenture;
- (9) add any additional Defaults or Events of Default in respect of all or any series of debt securities;
- (10) change or eliminate any of the provisions of the indenture; provided that any such change or elimination shall become effective only when there is no debt security outstanding of any series created prior to the execution of such supplemental indenture that is entitled to the benefit of such provision;
- (11) establish the form or terms of debt securities of any series as permitted thereunder, including to reopen any series of any debt securities as permitted thereunder;
- (12) evidence and provide for the acceptance of appointment thereunder by a successor trustee with respect to the debt securities of one or more series and to add to or change any of the provisions of the indenture as shall be necessary to provide for or facilitate the administration of the trusts thereunder by more than one trustee, pursuant to the requirements of such indenture;
- (13) conform the text of the indenture (and/or any supplemental indenture) or notes or any other debt security or the Guarantees issued thereunder to any provision of a description of such debt securities appearing in a prospectus or prospectus supplement or an offering memorandum or offering circular pursuant to which such debt securities were offered to the extent that such description was intended to be a verbatim recitation of a provision of such indenture (and/or any supplemental indenture) or any debt securities or Guarantees issued thereunder;
- (14) add a corporate co-issuer in accordance with the covenant set forth under the caption “—Covenants—Merger, consolidation or sale of substantially all assets”; or

[Table of Contents](#)

- (15) modify, eliminate or add to the provisions of the indenture to such extent as shall be necessary to effect the qualification of the indenture under the Trust Indenture Act, or under any similar federal statute subsequently enacted, and to add to the indenture such other provisions as may be expressly required under the Trust Indenture Act.

The consent of the holders is not necessary under the indenture to approve the particular form of any proposed amendment, supplement or waiver, but it is sufficient if such consent approves the substance thereof. After an amendment, supplement or waiver under the indenture requiring approval of the holders becomes effective, the Company shall send to the holders of debt securities affected thereby a notice briefly describing such amendment, supplement or waiver. However, the failure to give such notice to all such holders, or any defect therein, will not impair or affect the validity of the applicable amendment, supplement or waiver.

Satisfaction and discharge

The indenture will be discharged and will cease to be of further effect as to all notes issued thereunder (except as to surviving rights of registration of transfer or exchange of the notes and as otherwise specified in the indenture), when:

- (1) either:
 - (a) 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 been deposited in trust and thereafter repaid to the Company, have been delivered to the trustee for cancellation; or
 - (b) all notes that have not been delivered to the trustee for cancellation have become due and payable by reason of the sending of a notice of redemption or otherwise or will become due and payable within one year and the Company or any Subsidiary Guarantor has irrevocably deposited or caused to be deposited with the trustee as trust funds in trust solely for the benefit of the holders, cash in U.S. dollars, non-callable Government Securities, or a combination of cash in U.S. dollars and non-callable Government Securities, in 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, premium, if any, and accrued interest to the date of maturity or redemption;
- (2) no Default or Event of Default has occurred and is continuing on the date of the deposit (other than a Default or Event of Default resulting from the borrowing of funds to be applied to such deposit or the grant of Liens securing such borrowing);
- (3) such deposit will not result in a breach or violation of, or constitute a default under, any material agreement or instrument (other than the indenture) to which the Company or any Subsidiary Guarantor is a party or by which the Company or any Subsidiary Guarantor is bound;
- (4) the Company or any Subsidiary Guarantor has paid or caused to be paid all sums payable by it under the indenture; and
- (5) the Company has delivered irrevocable instructions to the trustee to apply the deposited money toward the payment of the notes at maturity or on the redemption date, as the case may be.

[Table of Contents](#)

In addition, the Company must deliver to the trustee (a) an Officers' Certificate, stating that all conditions precedent set forth in clauses (1) through (5) above have been satisfied and (b) an opinion of counsel, stating that all conditions precedent set forth in clauses (3) and (5) above have been satisfied.

Concerning the trustee

If the trustee becomes a creditor of the Company or any Subsidiary Guarantor, the indenture will limit the right of the trustee to obtain payment of claims in certain cases, or to realize on certain property received in respect of any such claim as security or otherwise. The trustee will be permitted to engage in other transactions; however, if it acquires any conflicting interest (as defined in the Trust Indenture Act) after a Default has occurred and is continuing, it must eliminate such conflict within 90 days, apply to the SEC for permission to continue as trustee (if the indenture has been qualified under the Trust Indenture Act) or resign.

The holders of at least a majority in aggregate principal amount of the then outstanding notes will have the right to direct the time, method and place of conducting any proceeding for exercising any remedy available to the trustee, subject to certain exceptions. If an Event of Default occurs and is continuing, the trustee will be required, in the exercise of its powers, to use the degree of care of a prudent man in the conduct of his own affairs. Subject to such provisions, the trustee will be under no obligation to exercise any of its rights or powers under the indenture at the request of any holder of notes, unless such holder has offered to the trustee reasonable security or indemnity against any loss, liability or expense.

Governing law

The indenture, the notes and the Subsidiary Guarantees will be governed by the laws of the State of New York.

Book-entry, delivery and form

Notes will be issued either in registered, global form or in registered, certificated form in minimum denominations of \$2,000 and integral multiples of \$1,000 in excess thereof. Notes will be issued at the closing of this offering only against payment in immediately available funds.

Initially, all notes will be represented by one or more notes in registered, global form without interest coupons (collectively, the "*Global Notes*"). The Global Notes will be deposited upon issuance with the trustee as custodian for The Depository Trust Company ("*DTC*"), and registered in the name of DTC or its nominee, in each case for credit to an account of a direct or indirect participant in DTC as described below. Beneficial interests in the Global Notes may be held through Euroclear Bank S.A./N.V. as the operator of the Euroclear System ("*Euroclear*"), and Clearstream Banking *société anonyme* ("*Clearstream*") (as indirect participants in DTC).

Except as set forth below, the Global Notes may be transferred, in whole and not in part, only to another nominee of DTC or to a successor of DTC or its nominee. Beneficial interests in the Global Notes may not be exchanged for definitive notes in registered certificated form ("*Certificated Notes*") except in the limited circumstances described below. See "—Exchange of global notes for certificated notes."

Transfers of beneficial interests in the Global Notes will be subject to the applicable rules and procedures of DTC and its direct or indirect participants (including, if applicable, those of Euroclear and Clearstream), which may change from time to time.

[Table of Contents](#)**Depository procedures**

The following description of the operations and procedures of DTC, Euroclear and Clearstream are provided solely as a matter of convenience. These operations and procedures are solely within the control of the respective settlement systems and are subject to changes by them. The Company takes no responsibility for these operations and procedures and urges investors to contact the system or their participants directly to discuss these matters.

DTC has advised the Company that DTC is a limited-purpose trust company created to hold securities for its participating organizations (collectively, the "*Participants*") and to facilitate the clearance and settlement of transactions in those securities between the Participants through electronic book-entry changes in accounts of its Participants. The Participants include securities brokers and dealers (including the underwriters), banks, trust companies, clearing corporations and certain other organizations. Access to DTC's system is also available to other entities such as banks, brokers, dealers and trust companies that clear through or maintain a custodial relationship with a Participant, either directly or indirectly (collectively, the "*Indirect Participants*"). Persons that are not Participants may beneficially own securities held by or on behalf of DTC only through the Participants or the Indirect Participants. The ownership interests in, and transfers of ownership interests in, each security held by or on behalf of DTC are recorded on the records of the Participants and Indirect Participants.

DTC has also advised the Company that, pursuant to procedures established by it:

- (1) upon deposit of the Global Notes, DTC will credit the accounts of the Participants designated by the underwriters with portions of the principal amount of the Global Notes; and
- (2) ownership of these interests in the Global Notes will be shown on, and the transfer of ownership of these interests will be effected only through, records maintained by DTC (with respect to the Participants) or by the Participants and the Indirect Participants (with respect to other owners of beneficial interests in the Global Notes).

Investors in the Global Notes who are Participants may hold their interests therein directly through DTC. Investors in the Global Notes who are not Participants may hold their interests therein indirectly through organizations (including Euroclear and Clearstream) which are Participants. Euroclear and Clearstream may hold interests in the Global Notes on behalf of their participants through customers' securities accounts in their respective names on the books of their respective depositories, which are Euroclear Bank S.A./N.V., as operator of Euroclear, and Citibank, N.A., as operator of Clearstream. All interests in a Global Note, including those held through Euroclear or Clearstream, may be subject to the procedures and requirements of DTC. Those interests held through Euroclear or Clearstream may also be subject to the procedures and requirements of such systems. 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 beneficial interests in a Global Note to such Persons will be limited to that extent. Because DTC can act only on behalf of the Participants, which in turn act on behalf of the Indirect Participants, the ability of a Person having beneficial interests in a Global Note to pledge such interests to Persons that do not participate in the DTC system, or otherwise take actions in respect of such interests, may be affected by the lack of a physical certificate evidencing such interests.

Except as described below, beneficial owners of interests in the Global Notes will not have notes registered in their names, will not receive physical delivery of Certificated Notes and will not be considered the registered owners or "holders" thereof under the indenture for any purpose.

[Table of Contents](#)

Payments in respect of the principal of, and interest and premium, if any, on a Global Note registered in the name of DTC or its nominee will be payable to DTC in its capacity as the registered holder under the indenture. Under the terms of the indenture, the Company, the Subsidiary Guarantors and the trustee will treat the Persons in whose names the notes, including the Global Notes, are registered as the owners thereof for the purpose of receiving payments and for all other purposes. Consequently, neither the Company, the Subsidiary Guarantors, the trustee nor any agent of any of them has or will have any responsibility or liability for:

- (1) any aspect of DTC's records or any Participant's or Indirect Participant's records relating to or payments made on account of beneficial ownership interest in the Global Notes or for maintaining, supervising or reviewing any of DTC's records or any Participant's or Indirect Participant's records relating to the beneficial ownership interests in the Global Notes; or
- (2) any other matter relating to the actions and practices of DTC or any of its Participants or Indirect Participants.

DTC has advised the Company that its current practice, at the due date of any payment in respect of securities such as the notes (including principal and interest), is to credit the accounts of the relevant Participants with the payment on the payment date unless DTC has reason to believe that it will not receive payment on such payment date. Each relevant Participant is credited with an amount proportionate to its beneficial ownership of an interest in the principal amount of the relevant security as shown on the records of DTC. Payments by the Participants and the Indirect Participants to the beneficial owners of notes will be governed by standing instructions and customary practices and will be the responsibility of the Participants or the Indirect Participants and will not be the responsibility of DTC, the trustee or the Company. Neither the Company nor the trustee will be liable for any delay by DTC or any of its Participants in identifying the beneficial owners of the notes, and the Company and the trustee may conclusively rely on and will be protected in relying on instructions from DTC or its nominee for all purposes.

Transfers between Participants in DTC will be effected in accordance with DTC's procedures, and will be settled in same-day funds, and transfers between participants in Euroclear and Clearstream will be effected in accordance with their respective rules and operating procedures.

Cross-market transfers between the Participants in DTC, on the one hand, and Euroclear or Clearstream participants, on the other hand, will be effected through DTC in accordance with DTC's rules on behalf of Euroclear or Clearstream, as the case may be, by its depository; however, such cross-market transactions will require delivery of instructions to Euroclear or Clearstream, as the case may be, by the counterparty in such system in accordance with the rules and procedures and within the established deadlines (Brussels time) of such system. Euroclear or Clearstream, as the case may be, will, if the transaction meets its settlement requirements, deliver instructions to its depository to take action to effect final settlement on its behalf by delivering or receiving interests in the relevant Global Note in DTC, and making or receiving payment in accordance with normal procedures for same-day funds settlement applicable to OTC. Euroclear participants and Clearstream participants may not deliver instructions directly to the depositories for Euroclear or Clearstream.

DTC has advised the Company that it will take any action permitted to be taken by a holder of notes only at the direction of one or more Participants to whose account DTC has credited the interests in the Global Notes and only in respect of such portion of the aggregate principal amount of the notes as to which such Participant or Participants has or have given such direction.

[Table of Contents](#)

However, if there is an Event of Default under the notes, DTC reserves the right to exchange the Global Notes for legended notes in certificated form, and to distribute such notes to its Participants.

Although DTC, Euroclear and Clearstream have agreed to the foregoing procedures to facilitate transfers of interests in the Global Notes among participants in DTC, Euroclear and Clearstream, they are under no obligation to perform or to continue to perform such procedures, and may discontinue such procedures at any time. Neither the Company nor the trustee nor any of their respective agents will have any responsibility for the performance by DTC, Euroclear or Clearstream or their respective participants or indirect participants of their respective obligations under the rules and procedures governing their operations.

Exchange of global notes for certificated notes

A Global Note is exchangeable for Certificated Notes if:

- (1) DTC (a) notifies the Company that it is unwilling or unable to continue as depository for the Global Note or (b) has ceased to be a clearing agency registered under the Exchange Act, and in each case the Company fails to appoint a successor depository within 90 days;
- (2) the Company, at its option, notifies the trustee in writing that it elects to cause the issuance of Certificated Notes (DTC has advised the Company that, in such event, under its current practices, DTC would notify its Participants of the Company's request, but will only withdraw beneficial interests from a Global Note at the request of each Participant); or
- (3) a Default or Event of Default has occurred and is continuing and DTC notifies the trustee of its decision to exchange the Global Note for Certificated Notes.

In addition, beneficial interests in a Global Note may be exchanged for Certificated Notes upon prior written notice given to the trustee by or on behalf of DTC in accordance with the indenture. In all cases, Certificated Notes delivered in exchange for any Global Note or beneficial interests in Global Notes will be registered in the names, and issued in any approved denominations, requested by or on behalf of the depository (in accordance with its customary procedures).

Exchange of certificated notes for global notes

Certificated Notes may not be exchanged for beneficial interests in any Global Note.

Same day settlement and payment

The Company will make payments in respect of the notes represented by the Global Notes (including principal, premium, if any, and interest) by wire transfer of immediately available funds to the accounts specified by DTC or its nominee. The Company will make all payments of principal, interest and premium, if any, with respect to Certificated Notes by wire transfer of immediately available funds to the accounts specified by the holders thereof or, if no such account is specified, by mailing a check to each such holder's registered address. The notes represented by the Global Notes are expected to trade in DTC's Same-Day Funds Settlement System, and any permitted secondary market trading activity in such notes will, therefore, be required by DTC to be settled in immediately available funds. The Company expects that secondary trading in any Certificated Notes will also be settled in immediately available funds.

[Table of Contents](#)

Because of time zone differences, the securities account of a Euroclear or Clearstream participant purchasing an interest in a Global Note from a Participant in DTC will be credited, and any such crediting will be reported to the relevant Euroclear or Clearstream participant, during the securities settlement processing day (which must be a business day for Euroclear and Clearstream) immediately following the settlement date of DTC. DTC has advised the Company that cash received in Euroclear or Clearstream as a result of sales of interests in a Global Note by or through a Euroclear or Clearstream participant to a Participant in DTC will be received with value on the settlement date of DTC but will be available in the relevant Euroclear or Clearstream cash account only as of the business day for Euroclear or Clearstream following DTC's settlement date.

Definitions

"*2007 Plan*" means, the 2007 Stock Incentive Plan as described in the prospectus supplement, as amended, restated, modified, supplemented, renewed, replaced, supplemented or restructured or refinanced in whole or in part.

"*Acquired Debt*" means, with respect to any specified Person:

- (1) Indebtedness of any other Person existing at the time such other Person is merged with or into or became a Subsidiary of such specified Person, regardless of whether such Indebtedness is incurred in connection with, or in contemplation of, such other Person merging with or into, or becoming a Restricted Subsidiary of, such specified Person, but excluding Indebtedness which is extinguished, retired or repaid in connection with such Person merging with or becoming a Subsidiary of such specified Person; and
- (2) Indebtedness secured by a Lien encumbering any asset acquired by such specified Person.

"*Additional Assets*" means:

- (1) any property or assets (other than Indebtedness and Capital Stock) to be used by the Company or a Restricted Subsidiary in a Related Business;
- (2) the Capital Stock of a Person that becomes a Restricted Subsidiary as a result of the acquisition of such Capital Stock by the Company or another Restricted Subsidiary;
- (3) Capital Stock constituting a minority interest in any Person that at such time is a Restricted Subsidiary; or
- (4) Capital Stock of any Restricted Subsidiary; *provided* that all the Capital Stock of such Subsidiary held by the Company or any Restricted Subsidiary shall entitle the Company or such Restricted Subsidiary to not less than a pro rata portion of all dividends or other distributions made by such Subsidiary upon any of such Capital Stock;

provided, however, that, in the case of clauses (2), (3) and (4), such Subsidiary is primarily engaged in a Related Business.

"*Adjusted Consolidated Net Tangible Assets*" means, with respect to any specified Person or Persons (all of such specified Persons, whether one or more, being referred to in this definition as the "*Referent Person*"), as of the date of determination (without duplication), the remainder of:

Table of Contents

(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 provincial, territorial, state, federal or foreign income taxes, as estimated by the Company in a reserve report prepared as of the end of the Company's most recently completed fiscal year for which audited financial statements are available and giving effect to applicable Oil and Natural Gas Hedging Contracts, (A) as increased by, as of the date of determination, the estimated discounted future net revenues from (1) estimated proved oil and gas reserves acquired or classified as proved since such year end, which reserves were not reflected in such year-end reserve report, and (2) estimated oil and gas reserves attributable to upward revisions of estimates of proved oil and gas reserves (including previously estimated development costs incurred during the period and the accretion of discount since the prior period end) since such year-end due to exploration, development, exploitation or other activities, and (B) as decreased by, as of the date of determination, the estimated discounted future net revenues from (1) estimated proved oil and gas reserves reflected in such reserve report produced or disposed of since such year end, and (2) estimated oil and gas reserves attributable to downward revisions of estimates of proved oil and gas reserves reflected in such reserve report since such year-end due to changes in geological conditions or other factors that would, in accordance with standard industry practice, cause such revisions, in each case described in this clause (i) calculated in accordance with SEC guidelines and estimated by the Company's petroleum engineers or any independent petroleum engineers engaged by the Company for that purpose;
- (ii) the capitalized costs that are attributable to oil and gas properties of the Referent Person and its Restricted Subsidiaries to which no proved oil and gas reserves are attributable, based on the Company's books and records as of a date no earlier than the date of the Company's latest available annual or quarterly financial statements;
- (iii) the Net Working Capital of the Referent Person on a date no earlier than the date of the Company's latest annual or quarterly financial statements; and
- (iv) the greater of (A) the net book value of other tangible assets of the Referent Person and its Restricted Subsidiaries, as of a date no earlier than the date of the Company's latest annual or quarterly financial statements, and (B) the appraised value, as estimated by independent appraisers, of other tangible assets of the Referent Person and its Restricted Subsidiaries, as of a date no earlier than the date of the Company's latest audited financial statements (*provided* that the Company shall not be required to obtain such appraisal solely for the purpose of determining this value); minus

(b) the sum of:

- (i) the net book value of any Capital Stock of a Restricted Subsidiary of the Referent Person that is not owned by the Referent Person or another Restricted Subsidiary of the Referent Person;
- (ii) to the extent not otherwise taken into account in determining Adjusted Consolidated Net Tangible Assets of the Referent Person, any net gas-balancing liabilities of the Referent Person and its Restricted Subsidiaries reflected in the Company's latest audited financial statements;

Table of Contents

- (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 the Company's year-end reserve report), attributable to reserves that are required to be delivered by the Referent Person to third parties to fully satisfy the obligations of the Referent Person and its 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 that, based on the estimates of production and price assumptions included in determining the discounted future net revenues specified in (a)(i) above, would be necessary to fully satisfy the payment obligations of the Referent Person and its Subsidiaries with respect to Dollar-Denominated Production Payments (determined, if applicable, using the schedules specified with respect thereto).

If the Company changes its method of accounting from the successful efforts or a similar method to the full cost method of accounting, "Adjusted Consolidated Net Tangible Assets" of the Referent Person will continue to be calculated as if the Company were still using the successful efforts or a similar 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 purposes of this definition, "control," as used with respect to any Person, means the possession, directly or indirectly, of the power to direct or cause the direction of the management or policies of such Person, whether through the ownership of voting securities, by agreement or otherwise. For purposes of this definition, the terms "controlling," "controlled by" and "under common control with" have correlative meanings.

"Asset Sale" means:

- (1) the sale, lease, conveyance or other disposition of any assets or rights (including by way of a Production Payment or a sale and leaseback transaction); provided that the sale, lease, conveyance or other disposition of all or substantially all of the assets of the Company and its Restricted Subsidiaries taken as a whole will be governed by the provisions of the indenture described above under the caption "—Repurchase at the option of holders—Change of control" and/or the provisions described above under the caption "—Covenants—Merger, consolidation or sale of substantially all assets" and not by the provisions of the Asset Sales covenant; and
- (2) the issuance of Equity Interests in any of the Company's Restricted Subsidiaries (other than directors' qualifying shares) or the sale of Equity Interests held by the Company or its Subsidiaries in any of its Subsidiaries.

Notwithstanding the preceding, none of the following items will be deemed to be an Asset Sale:

- (1) any single transaction or series of related transactions that involves assets having a Fair Market Value of less than \$10 million;
- (2) a transfer of assets between or among the Company and its Restricted Subsidiaries;
- (3) an issuance of Equity Interests by a Restricted Subsidiary to the Company or to a Restricted Subsidiary;

Table of Contents

- (4) the sale, lease or other disposition of equipment, inventory, products, services, accounts receivable or other assets in the ordinary course of business, including in connection with any compromise, settlement or collection of accounts receivable, and any sale or other disposition of damaged, worn-out or obsolete assets or assets that are no longer useful in the conduct of the business of the Company and its Restricted Subsidiaries;
- (5) the sale or other disposition of cash or Cash Equivalents;
- (6) a Restricted Payment that does not violate the covenant described above under the caption “—Covenants—Restricted payments,” including the issuance or sale of Equity Interests or the sale, lease or other disposition of products, services, equipment, inventory, accounts receivable or other assets pursuant to any such Restricted Payment;
- (7) a Permitted Investment, including, without limitation, unwinding any Hedging Obligations, and including the issuance or sale of Equity Interests or the sale, lease or other disposition of products, services, equipment, inventory, accounts receivable or other assets pursuant to any such Permitted Investment;
- (8) a disposition of Hydrocarbons or mineral products inventory in the ordinary course of business;
- (9) (a) the farm-out, lease or sublease of developed or undeveloped crude oil or natural gas properties owned or held by the Company or any Restricted Subsidiary in exchange for crude oil and natural gas properties owned or held by another Person, and (b) any abandonment, relinquishment, farm-in, farm-out, lease and sub-lease of developed and/or undeveloped properties made or entered into in the ordinary course of business or that is usual and customary in the oil and gas business, but excluding in the case of this clause (b) any disposition as a result of the creation of a Production Payments and Reserve Sale;
- (10) the creation or perfection of a Lien (but not, except as contemplated in clause (11) below, the sale or other disposition of the properties or assets subject to such Lien);
- (11) (a) the creation or perfection of a Permitted Lien and (b) solely for purposes of clauses (1) and (2) of the first paragraph of the covenant described above under “—Repurchase at the option of holders—Asset Sales”, the enforcement of such Lien;
- (12) the licensing or sublicensing of intellectual property, including, without limitation, licenses for seismic data, in the ordinary course of business and which do not materially interfere with the business of the Company and its Restricted Subsidiaries;
- (13) surrender or waiver of contract rights or the settlement, release or surrender of contract, tort or other claims of any kind;
- (14) any Production Payments and Reserve Sales; provided that all such Production Payments and Reserve Sales (other than incentive compensation programs on terms that are reasonably customary in the oil and gas business for geologists, geophysicists and other providers of technical services to the Company or a Restricted Subsidiary) shall have been created, incurred, issued, assumed or Guaranteed no later than 60 days after the acquisition of, the oil and gas properties that are subject thereto;
- (15) the sale or other disposition (regardless of whether in the ordinary course of business) of oil and gas properties; provided that, at the time of such sale or other disposition, such properties do not have attributed to them any proved reserves;

Table of Contents

- (16) any trade or exchange by the Company or any Restricted Subsidiary of properties or assets used or useful in a Related Business for other properties or assets used or useful in a Related Business owned or held by another Person (including Capital Stock of a Person engaged in a Related Business that is or becomes a Restricted Subsidiary), including any cash or Cash Equivalents necessary in order to achieve and exchange of equivalent value, *provided* that the Fair Market Value of the properties or assets traded or exchanged by the Company or such Restricted Subsidiary (including any cash or Cash Equivalents to be delivered by the Company or such Restricted Subsidiary) is reasonably equivalent to the Fair Market Value of the properties or assets (together with any cash or Cash Equivalents) to be received by the Company or such Restricted Subsidiary, and *provided, further*, that any cash received in the transaction must be applied in accordance with the covenant described above under “—Repurchase at the option of holders—Asset Sales” as if such transaction were an Asset Sale;
- (17) any assignment of an overriding royalty or net profit interest in oil and gas properties granted to vendors (including consultants) in exchange for oil and gas property development services related to such oil and gas properties; and
- (18) any sale of Equity Interests in, or Indebtedness or other securities of, an Unrestricted Subsidiary.

“*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 or upon the occurrence of a subsequent condition. The terms “Beneficially Owns,” “Beneficially Owned” and “Beneficially Owning” will have a corresponding meaning.

“*Board of Directors*” means:

- (1) with respect to a corporation, the board of directors of the corporation or any committee thereof duly authorized to act on behalf of such board;
- (2) with respect to a partnership, the board of directors of the general partner of the partnership;
- (3) with respect to a limited liability company, the managers or managing member or members of such limited liability company (as applicable) or any duly authorized committee of managers or managing members (as applicable) thereof; and
- (4) with respect to any other Person, the board of directors or duly authorized committee of such Person serving a similar function.

“*Business Day*” means any day other than a Legal Holiday.

“*Capital Lease Obligation*” means, at the time any determination is to be made, the amount of the liability in respect of a capital lease that would at that time be required to be capitalized on a balance sheet in accordance with GAAP, and the Stated Maturity thereof shall be the date of the last payment of rent or any other amount due under such lease prior to the first date upon which such lease may be prepaid by the lessee without payment of a penalty.

[Table of Contents](#)

"Capital Stock" means:

- (1) in the case of a corporation, corporate stock;
- (2) in the case of an association or business entity, any and all shares, interests, participations, rights or other equivalents (however designated) of corporate stock;
- (3) in the case of a partnership or limited liability company, partnership interests (whether general or limited) or membership interests; and
- (4) any other interest or participation that confers on a Person the right to receive a share of the profits and losses of, or distributions of assets of, the issuing Person, but excluding from all of the foregoing any debt securities convertible into Capital Stock, regardless of whether such debt securities include any right of participation with Capital Stock.

"Cash Equivalents" means:

- (1) United States dollars;
- (2) Government Securities having maturities of not more than one year from the date of acquisition;
- (3) 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 thereof and, at the time of acquisition thereof, having a credit rating of "A" or better from either S&P or Moody's;
- (4) certificates of deposit, demand deposit accounts and eurodollar time deposits with maturities of one year or less from the date of acquisition, bankers' acceptances with maturities not exceeding one year and overnight bank deposits, in each case, with any domestic commercial bank having capital and surplus in excess of \$500.0 million and a Thomson Bank Watch Rating of "B" or better;
- (5) repurchase obligations with a term of not more than seven days for underlying securities of the types described in clauses (2), (3) and (4) above entered into with any financial institution meeting the qualifications specified in clause (4) above;
- (6) commercial paper having one of the two highest ratings obtainable from Moody's or S&P and, in each case, maturing within one year after the date of acquisition;
- (7) money market funds at least 95% of the assets of which constitute Cash Equivalents of the kinds described in clauses (1) through (6) of this definition; and
- (8) deposits in any currency available for withdrawal on demand with any commercial bank that is organized under the laws of any country in which the Company or any Restricted Subsidiary maintains its chief executive office or is engaged in the Related Business; provided that all such deposits are made in such accounts in the ordinary course of business.

"Change of Control" means:

- (1) any "person" or "group" of related persons (as such terms are used in Section 13(d) of the Exchange Act) is or becomes a Beneficial Owner, directly or indirectly, of more than 50% of the total voting power of the Voting Stock of the Company (or its successor by merger, consolidation or purchase of all or substantially all of its properties or assets) (for the

Table of Contents

purposes of this clause, such person or group shall be deemed to Beneficially Own any Voting Stock of the Company held by an entity, if such person or group Beneficially Owns, directly or indirectly, more than 50% of the voting power of the Voting Stock of such entity);

- (2) the first day on which a majority of the members of the Board of Directors of the Company are not Continuing Directors;
- (3) the direct or indirect 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 properties or assets of the Company and its Restricted Subsidiaries taken as a whole to any "person" (as such term is used in Section 13(d) of the Exchange Act); or
- (4) the adoption or approval by the stockholders of the Company of a plan for the liquidation or dissolution of the Company.

"Consolidated Cash Flow" means, with respect to any specified Person for any period, the Consolidated Net Income of such Person for such period *plus*, without duplication:

- (1) provision for taxes based on income or profits of such Person and its Restricted Subsidiaries for such period, to the extent that such provision for taxes was deducted in computing such Consolidated Net Income; *plus*
- (2) the Fixed Charges of such Person and its Restricted Subsidiaries for such period, to the extent that such Fixed Charges were deducted in computing such Consolidated Net Income; *plus*
- (3) exploration and abandonment expense to the extent deducted in calculating Consolidated Net Income; *plus*
- (4) depreciation, depletion, amortization (including amortization of intangibles but excluding amortization of prepaid cash expenses that were paid in a prior period), impairment, other non-cash expenses and other non-cash items (excluding any such non-cash expense to the extent that it represents an accrual of or reserve for cash expenses in any future period or amortization of a prepaid cash expense that was paid in a prior period) of such Person and its Restricted Subsidiaries for such period to the extent that such depreciation, depletion, amortization, impairment and other non-cash expenses were deducted in computing such Consolidated Net Income; *plus*
- (5) any interest expense attributable to any Oil and Natural Gas Hedging Contract, to the extent that such interest expense was deducted in computing such Consolidated Net Income; *minus*
- (6) non-cash items increasing such Consolidated Net Income for such period, other than items that were accrued in the ordinary course of business, and *minus*
- (7) the sum of (a) the amount of deferred revenues that are amortized during such period and are attributable to reserves that are subject to Volumetric Production Payments and (b) amounts recorded in accordance with GAAP as repayments of principal and interest pursuant to Dollar-Denominated Production Payments;

in each case, on a consolidated basis and determined in accordance with GAAP. Notwithstanding the preceding sentence, clauses (1) through (5) relating to amounts of a Restricted Subsidiary of the referent Person will be added to Consolidated Net Income to compute Consolidated Cash Flow of such Person only to the extent (and in the same proportion) that the Net Income 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 (1) through (5) are in excess of those necessary to offset a net loss of

Table of Contents

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

"*Consolidated Net Income*" means, with respect to any specified Person for any period, the aggregate of the Net Income of such Person and its Restricted Subsidiaries for such period, on a consolidated basis, determined in accordance with GAAP; *provided* that:

- (1) the Net Income (but not loss) of any Person that is not a Restricted Subsidiary or that is accounted for by the equity method of accounting will be included only to the extent of the amount of dividends or similar distributions paid in cash to the specified Person or a Restricted Subsidiary of the Person;
- (2) the Net Income of any Restricted Subsidiary will be excluded to the extent that the declaration or payment of dividends or similar distributions by that Restricted Subsidiary of that Net Income is not at the date of determination permitted without any prior governmental approval (that has not been obtained) or, directly or indirectly, by operation of the terms of its charter or any agreement, instrument, judgment, decree, order, statute, rule or governmental regulation applicable to that Restricted Subsidiary or its stockholders, members or partners;
- (3) the cumulative effect of a change in accounting principles will be excluded;
- (4) any after tax effect of gains (losses) realized upon the sale or other disposition of any property, plant or equipment of such Person or its consolidated Restricted Subsidiaries (including pursuant to any sale or leaseback transaction) that 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 will be excluded;
- (5) any asset impairment writedowns on oil and gas properties under GAAP or SEC guidelines will be excluded;
- (6) any non-cash mark-to-market adjustments to assets or liabilities resulting in unrealized gains or losses in respect of Hedging Obligations (including those resulting from the application of ASC 815) shall be excluded; and
- (7) to the extent deducted in the calculation of Net Income, any non-cash or other charges associated with any premium or penalty paid, write-off of deferred financing costs or other financial recapitalization charges in connection with redeeming or retiring any Indebtedness will be excluded;.
- (7) any after-tax effect of extraordinary, non-recurring or unusual gains, losses or charges (including fees and expenses reacting thereto) or expenses shall be excluded;
- (8) any (i) non-cash compensation expense recorded from grants of stock appreciation or similar rights, phantom equity, stock options, restricted stock or other rights to officers, directors, managers or employees and (ii) non-cash income (loss) attributable to deferred compensation plans or trusts, shall be excluded.

[Table of Contents](#)

“*Continuing Directors*” means, as of any date of determination, any member of the Board of Directors of the Company who:

- (1) was a member of such Board of Directors on the Issue Date; or
- (2) was nominated for election or elected to such Board of Directors with the approval of a majority of the Continuing Directors who were members of such Board of Directors at the time of such nomination or election.

“*Credit Facilities*” means, with respect to the Company or any Restricted Subsidiary, one or more debt facilities (including, without limitation, the Senior Credit Agreement), commercial paper facilities or Debt Issuances providing for revolving credit loans, term loans, receivables financing (including through the sale of receivables to any lenders, other financiers or to special purpose entities formed to borrow from (or sell such receivables to) any lenders or other financiers against such receivables), letters of credit, bankers’ acceptances, other borrowings or Debt Issuances, in each case, as amended, restated, modified, renewed, extended, refunded, replaced or refinanced (in each case, without limitation as to amount), in whole or in part, from time to time (including through one or more Debt Issuances).

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

“*Debt Issuances*” means, with respect to the Company or any Restricted Subsidiary, one or more issuances after the Issue Date of Indebtedness evidenced by notes, debentures, bonds or other similar securities or instruments.

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

“*De Minimis Amount*” means a principal amount of Indebtedness that does not exceed \$1.0 million.

“*Disinterested Member*” means, with respect to any transaction, a member of the Company’s Board of Directors who does not have any material direct or indirect financial interest (other than as an owner of Equity Interests in the Company or as an officer, manager or employee of the Company or any Restricted Subsidiary) in or with respect to such transaction and is not an Affiliate, or an officer, director, member of a supervisory, executive or management board or employee of any Person (other than the Company or a Restricted Subsidiary), who has any direct or indirect financial interest in or with respect to such transaction.

“*Disqualified Stock*” means any Capital Stock that, by its terms (or by the terms of any security into which it is convertible, or for which it is exchangeable, in each case at the option of the holder of the Capital Stock), or upon the happening of any event, matures or is mandatorily redeemable, pursuant to a sinking fund obligation or otherwise, or redeemable at the option of the holder of the Capital Stock, in whole or in part, on or prior to the date that is 91 days after the date on which the notes mature. Notwithstanding the preceding sentence, any Capital Stock that would constitute Disqualified Stock solely because the holders of the Capital Stock have the right to require the Company to repurchase or redeem such Capital Stock upon the occurrence of a Change of Control or an Asset Sale will not constitute Disqualified Stock if the terms of such Capital Stock provide that the Company may not repurchase or redeem any such Capital Stock pursuant to such provisions unless such repurchase or redemption complies with the covenant described above under the caption “—Covenants—Restricted payments.” The amount of Disqualified Stock deemed to be outstanding at any time for purposes of the indenture will be

[Table of Contents](#)

the maximum amount that the Company and its Restricted Subsidiaries may become obligated to pay upon the maturity of, or pursuant to any mandatory redemption provisions of, such Disqualified Stock, exclusive of accrued dividends.

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

"Domestic Subsidiary" means any Subsidiary that was formed under the laws of the United States or any state of the United States or the District of Columbia.

"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 (1) an offering for cash by the Company of its Capital Stock (other than Disqualified Stock), or options, warrants or rights with respect to its Capital Stock or (2) a cash contribution to the Company's common equity capital from any Person.

"Exchange Act" means the Securities Exchange Act of 1934, as amended.

