

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

**Amendment No. 3
to
FORM S-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933**

MEMORIAL RESOURCE DEVELOPMENT CORP.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

1311
(Primary Standard Industrial
Classification Code Number)

46-4710769
(I.R.S. Employer
Identification Number)

**1301 McKinney Street, Suite 2100
Houston, Texas 77010
(713) 588-8300**

(Address, including zip code, and telephone number, including area code, of registrants' principal executive offices)

**Kyle N. Roane
Vice President, General Counsel and Corporate Secretary
Memorial Resource Development Corp.
1301 McKinney Street, Suite 2100
Houston, Texas 77010
(713) 588-8300**

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

With copies to:

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Approximate date of commencement of proposed sale of the securities to the public: As soon as practicable after this Registration Statement becomes effective.

If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box:

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

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

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

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

Large Accelerated filer Accelerated filer

Non-accelerated filer (Do not check if a smaller reporting company) Smaller reporting company

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered(1)	Proposed Maximum Offering Price Per Share(2)	Proposed Maximum Aggregate Offering Price(1)(2)	Amount of Registration Fee(3)
Common Stock, \$0.01 par value per share	41,400,000	\$18.00	\$745,200,000	\$95,982

(1) Estimated pursuant to Rule 457(a) under the Securities Act of 1933, as amended. Includes 5,400,000 additional shares of common stock that the underwriters have the option to purchase.

(2) Estimated solely for the purpose of calculating the registration fee.

(3) The Registrant previously paid \$90,160 of the total registration fee in connection with the previous filing of this Registration Statement.

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

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

SUBJECT TO COMPLETION, DATED JUNE [], 2014

PRELIMINARY PROSPECTUS



Memorial Resource Development Corp.

Common Stock

\$ _____ per share

This is our initial public offering. We are selling 24,500,000 shares of common stock, and MRD Holdco LLC is selling 11,500,000 shares of our common stock. We expect the public offering price to be between \$16.00 and \$18.00 per share. MRD Holdco LLC has granted the underwriters a 30-day option to purchase up to an additional 5,400,000 shares of common stock. We will not receive any proceeds from the sale of shares by MRD Holdco LLC, including any shares that it may sell pursuant to the underwriters' option to purchase additional shares of common stock.

Currently, no public market exists for our common stock. We have applied to list our common stock on the NASDAQ Global Market under the symbol "MRD." Following the completion of this offering, we will be a "controlled company" as defined under the NASDAQ listing rules because the group consisting of affiliates of Natural Gas Partners will beneficially own over 50% of our shares of outstanding common stock. See "Principal and Selling Stockholders."

Investing in our common stock involves risks that are described in the "Risk Factors" section beginning on page 25 of this prospectus.

We are an emerging growth company as that term is used in the Jumpstart Our Business Startups Act of 2012, and as such, we have elected to take advantage of certain reduced public company reporting requirements for this prospectus and future filings. See "Risk Factors" and "Summary—Emerging Growth Company Status."

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.

Table with 3 columns: Description, Per Share, Total. Rows include Initial Public Offering Price, Underwriting Discounts and Commissions(1), Proceeds, Before Expenses, to Us, and Proceeds, Before Expenses, to MRD Holdco LLC.

(1) See "Underwriting (Conflicts of Interest)" for a description of underwriting compensation payable in connection with this offering.

The underwriters expect to deliver the shares of common stock on or about _____, 2014.

Joint Book-Running Managers

Citigroup
BofA Merrill Lynch
Raymond James

BMO Capital Markets
RBC Capital Markets

Barclays
Goldman, Sachs & Co.
Wells Fargo Securities

Co-Managers

Comerica Securities
Morgan Stanley
Stephens Inc.
UBS Investment Bank

Credit Suisse
Scotiabank / Howard Weil

Mitsubishi UFJ Securities
Simmons & Company International
Stifel
Wunderlich Securities

The date of this prospectus is _____, 2014.

SUMMARY

This summary highlights information appearing elsewhere in this prospectus. You should read the entire prospectus carefully, including “Risk Factors” beginning on page 25 and the historical and pro forma financial statements and the related notes to those financial statements. Certain oil and gas industry terms, including the terms proved reserves, probable reserves and possible reserves, used in this prospectus are defined in the “Glossary of Oil and Natural Gas Terms” in Appendix A of this prospectus.

Because we control MEMP through our ownership of its general partner, we are required to consolidate MEMP for accounting and financial reporting purposes even though we only own a minority of its limited partner interests. Our financial statements include two reportable business segments: (i) the MRD Segment, which reflects all of our operations except for MEMP and its subsidiaries, and (ii) the MEMP Segment, which reflects the operations of MEMP and its subsidiaries. Except with respect to our consolidated and combined financial statements or as otherwise indicated, the description of our business, properties, strategies and other information in this summary does not include the business, properties or results of operations of BlueStone, MRD Royalty, MRD Midstream and Classic Pipeline (the assets of which are included in our predecessor but will not be conveyed to us in the restructuring transactions) or MEMP. Our proved reserves as of December 31, 2013 have been prepared by Netherland, Sewell & Associates, Inc., our independent reserve engineers (“NSAI”), and our probable and possible reserves as of December 31, 2013 have been prepared by our internal reserve engineers and audited by NSAI, all of which are reflected in our reserve reports (which we collectively refer to as our “reserve report”), summaries of which are included in Appendices B-1 and B-2 of this prospectus.

Information expressed on a pro forma basis in this summary gives effect to certain transactions as if they had occurred on March 31, 2014 for pro forma balance sheet purposes and on January 1, 2013 for pro forma statements of operations purposes. For a description of these transactions, please read “Summary Historical Consolidated and Combined Pro Forma Financial Data” and “—Our Structure and Restructuring Transactions.” Where applicable, we have assumed an initial public offering price of \$17.00 per share, the midpoint of the price range set forth on the cover page of this prospectus.

Overview

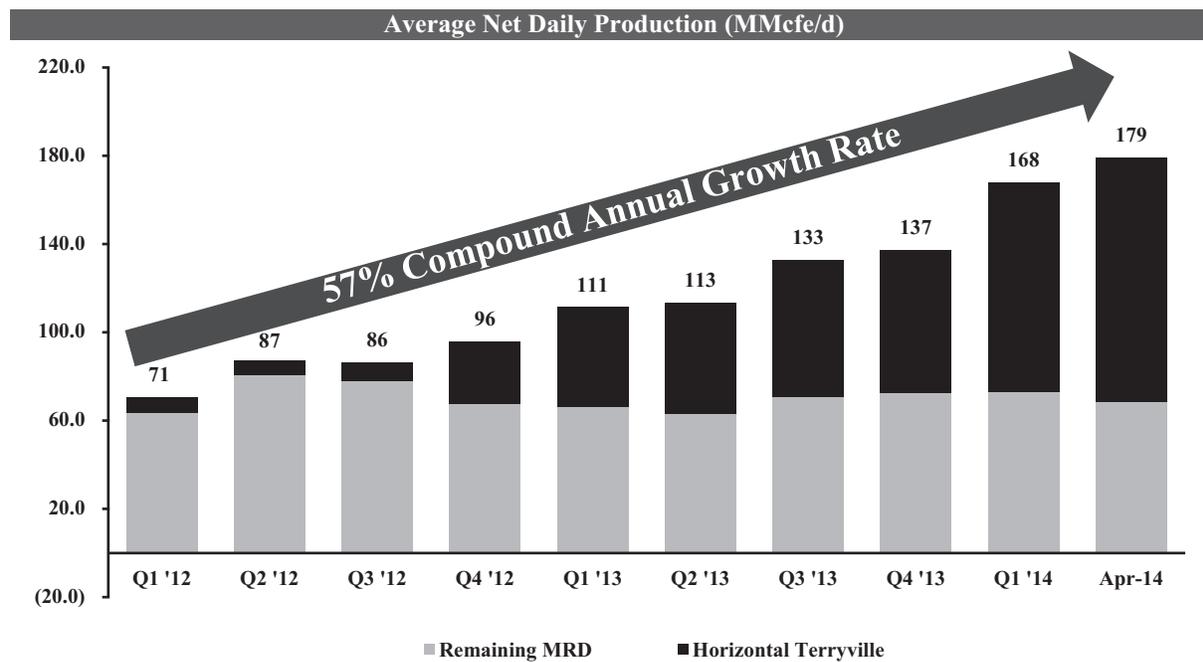
We are an independent natural gas and oil company focused on the exploitation, development, and acquisition of natural gas, NGL and oil properties with a majority of our activity in the Terryville Complex of North Louisiana, where we are targeting overpressured, liquids-rich natural gas opportunities in multiple zones in the Cotton Valley formation. Our total leasehold position is 347,458 gross (205,818 net) acres, of which 60,041 gross (51,522 net) acres are in what we believe to be the core of the Terryville Complex. We are focused on creating shareholder value primarily through the development of our sizeable horizontal inventory. As of December 31, 2013, we had 1,582 gross (1,091 net) identified horizontal drilling locations, of which 1,431 gross (994 net) identified horizontal drilling locations are located in the Terryville Complex. These total net identified horizontal drilling locations represent an inventory of over 32 years based on our expected 2014 drilling program. We believe our inventory to be repeatable and capable of generating high returns based on the extensive production history in the area, the results of our horizontal wells drilled to date, and the consistent reservoir quality across multiple target formations.

As of December 31, 2013, we had estimated proved, probable and possible reserves of approximately 1,126 Bcfe, 800 Bcfe and 1,711 Bcfe, respectively. As of such date, we operated 98% of our proved reserves, 71% of which were natural gas. For the three months ended March 31, 2014, 52% of our pro forma MRD Segment revenues were attributable to natural gas production, 24% to NGLs and 24% to oil. For the three months ended March 31, 2014, we generated pro forma MRD Segment Adjusted EBITDA of \$67 million and pro forma net income of \$15.9 million, and made pro forma capital expenditures of \$83 million. For the year ended December 31, 2013, we generated pro forma MRD Segment Adjusted EBITDA of \$159 million and pro forma

net income of \$11.8 million, and made pro forma total capital expenditures of \$203 million. Please see “—Summary Historical Consolidated and Combined Pro Forma Financial Data—Adjusted EBITDA” for an explanation of the basis for the pro forma presentation and our use of Adjusted EBITDA to measure the MRD Segment’s profitability.

Our average net daily production for the three months ended March 31, 2014 was 168 MMcfe/d (approximately 70% natural gas, 21% NGLs and 9% oil) and our reserve life was 18 years. As of December 31, 2013, we produced from 95 horizontal wells and 800 vertical wells. The Terryville Complex represented 85% of our total net production for the three months ended March 31, 2014. Our estimated average net daily production for the period from April 1 through April 30, 2014 was 179 MMcfe/d, of which 73% was from natural gas. Our estimated average net daily production from our properties in the Terryville Complex for the same period was 141 MMcfe/d, or 79% of our total production. In the Terryville Complex, we have completed and brought online six additional horizontal wells since January 1, 2014, bringing our total number of producing horizontal wells to 27 in our primary formations. The 30 day production average rates of our four most recent wells averaged 25.1 MMcfe/d per well.

The following chart provides information regarding our production growth and the increasing proportion of our horizontal well production since the beginning of 2012.



Our Properties

Cotton Valley—Overview

The Cotton Valley formation extends across East Texas, North Louisiana and Southern Arkansas. The formation has been under development since the 1930s and is characterized by thick, multi-zone natural gas and oil reservoirs with well-known geologic characteristics and long-lived, predictable production profiles. Over 21,000 vertical wells have been completed throughout the play. In 2005, operators started redeveloping the Cotton Valley using horizontal drilling and advanced hydraulic fracturing techniques. To date, operators have drilled over 600 horizontal Cotton Valley wells. Some large, analogous redevelopment projects in the Cotton

Recent Drilling Updates

During the week of April 14, 2014, we completed four new wells in the Terryville Complex. The combined 30 day production average for the four wells was 100.4 MMcfe per day. Three of the wells were drilled on one pad in the eastern edge of our property, the farthest step out from our core position to date, and produced a combined 30 day production average of 75.1 MMcfe per day. ▲

East Texas

We own and operate approximately 54,337 gross (42,894 net) acres as of December 31, 2013 in Texas, where we are currently producing primarily from the Cotton Valley, Travis Peak and Bossier formations and targeting the Cotton Valley formation for future development. From January 1, 2011 through December 31, 2013, we have drilled and completed 28 gross (10.3 net) wells and are operating one rig in East Texas as of December 31, 2013. In 2014, we plan to invest \$36 million to drill and complete 8 gross (6 net) wells in East Texas in the Joaquin Field of Panola and Shelby Counties. As of December 31, 2013, we had approximately 108 gross identified horizontal drilling locations in East Texas, including 54 gross (43 net) drilling locations to which we have attributed proved undeveloped reserves as of December 31, 2013. For the three months ended March 31, 2014, our average net daily production from our East Texas properties was 21 MMcfe/d, of which 74% was natural gas. Within our East Texas properties, on a proved reserves basis, we operate approximately 94% of our existing properties.

Rockies

We own approximately 162,375 gross (66,191 net) acres as of December 31, 2013 in our Rockies region and for the three months ended March 31, 2014 our average net daily production from this region was 4 MMcfe/d. In 2014, we plan to operate one rig and invest \$12 million to drill 3 gross (3 net) vertical wells in the Tepee Field of the Piceance Basin targeting the Mancos and Williams Fork formations. As of December 31, 2013, we had approximately 174 gross identified vertical drilling locations in the Tepee Field in our Rockies properties.

Proven and incentivized executive and technical team. We believe our management and technical teams are one of our principal competitive strengths due to our team’s significant industry experience and long history of working together in the identification, execution and integration of acquisitions, cost efficient management of profitable, large scale drilling programs and a focus on rates of return. Additionally, our technical team has substantial expertise in advanced drilling and completion technologies and decades of expertise in operating in the North Louisiana and East Texas regions. The members of our management team collectively have an average of 22 years of experience in the oil and natural gas industry. John A. Weinzierl, our Chief Executive Officer, has 24 years of oil and natural gas industry experience as a petroleum engineer, a strong commercial and technical background and extensive experience acquiring and managing oil and natural gas properties. Our management team has a significant economic interest in us directly and through its equity interests in our controlling stockholder, MRD Holdco. We believe our management team is motivated to deliver high returns, create shareholder value and maintain safe and reliable operations.

Our relationship with MEMP. We own a 0.1% general partner interest in MEMP through our ownership of its general partner as well as 50% of MEMP’s incentive distribution rights. MEMP’s objective as a master limited partnership is to generate stable cash flows, allowing it to make quarterly distributions to its limited partners and, over time, to increase those quarterly distributions. As a result of its familiarity with our management team and our asset base and our track record of prior “drop-down” transactions, we believe that MEMP is a natural purchaser of properties from us that meet its acquisition criteria. We believe this mutually beneficial relationship enhances MEMP’s ability to generate consistent returns on its oil and natural gas properties, provides us with a growing source of cash flow from our partnership interests in MEMP and allows us to monetize producing non-core properties. Since MEMP’s initial public offering, we have consummated “drop-down” transactions with MEMP totaling approximately \$376 million. In addition, we may have the opportunity to work jointly with MEMP to pursue certain acquisitions of oil and natural gas properties that may not otherwise be attractive acquisition candidates for either of us individually. While we believe that MEMP would be a preferred acquirer of our mature, non-core assets, we are under no obligation to offer to sell, and it is under no obligation to offer to buy, any of our properties.

Financial strength and flexibility. During 2013, we generated \$159 million of pro forma MRD Segment Adjusted EBITDA and made pro forma total capital expenditures of \$203 million. During the three months ended March 31, 2014, we generated pro forma MRD Segment Adjusted EBITDA of \$67 million and made pro forma capital expenditures of \$83 million. We intend to continue to fund our organic growth predominantly with internally generated cash flows while maintaining ample liquidity for opportunistic acquisitions. We will continue to maintain a disciplined approach to spending whereby we allocate capital in order to optimize returns and create shareholder value. We seek to protect these future cash flows and liquidity levels by maintaining a three-to-five year rolling hedge program. Pro forma as of March 31, 2014 for this offering and the restructuring transactions (including the redemption of the PIK notes for approximately \$360 million 30 days after the closing of this offering), we expect our total liquidity, consisting of cash on hand and available borrowing capacity under our new revolving credit facility, to be in excess of \$146 million.

Recent Developments

In December 2013, MRD LLC issued \$350,000,000 of its 10.00%/10.75% Senior PIK toggle notes due 2018, which we refer to as the PIK notes. MRD LLC used the net proceeds from that issuance to repay outstanding indebtedness, to fund a debt service reserve account for the payment of interest on the PIK notes, to pay a distribution to the Funds, and for general company purposes. In connection with the closing of this offering, we will assume the PIK notes and use a portion of the proceeds of this offering to redeem the PIK notes in their entirety, to pay any applicable premium in connection with such redemption and to pay accrued and unpaid interest, if any, to the date of redemption. MRD Holdco will receive the cash released upon the termination of the debt service reserve account in connection with the redemption of the PIK notes. See “Restructuring Transactions.”

In April 2014, we sold approximately 15 Bcfe of proved reserves located in East Texas to MEMP for cash consideration of approximately \$34.0 million, subject to customary post-closing adjustments.

In May 2014, we sold certain producing and non-producing properties (consisting of 43 gross (4 net) wells) in the Mississippian oil play of Northern Oklahoma to a third party for cash consideration of approximately \$6.7 million, subject to customary post-closing adjustments.

In connection with the closing of this offering, we intend to enter into a new \$2.0 billion revolving credit facility. Immediately prior to the closing of this offering, we will borrow approximately \$608.1 million from our new revolving credit facility primarily to pay off and terminate in their entirety WildHorse Resources' revolving credit facility and second lien term loan, which we refer to collectively as WildHorse Resources' credit agreements. See "Restructuring Transactions."

Acquisition History

We built out our leasehold positions in North Louisiana, East Texas and the Rocky Mountains primarily through the following acquisition activities:

- In November 2007, we acquired interests in the Joaquin Field, which is the core of our East Texas acreage;
- In December 2007, we acquired interests in the Tepee Field in the Piceance Basin in Colorado;
- In April and May 2010, we acquired interests in the Terryville Complex and other North Louisiana fields, which are the core of our North Louisiana acreage;
- In November 2010, we acquired interests in the Spider and E. Logansport Fields in North Louisiana;
- In May 2012, we acquired interests in the Terryville Complex and Double A Field in North Louisiana and East Texas;
- In April 2013, we acquired interests in the West Simsboro and Simsboro Fields of the Terryville Complex in North Louisiana;
- In November 2013, we acquired the remaining equity interests in Classic Hydrocarbons Holdings, L.P., Classic Hydrocarbons GP Co., L.L.C. and Black Diamond Minerals, LLC, which hold oil and natural gas properties in East Texas, North Louisiana and the Rocky Mountains; and
- In February 2014, we repurchased net profits interests in the Terryville Complex from an affiliate of NGP for \$63.4 million after customary adjustments. These net profits interests were originally sold to the NGP affiliate upon the completion of certain acquisitions in 2010 by WildHorse Resources.

Our Principal Stockholder

Our principal stockholder is MRD Holdco, which is controlled by the Funds, which are three of the private equity funds managed by NGP. Upon completion of this initial public offering, MRD Holdco, the selling stockholder in this offering, will own approximately 60.1% of our common stock (or approximately 57.3% if the underwriters' option to purchase additional shares from MRD Holdco is exercised in full). Pursuant to a voting agreement, MRD Holdco will also have the right to direct the vote of an additional approximately 21.2% of our common stock. The Funds also collectively indirectly own 50% of MEMP's incentive distribution rights, and at the completion of this offering MRD Holdco will own 5,360,912 subordinated units of MEMP, representing an 8.7% limited partner interest in MEMP. We are also a party to certain other agreements with MRD Holdco, the Funds and certain of their affiliates. For a description of the voting agreement and these other agreements, please read "Certain Relationships and Related Party Transactions."

- 99.9% of the membership interests in WildHorse Resources, the owner of our properties in the Terryville Complex; and
- MEMP GP (including MEMP GP's ownership of 50% of MEMP's incentive distribution rights);
- We will issue 127,108,112 shares of our common stock to MRD LLC, which MRD LLC will immediately distribute to MRD Holdco;
- We will assume the obligations of MRD LLC under the PIK notes, including the obligation to pay interest on the PIK notes if this offering closes before June 15, 2014 or to reimburse MRD LLC for the June 15, 2014 interest payment made on the PIK notes if this offering closes after June 15, 2014;
- Certain former management members of WildHorse Resources will contribute to us their outstanding incentive units in WildHorse Resources, as well as the remaining 0.1% of the membership interests in WildHorse Resources, and we will issue 40,891,888 shares of our common stock and pay cash consideration of \$30.0 million to such former management members of WildHorse Resources;
- We will enter into a registration rights agreement and a voting agreement with MRD Holdco and certain former management members of WildHorse Resources;
- We will enter into our new \$2.0 billion revolving credit facility and will use approximately \$608.1 million in borrowings under that facility to repay all amounts outstanding under WildHorse Resources' credit agreements, to pay the cash consideration payable to the former management members of WildHorse Resources and, if applicable, to reimburse MRD LLC for the June 15, 2014 interest payment made on the PIK notes;
- Our subsidiary MRD Operating LLC will enter into a merger agreement with MRD LLC pursuant to which (i) after the redemption of the PIK notes as described below, MRD LLC will merge into MRD Operating LLC, (ii) until the date of such merger, MRD LLC will perform under certain ancillary commercial contracts to which it is a party in support of its current operations for our benefit (such as office leases and drilling contracts), (iii) all amounts received under such contracts will be for our benefit and (iv) we will be responsible for all amounts owing under such contracts; and
- We will give notice of redemption to the holders of the PIK notes, which will specify a redemption date of 30 days after the closing of this offering, and we will use a portion of the net proceeds from this offering to redeem all outstanding PIK notes, including paying any applicable premium and accrued and unpaid interest, if any, to the date of redemption. Until the redemption date, or any earlier discharge date as noted below, of the PIK notes, we will use the amount to be paid to the holders of these notes to temporarily reduce amounts outstanding under our new revolving credit facility.

