

Gastar Exploration USA, Inc.
Form 424B5
October 28, 2013
Table of Contents

**Filed Pursuant to Rule 424(b)(5)
Registration Statement No. 333-174552**

The information in this preliminary prospectus supplement is not complete and may be changed. This preliminary prospectus supplement and the accompanying prospectus are part of an effective registration statement filed with the Securities and Exchange Commission. This preliminary prospectus supplement and the accompanying prospectus are not an offer to sell these securities and they are not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED October 28, 2013

PRELIMINARY PROSPECTUS SUPPLEMENT

(To Prospectus dated June 8, 2011)

Shares

Gastar Exploration USA, Inc.

% Series B Cumulative Preferred Stock

\$25.00 Per Share

Liquidation Preference \$25.00 Per Share

Guaranteed to the extent set forth herein by Gastar Exploration Ltd.

We are offering _____ shares of our _____ % Series B Cumulative Preferred Stock, par value \$0.01 per share, which we refer to in this prospectus supplement as the Series B Preferred Stock. The offering of Series B Preferred Stock contemplated by this prospectus supplement is the first issuance of shares of this series by us. With respect to shares of Series B Preferred Stock issued pursuant to this prospectus supplement or any other shares of Series B Preferred Stock issued in _____ 2013, we anticipate setting the record date for a _____, 2013 partial dividend period on _____, 2013 with such initial dividend payment to be made at the end of _____, 2013. Any other subsequently issued shares of Series B Preferred Stock will become entitled to dividends commencing on the first monthly record date following the date of issuance, and we anticipate setting record dates as of the fifteenth of every month with dividends to be paid at the end of the month to such holders of record. Dividends will be in the amount of \$ _____ per share each year, which is equivalent to _____ % of the \$25.00 liquidation preference per share. If the Series B Preferred Stock, however, is not listed on a National Exchange, as defined in this prospectus supplement, for a total of at least 180 consecutive days after the Series B Preferred Stock becomes eligible for listing on a National Exchange or if we fail to pay cash dividends on the outstanding Series B Preferred Stock in full for any monthly dividend period within a quarterly period for a total of four consecutive or non-consecutive quarterly periods and such dividends remain accumulated, accrued and unpaid, subject to our right to remedy these matters as described in this prospectus supplement, investors will be entitled to receive cumulative cash dividends at the increased rate of _____ % per annum of the \$25.00 liquidation preference per share (equivalent to \$ _____ per year

Edgar Filing: Gastar Exploration USA, Inc. - Form 424B5

per share) as outlined in this prospectus supplement.

The Series B Preferred Stock will be subordinated to all of our existing and future debt and all future capital stock designated as senior to the Series B Preferred Stock. With respect to dividend and liquidation rights, our Series B Preferred Stock will rank senior to our common stock and pari passu with our outstanding 8.625% Series A Cumulative Preferred Stock (the Series A Preferred Stock). Our parent, Gastar Exploration Ltd., will fully and unconditionally guarantee the payment of dividends that have been declared by the board of directors of Gastar Exploration USA, Inc., amounts payable upon redemption or liquidation, dissolution or winding up, and any other amounts due with respect to the Series B Preferred Stock, to the extent described in this prospectus supplement. Gastar Exploration Ltd.'s obligations with respect to the guarantee will be effectively subordinated to all of its existing and future debt. Gastar Exploration Ltd.'s guarantee of the Series B Preferred Stock is further described in this prospectus supplement under Description of Guarantee of Preferred Securities.

Investors in the Series B Preferred Stock generally will have no voting rights other than with respect to the authorization or creation of shares ranking senior to the Series B Preferred Stock, matters directly impacting the rights of the holders and for certain share exchanges and other acquisitions. However, holders will have limited voting rights if the Series B Preferred Stock is not listed on a National Exchange for at least 180 consecutive days after the shares first become eligible for listing or if we fail to make a monthly dividend payment on the outstanding Series B Preferred Stock during a quarterly period for four or more consecutive or non-consecutive quarters, and under certain other circumstances. The voting rights of investors in the Series B Preferred Stock are further described in this prospectus supplement under Description of Series B Preferred Stock Voting Rights.

We may not redeem the Series B Preferred Stock before [redacted], 2018, except as described below. On or after [redacted], 2018, we may, at our option, redeem the Series B Preferred Stock, in whole or in part, by paying \$25.00 per share, plus any accrued and unpaid dividends to the redemption date. If at any time a Change of Ownership or Control, as defined in this prospectus supplement, occurs, we (or the acquiring company) will have the option to redeem the Series B Preferred Stock, in whole but not in part, within 90 days after the date on which the Change of Ownership or Control has occurred at specified redemption amounts as described in this prospectus supplement. If we exercise any of our redemption rights relating to shares of Series B Preferred Stock, the holders of Series B Preferred Stock will not have the conversion right described in this prospectus supplement with respect to the shares of Series B Preferred Stock called for redemption.

The Series B Preferred Stock has no stated maturity, will not be subject to any sinking fund or other mandatory redemption, and will remain outstanding indefinitely unless repurchased or redeemed by us or converted into our common stock in connection with a Change of Ownership or Control.

The underwriters have an option to purchase a maximum of [redacted] additional shares of Series B Preferred Stock to cover over-allotments, if any, on the same terms and conditions set forth above within 30 days of the date of this prospectus supplement.

There is currently no public market for the Series B Preferred Stock. Subject to issuance, we anticipate that our shares of Series B Preferred Stock will be approved for listing on the NYSE MKT LLC under the symbol GST.PR.B.

Investing in the Series B Preferred Stock involves a high degree of risk. You should carefully consider the risks relating to an investment in the Series B Preferred Stock and each of the other risk factors described under Risk Factors beginning on page S-37 of this prospectus supplement, on page 2 of the accompanying prospectus and in our reports filed with the Securities and Exchange Commission, which are incorporated by reference herein, before you make an investment in our securities.

	Per Share	Total (1)
Public offering price	\$	\$
Underwriting discounts and commissions	\$	\$
Proceeds, before expenses, to us	\$	\$

(1) The underwriters will receive compensation in addition to the underwriting commission. See Underwriting beginning on page S-73 of this prospectus supplement for a description of compensation payable to the underwriters.

We expect that the Series B Preferred Stock will be ready for delivery in book-entry form through The Depository Trust Company on or about [redacted], 2013 (a T+6 settlement). See Underwriting beginning on page S-73.

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 SUPPLEMENT OR THE ACCOMPANYING PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

Joint Book-Running Managers

Barclays

Credit Suisse

MLV & Co.

Sterne Agee

Lead Manager

Janney Montgomery Scott

Co-Managers

**Euro Pacific Capital Inc.
Ladenburg Thalmann & Co. Inc.**

**IBERIA Capital Partners L.L.C.
Maxim Group LLC National Securities Corporation**
The date of this prospectus supplement is , 2013.

**Imperial Capital
Northland Capital Markets**

Table of Contents

TABLE OF CONTENTS

	Page
Prospectus Supplement	
<u>About This Prospectus Supplement</u>	S-1
<u>Certain Terms Used in this Prospectus Supplement</u>	S-2
<u>Cautionary Statement Regarding Forward-Looking Statements</u>	S-3
<u>Prospectus Supplement Summary</u>	S-6
<u>Summary Historical Financial Data</u>	S-28
<u>Summary Pro Forma Financial Data</u>	S-30
<u>Summary Historical and Pro Forma Reserves and Production Data</u>	S-34
<u>Risk Factors</u>	S-37
<u>Use of Proceeds</u>	S-44
<u>Capitalization</u>	S-45
<u>Ratio of Earnings to Combined Fixed Charges and Preferred Stock Dividends</u>	S-46
<u>Selected Historical Consolidated Financial Data</u>	S-47
<u>Description of Series B Preferred Stock</u>	S-49
<u>Description of Guarantee of Preferred Securities</u>	S-62
<u>Material U.S. Federal Income Tax Consequences</u>	S-64
<u>Underwriting</u>	S-73
<u>Legal Matters</u>	S-76
<u>Experts</u>	S-76
<u>Where You Can Find More Information</u>	S-76

Prospectus

<u>Prospectus Summary</u>	1
<u>Risk Factors</u>	2
<u>Cautionary Statements Regarding Forward-Looking Statements</u>	3
<u>Use of Proceeds</u>	5
<u>Ratio of Earnings to Combined Fixed Charges and Preferred Dividends</u>	6
<u>Description of Preferred Securities</u>	7
<u>Description of Guarantee of Preferred Securities</u>	8
<u>Plan of Distribution</u>	9
<u>Legal Matters</u>	12
<u>Experts</u>	12
<u>Where You Can Find More Information</u>	12
<u>Disclosure of SEC Position on Indemnification for Securities Act Liabilities</u>	14

This prospectus supplement and the accompanying prospectus, including the exhibits and the documents incorporated herein by reference, can be accessed on the Securities and Exchange Commission's (SEC) website or at the SEC's offices identified in Where You Can Find More Information.

Table of Contents

ABOUT THIS PROSPECTUS SUPPLEMENT

This document is in two parts – the first part is this prospectus supplement, which describes the specific terms of this offering of Series B Preferred Stock, and the second part is the accompanying prospectus, which provides more general information about us and the securities registered thereunder, some of which may not apply to this offering. This document also includes those documents and other information incorporated by reference in this prospectus supplement and the accompanying prospectus. This prospectus supplement and the accompanying prospectus are part of a shelf registration statement on Form S-3 (Registration No. 333-174552) that we filed with the SEC on May 27, 2011 as part of a shelf registration process and was declared effective by the SEC on June 8, 2011. Under the shelf registration process, we may offer to sell preferred stock of Gastar Exploration USA, Inc. from time to time, in one or more offerings, up to \$200,000,000 in total aggregate offering price. Generally, when we refer to this prospectus supplement, we are referring to both parts of this document combined, including all documents and other information incorporated by reference herein.

This prospectus supplement, the accompanying prospectus, and any free writing prospectus that we have authorized to be distributed to you in connection with this offering, and the documents and other information incorporated by reference herein and therein, include important information about us, the Series B Preferred Stock being offered hereby and other information you should know before investing in our securities. This prospectus supplement may supplement, update or change information contained in the accompanying prospectus. To the extent that any statement that we make in this prospectus supplement is inconsistent with statements made in the accompanying prospectus or any documents incorporated by reference therein, the statements made in this prospectus supplement will be deemed to modify or supersede those made in the accompanying prospectus and such documents incorporated by reference therein. We urge you to carefully read this prospectus supplement, including the Risk Factors, the accompanying prospectus, any free writing prospectus that we authorize to be distributed to you, the information incorporated by reference herein and therein (including the documents described in Where You Can Find More Information in both this prospectus supplement and the accompanying prospectus), and any additional information you may need to make your investment decision, before buying any of the securities being offered under this prospectus supplement.

In making your investment decision, you should rely only on the information contained or incorporated by reference in this prospectus supplement, the accompanying prospectus, and any free writing prospectus we have authorized to be distributed to you in connection with this offering. We have not, and the underwriters have not, authorized anyone to provide you with any other information. You should not rely on any unauthorized information or representation. You should assume that the information in this prospectus supplement, the accompanying prospectus and any free writing prospectus authorized to be distributed by us is accurate only as of the date on the front cover of the applicable document and that any information incorporated by reference in such documents is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus supplement, the accompanying prospectus, any free writing prospectus or any sale of a security. Our business, assets, financial condition, results of operations and prospects may have changed since such dates.

This prospectus supplement is an offer to sell only the securities offered hereby, and only under circumstances and in jurisdictions where it is lawful to do so. We are not making any representation to you regarding the legality of an investment in Series B Preferred Stock and the guarantee by you under applicable law. You should consult with your own legal advisors as to the legal, tax, business, financial and related aspects of a purchase of the Series B Preferred Stock and the guarantee.

Table of Contents

CERTAIN TERMS USED IN THIS PROSPECTUS SUPPLEMENT

Unless indicated otherwise in this prospectus supplement or the context requires otherwise:

All references to **Gastar USA** refer solely to Gastar Exploration USA, Inc., the issuer of the Series B Preferred Stock offered hereby.

All references to **Parent** refer solely to Gastar Exploration Ltd., the owner of all of the shares of common stock of Gastar USA and the guarantor of Gastar USA's obligations under the Series B Preferred Stock offered hereby.

All references in this prospectus supplement to the **Gastar entities, we, us, and our** or similar references refer to Parent and its subsidiaries, including Gastar USA.

All references to the **Chesapeake Acquisition** refer to our June 7, 2013 acquisition of approximately 157,000 net acres of Mid-Continent oil and gas leasehold interests primarily located in the Mid-Continent area in Oklahoma, including a small interest acquired from an entity controlled by the former chief executive officer of Chesapeake Energy Corporation (together with its affiliates Chesapeake). See Prospectus Supplement Summary Recent Developments Chesapeake Acquisition and Related Dispositions.

All references to the **Chesapeake Parties** refer to Chesapeake Exploration, L.L.C. and Larchmont Resources, L.L.C.

All references to the **AMI Election Disposition** refer to our sale of approximately 12,800 net acres and 50% of the interest in 62 producing wells acquired in the Chesapeake Acquisition (effective October 1, 2012) to our partner in an area of mutual interest in Oklahoma (the AMI) on July 1, 2013, pursuant to the exercise of its rights within the AMI in connection with the properties acquired in the Chesapeake Acquisition. See Prospectus Supplement Summary Recent Developments Chesapeake Acquisition and Related Dispositions.

All references to the **Newfield Disposition** refer collectively to the sale to Newfield Exploration Mid-Continent Inc. of approximately 76,000 net acres in Kingfisher and Canadian Counties, Oklahoma and our acquisition from Newfield of approximately 1,850 net acres of Oklahoma oil and gas leasehold interests, each completed on August 6, 2013. See Prospectus Supplement Summary Recent Developments Chesapeake Acquisition and Related Dispositions.

All references to the **Chesapeake Acquisition and Related Dispositions** refer collectively to the Chesapeake Acquisition, the AMI Election Disposition and the Newfield Disposition. See Prospectus Supplement Summary Recent Developments Chesapeake Acquisition and Related Dispositions.

All references to the **East Texas Disposition** refer to the sale to Cubic Energy, Inc. of approximately 31,800 gross (16,300 net) acres of leasehold interests in the Hilltop area of East Texas in Leon and Robertson Counties, Texas, including production from interests in producing wells completed on October 2, 2013. See Prospectus Supplement Summary Recent Developments East Texas Disposition.

All references to the **WEHLU Acquisition** refer to our pending acquisition of approximately 24,000 net acres of Mid-Continent oil and gas leasehold interests in the West Edmond Hunton Lime Unit (WEHLU) located in Kingfisher, Logan, Oklahoma and Canadian counties, Oklahoma expected to close in late November 2013 (the WEHLU Assets). See Prospectus Supplement Summary Recent Developments Pending WEHLU Acquisition.

Table of Contents

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement contains or incorporates by reference forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the Securities Act), and Section 21E of the Securities Exchange Act of 1934, as amended (the Exchange Act). All statements other than statements of historical fact included or incorporated by reference into this prospectus supplement are forward-looking statements, including without limitation all statements regarding future plans, business objectives, strategies, expected future financial position or performance, expected future operational position or performance, budgets and projected costs, future competitive position or performance, expected future operational position or operations. In some cases, you can identify a forward-looking statement by terminology such as may, will, could, should, expect, plan, project, intend, anticipate, believe, estimate, predict, potential, pursue, or the negative of such terms or variations thereon, or other comparable terminology.

The forward-looking statements contained or incorporated by reference in this prospectus supplement are largely based on our expectations and beliefs concerning future developments and their potential effect on us, which reflect certain estimates and assumptions made by our management. These estimates and assumptions reflect our best judgment based on currently known market conditions, operating trends, and other factors. Forward-looking statements may include statements that relate to, among other things, our:

financial position;

business strategy and budgets;

anticipated capital expenditures;

drilling of wells, including the anticipated scheduling and results of such operations;

natural gas, oil and natural gas liquids (NGLs) reserves;

timing and amount of future production of natural gas, condensate, oil and NGLs;

operating costs and other expenses;

cash flow and anticipated liquidity;

prospect development; and

property acquisitions and sales.

Although we believe such estimates and assumptions to be reasonable, they are inherently uncertain and involve a number of risks and uncertainties that are beyond our control. As such, management's assumptions about future events may prove to be inaccurate. These cautionary statements qualify all forward-looking statements attributable to us or persons acting on our behalf. Management cautions all readers that the forward-looking statements contained or incorporated by reference in this prospectus supplement are not guarantees of future performance, and we cannot assure any reader that such statements will be realized or that the events and circumstances they describe will occur. Factors that could cause actual results to differ materially from those anticipated or implied in the forward-looking statements herein include, but are not limited to:

our ability to successfully complete the pending WEHLU Acquisition described under Summary Recent Developments Pending WEHLU Acquisition, integrate the acquired assets with ours and realize the benefits from the transaction;

our ability to successfully integrate the Mid-Continent assets we acquired from Chesapeake described under Summary Recent Developments Chesapeake Acquisition and Related Dispositions with ours and realize the anticipated benefits from the transaction;

the supply and demand for natural gas, condensate, oil and NGLs;

S-3

Table of Contents

low and/or declining prices for natural gas, condensate, oil and NGLs;

price volatility of natural gas, condensate, oil and NGLs;

worldwide political and economic conditions and conditions in the energy market;

our ability to raise capital to fund capital expenditures or repay or refinance debt upon maturity;

the ability and willingness of our current or potential counterparties, third-party operators or vendors to enter into transactions with us and/or fulfill their obligation to us;

failure of our joint interest partners to fund any or all of their portion of any capital program;

the ability to find, acquire, market, develop and produce new natural gas and oil properties;

uncertainties about the estimated quantities of natural gas and oil reserves and in the projection of future rates of production and timing of development expenditures of proved reserves;

strength and financial resources of competitors;

availability and cost of material and equipment, such as drilling rigs and transportation pipelines;

availability and cost of processing and transportation;

changes or advances in technology;

the risks associated with exploration, including cost overruns and the drilling of non-economic wells or dry wells, operating hazards inherent to the natural gas and oil business and down hole drilling and completion risks that are generally not recoverable from third parties or insurance;

potential mechanical failure or under-performance of significant wells or pipeline mishaps;

environmental risks;

possible new legislative initiatives and regulatory changes potentially adversely impacting our business and industry, including, but not limited to, national healthcare, hydraulic fracturing, state and federal corporate income taxes, retroactive royalty or production tax regimes, changes in environmental regulations, environmental risks and liability under federal,

Edgar Filing: Gastar Exploration USA, Inc. - Form 424B5

state and local environmental laws and regulations;

effects of the application of applicable laws and regulations, including changes in such regulations or the interpretation thereof;

potential losses from pending or possible future claims, litigation or enforcement actions;

potential defects in title to our properties or lease termination due to lack of activity or other disputes with mineral lease and royalty owners, whether regarding calculation and payment of royalties or otherwise;

the weather, including the occurrence of any adverse weather conditions and/or natural disasters affecting our business;

ability to find and retain skilled personnel; and

any other factors that impact or could impact the exploration of natural gas or oil resources, including, but not limited to, the geology of a resource, the total amount and costs to develop recoverable reserves, legal title, regulatory, natural gas administration, marketing and operational factors relating to the extraction of natural gas and oil.

You should not unduly rely on the forward-looking statements contained or incorporated by reference in this prospectus supplement and the accompanying prospectus as they speak only as of the date of this prospectus supplement or the accompanying prospectus or the date of the document incorporated by reference herein and

S-4

Table of Contents

therein. Please see **Risk Factors** in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein and therein for some of the important factors that could affect our financial performance or could cause actual results to differ materially from estimates contained in forward-looking statements.

Except as required by law, we undertake no obligation to update, revise or release any revisions to any forward-looking statement to reflect events or circumstances occurring after the date on which such statement is made or to reflect the occurrence of unanticipated events. New factors emerge from time to time, and it is not possible for us to predict all of these factors. Further, we cannot assess the impact of each such factor on our business or the extent to which any factor, or combination of factors, may cause actual results to be materially different from those contained in any forward-looking statement.

S-5

Table of Contents

PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights certain information about us, this offering, the Series B Preferred Stock, the guarantee and other information appearing elsewhere in this prospectus supplement, in the accompanying prospectus and in the documents we incorporate by reference. This summary is not complete and does not contain all of the information that you should consider before investing in our securities. To fully understand this offering and its consequences to you, you should carefully read this entire prospectus supplement, the accompanying prospectus and any free writing prospectus distributed by us, including the information contained under Risk Factors in this prospectus supplement beginning on page S-37 and the financial statements and other information incorporated by reference into this prospectus supplement and the accompanying prospectus, before making an investment decision.

All dollar amounts appearing in this prospectus supplement are stated in U.S. dollars and all financial data included in this prospectus supplement has been prepared in accordance with generally accepted accounting principles in the United States (GAAP). Unless otherwise indicated, the pro forma financial and reserve information included in this prospectus supplement give pro forma effect to the pending WEHLU Acquisition and related financing transactions, including the issuance and sale of preferred stock in this offering and the application of the net proceeds therefrom as described in Use of Proceeds , the Chesapeake Acquisition and Related Dispositions, the issuance of 8 5/8% senior notes on May 10, 2013 (the Senior Notes Offering) and the use of proceeds therefrom and the East Texas Disposition and the use of proceeds therefrom as of and for the periods indicated.

The estimates of our proved reserves as of June 30, 2013 included in this prospectus supplement are derived from reserve reports prepared by Wright & Company, Inc. (Wright) and Netherland, Sewell & Associates, Inc. (NSAI), independent petroleum engineers, using SEC pricing based on the average price as of the first day of each of the twelve months ended June 30, 2013 and NYMEX pricing based on closing monthly futures prices on the NYMEX for oil and gas on June 30, 2013. This prospectus supplement also includes the present value, discounted at 10% per annum, of estimated future net revenue before income tax of our estimated proved reserves, which is referred to herein as the PV-10. Please see Summary Historical and Pro Forma Reserve and Production Information for additional information regarding our reserves and a reconciliation of PV-10, a non-GAAP financial measure, to standardized measure of future net cash flows of such reserves.

Company Overview

We are an independent energy company engaged in the exploration, development and production of natural gas, condensate, oil and NGLs in the United States. Our principal business activities include the identification, acquisition, and subsequent exploration and development of natural gas and oil properties with an emphasis on unconventional reserves, such as shale resource plays and the application of horizontal drilling technology to conventional reservoirs. Our primary producing properties are located in some of the most active established and emerging liquids-rich resource plays in the United States, including the liquids-rich area of the Marcellus Shale in West Virginia and the primarily oil bearing reservoirs of the Hunton Limestone formation located in the Mid-Continent area in Oklahoma. We believe that the quality and diversity of our properties reduces our development risk and allows us to take advantage of underlying economic and commodity pricing trends. Using a portion of the proceeds from this offering, we will acquire proved reserves and undeveloped leasehold interests on 24,000 net acres in the West Edmond Hunton Lime Unit (WEHLU) located in Oklahoma, which will complement our existing Hunton Limestone position and provide for additional future drilling opportunities. See Recent Developments Pending WEHLU Acquisition. Pro forma for the pending WEHLU Acquisition, we will control a total of 68,300 net acres in the Marcellus Shale and 120,300 net acres in the Mid-Continent area. Additionally, we recently divested all of our existing acreage in the deep Bossier play in the Hilltop area of East Texas. See Recent Developments East Texas Disposition.

Table of Contents

As of June 30, 2013, our total proved reserves based on SEC pricing, as derived from reserve reports prepared by Wright and NSAI, as adjusted for the AMI Election Disposition, the Newfield Disposition and the East Texas Disposition, were 221.5 Bcfe (36.9 MMBoe), consisting of 146.0 MMcf of natural gas, 5.5 MMBbbls of condensate and oil and 7.1 MMBbbls of NGLs. The PV-10 value of these proved reserves as of June 30, 2013 was approximately \$306.9 million based on SEC pricing and \$398.8 million based on NYMEX strip pricing. Pro forma for the AMI Election Disposition, the Newfield Disposition, the East Texas Disposition and the pending WEHLU Acquisition, our total proved reserves based on SEC pricing as of June 30, 2013 would have been 296.0 Bcfe (49.3 MMBoe), consisting of 161.4 MMcf of natural gas, 12.9 MMBbbls of condensate and oil and 9.5 MMBbbls of NGLs. The PV-10 value of these pro forma proved reserves as of June 30, 2013 would have been approximately \$509.0 million based on SEC pricing and \$575.3 million based on NYMEX strip pricing. See Summary Historical and Pro Forma Reserves and Production Data for additional information regarding our reserves and a reconciliation of PV-10, a non-GAAP financial measure, to standardized measure. Our reserve base also includes significant undeveloped and exploratory drilling opportunities.

Since 2010, we have successfully utilized pad drilling techniques along with horizontal drilling technologies and multi-stage hydraulic fracture stimulation to increase our production and reserves. To date, we have successfully drilled and completed a total of 57 gross (27.0 net) operated wells in the Marcellus Shale play and six gross (3.1 net) non-operated wells in the Hunton Limestone play. During the first half of 2013, average daily production on our properties increased 53% compared to the first half of 2012 and increased 36% compared to our annual average daily production for 2012. Average daily production on our properties during the second quarter of 2013 increased 42% as compared to the first quarter of 2013 primarily due to ten gross (5.0 net) Marcellus wells and two gross (1.1 net) Hunton wells being placed on production, as well as reduced downtime on the third party midstream facilities serving our operated Marcellus Shale operations. In August 2013, we placed on production four gross (2.0 net) Marcellus shale wells. We are not scheduled to complete any additional Marcellus wells during the remainder of 2013. We are scheduled to bring on production an additional seven gross (3.6 net) Mid-Continent wells by the end of 2013, bringing our total producing well count in the Mid-Continent to 12 gross (6.2 net) wells by year-end. Additionally, we believe that through continued expansion of our acreage position and drilling activity, we have created a multi-year inventory of drilling opportunities throughout our properties. On our existing acreage, we have identified an additional 117 gross (58.5 net) liquids-rich horizontal drilling locations in the Marcellus Shale, of which 31 gross (15.1 net) PUD locations were included in the June 30, 2013 reserve report and 275 gross (275.0 net) drilling locations in our existing Hunton Limestone play. Additionally, we have identified 203 gross (200.0 net) drilling locations in the WEHLU Assets targeting the Hunton Limestone play, of which only 62 gross (61.0 net) upper Hunton PUD locations were included in the June 30, 2013 reserve report.

On a pro forma basis for the Chesapeake Acquisition and Related Dispositions and the East Texas Disposition, our Pro Forma Adjusted EBITDA for the year ended December 31, 2012 and the six months ended June 30, 2013 totaled approximately \$38.7 million and \$31.3 million, respectively. Our Pro Forma Adjusted EBITDA margin for the year ended December 31, 2012 and the six months ended June 30, 2013 were approximately \$3.80 per Mcfe (\$22.82 per Boe), and \$4.05 per Mcfe (\$24.29 per Boe), respectively, including realized impact of hedging. On a pro forma basis for the Chesapeake Acquisition and Related Dispositions, the East Texas Disposition and the pending WEHLU Acquisition, our Pro Forma Adjusted EBITDA for the year ended December 31, 2012 and the six months ended June 30, 2013 totaled approximately \$66.9 million and \$48.7 million, respectively. Our Pro Forma Adjusted EBITDA margin for the year ended December 31, 2012 and the six months ended June 30, 2013 was approximately \$4.82 per Mcfe (\$28.93 per Boe) and \$4.96 per Mcfe (\$29.74 per Boe), respectively, including realized impact of hedging.

For a reconciliation of the non-GAAP financial measure Pro Forma Adjusted EBITDA to net income, see footnotes to the tables under Summary Historical Financial Data and Summary Pro Forma Financial Data.

As of June 30, 2013, our cash balance was \$10.8 million and we had an undrawn revolving credit facility borrowing base of \$50.0 million. On a pro forma basis for the AMI Election Disposition, the Newfield Disposition and the East Texas Disposition, our June 30, 2013 pro forma cash balance was \$118.5 million and we

Table of Contents

had an undrawn revolving credit facility borrowing base of \$50.0 million. Upon completion of the WEHLU Acquisition, we anticipate that our borrowing base will increase to between \$90.0 million and \$110.0 million.

Our Properties

The following table presents summary data for each of our primary areas of development as of June 30, 2013, unless otherwise indicated, each on a pro forma basis to reflect the Chesapeake Acquisition and Related Dispositions, the East Texas Disposition and the pending WEHLU Acquisition based on SEC pricing for reserves. For additional information, see Recent Developments Chesapeake Acquisition and Related Dispositions and Recent Developments East Texas Disposition.

	Identified Drilling Locations (1)		2013 Budget			Pro Forma Estimated Net Proved Reserves as of June 30, 2013 (3)	Pro Forma Average Daily Production for the Three Months ended June 30, 2013		
	Net Acreage	Net Remaining	Gross Wells (2)	Drilling Capex (in millions)		Developed Bcfe	%	(MMcfe/d)	(MBoe/d)
				Net Wells					
Marcellus Shale, West Virginia and Pennsylvania:									
Marcellus West	19,300	58.5	19	9.5	\$ 52.3	205.9	62%	43.9	7.3
Marcellus East	49,000					0.3	100%	0.3	0.1
Mid-Continent									
Existing (4)	96,300	275.0	11	5.7	41.7	15.3	100%	6.9	1.1
Pending WEHLU Acquisition (5)	24,000	200.0	1	1.0	2.2	74.4	47%	11.5	1.9
Pro forma total (4)(5)(6)	188,600	533.5	31	16.2	96.2	295.9	60%	62.6	10.4

- (1) Our identified potential drilling locations in the Marcellus Shale area are actual surface locations that have been specifically identified by management for future drilling units based on an evaluation of applicable geological, seismic, engineering, production and reserve data on nearby acreage and geological formations, including successful drilling efforts by other operators in the area. In identifying potential drilling locations in the Marcellus Shale area, we have assumed 400-foot well spacing, which we have recently successfully tested. Potential drilling locations in the Mid-Continent area have been identified along the geological trend believed to be most prospective for middle and lower Hunton Limestone development, which is supported by information from thousands of vertical wells that intersect the Hunton Limestone formation and by recent horizontal drilling along the trend by us, our operating partner and other operators. In identifying potential drilling locations in the Mid-Continent area, the number of lower Hunton locations is based upon 320-acre well spacing and drainage. Under Oklahoma forced pooling rules, we believe that all available net acres identified along the geological trend can be utilized. We have not committed to drill any specific number of our potential drilling locations. For the pending WEHLU Acquisition acreage, we assume the Upper Hunton (Bois d'Arc) Limestone will be developed on 80-acre well spacing and the Lower Hunton (Chimney Hill) Limestone based on 120-acre well spacing. Our identified potential drilling locations are scheduled out over many years, making them susceptible to uncertainties that could materially alter the occurrence or timing of their drilling, which in certain instances could prevent production prior to the expiration date of leases for such locations. In addition, we may not be able to raise the substantial amount of capital that would be necessary to drill a substantial portion of our identified potential drilling locations.
- (2) Of the 533.5 net pro forma total drilling locations, 76.1 net locations were associated with proved undeveloped reserves.
- (3) Our estimated proved reserves and related future net revenues and PV-10 at June 30, 2013 were determined using benchmark prices that are the 12-month unweighted arithmetic average of the first-day-of-the-month prices for natural gas and oil. Key natural gas prices utilized were the Henry Hub price of \$3.44 per MMBtu. NSAI utilized an average West Texas Intermediate (WTI) posted oil price of \$88.13 per barrel, and Wright utilized a WTI spot oil price of \$91.60 per barrel. Our reserve engineers utilized an NGLs per Bbl price of approximately 30% of the WTI spot oil price. These prices are held constant in accordance with SEC definitions and guidelines for the life of the wells included in the reserve reports but are adjusted by lease in accordance with sales contracts and for energy content, quality, transportation, compression and gathering fees and regional price differentials. Estimated quantities of proved reserves and future net revenues are affected by natural gas and oil prices, which have fluctuated significantly in recent years. All of our proved reserves are located onshore within the United States.

Table of Contents

- (4) Includes reserves and production associated with the properties purchased in the Chesapeake Acquisition on June 7, 2013. Excludes estimated acreage, drilling locations, reserves and production associated with oil and gas properties sold in the AMI Election Disposition on July 1, 2013 and in the Newfield Disposition on August 6, 2013, net of estimated acreage, drilling locations, reserves and production associated with oil and gas properties purchased in the Newfield Disposition. For more information, see *Recent Developments Chesapeake Acquisition and Related Dispositions*.
- (5) Includes estimated acreage, drilling locations, reserves and production associated with the WEHLU Assets (as defined below) that will be purchased in connection with the pending WEHLU Acquisition. The closing of the WEHLU Acquisition is not a condition to the issuance of the Series B Preferred Stock offered hereby. There can be no assurance that the pending WEHLU Acquisition will be completed or, if completed, that it will be completed on the terms described in this prospectus supplement. For more information regarding the pending WEHLU Acquisition, see *Recent Developments Pending WEHLU Acquisition*.
- (6) Excludes estimated acreage, drilling locations, reserves and production associated with oil and gas properties sold in the East Texas Disposition on October 2, 2013. For more information, see *Recent Developments East Texas Disposition*.