"Existing Indebtedness" means Indebtedness of the Company and its Subsidiaries (other than Indebtedness under the Senior Credit Agreement, the notes and the Subsidiary Guarantees) in existence on the Issue Date, until such amounts are repaid.

"Fair Market Value" means the value that would be paid by a willing buyer to an unaffiliated willing seller in a transaction not involving distress or necessity of either party. Fair Market Value of an asset or property in excess of \$5.0 million shall be determined by the Board of Directors of the Company acting in good faith, whose determination shall be conclusive and evidenced by a resolution of such Board of Directors, and any lesser Fair Market Value may be determined by an officer of the Company acting in good faith.

"Farm-In Agreement" means an agreement whereby a 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 interests 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.

"Farm-Out Agreement" means a Farm-In Agreement, viewed from the standpoint of the party that transfers an ownership interest to another.

"Fixed Charge Coverage Ratio" means with respect to any specified Person for any four-quarter reference period, the ratio of the Consolidated Cash Flow of such Person for such period to the Fixed Charges of such Person for such period. In the event that the specified Person or any Restricted Subsidiary incurs, assumes, Guarantees, repays, repurchases, redeems, defeases or otherwise discharges any Indebtedness (other than ordinary working capital borrowings) or issues, repurchases or redeems preferred stock subsequent to the commencement of the period for which the Fixed Charge Coverage Ratio is being calculated and on or prior to the date on which the event for which the calculation of the Fixed Charge Coverage Ratio is made (the *"Calculation Date"*), then the Fixed Charge Coverage Ratio will be calculated giving pro forma effect to such incurrence, assumption, Guarantee, repayment, repurchase, redemption,

[Table of Contents](#)

defeasance or other discharge of Indebtedness, or such issuance, repurchase or redemption of preferred stock, and the use of the proceeds therefrom, as if the same had occurred at the beginning of the applicable four-quarter reference period.

In addition, for purposes of calculating the Fixed Charge Coverage Ratio:

- (1) acquisitions that have been made by the specified Person or any Restricted Subsidiary, including through mergers, consolidations or otherwise (including acquisitions of assets used or useful in a Related Business), or any Person or any Restricted Subsidiary acquired by the specified Person or any Restricted Subsidiary, and including in each case any related financing transactions and increases in ownership of Restricted Subsidiaries, during the four-quarter reference period or subsequent to such reference period and on or prior to the Calculation Date will be given pro forma effect as if they had occurred on the first day of the four-quarter reference period, and any Consolidated Cash Flow for such period will be calculated giving pro forma effect to any operating improvements or cost savings that have occurred or are reasonably expected to occur in the reasonable judgment of the principal accounting officer or Chief Financial Officer of the Company (regardless of whether those operating improvements or cost savings could then be reflected in pro forma financial statements prepared in accordance with Regulation S-X under the Securities Act or any other regulation or policy of the SEC related thereto);
- (2) the Consolidated Cash Flow attributable to discontinued operations, as determined in accordance with GAAP, and operations or businesses (and ownership interests therein) disposed of prior to the Calculation Date, will be excluded;
- (3) the Fixed Charges attributable to discontinued operations, as determined in accordance with GAAP, and operations or businesses (and ownership interests therein) disposed of prior to the Calculation Date, will be excluded, but only to the extent that the obligations giving rise to such Fixed Charges will not be obligations of the specified Person or any Restricted Subsidiary following the Calculation Date;
- (4) any Person that is a Restricted Subsidiary on the Calculation Date will be deemed to have been a Restricted Subsidiary at all times during such four-quarter period;
- (5) any Person that is not a Restricted Subsidiary on the Calculation Date will be deemed not to have been a Restricted Subsidiary at any time during such four-quarter period;
- (6) if any Indebtedness bears a floating rate of interest, the interest expense on such Indebtedness will be calculated as if the rate in effect on the Calculation Date had been the applicable rate for the entire period (taking into account any Hedging Obligation applicable to such Indebtedness, but if the remaining term of such Hedging Obligation is less than 12 months, then such Hedging Obligation shall only be taken into account for that portion of the period equal to the remaining term thereof); and
- (7) the Company shall use audited financial statements for the portions of the relevant period for which audited financial statements are available on the date of determination and unaudited financial statements and other current financial data based on the books and records of the Company for the remaining portion of such period and (2) the Company shall be permitted to rely in good faith on the financial statements and other financial data derived from the books and records of the Company that are available on the date of determination.

Table of Contents

"Fixed Charges" means, with respect to any specified Person for any period, the sum, without duplication, of:

- (1) the consolidated interest expense of such Person and its Restricted Subsidiaries for such period, whether paid or accrued (excluding (i) any interest attributable to Production Payments and Reserve Sales, (ii) write-off of deferred financing costs and (iii) accretion of interest charges on future plugging and abandonment obligations, future retirement benefits and other obligations that do not constitute Indebtedness, but including, without limitation, amortization of debt issuance costs and original issue discount, non-cash interest payments, the interest component of any deferred payment obligations other than that attributable to any Oil and Natural Gas Hedging Contract, the interest component of all payments associated with Capital Lease Obligations, commissions, discounts and other fees and charges incurred in respect of letter of credit or bankers' acceptance financings), and net of the effect of all payments made or received pursuant to Interest Rate Agreements; *plus*
- (2) the consolidated interest expense of such Person and its Restricted Subsidiaries that was capitalized during such period; *plus*
- (3) any interest on Indebtedness of another Person that is Guaranteed by the specified Person or one or more of its Restricted Subsidiaries or secured by a Lien on assets of such specified Person or one or more of its Restricted Subsidiaries, regardless of whether such Guarantee or Lien is called upon; *plus*
- (4) all dividends, whether paid or accrued and regardless of whether in cash, on any series of preferred stock of such Person or any Restricted Subsidiary, other than dividends on Equity Interests payable solely in Equity Interests of the Company (other than Disqualified Stock) or to the Company or a Restricted Subsidiary,

in each case, on a consolidated basis and determined in accordance with GAAP.

"Foreign Subsidiary" means any Restricted Subsidiary other than a Domestic Subsidiary.

"GAAP" means generally accepted accounting principles in the United States 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. At any time after the Issue Date, the Company may elect to apply International Financial Reporting Standards, or IFRS, accounting principles in lieu of GAAP and, upon any such election, references herein to GAAP shall thereafter be construed to mean IFRS (except as otherwise provided in the indenture); *provided* that any such election, once made, shall be irrevocable; *provided, further*, that any calculation or determination in the indenture that requires the application of GAAP for periods that include fiscal quarters ended prior to the Company's election to apply IFRS shall remain as previously calculated or determined in accordance with GAAP. The Company shall give notice of any such election made in accordance with this definition to the trustee and the holders of notes.

"Government Securities" means direct obligations of, or obligations Guaranteed by, the United States of America, and the payment for which the United States pledges its full faith and credit.

"Guarantee" means a guarantee other than by endorsement of negotiable instruments for collection in the ordinary course of business, direct or indirect, in any manner including, without limitation, by way of a pledge of assets or through letters of credit or reimbursement agreements in respect thereof, of all or any part of any Indebtedness (whether arising by virtue of partnership arrangements, or by agreements to keep-well, to purchase assets, goods, securities or services or to take or pay or to maintain financial statement conditions or otherwise), or entered

[Table of Contents](#)

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). "Guarantee" used as a verb has a correlative meaning.

"*Hedging Obligations*" of any Person means the obligations of such Person pursuant to any Interest Rate and Currency Hedges and any Oil and Natural Gas Hedging Contracts.

"*Hydrocarbons*" means oil, natural gas, casinghead gas, drip gasoline, natural gasoline, condensate, distillate, liquid hydrocarbons, gaseous hydrocarbons and all constituents, elements or compounds thereof and products refined or processed therefrom.

"*Indebtedness*" means, with respect to any specified Person, without duplication, any indebtedness of such Person, regardless of whether contingent:

- (1) in respect of borrowed money;
- (2) evidenced by bonds, notes, credit agreements, debentures or similar instruments or letters of credit (or reimbursement agreements in respect thereof);
- (3) in respect of bankers' acceptances;
- (4) representing Capital Lease Obligations;
- (5) in respect of any Guarantee by such Person of production or payment with respect to a Production Payment (but not any other contractual obligation in respect of such Production Payment);
- (6) representing the balance deferred and unpaid of the purchase price of any property or services due more than six months after such property is acquired or such services are completed, except any such balance that constitutes an accrued expense or a trade payable; or
- (7) representing net obligations under Interest Rate and Currency Hedges,

if and to the extent any of the preceding items (other than letters of credit and Interest Rate and Currency Hedges) would appear as a liability upon a balance sheet of the specified Person prepared in accordance with GAAP. In addition, the term "Indebtedness" includes (a) all Indebtedness of any other Person, of the types described above in clauses (1) through (7), secured by a Lien on any asset of the specified Person (regardless of whether such Indebtedness is assumed by the specified Person); *provided* that the amount of such Indebtedness will be the lesser of (i) the Fair Market Value of such asset at such date of determination and (ii) the amount of such Indebtedness of such other Person, and (b) to the extent not otherwise included, the Guarantee by the specified Person of any Indebtedness of any other Person, of the types described above in clauses (1) through (7) above. Furthermore, the amount of any Indebtedness outstanding as of any date will be the accreted value thereof, in the case of any Indebtedness issued with original issue discount; and the principal amount thereof, together with any interest thereon that is more than 30 days past due, in the case of any other Indebtedness.

Notwithstanding the foregoing, the following shall not constitute "Indebtedness":

- (i) accrued expenses, royalties and trade accounts payable arising in the ordinary course of business;

Table of Contents

- (ii) except as provided in clause (5) of the first paragraph of this definition, any obligation in respect of any Production Payment and Reserve Sales;
- (iii) any obligation in respect of any Farm-In Agreement;
- (iv) any indebtedness which has been defeased in accordance with GAAP or defeased pursuant to the deposit of cash or Government Securities (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, and the other applicable terms of the instrument governing such indebtedness;
- (v) oil or natural gas balancing liabilities incurred in the ordinary course of business and consistent with past practice;
- (vi) any obligation in respect of any Oil and Natural Gas Hedging Contract;
- (vii) any unrealized losses or charges in respect of Hedging Obligations (including those resulting from the application of the Financial Standards Accounting Board's Accounting Standards Codification (ASC) 815);
- (viii) any obligations in respect of (a) bid, performance, completion, surety, appeal and similar bonds, (b) obligations in respect of bankers' acceptances, (c) insurance obligations or bonds and other similar bonds and obligations and (d) any Guarantees or letters of credit functioning as or supporting any of the foregoing bonds or obligations; *provided, however*, that such bonds or obligations mentioned in subclause (a), (b), (c) or (d) of this clause (viii), are incurred in the ordinary course of the business of the Company and its Restricted Subsidiaries and do not relate to obligations for borrowed money;
- (ix) any Disqualified Stock of the Company or preferred stock of a Restricted Subsidiary;
- (x) any obligation arising from any agreement providing for indemnities, guarantees, purchase price adjustments, holdbacks, contingency payment obligations based on the performance of the acquired or disposed assets or similar obligations (other than Guarantees of Indebtedness) incurred by any Person in connection with the acquisition or disposition of assets;
- (xi) all contracts and other obligations, agreements instruments or arrangements described in clauses (20), (21), (22) and (23) of the definition of "Permitted Liens";
- (xii) contingent obligations incurred in the ordinary course of business; or
- (xiii) any indebtedness that has been defeased in accordance with GAAP or defeased pursuant to the deposit of cash, U.S. government obligations and Cash Equivalents (sufficient to satisfy all obligations relating thereto at maturity or redemption, as applicable) in a trust or account created or pledged for the sole benefit of the holders of such indebtedness, in accordance with the terms of the instruments governing such indebtedness.

"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.

[Table of Contents](#)

"Interest Rate and Currency Hedges" of any Person means the obligations of such Person pursuant to any Interest Rate Agreement or Currency Agreement.

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

- (1) Baa3 (or the equivalent) by Moody's; or
- (2) BBB- (or the equivalent) by S&P,

or, if either such entity ceases to rate the notes for reasons outside of the control of the Company, the equivalent investment grade credit rating from any other Rating Agency.

"Investments" means, with respect to any Person, all direct or indirect investments by such Person in other Persons (including Affiliates) in the forms of loans (including Guarantees or other obligations, advances or capital contributions (excluding endorsements of negotiable instruments and documents in the ordinary course of business, and commission, travel and similar advances to officers, employees and consultants made in the ordinary course of business), purchases or other acquisitions for consideration of Indebtedness, Equity Interests or other securities, together with all items that are or would be classified as investments on a balance sheet of such Person prepared in accordance with GAAP. If the Company or any Restricted Subsidiary sells or otherwise disposes of any Equity Interests of any direct or indirect Restricted Subsidiary such that, after giving effect to any such sale or disposition, such Person is no longer a Restricted Subsidiary, the Company will be deemed to have made an Investment on the date of any such sale or disposition equal to the Fair Market Value of the Company's Investments in such Restricted Subsidiary that were not sold or disposed of in an amount determined as provided in the final paragraph of the covenant described above under the caption "*—Covenants—Restricted payments.*" The acquisition by the Company or any Subsidiary of the Company of a Person that holds an Investment in a third Person will be deemed to be an Investment by the Company or such Subsidiary in such third Person in an amount equal to the Fair Market Value of the Investments held by the acquired Person in such third Person in an amount determined as provided in the final paragraph of the covenant described above under the caption "*—Covenants—Restricted payments.*" Except as otherwise provided in the indenture, the amount of an Investment will be determined at the time the Investment is made and without giving effect to subsequent changes in value.

"Issue Date" means the first date on which notes are issued under the indenture.

"Legal Holiday" means a Saturday, a Sunday or a day on which banking institutions in the City of New York or at a place of payment are authorized by law, regulation or executive order to remain closed.

"Lien" means, with respect to any asset, any mortgage, lien, pledge, charge, security interest or encumbrance of any kind in respect of such asset, regardless of whether 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 other than a precautionary financing statement respecting a lease not intended as a security agreement.

"Moody's" means Moody's Investors Service, Inc. or any successor to the rating agency business thereof.

Table of Contents

"*Net Income*" means, with respect to any specified Person, the net income (loss) of such Person, determined in accordance with GAAP and before any reduction in respect of non-cash preferred stock dividends, excluding, however:

- (1) any gain or loss, together with any related provision for taxes on such gain or loss, realized in connection with: (a) any Asset Sale (including, without limitation, any cash received pursuant to any sale and leaseback transaction) or (b) the disposition of any securities by such Person or the extinguishment of any Indebtedness of such Person; and
- (2) any extraordinary gain or loss, together with any related provision for taxes on such extraordinary gain or loss.

"*Net Proceeds*" means the aggregate cash proceeds received by the Company or any Restricted Subsidiary in respect of any Asset Sale (including, without limitation, any cash received upon the sale or other disposition of any non-cash consideration received in any Asset Sale), net of:

- (1) all legal, accounting, investment banking, title and recording tax expenses, commissions and other fees and expense 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 Sale;
- (2) all payments made on any Indebtedness which is secured by any assets subject to such Asset Sale, in accordance with the terms of such Indebtedness, or which must by its terms, or in order to obtain a necessary consent to such Asset Sale, or by applicable law be repaid out of the proceeds from such Asset Sale;
- (3) all distributions and other payments required to be made to holders of minority interests in Subsidiaries or joint ventures as a result of such Asset Sale; and
- (4) the deduction of appropriate amounts to be provided by the seller as a reserve, in accordance with GAAP, or held in escrow, in either case for adjustment in respect of the sale price or for any liabilities associated with the assets disposed of in such Asset Sale and retained by the Company or any Restricted Subsidiary after such Asset Sale.

"*Net Working Capital*" means (a) all current assets of the Company and its Restricted Subsidiaries except current assets from Oil and Natural Gas Hedging Contracts, less (b) all current liabilities of the Company and its Restricted Subsidiaries, except (i) current liabilities included in Indebtedness, (ii) current liabilities associated with asset retirement obligations relating to oil and gas properties and (iii) any current liabilities from Oil and Natural Gas Hedging Contracts, in each case as set forth in the consolidated financial statements of the Company prepared in accordance with GAAP (excluding any adjustments made pursuant to the Financial Standards Accounting Board's Accounting Standards Codification (ASC) 815).

"*Non-Recourse Debt*" means Indebtedness:

- (1) as to which neither the Company 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), in each case other than Liens on and pledges of the Equity Interests of any Unrestricted Subsidiary or any joint venture owned by the Company or any Restricted Subsidiary to the extent securing otherwise Non-Recourse Debt of such Unrestricted Subsidiary or joint ventures;

Table of Contents

- (2) no default with respect to which (including any rights that the holders thereof may have to take enforcement action against an Unrestricted Subsidiary) would permit (upon notice, lapse of time or both) any holder of any other Indebtedness of the Company 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, except for any Equity Interests referred to in clause (1) of this definition.

"Obligations" means any principal, interest, penalties, fees, indemnifications, reimbursements, damages and other liabilities payable under the documentation governing any Indebtedness.

"Officer" means, in the case of the Company, the Chairman of the Board, the Chief Executive Officer, the President, the Chief Financial Officer, any Vice President, the Treasurer or the Secretary of the Company and, in the case of any Subsidiary Guarantor, the Chairman of the Board, the Chief Executive Officer, the President, the Chief Financial Officer, any Vice President, the Treasurer or the Secretary of such Subsidiary Guarantor.

"Officers' Certificate" means, in the case of the Company, a certificate signed by two Officers or by an Officer and either an Assistant Treasurer or an Assistant Secretary of the Company and, in the case of any Subsidiary Guarantor, a certificate signed by two Officers or by an Officer and either an Assistant Treasurer or an Assistant Secretary of such Subsidiary Guarantor.

"Oil and Natural Gas Hedging Contract" means any Hydrocarbon hedging agreements and other agreements or arrangements entered into in the ordinary course of business in the oil and gas industry for the purpose of protecting against fluctuations in Hydrocarbon prices.

"Permitted Acquisition Indebtedness" means Indebtedness or Disqualified Stock of the Company or any of the Company's Restricted Subsidiaries to the extent such Indebtedness or Disqualified Stock was Indebtedness or Disqualified Stock of:

- (1) a Subsidiary prior to the date on which such Subsidiary became a Restricted Subsidiary; or
- (2) a Person that was merged or consolidated into the Company or a Restricted Subsidiary;

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

- (a) the Restricted Subsidiary or the Company, as applicable, would be permitted to incur at least \$1.00 of additional Indebtedness pursuant to the Fixed Charge Coverage Ratio test described under *"—Covenants—Incurrence of indebtedness and issuance of preferred stock,"* or
- (b) the Fixed Charge Coverage Ratio for the Company would be greater than the Fixed Charge Coverage Ratio for the Company immediately prior to such transaction.

"Permitted Business Investments" means Investments and expenditures made in the ordinary course of, and of a nature that is or shall have become customary in, a Related Business as means of actively exploiting, exploring for, acquiring, developing, processing, gathering, marketing or transporting oil, natural gas, other Hydrocarbons and minerals (including with respect to disposal of water, by-products or waste, remediation and plugging and abandonment) through agreements, transactions, interests or arrangements that permit one to share risks or costs of such activities or comply with regulatory requirements regarding local ownership, including

Table of Contents

without limitation, (a) ownership interests in oil, natural gas, other Hydrocarbons and minerals properties, liquefied natural gas facilities, processing facilities, gathering systems, pipelines, disposal facilities, storage facilities or related systems or ancillary real property interests and ancillary property, plant and equipment; (b) 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, disposal and remediation agreements, joint venture agreements, partnership agreements (whether general or limited), subscription agreements, stock purchase agreements, stockholder agreements and other similar agreements (including for limited liability companies) with third parties; and (c) direct or indirect ownership interests in drilling rigs, transportation equipment and other equipment related to such drilling rigs or transportation equipment.

"Permitted Investments" means:

- (1) any Investment in the Company or in a Restricted Subsidiary;
- (2) any Investment in Cash Equivalents;
- (3) any Investment by the Company or any Restricted Subsidiary in a Person, if as a result of such Investment:
 - (a) such Person becomes a Restricted Subsidiary; or
 - (b) such Person is merged or consolidated with or into, or transfers or conveys substantially all of its properties or assets to, or is liquidated into, the Company or a Restricted Subsidiary;
- (4) any Investment made as a result of the receipt of non-cash consideration from an Asset Sale that was made pursuant to and in compliance with the covenant described above under the caption "*—Repurchase at the option of holders—Asset sales*";
- (5) any Investments received in compromise or resolution of (a) obligations of trade creditors or customers that were incurred in the ordinary course of business of the Company or any Restricted Subsidiary, including pursuant to any plan of reorganization or similar arrangement upon the bankruptcy or insolvency of any trade creditor or customer; or (b) litigation, arbitration or other disputes with Persons that are not Affiliates;
- (6) Investments represented by Hedging Obligations;
- (7) advances to or reimbursements of employees for moving, entertainment and travel expenses, drawing accounts and similar expenditures in the ordinary course of business, in each case to the extent they constitute Investments;
- (8) loans or advances to employees in the ordinary course of business or consistent with past practice, in each case to the extent they constitute Investments;
- (9) advances and prepayments for asset purchases in the ordinary course of business in a Related Business of the Company or any Restricted Subsidiary;

[Table of Contents](#)

- (10) receivables owing to the Company or any Restricted Subsidiary created or acquired in the ordinary course of business and payable or dischargeable in accordance with customary trade terms; *provided, however*, that such trade terms may include such concessionary trade terms as the Company or any such Restricted Subsidiary deems reasonable under the circumstances;
- (11) surety and performance bonds and workers' compensation, utility, lease, tax, performance and similar deposits, negotiable instruments held for collection, endorsements for collection or deposit and prepaid expenses, in each case, arising in the ordinary course of business;
- (12) guarantees by the Company or any Restricted Subsidiary of operating leases (other than Capital Lease Obligations) or of other obligations that do not constitute Indebtedness, in each case entered into by the Company or any such Restricted Subsidiary in the ordinary course of business;
- (13) Investments of a Restricted Subsidiary acquired after the Issue Date or of any entity merged into the Company or merged into or consolidated with a Restricted Subsidiary in accordance with the covenant described under "—Covenants—Merger, consolidation or sale of substantially all assets" or the covenant described in the third paragraph under "—Subsidiary guarantees of the notes" (as applicable) to the extent that such Investments were not made in contemplation of or in connection with such acquisition, merger or consolidation and were in existence on the date of such acquisition, merger or consolidation;
- (14) Permitted Business Investments;
- (15) Investments received as a result of a foreclosure by the Company or any Restricted Subsidiary with respect to any secured Investment in default;
- (16) Investments in any units of any oil and gas royalty trust;
- (17) Investments existing on the Issue Date, and any extension, modification or renewal of any such Investments existing on the Issue Date, but only to the extent not involving additional advances, contributions or other Investments of cash or other assets or other increases of such Investments (other than as a result of the accrual or accretion of interest or original issue discount or the issuance of pay-in-kind securities, in each case, pursuant to the terms of such Investments as in effect on the Issue Date);
- (18) repurchases of or other Investments in the notes;
- (19) any acquisition of assets solely in exchange for the issuance of Equity Interests (other than Disqualified Stock) of the Company;
- (20) Guarantees of performance or other obligations (other than Indebtedness) arising in the ordinary course of a Related Business, including obligations under oil and natural gas exploration, development, joint operating and related agreements and licenses, concessions or operating leases related to a Related Business;
- (21) Guarantees received from any Person with respect to any Permitted Investment; and
- (22) other Investments in any Person having an aggregate Fair Market Value (measured on the date each such Investment was made and without giving effect to subsequent changes in value), when taken together with all other Investments made pursuant to this clause (22) that are at the time outstanding not to exceed the greater of (a) 4% of Adjusted Consolidated Net Tangible Assets of the Company and (b) \$35.0 million.

[Table of Contents](#)

With respect to any Investment, the Company may, in its sole discretion, allocate or re-allocate all or any portion of any Investment to one or more of the above clauses so that the entire Investment is a Permitted Investment.

“*Permitted Liens*” means, with respect to any Person:

- (1) Liens securing Indebtedness incurred under Credit Facilities pursuant to subparagraph (1) of the second paragraph of the covenant described under the caption “—Covenants—Incurrence of indebtedness and issuance of preferred stock”; *provided* that the aggregate amount of such indebtedness does not exceed the aggregate amount that would be allowed under such subparagraph (1);
- (2) Liens to secure Indebtedness (including Capital Lease Obligations) permitted by clause (4) of the second paragraph of the covenant entitled “—Covenants—Incurrence of indebtedness and issuance of preferred stock” covering only the assets acquired with or financed by such Indebtedness;
- (3) pledges or deposits by such Person under workers' compensation laws, unemployment insurance 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 to secure public or statutory obligations of such Person or deposits or cash or United States government bonds to secure surety or appeal 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;
- (4) landlords', carriers', warehousemen's, mechanics', materialmen's, repairmen's, operators or similar Liens arising by contract or statute in the ordinary course of business and with respect to amounts which are not yet delinquent or are being contested in good faith by appropriate proceedings;
- (5) Liens for taxes, assessments or other governmental charges or which are being contested in good faith by appropriate proceedings provided appropriate reserves have been made in respect thereof to the extent required pursuant to GAAP;
- (6) Liens in favor of the issuers of surety or performance bonds or bankers' acceptances issued pursuant to the request of and for the account of such Person in the ordinary course of its business;
- (7) encumbrances, 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 or other restrictions 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 said properties or materially impair their use in the operation of the business of such Person;
- (8) leases and subleases of real property which do not materially interfere with the ordinary conduct of the business of the Company and its Restricted Subsidiaries, taken as a whole;
- (9) any attachment or judgment Liens not giving rise to an Event of Default;

S-151

Table of Contents

- (10) Liens for the purpose of securing the payment of all or a part of the purchase price of, or Capital Lease Obligations with respect to, or the repair, improvement or construction cost of, assets or property acquired or repaired, improved 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 repaired, improved or constructed plus fees and expenses in connection therewith; and
 - (b) such Liens are created within 180 days of repair, improvement or construction or acquisition of such assets or property and do not encumber any other assets or property of the Company or any Restricted Subsidiary other than such assets or property and assets affixed or appurtenant thereto (including improvements);
- (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 or deposited with a depository institution; *provided that*:
- (a) such deposit account is not a dedicated cash collateral account and is not subject to restrictions against access by the Company in excess of those set forth by regulations promulgated by the Federal Reserve Board; and
 - (b) such deposit account is not intended by the Company or any Restricted Subsidiary to provide collateral to the depository institution;
- (12) Liens arising from Uniform Commercial Code financing statement filings regarding operating leases entered into by the Company and its Restricted Subsidiaries in the ordinary course of business or otherwise not arising in connection with security for Indebtedness;
- (13) Liens existing on the Issue Date;
- (14) Liens on property at the time the Company or a Restricted Subsidiary acquired the property, including any acquisition by means of a merger or consolidation with or into the Company or a Restricted Subsidiary; *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 the Company or any Restricted Subsidiary other than those of the Person merged or consolidated with the Company or such Restricted Subsidiary;
- (15) Liens on property or Capital Stock of a Person at the time such Person becomes a Restricted Subsidiary; *provided, however*, that such Liens are not created, incurred or assumed in connection with, or in contemplation of, such other Person becoming a Restricted Subsidiary; *provided further, however*, that such Liens may not extend to any other property owned by the Company or any Restricted Subsidiary;
- (16) Liens securing Indebtedness or other obligations of the Company or a Restricted Subsidiary owing to the Company or a Subsidiary Guarantor;
- (17) Liens securing the notes, the Subsidiary Guarantees and other obligations arising under the indenture;

Table of Contents

- (18) Liens securing Permitted Refinancing Indebtedness of the Company or a Restricted Subsidiary incurred to refinance Indebtedness of the Company or a Restricted Subsidiary 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) Liens in respect of Production Payments and Reserve Sales;
- (20) Liens on pipelines and pipeline facilities that arise by operation of law;
- (21) Liens arising under joint venture agreements, partnership agreements, oil and gas leases or subleases, assignments, purchase and sale agreements, division orders, contracts for the sale, purchasing, processing, transportation or exchange of oil or natural gas, unitization and pooling declarations and agreements, development agreements, area of mutual interest agreements, licenses, sublicenses, net profits interests, participation agreements, Farm-Out Agreements, Farm-In Agreements, carried working interest, joint operating, unitization, royalty, sales and similar agreements relating to the exploration, development or operation of, or production from, oil and gas properties entered into in the ordinary course of business in a Related Business;
- (22) Liens reserved in oil and gas mineral leases for bonus, royalty or rental payments and for compliance with the terms of such leases;
- (23) Liens on, or related to, properties or assets to secure all or part of the costs incurred in the ordinary course of a Related Business for exploration, drilling, development, production, processing, transportation, marketing, storage, disposal, abandonment or operation;
- (24) 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* 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 the Indebtedness;
- (25) Liens securing obligations of the Company and its Restricted Subsidiaries under non-speculative Hedging Obligations;
- (26) Liens securing Indebtedness of any Foreign Subsidiary which Indebtedness is permitted by the indenture;
- (27) Liens on property securing a defeasance trust;
- (28) Liens securing any insurance premium financing under customary terms and conditions; provided that no such Lien extends to or covers any assets or property other than the insurance being acquired with such financing, the proceeds thereof and any unearned or refunded insurance premiums relating thereto;
- (29) Liens upon specific items of inventory or other goods and proceeds of any Person securing such Person's obligations in respect of bankers' acceptances or commercial letters of credit issued or created for the account of such Person to facilitate the purchase, shipment or storage of such inventory or goods;

Table of Contents

- (30) Liens on and pledges of the Equity Interests of any Unrestricted Subsidiary or any joint venture owned by the Company or any Restricted Subsidiary to the extent securing Non-Recourse Debt of such Unrestricted Subsidiary or joint venture; and
- (31) other Liens with respect to obligations that, at any one time outstanding, do not exceed the greater of (a) \$30 million and (b) 3.0% of the Adjusted Consolidated Net Tangible Assets of the Company.

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

"*Permitted Refinancing Indebtedness*" means any Indebtedness of the Company or any Restricted Subsidiary, any Disqualified Stock of the Company or any preferred stock of any Restricted Subsidiary (a) issued in exchange for, or the net proceeds of which are used to extend, renew, refund, refinance, replace, defease, discharge or otherwise retire for value, in whole or in part, or (b) constituting an amendment, modification or supplement to or a deferral or renewal of ((a) and (b) above, collectively, a "*Refinancing*"), any other Indebtedness of the Company or any Restricted Subsidiary (other than intercompany Indebtedness), any Disqualified Stock of the Company or any preferred stock of a Restricted Subsidiary in a principal amount or, in the case of Disqualified Stock of the Company or preferred stock of a Restricted Subsidiary, liquidation preference, not to exceed (after deduction of reasonable and customary fees and expenses incurred in connection with the Refinancing) the lesser of:

- (1) the principal amount or, in the case of Disqualified Stock or preferred stock, liquidation preference, of the Indebtedness, Disqualified Stock or preferred stock so Refinanced (*plus*, in the case of Indebtedness, the amount of premium, if any paid in connection therewith), and
- (2) if the Indebtedness being Refinanced was issued with any original issue discount, the accreted value of such Indebtedness (as determined in accordance with GAAP) at the time of such Refinancing.

Notwithstanding the preceding, no Indebtedness, Disqualified Stock or preferred stock will be deemed to be Permitted Refinancing Indebtedness, unless:

- (1) such Indebtedness, Disqualified Stock or preferred stock has a final maturity date or redemption date, as applicable, no earlier than the final maturity date or redemption date, as applicable, of, and has a Weighted Average Life to Maturity equal to or greater than the Weighted Average Life to Maturity of, the Indebtedness, Disqualified Stock or preferred stock being Refinanced;
- (2) if the Indebtedness, Disqualified Stock or preferred stock being Refinanced is contractually subordinated or otherwise junior in right of payment to the notes, such Indebtedness, Disqualified Stock or preferred stock has a final maturity date or redemption date, as applicable, no earlier than the final maturity date or redemption date, as applicable, of, and is contractually subordinated or otherwise junior in right of payment to, the notes, on terms at least as favorable to the holders of notes as those contained in the documentation governing the Indebtedness, Disqualified Stock or preferred stock being Refinanced at the time of the Refinancing; and

[Table of Contents](#)

- (3) such Indebtedness or Disqualified Stock is incurred or issued by the Company or such Indebtedness, Disqualified Stock or preferred stock is incurred or issued by the Restricted Subsidiary that is the obligor on the Indebtedness being Refinanced or the issuer of the Disqualified Stock or preferred stock being Refinanced; *provided* that a Restricted Subsidiary that is also a Subsidiary Guarantor may guarantee Permitted Refinancing Indebtedness incurred by the Company, regardless of whether such Restricted Subsidiary was an obligor or guarantor of the Indebtedness being Refinanced.

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

"Production Payments" means Dollar-Denominated Production Payments and Volumetric Production Payments, collectively.

"Production Payments and Reserve Sales" means the grant or transfer by the Company or a Subsidiary of the Company to any Person of a royalty, overriding royalty, net profits interest, Production Payment, 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, including any such grants or transfers pursuant to incentive compensation programs on terms that are reasonably customary in the oil and gas business for geologists, geophysicists and other providers of technical services to the Company or a Subsidiary of the Company.

"Rating Agency" means each of S&P and Moody's, or if (and only if) S&P or Moody's or both shall not make a rating on the notes publicly available, a nationally recognized statistical rating agency or agencies, as the case may be, selected by the Company, which shall be substituted for S&P or Moody's, or both, as the case may be.

"Related Business" means any business which is the same as or related, ancillary or complementary to any of the businesses of the Company and its Restricted Subsidiaries on the Issue Date, which includes (1) the acquisition, exploration, exploitation, development, production, operation, servicing and disposition of interests in oil, natural gas and other hydrocarbon properties, and the utilization of the Company's and any Restricted Subsidiary's properties, (2) the gathering, marketing, treating, processing, storage, refining, selling and transporting Hydrocarbons, (3) oil field sales and services and related activities, (4) development, purchase and sale of real estate and interests therein, and (5) any business or activity relating to, arising from, or necessary, appropriate or incidental to the activities described in the foregoing clauses (1) through (4) of this definition.

"Reporting Failure" means the failure of the Company to file with the SEC and make available or otherwise deliver to the trustee and each holder of notes, within the time periods specified in "*—Covenants—Reports*" (after giving effect to any grace period specified under Rule 12b-25 under the Exchange Act), the periodic reports, information, documents or other reports that the Company may be required to file with the SEC pursuant to such provision.

"Restricted Investment" means any Investment other than a Permitted Investment.

"Restricted Subsidiary" means any Subsidiary of the Company other than an Unrestricted Subsidiary.

"S&P" means Standard & Poor's Ratings Services, a division of The McGraw-Hill Companies, Inc.

[Table of Contents](#)

“SEC” means the Securities and Exchange Commission.

“Securities Act” means the Securities Act of 1933, as amended.

“*Senior Credit Agreement*” means the Credit Agreement dated as of January 8, 2008, as amended by the First through the Twelfth Amendments thereto, among (i) the Company, as borrower, (ii) Approach Oil & Gas Inc., a Delaware corporation, Approach Oil & Gas (Canada) Inc., an Alberta, Canada corporation, and Approach Resources I, LP, a Texas limited partnership, as guarantors, (iii) Frost National Bank, as administrative agent and lender, and (iv) the lenders party thereto from time to time, and any related notes, Guarantees, collateral documents, instruments and agreements executed in connection therewith, and in each case as further amended, restated, modified, supplemented, increased, renewed, refunded, replaced (including replacement after the termination of such credit facility), supplemented, restructured or refinanced in whole or in part from time to time in one or more agreements or instruments.

“*Significant Subsidiary*” means any Restricted Subsidiary that would be a “significant subsidiary” of the Company within the meaning of Rule 1-02 under Regulation S-X under the Securities Act.

“*Stated Maturity*” means, with respect to any installment of interest or principal on any series of Indebtedness, the date on which the payment of interest or principal was scheduled to be paid in the documentation governing such Indebtedness as of its issue date, and will not include any contingent obligations to repay, redeem or repurchase any such interest or principal prior to the date originally scheduled for the payment thereof.