From the closing date of this offering until the date upon which the PIK notes are redeemed and the PIK notes indenture is terminated, MRD LLC will remain a subsidiary of MRD Holdco. During that time, MRD LLC will distribute to MRD Holdco:

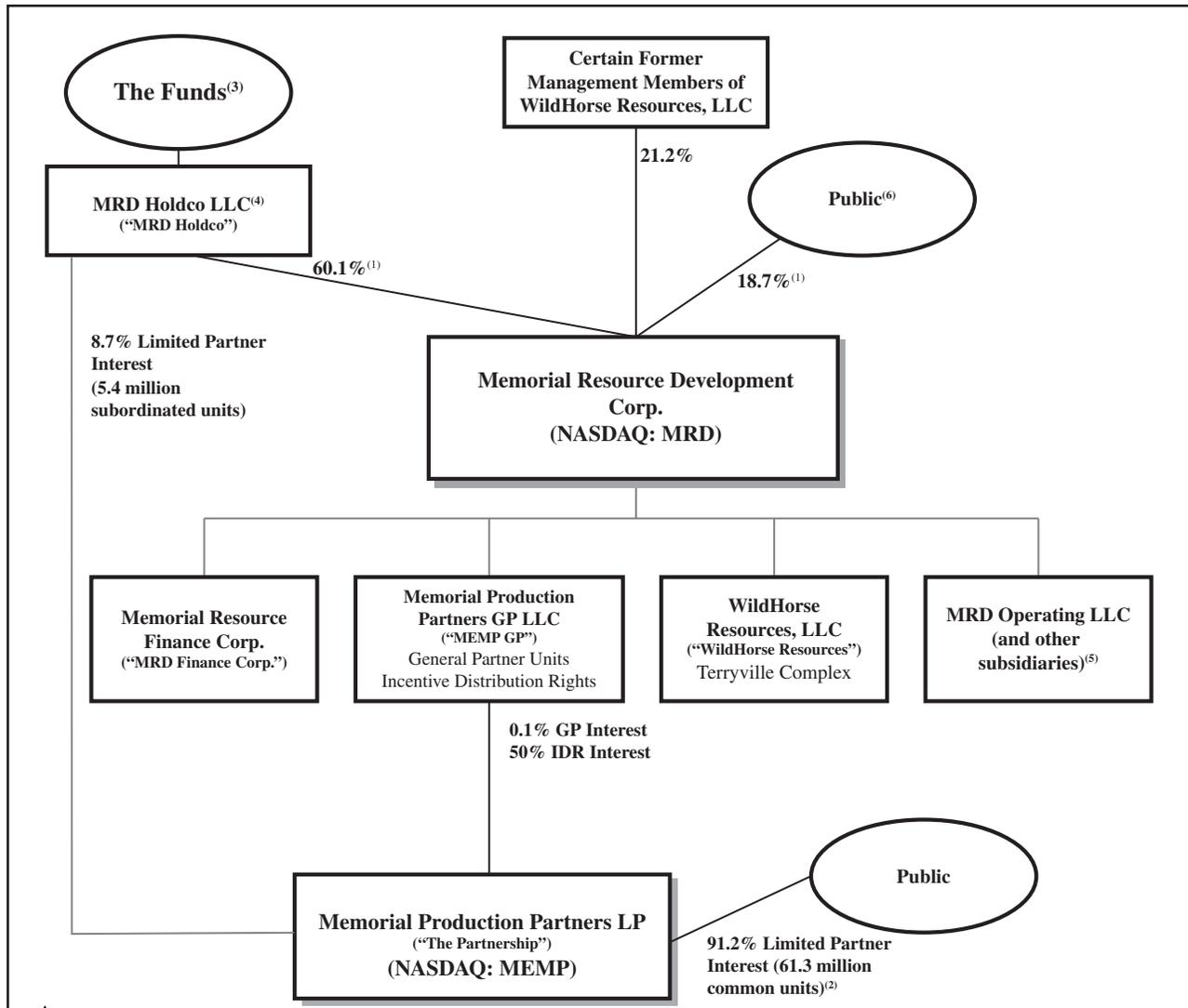
- BlueStone, which sold substantially all of its assets in July 2013 for \$117.9 million, MRD Royalty, which owns certain immaterial leasehold interests and overriding royalty interests in Texas and Montana, MRD Midstream, which owns an indirect interest in certain immaterial midstream assets in North Louisiana, Golden Energy Partners LLC and Classic Pipeline;
- 5,360,912 subordinated units of MEMP representing an approximate 8.7% limited partner interest in MEMP;
- The right to the \$50 million of cash to be released from the debt service reserve account in connection with the redemption of the PIK notes (or, if the closing of this offering occurs after June 15, 2014 the right to the amount remaining in such account plus the cash received from us in reimbursement of the interest paid on June 15, 2014 in respect of the PIK notes); and

- Approximately \$6.7 million of cash received by MRD LLC in connection with the sale of Golden Energy Partners LLC's assets in May 2014.

The redemption date of the PIK notes will be approximately 30 days after the closing of this offering. We will have the option to pay the full redemption amount (including any applicable premium and accrued and unpaid interest to the redemption date) to the PIK notes trustee at any time before the redemption date. If we deposit that amount with the PIK notes trustee in advance of the redemption date together with irrevocable instructions to use such amount for the redemption on the redemption date, then our obligations under the PIK notes indenture will be discharged on the date of such deposit. We may choose to so deposit that amount with the PIK notes trustee in advance of the redemption date. After the PIK notes indenture is terminated or discharged, as the case may be, MRD LLC will merge into MRD Operating LLC. At that time, MRD LLC's sole assets will be the commercial contracts noted above, which relate to the businesses owned by us.

Please read "Use of Proceeds" and "Restructuring Transactions" for more information about the application of the net proceeds from this offering and the restructuring transactions. For more information regarding BlueStone, see "Management's Discussion and Analysis of Financial Condition and Results of Operations—Results of Operations—MRD Segment." For more information about the services agreement with WildHorse Resources, see "Certain Relationships and Related Party Transactions—Services Agreement."

The following diagram shows our ownership structure after giving effect to the restructuring transactions and this offering, assuming no exercise of the underwriters' option to purchase additional shares from MRD Holdco and does not give effect to 19,250,000 shares of common stock reserved for future issuance under the Memorial Resource Development Corp. 2014 Long Term Incentive Plan (described in "Management—2014 Long Term Incentive Plan") or our intended grant of 1,176,471 restricted shares of common stock to our independent directors and certain of our employees under such plan in connection with a successful completion of this offering. See "Management—Executive Compensation—Compensation Following This Offering—IPO Bonuses." For information regarding our ownership structure before giving effect to the restructuring transactions and this offering, see the diagram on page 154 in "Restructuring Transactions."



- (1) If the underwriters exercise in full their option to purchase additional shares of common stock from MRD Holdco, the ownership interest of the public stockholders will increase to 41,400,000 shares of common stock, representing an aggregate 21.5% ownership interest in us, and MRD Holdco will own 110,208,112 shares of common stock, representing an aggregate 57.3% ownership interest in us.
- (2) As of March 31, 2014.
- (3) "The Funds" refer collectively to Natural Gas Partners VIII, L.P., Natural Gas Partners IX, L.P. and NGP IX Offshore Holdings, L.P., which collectively own all of the membership interests in MRD Holdco. Please read "Principal and Selling Stockholders" for information regarding beneficial ownership. The Funds collectively indirectly own 50% of the Partnership's incentive distribution rights.
- (4) Subsidiaries of MRD Holdco following the restructuring transactions will include BlueStone Natural Resources Holdings, LLC ("BlueStone"), MRD Royalty LLC ("MRD Royalty"), MRD Midstream LLC ("MRD Midstream"), Golden Energy Partners LLC ("Golden Energy") and Classic Pipeline & Gathering, LLC ("Classic Pipeline"). Also, please see the "Principal and Selling Stockholders" table on page 145 for the beneficial ownership of our shares by our executive officers and directors.
- (5) Includes Classic Hydrocarbons Holdings, L.P. ("Classic"), Classic Hydrocarbons GP Co., L.L.C. ("Classic GP"), Black Diamond Minerals, LLC ("Black Diamond"), and Beta Operating Company, LLC ("Beta Operating").
- (6) Does not include restricted common stock to be issued to our independent directors and certain of our employees in connection with the completion of this offering.

The Offering

Common stock offered by us	<u>24,500,000</u> shares.
Common stock offered by MRD Holdco	<u>11,500,000</u> shares (or <u>16,900,000</u> shares, if the underwriters exercise in full their option to purchase additional shares).
Common stock to be outstanding immediately after the offering ⁽¹⁾	<u>192,500,000</u> shares.
Option to purchase additional shares	MRD Holdco has granted the underwriters a 30-day option to purchase up to an aggregate of <u>5,400,000</u> additional shares of our common stock held by MRD Holdco to cover over-allotments.
Common stock voting rights	Each share of our common stock will entitle its holder to one vote.
Use of proceeds	<p>We intend to use the estimated net proceeds of approximately <u>\$390.7</u> million from this offering, based upon the assumed initial public offering price of <u>\$17.00</u> per share (the midpoint of the price range set forth on the cover of this prospectus), after deducting underwriting discounts and commissions and fees and expenses associated with this offering and the restructuring transactions, to redeem the PIK notes in their entirety and to pay any applicable premium in connection with such redemption and accrued and unpaid interest, if any, to the date of redemption (which we expect will be 30 days after the closing of this offering); together with borrowings of approximately <u>\$608.1</u> million under our new revolving credit facility, to make a cash payment to certain former management members of WildHorse Resources in connection with their contribution to us of their membership interests and incentive units in WildHorse Resources; to repay borrowings outstanding under WildHorse Resources' credit agreements; if the closing of this offering occurs after June 15, 2014, to reimburse MRD LLC for interest paid on the PIK notes; and for general corporate purposes. Until the redemption date or any earlier discharge date of the PIK notes, we will use the amount to be paid to the holders of those notes to temporarily reduce amounts outstanding under our new revolving credit facility. See "Use of Proceeds."</p> <p>We will not receive any of the proceeds from the sale of shares of our common stock by MRD Holdco, including pursuant to any exercise by the underwriters of their option to purchase additional shares of our common stock. MRD Holdco is deemed under federal securities laws to be an underwriter with respect to the common stock it may sell in connection with this offering.</p>
Dividend policy	We currently intend to retain all future earnings, if any, for use in the operation of our business and to fund future growth. The decision whether to pay dividends in the future will be made by our board of directors (our "Board") in light of conditions then existing, including

factors such as our financial condition, earnings, available cash, business opportunities, legal requirements, restrictions in our debt agreements and other contracts and other factors our Board deems relevant. See “Dividend Policy.”

Directed Share Program

The underwriters have reserved for sale at the initial public offering price up to 2% of the common stock being offered by this prospectus for sale to our employees, executive officers and directors who have expressed an interest in purchasing common stock in the offering. We do not know if these persons will choose to purchase all or any portion of these reserved shares, but any purchases they do make will reduce the number of shares available to the general public. Please read “Underwriting (Conflicts of Interest)” beginning on page 166.

Risk factors

You should carefully read and consider the information set forth under “Risk Factors” beginning on page 25 of this prospectus and all other information set forth in this prospectus before deciding to invest in our common stock.

Conflicts of Interest

Affiliates of Citigroup Global Markets Inc., Barclays Capital, Inc., Merrill Lynch, Pierce, Fenner & Smith Incorporated, BMO Capital Markets Corp., Comerica Securities, Inc., RBC Capital Markets, LLC and Wells Fargo Securities, LLC will be lenders under the Company’s new revolving credit facility and will receive more than 5% of the net proceeds of this offering in connection with the temporary repayment of amounts under such credit facility. See “Use of Proceeds.” Accordingly, this offering will be made in compliance with the applicable provisions of Rule 5121 of the Financial Industry Regulatory Authority, Inc. This rule requires that a “qualified independent underwriter” meeting certain standards participate in the preparation of the registration statement and prospectus and exercise the usual standards of due diligence with respect thereto. Simmons & Company International has agreed to act as a “qualified independent underwriter” within the meaning of Rule 5121 in connection with this offering. See “Underwriting (Conflicts of Interest).”

Listing and trading symbol

We have applied to list our common stock on the NASDAQ Global Market (“NASDAQ”) under the trading symbol “MRD.”

- (1) Does not include restricted shares of our common stock to be issued to our independent directors and certain of our employees in connection with the successful completion of this offering pursuant to our Plan (as defined herein). See “Management—Executive Compensation—Compensation Following This Offering—IPO Bonuses.”

We derived the data in the following tables from, and the following tables should be read together with and is qualified in its entirety by reference to, our predecessor's historical financial statements and our pro forma financial statements and the accompanying notes included elsewhere in this prospectus. You should also read "Restructuring Transactions," "Use of Proceeds," "Management's Discussion and Analysis of Financial Condition and Results of Operations," and our pro forma and historical consolidated financial statements, all included elsewhere in this prospectus. Among other things, those historical consolidated and combined financial statements and pro forma financial statements include more detailed information regarding the basis of presentation for the following data.

	MRD LLC (Predecessor)				Memorial Resource Development Corp. Pro Forma	
	Year Ended December 31,		Three Months Ended March 31,		Year Ended December 31,	Three Months Ended March 31,
	2013	2012	2014	2013	2013	2014
	(unaudited)				(unaudited)	
(in thousands)						
Statement of Operations Data:						
Revenues:						
Oil and natural gas sales	\$ 571,948	\$ 393,631	\$ 189,917	\$121,626	\$553,800	\$ 189,359
Other revenues	3,075	3,237	911	555	2,268	812
Total revenues	575,023	396,868	190,828	122,181	556,068	190,171
Costs and expenses:						
Lease operating	113,640	103,754	33,682	26,364	111,988	34,092
Pipeline operating	1,835	2,114	489	470	1,835	489
Exploration	2,356	9,800	146	856	2,356	146
Production and ad valorem taxes	27,146	23,624	8,584	7,286	26,269	8,558
Depreciation, depletion and amortization	184,717	138,672	57,679	43,206	174,198	57,369
Impairment of proved oil and gas properties	6,600	28,871	—	—	4,201	—
General and administrative	125,358	69,187	18,762	12,586	101,098	17,723
Accretion of asset retirement obligations	5,581	5,009	1,521	1,330	5,523	1,521
(Gain) loss on commodity derivatives	(29,294)	(34,905)	59,482	22,545	(29,311)	59,482
(Gain) loss on sale of property	(85,621)	(9,761)	(110)	(1,983)	3,927	—
Other, net	649	502	(12)	—	649	(12)
Total costs and expenses	352,967	336,867	180,223	112,660	402,733	179,368
Operating income	222,056	60,001	10,605	9,521	153,335	10,803
Other income (expense)						
Interest expense, net	(69,250)	(33,238)	(34,052)	(9,370)	(64,825)	(20,737)
Amortization of investment premium	—	(194)	—	—	—	—
Other, net	145	535	31	29	143	31
Total other income (expense)	(69,105)	(32,897)	(34,021)	(9,341)	(64,682)	(20,706)
Income tax benefit (expense)	(1,619)	(107)	(100)	—	(31,915)	3,565
Net income (loss)	\$ 151,332	\$ 26,997	\$ (23,516)	\$ 180	\$ 56,738	\$ (6,338)
Cash Flow Data:						
Net cash provided by operating activities	\$ 277,823	\$ 240,404	\$ 103,941	\$ 75,281		
Net cash used in investing activities	367,443	606,738	308,361	86,312		
Net cash provided by financing activities	117,950	361,761	166,218	91,570		
Balance Sheet Data (at period end):						
Working capital (deficit)	\$ 48,256	\$ 63,054	\$ (36,811)			(64,569)
Total assets	2,829,161	2,459,304	3,039,091			2,940,622
Total debt	1,663,217	939,382	1,927,931			1,600,186
Total equity (including noncontrolling interests)	858,132	1,276,709	742,313			869,744

	MRD Segment				MRD Segment Pro Forma	
	Year Ended December 31,		Three Months Ended March 31,		Year Ended December 31,	Three Months Ended March 31,
	2013	2012	2014	2013	2013	2014
	(unaudited) (in thousands)				(unaudited)	
Statement of Operations Data:						
Revenues:						
Oil and natural gas sales	\$230,751	\$138,032	\$ 89,618	\$54,038	\$212,603	\$ 89,060
Other revenues	807	782	248	124	—	149
Total revenues	231,558	138,814	89,866	54,162	212,603	89,209
Costs and expenses:						
Lease operating	25,006	24,438	5,709	5,077	23,354	6,119
Exploration	1,226	7,337	140	629	1,226	140
Production and ad valorem taxes	9,362	7,576	3,000	3,406	8,485	2,974
Depreciation, depletion and amortization	87,043	62,636	30,127	23,084	76,524	29,817
Impairment of proved oil and gas properties	2,527	18,339	—	—	128	—
General and administrative	81,758	38,414	8,804	5,273	57,498	7,765
Accretion of asset retirement obligations	728	632	164	185	670	164
(Gain) loss on commodity derivatives	(3,013)	(13,488)	12,716	9,476	(3,030)	12,716
(Gain) loss on sale of property	(82,773)	(2)	(110)	—	6,775	—
Other, net	2	364	—	—	2	—
Total costs and expenses	121,866	146,246	60,550	47,130	171,632	59,695
Operating income	109,692	(7,432)	29,316	7,032	40,971	29,514
Other income (expense)						
Interest expense, net	(27,349)	(12,802)	(17,974)	(2,828)	(22,924)	(4,659)
Earnings from equity investments	1,066	4,880	—	—	269	6
Other, net	145	535	(2,955)	(2,120)	143	31
Total other income (expense)	(26,138)	(7,387)	(20,929)	(4,948)	(22,512)	(4,622)
Income tax (expense) benefit	(1,311)	178	(25)	—	(6,645)	(8,961)
Net income (loss)	\$ 82,243	\$ (14,641)	\$ 8,362	\$ 2,084	\$ 11,814	\$ 15,931
Cash Flow Data (Unaudited):						
Net cash provided by operating activities	\$ 83,910	\$ 84,172	\$ 55,917	\$33,762		
Net cash used in investing activities	5,533	230,471	83,962	32,635		
Net cash provided by (used in) financing activities	(38,963)	133,271	1,246	58,902		
Other Financial Data:						
Adjusted EBITDA (unaudited)	\$ 197,903	\$ 132,105	\$ 71,188	\$50,759	\$159,239	\$ 67,104
Balance Sheet Data (at period end):						
Working capital (deficit) (unaudited)	\$ 51,214	\$ 2,424	\$ 15,914			(11,844)
Total assets	1,281,134	1,102,406	1,311,286			1,168,444
Total debt	871,150	309,200	939,496			611,751
Total equity (unaudited)	279,412	682,644	225,035			308,093

Conflicts of interest may arise because the board of directors of MEMP GP has a fiduciary duty to manage the general partner in a manner that is beneficial to the owner of MEMP GP, and at the same time, to manage MEMP in a manner that is beneficial to the MEMP unitholders. Conflicts may also arise because our executive officers have significant equity interests in MEMP.

We own MEMP GP, the sole general partner of MEMP. MEMP is a publicly traded limited partnership. The board of directors of MEMP GP owes specified duties to the MEMP unitholders, and also owes specified duties to us as owner of MEMP GP. As a result of these conflicts, the board of directors of MEMP GP may favor the interests of the MEMP public unitholders over our interests.

Our executive officers have significant equity interests in MEMP. As of March 31, 2014, Mr. Weinzierl, our Chief Executive Officer, owns 359,925 MEMP common units; Mr. Scarff, our President, owns 1,538 MEMP common units; Mr. Cozby, our Vice President and Chief Financial Officer, owns 101,837 MEMP common units; Mr. Forney, our Vice President, Operations, owns 92,447 MEMP common units; Mr. Roane, our Vice President, General Counsel and Corporate Secretary, owns 47,930 MEMP common units; and Mr. Robbins, our Vice President, Corporate Development, owns 53,801 MEMP common units. As a result of our executive officers' significant holdings of MEMP common units, our executive officers may favor the interests of MEMP over our interests.

If MEMP's unitholders remove MEMP GP, we would lose our general partner interest and incentive distribution rights in MEMP and the ability to manage MEMP.

We currently manage our investment in MEMP through our ownership interest in MEMP GP. MEMP's partnership agreement, however, gives unitholders of MEMP the right to remove its general partner upon the affirmative vote of holders of 66 $\frac{2}{3}$ % of the MEMP's outstanding units. If MEMP GP were removed as general partner of MEMP, it would receive cash or common units in exchange for its 0.1% general partner interest and incentive distribution rights and would also lose its ability to manage MEMP. While the cash or common units the general partner would receive are intended under the terms of MEMP's partnership agreement to fully compensate MEMP GP in the event such an exchange is required, the value of the investments we make with the cash or the common units may not over time be equivalent to the value of the general partner interest and the incentive distribution rights had MEMP GP retained them.

Restrictions in our existing and future debt agreements could limit our growth and our ability to engage in certain activities.

We have, and after the consummation of this offering will continue to have, a substantial amount of indebtedness. As of March 31, 2014, on a pro forma basis and after giving effect to this offering, the transactions described in "Restructuring Transactions" and the application of the net proceeds therefrom, we would have had aggregate indebtedness of approximately \$611.8 million at the MRD Segment. The terms and conditions governing our indebtedness:

- require us to dedicate a substantial portion of our cash flow from operations to service our existing debt, thereby reducing the cash available to finance our operations and other business activities and could limit our flexibility in planning for or reacting to changes in our business and the industry in which we operate;
- increase our vulnerability to economic downturns and adverse developments in our business;
- limit our ability to access the capital markets to raise capital on favorable terms or to obtain additional financing for working capital, capital expenditures or acquisitions or to refinance existing indebtedness;
- place restrictions on our ability to obtain additional financing, make investments, lease equipment, sell assets and engage in business combinations;
- place us at a competitive disadvantage relative to competitors with lower levels of indebtedness in relation to their overall size or less restrictive terms governing their indebtedness; and
- limit management's discretion in operating our business.

proceeds from such disposition. We may not be able to consummate those dispositions, and the proceeds of any such disposition may not be adequate to meet any debt service obligations then due. These alternative measures may not be successful and may not permit us to meet our scheduled debt service obligations.