For more information about our proved reserves on a pro forma as adjusted basis to give effect to the Chesapeake Acquisition and Related Dispositions, the East Texas Disposition and the pending WEHLU Acquisition, see *Summary Historical and Pro Forma Reserves and Production Data*.

Marcellus Shale and Other Appalachia

We own, develop and operate properties in West Virginia, and to a lesser extent Pennsylvania, where we target liquids-rich natural gas from the Marcellus Shale formation. The Marcellus Shale is a Devonian aged shale that underlies much of the Appalachian region of Pennsylvania, New York, Ohio, West Virginia and adjacent states. The depth of the Marcellus Shale and its low permeability make the Marcellus Shale an unconventional exploration target in the Appalachian Basin. Advancements in horizontal drilling and stimulation have produced excellent results in the Marcellus Shale. These developments have resulted in increased leasing and drilling activity in the area. As of June 30, 2013, our acreage position in the play was approximately 94,400 gross (68,300 net) acres. We refer to the approximately 41,800 gross (19,300 net) acres reflecting our interest in our Marcellus Shale assets in West Virginia and Pennsylvania subject to the Atinum Joint Venture described below as our Marcellus West acreage. We refer to the approximately 52,600 gross (49,000 net) acres in Preston, Tucker, Pocahontas, Randolph and Pendleton Counties, West Virginia as our Marcellus East acreage. The entirety of our acreage is believed to be in the core, over-pressured area of the Marcellus play.

On September 21, 2010, we entered into the Atinum Joint Venture pursuant to which we assigned to Atinum Partners Co. Ltd. (*Atinum*), for \$70.0 million in total consideration, an initial 21.43% interest in all of our existing Marcellus Shale assets in West Virginia and Pennsylvania at that date, consisting of certain undeveloped acreage and a 50% working interest in 16 producing shallow conventional wells and one non-producing vertical Marcellus Shale well (the *Atinum Joint Venture Assets*). In early 2012, we made additional assignments to Atinum as a result of which Atinum now owns a 50% interest in the Atinum Joint Venture Assets. Effective June 30, 2011, Atinum has the right to participate in any future leasehold acquisitions made by us within Ohio, New York, Pennsylvania and West Virginia, excluding the counties of Pendleton, Pocahontas, Preston, Randolph and Tucker, West Virginia, on terms identical to those governing the existing Atinum Joint Venture. We will act as operator and are obligated to offer any future lease acquisitions to Atinum on a 50/50 basis. Atinum will pay us on an annual basis an amount equal to 10% of lease bonuses, up to \$20.0 million, and 5% of such costs on activities above \$20.0 million.

The Atinum Joint Venture's initial three-year development program called for the partners to drill a minimum of 12 horizontal wells in 2011 and 24 horizontal wells in each of 2012 and 2013, resulting in a total of 60 gross operated wells to be drilled. Due to natural gas price declines, Atinum and Gastar USA agreed to reduce the 2012 and 2013 required minimum wells to be drilled resulting in a plan to drill and complete 57 gross (27.0 net) wells by December 31, 2013. As of June 30, 2013, we had drilled and completed 53 gross (25.0 net) operated wells. In August 2013, we placed on production four gross (2.0 net) Marcellus Shale wells resulting in total operated wells on production of 57 gross (27.0 net). All of our 2012 Marcellus Shale well operations were, and all of our 2013 Marcellus Shale well operations will be, under the Atinum Joint Venture.

Table of Contents**Mid-Continent Horizontal Oil Play**

We have recently focused on a new horizontally drilled oil play in Oklahoma primarily targeting the Hunton Limestone formation, which we refer to as our Mid-Continent area. We began building an acreage position in 2012 through a joint venture with a privately held third-party operator. Initial operations with our current operator were focused in an AMI in Garfield and Kingfisher Counties, Oklahoma, but subsequently expanded to include additional AMIs covering portions of Garfield, Major and Blaine Counties, Oklahoma. For the first 12,500 gross acres acquired in the initial AMI, we paid 62.5% of lease acquisition costs for a 50% working interest and 50% of lease acquisition costs on additional acres in excess of 12,500 gross acres acquired for a 50% working interest. In the initial prospect area, we are responsible for paying 62.5% of the first four wells' gross drilling and completion costs and 56.25% of the next four wells' gross drilling and completion costs to earn a 50% working interest. For all additional wells beyond the first eight in the initial prospect area, we are responsible for paying only the drilling and completion costs associated with our 50% working interest (our approximate net revenue interest is 39.0%). We will pay 54.25% of the lease acquisition, drilling and completion costs in the two new prospect areas for a 50% working interest. On mutually owned interests, a third-party operator handles all drilling, completion and production activities, and we handle all leasing and permitting activities in this oil play.

We have significantly expanded our Mid-Continent position through our recently completed Chesapeake Acquisition and will further increase our position with the pending acquisition of the WEHLU Assets described below. See Recent Developments Pending WEHLU Acquisition. Following the consummation of the pending WEHLU Acquisition, we will increase our consolidated position to approximately 120,300 net acres and 475 net potential drilling locations in areas prospective for our Hunton Limestone horizontal oil play. In addition to expanding our Mid-Continent position through the pending WEHLU Acquisition, we expect to continue to build our acreage position in this region as we permit and drill wells during 2013 and future years.

To date, we and our operating partner have drilled and completed six gross (3.1 net) horizontal wells. Flow back is just commencing on the sixth well and we are in the process of drilling a seventh well.

Well Name	Date of First Production	% Working Interest	Peak 24-Hour IP Rate (Boe/d)	% oil	Current 30-Day IP Rate (Boe/d)	% oil
Mid-Con 1H	10/05/12	50.0%	140	67%	32	65%
Mid-Con 2H	02/15/13	50.0%	1,383	83%	586	55%
Mid-Con 3H	04/04/13	56.7%	111	89%	72	92%
Mid-Con 4H	04/24/13	50.0%	177	65%	102	63%
Mid-Con 5H	08/23/13	54.5%	390	79%	350	82%
Mid-Con 6H	10/06/13	50.0%	(1)	n/a	(1)	n/a

(1) Flowback operations commenced on October 6, 2013.

Our Strengths

High Quality Reserve Base. At June 30, 2013, our leasehold position totaled 68,300 net acres in the Marcellus Shale formation in the Appalachian Basin. Our activities have been strategically focused in northern West Virginia, where the Marcellus Shale yields significant quantities of condensate and high-value NGLs due to higher Btu content and lower thermal maturity than other areas of the Marcellus Shale. Our contiguous acreage enables us to drill long laterals and perform pad drilling operations to conduct large, multi-stage fracture stimulations that improve well performance and economics. As of August 31, 2013, we have drilled and completed 57 gross (27.0 net) successful horizontal Marcellus Shale wells with production profiles that we believe provide an attractive rate of return even in a low natural gas price environment. These assets are in close

Table of Contents

proximity to several other fields operated by leading companies in the industry, including Chesapeake Energy Corporation, Chevron Corporation, Noble Energy Inc. and Stone Energy Corporation, which we believe confirms the quality of the location of our properties, reduces our development risk and attracts oilfield service and midstream providers. In addition, we are focused on developing the oil-rich Hunton Limestone formation in our Mid-Continent assets in Oklahoma, which currently consist of 96,300 net acres, with a further 24,000 net acres to be acquired in connection with the pending WEHLU Acquisition. Along with our operating partner, we have drilled and completed six gross (3.1 net) horizontal wells and are in the process of drilling a seventh non-operated AMI well and our first operated well in the Hunton Limestone play. The Hunton Limestone play is projected to be 65% oil and liquids production. As of June 30, 2013, the combined value of our Marcellus and Mid-Continent proved PV-10, including the pending WEHLU Acquisition was approximately \$509.0 million based on SEC pricing and \$575.3 million based upon NYMEX strip pricing. See Summary Historical and Pro Forma Reserves and Production Data for additional information regarding our reserves and a reconciliation of PV-10, a non-GAAP financial measure, to standardized measure. As of June 30, 2013, our proven reserves in the Marcellus Shale were comprised of 53 gross (25.0 net) proved producing wells and only 31 gross (15.1 net) proved undeveloped locations (PUDs). We have taken a conservative approach to booking PUDs relative to the number of proved producing wells we have completed to date.

Strong Historical Growth Profile with Extensive Drilling Inventory. We believe that the expansion of our acreage position and our drilling activity in the Marcellus Shale during 2012 has provided us with a multi-year inventory of drilling opportunities. As of June 30, 2013, we had identified approximately 117 gross (58.5 net) potential undrilled proved and unproved Marcellus Shale horizontal drilling locations in the liquids-rich areas of Marshall and Wetzel Counties, West Virginia. Additionally, in our existing Mid-Continent position, we have identified 275 gross (275.0 net) drilling locations in our existing acreage, and approximately 203 gross (200.0 net) drilling locations in the undrilled acreage associated with the pending WEHLU Acquisition.

Ability to Allocate Capital to either Oil or Natural Gas Opportunities. Our growing position in the primarily oil-bearing Hunton Limestone play complements our largely natural gas reserves in the Marcellus Shale play. Our strong portfolio of development opportunities in both natural gas and oil-rich plays provides us with increased flexibility to allocate capital to effectively capture varying economic and technical factors, including well costs, service availability, production take-away capacity and commodity prices. We believe this flexibility afforded by our asset diversity will enable us to generate better cash flow growth and maximize returns from our future capital expenditure programs.

High Degree of Horizontal Drilling Experience Combined with Operational Control. We believe that we have assembled an experienced team of operating professionals with the specialized skills needed to plan and execute the drilling and completion of horizontal Marcellus Shale and Hunton Limestone wells. As of August 31, 2013, we have drilled and completed 57 gross (27.0 net) horizontal wells in the Marcellus Shale with a 100% success rate. We utilize the latest technologies and pad drilling techniques, which have allowed us to reduce average drilling time to approximately 16 days per well and realize additional savings on drilling and completion costs. As a result of the observed production results and based on extensive reservoir studies, we are currently testing tighter well spacing and different drilling orientations to potentially increase initial production (IP) rates, estimated ultimate recovery (EURs) and the number of available future drilling locations. Because we continue to operate 100% of our wells in the Marcellus Shale and approximately 62% of the wells in the Hunton Limestone, we believe we are able to more effectively direct the timing and cost of approximately 87% of our 2014 drilling program as well as control the majority of our operating costs. We believe that the technical expertise developed through our successful operations in the Marcellus Shale will be critical in successfully exploiting the Hunton Limestone formations.

Experienced Management Team. Parent's senior management team has an average of more than 25 years of experience in the natural gas and oil industry and an average of nearly eight years with the Company. The senior

Table of Contents

management team brings a broad range of industry and financial experience from a variety of industry participants and recognized natural resource plays, and has a proven track record of successfully increasing production and reserves through the development of conventional and unconventional oil and gas assets.

Our Strategies

Continue Growth Through Exploitation, Development and Exploration of Unconventional Resource Plays. Over the past several years, we have strategically identified and acquired net acreage in some of the most active resource plays in the United States, including 68,300 net acres in the Marcellus Shale play in the Appalachian Basin and 96,300 net acres in our existing position, and an additional 24,000 net acres to be acquired in the pending WEHLU Acquisition, in the Hunton Limestone formation of the Mid-Continent area in Oklahoma. We believe our current portfolio of drilling inventory will allow us to grow organically through low-risk development drilling opportunities. We expect to continue to utilize horizontal drilling and refined fracture stimulation techniques to pursue growth in reserves and production through the exploitation and development of our existing prospects and exploration of new potential prospects in our focus areas. Our current capital plan, excluding acquisition costs relating to the Chesapeake Acquisition and the WEHLU Acquisition, calls for approximately \$96.4 million of drilling, completion and infrastructure costs in 2013, which will provide for 19 gross (9.5 net) horizontal wells in the Marcellus Shale and 11 gross (5.7 net) horizontal wells in the Mid-Continent area. In addition, our 2013 capital plan calls for land expenditures of \$24.6 million, seismic expenditures of \$1.5 million and other capitalized costs of \$6.3 million.

We have now completed all of the Marcellus Shale wells scheduled for 2013 and we believe future Marcellus Shale wells will be completed at an average gross cost of approximately \$6.7 million with an average 5,000 foot lateral. We plan to drill up to 24 gross (12.0 net) horizontal Marcellus Shale wells during 2014. For the remainder of 2013, we anticipate completing the drilling of two gross (1.8 net) operated and three gross (1.8 net) AMI non-operated wells in the lower Hunton Limestone play at an average gross operated cost of approximately \$4.5 million and participate in one gross (<0.1 net) non-operated Woodford Shale well at a gross cost of \$4.2 million and one gross (0.1 net) non-operated Mississippi Lime well at a gross cost of \$4.2 million. For 2014, we are currently planning an additional 26 gross horizontal wells in the Hunton Limestone play, consisting of ten gross (10.0 net) operated wells at a gross per well cost of \$4.5 million and ten gross (5.0 net) non-operated wells at a gross per well cost of \$5.2 million within our existing acreage and six gross (5.9 net) upper Hunton wells on new acreage to be acquired in the pending WEHLU Acquisition. The upper Hunton gross per well cost is estimated to be \$2.3 million.

Diversify into Higher Margin Liquids and Oil Production. We seek to continue to increase profitability, operating cash flows and production unit cash margins by focusing on allocating capital to increase our production and reserves of condensate and oil and NGLs. Over the past several years, we have successfully increased the production mix of these liquids from nearly 0% of total production in 2010 to approximately 30% of total production volume for the second quarter of 2013. Pro forma for the Chesapeake Acquisition and Related Dispositions, the East Texas Disposition and the pending WEHLU Acquisition, liquids production would have been approximately 44% of total production volume for the first six months of 2013. For 2014, approximately 48% of our drilling and completion budget will be focused in the liquids-rich area of the Marcellus Shale and the remainder in the emerging Mid-Continent area. Our drilling program in the Hunton Limestone play focuses on using modern horizontal drilling and multi-stage fracture stimulation technologies to exploit a predominantly oil-bearing reservoir, which has been produced historically using vertical wells with conventional completion techniques. We will continue to focus on development opportunities in our liquids-rich properties unless natural gas prices support resumed activity in areas where dry natural gas is expected to be produced.

Manage and Utilize Technological Expertise. We believe our use of micro-seismic data acquisition and interpretation, enhanced natural gas recovery processes, horizontal drilling and other advanced drilling,

Table of Contents

formation evaluation, completion and production techniques are valuable tools that improve drilling results and ultimately enhance production and returns. Our utilization of these technologies and production techniques in exploring for, developing and exploiting natural gas and oil properties has helped us reduce drilling risks, lower finding costs and provide for more efficient production of natural gas and oil from our properties.

Manage Risk Exposure Through an Active Hedging Program. We actively manage our exposure to commodity price fluctuations by hedging the commodity price risk for our expected natural gas, condensate and oil and NGLs production. The level of our hedging activity and duration of the instruments employed depend upon our cash flows at risk, available hedge prices and our development plans. As of September 30, 2013, we have hedges providing downside price protection on approximately 91% of our 2013 proved condensate and oil production at an average swap price of \$97.70 per barrel and 92% of our 2014 proved condensate and oil production at an average swap price of \$92.68. In addition, as of September 30, 2013, we have downside hedge protection on approximately 78% of our 2013 future proved natural gas production comprised mostly of swaps averaging \$3.89 per MMBtu. For 2014, we have approximately 74% downside protection comprised of swaps averaging \$4.06 per MMBtu and three way protection with weighted-average per MMBtu strikes of \$3.00, \$3.88 and \$4.54, respectively. Further, as of September 30, 2013, we have hedged approximately 31% of our proved NGLs production with propane swaps at a weighted-average swap price of \$39.88 per barrel for the remainder of 2013. We have various hedges covering later years' natural gas, condensate and oil and NGLs production based on current proved developed production projections. In addition, we have utilized oil put and put spread options, with deferred put premiums, to minimize the future oil price risk for the proved reserves associated with the pending WEHLU Acquisition. For December 2013 production, we have a 1,000 barrels of oil per day (BOPD) put at a price of \$103.00. For 2014, we have put protection on approximately 824 BOPD at a weighted average price of \$95.70 per barrel and put spread protection on an additional 67 BOPD with a floor price of \$93.00 and short put of \$73.00. For the period January 1, 2015 to August 31, 2018, we have utilized put spreads, with deferred put premiums, with floors ranging from \$90.00 to \$80.00 and short puts ranging \$73.00 to \$60.00. Based on pending WEHLU Acquisition total proven reserves, we have secured downside condensate and oil price protection for 2013, 2014, 2015 and 2016 of 90%, 73%, 57%, and 48%, respectively. We believe these hedges significantly reduce near term price risk associated to possible declining oil prices while not limiting our oil price upside. The total cost of the deferred put premium over the five year period hedged is \$9.5 million. We will consider hedging a portion of the pending WEHLU Acquisition natural gas and NGLs proved production volumes after the transaction has closed.

Pursue Opportunistic Acquisitions. We continually review opportunities to acquire leasehold acreage, producing properties and drilling prospects. Our acquisition strategy, as exemplified by the recent Chesapeake Acquisition and the pending WEHLU Acquisition, will focus primarily on underdeveloped assets in unconventional plays with liquids-rich reserves to allow for significant growth potential. In addition, we may target opportunities to acquire assets that complement our existing positions. This would enable us to capitalize on our significant expertise in the target formation and existing infrastructure to quickly realize growth in production and reserves. Along with organic growth from our existing reserve base, our acquisition strategy should allow us to maintain a balanced portfolio of near term and longer term exploratory opportunities for the benefit of sustainable reserve and production growth.

Recent Developments

Pending WEHLU Acquisition

On September 4, 2013, we entered into a purchase and sale agreement with Lime Rock Resources II-A, L.P. and Lime Rock Resources II-C, L.P. (together, Lime Rock) to acquire approximately 24,000 net acres of Mid-Continent oil and gas leasehold interests in the West Edmond Hunton Lime Unit located in Kingfisher, Logan and Oklahoma counties, Oklahoma, including production from interests in 56 gross (55.0 net) producing wells,

Table of Contents

for a cash purchase price of approximately \$187.5 million, subject to customary adjustments, including an effective date adjustment to August 1, 2013. The WEHLU Assets are adjacent to our existing Mid-Continent acreage.

For the six months ended June 30, 2013, the WEHLU Assets had revenues of \$22.2 million and pro forma operating expenses of \$14.7 million, including pro forma depreciation, depletion and amortization expense of \$10.0 million. During the six months ended June 30, 2013, the average daily production rate associated with the WEHLU Assets was 11.6 MMcfe/d (1,918 Boe/d). As of June 30, 2013, based on Wright's evaluation, SEC proved reserves associated with the WEHLU Assets were approximately 74.4 MMcfe (12.4 MMBoe), of which 79% were oil and NGLs and 47% were proved developed reserves. Included in the proved developed reserve estimates were 55.0 net producing wells and 60.9 net PUD locations. The PV-10 value of the WEHLU Assets' proved reserves as of June 30, 2013 was \$202.1 million using SEC pricing and \$176.5 million using NYMEX strip pricing. See Summary Historical and Pro Forma Reserves and Production Data for additional information regarding our reserves volumes and pricing and a reconciliation of PV-10, a non-GAAP financial measure, to standardized measure of future net cash flows of such reserves.

The closing of the pending WEHLU Acquisition is subject to satisfaction of customary closing conditions, including the accuracy of Lime Rock's representations and warranties and the completion of our due diligence, and delivery of the total acquisition purchase price of approximately \$187.5 million (subject to adjustment for an acquisition effective date of August 1, 2013). We intend to finance the acquisition purchase price with the net proceeds from this offering, cash on hand, borrowings under our revolving credit facility or from a possible offering of senior notes. The closing is not, however, conditioned upon any pending regulatory approval or on our ability to obtain financing. The purchase and sale agreement may be terminated by either party if the other party has materially breached the purchase and sale agreement (subject to customary cure rights) or if the acquisition has not been consummated by December 31, 2013. The purchase and sale agreement may also be terminated by both parties upon their mutual written consent. The pending WEHLU Acquisition is expected to close in late November. However, there is no assurance that the acquisition will be completed or that the expected benefits of the pending WEHLU Acquisition will be realized.

For a discussion of the risks related to the pending WEHLU Acquisition, see Risk Factors Risks Related to the Pending WEHLU Acquisition.

Third Quarter 2013 Financial and Operating Data (Preliminary)

Financial Results. Based on the most current information available to us, for the three months ended September 30, 2013, we expect to report the following items in Gastar USA's consolidated statement of operations within the indicated ranges:

Total revenues	\$17.8 to \$19.8 million
Income from operations	\$1.0 to \$2.0 million

Each of the foregoing includes the impact of an unrealized hedge loss for such period in the range of \$4.5 to \$5.5 million resulting from mark-to-market accounting. We also estimate that Gastar USA's consolidated capital expenditures for the three months ended September 30, 2013, excluding acquisitions, were in the range of \$22.0 to \$24.0 million. We project our capital expenditures for fourth quarter 2013, excluding acquisitions, to be in the range of \$30.0 to \$34.0 million.

Our normal closing and financial reporting processes with respect to the foregoing preliminary financial data for the three months ended September 30, 2013 have not been fully completed. As a result, our actual financial results could be different from these preliminary financial data, and any differences could be material.

Table of Contents

Our independent registered public accounting firm has not completed its review procedures with respect to our unaudited financial statements from which such data may be derived, nor have they expressed any opinion or provided any other form of assurance on the data. The foregoing is not intended to be a comprehensive statement of our unaudited financial results for this period. The results of operations for an interim period, including the preliminary financial data provided above, may not give a true indication of the results to be expected for a full year or any future period.

Production. Our preliminary estimate of average daily production for the quarter ended September 30, 2013 is 59.3 MMcfe per day, which includes an average of 9.3 MMcfe per day from our East Texas oil and natural gas properties, which we sold on October 2, 2013. Condensate and oil and NGLs total production are estimated to represent 29.1% of current quarter average daily production, and 34.1% excluding production of the East Texas oil and gas properties. For a discussion of the East Texas Disposition, see Prospectus Supplement Summary Recent Developments East Texas Disposition.

East Texas Disposition

On October 2, 2013, we sold all of our East Texas oil and natural gas properties to Cubic Energy, Inc. for cash consideration of approximately \$47.3 million, with an effective date of January 1, 2013. We expect to use the net proceeds from the East Texas Disposition to partially fund our ongoing capital expenditure program, including a portion of the cost associated with the pending WEHLU Acquisition, if such acquisition is completed. For the six months ended June 30, 2013, the properties sold produced an average of approximately 10.3 MMcfe/d, substantially all of which was natural gas. The properties sold included SEC proved reserves as of January 1, 2013, the effective date of sale, of approximately 27.4 MMcfe and PV-10 value of \$12.8 million and as of June 30, 2013 included SEC proved reserves of approximately 27.4 MMcfe and PV-10 value of \$17.2 million. The proved NYMEX PV-10 value for the East Texas oil and natural gas properties sold was \$45.6 million as of January 1, 2013 and \$33.0 million as of June 30, 2013.

Chesapeake Acquisition and Related Dispositions

On June 7, 2013, we acquired approximately 157,000 net acres of Oklahoma oil and gas leasehold interests in Canadian and Kingfisher Counties, Oklahoma from the Chesapeake Parties, including production from interests in 176 producing wells located in Oklahoma (collectively, the Chesapeake Assets), for an adjusted cash purchase price of approximately \$69.4 million. The purchase and sale agreement with the Chesapeake Parties also included the acquisition, as part of the Chesapeake Assets, of small additional interests in certain producing wells and related leases from three entities controlled by the former chief executive officer of Chesapeake Energy Corporation, referred to in this prospectus supplement as the Minority Chesapeake Interest.

Effective July 1, 2013, our working interest partner in our original AMI in Oklahoma exercised its rights to acquire approximately 12,800 net acres and certain proved properties that we acquired in the Chesapeake Acquisition for a total payment of \$12.1 million, referred to in this prospectus supplement as the AMI Election Disposition. In addition, on August 6, 2013, we sold approximately 76,000 net acres of undeveloped oil and gas leasehold interests in Kingfisher and Canadian Counties, Oklahoma to Newfield Exploration Mid-Continent Inc. (Newfield) and acquired from Newfield approximately 1,850 net acres of Oklahoma undeveloped oil and gas leasehold interests, resulting in net proceeds to us of \$54.1 million. We expect to use the net proceeds of \$66.2 million from the AMI Election Disposition and the Newfield Disposition to partially fund our ongoing capital expenditure program, including a portion of the cost associated with the pending WEHLU Acquisition if such acquisition is completed.

For the six months ended June 30, 2013, the Chesapeake Assets, net of the Minority Chesapeake Interest and AMI Election Disposition, had pro forma revenues of \$4.4 million and pro forma operating expenses of \$2.4

Table of Contents

million, including depreciation, depletion and amortization expense of \$814,000. During the six months ended June 30, 2013, the pro forma average daily production rate associated with the Chesapeake Assets, net of the Minority Chesapeake Interest and AMI Election Disposition, was 3.8 MMcfe/d (641 Boe/d). As of June 30, 2013, SEC proved reserves associated with the Chesapeake Assets, net of AMI Election Disposition, were approximately 13.6 MMcfe (2.3 MMBoe), all of which were proved developed reserves. Included in the proved developed reserve estimates were 176 gross producing wells. The PV-10 value of the Chesapeake Assets' proved reserves as of June 30, 2013 was \$22.7 million using SEC pricing and \$31.9 million using NYMEX strip pricing. See Summary Historical and Pro Forma Reserves and Production Data for additional information regarding our reserves volumes and pricing and a reconciliation of PV-10, a non-GAAP financial measure, to standardized measure of future net cash flows of such reserves.

In connection with the Chesapeake Acquisition, we entered into a settlement agreement with Chesapeake to settle and resolve all claims of Chesapeake and its subsidiaries against Parent and its subsidiaries made in a previously disclosed lawsuit filed in the U.S. District Court for the Southern District of Texas. In order to effect a mutual full and unconditional release and settlement of all claims made in the lawsuit filed by Chesapeake, we paid Chesapeake approximately \$10.8 million in cash, approximately \$9.8 million of which was paid for by Parent's repurchase of 6,781,768 outstanding common shares of Parent held by Chesapeake.

Senior Notes Offering

On May 15, 2013, we issued \$200.0 million aggregate principal amount of 8 5/8% Senior Secured Notes due 2018. We used the net proceeds of approximately \$194.5 million to (i) finance the Chesapeake Acquisition, repurchase shares of the Company's common stock held by Chesapeake and settle litigation with Chesapeake, (ii) repay in full borrowings under our revolving credit facility and (iii) for general corporate purposes.

New Revolving Credit Facility

On June 7, 2013, Gastar USA entered into the Second Amended and Restated Credit Agreement, dated as of June 7, 2013, among Gastar USA, Wells Fargo Bank, National Association, as Administrative Agent, Collateral Agent, Swing Line Lender and Issuing Lender and the lenders named therein (the Revolving Credit Facility). The Revolving Credit Facility provides an initial borrowing base of \$50.0 million.

The Revolving Credit Facility is guaranteed by all of Gastar USA's current domestic subsidiaries and all future domestic subsidiaries formed during the term of the Revolving Credit Facility. Borrowings and related guarantees are secured by a first priority lien on all domestic natural gas and oil properties currently owned by or later acquired by Gastar USA and its subsidiaries, excluding de minimis value properties as determined by the lender. The Revolving Credit Facility is secured by a first priority pledge of the stock of each domestic subsidiary, a first priority interest on all accounts receivable, notes receivable, inventory, contract rights, general intangibles and material property of Gastar USA and 65% of the stock of each foreign subsidiary of Gastar USA.

On July 31, 2013, Gastar USA, together with the parties thereto, entered into the Waiver, Agreement and Amendment No. 1 to Second Amended and Restated Credit Agreement (Amendment No. 1). Amendment No. 1 amended the Revolving Credit Facility to clarify the current ratio covenant calculation.

On October 18, 2013, Gastar USA, together with the parties thereto, entered into the Agreement and Amendment No. 2 to Second Amended and Restated Credit Agreement (Amendment No. 2). Amendment No. 2 amended the Revolving Credit Facility to, among other things, (i) increase the aggregate principal amount of 8 5/8% Senior Secured Notes due 2018 permitted to be issued from \$200.0 million to \$325.0 million, (ii) allow for the issuance of the Series B Preferred Stock and (iii) increase the aggregate amount of annual cash dividends permitted to be paid to preferred stockholders from \$12.5 million to \$20.0 million.

Table of Contents

Revised 2013 Capital Budget

We expect to spend approximately \$60.4 million in the Marcellus Shale and Other Appalachia in fiscal year 2013, including approximately \$52.3 million for drilling, completion and infrastructure costs and approximately \$8.1 million for lease acquisition and seismic costs. For fiscal year 2013, in Marshall County, West Virginia, we have placed on production an additional 19 gross (9.5 net) operated horizontal Marcellus Shale wells bringing our total operated producing wells in the field to 57 gross (27.0 net) wells.

Excluding acquisition costs, for fiscal year 2013 we expect to spend approximately \$57.0 million in our Hunton Limestone horizontal oil play, including approximately \$41.7 million for drilling and completion costs and approximately \$15.3 million for additional lease acquisition costs. For the fiscal year 2013, we plan to drill approximately two gross (1.8 net) operated wells and seven gross (3.8 net) AMI non-operated wells testing the Hunton Limestone formation and one gross (<0.1 net) non-operated well testing the Woodford Shale and one gross (0.1 net) non-operated well testing the Mississippi Lime. On our existing Mid-Continent acreage, we spudded our first operated well in October 2013 and anticipate completing it and one additional gross (1.0 net) operated well by year end.

Marcellus Shale Curtailment Remediation

Since the inception of our operations in the Marcellus Shale in 2011, our operated production and sales in West Virginia have been curtailed by issues with condensate handling, dehydration limitations, high line pressures and excessive unscheduled system down-time on the gathering system owned and operated by Williams Ohio Valley Midstream (Williams) that services our West Marcellus production. We estimate that the unscheduled downtime and high line pressures on the Williams system during the first six months of 2013 resulted in reduced average production of approximately 12.0 MMcfe/d, or 24% of total production. For the quarter ended June 30, 2013, we estimate that the unscheduled downtime on the Williams system resulted in reduced average production of approximately 7.7 MMcfe/d, or 13% of total production.

In 2013, Williams has continued to take steps to resolve the downtime issues by increasing dehydration capacity from 40 MMcf per day to 70 MMcf per day and adding compression to reduce line pressure at an existing CRP in May and in April, adding a second CRP and additional compression to reduce line pressures at the new CRP.

Currently, we are experiencing no significant curtailment or high-line pressure issues on our West Marcellus production on the Williams system. We continue to work with Williams to improve operational performance on their system and oil and NGLs product pricing issues.

Corporate Reorganization

At the 2013 Annual General and Special Meeting of Shareholders of Parent, Parent's shareholders voted to approve a special resolution approving a plan of arrangement (the Arrangement) pursuant to which Parent would be continued as if it had been incorporated under the laws of the State of Delaware. On August 2, 2013 and September 19, 2013, Parent obtained orders from the Court of Queens Bench of Alberta (the Court) approving the Arrangement, as amended. Parent currently contemplates completing the continuance into the State of Delaware following the completion of this offering (the Delaware Migration).

Also following the completion of this offering, we expect to make a proposal to Parent's shareholders to restructure our equity ownership by merging Parent, a holding company, with and into us (the Downstream Merger). If approved by shareholders and completed, we expect that this reorganization will be effected prior to year end 2013. In the event of a merger, Parent will cease to exist and we will have common and preferred equity securities traded on the NYSE MKT LLC. While the Board of Directors of Parent has approved the corporate reorganization, we cannot assure you that we will make a proposal to Parent's shareholders to restructure our equity ownership or that Parent's shareholders will approve such transactions.

Table of Contents

Organizational Structure

The following chart depicts our current organizational structure:

- (1) The Board of Directors and shareholders of Gastar Exploration Ltd. have approved Gastar Exploration Ltd.'s migration from Alberta, Canada to the State of Delaware (the "Delaware Migration"). It is anticipated that Gastar Exploration Ltd. will be continued into the State of Delaware following the completion of this offering.
- (2) The Board of Directors of Gastar Exploration Ltd. has approved, and, upon completion of the migration from Alberta, Canada to the State of Delaware, its shareholders are expected to be asked to approve, the merger of Gastar Exploration Ltd. with and into Gastar Exploration USA, Inc. (the "Downstream Merger").
- (3) Our Series A Cumulative Perpetual Preferred Stock currently trades on the NYSE MKT LLC under the ticker symbol GST.PR.A. There is currently no public market for the Series B Preferred Stock. Subject to issuance, we anticipate that our shares of Series B Preferred Stock will be approved for listing on the NYSE MKT LLC under the symbol GST.PR.B. Upon completion of the Delaware Migration and the Downstream Merger (together, the "Reorganization Transactions"), shares of Gastar Exploration Ltd.'s common stock are expected to be exchanged for the right to receive an equal number of shares of Gastar Exploration USA, Inc.'s common stock. Upon completion of the Downstream Merger and the share exchange, we anticipate Gastar Exploration USA, Inc.'s common stock will be listed on the NYSE MKT LLC.