“*Subordinated Debt*” means Indebtedness of the Company or a Subsidiary Guarantor that is contractually subordinated in right of payment (by its terms or the terms of any document or instrument relating thereto), to the notes or the Subsidiary Guarantee of such Subsidiary Guarantor, as applicable.

“*Subsidiary*” means, with respect to any specified Person:

- (1) any corporation, association or other business entity (other than a partnership) of which more than 50% of the total voting power of its Voting Stock is at the time owned or controlled, directly or indirectly, by that Person or one or more of the other Subsidiaries of that Person (or a combination thereof); and
- (2) any partnership (a) the sole general partner or the managing general partner of which is such Person or a Subsidiary of such Person or (b) the only general partners of which are that Person or one or more Subsidiaries of that Person (or any combination thereof).

“*Subsidiary Guarantee*” means any Guarantee of the notes by any Subsidiary Guarantor in accordance with the provisions of the indenture described under the caption “—Covenants—Subsidiary guarantees.”

“*Subsidiary Guarantor*” means each Restricted Subsidiary that has become obligated under a Subsidiary Guarantee, in accordance with the terms of the guarantee provisions of the indenture, but only for so long as such Subsidiary remains so obligated pursuant to the terms of the indenture.

“*Unrestricted Subsidiary*” means any Subsidiary of the Company (including any newly acquired or newly formed Subsidiary or a Person becoming a Subsidiary through merger or consolidation or Investment therein) that is designated by the Board of Directors of the Company as an

[Table of Contents](#)

Unrestricted Subsidiary pursuant to a resolution of such Board of Directors, but only to the extent that such Subsidiary:

- (1) has no Indebtedness other than Non-Recourse Debt;
- (2) is a Person with respect to which neither the Company nor any Restricted Subsidiary has any direct or indirect obligation (a) to subscribe for additional Equity Interests 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
- (3) has not guaranteed or otherwise directly or indirectly provided credit support for any Indebtedness of the Company or any Restricted Subsidiary, except to the extent such Guarantee or credit support would be released upon such designation.

Any Subsidiary of an Unrestricted Subsidiary shall also be an Unrestricted Subsidiary.

"Volumetric Production Payments" means production obligations recorded as deferred revenue in accordance with GAAP, together with all related undertakings and obligations.

"Voting Stock" of any specified Person as of any date means the Capital Stock of such Person that is at the time entitled (without regard to the occurrence of any contingency and after giving effect to any voting agreement or stockholders' agreement that effectively transfers voting power) to vote in the election of the Board of Directors of such Person.

"Weighted Average Life to Maturity" means, when applied to any Indebtedness at any date, the number of years obtained by dividing:

- (1) the sum of the products obtained by multiplying (a) the amount of each then remaining installment, sinking fund, serial maturity or other required payments of principal, including payment at final maturity, in respect of the Indebtedness, *by* (b) the number of years (calculated to the nearest one-twelfth) that will elapse between such date and the making of such payment; *by*
- (2) the then outstanding principal amount of such Indebtedness.

[Table of Contents](#)

Material U.S. federal income tax considerations

The following is a summary based on present law of material United States federal income tax considerations relating to the acquisition, ownership and disposition of the notes, but does not purport to be a complete analysis of all of the potential tax considerations relating thereto. This summary is based on the Internal Revenue Code of 1986, as amended (the "Code"), Treasury regulations, rulings and pronouncements of the Internal Revenue Service (the "IRS"), and judicial decisions, all as of the date of this prospectus supplement. These authorities may be changed or subject to different interpretations, possibly with retroactive effect, so as to cause the United States federal income tax consequences to be different from those described herein. This summary applies only to the initial holders of the notes who hold the notes as capital assets (generally, property held for investment) and who acquire the notes in the original offering for a price equal to the issue price of the notes. The issue price of the notes is the first price at which a substantial amount of the notes is sold for cash to investors, other than to bond houses, brokers or similar persons or organizations acting in the capacity of underwriters, placement agents or wholesalers.

This summary does not address tax considerations arising under the laws of any foreign, state or local jurisdiction, the effect of any tax treaty or any United States federal tax laws other than income tax law (such as estate or gift tax law). In addition, this discussion does not address tax considerations that are the result of a holder's particular circumstances or of special rules, such as those that apply to holders subject to the alternative minimum tax or the recently enacted Medicare tax on certain investment income, banks and other financial institutions, tax-exempt entities, insurance companies, dealers or traders in securities or commodities, regulated investment companies, real estate investment trusts, United States Holders (as defined below) whose "functional currency" is not the U.S. dollar, former citizens or former long-term residents of the United States, foreign governments or international organizations, persons who will hold the notes as a position in a hedging transaction, "straddle," "conversion transaction" or other risk reduction or integrated transaction, or partnerships (including any entity or arrangement treated as a partnership for United States federal income tax purposes) or other pass-through entities or investors in such entities. If an entity or arrangement treated as a partnership for United States federal income tax purposes holds the notes, the United States federal income tax treatment of a partner generally will depend on the status of the partner and the activities of the partnership. A partner in a partnership considering the purchase of notes should consult its own tax advisor as to its tax consequences.

We have not sought any ruling from the IRS with respect to the statements made and conclusions reached in this summary, and there can be no assurance that the IRS will agree with and not challenge these statements and conclusions.

THIS SUMMARY IS NOT INTENDED OR WRITTEN TO BE USED, AND CANNOT BE USED BY ANY TAXPAYER OR TAX PREPARER, FOR THE PURPOSE OF AVOIDING ANY UNITED STATES FEDERAL TAX PENALTIES THAT MAY BE IMPOSED ON THE TAXPAYER OR TAX PREPARER, AND IS WRITTEN TO SUPPORT THE PROMOTION AND MARKETING OF THE OFFERING OF THE NOTES. EACH TAXPAYER SHOULD SEEK ADVICE BASED ON THE TAXPAYER'S PARTICULAR CIRCUMSTANCES FROM AN INDEPENDENT TAX ADVISOR WITH RESPECT TO THE APPLICATION TO SUCH CIRCUMSTANCES OF THE UNITED STATES FEDERAL INCOME TAX LAWS AS WELL AS WITH RESPECT TO ANY TAX CONSEQUENCES ARISING UNDER THE LAWS OF ANY STATE, LOCAL OR FOREIGN TAXING JURISDICTION OR UNDER ANY APPLICABLE TAX TREATY.

[Table of Contents](#)**Effect of certain contingencies**

In certain circumstances (see “Description of Notes—Repurchase at the Option of Holders—Change of Control” and “Description of Notes—Optional Redemption”), we may be entitled or obligated to redeem the notes offered hereby before their stated maturity date or obligated to pay a holder additional amounts in excess of stated interest or principal on the notes offered hereby. The obligation to make such payments may implicate provisions of the Treasury regulations relating to “contingent payment debt instruments.” We do not intend to treat the potential redemption or payment of any such amounts as causing the notes to be treated as contingent payment debt instruments. Our determination is not, however, binding on the IRS and if the IRS were to successfully challenge this determination, a holder subject to United States federal income taxation might be required to accrue income on the notes offered hereby at a higher rate than the stated interest rate and to treat as ordinary income (rather than capital gain) income realized on the taxable disposition of a note. In the event such a contingency occurs, it would affect the amount and timing of the income (and possibly character) that a holder subject to United States federal income taxation must recognize. The remainder of this discussion assumes that the notes will not be treated as contingent payment debt instruments.

United States Holders

As used in this discussion, “United States Holder” means a beneficial owner of notes that for United States federal income tax purposes is:

- an individual who is a citizen or resident of the United States, including an alien individual who is a lawful permanent resident of the United States or who meets the “substantial presence” test under Section 7701(b) of the Code;
- a corporation created or organized under the laws of the United States, any state thereof or the District of Columbia;
- an estate whose income is subject to United States federal income taxation regardless of its source; or
- a trust (i) if its administration is subject to the primary supervision of a court within the United States and one or more “United States persons” (within the meaning of the Code) have the authority to control all substantial decisions of the trust or (ii) that has a valid election in effect under applicable Treasury regulations to be treated as a United States person.

Stated interest

Stated interest on the notes generally will be taxable to you as ordinary income at the time it is received or accrued in accordance with your regular method of accounting for United States federal income tax purposes.

[Table of Contents](#)

Disposition of the notes

Upon a sale, exchange, redemption, retirement or other taxable disposition of the notes, you generally will recognize capital gain or loss equal to the difference, if any, between:

- the amount of cash proceeds and the fair market value of any property received on such disposition (less any amount attributable to accrued and unpaid stated interest on the notes, which will generally be taxable as ordinary income to the extent not previously so taxed); and
- your adjusted tax basis in the notes.

Your adjusted tax basis in a note generally will equal the cost of the note to you, decreased by any payments other than payments of stated interest. Any gain or loss that is recognized on the disposition of a note generally will be capital gain or loss and will be long-term capital gain or loss if you have held the note for more than one year at the time of disposition. Long-term capital gains of individuals, estates and trusts currently are taxed at reduced rates. Your ability to deduct capital losses is subject to certain limitations.

Information reporting and backup withholding

In general, information reporting is required as to payments of stated interest on the notes and the proceeds of a sale or other disposition (including a retirement or redemption) of the notes unless you are a corporation or other exempt person and, if requested, certify such status. In addition, you will be subject to backup withholding on payments made to you of stated interest on your note and to proceeds of a sale or other disposition of your note if you are not exempt, you fail to properly furnish a taxpayer identification number or you fail to certify that you are not subject to backup withholding.

Backup withholding is not an additional tax. Any amount withheld from a payment under the backup withholding rules may be allowed as a credit against your United States federal income tax liability, if any, and may entitle you to a refund, provided that the required information is timely furnished to the IRS.

Non-United States Holders

As used in this tax discussion, "non-United States Holder" means any beneficial owner of the notes that is, for United States federal income tax purposes, an individual, corporation, estate or trust that is not a United States Holder. The rules governing the United States federal income taxation of a non-United States Holder are complex, and no attempt will be made herein to provide more than a summary of certain of those rules.

Interest

Subject to the discussions of backup withholding and FATCA below, interest on the notes will not be subject to United States federal income tax or withholding tax if the interest is not effectively connected with your conduct of a trade or business in the United States and if you qualify for the "portfolio interest" exemption. You will qualify for the portfolio interest exemption if you:

- do not own, actually or constructively, 10% or more of the combined voting power of all classes of our stock entitled to vote;

[Table of Contents](#)

- are not a controlled foreign corporation related to us through stock ownership;
- are not a bank whose receipt of interest on the notes is interest received pursuant to a loan agreement entered into in the ordinary course of your trade or business; and
- appropriately certify as to your foreign status.

You generally may meet the certification requirement listed above by providing to the applicable withholding agent a properly completed IRS Form W-8BEN. If the portfolio interest exemption is not available to you, then payments of interest on the notes that is not effectively connected with your conduct of a trade or business in the United States generally will be subject to United States federal withholding tax at a rate of 30% unless you certify on IRS Form W-8BEN as to your eligibility for a lower rate under an applicable income tax treaty.

Interest that is effectively connected with your conduct of a trade or business in the United States is not subject to withholding if you provide a properly completed IRS Form W-8ECI (or other applicable form). However, unless an applicable income tax treaty provides otherwise, you generally will be subject to United States federal income tax on such interest on a net income basis at graduated rates applicable to United States persons generally. In addition, if you are a foreign corporation you may incur a branch profits tax equal to 30% of your effectively connected earnings and profits for the taxable year, as adjusted for certain items, unless a lower rate applies to you under a United States income tax treaty with your country of residence. For this purpose, you must include any interest, gain and income on your notes that is effectively connected with your conduct of a trade or business in the United States in the earnings and profits subject to United States branch profits tax.

Disposition of the notes

Subject to the discussions of backup withholding and FATCA below, you generally will not be subject to United States federal income tax or withholding tax on any gain realized on a sale, exchange, redemption, retirement or other taxable disposition of the notes unless:

- the gain is effectively connected with your conduct of a trade or business in the United States (and, if required by an applicable income tax treaty, is attributable to a permanent establishment maintained by you in the United States), in which case you generally will be subject to United States federal income tax on a net income basis, in the same manner as a United States person, and if you are a foreign corporation, you may incur a branch profits tax at a rate of 30% (or a lower applicable treaty rate) of your effectively connected earnings and profits (subject to adjustments), which will include such gain; or
- you are an individual present in the United States for 183 days or more in the taxable year in which such disposition occurs and certain other conditions are met, in which case you will be subject to United States federal income tax at a 30% rate (or lower applicable treaty rate) on the gain, which may be offset by United States source capital losses.

Information reporting and backup withholding

Payments to you of interest on the notes (including amounts withheld from such payments, if any) generally will be required to be reported to the IRS and to you. United States backup

[Table of Contents](#)

withholding generally will not apply to payments to you of interest on the notes if the statement described in “ —Non-United States Holders—Interest” is duly provided by you or you otherwise establish an exemption.

Payment of the proceeds of a sale or other disposition (including a retirement or redemption) of the notes effected by the U.S. office of a U.S. or foreign broker will be subject to information reporting requirements and backup withholding unless you properly certify under penalties of perjury as to your foreign status and certain other conditions are met or you otherwise establish an exemption. Information reporting requirements and backup withholding generally will not apply to any payment of the proceeds of a sale or other disposition of the notes effected outside the United States by a foreign office of a broker. However, unless such a broker has documentary evidence in its records that you are a non-United States Holder and certain other conditions are met, or you otherwise establish an exemption, information reporting will apply to a payment of the proceeds of the sale or other disposition of the notes effected outside the United States by such a broker if the broker is:

- a United States person;
- a foreign person which derives 50% or more of its gross income for certain periods from the conduct of a trade or business in the United States;
- a controlled foreign corporation for United States federal income tax purposes; or
- a foreign partnership that, at any time during its taxable year, has more than 50% of its income or capital interests owned by United States persons or is engaged in the conduct of a U.S. trade or business.

Backup withholding is not an additional tax. Any amount withheld from a payment under the backup withholding rules may be allowed as a credit against your United States federal income tax liability, if any, and may entitle you to a refund, provided that the required information is timely furnished to the IRS.

Foreign account tax compliance

The Hiring Incentives to Restore Employment Act (sometimes referred to as “FATCA”), enacted on March 18, 2010, would impose a 30% withholding tax on any interest payments on our obligations made to a foreign financial institution or non financial foreign entity (including, in some cases, when such foreign financial institution or entity is acting as an intermediary), and on the gross proceeds of the sale or other disposition (including a retirement or redemption) of our obligations, unless (i) in the case of a foreign financial institution, such institution enters into an agreement with the United States government to withhold on certain payments, and to collect and provide to the United States tax authorities substantial information regarding United States account holders of such institution (which includes certain equity and debt holders of such institution, as well as certain account holders that are foreign entities with United States owners), (ii) in the case of a non financial foreign entity, such entity provides the withholding agent with a certification identifying the direct and indirect substantial United States owners of the entity or certifies that it does not have any substantial United States owners, or (iii) the foreign financial institution or non foreign financial entity otherwise qualifies for an exemption from these rules. Under certain circumstances, a holder might be eligible for refunds or credits of such taxes. Pursuant to final Treasury regulations, the foregoing withholding will only apply to payments made after December 31, 2013 (in the case of interest payments) or after December 31,

[Table of Contents](#)

2016 (in the case of disposition proceeds). However, interest payments with respect to a debt obligation outstanding on December 31, 2013 and proceeds from a disposition of such an obligation are not subject to these rules unless such debt obligation undergoes a material modification after December 31, 2013. You are encouraged to consult with your own tax advisors regarding the possible implications of this legislation on the notes.

S-163

[Table of Contents](#)

Underwriting; Conflicts of interest

Subject to the terms and conditions in the underwriting agreement between us and the underwriters, we have agreed to sell to each underwriter, and each underwriter has severally agreed to purchase from us, the principal amount of notes that appears opposite its name in the table below:

| Name | Principal amount of notes |
|---|------------------------------|
| J.P. Morgan Securities LLC | \$ 100,000,000 |
| RBC Capital Markets, LLC | 50,000,000 |
| KeyBanc Capital Markets Inc. | 37,500,000 |
| Wells Fargo Securities, LLC | 25,000,000 |
| Merrill Lynch, Pierce, Fenner & Smith Incorporated | 12,500,000 |
| Scotia Capital (USA) Inc. | 12,500,000 |
| Tudor, Pickering, Holt & Co. Securities, Inc. | 12,500,000 |
| Total | <u>\$ 250,000,000</u> |

The underwriters initially propose to offer the notes to the public at the public offering price that appears on the cover page of this prospectus supplement. The underwriters may offer the notes to selected dealers at the public offering price *minus* a concession of up to 0.375% of the principal amount of the notes. In addition, the underwriters may allow, and those selected dealers may reallow, a concession of up to 0.250% of the principal amount of the notes to certain other dealers. After the initial offering, the underwriters may change the public offering price and any other selling terms. The underwriters may offer and sell notes through certain of their affiliates.

The expenses of the offering, not including the underwriting discount, are estimated to be approximately \$1.2 million, and are payable by us.

In the underwriting agreement, we have agreed that:

- We will not offer or sell any of our debt securities (other than the notes) for a period of 90 days after the date of this prospectus supplement without the prior consent of J.P. Morgan Securities LLC.
- We will indemnify the several underwriters against certain liabilities, including liabilities under the Securities Act, or contribute to payments that the underwriters may be required to make in respect of those liabilities.

The notes are a new issue of securities for which there is no established trading market. We do not intend to apply for the notes to be listed on any securities exchange or to arrange for the notes to be quoted on any quotation system. The underwriters have advised us that certain underwriters intend to make a market in the notes. However, they are not obligated to do so and they may discontinue any market making at any time in their sole discretion. Therefore, we cannot assure you that a liquid trading market will develop for the notes, that you will be able to sell your notes at a particular time or that the prices that you receive when you sell will be favorable.

You should be aware that the laws and practices of certain countries require investors to pay stamp taxes and other charges in connection with purchases of securities.

[Table of Contents](#)

In relation to each Member State of the European Economic Area which has implemented the Prospectus Directive (each, a Relevant Member State), each underwriter has represented and agreed that with effect from and including the date on which the Prospectus Directive is implemented in that Relevant Member State (the Relevant Implementation Date) it has not made and will not make an offer of the notes to the public in that Relevant Member State prior to the publication of a prospectus in relation to the notes which has been approved by the competent authority in that Relevant Member State or, where appropriate, approved in another Relevant Member State and notified to the competent authority in that Relevant Member State, all in accordance with the Prospectus Directive and the 2010 PD Amending Directive to the extent implemented, except that it may, with effect from and including the Relevant Implementation Date, make an offer of notes to the public in that Relevant Member State at any time:

- to any legal entity which is a qualified investor as defined in the Prospectus Directive or the 2010 PD Amending Directive if the relevant provision has been implemented;
- to fewer than (i) 100 natural or legal persons per Relevant Member State (other than qualified investors as defined in the Prospectus Directive or the 2010 PD Amending Directive if the relevant provision has been implemented) or (ii) if the Relevant Member State has implemented the relevant provision of the 2010 PD Amending Directive, 150 natural or legal persons per Relevant Member State (other than qualified investors as defined in the Prospectus Directive or the 2010 PD Amending Directive if the relevant provision has been implemented), subject to obtaining the prior consent of the relevant dealer or dealers nominated by the company for any such offer; or
- in any other circumstances falling within Article 3(2) of the Prospectus Directive or Article 3(2) of the 2010 PD Amending Directive to the extent implemented.

For the purposes of this provision, the expression an “offer of the notes to the public,” in relation to any notes in any Relevant Member State, means the communication in any form and by any means of sufficient information on the terms of the offer and the notes to be offered so as to enable an investor to decide to purchase or subscribe for the notes, as the same may be varied in that Relevant Member State by any measure implementing the Prospectus Directive in that Relevant Member State, the expression “Prospectus Directive” means Directive 2003/71/EC, and includes any relevant implementing measure in that Relevant Member State, and the expression “2010 PD Amending Directive” means Directive 2010/73/EC.

Each underwriter has represented and agreed that:

- it has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of Section 21 of the Financial Services and Markets Act 2000) received by it in connection with the issue or sale of the notes in circumstances in which Section 21(1) of the Financial Services and Markets Act 2000 does not apply to us; and
- it has complied and will comply with all applicable provisions of the Financial Services and Markets Act 2000 with respect to anything done by it in relation to the notes in, from or otherwise involving the United Kingdom.

In connection with the offering of the notes, the underwriters may engage in overallotment, stabilizing transactions and syndicate covering transactions. Overallotment involves sales in excess of the offering size, which creates a short position for the underwriters. Stabilizing transactions involve bids to purchase the notes in the open market for the purpose of pegging,

[Table of Contents](#)

fixing or maintaining the price of the notes. Syndicate covering transactions involve purchases of the notes in the open market after the distribution has been completed in order to cover short positions. Stabilizing transactions and syndicate covering transactions may cause the price of the notes to be higher than it would otherwise be in the absence of those transactions. If the underwriters engage in stabilizing or syndicate covering transactions, they may discontinue them at any time.

Conflicts of interest

Affiliates of certain of the underwriters, including J.P. Morgan Securities LLC, RBC Capital Markets, LLC, KeyBanc Capital Markets Inc., and Wells Fargo Securities, LLC, are lenders under our revolving credit facility and will receive a portion of the net proceeds from this offering pursuant to the repayment of indebtedness outstanding under our revolving credit facility. Because we intend to use a portion of the net proceeds from this offering to reduce indebtedness owed by us under our revolving credit facility, each of the underwriters whose affiliates will receive at least 5% of the net proceeds of this offering pursuant to the repayment of the indebtedness outstanding under our revolving credit facility is considered by the Financial Industry Regulatory Authority, or FINRA, to have a conflict of interest in regards to this offering. As such, this offering is being conducted in accordance with the applicable requirements of FINRA Rule 5121 regarding the underwriting of securities of a company with a member that has a conflict of interest within the meaning of that rule. Rule 5121 requires prominent disclosure of the nature of the conflict of interest in the prospectus supplement for the public offering. Additionally, Rule 5121 requires that a qualified independent underwriter, as defined in Rule 5121, participate in the preparation of the registration statement of which this prospectus forms a part and perform its usual standard of diligence with respect thereto. As a result of this conflict of interest and in accordance with Rule 5121, Tudor, Pickering, Holt & Co. Securities, Inc. is assuming the responsibilities of acting as the qualified independent underwriter in connection with this offering. In its role as qualified independent underwriter, Tudor, Pickering, Holt & Co. Securities, Inc. has performed a due diligence investigation and participated in the preparation of the registration statement and prospectus for this offering. We have agreed to indemnify Tudor, Pickering, Holt & Co. Securities, Inc. against certain liabilities incurred in connection with it acting as a qualified independent underwriter for this offering, including liabilities under the Securities Act.

The underwriters and their respective affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, investment research, principal investment, hedging, financing and brokerage activities. From time to time, the underwriters and their respective affiliates have directly and indirectly provided investment banking, commercial banking and financial advisory services to us for which they have received customary compensation and expense reimbursement. The underwriters and their affiliates may in the future provide similar services.

If any of the underwriters or their affiliates has a lending relationship with us, certain of those underwriters or their affiliates routinely hedge, and certain other of those underwriters or their affiliates may hedge, their credit exposure to us consistent with their customary risk management policies. Typically, these underwriters and their affiliates would hedge such exposure by entering into transactions which consist of either the purchase of credit default swaps or the creation of short positions in our securities, including potentially the notes offered hereby. Any such credit default swaps or short positions could adversely affect future trading prices of the notes offered hereby.

[Table of Contents](#)

In the ordinary course of their various business activities, the underwriters and their respective affiliates may make or hold, a broad array of investments, including serving as counterparties to certain derivative and hedging arrangements, and may actively trade, debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers and may have in the past and at any time in the future hold long and short positions in such securities and instruments. Such investment and securities activities may have involved, and in the future may involve, our securities and instruments. The underwriters and their respective affiliates may also make investment recommendations and/or publish or express independent research views in respect of such securities or instruments and may at any time hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

S-167

[Table of Contents](#)

Legal matters

The validity of the notes and guarantees offered hereby will be passed upon for us by Thompson & Knight LLP, Dallas, Texas. The validity of the notes and guarantees offered hereby will be passed upon for the underwriters by Cahill Gordon & Reindel LLP.

Experts

The consolidated financial statements of Approach Resources Inc. and subsidiaries included herein and incorporated herein by reference to our Annual Report on Form 10-K for the year ended December 31, 2012 and the effectiveness of internal control over financial reporting have been audited by Hein & Associates LLP, independent registered public accountants, as stated in their reports appearing in our Annual Report on Form 10-K for the year ended December 31, 2012, and have been so included in reliance upon the reports of such firm given upon their authority as experts in accounting and auditing.

Certain estimates of our oil and natural gas reserves and related information included in or incorporated herein by reference have been derived from reports prepared by DeGolyer and MacNaughton. All such information has been so included or incorporated by reference in reliance upon the authority of DeGolyer and MacNaughton as experts in these matters.

S-168

[Table of Contents](#)

Glossary and selected abbreviations

The following is a description of the meanings of some of the oil and gas industry terms used in this prospectus supplement and the accompanying prospectus.

| | |
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| <i>3-D seismic</i> | (Three Dimensional Seismic Data) Geophysical data that depicts the subsurface strata in three dimensions. 3-D seismic data typically provides a more detailed and accurate interpretation of the subsurface strata than two dimensional seismic data. |
| <i>Basin</i> | A large natural depression on the earth's surface in which sediments generally brought by water accumulate. |
| <i>Bbl</i> | One stock tank barrel, of 42 U.S. gallons liquid volume, used to reference oil, condensate or NGLs. |
| <i>Boe</i> | Barrel of oil equivalent, determined using the ratio of six Mcf of gas to one Boe, and one Bbl of NGLs to one Boe. |
| <i>Btu or British Thermal Unit</i> | The quantity of heat required to raise the temperature of one pound of water by one degree Fahrenheit. |
| <i>Completion</i> | The installation of permanent equipment for production of oil or gas, or, in the case of a dry well, for reporting to the appropriate authority that the well has been abandoned. |
| <i>Developed acreage</i> | The number of acres that are allocated or assignable to productive wells or wells that are capable of production. |
| <i>Developed oil and gas reserves</i> | Has the meaning given to such term in Rule 4-10(a)(6) of Regulation S-X, as follows: Developed oil and gas reserves are reserves of any category that can be expected to be recovered: <ul style="list-style-type: none"> (i) Through existing wells with existing equipment and operating methods or in which the cost of the required equipment is relatively minor compared to the cost of a new well; and (ii) Through installed extraction equipment and infrastructure operational at the time of the reserves estimate if the extraction is by means not involving a well. |
| <i>Development project</i> | The means by which petroleum resources are brought to the status of economically producible. As examples, the development of a single reservoir or field, an incremental development in a producing field or the integrated development of a group of several fields and associated facilities with a common ownership may constitute a development project. |
| <i>Development well</i> | A well drilled within the proved area of an oil or gas reservoir to the depth of a stratigraphic horizon known to be productive. |

[Table of Contents](#)

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| <i>Dry hole or well</i> | An exploratory, development or extension well that proved to be incapable of producing either oil or gas in sufficient quantities to justify completion as an oil or gas well. |
| <i>Exploratory well</i> | A well drilled to find a new field or to find a new reservoir in a field previously found to be productive of oil or gas in another reservoir. |
| <i>Extension well</i> | A well drilled to extend the limits of a known reservoir. |
| <i>Farm-in</i> | An arrangement in which the owner or lessee of mineral rights (the first party) assigns a working interest to an operator (the second party), the consideration for which is specified exploration and/or development activities. The first party retains an overriding royalty, working interest or other type of economic interest in the mineral production. The arrangement from the viewpoint of the second party is termed a "farm-in" arrangement. |
| <i>Field</i> | An area consisting of either a single reservoir or multiple reservoirs, all grouped on or related to the same individual geological structural feature and/or stratigraphic condition. |
| <i>Hydraulic fracturing</i> | The technique designed to improve a well's production rates by pumping a mixture of water and sand (in our case, over 99% by mass) and chemical additives (in our case, less than 1% by mass) into the formation and rupturing the rock, creating an artificial channel. |
| <i>Gross acres or gross wells</i> | The total acres or wells, as the case may be, in which a working interest is owned. |
| <i>Lease operating expenses</i> | The expenses of lifting oil or gas from a producing formation to the surface, and the transportation and marketing thereof, constituting part of the current operating expenses of a working interest, and also including labor, superintendence, supplies, repairs, short lived assets, maintenance, allocated overhead costs and other expenses incidental to production, but excluding lease acquisition or drilling or completion expenses. |
| <i>LNG</i> | Liquefied natural gas. |
| <i>MBbls</i> | Thousand barrels of oil or other liquid hydrocarbons. |
| <i>MBoe</i> | Thousand barrels of oil equivalent, determined using the ratio of six Mcf of gas to one Boe, and one Bbl of NGLs to one Boe. |
| <i>Mcf</i> | Thousand cubic feet of natural gas. |
| <i>MMBoe</i> | Million barrels of oil equivalent, determined using the ratio of six Mcf of gas to one Boe, and one Bbl of NGLs to one Boe. |

Table of Contents

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| <i>MMBtu</i> | Million British thermal units. |
| <i>MMcf</i> | Million cubic feet of gas. |
| <i>Net acres or net wells</i> | The sum of the fractional working interests owned in gross acres or wells, as the case may be. |
| <i>NGLs</i> | Natural gas liquids. The portions of gas from a reservoir that are liquefied at the surface in separators, field facilities or gas processing plants. |
| <i>NYMEX</i> | New York Mercantile Exchange. |
| <i>Play</i> | A set of known or postulated oil and/or gas accumulations sharing similar geologic, geographic and temporal properties, such as source rock, migration pathways, timing, trapping mechanism and hydrocarbon type. |
| <i>Productive well</i> | An exploratory, development or extension well that is not a dry well. |
| <i>Proved developed producing reserves</i> | Proved developed oil and gas reserves that are expected to be recovered: <ul style="list-style-type: none"> (i) Through existing wells with existing equipment and operating methods or in which the cost of the required equipment is relatively minor compared to the cost of a new well; and (ii) Through installed extraction equipment and infrastructure operational at the time of the reserves estimate if the extraction is by means not involving a well. |
| <i>Proved oil and gas reserves</i> | Has the meaning given to such term in Rule 4-10(a)(22) of Regulation S-X, as follows: Proved oil and gas reserves are those quantities of oil and gas, which, by analysis of geoscience and engineering data, can be estimated with reasonable certainty to be economically producible—from a given date forward, from known reservoirs, and under existing economic conditions, operating methods, and government regulations—prior to the time at which contracts providing the right to operate expire, unless evidence indicates that renewal is reasonably certain, regardless of whether deterministic or probabilistic methods are used for the estimation. The project to extract the hydrocarbons must have commenced or the operator must be reasonably certain that it will commence the project within a reasonable time. <ul style="list-style-type: none"> (i) The area of the reservoir considered as proved includes: <ul style="list-style-type: none"> (A) The area identified by drilling and limited by fluid contacts, if any, and (B) Adjacent undrilled portions of the reservoir that can, with reasonable certainty, be judged to be continuous with it and to contain economically producible oil or gas on the basis of available geoscience and engineering data. |

Table of Contents

- (ii) In the absence of data on fluid contacts, proved quantities in a reservoir are limited by the lowest known hydrocarbons (LKH) as seen in a well penetration unless geoscience, engineering, or performance data and reliable technology establishes a lower contact with reasonable certainty.
- (iii) Where direct observation from well penetrations has defined a highest known oil (HKO) elevation and the potential exists for an associated gas cap, proved oil reserves may be assigned in the structurally higher portions of the reservoir only if geoscience, engineering, or performance data and reliable technology establish the higher contact with reasonable certainty.
- (iv) Reserves which can be produced economically through application of improved recovery techniques (including, but not limited to, fluid injection) are included in the proved classification when:
 - (A) Successful testing by a pilot project in an area of the reservoir with properties no more favorable than in the reservoir as a whole, the operation of an installed program in the reservoir or an analogous reservoir, or other evidence using reliable technology establishes the reasonable certainty of the engineering analysis on which the project or program was based; and
 - (B) The project has been approved for development by all necessary parties and entities, including governmental entities.
- (v) Existing economic conditions include prices and costs at which economic producibility from a reservoir is to be determined. The price shall be the average price during the 12-month period prior to the ending date of the period covered by the report, determined as an unweighted arithmetic average of the first-day-of-the-month price for each month within such period, unless prices are defined by contractual arrangements, excluding escalations based upon future conditions.

PV-10

An estimate of the present value of the future net revenues from proved oil and gas reserves after deducting estimated production and ad valorem taxes, future capital costs and operating expenses, but before deducting any estimates of federal income taxes. The estimated future net revenues are discounted at an annual rate of 10% to determine their "present value." The present value is shown to indicate the effect of time on the value of the revenue stream and should not be construed as being the fair market value of the properties. Estimates of PV-10 are made using oil and gas prices and operating costs at the date indicated and held constant for the life of the reserves.

"Recompletion" or to "recomplete" a well

The addition of production from another interval or formation in an existing wellbore.

Table of Contents

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| <i>Reserve life</i> | This index is calculated by dividing year-end 2012 estimated proved reserves by 2012 production of 2,888 MBoe to estimate the number of years of remaining production. |
| <i>Reservoir</i> | A porous and permeable underground formation containing a natural accumulation of producible oil and/or gas that is confined by impermeable rock or water barriers and is individual and separate from other reservoirs. |
| <i>Spacing</i> | The distance between wells producing from the same reservoir. Spacing is expressed in terms of acres, e.g., 40-acre spacing, and is established by regulatory agencies. |
| <i>Standardized measure</i> | The present value of estimated future net revenues to be generated from the production of proved reserves, determined in accordance with the rules and regulations of the SEC (using prices and costs in effect as of the period end date) without giving effect to non-property related expenses such as general and administrative expenses, debt service and future income tax expenses or to depletion, depreciation and amortization and discounted using an annual discount rate of 10%. Standardized measure does not give effect to derivative transactions. |
| <i>Tight gas sands</i> | A sandstone formation with low permeability that produces natural gas with low flow rates for long periods of time. |
| <i>Unconventional resources or reserves</i> | Natural gas or oil resources or reserves from (i) low-permeability sandstone and shale formations, such as tight gas and gas shales, respectively, and (ii) coalbed methane. |
| <i>Undeveloped acreage</i> | Lease acreage on which wells have not been drilled or completed to a point that would permit the production of commercial quantities of oil or gas regardless of whether such acreage contains proved reserves. |
| <i>Undeveloped oil and gas reserves</i> | Has the meaning given to such term in Rule 4-10(a)(31) of Regulation S-X, which defines proved undeveloped reserves as follows: <i>Undeveloped oil and gas reserves</i> are reserves of any category that are expected to be recovered from new wells on undrilled acreage, or from existing wells where a relatively major expenditure is required for recompletion. (i) Reserves on undrilled acreage shall be limited to those directly offsetting development spacing areas that are reasonably certain of production when drilled, unless evidence using reliable technology exists that establishes reasonable certainty of economic producibility at greater distances. |

[Table of Contents](#)

- (ii) Undrilled locations can be classified as having undeveloped reserves only if a development plan has been adopted indicating that they are scheduled to be drilled within five years, unless the specific circumstances, justify a longer time.
- (iii) Under no circumstances shall estimates for undeveloped reserves be attributable to any acreage for which an application of fluid injection or other improved recovery technique is contemplated, unless such techniques have been proved effective by actual projects in the same reservoir or an analogous reservoir or by other evidence using reliable technology establishing reasonable certainty.

Working interest

The operating interest that gives the owner the right to drill, produce and conduct operating activities on the property and receive a share of production.

Workover

Operations on a producing well to restore or increase production.

/d

"Per day" when used with volumetric units or dollars.

[Table of Contents](#)

Supplemental Non-GAAP financial and other measures

This prospectus supplement contains certain financial measures that are non-GAAP measures. We have provided reconciliations below of the non-GAAP financial measures to the most directly comparable GAAP financial measures.

Reconciliation of PV-10 to standardized measure

PV-10 is our estimate of the present value of future net revenues from estimated proved oil, NGL and natural gas reserves after deducting estimated production and ad valorem taxes, future capital costs and operating expenses, but before deducting any estimates of future income taxes. PV-10 is a non-GAAP financial measure and generally differs from the standardized measure of discounted future net cash flows, the most directly comparable GAAP financial measure, because it does not include the effects of income taxes on future cash flows. PV-10 should not be considered as an alternative to the standardized measure of discounted future net cash flows as computed under GAAP.

