

Gastar Exploration Inc.
Form 424B5
May 13, 2016
Table of Contents

Filed pursuant to Rule 424(b)(5)

Registration No. 333-193832

PROSPECTUS SUPPLEMENT

(To Prospectus dated February 24, 2014)

50,000,000 Shares

Gastar Exploration Inc.

Common Stock

This is an offering of 50,000,000 shares of the common stock of Gastar Exploration Inc.

Our common stock trades on the NYSE MKT LLC (the "NYSE MKT") under the symbol "GST". The last reported trading price of our common stock on May 10, 2016 was \$1.02 per share.

*Investing in our common stock involves a high degree of risk. See **Risk Factors** beginning on page S-4 of this prospectus supplement and page 7 of the accompanying base prospectus.*

	Per Share	Total
Price to the public	\$0.9500	\$ 47,500,000
Underwriting discount	\$0.0475	\$ 2,375,000
Proceeds to Gastar Exploration Inc. (before expenses)	\$0.9025	\$ 45,125,000

We have granted the underwriters a 30-day option to purchase up to 7,500,000 additional shares of common stock on the same terms and conditions as set forth above.

Neither the Securities and Exchange Commission (the "SEC") nor any state securities commission has approved or disapproved of these securities or passed on the adequacy or accuracy of this prospectus supplement. Any representation to the contrary is a criminal offense.

The underwriters expect to deliver the shares on or about May 17, 2016.

Joint Book-Running Managers

Seaport Global Securities

Johnson Rice & Company L.L.C.

Co-Managers

Canaccord Genuity

Heikkinen Energy Advisors

IBERIA Capital Partners L.L.C.

Imperial Capital

Wunderlich

Prospectus Supplement dated May 12, 2016

Table of Contents

TABLE OF CONTENTS

Prospectus Supplement

<u>About This Prospectus Supplement</u>	S-ii
<u>Where You Can Find More Information</u>	S-ii
<u>Cautionary Statement Regarding Forward-Looking Statements</u>	S-iv
<u>Summary</u>	S-1
<u>Risk Factors</u>	S-4
<u>Use of Proceeds</u>	S-9
<u>Capitalization</u>	S-10
<u>Price Range of Common Stock</u>	S-11
<u>Dividend Policy</u>	S-12
<u>Description of Capital Stock</u>	S-13
<u>Material U.S. Federal Income Tax Considerations for Non-U.S. Holders</u>	S-20
<u>Underwriting</u>	S-24
<u>Legal Matters</u>	S-27
<u>Experts</u>	S-27
<u>Glossary of Terms</u>	A-1

Prospectus

<u>About this Prospectus</u>	1
<u>The Company</u>	2
<u>About the Subsidiary Guarantors</u>	2
<u>Where You Can Find More Information</u>	3
<u>Cautionary Statements Regarding Forward-Looking Statements</u>	5
<u>Risk Factors</u>	7
<u>Use of Proceeds</u>	8
<u>Ratios of Earnings to Fixed Charges and Ratio of Earnings to Combined Fixed Charges and Preferred Stock</u>	
<u>Dividends</u>	9
<u>Description of Capital Stock</u>	10
<u>Description of Debt Securities</u>	16
<u>Description of Rights</u>	28
<u>Plan of Distribution</u>	29
<u>Legal Matters</u>	32
<u>Experts</u>	32

Table of Contents

ABOUT THIS PROSPECTUS SUPPLEMENT

This document is in two parts. The first part is the prospectus supplement and the documents incorporated by reference herein, which describes the specific terms of this offering of our common stock. The second part is the accompanying base prospectus, which gives more general information, some of which may not apply to our common stock or this offering. If the information relating to the offering varies between the prospectus supplement and the accompanying base prospectus, the statements made in this prospectus supplement will be deemed to modify or supersede those made in the accompanying base prospectus and such documents incorporated by reference herein and therein.

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

WHERE YOU CAN FIND MORE INFORMATION

We have filed a registration statement with the SEC under the Securities Act of 1933, as amended (the Securities Act), that registers the offer and sale of the common stock covered by this prospectus supplement and the accompanying base prospectus. The registration statement, including the exhibits attached to the registration statement, contains additional relevant information about us.

We incorporate by reference information into this prospectus supplement. This means that we are disclosing important information to you by referring you to another document filed separately with the SEC. The information incorporated by reference is considered to be part of this prospectus supplement, except for any information superseded by information contained expressly in this prospectus supplement, and the information that we file later with the SEC will automatically supersede this information. We incorporate by reference the documents and financial statements listed below, which were filed with the SEC by us, other than any portions of the respective filings that were furnished (pursuant to Item 2.02 or Item 7.01 of Current Reports on Form 8-K or other applicable SEC rules) rather than filed:

Our Annual Report on Form 10-K for the fiscal year ended December 31, 2015, filed with the SEC on March 10, 2016;

Our Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2016, filed with the SEC on May 5, 2016;

Edgar Filing: Gastar Exploration Inc. - Form 424B5

Our Current Reports on Form 8-K filed with the SEC on January 19, 2016, February 2, 2016, February 5, 2016, February 23, 2016, March 30, 2016, April 14, 2016 and May 11, 2016; and

The description of our common stock contained in Exhibit 99.1 to our Current Report on Form 8-K, filed with the SEC on January 31, 2014, including any amendment that we may file in the future for the purpose of updating the description of our common stock.

Any future filing we make with the SEC under Section 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended (the Exchange Act) (excluding any information furnished pursuant to Item 2.02 or Item 7.01 on any Current Report on Form 8-K), including all such documents or amendments we may file with the SEC before the termination of the offering of securities under this prospectus supplement, will be deemed to be incorporated by reference into this prospectus supplement and will be a part of this prospectus supplement from the date of the filing of the document. Any statement contained in a document incorporated or deemed to be incorporated by reference

S-ii

Table of Contents

into this prospectus supplement will be deemed to be modified or superseded for purposes of this prospectus supplement to the extent that a statement contained in this prospectus supplement or in any other subsequently filed document that also is or is deemed to be incorporated by reference into this prospectus supplement modifies or supersedes that statement. Any statement that is modified or superseded will not constitute a part of this prospectus supplement, except as modified or superseded.

You may request a copy of these filings, other than an exhibit to these filings unless we have specifically incorporated that exhibit by reference into the filing, at no cost, by writing or calling:

Gastar Exploration Inc.

1331 Lamar Street, Suite 650

Houston, TX 77010

Attention: Investor Relations

(713) 739-1800

S-iii

Table of Contents

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement, the accompanying base prospectus and the documents incorporated by reference herein contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, Section 27A of the Securities Act, and Section 21E of the Exchange Act. All statements other than statements of historical fact included or incorporated by reference in this prospectus supplement, the accompanying base prospectus and the documents incorporated by reference herein 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.

The forward-looking statements contained in this prospectus supplement, the accompanying base prospectus and the documents incorporated by reference herein 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;

cash flow and liquidity;

timing and results of property divestitures;

compliance with covenants under our indenture and the credit agreement, as amended (Revolving Credit Facility Agreement), governing our revolving credit facility (Revolving Credit Facility);

business strategy and budgets;

capital expenditures;

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

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

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

operating costs and other expenses;

availability of capital; and

prospect development.

Although we believe such estimates and assumptions to be reasonable, these statements involve known and unknown risks, uncertainties, and other factors that may cause our actual results, performance, or achievements to be materially different from any future results, performance, or achievements expressed or implied by the forward-looking statements. For a more detailed description of the known material factors that could cause actual results to differ from those in the forward-looking statements, see the information presented under the heading **Risk Factors** beginning on page S-4 of this prospectus supplement and other risks set forth in Item 1A of our Annual Report on Form 10-K for the year ended December 31, 2015 and, if applicable, in our Quarterly Reports on Form 10-Q and Current Reports on Form 8-K. Except as otherwise required by applicable law, we disclaim any duty to update or revise any forward-looking statements as a result of new information, future events, changes in circumstances or otherwise, to reflect events or circumstances after the date of this prospectus supplement. These cautionary statements qualify all forward-looking statements attributable to us, or persons acting on our behalf. Management

S-iv

Table of Contents

cautions all readers that the forward-looking statements contained in this prospectus supplement, the accompanying base prospectus and the documents incorporated by reference herein 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 oil, condensate, natural gas and NGLs;

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

our financial condition, results of operations, revenues, cash flows and expenses;

the potential need to sell certain assets, restructure our debt or raise additional capital;

the need to take ceiling test impairments due to lower commodity prices;

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

the extent to which we are able to realize the anticipated benefits from acquired assets;

our ability to monetize certain assets;

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

our ability to meet financial covenants under our indenture or Revolving Credit Facility Agreement or the ability to obtain amendments or waivers to effect such compliance;

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 co-participants to fund any or all of their portion of any capital program;

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

uncertainties about the estimated quantities of oil and natural gas 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 oil and natural gas 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, state and local environmental laws and regulations;

S-v

Table of Contents

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;

our ability to find and retain skilled personnel; and

any other factors that impact or could impact the exploration of oil or natural gas 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 oil and natural gas.

You should not unduly rely on these forward-looking statements in this prospectus supplement, the accompanying base prospectus and the documents incorporated by reference herein, as they speak only as of the date of this prospectus supplement. 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 supplement or to reflect the occurrence of unanticipated events.

Table of Contents

SUMMARY

*This summary highlights basic information about our business and this offering. It does not contain all of the information that may be important to you and your investment decision. The following summary is qualified in its entirety by the more detailed information and financial statements and notes thereto included or incorporated by reference in this prospectus supplement, the accompanying base prospectus and the documents incorporated by reference herein. We urge you to read carefully the entire prospectus supplement, the accompanying base prospectus and the documents incorporated by reference herein, including our financial statements and the notes to those statements, before making an investment decision. We also encourage you to read the information presented under the heading *Risk Factors* and our discussion of other risks and uncertainties in our reports filed with the SEC under the Exchange Act, particularly our Annual Report on Form 10-K for the year ended December 31, 2015 and our Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2016, which are incorporated by reference into this prospectus supplement and the accompanying base prospectus.*

Unless otherwise indicated or required by the context, (i) Gastar, the Company, we, us, our and similar terms refer collectively to Gastar Exploration Inc. and (ii) all financial data included in this prospectus supplement and the accompanying base prospectus have been prepared in accordance with generally accepted accounting principles in the United States of America (U.S. GAAP).

*We have provided definitions for some of the natural gas and oil industry terms used or incorporated by reference in this prospectus supplement and the accompanying base prospectus in the *Glossary of Certain Industry Terms* on page A-1.*

Company Overview

We are a pure play Mid-Continent independent energy company engaged in the exploration, development and production of oil, condensate, natural gas and NGLs. We hold a concentrated acreage position in what we believe to be the core of the STACK Play, an area of central Oklahoma which is home to multiple oil and natural gas-rich reservoirs including the Meramec, Oswego, Osage, Woodford and Hunton formations.

We believe the STACK Play is one of the most economic plays in North America. It is a horizontal drilling play in an area of previously drilled vertical wells with multiple productive reservoirs that are predominantly oil producing. The STACK Play encompasses all or parts of Blaine, Canadian, Garfield, Kingfisher and Major counties in Oklahoma. STACK is an acronym for Sooner Trend Anadarko Canadian Kingfisher.

The STACK Play is currently one of the most active horizontal plays in North America and is in the early stages of development. Operated and non-operated drilling activity within and near our acreage could further delineate, or de-risk, our leased acreage position for its potential development in one or more formations in the STACK Play. We believe the drilling activity in the STACK Play has increased due to strong recent well results from us and other operators, the STACK Play's multiple, stacked, and productive reservoirs and the premium prices paid in recent acquisitions of oil and natural gas assets located in the play.

We have approximately 110,200 net surface acres in Oklahoma, including approximately 86,000 net surface acres in the STACK Play. The following table shows the potential net acreage and number of net drilling locations we have in each of the STACK Play formations:

STACK Play Formation	Potential Net Acreage(1)	Number of Net Drilling Locations(2)
Meramec	37,500	351
Oswego	14,900	93
Osage	38,700	242
Woodford	38,700	363
Hunton	71,600	506
Total	201,400	1,555

- (1) Potential net acreage represents the portion of our net acres that we believe lies within a prospective formation. Net acreage is represented in multiple plays and therefore represents a multiple of the net surface acreage.
- (2) Net drilling locations represents each location that we currently estimate could be drilled in a particular area calculated by well spacing and geological characteristic assumptions applicable to the formation in that area. Net drilling locations are represented in multiple STACK Play formations and therefore represents a multiple of the surface drilling locations.

Table of Contents**Recent Developments*****Our STACK Play Operating Results***

On September 6, 2015, we spudded our first Meramec well, the Deep River 30-1H, with a vertical depth of approximately 7,300 feet and drilled an approximate 5,100-foot lateral and completed it with a 34-stage fracture stimulation. The Deep River 30-1H was placed on flow back on October 28, 2015 and in December 2015 produced at a peak 24-hour rate of 1,094 Boe per day (71% oil) and has produced at a post-peak 120-day average daily rate of 663 Boe/d (58% oil). Our working interest in the Deep River 30-1H is 100% (NRI 80%). The estimated cost to drill and complete the Deep River 30-1H was approximately \$6.5 million.

On February 10, 2016, we spudded our second Meramec well, the Holiday Road 2-1H. The well was drilled to a total depth of 12,000 feet in approximately 12 days and has a horizontal lateral of approximately 4,300 feet. The Holiday Road 2-1H was completed in late March 2016 with a 34-stage fracture using approximately 12 million pounds of proppant. The well commenced flow back on April 11, 2016. Oil and natural gas production from the well is gradually increasing with the most-recent five-day average being 62 Bbl/d, 50 Mcf/d and 2,609 barrels of completion fluids recovered per day. Peak production rates for Meramec wells are typically achieved 60 to 90 days following initial flow back. The Holiday Road 2-1H exhibits significant permeability and reservoir energy and has averaged from inception to date approximately 3,000 barrels of completion fluid flow back per day. Our working interest in the Holiday Road 2-1H is 78.3% (approximate NRI 63%). The estimated cost to drill and complete the Holiday Road 2-1H was approximately \$4.5 million, including approximately \$520,000 of non-recurring costs associated with fishing coiled tubing from the wellbore during the completion process.