Risks Relating to this Offering and Our Common Stock

There is no existing market for our common stock, and we do not know if one will develop, which could impede your ability to sell your shares and may depress the market price of our common stock.

There has not been a public market for our common stock prior to this offering. We cannot predict the extent to which investor interest in us will lead to the development of an active trading market or how liquid that market might become. If an active trading market does not develop, you may have difficulty selling any of our common stock that you buy. The initial public offering price for the common stock will be determined by negotiations between us, MRD Holdco and the underwriters and may not be indicative of prices that will prevail in the open market following this offering. See “Underwriting.” Consequently, you may be unable to sell our common stock at prices equal to or greater than the price you pay in this offering.

The underwriters of this offering may waive or release parties to the lock-up agreements entered into in connection with this offering, which could adversely affect the price of our common stock.

MRD Holdco, certain former management members of WildHorse Resources and our directors and executive officers have entered into lock-up agreements with respect to their common stock, pursuant to which they are subject to certain resale restrictions for a period of 180 days following the date of this prospectus. Citigroup Global Markets Inc., at any time, may release all or any portion of the common stock subject to the foregoing lock-up agreements. If the restrictions under the lock-up agreements are waived, then common stock will be available for sale into the public markets, which could cause the market price of our common stock to decline and impair our ability to raise capital.

If securities or industry analysts do not publish research or reports about our business, if they adversely change their recommendations regarding our common stock or if our operating results do not meet their expectations, our stock price could decline.

The trading market for our common stock will be influenced by the research and reports that industry or securities analysts publish about us or our business. If one or more of these analysts cease coverage of our company or fail to publish reports on us regularly, we could lose visibility in the financial markets, which in turn could cause our stock price or trading volume to decline. Moreover, if one or more of the analysts who cover our company downgrades our common stock or if our operating results do not meet their expectations, our stock price could decline.

NGP has the ability to direct the voting of more than a majority of our common stock, and its interests may conflict with those of our other stockholders.

Upon completion of this offering, NGP, through the Funds, will beneficially own all of MRD Holdco, which will own in the aggregate approximately 60.1% of the combined voting power of our common stock (or approximately 57.3% if the underwriters option to purchase additional shares of common stock from MRD Holdco is exercised in full). In connection with the completion of this offering, MRD Holdco and certain former management members of WildHorse Resources (which former management members will own in the aggregate approximately 21.2% of the combined voting power of our common stock) will enter into a voting agreement, pursuant to which, they will agree, among other things, to vote all of their shares as directed by MRD Holdco. As a result, MRD Holdco and, thus, NGP will be able to control matters requiring stockholder approval, including the election of directors, changes to our organizational documents and significant corporate transactions. This concentration of ownership makes it unlikely that any other holder or group of holders of our common stock will be able to affect the way we are managed or the direction of our business. The interests of

We currently have no plans to pay regular dividends on our common stock, so you may not receive funds without selling your common stock.

We currently have no plans to pay regular dividends on our common stock. Any payment of dividends in the future will be at the discretion of our Board and will depend on, among other things, our earnings, financial condition and business opportunities, the restrictions in our debt agreements, and other considerations that our Board deems relevant. Accordingly, you may have to sell some or all of your common stock in order to generate cash flow from your investment.

Future sales or the possibility of future sales of a substantial amount of our common stock may depress the price of shares of our common stock.

We may sell additional shares of common stock in subsequent public offerings or otherwise, including to finance acquisitions. Our amended and restated certificate of incorporation which we will adopt in connection with the closing of this offering will authorize us to issue 600,000,000 shares of common stock, of which 192,500,000 shares will be outstanding upon consummation of this offering. The outstanding share number includes shares that we and MRD Holdco are selling in this offering, which may be resold immediately in the public market. The remaining outstanding shares are restricted from immediate resale under the lock-up agreements with the underwriters described in “Underwriting,” but may be sold into the market in the near future. Following the expiration of the applicable lock-up period, which is 180 days after the date of this prospectus, 156,500,000 shares of our common stock may be sold into the public market, subject to compliance with the Securities Act or exemptions therefrom. See “Shares Eligible for Future Sale” for a discussion of the shares of our common stock that may be sold into the public market in the future.

MRD Holdco and certain former management members of WildHorse Resources will be party to the Registration Rights Agreement, which will require us to effect the registration of their shares in certain circumstances no earlier than the expiration of the lock-up period contained in the underwriting agreement entered into in connection with this offering. Upon the effectiveness of such a registration statement, all shares covered by the registration statement would be freely transferable without restriction or further registration under the Securities Act, except for any such shares which are acquired by any of our “affiliates” as that term is defined in Rule 144 under the Securities Act, which will be subject to the resale limitations of Rule 144. See “Certain Relationships and Related Party Transactions—Registration Rights Agreement.”

As soon as practicable after this offering, we intend to file a registration statement with the SEC on Form S-8 providing for the registration of 19,250,000 shares of our common stock issued or reserved for issuance under our Memorial Resource Development Corp. 2014 Long Term Incentive Plan that we plan to adopt prior to the completion of this offering. Subject to the satisfaction of vesting conditions and the expiration of lock-up agreements, shares registered under our registration statement on Form S-8 will be available for resale immediately in the public market without restriction.

We cannot predict the size of future issuances of our common stock or the effect, if any, that future issuances and sales of our common stock will have on the market price of our common stock. Sales of substantial amounts of our common stock (including any shares issued in connection with an acquisition), or the perception that such sales could occur, may adversely affect prevailing market prices for our common stock.

Our organizational documents and the voting agreement may impede or discourage a takeover, which could deprive our investors of the opportunity to receive a premium for their shares.

Provisions of our amended and restated certificate of incorporation, our amended and restated bylaws to be effective upon the completion of this offering and the voting agreement may make it more difficult for, or prevent a third party from, acquiring control of us. These provisions include:

- requiring that certain former management members of WildHorse Resources vote all of their shares of our common stock, including with respect to the election of our directors, as directed by MRD Holdco;

You will experience an immediate and substantial dilution in the net tangible book deficit of the common stock you purchase.

After giving effect to this offering and the other adjustments described in “Dilution,” we expect that our pro forma as adjusted net tangible book deficit as of March 31, 2014 would be \$3.18 per share. Based on an assumed initial public offering price of \$17.00 per share, the midpoint of the estimated offering range set forth on the cover page of this prospectus, you will experience immediate and substantial dilution of approximately \$13.82 per share in net tangible book deficit of the common stock you purchase in this offering. See “Dilution,” including the discussion of the effects on dilution from a change in the price of this offering.

We may issue preferred stock whose terms could adversely affect the voting power or value of our common stock.

Our amended and restated certificate of incorporation authorizes us to issue, without the approval of our stockholders, one or more classes or series of preferred stock having such designations, preferences, limitations and relative rights, including preferences over our common stock respecting dividends and distributions, as our Board may determine. The terms of one or more classes or series of preferred stock could adversely impact the voting power or value of our common stock. For example, we might grant holders of preferred stock the right to elect some number of our directors in all events or on the happening of specified events or the right to veto specified transactions. Similarly, the repurchase or redemption rights or liquidation preferences we might assign to holders of preferred stock could affect the residual value of the common stock. See “Description of Capital Stock—Limitation of Liability and Indemnification Matters.”

The additional requirements of having a class of publicly traded equity securities may strain our resources and distract management.

After the consummation of this offering, we will be subject to additional reporting requirements of the Securities and Exchange Act of 1934 (the “Exchange Act”), the Sarbanes-Oxley Act of 2002 and the Dodd-Frank Act. The Dodd-Frank Act effects comprehensive changes to public company governance and disclosures in the United States and will subject us to additional federal regulation. We cannot predict with any certainty the requirements of the regulations ultimately adopted or how the Dodd-Frank Act and such regulations will impact the cost of compliance for a company with publicly traded common stock. We are currently evaluating and monitoring developments with respect to the Dodd-Frank Act and other new and proposed rules and cannot predict or estimate the amount of the additional costs we may incur or the timing of such costs. These laws, regulations and standards are subject to varying interpretations, in many cases due to their lack of specificity, and, as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. This could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices. We intend to invest resources to comply with evolving laws, regulations and standards, and this investment may result in increased general and administrative expenses and a diversion of management’s time and attention from revenue-generating activities to compliance activities. If our efforts to comply with new laws, regulations and standards differ from the activities intended by regulatory or governing bodies due to ambiguities related to practice, regulatory authorities may initiate legal proceedings against us and our business may be harmed. We also expect that being a company with publicly traded common stock and these new rules and regulations will make it more expensive for us to obtain director and officer liability insurance, and we may be required to accept reduced coverage or incur substantially higher costs to obtain coverage. These factors could also make it more difficult for us to attract and retain qualified members of our Board, particularly to serve on our audit committee, and qualified executive officers.

The Sarbanes-Oxley Act requires that we maintain effective disclosure controls and procedures and internal control over financial reporting. These requirements may place a strain on our systems and resources. Under Section 404 of the Sarbanes-Oxley Act, we will be required to include a report of management on our internal control over financial reporting in our Annual Reports on Form 10-K beginning with the Form 10-K for the year ending December 31, 2014. In order to maintain and improve the effectiveness of our disclosure controls and

USE OF PROCEEDS

Assuming an initial public offering price of \$17.00 per share, the midpoint of the range set forth on the cover page of this prospectus, we estimate that we will receive net proceeds from this offering of approximately \$390.7 million, after deducting underwriting discounts and commissions and fees and expenses associated with this offering and the restructuring transactions of \$25.8 million payable by us.

The following table illustrates our use of proceeds of this offering and borrowings under our new revolving credit facility:

<u>Sources of Cash (In millions)</u>		<u>Uses of Cash (In millions)</u>	
Net proceeds from this offering	\$390.7	Redemption of PIK notes(1)	\$359.9
Borrowings under our new revolving credit facility	608.1	Cash consideration to certain former management members of WildHorse Resources(2)	30.0
		Repayment of outstanding borrowings under WildHorse Resources' credit agreements(2)	<u>587.4</u>
		Reimbursement to MRD LLC for June 15 interest payment on the PIK notes(2)	<u>17.2</u>
		Costs associated with our new revolving credit facility	<u>4.3</u>
Total	<u><u>\$998.8</u></u>	Total	<u><u>\$998.8</u></u>

- (1) Includes the payment of principal plus any applicable premium and accrued and unpaid interest, if any, to the date of redemption, which we expect will be 30 days after the closing of this offering. Until such redemption date or any earlier discharge date, we will use the amount to be paid to the holders of the PIK notes to temporarily reduce amounts outstanding under our new revolving credit facility.
- (2) Please see "Restructuring Transactions" for additional discussion of the cash consideration that will be paid to certain former management members of WildHorse Resources and the reimbursement to MRD LLC and "Management Discussion and Analysis of Financial Condition and Results of Operations—Debt Agreements—MRD Segment—WildHorse Resources Revolving Credit Facility and Second Lien Facility (To Be Terminated at Closing)" for a description of the repayment of outstanding borrowings under WildHorse Resources' credit agreements that will be made in connection with the restructuring transactions. \$587.4 million represents the aggregate outstanding borrowings under the WildHorse Resources' credit agreements as of May 30, 2014.

We will not receive any proceeds from the sale of shares of our common stock by MRD Holdco, including pursuant to any exercise by the underwriters of their option to purchase additional shares of our common stock. MRD Holdco is deemed under federal securities laws to be an underwriter with respect to the common stock it may sell in connection with this offering.

Each \$1.00 increase (decrease) in the assumed initial public offering price of \$17.00 per share would increase (decrease) the net proceeds to us from this offering by \$23.2 million, assuming the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting the estimated underwriting discounts and commissions and estimated expenses payable by us. An increase (decrease) of 1,000,000 in the number of shares we are offering would increase (decrease) the net proceeds to us from this offering, after deducting the estimated underwriting discounts and commissions and estimated expenses payable by us, by approximately \$16.1 million, assuming the initial public offering price per share remains the same.

The PIK notes bear interest at the rate of 10.00% per annum if paid in cash and 10.75% per annum if paid as PIK interest and mature on December 15, 2018. MRD LLC used the net proceeds from the offering of the PIK notes after paying offering expenses to repay all amounts outstanding under its senior secured credit facility, to fund a debt service reserve account for the payment of interest on the PIK notes, to pay a distribution to the Funds and for general company purposes. In connection with the closing of this offering, we will enter into a new revolving credit facility and use a portion of the borrowings under that agreement to repay outstanding borrowings under WildHorse Resources' credit agreements, which will be terminated upon repayment. Borrowings under WildHorse Resources' credit agreements were used to acquire assets, to make capital expenditures and for other general corporate purposes. See "Management's Discussion and Analysis of Financial Condition and Results of Operations—Debt Agreements—MRD Segment."

CAPITALIZATION

The following table shows our predecessor's cash and cash equivalents and our predecessor's capitalization as of March 31, 2014:

- on an actual basis; and
- on an as adjusted basis to give effect to (i) the restructuring transactions described under "Restructuring Transactions," including borrowing \$611.8 million under our new revolving credit facility to repay outstanding borrowings under WildHorse Resources' credit agreements and (ii) the issuance and sale of 24,500,000 shares of common stock in this offering by us at an assumed initial offering price of \$17.00 per share (the midpoint of the price range set forth on the cover of this prospectus) and our application of the net proceeds as described under "Use of Proceeds."

You should read this table together with "Restructuring Transactions," "Use of Proceeds," and "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the pro forma and historical consolidated financial statements included elsewhere in this prospectus. For a description of the pro forma adjustments, please read our Unaudited Pro Forma Combined Financial Statements.

	At March 31, 2014	
	Actual	As Adjusted
Cash and cash equivalents(1)	\$ 39,519	36,444
Restricted cash(2)	50,003	—
Long-term debt:		
MRD Segment:		
WildHorse Resources revolving credit facility	271,100	—
WildHorse Resources second lien term loan	325,000	—
MRD senior secured revolving credit facility	—	611,751
10.00%/10.75% Senior PIK Toggle Notes due 2018	343,396	—
MEMP Segment:		
MEMP revolving credit facility	299,000	299,000
7.625% senior notes due 2021	689,435	689,435
Total long-term debt	1,927,931	1,600,186
Members' equity:		
MRD LLC members' equity	222,889	—
Stockholders' equity:		
Common stock, \$0.01 par value, 1,000 shares authorized, 100 shares issued and outstanding (historical); 600,000,000 shares authorized, 192,500,000 shares issued and outstanding	—	1,954
Additional paid-in capital	—	1,071,553
Accumulated deficit	—	(761,073)
Total Memorial Resource Development Corp. stockholders' equity	—	312,434
Noncontrolling interest	519,424	557,310
Total capitalization	2,670,244	2,469,930

(1) Includes \$1.7 million of cash and cash equivalents related to MEMP and its subsidiaries.

(2) Represents the \$50 million of restricted cash held in the debt service reserve account related to, including as security for payment of interest and certain other payments on, the PIK notes of which \$32.8 million (net of approximately \$17.2 million to be used to pay accrued interest on the PIK notes on June 15, 2014 if this offering does not close by such date) is to be retained by MRD LLC in the restructuring transactions and released to MRD Holdco upon redemption of the PIK notes (which we expect will be 30 days after the closing of this offering). We will reimburse MRD LLC for the approximately \$17.2 million interest payment, or, if this offering closes before June 15, 2014, we will make such interest payment with borrowings under our new revolving credit facility.

DILUTION

Dilution is the amount by which the offering price paid by the purchasers of the common stock to be sold in this offering exceeds the net tangible book value (deficit) per share of common stock after the offering. Net tangible book value per share is determined at any date by subtracting our total liabilities from the total book value of our tangible assets and dividing the difference by the number of shares of common stock deemed to be outstanding at that date. There will be 19,250,000 shares of our common stock reserved for future awards under the Memorial Resource Development Corp. 2014 Long Term Incentive Plan as of the consummation of this offering.

Our net tangible book value as of March 31, 2014 was \$222.9 million, or \$1.33 per share. After giving effect to the receipt of approximately \$390.7 million of estimated net proceeds from our sale of 24,500,000 shares of common stock in this offering at an assumed offering price of \$17.00 per share, which represents the midpoint of the range set forth on the front cover of this prospectus and 1,176,471 restricted shares of common stock to be issued by us to our independent directors and certain of our employees in connection with the successful completion of this offering pursuant to our Plan (see “Management—Executive Compensation—Compensation Following This Offering—IPO Bonuses.”), our as adjusted net tangible book value as of March 31, 2014 would have been approximately \$613.6 million, or \$3.18 per share. This represents an immediate increase in our net tangible book value of \$1.85 per share to our existing stockholders and an immediate dilution of \$13.82 per share to new investors purchasing shares of common stock in the offering. The following table illustrates this substantial and immediate per share dilution to new investors:

	Per Share
Assumed initial public offering price per share	\$17.00
Net tangible book value before the offering	1.33
Increase per share attributable to investors in the offering	1.85
As adjusted net tangible book value after the offering	3.18
Dilution per share to new investors	\$13.82

A \$1.00 increase (decrease) in the assumed initial public offering price of \$17.00 per share would decrease (increase) our as adjusted net tangible book value by \$23.2 million, or \$0.12 per share, and increase (decrease) the dilution per share to new investors in this offering by \$0.88, assuming the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting the estimated underwriting discounts and commissions and estimated expenses payable by us.

The following table summarizes on an as adjusted basis as of March 31, 2014, giving effect to:

- the total number of shares of common stock purchased from us;
- the total consideration paid to us, assuming an initial public offering price of \$17.00 per share (before deducting the estimated underwriting discount and commissions and offering expenses payable by us in connection with this offering); and
- the average price per share paid by our existing stockholders and by new investors purchasing shares in this offering:

	Shares Purchased		Total Consideration		Average Price Per Share
	Number	Percent	(in thousands) Amount	Percent	
Existing stockholders(1)+	168,000,000	87%	\$223,440	34%	\$ 1.33
Investors in the offering	24,500,000	13%	416,500	66%	17.00
Total	192,500,000	100%	\$639,940	100%	\$ 3.32

(1) The number of shares disclosed for the existing stockholders includes 16,900,000 shares that may be sold by MRD Holdco in this offering, including pursuant to any exercise of the underwriters’ option to purchase additional shares of common stock.

A \$1.00 increase (decrease) in the assumed initial public offering price of \$17.00 per share (the midpoint of the range set forth on the cover page of this prospectus) would increase (decrease) total consideration paid by new investors, total consideration paid by all stockholders and the average price per share by \$24.5 million, \$24.5 million and \$0.12 per share, respectively, assuming the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same.