The following table shows our reconciliation of our PV-10 to the standardized measure of discounted future net cash flows (the most directly comparable measure calculated and presented in accordance with GAAP). The estimated future net revenues are discounted at an annual rate of 10% to determine their "present value."

| (In thousands) | December 31, 2012 |
|--|-------------------|
| PV-10 | \$ 830,922 |
| Less income taxes: | |
| Undiscounted future income taxes | (692,527) |
| 10% discount factor | 355,825 |
| Future discounted income taxes | (336,702) |
| Standardized measure of discounted future net cash flows | \$ 494,220 |

We believe PV-10 to be an important measure for evaluating the relative significance of our oil and gas properties and that the presentation of the non-GAAP financial measure of PV-10 provides useful information to investors because it is widely used by professional analysts and sophisticated investors in evaluating oil and gas companies. Because there are many unique factors that can impact an individual company when estimating the amount of future income taxes to be paid, we believe the use of a pre-tax measure is valuable for evaluating our company. We believe that most other companies in the oil and gas industry calculate PV-10 on the same basis.

Finding and development costs

All-in finding and development ("F&D") costs are calculated by dividing the sum of property acquisition costs, exploration costs and development costs for the year by the sum of reserve extensions and discoveries, purchases of minerals in place and total revisions for the year.

Drill-bit F&D costs are calculated by dividing the sum of exploration costs and development costs for the year by the total of reserve extensions and discoveries for the year.

We believe that providing the above measures of F&D cost is useful to assist in an evaluation of how much it costs the Company, on a per Boe basis, to add proved reserves. However, these

[Table of Contents](#)

measures are provided in addition to, and not as an alternative for, and should be read in conjunction with, the information contained in our financial statements prepared in accordance with GAAP (including the notes), included in our SEC filings. Due to various factors, including timing differences, F&D costs do not necessarily reflect precisely the costs associated with particular reserves. For example, exploration costs may be recorded in periods before the periods in which related increases in reserves are recorded, and development costs may be recorded in periods after the periods in which related increases in reserves are recorded. In addition, changes in commodity prices can affect the magnitude of recorded increases (or decreases) in reserves independent of the related costs of such increases.

As a result of the above factors and various factors that could materially affect the timing and amounts of future increases in reserves and the timing and amounts of future costs, including factors disclosed in our filings with the SEC, we cannot assure you that the Company's future F&D costs will not differ materially from those set forth above. Further, the methods used by us to calculate F&D costs may differ significantly from methods used by other companies to compute similar measures. As a result, our F&D costs may not be comparable to similar measures provided by other companies.

The following tables reconcile our estimated F&D costs for the three year period ended December 31, 2012 to the information required by paragraphs 11 and 21 of ASC 932-235:

| | Oil (MBbl) | NGLs (MBbl) | Natural gas (Mmcf) | Total (MMboe) |
|------------------------------------|---------------|----------------|--------------------------|------------------|
| Balance – December 31, 2009 | 4,338 | 4,094 | 168,334 | 36,488 |
| Extensions and discoveries | 984 | 1,395 | 8,365 | 3,773 |
| Purchases of minerals in place | 383 | 786 | 4,736 | 1,958 |
| Production | (247) | (261) | (6,290) | (1,556) |
| Revisions to previous estimates | (507) | 14,685 | (24,756) | 10,052 |
| Balance- December 31, 2010 | 4,951 | 20,699 | 150,389 | 50,715 |
| Extensions and discoveries | 11,847 | 7,010 | 40,146 | 25,548 |
| Purchases of minerals in place | 2,200 | 4,284 | 24,083 | 10,498 |
| Production | (482) | (798) | (6,344) | (2,338) |
| Revisions to previous estimates | (465) | (2,072) | (29,466) | (7,448) |
| Balance- December 31, 2011 | 18,051 | 29,123 | 178,807 | 76,975 |
| Extensions and discoveries | 21,993 | 8,639 | 49,372 | 38,861 |
| Production | (969) | (904) | (6,089) | (2,888) |
| Revisions to previous estimates | (1,823) | (7,758) | (47,330) | (17,469) |
| Balance- December 31, 2012 | 37,252 | 29,100 | 174,760 | 95,479 |

| Cost summary (in thousands) | Years ended December 31, | | |
|--------------------------------|--------------------------|-----------|-----------|
| | 2010 | 2011 | 2012 |
| Property acquisition costs: | | | |
| Unproved properties | \$ 8,931 | \$ 17,361 | \$ 2,335 |
| Proved properties | 86 | 5,063 | 5,407 |
| Working interest acquisitions | 21,179 | 70,827 | — |
| Exploration costs | 2,874 | 9,991 | 4,550 |
| Development costs(1) | 56,915 | 182,522 | 285,039 |
| Total costs incurred | \$89,985 | \$285,764 | \$297,331 |

[Table of Contents](#)

(1) For the years ended December 31, 2010, 2011 and 2012, development costs include \$604,000, \$1.2 million and \$409,000 in non-cash asset retirement obligations, respectively.

3-Year F&D Costs (2010-2012):

| | |
|--|-----------|
| Total costs 2010-2012 (in thousands) | \$673,080 |
| Exploration and development costs 2010-2012 (in thousands) | \$541,872 |
| Net reserve additions 2010-2012 (in thousands) | 65,773 |
| Total extensions and discoveries 2010-2012 (in thousands) | 68,182 |
| 3-Year All-in F&D cost (\$/Boe) | \$ 10.23 |
| 3-Year Drill-bit F&D cost (\$/Boe) | \$ 7.95 |

S-177

[Table of Contents](#)

Index to consolidated financial statements

Annual financial statements

| | |
|---|------|
| Management's report on internal control over financial reporting | F-2 |
| Report of independent registered public accounting firm-internal control over financial reporting | F-3 |
| Report of independent registered public accounting firm-financial statements | F-5 |
| Consolidated balance sheets as of December 31, 2012 and 2011 | F-6 |
| Consolidated statements of operations for the years ended December 31, 2012, 2011 and 2010 | F-7 |
| Consolidated statements of changes in stockholders' equity for the years ended December 31, 2010, 2011 and 2012 | F-8 |
| Consolidated statements of cash flows for the years ended December 31, 2012, 2011 and 2010 | F-9 |
| Notes to consolidated financial statements | F-10 |
| <h3><u>Quarterly financial statements</u></h3> | |
| Unaudited consolidated balance sheets-March 31, 2013 and December 31, 2012 | F-34 |
| Unaudited consolidated statements of operations-three months ended March 31, 2013 and 2012 | F-35 |
| Unaudited consolidated statements of cash flows-three months ended March 31, 2013 and 2012 | F-36 |
| Notes to consolidated financial statements (unaudited) | F-37 |

[Table of Contents](#)

Management's report on internal control over financial reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rule 13a-15(f) under the Securities Exchange Act of 1934). Our internal control over financial reporting is designed to provide reasonable assurance to management and our board of directors regarding the preparation and fair presentation of published financial statements. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation. Management assessed the effectiveness of our internal control over financial reporting as of December 31, 2012. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in *Internal Control — Integrated Framework*. Based on our assessment, we believe that, as of December 31, 2012, our internal control over financial reporting is effective based on those criteria.

By: /s/ J. Ross Craft
J. Ross Craft
President and Chief Executive Officer

By: /s/ Steven P. Smart
Steven P. Smart
Executive Vice President and Chief Financial Officer

Fort Worth, Texas
February 28, 2013

F-2

[Table of Contents](#)

Report of independent registered public accounting firm

To the Board of Directors and Stockholders
Approach Resources Inc.

We have audited Approach Resources Inc. and subsidiaries' (collectively, the "Company") internal control over financial reporting as of December 31, 2012, based on criteria established in Internal Control – Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission. The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (a) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (b) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (c) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2012, based on criteria established in Internal Control – Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of Approach Resources Inc. and subsidiaries as of December 31, 2012 and 2011, and the related consolidated statements of

[Table of Contents](#)

operations, changes in stockholders' equity and cash flows for each of the three years in the period ended December 31, 2012 and our report dated February 28, 2013 expressed an unqualified opinion.

/s/ **HEIN** & ASSOCIATES LLP

Dallas, Texas

February 28, 2013

F-4

[Table of Contents](#)

Report of independent registered public accounting firm

To the Board of Directors and Stockholders
Approach Resources Inc.

We have audited the accompanying consolidated balance sheets of Approach Resources Inc. and subsidiaries (collectively, the "Company") as of December 31, 2012 and 2011, and the related consolidated statements of operations, changes in stockholders' equity and cash flows for each of the three years in the period ended December 31, 2012. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Approach Resources Inc. and subsidiaries as of December 31, 2012 and 2011, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2012, in conformity with U.S. generally accepted accounting principles.

We have also audited, in accordance with standards of the Public Company Accounting Oversight Board (United States), the Company's internal control over financial reporting as of December 31, 2012, based on criteria established in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission, and our report dated February 28, 2013 expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

/s/ **HEIN & ASSOCIATES LLP**
Dallas, Texas
February 28, 2013

[Table of Contents](#)

Approach Resources Inc. and Subsidiaries

Consolidated balance sheets

(In thousands, except shares and per-share amounts)

| | December 31, | |
|--|--------------|------------|
| | 2012 | 2011 |
| ASSETS | | |
| CURRENT ASSETS: | | |
| Cash and cash equivalents | \$ 767 | \$ 301 |
| Accounts receivable: | | |
| Joint interest owners | 215 | 179 |
| Oil, NGL and gas sales | 12,575 | 10,060 |
| Unrealized gain on commodity derivatives | 1,552 | — |
| Prepaid expenses and other current assets | 547 | 342 |
| Deferred income taxes — current | — | 504 |
| Total current assets | 15,656 | 11,386 |
| PROPERTIES AND EQUIPMENT: | | |
| Oil and gas properties, at cost, using the successful efforts method of accounting | 1,025,440 | 732,659 |
| Furniture, fixtures and equipment | 2,108 | 1,621 |
| | 1,027,548 | 734,280 |
| Less accumulated depletion, depreciation and amortization | (199,081) | (138,996) |
| Net properties and equipment | 828,467 | 595,284 |
| Equity method investment | 9,892 | — |
| Unrealized gain on commodity derivatives | 881 | — |
| Other assets | 843 | 1,224 |
| Total assets | \$ 855,739 | \$ 607,894 |
| LIABILITIES AND STOCKHOLDERS' EQUITY | | |
| CURRENT LIABILITIES: | | |
| Accounts payable | \$ 24,916 | \$ 12,599 |
| Oil, NGL and gas sales payable | 4,960 | 4,748 |
| Deferred income taxes — current | 531 | — |
| Accrued liabilities | 29,840 | 24,837 |
| Unrealized loss on commodity derivatives | — | 1,441 |
| Total current liabilities | 60,247 | 43,625 |
| NON-CURRENT LIABILITIES: | | |
| Long-term debt | 106,000 | 43,800 |
| Deferred income taxes | 48,593 | 46,290 |
| Asset retirement obligations | 7,431 | 6,730 |
| Total liabilities | 222,271 | 140,445 |
| COMMITMENTS AND CONTINGENCIES (Note 8) | | |
| STOCKHOLDERS' EQUITY : | | |
| Preferred stock, \$0.01 par value, 10,000,000 shares authorized none outstanding | — | — |
| Common stock, \$0.01 par value, 90,000,000 shares authorized, 38,829,368 and 33,093,594 issued and outstanding, respectively | 388 | 331 |
| Additional paid-in capital | 560,468 | 400,890 |
| Retained earnings | 72,612 | 66,228 |
| Total stockholders' equity | 633,468 | 467,449 |
| Total liabilities and stockholders' equity | \$ 855,739 | \$ 607,894 |

See accompanying notes to these consolidated financial statements.

[Table of Contents](#)

Approach Resources Inc. and Subsidiaries

Consolidated statements of operations

(In thousands, except shares and per-share amounts)

| | Years Ended December 31, | | |
|--|--------------------------|------------|------------|
| | 2012 | 2011 | 2010 |
| REVENUES: | | | |
| Oil, NGL and gas sales | \$ 128,892 | \$ 108,387 | \$ 57,581 |
| EXPENSES: | | | |
| Lease operating | 19,002 | 10,687 | 6,620 |
| Production and ad valorem taxes | 9,255 | 8,447 | 4,925 |
| Exploration | 4,550 | 9,546 | 2,589 |
| Impairment | — | 18,476 | 2,622 |
| General and administrative | 24,903 | 17,900 | 11,422 |
| Depletion, depreciation and amortization | 60,381 | 32,475 | 22,224 |
| Total expenses | 118,091 | 97,531 | 50,402 |
| OPERATING INCOME | 10,801 | 10,856 | 7,179 |
| OTHER: | | | |
| Interest expense, net | (4,737) | (3,402) | (2,189) |
| Equity in losses of investee | (108) | — | — |
| Realized (loss) gain on commodity derivatives | (108) | 3,375 | 5,784 |
| Unrealized gain (loss) on commodity derivatives | 3,874 | (347) | 788 |
| Gain on sale of oil and gas properties, net of foreign currency transaction loss | — | 248 | — |
| INCOME BEFORE INCOME TAX PROVISION | 9,722 | 10,730 | 11,562 |
| INCOME TAX PROVISION | 3,338 | 3,488 | 4,100 |
| NET INCOME | \$ 6,384 | \$ 7,242 | \$ 7,462 |
| EARNINGS PER SHARE: | | | |
| Basic | \$ 0.18 | \$ 0.25 | \$ 0.34 |
| Diluted | \$ 0.18 | \$ 0.25 | \$ 0.34 |
| WEIGHTED AVERAGE SHARES OUTSTANDING: | | | |
| Basic | 34,965,182 | 28,930,792 | 22,065,797 |
| Diluted | 35,030,323 | 29,158,598 | 22,214,070 |

See accompanying notes to these consolidated financial statements.

[Table of Contents](#)

Approach Resources Inc. and Subsidiaries
Consolidated statements of changes in stockholders' equity
for the years ended December 31, 2010, 2011 and 2012
(In thousands, except shares and per-share amounts)

| | Common stock | | Additional | Retained | Accumulated | |
|--|--------------|--------|------------|-----------|---------------|-----------|
| | Shares | Amount | paid-in | earnings | Other | Total |
| | | | capital | | comprehensive | |
| | | | | | income (Loss) | |
| BALANCES, January 1, 2010 | 20,959,285 | \$ 209 | \$ 168,993 | \$ 51,524 | (230) | \$220,496 |
| Issuance of common stock upon exercise of options | 58,798 | 1 | 750 | — | — | 751 |
| Issuance of common stock, net of issuance costs | 6,612,500 | 66 | 101,698 | — | — | 101,764 |
| Issuance of common shares to directors for compensation | 46,347 | — | 380 | — | — | 380 |
| Restricted stock issuance, net of cancellations | 560,870 | 6 | (6) | — | — | — |
| Share-based compensation expense | — | — | 2,248 | — | — | 2,248 |
| Surrender of restricted shares for payment of income taxes | (10,910) | — | (89) | — | — | (89) |
| Adjustment to additional paid-in capital for tax shortfall upon vesting of restricted shares | — | — | (62) | — | — | (62) |
| Net income | — | — | — | 7,462 | — | 7,462 |
| Foreign currency translation adjustments, net of related income tax of \$2 | — | — | — | — | (4) | (4) |
| BALANCES, December 31, 2010 | 28,226,890 | 282 | 273,912 | 58,986 | (234) | \$332,946 |
| Issuance of common stock upon exercise of options | 74,241 | 1 | 1,008 | — | — | 1,009 |
| Issuance of common stock, net of issuance costs | 4,600,000 | 46 | 122,104 | — | — | 122,150 |
| Issuance of common shares to directors for compensation | 18,446 | — | 420 | — | — | 420 |
| Restricted stock issuance, net of cancellations | 205,475 | 2 | (2) | — | — | — |
| Share-based compensation expense | — | — | 4,263 | — | — | 4,263 |
| Surrender of restricted shares for payment of income taxes | (31,458) | — | (815) | — | — | (815) |
| Net income | — | — | — | 7,242 | — | 7,242 |
| Foreign currency transaction and translation adjustments, net of related income tax of \$85 | — | — | — | — | 234 | 234 |
| BALANCES, December 31, 2011 | 33,093,594 | 331 | 400,890 | 66,228 | — | 467,449 |
| Issuance of common stock upon exercise of options | 216,822 | 2 | 796 | — | — | 798 |
| Issuance of common stock, net of issuance costs | 5,325,000 | 53 | 154,364 | — | — | 154,417 |
| Issuance of common shares to directors for compensation | 16,935 | — | 535 | — | — | 535 |
| Restricted stock issuance, net of cancellations | 293,382 | 2 | (2) | — | — | — |
| Share-based compensation expense | — | — | 6,930 | — | — | 6,930 |
| Surrender of restricted shares for payment of income taxes | (116,365) | — | (3,045) | — | — | (3,045) |
| Net income | — | — | — | 6,384 | — | 6,384 |
| BALANCES, December 31, 2012 | 38,829,368 | \$ 388 | \$ 560,468 | \$ 72,612 | \$ — | \$633,468 |

See accompanying notes to these consolidated financial statements.

[Table of Contents](#)**Approach Resources Inc. and Subsidiaries****Consolidated statements of cash flows**

(In thousands, except shares and per-share amounts)

| | For the years ended December 31, | | |
|---|-------------------------------------|-----------------|------------------|
| | 2012 | 2011 | 2010 |
| OPERATING ACTIVITIES: | | | |
| Net income | \$ 6,384 | \$ 7,242 | \$ 7,462 |
| Adjustments to reconcile net income to net cash provided by operating activities: | | | |
| Depletion, depreciation and amortization | 60,381 | 32,475 | 22,224 |
| Unrealized (gain) loss on commodity derivatives | (3,874) | 347 | (788) |
| Impairment | — | 18,476 | 2,622 |
| Gain on sale of oil and gas properties, net of foreign currency transaction loss | — | (248) | — |
| Exploration expense | 4,550 | 9,546 | 2,589 |
| Share-based compensation expense | 7,465 | 4,683 | 2,628 |
| Deferred income taxes | 3,338 | 3,488 | 4,100 |
| Equity in losses of investee | 108 | — | — |
| Changes in operating assets and liabilities: | | | |
| Accounts receivable | (2,550) | 6,168 | (6,581) |
| Prepaid expenses and other current assets | 296 | 378 | 527 |
| Accounts payable | 9,271 | (151) | 6,083 |
| Oil, NGL and gas sales payable | 212 | (786) | 1,760 |
| Accrued liabilities | 5,004 | 14,152 | (249) |
| Cash provided by operating activities | 90,585 | 95,770 | 42,377 |
| INVESTING ACTIVITIES: | | | |
| Additions to oil and gas properties | (296,927) | (284,574) | (91,016) |
| Contribution to equity method investment | (10,000) | — | — |
| Proceeds from gain on sale of oil and gas properties, net | — | 360 | — |
| Additions to furniture, fixtures and equipment, net | (487) | (544) | (330) |
| Cash used in investing activities | (307,414) | (284,758) | (91,346) |
| FINANCING ACTIVITIES: | | | |
| Borrowings under credit facility | 304,600 | 246,800 | 121,800 |
| Repayment of amounts outstanding under credit facility | (242,400) | (203,000) | (154,119) |
| Proceeds from issuance of common stock, net offering costs | 154,417 | 122,150 | 101,764 |
| Proceeds from issuance of common stock upon exercise of stock options | 798 | 1,009 | 751 |
| Loan origination fees | (120) | (1,116) | (448) |
| Cash provided by financing activities | 217,295 | 165,843 | 69,748 |
| CHANGE IN CASH AND CASH EQUIVALENTS | 466 | (23,145) | 20,779 |
| EFFECT OF FOREIGN CURRENCY TRANSLATION ON CASH AND CASH EQUIVALENTS | — | (19) | 1 |
| CASH AND CASH EQUIVALENTS, beginning of year | 301 | 23,465 | 2,685 |
| CASH AND CASH EQUIVALENTS, end of year | <u>\$ 767</u> | <u>\$ 301</u> | <u>\$ 23,465</u> |
| SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION: | | | |
| Cash paid for interest | <u>\$ 4,192</u> | <u>\$ 2,856</u> | <u>\$ 1,920</u> |
| SUPPLEMENTAL DISCLOSURE OF NON-CASH TRANSACTION: | | | |
| Acquisition of oil and gas properties | <u>\$ —</u> | <u>\$ 547</u> | <u>\$ 132</u> |
| Asset retirement obligations capitalized | <u>\$ 409</u> | <u>\$ 1,190</u> | <u>\$ 604</u> |

See accompanying notes to these consolidated financial statements.

[Table of Contents](#)

Approach Resources Inc. and Subsidiaries

Notes to consolidated financial statements

1. Summary of significant accounting policies

Organization and Nature of Operations

Approach Resources Inc. ("Approach," the "Company," "we," "us" or "our") is an independent energy company engaged in the exploration, development, production and acquisition of oil and gas properties. We focus on finding and developing oil and natural gas reserves in oil shale and tight sands. Our properties are primarily located in the Permian Basin in West Texas. We also own interests in the East Texas Basin.

Consolidation, basis of presentation and significant estimates

The accompanying consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America and include the accounts of the Company and its wholly-owned subsidiaries. Intercompany accounts and transactions are eliminated. In preparing the accompanying financial statements, management has made certain estimates and assumptions that affect reported amounts in the financial statements and disclosures of contingencies. Actual results may differ from those estimates. Significant assumptions are required in the valuation of proved oil and natural gas reserves, which affect our estimate of depletion expense as well as our impairment analyses. Significant assumptions also are required in our estimation of accrued liabilities, commodity derivatives, income tax provision, share-based compensation and asset retirement obligations. It is at least reasonably possible these estimates could be revised in the near term, and these revisions could be material. Certain prior year amounts have been reclassified to conform to current year presentation. These classifications have no impact on the net income or loss reported.

Cash and cash equivalents

We consider all highly liquid debt instruments purchased with an original maturity of three months or less to be cash equivalents. At times, the amount of cash and cash equivalents on deposit in financial institutions exceeds federally insured limits. We monitor the soundness of the financial institutions and believe the Company's risk is negligible.

Financial instruments

The carrying amounts of financial instruments including cash and cash equivalents, accounts receivable, accounts payable and accrued liabilities and long-term debt approximate fair value, as of December 31, 2012 and 2011. See Note 7 for commodity derivative fair value disclosures.

[Table of Contents](#)

Approach Resources Inc. and Subsidiaries

Notes to consolidated financial statements—(continued)

Oil and Gas Properties and Operations

Capitalized Costs. Our oil and gas properties comprised the following (in thousands):

| | December 31, | |
|---|--------------|------------|
| | 2012 | 2011 |
| Mineral interests in properties: | | |
| Unproved leasehold costs | \$ 49,148 | \$ 46,813 |
| Proved leasehold costs | 32,252 | 26,845 |
| Wells and related equipment and facilities | 908,456 | 626,564 |
| Support equipment | 6,753 | 5,135 |
| Uncompleted wells, equipment and facilities | 28,831 | 27,302 |
| Total costs | 1,025,440 | 732,659 |
| Less accumulated depreciation, depletion and amortization | (197,751) | (137,980) |
| Net capitalized costs | \$ 827,689 | \$ 594,679 |

We follow the successful efforts method of accounting for our oil and gas producing activities. Costs to acquire mineral interests in oil and gas properties and to drill and equip development wells and related asset retirement costs are capitalized. Costs to drill exploratory wells are capitalized pending determination of whether the wells have proved reserves. If we determine that the wells do not have proved reserves, the costs are charged to expense. There were no exploratory wells capitalized, pending determination of whether the wells have proved reserves, at December 31, 2012 or 2011. Geological and geophysical costs, including seismic studies and costs of carrying and retaining unproved properties are charged to expense as incurred. We capitalize interest on expenditures for significant exploration and development projects that last more than six months while activities are in progress to bring the assets to their intended use and while these expenditures are excluded from our depletable base. Through December 31, 2012, we have capitalized no interest costs because our individual wells and infrastructure projects are generally developed in less than six months. Costs incurred to maintain wells and related equipment are charged to expense as incurred.

On the sale or retirement of a complete unit of a proved property, the cost and related accumulated depreciation, depletion and amortization are eliminated from the property accounts, and the resultant gain or loss is recognized. On the retirement or sale of a partial unit of proved property, the cost is charged to accumulated depreciation, depletion and amortization with a resulting gain or loss recognized in income.

Capitalized amounts attributable to proved oil and gas properties are depleted by the unit-of-production method over proved reserves using the unit conversion ratio of six Mcf of gas to one barrel of oil equivalent ("Boe"), and one barrel of NGLs to one Boe. The ratios of six Mcf of natural gas to one Boe and one barrel of NGLs to one Boe do not assume price equivalency and, given price differentials, the price for a Boe for natural gas may differ significantly from the price for a barrel of oil. Depreciation, depletion and amortization expense for oil and gas producing property and related equipment was \$60.0 million, \$32.1 million and \$22.0 million for the years ended December 31, 2012, 2011 and 2010, respectively.

[Table of Contents](#)

Approach Resources Inc. and Subsidiaries

Notes to consolidated financial statements—(continued)

Capitalized costs related to proved oil and gas properties, including wells and related equipment and facilities, are evaluated for impairment based on an analysis of undiscounted future net cash flows in accordance with ASC 360, formerly Statement of Financial Accounting Standards 144, *Accounting for the Impairment or Disposal of Long-Lived Assets*. If undiscounted cash flows are insufficient to recover the net capitalized costs related to proved properties, then we recognize an impairment charge in income from operations equal to the difference between the net capitalized costs related to proved properties and their estimated fair values based on the present value of the related future net cash flows. For 2011, we recorded an impairment expense of \$15.2 million, which was attributable to our oil and gas properties in the East Texas Basin. At December 31, 2011, we had \$2.7 million recorded for the East Texas Basin, which was the estimated fair value at December 31, 2011. We noted no impairment of our proved properties based on our analysis for the years ended December 31, 2010 and 2012.

Unproved oil and gas properties that are individually significant are periodically assessed for impairment of value, and a loss is recognized at the time of impairment by providing an impairment allowance. For 2011, we recorded an impairment expense of \$3.3 million, related to all of our remaining carrying costs associated with our unproved properties in Northern New Mexico. For 2010, we recorded an impairment of \$2.6 million, which resulted from a write-off of \$2.6 million in costs associated with our Boomerang project in Kentucky and represented the remaining carrying value we had recorded for the project.

On the sale of an entire interest in an unproved property for cash or cash equivalent, gain or loss on the sale is recognized, taking into consideration the amount of any recorded impairment if the property had been assessed individually. If a partial interest in an unproved property is sold, the amount received is treated as a reduction of the cost of the interest retained. During 2011, we sold our working interest in Northeast British Columbia for net proceeds of \$360,000. The gain on the sale of this interest, net of foreign currency, was \$248,000, and is included under "Other" on the consolidated statement of operations for the year ended December 31, 2011.

Oil and gas operations

Revenue and Accounts Receivable. We recognize revenue for our production when the quantities are delivered to or collected by the respective purchaser. Prices for such production are defined in sales contracts and are readily determinable based on certain publicly available indices.

Accounts receivable, joint interest owners, consist of uncollateralized joint interest owner obligations due within 30 days of the invoice date. Accounts receivable, oil, NGL and gas sales, consist of uncollateralized accrued revenues due under normal trade terms, generally requiring payment within 30 to 60 days of production. No interest is charged on past-due balances. Payments made on all accounts receivable are applied to the earliest unpaid items. We review accounts receivable periodically and reduce the carrying amount by a valuation allowance that reflects our best estimate of the amount that may not be collectible. No such allowance was considered necessary at December 31, 2012 or 2011.

Oil, NGL and Gas Sales Payable. Oil, NGL and gas sales payable represents amounts collected from purchasers for oil, NGL and gas sales which are either revenues due to other revenue

[Table of Contents](#)

Approach Resources Inc. and Subsidiaries

Notes to consolidated financial statements—(continued)

interest owners or severance taxes due to the respective state or local tax authorities. Generally, we are required to remit amounts due under these liabilities within 30 days of the end of the month in which the related production occurred.

Production Costs. Production costs, including compressor rental and repair, pumpers' and supervisors' salaries, saltwater disposal, insurance, repairs and maintenance, expensed workovers and other operating expenses are expensed as incurred and included in lease operating expense on our consolidated statements of operations.

Exploration expenses. Exploration expenses include dry hole costs, lease extensions, delay rentals and geological and geophysical costs.

Dependence on Major Customers. For the years ended December 31, 2012, 2011 and 2010, we sold substantially all of our oil and gas produced to seven purchasers. Additionally, substantially all of our accounts receivable related to oil and gas sales were due from those seven purchasers at December 31, 2012 and 2011. As of December 31, 2012, we had dedicated substantially all of our oil production to the oil pipeline joint venture in which we own a 50% equity interest for 10 years. In addition, at December 31, 2012, we had contracted to sell substantially all of our NGLs and natural gas production to one purchaser through January 2016. We believe that there are potential alternative purchasers and that it may be necessary to establish relationships with new purchasers. However, there can be no assurance that we can establish such relationships and that those relationships will result in increased purchasers. Although we are exposed to a concentration of credit risk, we believe that all of our purchasers are credit worthy.

Equity Method Investment. For investments in which we have the ability to exercise significant influence but do not control, we follow the equity method of accounting. In September 2012, we entered into a joint venture to build an oil pipeline in Crockett and Reagan Counties, Texas, which will be used to transport our oil to market. The joint venture will purchase our dedicated crude oil production from certain of our acreage in Crockett County for ten years, subject to certain terms and conditions. In October 2012, we made our initial contribution of \$10 million to the joint venture for pipeline and facilities construction. Our initial contribution was recorded at cost and is included in noncurrent assets on our consolidated balance sheet at December 31, 2012. Our share of the investee earnings was recorded on our consolidated statement of operations for the year ended December 31, 2012. Our 50% equity interest in the joint venture is classified as "Equity method investment" on our consolidated balance sheet at December 31, 2012, and is held by our wholly-owned subsidiary, Approach Midstream Holdings LLC.

Dependence on Suppliers. Our industry is cyclical, and from time to time there is a shortage of drilling rigs, equipment, services, supplies and qualified personnel. During these periods, the costs and delivery times of rigs, equipment, services and supplies are substantially greater. If the unavailability or high cost of drilling rigs, equipment, services, supplies or qualified personnel were particularly severe in the area where we operate, we could be materially and adversely affected. We believe that there are potential alternative providers of drilling and completion services and that it may be necessary to establish relationships with new contractors. However, there can be no assurance that we can establish such relationships and that those relationships will result in increased availability of drilling rigs or other services.

[Table of Contents](#)

Approach Resources Inc. and Subsidiaries

Notes to consolidated financial statements—(continued)

Other Property. Furniture, fixtures and equipment are carried at cost. Depreciation of furniture, fixtures and equipment is provided using the straight-line method over estimated useful lives ranging from three to ten years. Gain or loss on retirement or sale or other disposition of assets is included in income in the period of disposition. Depreciation expense for other property and equipment was \$333,000, \$372,000 and \$233,000 for the years ended December 31, 2012, 2011 and 2010, respectively.

Income Taxes. We are subject to U.S. federal income taxes along with state income taxes in Texas and New Mexico. When tax returns are filed, it is highly certain that some positions taken would be sustained upon examination by the taxing authorities, while others are subject to uncertainty about the merits of the position taken or the amount of the position that would be ultimately sustained. The benefit of a tax position is recognized in the financial statements in the period during which, based on all available evidence, management believes it is more likely than not that the position will be sustained upon examination, including the resolution of appeals or litigation processes, if any. Tax positions taken are not offset or aggregated with other positions. Tax positions that meet the more-likely-than-not recognition threshold are measured as the largest amount of tax benefit that is more than 50% likely of being realized upon settlement with the applicable taxing authority. The portion of the benefits associated with tax positions taken that exceeds the amount measured as described above is reflected as a liability for unrecognized tax benefits in the accompanying balance sheet along with any associated interest and penalties that would be payable to the taxing authorities upon examination. Interest and penalties associated with unrecognized tax benefits are classified as additional income taxes in the consolidated statement of income.

Based on our analysis, we did not have any uncertain tax positions as of December 31, 2012 or 2011. The Company's income tax returns are subject to examination by the relevant taxing authorities as follows: U.S. Federal income tax returns for tax years 2009 and forward, Texas income and margin tax returns for tax years 2009 and forward and New Mexico income tax returns for years 2009 and forward. There are currently no income tax examinations underway for these jurisdictions.

Deferred tax assets and liabilities are recognized for the estimated future tax consequences attributable to the differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using the tax rate in effect for the year in which those temporary differences are expected to be recovered or settled. The effect of a change in tax rates on deferred tax assets and liabilities is recognized in income in the year of the enacted tax rate change.

Derivative Activity. All derivative instruments are recorded on the balance sheet at fair value. Changes in the instruments' fair values are recognized in the statement of operations immediately unless specific commodity derivative accounting criteria are met. For qualifying cash flow commodity derivatives, the gain or loss on the derivative is deferred in accumulated other comprehensive income to the extent the commodity derivative is effective. The ineffective portion of the commodity derivative is recognized immediately in the statement of operations. Gains and losses on commodity derivative instruments included in cumulative other comprehensive income are reclassified to oil, NGL and natural gas sales revenue in the period that the related production is delivered. Derivative contracts that do not qualify for commodity

[Table of Contents](#)

Approach Resources Inc. and Subsidiaries

Notes to consolidated financial statements—(continued)

derivative accounting treatment are recorded as derivative assets and liabilities at fair value in the balance sheet, and the associated unrealized gains and losses are recorded as current income or expense in the statement of operations.

Historically, we have not designated our derivative instruments as cash-flow hedges. We record our open derivative instruments at fair value on our consolidated balance sheets as either unrealized gains or losses on commodity derivatives. We record changes in such fair value in earnings on our consolidated statements of operations under the caption entitled "unrealized gain (loss) on commodity derivatives."

Although we have not designated our derivative instruments as cash-flow hedges, we use those instruments to reduce our exposure to fluctuations in commodity prices related to our natural gas and oil production. Unrealized gains and losses, at fair value, are included on our consolidated balance sheets as current or non-current assets or liabilities based on the anticipated timing of cash settlements under the related contracts. Changes in the fair value of our commodity derivative contracts are recorded in earnings as they occur and included in other income (expense) on our consolidated statements of operations. Realized gains and losses are also included in other income (expense) on our consolidated statements of operations.

Accrued Liabilities. Following is a summary of our accrued liabilities at December 31, 2012 and 2011 (in thousands):

| | 2012 | 2011 |
|------------------------------|-----------------|-----------------|
| Capital expenditures accrued | \$25,526 | \$20,512 |
| Operating expenses and other | 4,314 | 4,325 |
| Total | <u>\$29,840</u> | <u>\$24,837</u> |

Asset Retirement Obligations. Our asset retirement obligations relate to future plugging and abandonment expenses on oil and gas properties. Based on the expected timing of payments, the full asset retirement obligation is classified as non-current. There were no significant changes to the asset retirement obligations for the years ended December 31, 2012, 2011 and 2010.

Foreign Currency Translation. The functional currency of the countries in which we operate is the U.S. dollar in the United States and the Canadian Dollar in Canada. Assets and liabilities of our Canadian subsidiary that are denominated in currencies other than the Canadian Dollar are translated at current exchange rates. Gains and losses resulting from such translations, along with gains or losses realized from transactions denominated in currencies other than the Canadian Dollar are included in operating results on our statements of operations. For purposes of consolidation, we translate the assets and liabilities of our Canadian Subsidiary into U.S. Dollars at current exchange rates while revenues and expenses are translated at the average rates in effect for the period. The related translation gains and losses are included in accumulated other comprehensive income within stockholders' equity on our consolidated balance sheets. We recognized no translation gains or losses during the year ended December 31, 2012, since we sold our working interest in northeast British Columbia in 2011. During the years ended December 31, 2011 and 2010, we recognized a translation loss of \$20,000 and \$4,000, net of the related income taxes, respectively.