Appalachian Basin Sale

On February 19, 2016, the Company entered into an agreement to sell substantially all of its producing assets and proved reserves and a significant portion of its undeveloped acreage in the Appalachian Basin for \$80.0 million, subject to customary closing adjustments (the Appalachian Basin Sale). Pursuant to the agreement, on April 8, 2016, the Company completed the Appalachian Basin Sale for an adjusted sales price of \$76.6 million, subject to certain additional adjustments, and used the net proceeds along with other funds to reduce the outstanding borrowings under our Revolving Credit Facility by \$80.0 million.

Torchlight Litigation

We recently learned of a lawsuit against us, two of our executive officers, a director and a former director of the Company filed on May 3, 2016 in State District Court in Collin County, Texas styled Torchlight Energy Resources, Inc., Torchlight Energy, Inc. v. Husky Ventures, Inc., et al; (Cause No. 429-01961-2016) (the Torchlight Lawsuit). The Torchlight Lawsuit arises out of Torchlight's business dealings with Husky Ventures, Inc. (Husky). Husky and several of its employees and affiliates are also defendants in the Torchlight Lawsuit. In connection with transactions that resulted from the settlement of litigation between us and Husky, Husky informed us that it had agreed to repurchase assets from Torchlight that Husky had previously sold to Torchlight (the Torchlight Assets). Husky offered to sell the Torchlight Assets to us. In connection with the transaction between Torchlight and Husky, Torchlight specifically acknowledged that the Torchlight Assets were being sold to us and released us from any claims connected to the Torchlight Assets in the Purchase and Sale Agreement. Despite this release, Torchlight is alleging multiple causes of action relating to the sale of the Torchlight Assets to Husky and Torchlight's other business dealings it had with Husky.

We believe the Plaintiffs' claims are without merit and an attempt to leverage us into settling disputes Plaintiffs may have with Husky. We intend to defend this case vigorously, including asserting coverage of these matters under the release executed by Plaintiffs.

Corporate Information

Gastar 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, however, is not part of this prospectus supplement or the accompanying base prospectus, and you should rely only on the information contained in this prospectus supplement and the accompanying base prospectus and the documents incorporated by reference herein when making an investment decision.

S-2

Table of Contents

THE OFFERING

Issuer	Gastar Exploration Inc.
Common stock offered by us	50,000,000 shares (or 57,500,000 shares, if the underwriters exercise in full their option to purchase additional shares).
Option to purchase additional shares	We have granted the underwriters a 30-day option to purchase up to an aggregate 7,500,000 additional shares of our common stock.
Shares of common stock outstanding after completion of this offering	131,729,051 shares (or 139,229,051 shares, if the underwriters exercise in full their option to purchase additional shares).
Use of proceeds	We intend to use the net proceeds from this offering for general corporate purposes, including funding a drilling program in the STACK Play. Please read Use of Proceeds.
Dividend policy	We do not anticipate paying any cash dividends on our common stock. In addition, certain of our debt instruments place restrictions on our ability to pay cash dividends. Please read Dividend Policy.
NYSE MKT symbol	Our common stock is listed on the NYSE MKT under the symbol GST.
Risk factors	You should carefully consider all of the information set forth under the heading Risk Factors and all other information included or incorporated by reference in this prospectus supplement and the accompanying base prospectus before deciding to invest in our common stock.

The number of shares to be outstanding after this offering is based on 81,729,051 shares of our common stock outstanding as of May 10, 2016, which includes 4,515,320 shares that may be issued pursuant to outstanding awards under our equity compensation plans. Unless otherwise indicated, the information in this prospectus supplement assumes that the underwriters will not exercise their over-allotment option.

Table of Contents

RISK FACTORS

An investment in our common stock involves a high degree of risk. You should carefully consider the risk factors and all of the other information included in this prospectus supplement, the accompanying base prospectus and the documents incorporated by reference into this prospectus supplement, including Item 1A. Risk Factors in our Annual Report on Form 10-K for the year ended December 31, 2015, and, if applicable, in our Quarterly Reports on Form 10-Q and Current Reports on Form 8-K, in evaluating an investment in our common stock. If any of these risks were to occur, our business, financial condition or results of operations could be adversely affected. In that case, the trading price of our common stock could decline and you could lose all or part of your investment.

Risks Related to the Company

We are highly leveraged and may not be able to generate sufficient cash or cash flows, as applicable, to service all of our indebtedness or to meet financial covenants under our debt agreements and may be forced to take other actions to satisfy our obligations under such agreements, which may not be successful, or if successful, could be highly dilutive to, and adversely affect, creditors and our existing holders of our common and preferred stock.

Our ability to make scheduled payments on or to refinance our indebtedness obligations and to meet related financial covenants applicable to our debt instruments, including our Revolving Credit Facility and our \$325.0 million outstanding principal amount of 8 5/8% Senior Secured Notes due 2018 (the Notes), depends on our financial condition and operating performance, which are subject to prevailing economic and competitive conditions and certain financial, business and other factors beyond our control. As of May 2, 2016, our cash balance was approximately \$20.4 million. We may not be able to maintain a level of cash flows from operating activities sufficient to permit us to pay the principal, if any, and interest on our indebtedness, including the Notes.

Our level of indebtedness will have several important effects on our future operations, including, without limitation:

requiring us to dedicate a significant portion of our cash flows from operations to support the payment of debt service and reduce our capital expenditures required to maintain or grow our reserves and production base;

increasing our vulnerability to adverse changes in general economic and industry conditions, and putting us at a competitive disadvantage relative to competitors that have fewer fixed obligations and greater cash flows to devote to their businesses;

limiting our ability to obtain additional financing for working capital, capital expenditures, general corporate and other purposes; and

limiting our flexibility in operating our business and preventing us from engaging in certain transactions that might otherwise be beneficial to us.

Due to the relatively high level of our indebtedness, we are pursuing or analyzing various alternatives to reduce the level of our long-term debt and lower our future debt obligations, including the application of proceeds from possible targeted assets sales, the issuance of equity securities for cash, debt repurchases, exchanges of existing debt securities

for new debt securities and exchanges or conversions of existing debt securities for new equity securities, among other options. Our ability to restructure or refinance our indebtedness will depend on the condition of the capital markets and our financial condition at such time. One or more of these alternatives could potentially be consummated with the consent of any one or more of our current security holders, or, if necessary, without the consent of holders through a restructuring under a voluntary bankruptcy proceeding. Such alternatives would likely adversely affect our creditors and be highly dilutive to our existing holders of our common and preferred stock or possibly cause the loss of substantially all of their investment. Any refinancing of our indebtedness could be at higher interest rates and may require us to comply with more onerous covenants, which could further restrict our business operations. The terms of existing or future debt instruments, including the indentures governing our Notes, may restrict us from adopting some of these alternatives. For example, covenants in the indenture governing the Notes also limit our ability to borrow on a first priority lien secured basis, which may limit our ability to refinance the full amount of currently outstanding borrowings under our Revolving Credit Facility or to reborrow on such facility in the event current borrowings thereunder are paid down. In addition, any failure to make payments of interest and principal on our outstanding indebtedness on a timely basis would likely result in a reduction of our credit rating, which could harm our ability to incur additional indebtedness. In the absence of sufficient cash flows and capital resources, we could face substantial liquidity problems and might be

Table of Contents

required to dispose of material assets or operations to meet our debt service and other obligations. Our Revolving Credit Facility Agreement and the indentures governing our Notes currently restrict our ability to dispose of assets and our use of the proceeds from such disposition. We may not be able to consummate those dispositions, and the proceeds of any such disposition may not be adequate to meet any debt service obligations then due, including required reduction in amounts owed in our Revolving Credit Facility as a result of reductions in our borrowing base. If we are unable to meet our debt obligations, we would be forced to restructure our indebtedness and equity capitalization. Depending upon asset values and other factors, any future restructuring could be highly dilutive to existing holders of our common and preferred stock, could result in equity holders losing a significant amount or all of their investment in us and may adversely affect the trading prices and values of our existing debt and equity securities.

We may in the future seek a postponement of further reductions in our borrowing base under our Revolving Credit Facility or seek relief from financial covenant compliance for future periods under our Revolving Credit Facility, which if not successful, could require immediate repayment of a portion or all amounts borrowed on our Revolving Credit Facility and could result in actions that could be highly dilutive to, and adversely affect, our creditors and our existing holders of our common and preferred stock.

On March 9, 2016, the Company entered into Waiver and Amendment No. 8 to the Revolving Credit Facility Agreement (Amendment No. 8). As consideration for the financial covenant relief provided for in Amendment No. 8, the Revolving Credit Facility was also amended to, among other things, (i) reduce the borrowing base from \$200.0 million to \$180.0 million until the earlier of the closing of the Appalachian Basin Sale or April 10, 2016, at which point the borrowing base would automatically be reduced to \$100.0 million and require borrowings in excess of such amount be repaid immediately; (ii) require additional automatic reductions of the borrowing base in connection with asset sales in excess of \$5.0 million or the termination of any hedge agreements governing hedges with a settlement date on or after July 1, 2016; (iii) provide for an additional interim borrowing base redetermination in August 2016; (iv) require the consent of the lenders to any asset sales in excess of \$5.0 million; and (v) restrict the Company after March 2016 from making any distributions or paying any cash dividends to the holders of its preferred equity, including its outstanding shares of Series A Preferred Stock and Series B Preferred Stock.

After completion of our Appalachian Basin Sale on April 8, 2016 and our related repayment of \$80.0 million in outstanding borrowings, our borrowing base under our Revolving Credit Facility was reduced to \$100.0 million, and as of May 2, 2016, \$99.6 million of borrowings remained outstanding and \$370,000 of letters of credit were issued and outstanding under the Revolving Credit Facility.

In connection with Amendment No. 8 to the Revolving Credit Facility Agreement, we have agreed to an additional scheduled borrowing base redetermination in August 2016, which could require immediate repayment of a portion or all amounts borrowed under our Revolving Credit Facility. Our borrowing base is otherwise determined semi-annually by our lenders in May and November of each year and is based on our proved reserves and the value attributed to those reserves. We and the lenders each have the option to initiate a redetermination of the borrowing base between scheduled semi-annual redeterminations.

The borrowing base under our Revolving Credit Facility could be further reduced as a result of lower oil or natural gas prices, declines in estimated oil and natural gas reserves or production, our issuance of new indebtedness or for other reasons. If the borrowing base under our Revolving Credit Facility is further reduced, there would be a reduction of our available credit and the potential requirement for us to repay outstanding indebtedness in excess of the redetermined borrowing base. In addition, we may not be able to access adequate funding under our Revolving Credit Facility as a result of the inability on the part of our lending counterparties to meet their funding obligations and the inability of other lenders to provide additional funding to cover the defaulting lender's portion. If our borrowing base is further reduced or we cannot access adequate funding under our Revolving Credit Facility, it will reduce the

availability of our cash flow for replacing reserves through implementing our drilling and development plan, making acquisitions or otherwise carrying out our business plan, which would have a material adverse effect on our financial condition and results of operations and impair our ability to service our indebtedness.

In addition, under our Revolving Credit Facility Agreement, we are required to maintain compliance with certain financial covenants, including a minimum interest coverage ratio, and for quarterly periods ending on or after June 30, 2017, a maximum leverage ratio. Under the recent commodity price environment (utilizing recent NYMEX strip commodities pricing for the remainder of the year and assuming limited capital expenditures to maintain or grow our reserves and production), we believe it is likely we would not meet the minimum interest coverage ratio applicable to our Revolving Credit Facility at year-end 2016. In addition, our compliance with the maximum

Table of Contents

leverage ratio covenant as of June 30, 2017 is uncertain. Accordingly, absent significant increased prices, reduced costs or production increases during 2016, we expect to request further waivers of compliance or amendments with respect to such ratios from lenders holding of a majority of the commitments under our Revolving Credit Facility. There is, however, no assurance that we will be successful in obtaining such a waiver or amendment.

If we fail to comply with our financial covenant ratios or lenders under our Revolving Credit Facility Agreement reduce our borrowing base beyond our ability to repay, our lenders could accelerate the maturity of our Revolving Credit Facility and exercise remedies available to them, including foreclosure on our pledged oil and gas properties. We expect that in these circumstances, we would pursue the various alternatives described in the immediately preceding risk factor to reduce our indebtedness and repay amounts owed under our Revolving Credit Facility, all of which could be highly dilutive to existing holders of our common and preferred stock, could result in equity holders losing a significant amount or all of their investment in us and may adversely affect the trading prices and values of our existing debt and equity securities.

After March 31, 2017, if we do not pay all accumulated and unpaid dividends on our outstanding preferred stock in cash, we may be required to issue a significant number of shares of common stock as dividends to holders of our outstanding preferred stock, which will dilute our common stockholders and may adversely affect the trading price of our common stock.

We have two series of perpetual preferred stock outstanding with an aggregate stated value liquidation preference of \$154.6 million. Under recent amendments to our Revolving Credit Facility Agreement, we are prohibited from paying cash dividends on our preferred stock. Accordingly, we ceased paying monthly dividends on our preferred stock in April 2016. If we do not or cannot pay accumulated dividends on our outstanding preferred stock in cash by April 30, 2017, we may be required to issue shares of common stock to pay the accumulated and unpaid dividends, which would aggregate approximately \$15.9 million at April 30, 2017 (assuming no issuance of cash dividends before such date), and pay all future monthly dividends in common stock, in each case assuming our common stock is then listed on a national securities exchange or market and we have surplus under Delaware law at that time equal to or in excess of the par value of the common stock issued as dividends. The number of shares of common stock issued in lieu of cash dividends would be determined based upon a ten day average last sale trading price of the common stock immediately prior (or reasonably close) to the date of such dividends. In addition, after March 31, 2017, unless and until all accrued and unpaid preferred stock dividends are paid in full and paid in cash for the most recent two calendar quarters, the fixed rate of dividends on each of our two outstanding series of preferred stock will increase by 2.00% per annum and monthly dividends, if not paid in cash, will be required to be paid in common stock, subject to the requirements described above. In such event, the monthly dividend requirement for our currently outstanding preferred stock would increase to approximately \$1.5 million, an increase of \$258,000 per month. As a result, a significant number of shares of common stock may be issued as dividends on our outstanding preferred stock after March 31, 2017, which issuances will dilute the ownership of our common stockholders and may adversely affect the trading price of our common stock.