	MRD LLC (Predecessor)				Memorial Resource Development Corp. Pro Forma	
	Year Ended December 31,		Three Months Ended March 31,		Year Ended December 31,	Three Months Ended March 31,
	2013	2012	2014	2013	2013	2014
			(unaudited) (in thousands)		(unaudited)	
Statement of Operations Data:						
Revenues:						
Oil and natural gas sales	\$ 571,948	\$ 393,631	\$ 189,917	\$ 121,626	\$ 553,800	\$ 189,359
Other revenues	3,075	3,237	911	555	2,268	812
Total revenues	575,023	396,868	190,828	122,181	556,068	190,171
Costs and expenses:						
Lease operating	113,640	103,754	33,682	26,364	111,988	34,092
Pipeline operating	1,835	2,114	489	470	1,835	489
Exploration	2,356	9,800	146	856	2,356	146
Production and ad valorem taxes	27,146	23,624	8,584	7,286	26,269	8,558
Depreciation, depletion and amortization	184,717	138,672	57,679	43,206	174,198	57,369
Impairment of proved oil and gas properties	6,600	28,871	—	—	4,201	—
General and administrative	125,358	69,187	18,762	12,586	101,098	17,723
Accretion of asset retirement obligations	5,581	5,009	1,521	1,330	5,523	1,521
(Gain) loss on commodity derivatives	(29,294)	(34,905)	59,482	22,545	(29,311)	59,482
(Gain) loss on sale of property	(85,621)	(9,761)	(110)	(1,983)	3,927	—
Other, net	649	502	(12)	—	649	(12)
Total costs and expenses	352,967	336,867	180,223	112,660	402,733	179,368
Operating income	222,056	60,001	10,605	9,521	153,335	10,803
Other income (expense)						
Interest expense, net	(69,250)	(33,238)	(34,052)	(9,370)	(64,825)	(20,737)
Amortization of investment premium	—	(194)	—	—	—	—
Other, net	145	535	31	29	143	31
Total other income (expense)	(69,105)	(32,897)	(34,021)	(9,341)	(64,682)	(20,706)
Income tax benefit (expense)	(1,619)	(107)	(100)	—	(31,915)	3,565
Net income (loss)	\$ 151,332	\$ 26,997	\$ (23,516)	\$ 180	\$ 56,738	\$ (6,338)
Cash Flow Data:						
Net cash provided by operating activities						
	\$ 277,823	\$ 240,404	\$ 103,941	\$ 75,281		
Net cash used in investing activities						
	367,443	606,738	308,361	86,312		
Net cash provided by financing activities						
	117,950	361,761	166,218	91,570		
Balance Sheet Data (at period end):						
Working capital (deficit)	\$ 48,256	\$ 63,054	\$ (36,811)			(64,569)
Total assets	2,829,161	2,459,304	3,039,091			2,940,622
Total debt	1,663,217	939,382	1,927,931			1,600,186
Total equity (including noncontrolling interests)	858,132	1,276,709	742,313			869,744

	MRD Segment				MRD Segment Pro Forma	
	Year Ended December 31,		Three Months Ended March 31,		Year Ended December 31,	Three Months Ended March 31,
	2013	2012	2014	2013	2013	2014
	(unaudited) (in thousands)				(unaudited)	
Statement of Operations Data:						
Revenues:						
Oil and natural gas sales	\$ 230,751	\$ 138,032	\$ 89,618	\$ 54,038	\$ 212,603	\$ 89,060
Other revenues	807	782	248	124	—	149
Total revenues	231,558	138,814	89,866	54,162	212,603	89,209
Costs and expenses:						
Lease operating	25,006	24,438	5,709	5,077	23,354	6,119
Exploration	1,226	7,337	140	629	1,226	140
Production and ad valorem taxes	9,362	7,576	3,000	3,406	8,485	2,974
Depreciation, depletion and amortization	87,043	62,636	30,127	23,084	76,524	29,817
Impairment of proved oil and gas properties	2,527	18,339	—	—	128	—
General and administrative	81,758	38,414	8,804	5,273	57,498	7,765
Accretion of asset retirement obligations	728	632	164	185	670	164
(Gain) loss on commodity derivatives	(3,013)	(13,488)	12,716	9,476	(3,030)	12,716
(Gain) loss on sale of property	(82,773)	(2)	(110)	—	6,775	—
Other, net	2	364	—	—	2	—
Total costs and expenses	121,866	146,246	60,550	47,130	171,632	59,695
Operating income	109,692	(7,432)	29,316	7,032	40,971	29,514
Other income (expense)						
Interest expense, net	(27,349)	(12,802)	(17,974)	(2,828)	(22,924)	(4,659)
Earnings from equity investments	1,066	4,880	—	—	269	6
Other, net	145	535	(2,955)	(2,120)	143	31
Total other income (expense)	(26,138)	(7,387)	(20,929)	(4,948)	(22,512)	(4,622)
Income tax (expense) benefit	(1,311)	178	(25)	—	(6,645)	(8,961)
Net income (loss)	\$ 82,243	\$ (14,641)	\$ 8,362	\$ 2,084	\$ 11,814	\$ 15,931
Cash Flow Data (Unaudited):						
Net cash provided by operating activities						
	\$ 83,910	\$ 84,172	\$ 55,917	\$ 33,762		
Net cash used in investing activities						
	5,533	230,471	83,962	32,635		
Net cash provided by (used in) financing activities						
	(38,963)	133,271	1,246	58,902		
Other Financial Data:						
Adjusted EBITDA (unaudited)	\$ 197,903	\$ 132,105	\$ 71,188	\$ 50,759	\$ 159,239	\$ 67,104
Balance Sheet Data (at period end):						
Working capital (deficit) (unaudited)	\$ 51,214	\$ 2,424	\$ 15,914			(11,844)
Total assets	1,281,134	1,102,406	1,311,286			1,168,444
Total debt	871,150	309,200	939,496			611,751
Total equity (unaudited)	279,412	682,644	225,035			308,093

- *Production and ad valorem taxes.* These consist of severance and ad valorem taxes. Production taxes are paid on produced natural gas, NGLs and oil based on a percentage of market prices and at fixed per unit rates established by federal, state or local taxing authorities. Both the MRD and MEMP Segments take full advantage of all credits and exemptions in the various taxing jurisdictions where they operate. Ad valorem taxes are generally tied to the valuation of the oil and natural properties; however, these valuations are reasonably correlated to revenues, excluding the effects of any commodity derivative contracts.
- *Exploration expense.* These are geological and geophysical costs and include seismic costs, costs of unsuccessful exploratory dry holes and unsuccessful leasing efforts.
- *Impairment of unproved and proved properties.* For unproved properties, these primarily include costs associated with lease expirations. Proved properties are impaired whenever the carrying value of the properties exceed their estimated undiscounted future cash flows.
- *Depreciation, depletion and amortization.* Depreciation, depletion and amortization, or DD&A, includes the systematic expensing of the capitalized costs incurred to acquire, explore and develop natural gas, NGLs and oil. As a “successful efforts” company, all costs associated with acquisition and development efforts and all successful exploration efforts are capitalized, and these costs are allocated to each unit of production using the units of production method.
- *General and administrative expense.* These costs include overhead, including payroll and benefits for employees, costs of maintaining headquarters, costs of managing production and development operations, compensation expense associated with incentive units, franchise taxes, audit and other professional fees, and legal compliance expenses. Certain of our and our predecessor’s employees hold incentive units in MRD LLC and/or, prior to the restructuring transactions, certain subsidiaries of MRD LLC, that may, upon vesting, entitle the holders to a disproportionate share of future distributions by MRD LLC to its members after all of the members that have made capital contributions to MRD LLC and/or certain subsidiaries have received cumulative distributions in respect of their membership interest equal to specified rates of return.

In connection with the closing of this offering, certain former management members of WildHorse Resources will contribute to us their incentive units in WildHorse Resources, as well as the remaining 0.1% of the membership interests in WildHorse Resources in exchange for approximately 40.9 million shares of our common stock and cash consideration of \$30.0 million. We expect that approximately \$0.5 million, which is the portion of the total consideration related to acquiring the 0.1% membership interest, will be accounted for as the acquisition of noncontrolling interests and approximately \$724.7 million will be recorded in compensation expense within general and administrative expenses during the second quarter of 2014 related to the incentive units. The compensation expense related to the shares of our common stock, which is approximately \$695.2 million, will be offset by a deemed capital contribution from MRD Holdco.

In connection with the restructuring transactions, the MRD LLC incentive units will be exchanged for substantially identical units in MRD Holdco, and such incentive units will entitle holders thereof to portions of future distributions by MRD Holdco. While any such distributions made by MRD Holdco will not involve any cash payment by us, we will be required to recognize non-cash compensation expense within general and administrative expenses, which may be material, in the period in which the performance conditions are probable of being satisfied. The compensation expense recognized by us related to the incentive units will be offset by a deemed capital contribution from MRD Holdco.

- *Interest expense.* Both the MRD and MEMP Segments finance a portion of their working capital requirements and acquisitions with borrowings under revolving credit facilities and senior note issuances. As a result, both the MRD and MEMP Segments incur substantial interest expense that is affected by both fluctuations in interest rates and financing decisions. We expect to continue to incur significant interest expense as we continue to grow.
- *Income tax expense.* MRD LLC, our predecessor, is a limited liability company not subject to federal income taxes. Accordingly, no provision for federal income taxes has been provided for in our historical results of operations because taxable income was passed through to MRD LLC’s members. Although we are a corporation under the Internal Revenue Code, subject to federal income taxes at a statutory rate of 35% of pretax earnings, we do not expect to report any income tax benefit or expense until the consummation of this offering.

BUSINESS

MRD LLC has two reportable business segments, both of which are engaged in the acquisition, exploitation, development and production of oil and natural gas properties:

- MRD—reflects all of MRD LLC’s consolidating subsidiaries except for MEMP.
- MEMP—reflects the consolidated and combined operations of MEMP.

Because we control MEMP through our ownership of its general partner, its business and operations are consolidated with ours for financial reporting purposes, even though we own a minority of its partner interests. As a result, our financial statements and notes thereto included elsewhere in this prospectus consolidate MEMP’s business and assets with ours. However, except where expressly noted to the contrary, the following discussion of our business, operations and assets and the use of the terms “we”, “our” and “us” excludes MEMP’s business, operations and assets. See “—MEMP” for information regarding MEMP’s business and assets. In addition, because BlueStone will not be included in the assets that MRD LLC will contribute to us in connection with the restructuring transactions, unless stated otherwise, the information in this section does not include BlueStone.

We are an independent natural gas and oil company focused on the exploitation, development, and acquisition of natural gas, NGL and oil properties with a majority of our activity in the Terryville Complex of North Louisiana, where we are targeting overpressured, liquids-rich natural gas opportunities in multiple zones in the Cotton Valley formation. Our total leasehold position is 347,458 gross (205,818 net) acres, of which 60,041 gross (51,522 net) acres are in what we believe to be the core of the Terryville Complex. We are focused on creating shareholder value primarily through the development of our sizeable horizontal inventory.

MEMP is engaged in the acquisition, exploitation, development and production of oil and natural gas properties, with assets consisting primarily of producing oil and natural gas properties that are principally located in East Texas/North Louisiana, the Permian Basin, offshore Southern California, the Rockies, the Eagle Ford and South Texas. Most of MEMP’s properties are located in large, mature oil and natural gas reservoirs with well-known geologic characteristics and long-lived, predictable production profiles and modest capital requirements. MEMP is focused on generating stable cash flows, to allow MEMP to make quarterly cash distributions to its unitholders and, over time, to increase those quarterly cash distributions.

MRD

Overview

As of December 31, 2013, we had 1,582 gross (1,091 net) identified horizontal drilling locations, of which 1,431 gross (994 net) identified horizontal drilling locations are located in the Terryville Complex. These total net identified horizontal drilling locations represent an inventory of over 32 years based on our expected 2014 drilling program. We believe our inventory to be repeatable and capable of generating high returns based on the extensive production history in the area, the results of our horizontal wells drilled to date, and the consistent reservoir quality across multiple target formations. As of December 31, 2013, we had estimated proved, probable and possible reserves of approximately 1,126 Bcfe, 800 Bcfe and 1,711 Bcfe, respectively. As of such date, we operated 98% of our proved reserves, 71% of which were natural gas. For the three months ended March 31, 2014, 52% of our pro forma MRD Segment revenues were attributable to natural gas production, 24% to NGLs and 24% to oil. For the three months ended March 31, 2014, we generated pro forma MRD Segment Adjusted EBITDA of \$67 million and pro forma net income of \$15.9 million, and made pro forma capital expenditures of \$83 million. For the year ended December 31, 2013, we generated pro forma MRD Segment Adjusted EBITDA of \$159 million and pro forma net income of \$11.8 million, and made pro forma total capital expenditures of \$203 million. Please see “—Summary Historical Consolidated and Combined Pro Forma Financial Data—Adjusted EBITDA” for an explanation of the basis for the pro forma presentation and our use of Adjusted EBITDA to measure the MRD Segment’s profitability.

“drop-down” transactions with MEMP totaling approximately \$376 million. In addition, we may have the opportunity to work jointly with MEMP to pursue certain acquisitions of oil and natural gas properties that may not otherwise be attractive acquisition candidates for either of us individually. While we believe that MEMP would be a preferred acquirer of our mature, non-core assets, we are under no obligation to offer to sell, and it is under no obligation to offer to buy, any of our properties.

Financial strength and flexibility. During 2013, we generated \$159 million of pro forma MRD Segment Adjusted EBITDA and made pro forma total capital expenditures of \$203 million. During the three months ended March 31, 2014, we generated pro forma MRD Segment Adjusted EBITDA of \$67 million and pro forma net income of \$360 million, and made pro forma capital expenditures of \$83 million. We intend to continue to fund our organic growth predominantly with internally generated cash flows while maintaining ample liquidity for opportunistic acquisitions. We will continue to maintain a disciplined approach to spending whereby we allocate capital in order to optimize returns and create shareholder value. We seek to protect these future cash flows and liquidity levels by maintaining a three-to-five year rolling hedge program. Pro forma as of March 31, 2014 for this offering and the restructuring transactions (including the redemption of the PIK notes for approximately \$363 million 30 days after the closing of this offering), we expect our total liquidity, consisting of cash on hand and available borrowing capacity under our new revolving credit facility, to be in excess of \$146 million.

Acquisition History

We built out our leasehold positions in North Louisiana, East Texas and the Rocky Mountains primarily through the following acquisition activities:

- In November 2007, we acquired interests in the Joaquin Field, which is the core of our East Texas acreage;
- In December 2007, we acquired interests in the Tepee Field in the Piceance Basin in Colorado;
- In April and May 2010, we acquired interests in the Terryville Complex and other North Louisiana fields, which are the core of our North Louisiana acreage;
- In November 2010, we acquired interests in the Spider and E. Logansport Fields in North Louisiana;
- In May 2012, we acquired interests in the Terryville Complex and Double A Field in North Louisiana and East Texas;
- In April 2013, we acquired interests in the West Simsboro and Simsboro Fields of the Terryville Complex in North Louisiana;
- In November 2013, we acquired the remaining equity interests in Classic Hydrocarbons Holdings, L.P., Classic Hydrocarbons GP Co., L.L.C. and Black Diamond Minerals, LLC, which hold oil and natural gas properties in East Texas, North Louisiana and the Rocky Mountains; and
- In February 2014, we repurchased net profits interests in the Terryville Complex from an affiliate of NGP for \$63.4 million after customary adjustments. These net profits interests were originally sold to the NGP affiliate upon the completion of certain acquisitions in 2010 by WildHorse Resources.

2013 and 2014 Capital Budget

During 2013, we invested approximately \$190 million of capital to drill 31 gross (21.3 net) wells. A substantial portion of our development program is focused on horizontal drilling of liquids rich wells in the Terryville Complex, where we spent approximately \$163 million in capital expenditures to drill 15 gross (12.1 net) horizontal wells during 2013.

In 2014, we have budgeted a total of \$312 million to drill and complete 46 gross (39 net) operated wells, which includes \$83 million of capital expenditures we made during the three months ended March 31, 2014 (including \$61 million of capital expenditures we made in the Terryville Complex). We expect to fund our 2014 development primarily from cash flows from operations. The majority of our drilling locations and our 2014 development program are focused on the Terryville Complex, where we plan to invest \$264 million on

drilling and completing 33 gross (28 net) horizontal wells and 2 gross (2.0 net) vertical wells. We plan to run four to five rigs during 2014 targeting primarily our four primary zones within the Cotton Valley—the Upper Red, Lower Red, Lower Deep Pink and Upper Deep Pink. Total vertical depth of these zones ranges from 8,200 to 11,200 feet.

In our East Texas properties in the Joaquin Field, we plan to spend development capital of \$36 million running one rig to drill 8 gross (6 net) horizontal wells targeting the Cotton Valley formation at vertical depths of 6,000 to 10,000 feet.

In our Rockies properties, we plan to spend \$12 million of development capital, primarily in the Tepee Field in the Piceance Basin in Colorado focused on completing 3 wells drilled in fourth quarter of 2013 and running 1 rig to drill an additional 3 operated wells.

Our Equity Owners

Our principal stockholder is MRD Holdco, which is controlled by the Funds, which are three of the private equity funds managed by NGP. Upon completion of this initial public offering, MRD Holdco, the selling stockholder in this offering, will own approximately 60.1% of our common stock (or approximately 57.3% if the underwriters' option to purchase additional shares from MRD Holdco is exercised in full). The Funds also collectively indirectly own 50% of MEMP's incentive distribution rights. We are also a party to certain other agreements with MRD Holdco, MRD LLC, the Funds and certain of their affiliates. For a description of these agreements, please read "Certain Relationships and Related Party Transactions."

Additionally, upon the closing of this initial public offering, certain former management members of WildHorse Resources will own approximately 21.2% of our common stock. Upon completion of this offering, we will enter into a services agreement with WildHorse Resources Management Company, LLC, which will be a subsidiary of WildHorse Resources II, LLC. NGP and certain former management members of WildHorse Resources own WildHorse Resources II, LLC. For a description of this services agreement, please read "Certain Relationships and Related Party Transactions."

Founded in 1988, NGP is a family of private equity investment funds, with cumulative committed capital of approximately \$10.5 billion since inception, organized to make investments in the natural resources sector. NGP is part of the investment platform of NGP Energy Capital Management, a premier investment franchise in the natural resources industry, which together with its affiliates has managed approximately \$13 billion in cumulative committed capital since inception.

Relationship with Memorial Production Partners LP

Through our ownership of its general partner, we control MEMP, a publicly traded limited partnership. In addition to the general partner interest, we also own 50% of MEMP's incentive distribution rights.

MEMP is engaged in the acquisition, exploitation, development and production of oil and natural gas properties in the United States, with assets consisting primarily of producing oil and natural gas properties that are located in East Texas/North Louisiana, the Permian Basin, offshore Southern California, the Rockies, the Eagle Ford and South Texas. Most of MEMP's properties are located in large, mature oil and natural gas reservoirs with well-known geologic characteristics and long-lived, predictable production profiles and modest capital requirements. As of December 31, 2013:

- MEMP's total estimated proved reserves were approximately 1,015 Bcfe, of which approximately 60% were natural gas and 61% were classified as proved developed reserves; and
- MEMP produced from 2,866 gross (1,663 net) producing wells across its properties, with an average working interest of 58%.

Undeveloped Acreage Expirations

The following table sets forth the gross and net undeveloped acreage in our core operating areas as of December 31, 2013 that will expire over the next three years unless production is established within the spacing units covering the acreage or the lease is renewed or extended under continuous drilling provisions prior to the primary term expiration dates. There are no reserves attributable to our expiring acreage.

<u>Area</u>	<u>2014</u>		<u>2015</u>		<u>2016</u>	
	<u>Gross</u>	<u>Net</u>	<u>Gross</u>	<u>Net</u>	<u>Gross</u>	<u>Net</u>
Terryville Complex	2,407	2,180	2,487	2,390	3,633	3,420
East Texas	5,212	2,606	2,027	748	—	—
Rockies	3,206	2,199	15,564	8,878	27,582	17,455
Total	10,825	6,985	20,078	12,015	31,215	20,875

Drilling Activity

The following table summarizes our drilling activity for the years ended December 31, 2013, 2012 and 2011. Gross wells reflect the sum of all wells in which we own an interest. Net wells reflect the sum of our working interests in gross wells. At December 31, 2013, 10 gross (9.2 net) wells were in various stages of completion.

	<u>Years ended December 31,</u>					
	<u>2013</u>		<u>2012</u>		<u>2011</u>	
	<u>Gross</u>	<u>Net</u>	<u>Gross</u>	<u>Net</u>	<u>Gross</u>	<u>Net</u>
Development wells:						
Productive	22.0	13.3	11.0	10.2	4.0	3.9
Dry	—	—	—	—	—	—
Total development wells	22.0	13.3	11.0	10.2	4.0	3.9
Exploratory wells:						
Productive	9.0	8.0	7.0	5.6	27.0	9.4
Dry	—	—	—	—	3.0	1.5
Total exploratory wells	9.0	8.0	7.0	5.6	30.0	10.9
Total wells drilled	31.0	21.3	18.0	15.8	34.0	14.8

Drilling Locations

1,171 of our 1,582 gross horizontal locations are attributable to acreage that is currently held by production and approximately 9% are attributable to proved undeveloped reserves as of December 31, 2013. In making these assessments, we include properties in which we hold operated and non-operated interests, as well as redevelopment opportunities. Once we have identified acreage that is prospective for the targeted formations, well placement is determined primarily by the regulatory spacing rules prescribed by the governing body in each of our operating areas.

Our 1,582 gross horizontal drilling locations include 145 locations in the proved category, 209 in the probable category, and 485 in the possible category as identified by NSAI, our third party engineers. The additional 743 gross horizontal drilling locations are locations that have been identified by our management team. We identified those additional locations using the same methodology as those locations to which probable and possible reserves are attributed – by using existing geologic and engineering data from vertical production and seismic data. Of those 743 gross horizontal drilling locations, 321 lie within the geographic areas to which probable and possible reserves are attributed and are based on assumed well spacing of 137 acres versus NSAI’s well spacing assumption of 280 acres. We believe that our 137-acre spacing assumptions are supported by existing production spacing.

The remaining 422 identified gross horizontal drilling locations are within geographic areas to which probable or possible reserves are not attributed, but nonetheless are locations that we have specifically identified based on our evaluation of applicable geologic and engineering data accrued over our multi-year historical drilling activities in the surrounding area. For example, we believe that area seismic data, as well as information gathered from the results of our existing 275 vertical and 27 horizontal wells throughout the field, support the existence of at least ten stacked pay zones across the Terryville Complex. In evaluating and determining those locations, we also considered the availability of local infrastructure, drilling support assets and easement restrictions and state and local regulations. The locations on which we actually drill wells will ultimately depend upon the availability of capital, regulatory approvals, seasonal restrictions, oil and natural gas prices, costs, actual drilling results and other factors, and may differ from the locations currently identified. For a discussion of the risks associated with our drilling program, see “Risk Factors—Risks Related to Our Business—Our identified drilling locations, which are scheduled out over many years, are susceptible to uncertainties that could materially alter the occurrence or timing of their drilling.”

MEMP

The following table summarizes information about MEMP’s proved oil and natural gas reserves by geographic region as of December 31, 2013 and its average net production for the three months ended December 31, 2013:

	Estimated Total Proved Reserves				Standardized Measure (in millions)(1)	Average Net Daily Production (MMcfe/d)	R/P Ratio(2) (years)
	Total (Bcfe)	% Gas	% Oil & NGLs	% Developed			
East Texas/North Louisiana	598	69%	31%	54%	\$ 688	110.2	15
Permian Basin	108	8%	92%	45%	362	13.3	22
California	86	0%	100%	70%	344	9.3	25
Rockies	61	83%	17%	84%	78	11.5	15
South Texas	162	85%	15%	82%	137	23.4	19
Total	<u>1,015</u>	<u>60%</u>	<u>40%</u>	<u>61%</u>	<u>\$1,609</u>	<u>167.7</u>	<u>17</u>

- (1) Standardized measure is calculated in accordance with Accounting Standards Codification, or ASC, Topic 932, *Extractive Activities—Oil and Gas*. Because MEMP is a limited partnership, it is generally not subject to federal or state income taxes and thus makes no provision for federal or state income taxes in the calculation of its standardized measure. Standardized measure does not give effect to commodity derivative contracts.
- (2) The reserve-to-production ratio is calculated by dividing our estimated proved reserves as of December 31, 2013 by average net daily production for the three months ended December 31, 2013 on an annualized basis.

Estimated Proved Reserves

The following table presents the estimated net proved oil and natural gas reserves attributable to MEMP’s properties and the standardized measure amounts associated with the estimated proved reserves attributable to MEMP’s properties as of December 31, 2013, based on MEMP’s reserve report.