[Table of Contents](#)

Approach Resources Inc. and Subsidiaries

Notes to consolidated financial statements—(continued)

Share-Based Compensation. We measure and record compensation expense for all share-based payment awards to employees and outside directors based on estimated grant date fair values. We recognize compensation costs for awards granted over the requisite service period based on the grant date fair value.

Earnings Per Common Share. We report basic earnings per common share, which excludes the effect of potentially dilutive securities, and diluted earnings per common share, which includes the effect of all potentially dilutive securities unless their impact is anti-dilutive. The following are reconciliations of the numerators and denominators of our basic and diluted earnings per share, (dollars in thousands, except per-share amounts):

| | For the years ended December 31, | | |
|--|----------------------------------|------------|------------|
| | 2012 | 2011 | 2010 |
| Income (numerator): | | | |
| Net income — basic | \$ 6,384 | \$ 7,242 | \$ 7,462 |
| Weighted average shares (denominator): | | | |
| Weighted average shares — basic | 34,965,182 | 28,930,792 | 22,065,797 |
| Dilution effect of share-based compensation, treasury method | 65,141 | 227,806 | 148,273 |
| Weighted average shares — diluted | 35,030,323 | 29,158,598 | 22,214,070 |
| Earnings per share: | | | |
| Basic | \$ 0.18 | \$ 0.25 | \$ 0.34 |
| Diluted | \$ 0.18 | \$ 0.25 | \$ 0.34 |

2. Working interest acquisitions

In February 2011, we acquired 38% working interest in northwest Project Pangea from two non-operating partners for \$70.8 million, after customary post-closing adjustments (the “38% Working Interest Acquisition”). We funded the 38% Working Interest Acquisition with cash on hand and borrowings under our revolving credit facility. Our 2011 oil, NGL and gas sales and net income included approximately \$25.5 million and \$8.4 million, respectively, related to this acquisition.

In October 2010, we acquired a 10% working interest in northwest Project Pangea from a non-operating partner for \$21.2 million, after post-closing adjustments (the “10% Working Interest Acquisition”). Funding was provided through borrowings under our revolving credit facility. Our 2010 oil, NGL and gas sales and net income included approximately \$1.3 million and \$477,000, respectively, related to this acquisition.

[Table of Contents](#)

Approach Resources Inc. and Subsidiaries

Notes to consolidated financial statements—(continued)

The following table represents the allocation of the total purchase price of the 38% Working Interest Acquisition and the 10% Working Interest Acquisition (in thousands).

| | 38% Working interest acquisition | 10% Working interest acquisition |
|---|---|---|
| Purchase price: | | |
| Acquisition price | \$ 76,000 | \$ 21,500 |
| Asset retirement obligations assumed | 547 | 132 |
| Post-closing purchase price adjustments | (5,720) | (453) |
| Total | \$ 70,827 | \$ 21,179 |
| Allocation: | | |
| Wells, equipment and related facilities | \$ 51,447 | \$ 15,613 |
| Mineral interests in oil and gas properties | 19,380 | 5,566 |
| Total | \$ 70,827 | \$ 21,179 |

The following condensed unaudited pro forma information gives effect to these acquisitions as if they had occurred on January 1, 2010. The pro forma information has been included in the notes as required by U.S. generally accepted accounting principles and is provided for comparison purposes only. The pro forma financial information is not necessarily indicative of the financial results that would have occurred had these acquisitions been effective on the dates as indicated and should not be viewed as indicative of operations in the future.

| | Unaudited pro forma financial data | |
|-----------------------------------|---|-----------|
| | years ended December 31, | |
| | 2011 | 2010 |
| | (dollars in thousands, except per-share amounts) | |
| Oil, NGL and gas sales | \$ 113,041 | \$ 86,114 |
| Total operating expenses | \$ 100,125 | \$ 63,384 |
| Net income (loss) | \$ 7,186 | \$ 15,714 |
| Earnings (loss) per share—basic | \$ 0.25 | \$ 0.71 |
| Earnings (loss) per share—diluted | \$ 0.25 | \$ 0.71 |

3. Public equity offerings

On September 19, 2012, we completed a public offering of 5,000,000 shares of our common stock. The underwriters exercised their option and purchased an additional 325,000 shares on October 3, 2012. After deducting underwriting discounts and transaction costs of approximately \$8.0 million, we received net proceeds of approximately \$154.4 million. We used the proceeds of the 2012 equity offering to repay outstanding borrowings under our revolving credit facility, fund our capital expenditures for the Wolfcamp oil shale resource play and for general working capital needs.

[Table of Contents](#)

Approach Resources Inc. and Subsidiaries

Notes to consolidated financial statements—(continued)

On November 15, 2011, we completed a public offering of 4,000,000 shares of our common stock. The underwriters were granted an option to purchase up to 600,000 additional shares of our common stock. The underwriters fully exercised this option and purchased the additional shares on November 16, 2011. After deducting underwriting discounts and transaction costs of approximately \$6.6 million, we received net proceeds of approximately \$122.2 million. We used the proceeds of the 2011 equity offering to repay outstanding borrowings under our revolving credit facility, fund our capital expenditures for the Wolfcamp oil shale resource play, fund working interest and leasehold acquisitions in the Permian Basin and for general working capital needs.

On November 10, 2010, we completed a public offering of 5,750,000 shares of our common stock. The underwriters were granted an option to purchase up to 862,500 additional shares of our common stock. The underwriters fully exercised this option and purchased the additional shares on November 11, 2010. After deducting underwriting discounts and transaction costs of approximately \$5.7 million, we received net proceeds of approximately \$101.8 million. We used the proceeds of the 2010 equity offering to repay all outstanding borrowings under our revolving credit facility, and to fund our capital expenditures for the Wolfcamp oil shale resource play, working interest and leasehold acquisitions in the Permian Basin and general working capital needs.

4. Revolving credit facility

We have a \$300 million revolving credit facility with a borrowing base set at \$280 million. The borrowing base is redetermined semi-annually on or before each April 1 and October 1 based on our oil and gas reserves. We or the lenders can each request one additional borrowing base redetermination each calendar year.

The maturity date under our revolving credit facility is July 31, 2014. Borrowings bear interest based on the agent bank's prime rate plus an applicable margin ranging from 0.75% to 1.75%, or the sum of the Eurodollar rate plus an applicable margin ranging from 1.75% to 2.75%. Margins vary based on the borrowings outstanding compared to the borrowing base. In addition, we pay an annual commitment of 0.50% of unused borrowings available under our revolving credit facility.

Effective April 26, 2012, the lenders increased the borrowing base under our credit agreement to \$270 million from \$260 million.

Effective September 7, 2012, we entered into a thirteenth amendment to our credit agreement, which permits the Company to enter into thirty-six (36) month derivatives contracts on up to 100% of projected production from proved developed producing ("PDP") reserves, compared to 85% under the former credit agreement, and sixty (60) – month derivatives contracts on up to 85% of projected production from PDP reserves, compared to thirty-six (36) months under the former credit agreement.

Effective November 16, 2012, we entered into a fourteenth amendment to our credit agreement, which increased the aggregate limit on the Company's permitted indebtedness evidenced by the issuance of unsecured senior notes from \$200 million to \$400 million, eliminated the borrowing

[Table of Contents](#)

Approach Resources Inc. and Subsidiaries

Notes to consolidated financial statements—(continued)

base reduction associated with the issuance of senior unsecured notes for notes issued before October 1, 2013, and added Approach Services, LLC and Approach Midstream Holdings LLC, wholly-owned subsidiaries of the Company, as guarantors under the credit agreement.

Effective October 11, 2012, the lenders increased the borrowing base under the credit agreement to \$280 million from \$270 million.

We had outstanding borrowings of \$106.0 million and \$43.8 million under our revolving credit facility at December 31, 2012, and 2011, respectively. The interest rate applicable to our revolving credit facility at December 31, 2012, and 2011 was 2.7% and 3.7%, respectively. We also had outstanding unused letters of credit under our revolving credit facility totaling \$325,000 at December 31, 2012, which reduce amounts available for borrowing under our revolving credit facility.

Loans under our revolving credit facility are secured by first priority liens on substantially all of our West Texas assets, a pledge of our equity interests in our subsidiaries, and are guaranteed by our subsidiaries.

Covenants

Our credit agreement contains two principal financial covenants:

- a consolidated modified current ratio covenant that requires us to maintain a ratio of not less than 1.0 to 1.0 at all times. The consolidated modified current ratio is calculated by dividing Consolidated Current Assets (as defined in the credit agreement) by Consolidated Current Liabilities (as defined in the credit agreement). As defined more specifically in the credit agreement, the consolidated modified current ratio is calculated as current assets less current unrealized gains on commodity derivatives plus the available borrowing base at the respective balance sheet date, divided by current liabilities less current unrealized losses on commodity derivatives at the respective balance sheet date.
- a consolidated funded debt to consolidated EBITDAX ratio covenant that requires us to maintain a ratio of not more than 4.0 to 1.0 at the end of each fiscal quarter. The consolidated funded debt to consolidated EBITDAX ratio is calculated by dividing Consolidated Funded Debt (as defined in the credit agreement) by Consolidated EBITDAX (as defined in the credit agreement). As defined more specifically in the credit agreement, consolidated EBITDAX is calculated as net income (loss), plus (1) exploration expense, (2) depletion, depreciation and amortization expense, (3) share-based compensation expense, (4) unrealized loss on commodity derivatives, (5) interest expense, (6) income and franchise taxes and (7) certain other noncash expenses, less (1) gains or losses from sales or dispositions of assets, (2) unrealized gain on commodity derivatives and (3) extraordinary or nonrecurring gains. For purposes of calculating this ratio, consolidated EBITDAX for a fiscal quarter is annualized pursuant to the credit agreement.

Our credit agreement also restricts cash dividends and other restricted payments, transactions with affiliates, incurrence of other debt, consolidations and mergers, the level of operating leases, asset sales, investments in other entities and liens on properties.

[Table of Contents](#)

Approach Resources Inc. and Subsidiaries

Notes to consolidated financial statements—(continued)

In addition, our credit agreement contains customary events of default that would permit our lenders to accelerate the debt under our credit agreement if not cured within applicable grace periods, including, among others, failure to make payments of principal or interest when due, materially incorrect representations and warranties, failure to make mandatory prepayments in the event of borrowing base deficiencies, breach of covenants, defaults upon other obligations in excess of \$500,000, events of bankruptcy, the occurrence of one or more unstayed judgments in excess of \$500,000 not covered by an acceptable policy of insurance, failure to pay any obligation in excess of \$500,000 owed under any derivatives transaction or in any amount if the obligation under the derivatives transaction is secured by collateral under the credit agreement, any event of default by the Company occurs under any agreement entered into in connection with a derivatives transaction, liens securing the loans under the credit agreement cease to be in place, a Change in Control (as defined in the credit agreement) of the Company occurs, and dissolution of the Company.

At December 31, 2012, we were in compliance with all of our covenants and had not committed any acts of default under the credit agreement.

5. Share-based compensation

In June 2007, the board of directors and stockholders approved the 2007 Stock Incentive Plan ("the 2007 Plan"). Under the 2007 Plan, we may grant restricted stock, stock options, stock appreciation rights, restricted stock units, performance awards, unrestricted stock awards and other incentive awards. Under a Second Amendment to the 2007 Plan effective May 31, 2012, the maximum number of shares of common stock available for the grant of awards under the 2007 Plan after May 31, 2012, is 2,100,000. Awards of any stock options are to be priced at not less than the fair market value at the date of the grant. The vesting period of any stock award is to be determined by the board or an authorized committee at the time of the grant. The term of each stock option is to be fixed at the time of grant and may not exceed 10 years. Shares issued upon stock options exercised are issued as new shares.

Share-based compensation expense amounted to \$7.5 million, \$4.7 million and \$2.6 million for the years ended December 31, 2012, 2011 and 2010, respectively. Such amounts represent the estimated fair value of stock awards for which the requisite service period elapsed during those periods. Included in share-based compensation expense for the years ended December 31, 2012, 2011 and 2010, was \$535,000, \$420,000 and \$381,000, respectively, related to grants to nonemployee directors.

Stock options

There were no stock option grants during the years ended December 31, 2012, 2011 and 2010. As of December 31, 2012, all stock options are fully vested.

[Table of Contents](#)

Approach Resources Inc. and Subsidiaries

Notes to consolidated financial statements—(continued)

The following table summarizes stock options outstanding and activity as of and for the years ended December 31, 2012, 2011 and 2010, (dollars in thousands):

| | Shares subject to stock options | Weighted average exercise price | Weighted average remaining contractual term (in years) | Aggregate intrinsic value |
|---|--|--|---|---------------------------------|
| Outstanding at January 1, 2010 | 409,327 | \$ 8.03 | 5.41 | \$ — |
| Granted | — | \$ — | | |
| Exercised | (58,798) | \$ 12.76 | | |
| Canceled | (16,191) | \$ 12.00 | | |
| Outstanding at December 31, 2010 | 334,338 | \$ 7.01 | 3.85 | \$ 4,567 |
| Granted | — | \$ — | | |
| Exercised | (74,241) | \$ 13.59 | | |
| Canceled | — | \$ — | | |
| Outstanding at December 31, 2011 | 260,097 | \$ 5.13 | 1.94 | \$ 6,315 |
| Granted | — | \$ — | | |
| Exercised | (216,822) | \$ 3.68 | | |
| Canceled | — | \$ — | | |
| Outstanding at December 31, 2012 | 43,275 | \$ 12.38 | 4.88 | \$ 547 |
| Exercisable (fully vested) at December 31, 2012 | 43,275 | \$ 12.38 | 4.88 | \$ 547 |

The intrinsic value of the options exercised during the years ended December 31, 2012, 2011 and 2010, was \$7.0 million, \$1.1 million and \$608,000, respectively. The tax benefit recognized related to the stock option exercises was \$358,000 and \$141,000 in the years ended December 31, 2011 and 2010, respectively. There was no tax benefit recognized related to the stock option exercises in the year ended December 31, 2012.

Nonvested Shares

Share grants totaling 316,279 shares, 256,317 shares and 568,142 shares with an approximate aggregate fair market value of \$10.4 million, \$8.1 million and \$4.3 million at the time of grant were granted to employees during the years ended December 31, 2012, 2011 and 2010, respectively. Included in the share grants for 2012, 2011 and 2010, are 129,890 shares, 204,000 shares and 400,000 shares, respectively, awarded to our executive officers. The aggregate fair market value of these shares on the grant date was \$4.8 million, \$6.5 million and \$2.7 million, respectively, to be expensed over a remaining service period of approximately three years, subject to certain performance restrictions.

[Table of Contents](#)

Approach Resources Inc. and Subsidiaries

Notes to consolidated financial statements—(continued)

A summary of the status of nonvested shares for the years ended December 31, 2012, 2011 and 2010, is presented below:

| | Shares | Weighted average grant- date fair value |
|--------------------------------|-----------|---|
| Nonvested at January 1, 2010 | 225,880 | \$ 9.73 |
| Granted | 568,142 | 7.71 |
| Vested | (77,969) | 10.07 |
| Canceled | (7,272) | 9.51 |
| Nonvested at December 31, 2010 | 708,781 | 8.04 |
| Granted | 256,317 | 31.54 |
| Vested | (124,134) | 9.93 |
| Canceled | (50,842) | 12.03 |
| Nonvested at December 31, 2011 | 790,122 | 15.06 |
| Granted | 316,279 | 32.94 |
| Vested | (333,957) | 14.57 |
| Canceled | (19,365) | 23.74 |
| Nonvested at December 31, 2012 | 753,079 | \$ 22.35 |

As of December 31, 2012, unrecognized compensation expense related to the nonvested shares amounted to \$10.3 million, which will be recognized over a remaining service period of three years.

Subsequent Restricted Share Award

Subsequent to December 31, 2012, 183,673 restricted shares were awarded to our executive officers. The number of shares awarded assumes that the Company will achieve certain threshold performance and maximum total shareholder return conditions. The aggregate fair market value of these shares on the grant date was \$4.5 million, to be expensed over a remaining service period of approximately four years, subject to certain threshold performance and three-year total shareholder return conditions.

6. Income taxes

Our provision for income taxes comprised the following (in thousands):

| | Years ended December 31, | | |
|---|--------------------------|-----------------|-----------------|
| | 2012 | 2011 | 2010 |
| Deferred: | | | |
| Federal | \$ 3,359 | \$ 3,199 | \$ 3,917 |
| State | (21) | 289 | 183 |
| Total deferred provision for income taxes | <u>\$ 3,338</u> | <u>\$ 3,488</u> | <u>\$ 4,100</u> |

[Table of Contents](#)

Approach Resources Inc. and Subsidiaries

Notes to consolidated financial statements—(continued)

Total income tax expense differed from the amounts computed by applying the U.S. Federal statutory tax rates to pre-tax income (in thousands):

| | Years ended December 31, | | |
|--------------------------------------|--------------------------|-----------------|-----------------|
| | 2012 | 2011 | 2010 |
| Statutory tax at 34% | \$ 3,306 | \$ 3,648 | \$ 3,931 |
| State taxes, net of federal impact | (21) | 289 | 184 |
| Permanent differences ⁽¹⁾ | 53 | (289) | 53 |
| Other differences | — | (160) | (68) |
| Total | <u>\$ 3,338</u> | <u>\$ 3,488</u> | <u>\$ 4,100</u> |

⁽¹⁾ Amounts primarily relate to share-based compensation expense and stock option exercises.

Deferred tax assets and liabilities are the result of temporary differences between the financial statement carrying values and tax bases of assets and liabilities. Our net deferred tax assets and liabilities are recorded as a long-term liability of \$48.6 million and \$46.3 million at December 31, 2012 and 2011, respectively. At December 31, 2012, \$531,000 of deferred taxes expected to be realized within one year were included in current liabilities. At December 31, 2011, \$504,000 of deferred taxes expected to be realized within one year were included in current assets.

Significant components of net deferred tax assets and liabilities are (in thousands):

| | Years ended December 31, | |
|---|--------------------------|--------------------|
| | 2012 | 2011 |
| Deferred tax assets: | | |
| Net operating loss carryforwards | \$ 27,353 | \$ 31,052 |
| Unrealized loss on commodity derivatives | — | 504 |
| Other | 542 | 866 |
| Total deferred tax assets | <u>27,895</u> | <u>32,422</u> |
| Deferred tax liabilities: | | |
| Difference in depreciation, depletion and capitalization methods—oil and gas properties | (76,170) | (78,174) |
| Unrealized gain on commodity derivatives | (849) | — |
| Total deferred tax liabilities | <u>(77,019)</u> | <u>(78,174)</u> |
| Net deferred tax liability | <u>\$ (49,124)</u> | <u>\$ (45,752)</u> |

[Table of Contents](#)

Approach Resources Inc. and Subsidiaries

Notes to consolidated financial statements—(continued)

Net operating loss carryforwards for tax purposes have the following expiration dates (in thousands):

| Expiration Dates | Amounts | Stock option adjustments | Total |
|------------------|-----------|--------------------------------|----------|
| 2023 | \$ 1,523 | \$ — | \$ 1,523 |
| 2024 | 1,082 | — | 1,082 |
| 2025 | 2,594 | — | 2,594 |
| 2026 | 1,683 | — | 1,683 |
| 2027 | 1,020 | — | 1,020 |
| 2028 | 1,308 | — | 1,308 |
| 2029 | 3,299 | — | 3,299 |
| 2030 | 12,605 | 750 | 13,355 |
| 2031 | 18,642 | 2,984 | 21,626 |
| 2032 | 34,673 | 1,043 | 35,716 |
| Total | \$ 78,429 | \$ 4,777 | \$83,206 |

As of December 31, 2012, we had net operating loss carryforwards of approximately \$83.2 million, of which approximately \$4.8 million was generated from the benefit of stock options. When these benefits are realized, they will be credited to additional paid-in capital.

7. Derivatives

At December 31, 2012, we had the following commodity derivatives positions outstanding:

| Commodity and time period | Contract type | Volume transacted | Contract price |
|---------------------------|---------------|---------------------|-----------------------------|
| Crude Oil | | | |
| 2013 | Collar | 650 Bbls/d | \$ 90.00/Bbl – \$105.80/Bbl |
| 2013 | Collar | 450 Bbls/d | \$ 90.00/Bbl – \$101.45/Bbl |
| 2014 | Collar | 550 Bbls/d | \$ 90.00/Bbl – \$105.50/Bbl |
| Natural Gas | | | |
| 2013 | Swap | 200,000 MMBtu/month | \$ 3.54/MMBtu |
| 2013 | Swap | 190,000 MMBtu/month | \$ 3.80/MMBtu |

Subsequent to December 31, 2012, we added to our 2013 commodity derivatives positions with a crude oil collar contract covering 1,200 Bbls/d for February 2013 through December 2013 at a contract floor of \$90.35/Bbl and a ceiling of \$100.35/Bbl. We also added to our 2013 commodity derivatives positions with a Midland/Cushing basis differential swap covering 2,300 Bbls/d from March 2013 through December 2013 at a price of \$1.10/Bbl.

[Table of Contents](#)

Approach Resources Inc. and Subsidiaries

Notes to consolidated financial statements—(continued)

The following summarizes the fair value of our open commodity derivatives as of December 31, 2012 and 2011 (in thousands):

| | Asset derivatives | | | Liability derivatives | | |
|--|--|-------------------|------------------------------|--|-------------------|------------------------------|
| | Balance Sheet Location | December 31, 2012 | Fair value December 31, 2011 | Balance Sheet Location | December 31, 2012 | Fair value December 31, 2011 |
| Derivatives not designated as hedging instruments | | | | | | |
| Commodity derivatives | Unrealized gain on commodity derivatives | \$ 2,433 | \$ — | Unrealized loss on commodity derivatives | \$ — | \$ 1,441 |

The following summarizes the change in the fair value of our commodity derivatives (in thousands):

| | Income statement location | Year ended December 31, | | |
|--|---|-------------------------|----------------|----------------|
| | | 2012 | 2011 | 2010 |
| Derivatives not designated as hedging instruments | | | | |
| Commodity derivatives | Unrealized gain (loss) on commodity derivatives | \$3,874 | \$ (347) | \$ 788 |
| | Realized (loss) gain on commodity derivatives | (108) | 3,375 | 5,784 |
| | | <u>\$3,766</u> | <u>\$3,028</u> | <u>\$6,572</u> |

Unrealized gains and losses, at fair value, are included on our consolidated balance sheets as current or non-current assets or liabilities based on the anticipated timing of cash settlements under the related contracts. Changes in the fair value of our commodity derivative contracts are recorded in earnings as they occur and included in other income (expense) on our consolidated statements of operations. We estimate the fair value of swap contracts based on the present value of the difference in exchange-quoted forward price curves and contractual settlement prices multiplied by notional quantities. We internally valued the option contracts using industry-standard option pricing models and observable market inputs. We use our internal valuations to determine the fair values of the contracts that are reflected on our consolidated balance sheets. Realized gains and losses are also included in other income (expense) on our consolidated statements of operations.

We are exposed to credit losses in the event of nonperformance by the counterparties on our commodity derivatives positions and have considered the exposure in our internal valuations. However, we do not anticipate nonperformance by the counterparties over the term of the commodity derivatives positions.

[Table of Contents](#)

Approach Resources Inc. and Subsidiaries

Notes to consolidated financial statements—(continued)

To estimate the fair value of our commodity derivatives positions, we use market data or assumptions that market participants would use in pricing the asset or liability, including assumptions about risk and the risks inherent in the inputs to the valuation technique. These inputs can be readily observable, market corroborated or generally unobservable. We primarily apply the market approach for recurring fair value measurements and attempt to use the best available information. We determine the fair value based upon the hierarchy that prioritizes the inputs used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurement) and lowest priority to unobservable inputs (Level 3 measurement). The three levels of fair value hierarchy are as follows:

- Level 1—Quoted prices are available in active markets for identical assets or liabilities as of the reporting date. At December 31, 2012, we had no Level 1 measurements.
- Level 2—Pricing inputs are other than quoted prices in active markets included in Level 1, which are either directly or indirectly observable as of the reporting date. Level 2 includes those financial instruments that are valued using models or other valuation methodologies. These models are primarily industry-standard models that consider various assumptions, including quoted forward prices for commodities, time value, volatility factors and current market and contractual prices for the underlying instruments, as well as other relevant economic measures. Our derivatives, which consist primarily of commodity swaps and collars, are valued using commodity market data which is derived by combining raw inputs and quantitative models and processes to generate forward curves. Where observable inputs are available, directly or indirectly, for substantially the full term of the asset or liability, the instrument is categorized in Level 2. At December 31, 2012, all of our commodity derivatives were valued using Level 2 measurements.
- Level 3—Pricing inputs include significant inputs that are generally less observable from objective sources. These inputs may be used with internally developed methodologies that result in management's best estimate of fair value. At December 31, 2012, our Level 3 measurements were limited to our asset retirement obligation. Additionally, Level 3 measurements were used to calculate our estimated fair value of our oil and gas properties in the East Texas Basin. We valued these properties by estimating future discounted net cash flows of reserves using forward market prices adjusted for locational basis differentials and other costs.

8. Commitments and contingencies

In September 2012, we entered into a joint venture to build an oil pipeline in Crockett and Reagan Counties, Texas, which will be used to transport our oil to market. The joint venture will purchase our oil production from certain acreage in Crockett County, Texas, which production we have dedicated to the joint venture for 10 years subject to certain conditions. In October 2012, we made an initial capital contribution of \$10 million to the joint venture for pipeline and facilities construction. Additional capital contributions are at the discretion of the Company.

We periodically enter into contractual arrangements under which we are committed to expend funds to drill wells in the future, including agreements to secure drilling rig services, which

[Table of Contents](#)

Approach Resources Inc. and Subsidiaries

Notes to consolidated financial statements—(continued)

require us to make future minimum payments to the rig operators. We record drilling commitments in the periods in which well capital expenditures are incurred or rig services are provided. Our commitment under daywork drilling contracts was \$5.4 million at December 31, 2012.

At December 31, 2012, we had employment agreements with all five of our executive officers. These agreements are automatically renewed for successive terms of one year unless employment is terminated at the end of the term by written notice given to the employee not less than 60 days prior to the end of such term. Our maximum commitment under the employment agreements, which would apply if the executives covered by these agreements were each terminated without cause, was approximately \$4.9 million at December 31, 2012. This estimate assumes the maximum potential bonus for 2013 is earned by each employee during 2013.

We lease our office space in Fort Worth, Texas, under a non-cancelable agreement that expires on December 31, 2017. We also have non-cancelable operating lease commitments related to office equipment that expire by 2017. The following is a schedule by years of future minimum rental payments required under our operating lease arrangements as of December 31, 2012 (in thousands):

| | |
|-------------|-----------------|
| 2013 | \$ 633 |
| 2014 – 2017 | 2,588 |
| Total | <u>\$ 3,221</u> |

Rent expense under our lease arrangements amounted to \$716,000, \$630,000 and \$463,000 for the years ended December 31, 2012, 2011 and 2010, respectively.

Litigation

We are involved in various legal and regulatory proceedings arising in the normal course of business. While we cannot predict the outcome of these proceedings with certainty, we do not believe that an adverse result in any pending legal or regulatory proceeding, individually or in the aggregate, would be material to our consolidated financial condition or cash flows.

Environmental Issues

We are engaged in oil and gas exploration and production and may become subject to certain liabilities or damages as they relate to environmental clean up of well sites or other environmental restoration or ground water contamination, in connection with drilling or operating oil and gas wells. In connection with our acquisition of existing or previously drilled well bores, we may not be aware of what environmental safeguards were taken at the time such wells were drilled or during such time the wells were operated. Should it be determined that a liability exists with respect to any environmental clean up, restoration or contamination, we would be responsible for curing such a violation or paying damages. No claim has been made, nor are we aware of any liability that exists, as it relates to any environmental clean up, restoration, contamination or the violation of any rules or regulations relating thereto.

[Table of Contents](#)

Approach Resources Inc. and Subsidiaries

Notes to consolidated financial statements—(continued)

9. Oil and gas producing activities

Set forth below is certain information regarding the costs incurred for oil and gas property acquisition, development and exploration activities (in thousands):

| | For the years ended December 31, | | |
|----------------------------------|----------------------------------|------------|-----------|
| | 2012 | 2011 | 2010 |
| Property acquisition costs: | | | |
| Unproved properties | \$ 2,335 | \$ 17,361 | \$ 8,931 |
| Proved properties | 5,407 | 5,063 | 86 |
| Working interest acquisitions | — | 70,827 | 21,179 |
| Exploration costs | 4,550 | 9,991 | 2,874 |
| Development costs ⁽¹⁾ | 285,039 | 182,522 | 56,915 |
| Total costs incurred | \$ 297,331 | \$ 285,764 | \$ 89,985 |

(1) For the years ended December 31, 2012, 2011 and 2010, development costs include \$409,000, \$1.2 million and \$604,000 in non-cash asset retirement obligations, respectively.

Set forth below is certain information regarding the results of operations for oil and gas producing activities (in thousands):

| | For the years ended December 31, | | |
|-----------------------|----------------------------------|------------|-----------|
| | 2012 | 2011 | 2010 |
| Revenues | \$ 128,892 | \$ 108,387 | \$ 57,581 |
| Production costs | (28,257) | (19,134) | (11,545) |
| Exploration expense | (4,550) | (9,546) | (2,589) |
| Impairment | — | (18,476) | (2,622) |
| Depletion | (60,381) | (31,858) | (21,991) |
| Income tax expense | (12,139) | (9,546) | (6,527) |
| Results of operations | \$ 23,565 | \$ 19,827 | \$ 12,307 |

10. Disclosures about oil and gas producing activities (unaudited)

Proved Reserves

All of our estimated oil and natural gas reserves are attributable to properties within the United States, primarily in the Permian Basin in West Texas. The estimates of proved reserves and related valuations for the years ended December 31, 2012, 2011 and 2010, were prepared by DeGolyer and MacNaughton, independent petroleum engineers. Each year's estimate of proved reserves and related valuations were also prepared in accordance with then-current rules and guidelines established by the Securities and Exchange Commission and the Financial Accounting Standards Board.

The following table summarizes the prices used in the reserve estimates for 2012, 2011 and 2010. Commodity prices used for the reserve estimates, adjusted for basis differentials, grade and quality, are as follows:

| | 2012 | 2011 | 2010 |
|-------------------------------|---------|---------|---------|
| Oil (per Bbl) | \$90.21 | \$89.65 | \$74.90 |
| Natural gas liquids (per Bbl) | \$37.88 | \$49.63 | \$39.25 |
| Gas (per Mcf) | \$ 2.62 | \$ 3.97 | \$ 4.13 |

[Table of Contents](#)

Approach Resources Inc. and Subsidiaries

Notes to consolidated financial statements—(continued)

Oil, NGL and natural gas reserve estimates are subject to numerous uncertainties inherent in the estimation of quantities of proved reserves and in the projection of future rates of production and the timing of development expenditures. The accuracy of such estimates is a function of the quality of available data and of engineering and geological interpretation and judgment. Results of subsequent drilling, testing and production may cause either upward or downward revision of previous estimates. Further, the volumes considered to be commercially recoverable fluctuate with changes in prices and operating costs. The Company emphasizes that reserve estimates are inherently imprecise and that estimates of new discoveries are more imprecise than those of currently producing oil and natural gas properties. Accordingly, these estimates are expected to change as additional information becomes available in the future.

The following table provides a summary of the changes of the total proved reserves for the years ended December 31, 2012, 2011 and 2010, as well as proved developed and proved undeveloped reserves at the beginning and end of each respective year.

| | Oil (MBbls) | NGLs (MBbls) | Natural gas (MMcf) | Total (MBoe) |
|-------------------------------------|----------------|-----------------|--------------------------|-----------------|
| Total proved reserves | | | | |
| Balance — December 31, 2009 | 4,338 | 4,094 | 168,334 | 36,488 |
| Extensions and discoveries | 984 | 1,395 | 8,365 | 3,773 |
| Purchases of minerals in place | 383 | 786 | 4,736 | 1,958 |
| Production | (247) | (261) | (6,290) | (1,556) |
| Revisions to previous estimates | (507) | 14,685 | (24,756) | 10,052 |
| Balance — December 31, 2010 | 4,951 | 20,699 | 150,389 | 50,715 |
| Extensions and discoveries | 11,847 | 7,010 | 40,146 | 25,548 |
| Purchases of minerals in place | 2,200 | 4,284 | 24,083 | 10,498 |
| Production | (482) | (798) | (6,345) | (2,338) |
| Revisions to previous estimates | (465) | (2,072) | (29,466) | (7,448) |
| Balance — December 31, 2011 | 18,051 | 29,123 | 178,807 | 76,975 |
| Extensions and discoveries | 21,993 | 8,639 | 49,372 | 38,861 |
| Production | (969) | (904) | (6,089) | (2,888) |
| Revisions to previous estimates | (1,823) | (7,758) | (47,330) | (17,469) |
| Balance — December 31, 2012 | 37,252 | 29,100 | 174,760 | 95,479 |
| Proved Developed Reserves: | | | | |
| January 1, 2010 | 1,239 | 1,879 | 74,804 | 15,585 |
| December 31, 2010 | 2,146 | 11,193 | 74,739 | 25,795 |
| January 1, 2011 | 2,146 | 11,193 | 74,739 | 25,795 |
| December 31, 2011 | 5,542 | 13,945 | 84,743 | 33,611 |
| January 1, 2012 | 5,542 | 13,945 | 84,743 | 33,611 |
| December 31, 2012 | 8,816 | 11,761 | 73,178 | 32,774 |
| Proved Undeveloped Reserves: | | | | |
| January 1, 2010 | 3,099 | 2,215 | 93,530 | 20,903 |
| December 31, 2010 | 2,805 | 9,506 | 75,650 | 24,920 |
| January 1, 2011 | 2,805 | 9,506 | 75,650 | 24,920 |
| December 31, 2011 | 12,509 | 15,178 | 94,064 | 43,365 |
| January 1, 2012 | 12,509 | 15,178 | 94,064 | 43,365 |
| December 31, 2012 | 28,436 | 17,339 | 101,582 | 62,705 |

[Table of Contents](#)

Approach Resources Inc. and Subsidiaries

Notes to consolidated financial statements—(continued)

The following is a discussion of the material changes in our proved reserve quantities for the years ended December 31, 2012, 2011 and 2010:

Year ended December 31, 2012

We produced 2.9 MMBoe during 2012, 99.4% of which is attributable to our assets in the Permian Basin. Extensions and discoveries of 38.9 MMBoe for 2012 were primarily attributable to ongoing development of Project Pangea in the Wolfcamp oil shale resource play in the Permian Basin. We recorded downward revisions of 17.5 MMBoe to the December 31, 2011, estimates of our proved reserves at year end 2012. Downward revisions of 17.5 MMBoe include 8.9 MMBoe of deeper, Canyon reserves in southeast Project Pangea that we reclassified to probable undeveloped. Due to our horizontal Wolfcamp development project, including pad drilling, postponement of these deeper Canyon locations beyond five years from initial booking is necessary in order to integrate their development with shallower Wolfcamp target zones. Revisions in 2012 also include 3.3 MMBoe of performance revisions related to vertical Canyon wells in Project Pangea, 2.9 MMBoe of revisions resulting from technical evaluations and 2.4 MMBoe of revisions resulting from lower natural gas and NGL prices in 2012.

Year ended December 31, 2011

We produced 2.4 MMBoe during 2011, 99% of which is attributable to our assets in the Permian Basin. Extensions and discoveries of 25.5 MMBoe for 2011 include 24.2 MMBoe attributable to our Wolfcamp oil shale resource play in the Permian Basin. During 2011, we acquired approximately 10.5 MMBoe of proved reserves through the 38% Working Interest Acquisition. We recorded downward revisions of 7.5 MMBoe to the December 31, 2010, estimates of our proved reserves at year end 2011. Downward revisions of 7.5 MMBoe include 5.6 MMBoe of economic revisions in southeast Project Pangea in the Permian Basin and 2.2 MMBoe of proved undeveloped reserves in the East Texas Basin that, due to ongoing, low natural gas prices, we did not expect to develop by year-end 2013. Also included in the revisions were 0.3 MMBoe of positive revisions resulting from higher oil and NGL prices using the average 12-month price in 2011.