Corporate Information

Gastar USA is a Delaware corporation. Our executive offices are located at 1331 Lamar Street, Suite 650, Houston, Texas 77010. Our telephone number is (713) 739-1800. We maintain a website at <http://www.gastar.com>. The information on our website is not part of this prospectus supplement, and you should rely only on the information contained in this prospectus supplement and the documents we incorporate by reference herein when making a decision as to whether to invest in shares of our Series B Preferred Stock.

Table of Contents

The Offering

The following is a brief summary of certain terms of the Series B Preferred Stock and this offering. For a more complete description of the terms of the Series B Preferred Stock, see Description of Series B Preferred Stock beginning on page S-49 of this prospectus supplement and Description of Preferred Securities beginning on page 7 of the accompanying prospectus.

Issuer	Gastar Exploration USA, Inc.
Guarantor	Gastar Exploration Ltd.
Securities Offered	shares of % Series B Cumulative Preferred Stock, par value \$0.01 per share
Guarantee	Parent will fully and unconditionally guarantee the payment of dividends that have been declared by the board of directors of Gastar USA (the Gastar USA Board), amounts payable upon redemption or liquidation, dissolution or winding up, and any other amounts due with respect to the Series B Preferred Stock, to the extent described in this prospectus supplement. For a more complete description of the terms of the Parent guarantee, see Description of Guarantee of Preferred Securities beginning on page S-62 of this prospectus supplement and Description of Guarantee of Preferred Securities beginning on page 8 of the accompanying prospectus.
Option to purchase additional Series B Preferred Stock	The underwriters have an option to purchase a maximum of additional shares of Series B Preferred Stock to cover over-allotments, if any, on the same terms and conditions set forth above within 30 days of the date of this prospectus supplement.
Dividends	<p> Holders of the Series B Preferred Stock will be entitled to receive, when and as declared by the Gastar USA Board, out of funds legally available for the payment of dividends, cumulative cash dividends on the Series B Preferred Stock at a rate of % per annum of the \$25.00 liquidation preference per share (equivalent to \$ per annum per share).</p> <p> Under certain conditions relating to non-payment of dividends on the Series B Preferred Stock or if the Series B Preferred Stock is no longer listed on a National Exchange, the dividend rate on the Series B Preferred Stock may increase to % per annum, which is referred to as the Penalty Rate.</p> <p> If Parent and Gastar USA fail to consummate the Reorganization Transactions prior to June 30, 2014, the dividend rate shall increase to the Penalty Rate until such time as the Reorganization Transactions are consummated.</p> <p> Notwithstanding any provision of the Series B Preferred Stock Certificate of Designation to the contrary, if a Change of Ownership</p>

Table of Contents

or Control occurs prior to the consummation of the Reorganization Transactions, (i) holders of the Series B Preferred Stock shall not have a Change of Control Conversion Right and (ii) the dividend rate shall increase to the Penalty Rate.

Dividends will generally be payable monthly in arrears on the last day of each calendar month.

Dividends on the Series B Preferred Stock will accrue regardless of whether:

the terms of any Senior Shares (as defined below) issued by Gastar USA or agreements of Gastar USA, including any documents governing Gastar USA's indebtedness, at any time prohibit the current payment of dividends;

Gastar USA has earnings;

there are funds legally available for the payment of such dividends; or

such dividends are declared by the Gastar USA Board.

All payments of dividends made to the holders of Series B Preferred Stock will be credited against the previously accrued dividends on such shares of Series B Preferred Stock. Gastar USA will credit any dividends paid on the Series B Preferred Stock first to the earliest accrued and unpaid dividend due.

Penalties as a Result of Failure to Maintain a Listing on a National Exchange

Once the Series B Preferred Stock is eligible for listing, if Gastar USA fails to maintain a listing of the Series B Preferred Stock on a National Exchange, for 180 consecutive days, then (i) the annual dividend rate on the Series B Preferred Stock will be increased to the Penalty Rate on the 181st day, and (ii) the holders of Series B Preferred Stock, voting separately as a class with holders of all other series of Parity Shares (as defined under Ranking below) upon which like voting rights have been conferred and are exercisable, will have the right to elect two directors to serve on the Gastar USA Board in addition to those directors then serving on such Board. The Penalty Rate and director service will continue for so long the Series B Preferred Stock is not listed on a National Exchange.

The amended and restated bylaws of Gastar USA provide that the number of directors on the Gastar USA Board shall be fixed from time to time by a majority of the Gastar USA Board and vacancies resulting from newly created directorships may be filled by a majority of the Gastar USA Board. Because the Parent owns all of the common stock of Gastar USA and controls Gastar USA, Gastar USA presently only has one director, the Chief Executive Officer of Parent. Upon completion of the Downstream Merger, the Gastar USA Board will

Table of Contents

consist of the same five members as the board of directors of Parent prior to the Downstream Merger. In the event that the holders of Series B Preferred Stock and any other voting Parity Shares exercise any right to elect two directors to serve on the Gastar USA Board, the existing Gastar USA Board may, pursuant to the provisions of Gastar USA's bylaws, (i) increase the number of directors on the Gastar USA Board to a number that would allow the directors elected by the holders of the common stock of Gastar USA or appointed by the existing Gastar USA Board to fill the newly created directorships to constitute at least a majority of the Gastar USA Board and (ii) fill those vacancies prior to any such election by the holders of Series B Preferred Stock and other voting Parity Shares.

Penalties as a Result of Failure to Pay Dividends

If, at any time, there is a dividend default because cash dividends on the outstanding Series B Preferred Stock are accrued but not paid in full for any monthly dividend period within a quarterly period for a total of four consecutive or non-consecutive quarterly periods ("Dividend Default"), then, (i) the annual dividend rate on the Series B Preferred Stock will be increased to the Penalty Rate commencing on the first day after the dividend payment date on which such Dividend Default occurs; (ii) if the dividends are not paid in cash, then dividends on the Series B Preferred Stock, including all accrued but unpaid dividends, will be paid by issuing to the holders thereof: (a) if Gastar USA's common stock is then listed on a National Exchange and to the extent permitted under the rules of the National Exchange on which such shares are listed, registered common stock of Gastar USA (based on the weighted average daily trading price for the 10 business day period ending on the business day immediately preceding the payment) and cash in lieu of any fractional share or (b) if Gastar USA's common stock is not listed on a National Exchange, either, at Gastar USA's election, (x) additional shares of Series B Preferred Stock with a liquidation value equal to the amount of the dividend and cash in lieu of any fractional share or (y) if the Parent Common Stock is then listed on a National Exchange, Parent owns a majority of the voting stock of Gastar USA and to the extent permitted under applicable securities laws and the rules of the National Exchange on which such shares are listed, freely tradeable shares of Parent Common Stock (based on the weighted average daily trading price for the 10 business day period ending on the business day immediately preceding the payment) and cash in lieu of any fractional shares of Parent Common Stock, provided that the Parent consents to such issuance of freely tradeable shares of Parent Common Stock; and (iii) the holders of Series B Preferred Stock, voting separately as a class with holders of all other series of Parity Shares upon which like voting rights have been conferred and are exercisable, will have the right to elect two directors to serve on the Gastar USA Board, in addition to those directors then serving on such Board. Once all of the accumulated and unpaid dividends on the Series B Preferred Stock have been paid in full and cash dividends at

Table of Contents

the Penalty Rate have been paid in full for an additional two consecutive quarters, the dividend rate will be restored to the stated rate and the term of office of all directors so elected will terminate with the termination of such voting rights. The foregoing provisions will not be applicable unless there is again a failure to pay a monthly dividend during any future quarter.

The amended and restated bylaws of Gastar USA provide that the number of directors on the Gastar USA Board shall be fixed from time to time by a majority of the Gastar USA Board and vacancies resulting from newly created directorships may be filled by a majority of the Gastar USA Board. Because the Parent owns all of the common stock of Gastar USA and controls Gastar USA, Gastar USA presently only has one director, the Chief Executive Officer of Parent. Upon completion of the Downstream Merger, the Gastar USA Board will consist of the same five members as the board of directors of Parent prior to the merger. In the event that the holders of Series B Preferred Stock and any other voting Parity Shares exercise any right to elect two directors to serve on the Gastar USA Board, the existing Gastar USA Board may, pursuant to the provisions of Gastar USA's bylaws, (i) increase the number of directors on the Gastar USA Board to a number that would allow the directors elected by the holders of the common stock of Gastar USA or appointed by the existing Gastar USA Board to fill the newly created directorships to constitute at least a majority of the Gastar USA Board and (ii) fill those vacancies prior to any such election by the holders of Series B Preferred Stock and other voting Parity Shares.

Optional Redemption

Gastar USA may not redeem the Series B Preferred Stock prior to _____, 2018 except pursuant to the special redemption upon a Change of Ownership or Control discussed below. On and after _____, 2018, Gastar USA may redeem the Series B Preferred Stock for cash at Gastar USA's option, from time to time, in whole or in part, at a redemption price of \$25.00 per share, plus accrued and unpaid dividends (whether or not earned or declared) to the redemption date.

Special Redemption upon Change of Ownership or Control

Following a Change of Ownership or Control (as defined herein) of us or the Parent by a person, entity or group, Gastar USA (or the acquiring entity) will have the option to redeem the Series B Preferred Stock, in whole but not in part, within 90 days after the date on which the Change of Ownership or Control has occurred, for cash, at a redemption price of \$25.00 per share, plus accumulated accrued and unpaid dividends to, but not including, the date of redemption.

Table of Contents

A Change of Ownership or Control shall be deemed to have occurred when, after any share of Series B Preferred Stock is originally issued by Gastar USA, each of the following has occurred and is continuing:

(i) a person or group (within the meaning of Sections 13(d) and 14(d) of the Exchange Act) becomes the beneficial owner (as defined in Rules 13d-3 and 13d-5 under the Exchange Act, except that a person or group shall be deemed to have beneficial ownership of all shares of voting stock that such person or group has the right to acquire regardless of when such right is first exercisable), directly or indirectly, of voting stock representing more than 50% of the total voting power of the voting stock of either Gastar USA or the Parent; (ii) either Gastar USA or the Parent sells, transfers or otherwise disposes of all or substantially all of its assets; or (iii) of the consummation of a merger or share exchange of either Gastar USA or the Parent with another entity where the applicable entity's stockholders immediately prior to the merger or share exchange would not beneficially own, immediately after the merger or share exchange, shares representing 50% or more of the outstanding voting stock of the entity issuing cash or securities in the merger or share exchange (without consideration of the rights of any class of stock to elect directors by a separate group vote), or where members of the Board of Directors of the applicable entity immediately prior to the merger or share exchange would not immediately after the merger or share exchange constitute a majority of the board of directors of the corporation issuing cash or securities in the merger or share exchange; and

following the closing of any transaction referred to in the bullet point above, neither we nor the acquiring or surviving entity has a class of common stock (or ADRs representing such securities) listed on a National Exchange.

Notwithstanding the foregoing, neither the Delaware Migration nor the Downstream Merger shall constitute a Change of Ownership or Control.

Voting stock shall mean stock of any class or kind having the power to vote generally for the election of directors.

Conversion Rights

Upon the occurrence of a Change of Ownership or Control after the date of consummation of the Reorganization Transactions, each holder of Series B Preferred Stock will have the right to convert some or all of the Series B Preferred Stock held by such holder on the Change of Control Conversion Date (unless, prior to the Change of Control Conversion Date, we have provided or provide irrevocable notice of our election to redeem the Series B Preferred Stock, in which case such holder will only have the right with respect to the shares of Series B Preferred Stock not called for redemption (unless we default in the payment of the redemption price and all accumulated and unpaid dividends in which case such holder will

Table of Contents

again have a conversion right with respect to the shares subject to such default in payment)) into a number of shares of our common stock per share of Series B Preferred Stock to be converted to a number of shares of our common stock equal to the lesser of:

the quotient obtained by dividing (i) the sum of the \$25.00 liquidation preference per preferred share plus the amount of any accumulated and unpaid dividends to, but not including, the Change of Control Conversion Date (unless the Change of Control Conversion Date is after a record date for a Series B Preferred Stock dividend payment and prior to the corresponding dividend payment date for the Series B Preferred Stock, in which case no additional amount for such accumulated and unpaid dividend will be included in this sum) by (ii) the Common Stock Price (as defined herein); and

shares of common stock per preferred share (the Share Cap) (assuming a ratio of one share of common stock of Gastar USA is issued in the Downstream Merger for each then outstanding common share of Parent, provided, however, that if pursuant to the terms of the Downstream Merger the ratio of shares of new common stock of Gastar USA issued to the holders of common shares of Parent in exchange therefore is other than one share of common stock of Gastar USA for each common share of Parent, the Share Cap shall be the number of shares of common stock of Gastar USA equal to the product obtained by multiplying (i) the Share Cap per share in effect immediately prior to the Downstream Merger by (ii) the number of shares of common stock of Gastar USA issued in the Downstream Merger for one share of common stock of Parent), subject to certain adjustments described in this prospectus supplement;

subject, in each case, to provisions for the receipt of alternative consideration and other conditions as described in this prospectus supplement.

If, prior to the Change of Control Conversion Date, we have provided or provide irrevocable notice of redemption, whether pursuant to our change of control redemption right or our optional redemption right, holders of Series B Preferred Stock will not have any right to convert the shares of Series B Preferred Stock selected for redemption and any shares of Series B Preferred Stock selected for redemption that have been tendered for conversion will be redeemed on the related date of redemption instead of converted on the Change of Control Conversion Date (in each case, unless we default in the payment of the redemption price and all accumulated and unpaid dividends).

Notwithstanding the foregoing, if a Change of Ownership or Control occurs prior to the consummation of the Reorganization Transactions, (i) the holders of Series B Preferred Shares shall not have a Change of

Table of Contents

Control Conversion Right and (ii) the Dividend Rate shall increase to the Penalty Rate.

For definitions of Change of Control Conversion Right, Change of Control Conversion Date and Common Stock Price and for a description of the adjustments and provisions for the receipt of alternative consideration that may be applicable to the Change of Control Conversion Right, see Description of the Series B Preferred Stock Conversion Rights.

Ranking

The Series B Preferred Stock will rank: (i) senior to the common stock and any other equity securities that Gastar USA may issue in the future, the terms of which specifically provide that such equity securities rank junior to such Series B Preferred Stock, in each case with respect to payment of dividends and amounts upon liquidation, dissolution or winding up, referred to as Junior Shares, (ii) equal to the Series A Preferred Stock and any shares of equity securities that Gastar USA may issue in the future, the terms of which specifically provide that such equity securities rank on par with such Series B Preferred Stock, in each case with respect to payment of dividends and amounts upon liquidation, dissolution or winding up, referred to as Parity Shares, (iii) junior to all other equity securities issued by us, the terms of which specifically provide that such equity securities rank senior to such Series B Preferred Stock, in each case with respect to payment of dividends and amounts upon liquidation, dissolution or winding up (any such issuance would require the affirmative vote of the holders of at least two-thirds of the outstanding shares of Series B Preferred Stock and all other series of Voting Preferred Shares (as defined herein)), referred to as Senior Shares, and (iv) junior to all of Gastar USA's existing and future indebtedness.

The Parent's guarantee of the Series B Preferred Stock will be the subordinated obligation of the Parent and will rank junior to all of its existing and future debt. See Description of Guarantee of Preferred Securities.

As of June 30, 2013, Gastar USA had outstanding indebtedness of \$200.0 million, all of which was secured. As of June 30, 2013, the Parent had no outstanding indebtedness.

Liquidation Preference

If Gastar USA liquidates, dissolves or winds up its operations, the holders of the Series B Preferred Stock will have the right to receive \$25.00 per share, plus all accrued and unpaid dividends (whether or not earned or declared) to and including the date of payment, before any payments are made to the holders of Gastar USA's common stock and any other Junior Shares. The rights of the holders of the Series B Preferred Stock to receive the liquidation preference will be subject to the proportionate rights of holders of each other future series or class of Parity Shares and subordinate to the rights of Senior Shares.

Table of Contents

No Maturity or Mandatory Redemption

The Series B Preferred Stock does not have any stated maturity redemption date and will not be subject to any sinking fund or mandatory redemption provisions except for redemption at Gastar USA's option (or the option of the acquiring entity) under some circumstances upon a Change of Ownership or Control as described above or after , 2018.

Voting Rights

Holders of the Series B Preferred Stock will generally only be entitled to vote on certain acquisitions and share exchange transactions and changes that would be materially adverse to the rights of holders of Series B Preferred Stock. However, if cash dividends on any outstanding Series B Preferred Stock have not been paid in full for any monthly dividend period for any four consecutive or non-consecutive quarterly periods, or if Gastar USA fails to maintain the listing of the Series B Preferred Stock on a National Exchange for at least 180 consecutive days after the Series B Preferred Stock becomes eligible for listing on a National Exchange, the holders of the Series B Preferred Stock, voting separately as a class with holders of all other series of Parity Shares upon which like voting rights have been conferred and are exercisable, will have the right to elect two directors to serve on the Gastar USA Board in addition to those directors then serving on the Gastar USA Board until such time as the Series B Preferred Stock becomes listed on a National Exchange or the dividend arrearage is eliminated.

Additionally, the affirmative consent of holders of at least 66 2/3% of the outstanding Series B Preferred Stock will be required for the issuance of any Senior Shares or for amendments to Gastar USA's certificate of incorporation by merger or otherwise that would affect adversely the rights of holders of the Series B Preferred Stock. For more information regarding the voting rights of the Series B Preferred Stock, please see Description of Series B Preferred Stock Voting Rights.

Material U.S. Federal Income Tax Consequences

The material U.S. federal income tax consequences of purchasing, owning and disposing of Series B Preferred Stock are described in Material U.S. Federal Income Tax Consequences beginning on page S-64 of this prospective supplement. You should consult your tax advisor with respect to the U.S. federal income tax consequences of owning the Series B Preferred Stock in light of your own particular situation and with respect to any tax consequences arising under the laws of any state, local, foreign or other taxing jurisdiction.

Listing, Market for Series B Preferred Stock

Subject to issuance, Gastar USA anticipates that the shares of Series B Preferred Stock will be approved for listing on the NYSE MKT LLC under the symbol GST.PR.B. There is no established

Table of Contents

public trading market for the Series B Preferred Stock and such a market may not develop.

Form The Series B Preferred Stock will be issued and maintained in book-entry form registered in the name of the nominee of The Depository Trust Company, except under limited circumstances.

Use of Proceeds We estimate that, in the event that shares offered hereunder are sold at \$25.00 per share, the net proceeds from this offering will be approximately \$ million (or approximately \$ million if the underwriters option is exercised in full), after deducting the underwriting commissions and estimated offering expenses payable by us. We intend to use the net proceeds from this offering, including any proceeds from shares issued if the underwriters exercise their over-allotment option, to partially fund our ongoing capital expenditure program, including a portion of the cost associated with the pending WEHLU Acquisition if such acquisition is completed. See Summary Recent Developments Pending WEHLU Acquisition.

Risk Factors Investing in the Series B Preferred Stock involves certain risks. You should carefully consider the information set forth in the section of this prospectus supplement titled Risk Factors, in the reports of Parent and Gastar USA filed with the SEC, which are incorporated by reference herein, and the other information included in or incorporated in this prospectus supplement, before deciding whether to invest in our Series B Preferred Stock.

Table of Contents**SUMMARY HISTORICAL FINANCIAL DATA**

The following tables set forth summary historical consolidated financial data for Gastar USA for the years ended December 31, 2010, 2011 and 2012 and the six months ended June 30, 2012 and 2013. The annual historical financial data are derived from our audited consolidated financial statements and the notes thereto incorporated by reference in this prospectus supplement. The data for the six months ended June 30, 2012 and 2013 are derived from our unaudited condensed consolidated financial statements and the notes thereto incorporated by reference in this prospectus supplement. This data should be read in conjunction with, and is qualified in its entirety by reference to, Selected Historical Financial Data included in this prospectus supplement, Management's Discussion and Analysis of Financial Condition and Results of Operations and our financial statements and the notes thereto incorporated by reference in this prospectus supplement.

	2010	Year Ended December 31, 2011 (Audited)	2012	Six Months Ended June 30, 2012 (Unaudited)	2013 (Unaudited)
	(In Thousands)				
Statements of Operations Data:					
Revenues					
Natural gas	\$ 30,811	\$ 33,391	\$ 33,829	\$ 13,593	\$ 23,277
Condensate and oil	742	3,416	12,377	4,291	14,143
NGLs		1,092	9,300	3,911	6,922
Unrealized hedge (loss) gain	11,214	2,336	(5,566)	1,280	(2,152)
Total revenues	42,767	40,235	49,940	23,075	42,190
Expenses					
Production taxes	370	620	2,269	934	1,793
Lease operating expenses	6,676	8,629	6,174	3,974	4,006
Transportation, treating and gathering	4,654	4,501	4,965	2,410	2,288
Depreciation, depletion and amortization	9,306	15,216	25,424	12,609	12,961
Impairment of natural gas and oil properties			150,787	72,733	
Accretion of asset retirement obligation	396	534	388	183	216
General and administrative expense	13,468	10,434	10,732	5,624	7,397
Litigation settlement expense	21,744		1,250	1,250	1,000
Total expenses	56,614	39,934	201,989	99,717	29,661
(Loss) income from operations	(13,847)	301	(152,049)	(76,642)	12,529
Other income (expense)					
Gain on acquisition of assets at fair value					43,712
Interest expense	(97)	(112)	(271)	(57)	(4,154)
Investment and other (expense) income	1,238	95	(4)	1	2
Foreign transaction gain	354	1	2	1	(8)
(Loss) income before provision for income taxes	(12,352)	285	(152,322)	(76,697)	52,081
Provision for income tax (benefit)	(804)				
Net (loss) income	(11,548)	285	(152,322)	(76,697)	52,081
Dividend on preferred stock		(1,024)	(7,077)	(2,963)	(4,264)
Net (loss) income attributable to common stockholder	\$ (11,548)	\$ (739)	\$ (159,399)	\$ (79,660)	\$ 47,817
Other Financial Data (Unaudited):					
Adjusted EBITDA (1)	\$ 9,150	\$ 16,327	\$ 34,661	\$ 10,699	\$ 30,824
Drilling Capital Expenditures	36,814	65,835	120,750	53,519	51,980
Land Acquisition and Other Expenditures	24,638	19,552	25,676	15,655	12,255

Table of Contents

	As of December 31, 2012	As of June 30, 2013 (Unaudited)
	(In Thousands)	
Balance Sheet Data		
Cash and cash equivalents	\$ 8,892	\$ 10,760
Property and equipment, net	256,250	419,767
Total assets	289,879	450,076
Total long-term debt	98,000	194,609
Total stockholders' equity	95,464	131,414

- (1) EBITDA and Adjusted EBITDA are not alternative measures of operating results of cash flows from operations, as determined in accordance with GAAP. We have included EBITDA and Adjusted EBITDA because we believe they are indicative measures of operating performance and our ability to meet our debt service requirements and are used by investors and analysts to evaluate companies with our capital structure. As presented by us, EBITDA and Adjusted EBITDA may not be comparable to similarly titled measures reported by other companies. EBITDA and Adjusted EBITDA should be considered in addition to, not as a substitute for, operating income, net income (loss), cash flow and other measures of financial performance and liquidity reported in accordance with GAAP.

The following table reconciles net (loss) income in accordance with GAAP to EBITDA and Adjusted EBITDA.

	2010	Year Ended December 31, 2011	2012 (Unaudited)	Six Months Ended June 30, 2012	2013
	(In Thousands)				
Net (loss) income attributable to common stockholder	\$ (11,548)	\$ (739)	\$ (159,399)	\$ (79,660)	\$ 47,817
Plus:					
Dividend expense		1,024	7,077	2,963	4,264
Depreciation, depletion and amortization	9,306	15,216	25,424	12,609	12,961
Impairment of natural gas and oil properties			150,787	72,733	
Interest expense	97	112	271	57	4,154
Income tax benefit	(804)				
EBITDA	(2,949)	15,613	24,160	8,702	69,196
Other adjustments:					
Accretion of asset retirement obligation	396	534	388	183	216
Stock option expense	2,765	2,612	3,295	1,846	1,966
Litigation settlement expense (a)	21,744		1,250	1,250	1,000
Gain on acquisition of assets at fair value (b)					(43,712)
Investment income and other	(1,238)	(95)	4	(1)	(2)
Foreign transaction gain (c)	(354)	(1)	(2)	(1)	8
Unrealized hedge (gain) loss	(11,214)	(2,336)	5,566	(1,280)	2,152
Adjusted EBITDA	\$ 9,150	\$ 16,327	\$ 34,661	\$ 10,699	\$ 30,824

- (a) Litigation settlement expense for fiscal year 2010 primarily resulted from our settlement with the plaintiffs in the ClassicStar Mare Lease litigation suits in December 2010. Litigation settlement expense for fiscal year 2012 primarily resulted from our settlement with Navasota Resources LP in April 2012. Litigation settlement expense for the six months ended June 30, 2013 resulted from an accrual for settlement of the Chesapeake litigation.
- (b) Gain on acquisition of assets at fair value for the six months ended June 30, 2013 represents a non-cash bargain purchase gain on acquisition of the Chesapeake Assets.

Edgar Filing: Gastar Exploration USA, Inc. - Form 424B5

- (c) Foreign exchange gain for fiscal year 2010 primarily resulted from Australian denominated cash and accounts receivable balances. The Australian properties were sold in 2009.

S-29

Table of Contents

SUMMARY PRO FORMA FINANCIAL DATA

The summary pro forma financial data presented for the year ended December 31, 2012 and as of and for the six months ended June 30, 2013 are derived from our pro forma condensed consolidated financial statements incorporated by reference in this prospectus supplement.

The pro forma balance sheet data as of June 30, 2013 has been prepared assuming the pending WEHLU Acquisition, the East Texas Disposition, the AMI Election, the Newfield Disposition and this offering of Series B Preferred Stock were consummated on June 30, 2013. The impact of the Chesapeake Acquisition and the Senior Notes Offering and use of a portion of the proceeds therefrom to fund the Chesapeake Acquisition is already reflected in the historical balance sheet financial information at June 30, 2013. The pro forma statements of operations data for the year ended December 31, 2012 and for the six months ended June 30, 2013 have been prepared assuming the Chesapeake Acquisition, the repurchase of 6,781,768 shares of Parent's common stock from Chesapeake, the settlement of litigation with Chesapeake, the AMI Election Disposition, the East Texas Disposition, the Senior Notes Offering and use of a portion of the proceeds therefrom to fund the Chesapeake Acquisition, the pending WEHLU Acquisition and the issuance and sale of the Series B Preferred Stock in this offering and the application of the net proceeds therefrom as described in "Use of Proceeds" were consummated on January 1, 2012. See "Prospectus Supplement Summary Recent Developments Chesapeake Acquisition and Related Dispositions," "Prospectus Supplement Summary Recent Developments Senior Notes Offering," "Prospectus Supplement Summary Recent Developments East Texas Disposition" and "Prospectus Supplement Summary Recent Developments Pending WEHLU Acquisition." The Newfield Disposition was a disposition of undeveloped oil and gas leasehold interests and is accounted for as an adjustment of capitalized costs, with no gain recognized as such adjustment would not significantly alter the relationship between capitalized costs and proved reserves of oil and gas attributable to our or Parent's full cost pool. Therefore, the Newfield Disposition has no impact on the statement of operations.

The pro forma financial data have been prepared for illustrative purposes only and do not purport to be indicative of the actual results for the period indicated or that may be realized in the future. Although management believes the assumptions used in preparing these pro forma financial results are reasonable, these assumptions may not be correct. As a result, actual results could differ materially. These pro forma financial statements should be read in conjunction with, and are qualified in their entirety by reference to, "Selected Historical Financial Data" in this prospectus supplement and "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and the notes thereto incorporated by reference in this prospectus supplement. The summary pro forma data below include the pro forma effects of the pending WEHLU Acquisition, the closing of which is not a condition to the issuance of the Series B Preferred Stock offered hereby. Actual results for the pending WEHLU Acquisition for such period may differ. See "Unaudited Condensed Combined Pro Forma Financial Statements" for pro forma financial information assuming the pending WEHLU Acquisition is not consummated.

Table of Contents

	Pro Forma Gastar USA Prior to WEHLU Acquisition (1)		Pro Forma Gastar USA After WEHLU Acquisition (1)(2)	
	Year Ended December 31, 2012	Six Month Ended June 30, 2013	Year Ended December 31, 2012	Six Months Ended June 30, 2013
(Unaudited) (In Thousands)				
Statements of Operations Data:				
Revenues				
Natural gas	\$ 27,907	\$ 19,872	\$ 30,224	\$ 21,522
Condensate and oil	18,005	15,703	47,034	33,623
NGLs	9,981	7,129	14,515	9,713
Unrealized hedge loss	(5,566)	(2,152)	(5,566)	(2,152)
Total revenues	50,327	40,552	86,207	62,706
Expenses				
Production taxes	2,740	2,012	4,349	3,046
Lease operating expenses	5,725	3,523	11,768	7,210
Transportation, treating and gathering	1,340	477	1,340	477
Depreciation, depletion and amortization	19,453	10,950	37,289	20,911
Impairment of natural gas and oil properties	150,787		150,787	
Accretion of asset retirement obligation	333	172	412	214
General and administrative expense	10,732	7,397	10,732	7,397
Litigation settlement expense	1,250	1,000	1,250	1,000
Total expense	192,360	25,531	217,927	40,255
(Loss) income from operations	(142,033)	15,021	(131,720)	22,451
Other income (expense)				
Gain on acquisition of assets at fair value		43,712		43,712
Interest expense	(14,183)	(8,555)	(13,929)	(8,209)
Investment and other (expense) income	(4)	2	(4)	2
Foreign transaction gain	2	(8)	2	(8)
(Loss) income before provision for income taxes	(156,218)	50,172	(145,651)	57,948
Provision for income tax (benefit)				
Net (loss) income	(156,218)	50,172	(145,651)	57,948
Dividend on preferred stock	(17,827)	(9,639)	(17,827)	(9,639)
Net (loss) income attributable to common stockholder	\$ (174,045)	\$ 40,533	\$ (163,478)	\$ 48,309
Other Financial Data (Unaudited):				
Adjusted EBITDA (3)	\$ 38,651	\$ 31,261	\$ 66,879	\$ 48,694

Table of Contents

	Pro Forma Gastar USA Prior to WEHLU Acquisition(4)	Pro Forma Gastar USA After WEHLU Acquisition(4)
	2013	As of June 30, 2013
		(Unaudited) (In Thousands)
Balance Sheet Data		
Cash and cash equivalents	\$ 118,524	\$ 25,524
Property and equipment, net	305,359	493,666
Total assets	443,432	538,739
Total long-term debt	194,609	194,609
Total stockholders' equity	225,914	225,914

- (1) Pro forma adjustments for the statements of operations and Adjusted EBITDA prior to the pending WEHLU Acquisition give effect to the Chesapeake Acquisition, the AMI Election Disposition, the East Texas Disposition, the Senior Notes Offering and use of a portion of the proceeds therefrom to fund the Chesapeake Acquisition and the issuance and sale of the Series B Preferred Stock in this offering and the application of the net proceeds therefrom as described in "Use of Proceeds" as if they were consummated on January 1, 2012. Pro forma adjustments after the WEHLU Acquisition also give effect to the pending WEHLU Acquisition as if it was consummated on January 1, 2012. See "Recent Developments - Chesapeake Acquisition and Related Dispositions," "Recent Developments - Senior Notes Offering," "Recent Developments - East Texas Disposition" and "Recent Developments - Pending WEHLU Acquisition."
- (2) Pro forma financial information after the pending WEHLU Acquisition was prepared assuming that the purchase price for the pending WEHLU Acquisition will be funded from pro forma cash on hand and net proceeds from this offering. The pending WEHLU Acquisition is expected to be funded from a combination of net proceeds from this offering, cash on hand, borrowings under Gastar USA's senior revolving credit facility or from a possible offering of senior notes. The actual sources of funding of the purchase price and amounts from the various sources may differ.
- (3) EBITDA and Adjusted EBITDA are not alternative measures of operating results of cash flows from operations, as determined in accordance with GAAP. We have included EBITDA and Adjusted EBITDA because we believe they are indicative measures of operating performance and our ability to meet our debt service requirements and are used by investors and analysts to evaluate companies with our capital structure. As presented by us, EBITDA and Adjusted EBITDA may not be comparable to similarly titled measures reported by other companies. EBITDA and Adjusted EBITDA should be considered in addition to, not as a substitute for, operating income, net income (loss), cash flow and other measures of financial performance and liquidity reported in accordance with GAAP.
- (4) Pro forma adjustments for the balance sheet prior to the pending WEHLU Acquisition give effect to the AMI Election Disposition, the East Texas Disposition, the Newfield Disposition and the issuance and sale of the Series B Preferred Stock in this offering and the application of the net proceeds therefrom as described in "Use of Proceeds" as if they were consummated on June 30, 2013. Pro forma adjustments after the WEHLU Acquisition also give effect to the pending WEHLU Acquisition as if it were consummated on June 30, 2013. See "Recent Developments - Chesapeake Acquisition and Related Dispositions," "Recent Developments - East Texas Disposition" and "Recent Developments - Pending WEHLU Acquisition."