	Oil (MBbl)	Natural Gas (MMcf)	Natural Gas Liquids (MBbl)	Total (MMcfe)
Estimated Proved Reserves				
Total Proved Developed	22,265	387,548	15,959	616,893
Total Proved Undeveloped	<u>16,884</u>	<u>219,591</u>	<u>12,887</u>	<u>398,212</u>
Total Proved Reserves	39,149	607,139	28,846	1,015,105

prospectus are not expected to constitute a change in control resulting in the automatic vesting of the incentive units under the MRD LLC limited liability company agreement. For a description of how and when the incentive units could obtain value and receive payment, see the discussion below.

Narrative to the Outstanding Equity Awards Table

Our predecessor granted incentive units to each of the named executive officers in order to provide them with the ability to benefit from the growth in MRD LLC's operations and business. A payout on the incentive units will occur only if, and then after, a specified level of cumulative cash distributions has been received by the Funds. Once this cumulative cash distributions threshold is achieved, all of the incentive unit holders will collectively share 10% of all further cash distributions made by MRD LLC to its members. While any such distributions made by MRD Holdco will not involve any cash payment by us, we will be required to recognize non-cash compensation expense within general and administrative expenses, which may be material, in the period in which the performance conditions are probable of being satisfied. The compensation expense recognized by us related to the incentive units will be offset by a deemed capital contribution from MRD Holdco.

Potential Payments Upon Termination or Change in Control

Awards under the Memorial Production Partners GP LLC Long-Term Incentive Plan may vest and/or become exercisable, as applicable, upon a "change of control" of MRD LLC or MEMP GP, as determined by the plan administrator. Under the Memorial Production Partners GP LLC Long-Term Incentive Plan, a "change of control" will be deemed to have occurred upon one or more of the following events (i) the managers of MRD LLC appointed by the Funds or their affiliates do not constitute a majority of the board of managers of MRD LLC; (ii) MRD LLC, the Funds or any of their affiliates do not have the right to appoint or nominate a majority of the board of directors of MEMP GP; (iii) the members of MEMP GP approve and implement, in one or a series of transactions, a plan of complete liquidation of MEMP GP; (iv) the sale or other disposition by MEMP GP of all or substantially all of its assets in one or more transactions to any person or entity other than MEMP GP or an affiliate of MEMP GP or the Funds; or (v) a person or entity other than MEMP GP or an affiliate of MEMP GP or the Funds becomes the general partner of MEMP. The consequences of the termination of a grantee's employment, consulting arrangement or membership on the board of managers or directors will be determined by the plan administrator in the terms of the relevant award agreement.

As described above, the vesting of the incentive units will be fully accelerated upon the occurrence of an event which results in the Funds no longer owning a majority of the interests in, or possessing the right to appoint a majority of the board of managers of, MRD LLC.

In connection with the closing of this offering, we will adopt the Memorial Resource Development Corp. 2014 Long Term Incentive Plan, as further described in "—Compensation Following this Offering—2014 Long Term Incentive Plan," and will enter into change in control agreements with our executive officers, as further described in "—Compensation Following this Offering—Change in Control Agreements."

Manager Compensation

None of MRD LLC's managers, whether or not employed by MRD LLC, received compensation for services to MRD LLC as a manager for the year ended December 31, 2013.

Compensation Following This Offering

We expect that our named executive officers will also serve as executive officers of MEMP GP. MEMP will reimburse us for costs and expenses incurred for its or MEMP GP's benefit pursuant to the terms of the omnibus agreement, including an allocated portion of each such executive's compensation. See "Certain Relationships and Related Party Transactions—Omnibus Agreement" for more information about the omnibus agreement. We will have sole responsibility and authority for compensation-related decisions for our executive officers and other personnel.

We expect to employ a compensation philosophy that will emphasize pay-for-performance, which will be based on a combination of our performance and the individual's impact on our performance and will place the majority of each officer's compensation at risk. We expect that the future compensation of our executive and non-executive officers will include a significant component of incentive compensation based on our performance. The performance metrics governing incentive compensation will not be tied in any way to the performance of entities other than us. We believe this pay-for-performance approach generally aligns the interests of our executive officers with that of our stockholders, and at the same time enables us to maintain a lower level of base overhead in the event our operating and financial performance fails to meet expectations.

We will design our executive compensation to attract and retain individuals with the background and skills necessary to successfully execute our business model in a demanding environment, to motivate those individuals to reach near-term and long-term goals in a way that aligns their interest with that of our stockholders, and to reward success in reaching such goals. We expect that we will use three primary elements of compensation to fulfill that design—salary, cash bonus and long-term equity incentive awards. Cash bonuses and equity incentives (as opposed to salary) represent the performance driven elements. They are also flexible in application and can be tailored to meet our objectives. The determination of specific individuals' cash bonuses reflects their relative contribution to achieving or exceeding annual goals, and the determination of specific individuals' long-term incentive awards is based on their expected contribution in respect of longer term performance objectives.

We do not intend to establish a defined benefit or pension plan for our executive officers because we believe such plans primarily reward longevity rather than performance. We will provide a basic benefits package generally to all employees, which includes a 401(k) plan and health, disability and life insurance.

We expect that our named executive officers for the year ended December 31, 2014 will be the following:

<u>Name</u>	<u>Principal Position</u>
John A. Weinzierl	Chief Executive Officer
William J. Scarff	President
Andrew J. Cozby	Vice President and Chief Financial Officer

The following table sets forth the expected base salaries and expected annual target bonus opportunities for our named executive officers for 2014:

<u>Name</u>	<u>2014 Base Salary</u>	<u>2014 Target Bonus Opportunity (% of Base Salary)</u>
John A. Weinzierl	\$350,000	100%
William J. Scarff	\$350,000	100%
Andrew J. Cozby	\$350,000	80%

IPO Bonuses

We intend to grant certain employees, including our named executive officers, bonuses in connection with the successful completion of our initial offering. The bonuses will be granted to the employees in the form of restricted stock awards that will be governed by the Plan described below. The restricted stock awards will be granted following the closing of this offering and will vest ratably on a four-year annual vesting schedule. We expect that these bonuses will total approximately \$20 million, or 1,176,471 shares for all employees (at an assumed offering price of \$17.00 per share (the midpoint of the price range set forth on the cover of this prospectus)), including our named executive officers. Of our 2014 named executive officers, we expect that Mr. Weinzierl will receive an award of 205,882 shares, Mr. Scarff of 147,059 shares and Mr. Cozby of 108,824 shares, in each case, assuming an offering price of \$17.00 per share (the midpoint of the price range set forth on the cover of this prospectus).

such executive's one way commute by more than 50 miles). The term "change in control" has the meaning ascribed to such term in the Memorial Resource Development Corp. 2014 Incentive Award Plan and is described in the discussion below under "—2014 Long Term Incentive Plan—Merger, recapitalization or change in control."

In the event that the board determines that payments to be made to an executive under the change in control agreement would constitute excess parachute payments subject to excise tax under Section 4999 of the Internal Revenue Code, then the amount of such payments shall either (i) be reduced so that such payments will not be subject to such excise tax or (ii) paid in full, whichever results in the better net after tax position for the executive.

2014 Long Term Incentive Plan

We intend to adopt the Memorial Resource Development Corp. 2014 Long Term Incentive Plan (the "Plan") for the employees of the Company and our directors. The description of the Plan set forth below is a summary of the material features of the Plan. This summary is qualified in its entirety by reference to the Plan, a copy of which has been filed as an exhibit to this registration statement. The purpose of the Plan is to provide a means to attract and retain individuals to serve as our directors and employees by affording such individuals a means to acquire and maintain ownership of awards, the value of which is tied to the performance of our common stock. We have not yet made decisions regarding the type of award or the amounts of equity-based awards that will be appropriate for our employees or directors following this offering. The restricted stock units granted in connection with the closing of this offering described below should be not be interpreted as representative of the Plan awards that may be granted in the future.

The Plan will provide for potential grants of: (i) incentive stock options qualified as such under U.S. federal income tax laws ("incentive options"); (ii) stock options that do not qualify as incentive stock options ("nonstatutory options," and together with incentive options, "options"); (iii) stock appreciation rights; (iv) restricted stock awards; (v) restricted stock units ("RSUs"); (vi) bonus stock; (vii) dividend equivalents, (viii) performance awards; (ix) annual incentive awards; and (x) other stock-based awards (collectively referred to as "awards").

Administration

Our Board will administer the Plan pursuant to its terms and all applicable state, federal or other rules or laws, and may delegate its duties and responsibilities as Plan administrator to a committee composed of two or more directors, subject to certain limitations. The Plan administrator will have the power to determine to whom and when awards will be granted, determine the amount of awards (measured in cash or in shares of our common stock), proscribe and interpret the terms and provisions of each award agreement (the terms of which may vary), make determinations of fair market value, accelerate the exercise terms of an option, delegate duties under the Plan, terminate, modify or amend the Plan in certain cases and execute all other responsibilities permitted or required under the Plan. The Plan administrator shall be limited in its administration of the Plan only in the event that a performance award or annual incentive award intended to comply with section 162(m) of the Code requires the Board to be composed solely of "outside" directors at a time when not all directors are considered "outside" directors for purposes of section 162(m) of the Code; at such time any director that is not qualified to grant or administer such an award will recuse himself from the Board's actions with regard to that award.

Securities to be Offered

The maximum aggregate number of shares of common stock that may be issued pursuant to any and all awards under the Plan shall not exceed 19,250,000 shares, subject to adjustment due to recapitalization or reorganization, or related to forfeitures or the expiration of awards, as provided under the Plan.

If common stock subject to any award is not issued or transferred, or ceases to be issuable or transferable for any reason, including (but not exclusively) because shares are withheld or surrendered in payment of taxes or any

- *Dividend equivalents.* Dividend equivalents are rights to receive cash, stock, other awards, or other property equal in value to dividends paid with respect to a specified number of shares of common stock. Dividend equivalents may be awarded on a free-standing basis or in connection with another award. The Board may provide that dividend equivalents shall be paid or distributed when accrued or shall be deemed to have been reinvested in additional common stock, awards, or other investment vehicles, and be subject to such restrictions on transferability and risks of forfeiture, as determined by the Board.
- *Performance awards and annual incentive awards.* The Board may designate that certain awards granted under the Plan constitute “performance” awards. A performance award is any award the grant, exercise or settlement of which is subject to one or more performance standards. An annual incentive award is an award based on a performance period of the fiscal year, and is also conditioned on one or more performance standards. One or more of the following business criteria for the company, on a consolidated basis, and/or for specified subsidiaries, may be used by the Board in establishing performance goals for such performance awards or annual incentive awards that are intended to meet the “performance-based compensation” criteria of section 162(m) of the Code: (i) earnings per share; (ii) increase in revenues; (iii) increase in cash flow; (iv) increase in cash flow from operations; (v) increase in cash flow return; (vi) return on net assets; (vii) return on assets; (viii) return on investment; (ix) return on capital; (x) return on equity; (xi) economic value added; (xii) operating margin; (xiii) contribution margin; (xiv) net income; (xv) net income per share; (xvi) pretax earnings; (xvii) pretax operating earnings after interest expense and before incentives, service fees and extraordinary or special items; (xviii) pretax earnings before interest, depreciation and amortization; (xix) total stockholder return; (xx) debt reduction; (xxi) market share; (xxii) change in the fair market value of the common stock; (xxiii) operating income; or (xxiv) lease operating expenses. The Board may exclude the impact of any of the following events or occurrences which the Board determines should appropriately be excluded: (i) asset write-downs; (ii) litigation, claims, judgments or settlements; (iii) the effect of changes in tax law or other such laws or regulations affecting reported results; (iv) accruals for reorganization and restructuring programs; (v) any extraordinary, unusual or nonrecurring items as described in the Accounting Standards Codification Topic 225, as the same may be amended or superseded from time to time; (vi) any change in accounting principles as defined in the Accounting Standards Codification Topic 250, as the same may be amended or superseded from time to time; (vii) any loss from a discontinued operation as described in the Accounting Standards Codification Topic 360, as the same may be amended or superseded from time to time; (viii) goodwill impairment charges; (ix) operating results for any business acquired during the calendar year; (x) third party expenses associated with any acquisition by us or any subsidiary; and (xi) to the extent set forth with reasonable particularity in connection with the establishment of performance goals, any other extraordinary events or occurrences identified by the Board. The Board may also use any of the above goals determined on an absolute or relative basis or as compared to the performance of a published or special index deemed applicable by the Board including, but not limited to, the Standard & Poor’s 500 stock index or a group of comparable companies.
- *Other stock-based awards.* The Board is authorized, subject to limitations under applicable law, to grant such other awards that may be denominated or payable in, valued in whole or in part by reference to, or otherwise based on, or related to, our common stock, as deemed by the Board to be consistent with the purposes of the Plan. These other awards could include convertible or exchangeable debt securities, other rights convertible or exchangeable into common stock, purchase rights for common stock, awards with value and payment contingent upon performance of the Company or any other factors designated by the Board, and awards valued by reference to the book value of our common stock or the value of securities of or the performance of specified subsidiaries of the Company. The Board shall determine the terms and conditions of these awards.

Performance awards or annual incentive awards granted to eligible persons who are deemed by the Board to be “covered employees” pursuant to section 162(m) of the Code shall be administered in accordance with the rules and regulations issued under section 162(m) of the Code. The Board may also impose individual performance criteria on the awards, which, if required for compliance with section 162(m) of the Code, will be approved by our stockholders. In any calendar year, a covered employee may not be granted an award of more than 2.5 million of our shares of stock, or cash-based award having a value of more than \$50 million.

Tax withholding. At our discretion, subject to conditions that the Board may impose, a participant's minimum statutory tax withholding with respect to an award may be satisfied by withholding from any payment related to an award or by the withholding of shares of common stock issuable pursuant to the award based on the fair market value of the shares.

Merger, recapitalization or change in control. If any change is made to our capitalization, such as a stock split, stock combination, stock dividend, exchange of shares or other recapitalization, merger or otherwise, which results in an increase or decrease in the number of outstanding shares of common stock, appropriate adjustments will be made by the Board in the shares subject to an award under the Plan. We will also have the discretion to make certain adjustments to awards in the event of a change in control, such as accelerating the exercisability of options or SARs, requiring the surrender of an award, with or without consideration, or making any other adjustment or modification to the award we feel is appropriate in light of the specific transaction.

A "change in control" is defined in the Plan to mean (i) subject to certain exceptions, the acquisition by a person or group of more than 50% of shares of our outstanding common stock or the total combined voting power of our outstanding securities, (ii) individuals who constitute our incumbent board cease for any reason to constitute at least a majority of the Board, (iii) a merger, consolidation, reorganization or business combination or the sale or other disposition of all or substantially all of our assets or an acquisition of assets of another entity unless following such transaction, (a) our stockholders continue to own more than 50% of the voting power of the resulting entity, (b) no person (excluding any entity controlled by or under common control with NGP Energy Capital Management, L.L.C.) beneficially owns, directly or indirectly, 20% or more of the then outstanding shares of common stock or common equity interests of the resulting entity or the combined voting power of the then outstanding voting securities to the extent that such ownership results solely from ownership of the Company prior to the transaction or event and (c) a majority of the members of the board of directors of the resulting entity were members of our incumbent board at the time of the action of our Board providing for such transaction or event or (iv) approval by our stockholders of the Company's complete liquidation or dissolution.

Awards To Be Granted Following This Offering

Following the closing of this offering, we expect that our Board will approve an award of 1,176,471 shares of restricted stock under the Plan to certain of our key employees, including each of our executive officers, as further described in "—Compensation Following This Offering—IPO Bonuses." Following the awards described above, we do not currently expect that our Board will approve additional awards under the Plan for the remainder of 2014.

PRINCIPAL AND SELLING STOCKHOLDERS

The following table provides certain information regarding the beneficial ownership of our outstanding capital stock as of May 30, 2014, and after giving effect to the offering and the restructuring transactions, for:

- each person who then will beneficially own more than 5% of the then outstanding capital stock on a fully diluted basis;
- each of our directors and director nominees;
- each of our named executive officers; and
- all of our directors, director nominees and executive officers as a group.

The amounts and percentages of common stock beneficially owned are reported on the basis of regulations of the SEC governing the determination of beneficial ownership of securities. Under the rules of the SEC, a person is deemed to be a “beneficial owner” of a security if that person has or shares “voting power,” which includes the power to vote or to direct the voting of such security, or “investment power,” which includes the power to dispose of or to direct the disposition of such security. A person is also deemed to be a beneficial owner of any securities of which that person has a right to acquire beneficial ownership within 60 days. Under these rules, more than one person may be deemed a beneficial owner of the same securities and a person may be deemed a beneficial owner of securities as to which he has no economic interest. Except as indicated by footnote and in the next paragraph, the persons named in the table below have sole voting and investment power with respect to all shares of common stock shown as beneficially owned by them. Unless otherwise noted, the mailing address of each person or entity named in the table is 1301 McKinney Street, Suite 2100, Houston, Texas 77010.

Upon the closing of this offering, the group consisting of MRD Holdco, Messrs. Bahr and Graham, and certain other former management members of WildHorse Resources will continue to control a majority of our voting common stock. As a result, we will be a “controlled company” within the meaning of the NASDAQ listing rules. However, the number of shares reflected in the table below as beneficially owned by each of the members of that group does not include shares held by the other members of that group that are subject to the terms of the voting agreement pursuant to which, among other things, such group members have agreed to vote as directed by MRD Holdco.

MRD Holdco has granted the underwriters the option to purchase up to an additional 5,400,000 shares of common stock and will sell such shares only to the extent such option is exercised. MRD Holdco is deemed under federal securities laws to be an underwriter with respect to the common stock it may sell in connection with this offering. The number of shares being offered by MRD Holdco in the table below assumes no exercise of the underwriters’ option to purchase additional shares of common stock from MRD Holdco.

The table does not reflect any common stock that directors and named executive officers may purchase in this offering through the directed share program described under “Underwriting.”

Name of beneficial owner	Shares beneficially owned prior to offering		Shares being offered	Shares beneficially owned after offering	
	Number	Percentage		Number	Percentage
MRD Holdco LLC (“MRD Holdco”)(1)	127,108,112	75.7%	11,500,000	115,608,112	60.6%
Kenneth A. Hersh(2)	127,108,112	75.7%	—	115,608,112	60.6%
Anthony Bahr(3)	14,312,161	8.5%	—	14,312,161	7.4%
Jay Graham(3)	14,312,161	8.5%	—	14,312,161	7.4%
Tony R. Weber	—	—	—	—	—
John A. Weinzierl(4)	—	—	—	—	—
Scott A. Gieselman	—	—	—	—	—
William J. Scarff(4)	—	—	—	—	—
Andrew J. Cozby(4)	—	—	—	—	—
Larry R. Forney(4)	—	—	—	—	—
Robert Innamorati(5)	—	—	—	—	—
Carol O’Neill(5)	—	—	—	—	—
Pat Wood, III(5)	—	—	—	—	—
All executive officers, directors and director nominees as a group (13 persons)(4)	127,108,112	75.7%	—	115,608,112	60.6%

- (1) The board of managers of MRD Holdco has voting and dispositive power over these shares. The board of managers of MRD Holdco consists of John A. Weinzierl, Kenneth A. Hersh, Scott A. Gieselman and Tony R. Weber, none of whom individually have voting and dispositive power over these shares. Each such person expressly disclaims beneficial ownership over these shares, except to the extent of any pecuniary interest therein. MRD Holdco is owned by Natural Gas Partners VIII, L.P. (“NGP VIII”), Natural Gas Partners IX, L.P. (“NGP IX”) and NGP IX Offshore Holdings, L.P. (“NGP IX Offshore”). NGP VIII, NGP IX and NGP IX Offshore may be deemed to share voting and dispositive power over the reported securities; thus, each may also be deemed to be the beneficial owner of these securities. Each of NGP VIII, NGP IX and NGP IX Offshore disclaims beneficial ownership of the reported securities in excess of such entity’s respective pecuniary interest in the securities. G.F.W. Energy VIII, L.P., GFW VIII, L.L.C., G.F.W. Energy IX, L.P. and GFW IX, L.L.C. may be deemed to beneficially own the shares held by MRD Holdco that are attributable to NGP VIII, NGP IX and NGP IX Offshore by virtue of GFW VIII, L.L.C. being the sole general partner of G.F.W. Energy VIII, L.P. (which is the general partner of NGP VIII) and GFW IX, L.L.C. being the sole general partner of G.F.W. Energy IX, L.P. (which is the general partner of NGP IX and NGP IX Offshore). Kenneth A. Hersh, one of our directors and who is an Authorized Member of each of GFW VIII, L.L.C. and GFW IX, L.L.C., may also be deemed to share the power to vote, or to direct the vote, and to dispose, or to direct the disposition, of those shares. Mr. Hersh does not own directly any shares.
- (2) G.F.W. Energy VIII, L.P., GFW VIII, L.L.C., G.F.W. Energy IX, L.P. and GFW IX, L.L.C. may be deemed to beneficially own the shares held by MRD Holdco that are attributable to NGP VIII, NGP IX and NGP IX Offshore by virtue of GFW VIII, L.L.C. being the sole general partner of G.F.W. Energy VIII, L.P. (which is the general partner of NGP VIII) and GFW IX, L.L.C. being the sole general partner of G.F.W. Energy IX, L.P. (which is the general partner of NGP IX and NGP IX Offshore). Kenneth A. Hersh, one of our directors and who is an Authorized Member of each of GFW VIII, L.L.C. and GFW IX, L.L.C., may also be deemed to share the power to vote, or to direct the vote, and to dispose, or to direct the disposition, of those shares. Mr. Hersh does not own directly any shares.
- (3) The address for these beneficial owners is 9805 Katy Freeway, Suite 400, Houston, TX 77024.
- (4) Does not include 205,882, 147,059, 108,824, 108,824, 100,000, 100,000, and 44,118 shares of restricted stock (assuming an initial public offering price equal to the midpoint of the range set forth on the cover of this prospectus) that we will grant to each of Messrs. Weinzierl, Scarff, Cozby, Forney, Roane, Robbins and Venghaus, respectively, following the closing of this offering pursuant to the Memorial Resource Development Corp. 2014 Long Term Incentive Plan. These restricted stock awards will vest ratably on a four-year annual vesting schedule from the date of the grant.
- (5) Does not include 5,882 shares of restricted stock (assuming an initial public offering price equal to the midpoint of the range set forth on the cover of this prospectus) that we will grant to each of Messrs. Innamorati and Wood and Ms. O’Neill following the closing of this offering pursuant to the Memorial Resource Development Corp. 2014 Long Term Incentive Plan. These restricted stock awards will vest one year from the date of the grant.