Year ended December 31, 2010

Our drilling and development activities in Project Pangea in the Permian Basin resulted in our classification of reserves as proved, which accounts for the additional quantities listed under extensions and discoveries. For the year ended December 31, 2010, we recorded a 10.1 MMBoe positive revision to our previous estimate, resulting from 9.2 MMBoe attributable to planned processing upgrades in southeast Project Pangea and 1.1 MMBoe attributable to an increase in commodity prices, partially offset by 0.2 MMBoe of negative performance revisions. On April 1, 2011, we began realizing NGL revenues from the natural gas production in southeast Project Pangea under a gas purchase and processing contract with DCP Midstream, LP. The commodity prices used to estimate our proved reserves at December 31, 2010, increased to \$4.38/MMBtu of gas, \$39.25/Bbl of NGLs and \$79.40/Bbl of oil from \$3.87/MMBtu of natural gas, \$27.20/Bbl of

[Table of Contents](#)

Approach Resources Inc. and Subsidiaries

Notes to consolidated financial statements—(continued)

NGLs and \$56.04/Bbl of oil at December 31, 2009. The negative revision of 0.1 MMBoe, primarily related to producing properties in our North Bald Prairie field in the East Texas Basin. Well performance data collected during 2010 for North Bald Prairie indicated that these assets underperformed our year-end 2010 decline estimates. Accordingly, we removed 0.9 Bcf (0.2 MMBoe) from proved reserves recorded for North Bald Prairie. We also removed 0.1 MMBoe in Project Pangea due to performance revisions.

Standardized measure of discounted future net cash flows relating to proved reserves

The standardized measure of discounted future net cash flows is computed by applying the 12-month unweighted average of the first-day-of-the-month pricing for oil and natural gas (with consideration of price changes only to the extent provided by contractual arrangements) to the estimated future production of proved oil and natural gas reserves less estimated future expenditures (based on year-end costs) to be incurred in developing and producing the proved reserves, discounted using a rate of 10 percent per year to reflect the estimated timing of the future cash flows. Future income taxes are calculated by comparing undiscounted future cash flows to the tax basis of oil and natural gas properties plus available carryforwards and credits and applying the current tax rates to the difference.

Discounted future cash flow estimates like those shown below are not intended to represent estimates of the fair value of oil and natural gas properties. Estimates of fair value would also consider probable and possible reserves, anticipated future oil and natural gas prices, interest rates, changes in development and production costs and risks associated with future production. Because of these and other considerations, any estimate of fair value is necessarily subjective and imprecise.

The following table provides the standardized measure of discounted future net cash flows at December 31, 2012, 2011 and 2010:

| | Years ended December 31, | | |
|--|--------------------------|--------------|--------------|
| | 2012 | 2011 | 2010 |
| Future cash flows | \$ 4,920,231 | \$ 3,772,633 | \$ 1,804,477 |
| Future production costs | (1,220,403) | (1,012,044) | (499,321) |
| Future development costs | (1,025,193) | (625,994) | (259,005) |
| Future income tax expense | (692,528) | (583,961) | (282,628) |
| Future net cash flows | 1,982,107 | 1,550,634 | 763,523 |
| 10% annual discount for estimated timing of cash flows | (1,487,887) | (1,136,253) | (559,291) |
| Standardized measure of discounted future net cash flows | \$ 494,220 | \$ 414,381 | \$ 204,232 |

Future cash flows as shown above were reported without consideration for the effects of commodity derivative transactions outstanding at each period end.

[Table of Contents](#)

Approach Resources Inc. and Subsidiaries

Notes to consolidated financial statements—(continued)

Changes in standardized measure of discounted future net cash flows

The changes in the standardized measure of discounted future net cash flows relating to proved oil and natural gas reserves are as follows (in thousands):

| | Years ended December 31, | | |
|--|--------------------------|------------|-----------|
| | 2012 | 2011 | 2010 |
| Balance, beginning of period | \$ 414,381 | \$ 204,232 | \$ 79,991 |
| Net change in sales and transfer prices and in production (lifting) costs related to future production | 147,421 | 334,104 | 120,520 |
| Changes in estimated future development costs | (486,435) | (395,037) | (65,718) |
| Sales and transfers of oil and gas produced during the period | (100,634) | (89,253) | (46,031) |
| Net change due to extensions, discoveries and improved recovery | 467,822 | 291,501 | 30,240 |
| Net change due to purchase of minerals in place | — | 119,780 | 15,696 |
| Net change due to revisions in quantity estimates | (210,296) | (84,988) | 80,564 |
| Previously estimated development costs incurred during the period | 285,039 | 182,522 | 40,265 |
| Accretion of discount | 60,162 | 32,793 | 17,166 |
| Other | (11,281) | (38,107) | 4,171 |
| Net change in income taxes | (71,959) | (143,166) | (72,632) |
| Standardized measure of discounted future net cash flows | \$ 494,220 | \$ 414,381 | \$204,232 |

11. Supplementary data

Selected quarterly financial data (unaudited), (dollars in thousands, except per-share amounts):

| | 2012 Quarters ended | | | |
|--|---------------------|--------------|-----------|-----------|
| | December 31 | September 30 | June 30 | March 31 |
| Net revenue | \$ 35,309 | \$ 33,038 | \$ 29,927 | \$ 30,618 |
| Net operating expenses | (36,777) | (31,340) | (26,095) | (23,879) |
| Interest expense, net | (926) | (1,544) | (1,380) | (887) |
| Loss on equity investment | (108) | — | — | — |
| Realized (loss) gain on commodity derivatives | (408) | 423 | 361 | (484) |
| Unrealized gain (loss) on commodity derivatives | 1,292 | (4,185) | 9,439 | (2,672) |
| (Loss) income before income tax (benefit) | (1,618) | (3,608) | 12,252 | 2,696 |
| Income tax (benefit) provision | (781) | (1,253) | 4,390 | 982 |
| Net (loss) income | \$ (837) | \$ (2,355) | \$ 7,862 | \$ 1,714 |
| Basic net (loss) income applicable to common stockholders per common share | \$ (0.02) | \$ (0.07) | \$ 0.23 | \$ 0.05 |
| Diluted net (loss) income applicable to common stockholders per common share | \$ (0.02) | \$ (0.07) | \$ 0.23 | \$ 0.05 |

[Table of Contents](#)

Approach Resources Inc. and Subsidiaries

Notes to consolidated financial statements—(continued)

| | 2011 Quarters ended | | | |
|--|---------------------|--------------|-----------|-----------|
| | December 31 | September 30 | June 30 | March 31 |
| Net revenue | \$ 31,123 | \$ 27,958 | \$ 29,123 | \$ 20,183 |
| Net operating expenses | (42,339) | (19,092) | (18,170) | (17,930) |
| Interest expense, net | (1,010) | (1,016) | (863) | (513) |
| Realized gain on commodity derivatives | 1,720 | 1,392 | 66 | 197 |
| Unrealized (loss) gain on commodity derivatives | (4,168) | 1,739 | 2,231 | (149) |
| (Loss) gain on sale of oil and gas properties | (243) | — | 3 | 488 |
| (Loss) income before income (benefit) tax | (14,917) | 10,981 | 12,390 | 2,276 |
| Income tax (benefit) provision | (5,632) | 3,908 | 4,400 | 812 |
| Net (loss) income | \$ (9,285) | \$ 7,073 | \$ 7,990 | \$ 1,464 |
| Basic net (loss) income applicable to common stockholders per common share | \$ (0.30) | \$ 0.25 | \$ 0.28 | \$ 0.05 |
| Diluted net (loss) income applicable to common stockholders per common share | \$ (0.30) | \$ 0.25 | \$ 0.28 | \$ 0.05 |

| | 2010 Quarters ended | | | |
|---|---------------------|--------------|-----------|-----------|
| | December 31 | September 30 | June 30 | March 31 |
| Net revenue | \$ 16,290 | \$ 14,916 | \$ 13,155 | \$ 13,220 |
| Net operating expenses | (15,493) | (12,350) | (10,191) | (12,368) |
| Interest expense, net | (558) | (615) | (550) | (466) |
| Realized gain on commodity derivatives | 2,171 | 1,615 | 1,768 | 230 |
| Unrealized (loss) gain on commodity derivatives | (2,094) | (312) | (1,901) | 5,095 |
| Income before income taxes | 316 | 3,254 | 2,281 | 5,711 |
| Income tax provision | 55 | 1,167 | 730 | 2,148 |
| Net income | \$ 261 | \$ 2,087 | \$ 1,551 | \$ 3,563 |
| Basic net income applicable to common stockholders per common share | \$ 0.01 | \$ 0.10 | \$ 0.07 | \$ 0.17 |
| Diluted net income applicable to common stockholders per common share | \$ 0.01 | \$ 0.10 | \$ 0.07 | \$ 0.17 |

F-33

[Table of Contents](#)**Approach Resources Inc. and Subsidiaries****Unaudited consolidated balance sheets**

(In thousands, except shares and per-share amounts)

| | March 31, 2013 | December 31, 2012 |
|--|-------------------|----------------------|
| ASSETS | | |
| CURRENT ASSETS: | | |
| Cash and cash equivalents | \$ 594 | \$ 767 |
| Accounts receivable: | | |
| Joint interest owners | 229 | 215 |
| Oil, NGL and gas sales | 10,012 | 12,575 |
| Unrealized gain on commodity derivatives | — | 1,552 |
| Prepaid expenses and other current assets | 986 | 547 |
| Deferred income taxes – current | 791 | — |
| Total current assets | 12,612 | 15,656 |
| PROPERTIES AND EQUIPMENT: | | |
| Oil and gas properties, at cost, using the successful efforts method of accounting | 1,094,709 | 1,025,440 |
| Furniture, fixtures and equipment | 2,359 | 2,108 |
| | 1,097,068 | 1,027,548 |
| Less accumulated depletion, depreciation and amortization | (216,060) | (199,081) |
| Net properties and equipment | 881,008 | 828,467 |
| Equity method investment | 16,056 | 9,892 |
| Unrealized gain on commodity derivatives | 630 | 881 |
| Other assets | 776 | 843 |
| Total assets | \$ 911,082 | \$ 855,739 |
| LIABILITIES AND STOCKHOLDERS' EQUITY | | |
| CURRENT LIABILITIES: | | |
| Accounts payable | \$ 31,039 | \$ 24,916 |
| Oil, NGL and gas sales payable | 4,837 | 4,960 |
| Deferred income taxes – current | — | 531 |
| Accrued liabilities | 28,140 | 29,840 |
| Unrealized loss on commodity derivatives | 2,273 | — |
| Total current liabilities | 66,289 | 60,247 |
| NON-CURRENT LIABILITIES: | | |
| Long-term debt | 152,250 | 106,000 |
| Unrealized loss on commodity derivatives | 23 | — |
| Deferred income taxes | 49,727 | 48,593 |
| Asset retirement obligations | 7,582 | 7,431 |
| Total liabilities | 275,871 | 222,271 |
| COMMITMENTS AND CONTINGENCIES | | |
| STOCKHOLDERS' EQUITY : | | |
| Preferred stock, \$0.01 par value, 10,000,000 shares authorized none outstanding | — | — |
| Common stock, \$0.01 par value, 90,000,000 shares authorized, 39,022,510 and 38,829,368 issued and outstanding, respectively | 390 | 388 |
| Additional paid-in capital | 562,556 | 560,468 |
| Retained earnings | 72,265 | 72,612 |
| Total stockholders' equity | 635,211 | 633,468 |
| Total liabilities and stockholders' equity | \$ 911,082 | \$ 855,739 |

See accompanying notes to these consolidated financial statements.

[Table of Contents](#)

Approach Resources Inc. and Subsidiaries

Unaudited consolidated statements of operations

(In thousands, except shares and per-share amounts)

| | Three months ended | |
|--|--------------------|-------------------|
| | 2013 | March 31, 2012 |
| REVENUES: | | |
| Oil, NGL and gas sales | \$ 36,269 | \$ 30,618 |
| EXPENSES: | | |
| Lease operating | 5,383 | 3,580 |
| Production and ad valorem taxes | 2,556 | 2,218 |
| Exploration | 260 | 1,287 |
| General and administrative | 6,410 | 5,764 |
| Depletion, depreciation and amortization | 17,056 | 11,030 |
| Total expenses | 31,665 | 23,879 |
| OPERATING INCOME | 4,604 | 6,739 |
| OTHER: | | |
| Interest expense, net | (1,229) | (887) |
| Equity in losses of investee | (116) | — |
| Realized gain (loss) on commodity derivatives | 307 | (484) |
| Unrealized loss on commodity derivatives | (4,100) | (2,672) |
| (LOSS) INCOME BEFORE INCOME TAX (BENEFIT) PROVISION | (534) | 2,696 |
| INCOME TAX (BENEFIT) PROVISION | (187) | 982 |
| NET (LOSS) INCOME | \$ (347) | \$ 1,714 |
| (LOSS) EARNINGS PER SHARE: | | |
| Basic | \$ (0.01) | \$ 0.05 |
| Diluted | \$ (0.01) | \$ 0.05 |
| WEIGHTED AVERAGE SHARES OUTSTANDING: | | |
| Basic | 38,924,163 | 33,249,769 |
| Diluted | 38,924,163 | 33,437,682 |

See accompanying notes to these consolidated financial statements.

[Table of Contents](#)

Approach Resources Inc. and Subsidiaries
Unaudited consolidated statements of cash flows
(In thousands)

| | Three months ended | |
|---|--------------------|-------------------|
| | 2013 | March 31, 2012 |
| OPERATING ACTIVITIES: | | |
| Net (loss) income | \$ (347) | \$ 1,714 |
| Adjustments to reconcile net income to cash provided by operating activities: | | |
| Depletion, depreciation and amortization | 17,056 | 11,030 |
| Unrealized loss on commodity derivatives | 4,100 | 2,672 |
| Exploration expense | 260 | 1,287 |
| Share-based compensation expense | 2,257 | 2,232 |
| Deferred income (benefit) tax | (187) | 982 |
| Equity in losses of investee | 116 | — |
| Changes in operating assets and liabilities: | | |
| Accounts receivable | 2,548 | (599) |
| Prepaid expenses and other assets | (297) | (296) |
| Accounts payable | 5,955 | (1,855) |
| Oil, NGL and gas sales payable | (123) | (397) |
| Accrued liabilities | (1,700) | 18,721 |
| Cash provided by operating activities | 29,638 | 35,491 |
| INVESTING ACTIVITIES: | | |
| Additions to oil and gas properties | (69,455) | (77,608) |
| Contribution to equity method investment | (6,280) | — |
| Additions to furniture, fixtures and equipment, net | (251) | (57) |
| Cash used in investing activities | (75,986) | (77,665) |
| FINANCING ACTIVITIES: | | |
| Borrowings under credit facility, net of debt issuance costs | 79,975 | 60,650 |
| Repayment of amounts outstanding under credit facility | (33,800) | (19,100) |
| Proceeds from issuance of common stock upon exercise of stock options | — | 798 |
| Cash provided by financing activities | 46,175 | 42,348 |
| CHANGE IN CASH AND CASH EQUIVALENTS | (173) | 174 |
| CASH AND CASH EQUIVALENTS , beginning of period | \$ 767 | \$ 301 |
| CASH AND CASH EQUIVALENTS , end of period | \$ 594 | \$ 475 |
| SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION: | | |
| Cash paid for interest | \$ 806 | \$ 643 |

See accompanying notes to these consolidated financial statements.

[Table of Contents](#)

Approach Resources Inc. and Subsidiaries

Notes to consolidated financial statements (unaudited)

March 31, 2013

1. Summary of significant accounting policies

Organization and nature of operations

Approach Resources Inc. ("Approach," the "Company," "we," "us" or "our") is an independent energy company engaged in the exploration, development, production and acquisition of oil and gas properties. We focus on finding and developing oil and gas reserves in oil shale and tight sands. Our properties are primarily located in the Permian Basin in West Texas.

During 2012, we entered into a joint venture to build an oil pipeline in Crockett and Regan Counties, Texas, which will be used to transport our oil to market. The joint venture will purchase our dedicated crude oil production from certain of our acreage in Crockett County for ten years, subject to certain terms and conditions. In October 2012, we made our initial contribution of \$10 million to the joint venture for pipeline and facilities construction. During the three months ended March 31, 2013, we made an additional contribution of \$6.3 million. Our contributions are recorded at cost and are included in noncurrent assets on our consolidated balance sheets.

Consolidation, basis of presentation and significant estimates

The interim consolidated financial statements of the Company are unaudited and contain all adjustments (consisting primarily of normal recurring accruals) necessary for a fair statement of the results for the interim periods presented. Results for interim periods are not necessarily indicative of results to be expected for a full year due in part to the volatility in prices for oil and gas, future commodity prices for commodity derivative contracts, global economic and financial market conditions, interest rates, access to sources of liquidity, estimates of reserves, drilling risks, geological risks, transportation restrictions, the timing of acquisitions, product supply and demand, market competition and interruptions of production. You should read these consolidated interim financial statements in conjunction with the audited consolidated financial statements and notes thereto included in our Annual Report on Form 10-K for the year ended December 31, 2012, filed with the Securities and Exchange Commission on February 28, 2013.

The accompanying interim consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America and include the accounts of the Company and its wholly-owned subsidiaries. Intercompany accounts and transactions are eliminated. In preparing the accompanying financial statements, we have made certain estimates and assumptions that affect reported amounts in the financial statements and disclosures of contingencies. Actual results may differ from those estimates. Significant assumptions are required in the valuation of proved oil and gas reserves, which affect the amount at which oil and gas properties are recorded. Significant assumptions are also required in our estimation of accrued liabilities, commodity derivatives, income taxes, share-based compensation and asset retirement obligations. It is at least reasonably possible these estimates could be revised in the near term, and these revisions could be material. Certain prior year amounts have been reclassified to conform to current year presentation. These classifications have no impact on the net income reported.

[Table of Contents](#)

Approach Resources Inc. and Subsidiaries

Notes to consolidated financial statements (unaudited)

March 31, 2013

2. Earnings per common share

We report basic earnings per common share, which excludes the effect of potentially dilutive securities, and diluted earnings per common share, which includes the effect of all potentially dilutive securities unless their impact is antidilutive. The following table provides a reconciliation of the numerators and denominators of our basic and diluted earnings per share (dollars in thousands, except per-share amounts).

| | Three months ended | |
|--|--------------------|-------------------|
| | 2013 | March 31, 2012 |
| Income (numerator): | | |
| Net (loss) income – basic | \$ (347) | \$ 1,714 |
| Weighted average shares (denominator): | | |
| Weighted average shares – basic | 38,924,163 | 33,249,769 |
| Dilution effect of share-based compensation, treasury method | —(1) | 187,913 |
| Weighted average shares – diluted | 38,924,163 | 33,437,682 |
| Net (loss) income per share: | | |
| Basic | \$ (0.01) | \$ 0.05 |
| Diluted | \$ (0.01) | \$ 0.05 |

(1) Approximately 43,000 options to purchase our common stock were excluded from this calculation because they were antidilutive for the three months ended March 31, 2013.

3. Revolving credit facility

At March 31, 2013, we had a \$300 million revolving credit facility with a borrowing base set at \$280 million. The borrowing base is redetermined semi-annually on or before each April 1 and October 1 based on our oil, NGL and gas reserves. We or the lenders can each request one additional borrowing base redetermination each calendar year.

At March 31, 2013, the maturity date under our revolving credit facility was July 31, 2014. Borrowings bear interest based on the agent bank's prime rate plus an applicable margin ranging from 0.75% to 1.75%, or the sum of the Eurodollar rate plus an applicable margin ranging from 1.75% to 2.75%. Margins vary based on the borrowings outstanding compared to the borrowing base. In addition, we pay an annual commitment of 0.50% of unused borrowings available under our revolving credit facility.

We had outstanding borrowings of \$152.3 million and \$106 million under our revolving credit facility at March 31, 2013, and December 31, 2012, respectively. The weighted average interest rate applicable to our revolving credit facility at March 31, 2013, and December 31, 2012, was 2.7%. We also had outstanding unused letters of credit under our revolving credit facility totaling \$325,000 at March 31, 2013, which reduce amounts available for borrowing under our revolving credit facility.

[Table of Contents](#)

Approach Resources Inc. and Subsidiaries

Notes to consolidated financial statements (unaudited)

March 31, 2013

On May 1, 2013, we entered into a fifteenth amendment (the "Fifteenth Amendment") to our credit agreement, which (i) increased the borrowing base under the credit agreement to \$315 million from \$280 million, (ii) increased the lenders' aggregate maximum commitment to \$500 million from \$300 million, and (iii) extended the maturity date of the agreement by two years, to July 31, 2016. Loans under our revolving credit facility are secured by first priority liens on substantially all of our West Texas assets and are guaranteed by certain of our subsidiaries.

Covenants

Our credit agreement contains two principal financial covenants:

- a consolidated modified current ratio covenant that requires us to maintain a ratio of not less than 1.0 to 1.0 at all times. The consolidated modified current ratio is calculated by dividing Consolidated Current Assets (as defined in the credit agreement) by Consolidated Current Liabilities (as defined in the credit agreement). As defined more specifically in the credit agreement, the consolidated modified current ratio is calculated as current assets less current unrealized gains on commodity derivatives plus the available borrowing base at the respective balance sheet date, divided by current liabilities less current unrealized losses on commodity derivatives at the respective balance sheet date.
- a consolidated funded debt-to-consolidated EBITDAX ratio covenant that requires us to maintain a ratio of not more than 4.0 to 1.0 at the end of each fiscal quarter. The consolidated funded debt to consolidated EBITDAX ratio is calculated by dividing Consolidated Funded Debt (as defined in the credit agreement) by Consolidated EBITDAX (as defined in the credit agreement). As defined more specifically in the credit agreement, consolidated EBITDAX is calculated as net income (loss), plus (1) exploration expense, (2) depletion, depreciation and amortization expense, (3) share-based compensation expense, (4) unrealized loss on commodity derivatives, (5) interest expense, (6) income and franchise taxes and (7) certain other noncash expenses, less (1) gains or losses from sales or dispositions of assets, (2) unrealized gain on commodity derivatives and (3) extraordinary or nonrecurring gains. For purposes of calculating this ratio, consolidated EBITDAX for a fiscal quarter is annualized pursuant to the credit agreement.

Our credit agreement also restricts cash dividends and other restricted payments, transactions with affiliates, incurrence of other debt, consolidations and mergers, the level of operating leases, asset sales, investments in other entities and liens on properties.

In addition, our credit agreement contains customary events of default that would permit our lenders to accelerate the debt under our credit agreement if not cured within applicable grace periods, including, among others, failure to make payments of principal or interest when due, materially incorrect representations and warranties, failure to make mandatory prepayments in the event of borrowing base deficiencies, breach of covenants, defaults upon other obligations in excess of \$500,000, events of bankruptcy, the occurrence of one or more unstayed judgments in excess of \$500,000 not covered by an acceptable policy of insurance, failure to pay any obligation in excess of \$500,000 owed under any derivatives transaction or in any amount if the obligation

[Table of Contents](#)

Approach Resources Inc. and Subsidiaries

Notes to consolidated financial statements (unaudited)

March 31, 2013

under the derivatives transaction is secured by collateral under the credit agreement, any event of default by the Company occurs under any agreement entered into in connection with a derivatives transaction, liens securing the loans under the credit agreement cease to be in place, a Change in Control (as defined in the credit agreement) of the Company occurs, and dissolution of the Company.

At March 31, 2013, we were in compliance with all of our covenants, and there were no existing defaults or events of defaults under the credit agreement.

4. Commitments and contingencies

Our contractual obligations include long-term debt, daywork drilling contracts, operating lease obligations, asset retirement obligations and employment agreements with our executive officers. Since December 31, 2012, there have been no material changes to our contractual obligations, other than an increase in long-term debt, as discussed previously under the Revolving Credit Facility note above.

We are involved in various legal and regulatory proceedings arising in the normal course of business. While we cannot predict the outcome of these proceedings with certainty, we do not believe that an adverse result in any pending legal or regulatory proceeding, individually or in the aggregate, would be material to our consolidated financial condition or cash flows.

5. Income taxes

The effective income tax rate for the three months ended March 31, 2013 and 2012, was 35.1% and 36.4%, respectively. Total income tax expense for the three months ended March 31, 2013 and 2012, differed from amounts computed by applying the U.S. federal statutory tax rates to pre-tax income due primarily to state taxes and the impact of permanent differences between book and taxable income.

6. Derivatives

At March 31, 2013, we had the following commodity derivatives positions outstanding:

| Commodity and period | Contract type | Volume transacted | Contract price |
|---|---------------|---------------------|-----------------------------|
| Crude Oil | | | |
| 2013 | Collar | 650 Bbls/d | \$ 90.00/Bbl – \$105.80/Bbl |
| 2013 | Collar | 450 Bbls/d | \$ 90.00/Bbl – \$101.45/Bbl |
| 2013(1) | Collar | 1,200 Bbls/d | \$ 90.35/Bbl – \$100.35/Bbl |
| 2014 | Collar | 550 Bbls/d | \$ 90.00/Bbl – \$105.50/Bbl |
| Crude Oil Basis Differential (Midland/Cushing) | | | |
| 2013(2) | Swap | 2,300 Bbls/d | \$1.10/Bbl |
| Natural Gas | | | |
| 2013 | Swap | 200,000 MMBtu/month | \$3.54/MMBtu |
| 2013 | Swap | 190,000 MMBtu/month | \$3.80/MMBtu |
| 2014 | Swap | 360,000 MMBtu/month | \$4.18/MMBtu |

(1) February 2013 – December 2013

(2) March 2013 – December 2013

[Table of Contents](#)

Approach Resources Inc. and Subsidiaries

Notes to consolidated financial statements (unaudited)

March 31, 2013

Subsequent to March 31, 2013, we entered into a natural gas collar covering 100,000 MMBtu per month for May 2013 through December 2013 at a floor of \$4.00/MMBtu and a ceiling of \$4.36/MMBtu. We also entered into an oil collar covering 950 Bbls per day for 2014 at a floor of \$85.05/Bbl and a ceiling of \$95.05/Bbl.

The following table summarizes the fair value of our open commodity derivatives as of March 31, 2013, and December 31, 2012 (in thousands).

| | Balance sheet location | Asset/liability derivatives | |
|--|---|-----------------------------|-------------------|
| | | Fair value | |
| | | March 31, 2013 | December 31, 2012 |
| Derivatives not designated as hedging instruments | | | |
| Commodity derivatives | Unrealized (loss) gain on commodity derivatives | \$ (1,666) | \$ 2,433 |

The following table summarizes the change in the fair value of our commodity derivatives (in thousands).

| | Income statement location | Three months ended March 31, | |
|--|---|------------------------------|-----------|
| | | 2013 | 2012 |
| Derivatives not designated as hedging instruments | | | |
| Commodity derivatives | Unrealized loss on commodity derivatives | \$(4,100) | \$(2,672) |
| | Realized gain (loss) on commodity derivatives | 307 | (484) |
| | | |) |
| | | \$(3,793) | \$(3,156) |

Unrealized gains and losses, at fair value, are included on our consolidated balance sheets as current or non-current assets or liabilities based on the anticipated timing of cash settlements under the related contracts. Changes in the fair value of our commodity derivative contracts are recorded in earnings as they occur and included in other income (expense) on our consolidated statements of operations. We estimate the fair values of swap contracts based on the present value of the difference in exchange-quoted forward price curves and contractual settlement prices multiplied by notional quantities. We internally valued the option contracts using industry-standard option pricing models and observable market inputs. We use our internal valuations to determine the fair values of the contracts that are reflected on our consolidated balance sheets. Realized gains and losses are also included in other income (expense) on our consolidated statements of operations.

We are exposed to credit losses in the event of nonperformance by the counterparties on our commodity derivatives positions and have considered the exposure in our internal valuations. However, we do not anticipate nonperformance by the counterparties over the term of the commodity derivatives positions.

[Table of Contents](#)

Approach Resources Inc. and Subsidiaries

Notes to consolidated financial statements (unaudited)

March 31, 2013

To estimate the fair value of our commodity derivatives positions, we use market data or assumptions that market participants would use in pricing the asset or liability, including assumptions about risk and the risks inherent in the inputs to the valuation technique. These inputs can be readily observable, market corroborated or generally unobservable. We primarily apply the market approach for recurring fair value measurements and attempt to use the best available information. We determine the fair value based upon the hierarchy that prioritizes the inputs used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurement) and lowest priority to unobservable inputs (Level 3 measurement). The three levels of fair value hierarchy are as follows:

- Level 1 — Quoted prices are available in active markets for identical assets or liabilities as of the reporting date. At March 31, 2013, we had no Level 1 measurements.
- Level 2 — Pricing inputs are other than quoted prices in active markets included in Level 1, which are either directly or indirectly observable as of the reporting date. Level 2 includes those financial instruments that are valued using models or other valuation methodologies. These models are primarily industry-standard models that consider various assumptions, including quoted forward prices for commodities, time value, volatility factors and current market and contractual prices for the underlying instruments, as well as other relevant economic measures. Our derivatives, which consist primarily of commodity swaps and collars, are valued using commodity market data which is derived by combining raw inputs and quantitative models and processes to generate forward curves. Where observable inputs are available, directly or indirectly, for substantially the full term of the asset or liability, the instrument is categorized in Level 2. At March 31, 2013, all of our commodity derivatives were valued using Level 2 measurements.
- Level 3 — Pricing inputs include significant inputs that are generally less observable from objective sources. These inputs may be used with internally developed methodologies that result in management's best estimate of fair value. At March 31, 2013, our Level 3 measurements were limited to our asset retirement obligation.

7. Share-based compensation

In February 2013, we awarded an aggregate of 183,673 restricted shares to our executive officers. Approximately 25% of the total award will be made up of restricted shares subject to three-year total stockholder return ("TSR") performance conditions, assuming target TSR is achieved. If maximum TSR is achieved, then approximately 33% of the total award will be made up of TSR restricted shares. The remaining restricted shares are performance-based awards with service-based vesting restrictions. The number of shares awarded assumes that the Company will achieve maximum TSR performance conditions. The aggregate fair market value of these shares on the grant date was \$4.5 million, to be expensed over a remaining service period of approximately four years, subject to three-year TSR and other performance conditions.

[Table of Contents](#)

PROSPECTUS

**APPROACH RESOURCES INC.**

Common Stock
Preferred Stock
Depository Shares
Warrants
Rights
Debt Securities

Guarantee of Debt Securities of Approach Resources Inc. by:

Approach Resources I, LP
Approach Oil & Gas Inc.
Approach Operating, LLC
Approach Delaware, LLC
Approach Services, LLC

We may offer and sell the securities listed above from time to time in one or more transactions. Any non-convertible debt securities we issue under this prospectus may be guaranteed by one or more of our subsidiaries.

The securities:

- will be offered at prices and on terms to be set forth in an accompanying prospectus supplement;
- may be offered separately or together, or in separate series;
- may be convertible into or exchangeable for other securities;
- may be guaranteed by certain of our domestic subsidiaries; and
- may be listed on a national securities exchange, if specified in an accompanying prospectus supplement

We will provide the specific terms of the securities in supplements to this prospectus. This prospectus may be used to offer and sell securities only if it is accompanied by a prospectus supplement. The prospectus supplement will contain more specific information about the offering and the terms of the securities being offered, including any guarantees by our domestic subsidiaries. A prospectus supplement may also add, update or change information contained in this prospectus. This prospectus may not be used to offer or sell securities without a prospectus supplement describing the method and terms of the offering.

We may sell these securities directly or through agents, underwriters or dealers or through a combination of these methods. See "Plan of Distribution." The prospectus supplement will list any agents, underwriters or dealers that may be involved and the compensation they will receive. The prospectus supplement will also show you the net proceeds that we expect to receive from selling the securities being offered. You should carefully read this prospectus and any accompanying prospectus supplement, together with the documents we incorporate by reference, before you invest in any of our securities.

Investing in any of our securities involves risk. Please read carefully the information included and incorporated by reference in this prospectus and in any applicable prospectus supplement for a discussion of the factors you should consider before deciding to purchase our securities. See "[Risk Factors](#)" beginning on page 5 of this prospectus.

Our common stock is traded on the NASDAQ Global Select Market under the symbol "AREX."

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

This prospectus is dated May 18, 2011.

[Table of Contents](#)**TABLE OF CONTENTS**

| | <u>Page</u> |
|---|-------------|
| ABOUT THIS PROSPECTUS | 1 |
| APPROACH RESOURCES INC | 1 |
| THE SUBSIDIARY GUARANTORS | 1 |
| WHERE YOU CAN FIND MORE INFORMATION | 2 |
| CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS | 3 |
| RISK FACTORS | 5 |
| RATIOS OF EARNINGS TO FIXED CHARGES | 5 |
| USE OF PROCEEDS | 5 |
| DESCRIPTION OF CAPITAL STOCK | 6 |
| DESCRIPTION OF DEPOSITARY SHARES | 11 |
| DESCRIPTION OF WARRANTS | 14 |
| DESCRIPTION OF RIGHTS | 15 |
| DESCRIPTION OF DEBT SECURITIES | 16 |
| PLAN OF DISTRIBUTION | 29 |
| LEGAL MATTERS | 31 |
| EXPERTS | 31 |

You should rely only on the information contained in this prospectus, any prospectus supplement and the documents we have incorporated by reference. We have not authorized anyone to provide you with different information. We are not making an offer of these securities in any state where the offer is not permitted. You should not assume that the information contained in this prospectus or any prospectus supplement, as well as information we previously filed with the Securities and Exchange Commission that is incorporated by reference herein, is accurate as of any date other than its respective date.

[Table of Contents](#)**ABOUT THIS PROSPECTUS**

This prospectus is a part of a registration statement that we filed with the Securities and Exchange Commission, which we refer to as the SEC, utilizing a “shelf” registration process. Under this shelf registration process, we may sell any combination of the securities described in this prospectus in one or more offerings. This prospectus provides you with a general description of the securities we may offer. Each time we sell securities under this shelf registration, we will provide a prospectus supplement that will contain specific information about the terms of that offering and the securities offered by us in that offering. The prospectus supplement may also add, update or change information contained in this prospectus. Any statement that we make in this prospectus will be modified or superseded by any inconsistent statement made by us in a prospectus supplement. You should read both this prospectus and any prospectus supplement together with additional information described under the heading “Where You Can Find More Information” before making an investment in our securities.

You should not assume that the information in this prospectus, any accompanying prospectus supplement or any document incorporated herein by reference is accurate as of any date other than the date of such document.

In this prospectus, the “Company,” “we,” “us,” “our” or “ours” refer to Approach Resources Inc. and its subsidiaries, unless we state otherwise or the context indicates otherwise.

APPROACH RESOURCES INC.

Approach Resources Inc. is an independent energy company engaged in the exploration, development, production and acquisition of oil and gas properties. Our core properties are located in the Permian Basin in West Texas (Clearfork, Wolfcamp Shale, Canyon Sands, Strawn and Ellenburger target formations). We also own interests in the East Texas Basin (Cotton Valley Sands and Cotton Valley Lime target formations) and in the Chama Basin in Northern New Mexico (Mancos Shale target formation). The Company was incorporated in Delaware in 2002. Our principal executive offices are located at One Ridgmar Centre, 6500 West Freeway, Suite 800, Fort Worth, Texas 76116, and our telephone number is (817) 989-9000.

THE SUBSIDIARY GUARANTORS

Certain of our domestic subsidiaries, which we refer to as the Subsidiary Guarantors in this prospectus, may fully and unconditionally guarantee our payment obligations under any series of debt securities offered by this prospectus. Financial information concerning our Subsidiary Guarantors and any non-guarantor subsidiaries will be included in our consolidated financial statements filed as part of our periodic reports filed pursuant to the Securities Exchange Act of 1934, as amended, which we refer to as the Exchange Act, to the extent required by the rules and regulations of the SEC.

Additional information concerning our subsidiaries and us is included in reports and other documents incorporated by reference in this prospectus. See “Where You Can Find More Information.”

[Table of Contents](#)**WHERE YOU CAN FIND MORE INFORMATION**

We file annual, quarterly and current reports and other information with the SEC (File No. 001-33801) pursuant to the Exchange Act. You may read and copy any documents that are filed at the SEC's public reference room at 100 F Street, N.E., Washington, D.C. 20549. You may also obtain copies of these documents at prescribed rates from the public reference section of the SEC at its Washington address. Please call the SEC at 1-800-SEC-0330 for further information.

Our filings are also available to the public through the SEC's website at <http://www.sec.gov>.