In the event of a liquidation of the Company, holders of our outstanding preferred stock will have the right to receive the full amount of their stated liquidation value plus the value of accumulated and unpaid dividends prior to any distributions made in respect of outstanding common stock, which right may affect the market price of our common stock and also limit the value received by common stockholders in connection with any sale, merger or other business combination or recapitalization of the Company.

Upon the liquidation, dissolution or winding up of the Company, holders of our then outstanding preferred stock will have the right to receive the full amount of their stated liquidation value, currently \$154.6 million, plus the value of accumulated and unpaid dividends thereon, prior to any distributions made to our common stockholders. This right

will likely be taken into account in connection with any sale, merger or other business combination or recapitalization of the Company and reduce the value available to common stockholders in such transactions. Under the terms of our outstanding two series of preferred stock, if after March 31, 2017 our common stock is not trading on a national securities exchange or market and we have not fully paid accumulated preferred stock dividends in cash, we may be required to issue additional shares of our outstanding two series of preferred stock as pay-in-kind dividends, which will further increase the value of liquidation preference of our outstanding preferred stock.

If the trading price of our common stock fails to comply with the continued listing requirements of the NYSE MKT, we could face possible delisting. NYSE MKT delisting could materially adversely affect the market for our shares.

Table of Contents

Our common stock currently is listed on the NYSE MKT. The NYSE MKT will consider suspending dealings in, or delisting, securities of an issuer that does not meet its continued listing standards. If we cannot meet the NYSE MKT continued listing requirements, the NYSE MKT may delist our common stock, which could have an adverse impact on us and the liquidity and market price of our stock. The delisting of our stock from the NYSE MKT could result in even further reductions in our stock price, substantially limit the liquidity of our common stock, and materially adversely affect our ability to raise capital or pursue strategic restructuring, refinancing or other transactions on acceptable terms, or at all. Delisting from the NYSE MKT could also have other negative results, including the potential loss of confidence by suppliers and employees, the loss of institutional investor interest and fewer business development opportunities.

There is no assurance that we will continue to maintain compliance with NYSE MKT continued listing standards. Our business has been and may continue to be affected by worldwide macroeconomic factors, which include uncertainties in the credit and capital markets. External factors that affect our stock price, such as liquidity requirements of our investors, as well as our performance, could impact our market capitalization, revenue and operating results, which, in turn, affect our ability to comply with the NYSE MKT's listing standards. The NYSE MKT has the ability to suspend trading in our common stock or remove our common stock from listing on the NYSE MKT if in the opinion of the exchange: (a) the financial condition and/or operating results of the Company appear to be unsatisfactory; (b) it appears that the extent of public distribution or the aggregate market value of our common stock has become so reduced as to make further dealings on the exchange inadvisable; (c) we have sold or otherwise disposed of our principal operating assets, or have ceased to be an operating company; (d) we have failed to comply with our listing agreements with the exchange; or (e) any other event shall occur or any condition shall exist which makes further dealings on the exchange unwarranted.

Risks Related to Our Common Stock and this Offering

The price of our common stock may fluctuate significantly, which could negatively affect us and holders of our common stock.

The trading price of our common stock may fluctuate significantly in response to a number of factors, many of which are beyond our control. For instance, if our financial results are below the expectations of securities analysts and investors, the market price of our common stock could decrease, perhaps significantly. Other factors that may affect the market price of our common stock include:

actual or anticipated fluctuations in our quarterly results of operations;

our actual or perceived cash needs for operations and debt service and our liquidity position;

sales of common stock by our stockholders;

continued low or further declining prices for oil, natural gas and NGLs;

changes in our cash flow from operations or earnings estimates;

publication of research reports about us or the oil, natural gas and NGL exploration and production industry generally;

our ability to meet financial covenants under our indenture or Revolving Credit Facility Agreement or the ability to obtain amendments or waivers to effect such compliance;

competition for, among other things, capital, acquisition of reserves, undeveloped land, and skilled personnel;

increases in market interest rates which may increase our cost of capital;

changes in applicable laws or regulations, court rulings, and enforcement and legal actions;

changes in market valuations of similar companies;

adverse market reaction to any indebtedness we may incur in the future;

additions or departures of key management personnel;

actions by our stockholders;

commencement of or involvement in litigation;

news reports relating to trends, concerns, technological or competitive developments, regulatory changes, and other related issues in our industry;

speculation in the press or investment community regarding our business;

political conditions in oil and natural gas producing regions;

Table of Contents

general market and economic conditions; and

domestic and international economic, legal, and regulatory factors unrelated to our performance. In addition, the U.S. securities markets have recently experienced significant price and volume fluctuations. These fluctuations often have been unrelated to the operating performance of companies in these markets. Market fluctuations and broad market, economic, and industry factors may negatively affect the price of our common stock, regardless of our operating performance. Further, if we were to be the object of securities class action litigation as a result of volatility in our common stock price or for other reasons, it could result in substantial costs and diversion of our management's attention and resources, which could negatively affect our financial results.

Investors in this offering will experience immediate and substantial dilution.

Because the price per share of our common stock being offered will be higher than the negative book value per share of our common stock, you will suffer immediate and substantial dilution in the net tangible book value of the common stock you purchase in this offering. Additionally, in the future we may need to raise capital by issuing shares of common stock or securities convertible into or exercisable for shares of common stock, including preferred stock, options, rights or warrants. Any such issuance of our common stock will further dilute the ownership of our stockholders and may further increase the negative net tangible book value of our common stock. For a description of possible actions we may consider to improve our liquidity, see *Risks Related to the Company We are highly leveraged and may not be able to generate sufficient cash or cash flows, as applicable, to service all of our indebtedness or to meet financial covenants under our debt agreements and may be forced to take other actions to satisfy our obligations under such agreements, which may not be successful, or if successful, could be highly dilutive to, and adversely affect, creditors and our existing holders of our common and preferred stock.*

We may issue additional shares of preferred stock with greater rights than our common stock or our outstanding preferred stock.

Our certificate of incorporation authorizes our board of directors to issue one or more series of preferred shares and set the terms of the preferred shares without seeking any further approval from our stockholders. The preferred shares that we have issued rank ahead of our common stock in terms of dividends and liquidation rights. We may issue additional preferred shares that rank ahead of our common stock or existing shares of preferred stock in terms of dividends, liquidation rights or voting rights. If we issue additional preferred shares in the future, it may adversely affect the market price of our common stock and our outstanding series of preferred stock. We have issued in the past, and may in the future continue to issue, in the open market at prevailing prices or in capital markets offerings series of perpetual preferred stock with dividend and liquidation preferences that rank ahead of our common stock. Under certain circumstances, we may be required to issue additional shares of our two outstanding series of preferred stock as pay-in-kind dividends.

Table of Contents

USE OF PROCEEDS

We expect the net proceeds from this offering to be approximately \$44.6 million (or approximately \$51.4 million if the underwriters exercise their option to purchase additional shares in full), after deducting estimated fees and expenses (including underwriting discounts and commissions). We intend to use net proceeds of the offering for general corporate purposes, including up to approximately \$31.2 million of the net proceeds from this offering to fund a drilling program of up to nine wells that we believe could de-risk and delineate a substantial portion of our acreage position in the STACK Play. The actual amount of net proceeds we spend on drilling our STACK Play acreage and the scope of these drilling activities will depend upon several factors, including, but not limited to, initial well results, changes in commodity prices, costs of drilling and completion and leasehold acquisitions, results of any redeterminations made under the Revolving Credit Facility Agreement, and other liquidity needs of the Company.

The Company has agreed to an additional scheduled borrowing base redetermination in August 2016. In the event the Company's borrowing base is reduced at the time of this redetermination, the Company may be required to immediately repay a portion or all amounts borrowed on the Revolving Credit Facility and proceeds from this offering may be used for the repayment of such borrowings.

Table of Contents**CAPITALIZATION**

Assuming no exercise of the underwriters' option to purchase additional shares, the following table sets forth our consolidated cash and cash equivalents and our consolidated capitalization as of March 31, 2016 on: (i) an actual basis, (ii) a pro forma basis to give effect to the Appalachian Basin Sale; and (iii) on a pro forma as adjusted basis to give effect to the Appalachian Basin Sale and this offering, including the application of the estimated net proceeds of this offering in the manner described under "Use of Proceeds."

This table should be read together with, and is qualified in its entirety by reference to, our historical consolidated financial statements incorporated by reference in this prospectus supplement and the accompanying base prospectus and "Use of Proceeds."

	As of March 31, 2016		
	Actual	Pro Forma	Pro Forma As Adjusted
	(in thousands)		
Cash and cash equivalents (1)	\$ 26,950	\$ 23,523	\$ 68,148
Debt:			
Revolving Credit Facility (2)	\$ 179,630	\$ 99,630	\$ 99,630
8 5/8% Senior Secured Notes due 2018 (3)	317,297	317,297	317,297
Total debt	\$ 496,927	\$ 416,927	\$ 416,927
Stockholders' equity:			
Cumulative Preferred Stock, par value \$0.01 per share; 40,000,000 shares authorized			
Series A Cumulative Preferred Stock: 4,045,000 shares issued and outstanding	\$ 41	\$ 41	\$ 41
Series B Cumulative Preferred Stock: 2,140,000 shares issued and outstanding	21	21	21
Common stock, par value \$0.001 per share, offered hereby: 275,000,000 shares authorized (on an actual basis: 81,712,300 shares issued and outstanding; as adjusted for this offering: 131,729,051 shares issued and outstanding)	82	82	132
Additional paid-in capital	572,867	572,867	617,442
Accumulated deficit	(765,749)	(765,749)	(765,749)
Total stockholders' equity	(192,738)	(192,738)	(148,113)
Total capitalization	\$ 304,189	\$ 224,189	\$ 268,814

(1) Actual cash balance on the closing date will differ from these amounts. As of May 9, 2016, our cash and cash equivalents were \$19.3 million.

(2)

As of March 31, 2016, the outstanding amount under the Revolving Credit Facility totaled \$179.6 million with a borrowing base of \$180.0 million, and there were \$370,000 letters of credit issued and outstanding. As of May 2, 2016, the outstanding amount under the Revolving Credit Facility totaled \$99.6 million with a borrowing base of \$100.0 million, and there were \$370,000 letters of credit issued and outstanding.

- (3) Net of unamortized discounts of \$6.5 million and deferred financing costs of \$1.2 million.

S-10

Table of Contents**PRICE RANGE OF COMMON STOCK**

Our common stock is listed on the NYSE MKT under the symbol GST. The following table shows, for the periods indicated, the high and low reported sale prices for our common stock, as reported on the NYSE MKT.

	Sales Price	
	High	Low
2014:		
First quarter	\$ 7.13	\$ 5.05
Second quarter	\$ 9.10	\$ 5.72
Third quarter	\$ 8.75	\$ 5.85
Fourth quarter	\$ 6.09	\$ 2.11
2015:		
First quarter	\$ 3.27	\$ 1.89
Second quarter	\$ 3.79	\$ 2.58
Third quarter	\$ 3.13	\$ 1.00
Fourth quarter	\$ 1.93	\$ 1.00
2016:		
First quarter	\$ 1.38	\$ 0.57
Second quarter (through May 10, 2016)	\$ 2.21	\$ 0.93

On May 10, 2016, the last sales price of our common stock as reported on the NYSE MKT was \$1.02 per share.

As of May 10, 2016, there were 232 holders of record of our common stock.

Table of Contents

DIVIDEND POLICY

We have not paid, and do not intend to pay in the foreseeable future, cash dividends on our common stock. Covenants contained in the Revolving Credit Facility Agreement and the indenture governing our 8.625% senior secured notes due 2018 restrict the payment of dividends on our common stock. In April 2016, we ceased paying dividends on our outstanding Series A preferred stock and Series B preferred stock due to restrictions imposed under our Revolving Credit Facility Agreement. Under the terms of our outstanding preferred stock, we cannot pay dividends on our common stock until we pay all of our accumulated and unpaid dividends on our common stock. We currently intend to retain all future earnings to fund the development and growth of our business. Any payment of future dividends will be at the discretion of our board of directors and will depend on, among other things, our earnings, financial condition, capital requirements, level of indebtedness, statutory and contractual restrictions applying to the payment of dividends and other considerations that our board of directors deems relevant.

In the event that we do not pay cash dividends for a period of four quarters on our Series A Preferred Stock and Series B Preferred Stock, whether consecutive or non-consecutive, then (i) we may be required to issue a dividend of common stock to pay accrued and unpaid dividends, which such issuance will dilute the interests of our existing common stockholders and those holders who invest in this offering, provided we have sufficient surplus to pay such a dividend under state law; (ii) the holders of Series A Preferred Stock and Series B Preferred Stock, voting as a single class, will have the right to elect up to two additional directors to our board directors; and (iii) the fixed rate of Series A Preferred Stock and Series B Preferred Stock each increases by 2.00%.

Table of Contents

DESCRIPTION OF CAPITAL STOCK

General

The following descriptions are summaries of material terms of our common stock, preferred stock, certificate of incorporation and bylaws. These summaries are qualified by reference to our certificate of incorporation, bylaws and the designations of our preferred stock, which are filed as exhibits to the registration statement of which this prospectus supplement forms a part, and by the provisions of applicable law.

As of the date of this prospectus supplement, our authorized capital stock consisted of (a) 40,000,000 shares of preferred stock, \$0.01 par value per share, 6,185,000 of which were issued and outstanding, and (b) 275,000,000 shares of common stock, \$0.001 par value per share, 81,712,298 of which were issued and outstanding. In addition, as of the date of this prospectus supplement, 4,498,567 shares of common stock were subject to outstanding awards pursuant to our equity incentive plans, of which (a) 594,600 shares were subject to options to purchase our common stock at a weighted average exercise price of \$9.08 per share, (b) 2,428,237 shares consisted of shares of unvested restricted stock and (c) 1,475,730 shares were subject to outstanding performance-based stock unit awards (assuming settlement at 100% of the target level of performance).