Table of Contents

The following table reconciles net (loss) income in accordance with GAAP to EBITDA and Adjusted EBITDA.

	Pro Forma Gastar USA Prior to WEHLU Acquisition		Pro Forma Gastar USA After WEHLU Acquisition	
	Year Ended December 31, 2012	Six Months Ended June 30, 2013	Year Ended December 31, 2012	Six Months Ended June 30, 2013
	(Unaudited) (In Thousands)			
Net (loss) income attributable to common stockholder	\$ (174,045)	\$ 40,533	\$ (163,728)	\$ 48,184
Plus:				
Dividend expense	17,827	9,639	18,077	9,764
Depreciation, depletion and amortization	19,453	10,950	37,289	20,911
Impairment of natural gas and oil properties	150,787		150,787	
Interest expense	14,183	8,555	13,929	8,209
EBITDA	28,205	69,677	56,354	87,068
Other adjustments:				
Accretion of asset retirement obligation	333	172	412	214
Stock option expense	3,295	1,966	3,295	1,966
Litigation settlement expense (a)	1,250	1,000	1,250	1,000
Gain on acquisition of assets at fair value (b)		(43,712)		(43,712)
Investment income and other	4	(2)	4	(2)
Foreign transaction gain	(2)	8	(2)	8
Unrealized hedge loss	5,566	2,152	5,566	2,152
Adjusted EBITDA	\$ 38,651	\$ 31,261	\$ 66,879	\$ 48,694

- (a) Litigation settlement expense for fiscal year 2012 primarily resulted from our settlement with Navasota Resources LP in April 2012. Litigation settlement expense for the six months ended June 30, 2013 resulted from an accrual for settlement of the Chesapeake litigation.
- (b) Gain on acquisition of assets at fair value for the six months ended June 30, 2013 represents a non-cash bargain purchase gain on acquisition of the Chesapeake Assets.

Table of Contents**SUMMARY HISTORICAL AND PRO FORMA RESERVES AND PRODUCTION DATA**

The following tables summarize our historical and pro forma oil and natural gas proved reserves and present values as of the dates indicated. Our historical reserve information has been derived from reserve reports prepared by Wright and NSAI. Wright has made the proved reserve estimates for our Marcellus Shale and other Appalachia area and our Mid-Continent area, including the Chesapeake Acquisition, as of June 30, 2013. NSAI has evaluated the reserve estimates for our Hilltop Area of East Texas as of June 30, 2013, which properties were divested as described under Prospectus Supplement Summary Recent Developments East Texas Disposition. Estimated proved reserve data for the WEHLU Assets as of June 30, 2013 has been derived from a reserve report prepared by Wright. See Prospectus Supplement Summary Recent Developments Pending WEHLU Acquisition.

SEC Case Reserves

Definitions and guidelines established by the SEC regarding the present value of future net cash flows were utilized to prepare the estimates in the table below. Estimates of reserves and their value are inherently imprecise and are subject to constant revision and change, and they should not be construed as representing the actual quantities of future production or cash flows to be realized from oil and natural gas properties or the fair market value of such properties.

	Historical Gastar USA (1)	Pro Forma Gastar USA Prior to WEHLU Acquisition	Pro Forma Gastar USA After WEHLU Acquisition (2)
Proved Reserves SEC Case (3)			
Natural gas (MMcf)	173,357	146,046	161,402
NGLs (MBbls)	7,097	7,097	9,549
Condensate and oil (MBbls)	5,501	5,483	12,876
Total proved reserves (MMcfe)	248,944	221,525	295,954
Proved developed reserves (MMcfe)	169,833	142,414	177,528
SEC PV-10 (in thousands) (4)	\$ 324,076	\$ 306,861	\$ 509,008

- (1) Net of AMI Election Disposition.
- (2) Pro forma estimated proved reserve data includes proved reserve data for the WEHLU Assets as of June 30, 2013 prepared using an unweighted average of the first-day-of-the-month prices for the twelve-months ended June 30, 2013.
- (3) Our estimated proved reserves and related future net revenues and PV-10 at June 30, 2013 were determined using benchmark prices that are the 12-month unweighted arithmetic average of the first-day-of-the-month prices for natural gas and oil. Key natural gas prices utilized were the Henry Hub price of \$3.44 per MMBtu. NSAI utilized an average WTI posted oil price of \$88.13 per barrel, and Wright utilized a WTI spot oil price of \$91.60 per barrel. Our reserve engineers utilized an NGLs per Bbl price of approximately 30% of the WTI spot oil price. These prices are held constant in accordance with SEC definitions and guidelines for the life of the wells included in the reserve reports but are adjusted by lease in accordance with sales contracts and for energy content, quality, transportation, compression and gathering fees and regional price differentials. Estimated quantities of proved reserves and future net revenues are affected by natural gas and oil prices, which have fluctuated significantly in recent years. All of our proved reserves are located onshore within the United States.
- (4) PV-10 represents the present value, discounted at 10% per annum, of estimated future net revenue to be generated from the production of proved reserves before income tax. PV-10 is a non-GAAP financial measure because it excludes the effect of income taxes, which effect is included in standardized measure of discounted future net cash flows as defined under GAAP, which we refer to as standardized measure. We

Table of Contents

believe that PV-10 is a useful measure for evaluating the relative monetary significance of oil and natural gas properties. Further, investors may use the measure as a basis for comparison of the relative size and value of our reserves to other companies. PV-10 should not be considered as an alternative to standardized measure. We presently have approximately \$273.3 million of net operating loss carryforwards, \$50.6 million of foreign tax credit carryforwards and \$317.8 million of remaining property tax basis for Federal income tax purposes. Based on those carryforwards and current and future property tax basis, we will not incur future income taxes, and as such, the standardized measure of our proved reserves is equal to its PV-10 value. Assuming that Chesapeake's tax rates would be the same as ours, the standardized measure of discounted future net cash flows attributable to the Chesapeake Assets would be \$22.7 million. Assuming that Lime Rock's tax rates would be the same as ours, the standardized measure of discounted future net cash flows attributable to the WEHLU Assets would be \$202.1 million.

NYMEX Case Reserves

The following table illustrates the price sensitivity of our estimated proved natural gas and oil reserves as of June 30, 2013 and related PV-10 changes in product price levels. The reserve quantities and PV-10 shown below were prepared on the same basis as in the table above, except for the use of pricing based on closing monthly futures prices on the NYMEX for oil and natural gas on June 30, 2013 rather than the unweighted average of the first-day-of-the-month prices for the prior 12 months as specified by the SEC. In our NYMEX case, oil prices in effect for December 2018 and thereafter were held constant and natural gas prices in effect for December 2025 and thereafter were held constant. We believe that the use of forward prices provides investors with additional useful information about our reserves, as the forward prices are based on the market's forward-looking expectations of oil and natural gas prices as of a certain date. NGLs and condensate pricing in this was based on a fixed historical average percentage of the applicable future WTI price. Investors should be careful to consider forward prices in addition to, and not as a substitute for, SEC prices, when considering our oil and natural gas reserves. The assumed lease and well operating costs included in the pricing sensitivity are based on our historical lease and well operating costs and have been held constant throughout the life of the properties. The assumed capital and abandonment costs were held constant to the date of the expenditure. Based on SEC pricing, the pro forma PV-10 of our historical proved oil and natural gas reserves at June 30, 2013 was approximately \$324.1 million while, based on NYMEX forward pricing at June 30, 2013, as set forth below, the pro forma PV-10 of our historical proved oil and natural gas reserves at June 30, 2013 was approximately \$431.8 million.

	Historical Gastar USA (1)	Pro Forma Gastar USA Prior to WEHLU Acquisition	Pro Forma Gastar USA After WEHLU Acquisition (2)
Proved Reserves NYMEX Case (3)			
Natural gas (MMcf)	181,032	149,748	165,531
NGLs (MBbls)	7,224	7,224	9,738
Condensate and oil (MBbls)	5,558	5,541	12,895
Total proved reserves (MMcfe)	257,724	226,336	301,326
Proved developed reserves (MMcfe)	178,613	147,225	182,900
NYMEX PV-10 (in thousands) (4)	\$ 431,788	\$ 398,798	\$ 575,269

- (1) Net of AMI Election Disposition.
- (2) Pro forma estimated proved reserve data includes proved reserve data for the WEHLU Assets as of June 30, 2013 prepared using pricing based on closing monthly futures prices on the NYMEX for oil and natural gas on June 30, 2013 rather than the unweighted average of the first-day-of-the-month prices for the prior 12 months as specified by the SEC.

Table of Contents

- (3) Our NYMEX case estimated proved reserves and related future net revenues and PV-10 at June 30, 2013 were determined using index prices for oil and natural gas, without giving effect to derivative transactions. At June 30, 2013, the average futures prices for benchmark commodities used in our NYMEX case reserve estimates were \$3.64/MMBtu for natural gas and \$95.62/Bbl for oil for the six months ended December 31, 2013, and \$5.50/MMBtu for natural gas and \$80.68/Bbl for oil for the production years thereafter. These prices were adjusted by lease for quality, transportation fees, historical geographical differentials, marketing bonuses or deductions and other factors affecting the price received at the wellhead. NGLs and condensate pricing on our NYMEX case was based on approximately 30% of the future WTI price.
- (4) For additional information about our SEC PV-10 and standardized measure, please read footnote 4 to the table above under Summary Historical and Pro Forma Reserves and Production Data SEC Case Reserves.

Summary Historical and Pro Forma Production Data

	Year Ended December 31, 2012			Six Months Ended June 30, 2013		
	Historical Gastar USA	Pro Forma Gastar USA Prior to WEHLU Acquisition	Pro Forma Gastar USA After WEHLU Acquisition	Historical Gastar USA	Pro Forma Gastar USA Prior to WEHLU Acquisition	Pro Forma Gastar USA After WEHLU Acquisition
Production:						
Natural gas (MMcf)	10,564	6,970	7,904	6,391	5,085	5,538
Condensate and oil (MBbls)	177	240	557	205	223	418
NGLs (MBbls)	270	292	438	210	217	296
Total production (MMcfe)	13,247	10,163	13,870	8,884	7,723	9,822
(MBoe)	2.2	1.7	2.3	1.5	1.3	1.6
Daily production:						
Natural gas (MMcf/d)	28.9	19.0	21.6	35.3	28.1	30.6
Condensate and oil (MBbls/d)	0.5	0.7	1.5	1.1	1.2	2.3
NGLs (MBbls/d)	0.7	0.8	1.2	1.2	1.2	1.6
Total production (MMcfe/d)	36.2	27.8	37.9	49.1	42.7	54.3
Revenues (in thousands):						
Natural gas	\$ 33,829	\$ 27,907	\$ 30,224	\$ 23,277	\$ 19,872	\$ 21,522
Condensate and oil	12,377	18,005	47,034	14,143	15,703	33,623
NGLs	9,300	9,981	14,515	6,922	7,129	9,713
Unrealized hedge loss	(5,566)	(5,566)	(5,566)	(2,152)	(2,152)	(2,152)
Total revenues	\$ 49,940	\$ 50,327	\$ 86,207	\$ 42,190	\$ 40,552	\$ 62,706
Average sales prices (including the impact of realized hedging):						
Natural gas (\$/Mcf)	\$ 3.20	\$ 4.00	\$ 3.82	\$ 3.64	\$ 3.91	\$ 3.89
Condensate and oil (\$/Bbl)	70.01	75.08	84.51	68.93	70.42	80.41
NGLs (\$/Bbl)	34.40	34.16	33.16	32.92	32.91	32.83
Average sales price (\$/Mcf)	4.19	5.50	6.62	4.99	5.53	6.60
Average sales price (\$/Boe)	25.14	33.00	39.70	29.95	33.18	39.62

Table of Contents

RISK FACTORS

An investment in our securities involves a high degree of risk. You should carefully consider the following risks and all of the other information included or incorporated by reference in this prospectus supplement, including but not limited to the risk factors included in the Annual Report on Form 10-K for the year ended December 31, 2012, as amended, jointly filed by Parent and Gastar USA with the SEC, the Quarterly Reports on Form 10-Q for the quarterly periods ended March 31, 2013 and June 30, 2013, jointly filed by Parent and Gastar USA, Current Reports on Form 8-K filed from time to time by Parent and Gastar USA, and the accompanying prospectus before making an investment decision. In evaluating us, the factors described below should be considered carefully. The occurrence of one or more of these events could significantly and adversely affect our business, prospects, financial condition, results of operations and cash flows. The trading price of our Series B Preferred Stock could decline due to any of these risks, and you may lose all or part of your investment.

Risks Relating to the pending WEHLU Acquisition

We may not complete the pending WEHLU Acquisition.

The closing of this offering is not subject to a condition that we successfully complete the pending WEHLU Acquisition. There can be no assurance that the pending WEHLU Acquisition will be completed or, if completed, that it will be completed on the terms described in this prospectus supplement.

The representation, warranties and indemnifications of Lime Rock contained in the purchase and sale agreement are limited; as a result, the assumptions on which our estimates of future results of the WEHLU Assets have been based may prove to be incorrect in a number of material ways, resulting in our not realizing the expected benefits of the pending WEHLU Acquisition. The pending WEHLU Acquisition could also expose us to additional unknown and contingent liabilities.

The representations and warranties of Lime Rock contained in the purchase and sale agreement are limited. In addition, the purchase and sale agreement provides limited indemnities. As a result, the assumptions on which our estimates of future results of the WEHLU Assets have been based may prove to be incorrect in a number of material ways, resulting in our not realizing our expected benefits of the pending WEHLU Acquisition, including anticipated increased cash flow.

The pending WEHLU Acquisition could expose us to additional unknown and contingent liabilities. We have performed a certain level of diligence in connection with the pending WEHLU Acquisition and have attempted to verify the representations made by Lime Rock, but there may be unknown and contingent liabilities related to the assets to be acquired in the pending WEHLU Acquisition of which we are unaware. Lime Rock has agreed to indemnify us for losses or claims relating to the assets to be acquired in the pending WEHLU Acquisition and otherwise subject to the limitations described in the purchase and sale agreement. We could be liable for unknown obligations relating to the assets to be acquired in the pending WEHLU Acquisition for which indemnification is not available, which could materially adversely affect our business, results of operations and cash flow.

Risks Relating to This Offering

The Series B Preferred Stock is a new issuance of securities and does not have an established trading market, which may negatively affect its market value and your ability to transfer or sell your shares; the Series B Preferred Stock has no stated maturity date.

The shares of Series B Preferred Stock are a new issuance of securities with no established trading market. Since the securities have no stated maturity date, investors seeking liquidity will be limited to selling their shares in the secondary market. Subject to issuance, we anticipate that our shares of Series B Preferred Stock will be approved for listing on the NYSE MKT LLC under the symbol GST.PR.B. An active trading market for the

Table of Contents

shares may not develop or, even if it develops, may not last, in which case the trading price of the shares could be adversely affected and your ability to transfer your shares of Series B Preferred Stock will be limited.

The market value of the Series B Preferred Stock could be adversely affected by various factors.

The trading price of the shares of Series B Preferred Stock may depend on many factors, including:

market liquidity;

prevailing interest rates;

the market for similar securities;

general economic conditions; and

our financial condition, performance and prospects.

For example, higher market interest rates could cause the market price of the Series B Preferred Stock to decrease.

Gastar USA could be prevented from paying cash dividends on the Series B Preferred Stock.

Although dividends on the Series B Preferred Stock are cumulative and arrearages will accrue until paid, you will only receive cash dividends on the Series B Preferred Stock if Gastar USA has funds legally available for the payment of dividends and such payment is not restricted or prohibited by law, the terms of any Senior Shares or the terms of any of its agreements, including the documents governing its indebtedness.

Under Delaware law, cash dividends on capital stock may only be paid from surplus or, if there is no surplus, from the corporation's net profits for the then-current or the preceding fiscal year. Unless Gastar USA operates profitably, its ability to pay cash dividends on the Series B Preferred Stock would require the availability of adequate surplus, which is defined as the excess, if any, of net assets (total assets less total liabilities) over capital. Gastar USA's business may not generate sufficient cash flow from operations to enable us to pay dividends on the Series B Preferred Stock when payable. Further, even if adequate surplus is available to pay cash dividends on the Series B Preferred Stock, Gastar USA may not have sufficient cash to pay dividends on the Series B Preferred Stock.

Gastar USA's revolving credit facility, which is guaranteed by Gastar USA's subsidiaries, contains covenants that prohibit the Gastar entities from (i) paying cash dividends or dividends paid in equity interests if a default or an event of default exists at the time of, or would be caused by, such payment and (ii) paying any cash dividends in excess of \$20 million in the aggregate each calendar year to the holders of Series A Preferred Stock and Series B Preferred Stock. As such, Gastar USA could become unable, on a temporary or permanent basis, to pay dividends, either in cash or in kind, on the shares of Series B Preferred Stock. Future debt, contractual covenants or arrangements that Gastar USA may enter into in the future may also restrict or prevent future dividend payments.

The payment of any future dividends will be determined by the Gastar USA Board in light of conditions then existing, including earnings, financial condition, capital requirements, restrictions in financing agreements, business conditions and other factors affecting us as a whole. Accordingly, there is no guarantee that we will be able to pay any dividends on the Series B Preferred Stock.

As a holding company, Parent depends on the ability of its subsidiaries to transfer funds to it to meet its debt service and other obligations, including with respect to its guarantee of the Series B Preferred Stock.

Parent is a holding company and has substantially no direct operations or significant assets, other than the equity interest of its subsidiaries. Accordingly, Parent depends on its subsidiaries, including Gastar USA, its

Table of Contents

primary operating subsidiary, for dividends and other payments to generate the funds necessary to meet its debt service and other obligations. Parent's ability to satisfy its obligations under the guarantee of the Series B Preferred Stock will depend on the receipt of distributions and other payments from Gastar USA and its subsidiaries. The ability of Gastar USA and its subsidiaries to pay dividends, interest payments, loans and other distributions to Parent is limited by the terms of the revolving credit facility, as well as by such subsidiaries' operating results.

Your rights with respect to the payment of dividends are limited. In the event Gastar USA is unable to pay cash dividends, you may receive additional Series B Preferred Stock, Gastar USA common stock or Parent Common Stock.

Your rights with respect to the payment of dividends are limited. In the event Gastar USA is unable to pay cash dividends, the dividends will be paid in shares of additional Series B Preferred Stock, Gastar USA common stock or Parent Common Stock. Although the payment of such equity interests is designed to be equivalent to the value of the cash dividend then owed, the value of any such equity interests issued in lieu of cash may not be sufficient to adequately compensate you for your investment. In the event Gastar USA were to pay dividends in additional Series B Preferred Stock, Gastar USA common stock or Parent Common Stock rather than cash, the price of our Series B Preferred Stock may be depressed at such time. Additional issuances and sales of Series B Preferred Stock, Gastar USA common stock or Parent Common Stock, or the perception that such issuances and sales could occur, may cause prevailing market prices for such securities to decline.

In order to issue shares of common stock of Gastar USA, such shares would need to be registered with and approved for listing on the NYSE MKT LLC. There can be no assurance that Gastar USA would be successful in registering such shares on the NYSE MKT LLC. Additionally, if listed on the NYSE MKT LLC, Gastar USA's ability to pay dividends on the Series B Preferred Stock in shares of Gastar USA common stock would be limited by Section 713(a) of the NYSE MKT LLC Company Guide (Section 713). Section 713 requires a listed company to obtain shareholder approval in order to issue shares of common stock representing more than 20% of its outstanding shares immediately prior to such issuance, subject to certain exceptions listed in Section 710(b) of the NYSE MKT LLC Company Guide. Furthermore, Gastar USA must obtain the consent of Parent in order to use shares of the Parent Common Stock as payment of dividends on the Series B Preferred Stock and Section 713 would likewise limit the Parent's ability to issue shares of Parent Common Stock in payment of dividends.

The Series B Preferred Stock has not been rated and our payment obligations with respect to the shares of Series B Preferred Stock, including under the Parent guarantee, will be effectively subordinated to all of the existing and future debt of Gastar USA and Parent.

The Series B Preferred Stock has not been rated by any nationally recognized statistical rating organization. In addition, with respect to dividend rights and rights upon our liquidation, winding-up or dissolution, the Series B Preferred Stock will be subordinated to all of Gastar USA's existing and future debt and all future capital stock designated as senior to the Series B Preferred Stock. Similarly, the guarantee of the Series B Preferred Stock will effectively rank junior to any existing and future debt of Parent. As of June 30, 2013, the total outstanding indebtedness of Gastar USA was approximately \$200.0 million. Parent has no outstanding indebtedness. We may incur additional indebtedness in the future, including the issuance of senior notes, to finance potential acquisitions, including the pending WEHLU Acquisition, or the development of new properties and the terms of the Series B Preferred Stock do not require us to obtain the approval of the holders of the Series B Preferred Stock prior to incurring additional indebtedness. As a result, our existing and future indebtedness may be subject to restrictive covenants or other provisions that may prevent or otherwise limit our ability to make dividend or liquidation payments on the Series B Preferred Stock. Upon our liquidation, our obligations to our creditors would rank senior to the Series B Preferred Stock and would be required to be paid before any payments could be made to holders of the Series B Preferred Stock.

Table of Contents

A court could cancel the Series B Preferred Stock or the guarantee of Parent under fraudulent conveyance laws or certain other circumstances.

Our issuance of the Series B Preferred Stock by our current and future subsidiaries and Parent may be subject to review under federal or state fraudulent transfer or similar laws.

Gastar USA's obligations with respect to the Series B Preferred Stock are guaranteed by Parent. The Parent guarantee may be subject to legal challenge and review based on various laws and defenses relating to fraudulent conveyance or transfer, voidable preferences, financial assistance, corporate purpose, capital maintenance, the payment of legally sufficient consideration and other laws and defenses affecting the rights of creditors generally. The laws of various jurisdictions, including the jurisdictions in which Parent is organized and those in which Parent owns assets or otherwise conducts business, may be applicable to the Parent guarantee. Accordingly, there can be no assurance that a third party creditor or bankruptcy trustee would not challenge the Parent guarantee in court and prevail in whole or in part.

Although laws differ among various jurisdictions, in general, under fraudulent conveyance or transfer laws, a court could void or subordinate the Series B Preferred Stock or the Parent guarantee if it found that:

Gastar USA or Parent intended to hinder, delay or defraud our creditors;

Gastar USA or Parent knew or should have known that the transactions were to the detriment of our creditors;

the transactions had the effect of giving a preference to one creditor or class of creditors over another; or

Gastar USA or Parent did not receive fair consideration and reasonably equivalent value for incurring such indebtedness or guarantee obligations and Gastar USA or Parent (i) were insolvent or rendered insolvent by reason of the incurrence of such indebtedness or obligations, (ii) were engaged or about to engage in a business or transaction for which Gastar USA's or Parent's remaining assets constituted unreasonably insufficient capital or (iii) intended to incur, or believed that Gastar USA or Parent would incur, debts beyond our or their ability to pay as they mature.

The measure of insolvency for purposes of fraudulent transfer laws varies depending on the law applied. Generally, however, an entity would be considered insolvent if:

the sum of its debts, including contingent liabilities, was greater than the fair saleable value of all of its assets;

the present fair saleable value of its assets was less than the amount that would be required to pay its existing debts and liabilities, including contingent liabilities, as they become absolute and mature; or

it could not or would not pay its debts as they become due.

There can be no assurance that a court would reach the conclusion that, upon the issuance of the Series B Preferred Stock and the Parent guarantee, Gastar USA and Parent will be solvent, will have sufficient capital to carry on their business and will be able to pay their debts as they mature. If a court were to find that the issuance of the Series B Preferred Stock and the Parent guarantee was a fraudulent conveyance or transfer or constituted an illegal preference, the court could void the payment obligations under the Series B Preferred Stock and the Parent guarantee, further subordinate the Series B Preferred Stock or the Parent guarantee to presently existing and future indebtedness of Gastar USA or Parent, or require the holders of Series B Preferred Stock to repay any amounts received with respect to the Series B Preferred Stock or the Parent guarantee.

Edgar Filing: Gastar Exploration USA, Inc. - Form 424B5

It is possible that a creditor of Parent, or a bankruptcy trustee in the case of a bankruptcy of Parent, may contest the validity or enforceability of the Parent guarantee and that a court may determine that the Parent guarantee should be limited or voided. To the extent that the Parent guarantee is determined to be void or unenforceable, or the agreed limitations on the guaranteed obligations become applicable, the Series B Preferred Stock would not have a claim under the Parent guarantee and would accordingly be effectively subordinated to all other liabilities of Parent.

S-40

Table of Contents

The guarantee by Parent may terminate prior to the repayment of the Series B Preferred Stock.

Gastar USA's obligations with respect to the Series B Preferred Stock are guaranteed by Parent to the extent set forth in the Guarantee Agreement. Under the terms of the Guarantee Agreement, the Parent guarantee will terminate if it no longer holds a majority of the voting equity of Gastar USA. If Parent sells all or a portion of its Gastar USA common stock, if Gastar USA issues voting equity to a third party or if there is some reorganization or other event which causes Parent to no longer hold a majority of the voting equity of Gastar USA, then the holders of the Series B Preferred Stock will no longer have the benefit of the Parent guarantee.

Investors should not expect us to redeem the Series B Preferred Stock on the date the Series B Preferred Stock becomes redeemable by the Company or on any particular date afterwards.

The shares of Series B Preferred Stock have no maturity or mandatory redemption date and are not redeemable at the option of investors under any circumstances. By its terms, the Series B Preferred Stock may be redeemed by us at our option either in whole or in part at any time on or after [redacted], 2018, except upon the occurrence of a Change of Ownership or Control. Any decision we may make at any time to redeem the Series B Preferred Stock will depend upon, among other things, our evaluation of our capital position, including the composition of our stockholders' equity and general market conditions at that time.

You may not be able to exercise conversion rights upon a change of control. If exercisable, the change of control conversion rights may not adequately compensate you and may make it more difficult for a party to take over our company or discourage a party from taking over our company.

Upon the occurrence of a change of control (as described herein) after the date of consummation of the Reorganization Transactions after which neither our common stock nor the common securities of the acquiring or surviving entity (or ADRs representing such securities) is listed on a National Exchange, holders of the Series B Preferred Stock will have the right (unless, (i) prior to the Change of Control Conversion Date, we have provided or provide notice of our election to redeem the Series B Preferred Stock, in which case, holders will have the right only with respect to shares of Series B Preferred Stock that are not selected for redemption unless we default in payment of the redemption price or (ii) upon the occurrence of a Change of Ownership or Control the common shares of Gastar USA are not listed on a National Exchange, in which case, holders shall not have the right to convert their shares of Series B Preferred Stock into our common stock or the common securities of the acquiring or surviving entity) to convert some or all of their Series B Preferred Stock into shares of our common stock (or equivalent value of alternative consideration).

Notwithstanding that we generally may not redeem the Series B Preferred Stock prior to [redacted], 2018, we have a right to redeem the Series B Preferred Stock in the event of such a change of control, and holders of the Series B Preferred Stock will not have the right to convert any shares that we have elected to redeem prior to the Change of Control Conversion Date unless we default in payment of the redemption price. See Description of the Series B Preferred Stock Conversion Rights, Description of the Series B Preferred Stock Optional Redemption and Description of the Series B Preferred Stock Special Redemption upon Change of Ownership or Control.

If we do not elect to redeem the Series B Preferred Stock prior to the Change of Control Conversion Date, then upon an exercise of the conversion rights provided to the holders of our Series B Preferred Stock, the holders will be limited to a maximum number of shares of our common stock equal to the Share Cap multiplied by the number of shares of Series B Preferred Stock converted. If the Common Stock Price is less than \$ [redacted] per share (which is approximately 50% of the per-share closing sale price of Parent's common stock reported on the NYSE MKT LLC on [redacted], 2013), subject to adjustment, the holders will receive a maximum of [redacted] shares of our common stock per share of Series B Preferred Stock, which may result in a holder receiving a value that is less than the liquidation preference of the Series B Preferred Stock.

Table of Contents

In addition, the type of change of control transaction in which the conversion rights apply, and in which we have the right to redeem the Series B Preferred Stock, is very limited. A change of control shall be deemed to have occurred when, after any share of Series B Preferred Stock is originally issued by Gastar USA, each of the following has occurred and is continuing: (1) (i) a person or group (within the meaning of Sections 13(d) and 14(d) of the Exchange Act) becomes the beneficial owner (as defined in Rules 13d-3 and 13d-5 under the Exchange Act, except that a person or group shall be deemed to have beneficial ownership of all shares of voting stock that such person or group has the right to acquire regardless of when such right is first exercisable), directly or indirectly, of voting stock representing more than 50% of the total voting power of the voting stock of either Gastar USA or the Parent; (ii) either Gastar USA or the Parent sells, transfers or otherwise disposes of all or substantially all of its assets; or (iii) the consummation of a merger or share exchange of either Gastar USA or the Parent with another entity where the applicable entity's stockholders immediately prior to the merger or share exchange would not beneficially own, immediately after the merger or share exchange, shares representing 50% or more of the outstanding voting stock of the entity issuing cash or securities in the merger or share exchange (without consideration of the rights of any class of stock to elect directors by a separate group vote), or where members of the Board of Directors of the applicable entity immediately prior to the merger or share exchange would not immediately after the merger or share exchange constitute a majority of the board of directors of the corporation issuing cash or securities in the merger or share exchange; and (2) following the closing of any transaction referred to in the bullet point above, neither we nor the acquiring or surviving entity has a class of common stock (or ADRs representing such securities) listed on a National Exchange. Notwithstanding the foregoing, neither the Delaware Migration nor the Downstream Merger shall constitute a Change of Ownership or Control.

In addition, the change of control conversion feature of the Series B Preferred Stock may have the effect of discouraging a third party from making an acquisition proposal for our company or of delaying, deferring or preventing certain change of control transactions of our company under circumstances that otherwise could provide the holders of our common stock and Series B Preferred Stock with the opportunity to realize a premium over the then-current market price or that stockholders may otherwise believe is in their best interests.

Holders of Series B Preferred Stock have extremely limited voting rights.

Except as expressly stated in the certificate of designations governing the Series B Preferred Stock, as a holder of Series B Preferred Stock, you will not have any relative, participating, optional or other special voting rights and powers and your approval will not be required for the taking of any corporate action. For example, your approval would not be required for any merger or consolidation in which we are involved or sale of all or substantially all of our assets except to the extent that such transaction materially adversely changes the express powers, preferences, rights or privileges of the holders of Series B Preferred Stock. None of the provisions relating to the Series B Preferred Stock contains any provisions affording the holders of the Series B Preferred Stock protection in the event of a highly leveraged or other transaction, including a merger or the sale, lease or conveyance of all or substantially all of our assets or business, that might adversely affect the holders of the Series B Preferred Stock, so long as the terms and rights of the holders of Series B Preferred Stock are not materially and adversely changed. See Description of Series B Preferred Stock Voting Rights on page S-58 of this prospectus supplement.

The issuance of future offerings of preferred stock may adversely affect the value of the Series B Preferred Stock.

Gastar USA's certificate of incorporation currently authorizes the issuance of up to 40,000,000 shares of preferred stock in one or more series on terms that may be determined at the time of issuance by the Gastar USA Board. Upon the completion of the offering described in this prospectus supplement, Gastar USA may sell additional shares of Series B Preferred Stock on terms that may differ from those described in this prospectus supplement. Accordingly, Gastar USA may issue additional shares of Series A Preferred Stock, Series B Preferred Stock and/or other classes of preferred shares that would rank on parity with or senior to the Series A Preferred Stock and the Series B Preferred Stock as to dividend rights or rights upon liquidation, winding up or

Table of Contents

dissolution. The issuance of additional preferred shares on parity with or, with the consent of the holders of the Series A Preferred Stock and the Series B Preferred Stock, senior to the Series A Preferred Stock and the Series B Preferred Stock would dilute the interests of the holders of the Series A Preferred Stock and the Series B Preferred Stock and any issuance of preferred stock that is senior to the Series A Preferred Stock and the Series B Preferred Stock could affect Gastar USA's ability to pay dividends on, redeem or pay the liquidation preference on the Series B Preferred Stock.

You may be required to use other sources of funds to pay income taxes in respect of dividends received, or deemed to be received, on the Series B Preferred Stock in certain circumstances.