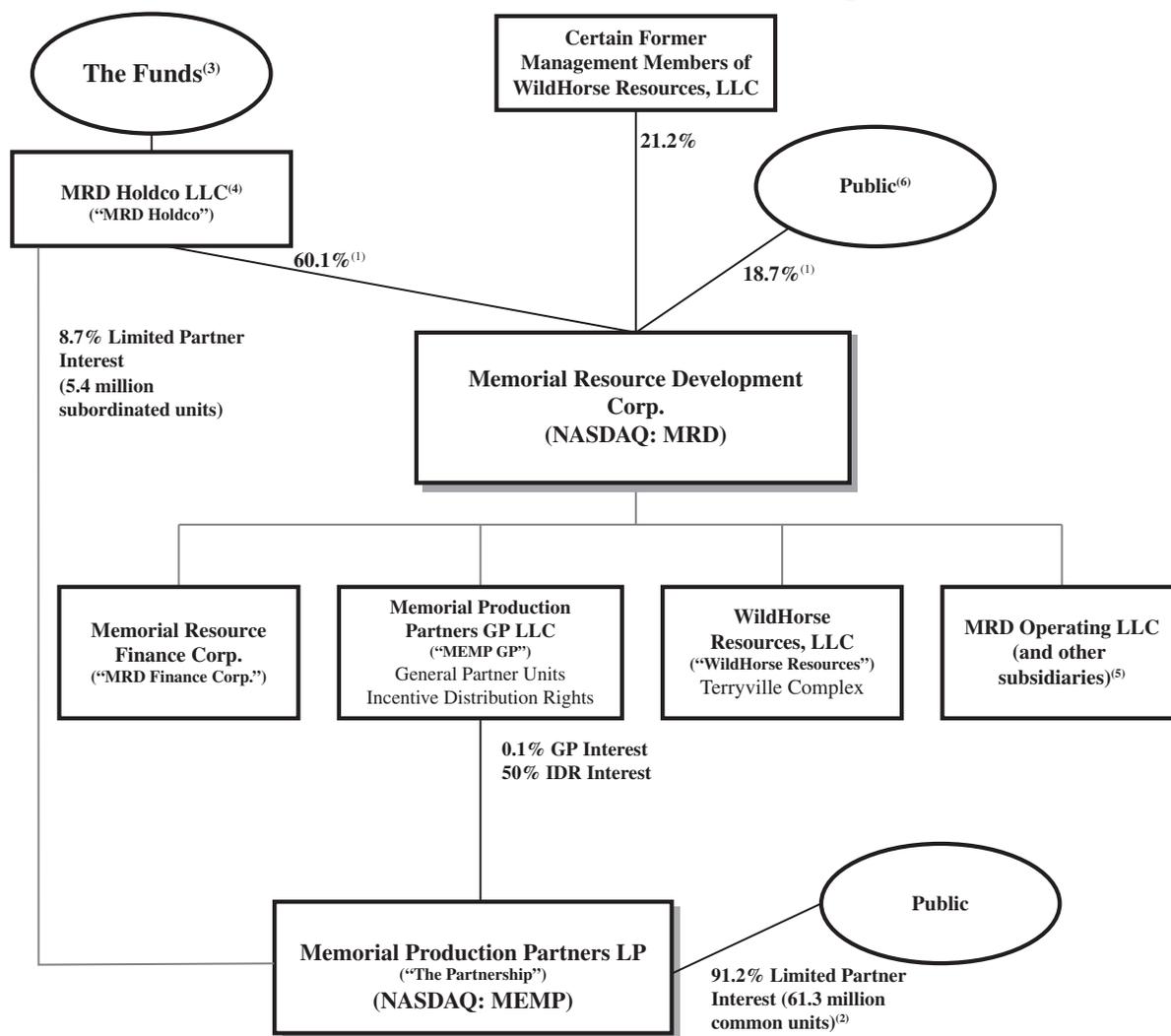
RESTRUCTURING TRANSACTIONS

We are a Delaware corporation recently formed by MRD LLC. As part of the corporate restructuring that will occur in connection with the closing of this offering, MRD LLC and former WildHorse Resources management will contribute equity interests in certain entities to us in exchange for cash and shares of our common stock. See “Description of Capital Stock” for additional information regarding the terms of our amended and restated certificate of incorporation and amended and restated bylaws as will be in effect upon the closing of this offering.

The corporate restructuring will consist of the following steps, to be taken on or before the closing date of this offering:

- The Funds will contribute all of their interests in MRD LLC to MRD Holdco and the members of our management who own incentive units in MRD LLC will exchange those incentive units for substantially identical incentive units in MRD Holdco, after which MRD Holdco will own 100% of MRD LLC;
- WildHorse Resources will sell its subsidiary, WildHorse Resources Management Company, LLC (which holds certain immaterial assets related to our WildHorse Resources operations), to an affiliate of the Funds for approximately \$0.2 million in cash, and that subsidiary will enter into a services agreement with WildHorse Resources pursuant to which that subsidiary will provide transition services to WildHorse Resources;
- Classic Hydrocarbons Holdings, L.P. and Classic Hydrocarbons GP Co., L.L.C. will distribute to MRD LLC the ownership interests in Classic Pipeline, which owns certain immaterial midstream assets in Texas, and Black Diamond Minerals, LLC will distribute to MRD LLC its ownership interests in Golden Energy Partners LLC, which sold all of its assets in May 2014;
- MRD LLC will contribute to us substantially all of its assets, comprised of:
 - 100% of the ownership interests in Classic Hydrocarbons Holdings, L.P., Classic Hydrocarbons GP Co., L.L.C., Black Diamond Minerals, LLC, Beta Operating Company, LLC, Memorial Resource Finance Corp. and MRD Operating LLC;
 - 99.9% of the membership interests in WildHorse Resources, the owner of our properties in the Terryville Complex; and
 - MEMP GP (including MEMP GP’s ownership of 50% of MEMP’s incentive distribution rights);
- We will issue 127,108,112 shares of our common stock to MRD LLC, which MRD LLC will immediately distribute to MRD Holdco;
- We will assume the obligations of MRD LLC under the PIK notes, including the obligation to pay interest on the PIK notes if this offering closes before June 15, 2014 or to reimburse MRD LLC for the June 15, 2014 interest payment made on the PIK notes if this offering closes after June 15, 2014;
- Certain former management members of WildHorse Resources will contribute to us their outstanding incentive units in WildHorse Resources, as well as the remaining 0.1% of the membership interests in WildHorse Resources, and we will issue 40,891,888 shares of our common stock and pay cash consideration of approximately \$30.0 million to such former management members of WildHorse Resources;
- We will enter into a registration rights agreement and a voting agreement with MRD Holdco and certain former management members of WildHorse Resources;
- We will enter into our new \$2.0 billion revolving credit facility and will use approximately \$608.1 million in borrowings under that facility to repay all amounts outstanding under WildHorse Resources’ credit agreements, to pay the cash consideration payable to the former management members of WildHorse Resources and, if applicable, to reimburse MRD LLC for the June 15, 2014 interest payment made on the PIK notes;

The following diagram shows our ownership structure after giving effect to the restructuring transactions and this offering, assuming no exercise of the underwriters' option to purchase additional shares from MRD Holdco and does not give effect to 19,250,000 shares of common stock reserved for future issuance under the Memorial Resource Development Corp. 2014 Long Term Incentive Plan (described in "Management—2014 Long Term Incentive Plan") or 1,176,471 restricted shares of common stock to be issued by us to our independent directors and certain of our employees in connection with the successful completion of this offering pursuant to our Plan (see "Management—Executive Compensation—Compensation Following This Offering—IPO Bonuses").



- (1) If the underwriters exercise in full their option to purchase additional shares of common stock from MRD Holdco, the ownership interest of the public stockholders will increase to 41,400,000 shares of common stock, representing an aggregate 21.5% ownership interest in us, and MRD Holdco will own 110,208,112 shares of common stock, representing an aggregate 57.3% ownership interest in us.
- (2) As of March 31, 2014.
- (3) "The Funds" refer collectively to Natural Gas Partners VIII, L.P., Natural Gas Partners IX, L.P. and NGP IX Offshore Holdings, L.P., which collectively own all of the membership interests in MRD Holdco. Please read "Principal and Selling Stockholders" for information regarding beneficial ownership. The Funds collectively indirectly own 50% of the Partnership's incentive distribution rights.
- (4) Subsidiaries of MRD Holdco following the restructuring transactions will include BlueStone Natural Resources Holdings, LLC ("BlueStone"), MRD Royalty LLC ("MRD Royalty"), MRD Midstream LLC ("MRD Midstream"), Golden Energy Partners LLC ("Golden Energy") and Classic Pipeline & Gathering, LLC ("Classic Pipeline"). Also, please see the "Principal and Selling Stockholders" table on page 145 for the beneficial ownership of our shares by our executive officers and directors.
- (5) Includes Classic Hydrocarbons Holdings, L.P. ("Classic"), Classic Hydrocarbons GP Co., L.L.C. ("Classic GP"), Black Diamond Minerals, LLC ("Black Diamond") and Beta Operating Company, LLC ("Beta Operating").
- (6) Does not include restricted common stock to be issued to our independent directors and certain of our employees in connection with the completion of this offering.

DESCRIPTION OF CAPITAL STOCK

Upon completion of this offering, our authorized capital stock will consist of 600,000,000 shares of common stock, \$0.01 par value per share, of which 192,500,000 shares will be issued and outstanding, and 50,000,000 shares of preferred stock, \$0.01 par value per share, of which no shares will be issued and outstanding.

The following summary of our capital stock, our amended and restated certificate of incorporation and our amended and restated bylaws do not purport to be complete and are qualified in their entirety by reference to the provisions of applicable law and to our amended and restated certificate of incorporation and amended and restated bylaws, forms of which are filed as exhibits to the registration statement of which this prospectus is a part and which will become effective at or around the effective time of such registration statement.

Common Stock

Except as provided by law or in a preferred stock designation, holders of common stock are entitled to one vote for each share held of record on all matters submitted to a vote of the stockholders, will have the exclusive right to vote for the election of directors and do not have cumulative voting rights. Except as otherwise required by law, holders of common stock are not entitled to vote on any amendment to the amended and restated certificate of incorporation (including any certificate of designations relating to any series of preferred stock) that relates solely to the terms of any outstanding series of preferred stock if the holders of such affected series are entitled, either separately or together with the holders of one or more other such series, to vote thereon pursuant to the amended and restated certificate of incorporation (including any certificate of designations relating to any series of preferred stock) or pursuant to the DGCL. Subject to prior rights and preferences that may be applicable to any outstanding shares or series of preferred stock, holders of common stock are entitled to receive ratably in proportion to the shares of common stock held by them such dividends (payable in cash, stock or otherwise), if any, as may be declared from time to time by our Board out of funds legally available for dividend payments. All outstanding shares of common stock are fully paid and non-assessable, and the shares of common stock to be issued upon completion of this offering will be fully paid and non-assessable. The holders of common stock have no preferences or rights of conversion, exchange, pre-emption or other subscription rights. There are no redemption or sinking fund provisions applicable to the common stock. In the event of any voluntary or involuntary liquidation, dissolution or winding-up of our affairs, holders of common stock will be entitled to share ratably in our assets in proportion to the shares of common stock held by them that are remaining after payment or provision for payment of all of our debts and obligations and after distribution in full of preferential amounts to be distributed to holders of outstanding shares of preferred stock, if any.

Preferred Stock

Our amended and restated certificate of incorporation authorizes our Board, subject to any limitations prescribed by law, 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 50,000,000 shares of preferred stock. Each class or series of preferred stock will cover the number of shares and will have the powers, preferences, rights, qualifications, limitations and restrictions determined by the Board, which may include, among others, dividend rights, liquidation preferences, voting rights, conversion rights, preemptive rights and redemption rights. Except as provided by law or in a preferred stock designation, the holders of preferred stock will not be entitled to vote at or receive notice of any meeting of stockholders.

Anti-Takeover Effects of Provisions of Our Amended and Restated Certificate of Incorporation, Our Amended and Restated Bylaws and Delaware Law

Some provisions of Delaware law and our amended and restated certificate of incorporation and our amended and restated bylaws contain provisions that could make the following transactions more difficult: acquisitions of us by means of a tender offer, a proxy contest or otherwise; or removal of our incumbent officers

SHARES ELIGIBLE FOR FUTURE SALE

There has not been a public market for our common stock prior to this offering. We cannot predict the extent to which investor interest in us will lead to the development of an active trading market or how liquid that market might become. If an active trading market does not develop, you may have difficulty selling any of our common stock that you buy. The initial public offering price for the common stock will be determined by negotiations between us and the underwriters and may not be indicative of prices that will prevail in the open market following this offering. See “Underwriting (Conflicts of Interest).” Consequently, you may be unable to sell our common stock at prices equal to or greater than the price you pay in this offering.

Sale of Restricted Shares

Upon completion of this offering, we will have an aggregate of 192,500,000 shares of our common stock outstanding. Of these 192,500,000 shares, 36,000,000 shares of our common stock to be sold in this offering will be freely tradable without restriction or further registration under the Securities Act, except for any shares which may be acquired by any of our “affiliates” as that term is defined in Rule 144 under the Securities Act, which will be subject to the resale limitations of Rule 144. The remaining shares of our common stock outstanding will be restricted securities, as that term is defined in Rule 144, and may in the future be sold pursuant to an effective registration statement or under the Securities Act to the extent permitted by Rule 144 or any other available exemption under the Securities Act. All of the shares beneficially owned by MRD Holdco and certain former management members of WildHorse Resources following this offering will be restricted securities.

Memorial Resource Development Corp. 2014 Long Term Incentive Plan

Following the completion of this offering, we intend to file a registration statement on Form S-8 under the Securities Act with the SEC to register 19,250,000 shares of our common stock issued or reserved for issuance under the Memorial Resource Development Corp. 2014 Long Term Incentive Plan. Subject to the expiration of any lock-up restrictions as described below and following the completion of any vesting periods, shares of our common stock issued under the Memorial Resource Development Corp. 2014 Long Term Incentive Plan, issuable upon the exercise of options granted or to be granted under the plan, will be freely tradable without restriction under the Securities Act, unless such shares are held by any of our affiliates. Following the completion of this offering, we intend to grant 1,176,471 restricted shares of common stock to certain of our employees under such plan. See “Management—Executive Compensation—Compensation Following This Offering—IPO Bonuses.”

Lock-up Agreements

Executive officers, directors and our stockholders, including MRD Holdco, WHR Incentive LLC, a limited liability company beneficially owned by Messrs. Anthony Bahr and Jay Graham, and certain former management members of WildHorse Resources, have agreed not to sell or transfer any shares of our common stock for a period of 180 days from the date of this prospectus, subject to certain exceptions and extensions. See “Underwriting” for a description of these lock-up provisions.

Rule 144

In general, under Rule 144 under the Securities Act, a person who is not deemed to have been an affiliate of ours at any time during the three months preceding a sale, and who has beneficially owned restricted securities within the meaning of Rule 144 for at least six months (including any period of consecutive ownership of preceding non-affiliated holders) would be entitled to sell those shares. A non-affiliated person who has beneficially owned restricted securities within the meaning of Rule 144 for at least one year would be entitled to sell those shares without regard to the provisions of Rule 144.

All of our outstanding common stock before this offering is held by affiliates. A person who is deemed to be an affiliate of ours and who has beneficially owned restricted securities within the meaning of Rule 144 for at least six months would be entitled to sell within any three-month period a number of shares (when aggregated with sales by certain related parties) that does not exceed the greater of 1% of the then outstanding shares of our common stock (192,500,000 shares following this offering) or the average weekly trading volume of our common stock reported through the applicable stock exchange during the four calendar weeks preceding such sale. Such sales are also subject to certain manner of sale provisions, notice requirements and the availability of current public information about us.

Rule 701

In general, under Rule 701, any of our employees, directors, officers, consultants or advisors who purchases shares from us in connection with a compensatory stock or option plan or other written agreement before the effective date of this offering is entitled to sell such shares 90 days after the effective date of this offering in reliance on Rule 144, without having to comply with the holding period requirement of Rule 144 and, in the case of non-affiliates, without having to comply with the public information, volume limitation or notice filing provisions of Rule 144. The SEC has indicated that Rule 701 will apply to typical stock options granted by an issuer before it becomes subject to the reporting requirements of the Exchange Act, along with the shares acquired upon exercise of such options, including exercises after the date of this prospectus.

Registration Rights

Pursuant to the Registration Rights Agreement we will enter into in connection with the closing of this offering, MRD Holdco and certain former management members of WildHorse Resources, Jay Graham and Anthony Bahr, will have customary rights to demand that we file a resale shelf registration statement or, in certain circumstances, conduct an underwritten offering of shares held by MRD Holdco, Jay Graham and Anthony Bahr. In addition, the agreement will grant MRD Holdco, Jay Graham and Anthony Bahr customary rights to participate in certain underwritten offerings of our common stock that we may conduct. See “Certain Relationships and Related Party Transactions—Registration Rights Agreement.”

**UNDERWRITING
(CONFLICTS OF INTEREST)**

Citigroup Global Markets Inc. and Barclays Capital Inc. are acting as the representatives of the underwriters named below, and Citigroup Global Markets Inc., Barclays Capital Inc., Merrill Lynch, Pierce, Fenner & Smith Incorporated, BMO Capital Markets Corp., Goldman, Sachs & Co., Raymond James & Associates, Inc., RBC Capital Markets, LLC and Wells Fargo Securities, LLC are acting as joint book-running managers for this offering. Subject to the terms and conditions stated in the underwriting agreement dated the date of this prospectus, each underwriter named below has severally agreed to purchase, and we and MRD Holdco have agreed to sell to that underwriter, the number of shares set forth opposite the underwriter's name.

<u>Underwriter</u>	<u>Number of Shares</u>
Citigroup Global Markets Inc.	
Barclays Capital Inc.	
Merrill Lynch, Pierce, Fenner & Smith Incorporated	
BMO Capital Markets Corp.	
Goldman, Sachs & Co.	
Raymond James & Associates, Inc.	
RBC Capital Markets, LLC	
Wells Fargo Securities, LLC	
Comerica Securities, Inc.	
Credit Suisse Securities (USA) LLC	
Mitsubishi UFJ Securities (USA), Inc.	
Morgan Stanley & Co. LLC	
Scotia Capital (USA) Inc.	
Simmons & Company International	
Stephens Inc.	
Stifel, Nicolaus & Company, Incorporated	
UBS Securities LLC	
Wunderlich Securities, Inc.	
Total	36,000,000

The underwriting agreement provides that the obligations of the underwriters to purchase the shares included in this offering are subject to approval of legal matters by counsel and to other conditions. The underwriters are obligated to purchase all the shares (other than those covered by the underwriters' option to purchase additional shares described below) if they purchase any of the shares.

Shares sold by the underwriters to the public will initially be offered at the initial public offering price set forth on the cover of this prospectus. Any shares sold by the underwriters to securities dealers may be sold at a discount from the initial public offering price not to exceed \$ per share. If all the shares are not sold at the initial offering price, the underwriters may change the offering price and the other selling terms. The representative has advised us that the underwriters do not intend to make sales to discretionary accounts.

If the underwriters sell more shares than the total number set forth in the table above, MRD Holdco has granted to the underwriters an option, exercisable for 30 days from the date of this prospectus, to purchase up to 5,400,000 additional shares at the public offering price less the underwriting discount. The underwriters may exercise the option solely for the purpose of covering over-allotments, if any, in connection with this offering. To the extent the option is exercised, each underwriter must purchase a number of additional shares approximately proportionate to that underwriter's initial purchase commitment. Any shares issued or sold under the option will be issued and sold on the same terms and conditions as the other shares that are the subject of this offering.

We, our officers and directors, MRD Holdco, certain former management members of WildHorse Resources and WHR Incentive LLC, a limited liability company beneficially owned by Messrs. Bahr and Graham have agreed that, for a period of 180 days from the date of this prospectus, we and they will not, without the prior written consent of Citigroup Global Markets Inc. dispose of or hedge any shares or any securities convertible into or exchangeable for our common stock. Citigroup Global Markets Inc. in its sole discretion may release any of the securities subject to these lock-up agreements at any time, which, in the case of officers and directors, shall be with notice.

The underwriters have reserved for sale at the initial public offering price up to 2% of the common stock being offered by this prospectus for sale to our employees, executive officers and directors who have expressed an interest in purchasing common stock in the offering. The number of shares available for sale to the general public in the offering will be reduced to the extent these persons purchase the reserved shares. Any reserved shares not so purchased will be offered by the underwriters to the general public on the same terms as the other shares. Any shares sold in the directed share program to directors and executive officers will be subject to the 180-day lock-up agreements described above.

Prior to this offering, there has been no public market for our shares. Consequently, the initial public offering price for the shares was determined by negotiations among us and the representative. Among the factors considered in determining the initial public offering price were our results of operations, our current financial condition, our future prospects, our markets, the economic conditions in and future prospects for the industry in which we compete, our management, and currently prevailing general conditions in the equity securities markets, including current market valuations of publicly traded companies considered comparable to our company. We cannot assure you, however, that the price at which the shares will sell in the public market after this offering will not be lower than the initial public offering price or that an active trading market in our shares will develop and continue after this offering.