As of the date of this prospectus supplement, our board of directors approved a proposal to amend our Amended and Restated Certificate of Incorporation to increase the number of authorized shares of common stock from 275,000,000 shares to 550,000,000 shares. Such amendment would require the approval of a majority of the outstanding common stock entitled to vote at the 2016 annual meeting of stockholders.

Common Stock

Shares of our common stock have the following rights, preferences and privileges:

1. *Voting Rights.* Holders of our common stock are entitled to receive notice of any meeting of stockholders and to one vote for each share held of record on all matters at all meetings of stockholders, except at a meeting where holders of a particular class or series of shares are entitled to vote separately. Our common stockholders have no cumulative voting rights and all members of our board of directors are to be elected annually by plurality of the votes of the shares present in person or represented by proxy at the meeting and entitled to vote on the election of directors. Under our bylaws, subject to the rights of the holders of any series of preferred stock to elect directors under specified circumstances set forth in any Preferred Stock Designation, each stockholder having the right to vote is entitled at every meeting of stockholders to vote one vote for every share standing in his name on the record date fixed by the board of directors pursuant to the bylaws. Except as otherwise provided by law, the certificate of incorporation, any Preferred Stock Designation, the bylaws or any resolution adopted by a majority of the whole board of directors, all matters submitted to the stockholders at any meeting (other than the election of directors) shall be decided by the affirmative vote of the majority of shares present in person or represented by proxy at the meeting and entitled to vote on the subject matter.
2. *Dividends.* Holders of common stock are entitled to receive dividends if, as and when declared by the board of directors out of funds legally available therefor, subject to the limitations contained in the Delaware General Corporation Law (the DGCL) and any dividend preferences of any outstanding shares of preferred

stock.

3. *Liquidation.* If we liquidate, dissolve or wind up, voluntarily or involuntarily, holders of our common stock are entitled to share ratably in all net assets available for distribution to our stockholders, after creditors of the Company have been paid in full and after the payment in full of any preferential amounts to which holders of our preferred stock may be entitled.

4. *Stockholder Rights Plan.* As part of our strategy to protect stockholder value by preserving important tax assets of the Company, our board of directors adopted on January 18, 2016 a stockholder rights plan (the Rights Agreement) pursuant to which the Company declared a dividend of one right (a Right) for each of the Company's issued and outstanding shares of common stock. The dividend was paid to stockholders of record on January 28, 2016. Each Right entitles the holder, subject to the terms of the Rights Agreement, to purchase one one-thousandth of a share of the Company's Series C

S-13

Table of Contents

Junior Participating Preferred Stock (the Series C Preferred Stock) at a price of \$6.96, subject to certain adjustments. The purpose of the Rights Agreement is to diminish the risk that the Company's ability to reduce potential future federal income tax obligations would become subject to limitations by reason of an ownership change, as defined in Section 382 of the Internal Revenue Code of 1986, as amended. The Rights generally become exercisable on the earlier of (i) ten business days after any person or group obtains beneficial ownership of 4.9% of the Company's outstanding common stock (an Acquiring Person) or (ii) ten business days after commencement of a tender or exchange offer resulting in any person or group becoming an Acquiring Person. The exercise price payable, and the number of shares of Series C Preferred Stock or other securities or property issuable, upon exercise of the Rights are subject to adjustment from time to time to prevent dilution. In the event that, after a person or a group has become an Acquiring Person, the Company is acquired in a merger or other business combination transaction (or 50% or more of the Company's assets or earning power are sold), proper provision will be made so that each holder of a Right will thereafter have the right to receive, upon the exercise thereof at the then-current exercise price of the Right, that number of shares of common stock of the acquiring company having a market value at the time of that transaction equal to two times the exercise price. The Company may redeem the Rights in whole, but not in part, at any time before a person or group becomes an Acquiring Person at a price of \$0.001 per Right, subject to adjustment. At any time after any person or group becomes an Acquiring Person, the Company may generally exchange each Right in whole or in part at an exchange ratio of two shares of common stock per outstanding Right, subject to adjustment. The Rights will expire on January 18, 2019 unless terminated on an earlier date pursuant to the terms of the Rights Agreement. The Series C Preferred Stock is not redeemable by the Company and has certain voting rights and dividend and liquidation privileges. Rights shall be issued, without any further action, in respect of all shares of common stock that become outstanding (whether originally issued or delivered from the Company's treasury) after the Record Date but prior to the earlier of the Distribution Date and the Expiration Date (each as defined in the Rights Agreement); provided, however, that Rights also shall be issued to the extent provided in the Rights Agreement. On May 11, 2016, our board of directors adopted an amendment to the Rights Agreement to make certain provisions of the Rights Agreement inapplicable to purchasers of common stock in this offering approved by the board of directors, or a committee thereof, so that no such purchaser will be deemed an Acquiring Person under the Rights Agreement by virtue of their purchase of securities in this offering. Affiliates of Global Undervalued Securities Master Fund, L.P., which collectively beneficially owned 12.4% of our outstanding common stock as of February 26, 2016, were the subject of such approval and we have been advised that they intend to purchase 1,000,000 shares in this offering.

5. *Other Rights and Preferences.* No share of common stock affords any preemptive rights or is convertible, redeemable, assessable or entitled to the benefits of any sinking or repurchase fund.
6. *Listing.* Our common stock is traded on the NYSE MKT LLC under the symbol GST.
7. *Transfer Agent and Registrar.* The transfer agent and registrar for our common stock is American Stock Transfer and Trust Company, LLC.

Shares of our common stock are validly issued, fully paid and non-assessable. Any additional shares of common stock offered pursuant to this prospectus supplement will, upon issuance, be fully paid and non-assessable.

Preferred Stock

As of the date of this prospectus supplement, we had 33,815,000 shares of authorized but unissued preferred stock, 20,000,000 of which are undesignated.

At the direction of our board of directors, we may issue shares of preferred stock from time to time. Our board of directors may, without any action by holders of our common stock:

adopt resolutions to issue preferred stock in one or more classes or series;

fix the number of shares constituting any class or series of preferred stock; and

establish the rights of the holders of any class or series of preferred stock.

The rights of any class or series of preferred stock may include, among others:

general or special voting rights;

Table of Contents

preferential liquidation or preemptive rights;

preferential cumulative or noncumulative dividend rights;

redemption or put rights; and

conversion or exchange rights.

We may issue shares of, or rights to purchase, preferred stock, the terms of which might:

adversely affect voting or other rights evidenced by, or amounts otherwise payable with respect to, the common stock;

discourage an unsolicited proposal to acquire us; or

facilitate a particular business combination involving us.

Any of these actions could discourage a transaction that some or a majority of our stockholders might believe to be in their best interests or in which our stockholders might receive a premium for their stock over its then market price.

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

8.625% Series A Cumulative Preferred Stock

As of the date of this prospectus supplement, we had designated 10,000,000 shares to constitute our 8.625% Series A Preferred Stock (the "Series A Preferred Stock") and have 4,045,000 shares issued and outstanding. The terms of the Series A Preferred Stock are contained in a Certificate of Designation (the "Series A Certificate"), which is incorporated by reference as an exhibit to the registration statement of which this prospectus supplement forms a part. The following description is a summary of the material provisions of the Series A Preferred Stock as set forth in the Series A Certificate:

Ranking. The Series A Preferred Stock will rank: (i) senior to the common stock and any other equity securities that we may issue in the future, the terms of which specifically provide that such equity securities rank junior to such Series A 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 any shares of equity securities that we may issue in the future, including the Series B Preferred Stock (as defined below), the terms of which specifically provide that such equity securities rank on par with such Series A 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 A 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 A Preferred Stock), referred to as Senior Shares, and (iv) junior to all of our existing and future indebtedness.

Voting Rights. Holders of the Series A 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 A Preferred Stock. However, if cash dividends on any outstanding Series A Preferred Stock have not been paid in full for any monthly dividend period for any four consecutive or non-consecutive quarterly periods, or if we fail to maintain the listing of the Series A Preferred Stock on a National Exchange for at least 180 consecutive days after the Series A Preferred Stock becomes eligible for listing on a National Exchange, the holders of the Series A 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 our board of directors in addition to those directors then serving on such board until such time as the Series A Preferred Stock becomes listed on a

Table of Contents

National Exchange or the dividend arrearage is eliminated. Additionally, the affirmative consent of holders of at least 66 2/3% of the outstanding Series A Preferred Stock will be required for the issuance of any Senior Shares or for amendments to our certificate of incorporation by merger or otherwise that would affect adversely the rights of holders of the Series A Preferred Stock.

Dividends. Holders of our Series A Preferred Stock are entitled to receive cumulative cash dividends when and as declared by our board of directors out of funds legally available for the payment therefor, at a rate of 8.625% per annum of the \$25.00 liquidation preference per share (equivalent to \$2.15625 per annum per share). Under certain conditions relating to non-payment of dividends on the Series A Preferred Stock or if the Series A Preferred Stock are no longer listed on a National Exchange, the dividend rate on the Series A Preferred Stock may increase to 10.625% per annum. Dividends will generally be payable monthly in arrears on the last day of each calendar month. If we fail to pay full cash dividends in four calendar quarters, whether consecutive or non-consecutive, and until accumulated dividends are paid in full for four calendar quarters with the last two calendar quarters dividends paid in cash, then (i) the fixed rate of Series A Preferred Stock increases by 2.00%, (ii) the Company may be required to issue a dividend of common stock to pay accrued and unpaid dividends, if such dividends are not paid in cash, provided it has sufficient surplus to pay such a dividend under state law and (iii) the holders of Series A Preferred Stock and Series B Preferred Stock, voting as a single class, will have the right to elect up to two additional directors to the board of directors of the Company. The number of shares of common stock paid as dividends would be determined based upon a ten day average last sale trading price of the common stock immediately prior (or reasonably close in time) to the dividend payment date.

Conversion Rights. Our Series A Preferred Stock is not convertible into, or exchangeable for, any of our property or securities.

Redemption Rights. We may not redeem the Series A Preferred Stock prior to June 23, 2014 except pursuant to the special redemption upon a Change of Ownership or Control (as defined in the Series A Certificate). On and after June 23, 2014, we may redeem the Series A Preferred Stock for cash at our 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.

Liquidation. If we liquidate, dissolve or wind up our operations, the holders of the Series A 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 our common stock and any other Junior Shares. The rights of the holders of the Series A 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.

Other Rights and Preferences. No share of our Series A Preferred Stock affords any preemptive rights or is entitled to the benefits of any retirement or sinking fund.

Listing: Our Series A Preferred Stock is traded on the NYSE MKT LLC under the symbol GST.PR.A.

Transfer Agent, Registrar and Dividend Disbursing Agent. The transfer agent, registrar and dividend disbursement agent for our Series A Preferred Stock is American Stock Transfer and Trust Company, LLC. Our Series A Preferred Stock is validly issued, fully paid and non-assessable.

10.75% Series B Cumulative Preferred Stock

As of the date of this prospectus supplement, we had designated 10,000,000 shares to constitute our 10.75% Series B Preferred Stock (the Series B Preferred Stock) and have 2,140,000 shares issued and outstanding. The terms of the Series B Preferred Stock are contained in a Certificate of Designation (the Series B Certificate), which is incorporated by reference as an exhibit to the registration statement of which this prospectus supplement forms a part. The following description is a summary of the material provisions of the Series B Preferred Stock as set forth in the Series B Certificate:

S-16

Table of Contents

Ranking. The Series B Preferred Stock will rank: (i) senior to the common stock and any other equity securities that we 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 we 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 in the Series B Certificate)), referred to as Senior Shares, and (iv) junior to all of our existing and future indebtedness.

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 we fail 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 our board of directors in addition to those directors then serving on such 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 our certificate of incorporation by merger or otherwise that would affect adversely the rights of holders of the Series B Preferred Stock.

Dividends. Holders of our Series B Preferred Stock are entitled to receive cumulative cash dividends when and as declared by our board of directors out of funds legally available for the payment therefor, at a rate of 10.75% per annum of the \$25.00 liquidation preference per share (equivalent to \$2.6875 per annum per share). 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 12.75% per annum. Dividends will generally be payable monthly in arrears on the last day of each calendar month. If we fail to pay full cash dividends in four calendar quarters, whether consecutive or non-consecutive, and until accumulated dividends are paid in full for four calendar quarters with the last two calendar quarters dividends paid in cash, then (i) the fixed rate of Series B Preferred Stock increases by 2.00%, (ii) the Company may be required to issue a dividend of common stock to pay accrued and unpaid dividends, if such dividends are not paid in cash, provided it has sufficient surplus to pay such a dividend under state law and (iii) the holders of Series A Preferred Stock and Series B Preferred Stock, voting as a single class, will have the right to elect up to two additional directors to the board of directors of the Company. The number of shares of common stock paid as dividends would be determined based upon a ten day average last sale trading price of the common stock immediately prior (or reasonably close in time) to the dividend payment date.

Conversion Rights. Except under certain conditions, upon the occurrence of a Change of Ownership or Control (as defined in the Series B Certificate), each holder of Series B Preferred Stock will have the right to convert some or all of such stock held by such holder into a number of shares of our common stock.

Redemption Rights. We may not redeem the Series B Preferred Stock prior to November 15, 2018 except pursuant to the special redemption upon a Change of Ownership or Control (as defined in the Series B Certificate). On and after November 15, 2018, we may redeem the Series B Preferred Stock for cash at our 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.

Table of Contents

Liquidation. If we liquidate, dissolve or wind up our operation, 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 our 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.

Other Rights and Preferences. No share of our Series B Preferred Stock affords any preemptive rights or is entitled to the benefits of any retirement or sinking fund.

Listing: Our Series B Preferred Stock is traded on the NYSE MKT LLC under the symbol GST.PR.B.