If we are required to pay dividends on the Series B Preferred Stock in additional shares of Series B Preferred Stock or in shares of Parent's common stock and this stock is not marketable at such time, you will be required to satisfy your income tax liability with respect to such dividends from other sources. For additional information concerning these matters, see Material U.S. Federal Income Tax Consequences beginning on page S-64 of this prospectus supplement.

Corporate Holders of the Series B Preferred Stock may be unable to use the dividends-received deduction.

Distributions paid to corporate U.S. holders of the Series B Preferred Stock will be eligible for the dividends-received deduction only if we have current or accumulated earnings and profits, as determined for U.S. federal income tax purposes. As of the date of this prospectus supplement, Gastar USA does not believe it has any accumulated earnings and profits for U.S. federal income tax purposes. Additionally, we may not have sufficient current earnings and profits during future fiscal years for the distributions on the Series B Preferred Stock to qualify as dividends for U.S. federal income tax purposes. If a distribution with respect to our Series B Preferred Stock fails to qualify as a dividend, U.S. corporate holders would be unable to use the dividends-received deduction. For additional information, see Material U.S. Federal Income Tax Consequences beginning on page S-64 of this prospectus supplement.

Non-U.S. holders may be subject to U.S. income tax with respect to gain on disposition of their Series B Preferred Stock.

If Gastar USA is a United States real property holding corporation at any time within the five-year period preceding a disposition of Series B Preferred Stock or our common stock received with respect to the Series B Preferred Stock by a non-U.S. holder or the holder's holding period of the stock disposed of, whichever period is shorter, such non-U.S. holder may be subject to U.S. federal income tax with respect to gain on such disposition. Gastar USA believes that it is a United States real property holding corporation. However, so long as the Series B Preferred Stock and our common stock are regularly traded on an established securities market, a non-U.S. holder will not be subject to U.S. federal income tax on the disposition of the Series B Preferred Stock or our common stock if it holds and has held (during the shorter of the five-year period immediately preceding the date of disposition or the holder's holding period) not more than 5% of the total outstanding shares of the Series B Preferred Stock or our common stock, as the case may be. For additional information concerning these matters, see Material U.S. Federal Income Tax Consequences beginning on page S-64 of this prospectus supplement.

The Series B Preferred Stock is not convertible except in limited circumstances and purchasers may not realize a corresponding benefit if we prosper.

Except upon the occurrence of a change of control (as defined herein), the Series B Preferred Stock is not convertible into Gastar USA's common stock and earns dividends at a fixed rate. Accordingly, the market value of the Series B Preferred Stock may depend on dividend and interest rates for other preferred stock, commercial paper and other investment alternatives and Gastar USA's actual and perceived ability to pay dividends on, and in the event of dissolution satisfy the liquidation preference with respect to, the Series B Preferred Stock. Moreover, Gastar USA's right to redeem the Series B Preferred Stock on or after _____, 2018 or in the event of a change in control could impose a ceiling on its value.

Table of Contents

USE OF PROCEEDS

We estimate that, in the event that shares of Series B Preferred Stock offered by this prospectus supplement are sold at \$25.00 per share, we will receive net proceeds of approximately \$ million (or approximately \$ million if the underwriters' option is exercised in full) from the sale of the Series B Preferred Stock offered by this prospectus supplement, after deducting the underwriting commissions and estimated expenses of this offering payable by us.

We intend to use the net proceeds from this offering, including any proceeds from shares issued if the underwriters exercise their over-allotment option, to partially fund our ongoing capital expenditure program, including a portion of the cost associated with the pending WEHLU Acquisition if such acquisition is completed. We intend to finance the remainder of the purchase price with cash on hand, borrowings under our revolving credit facility or from a possible issuance of senior notes. Should the WEHLU Acquisition not close, we intend to use the proceeds to accelerate our drilling program, primarily in the Hunton Limestone area. See Prospectus Supplement Summary Recent Developments Pending WEHLU Acquisition. The precise amount and timing of the application of such proceeds will depend upon our funding requirements and the availability and cost of other funds.

S-44

Table of Contents**CAPITALIZATION**

The following table sets forth consolidated capitalization of Gastar Exploration USA, Inc. as of June 30, 2013:

on an actual basis;

on an as adjusted basis to give effect to the:

AMI Election Disposition;

Newfield Disposition;

East Texas Disposition; and

the completion of this offering and the application of the net proceeds therefrom and pro forma cash and cash equivalents to fund the WEHLU Acquisition purchase price (see "Use of Proceeds" for other sources of funds for the WEHLU Acquisition and the alternate use of net proceeds from this offering should the WEHLU Acquisition not close).

This table should be read in conjunction with, and is qualified in its entirety by reference to, our historical consolidated financial statements and related notes, our pro forma combined financial statements and related notes, "Management's Discussion and Analysis of Financial Condition and Results of Operations" and other financial information included in Parent's and Gastar USA's Annual Report on Form 10-K for the year ended December 31, 2012, as amended, and the other information that Parent and/or Gastar USA has filed with the SEC and incorporated by reference herein. The table below should also be read in conjunction with "Use of Proceeds." See "Where You Can Find More Information" beginning on page S-76 of this prospectus supplement.

	As of June 30, 2013	
	Actual (Unaudited)	As Adjusted (Unaudited)
	(In Thousands)	
Cash and cash equivalents (1)	\$ 10,760	\$
Debt:		
Revolving credit facility	\$	\$
8 ⁵ / ₈ % senior secured notes due 2018	200,000	200,000
Total debt	\$ 200,000	\$ 200,000
Stockholders' equity:		
Cumulative Preferred Stock, par value \$0.01 per share; 10,000,000 shares authorized (2)		
Series A Cumulative Preferred Stock; 3,951,254 shares issued and outstanding	76,774	76,774
Series B Cumulative Preferred Stock offered hereby; on an actual basis: no shares issued and outstanding; as adjusted for this offering: shares issued and outstanding		
Common stock, no par value; 1,000 shares authorized; 750 shares issued and outstanding (3)	225,431	225,431
Accumulated deficit	(170,791)	(170,791)
Total shareholders' equity	131,414	

Total capitalization	\$ 331,414	\$
-----------------------------	------------	----

- (1) Actual cash balance on the closing date will differ from these amounts.
- (2) On October 25, 2013, Gastar USA amended and restated its certificate of incorporation to, among other things, increase the number of authorized shares of preferred stock to 40,000,000.
- (3) Parent owns all 750 issued and outstanding shares of our common stock. In the event that the Downstream Merger described elsewhere in this prospectus supplement is consummated, shares of Parent's common Stock are expected to be exchanged for the right to receive an equal number of shares of our common stock. See Prospectus Supplement Summary Corporate Reorganization.

S-45

Table of Contents**RATIO OF EARNINGS TO COMBINED FIXED CHARGES AND PREFERRED STOCK DIVIDENDS**

The following table sets forth our historical earnings to combined fixed charges and preferred stock dividends for Gastar Exploration USA, Inc. for the periods indicated.

	Year Ended December 31,					Pro Forma		
	2008	2009	2010	2011	2012	Six Months Ended June 30, 2013	Year Ended December 31, 2012	Six Months Ended June 30, 2013
Ratio of Earnings to Combined Fixed Charges and Preferred Stock Dividends (1)		4.8x				5.9x		3.5x

- (1) The ratio of earnings to fixed charges and preferred stock dividends was less than one-to-one for the years ended December 31, 2008, 2010, 2011 and 2012. Additionally, earnings of \$12.5 million, \$12.0 million, \$1.1 million and \$154.2 million, respectively, would have been needed to have a one-to-one ratio of earnings to fixed charges and preferred stock dividends for those periods. On a pro forma basis, the ratio of earnings to fixed charges was less than one-to-one for the year ended December 31, 2012. Additionally, earnings of \$163.5 million would have been needed to have a one-to-one ratio of earnings to fixed charges and preferred stock dividends for the pro forma year ended December 31, 2012.

Table of Contents

SELECTED HISTORICAL CONSOLIDATED FINANCIAL DATA

The following tables set forth selected historical consolidated financial data for the years ended December 31, 2010, 2011 and 2012 and the six months ended June 30, 2012 and 2013. The annual financial data was derived from our audited consolidated financial statements and the notes thereto incorporated by reference in this prospectus supplement. The data for the six months ended June 30, 2012 and 2013 was derived from our unaudited condensed consolidated financial statements incorporated by reference in this prospectus supplement. This data should be read in conjunction with, and is qualified in its entirety by reference to, Management's Discussion and Analysis of Financial Condition and Results of Operations and our financial statements and the notes thereto incorporated by reference in this prospectus supplement.

S-47

Table of Contents

The information in the following table is only a summary. For more information that will help you better understand the summary data, you should read this financial data in conjunction with Management's Discussion and Analysis of Financial Condition and Results of Operations and the financial statements and related notes and other financial information included in Parent's and Gastar USA's Annual Report on Form 10-K for the year ended December 31, 2012, as amended, and the other information that Parent and/or Gastar USA has filed with the SEC and incorporated by reference herein. See "Where You Can Find More Information" beginning on page S-76 of this prospectus supplement. Our historical results of operations are not necessarily indicative of results to be expected for any future periods.

	Year Ended December 31,			Six Months Ended June 30,	
	2010	2011	2012	2012	2013
	(In Thousands)				
Statements of Operations Data:					
Revenues					
Natural gas	\$ 30,811	\$ 33,391	\$ 33,829	\$ 13,593	\$ 23,277
Condensate and oil	742	3,416	12,377	4,291	14,143
NGLs		1,092	9,300	3,911	6,922
Unrealized hedge gain (loss)	11,214	2,336	(5,566)	1,280	(2,152)
Total revenues	42,767	40,235	49,940	23,025	42,190
Expenses					
Production taxes	370	620	2,269	934	1,793
Lease operating expenses	6,676	8,629	6,174	3,974	4,006
Transportation, treating and gathering	4,654	4,501	4,965	2,410	2,288
Depreciation, depletion and amortization	9,306	15,216	25,424	12,609	12,961
Impairment of natural gas and oil properties			150,787	72,733	
Accretion of asset retirement obligation	396	534	388	183	216
General and administrative expense	13,468	10,434	10,732	5,624	7,397
Litigation settlement expense	21,744		1,250	1,250	1,000
Total expense	56,614	39,934	201,989	99,717	29,661
Income (loss) from operations	(13,847)	301	(152,049)	(76,642)	12,529
Other income (expense)					
Gain on acquisition of assets at fair value					43,712
Interest expense	(97)	(112)	(271)	(57)	(4,154)
Investment and other (expense) income	1,238	95	(4)	1	2
Foreign transaction (loss) gain	354	1	2	1	8
(Loss) income before provision for income taxes	(12,352)	285	(152,322)	(76,697)	52,081
Provision for income tax (benefit)	(804)				
Net (loss) income	(11,548)	285	(152,322)	(76,697)	52,081
Dividend on Preferred Stock		(1,024)	(7,077)	(2,963)	(4,264)
Net (loss) income attributable to common stockholder	\$ (11,548)	\$ (739)	\$ (159,399)	\$ (79,660)	\$ 47,817
Balance Sheet Data:					
Cash and cash equivalents	\$ 7,401	\$ 10,595	\$ 8,892	\$ 7,961	\$ 10,760
Property and equipment, net	215,114	285,739	256,250	269,880	419,767
Total assets	247,096	334,267	289,879	316,816	450,076
Total long-term debt		30,000	98,000	47,000	194,609
Total stockholders' equity	181,961	207,613	95,464	164,402	131,414

Table of Contents

DESCRIPTION OF SERIES B PREFERRED STOCK

The terms of the Series B Preferred Stock will be contained in a certificate of designation that will amend Gastar USA's certificate of incorporation. The following description is a summary of the material provisions of the Series B Preferred Stock and the certificate of designation. It does not purport to be complete. You are strongly encouraged to read the certificate of designation because it, and not this description, defines your rights as a holder of shares of Series B Preferred Stock. We will include the certificate of designation in a Current Report on Form 8-K that we will file with the SEC.

General

The Gastar USA Board is authorized to cause Gastar USA to issue, from its authorized but unissued shares of preferred stock, one or more series of preferred stock, to establish from time to time the number of shares to be included in each such series, and to fix the designation and any preferences, conversion and other rights, voting powers, restrictions, limitations as to dividends, qualifications and terms and conditions of redemption of the shares of each such series. Pursuant to this authority, prior to the closing of this offering, the Gastar USA Board will establish the terms of the Series B Preferred Stock, which are described below.

When issued, the Series B Preferred Stock will be validly issued, fully paid and non-assessable. The holders of the Series B Preferred Stock will have no preemptive rights with respect to any of Gastar USA's common stock or any securities convertible into or carrying rights or options to purchase any such common stock. The Series B Preferred Stock will not be subject to any sinking fund or other obligation of Gastar USA to redeem or retire the Series B Preferred Stock, but Gastar USA may redeem the Series B Preferred Stock as described below under **Redemption**. Unless redeemed or repurchased by Gastar USA, or converted in the manner described below under **Conversion Right**, the Series B Preferred Stock will have a perpetual term with no maturity.

Under the terms and subject to the conditions contained in the underwriting agreement with the underwriters (see below under the caption **Underwriting**), Gastar USA has agreed to issue and sell to the underwriters, and the underwriters have agreed to purchase, _____ shares of Series B Preferred Stock. The underwriters have an option to purchase a maximum of _____ additional shares of Series B Preferred Stock to cover over-allotments. However, one of the conditions to Gastar USA's obligation to sell any of the shares of Series B Preferred Stock through the underwriters is that, upon the closing of the offering, the shares would qualify for listing on the NYSE MKT LLC. In order to list, the NYSE MKT LLC requires that at least 100,000 shares of Series B Preferred Stock be outstanding and the shares must be held in the aggregate by at least 100 round lot stockholders holding an aggregate of at least \$2,000,000 in shares.

Subject to issuance, Gastar USA anticipates that the shares of Series B Preferred Stock will be approved for listing on the NYSE MKT LLC under the symbol **GST.PR.B**.

The Series B Preferred Stock will be issued and maintained in book-entry form registered in the name of the nominee, The Depository Trust Company, except in limited circumstances. See **Book-Entry Procedures** below.

The transfer agent, registrar and dividend disbursing agent for the Series B Preferred Stock will be American Stock Transfer & Trust Company, LLC.

Parent Guarantee

Parent will fully and unconditionally guarantee the payment of dividends that have been declared by the Gastar USA Board, amounts payable upon redemption or liquidation, dissolution or winding up, and any other amounts due with respect to the Series B Preferred Stock, to the extent described in this prospectus supplement. The Parent guarantee of the Series B Preferred Stock is further described in this prospectus supplement under **Description of Guarantee of Preferred Securities**.

Table of Contents

Ranking

The Series B Preferred Stock will rank: (i) senior to all of Gastar USA's common stock and any other equity securities that it may issue in the future, the terms of which specifically provide that such equity securities rank junior to such Series B Preferred Stock, in each case with respect to payment of dividends and amounts upon liquidation, dissolution or winding up, referred to as Junior Shares; (ii) equal to the Series A Preferred Stock and any shares of equity securities that Gastar USA may issue in the future, the terms of which specifically provide that such equity securities rank on par with such Series B Preferred Stock, in each case with respect to payment of dividends and amounts upon liquidation, dissolution or winding up, referred to as Parity Shares; (iii) junior to all other equity securities issued by Gastar USA, the terms of which specifically provide that such equity securities rank senior to such Series B Preferred Stock, in each case with respect to payment of dividends and amounts upon liquidation, dissolution or winding up (any such issuance would require the affirmative vote of the holders of at least two-thirds of the outstanding shares of Series B Preferred Stock and all other series of Voting Preferred Shares), referred to as Senior Shares; and (iv) junior to all of Gastar USA's existing and future indebtedness.

Dividends

Holders of the Series B Preferred Stock will be entitled to receive, when and as declared by the Gastar USA Board, out of funds legally available for the payment of dividends, cumulative cash dividends at the rate of % per annum of the \$25.00 per share liquidation preference, equivalent to \$ per annum per share.

The offering of Series B Preferred Stock contemplated by this prospectus supplement is the first issuance of shares of this series by Gastar USA. With respect to shares of Series B Preferred Stock issued pursuant to this prospectus supplement or any other shares of Series B Preferred Stock issued in , 2013, Gastar USA anticipates setting the record date for a , 2013 partial dividend period on , 2013, with such initial dividend payment to be made at the end of , 2013. Any other subsequently issued shares of Series B Preferred Stock will become entitled to dividends commencing on the first monthly record date following the date of issuance, and Gastar USA anticipates setting record dates as of the fifteenth of every month with dividends to be paid at the end of the month to such holders of record. Dividends will be payable monthly in arrears on the last day of each calendar month; provided, that if such day falls on a national holiday or a weekend, such dividends will be due and payable on the next business day following such weekend or national holiday, and additional interest will not accrue during this period. Dividends payable on the shares of Series B Preferred Stock for any partial dividend period will be computed on the basis of a 360-day year consisting of twelve 30-day months. Except as discussed above with respect to the , 2013 partial dividend period, Gastar USA will pay dividends to holders of record as they appear in Gastar USA's stockholder records at the close of business on the applicable record date, which will be the 10th day preceding the applicable payment date, or such other date Gastar USA establishes no less than 10 days and no more than 30 days preceding the payment date.

Gastar USA will not declare or pay or set aside for payment any dividend on the shares of Series B Preferred Stock if the terms of any Senior Shares or any of its agreement, including documents relating to its indebtedness, prohibit that declaration, payment or setting aside of funds or provide that the declaration, payment or setting aside of funds is a breach of or a default under that agreement, or if the declaration, payment or setting aside of funds is restricted or prohibited by law. Gastar USA's revolving credit facility, which is guaranteed by Gastar USA's subsidiaries, contains covenants that prohibit the Gastar entities from (i) paying cash dividends or dividends paid in equity interests if a default or an event of default exists at the time of, or would be caused by, such payment and (ii) paying any cash dividends in excess of \$20 million in the aggregate each calendar year to the holders of Series A Preferred Stock and Series B Preferred Stock. As such, Gastar USA could become unable, on a temporary or permanent basis, to pay cash dividends on the shares of Series B Preferred Stock. In addition, future debt, contractual covenants or arrangements Gastar USA may enter into may restrict or prevent future dividend payments. The payment of any future dividends will be determined by the Gastar USA Board in light of conditions then existing, including earnings, financial condition, capital requirements, restrictions in financing agreements, business conditions and other factors affecting us as a whole.

Table of Contents

Notwithstanding the foregoing, however, dividends on the shares of Series B Preferred Stock will accrue regardless of whether: (i) the terms of Gastar USA's Senior Shares or its agreements, including documents relating to its indebtedness, at any time prohibit the current payment of dividends; (ii) Gastar USA has earnings; (iii) there are funds legally available for the payment of such dividends; or (iv) such dividends are declared by the Gastar USA Board. Except as otherwise provided, accrued but unpaid distributions on the shares of Series B Preferred Stock will not bear interest, and holders of the shares of Series B Preferred Stock will not be entitled to any distributions in excess of full cumulative distributions as described above. All dividends on the shares of Series B Preferred Stock will be credited to the previously accrued dividends on the shares of Series B Preferred Stock. Gastar USA will credit any dividends paid on the shares of Series B Preferred Stock first to the earliest accrued and unpaid dividend due.

Gastar USA may not declare or pay any dividends, or set aside any funds for the payment of dividends, on shares of common stock or other Junior Shares, or redeem, purchase or otherwise acquire shares of common stock or other Junior Shares, unless Gastar USA also has declared and either paid or set aside for payment the full cumulative dividends on the shares of Series B Preferred Stock for all past dividend periods.

If Gastar USA does not declare and either pay or set aside for payment the full cumulative dividends on the shares of Series B Preferred Stock and all Parity Shares, the amount which Gastar USA has declared will be allocated pro rata to the shares of Series B Preferred Stock and to each Parity Share so that the amount declared for each share of Series B Preferred Stock and for each Parity Share is proportionate to the accrued and unpaid distributions on those shares.

If Parent and Gastar USA fail to consummate the Reorganization Transactions prior to June 30, 2014, the dividend rate shall increase to the Penalty Rate until such time as the Reorganization Transactions are consummated.

Notwithstanding any provision of the Series B Preferred Stock Certificate of Designation to the contrary, if upon the occurrence of a Change of Ownership or Control the common shares of Gastar USA are not listed on a National Exchange, (i) holders of the Series B Preferred Stock shall not have a Change of Control Conversion Right and (ii) the dividend rate shall increase to the Penalty Rate.

Failure to Make Dividend Payments

If Gastar USA has committed a dividend default by failing to pay the accrued cash dividends on the outstanding Series B Preferred Stock in full for any monthly dividend period within a quarterly period for a total of four consecutive or non-consecutive quarterly periods, then (i) the annual dividend rate on the Series B Preferred Stock will be increased to % per annum (the Penalty Rate), commencing on the first day after the dividend payment date on which such dividend default occurs; (ii) if dividends are not paid in cash, dividends on the Series B Preferred Stock, including all accrued but unpaid dividends, will be paid by issuing to the holders thereof: (a) if Gastar USA's common stock is then listed on a National Exchange and to the extent permitted under the rules of the National Exchange on which such shares are listed, registered common stock of Gastar USA (based on the weighted average daily trading price for the 10 business day period ending on the business day immediately preceding the payment) and cash in lieu of any fractional share or (b) if Gastar USA's common stock is not listed on a National Exchange, either, at Gastar USA's election, (x) additional shares of Series B Preferred Stock with a liquidation value equal to the amount of the dividend and cash in lieu of any fractional share or (y) if the Parent Common Stock is then listed on a National Exchange, Parent owns a majority of the voting stock of Gastar USA and to the extent permitted under applicable securities laws and the rules of the National Exchange on which such shares are listed, freely tradeable shares of Parent Common Stock (based on the weighted average daily trading price for the 10 business day period ending on the business day immediately preceding the payment) and cash in lieu of any fractional shares of Parent Common Stock, provided that the Parent consents to such issuance of freely tradable shares of Parent Common Stock; and (iii) the holders of the

Table of Contents

Series B Preferred Stock will have the voting rights described below. See *Description of Series B Preferred Stock – Voting Rights*. Once all accumulated and unpaid dividends have been paid in full and cash dividends at the Penalty Rate have been paid in full for an additional two consecutive quarters, the dividend rate will be restored to the stated rate and the foregoing provisions will not be applicable, unless Gastar USA again fails to pay any monthly dividend for any future quarter.

Failure to Maintain National Market Listing of Series B Preferred Stock

Once the Series B Preferred Stock is eligible for listing, if Gastar USA fails to maintain the listing of the Series B Preferred Stock on a National Exchange for at least 180 consecutive days, then: (i) the annual dividend rate on the Series B Preferred Stock will be increased to the Penalty Rate commencing on the 181st day, in a period of 181 consecutive days, that the Series B Preferred Stock is not listed on a National Exchange, and (ii) holders of Series B Preferred Stock will have the voting rights described below. See *Voting Rights*. When the Series B Preferred Stock is once again listed on a National Exchange, the dividend rate will be restored to the Stated Rate and the foregoing provisions will not be applicable, unless the Series B Preferred Stock is again no longer listed on a National Exchange.

Liquidation Preference

Upon any voluntary or involuntary liquidation, dissolution or winding up of Gastar USA's affairs, then, before any distribution or payment shall be made to the holders of any common stock or any other class or series of Junior Shares in the distribution of assets upon any liquidation, dissolution or winding up of Gastar USA, the holders of Series B Preferred Stock and all other such classes or series of Parity Shares shall be entitled to receive out of its assets legally available for distribution to stockholders, liquidating distributions in the amount of the liquidation preference, or \$25.00 per share, plus an amount equal to all dividends (whether or not earned or declared) accrued and unpaid thereon. After payment of the full amount of the liquidating distributions to which they are entitled, the holders of Series B Preferred Stock will have no right or claim to any of Gastar USA's remaining assets. In the event that, upon any such voluntary or involuntary liquidation, dissolution or winding up, Gastar USA's available assets are insufficient to pay the amount of the liquidating distributions on all outstanding Series B Preferred Stock and the corresponding amounts payable on all Senior Shares and Parity Shares, then after payment of the liquidating distribution on all outstanding Senior Shares, the holders of the Series B Preferred Stock and all other such classes or series of Parity Shares shall share ratably in any such distribution of assets in proportion to the full liquidating distributions to which they would otherwise be respectively entitled. For such purposes, the consolidation or merger of Gastar USA with or into any other entity, or the sale, lease or conveyance of all or substantially all of Gastar USA's property or business, or a statutory share exchange shall not be deemed to constitute a voluntary or involuntary liquidation, dissolution or winding up of Gastar USA.

The certificate of designation for the Series B Preferred Stock will not contain any provision requiring funds to be set aside to protect the liquidation preference of the Series B Preferred Stock.

Redemption

General

Gastar USA may not redeem the Series B Preferred Stock prior to _____, 2018, except following a *Change of Ownership or Control* as described below in this prospectus supplement. On or after _____, 2018, Gastar USA, at its option, upon not less than 30 nor more than 60 days' written notice, may redeem the Series B Preferred Stock, in whole or in part, at any time or from time to time, for cash at a redemption price of \$25.00 per share, plus all accrued and unpaid dividends thereon to the date fixed for redemption, without interest. If fewer than all of the outstanding shares of Series B Preferred Stock are to be redeemed, the number of shares to be redeemed will be determined by Gastar USA and such shares may be redeemed pro rata from the holders of record of such shares in proportion to the number of such shares held by such holders (with adjustments to avoid redemption of fractional shares) or by lot in an equitable manner determined by Gastar USA.

Table of Contents

Unless full cumulative dividends on all Series B Preferred Stock and all Parity Shares shall have been or contemporaneously are declared and paid or declared and a sum sufficient for the payment thereof set apart for payment for all past dividend periods and the then current dividend period, no Series B Preferred Stock or Parity Shares shall be redeemed unless all outstanding Series B Preferred Stock and Parity Shares are simultaneously redeemed; provided, however, that the foregoing shall not prevent the purchase or acquisition of Series B Preferred Stock or Parity Shares pursuant to a purchase or exchange offer made on the same terms to holders of all outstanding Series B Preferred Stock and Parity Shares. Furthermore, unless full cumulative dividends on all outstanding Series B Preferred Stock and Parity Shares have been or contemporaneously are declared and paid or declared and a sum sufficient for the payment thereof set apart for payment for all past dividend periods and the then current dividend period, Gastar USA shall not purchase or otherwise acquire directly or indirectly any Series B Preferred Stock or Parity Shares (except by conversion into or exchange for Gastar USA's Junior Shares and Parity Shares).

From and after the redemption date (unless Gastar USA defaults in payment of the redemption price), all dividends will cease to accumulate on the Series B Preferred Stock, such shares shall no longer be deemed to be outstanding, and all of your rights as a holder of shares of Series B Preferred Stock will terminate with respect to such shares, except the right to receive the redemption price and all accrued and unpaid dividends up to the redemption date.

Procedures

Notice of redemption will be mailed at least 30 days but not more than 60 days before the redemption date to each holder of record of Series B Preferred Stock at the address shown on Gastar USA's share transfer books. Each notice shall state: (i) the redemption date, (ii) the number of shares of Series B Preferred Stock to be redeemed, (iii) the redemption price of \$25.00 per share of Series B Preferred Stock, plus any accrued and unpaid dividends through the date of redemption, (iv) the place or places where any certificates issued for Series B Preferred Stock other than through the DTC book entry described below, are to be surrendered for payment of the redemption price, (v) that dividends on the Series B Preferred Stock will cease to accrue on such redemption date, and (vi) any other information required by law or by the applicable rules of any exchange upon which the Series B Preferred Stock may be listed or admitted for trading. If fewer than all outstanding shares of Series B Preferred Stock are to be redeemed, the notice mailed to each such holder thereof shall also specify the number of shares of Series B Preferred Stock to be redeemed from each such holder.

At Gastar USA's election, on or prior to the redemption date, Gastar USA may irrevocably deposit the redemption price (including accrued and unpaid dividends) of the Series B Preferred Stock so called for redemption in trust for the holders thereof with a bank or trust company, in which case the notice to holders of the Series B Preferred Stock will (i) state the date of such deposit, (ii) specify the office of such bank or trust company as the place of payment of the redemption price, and (iii) require such holders to surrender any certificates issued for Series B Preferred Stock other than through the DTC book entry described below at such place on or about the date fixed in such redemption notice (which may not be later than such redemption date) against payment of the redemption price (including all accrued and unpaid dividends to the redemption date). Any interest or other earnings earned on the redemption price (including all accrued and unpaid dividends) deposited with a bank or trust company will be paid to Gastar USA. Any monies so deposited that remain unclaimed by the holders of the Series B Preferred Stock at the end of six months after the redemption date will be returned to Gastar USA by such bank or trust company. If Gastar USA makes such a deposit, shares of the Series B Preferred Stock shall not be considered outstanding for purposes of voting or determining shares entitled to vote on any matter on or after the date of such deposit.

On or after the date fixed for redemption, each holder of shares of Series B Preferred Stock that holds a certificate other than through the DTC book entry described below must present and surrender each certificate representing his Series B Preferred Stock to Gastar USA at the place designated in the applicable notice and thereupon the redemption price of such shares will be paid to or on the order of the person whose name appears

Table of Contents

on such certificate representing the Series B Preferred Stock as the owner thereof, each surrendered certificate will be canceled and the shares will be retired and restored to the status of undesignated, authorized shares of preferred stock.

If Gastar USA redeems any shares of Series B Preferred Stock and if the redemption date occurs after a dividend record date and on or prior to the related dividend payment date, the dividend payable on such dividend payment date with respect to such shares called for redemption shall be payable on such dividend payment date to the holders of record at the close of business on such dividend record date, and shall not be payable as part of the redemption price for such shares.

Special Redemption upon Change of Ownership or Control

Following a Change of Ownership or Control (as defined herein) of us or the Parent by a person, entity or group, Gastar USA (or the acquiring entity) will have the option to redeem the Series B Preferred Stock, in whole but not in part, within 90 days after the date on which the Change of Ownership or Control has occurred, for cash, at a redemption price of \$25.00 per share, plus accumulated accrued and unpaid dividends to, but not including, the date of redemption.

A Change of Ownership or Control shall be deemed to have occurred when, after any share of Series B Preferred Stock is originally issued by Gastar USA, each of the following has occurred and is continuing: (1) (i) a person or group (within the meaning of Sections 13(d) and 14(d) of the Exchange Act) becomes the beneficial owner (as defined in Rules 13d-3 and 13d-5 under the Exchange Act, except that a person or group shall be deemed to have beneficial ownership of all shares of voting stock that such person or group has the right to acquire regardless of when such right is first exercisable), directly or indirectly, of voting stock representing more than 50% of the total voting power of the voting stock of either Gastar USA or the Parent; (ii) either Gastar USA or the Parent sells, transfers or otherwise disposes of all or substantially all of its assets; or (iii) of the consummation of a merger or share exchange of either Gastar USA or the Parent with another entity where the applicable entity's stockholders immediately prior to the merger or share exchange would not beneficially own, immediately after the merger or share exchange, shares representing 50% or more of the outstanding voting stock of the entity issuing cash or securities in the merger or share exchange (without consideration of the rights of any class of stock to elect directors by a separate group vote), or where members of the Board of Directors of the applicable entity immediately prior to the merger or share exchange would not immediately after the merger or share exchange constitute a majority of the board of directors of the corporation issuing cash or securities in the merger or share exchange; and (2) following the closing of any transaction referred to above, neither we nor the acquiring or surviving entity has a class of common stock (or ADRs representing such securities) listed on a National Exchange. Notwithstanding the foregoing, neither the Delaware Migration nor the Downstream Merger shall constitute a Change of Ownership or Control.

Conversion Rights

Upon the occurrence of a Change of Ownership or Control after the date of consummation of the Reorganization Transactions, each holder of Series B Preferred Stock will have the right (unless, prior to the Change of Control Conversion Date, we have provided or provide irrevocable notice of our election to redeem the Series B Preferred Stock as described under Optional Redemption, or Special Redemption upon Change of Ownership or Control in which case such holder will only have the right with respect to the shares of Series B Preferred Stock not called for redemption (unless we default in the payment of the redemption price and accumulated and unpaid dividends in which case such holder will again have a conversion right with respect to the shares of Series B Preferred Stock subject to such default in payment)) to convert some or all of the Series B Preferred Stock held by such holder (the Change of Control Conversion Right) on the Change of Control Conversion Date into a number of shares of our common stock per share of Series B Preferred Stock (the Common Stock Conversion Consideration), which is equal to the lesser of:

the quotient obtained by dividing (i) the sum of the \$25.00 liquidation preference per preferred share plus the amount of any accumulated and unpaid dividends (whether or not declared) to, but not

Table of Contents

including, the Change of Control Conversion Date (unless the Change of Control Conversion Date is after a record date for any Series B Preferred Stock dividend payment and prior to the corresponding Series B Preferred Stock dividend payment date, in which case no additional amount for such accumulated and unpaid dividend will be included in this sum) by (ii) the Common Stock Price (such quotient, the Conversion Rate); and

the Share Cap (assuming a ratio of one share of common stock of Gastar USA is issued in the Downstream Merger for each then outstanding common share of Parent, provided, however, that if pursuant to the terms of the Downstream Merger the ratio of shares of new common stock of Gastar USA issued to the holders of common shares of Parent in exchange therefore is other than one share of common stock of Gastar USA for each common share of Parent, the Share Cap shall be the number of shares of common stock of Gastar USA equal to the product obtained by multiplying (i) the Share Cap per share in effect immediately prior to the Downstream Merger by (ii) the number of shares of common stock of Gastar USA issued in the Downstream Merger for one share of common stock of Parent), subject to certain adjustments described below.