We have applied to have our shares listed on the Nasdaq Global Market under the symbol “MRD.”

The following table shows the underwriting discounts and commissions that we and MRD Holdco are to pay to the underwriters in connection with this offering. These amounts are shown assuming both no exercise and full exercise of the underwriters’ over-allotment option.

		<u>Paid by the Company</u>	
		<u>No Exercise</u>	<u>Full Exercise</u>
Per share		\$	\$
Total		\$	\$
		<u>Paid by MRD Holdco</u>	
		<u>No Exercise</u>	<u>Full Exercise</u>
Per share		\$	\$
Total		\$	\$

We estimate that our portion of the total expenses of this offering will be \$3.4 million (excluding underwriting discounts and commissions). We have also agreed to reimburse the underwriters for certain of their expenses in an amount up to \$10,000.

In connection with the offering, the underwriters may purchase and sell shares in the open market. Purchases and sales in the open market may include short sales, purchases to cover short positions, which may include purchases pursuant to the underwriters’ option to purchase additional shares, and stabilizing purchases.

- Short sales involve secondary market sales by the underwriters of a greater number of shares than they are required to purchase in the offering.
- “Covered” short sales are sales of shares in an amount up to the number of shares represented by the underwriters’ option to purchase additional shares.

We and MRD Holdco have agreed to indemnify the several underwriters against certain liabilities, including liabilities under the Securities Act, or to contribute to payments the underwriters may be required to make because of any of those liabilities.

Conflicts of Interest

Affiliates of Citigroup Global Markets Inc., Barclays Capital Inc., Merrill Lynch, Pierce, Fenner & Smith Incorporated, BMO Capital Markets Corp., Comerica Securities, Inc., RBC Capital Markets, LLC and Wells Fargo Securities, LLC will be lenders under the Company's new revolving credit facility and will receive more than 5% of the net proceeds of this offering in connection with the temporary repayment of amounts under such credit facility. Accordingly, this offering is being made in compliance with the requirements of Rule 5121 of the Financial Industry Regulatory Authority, Inc. In accordance with this rule, Simmons & Company International has assumed the responsibilities of acting as a "qualified independent underwriter." In its role as a qualified independent underwriter, Simmons & Company International has participated in due diligence and the preparation of the registration statement of which this prospectus is a part. Simmons & Company International will not receive any additional fees for serving as a qualified independent underwriter in connection with this offering. Such underwriter will not confirm sales of the shares to any account over which it exercises discretionary authority without the prior written approval of the customer. We have agreed to indemnify Simmons & Company International against certain liabilities incurred in connection with acting as a "qualified independent underwriter," including liabilities under the Securities Act.

Notice to Prospective Investors in the European Economic Area

In relation to each member state of the European Economic Area that has implemented the Prospectus Directive (each, a relevant member state), with effect from and including the date on which the Prospectus Directive is implemented in that relevant member state (the relevant implementation date), an offer of shares described in this prospectus may not be made to the public in that relevant member state other than:

- to any legal entity which is a qualified investor as defined in the Prospectus Directive;
- to fewer than 100 or, if the relevant member state has implemented the relevant provision of the 2010 PD Amending Directive, 150 natural or legal persons (other than qualified investors as defined in the Prospectus Directive), as permitted under the Prospectus Directive, subject to obtaining the prior consent of the relevant Dealer or Dealers nominated by us for any such offer; or
- in any other circumstances falling within Article 3(2) of the Prospectus Directive,

provided that no such offer of shares shall require us or any underwriter to publish a prospectus pursuant to Article 3 of the Prospectus Directive.

For purposes of this provision, the expression an "offer of securities to the public" 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 shares to be offered so as to enable an investor to decide to purchase or subscribe for the shares, as the expression may be varied in that member state by any measure implementing the Prospectus Directive in that member state, and the expression "Prospectus Directive" means Directive 2003/71/EC (and amendments thereto, including the 2010 PD Amending Directive, to the extent implemented in the relevant member state) and includes any relevant implementing measure in the relevant member state. The expression 2010 PD Amending Directive means Directive 2010/73/EU.

The sellers of the shares have not authorized and do not authorize the making of any offer of shares through any financial intermediary on their behalf, other than offers made by the underwriters with a view to the final placement of the shares as contemplated in this prospectus. Accordingly, no purchaser of the shares, other than the underwriters, is authorized to make any further offer of the shares on behalf of the sellers or the underwriters.

MEMORIAL RESOURCE DEVELOPMENT CORP.
UNAUDITED PRO FORMA CONDENSED COMBINED FINANCIAL INFORMATION

- the Restructuring transactions as described above; and
- the initial public offering of shares of common stock and the use of the net proceeds therefrom as described in “Use of Proceeds” (the “Offering”).

Offering. For purposes of the unaudited pro forma combined financial statements, the Offering is defined as the planned issuance and sale to the public of 24,500,000 shares of common stock of MRDC as contemplated by this prospectus and the application of the net proceeds from such issuance as described in “Use of Proceeds.” The net proceeds from the sale of the common stock are expected to be \$390.7 million (based on an assumed initial public offering price of \$17.00, the midpoint of the price range set forth on the cover of this prospectus), net of underwriting discounts and commissions of \$22.4 million and other offering-related expenses payable by us, which is estimated to be approximately \$3.4 million.

The unaudited pro forma combined balance sheet of MRDC is based on the audited historical consolidated and combined balance sheet of MRD LLC as of March 31, 2014 and includes pro forma adjustments to give effect to the exclusion of BlueStone Holdings and Classic Pipeline, the MEMP subordinated units and the cash reserve associated with the PIK notes, the Restructuring, and the Offering, as if they had occurred on March 31, 2014.

The unaudited pro forma combined statements of operations of MRDC are based on: (i) the audited and unaudited historical consolidated and combined statement of operations of MRD LLC for the year ended December 31, 2013 and the three months ended March 31, 2014, respectively, having been adjusted to give effect to the exclusion of BlueStone Holdings and Classic Pipeline, the MEMP subordinated units, the Restructuring and the Offering as if they occurred on January 1, 2013 and (ii) the historical accounting records of MRD LLC.

The unaudited pro forma combined financial statements have been prepared on the basis that MRDC will be subject to subchapter C of the Internal Revenue Code of 1986, as amended, and as a result, will become taxable as a corporation and subject to U.S. federal and state income taxes at the entity level. The unaudited pro forma combined financial statements should be read in conjunction with the notes thereto and with the audited historical consolidated and combined financial statements and related notes of MRD LLC, included elsewhere in this prospectus.

The pro forma adjustments to the audited historical consolidated and combined financial statements are based on currently available information and certain estimates and assumptions. The actual effect of the transactions discussed in the accompanying notes ultimately may differ from the unaudited pro forma adjustments included herein. However, management believes that the assumptions utilized to prepare the pro forma adjustments provide a reasonable basis for presenting the significant effects of the transactions as currently contemplated and that the unaudited pro forma adjustments are factually supportable, give appropriate effect to the expected impact of events that are directly attributable to the transactions, and reflect those items expected to have a continuing impact on MRDC.

The unaudited pro forma combined financial statements of MRDC are not necessarily indicative of financial results that would have been attained had the described transactions occurred on the dates indicated below or which could be achieved in the future because they necessarily exclude various operating expenses, such as incremental general and administrative expenses associated with being a public company.

MEMORIAL RESOURCE DEVELOPMENT CORP.
UNAUDITED PRO FORMA CONDENSED COMBINED BALANCE SHEET
MARCH 31, 2014

	MRD LLC Historical	Exclude BlueStone Holdings & Classic Pipeline	Offering & Restructuring Related Adjustments	MRDC Pro Forma Combined
ASSETS				
Current assets:				
Cash and cash equivalents	\$ 39,519	\$ (3,075)	\$ (30,000)(c) \$ 390,700 (e) 611,751 (f) (4,300)(f) (968,151)(g)	\$ 36,444
Restricted cash	35,003	—	(35,003)(a)	—
Accounts receivable:				
Oil and natural gas sales	80,090	—	—	80,090
Joint interest owners and other	21,885	(2,648)	—	19,237
Affiliates	3,320	—	—	3,320
Short-term derivative instruments	2,481	—	—	2,481
Prepaid expenses and other current assets	20,122	(1,170)	—	18,952
Total current assets	202,420	(6,893)	(35,003)	160,524
Property and equipment, at cost:				
Oil and natural gas properties, successful efforts method	3,338,982	(34,257)	—	3,304,725
Other	9,878	—	—	9,878
Accumulated depreciation, depletion and impairment	(668,715)	7,947	—	(660,768)
Oil and natural gas properties, net	2,680,145	(26,310)	—	2,653,835
Long-term derivative instruments	31,775	—	—	31,775
Restricted investments	74,211	—	—	74,211
Restricted cash	15,506	—	(15,000)(a)	506
Other long-term assets	35,034	—	4,300 (f)	19,771
Total assets	\$3,039,091	\$(33,203)	\$ (65,266)	\$2,940,622

The accompanying notes are an integral part of this unaudited pro forma financial information.

MEMORIAL RESOURCE DEVELOPMENT CORP.
UNAUDITED PRO FORMA CONDENSED COMBINED BALANCE SHEET
MARCH 31, 2014

	<u>MRD LLC Historical</u>	<u>Exclude BlueStone Holdings & Classic Pipeline</u>	<u>Offering & Restructuring Related Adjustments</u>	<u>MRDC Pro Forma Combined</u>
LIABILITIES AND EQUITY				
Current liabilities:				
Accounts payable	\$ 19,491	(765)	\$ —	\$ 18,726
Accounts payable—affiliates	3,727	(124)	—	3,603
Revenues payable	69,209	(78)	—	69,131
Accrued liabilities	119,426	(1,370)	(11,801)(g)	106,255
Short-term derivative instruments	27,378	—	—	27,378
Total current liabilities	239,231	(2,337)	(11,801)	225,093
Long-term debt—MRD Segment	939,496	—	611,751 (f)	611,751
			(939,496)(g)	
Long-term debt—MEMP Segment	988,435	—	—	988,435
Asset retirement obligations	113,105	—	—	113,105
Long-term derivative instruments	11,262	—	—	11,262
Other long-term liabilities	5,249	—	115,983 (d)	121,232
Total liabilities	2,296,778	(2,337)	(223,563)	2,070,878
Equity:				
Common stock	—	—	1,300 (b)	1,954
			409 (c)	
			245 (e)	
Additional paid in capital	—	—	102,326 (b)	1,071,553
			694,755 (c)	
			(115,983)(d)	
			390,455 (e)	
Accumulated deficit	—	—	(724,656)(c)	(761,073)
			(16,854)(g)	
			(19,563)(h)	
Members' equity	222,889	(24,887)	(103,626)(b)	—
			(50,003)(a)	
			(44,373)(a)	
Noncontrolling interest	519,424	(5,979)	44,373 (a)	557,310
			(508)(c)	
Total equity	742,313	(30,866)	158,297	869,744
Total liabilities and equity	<u>\$3,039,091</u>	<u>\$(33,203)</u>	<u>\$ (65,266)</u>	<u>\$2,940,622</u>

The accompanying notes are an integral part of this unaudited pro forma financial information.

MEMORIAL RESOURCE DEVELOPMENT CORP.
UNAUDITED PRO FORMA CONDENSED COMBINED STATEMENTS OF OPERATIONS
FOR THE YEAR ENDED DECEMBER 31, 2013

	<u>MRD LLC Historical</u>	<u>Exclude BlueStone Holdings & Classic Pipeline</u>	<u>Offering & Restructuring Related Adjustments</u>	<u>MRDC Pro Forma Combined</u>
Revenues:				
Oil & natural gas sales	\$571,948	\$(18,148)	\$ —	\$553,800
Other revenues	3,075	(807)	—	2,268
Total revenues	<u>575,023</u>	<u>(18,955)</u>	<u>—</u>	<u>556,068</u>
Costs and expenses:				
Lease operating	113,640	(1,652)	—	111,988
Pipeline operating	1,835	—	—	1,835
Exploration	2,356	—	—	2,356
Production and ad valorem taxes	27,146	(877)	—	26,269
Depreciation, depletion, and amortization	184,717	(10,519)	—	174,198
Impairment of proved oil and natural gas properties	6,600	(2,399)	—	4,201
General and administrative	125,358	(24,260)	—	101,098
Accretion of asset retirement obligations	5,581	(58)	—	5,523
(Gain) loss on commodity derivative instruments	(29,294)	(17)	—	(29,311)
(Gain) loss on sale of properties	(85,621)	89,548	—	3,927
Other, net	649	—	—	649
Total costs and expenses	<u>352,967</u>	<u>49,766</u>	<u>—</u>	<u>402,733</u>
Operating income	222,056	(68,721)	—	153,335
Other income (expense):				
Interest expense, net	(69,250)	53	(17,853)(i) 1,411 (j) 20,814 (k)	(64,825)
Other, net	145	(2)	—	143
Total other income (expense)	<u>(69,105)</u>	<u>51</u>	<u>4,372</u>	<u>(64,682)</u>
Income (loss) before income taxes	152,951	(68,670)	4,372	88,653
Income tax benefit (expense)	(1,619)	1,147	(31,443)(l)	(31,915)
Net income (loss)	<u>\$151,332</u>	<u>\$(67,523)</u>	<u>\$(27,071)</u>	<u>\$ 56,738</u>
Net income (loss) per common share(n)				
Basic and diluted				<u>\$ 0.29</u>
Weighted average common shares outstanding(n)				
Basic and diluted				<u>193,676</u>

The accompanying notes are an integral part of this unaudited pro forma financial information.

MEMORIAL RESOURCE DEVELOPMENT CORP.
UNAUDITED PRO FORMA CONDENSED COMBINED STATEMENTS OF OPERATIONS
FOR THE THREE MONTHS ENDED MARCH 31, 2014

	<u>MRD LLC Historical</u>	<u>Exclude BlueStone Holdings & Classic Pipeline</u>	<u>Offering & Restructuring Related Adjustments</u>	<u>MRDC Pro Forma Combined</u>
Revenues:				
Oil & natural gas sales	\$189,917	\$ (558)	\$ —	\$189,359
Other revenues	911	(99)	—	812
Total revenues	<u>190,828</u>	<u>(657)</u>	<u>—</u>	<u>190,171</u>
Costs and expenses:				
Lease operating	33,682	410	—	34,092
Pipeline operating	489	—	—	489
Exploration	146	—	—	146
Production and ad valorem taxes	8,584	(26)	—	8,558
Depreciation, depletion, and amortization	57,679	(310)	—	57,369
General and administrative	18,762	(1,039)	—	17,723
Accretion of asset retirement obligations	1,521	—	—	1,521
(Gain) loss on commodity derivative instruments	59,482	—	—	59,482
(Gain) loss on sale of properties	(110)	110	—	—
Other	(12)	—	—	(12)
Total costs and expenses	<u>180,223</u>	<u>(855)</u>	<u>—</u>	<u>179,368</u>
Operating income	10,605	198	—	10,803
Other income (expense):				
Interest expense, net	(34,052)	—	(4,463)(i) 9,559(j) 8,219(k)	(20,737)
Other, net	31	—	—	31
Total other income (expense)	<u>(34,021)</u>	<u>—</u>	<u>13,315</u>	<u>(20,706) </u>
Income (loss) before income taxes	(23,416)	198	13,315	(9,903)
Income tax benefit (expense)	(100)	—	3,665(l)	3,565
Net income (loss)	<u>\$ (23,516)</u>	<u>\$ 198</u>	<u>\$16,980</u>	<u>\$ (6,338) </u>
Net income (loss) per common share(n)				
Basic and diluted				<u>\$ (0.03) </u>
Weighted average common shares outstanding(n)				
Basic and diluted				<u>193,676 </u>

The accompanying notes are an integral part of this unaudited pro forma financial information.

MEMORIAL RESOURCE DEVELOPMENT CORP.
NOTES TO UNAUDITED PRO FORMA CONDENSED COMBINED FINANCIAL STATEMENTS

Note 2. MRD Segment Stand-Alone Pro Forma Financial Statements

Unaudited Pro Forma Condensed Combined Balance Sheet—March 31, 2014

	<u>MRD Segment Historical</u>	<u>Exclude BlueStone Holdings & Classic Pipeline</u>	<u>Offering & Restructuring Related Adjustments</u>	<u>MRD Segment Pro Forma Combined</u>
ASSETS				
Current assets:				
Cash and cash equivalents	\$ 37,783	\$ (3,075)	\$ (30,000)(c) 390,700 (e) 611,751 (f) (4,300)(f) (968,151)(g)	\$ 34,708
Restricted cash	35,003	—	(35,003)(a)	—
Accounts receivable:				
Oil and natural gas sales	45,576	—	—	45,576
Joint interest owners and other	13,082	(2,648)	—	10,434
Affiliates	7,526	—	—	7,526
Short-term derivative instruments	928	—	—	928
Prepaid expenses and other current assets	9,090	(1,170)	—	7,920
Total current assets	148,988	(6,893)	(35,003)	107,092
Property and equipment, at cost:				
Oil and natural gas properties, successful efforts method	1,343,672	(34,257)	—	1,309,415
Other	6,958	—	—	6,958
Accumulated depreciation, depletion and impairment	(272,355)	7,947	—	(264,408)
Oil and natural gas properties, net	1,078,275	(26,310)	—	1,051,965
Long-term derivative instruments	5,445	—	—	5,445
Investment in unconsolidated affiliates	44,881	—	(44,373)(a)	508
Restricted cash	15,506	—	(15,000)(a)	506
Other long-term assets	18,191	—	4,300 (f) (19,563)(h)	2,928
Total assets	<u>\$1,311,286</u>	<u>\$(33,203)</u>	<u>\$(109,639)</u>	<u>\$1,168,444</u>

MEMORIAL RESOURCE DEVELOPMENT CORP.
NOTES TO UNAUDITED PRO FORMA CONDENSED COMBINED FINANCIAL STATEMENTS

	<u>MRD Segment Historical</u>	<u>Exclude BlueStone Holdings & Classic Pipeline</u>	<u>Offering & Restructuring Related Adjustments</u>	<u>MRD Segment Pro Forma Combined</u>
LIABILITIES AND EQUITY				
Current liabilities:				
Accounts payable	\$ 13,099	(765)	\$ —	\$ 12,334
Accounts payable—affiliates	7,695	(124)	—	7,571
Revenues payable	50,096	(78)	—	50,018
Accrued liabilities	54,638	(1,370)	(11,801)(g)	41,467
Short-term derivative instruments	7,546	—	—	7,546
Total current liabilities	<u>133,074</u>	<u>(2,337)</u>	<u>(11,801)</u>	<u>118,936</u>
Long-term debt— MRD Segment	939,496	—	611,751(f) (939,496)(g)	611,751
Asset retirement obligations	11,630	—	—	11,630
Long-term derivative instruments	616	—	—	616
Other long-term liabilities	1,435	—	115,983(d)	117,418
Total liabilities	<u>1,086,251</u>	<u>(2,337)</u>	<u>(223,563)</u>	<u>860,351</u>
Equity:				
Common stock	—	—	1,300(b) 409(c) 245(e)	1,954
Additional paid in capital	—	—	97,985(b) 694,755(c) (115,983)(d) 390,455(e)	1,067,212
Accumulated deficit	—	—	(724,656)(c) (16,854)(g) (19,563)(h)	(761,073)
Members' equity	218,548	(24,887)	(99,285)(b) (50,003)(a) (44,373)(a)	—
Noncontrolling interest	6,487	(5,979)	(508)(c)	—
Total equity	<u>225,035</u>	<u>(30,866)</u>	<u>113,924</u>	<u>308,093</u>
Total liabilities and lequit	<u>\$1,311,286</u>	<u>\$(33,203)</u>	<u>\$(109,639)</u>	<u>\$1,168,444</u>

MEMORIAL RESOURCE DEVELOPMENT CORP.
NOTES TO UNAUDITED PRO FORMA CONDENSED COMBINED FINANCIAL STATEMENTS

Unaudited Pro Forma Condensed Combined Statements of Operations—For the Year Ended December 31, 2013

	<u>MRD Segment Historical</u>	<u>Exclude BlueStone Holdings & Classic Pipeline</u>	<u>Offering & Restructuring Related Adjustments</u>	<u>MRD Segment Pro Forma Combined</u>
Revenues:				
Oil & natural gas sales	\$230,751	\$(18,148)	\$ —	\$212,603
Other revenues	807	(807)	—	—
Total revenues	<u>231,558</u>	<u>(18,955)</u>	<u>—</u>	<u>212,603</u>
Costs and expenses:				
Lease operating	25,006	(1,652)	—	23,354
Exploration	1,226	—	—	1,226
Production and ad valorem taxes	9,362	(877)	—	8,485
Depreciation, depletion, and amortization	87,043	(10,519)	—	76,524
Impairment of proved oil and natural gas properties	2,527	(2,399)	—	128
General and administrative	81,758	(24,260)	—	57,498
Accretion of asset retirement obligations	728	(58)	—	670
(Gain) loss on commodity derivative instruments	(3,013)	(17)	—	(3,030)
(Gain) loss on sale of properties	(82,773)	89,548	—	6,775
Other, net	2	—	—	2
Total costs and expenses	<u>121,866</u>	<u>49,766</u>	<u>—</u>	<u>171,632</u>
Operating income	109,692	(68,721)	—	40,971
Other income (expense):				
Interest expense, net	(27,349)	53	(17,853)(i) 1,411 (j) 20,814 (k)	(22,924)
Earnings from equity investments	1,066	—	(797)(m)	269
Other, net	145	(2)	—	143
Total other income (expense)	<u>(26,138)</u>	<u>51</u>	<u>3,575</u>	<u>(22,512)</u>
Income (loss) before income taxes	83,554	(68,670)	3,575	18,459
Income tax benefit (expense)	(1,311)	1,147	(6,481)(l)	(6,645)
Net income (loss)	<u>\$ 82,243</u>	<u>\$(67,523)</u>	<u>\$ (2,906)</u>	<u>\$ 11,814</u>