Transfer Agent, Registrar and Dividend Disbursing Agent. The transfer agent, registrar and dividend disbursement agent for our Series B Preferred Stock is American Stock Transfer and Trust Company, LLC. Our Series B Preferred Stock is validly issued, fully paid and non-assessable.

Anti-Takeover Provisions of our Certificate of Incorporation and Bylaws

The provisions of our certificate of incorporation and bylaws may have an anti-takeover effect and may delay, defer or prevent a tender offer or takeover attempt that a stockholder might consider in his or her best interest, including those attempts that might result in a premium over the market price for the common stock. Among other things, our certificate of incorporation and bylaws:

provide that any action taken by our stockholders must be taken (a) by a vote of stockholders at a meeting of stockholders duly noticed and called in accordance with the DGCL or (b) without a meeting, without prior notice, and without a vote if a consent or consents, in writing or by electronic transmission, setting forth the action so taken shall be signed by all stockholders entitled to vote on the taking of such action;

provide that stockholders seeking to present proposals before a meeting of stockholders or to nominate candidates for election as directors at a meeting of stockholders must provide notice in a timely manner, and also specify requirements as to the form and content of such notice;

provide that the board of directors or any individual director may be removed (i) with cause only by the affirmative vote of the holders of not less than a majority of the shares of our capital stock entitled to vote generally in the election of directors voting together as a single class or (ii) without cause only by the affirmative vote of the holders of not less than two-thirds (66.66%) of the shares of our capital stock entitled to vote generally in the election of directors voting together as a single class;

authorize the board of directors to determine the number of directors and to fill vacancies on the board;

provide that only the board of directors or chief executive officer may call a special meeting of the stockholders;

requires supermajority voting for some amendments to the certificate of incorporation; and

provide for the issuance of blank check preferred stock.

Limitation of Liability and Indemnification Matters

Our certificate of incorporation limits, to the fullest extent permitted by Delaware law, the personal liability of directors for monetary damages for breach of their fiduciary duties as a director. The effect of this provision is to eliminate our rights and those of our stockholders, through stockholders' derivative suits on behalf of the Company, to recover monetary damages against a director for breach of fiduciary duty as a director, including breaches resulting from grossly negligent behavior.

S-18

Table of Contents

Section 145 of the DGCL provides that a corporation may indemnify a director, officer, employee or agent made a party to an action by reason of the fact that he or she was a director, officer, employee or agent of the corporation or was serving at the request of the corporation against expenses, judgments, fines and amounts paid in settlement actually and reasonably incurred by him or her in connection with such action if he or she acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, the best interests of the corporation and, with respect to any criminal action, had no reasonable cause to believe his or her conduct was unlawful.

S-19

Table of Contents

MATERIAL U.S. FEDERAL INCOME TAX CONSIDERATIONS FOR NON-U.S. HOLDERS

The following is a summary of the material U.S. federal income tax considerations related to the purchase, ownership and disposition of our common stock by a non-U.S. holder (as defined below), that holds our common stock as a capital asset (generally property held for investment). This summary is based on the provisions of the Internal Revenue Code of 1986, as amended (the Code), U.S. Treasury regulations, administrative rulings and judicial decisions, all as in effect on the date hereof, and all of which are subject to change, possibly with retroactive effect. We have not sought any ruling from the Internal Revenue Service (IRS) with respect to the statements made and the conclusions reached in the following summary, and there can be no assurance that the IRS or a court will agree with such statements and conclusions.

This summary does not address all aspects of U.S. federal income taxation that may be relevant to non-U.S. holders in light of their personal circumstances. In addition, this summary does not address the Medicare tax on certain investment income, U.S. federal estate or gift tax laws, any state, local or non-U.S. tax laws or any tax treaties. This summary also does not address tax considerations applicable to investors that may be subject to special treatment under the U.S. federal income tax laws, such as:

banks, insurance companies or other financial institutions;

tax-exempt or governmental organizations;

qualified foreign pension funds;

dealers in securities or foreign currencies;

traders in securities that use the mark-to-market method of accounting for U.S. federal income tax purposes;

persons subject to the alternative minimum tax;

partnerships or other pass-through entities for U.S. federal income tax purposes or holders of interests therein;

persons deemed to sell our common stock under the constructive sale provisions of the Code;

persons that acquired our common stock through the exercise of employee stock options or otherwise as compensation or through a tax-qualified retirement plan;

certain former citizens or long-term residents of the United States; and

persons that hold our common stock as part of a straddle, appreciated financial position, synthetic security, hedge, conversion transaction or other integrated investment or risk reduction transaction.

PROSPECTIVE INVESTORS ARE ENCOURAGED TO CONSULT THEIR TAX ADVISORS WITH RESPECT TO THE APPLICATION OF THE U.S. FEDERAL INCOME TAX LAWS TO THEIR PARTICULAR SITUATION, AS WELL AS ANY TAX CONSEQUENCES OF THE PURCHASE, OWNERSHIP AND DISPOSITION OF OUR COMMON STOCK ARISING UNDER THE U.S. FEDERAL ESTATE OR GIFT TAX LAWS OR UNDER THE LAWS OF ANY STATE, LOCAL, NON-U.S. OR OTHER TAXING JURISDICTION OR UNDER ANY APPLICABLE INCOME TAX TREATY.

Non-U.S. Holder Defined

For purposes of this discussion, a non-U.S. holder is a beneficial owner of our common stock that is not for U.S. federal income tax purposes a partnership or any of the following:

an individual who is a citizen or resident of the United States;

S-20

Table of Contents

a corporation (or other entity treated as a corporation for U.S. federal income tax purposes) 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 tax regardless of its source; or

a trust (i) the administration of which is subject to the primary supervision of a U.S. court and which has one or more United States persons who have the authority to control all substantial decisions of the trust or (ii) which has made a valid election under applicable U.S. Treasury regulations to be treated as a United States person.

If a partnership (including an entity or arrangement treated as a partnership for U.S. federal income tax purposes) holds our common stock, the tax treatment of a partner in the partnership generally will depend upon the status of the partner, the activities of the partnership and upon certain determinations made at the partner level. Accordingly, we urge partners in partnerships (including entities or arrangements treated as partnerships for U.S. federal income tax purposes) considering the purchase of our common stock to consult their tax advisors regarding the U.S. federal income tax considerations of the purchase, ownership and disposition of our common stock by such partnership.

Distributions

We do not expect to pay any distributions on our common stock in the foreseeable future. However, in the event we do make distributions of cash or other property on our common stock, such distributions will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. To the extent those distributions exceed our current and accumulated earnings and profits, the distributions will be treated as a non-taxable return of capital to the extent of the non-U.S. holder's tax basis in our common stock and thereafter as capital gain from the sale or exchange of such common stock. See **Gain on Disposition of Common Stock**. Subject to the withholding requirements under FATCA (as defined below) and with respect to effectively connected dividends, each of which is discussed below, any distribution made to a non-U.S. holder on our common stock generally will be subject to U.S. withholding tax at a rate of 30% of the gross amount of the distribution unless an applicable income tax treaty provides for a lower rate. To receive the benefit of a reduced treaty rate, a non-U.S. holder must provide the applicable withholding agent with an IRS Form W-8BEN or IRS Form W-8BEN-E (or other applicable or successor form) certifying qualification for the reduced rate.

Dividends paid to a non-U.S. holder that are effectively connected with a trade or business conducted by the non-U.S. holder in the United States (and, if required by an applicable income tax treaty, are treated as attributable to a permanent establishment maintained by the non-U.S. holder in the United States) generally will be taxed on a net income basis at the rates and in the manner generally applicable to United States persons (as defined under the Code). Such effectively connected dividends will not be subject to U.S. withholding tax if the non-U.S. holder satisfies certain certification requirements by providing the applicable withholding agent a properly executed IRS Form W-8ECI certifying eligibility for exemption. If the non-U.S. holder is a non-U.S. corporation, it may also be subject to a branch profits tax (at a 30% rate or such lower rate as specified by an applicable income tax treaty) on its effectively connected earnings and profits (as adjusted for certain items), which will include effectively connected dividends.

Gain on Disposition of Common Stock

Subject to the discussion below under **Additional Withholding Requirements under FATCA**, a non-U.S. holder generally will not be subject to U.S. federal income tax on any gain realized upon the sale or other disposition of our

common stock unless:

the non-U.S. holder is an individual who is present in the United States for a period or periods aggregating 183 days or more during the calendar year in which the sale or disposition occurs and certain other conditions are met;

S-21

Table of Contents

the gain is effectively connected with a trade or business conducted by 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); or

our common stock constitutes a United States real property interest by reason of our status as a United States real property holding corporation (USRPHC) for U.S. federal income tax purposes.

A non-U.S. holder described in the first bullet point above will be subject to U.S. federal income tax at a rate of 30% (or such lower rate as specified by an applicable income tax treaty) on the amount of such gain, which generally may be offset by U.S. source capital losses.

A non-U.S. holder whose gain is described in the second bullet point above or, subject to the exceptions described in the next paragraph, the third bullet point above, generally will be taxed on a net income basis at the rates and in the manner generally applicable to United States persons (as defined under the Code) unless an applicable income tax treaty provides otherwise. If the non-U.S. holder is a corporation, it may also be subject to a branch profits tax (at a 30% rate or such lower rate as specified by an applicable income tax treaty) on its effectively connected earnings and profits (as adjusted for certain items), which will include such gain.

Generally, a corporation is a USRPHC if the fair market value of its United States real property interests equals or exceeds 50% of the sum of the fair market value of its worldwide real property interests and its other assets used or held for use in a trade or business. We believe that we currently are, and expect to remain for the foreseeable future, a USRPHC for U.S. federal income tax purposes. However, as long as our common stock continues to be regularly traded on an established securities market, only a non-U.S. holder that actually or constructively owns or owned at any time during the shorter of the five-year period ending on the date of the disposition or the non-U.S. holder's holding period for the common stock, more than 5% of our common stock will be taxable on gain realized on the disposition of our common stock as a result of our status as a USRPHC. If our common stock were not considered to be regularly traded on an established securities market during the calendar year in which the relevant disposition by a non-U.S. holder occurs, such holder (regardless of the percentage of stock owned) would be subject to U.S. federal income tax on a taxable disposition of our common stock (as described in the preceding paragraph), and a 15% withholding tax would apply to the gross proceeds from such disposition.

Non-U.S. holders should consult their tax advisors with respect to the application of the foregoing rules to their ownership and disposition of our common stock.

Backup Withholding and Information Reporting

Any dividends paid to a non-U.S. holder must be reported annually to the IRS and to the non-U.S. holder. Copies of these information returns may be made available to the tax authorities in the country in which the non-U.S. holder resides or is established. Payments of dividends to a non-U.S. holder generally will not be subject to backup withholding if the non-U.S. holder establishes an exemption by properly certifying its non-U.S. status on an IRS Form W-8BEN, IRS Form W-8BEN-E or other appropriate version of IRS Form W-8.

Payments of the proceeds from a sale or other disposition by a non-U.S. holder of our common stock effected by or through a U.S. office of a broker generally will be subject to information reporting and backup withholding (at the applicable rate) unless the non-U.S. holder establishes an exemption by properly certifying its non-U.S. status on an IRS Form W-8BEN, IRS Form W-8BEN-E or other appropriate version of IRS Form W-8 and certain other conditions are met. Information reporting and backup withholding generally will not apply to any payment of the proceeds from a sale or other disposition of our common stock effected outside the United States by a non-U.S. office

of a broker. However, unless such broker has documentary evidence in its records that the holder is not a United States person and certain other conditions are met, or the non-U.S. holder otherwise establishes an exemption, information reporting will apply to a payment of the proceeds of the disposition of our common stock effected outside the United States by such a broker if it has certain relationships within the United States.

Backup withholding is not an additional tax. Rather, the U.S. income tax liability (if any) of persons subject to backup withholding will be reduced by the amount of tax withheld. If backup withholding results in an overpayment of taxes, a refund may be obtained, provided that the required information is timely furnished to the IRS.

S-22

Table of Contents

Additional Withholding Requirements under FATCA

Sections 1471 through 1474 of the Code, and the Treasury regulations and administrative guidance issued thereunder (FATCA), impose a 30% withholding tax on any dividends paid on our common stock and on the gross proceeds from a disposition of our common stock (if such disposition occurs after December 31, 2018), 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 non-financial foreign 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 non-U.S. entities with U.S. owners), (ii) in the case of a non-financial foreign entity, such entity certifies that it does not have any substantial United States owners (as defined in the Code) or provides the applicable withholding agent with a certification identifying the direct and indirect substantial United States owners of the entity (in either case, generally on an IRS Form W-8BEN-E), or (iii) the foreign financial institution or non-financial foreign entity otherwise qualifies for an exemption from these rules and provides appropriate documentation (such as an IRS Form W-8BEN-E). Foreign financial institutions located in jurisdictions that have an intergovernmental agreement with the United States governing these rules may be subject to different rules. Under certain circumstances, a holder might be eligible for refunds or credits of such taxes.

INVESTORS CONSIDERING THE PURCHASE OF OUR COMMON STOCK ARE URGED TO CONSULT THEIR OWN TAX ADVISORS REGARDING THE APPLICATION OF THE U.S. FEDERAL INCOME TAX LAWS TO THEIR PARTICULAR SITUATIONS AND THE APPLICABILITY AND EFFECT OF U.S. FEDERAL ESTATE AND GIFT TAX LAWS AND ANY STATE, LOCAL OR NON-U.S. TAX LAWS AND TAX TREATIES.