The SEC allows us to "incorporate by reference" information that we file with it, which means that we can disclose important information to you by referring you to documents previously filed with the SEC. The information incorporated by reference is an important part of this prospectus, and the information that we later file with the SEC will automatically update and supersede this information. The following documents we have filed with the SEC pursuant to the Exchange Act are incorporated herein by reference:

- our Annual Report on Form 10-K for the year ended December 31, 2010;
- our Quarterly Report on Form 10-Q for the quarter ended March 31, 2011;
- our Current Reports on Form 8-K filed on January 6, 2011, January 14, 2011, January 28, 2011, March 1, 2011 (as such Current Report on Form 8-K was amended by the Form 8-K/A with the SEC on April 21, 2011), April 8, 2011 and May 4, 2011; and
- the description of our common stock contained in our registration statement on Form 8-A12B filed on November 5, 2007, including any amendment to that form that we may file in the future for the purpose of updating the description of our common stock.

These reports contain important information about us, our financial condition and our results of operations.

All future documents filed pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act (excluding any information furnished pursuant to Item 2.02 or Item 7.01 on any Current Report on Form 8-K) before the termination of each offering under this prospectus shall be deemed to be incorporated in this prospectus by reference and to be a part hereof from the date of filing of such documents. Any statement contained herein, or in a document incorporated or deemed to be incorporated by reference herein, shall be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained herein or in any subsequently filed document that also is or is deemed to be incorporated by reference herein, modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

You may request a copy of these filings at no cost by writing or telephoning us at the following address or telephone number:

Approach Resources Inc.
One Ridgmar Centre
6500 West Freeway, Suite 800
Fort Worth, Texas 76116
Attention: Executive Vice President and General Counsel
(817) 989-9000

We also maintain a website at <http://www.approachresources.com>. The information on our website is not part of this prospectus.

[Table of Contents](#)**CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS**

Various statements contained in this prospectus, any prospectus supplement and in the documents incorporated herein by reference, including those that express a belief, expectation or intention, as well as those that are not statements of historical fact, are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, which we refer to as the Securities Act, and Section 21E of the Exchange Act. The forward-looking statements may include projections and estimates concerning the timing and success of specific projects, typical well economics and our future reserves, production, revenues, costs, income, capital spending, 3-D seismic operations, interpretation and results and obtaining permits and regulatory approvals. When we use the words “will,” “believe,” “intend,” “expect,” “may,” “should,” “anticipate,” “could,” “estimate,” “plan,” “predict,” “project,” “potential” or their negatives, other similar expressions or the statements that include those words, they are intended to identify a forward-looking statement, although not all forward-looking statements contain such identifying words.

These forward-looking statements are largely based on our expectations, which reflect estimates and assumptions made by our management. These estimates and assumptions reflect our best judgment based on currently known market conditions and other factors. Although we believe such estimates and assumptions to be reasonable, they are inherently uncertain and involve a number of risks and uncertainties that are beyond our control. In addition, management’s assumptions about future events may prove to be inaccurate. We caution all readers that the forward-looking statements contained in this prospectus are not guarantees of future performance, and we cannot assure any reader that such statements will be realized or the forward-looking events and circumstances will occur. Actual results may differ materially from those anticipated or implied in the forward-looking statements due to the factors detailed below and discussed in our Annual Report on Form 10-K for the year ended December 31, 2010, and our subsequent SEC filings. All forward-looking statements contained in this prospectus speak only as of the date of this prospectus, and all forward-looking statements incorporated by reference into this prospectus speak only as of the dates such statements were issued. We expressly disclaim all responsibility to publicly update or revise any forward-looking statements as a result of new information, future events or otherwise. These cautionary statements qualify all forward-looking statements attributable to us, or persons acting on our behalf. The risks, contingencies and uncertainties relate to, among other matters, the following:

- our business strategy, including our ability to recover oil and gas in place associated with our Wofford oil resource play in the Permian Basin;
- estimated quantities of oil, natural gas liquids, which we refer to as NGLs, and gas reserves;
- uncertainty of commodity prices in oil, gas and NGLs;
- overall United States and global economic and financial market conditions;
- domestic and foreign demand and supply for oil, gas, NGLs and the products derived from such hydrocarbons;
- disruption of credit and capital markets;
- our financial position;
- our cash flow and liquidity;
- replacing our oil and natural gas reserves;
- our inability to retain and attract key personnel;
- uncertainty regarding our future operating results;
- uncertainties in exploring for and producing oil and gas;

[Table of Contents](#)

- high costs, shortages, delivery delays or unavailability of drilling and completion, equipment, materials, labor or other services;
- disruptions to, capacity constraints in or other limitations on the pipeline systems that deliver our gas and NGLs and other processing and transportation considerations;
- our inability to obtain additional financing necessary to fund our operations and capital expenditures and to meet our other obligations;
- competition in the oil and gas industry;
- marketing of oil, gas and NGLs;
- interpretation of 3-D seismic data;
- development of our current asset base or property acquisitions;
- the effects of government regulation and permitting and other legal requirements;
- plans, objectives, expectations and intentions contained in this prospectus, any prospectus supplement and the documents we incorporate herein by reference that are not historical; and
- the other risks described in this prospectus, any prospectus supplement and the documents we incorporate herein by reference.

[Table of Contents](#)

RISK FACTORS

You should carefully consider the risk factors set forth under the heading “Risk Factors” in our Annual Report on Form 10-K for the fiscal year ended December 31, 2010, as well as in any of our filings with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act incorporated herein by reference, and those risk factors that may be included in any applicable prospectus supplement, together with all of the other information included in this prospectus, any prospectus supplement and the documents we incorporate by reference, before investing in our securities. If any of the risks discussed in the foregoing documents were to occur, our business, financial condition, results of operations and cash flows could be materially adversely affected.

RATIOS OF EARNINGS TO FIXED CHARGES

The following table contains our consolidated ratio of earnings to fixed charges for the periods indicated. You should read these ratios of earnings to fixed charges in connection with our consolidated financial statements, including the notes to those statements, incorporated by reference into this prospectus.

| | Three Months Ended | Years Ended December 31, | | | | |
|--|-----------------------|--------------------------|-------|--------|-------|-------|
| | March 31, 2011 | 2010 | 2009 | 2008 | 2007 | 2006 |
| Ratio of (loss) earnings to fixed charges(1) | 5.35x | 6.21x | — (2) | 27.89x | 1.47x | 9.73x |

- (1) The ratio has been computed by dividing (loss) earnings by fixed charges. For purposes of computing the ratio, (i) (loss) earnings consist of (loss) income before income taxes, and (ii) fixed charges consist of interest expense and a portion of rentals representative of an implicit interest factor for such rentals.
- (2) Due to our net loss for the year ended December 31, 2009, the coverage ratio for this period was less than 1:1. To achieve a coverage ratio of 1:1, we would have needed additional earnings of approximately \$4.2 million for the year ended December 31, 2009.

We did not have any preferred stock outstanding and there were no preferred stock dividends paid or accrued during the periods presented above.

USE OF PROCEEDS

Except as may be stated in the applicable prospectus supplement, we intend to use the net proceeds from any sales of securities by us under this prospectus and any applicable prospectus supplement for general corporate purposes. These purposes may include repayment or refinancing of borrowings, working capital, capital expenditures, investments and acquisitions. Pending any specific application, we may initially invest funds in short-term marketable securities.

[Table of Contents](#)

DESCRIPTION OF CAPITAL STOCK

The following description is based on relevant provisions of the Delaware General Corporation Law, which we refer to as the DGCL, our restated certificate of incorporation, which we refer to as our certificate of incorporation, and our amended and restated bylaws, which we refer to as our bylaws. This summary does not purport to be complete and is qualified in its entirety by reference to the provisions of DGCL and to our certificate of incorporation and bylaws.

Our authorized capital stock consists of 90,000,000 shares of common stock, \$0.01 par value per share, and 10,000,000 shares of preferred stock, \$0.01 par value per share. Under the DGCL, our stockholders shall not be personally liable for our debts or obligations except as they may be liable by reason of their own conduct or acts.

Common Stock

As of May 11, 2011, we had a total of 28,462,505 shares of common stock issued and outstanding, including 874,536 shares of restricted stock. The shares of restricted stock have voting rights, rights to receive dividends and are subject to certain forfeiture restrictions. Additionally, options to purchase 302,775 shares of common stock are currently outstanding and have been granted to certain members of our management and other employees. We have reserved 10% of our outstanding shares of common stock for grant of awards under our 2007 Stock Incentive Plan (which are adjusted each year to remain at 10% of the outstanding shares of our common stock), plus all shares of common stock that remain available for grant of awards under a prior plan, plus shares of common stock subject to outstanding awards under the prior plan that later cease to be subject to those awards for any reason other than those awards having been exercised.

Holders of our common stock are entitled to one vote for each share held on all matters submitted to a vote of stockholders. Because holders of common stock do not have cumulative voting rights, the holders of a majority of the shares of common stock can elect all of the members of the board of directors standing for election.

Holders of our common stock are entitled to receive dividends if and when such dividends are declared by our board of directors out of assets legally available therefor after payment of dividends required to be paid on shares of preferred stock, if any. Upon our dissolution, liquidation or winding up, and subject to any prior rights of outstanding preferred stock, the holders of our common stock will be entitled to share pro rata in the distribution of all our assets available for distribution to our stockholders after satisfaction of our debts and other liabilities and the payment of the liquidation preference of any preferred stock that may be outstanding. There are no redemption or sinking fund provisions applicable to the common stock. All outstanding shares of common stock are fully paid and nonassessable. The holders of our common stock have no preemptive, conversion, redemption or other subscription rights. The rights, preferences and privileges of holders of common stock are subject to, and may be adversely affected by, the rights of holders of shares of any series of preferred stock that we may designate and issue in the future.

Our common stock is listed on the NASDAQ Global Select Market under the symbol "AREX." As of May 11, 2011, there were 80 holders of record of our common stock.

Preferred Stock

Subject to the provisions of our certificate of incorporation and limitations prescribed by law, our board of directors is authorized, without further stockholder approval, to establish and to issue from time to time one or more classes or series of preferred stock, par value \$0.01 per share, covering up to an aggregate of 10,000,000 shares of preferred stock. Each class or series of preferred stock will cover the number of shares and will have preferences, voting powers, qualifications and special or relative rights or privileges as is determined by the board of directors, which may include, among others, dividend rights, liquidation preferences, voting rights, conversion rights, preemptive rights and redemption rights.

[Table of Contents](#)

The rights of the holders of common stock will be subject to the rights of holders of any preferred stock issued in the future. The issuance of preferred stock could adversely affect the voting power of holders of common stock and reduce the likelihood that common stockholders will receive dividend payments and payments upon liquidation. The issuance of preferred stock could also have the effect of decreasing the market price of the common stock and could delay, deter or prevent a change in control of our company.

The existence of authorized but unissued shares of preferred stock could have anti-takeover effects because we could issue preferred stock with special dividend or voting rights that could discourage potential bidders. For example, a business combination could be impeded by the issuance of a series of preferred stock containing class voting rights that would enable the holder or holders of such series to block any such transaction. Alternatively, a business combination could be facilitated by the issuance of a series of preferred stock having sufficient voting rights to provide a required percentage vote of our stockholders. In addition, under some circumstances, the issuance of preferred stock could adversely affect the voting power and other rights of the holders of common stock and could also affect the likelihood that holders of our common stock will receive dividend payments and payments on liquidation. Although prior to issuing any series of preferred stock our board of directors will be required to make a determination as to whether the issuance is in the best interest of our stockholders, our board of directors could act in a manner that would discourage an acquisition attempt or other transaction that some, or a majority, of our stockholders might believe to be in their best interests or in which our stockholders might receive a premium for their stock over prevailing market prices of such stock. Our board of directors does not at present intend to seek stockholder approval prior to any issuance of currently authorized preferred stock, unless otherwise required by law or applicable stock exchange requirements.

It is not possible to state the actual effect of the issuance of any shares of preferred stock upon the rights of holders of the common stock until the board of directors determines the specific rights of the holders of the preferred stock. We currently have no shares of preferred stock outstanding.

Anti-Takeover Effects of Provisions of Delaware Law, Our Certificate of Incorporation and Bylaws

A number of provisions in our certificate of incorporation, our bylaws and the DGCL may make it more difficult to acquire control of us. These provisions could deprive our stockholders of opportunities to realize a premium on the shares of common stock owned by them. In addition, these provisions may adversely affect the prevailing market price of our common stock. These provisions are intended to:

- enhance the likelihood of continuity and stability in the composition of the board of directors and in the policies formulated by the board of directors;
- discourage transactions which may involve an actual or threatened change in control of us;
- discourage tactics that may be involved in proxy fights; and
- encourage persons seeking to acquire control of our company to consult first with the board of directors to negotiate the terms of any proposed business combination or offer.

Written consent of stockholders. Our certificate of incorporation and bylaws provide that any action required or permitted to be taken by our stockholders must be taken at a duly called meeting of stockholders and not by written consent.

Call of special stockholder meetings. Our bylaws provide that stockholders are not permitted to call special meetings of stockholders. Only our board of directors, chairman or Chief Executive Officer is permitted to call a meeting of stockholders.

Amending the bylaws. Our certificate of incorporation permits our board of directors to adopt, alter or repeal any provision of the bylaws or to make new bylaws. Our certificate of incorporation also provides that our bylaws may be amended by the affirmative vote of at least 67% of the voting power of the outstanding shares of our capital stock.

[Table of Contents](#)

Classified board. Our certificate of incorporation provides that our board of directors is divided into three classes of directors, with the classes to be as nearly equal in number as possible. As a result, approximately one-third of our board of directors will be elected each year. The classification of directors has the effect of making it more difficult for stockholders to change the composition of our board of directors. Our certificate of incorporation and bylaws provide that the number of directors will be fixed from time to time pursuant to a resolution adopted by the board of directors.

Advance notice procedures for stockholder proposals and director nominations. Our bylaws provide that stockholders seeking to bring business before an annual meeting of stockholders, or to nominate candidates for election as directors at an annual meeting of stockholders, must provide timely notice thereof in writing. To be timely, a stockholder's notice generally must be delivered to or mailed and received at our principal executive offices not less than 90 and no more than 120 calendar days before the first anniversary of the date on which we first mailed our proxy materials for the preceding year's annual meeting of stockholders. In addition, our bylaws specify requirements for the form and content of a stockholder's notice. These provisions may preclude stockholders from bringing matters before an annual meeting of stockholders or from making nominations for directors at an annual meeting of stockholders.

Filling board of directors vacancies; removal. Our certificate of incorporation provides that vacancies and newly created directorships resulting from any increase in the authorized number of directors may be filled by the affirmative vote of a majority of our directors then in office, though less than a quorum. Each director will hold office until his or her successor is elected and qualified, or until the director's earlier death, resignation, retirement or removal from office. Any director may resign at any time upon written notice to us. Our certificate of incorporation provides, in accordance with the DGCL, that the stockholders may remove directors only for cause and by the affirmative vote of at least 67% of the voting power of all of the then-outstanding shares of our common stock. We believe that the removal of directors by the stockholders only for cause, together with the classification of the board of directors, will promote continuity and stability in our management and policies and that this continuity and stability will facilitate long-range planning.

No cumulative voting. The DGCL provides that stockholders are not entitled to use cumulative voting in the election of directors unless our restated certificate of incorporation provides otherwise. Under cumulative voting, a majority stockholder holding a sufficient percentage of a class of shares may be able to ensure the election of one or more directors. Our certificate of incorporation expressly precludes cumulative voting.

Authorized but unissued shares. Our certificate of incorporation provides that the authorized but unissued shares of preferred stock are available for future issuance without stockholder approval. These additional shares may be utilized for a variety of corporate purposes, including future public offerings to raise additional capital, corporate acquisitions and employee benefit plans. The existence of authorized but unissued shares of common stock and preferred stock could discourage an attempt to obtain control of us by means of a proxy contest, tender offer, merger or otherwise.

Delaware Business Combination Statute. We are subject to Section 203 of the DGCL regulating corporate takeovers. This section prevents a Delaware corporation from engaging in a business combination that includes a merger or sale of more than 10% of the corporation's assets with a stockholder who owns 15% or more of the corporation's outstanding voting stock, as well as affiliates and associates of any of those persons. That prohibition extends for three years following the date that stockholder acquired that amount of stock unless:

- the transaction in which that stockholder acquired the stock is approved by the board of directors prior to that date;
- upon completion of the transaction that resulted in the acquisition of the stock, the stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding those shares owned by various employee benefit plans or persons who are directors and also officers; or

Table of Contents

- on or after the date the stockholder acquired the stock, the business combination is approved by the board of directors and authorized at an annual or special meeting of stockholders by the affirmative vote of at least two-thirds of the outstanding voting stock that is not owned by the stockholder.

Stockholders may, by adopting an amendment to our certificate of incorporation or our bylaws, elect for the corporation not to be governed by Section 203 of the DGCL. Such amendment shall not become effective until 12 months after the date it is adopted or applies to a stockholder. Neither our certificate of incorporation nor our bylaws exempt us from the restrictions imposed under Section 203. It is anticipated that the provisions of Section 203 may encourage companies interested in acquiring us to negotiate in advance with our board of directors. Section 203 will not apply to a business combination between us and Yorktown Energy Partners V, L.P., Yorktown Energy Partners VI, L.P. or Yorktown Energy Partners VII, L.P., or collectively, Yorktown, which are under common management, or a Yorktown affiliate because Yorktown held more than 15% of our stock prior to the effective date of our certificate of incorporation.

Limitation of liability of directors and officers; indemnification. Our certificate of incorporation provides that to the fullest extent permitted by Delaware law, as that law may be amended and supplemented from time to time, our directors shall not be personally liable to us or our stockholders for monetary damages for breach of fiduciary duty as a director, except for liability (i) for any breach of the director's duty of loyalty to the company or our stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct, fraud or a knowing violation of law, (iii) the payment of dividends in violation of Section 174 of the DGCL, or (iv) for any transaction from which the director derived any improper personal benefit. The effect of the provision of our certificate of incorporation is to eliminate the rights of the company and our stockholders (through stockholders' derivative suits on our behalf) to recover monetary damages against a director for breach of the fiduciary duty of care as a director (including breaches resulting from negligent behavior) except in the situations described in clauses (i) through (iv) above. Our bylaws also set forth certain indemnification provisions and provide for the advancement of expenses incurred by a director in defending a claim by reason of the fact that he was one of our directors (or was serving as a director or officer of another entity at our request), provided that the director agrees to repay the amounts advanced if the director is not entitled to be indemnified by us under the provisions of the DGCL. The indemnification provisions of our certificate of incorporation may reduce the likelihood of derivative litigation against directors and may discourage or deter stockholders or management from bringing a lawsuit against directors for breaches of their fiduciary duties, even though an action, if successful, otherwise might have benefited us and our stockholders.

The right to indemnification and advancement of expenses are not exclusive of any other rights to indemnification our directors or officers may be entitled to under any agreement, vote of stockholders or disinterested directors or otherwise. We have entered into indemnification agreements with each of our directors and some of our officers pursuant to which we agree to indemnify the director or officer against expenses, judgments, fines or amounts paid in settlement incurred by the director or officer and arising in his capacity as a director, officer, employee and/or agent of the Company or other enterprise of which he is a director, officer, employee or agent acting at our request to the maximum extent permitted by applicable law, subject to certain limitations. Additionally, under Delaware law, we may purchase and maintain insurance for the benefit and on behalf of our directors and officers insuring against all liabilities that may be incurred by the director or officer in or arising out of his capacity as our director, officer, employee and/or agent.

Business Opportunities Renunciation

All of our non-employee directors and certain of our stockholders may from time to time have investments in other exploration and production companies that may compete with us. Section 122(17) of the DGCL permits a Delaware corporation, such as the Company, to renounce in its certificate of incorporation or by action of its board of directors any interest or expectancy of the corporation in certain opportunities, effectively eliminating the ambiguity in a Delaware corporation's ability to do so in advance arising out of prior Delaware case law. Under corporate law concepts of fiduciary duty, officers and directors generally have a duty to disclose to us

[Table of Contents](#)

opportunities that are related to our business and are generally prohibited from pursuing those opportunities unless we determine that we are not going to pursue them. Our certificate of incorporation and our business opportunities agreements provide that so long as any of the parties to the business opportunities agreements, which we refer to as “designated parties,” is serving as a member of our board of directors, we renounce any interest or expectancy in any business opportunity, transaction or other matter in and that involves any aspect of the oil and gas exploration, exploitation, development and production other than:

- any business opportunity that is brought to the attention of a designated party solely in such person’s capacity as a director of the Company and with respect to which, at the time of such presentment, no other designated party has independently received notice or otherwise identified such opportunity; or
- any business opportunity that is identified by a designated party solely through the disclosure of information by or on behalf of us.

Thus, for example, designated parties may pursue opportunities in the oil and gas exploration and production industry for their own account. Our certificate of incorporation provides that the designated parties have no obligation to offer such opportunities to us.

Pursuant to the business opportunities agreements approved by our board of directors, each of the designated parties do not have a duty to inform us of a business opportunity that he becomes aware of so long as he did not become aware of the opportunity solely as a consequence of serving as a member of our board of directors. Furthermore, the designated parties each are permitted to pursue that opportunity even if it is competitive with our business. The business opportunities agreements do not prohibit us from pursuing any business opportunity to which we have renounced any interest or expectancy. The business opportunities agreements provide the designated parties and their respective affiliates with some certainty that opportunities that they independently pursue will not be required to be first offered to us.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is American Stock Transfer & Trust Company.

[Table of Contents](#)

DESCRIPTION OF DEPOSITARY SHARES

We may, at our option, elect to offer fractional shares of preferred stock, rather than full shares of preferred stock. If we do, we will issue to the public receipts for depositary shares, and each of these depositary shares will represent a fraction of a share of a particular series of preferred stock.

Description of Depositary Shares

The shares of any series of preferred stock underlying the depositary shares will be deposited under a deposit agreement between us and a bank or trust company selected by us to be the depositary. Subject to the terms of the deposit agreement, each owner of a depositary share will be entitled, in proportion to the applicable fractional interest in shares of preferred stock underlying that depositary share, to all the rights and preferences of the preferred stock underlying that depositary share.

The depositary shares will be evidenced by depositary receipts issued pursuant to the deposit agreement. Depositary receipts will be issued to those persons who purchase the fractional interests in the preferred stock underlying the depositary shares, in accordance with the terms of the offering. The following summary of the deposit agreement, the depositary shares and the depositary receipts is not complete. You should refer to the forms of the deposit agreement and depositary receipts that may be filed as exhibits to the registration statement of which this prospectus forms a part in the event we issue depositary shares.

Dividends and Other Distributions

The depositary will distribute all cash dividends or other cash distributions received in respect of the preferred stock to the record holders of depositary shares relating to that preferred stock in proportion to the number of depositary shares owned by those holders.

If there is a distribution other than in cash, the depositary will distribute property received by it to the record holders of depositary shares that are entitled to receive the distribution, unless the depositary determines that it is not feasible to make the distribution. If this occurs, the depositary may, with our approval, sell the property and distribute the net proceeds from the sale to the applicable holders.

Redemption of Depositary Shares

If a series of preferred stock underlying the depositary shares is subject to redemption, the depositary shares will be redeemed from the proceeds received by the depositary resulting from the redemption, in whole or in part, of that series of preferred stock held by the depositary. The redemption price per depositary share will be equal to the applicable fraction of the redemption price per share payable with respect to that series of the preferred stock. Whenever we redeem shares of preferred stock that are held by the depositary, the depositary will redeem, as of the same redemption date, the number of depositary shares representing the shares of preferred stock so redeemed. If fewer than all the depositary shares are to be redeemed, the depositary shares to be redeemed will be selected by lot or pro rata as determined by the depositary.

After the date fixed for redemption, the depositary shares called for redemption will no longer be outstanding, and all rights of the holders of those depositary shares will cease, except the right to receive any money, securities or other property upon surrender to the depositary of the depositary receipts evidencing those depositary shares.

Voting the Preferred Stock

Upon receipt of notice of any meeting at which the holders of preferred stock are entitled to vote, the depositary will mail the information contained in the notice of meeting to the record holders of the depositary shares underlying that preferred stock. Each record holder of those depositary shares on the record date (which

Table of Contents

will be the same date as the record date for the preferred stock) will be entitled to instruct the depositary as to the exercise of the voting rights pertaining to the amount of the preferred stock underlying that holder's depositary shares. The depositary will try, as far as practicable, to vote the number of shares of preferred stock underlying those depositary shares in accordance with such instructions, and we will agree to take all action which may be deemed necessary by the depositary in order to enable the depositary to do so. The depositary will not vote the shares of preferred stock to the extent it does not receive specific instructions from the holders of depositary shares underlying the preferred stock.

Amendment and Termination of the Depositary Agreement

The form of depositary receipt evidencing the depositary shares and any provision of the deposit agreement may be amended at any time by agreement between us and the depositary. However, any amendment that materially and adversely alters the rights of the holders of depositary shares will not be effective unless the amendment has been approved by the holders of at least a majority of the depositary shares then outstanding. The deposit agreement may be terminated by us or by the depositary only if (i) all outstanding depositary shares have been redeemed, or (ii) there has been a final distribution of the underlying preferred stock in connection with our liquidation, dissolution or winding up and the preferred stock has been distributed to the holders of depositary receipts.

Charges of Bank Depositary

We will pay all transfer and other taxes and governmental charges arising solely from the existence of the depositary arrangements. We will pay charges of the bank depositary in connection with the initial deposit of the preferred stock and any redemption of the preferred stock. Holders of depositary shares will pay other transfer and other taxes and governmental charges and any other charges, including a fee for the withdrawal of shares of preferred stock upon surrender of depositary receipts, as are expressly provided in the depositary agreement to be payable by such holders.

Withdrawal of Preferred Stock

Except as may be provided otherwise in the applicable prospectus supplement, upon surrender of depositary receipts at the principal office of the bank depositary, subject to the terms of the depositary agreement, the owner of the depositary shares may demand delivery of the number of whole shares of preferred stock and all money and other property, if any, represented by those depositary shares. Partial shares of preferred stock will not be issued. If the depositary receipts delivered by the holder evidence a number of depositary shares in excess of the number of depositary shares representing the number of whole shares of preferred stock to be withdrawn, the bank depositary will deliver to such holder at the same time a new depositary receipt evidencing the excess number of depositary shares. Holders of preferred stock thus withdrawn may not thereafter deposit those shares under the depositary agreement or receive depositary receipts evidencing depositary shares therefore.

Resignation and Removal of Depositary

The depositary may resign at any time by delivering a notice to us of its election to do so. We may remove the depositary at any time. Any such resignation or removal will take effect upon the appointment of a successor depositary and its acceptance of its appointment. The successor depositary must be appointed within 60 days after delivery of the notice of resignation or removal.

Miscellaneous

The depositary will forward to holders of depositary receipts all reports and communications from us that we deliver to the depositary and that we are required to furnish to the holders of the preferred stock.

[Table of Contents](#)

Neither we nor the depositary will be liable if either of us is prevented or delayed by law or any circumstance beyond our control in performing our respective obligations under the deposit agreement. Our obligations and those of the depositary will be limited to the performance in good faith of our respective duties under the deposit agreement. Neither we nor the depositary will be obligated to prosecute or defend any legal proceeding in respect of any depositary shares or preferred stock unless satisfactory indemnity is furnished. We and the depositary may rely upon written advice of counsel or accountants, or upon information provided by persons presenting preferred stock for deposit, holders of depositary receipts or other persons believed to be competent and on documents believed to be genuine.

[Table of Contents](#)

DESCRIPTION OF WARRANTS

We may issue warrants for the purchase of our common stock. Warrants may be issued independently or together with debt securities, preferred stock or common stock offered by any prospectus supplement and may be attached to or separate from any such offered securities. Each series of warrants will be issued under a separate warrant agreement to be entered into between us and a bank or trust company, as warrant agent, all as set forth in the prospectus supplement relating to the particular issue of warrants. The warrant agent will act solely as our agent in connection with the warrants and will not assume any obligation or relationship of agency or trust for or with any holders of warrants or beneficial owners of warrants. The following summary of certain provisions of the warrants does not purport to be complete and is subject to, and is qualified in its entirety by reference to, all provisions of the warrant agreements.

You should refer to the prospectus supplement relating to a particular issue of warrants for the terms of and information relating to the warrants, including, where applicable:

- the number of shares of common stock purchasable upon exercise of the warrants and the price at which such number of shares of common stock may be purchased upon exercise of the warrants;
- the date on which the right to exercise the warrants commences and the date on which such right expires, which we refer to as the expiration date;
- United States federal income tax consequences applicable to the warrants;
- the amount of the warrants outstanding as of the most recent practicable date; and
- any other terms of the warrants.

Warrants will be offered and exercisable for United States dollars only. Warrants will be issued in registered form only. Each warrant will entitle its holder to purchase such number of shares of common stock at such exercise price as is in each case set forth in, or calculable from, the prospectus supplement relating to the warrants. The exercise price may be subject to adjustment upon the occurrence of events described in such prospectus supplement. After the close of business on the expiration date (or such later date to which we may extend such expiration date), unexercised warrants will become void. The place or places where, and the manner in which, warrants may be exercised will be specified in the prospectus supplement relating to such warrants.

Prior to the exercise of any warrants, holders of the warrants will not have any of the rights of holders of common stock, including the right to receive payments of any dividends on the common stock purchasable upon exercise of the warrants, or to exercise any applicable right to vote.

[Table of Contents](#)

DESCRIPTION OF RIGHTS

We may issue rights to purchase preferred stock, common stock or other securities that are being registered hereunder. These rights may be issued independently or together with any other security offered hereby and may or may not be transferable by the stockholder receiving the rights in such offering. In connection with any offering of such rights, we may enter into a standby arrangement with one or more underwriters or other purchasers pursuant to which the underwriters or other purchasers may be required to purchase any securities remaining unsubscribed for after such offering.

Each series of rights will be issued under a separate rights agreement which we will enter into with a bank or trust company, as rights agent, all as set forth in the applicable prospectus supplement. The rights agent will act solely as our agent in connection with the certificates relating to the rights and will not assume any obligation or relationship of agency or trust with any holders of rights certificates or beneficial owners of rights. We will file the rights agreement and the rights certificates relating to each series of rights with the SEC, and incorporate them by reference as an exhibit to the registration statement of which this prospectus is a part on or before the time we issue a series of rights.

The applicable prospectus supplement will describe the specific terms of any offering of rights for which this prospectus is being delivered, including the following:

- the date of determining the stockholders entitled to the rights distribution;
- the number of rights issued or to be issued to each stockholder;
- the exercise price payable for each share preferred stock, common stock or other securities upon the exercise of the rights;
- the number and terms of the shares preferred stock, common stock or other securities which may be purchased per each right;
- the extent to which the rights are transferable;
- the date on which the holder's ability to exercise the rights shall commence, and the date on which the rights shall expire;
- the extent to which the rights may include an over-subscription privilege with respect to unsubscribed securities;
- if applicable, the material terms of any standby underwriting or purchase arrangement entered into by us in connection with the offering of such rights; and
- any other terms of the rights, including the terms, procedures, conditions and limitations relating to the exchange and exercise of the rights.

The description in the applicable prospectus supplement of any rights that we may offer will not necessarily be complete and will be qualified in its entirety by reference to the applicable rights certificate, which will be filed with the SEC.

[Table of Contents](#)

DESCRIPTION OF DEBT SECURITIES

The following description of debt securities sets forth certain general terms and provisions of the debt securities to which this prospectus and any prospectus supplement may relate. The particular term of any series of debt securities and the extent to which the general provisions may apply to a particular series of debt securities will be described in a prospectus supplement relating to that series. The debt securities will be issued under one or more separate indentures between us and a trustee to be named in the prospectus supplement.

The debt securities will be either senior debt securities or subordinated debt securities. The senior and subordinated debt securities will be issued under separate indentures among us, the subsidiary guarantors of the debt securities, if any, and a trustee to be determined. Senior debt securities will be issued under a “senior indenture” and subordinated debt securities will be issued under a “subordinated indenture.” Together, the senior indenture and the subordinated indenture are called “indentures.”

Unless the debt securities are guaranteed by our subsidiaries as described below, the rights of the Company and our creditors, including holders of the debt securities, to participate in the assets of any subsidiary upon the latter’s liquidation or reorganization, will be subject to the prior claims of the subsidiary’s creditors, except to the extent that we may ourselves be a creditor with recognized claims against such subsidiary.

We have summarized selected provisions of the indentures below. The summary is not complete. The form of each indenture has been filed with the SEC as an exhibit to the registration statement of which this prospectus is a part, and you should read the indentures for provisions that may be important to you.

General

The indentures provide that debt securities in separate series may be issued thereunder from time to time without limitation as to aggregate principal amount. We may specify a maximum aggregate principal amount for the debt securities of any series. We will determine the terms and conditions of the debt securities, including the maturity, principal and interest, but those terms must be consistent with the Indenture. Unless otherwise indicated in the applicable prospectus supplement, the debt securities will be our direct, unsecured obligations.

The subordinated debt securities will be subordinated in right of payment to the prior payment in full of all of our senior debt as described in this prospectus under “—Subordination of Subordinated Debt Securities” and in the prospectus supplement applicable to any subordinated debt securities. If the prospectus supplement so indicates, the debt securities will be convertible into our common stock.

If specified in the prospectus supplement respecting a particular series of debt securities, certain subsidiaries of the Company, each referred to as a subsidiary guarantor, will fully and unconditionally guarantee that series as described in this prospectus under “—Subsidiary Guarantee” and in the prospectus supplement. Each subsidiary guarantee will be an unsecured obligation of the subsidiary guarantor. A subsidiary guarantee of subordinated debt securities will be subordinated to the senior debt of the subsidiary guarantor on the same basis as the subordinated debt securities are subordinated to our senior debt.

The applicable prospectus supplement and a supplemental indenture relating to any series of debt securities being offered will set forth the price or prices at which the debt securities to be issued will be offered for sale and will describe the following terms of such debt securities:

- the title of the debt securities;
- whether the debt securities are senior debt securities or subordinated debt securities and, if subordinated debt securities, the related subordination terms;
- whether any subsidiary guarantor will provide a subsidiary guarantee of the debt securities, and the terms of any subordination of such guarantee;

Table of Contents

- any limit on the aggregate principal amount of the debt securities;
- each date on which the principal of the debt securities will be payable;
- the interest rate or rates, or the method of determination thereof, that the debt securities will bear and the interest payment dates for the debt securities;
- each place where payments of the principal, premium, if any, and interest may be made on the debt securities;
- any terms upon which the debt securities may be redeemed, in whole or in part, at our option;
- any sinking fund, amortization or other provisions that would obligate us to redeem, repurchase or otherwise repay some or all of the debt securities;
- the portion of the principal amount, if less than all, of the debt securities that will be payable upon declaration of acceleration of the maturity of the debt securities;
- any index or other method used to determine the amount of payment of principal of (and premium, if any) and/or interest on the debt securities;
- whether the debt securities will be subject to certain optional interest rate reset provisions;
- whether any portion of the principal amount of such debt securities is payable upon declaration of the acceleration of the maturity thereof;
- any additional means of satisfaction or discharge of the debt securities;
- whether the debt securities are defeasible;
- any deletions, modifications, additions to or changes in the events of default or covenants pertaining to the debt securities or made for the benefit of the holders thereof;
- whether the debt securities are convertible into our common stock and, if so, the terms and conditions upon which conversion will be effected, including the initial conversion price or conversion rate and any adjustments thereto and the conversion period;
- any addition to or change in the covenants in the indenture applicable to the debt securities;
- whether the debt securities will be issued as a global debt security and, in that case, the identity of the depository for the debt securities; and
- any other terms of the debt securities not inconsistent with the provisions of the indenture.

Neither of the indentures limits the amount of debt securities that may be issued. Each indenture allows debt securities to be issued up to the principal amount that may be authorized by us.

Original Issue Discount

Debt securities, including any debt securities that provide for an amount less than the principal amount thereof to be due and payable upon a declaration of acceleration of the maturity thereof, or “original issue discount securities,” may be sold at a substantial discount below their principal amount. Special United States federal income tax considerations applicable to debt securities sold at an original issue discount may be described in the applicable prospectus supplement. In addition, special United States federal income tax or other considerations applicable to any debt securities that are denominated in a currency or currency unit other than United States dollars may be described in the applicable prospectus supplement.