MEMORIAL RESOURCE DEVELOPMENT CORP.
NOTES TO UNAUDITED PRO FORMA CONDENSED COMBINED FINANCIAL STATEMENTS

Unaudited Pro Forma Condensed Combined Statements of Operations—Three Months Ended March 31, 2014

	<u>MRD Segment Historical</u>	<u>Exclude BlueStone Holdings & Classic Pipeline</u>	<u>Offering & Restructuring Related Adjustments</u>	<u>MRD Segment Pro Forma Combined</u>
Revenues:				
Oil & natural gas sales	\$ 89,618	\$ (558)	\$ —	\$89,060
Other revenues	248	(99)	—	149
Total revenues	<u>89,866</u>	<u>(657)</u>	<u>—</u>	<u>89,209</u>
Costs and expenses:				
Lease operating	5,709	410	—	6,119
Exploration	140	—	—	140
Production and ad valorem taxes	3,000	(26)	—	2,974
Depreciation, depletion, and amortization	30,127	(310)	—	29,817
General and administrative	8,804	(1,039)	—	7,765
Accretion of asset retirement obligations	164	—	—	164
(Gain) loss on commodity derivative instruments	12,716	—	—	12,716
(Gain) loss on sale of properties	(110)	110	—	—
Total costs and expenses	<u>60,550</u>	<u>(855)</u>	<u>—</u>	<u>59,695</u>
Operating income	29,316	198	—	29,514
Other income (expense):				
Interest expense, net	(17,974)	—	(4,463)(i) 9,559 (j) 8,219 (k)	(4,659)
Earnings from equity investments	(2,986)	—	2,992 (m)	6
Other, net	31	—	—	31
Total other income (expense)	<u>(20,929)</u>	<u>—</u>	<u>16,307</u>	<u>(4,622) </u>
Income (loss) before income taxes	8,387	198	16,307	24,892
Income tax benefit (expense)	(25)	—	(8,936)(l)	(8,961)
Net income (loss)	<u>\$ 8,362</u>	<u>\$ 198</u>	<u>\$ 7,371</u>	<u>\$15,931</u>

MEMORIAL RESOURCE DEVELOPMENT CORP.
NOTES TO UNAUDITED PRO FORMA CONDENSED COMBINED FINANCIAL STATEMENTS

Note 3. Pro Forma Adjustments and Assumptions

Unaudited Pro Forma Condensed Combined Balance Sheet

The following adjustments were made in the preparation of the unaudited pro forma condensed combined balance sheet:

- (a) Pro forma adjustments to reflect the \$50 million in cash to be released from its debt service reserve account in connection with the redemption of the PIK notes and the related distribution of this \$50 million of cash to MRD Holdco as well as the exclusion of the MEMP subordinated units.
- (b) Pro forma adjustment to reflect the issuance of approximately 127.1 million shares of our common stock to MRD LLC in exchange for: (1) 100% of the ownership interests in Classic, Classic GP, Black Diamond, Beta Operating, MRD Operating and MEMP GP; (2) 99.9% of the membership interests in WildHorse Resources; and (3) 50% of the incentive distribution rights of MEMP.
- (c) Pro forma adjustment to reflect the contribution from certain former management members of WildHorse Resources to us of the remaining 0.1% membership interest in WildHorse Resources and the forfeiture of their incentive units in exchange for approximately 40.9 million shares of our common stock and cash consideration of \$30.0 million. The cash consideration will be paid from the net proceeds from the Offering and borrowings under a new revolving credit facility as discussed in (e) and (f) below. Approximately \$0.5 million of the total consideration related to acquiring the 0.1% membership interest will be accounted for as the acquisition of noncontrolling interests and the remaining \$724.7 million related to the incentive units will be recorded as compensation expense within general and administrative expenses. The compensation expense related to the shares of our common stock, which is approximately \$695.2 million, will be offset by a deemed capital contribution from MRD Holdco. A corresponding charge to earnings has not been reflected in the unaudited pro forma combined statements of operations as the charge is considered non-recurring.
- (d) Pro forma adjustment to reflect the estimated change in long-term deferred tax liabilities for temporary differences between the historical cost basis and tax basis of the assets and liabilities being contributed to MRDC. MRDC will be subject to subchapter C of the Internal Revenue Code of 1986, as amended, and as a result, will become taxable as a corporation and subject to U.S. federal and state income taxes at the entity level. The deferred tax liabilities associated with the corporate reorganization will be recorded in equity as it represents a transaction among shareholders.
- (e) Pro forma adjustments to reflect the estimated gross proceeds of \$416.5 million to the Company from the issuance and sale of 24.5 million shares of common stock at an assumed initial public offering price of \$17.00 per share (the midpoint of the price range set forth on the cover of this registration statement), net of estimated underwriting discounts and commissions of \$22.4 million and additional estimated expenses related to the Offering of approximately \$3.4 million.
- (f) Pro forma adjustment to reflect the cash proceeds from borrowings by MRDC of \$611.8 million under a new credit facility, including financing costs of \$4.3 million.
- (g) Pro forma adjustments to record the use of \$968.2 million of net proceeds from this Offering and borrowings under our new revolving credit facility to: (1) redeem the PIK notes in their entirety and pay any applicable premium in connection with such redemption and accrued and unpaid interest, if any, to the date of redemption; (2) repay indebtedness under WildHorse Resources' revolving and second lien credit facilities, including accrued interest; and (3) adjustment to accumulated deficit for the premiums paid to repay indebtedness and write-offs of unamortized discounts.
- (h) Pro forma adjustment to reflect a \$8.6 million write-off of unamortized deferred financing costs associated with the PIK notes upon redemption and a \$10.9 million of write-off of unamortized

MEMORIAL RESOURCE DEVELOPMENT CORP.
NOTES TO UNAUDITED PRO FORMA CONDENSED COMBINED FINANCIAL STATEMENTS

deferred financing costs associated with WildHorse Resources' revolving and second lien credit facilities; however, a corresponding charge to earnings has not been reflected in the unaudited pro forma combined statements of operations as the charge is considered non-recurring.

Unaudited Pro Forma Condensed Combined Statements of Operations

The following adjustments were made in the preparation of the unaudited pro forma condensed combined statements of operations for the year ended December 31, 2013 and the three months ended March 31, 2014:

- (i) Pro forma adjustment to reflect the incurrence of interest expense on \$611.8 million of borrowings by MRDC under a new credit facility at LIBOR plus 2.50% and expenses on the unused borrowing base of 0.50%. Pro forma adjustment also reflects amortization of deferred financing costs of approximately \$0.9 million and \$0.2 million for the year ended December 31, 2013 and the three months ended March 31, 2014, respectively. A one-eighth percentage point change in the interest rate would change pro forma interest by \$0.8 million and \$0.2 million for the year ended December 31, 2013 and the three months ended March 31, 2014, respectively.
- (j) Pro forma adjustment to reflect a reduction in interest expense on the PIK notes as a result of applying \$357.0 million of net proceeds from this Offering to redeem the PIK notes in their entirety.
- (k) Pro forma adjustment to reflect a reduction in interest expense under WildHorse Resources' revolving and second lien credit facilities associated with repayment of such debt with net proceeds from the Offering and borrowing by MRDC under a new credit facility. The second lien facility was entered into in June 2013.
- (l) Pro forma adjustment to reflect the estimated incremental income tax provision associated with the historical results of operations and pro forma adjustments assuming the earnings had been subject to federal income tax as a subchapter C corporation using an effective tax rate of approximately 36.0%. This rate is inclusive of federal and state income taxes.
- (m) Pro forma adjustment to reflect the exclusion of the MEMP subordinated units.
- (n) Basic and diluted earnings per share is based on the shares of common stock outstanding at the completion of this offering and includes 1,176,471 restricted shares issued to our independent directors and certain employees in connection with the completion of this offering.

Note 4. Pro Forma Proved Reserves and Standardized Measure of Discounted Future Net Cash Flows

Users of this information should be aware that the process of estimating quantities of "proved" and "proved developed" oil and natural gas reserves is very complex, requiring significant subjective decisions in the evaluation of all available geological, engineering and economic data for each reservoir. The data for a given reservoir may also change substantially over time as a result of numerous factors including, but not limited to, additional activity, evolving production history and continual reassessment of the viability of production under varying economic conditions. As a result, revisions to existing reserve estimates may occur from time to time. Although every reasonable effort is made to ensure reserve estimates reported represent the most accurate assessments possible, the subjective decisions and variances in available data for various reservoirs make these estimates generally less precise than other estimates included in the financial statement disclosures.

Proved reserves are those quantities of oil and natural gas that 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

MEMORIAL RESOURCE DEVELOPMENT LLC (PREDECESSOR)
UNAUDITED CONDENSED STATEMENTS OF CONSOLIDATED AND COMBINED OPERATIONS
(In thousands)

	For Three Months Ended March 31,	
	2014	2013
Revenues:		
Oil & natural gas sales	\$189,917	\$121,626
Other revenues	911	555
Total revenues	190,828	122,181
Costs and expenses:		
Lease operating	33,682	26,364
Pipeline operating	489	470
Exploration	146	856
Production and ad valorem taxes	8,584	7,286
Depreciation, depletion, and amortization	57,679	43,206
General and administrative	18,762	12,586
Accretion of asset retirement obligations	1,521	1,330
(Gain) loss on commodity derivative instruments	59,482	22,545
(Gain) loss on sale of properties	(110)	(1,983)
Other, net	(12)	—
Total costs and expenses	180,223	112,660
Operating income	10,605	9,521
Other income (expense):		
Interest expense, net	(34,052)	(9,370)
Other, net	31	29
Total other income (expense)	(34,021)	(9,341)
Income (loss) before income taxes	(23,416)	180
Income tax benefit (expense)	(100)	—
Net income (loss)	(23,516)	180
Net income (loss) attributable to noncontrolling interest	(31,888)	(4,069)
Net income (loss) attributable to Memorial Resource Development LLC	\$ 8,372	\$ 4,249
Net income (loss) attributable to members	\$ 6,947	\$ 2,597
Net income (loss) attributable to previous owners (Note 1)	1,425	1,652
Net income (loss) attributable to Memorial Resource Development LLC	\$ 8,372	\$ 4,249
Income (loss) before income taxes	\$ (23,416)	\$ 180
Pro forma (provision) benefit for income taxes (Note 2)	8,096	(63)
Pro forma net income (loss)	\$ (15,320)	\$ 117
Pro forma basic and diluted earnings per share (Note 2)	\$ 0.02	\$ 0.01
Pro forma basic and diluted weighted average shares outstanding	193,676	193,676

See Accompanying Notes to Unaudited Condensed Consolidated and Combined Financial Statements.

MEMORIAL RESOURCE DEVELOPMENT LLC (PREDECESSOR)
NOTES TO UNAUDITED CONDENSED CONSOLIDATED AND
COMBINED FINANCIAL STATEMENTS

The following sets forth the calculation of pro forma EPS for the periods indicated (in thousands, except per share amounts):

	For Three Months Ended March 31,	
	<u>2014</u>	<u>2013</u>
Numerator:		
Pro forma net income (loss)	\$ (15,320)	\$ 117
Noncontrolling interest in pro forma net (income) loss, net of tax	20,861	2,642
Previous owner interest in pro forma net (income) loss, net of tax	(932)	(1,074)
Pro forma net income (loss) available to common shareholders	<u>\$ 4,609</u>	<u>\$ 1,685</u>
Denominator:		
Common shares outstanding immediately following the Offering	<u>193,676</u>	<u>193,676</u>
Basic and diluted EPS	\$ 0.02	\$ 0.01

The following sets forth the calculation of our supplemental pro forma EPS, for the periods indicated (in thousands, except per share amounts):

	For Three Months Ended March 31,	
	<u>2014</u>	<u>2013</u>
Numerator:		
Pro forma net income (loss)	\$ (15,320)	\$ 117
Noncontrolling interest in pro forma net (income) loss, net of tax	20,861	2,642
Pro forma net income (loss) available to common shareholders	<u>\$ 5,541</u>	<u>\$ 2,759</u>
Denominator:		
Common shares outstanding immediately following the Offering	<u>193,676</u>	<u>193,676</u>
Basic and diluted EPS	\$ 0.03	\$ 0.01

Our supplemental basic and diluted EPU includes all the earnings generated by the previous owners for all periods presented due to common control considerations.

Current Liabilities—Accrued Liabilities

Current accrued liabilities consisted of the following at the dates indicated (in thousands):

	<u>March 31,</u>	<u>December 31,</u>
	<u>2014</u>	<u>2013</u>
Accrued capital expenditures	\$ 59,247	\$48,579
Accrued lease operating expense	8,814	13,240
Accrued general and administrative expenses	8,808	14,485
Accrued ad valorem and production taxes	4,431	3,541
Accrued interest payable	34,056	11,934
Accrued environmental	1,577	577
Other miscellaneous, including operator advances	2,493	5,774
	<u>\$119,426</u>	<u>\$98,130</u>

MEMORIAL RESOURCE DEVELOPMENT LLC (PREDECESSOR)
STATEMENTS OF CONSOLIDATED AND COMBINED OPERATIONS
(In thousands)

	For Year Ended December 31,	
	2013	2012
Revenues:		
Oil & natural gas sales	\$571,948	\$393,631
Other revenues	3,075	3,237
Total revenues	575,023	396,868
Costs and expenses:		
Lease operating	113,640	103,754
Pipeline operating	1,835	2,114
Exploration	2,356	9,800
Production and ad valorem taxes	27,146	23,624
Depreciation, depletion, and amortization	184,717	138,672
Impairment of proved oil and natural gas properties	6,600	28,871
General and administrative	125,358	69,187
Accretion of asset retirement obligations	5,581	5,009
(Gain) loss on commodity derivative instruments	(29,294)	(34,905)
(Gain) loss on sale of properties	(85,621)	(9,761)
Other, net	649	502
Total costs and expenses	352,967	336,867
Operating income	222,056	60,001
Other income (expense):		
Interest expense, net	(69,250)	(33,238)
Amortization of investment premium	—	(194)
Other, net	145	535
Total other income (expense)	(69,105)	(32,897)
Income before income taxes	152,951	27,104
Income tax benefit (expense)	(1,619)	(107)
Net income	151,332	26,997
Net income (loss) attributable to noncontrolling interest	49,830	(2,701)
Net income (loss) attributable to Memorial Resource Development LLC	\$101,502	\$ 29,698
Net income (loss) attributable to members	\$ 90,712	\$ (7,620)
Net income (loss) attributable to previous owners (Note 1)	10,790	37,318
Net income (loss) attributable to Memorial Resource Development LLC	\$101,502	\$ 29,698
Income before income taxes	152,951	27,104
Pro forma provision for income taxes (Note 2)	(55,154)	(9,592)
Pro forma net income	\$ 97,797	\$ 17,512
Pro forma basic and diluted earnings per share (Note 2)	\$ 0.31	\$ (0.03)
Pro forma basic and diluted weighted average shares outstanding	193,676	193,676

See Accompanying Notes to Consolidated and Combined Financial Statements.

MEMORIAL RESOURCE DEVELOPMENT LLC (PREDECESSOR)
NOTES TO CONSOLIDATED AND COMBINED FINANCIAL STATEMENTS

financial statement carrying value of existing assets and liabilities and their respective tax basis. Deferred tax liabilities as of December 31, 2013 were approximately \$3.2 million and total tax expense for the year was approximately \$1.6 million. Deferred tax liabilities as of December 31, 2012 were approximately \$3.1 million and total tax expense for the year was approximately \$0.1 million.

We must recognize the tax effects of any uncertain tax positions we may adopt if the position taken by us is more likely than not sustainable based on its technical merits. If a tax position meets such criteria, the tax effect that would be recognized by us would be the largest amount of benefit with more than a 50% chance of being realized. There were no uncertain tax positions that required recognition in the financial statements at December 31, 2013 or 2012.

Upon closing of the Offering, MRDC will be treated as a taxable C corporation and will be subject to federal and certain state income taxes. Accordingly, a pro forma income tax provision has been disclosed as if Memorial Resource was a taxable corporation for all periods presented. Pro forma tax expense was computed using a blended corporate level federal and state tax rate of 36.06% and 35.39% for the years ended December 31, 2013 and 2012, respectively.

Unaudited Pro Forma Earnings Per Share

Memorial Resource has presented pro forma earnings per share (“EPS”) for all periods presented. Pro forma net income (loss) per basic share is determined by dividing the pro forma net income (loss) available to common shareholders by the number of common shares expected to be outstanding immediately following the Offering.

The following sets forth the calculation of pro forma EPS for the periods indicated (in thousands, except per share amounts):

	For the Year Ended December 31,	
	2013	2012
Numerator:		
Pro forma net income (loss)	\$ 97,797	\$ 17,512
Noncontrolling interest in pro forma net (income) loss, net of tax	(31,861)	1,745
Previous owners interest in pro forma net (income) loss, net of tax	(6,899)	(24,111)
Pro forma net income (loss) available to common shareholders	\$ 59,037	\$ (4,854)
Denominator:		
Common shares outstanding immediately following the Offering	193,676	193,676
Basic and diluted EPS	\$ 0.31	\$ (0.03)

MEMORIAL RESOURCE DEVELOPMENT LLC (PREDECESSOR)
NOTES TO CONSOLIDATED AND COMBINED FINANCIAL STATEMENTS

The following sets forth the calculation of our supplemental pro forma EPS, for the periods indicated (in thousands, except per share amounts):

	For the Year Ended December 31,	
	2013	2012
Numerator:		
Pro forma net income (loss)	\$ 97,797	\$ 17,512
Noncontrolling interest in pro forma net (income) loss, net of tax	(31,861)	1,745
Pro forma net income (loss) available to common shareholders	\$ 65,936	\$ 19,257
Denominator:		
Common shares outstanding immediately following the Offering	193,676	193,676
Basic and diluted EPS	\$ 0.34	\$ 0.10

Our supplemental basic and diluted EPU includes all the earnings generated by the previous owners for all periods presented due to common control considerations.

Unit-Based Compensation Arrangements

The fair value of equity-classified awards (e.g., restricted common unit awards) is amortized to earnings over the requisite service or vesting period. Compensation expense for liability-classified awards are recognized over the requisite service or vesting period of an award based on the fair value of the award re-measured at each reporting period. Generally, no compensation expense is recognized for equity instruments that do not vest.

The governing documents of Memorial Resource and certain of its subsidiaries, including WildHorse and BlueStone, provide for the issuance of incentive units. The incentive units are subject to performance conditions that affect their vesting. Compensation cost is recognized only if the performance condition is probable of being satisfied at each reporting date.

See Note 10 and 11 for further information.

Current Accrued Liabilities

Current accrued liabilities consisted of the following at the dates indicated (in thousands):

	December 31,	
	2013	2012
Accrued capital expenditures	\$48,579	\$14,352
Accrued lease operating expense	13,240	6,701
Accrued general and administrative expenses	14,485	2,290
Accrued ad valorem and production taxes	3,541	3,753
Accrued interest payable	11,934	1,239
Accrued environmental	577	1,012
Other miscellaneous, including operator advances	5,774	4,140
	\$98,130	\$33,487

New Accounting Pronouncements

Offsetting Disclosure Requirements. In December 2011, the FASB issued an accounting standard update intended to enhance current disclosure requirements on offsetting financial assets and liabilities. In January 2013,

36,000,000 Shares



Common Stock

PRELIMINARY PROSPECTUS

Joint Book-Running Managers

Citigroup
Barclays
BofA Merrill Lynch
BMO Capital Markets
Goldman, Sachs & Co.
Raymond James
RBC Capital Markets
Wells Fargo Securities

Co-Managers

Comerica Securities
Credit Suisse
Mitsubishi UFJ Securities
Morgan Stanley
Scotiabank / Howard Weil
Simmons & Company International
Stephens Inc.
Stifel
UBS Investment Bank
Wunderlich Securities

, 2014

Until _____, 2014 (25 days after the date of this prospectus), all dealers effecting transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to the dealers' obligation to deliver a prospectus when acting as an underwriter and with respect to their unsold allotments or subscriptions.

PART II. INFORMATION NOT REQUIRED IN THE PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution

The following table sets forth the estimated fees and expenses, other than underwriting discounts and commissions, paid or payable by the registrant in connection with the issuance and distribution of the common stock. All amounts are estimates except for the SEC registration, Financial Industry Regulatory Authority, Inc. and stock exchange and listing fees.

SEC registration fee	\$ 95,982
Stock exchange filing fee and listing fee	225,000
Transfer agent and registrar fees	10,000
Printing and engraving costs	500,000
Legal fees and expenses	1,800,000
Accountants' fees and expenses	600,000
Financial Industry Regulatory Authority, Inc. filing fee	112,280
Miscellaneous	56,738
Total	<u>\$3,400,000</u>

Item 14. Indemnification of Directors and Officers

The Company is incorporated in Delaware. Section 145 of the Delaware General Corporation Law (“DGCL”) provides that a corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation) by reason of the fact that he is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys’ fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by him in connection with such action, suit or proceeding if he acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his conduct was unlawful. Section 145 further provides that a corporation similarly may indemnify any such person serving in any such capacity who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor by reason of the fact that he is or was a director, officer, employee or agent of the corporation or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys’ fees) actually and reasonably incurred in connection with the defense or settlement of such action or suit if he acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation and except that no indemnification shall be made in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Delaware Court of Chancery or such other court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all of the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Delaware Court of Chancery or such other court shall deem proper.

The Company’s bylaws provide that indemnification shall be to the fullest extent permitted by the DGCL for all current or former directors or officers of the Company. As permitted by the DGCL, the Company’s certificate of incorporation provides that directors of the Company shall have no personal liability to the Company or its stockholders for monetary damages for breach of fiduciary duty as a director, except to the extent that exculpation from liability is not permitted under the DGCL as in effect when such liability is determined.