Table of Contents**UNDERWRITING**

We are offering the shares of common stock described in this prospectus supplement through the underwriters named below. Seaport Global Securities LLC and Johnson Rice & Company L.L.C. are acting as the representatives of the underwriters named below. Subject to the terms and conditions of the underwriting agreement between us and the representatives, we have agreed to sell to the underwriters, and each underwriter has severally agreed to purchase, at the public offering price less the underwriting discounts and commissions set forth on the cover page of this prospectus supplement, the number of shares of common stock listed next to its name in the following table:

Underwriters	Number of Firm Shares
Seaport Global Securities LLC	21,250,000
Johnson Rice & Company L.L.C.	21,250,000
Canaccord Genuity Inc.	1,500,000
Heikkinen Energy Securities, L.L.C.	1,500,000
IBERIA Capital Partners L.L.C.	1,500,000
Imperial Capital, LLC	1,500,000
Wunderlich Securities, Inc.	1,500,000
Total	50,000,000

The underwriting agreement provides that the underwriters' obligation to purchase our common stock is subject to approval of legal matters by counsel and the satisfaction of the conditions contained in the underwriting agreement. The conditions contained in the underwriting agreement include the conditions that the representations and warranties made by us to the underwriters are true, that there has been no material adverse change to our condition or in the financial markets, and that we deliver to the underwriters customary closing documents. The underwriters are obligated to purchase all of the shares of common stock (other than those covered by the over-allotment option described below) if they purchase any of the shares of common stock.

Option to Purchase Additional Common Stock

We have granted to the underwriters an option, exercisable for 30 days from the date of this prospectus supplement, to purchase up to additional shares of common stock at the public offering price per share less the underwriting discount and commissions shown on the cover page of this prospectus supplement. The underwriters may exercise this option solely to cover over-allotments, if any, made in connection with this offering.

Underwriting Discount and Commissions and Offering Expenses

The underwriters propose to offer the common stock to the public at the public offering price set forth on the cover of this prospectus supplement. The underwriters may offer the common stock to securities dealers at the price to the public less a concession not in excess of \$ per share of common stock. After the common stock is released for sale to the public, the underwriters may vary the offering price and other selling terms from time to time.

The following table summarizes the compensation to be paid to the underwriters by us:

		Total	
	Per Share	No Option Exercise	Full Option Exercise
Public offering price	\$ 0.9500	\$ 47,500,000	\$ 54,625,000
Underwriting discounts and commissions	\$ 0.0475	\$ 2,375,000	\$ 2,731,250
Proceeds, before expenses, to us	\$ 0.9025	\$ 45,125,000	\$ 51,893,750

We estimate our expenses associated with the offering, excluding underwriting discounts and commissions, will be approximately \$500,000 (excluding underwriting discounts and commissions).

S-24

Table of Contents

Indemnification

We have agreed to indemnify the underwriters against certain liabilities, including liabilities under the U.S. federal securities laws, or to contribute to payments that may be required to be made in respect of these liabilities.

Lock-Up Agreements

We and all of our directors and executive officers have agreed that, without the prior written consent of Seaport Global Securities LLC, we and they will not directly or indirectly, for a period of 60 days after the date of this prospectus supplement, (A) offer for sale, sell, pledge, or otherwise dispose of (or enter into any transaction or device that is designed to, or could be expected to, result in the disposition by any person at any time in the future of) any shares of common stock (other than the stock and shares (i) issued pursuant to employee benefit plans, qualified stock option plans or other employee compensation plans existing on the date hereof (ii) sold or forfeited to the Company in connection with the payment of any exercise price or tax withholding due in connection with the settlement or exercise price of any stock option or other equity or equity-based compensation award existing on the date hereof or (iii) issued to holders of the Company's preferred stock or its senior secured notes in exchange for such preferred stock or senior secured notes or filing or causing to be filed a registration statement with respect to the registration of any shares of common stock issued pursuant to this clause (iii)) or securities convertible into or exercisable or exchangeable for common stock, or sell or grant options, rights or warrants with respect to any shares of common stock or securities convertible into or exchangeable for common stock (other than the grant of options pursuant to employee benefit plans, option plans, qualified stock option plans or other employee compensation plans existing on the date hereof), (B) enter into any swap or other derivatives transaction that transfers to another, in whole or in part, any of the economic benefits or risks of ownership of such shares of common stock, whether any such transaction described in clause (A) or (B) above is to be settled by delivery of common stock or other securities, in cash or otherwise, (C) make any demand for or exercise any right or cause to be filed a registration statement, including any amendments thereto, with respect to the registration of any shares of common stock or securities convertible, exercisable or exchangeable into common stock or any other securities of the Company (other than as described in (A)(iii) of this paragraph) or (D) publicly disclose the intention to do any of the foregoing.

Seaport Global Securities LLC may release the common stock and other securities subject to the lock-up agreements described above in whole or in part at any time with or without notice. When determining whether or not to release common stock and other securities from lock-up agreements, Seaport Global Securities LLC will consider, among other factors, the holder's reasons for requesting the release, the number of shares of common stock and other securities for which the release is being requested, and market conditions at the time.

Price Stabilization, Short Positions and Penalty Bids

The underwriters may engage in over-allotment, stabilizing transactions, syndicate covering transactions, and penalty bids in accordance with Regulation M under the Exchange Act. Over-allotment involves syndicate sales in excess of the offering size, which creates a syndicate short position. Covered short sales are sales made in an amount not greater than the number of shares available for purchase by the underwriters under their over-allotment option. The underwriters may close out a covered short sale by exercising their over-allotment option or purchasing shares in the open market. Naked short sales are sales made in an amount in excess of the number of shares available under the over-allotment option. The underwriters must close out any naked short sale by purchasing shares in the open market. Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum. Syndicate covering transactions involve purchases of shares of common stock in the open market after the distribution has been completed in order to cover syndicate short positions. Penalty bids permit the underwriters to reclaim a selling concession from a syndicate member when the shares of common stock originally

sold by such syndicate member is purchased in a syndicate covering transaction to cover syndicate short positions. Penalty bids may have the effect of deterring syndicate members from selling to people who have a history of quickly selling their shares. These stabilizing transactions, syndicate covering transactions and penalty bids may cause the price of our common stock to be higher than it would otherwise be in the absence of these transactions.

S-25

Table of Contents

The underwriters are not required to engage in these activities and may end any of these activities at any time.

Electronic Distribution

This prospectus supplement, the accompanying base prospectus, and the documents incorporated herein and therein by reference in electronic format may be made available on the websites maintained by one or more of the underwriters. The underwriters may agree to allocate a number of shares of common stock for sale to their online brokerage account holders. The common stock will be allocated to underwriters that may make Internet distributions on the same basis as other allocations. In addition, common stock may be sold by the underwriters to securities dealers who resell common stock to online brokerage account holders.

Other than this prospectus supplement, the accompanying base prospectus and the documents incorporated herein and therein by reference in electronic format, information contained in any website maintained by an underwriter is not part of this prospectus supplement, the accompanying base prospectus, the documents incorporated herein and therein by reference or registration statement of which the prospectus supplement forms a part, has not been endorsed by us and should not be relied on by investors in deciding whether to purchase common stock. The underwriters are not responsible for information contained in websites that they do not maintain.

Relationship with the Underwriters

Seaport Global Securities LLC acted as financial advisor to us in connection with the disposition of certain oil and properties in 2013, for which it received a customary fee. The transaction was publicly announced and closed in October 2013.

An affiliate of IBERIA Capital Partners L.L.C., IBERIABANK, is a lender under our Revolving Credit Facility. Although it is not intended that IBERIABANK will receive any of the net proceeds of this offering in connection with the repayment of amounts under our Revolving Credit Facility, the proceeds from this offering will be used for general corporate purposes, and therefore, may be used to repay amounts due to IBERIABANK.

In addition, from time to time, certain of the underwriters and their respective affiliates have provided, and may continue to provide, investment banking services to us in the ordinary course of their businesses, and have received, and may continue to receive, compensation for such services.

Table of Contents

LEGAL MATTERS

Certain legal matters in connection with the common stock will be passed upon by Vinson & Elkins L.L.P., Houston, Texas, as our counsel. Certain legal matters will be passed upon for the underwriters by Baker & Hostetler LLP.

EXPERTS

The consolidated financial statements of Gastar Exploration Inc. as of December 31, 2015 and 2014, and for each of the years in the three year period ended December 31, 2015, and management's assessment of the effectiveness of internal control over financial reporting as of December 31, 2015 have been 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, and 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. 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.

Table of Contents**Glossary of Terms**

AMI	Area of mutual interest, an agreed designated geographic area where co-participants or other industry participants have a right of participation in acquisitions and operations
Bbl	Barrel of oil, condensate or NGLs
Bbl/d	Barrels of oil, condensate or NGLs per day
Bcf	One billion cubic feet of natural gas
Bcfe	One billion cubic feet of natural gas equivalent, calculated by converting liquids volumes on the basis of 1/6th of a barrel of oil, condensate or NGLs per Mcf
Boe	One barrel of oil equivalent determined using the ratio of six thousand cubic feet of natural gas to one barrel of oil, condensate or NGLs
Boe/d	Barrels of oil equivalent per day
Btu	British thermal unit, typically used in measuring natural gas energy content
CRP	Central receipt point
FASB	Financial Accounting Standards Board
GAAP	Accounting principles generally accepted in the United States of America
Gross acres	Refers to acres in which we own a working interest
Gross wells	Refers to wells in which we have a working interest
MBbl	One thousand barrels of oil, condensate or NGLs
MBbl/d	One thousand barrels of oil, condensate or NGLs per day
MBoe	One thousand barrels of oil equivalent, calculated by converting natural gas volumes on the basis of 6 Mcf of natural gas per barrel
MBoe/d	One thousand barrels of oil equivalent per day
Mcf	One thousand cubic feet of natural gas
Mcf/d	One thousand cubic feet of natural gas per day
Mcfe	One thousand cubic feet of natural gas equivalent, calculated by converting liquids volumes on the basis of 1/6th of a barrel of oil, condensate or NGLs per Mcf
MMBtu/d	One million British thermal units per day
MMcf	One million cubic feet of natural gas
MMcf/d	One million cubic feet of natural gas per day
MMcfe	One million cubic feet of natural gas equivalent, calculated by converting liquids volumes on the basis of 1/6th of a barrel of oil, condensate or NGLs per Mcf
MMcfe/d	One million cubic feet of natural gas equivalent per day
Net acreage	

Edgar Filing: Gastar Exploration Inc. - Form 424B5

Is calculated using net well locations, 640 acre drilling units and the spacing assumptions for a given formation

Net wells	Refers to gross wells multiplied by our working interest in such wells
NGLs	Natural gas liquids
NYMEX	New York Mercantile Exchange
PBU	Performance based unit comprising one of our compensation plan awards

A-1

Table of Contents

psi Pounds per square inch

PUD Proved undeveloped reserves

STACK An acronymic name for a predominantly oil producing play referring to the exploration and development of
Play the Sooner Trend of the Anadarko Basin in Canadian and Kingfisher Counties, Oklahoma

U.S. United States of America

WTI West Texas Intermediate

A-2

Table of Contents

PROSPECTUS

\$300,000,000

GASTAR EXPLORATION INC.

Common Stock

Preferred Stock

Debt Securities

Rights

Guarantees of Debt Securities

We may offer and sell the securities listed above from time to time in one or more classes or series and in amounts, at prices and on terms that we will determine at the time of the offering. Any debt securities we issue under this prospectus may be guaranteed by certain of Gastar Exploration Inc.'s subsidiaries. The aggregate initial offering price of the securities that we will offer will not exceed \$300,000,000.

This prospectus provides you with a general description of the securities that may be offered. Each time securities are offered, we will provide a prospectus supplement and attach it to this prospectus. The prospectus supplement will contain more specific information about the offering and the terms of the securities being offered, including any guarantees by our subsidiaries. The prospectus supplements may also add, update or change information contained in this prospectus. This prospectus may not be used to offer or sell securities without a prospectus supplement describing the method and terms of the offering.

The securities may be offered and sold 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. See Plan of Distribution. The prospectus supplement will list any agents, underwriters or dealers that may be involved and the compensation they will receive. The prospectus supplement will also show you the total amount of money that we will receive from selling the securities being offered, after the expenses of the offering.

You should carefully read this prospectus and any accompanying prospectus supplement, together with the documents we incorporate by reference, before you invest in any of our securities.

Investing in our securities involves risk. Please see Risk Factors beginning on page 7 for a discussion of certain risks that you should consider in connection with an investment in the securities.

Our common stock, 8.625% Series A Cumulative Preferred Stock and 10.75% Series B Cumulative Preferred Stock are listed on the NYSE MKT LLC under the symbols GST, GST.PR.A and GST.PR.B, respectively.

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 February 24, 2014 .

Table of Contents**TABLE OF CONTENTS**

	Page
<u>About This Prospectus</u>	1
<u>The Company</u>	2
<u>About the Subsidiary Guarantors</u>	2
<u>Where You Can Find More Information</u>	3
<u>Cautionary Statements Regarding Forward-Looking Statements</u>	5
<u>Risk Factors</u>	7
<u>Use of Proceeds</u>	8
<u>Ratio of Earnings to Fixed Charges and Ratio of Earnings to Combined Fixed Charges and Preferred Stock Dividends</u>	9
<u>Description of Capital Stock</u>	10
<u>Description of Debt Securities</u>	16
<u>Description of Rights</u>	28
<u>Plan of Distribution</u>	29
<u>Legal Matters</u>	32
<u>Experts</u>	32

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

Table of Contents

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, which we refer to as the SEC, utilizing a shelf registration process. Under this shelf registration process, we may, from time to time, offer and sell any combination up to \$300,000,000 of the securities described in this prospectus in one or more offerings. This prospectus provides you with a general description of Gastar Exploration Inc. and the securities we may offer. Each time we sell securities, we will provide a prospectus supplement that will contain specific information about the terms of the offering and the offered securities. We may also authorize one or more free writing prospectuses to be provided to you that may contain material information relating to these offerings. We may also add or update in the prospectus supplement (and in any related free writing prospectus that we may authorize to be provided to you) any of the information contained in this prospectus or in the documents that we have incorporated by reference into this prospectus. You should read this prospectus, any applicable prospectus supplement and any related free writing prospectus together with the additional information described under the heading **Where You Can Find More Information** before buying any securities being offered.

You should rely only on the information that we have provided or incorporated by reference in this prospectus, any applicable prospectus supplement and any related free writing prospectus that we may authorize to be provided to you. We have not authorized anyone to provide you with different information. No dealer, salesperson or other person is authorized to give any information or to represent anything not contained in this prospectus, any applicable prospectus supplement or any related free writing prospectus that we may authorize to be provided to you. You must not rely on any unauthorized information or representation. This prospectus is an offer to sell only the securities offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. You should assume that the information in this prospectus, any applicable prospectus supplement or any related free writing prospectus is accurate only as of the date on the front of the document and that any information we have incorporated by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus, any applicable prospectus supplement or any related free writing prospectus, or any sale of a security.