The Share Cap is subject to pro rata adjustments for any share splits (including those effected pursuant to a distribution of our common stock), subdivisions or combinations (in each case, a Share Split) with respect to (i) the common shares of Parent at any time prior to the consummation of the Downstream Merger and (ii) the common stock of Gastar USA at any time following the Downstream Merger, as follows: the adjusted Share Cap as the result of a Share Split will be the number of shares of our common stock that is equivalent to the product obtained by multiplying (a) the Share Cap in effect immediately prior to such Share Split by (ii) a fraction, the numerator of which is the number of shares of common stock of Parent (if prior to the consummation of the Downstream Merger) or Gastar USA (if after the consummation of the Downstream Merger) outstanding after giving effect to such Share Split and the denominator of which is the number of shares of our common stock outstanding immediately prior to such Share Split.

For the avoidance of doubt, subject to the immediately succeeding sentence, the aggregate number of shares of our common stock (or equivalent Alternative Conversion Consideration (as defined below), as applicable) issuable in connection with the exercise of the Change of Control Conversion Right will not exceed shares of common stock (or equivalent Alternative Conversion Consideration, as applicable), subject to increase to the extent the underwriters over-allotment option to purchase additional shares of Series B Preferred Stock is exercised, not to exceed shares of common stock in total (or equivalent Alternate Conversion Consideration, if applicable) (the Exchange Cap). The Exchange Cap is subject to corresponding adjustment upon any adjustment to the Share Cap described in the immediately preceding paragraph and any pro rata adjustments for any Share Splits on the same basis as the corresponding adjustments to the Share Cap.

In the case of a Change of Ownership or Control after the date of consummation of the Reorganization Transactions pursuant to which our common stock will be converted into cash, securities or other property or assets (including any combination thereof) (the Alternative Form Consideration), a holder of Series B Preferred Stock will receive upon conversion of such Series B Preferred Stock the kind and amount of Alternative Form Consideration which such holder would have owned or been entitled to receive upon the Change of Ownership or Control had such holder held a number of shares of our common stock equal to the Common Stock Conversion Consideration immediately prior to the effective time of the Change of Ownership or Control (the Alternative Conversion Consideration). The Common Stock Conversion Consideration or the Alternative Conversion Consideration, as may be applicable to a Change of Ownership or Control, is referred to herein as the Conversion Consideration .

If the holders of our common stock have the opportunity to elect the form of consideration to be received in the Change of Ownership or Control after the date of consummation of the Reorganization Transactions, the Conversion Consideration will be deemed to be the kind and amount of consideration actually received by holders of a majority of our common stock that voted for such an election (if electing between two types of consideration) or holders of a plurality of the common stock of Gastar USA that voted for such an election (if electing between more than two types of consideration), as the case may be, and will be subject to any limitations

Table of Contents

to which all holders of our common stock are subject, including, without limitation, pro rata reductions applicable to any portion of the consideration payable in the Change of Ownership or Control.

We will not issue fractional shares of common stock upon the conversion of the Series B Preferred Stock. Instead, we will pay the cash value of such fractional shares.

Within 15 days following the occurrence of a Change of Ownership or Control that occurs after the date of consummation of the Reorganization Transactions, we will provide to holders of Series B Preferred Stock a notice of occurrence of the Change of Ownership or Control that describes the resulting Change of Control Conversion Right. This notice will state the following:

the events constituting the Change of Ownership or Control;

the date of the Change of Ownership or Control;

the last date on which the holders of Series B Preferred Stock may exercise their Change of Control Conversion Right;

the method and period for calculating the Common Stock Price;

the Change of Control Conversion Date;

that if, prior to the Change of Control Conversion Date, we have provided or provide irrevocable notice of our election to redeem all or any portion of the Series B Preferred Stock, holders will not be able to convert Series B Preferred Stock designated for redemption and such shares will be redeemed on the related redemption date, even if such shares have already been tendered for conversion pursuant to the Change of Control Conversion Right (unless we default in payment of the redemption price and all accumulated and unpaid dividends);

if applicable, the type and amount of Alternative Conversion Consideration entitled to be received per share of Series B Preferred Stock;

the name and address of the paying agent and the conversion agent;

the procedures that the holders of Series B Preferred Stock must follow to exercise the Change of Control Conversion Right; and

the last date on which holders of Series B Preferred Stock may withdraw shares surrendered for conversion and the procedures such holders must follow to effect such a withdrawal.

We will issue a press release for publication on the Dow Jones & Company, Inc., Business Wire, PR Newswire or Bloomberg Business News (or, if these organizations are not in existence at the time of issuance of the press release, such other news or press organization as is reasonably calculated to broadly disseminate the relevant information to the public), or post a notice on our website, in any event prior to the opening of business on the first business day following any date on which we provide the notice described above to the holders of Series B Preferred Stock.

To exercise the Change of Control Conversion Right, the holders of Series B Preferred Stock will be required to deliver, on or before the close of business on the Change of Control Conversion Date, the certificates (if any) representing Series B Preferred Stock to be converted, duly

Edgar Filing: Gastar Exploration USA, Inc. - Form 424B5

endorsed for transfer, together with a written conversion notice completed, to our transfer agent, or, in the case of Series B Preferred Stock held in global form, comply with the applicable procedures of DTC. The conversion notice must state:

the relevant Change of Control Conversion Date;

the number of shares of Series B Preferred Stock to be converted; and

that the Series B Preferred Stock is to be converted pursuant to the applicable provisions of the Series B Preferred Stock.

S-56

Table of Contents

The **Change of Control Conversion Date** is the date the Series B Preferred Stock is to be converted, which will be a business day that is no fewer than 20 days nor more than 35 days after the date on which we provide the notice described above to the holders of Series B Preferred Stock.

The **Common Stock Price** will be (i) if the consideration to be received in the Change of Ownership or Control by the holders of our common stock is solely cash, the amount of cash consideration per share of our common stock or (ii) if the consideration to be received in the Change of Ownership or Control by holders of our common stock is other than solely cash (x) the average of the closing sale prices per share of our common stock (or, if no closing sale price is reported, the average of the closing bid and ask prices or, if more than one in either case, the average of the average closing bid and the average closing ask prices) for the ten consecutive trading days immediately preceding, but not including, the effective date of the Change of Ownership or Control as reported on the principal U.S. securities exchange on which our common stock is then traded, or (y) the average of the last quoted bid prices for our common stock in the over-the-counter market as reported by OTC Market Group Inc. or similar organization for the ten consecutive trading days immediately preceding, but not including, the effective date of the Change of Ownership or Control, if our common stock is not then listed for trading on a U.S. securities exchange.

Holders of Series B Preferred Stock may withdraw any notice of exercise of a Change of Control Conversion Right (in whole or in part) by a written notice of withdrawal delivered to our transfer agent prior to the close of business on the business day prior to the Change of Control Conversion Date. The notice of withdrawal must state:

the number of withdrawn shares of Series B Preferred Stock;

if certificated Series B Preferred Stock have been issued, the certificate numbers of the withdrawn shares of Series B Preferred Stock; and

the number of shares of Series B Preferred Stock, if any, which remain subject to the conversion notice.

Notwithstanding the foregoing, if the Series B Preferred Stock is held in global form, the conversion notice and/or the notice of withdrawal, as applicable, must comply with applicable procedures of DTC.

Shares of Series B Preferred Stock as to which the Change of Control Conversion Right has been properly exercised and for which the conversion notice has not been properly withdrawn will be converted into the applicable Conversion Consideration in accordance with the Change of Control Conversion Right on the Change of Control Conversion Date, unless prior to the Change of Control Conversion Date we have provided or provide notice of our election to redeem such Series B Preferred Stock. If we elect to redeem Series B Preferred Stock that would otherwise be converted into the applicable Conversion Consideration on a Change of Control Conversion Date, such Series B Preferred Stock will not be so converted and the holders of such shares will be entitled to receive on the applicable redemption date the applicable redemption price per preferred share for the date fixed for redemption of the Series B Preferred Stock and specified in the notice to holders, as set forth in **Redemption**, plus any accumulated and unpaid dividends thereon to, but not including, the redemption date.

We will deliver amounts owing upon conversion no later than the third business day following the Change of Control Conversion Date.

In connection with the exercise of any Change of Control Conversion Right, we will comply with all federal and state securities laws and stock exchange rules in connection with any conversion of Series B Preferred Stock into shares of our common stock or other property.

The Change of Ownership or Control conversion feature may make it more difficult for a party to take over our company or discourage a party from taking over us.

Except as provided above in connection with a Change of Ownership or Control, the Series B Preferred Stock is not convertible into or exchangeable for any other securities or property.

Table of Contents

Voting Rights

Except as indicated below, the holders of Series B Preferred Stock will have no voting rights.

If and whenever either (i) cash dividends on any outstanding Series B Preferred Stock have not been paid in full for any monthly dividend period for any four consecutive or non-consecutive quarterly periods, whether or not earned or declared, or (ii) once the Series B Preferred Stock is eligible for listing on a National Exchange Gastar USA fails to maintain the listing of the Series B Preferred Stock on such National Exchange, for a period of at least 180 consecutive days, the number of directors then constituting the Gastar USA Board will increase by at least two (such exact number to be fixed by the Gastar USA Board in accordance with the Bylaws), and the holders of Series B Preferred Stock, voting together as a class with the holders of any other Parity Shares upon which like voting rights have been conferred (any such other series, being Voting Preferred Shares), will have the right to elect two additional directors to serve on the Gastar USA Board (as long as such additional directors were not previously elected by the holders of other securities of Gastar USA with similar voting rights). Such directors shall be nominated for election at any annual meeting of stockholders, or special meeting held in place thereof, or a special meeting of the holders of Series B Preferred Stock and such Voting Preferred Shares called at the request of any holder of record of the Series B Preferred Stock or by a holder of such Voting Preferred Shares and at each subsequent annual meeting of stockholders, all in accordance with the bylaws of Gastar USA, until Gastar USA has paid all accumulated accrued and unpaid dividends on the Series B Preferred Stock in full and has paid accrued dividends for all monthly dividend periods during the two most recently completed quarterly dividend periods in full in cash, or until the Series B Preferred Stock is again subject to a national market listing, as applicable. The term of office of all directors so elected will terminate with the termination of such voting rights.

The amended and restated bylaws of Gastar USA provide that the number of directors on the Gastar USA Board shall be fixed from time to time by a majority of the Gastar USA Board and vacancies resulting from newly created directorships may be filled by a majority of the Gastar USA Board. Because the Parent owns all of the common stock of Gastar USA and controls Gastar USA, Gastar USA presently only has one director, the Chief Executive Officer of Parent. In the event that the holders of Series B Preferred Stock and any other voting Parity Shares exercise any right to elect two directors to serve on the Gastar USA Board, the existing Gastar USA Board may, pursuant to the provisions of Gastar USA's bylaws, (i) increase the number of directors on the Gastar USA Board to a number that would allow the directors elected by the holders of the common stock of Gastar USA or appointed by the existing Gastar USA Board to fill the newly created directorships to constitute at least a majority of the Gastar USA Board and (ii) fill those vacancies prior to any such election by the holders of Series B Preferred Stock and other voting Parity Shares. For the avoidance of doubt, neither the Delaware Migration nor the Downstream Merger will require the vote of the outstanding Series B Preferred Stock.

The approval of two-thirds of the outstanding Series B Preferred Stock and all other series of Voting Preferred Shares similarly affected, voting as a single class, is required in order to: (i) amend Gastar USA's certificate of incorporation if such amendment materially and adversely affects the rights, preferences or voting power of the holders of the Series B Preferred Stock or the Voting Preferred Shares; (ii) enter into a statutory share exchange that affects the Series B Preferred Stock, consolidate with or merge into another entity, or permit another entity to consolidate with or merge into Gastar USA, unless in each such case each share of Series B Preferred Stock remains outstanding without a material adverse change to its terms and rights or is converted into or exchanged for preferred stock of the surviving entity having preferences, rights, voting powers, restrictions, limitations as to dividends, qualifications and terms or conditions of redemption thereof identical to that of the Series B Preferred Stock (except for changes that do not materially and adversely affect the holders of the Series B Preferred Stock); or (iii) authorize, reclassify, create, or increase the authorized amount of any class of stock having rights senior to the Series B Preferred Stock with respect to the payment of dividends or amounts upon liquidation, dissolution or winding up.

For avoidance of doubt, Gastar USA may create additional classes of Parity Shares and shares ranking junior to the Series B Preferred Stock as to dividends or upon liquidation (each, referred to as Junior Shares) and

Table of Contents

increase the authorized number of Series B Preferred Stock and any other series of Parity Shares and Junior Shares without the consent of any holder of Series B Preferred Stock.

The foregoing voting provisions will not apply to shares of Series B Preferred Stock if, at or prior to the time when the act with respect to which such vote would otherwise be required will be effected, such Series B Preferred Stock (i) have been redeemed in accordance with their terms, (ii) have been called for redemption in accordance with their terms and sufficient funds shall have been deposited in trust to effect such redemption, (iii) have been converted into shares of our common stock in accordance with their terms or (iv) are the subject of a property exercised and not withdrawn Change of Control Conversion Right.

Except as provided above, the holders of Series B Preferred Stock are not entitled to vote on any merger or consolidation involving Gastar USA or a sale of all or substantially all of Gastar USA's assets or any amendment to Gastar USA's certificate of incorporation.

Information Rights

During any period in which we are not subject to Section 13 or 15(d) of the Exchange Act and any shares of Series B Preferred Stock are outstanding, we will: (i) transmit by mail to all holders of Series B Preferred Stock, as their names and addresses appear in Gastar USA's record books, and without cost to such holders, copies of the annual reports and quarterly reports that we would have been required to file with the SEC pursuant to Section 13 or 15(d) of the Exchange Act if we were subject to such sections (other than any exhibits that would have been required); and (ii) promptly upon written request, supply copies of such reports to any prospective holder of Series B Preferred Stock. We will mail the reports to the holders of Series B Preferred Stock within 15 days after the respective dates by which we would have been required to file the reports with the SEC if we were subject to Section 13 or 15(d) of the Exchange Act.

Book-Entry Procedures

The Depository Trust Company (DTC) will act as securities depository for the Series B Preferred Stock. Gastar USA will issue one or more fully registered global securities certificates in the name of DTC's nominee, Cede & Co. These certificates will represent the total aggregate number of shares of Series B Preferred Stock. Gastar USA will deposit these certificates with DTC or a custodian appointed by DTC. Gastar USA will not issue certificates to you for the Series B Preferred Stock that you purchase, unless DTC's services are discontinued as described below.

Title to book-entry interests in the Series B Preferred Stock will pass by book-entry registration of the transfer within the records of DTC, as the case may be, in accordance with their respective procedures. Book-entry interests in the securities may be transferred within DTC in accordance with procedures established for these purposes by DTC.

Each person owning a beneficial interest in the Series B Preferred Stock must rely on the procedures of DTC and the participant through which such person owns its interest to exercise its rights as a holder of the Series B Preferred Stock.

DTC has advised us that it is a limited-purpose trust company organized under the New York Banking Law, a member of the Federal Reserve System, a clearing corporation within the meaning of the New York Uniform Commercial Code, and a clearing agency registered under the provisions of Section 17A of the Exchange Act. DTC holds securities that its participants, referred to as Direct Participants, deposit with DTC. DTC also facilitates the settlement among Direct Participants of securities transactions, such as transfers and pledges, in deposited securities through electronic computerized book-entry changes in Direct Participants' accounts, thereby eliminating the need for physical movement of securities certificates. Direct Participants include securities brokers and dealers, banks, trust companies, clearing corporations, and certain other organizations.

Table of Contents

DTC is owned by a number of its Direct Participants and by the New York Stock Exchange, Inc., the NYSE MKT LLC, and the Financial Industry Regulatory Authority, Inc. Access to the DTC system is also available to others such as securities brokers and dealers, banks and trust companies that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly, referred to as Indirect Participants. The rules applicable to DTC and its Direct and Indirect Participants are on file with the SEC.

When you purchase the Series B Preferred Stock within the DTC system, the purchase must be made by or through a Direct Participant. The Direct Participant will receive a credit for the Series B Preferred Stock on DTC's records. You, as the actual owner of the Series B Preferred Stock, are the beneficial owner. Your beneficial ownership interest will be recorded on the Direct and Indirect Participants' records, but DTC will have no knowledge of your individual ownership. DTC's records reflect only the identity of the Direct Participants to whose accounts Series B Preferred Stock are credited.

You will not receive written confirmation from DTC of your purchase. The Direct or Indirect Participants through whom you purchased the Series B Preferred Stock should send you written confirmations providing details of your transactions, as well as periodic statements of your holdings. The Direct and Indirect Participants are responsible for keeping an accurate account of the holdings of their customers like you.

Transfers of ownership interests held through Direct and Indirect Participants will be accomplished by entries on the books of Direct and Indirect Participants acting on behalf of the beneficial owners.

The laws of some states may require that specified purchasers of securities take physical delivery of the Series B Preferred Stock in definitive form. These laws may impair the ability to transfer beneficial interests in the global certificates representing the Series B Preferred Stock.

Conveyance of notices and other communications by DTC to Direct Participants, by Direct Participants to Indirect Participants, and by Direct Participants and Indirect Participants to beneficial owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time.

Gastar USA understands that, under DTC's existing practices, in the event that Gastar USA requests any action of holders, or an owner of a beneficial interest in a global security such as you desires to take any action which a holder is entitled to take under Gastar USA's certificate of incorporation, as amended or supplemented, DTC would authorize the Direct Participants holding the relevant shares to take such action, and those Direct Participants and any Indirect Participants would authorize beneficial owners owning through those Direct and Indirect Participants to take such action or would otherwise act upon the instructions of beneficial owners owning through them.

Redemption notices will be sent to Cede & Co. If less than all of the outstanding shares of Series B Preferred Stock are being redeemed, DTC will reduce each Direct Participant's holdings of Series B Preferred Stock in accordance with its procedures.

In those instances where a vote is required, neither DTC nor Cede & Co. itself will consent or vote with respect to the Series B Preferred Stock. Under its usual procedures, DTC would mail an omnibus proxy to Gastar USA as soon as possible after the record date. The omnibus proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts the Series B Preferred Stock are credited on the record date, which are identified in a listing attached to the omnibus proxy.

Dividends on the Series B Preferred Stock will be made directly to DTC. DTC's practice is to credit participants' accounts on the relevant payment date in accordance with their respective holdings shown on DTC's records unless DTC has reason to believe that it will not receive payment on that payment date.

Table of Contents

Payments by Direct and Indirect Participants to beneficial owners such as you will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in street name. These payments will be the responsibility of the participant and not of DTC, Gastar USA or any agent of Gastar USA.

DTC may discontinue providing its services as securities depository with respect to the Series B Preferred Stock at any time by giving reasonable notice to Gastar USA. Additionally, Gastar USA may decide to discontinue the book-entry only system of transfers with respect to the Series B Preferred Stock. In that event, Gastar USA will print and deliver certificates in fully registered form for the Series B Preferred Stock. If DTC notifies Gastar USA that it is unwilling to continue as securities depository, or if it is unable to continue or ceases to be a clearing agency registered under the Exchange Act and a successor depository is not appointed by Gastar USA within 90 days after receiving such notice or becoming aware that DTC is no longer so registered, Gastar USA will issue the Series B Preferred Stock in definitive form, at Gastar USA's expense, upon registration of transfer of, or in exchange for, such global security.

According to DTC, the foregoing information with respect to DTC has been provided to the financial community for informational purposes only and is not intended to serve as a representation, warranty or contract modification of any kind.

Initial settlement for the Series B Preferred Stock will be made in immediately available funds. Secondary market trading between DTC's participants will occur in the ordinary way in accordance with DTC's rules and will be settled in immediately available funds using DTC's Same-Day Funds Settlement System.

Direct Registration System

Our Series B Preferred Stock is registered in book-entry form through the Direct Registration System (the "DRS"). The DRS is a system administered by DTC pursuant to which the depository may register the ownership of uncertificated shares, which ownership shall be evidenced by periodic statements issued by the depository to the Series B Preferred Stock holders entitled thereto. This direct registration form of ownership allows investors to have securities registered in their names without requiring the issuance of a physical stock certificate, eliminates the need for you to safeguard and store certificates and permits the electronic transfer of securities to effect transactions without transferring physical certificates.

Table of Contents

DESCRIPTION OF GUARANTEE OF PREFERRED SECURITIES

The terms of the guarantee are contained in the guarantee agreement. A copy of the guarantee agreement is attached to this prospectus supplement as Exhibit A. The following description is a summary of the material provisions of the guarantee and the guarantee agreement. It does not purport to be complete. You are strongly encouraged to read the guarantee agreement because it, and not this description, defines your rights as a holder of the guarantee.

General

Parent irrevocably and unconditionally agrees to pay in full to the holders of Series B Preferred Stock (without duplication of amounts theretofore paid by or on behalf of Gastar USA), as and when due, regardless of any defense, right of set-off or counterclaim that Gastar USA may have or assert, the following payments, which are referred to as guarantee payments :

- (i) any accumulated and unpaid dividends (as described in the Certificate of Designation) that have been declared by the Gastar USA Board to be paid on the Series B Preferred Stock out of funds legally available for such dividends;
- (ii) the applicable redemption price (as described in the Certificate of Designation), plus all accrued and unpaid dividends to the date of redemption, with respect to any Series B Preferred Stock called for redemption by Gastar USA or otherwise required to be redeemed by the terms of the Certificate of Designation; and
- (iii) upon a voluntary or involuntary dissolution, winding-up or termination of Gastar USA, the aggregate of the liquidation preference and all accrued and unpaid dividends on the Series B Preferred Stock, whether or not declared, without regard to whether Gastar USA has sufficient assets to make full payment as required on liquidation.

The Parent's obligation to make a guarantee payment may be satisfied by direct payment of the required amounts by the Parent to the holders or by causing Gastar USA to pay the amounts to the holders.

Termination

The guarantee agreement will terminate upon the first to occur of (i) Parent ceases to own a majority of the common stock of Gastar USA, (ii) full payment of the redemption price of all Series B Preferred Stock or (iii) full payment of the amounts payable in accordance with the certificate of declaration upon liquidation of Gastar USA. Notwithstanding the foregoing, the guarantee agreement will continue to be effective or will be reinstated, as the case may be, if at any time any holder must restore payment of any sums paid under the Series B Preferred Stock or under the guarantee agreement.

Ranking

The guarantee will be the subordinated obligation of the Parent and will rank junior to all of its existing and future debt.

Holder of Series B Preferred Stock are Intended Third Party Beneficiaries

The guarantee agreement inures to the benefit of, and is intended to be for the benefit of the holders of Series B Preferred Stock, who are intended third-party beneficiaries of the guarantee agreement. A holder of Series B Preferred Stock may also directly institute a legal proceeding against Parent to enforce such holder's right to receive payment under the guarantee agreement without first instituting a legal proceeding directly against Gastar USA or any other person or entity.

Table of Contents

Amendments; Assignment

Parent may amend the guarantee agreement at any time for any purpose without the consent of any holder; provided, however, that if such amendment adversely affects the rights of any holder, the prior written consent of each holder affected shall be required.

Neither the guarantee agreement nor any right, remedy, obligation nor liability arising thereunder or by reason thereof shall be assignable by any party without the prior written consent of the other party, and any attempt to assign any right, remedy, obligation or liability thereunder without such consent shall be void, unless the successor or assignee agrees in writing to perform Parent's obligations thereunder.

The guarantee agreement shall be binding upon and shall inure to the benefit of any successor or permitted assign of Parent as well as any purchaser of Series B Preferred Stock.

Governing Law

The guarantee agreement for all purposes is governed by and construed in accordance with the laws of the State of Texas.

Table of Contents

MATERIAL U.S. FEDERAL INCOME TAX CONSEQUENCES

The following discussion summarizes the material U.S. federal income tax consequences that may be applicable to U.S. holders and non-U.S. holders (each as defined below) with respect to the purchase, ownership, disposition and conversion of the Series B Preferred Stock offered by this prospectus supplement and the ownership and disposition of any common stock received with respect to the Series B Preferred Stock. This discussion only applies to purchasers who purchase and hold the Series B Preferred Stock, and any common stock received in respect thereof, as a capital asset within the meaning of Section 1221 of the Internal Revenue Code of 1986, as amended (the Code) (generally property held for investment). This discussion does not describe all of the tax consequences that may be relevant to each purchaser or holder of Series B Preferred Stock, or common stock received in respect thereof, in light of its particular circumstances.

This discussion is based upon provisions of the Code, Treasury regulations, rulings and judicial decisions as of the date hereof. These authorities may change, perhaps retroactively, or may be subject to different interpretations which could result in U.S. federal income tax consequences different from those summarized below. We cannot assure you that the Internal Revenue Service (IRS) will not challenge one or more of the tax consequences described in this discussion, and we have not obtained, nor do we intend to obtain, a ruling from the IRS with respect to the U.S. federal tax consequences of acquiring, holding, converting, or disposing of the Series B Preferred Stock. This discussion does not address all aspects of U.S. federal income taxes (such as the alternative minimum tax) and does not describe any foreign, state, local or other tax considerations that may be relevant to a purchaser or holder of Series B Preferred Stock, or common stock received in respect thereof, in light of their particular circumstances. In addition, this discussion does not describe the U.S. federal income tax consequences applicable to a purchaser or a holder of Series B Preferred Stock or common stock who is subject to special treatment under U.S. federal income tax laws, such as:

a bank, insurance company or other financial institution;

a corporation that accumulates earnings to avoid U.S. federal income tax;

an entity that is tax-exempt for U.S. federal income tax purposes;

a broker-dealer, regulated investment company or real estate investment trust;

a person holding our Series B Preferred Stock or common stock received in respect thereof as part of a hedge, straddle, conversion, or other synthetic security or integrated transaction;

a former U.S. citizen or long-term resident of the United States;

a person subject to the alternative minimum tax;

a partnership or other pass-through entity and holders of interests therein; and

a pension or other employee benefit plan.

If an entity treated as a partnership for U.S. federal income tax purposes holds Series B Preferred Stock or common stock, the U.S. federal income tax treatment of a partner of that partnership generally will depend upon the status of the partner and the activities of the partnership. If you are a partnership or a partner of a partnership considering an investment in our Series B Preferred Stock, you should consult your tax advisors as to the particular U.S. federal income tax consequences of holding and disposing of the Series B Preferred Stock or common stock received in respect thereof.

THIS DISCUSSION CANNOT BE USED BY ANY HOLDER FOR THE PURPOSE OF AVOIDING FEDERAL TAX PENALTIES THAT MAY BE IMPOSED ON SUCH HOLDER. IF YOU ARE CONSIDERING THE PURCHASE OF OUR SERIES B PREFERRED STOCK, YOU SHOULD CONSULT YOUR OWN TAX ADVISORS CONCERNING THE U.S. FEDERAL INCOME TAX CONSEQUENCES OF PURCHASING, OWNING AND DISPOSING OF OUR SERIES B PREFERRED STOCK AND ANY COMMON STOCK RECEIVED IN RESPECT THEREOF IN LIGHT OF YOUR

S-64

Table of Contents

PARTICULAR CIRCUMSTANCES AND ANY CONSEQUENCES ARISING UNDER U.S. ESTATE OR GIFT TAX LAWS OR UNDER THE LAWS OF APPLICABLE STATE, LOCAL OR FOREIGN TAXING JURISDICTIONS. YOU SHOULD ALSO CONSULT WITH YOUR TAX ADVISORS CONCERNING ANY POSSIBLE ENACTMENT OF LEGISLATION THAT WOULD AFFECT YOUR INVESTMENT IN OUR SERIES B PREFERRED STOCK OR OUR COMMON STOCK RECEIVED IN RESPECT THEREOF IN YOUR PARTICULAR CIRCUMSTANCES.

U.S. holders

You are a U.S. holder for purposes of this discussion if you are a beneficial owner of our Series B Preferred Stock and you are for U.S. federal income tax purposes:

an individual citizen or resident of the United States;

a corporation that was created or organized in or under the laws of the United States, any state thereof or the District of Columbia;

an estate the income of which is subject to U.S. federal income taxation regardless of its source; or

a trust if it (a) is subject to the primary supervision of a court within the United States and one or more United States persons have the authority to control all substantial decisions of the trust or (b) has a valid election in effect under applicable U.S. Treasury regulations to be treated as a United States person.

Distributions of Cash or Shares

Cash distributions that are made with respect to the Series B Preferred Stock or common stock generally will be characterized as dividends when paid to the extent of our current and accumulated earnings and profits as determined for U.S. federal income tax purposes. To the extent that the amount of a distribution with respect to our Series B Preferred Stock or common stock exceeds our current and accumulated earnings and profits, such distribution will be treated first as a tax-free return of capital to the extent of the U.S. holder's adjusted tax basis in such Series B Preferred Stock or common stock, as the case may be, which reduces such basis dollar-for-dollar, and thereafter as capital gain. Such gain will be long-term capital gain provided that the U.S. holder has held such Series B Preferred Stock or common stock, as the case may be, for more than one-year at the time of the distribution. As of the date of this prospectus supplement, Gastar USA does not believe it has any accumulated earnings and profits for U.S. federal income tax purposes. Additionally, Gastar USA may not have sufficient current earnings and profits during future fiscal years for the distributions on the Series B Preferred Stock or common stock to qualify as dividends for U.S. federal income tax purposes.

Distributions treated as dividends that are received by individual holders of Series B Preferred Stock or common stock generally are subject to a reduced maximum tax rate of 20%, subject to certain holding period and other requirements. The rate reduction does not apply to dividends received to the extent that the individual stockholder elects to treat the dividends as investment income, which may be offset against investment expenses. Also, if a dividend received by an individual stockholder that qualifies for the rate reduction is an extraordinary dividend within the meaning of Section 1059 of the Code, any loss recognized by such individual stockholder on a subsequent disposition of the Series B Preferred Stock or common stock will be treated as long-term capital loss to the extent of such extraordinary dividend, irrespective of such stockholder's holding period for the Series B Preferred Stock or common stock. Individual stockholders should consult their own tax advisors regarding the implications of these rules in light of their particular circumstances.

Distributions treated as dividends that are received by corporations generally will be eligible for the dividends-received deduction subject to applicable limitations. If a corporate stockholder receives a dividend on the Series B Preferred Stock or common stock that is an extraordinary dividend within the meaning of Section 1059 of the Code, the stockholder in certain instances must reduce its basis (but not below zero) in the Series B Preferred Stock or common stock by the amount of the nontaxed portion of such extraordinary

Table of Contents

dividend that results from the application of the dividends received deduction. If the nontaxed portion of such extraordinary dividend exceeds such corporate stockholder's basis, any excess will be taxed as gain as if such stockholder had disposed of its Series B Preferred Stock or common stock in the year the extraordinary dividend is paid. As described above, we may not have sufficient earnings and profits in 2013 or in future years to cause distributions on our Series B Preferred Stock (or on our common stock) to be treated as dividends for U.S. federal income tax purposes. Each corporate U.S. holder of Series B Preferred Stock or common stock is urged to consult with its tax advisors with respect to the eligibility for and amount of any dividends received deduction and the application of Section 1059 of the Code to any dividends it receives.

As discussed under the Description of Series B Preferred Stock Dividends Failure to Make Dividend Payments, the certificate of designation governing the Series B Preferred Stock requires Gastar USA to pay dividends on Series B Preferred Stock in-kind in shares of Gastar USA common stock, additional shares of Series B Preferred Stock or Parent Common Stock in certain circumstances. Such distributions of shares of Gastar USA common stock, Parent Common Stock or additional shares of Series B Preferred Stock will be treated as taxable distributions in the same manner as cash distributions. The amount of the distribution and the tax basis of the shares of Gastar USA common stock, Parent Common Stock or Series B Preferred Stock received will be equal to the fair market value of such shares on the distribution date.