Subordination of Subordinated Debt Securities

The indebtedness evidenced by the subordinated debt securities will, to the extent set forth in the subordinated indenture with respect to each series of subordinated debt securities, be subordinated in right of payment to the prior payment in full of all of our senior debt, including the senior debt securities, and it may also

Table of Contents

be senior in right of payment to all of our subordinated debt. The prospectus supplement relating to any subordinated debt securities will summarize the subordination provisions of the subordinated indenture applicable to that series including:

- the applicability and effect of such provisions upon any payment or distribution respecting that series following any liquidation, dissolution or other winding-up, or any assignment for the benefit of creditors or other marshalling of assets or any bankruptcy, insolvency or similar proceedings;
- the applicability and effect of such provisions in the event of specified defaults with respect to any senior debt, including the circumstances under which and the periods during which we will be prohibited from making payments on the subordinated debt securities; and
- the definition of senior debt applicable to the subordinated debt securities of that series and, if the series is issued on a senior subordinated basis, the definition of subordinated debt applicable to that series.

The prospectus supplement will also describe as of a recent date the approximate amount of senior debt to which the subordinated debt securities of that series will be subordinated.

The failure to make any payment on any of the subordinated debt securities by reason of the subordination provisions of the subordinated indenture described in the prospectus supplement will not be construed as preventing the occurrence of an event of default with respect to the subordinated debt securities arising from any such failure to make payment.

The subordination provisions described above will not be applicable to payments in respect of the subordinated debt securities from a defeasance trust established in connection with any legal defeasance or covenant defeasance of the subordinated debt securities as described in this prospectus under “—Legal Defeasance and Covenant Defeasance.”

Subsidiary Guarantees

Our payment obligations under any series of the debt securities may be jointly and severally guaranteed by one or more of our domestic subsidiaries. If a series of debt securities is so guaranteed by any of our subsidiaries, such subsidiaries will execute a supplemental indenture or notation of guarantee as further evidence of their guarantee. Unless otherwise indicated in the prospectus supplement, the following provisions will apply to the subsidiary guarantee of the subsidiary guarantors.

Subject to the limitations described below and in the prospectus supplement, one or more of the subsidiary guarantors will jointly and severally, fully and unconditionally guarantee the punctual payment when due, whether at maturity, by acceleration or otherwise, of all our payment obligations under the indentures and the debt securities of a series, whether for principal of, premium, if any, or interest on the debt securities or otherwise (all such obligations guaranteed by a subsidiary guarantor being herein called the “guaranteed obligations”). The subsidiary guarantors will also pay all expenses (including reasonable counsel fees and expenses) incurred by the trustee in enforcing any rights under a subsidiary guarantee with respect to a subsidiary guarantor.

In the case of subordinated debt securities, a subsidiary guarantor’s subsidiary guarantee will be subordinated in right of payment to the senior debt of such subsidiary guarantor on the same basis as the subordinated debt securities are subordinated to our senior debt. No payment will be made by any subsidiary guarantor under its subsidiary guarantee during any period in which payments by us on the subordinated debt securities are suspended by the subordination provisions of the subordinated indenture.

Each subsidiary guarantee will be limited in amount to an amount not to exceed the maximum amount that can be guaranteed by the relevant subsidiary guarantor without rendering such subsidiary guarantee voidable under applicable law relating to fraudulent conveyance or fraudulent transfer or similar laws affecting the rights of creditors generally.

Table of Contents

Each subsidiary guarantee will be a continuing guarantee and will:

- remain in full force and effect until either (i) payment in full of all the applicable debt securities (or such debt securities are otherwise satisfied and discharged in accordance with the provisions of the applicable indenture), or (ii) released as described in the following paragraph;
- be binding upon each subsidiary guarantor; and
- inure to the benefit of and be enforceable by the trustee, the debt securities holders and their successors, transferees and assigns.

In the event that (i) a subsidiary guarantor ceases to be a subsidiary, (ii) either legal defeasance or covenant defeasance occurs with respect to the series or (iii) all or substantially all of the assets or all of the capital stock of such subsidiary guarantor is sold, including by way of sale, merger, consolidation or otherwise, such subsidiary guarantor will be released and discharged of its obligations under its subsidiary guarantee without any further action required on the part of the trustee or any debt securities holder, and no other person acquiring or owning the assets or capital stock of such subsidiary guarantor will be required to enter into a subsidiary guarantee. In addition, the prospectus supplement may specify additional circumstances under which a subsidiary guarantor can be released from its subsidiary guarantee.

Form, Exchange and Transfer

The debt securities of each series will be issuable only in fully registered form, without coupons, and, unless otherwise specified in the applicable prospectus supplement, only in denominations of \$1,000 and integral multiples thereof.

At the option of the debt securities holder, subject to the terms of the applicable indenture and the limitations applicable to global securities, debt securities of each series will be exchangeable for other debt securities of the same series of any authorized denomination and of a like tenor and aggregate principal amount.

Subject to the terms of the applicable indenture and the limitations applicable to global securities, debt securities may be presented for exchange as provided above or for registration of transfer (duly endorsed or with the form of transfer endorsed thereon duly executed) at the office of the security registrar or at the office of any transfer agent designated by us for such purpose. No service charge will be made for any registration of transfer or exchange of debt securities, but we may require payment of a sum sufficient to cover any tax or other governmental charge payable in that connection. Such transfer or exchange will be effected upon the security registrar or such transfer agent, as the case may be, being satisfied with the documents of title and identity of the person making the request. The security registrar and any other transfer agent initially designated by us for any debt securities will be named in the applicable prospectus supplement. We may at any time designate additional transfer agents or rescind the designation of any transfer agent or approve a change in the office through which any transfer agent acts, except that we will be required to maintain a transfer agent in each place of payment for the debt securities of each series.

If the debt securities of any series (or of any series and specified tenor) are to be redeemed in part, we will not be required to (i) issue, register the transfer of or exchange any debt security of that series (or of that series and specified tenor, as the case may be) during a period beginning at the opening of business 15 days before the day of mailing of a notice of redemption of any such debt security that may be selected for redemption and ending at the close of business on the day of such mailing or (ii) register the transfer of or exchange any debt security so selected for redemption, in whole or in part, except the unredeemed portion of any such debt security being redeemed in part.

Global Securities

Some or all of the debt securities of any series may be represented, in whole or in part, by one or more global securities that will have an aggregate principal amount equal to that of the debt securities they represent.

Table of Contents

Each global security will be registered in the name of a depositary or its nominee identified in the applicable prospectus supplement, will be deposited with such depositary or nominee or its custodian and will bear a legend regarding the restrictions on exchanges and registration of transfer thereof referred to below and any such other matters as may be provided for pursuant to the applicable indenture.

Notwithstanding any provision of the indentures or any debt security described in this prospectus, no global security may be exchanged in whole or in part for debt securities registered, and no transfer of a global security in whole or in part may be registered, in the name of any person other than the depositary for such global security or any nominee of such depositary unless:

- the depositary has notified us that it is unwilling or unable to continue as depositary for such global security or has ceased to be qualified to act as such as required by the applicable indenture, and in either case we fail to appoint a successor depositary within 90 days;
- an event of default with respect to the debt securities represented by such global security has occurred and is continuing and the trustee has received a written request from the depositary to issue certificated debt securities;
- subject to the rules of the depositary, we shall have elected to terminate the book-entry system through the depositary; or
- other circumstances exist, in addition to or in lieu of those described above, as may be described in the applicable prospectus supplement.

All certificated debt securities issued in exchange for a global security or any portion thereof will be registered in such names as the depositary may direct.

As long as the depositary, or its nominee, is the registered holder of a global security, the depositary or such nominee, as the case may be, will be considered the sole owner and debt securities holder of such global security and the debt securities that it represents for all purposes under the debt securities and the applicable indenture. Except in the limited circumstances referred to above, owners of beneficial interests in a global security will not be entitled to have such global security or any debt securities that it represents registered in their names, will not receive or be entitled to receive physical delivery of certificated debt securities in exchange for those interests and will not be considered to be the owners or holders of such global security or any debt securities that it represents for any purpose under the debt securities or the applicable indenture. All payments on a global security will be made to the depositary or its nominee, as the case may be, as the holder of the security. The laws of some jurisdictions may require that some purchasers of debt securities take physical delivery of such debt securities in certificated form. These laws may impair the ability to transfer beneficial interests in a global security.

Ownership of beneficial interests in a global security will be limited to institutions that have accounts with the depositary or its nominee, or "participants," and to persons that may hold beneficial interests through participants. In connection with the issuance of any global security, the depositary will credit, on its book-entry registration and transfer system, the respective principal amounts of debt securities represented by the global security to the accounts of its participants. Ownership of beneficial interests in a global security will be shown only on, and the transfer of those ownership interests will be effected only through, records maintained by the depositary (with respect to participants' interests) or any such participant (with respect to interests of persons held by such participants on their behalf). Payments, transfers, exchanges and other matters relating to beneficial interests in a global security may be subject to various policies and procedures adopted by the depositary from time to time. None of us, the subsidiary guarantors, the trustees or the agents of us, the subsidiary guarantors or the trustees will have any responsibility or liability for any aspect of the depositary's or any participant's records relating to, or for payments made on account of, beneficial interests in a global security, or for maintaining, supervising or reviewing any records relating to such beneficial interests.

[Table of Contents](#)**Payment and Paying Agents**

Unless otherwise indicated in the applicable prospectus supplement, payment of interest on a debt security on any interest payment date will be made to the person in whose name such debt security (or one or more predecessor securities) is registered at the close of business on the record date for such interest.

Unless otherwise indicated in the applicable prospectus supplement, principal of and any premium and interest on the debt securities of a particular series will be payable at the office of such paying agent or agents as we may designate for such purpose from time to time, except that at our option payment of any interest on debt securities in certificated form may be made by check mailed to the address of the person entitled thereto as such address appears in the security register. Unless otherwise indicated in the applicable prospectus supplement, the corporate trust office of the trustee under the senior indenture in the City of New York will be designated as sole paying agent for payments with respect to senior debt securities of each series, and the corporate trust office of the trustee under the subordinated indenture in the City of New York will be designated as the sole paying agent for payment with respect to subordinated debt securities of each series. Any other paying agents initially designated by us for the debt securities of a particular series will be named in the applicable prospectus supplement. We may at any time designate additional paying agents or rescind the designation of any paying agent or approve a change in the office through which any paying agent acts, except that we will be required to maintain a paying agent in each place of payment for the debt securities of a particular series.

All money paid by us to a paying agent for the payment of the principal of or any premium or interest on any debt security which remains unclaimed at the end of two years after such principal, premium or interest has become due and payable will be repaid to us, and the holder of such debt security thereafter may look only to us for payment.

Consolidation, Merger and Sale of Assets

Unless otherwise specified in the prospectus supplement, we may not consolidate with or merge into, or transfer, lease or otherwise dispose of all or substantially all of our assets to, any person, which we refer to as a successor person, and may not permit any person to consolidate with or merge into us, unless:

- the successor person (if not us) is a corporation, partnership, trust or other entity organized and validly existing under the laws of any domestic jurisdiction and assumes our obligations on the debt securities and under the indentures;
- immediately before and after giving pro forma effect to the transaction, no event of default, and no event which, after notice or lapse of time or both, would become an event of default, has occurred and is continuing; and
- several other conditions, including any additional conditions with respect to any particular debt securities specified in the applicable prospectus supplement, are met.

The successor person (if not us) will be substituted for us under the applicable indenture with the same effect as if it had been an original party to such indenture, and, except in the case of a lease, we will be relieved from any further obligations under such indenture and the debt securities.

Events of Default

Unless otherwise specified in the prospectus supplement, each of the following will constitute an event of default under the applicable indenture with respect to debt securities of any series:

1. failure to pay principal of or any premium on any debt security of that series when due, whether or not, in the case of subordinated debt securities, such payment is prohibited by the subordination provisions of the subordinated indenture;

[Table of Contents](#)

2. failure to pay any interest on any debt securities of that series when due, continued for 30 days, whether or not, in the case of subordinated debt securities, such payment is prohibited by the subordination provisions of the subordinated indenture;

3. failure to deposit any sinking fund payment, when due, in respect of any debt security of that series, whether or not, in the case of subordinated debt securities, such deposit is prohibited by the subordination provisions of the subordinated indenture;

4. failure to perform or comply with the provisions described in this prospectus under “—Consolidation, Merger and Sale of Assets”;

5. failure to perform any of our other covenants in such indenture (other than a covenant included in such indenture solely for the benefit of a series other than that series), continued for 60 days after written notice has been given by the trustee, or the holders of at least 25% in principal amount of the outstanding debt securities of that series, as provided in such indenture;

6. any debt of ourselves, any significant subsidiary or, if a subsidiary guarantor has guaranteed the series, such subsidiary guarantor, is not paid within any applicable grace period after final maturity or is accelerated by its holders because of a default and the total amount of such debt unpaid or accelerated exceeds \$20 million;

7. any judgment or decree for the payment of money in excess of \$20 million is entered against us, any significant subsidiary or, if a subsidiary guarantor has guaranteed the series, such subsidiary guarantor, remains outstanding for a period of 60 consecutive days following entry of such judgment and is not discharged, waived or stayed;

8. certain events of bankruptcy, insolvency or reorganization affecting us, any significant subsidiary or, if a subsidiary guarantor has guaranteed the series, such subsidiary guarantor; and

9. if any subsidiary guarantor has guaranteed such series, the subsidiary guarantee of any such subsidiary guarantor is held by a final non-appealable order or judgment of a court of competent jurisdiction to be unenforceable or invalid or ceases for any reason to be in full force and effect (other than in accordance with the terms of the applicable indenture) or any subsidiary guarantor or any person acting on behalf of any subsidiary guarantor denies or disaffirms such subsidiary guarantor’s obligations under its subsidiary guarantee (other than by reason of a release of such subsidiary guarantor from its subsidiary guarantee in accordance with the terms of the applicable indenture).

If an event of default (other than an event of default with respect to Approach Resources Inc. described in clause (8) above) with respect to the debt securities of any series at the time outstanding occurs and is continuing, either the trustee or the holders of at least 25% in principal amount of the outstanding debt securities of that series by notice as provided in the indenture may declare the principal amount of the debt securities of that series (or, in the case of any debt security that is an original issue discount debt security, such portion of the principal amount of such debt security as may be specified in the terms of such debt security) to be due and payable immediately, together with any accrued and unpaid interest thereon. If an event of default with respect to Approach Resources Inc. described in clause (8) above with respect to the debt securities of any series at the time outstanding occurs, the principal amount of all the debt securities of that series (or, in the case of any such original issue discount security, such specified amount) will automatically, and without any action by the trustee or any holder, become immediately due and payable, together with any accrued and unpaid interest thereon. After any such acceleration and its consequences, but before a judgment or decree based on acceleration, the holders of a majority in principal amount of the outstanding debt securities of that series may, under certain circumstances, rescind and annul such acceleration if all events of default with respect to that series, other than the non-payment of accelerated principal (or other specified amount), have been cured or waived as provided in the applicable indenture. For information as to waiver of defaults, see “—Modification and Waiver” below.

Subject to the provisions of the indentures relating to the duties of the trustees in case an event of default has occurred and is continuing, no trustee will be under any obligation to exercise any of its rights or powers under

Table of Contents

the applicable indenture at the request or direction of any of the holders, unless such holders have offered to such trustee reasonable security or indemnity. Subject to such provisions for the indemnification of the trustees, the holders of a majority in principal amount of the outstanding debt securities of any series will have the right to direct the time, method and place of conducting any proceeding for any remedy available to the trustee or exercising any trust or power conferred on the trustee with respect to the debt securities of that series.

No holder of a debt security of any series will have any right to institute any proceeding with respect to the applicable indenture, or for the appointment of a receiver or a trustee, or for any other remedy thereunder, unless:

- such holder has previously given to the trustee under the applicable indenture written notice of a continuing event of default with respect to the debt securities of that series;
- the holders of at least 25% in principal amount of the outstanding debt securities of that series have made written request, and such holder or holders have offered reasonable security or indemnity, to the trustee to institute such proceeding as trustee; and
- the trustee has failed to institute such proceeding, and has not received from the holders of a majority in principal amount of the outstanding debt securities of that series a direction inconsistent with such request, within 60 days after such notice, request and offer.

However, such limitations do not apply to a suit instituted by a holder of a debt security for the enforcement of payment of the principal of or any premium or interest on such debt security on or after the applicable due date specified in such debt security or, if applicable, to convert such debt security.

We will be required to furnish to each trustee annually a statement by certain of our officers as to whether or not we, to their knowledge, are in default in the performance or observance of any of the terms, provisions and conditions of the applicable indenture and, if so, specifying all such known defaults.

Modification and Waiver

We may modify or amend an indenture without the consent of any holders of the debt securities in certain circumstances, including:

- to evidence the succession under the indenture of another person to us or any subsidiary guarantor and to provide for its assumption of our or such subsidiary guarantor's obligations to holders of debt securities;
- to make any changes that would add any additional covenants of us or the subsidiary guarantors for the benefit of the holders of debt securities or that do not adversely affect the rights under the indenture of the holders of debt securities in any material respect;
- to add any additional events of default;
- to provide for uncertificated notes in addition to or in place of certificated notes;
- to secure the debt securities;
- to establish the form or terms of any series of debt securities;
- to evidence and provide for the acceptance of appointment under the indenture of a successor trustee;
- to cure any ambiguity, defect or inconsistency;
- to add subsidiary guarantors; or
- in the case of any subordinated debt security, to make any change in the subordination provisions that limits or terminates the benefits applicable to any holder of senior debt.

[Table of Contents](#)

Other modifications and amendments of an indenture may be made by us, the subsidiary guarantors, if applicable, and the applicable trustee with the consent of the holders of not less than a majority in principal amount of the outstanding debt securities of each series affected by such modification or amendment; provided, however, that no such modification or amendment may, without the consent of the holder of each outstanding debt security affected thereby:

- change the stated maturity of the principal of, or any installment of principal of or interest on, any debt security;
- reduce the principal amount of, or any premium or interest on, any debt security;
- reduce the amount of principal of an original issue discount security or any other debt security payable upon acceleration of the maturity thereof;
- change the place or currency of payment of principal of, or any premium or interest on, any debt security;
- impair the right to institute suit for the enforcement of any payment due on or any conversion right with respect to any debt security;
- modify the subordination provisions in the case of subordinated debt securities, or modify any conversion provisions, in either case in a manner adverse to the holders of the subordinated debt securities;
- except as provided in the applicable indenture, release the subsidiary guarantee of a subsidiary guarantor;
- reduce the percentage in principal amount of outstanding debt securities of any series, the consent of whose holders is required for modification or amendment of the indenture;
- reduce the percentage in principal amount of outstanding debt securities of any series necessary for waiver of compliance with certain provisions of the indenture or for waiver of certain defaults;
- modify such provisions with respect to modification, amendment or waiver; or
- following the making of an offer to purchase debt securities from any holder that has been made pursuant to a covenant in such indenture, modify such covenant in a manner adverse to such holder.

The holders of not less than a majority in principal amount of the outstanding debt securities of any series may waive compliance by us with certain restrictive provisions of the applicable indenture. The holders of not less than a majority in principal amount of the outstanding debt securities of any series may waive any past default under the applicable indenture, except a default in the payment of principal, premium or interest and certain covenants and provisions of the indenture which cannot be amended without the consent of the holder of each outstanding debt security of such series.

Each of the indentures provides that in determining whether the holders of the requisite principal amount of the outstanding debt securities have given or taken any direction, notice, consent, waiver or other action under such indenture as of any date:

- the principal amount of an original issue discount security that will be deemed to be outstanding will be the amount of the principal that would be due and payable as of such date upon acceleration of maturity to such date;
- if, as of such date, the principal amount payable at the stated maturity of a debt security is not determinable (for example, because it is based on an index), the principal amount of such debt security deemed to be outstanding as of such date will be an amount determined in the manner prescribed for such debt security;
- the principal amount of a debt security denominated in one or more foreign currencies or currency units that will be deemed to be outstanding will be the United States-dollar equivalent, determined as of such date in the manner prescribed for such debt security, of the principal amount of such debt security (or, in the case of a debt security described in clause (1) or (2) above, of the amount described in such clause); and
- certain debt securities, including those owned by us, any subsidiary guarantor or any of our other affiliates, will not be deemed to be outstanding.

Table of Contents

Except in certain limited circumstances, we will be entitled to set any day as a record date for the purpose of determining the holders of outstanding debt securities of any series entitled to give or take any direction, notice, consent, waiver or other action under the indenture, in the manner and subject to the limitations provided in the indenture. In certain limited circumstances, the trustee will be entitled to set a record date for action by holders. If a record date is set for any action to be taken by holders of a particular series, only persons who are holders of outstanding debt securities of that series on the record date may take such action. To be effective, such action must be taken by holders of the requisite principal amount of such debt securities within a specified period following the record date. For any particular record date, this period will be 180 days or such other period as may be specified by us (or the trustee, if it set the record date), and may be shortened or lengthened (but not beyond 180 days) from time to time.

Satisfaction and Discharge

Each indenture will be discharged and will cease to be of further effect as to all outstanding debt securities of any series issued thereunder, when:

- either:
 - (i) all outstanding debt securities of that series that have been authenticated (except lost, stolen or destroyed debt securities that have been replaced or paid and debt securities for whose payment money has theretofore been deposited in trust and thereafter repaid to us) have been delivered to the trustee for cancellation; or
 - (ii) all outstanding debt securities of that series that have been not delivered to the trustee for cancellation have become due and payable or will become due and payable at their stated maturity within one year or are to be called for redemption within one year under arrangements satisfactory to the trustee and in any case we have irrevocably deposited with the trustee as trust funds money in an amount sufficient, without consideration of any reinvestment of interest, to pay the entire indebtedness of such debt securities not delivered to the trustee for cancellation, for principal, premium, if any, and accrued interest to the stated maturity or redemption date;
- we have paid or caused to be paid all other sums payable by us under the indenture with respect to the debt securities of that series; and
- we have delivered an officers' certificate and an opinion of counsel to the trustee stating that all conditions precedent to satisfaction and discharge of the indenture with respect to the debt securities of that series have been satisfied.

Legal Defeasance and Covenant Defeasance

To the extent indicated in the applicable prospectus supplement, we may elect, at our option at any time, to have our obligations discharged under provisions relating to defeasance and discharge of indebtedness, which we refer to as legal defeasance, or relating to defeasance of certain restrictive covenants applied to the debt securities of any series, or to any specified part of a series, which we refer to as covenant defeasance.

Legal Defeasance

The indentures provide that, upon our exercise of our option (if any) to have the legal defeasance provisions applied to any series of debt securities, we and, if applicable, each subsidiary guarantor will be discharged from all our obligations, and, if such debt securities are subordinated debt securities, the provisions of the subordinated indenture relating to subordination will cease to be effective, with respect to such debt securities (except for certain obligations to convert, exchange or register the transfer of debt securities, to replace stolen, lost or mutilated debt securities, to maintain paying agencies and to hold moneys for payment in trust) upon the deposit in trust for the benefit of the holders of such debt securities of money or U.S. government obligations, or both,

[Table of Contents](#)

which, through the payment of principal and interest in respect thereof in accordance with their terms, will provide money in an amount sufficient (in the opinion of a nationally recognized firm of independent public accountants) to pay the principal of and any premium and interest on such debt securities on the respective stated maturities in accordance with the terms of the applicable indenture and such debt securities. Such defeasance or discharge may occur only if, among other things:

1. we have delivered to the applicable trustee an opinion of counsel to the effect that we have received from, or there has been published by, the United States Internal Revenue Service a ruling, or there has been a change in tax law, in either case to the effect that holders of such debt securities will not recognize gain or loss for federal income tax purposes as a result of such deposit and legal defeasance and will be subject to federal income tax on the same amount, in the same manner and at the same times as would have been the case if such deposit and legal defeasance were not to occur;
2. no event of default or event that with the passing of time or the giving of notice, or both, shall constitute an event of default shall have occurred and be continuing at the time of such deposit or, with respect to any event of default described in clause (8) under “—Events of Default,” at any time until 121 days after such deposit;
3. such deposit and legal defeasance will not result in a breach or violation of, or constitute a default under, any agreement or instrument (other than the applicable indenture) to which we are a party or by which we are bound;
4. in the case of subordinated debt securities, at the time of such deposit, no default in the payment of all or a portion of principal of (or premium, if any) or interest on any senior debt shall have occurred and be continuing, no event of default shall have resulted in the acceleration of any senior debt and no other event of default with respect to any senior debt shall have occurred and be continuing permitting after notice or the lapse of time, or both, the acceleration thereof; and
5. we have delivered to the trustee an opinion of counsel to the effect that such deposit shall not cause the trustee or the trust so created to be subject to the Investment Company Act of 1940, as amended.

Covenant Defeasance

The indentures provide that, upon our exercise of our option (if any) to have the covenant defeasance provisions applied to any debt securities, we may fail to comply with certain restrictive covenants (but not with respect to conversion, if applicable), including those that may be described in the applicable prospectus supplement, and the occurrence of certain events of default, which are described above in clause (5) (with respect to such restrictive covenants) and clauses (6), (7) and (9) under “Events of Default” and any that may be described in the applicable prospectus supplement, will not be deemed to either be or result in an event of default and, if such debt securities are subordinated debt securities, the provisions of the subordinated indenture relating to subordination will cease to be effective, in each case with respect to such debt securities. In order to exercise such option, we must deposit, in trust for the benefit of the holders of such debt securities, money or U.S. government obligations, or both, which, through the payment of principal and interest in respect thereof in accordance with their terms, will provide money in an amount sufficient (in the opinion of a nationally recognized firm of independent public accountants) to pay the principal of and any premium and interest on such debt securities on the respective stated maturities in accordance with the terms of the applicable indenture and such debt securities. Such covenant defeasance may occur only if we have delivered to the applicable trustee an opinion of counsel to the effect that holders of such debt securities will not recognize gain or loss for federal income tax purposes as a result of such deposit and covenant defeasance and will be subject to federal income tax on the same amount, in the same manner and at the same times as would have been the case if such deposit and covenant defeasance were not to occur, and the requirements set forth in clauses (2), (3), (4) and (5) above are satisfied. If we exercise this option with respect to any series of debt securities and such debt securities were declared due and payable because of the occurrence of any event of default, the amount of money and U.S. government obligations so deposited in trust would be sufficient to pay amounts due on such debt securities

[Table of Contents](#)

at the time of their respective stated maturities but may not be sufficient to pay amounts due on such debt securities upon any acceleration resulting from such event of default. In such case, we would remain liable for such payments.

If we exercise either our legal defeasance or covenant defeasance option, any subsidiary guarantee will terminate.

No Personal Liability of Directors, Officers, Employees and Stockholders

No director, officer, employee, incorporator, stockholder, member, partner or trustee of the Company or any subsidiary guarantor, as such, shall have any liability for any obligations of the Company or any subsidiary guarantor under the debt securities, the indentures or any subsidiary guarantees or for any claim based on, in respect of, or by reason of, such obligations or their creation. By accepting a debt security, each holder shall be deemed to have waived and released all such liability. The waiver and release shall be a part of the consideration for the issue of the debt securities. The waiver may not be effective to waive liabilities under the federal securities laws, and it is the view of the SEC that such a waiver is against public policy.

Notices

Notices to holders of debt securities will be given by mail to the addresses of such holders as they may appear in the security register.

Title

We, the subsidiary guarantors, the trustees and any agent of ours, the subsidiary guarantors or a trustee may treat the person in whose name a debt security is registered as the absolute owner of the debt security (whether or not such debt security may be overdue) for the purpose of making payment and for all other purposes.

Governing Law

The indentures and the debt securities will be governed by, and construed in accordance with, the law of the State of New York.

The Trustee

We will enter into the indentures with a trustee that is qualified to act under the Trust Indenture Act of 1939, as amended, which we refer to as the Trust Indenture Act, and with any other trustees chosen by us and appointed in a supplemental indenture for a particular series of debt securities. We may maintain a banking relationship in the ordinary course of business with our trustee and one or more of its affiliates.

Resignation or Removal of Trustee

If the trustee has or acquires a conflicting interest within the meaning of the Trust Indenture Act, the trustee must either eliminate its conflicting interest or resign, to the extent and in the manner provided by, and subject to the provisions of, the Trust Indenture Act and the applicable indenture. Any resignation will require the appointment of a successor trustee under the applicable indenture in accordance with the terms and conditions of such indenture.

The trustee may resign or be removed by us with respect to one or more series of debt securities and a successor trustee may be appointed to act with respect to any such series. The holders of a majority in aggregate principal amount of the debt securities of any series may remove the trustee with respect to the debt securities of such series.

[Table of Contents](#)***Limitations on Trustee if it is Our Creditor***

Each indenture will contain certain limitations on the right of the trustee, in the event that it becomes our creditor, to obtain payment of claims in certain cases, or to realize on certain property received in respect of any such claim as security or otherwise.

Certificates and Opinions to be Furnished to Trustee

Each indenture will provide that, in addition to other certificates or opinions that may be specifically required by other provisions of an indenture, every application by us for action by the trustee must be accompanied by an officers' certificate and an opinion of counsel stating that, in the opinion of the signers, all conditions precedent to such action have been complied with by us.

[Table of Contents](#)

PLAN OF DISTRIBUTION

We may sell securities pursuant to this prospectus in and outside the United States (i) through underwriters or dealers, (ii) directly to purchasers, including our affiliates and stockholders, (iii) through agents or (iv) through a combination of any of these methods. The prospectus supplement will include the following information:

- the terms of the offering;
- the names of any underwriters, dealers or agents;
- the name or names of any managing underwriter or underwriters;
- the purchase price of the securities;
- the estimated net proceeds to us from the sale of the securities;
- any delayed delivery arrangements;
- any underwriting discounts, commissions and other items constituting underwriters' compensation;
- any discounts or concessions allowed or reallowed or paid to dealers; and
- any commissions paid to agents.

Sale Through Underwriters or Dealers

If underwriters are used in the sale, the underwriters will acquire the securities for their own account for resale to the public, either on a firm commitment basis or a best efforts basis. The underwriters may resell the securities from time to time in one or more transactions, including negotiated transactions, at a fixed public offering price or at varying prices determined at the time of sale. Underwriters may offer securities to the public either through underwriting syndicates represented by one or more managing underwriters or directly by one or more firms acting as underwriters. Unless we inform you otherwise in the prospectus supplement, the obligations of the underwriters to purchase the securities will be subject to certain conditions. The underwriters may change from time to time any offering price and any discounts or concessions allowed or reallowed or paid to dealers.

We may also make direct sales through subscription rights distributed to our existing stockholders on a pro rata basis, which may or may not be transferable. In any distribution of subscription rights to our stockholders, if all of the underlying securities are not subscribed for, we may then sell the unsubscribed securities directly to third parties or may engage the services of one or more agents, dealers, underwriters, including standby underwriters, or remarketing firms to sell the unsubscribed securities to third parties.

During and after an offering through underwriters, the underwriters may purchase and sell the securities in the open market. These transactions may include overallotment and stabilizing transactions and purchases to cover syndicate short positions created in connection with the offering. The underwriters may also impose a penalty bid, which means that selling concessions allowed to syndicate members or other broker-dealers for the offered securities sold for their account may be reclaimed by the syndicate if the offered securities are repurchased by the syndicate in stabilizing or covering transactions. These activities may stabilize, maintain or otherwise affect the market price of the offered securities, which may be higher than the price that might otherwise prevail in the open market. If commenced, the underwriters may discontinue these activities at any time.

Some or all of the securities that we offer pursuant to this prospectus may be new issues of securities with no established trading market. Any underwriters to whom we sell our securities for public offering and sale may make a market in those securities, but they will not be obligated to do so and they may discontinue any market making at any time without notice. Accordingly, we cannot assure you of the liquidity of, or continued trading markets for, any securities that we offer.

If dealers are used, we will sell the securities to them as principals. The dealers may then resell those securities to the public at varying prices determined by the dealers at the time of resale. We will include in the prospectus supplement the names of the dealers and the terms of the transaction.

Table of Contents

The maximum commission or discount to be received by any FINRA member or independent broker/dealer will not be greater than eight percent (8%) of the gross proceeds received by us for the sale of any securities being registered pursuant to Rule 415 under the Securities Act.

If more than 10% of the net proceeds of any offering of securities made under this prospectus will be received by FINRA members participating in the offering or affiliates or associated persons of such FINRA members, the offering will be conducted in accordance with the National Association of Securities Dealers Conduct Rule 2710(h).

Direct Sales and Sales Through Agents

We may sell the offered securities directly. In this case, no underwriters or agents would be involved. We may also sell the offered securities through agents designated from time to time. In the prospectus supplement, we will name any agent involved in the offer or sale of the offered securities, and we will describe any commissions payable to the agent. Unless we inform you otherwise in the prospectus supplement, any agent will agree to use its reasonable best efforts to solicit purchases for the period of its appointment.

We may sell the offered securities upon the exercise of rights that we may issue to our securityholders. We may also sell the offered securities directly to institutional investors or others who may be deemed to be underwriters within the meaning of the Securities Act with respect to any sale of securities. We will describe the terms of any such sales in the prospectus supplement.

Remarketing Arrangements

Offered securities may also be offered and sold, if so indicated in the applicable prospectus supplement, in connection with a remarketing upon their purchase, in accordance with a redemption or repayment pursuant to their terms, or otherwise, by one or more remarketing firms, acting as principals for their own accounts or as agents for us. Any remarketing firm will be identified and the terms of its agreements, if any, with us and its compensation will be described in the applicable prospectus supplement. Remarketing firms may be deemed to be underwriters, as that term is defined in the Securities Act, in connection with the securities remarketed.

Delayed Delivery Contracts

If we so indicate in the prospectus supplement, we may authorize agents, underwriters or dealers to solicit offers from certain types of institutions to purchase securities from us at the public offering price under delayed delivery contracts. These contracts would provide for payment and delivery on a specified date in the future. The contracts would be subject only to those conditions described in the prospectus supplement. The prospectus supplement will describe the commission payable for solicitation of those contracts.

General Information

Agents, dealers, underwriters and remarketing firms that participate in the distribution of the offered securities may be underwriters as defined in the Securities Act, and any discounts or commissions received by them from us and any profit on the resale of the offered securities by them may be treated as underwriting discounts and commissions under the Securities Act. Any underwriters or agents will be identified and their compensation described in a prospectus supplement.

We may have agreements with the agents, dealers, underwriters and remarketing firms to indemnify them against certain civil liabilities, including liabilities under the Securities Act, or to contribute with respect to payments that the agents, dealers, underwriters or remarketing firms may be required to make. Agents, dealers, underwriters and remarketing firms may be customers of, engage in transactions with, or perform services for us or our subsidiaries in the ordinary course of their businesses.

[Table of Contents](#)**LEGAL MATTERS**

Certain legal matters in connection with the securities offered pursuant to this prospectus will be passed upon by Thompson & Knight LLP, Dallas, Texas, as our counsel. Underwriters, dealers, agents and remarketing firms, if any, who we will identify in a prospectus supplement, may have their counsel pass upon certain legal matters in connection with the securities offered by this prospectus.

EXPERTS

The (i) consolidated financial statements of Approach Resources Inc. and subsidiaries incorporated herein by reference to our Annual Report on Form 10-K for the year ended December 31, 2010, (ii) management's assessment of the effectiveness of internal control over financial reporting incorporated herein by reference to our Annual Report on Form 10-K for the year ended December 31, 2010, and (iii) the statement of revenues and direct operating expenses of properties acquired by Approach Resources Inc. incorporated herein by reference to our Current Report on Form 8-K/A filed on April 21, 2011, have been audited by Hein & Associates LLP, independent registered public accountants, as stated in their reports appearing in our Annual Report on Form 10-K for the year ended December 31, 2010 and their report appearing in our Current Report on Form 8-K/A filed on April 21, 2011, and have been so included in reliance upon the reports of such firm given upon their authority as experts in accounting and auditing.

Certain estimates of our oil and natural gas reserves and related information included in this prospectus, any applicable prospectus supplement or incorporated herein by reference have been derived from reports prepared by DeGolyer and MacNaughton. All such information has been so included or incorporated by reference in reliance upon the authority of DeGolyer and MacNaughton as experts in these matters.

[Table of Contents](#)