This prospectus contains summaries of certain provisions contained in some of the documents described herein, but reference is made to the actual documents for complete information. All of the summaries are qualified in their entirety by the actual documents. Copies of some of the documents referred to herein have been filed, will be filed or will be incorporated by reference as exhibits to the registration statement of which this prospectus is a part, and you may obtain copies of those documents as described below under the heading **Where You Can Find More Information**.

Unless the context otherwise requires, references in this prospectus to **Gastar**, **we**, **us**, **our** and the **Company** refer to Gastar Exploration Inc. and its subsidiaries and predecessors.

Table of Contents

THE COMPANY

We are an independent energy company engaged in the exploration, development and production of oil, natural gas, condensate and natural gas liquids in the United States. Our principal business activities include the identification, acquisition, and subsequent exploration and development of oil and natural gas properties with an emphasis on unconventional reserves such as shale resource plays. We are currently pursuing the development of liquids-rich natural gas in the Marcellus Shale and Utica Shale in West Virginia and are also in the early stages of exploring and developing the Hunton Limestone horizontal oil play in Oklahoma.

Our principal executive offices are located at 1331 Lamar Street, Suite 650, Houston, Texas 77010. Our telephone number at that address is (713) 739-1800. Our website address is <http://www.gastar.com>. We make our periodic reports and other information filed with or furnished to the SEC available, free of charge, through our website, as soon as reasonably practicable. Information contained on our website is not incorporated by reference into this prospectus and you should not consider information contained on our website as part of this prospectus.

For additional information as to our business and financial condition, please refer to the documents cited in [Where You Can Find More Information](#).

ABOUT THE SUBSIDIARY GUARANTORS

If specified in the accompanying prospectus supplement respecting a series of debt securities, any of our current or future subsidiaries specified in the prospectus supplement, which we refer to as [Subsidiary Guarantors](#), may jointly and severally, fully, irrevocably and unconditionally guarantee our payment obligations under any series of debt securities offered by this prospectus. Financial information concerning our [Subsidiary Guarantors](#) and non-guarantor subsidiaries, if any, will be included in our consolidated financial statements filed as a part of our periodic reports filed pursuant to the Securities Exchange Act of 1934, as amended (the [Exchange Act](#)) to the extent required by the rules and regulations of the SEC.

For additional information as to our and our subsidiaries' business, properties, and financial condition, please refer to the documents cited in [Where You Can Find More Information](#).

Table of Contents

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports and other information with the SEC (File No. 001-35211) pursuant to the Exchange Act. You may read and copy any documents that are filed at the SEC's Public Reference Room at 100 F Street, N.E., 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. Our filings are also available to the public through the SEC's website at www.sec.gov.

The SEC allows us to incorporate by reference information that we file with them, which means that we can disclose important information to you by referring you to documents previously filed with the SEC. The information incorporated by reference is an important part of this prospectus, and information that we file later with the SEC will automatically update and supersede this information. The following documents we filed with the SEC pursuant to the Exchange Act are incorporated herein by reference:

our Annual Report on Form 10-K for the fiscal year ended December 31, 2012, filed on March 11, 2013, as amended by the Form 10-K/A filed with the SEC on April 29, 2013 and the Form 10-K/A filed with the SEC on October 24, 2013;

our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2013, filed on May 2, 2013, June 30, 2013, filed on August 5, 2013 and September 30, 2013, filed on November 5, 2013;

our Current Reports on Form 8-K filed 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 28, 2013), April 3, 2013, April 23, 2013, May 2, 2013, May 7, 2013, May 10, 2013, May 15, 2013, June 12, 2013, June 13, 2013, July 3, 2013, July 9, 2013, July 17, 2013, August 6, 2013, August 12, 2013, September 3, 2013, September 6, 2013, September 23, 2013, October 4, 2013, October 8, 2013, October 22, 2013, October 28, 2013, November 1, 2013, November 6, 2013, November 7, 2013, November 15, 2013, November 20, 2013, November 24, 2013, December 24, 2013, January 22, 2014, January 31, 2014 and February 6, 2014 (in each case excluding any information furnished pursuant to Item 2.02 or Item 7.01);

the description of our common stock contained in Exhibit 99.1 to our Current Report on Form 8-K filed on January 31, 2014, including any amendment that we may file in the future for the purpose of updating the description of our common stock.

the description of our 8.625% Series A Cumulative Preferred Stock contained in our registration statement on Form 8-A filed on June 20, 2011, including any amendment to that Form that we may have filed in the past, or may file in the future, for the purpose of updating the description of our 8.625% Series A Cumulative Preferred Stock.

the description of our 10.75% Series B Cumulative Preferred Stock contained in our registration statement on Form 8-A filed on November 1, 2013, including any amendment to that Form that we may have filed in the past, or may file in the future, for the purpose of updating the description of our 10.75% Series B Cumulative Preferred Stock.

In addition, we incorporate by reference in this prospectus any future filings made by Gastar Exploration Inc. with the SEC under Sections 13(a), 13(c), 14, or 15(d) of the Exchange Act (excluding any information furnished and not filed with the SEC) after the date on which the registration statement that includes this prospectus was initially filed with the SEC (including all such documents we may file with the SEC after the date of the initial registration statement and prior to the effectiveness of the registration statement) and until all offerings under this shelf registration statement are terminated.

Any statement contained in a document incorporated by reference herein shall be deemed to be modified or superseded for all purposes to the extent that a statement contained in this prospectus or in any other subsequently filed document which is also incorporated or deemed to be incorporated by reference, modifies or

Table of Contents

supersedes such statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

You may request a copy of these filings (other than an exhibit to a filing unless that exhibit is specifically incorporated by reference into that filing) at no cost by writing or telephoning us at the following address and telephone number:

Gastar Exploration Inc.

1331 Lamar Street, Suite 650

Houston, Texas 77010

Attention: Michael A. Gerlich

Telephone: (713) 739-1800

We also make available free of charge on our website at <http://www.gastar.com> all of the documents that we file with the SEC as soon as reasonably practicable after we electronically file such material with the SEC. However, the information on our website is not part of this prospectus.

Table of Contents

CAUTIONARY STATEMENTS REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated herein contain 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 (the Securities Act), and Section 21E of 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, estimate, predict, potential, pursue, target or continue or variations thereon, or other comparable terminology.

The forward-looking statements contained in this prospectus 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. For a more detailed description of the known material factors that could cause actual results to differ from those in the forward-looking statements, see Risk Factors beginning on page 7 of this prospectus and other risks set forth in Item 1A of our Annual Report on Form 10-K for the year ended December 31, 2012. 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 prospectus are not guarantees of future

Edgar Filing: Gastar Exploration Inc. - Form 424B5

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 integrate acquired assets with ours and to realize the anticipated benefits from such acquisitions;

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

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

natural gas, condensate, oil and NGLs price volatility;

Table of Contents

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

our ability to raise capital to fund planned 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 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 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 natural gas and NGLs 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, 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;

Edgar Filing: Gastar Exploration Inc. - Form 424B5

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;

our 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

RISK FACTORS

An investment in our securities involves a high degree of risk. You should carefully consider the risk factors and all of the other information included in, or incorporated by reference into, this prospectus, including those included in our most recent Annual Report on Form 10-K and, if applicable, in our Quarterly Reports on Form 10-Q and Current Reports on Form 8-K, in evaluating an investment in our securities. If any of these risks were to occur, our business, financial condition or results of operations could be adversely affected. In that case, the trading price of our securities could decline and you could lose all or part of your investment. When we offer and sell any securities pursuant to a prospectus supplement, we may include additional risk factors relevant to such securities in the prospectus supplement.

Table of Contents

USE OF PROCEEDS

Except as may be stated in the applicable prospectus supplement or free writing prospectus, we intend to use the net proceeds we receive from any sales of securities by us under this prospectus and any accompanying prospectus supplement for general corporate purposes, which may include, among other things:

capital expenditures;

the repayment of indebtedness;

working capital; and

to make strategic acquisitions.

Any specific allocation of the net proceeds of an offering of securities to a specific purpose will be determined at the time of the offering and will be described in an accompanying prospectus supplement or free writing prospectus. The precise amount and timing of the application of these proceeds will depend upon our funding requirements and the availability and cost of other funds.

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

The following table contains our consolidated ratios of earnings to fixed charges and ratios of earnings to combined fixed charges plus preferred stock dividends for the periods indicated:

	Year Ended December 31,					Nine Months Ended September 30,
	2008	2009	2010	2011	2012	2013
Ratio of earnings to fixed charges(1)		10.8x				5.8x
Ratio of earnings to combined fixed charges and preference securities dividends(2)		10.8x				3.0x

- (1) The ratio of earnings to fixed charges was less than one-to-one for the years ended December 31, 2008, 2010, 2011 and 2012. Additional earnings of \$12.5 million, \$12.8 million, \$0.1 million and \$147.1 million, respectively, would have been needed to have a one-to-one ratio of earnings to fixed charges.
- (2) 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. Additional earnings of \$12.5 million, \$12.8 million, \$1.6 million and \$157.9 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.

Table of Contents

DESCRIPTION OF CAPITAL STOCK

General

The following descriptions are summaries of material terms of our common stock, preferred stock, certificate of incorporation and bylaws. These summaries are qualified by reference to our certificate of incorporation, bylaws and the designations of our preferred stock, which are filed as exhibits to the registration statement of which this prospectus forms a part, and by the provisions of applicable law.

As of the date of this prospectus, our authorized capital stock consisted of (a) 40,000,000 shares of preferred stock, \$0.01 par value per share, 6,098,160 of which were issued and outstanding, and (b) 275,000,000 shares of common stock, \$0.001 par value per share, 61,891,767 of which were issued and outstanding. In addition, as of the date of this prospectus, 5,196,221 shares of common stock were subject to outstanding awards pursuant to our equity incentive plans, of which (a) 874,100 shares were subject to options to purchase our common stock at a weighted average exercise price of \$11.68 per, (b) 3,331,463 shares consisted of shares of unvested restricted stock and (c) 990,658 shares were subject to outstanding performance-based stock unit awards (assuming settlement at 100% of the target level of performance).

Common Stock

Shares of our common stock have the following rights, preferences and privileges:

Voting Rights. Holders of our common stock are entitled to receive notice of any meeting of stockholders and to one vote for each share held of record on all matters at all meetings of stockholders, except at a meeting where holders of a particular class or series of shares are entitled to vote separately. Our common stockholders have no cumulative voting rights and all members of our board of directors are to be elected annually by plurality of the votes of the shares present in person or represented by proxy at the meeting and entitled to vote on the election of directors. Under our bylaws, subject to the rights of the holders of any series of preferred stock to elect directors under specified circumstances set forth in any Preferred Stock Designation, each stockholder having the right to vote is entitled at every meeting of stockholders to vote one vote for every share standing in his name on the record date fixed by the board of directors pursuant to the bylaws. Except as otherwise provided by law, the certificate of incorporation, any Preferred Stock Designation, the bylaws or any resolution adopted by a majority of the whole board of directors, all matters submitted to the stockholders at any meeting (other than the election of directors) shall be decided by the affirmative vote of the majority of shares present in person or represented by proxy at the meeting and entitled to vote on the subject matter.

Dividends. Holders of common stock are entitled to receive dividends if, as and when declared by the board of directors out of funds legally available therefor, subject to the limitations contained in the Delaware General Corporation Law (the "DGCL") and any dividend preferences of any outstanding shares of preferred stock.

Liquidation. If we liquidate, dissolve or wind up, voluntarily or involuntarily, holders of our common stock are entitled to share ratably in all net assets available for distribution to our stockholders, after creditors of the corporation have been paid in full and after the payment in full of any preferential amounts to which holders of our preferred stock may be entitled.

Other Rights and Preferences. No share of common stock affords any preemptive rights or is convertible, redeemable, assessable or entitled to the benefits of any sinking or repurchase fund.

Listing. Our common stock is traded on the NYSE MKT LLC under the symbol "GST".

Transfer Agent and Registrar. The transfer agent and registrar for our common stock is American Stock Transfer and Trust Company, LLC.

Table of Contents

Shares of our common stock are validly issued, fully paid and non-assessable. Any additional shares of common stock offered pursuant to this prospectus and the applicable prospectus supplement will, upon issuance, be fully paid and non-assessable.

Preferred Stock

As of the date of this prospectus, we had 33,901,840 shares of authorized but unissued preferred stock, 20,000,000 of which are undesignated.

At the direction of our board of directors, we may issue shares of preferred stock from time to time. Our board of directors may, without any action by holders of our common stock:

adopt resolutions to issue preferred stock in one or more classes or series;

fix the number of shares constituting any class or series of preferred stock; and

establish the rights of the holders of any class or series of preferred stock.

The rights of any class or series of preferred stock may include, among others:

general or special voting rights;

preferential liquidation or preemptive rights;

preferential cumulative or noncumulative dividend rights;

redemption or put rights; and

conversion or exchange rights.

We may issue shares of, or rights to purchase, preferred stock, the terms of which might:

adversely affect voting or other rights evidenced by, or amounts otherwise payable with respect to, the common stock;

discourage an unsolicited proposal to acquire us; or

facilitate a particular business combination involving us.

Any of these actions could discourage a transaction that some or a majority of our stockholders might believe to be in their best interests or in which our stockholders might receive a premium for their stock over its then market price.