Constructive Dividends

If the Series B Preferred Stock are issued at a price less than the redemption price, because Gastar USA may call for the redemption of the Series B Preferred Stock under certain circumstances, the holder of the Series B Preferred Stock may be treated as receiving periodically a constructive distribution of additional stock on the Series B Preferred Stock that would be taxable in the same manner as cash distributions. Under Treasury regulations, such constructive distribution would be required if, based on all of the facts and circumstances as of the issue date, the redemption pursuant to Gastar USA's right to redeem the Series B Preferred Stock is more likely than not to occur. The Treasury regulations provide that an issuer's right to redeem will not be treated as more likely than not to occur if: (i) the issuer and holder of the stock are not related within the meaning of Section 267(b) or Section 707(b) of the Code (substituting 20% for the phrase 50%); (ii) there are no plans, arrangements, or agreements that effectively require or are intended to compel the issuer to redeem the stock; and (iii) exercise of the right to redeem would not reduce the yield on the stock determined using principles applicable to the determination of original issue discount under Section 1272 of the Code and the Treasury Regulations under Sections 1271 through 1275 of the Code. The fact that a redemption right is not described in the preceding sentence does not mean that an issuer's right to redeem is more likely than not to occur, and the issuer's right to redeem must still be tested under all the facts and circumstances to determine if it is more likely than not to occur. Gastar USA believes that its right to call for the redemption of the Series B Preferred Stock should not be treated as more likely than not to occur applying the foregoing test, and as a result, no constructive distribution should be required.

Conversion into Common Stock

As discussed above, to the extent we have not provided irrevocable notice of our election to redeem the Series B Preferred Stock, upon the occurrence of a Change of Ownership or Control after the date of consummation of the Reorganization Transactions, each stockholder of our Series B Preferred Stock will have the right to convert the Series B Preferred Stock held by such holder on the Change of Control Conversion Date into a number of shares of our common stock. Please see Description of the Series B Preferred Stock Conversion Rights.

Except as discussed below, a U.S. holder generally will not recognize (i.e., take into account for U.S. federal income tax purposes) gain or loss upon the conversion of our Series B Preferred Stock, except to the extent of any cash or common stock received attributable to accumulated and unpaid dividends, which will be treated as described above under Distributions in Cash or Shares. The adjusted tax basis of shares of common stock received on conversion, other than shares of common stock attributable to accumulated but unpaid dividends,

Table of Contents

generally will equal the adjusted tax basis of our Series B Preferred Stock converted (reduced by the portion of adjusted tax basis allocated to any fractional shares of common stock exchanged for cash), and the holding period of such common stock received on conversion generally will include the period during which the U.S. holder held its converted Series B Preferred Stock prior to conversion. A U.S. holder's adjusted tax basis in any shares of common stock received attributable to accumulated but unpaid dividends will equal the fair market value of such common stock on the conversion date, and a U.S. holder's holding period for such shares shall begin on the day after receipt thereof.

Cash received upon conversion in lieu of a fractional common share generally will be treated as a payment in a taxable exchange for such fractional common share, and any gain or loss will be recognized in an amount equal to the difference between the amount of cash received in lieu of the fractional common share and the adjusted tax basis allocable to the fractional common share deemed exchanged.

Sale, Exchange, Redemption or other Disposition of Series B Preferred Stock or Common Stock

Upon any sale, exchange, redemption (except as discussed below), or other disposition of the Series B Preferred Stock or any common stock received in respect thereof, a U.S. holder generally will recognize capital gain or loss equal to the difference between the amount realized by the U.S. holder on any sale, exchange, redemption (except as discussed below), or other disposition, and the U.S. holder's adjusted tax basis in the Series B Preferred Stock or common stock. Such capital gain or loss will be long-term capital gain or loss if the U.S. holder's holding period for the Series B Preferred Stock or common stock is more than one year at the time of such disposition. Long-term capital gains of individuals generally are subject to a reduced maximum tax rate of 20%. The deductibility of net capital losses is subject to limitations. Each U.S. holder should consult its own tax advisor to determine the deductibility of any net capital losses.

A payment made in redemption of Series B Preferred Stock may be treated as a distribution, rather than as payment in exchange for the Series B Preferred Stock, unless the redemption:

is not essentially equivalent to a dividend with respect to a U.S. holder under Section 302(b)(1) of the Code;

is a substantially disproportionate redemption with respect to a U.S. holder under Section 302(b)(2) of the Code;

results in a complete redemption of a U.S. holder's stock interest in Gastar USA under Section 302(b)(3) of the Code; or

is a redemption of stock held by a non-corporate stockholder, where such redemption results in a partial liquidation of Gastar USA under Section 302(b)(4) of the Code.

In determining whether any of these tests has been met, a U.S. holder must take into account not only shares of Series B Preferred Stock and our common stock that the U.S. holder actually owns, but also shares that the U.S. holder constructively owns within the meaning of Section 318 of the Code. If a U.S. holder owns only an insubstantial percentage of our Series B Preferred Stock and does not participate in our control or management, a redemption of such stockholder's Series B Preferred Stock generally will qualify for sale or exchange treatment.

U.S. holders of Series B Preferred Stock should consult their own tax advisors to determine whether a payment made in redemption of Series B Preferred Stock will be treated for U.S. federal income tax purposes as a distribution or as payment in exchange for the Series B Preferred Stock in their particular circumstances. If the redemption payment is treated as a distribution, the rules discussed above in "Distributions of Cash or Shares" will apply, and U.S. holders should consult their tax advisors regarding the consequences of the redemption, including the consequences if we have no current and accumulated earnings and profits and effects on the adjusted tax basis in the stockholder's remaining Series B Preferred Stock. If the redemption is treated as occurring pursuant to a sale or exchange of our Series B Preferred Stock, the rules discussed in the first

Table of Contents

paragraph of this section Sale, Exchange, Redemption or Other Disposition of Series B Preferred Stock or Common Stock will apply.

Information Reporting and Backup Withholding

Information returns generally will be filed with the IRS pertaining to distributions we make on the Series B Preferred Stock or common stock and to certain payments of proceeds on the sale or other disposition of the Series B Preferred Stock or common stock. Certain U.S. holders may be subject to U.S. backup withholding (currently at a rate of 28%) on payments of dividends on the Series B Preferred Stock or common stock and on certain payments of proceeds on the sale or other disposition of the Series B Preferred Stock or common stock unless such U.S. holders furnish the applicable withholding agent with a taxpayer identification number, certified under penalties of perjury, and certain other information, or otherwise establish, in the manner prescribed by law, an exemption from backup withholding.

U.S. backup withholding tax is not an additional tax. Any amounts withheld under the backup withholding rules will be creditable against a U.S. holder's U.S. federal income tax liability, and the U.S. holder may be entitled to a refund, provided the U.S. holder timely furnishes the required information to the Internal Revenue Service.

Non-U.S. holders

The following discussion summarizes the material U.S. federal income tax consequences of the purchase, ownership, disposition, and conversion of the Series B Preferred Stock, and of the ownership and disposition of any common stock received with respect thereto, by certain non-U.S. holders. For purposes of this discussion, you are a non-U.S. holder if you are a beneficial owner of Series B Preferred Stock or common stock and you are an individual, corporation, estate or trust that is not a U.S. holder.

Distributions of Cash or Shares

In general, distributions (whether in cash or Gastar USA common stock, Parent Common Stock or Series B Preferred Stock) made with respect to the Series B Preferred Stock or common stock received with respect thereto, will be treated as dividends to the extent of our current and accumulated earnings and profits as determined under the Code and will be subject to withholding as discussed below. To the extent that the amount of a distribution with respect to our Series B Preferred Stock or common stock exceeds our current and accumulated earnings and profits, such distribution will be treated first as a tax-free return of capital to the extent of the non-U.S. holder's adjusted tax basis in such Series B Preferred Stock or common stock, as the case may be, which reduces such basis dollar-for-dollar, and thereafter as capital gain, the tax treatment of which is discussed below under Sale, Exchange, Redemption or other Disposition of Series B Preferred Stock or Common Stock.

Distributions paid to a non-U.S. holder of the Series B Preferred Stock or common stock will generally be subject to withholding of U.S. federal income tax at a 30% rate or such lower rate as may be specified by an applicable income tax treaty. A non-U.S. holder of the Series B Preferred Stock or common stock that wishes to claim the benefit of an applicable treaty rate will be required to (a) complete IRS Form W-8BEN (or other applicable form) and certify under penalties of perjury that such stockholder is not a United States person, as defined under the Code, and is eligible for treaty benefits, or (b) if the Series B Preferred Stock or common stock are held through certain foreign intermediaries, satisfy the relevant certification requirements of applicable Treasury regulations.

As described above, at the time of this prospectus supplement, Gastar USA does not believe that it has any accumulated earnings and profits for U.S. federal income tax purposes and may not have sufficient current earnings and profits during future fiscal years for the distributions on the Series B Preferred Stock or common

Table of Contents

stock to qualify as dividends for U.S. federal income tax purposes. As described below under *Sale, Exchange, Redemption or other Disposition of Series B Preferred Stock or Common Stock*, we believe that we are a United States real property holding corporation, (a USRPHC) for U.S. federal income tax purposes. Under rules applicable to USRPHCs, to the extent any distribution exceeds our current and accumulated earnings and profits, that portion of the distribution may be subject to the withholding rules described above at a rate not less than 10% unless an applicable income tax treaty specifically provides for a lower rate for distributions from a USRPHC.

A non-U.S. holder of the Series B Preferred Stock or common stock eligible for a reduced rate of U.S. withholding tax pursuant to an income tax treaty may obtain a refund of any excess amounts withheld by timely filing an appropriate claim for refund with the IRS.

Sale, Exchange, Redemption or other Disposition of Series B Preferred Stock or Common Stock

Any gain realized by a non-U.S. holder on the sale, exchange, redemption (except as discussed below) or other disposition of the Series B Preferred Stock or any common stock received with respect thereto will generally not be subject to U.S. federal income or withholding tax unless:

the gain is effectively connected with a trade or business of the non-U.S. holder in the United States (and, if required by an applicable income tax treaty, is attributable to a permanent establishment maintained by the non-U.S. holder in the United States);

the non-U.S. holder is an individual who is present in the United States for 183 days or more in the taxable year of that disposition, and certain other conditions are met; or

we are, or have been during the shorter of the stockholder's holding period or the five-year period preceding the stockholder's disposition of the Series B Preferred Stock or common stock, a USRPHC for U.S. federal income tax purposes.

A non-U.S. holder whose gain is described in the first bullet point above will generally be subject to U.S. federal income tax on the net gain derived from the sale or other disposition under regular graduated U.S. federal income tax rates in the same manner as if the non-U.S. holder were a United States person as defined under the Code. If the non-U.S. holder is a foreign corporation, it may also be subject to the branch profits tax equal to 30% of its effectively connected earnings and profits or at such lower rate as may be specified by an applicable income tax treaty.

A non-U.S. holder described in the second bullet point above will be subject to a flat 30% tax (unless an applicable income tax treaty provides for a lower rate) on the gain derived from the sale or other disposition, which may be offset by U.S. source capital losses, even though the individual is not considered a resident of the United States.

We believe we currently are a USRPHC. However, so long as the Series B Preferred Stock and our common stock are considered to be regularly traded on an established securities market, only a non-U.S. holder that actually or constructively owns more than 5% of the Series B Preferred Stock or 5% of our common stock, as the case may be, at any time during the five-year period ending on the date of the disposition of the Series B Preferred Stock or common stock, as the case may be, will be subject to U.S. federal income tax on the disposition thereof by reason of Gastar USA being a USRPHC. A non-U.S. holder that exceeds the ownership threshold described above will be subject to U.S. federal income tax at regular graduated U.S. federal income tax rates with respect to any gain recognized on a disposition in the same manner as if the non-U.S. holder were a United States person as defined under the Code and would be required to file a U.S. tax return to report such gain.

If the Series B Preferred Stock or our common stock were not considered to be regularly traded on an established securities market, then a non-U.S. holder of Series B Preferred Stock or common stock, as the case

Table of Contents

may be, would be taxable on a disposition thereof without regard to the percentage of the Series B Preferred Stock or common stock actually or constructively owned by such non-U.S. holder, and the proceeds of such disposition may be subject to withholding at a rate of 10%.

If a non-U.S. holder is subject to U.S. federal income tax on any disposition of the Series B Preferred Stock under the rules described above, a redemption of the Series B Preferred Stock will be a taxable event. If the redemption is treated for U.S. federal income tax purposes as a sale or exchange, instead of a dividend, a non-U.S. holder generally will recognize capital gain or loss (either short or long term capital gain or loss, as discussed above) equal to the difference between the amount of cash and the fair market value of property received and the non-U.S. holder's adjusted tax basis in the Series B Preferred Stock redeemed, except that to the extent that any cash received is attributable to any accrued but unpaid dividends on the Series B Preferred Stock, which generally will be subject to the rules discussed above in *Non-U.S. Holders' Distributions of Cash or Shares*. A payment made in redemption of Series B Preferred Stock may be treated as a dividend, rather than as payment in exchange for the Series B Preferred Stock, in the same circumstances discussed above under *U.S. Holders' Sale, Exchange, Redemption or Other Disposition of Series B Preferred Stock or Common Stock*. Each non-U.S. holder of Series B Preferred Stock should consult its own tax advisors to determine whether a payment made in redemption of Series B Preferred Stock will be treated as a dividend or as payment in exchange for the Series B Preferred Stock.

Non-U.S. holders that are considering an investment in our Series B Preferred Stock are encouraged to consult their own tax advisers with respect to the U.S. federal income tax consequences of the ownership and disposition of Series B Preferred Stock or common stock in light of Gastar USA's classification as a USRPHC.

Conversion into Common Stock

As discussed above, to the extent we have not provided irrevocable notice of our election to redeem the Series B Preferred Stock, upon the occurrence of a Change of Ownership or Control after the date of consummation of the Reorganization Transactions, each stockholder of our Series B Preferred Stock will have the right to convert the Series B Preferred Stock held by such stockholder on the Change of Control Conversion Date into a number of shares of our common stock. Please see *Description of the Series B Preferred Stock' Conversion Rights*.

Non-U.S. holders generally will not recognize (i.e., take into account for U.S. federal income tax purposes) gain or loss upon the conversion of our Series B Preferred Stock, except to the extent of any cash received in lieu of fractional shares (which generally will be subject to U.S. federal income tax as a redemption to the extent described above under *Non-U.S. Holders' Sale, Exchange, Redemption or Other Disposition of Series B Preferred Stock or Common Stock*). It is possible that dividend income may be recognized with respect to any common stock treated as received in respect of any accumulated but unpaid dividends. In such case, any U.S. federal withholding tax on common stock treated as a dividend may be satisfied by the withholding agent through a sale of a portion of the shares of common stock you receive as a dividend or may be withheld from cash dividends, shares of our common stock, or sale proceeds subsequently paid or credited to you. The adjusted tax basis of common stock received on conversion, other than shares of common stock attributable to accumulated but unpaid dividends, generally will equal the adjusted tax basis of our Series B Preferred Stock converted (reduced by the portion of adjusted tax basis allocated to any fractional share of common stock exchanged for cash), and the holding period of such common stock received on conversion generally will include the period during which the non-U.S. holder held its converted Series B Preferred Stock prior to conversion. A non-U.S. holder's adjusted tax basis in any shares of common stock received with respect to accumulated but unpaid dividends will equal the fair market value of such common stock on the conversion date, and a non-U.S. holder's holding period for such shares shall begin on the day after receipt thereof.

Notwithstanding these general rules, if the Series B Preferred Stock and the common stock are considered to be regularly traded on an established securities market, and a non-U.S. holder actually or constructively owns more than 5% of the Series B Preferred Stock that is convertible into less than 5% of the common stock, then a

Table of Contents

conversion of such Series B Preferred Stock into common stock would be a taxable event. In such case, the non-U.S. holder would be subject to U.S. federal income tax on any gain recognized and would be required to file a U.S. tax return to report such gain. If a non-U.S. holder actually or constructively owns more than 5% of the Series B Preferred Stock that is convertible into more than 5% of the common stock, then, although the conversion of the Series B Preferred Stock solely into the common stock generally would not be taxable, the non-U.S. holder may be required to file an income tax return for the taxable year of the conversion and satisfy certain procedural requirements in accordance with the applicable Treasury Regulations.

Non-U.S. holders that may be treated as actually or constructively owning more than 5% of our Series B Preferred Stock should consult their own tax advisers with respect to the U.S. federal income tax consequences of the conversion of their Series B Preferred Stock into common stock.

Information Reporting and Backup Withholding

Payments of dividends and any tax withheld with respect thereto are subject to information reporting requirements regardless of whether withholding was required. Copies of the information returns reporting such dividends and withholding may also be made available to the tax authorities in the country in which the non-U.S. holder resides under the provisions of an applicable income tax treaty.

A non-U.S. holder will not be subject to backup withholding on dividends paid to such non-U.S. holder as long as such non-U.S. holder certifies under penalties of perjury that it is not a United States person (and the payor does not have actual knowledge or reason to know that such non-U.S. holder is a United States person as defined under the Code), or such non-U.S. holder otherwise establishes an exemption.

Information reporting and, depending on the circumstances, backup withholding may apply to the proceeds received from a sale or other disposition of the Series B Preferred Stock or common stock within the United States or conducted through certain U.S.-related financial intermediaries, unless the beneficial owner certifies under penalties of perjury that it is not a United States person (and the payor does not have actual knowledge or reason to know that the beneficial owner is a United States person as defined under the Code), or such owner otherwise establishes an exemption.

U.S. backup withholding tax is not an additional tax. Any amounts withheld under the backup withholding rules may be allowed as a refund or a credit against a non-U.S. holder's U.S. federal income tax liability, if any, provided the required information is timely furnished to the IRS.

Additional Withholding Requirements under FATCA

Sections 1471 through 1474 of the Code, and the Treasury regulations and administrative guidance issued thereunder, impose a 30% withholding tax on any dividends on our Series B Preferred Stock or common stock and on the gross proceeds from a disposition of our Series B Preferred Stock or common stock, in each case if paid to a foreign financial institution or a non-financial foreign entity (each as defined in the Code) (including, in some cases, when such foreign financial institution or entity is acting as an intermediary), unless (i) in the case of a foreign financial institution, such institution enters into an agreement with the U.S. government to withhold on certain payments, and to collect and provide to the U.S. tax authorities substantial information regarding U.S. account holders of such institution (which includes certain equity and debt holders of such institution, as well as certain account holders that are foreign entities with one or more substantial United States owners (as defined in the Code)), (ii) in the case of a non-financial foreign entity, such entity certifies that it does not have any substantial United States owners or provides the withholding agent with a certification identifying the direct and indirect substantial United States owners of the entity, or (iii) the foreign financial institution or non-financial foreign entity otherwise qualifies for an exemption from these rules. Foreign financial institutions located in jurisdictions that have an intergovernmental agreement with the United States governing these rules may be subject to different rules.

Table of Contents

Payments subject to withholding tax under this law generally include dividends paid on stock of a U.S. corporation after June 30, 2014, and gross proceeds from sales or other dispositions of such stock after December 31, 2016. Non-U.S. holders are encouraged to consult their tax advisors regarding the possible implications of these withholding rules.

Additional Tax on Net Investment Income

An additional 3.8% Medicare tax is imposed on the net investment income of certain U.S. citizens and resident aliens and on the undistributed net investment income of certain estates and trusts. For individual U.S. stockholders, the additional Medicare Tax applies to the lesser of (i) net investment income, or (ii) the excess of modified adjusted gross income over \$200,000 (\$250,000 if married and filing jointly or \$125,000 if married and filing separately). Net investment income generally equals a stockholder's gross investment income reduced by the deductions that are allocable to such income. Investment income generally includes passive income such as interest, dividends and capital gains. U.S. holders are urged to consult their own tax advisors regarding this additional tax.

INVESTORS CONSIDERING THE PURCHASE OF OUR SERIES B PREFERRED STOCK ARE URGED TO CONSULT THEIR OWN TAX ADVISORS REGARDING THE APPLICATION OF THE U.S. FEDERAL INCOME TAX LAWS TO THEIR PARTICULAR SITUATION AND THE APPLICABILITY AND EFFECT OF STATE, LOCAL OR FOREIGN TAX LAWS AND TREATIES.

S-72

Table of Contents**UNDERWRITING**

Barclays Capital Inc., Credit Suisse Securities (USA) LLC, MLV & Co. LLC and Sterne, Agee & Leach, Inc. are acting as joint book-running managers of the offering and as representatives of the underwriters named below. Subject to the terms and conditions stated in the underwriting agreement dated the date of this prospectus supplement, each underwriter named below has severally agreed to purchase, and we have agreed to sell to that underwriter, the number of shares of Series B Preferred Stock set forth opposite the underwriter's name.

Underwriter	Number of Shares
Barclays Capital Inc.	
Credit Suisse Securities (USA) LLC	
MLV & Co. LLC	
Sterne, Agee & Leach, Inc.	
Janney Montgomery Scott LLC	
Euro Pacific Capital, Inc.	
IBERIA Capital Partners L.L.C.	
Imperial Capital, LLC	
Ladenburg Thalmann & Co. Inc.	
Maxim Group LLC	
National Securities Corporation	
Northland Capital Markets	
Total	

Northland Capital Markets is the trade name for certain capital markets and investment banking services of Northland Securities, Inc., Member FINRA/SIPC.

The underwriting agreement provides that the obligation of the underwriters to purchase the shares of Series B Preferred Stock is subject to certain conditions precedent, including but not limited to (1) listing on the NYSE MKT LLC, (2) delivery of legal opinions, and (3) delivery of various auditor and reserve engineer comfort letters. The underwriters are obligated to purchase all of the shares of Series B Preferred Stock (other than those covered by the over-allotment option described below) if it purchases any of the shares.

The underwriters initially propose to offer the shares of Series B Preferred Stock directly to the public at the public offering price set forth on the cover page of this prospectus supplement and to certain dealers at a price that represents a concession not in excess of \$ _____ per share below the public offering price. Any underwriters may allow, and such dealers may re-allow, a concession not in excess of \$ _____ per share to other underwriters or to certain dealers. If the shares are not sold at the initial price to the public, the underwriters may change the offering price and the other selling terms. The offering of the shares by the underwriters is subject to receipt and acceptance and subject to the underwriters' right to reject any order in whole or in part.

If the underwriters sell more than _____ shares of Series B Preferred Stock, we have granted the underwriters an option, exercisable for 30 days from the date of this prospectus supplement, to purchase up to _____ additional shares at the public offering price less the underwriting commission. 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 have agreed that, for a period of 30 days from the date of this prospectus supplement, we will not, without the prior written consent of the underwriters, dispose of or hedge any shares of Series B Preferred Stock or similar equity securities or any securities convertible into or exchangeable for shares of Series B Preferred Stock or similar equity securities. The underwriters in their sole discretion may release any of the securities subject to these lock-up agreements at any time without notice.

Table of Contents

The following table shows the underwriting discounts and commissions that we 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.

Per share	Paid by Us	
	No Exercise	Full Exercise
Total	\$	\$

We have agreed to pay the underwriters' reasonable out-of-pocket expenses (including fees and expense of underwriters' counsel) incurred by the underwriters in connection with this offering up to \$125,000. In addition, we estimate that our share of the total expenses of this offering, excluding underwriting discounts but including our reimbursement obligation of the underwriters' reasonable out-of-pocket expenses described above, will be approximately \$500,000.

Subject to issuance, we anticipate that our shares of Series B Preferred Stock will be approved for listing on the NYSE MKT LLC under the symbol GST.PR.B.

We expect that the delivery of the Series B Preferred Stock will be made against payment therefor on _____, 2013, which will be the sixth business day following the trade date of the Series B Preferred Stock (such settlement cycle being herein referred to as T+6). Under Rule 15c6-1 under the Securities Exchange Act of 1934, as amended, trades in the secondary market generally are required to settle in three business days, unless the parties to any such trade expressly agree otherwise. Accordingly, purchasers who wish to trade the Series B Preferred Stock more than three business days prior to the issue date of the Series B Preferred Stock will be required, by virtue of the fact that the Series B Preferred Stock will not settle in T+3, to specify an alternative settlement cycle at the time of such trade to prevent a failed settlement and should consult their own advisers in connection with that election.

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 over-allotment option, 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.

- i Covered short sales are sales of shares in an amount up to the number of shares represented by the underwriters over-allotment option.
- i Naked short sales are sales of shares in an amount in excess of the number of shares represented by the underwriters over-allotment option.

Covering transactions involve purchases of shares either pursuant to the over-allotment option or in the open market after the distribution has been completed in order to cover short positions.

- i To close a naked short position, the underwriters must purchase shares in the open market after the distribution has been completed. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the shares in the open market after pricing that could adversely affect investors who purchase in the offering.

Edgar Filing: Gastar Exploration USA, Inc. - Form 424B5

To close a covered short position, the underwriters must purchase shares in the open market after the distribution has been completed or must exercise the over-allotment option. In determining the source of shares to close the covered short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the over-allotment option.

Stabilizing transactions involve bids to purchase shares so long as the stabilizing bids do not exceed a specified maximum.

S-74

Table of Contents

Purchases to cover short positions and stabilizing purchases, as well as other purchases by the underwriters for their own accounts, may have the effect of preventing or retarding a decline in the market price of the shares. They may also cause the price of the shares to be higher than the price that would otherwise exist in the open market in the absence of these transactions. The underwriters may conduct these transactions on the NYSE MKT LLC, in the over-the-counter market or otherwise. If the underwriters commence any of these transactions, they may discontinue them at any time.

We have agreed to indemnify the underwriters and selected dealers against some specified types of liabilities, including liabilities under the Securities Act, and to contribute to payments the underwriters may be required to make in respect of any of these liabilities.

The underwriters and their affiliates have provided in the past to us and our affiliates and may provide from time to time in the future certain financial advisory, investment banking and other services for us and such affiliates in the ordinary course of their business, for which they have received and may continue to receive customary fees and commissions. MLV & Co. LLC acted as book running manager in the June 2011 offering of our Series A Preferred Stock and acted as sales agent in our at-the-market offering of Series A Preferred Stock. Imperial Capital acted as sole book-running manager in connection with Gastar USA's issuance of \$200.0 million aggregate principal amount of 8 5/8% Senior Secured Notes Due 2018, which was closed on May 15, 2013, and IBERIA Capital Partners L.L.C. acted as a Co-Manager. Additionally, IBERIABANK, an affiliate of IBERIA Capital Partners L.L.C., is a lender under our existing credit facility and will receive a portion of the proceeds from this offering. In addition, from time to time, the underwriters and their affiliates may effect transactions for their own accounts or the account of customers, and hold on behalf of themselves or their customers, long or short positions in our debt or equity securities or loans, and may do so in the future.

This prospectus supplement and the accompanying prospectus in electronic format may be made available on Internet website maintained by the underwriters of this offering and may be made available on websites maintained by other dealers. Other than the prospectus supplement and the accompanying prospectus in electronic format, the information on the underwriters' website and any information contained in any other website maintained by any dealer is not part of the prospectus supplement and the accompanying prospectus or the registration statement of which the prospectus supplement and the accompanying prospectus form a part.

Foreign Regulatory Restrictions on Purchase of Shares

We have not taken any action to permit a public offering of the shares outside the United States or to permit the possession or distribution of this prospectus supplement outside the United States except in accordance with the laws of each such jurisdiction. Persons outside the United States who come into possession of this prospectus supplement must inform themselves about and observe any restrictions relating to this offering of the Series B Preferred Stock and the distribution of the prospectus supplement outside the United States.

Table of Contents

LEGAL MATTERS

Certain legal matters with respect to the validity of the Series B Preferred Stock offered by this prospectus supplement will be passed upon for us by Vinson & Elkins L.L.P., Houston, Texas. Certain legal matters related to the guarantees will be passed upon for us by Burnet, Duckworth & Palmer LLP, Calgary, Alberta. Certain legal matters will also be passed upon for the underwriters by Reed Smith LLP.

EXPERTS

The consolidated financial statements of each of Gastar Exploration Ltd. and Gastar Exploration USA, Inc. as of December 31, 2012 and 2011, and for each of the years in the three-year period ended December 31, 2012, and Gastar Exploration Ltd.'s management's assessment of the effectiveness of internal control over financial reporting as of December 31, 2012, incorporated by reference in this prospectus supplement, have been so incorporated in reliance on the reports of BDO USA, LLP, independent registered public accounting firm, incorporated herein by reference, given upon the authority of said firm as experts in accounting and auditing.

The statement of revenues and direct operating expenses of the Chesapeake Acquisition properties for the year ended December 31, 2012 has been incorporated by reference herein in reliance upon the report of BDO USA, LLP, independent registered public accounting firm, given upon the authority of said firm as experts in accounting and auditing.

The statement of revenues and direct operating expenses of the WEHLU Acquisition properties for the years ended December 31, 2012 and 2011 have been incorporated by reference herein in reliance upon the report of BDO USA, LLP, independent auditors, given upon the authority of said firm as experts in accounting and auditing.

The information included in or incorporated by reference into this prospectus supplement regarding our estimated quantities of proved reserves, the future net revenues from those reserves and their present value is based, in part, on the estimated reserve evaluations and related calculations of Wright & Company, Inc., independent petroleum engineering consultants, and Netherland, Sewell & Associates, Inc., independent petroleum consultants. These estimates are aggregated and the sums are included in or incorporated by reference into this prospectus supplement in reliance upon the authority of each firm as experts in petroleum engineering.

The information included in or incorporated by reference into this prospectus supplement regarding the estimated proved reserves acquired in the WEHLU Acquisition, the future net revenues from those reserves and their present value is based on the estimated reserve evaluations and related calculations of Wright & Company, Inc., independent petroleum engineers, and have been included or incorporated by reference in reliance on the authority of that firm as experts in petroleum engineering.

WHERE YOU CAN FIND MORE INFORMATION

This prospectus supplement is part of a registration statement on Form S-3 that we filed with the SEC. Certain information in the registration statement has been omitted from this prospectus supplement in accordance with the SEC's rules and regulations. The SEC allows us to incorporate by reference the information we file with it, which means that we can disclose important information to you by referring you to those documents instead of having to repeat the information in this prospectus supplement. The information incorporated by reference is considered to be part of this prospectus supplement and the accompanying prospectus. In accordance with Section 412 of the Exchange Act, any statement contained in a document incorporated by reference herein shall be deemed modified or superseded to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. You should review the information and exhibits in the registration statement for

Table of Contents

further information about us and the securities we are offering. Statements in this prospectus supplement or the

accompanying prospectus concerning any document we filed as an exhibit to the registration statement or that we otherwise filed with the SEC are not intended to be comprehensive and are qualified by reference to those filings. You should review the complete document to evaluate these statements.

We are currently subject to the information requirements of the Exchange Act and file Exchange Act reports with Parent on a combined basis. In accordance with the Exchange Act, Parent files reports, proxy statements and other information with the SEC. We incorporate by reference the information and documents listed below and any future filings we will make with the SEC pursuant to Sections 13(a), 13(c), 14, or 15(d) of the Exchange Act after the date of this prospectus supplement until the termination of the offering of the Series B Preferred Stock covered by this prospectus supplement (other than information furnished under Item 2.02 or Item 7.01 of Form 8-K):

Annual Report on Form 10-K for the year ended December 31, 2012, filed by Gastar Exploration Ltd. and Gastar Exploration USA, Inc. with the SEC on March 11, 2013, as amended by the Form 10-K/A, as filed with the SEC on April 29, 2013, and the Form 10-K/A, as filed with the SEC on October 24, 2013.

Quarterly Reports on Form 10-Q for the quarters ended March 31, 2013 and June 30, 2013, filed by Gastar Exploration Ltd. and Gastar Exploration USA, Inc. with the SEC on May 2, 2013 and August 5, 2013, respectively;

Current Reports on Form 8-K filed by Gastar Exploration Ltd. and/or Gastar Exploration USA, Inc. with the SEC on January 8, 2013, February 21, 2013, March 11, 2013, April 1, 2013 (as amended by the Form 8-K/A filed with the SEC on June 27, 2013 and the Form 8-K/A filed with the SEC on October 25, 2013), April 3, 2013, April 23, 2013, May 2, 2013, May 7, 2013, May 10, 2013, May 15, 2013, June 12, 2013, July 3, 2013, July 9, 2013, July 17, 2013, August 6, 2013, August 12, 2013, September 3, 2013, September 6, 2013, September 23, October 4, 2013, October 8, 2013, October 22, 2013 and October 28, 2013.

The description of preferred stock and the Parent guarantee in the Registration Statement on Form S-3, filed by Gastar Exploration USA, Inc. and Gastar Exploration Ltd. with the SEC on May 27, 2011, including any amendment or reports filed for the purpose of updating this description; and

All documents that we file with the SEC pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act, after the date of this prospectus supplement and prior to the termination of the offering, except as to any portion of any future report or document that is furnished to the SEC and which is not deemed filed with the SEC under such provisions.

You may request a copy of these filings at no cost by making written or telephone requests for copies to:

Gastar Exploration USA, Inc.

1331 Lamar Street, Suite 650

Houston, Texas 77010

Attention: Michael A. Gerlich

Telephone: (713) 739-1800

Additionally, you may read and copy any documents that we have filed with the SEC at the SEC's Public Reference Room at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. You may also obtain copies of these documents at prescribed rates from the public reference section of the SEC at its Washington address. Please call the SEC at 1-800-SEC-0330 for further information. The SEC maintains an internet site that contains reports, proxy and information statements, and other information regarding us. The SEC's website address is <http://www.sec.gov>. You

Edgar Filing: Gastar Exploration USA, Inc. - Form 424B5

can also obtain copies of the materials we file with the SEC from our website at <http://www.gastar.com>. The information on our website or any other website is not part of this prospectus supplement.

S-77

Table of Contents

PROSPECTUS

\$200,000,000

Gastar Exploration USA, Inc.

Preferred Stock

Gastar Exploration Ltd.

Guarantee of Preferred Securities

Through this prospectus, Gastar Exploration USA, Inc. may periodically offer preferred stock that is fully and unconditionally guaranteed by Gastar Exploration Ltd. in the manner and to the extent as described in this prospectus. The aggregate offering price of the preferred stock may not exceed \$200,000,000. The prices and other terms of the preferred stock and the related guarantees we will offer will be determined at the time of its offering and will be described in a supplement to this prospectus.

There is currently no market for any of the securities included in this prospectus, although Gastar Exploration USA, Inc. intends to list certain series of its preferred stock offered by this prospectus on the NYSE Amex.

The securities may be offered on a delayed or continuous basis directly by us, through agents, underwriters or dealers as designated from time to time, through a combination of these methods or any other method as provided in the applicable prospectus supplement. The names of any underwriters, agents or dealers will be included in a supplement to this prospectus. You should read this prospectus and any applicable prospectus supplement carefully before you invest.

Investing in our securities involves a high degree of risk. Please read the matters set forth in Risk Factors beginning on page 2 of this prospectus, in any prospectus supplement or incorporated by reference herein or therein in determining whether to purchase our securities.

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

This prospectus is dated June 8, 2011

Table of Contents

You should rely only on the information contained in this prospectus. We have not authorized anyone to provide you with different information. We are not making an offer of these securities in any jurisdiction where an offer is not permitted. You should not assume that the information contained in this prospectus is accurate as of any date other than the date on the front cover of this prospectus. Information contained on our website or about us on any other website does not constitute part of this prospectus.

TABLE OF CONTENTS

	Page
<u>Prospectus Summary</u>	1
<u>Risk Factors</u>	2
<u>Cautionary Statements Regarding Forward-Looking Statements</u>	3
<u>Use of Proceeds</u>	5
<u>Ratio of Earnings to Combined Fixed Charges and Preferred Dividends</u>	6
<u>Description of Preferred Securities</u>	7
<u>Description of Guarantee of Preferred Securities</u>	8
<u>Plan of Distribution</u>	9
<u>Legal Matters</u>	12
<u>Experts</u>	12
<u>Where You Can Find More Information</u>	12
<u>Disclosure of SEC Position on Indemnification for Securities Act Liabilities</u>	14

ABOUT THIS PROSPECTUS

Unless otherwise stated or the context otherwise requires, all references to preferred stock or similar terms in the prospectus refer only to the preferred stock of Gastar Exploration USA, Inc. and all references to guarantees in this prospectus refer only to the guarantees of such preferred stock by Gastar Exploration Ltd.

This prospectus is part of a registration statement that we have filed with the Securities and Exchange Commission, or the SEC, using a shelf registration process. Under this shelf registration process, we may sell the preferred stock described in this prospectus in one or more offerings up to a total dollar amount of \$200,000,000. This prospectus provides you with a general description of the preferred stock and the related guarantees that we may offer. Each time we sell these securities with this prospectus, we will provide you with a prospectus supplement that will contain specific information about the terms of that offering including, among other things, the specific amounts, prices, and terms of the offered securities. The prospectus supplement may also add to, update or change information in this prospectus. The prospectus supplement will also contain information, where appropriate, about material United States federal income tax consequences relating to, and any listing on a securities exchange of, the securities covered by the prospectus supplement. You should read carefully this prospectus, any prospectus supplement, and the additional information described below.

This prospectus does not contain all the information provided in the registration statement we filed with the SEC. For further information about us or the securities offered by this prospectus, you should refer to that registration statement, which you can obtain from the SEC, as described below under the heading **Where You Can Find More Information**.

When acquiring securities, you should rely only on the information provided in this prospectus and in the related prospectus supplement, including any information incorporated by reference. No one is authorized to provide you with information different from that which is contained, or deemed to be contained, in this prospectus and related prospectus supplement. We are not offering the securities in any state where the offer is prohibited. You should not assume that the information in this prospectus, any prospectus supplement or any document incorporated by reference is truthful or complete as of any date other than the date indicated on the cover page of these documents.

Table of Contents

PROSPECTUS SUMMARY

Our Company

Gastar Exploration USA, Inc. is a Delaware corporation and the primary operating subsidiary of Gastar Exploration Ltd., which owns 100% of the common stock of Gastar Exploration USA, Inc. Gastar Exploration USA, Inc. converted from a Michigan corporation to a Delaware corporation on May 24, 2011.

Gastar Exploration Ltd. is a corporation, incorporated in Alberta and subsisting under the *Business Corporations Act* (Alberta), with its common shares listed on the NYSE Amex under the symbol GST. Gastar Exploration Ltd. is a holding company and substantially all of its operations are conducted through, and substantially all of its assets are held by, its primary operating subsidiary, Gastar Exploration USA, Inc., and its wholly-owned subsidiaries.

Unless otherwise stated or the context otherwise requires, all references in this prospectus to **Gastar USA** refer solely to Gastar Exploration USA, Inc., all references to **Parent** refer solely to Gastar Exploration Ltd., and all references to **we**, **us**, and **our** or similar references refer to Gastar Exploration Ltd. and its wholly-owned subsidiaries, including Gastar Exploration USA, Inc., its primary operating company.

Our Business

We are an independent energy company engaged in the exploration, development and production of natural gas and oil in the United States. Our principal business activities include the identification, acquisition, and subsequent exploration and development of natural gas and oil properties. Our emphasis is on prospective deep structures identified through seismic and other analytical techniques as well as unconventional natural gas reserves, such as shale resource plays. We are pursuing natural gas exploration in the Marcellus Shale in the Appalachian area of West Virginia and central and southwestern Pennsylvania and the deep Bossier play in the Hilltop area in East Texas. We also conduct limited coal bed methane development activities within the Powder River Basin of Wyoming and Montana.

Corporation Information

Our principal executive office is located at 1331 Lamar Street, Suite 650, Houston, Texas 77010, and our telephone number at that address is (713) 739-1800. Our website address is www.gastar.com. Information contained on or accessible through our website or about us on any other website is not incorporated by reference into this prospectus and does not constitute a part of this prospectus.

Table of Contents

RISK FACTORS

An investment in our securities involves a significant degree of risk. Before you invest in our securities you should carefully consider the risk factors included in the our most recent Annual Report on Form 10-K, any Quarterly Reports on Form 10-Q and any Current Reports on Form 8-K (each as may be amended), which are incorporated herein by reference, and those risk factors that may be included in the applicable prospectus supplement, together with all of the other information included in this prospectus, any prospectus supplement and the other documents we incorporate by reference in evaluating an investment in our securities.

If any of the risks discussed in the foregoing documents were to occur, our business, financial condition, results of operations and cash flows could be materially adversely affected. In that case, we may be unable to pay interest on, or the principal of, any debt securities. In that event, the trading price of our securities could decline and you could lose all or part of your investment.

For more information please refer to the sections described below under the headings **Cautionary Statements Regarding Forward-Looking Statements** and **Where You Can Find More Information**.

Table of Contents

CAUTIONARY STATEMENTS REGARDING FORWARD-LOOKING STATEMENTS

This prospectus includes forward looking information that is intended to be covered by the forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. All statements other than statements of historical fact included or incorporated by reference in this prospectus are forward-looking statements, including without limitation all statements regarding future plans, business objectives, strategies, expected future financial position or performance, expected future operational position or performance, budgets and projected costs, future competitive position or goals and/or projections of management for future operations. In some cases, you can identify a forward-looking statement by terminology such as may, will, could, should, expect, plan, project, intend, anticipate, believe, potential, pursue, target or continue, the negative of such terms or variations thereon, or other comparable terminology. Forward-looking statements may include statements that relate to, among other things, our:

financial position;

business strategy and budgets;

anticipated capital expenditures;

drilling of wells, including the anticipated scheduling and results of such operations;

natural gas and oil reserves;

timing and amount of future production of natural gas, natural gas liquids, oil and condensate;

operating costs and other expenses;

cash flow and anticipated liquidity;

prospect development; and

property acquisitions and sales.

The forward-looking statements contained in this prospectus are largely based on our expectations for the future, which reflect certain estimates and assumptions made by our management. These estimates and assumptions reflect our best judgment based on currently known market conditions, operating trends and other factors. Although we believe such estimates and assumptions to be reasonable, they are inherently uncertain and involve a number of risks and uncertainties that are beyond our control. As such, management's assumptions about future events may prove to be inaccurate. For a more detailed description of the risks and uncertainties involved, see Item 1A. Risk Factors in Part I of the Annual Report on Form 10-K for the fiscal year ended December 31, 2010 filed with the SEC by Parent. We do not intend to publicly update or revise any forward-looking statements as a result of new information, future events, changes in circumstances or otherwise. These cautionary statements qualify all forward-looking statements attributable to us, or persons acting on our behalf. Management cautions all readers that the forward-looking statements contained in this report are not guarantees of future performance, and we cannot assure any reader that such statements will be realized or that the events and circumstances they describe will occur. Factors that could cause actual results to differ materially from those anticipated or implied in the forward-looking statements herein include, but are not limited to:

the supply and demand for natural gas and oil;

low and/or declining prices for natural gas and oil;

natural gas and oil price volatility;

worldwide political and economic conditions and conditions in the energy market;

our ability to raise capital to fund capital expenditures or repay or refinance debt upon maturity;

Table of Contents

the ability and willingness of our current or potential counterparties, third-party operators or vendors to enter into transactions with us and/or to fulfill their obligations to us;

failure of our joint interest partners to fund any or all of their portion of any capital program;

the ability to find, acquire, market, develop and produce new natural gas and oil properties;

uncertainties about the estimated quantities of natural gas and oil reserves;

strength and financial resources of competitors;

availability and cost of material and equipment, such as drilling rigs and transportation pipelines;

availability and cost of processing and transportation;

changes or advances in technology;

uncertainties in the estimation of proved reserves and in the projection of future rates of production and timing of development expenditures;

the risks associated with exploration, including cost overruns and the drilling of non-economic wells or dry wells, operating hazards inherent to the natural gas and oil business and down hole drilling and completion risks that are generally not recoverable from third parties or insurance;

potential mechanical failure or under-performance of significant wells or pipeline mishaps;

environmental risks;

possible new legislative initiatives and regulatory changes potentially adversely impacting our business and industry, including, but not limited to, national healthcare, cap and trade, hydraulic fracturing, state and federal corporate income taxes, retroactive royalty or production tax regimes, changes in environmental regulations, environmental risks and liability under federal, state and local environmental laws and regulations;

effects of the application of applicable laws and regulations, including changes in such regulations or the interpretation thereof;

potential losses from pending or possible future claims, litigation or enforcement actions;

Edgar Filing: Gastar Exploration USA, Inc. - Form 424B5

potential defects in title to our properties or lease termination due to lack of activity or other disputes with mineral lease and royalty owners, whether regarding calculation and payment of royalties or otherwise;

the weather, including the occurrence of any adverse weather conditions and/or natural disasters affecting our business;

ability to find and retain skilled personnel; and

any other factors that impact or could impact the exploration of natural gas or oil resources, including, but not limited to, the geology of a resource, the total amount and costs to develop recoverable reserves, legal title, regulatory, natural gas administration, marketing and operational factors relating to the extraction of natural gas and oil.

You should not unduly rely on these forward-looking statements in this prospectus, as they speak only as of the date of this prospectus. Except as required by law, we undertake no obligation to publicly update, revise or release any revisions to these forward-looking statements after the date on which they are made to reflect new information, events or circumstances occurring after the date of this prospectus or to reflect the occurrence of unanticipated events.

Table of Contents

USE OF PROCEEDS

Unless we specify otherwise in any prospectus supplement, we expect to use the net proceeds from the sale of securities offered by this prospectus for general corporate purposes, which may include, among other things:

capital expenditures;

the repayment of indebtedness;

working capital; and

to make strategic acquisitions.

The precise amount and timing of the application of such proceeds will depend upon our funding requirements and the availability and cost of other funds.

Table of Contents**RATIO OF EARNINGS TO COMBINED FIXED CHARGES AND PREFERRED DIVIDENDS**

The following table sets forth our historical earnings to combined fixed charges and preferred dividends for Gastar Exploration USA, Inc. for the periods indicated.

	Three Months Ended March	Year Ended December 31,				
	31, 2011	2010	2009	2008	2007	2006
Ratio of Earnings to Combined Fixed Charges and Preferred Dividends (1)	(2)	(3)	4.8x	(4)	(5)	(6)

(1) No preferred dividends were paid for the periods shown.

(2) Earnings were inadequate to cover combined fixed charges and preferred dividends for the three months ended March 31, 2011 by \$1.8 million.

(3) Earnings were inadequate to cover combined fixed charges and preferred dividends for the year ended December 31, 2010 by \$12.0 million.

(4) Earnings were inadequate to cover combined fixed charges and preferred dividends for the year ended December 31, 2008 by \$12.5 million.

(5) Earnings were inadequate to cover combined fixed charges and preferred dividends for the year ended December 31, 2007 by \$407,000.

(6) Earnings were inadequate to cover combined fixed charges and preferred dividends for the year ended December 31, 2006 by \$67.9 million.

Table of Contents

DESCRIPTION OF PREFERRED SECURITIES

Subject to the filing of one or more Certificates of Designation in accordance with the Delaware General Corporation Law, or the DGCL, the board of directors of Gastar USA, or the Gastar USA Board, may, without the approval of stockholders, at any time and from time-to-time issue one or more series of preferred stock. Subject to the filings of one or more Certificates of Designation and other limitations prescribed by law, the Gastar USA Board may from time-to-time fix, before issuance, the number of shares of each series and the designation, rights, privileges, restrictions and conditions attaching to each series, including, without limiting the generality of the foregoing, the amount, if any, specified as being payable preferentially to such series on a distribution; the extent, if any, of further participation on a distribution; voting rights, if any; and dividend rights (including whether such dividends be preferential, or cumulative or non-cumulative), if any. The authorization of undesignated preferred stock makes it possible for the Gastar USA Board to issue preferred stock with rights or preferences that could impede the success of any attempt to change control of us. These and other provisions may have the effect of deterring hostile takeovers or delaying changes in control or management of us. If Gastar USA offers preferred stock, a description of the rights, privileges, restrictions and conditions attaching thereto will be filed with the SEC and described in the prospectus supplement, including the following terms:

The prospectus supplement with respect to any issuance of preferred stock will specify:

the series, the number of shares offered and the liquidation value of the preferred stock;

the price at which the preferred stock will be issued;

the annual dividend rate, if any, whether the dividend rate is fixed or variable, the date dividends will accrue, the dividend payment dates, and whether dividends will be cumulative;

the price and the terms and conditions for redemption, if any, including redemption at Gastar USA's option or at the option of the holders, including the time period for redemption, and any accumulated dividends or premiums;

the liquidation preference, if any, and any accumulated dividends upon liquidation, dissolution or winding up of Gastar USA's affairs;

any sinking fund or similar provision, and, if so, the terms and provisions relating to the purpose and operation of the fund;

the terms and conditions, if any, for conversion or exchange of the shares of preferred stock into or for shares of any other class or classes of Gastar USA's capital stock or any series of any other class or classes, or of any other series of the same class, or any other securities, including debt securities, or assets, including the price or the rate of conversion or exchange and the method, if any, of adjustment;

if applicable, a discussion of material U.S. federal income tax considerations;

any voting rights; and

any or all other preferences and relative, participating, optional or other special rights, privileges or qualifications, limitations or restrictions.

Edgar Filing: Gastar Exploration USA, Inc. - Form 424B5

Any shares of preferred stock offered pursuant to this prospectus and the applicable prospectus supplement will, upon issuance, be fully paid and non-assessable.

Table of Contents

DESCRIPTION OF GUARANTEE OF PREFERRED SECURITIES

Set forth below is a summary of information concerning the preferred securities guarantees that the Parent will execute and deliver for the benefit of the holders of any series of preferred stock offered by Gastar USA. The following summary does not purport to be complete and is subject in all respects to the provisions of, and is qualified in its entirety by reference to, the form of preferred securities guarantee which is filed as an exhibit to the registration statement of which this prospectus forms a part. A prospectus supplement may contain more specific information about the terms of the preferred securities guarantee.

Pursuant to each preferred stock guarantee, the Parent will agree to pay in full, to the holders of the preferred stock issued by Gastar USA, the guarantee payments, except to the extent paid by Gastar USA, as and when due, regardless of any defense, right of set-off or counterclaim which Gastar USA may have or assert. The following payments, without duplication, with respect to preferred stock, to the extent not paid by Gastar USA, will be subject to the preferred stock guarantee:

any accumulated and unpaid distributions (as described in the applicable Certificate of Designation of the preferred stock) that have been declared by the board of directors of Gastar USA to be paid on the preferred stock out of funds legally available for such dividends;

any redemption price (as described in the applicable Certificate of Designation of the preferred stock), plus all accrued and unpaid dividends to the date of redemption with respect to any preferred stock called for redemption by Gastar USA or otherwise required to be redeemed by the terms of the applicable Certificate of Designation; and

upon a voluntary or involuntary dissolution, winding-up or liquidation of Gastar USA, the aggregate stated liquidation preference and all accumulated and unpaid dividends, whether or not declared, without regard to whether Gastar USA has sufficient assets to make full payment as required on liquidation.

The Parent's obligation to make a guarantee payment may be satisfied by direct payment of the required amounts by the Parent to the holders of preferred stock or by causing Gastar USA to pay the amounts to the holders.

The preferred stock guarantees will be governed by, and construed and interpreted in accordance with, the laws of the State of Texas.

Table of Contents

PLAN OF DISTRIBUTION

General

We may sell the securities offered through this prospectus in any one or more of the following ways:

through underwriters or dealers;

through agents;

directly to purchasers;

in at the market offerings to or through a market maker or into an existing trading market, or a securities exchange or otherwise;

transactions not involving market makers or established trading markets, including direct sales or privately negotiated transactions;
or

through a combination of any of these methods of sale.

In addition, we may sell some or all of the securities included in this prospectus through:

a block trade in which a broker-dealer will attempt to sell as agent, but may position or resell a portion of the block, as principal, in order to facilitate the transaction;

purchases by a broker-dealer, as principal, and resale by the broker-dealer for its account;

ordinary brokerage transactions and transactions in which a broker solicits purchasers; or

privately negotiated transactions.

In addition, we may enter into option or other types of transactions that require us or them to deliver preferred stock to a broker-dealer, who will then resell or transfer the securities under this prospectus. We may enter into hedging transactions with respect to our securities. For example, we may:

enter into transactions with a broker-dealer or affiliate thereof in connection with which such broker-dealer or affiliate will engage in short sales of the preferred stock pursuant to this prospectus, in which case such broker-dealer or affiliate may use shares of preferred stock received from us to close out its short positions;

sell securities short and redeliver such shares to close out our short positions;

enter into option or other types of transactions that require us to deliver preferred stock to a broker-dealer or an affiliate thereof, who will then resell or transfer the preferred stock under this prospectus; or

loan or pledge the preferred stock to a broker-dealer or an affiliate thereof, who may sell the loaned shares or, in an event of default in the case of a pledge, sell the pledged shares pursuant to this prospectus.

The securities described in this prospectus may be distributed at a fixed price or prices, which may be changed, market prices prevailing at the time of sale, prices related to the prevailing market prices, or negotiated prices. Any of the prices may represent a discount from the prevailing market prices.

At the time that any particular offering of securities is made, to the extent required by the Securities Act, a prospectus supplement will be distributed setting forth the terms of the offering, including the aggregate number of securities being offered; the purchase price or initial public offering price of the securities; the names of any underwriters, dealers or agents; the net proceeds to us from the sale of the securities; any delayed delivery

Table of Contents

arrangements; any underwriting discounts, commissions and other items constituting compensation from us; any discounts, commissions or concessions allowed or reallocated or paid to dealers, and any commissions paid to agents.

Market Making and Stabilization

There is currently no market for any of the securities included in this prospectus, although we intend to list certain series of Gastar USA's preferred stock on the NYSE Amex. If the securities are traded after their initial issuance, they may trade at a discount from their initial offering price, depending upon prevailing interest rates, the market for similar securities and other factors. While it is possible that an underwriter could inform us that it intends to make a market in the securities, such underwriter would not be obligated to do so, and any such market making could be discontinued at any time without notice. Therefore, we cannot assure you as to whether an active trading market will develop for these other securities. We have no current plans for the listing of these other securities on any securities exchange or quoting such securities on the over the counter Bulletin Board or such other quotation system; any such listing with respect to these other securities will be described in the applicable prospectus supplement.

If a prospectus supplement so indicates, underwriters, brokers or dealers, in compliance with applicable law, may engage in transactions that stabilize, maintain or otherwise affect the market price of the offered securities, which may be higher than the price that might otherwise prevail in the open market.

Underwriters and Agents

If underwriters are used in the sale, the underwriters will acquire the securities for their own account for resale to the public, either on a firm commitment basis or a best efforts basis. The underwriters may resell the securities from time-to-time in one or more transactions, including negotiated transactions, at a fixed public offering price or at varying prices determined at the time of sale. Underwriters may offer securities to the public either through underwriting syndicates represented by one or more managing underwriters or directly by one or more firms acting as underwriters. Unless we inform you otherwise in the prospectus supplement, the obligations of the underwriters to purchase the securities will be subject to certain conditions. The underwriters may change from time-to-time any initial public offering price and any discounts or concessions allowed or reallocated or paid to dealers.

We may also sell the securities through agents designated from time-to-time. In the prospectus supplement, we will name any agent involved in the offer or sale of the offered securities, and we will describe any commissions payable to the agent. Unless we inform you otherwise in the prospectus supplement, any agent will agree to use its reasonable best efforts to solicit purchases for the period of its appointment.

Dealers

If dealers are used in the sale of securities, we will sell the securities to them as principals. The dealers may then resell those securities to the public at varying prices determined by the dealers at the time of resale. We will include in the prospectus supplement the names of the dealers and the terms of the transaction.

Direct Sales

Securities may also be sold directly by us. In this case, no underwriters or agents would be involved.

Institutional Purchasers

We may sell the securities directly to institutional investors or others who may be deemed to be underwriters within the meaning of the Securities Act with respect to any sale of those securities. We will describe the terms of any such sales in the prospectus supplement.

Table of Contents

Subscription Offerings

We may also make direct sales through subscription rights distributed to Gastar USA's existing stockholders on a pro rata basis, which may or may not be transferable. In any distribution of subscription rights to Gastar USA's stockholders, if all of the underlying securities are not subscribed for, we may then sell the unsubscribed securities directly to third parties or may engage the services of one or more underwriters, dealers or agents, including standby underwriters, to sell the unsubscribed securities to third parties.

Underwriting Compensation

We will bear costs relating to all of the securities being registered under this registration statement of which this prospectus forms a part.

Any broker-dealers or other persons acting on our behalf that participate with us in the distribution of the shares may be deemed to be underwriters and any commissions received or profit realized by them on the resale of the shares may be deemed to be underwriting discounts and commissions under the Securities Act. As of the date of this prospectus, we are not a party to any agreement, arrangement or understanding between any broker or dealer and us with respect to the offer or sale of the securities pursuant to this prospectus.

Pursuant to a requirement by the Financial Industry Regulatory Authority, or FINRA, the maximum commission or discount to be received by any FINRA member or independent broker/dealer may not be greater than eight percent (8%) of the gross proceeds received by us for the sale of any securities being registered pursuant to SEC Rule 415 under the Securities Act. If more than 5% of the net proceeds of any offering of securities made under this prospectus will be received by a FINRA member participating in the offering or its affiliates or associated persons of such FINRA member, the offering will be conducted in accordance with FINRA Conduct Rule 5110(h).

Indemnification; Other Relationships

We may have agreements with agents, underwriters, dealers and remarketing firms to indemnify them against certain civil liabilities, including liabilities under the Securities Act. Agents, underwriters, dealers and remarketing firms, and their affiliates, may engage in transactions with, or perform services for, us in the ordinary course of business. This includes commercial banking and investment banking transactions.

Table of Contents

LEGAL MATTERS

Vinson & Elkins L.L.P. will pass upon the validity of the securities offered in this registration statement. If certain legal matters in connection with an offering of the securities made by this prospectus and a related prospectus supplement are passed on by counsel for the underwriters of such offering, that counsel will be named in the applicable prospectus supplement related to that offering.

EXPERTS

The consolidated financial statements of each of Gastar Exploration Ltd. and Gastar Exploration USA, Ltd. as of December 31, 2010 and 2009 and for each of the three years in the period ended December 31, 2010 and Gastar Exploration Ltd.'s management's assessment of the effectiveness of internal control over financial reporting as of December 31, 2010 incorporated by reference in this prospectus, have been so incorporated in reliance on the reports of BDO USA, LLP, an independent registered public accounting firm, incorporated herein by reference, given on authority of said firm as experts in auditing and accounting.

Information incorporated by reference into this prospectus regarding our estimated quantities of natural gas and oil reserves was prepared by us. Our proved reserve estimates as of December 31, 2010, 2009 and 2008 incorporated by reference into this prospectus were prepared by Netherland, Sewell & Associates, Inc., independent petroleum engineers.

WHERE YOU CAN FIND MORE INFORMATION

We are incorporating by reference into this prospectus information we file with the SEC. This procedure means that we can disclose important information to you by referring you to documents filed with the SEC. The information we incorporate by reference is part of this prospectus and later information that we file with the SEC will automatically update and supersede this information. We incorporate by reference the documents listed below and any future filings made by us with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act (excluding any information furnished and not filed pursuant to Item 2.02, Item 7.01 or certain exhibits furnished pursuant to Item 9.01 of any current report on Form 8-K with the SEC) after the date of the initial registration statement and prior to the effectiveness of the registration statement and after the date of this prospectus until the offering under this registration statement is completed.

Annual Report on Form 10-K for the year ended December 31, 2010, filed by Gastar Exploration Ltd. with the SEC on March 10, 2011 (File No. 001-32714), including information incorporated by reference from the Definitive Proxy Statement on Schedule 14A filed by Gastar Exploration Ltd. with the SEC on April 19, 2011 (File No. 001-32714);

Quarterly Report on Form 10-Q for the quarter ended March 31, 2011, filed by Gastar Exploration Ltd. with the SEC on May 5, 2011 (File No. 001-32714); and

Current Reports on Form 8-K filed by Gastar Exploration Ltd. with the SEC on March 11, 2011, March 11, 2011, March 23, 2011, March 31, 2011 and May 26, 2011 (excluding any information furnished and not filed pursuant to Item 2.02 or Item 7.01 of any Current Report on Form 8-K with the SEC) (each File No. 001-32714).

You may request a copy of these filings at no cost by making written or telephone requests for copies to:

Gastar Exploration Ltd.

Gastar Exploration USA, Inc.

1331 Lamar Street, Suite 650

Houston, Texas 77010

Attention: Michael A. Gerlich

Table of Contents

Additionally, you may read and copy any materials that we have filed with the SEC at the SEC's Public Reference Room at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. You may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC maintains an internet site that contains reports, proxy and information statements, and other information regarding us. The SEC's website address is <http://www.sec.gov>. You can also obtain copies of the materials we file with the SEC from our website at <http://www.gastar.com>. The information on our website or about us on any other website is not part of this prospectus.

Table of Contents

**DISCLOSURE OF SEC POSITION ON INDEMNIFICATION
FOR SECURITIES ACT LIABILITIES**

Gastar Exploration Ltd.

The following description of the indemnification provisions of the *Business Corporations Act* (Alberta) and of the Parent's bylaws, as amended, does not purport to be complete and is subject to and qualified in its entirety by reference to the *Business Corporations Act* (Alberta) and the full text of the Parent's bylaws, each as amended.

The *Business Corporations Act* (Alberta) allows us to, and the Parent's bylaws provide in part that we will, indemnify each of the Parent's directors and officers, former directors and officers and any person who acts or acted at the Parent's request as a director or officer of a body corporate of which we are or were a shareholder or creditor (each an Indemnified Person), and such Indemnified Person's heirs and legal representatives, against all costs, charges and expenses reasonably incurred by such Indemnified Person in respect of any civil, criminal or administrative action or proceeding to which the Indemnified Person is made a party by reason of being or having been a director or officer of the Parent or that body corporate, if the Indemnified Person: (1) acted honestly and in good faith with a view to the Parent's best interests; and (2) in the case of a criminal or administrative action or proceeding that is enforced by a monetary penalty, had reasonable grounds for believing that his conduct was lawful. As used above, costs, charges and expenses includes an amount paid to settle an action or satisfy a judgment. These indemnities will continue in effect after the director or officer resigns his position or his position is terminated for any reason.

On December 13, 2006, the Board of Directors of the Parent approved changes to the Parent's bylaws. Such changes were to clarify the indemnification rights of the directors and officers within Article VIII of the bylaws as set forth in summary below:

Mandatory advancement of expenses to directors with respect to indemnification for proceedings;

Mandatory indemnification to directors, subject to court approval, for actions brought by or in the name of the Parent;

Indemnification for expenses incurred in respect of threatened litigation; and

Entitlement to payment of attorneys fees that directors/officers incur in litigating with the Parent their right to receive indemnity payments from the Parent whether successful or not.

The foregoing rights/entitlements are subject to the director/officer meeting the following standard of conduct:

- (a) The director/officer acting honestly and in good faith with a view to the best interests of the Parent; and
- (b) In the case of a criminal or administrative action or proceeding that is enforced by a monetary penalty, the director/officer having reasonable grounds for believing that the director's/officer's conduct was lawful.

All bylaw changes approved by the Parent's Board of Directors were approved by the Parent's shareholders at its annual meeting of shareholders held in June 2007.

There is currently no pending material litigation or proceeding involving any of the Parent's directors, officers or employees for which indemnification is sought.

Gastar Exploration USA, Inc.

Edgar Filing: Gastar Exploration USA, Inc. - Form 424B5

Section 145 of the DGCL provides that a corporation may indemnify any person, including an officer and director, who was or is, 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

Table of Contents

such cooperation), by reason of the fact that such person is or was a director, officer, employee or agent of such corporation, or is or was serving at the request of such corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise. The indemnity may include expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding, provided such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of such corporation, and, with respect to any criminal actions and proceedings, had no reasonable cause to believe that his conduct was unlawful. A Delaware corporation may indemnify any person, including an officer or director, who was or is, or is threatened to be made, a party to any threatened, pending or contemplated action or suit by or in the right of such corporation, under the same conditions, except that no indemnification is permitted without judicial approval if such person is adjudged to be liable to such corporation. Where an officer or director of a corporation is successful, on the merits or otherwise, in the defense of any action, suit or proceeding referred to above, or any claim, issue or matter herein, the corporation must indemnify such person against the expenses (including attorneys' fees) which such officer or director actually and reasonably incurred in connection therewith.

Section 5.7 of Gastar USA's Amended and Restated Bylaws provides for indemnification to the fullest extent authorized by the DGCL as the same exists or may hereafter be amended (but, in the case of any such amendment, only to the extent that such amendment permits Gastar USA to provide broader indemnification rights than said law permitted Gastar USA to provide prior to such amendment), against all expense, liability and loss reasonably incurred by such person in connection therewith and such indemnification shall continue as to such person's heirs, executors and administrators; provided, however, that except as provided below with respect to proceedings seeking to enforce rights to indemnification, Gastar USA shall indemnify any such person seeking indemnification in connection with a proceeding (or part thereof) initiated by such person only if such proceeding (or part thereof) was authorized by the Board of Directors of the Gastar USA.

If a claim is not paid in full by Gastar USA within thirty days after a written claim has been received by Gastar USA, the claimant may at any time thereafter bring suit against Gastar USA to recover the unpaid amount of the claim and, if successful in whole or in part, the claimant shall be entitled to be paid also the expense of prosecuting such claim. It shall be a defense to any such action (other than an action brought to enforce a claim for expenses incurred in defending any proceeding in advance of its final disposition where the required undertaking, if any is required, has been entered to Gastar USA) that the claimant has not met the standards of conduct which make it permissible under the DGCL for Gastar USA to indemnify the claimant for the amount claimed, but the burden of proving such defense shall be on Gastar USA.

SEC Position on Indemnification for Securities Act Liabilities

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by a registrant of expenses incurred or paid by a director, officer or controlling person of a registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, that registrant will, unless in the opinion of its counsel the claim has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

Table of Contents

SHARES
% SERIES B CUMULATIVE PREFERRED STOCK

GASTAR EXPLORATION USA, INC.

Prospectus Supplement

, 2013

Joint Book-Running Managers

Barclays

Credit Suisse

MLV & Co.

Sterne Agee

Lead Manager

Janney Montgomery Scott

Co-Managers

Euro Pacific Capital Inc.

IBERIA Capital Partners L.L.C.

Imperial Capital

Ladenburg Thalmann & Co. Inc.

Maxim Group LLC

National Securities Corporation

Northland Capital Markets