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

8.625% Series A Cumulative Preferred Stock

As of the date of this prospectus, we had designated 10,000,000 shares to constitute our 8.625% Series A Preferred Stock (the Series A Preferred Stock) and have 3,958,160 shares issued and outstanding. The terms of the Series A Preferred Stock are contained in a Certificate of Designation (the Series A Certificate), which is incorporated by reference to an exhibit to the registration statement of which this prospectus forms a part. The following description is a summary of the material provisions of the Series A Preferred Stock as set forth in the Series A Certificate:

Ranking. The Series A Preferred Stock will rank: (i) senior to the common stock and any other equity securities that we may issue in the future, the terms of which specifically provide that such equity securities rank junior to such Series A Preferred Stock, in each case with respect to payment of dividends and amounts upon liquidation, dissolution or winding up, referred to as Junior Shares,

Table of Contents

(ii) equal to any shares of equity securities that we may issue in the future, the terms of which specifically provide that such equity securities rank on par with such Series A 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 A 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 A Preferred Stock), referred to as Senior Shares, and (iv) junior to all of our existing and future indebtedness.

Voting Rights. Holders of the Series A 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 A Preferred Stock. However, if cash dividends on any outstanding Series A Preferred Stock have not been paid in full for any monthly dividend period for any four consecutive or non-consecutive quarterly periods, or if we fail to maintain the listing of the Series A Preferred Stock on a National Exchange for at least 180 consecutive days after the Series A Preferred Stock becomes eligible for listing on a National Exchange, the holders of the Series A 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 our board of directors in addition to those directors then serving on such board until such time as the Series A 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 A Preferred Stock will be required for the issuance of any Senior Shares or for amendments to our certificate of incorporation by merger or otherwise that would affect adversely the rights of holders of the Series A Preferred Stock.

Dividends. Holders of our Series A Preferred Stock are entitled to receive cumulative cash dividends when and as declared by our board of directors out of funds legally available for the payment therefor, at a rate of 8.625% per annum of the \$25.00 liquidation preference per share (equivalent to \$2.15625 per annum per share). Under certain conditions relating to non-payment of dividends on the Series A Preferred Stock or if the Series A Preferred Stock are no longer listed on a National Exchange, the dividend rate on the Series A Preferred Stock may increase to 10.625% per annum. Dividends will generally be payable monthly in arrears on the last day of each calendar month.

Conversion Rights. Our Series A Preferred Stock is not convertible into, or exchangeable for, any of our property or securities.

Redemption Rights. We may not redeem the Series A Preferred Stock prior to June 23, 2014 except pursuant to the special redemption upon a Change of Ownership or Control (as defined in the Series A Certificate). On and after June 23, 2014, we may redeem the Series A Preferred Stock for cash at our 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.

Liquidation. If we liquidate, dissolve or wind up our operations, the holders of the Series A 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 our common stock and any other Junior Shares. The rights of the holders of the Series A 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.

Other Rights and Preferences. No share of our Series A Preferred Stock affords any preemptive rights or is entitled to the benefits of any retirement or sinking fund.

Listing: Our Series A Preferred Stock is traded on the NYSE MKT LLC under the symbol GST.PR.A.

Table of Contents

Transfer Agent, Registrar and Dividend Disbursing Agent. The transfer agent, registrar and dividend disbursement agent for our Series A Preferred Stock is American Stock Transfer and Trust Company, LLC. Our Series A Preferred Stock is validly issued, fully paid and non-assessable.

10.75% Series B Cumulative Preferred Stock

As of the date of this prospectus, we had designated 10,000,000 shares to constitute our 10.75% Series B Preferred Stock (the Series B Preferred Stock) and have 2,140,000 shares issued and outstanding. The terms of the Series B Preferred Stock are contained in a Certificate of Designation (the Series B Certificate), which is incorporated by reference to an exhibit to the registration statement of which this prospectus forms a part. The following description is a summary of the material provisions of the Series B Preferred Stock as set forth in the Series B Certificate:

Ranking. The Series B Preferred Stock will rank: (i) senior to the common stock and any other equity securities that we 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 we 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 in the Series B Certificate)), referred to as Senior Shares, and (iv) junior to all of our existing and future indebtedness.

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 we fail 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 our board of directors in addition to those directors then serving on such 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 our certificate of incorporation by merger or otherwise that would affect adversely the rights of holders of the Series B Preferred Stock.

Dividends. Holders of our Series B Preferred Stock are entitled to receive cumulative cash dividends when and as declared by our board of directors out of funds legally available for the payment thereof, at a rate of 10.75% per annum of the \$25.00 liquidation preference per share (equivalent to \$2.6875 per annum per share). 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 12.75% per annum. Dividends will generally be payable monthly in arrears on the last day of each calendar month.

Table of Contents

Conversion Rights. Except under certain conditions, upon the occurrence of a Change of Ownership or Control (as defined in the Series B Certificate), each holder of Series B Preferred Stock will have the right to convert some or all of such stock held by such holder into a number of shares of our common stock.

Redemption Rights. We may not redeem the Series B Preferred Stock prior to November 15, 2018 except pursuant to the special redemption upon a Change of Ownership or Control (as defined in the Series B Certificate). On and after November 15, 2018, we may redeem the Series B Preferred Stock for cash at our 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.

Liquidation. If we liquidate, dissolve or wind up our operation, 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 our 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.

Other Rights and Preferences. No share of our Series B Preferred Stock affords any preemptive rights or is entitled to the benefits of any retirement or sinking fund.

Listing: Our Series B Preferred Stock is traded on the NYSE MKT LLC under the symbol GST.PR.B.

Transfer Agent, Registrar and Dividend Disbursing Agent. The transfer agent, registrar and dividend disbursement agent for our Series B Preferred Stock is American Stock Transfer and Trust Company, LLC. Our Series B Preferred Stock is validly issued, fully paid and non-assessable.

Anti-Takeover Provisions of our Certificate of Incorporation and Bylaws

The provisions of our certificate of incorporation and bylaws may have an anti-takeover effect and may delay, defer or prevent a tender offer or takeover attempt that a stockholder might consider in his or her best interest, including those attempts that might result in a premium over the market price for the common stock. Among other things, our certificate of incorporation and bylaws:

provide that any action taken by our stockholders must be taken (a) by a vote of stockholders at a meeting of stockholders duly noticed and called in accordance with the DGCL or (b) without a meeting, without prior notice, and without a vote if a consent or consents, in writing or by electronic transmission, setting forth the action so taken shall be signed by all stockholders entitled to vote on the taking of such action;

provide that stockholders seeking to present proposals before a meeting of stockholders or to nominate candidates for election as directors at a meeting of stockholders must provide notice in a timely manner, and also specify requirements as to the form and content of such notice;

provide that the board of directors or any individual director may be removed (i) with cause only by the affirmative vote of the holders of not less than a majority of the shares of our capital stock entitled to vote generally in the election of directors voting together as a single class or (ii) without cause only by the affirmative vote of the holders of not less than two-thirds (66.66%) of the shares of our capital stock entitled to vote generally in the election of directors voting together as a single class;

Edgar Filing: Gastar Exploration Inc. - Form 424B5

authorize the board of directors to determine the number of directors and to fill vacancies on the board;

provide that only the board of directors or chief executive officer may call a special meeting of the stockholders;

Table of Contents

requires supermajority voting for some amendments to the certificate of incorporation; and

provide for the issuance of blank check preferred stock.

Limitation of Liability and Indemnification Matters

Our certificate of incorporation limits, to the fullest extent permitted by Delaware law, the personal liability of directors for monetary damages for breach of their fiduciary duties as a director. The effect of this provision is to eliminate our rights and those of our stockholders, through stockholders' derivative suits on behalf of the Company, to recover monetary damages against a director for breach of fiduciary duty as a director, including breaches resulting from grossly negligent behavior.

Section 145 of the DGCL provides that a corporation may indemnify a director, officer, employee or agent made a party to an action by reason of the fact that he or she was a director, officer, employee or agent of the corporation or was serving at the request of the corporation against expenses, judgments, fines and amounts paid in settlement actually and reasonably incurred by him or her in connection with such action if he or she acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, the best interests of the corporation and, with respect to any criminal action, had no reasonable cause to believe his or her conduct was unlawful.

Table of Contents

DESCRIPTION OF DEBT SECURITIES

The Debt Securities will be either our senior debt securities (Senior Debt Securities) or our subordinated debt securities (Subordinated Debt Securities). The Senior Debt Securities and the Subordinated Debt Securities will be issued under separate indentures among us, the Subsidiary Guarantors of such Debt Securities, if any, and a trustee to be determined (the Trustee). Senior Debt Securities will be issued under a Senior Indenture and Subordinated Debt Securities will be issued under a Subordinated Indenture. Together, the Senior Indenture and the Subordinated Indenture are called Indentures.

The Debt Securities may be issued from time to time in one or more series. The particular terms of each series that are offered by a prospectus supplement will be described in the prospectus supplement.

Unless the Debt Securities are guaranteed by our subsidiaries as described below, our rights and the rights of our creditors, including holders of the Debt Securities, to participate in the assets of any subsidiary upon the latter's liquidation or reorganization, will be subject to the prior claims of the subsidiary's creditors, except to the extent that we may ourselves be a creditor with recognized claims against such subsidiary.

We have summarized selected provisions of the Indentures below. The summary is not complete. The form of each Indenture has been filed with the SEC as an exhibit to the registration statement of which this prospectus is a part, and you should read the Indentures for provisions that may be important to you. Capitalized terms used in the summary have the meanings specified in the Indentures.

General

The Indentures provide that Debt Securities in separate series may be issued thereunder from time to time without limitation as to aggregate principal amount. We may specify a maximum aggregate principal amount for the Debt Securities of any series. We will determine the terms and conditions of the Debt Securities, including the maturity, principal and interest, but those terms must be consistent with the Indenture. The Debt Securities will be our unsecured obligations.

The Subordinated Debt Securities will be subordinated in right of payment to the prior payment in full of all of our Senior Debt (as defined) as described under Subordination of Subordinated Debt Securities and in the prospectus supplement applicable to any Subordinated Debt Securities. If the prospectus supplement so indicates, the Debt Securities will be convertible into our common stock.

If specified in the prospectus supplement respecting a particular series of Debt Securities, any of our current and future subsidiaries specified in the prospectus supplement (each a Subsidiary Guarantor) will fully and unconditionally guarantee (the Subsidiary Guarantee) that series as described under Subsidiary Guarantee and in the prospectus supplement. Each Subsidiary Guarantee will be an unsecured obligation of the Subsidiary Guarantor. A Subsidiary Guarantee of Subordinated Debt Securities will be subordinated to the Senior Debt of the Subsidiary Guarantor on the same basis as the Subordinated Debt Securities are subordinated to our Senior Debt.

The applicable prospectus supplement will set forth the price or prices at which the Debt Securities to be issued will be offered for sale and will describe the following terms of such Debt Securities:

- (1) the title of the Debt Securities;
- (2) whether the Debt Securities are Senior Debt Securities or Subordinated Debt Securities and, if Subordinated Debt Securities, the related subordination terms;
- (3) whether any Subsidiary Guarantor will provide a Subsidiary Guarantee of the Debt Securities;
- (4) any limit on the aggregate principal amount of the Debt Securities;

- (5) each date on which the principal of the Debt Securities will be payable;

Table of Contents

- (6) the interest rate that the Debt Securities will bear and the interest payment dates for the Debt Securities;
- (7) each place where payments on the Debt Securities will be payable;
- (8) any terms upon which the Debt Securities may be redeemed, in whole or in part, at our option;
- (9) any sinking fund or other provisions that would obligate us to redeem or otherwise repurchase the Debt Securities;
- (10) the portion of the principal amount, if less than all, of the Debt Securities that will be payable upon declaration of acceleration of the Maturity of the Debt Securities;
- (11) whether the Debt Securities are defeasible;
- (12) any addition to or change in the Events of Default;
- (13) whether the Debt Securities are convertible into our common stock and, if so, the terms and conditions upon which conversion will be effected, including the initial conversion price or conversion rate and any adjustments thereto and the conversion period;
- (14) any addition to or change in the covenants in the Indenture applicable to the Debt Securities; and
- (15) any other terms of the Debt Securities not inconsistent with the provisions of the Indenture.

Debt Securities, including any Debt Securities that provide for an amount less than the principal amount thereof to be due and payable upon a declaration of acceleration of the Maturity thereof (Original Issue Discount Securities), may be sold at a substantial discount below their principal amount. Special United States federal income tax considerations applicable to Debt Securities sold at an original issue discount may be described in the applicable prospectus supplement. In addition, special United States federal income tax or other considerations applicable to any Debt Securities that are denominated in a currency or currency unit other than United States dollars may be described in the applicable prospectus supplement.

Subordination of Subordinated Debt Securities

The indebtedness evidenced by the Subordinated Debt Securities will, to the extent set forth in the Subordinated Indenture with respect to each series of Subordinated Debt Securities, be subordinated in right of payment to the prior payment in full of all of our Senior Debt, including the Senior Debt Securities, and it may also be senior in right of payment to all of our Subordinated Debt. The prospectus supplement relating to any Subordinated Debt Securities will summarize the subordination provisions of the Subordinated Indenture applicable to that series including:

the applicability and effect of such provisions upon any payment or distribution respecting that series following any liquidation, dissolution or other winding-up, or any assignment for the benefit of creditors or other marshalling of assets or any bankruptcy, insolvency or similar proceedings;

the applicability and effect of such provisions in the event of specified defaults with respect to any Senior Debt, including the circumstances under which and the periods during which we will be prohibited from making payments on the Subordinated Debt

Securities; and

the definition of Senior Debt applicable to the Subordinated Debt Securities of that series and, if the series is issued on a senior subordinated basis, the definition of Subordinated Debt applicable to that series.

The prospectus supplement will also describe as of a recent date the approximate amount of Senior Debt to which the Subordinated Debt Securities of that series will be subordinated.

The failure to make any payment on any of the Subordinated Debt Securities by reason of the subordination provisions of the Subordinated Indenture described in the prospectus supplement will not be construed as preventing the occurrence of an Event of Default with respect to the Subordinated Debt Securities arising from any such failure to make payment.

Table of Contents

The subordination provisions described above will not be applicable to payments in respect of the Subordinated Debt Securities from a defeasance trust established in connection with any legal defeasance or covenant defeasance of the Subordinated Debt Securities as described under Legal Defeasance and Covenant Defeasance.

Subsidiary Guarantee

If specified in the prospectus supplement, one or more of the Subsidiary Guarantors will guarantee the Debt Securities of a series. Unless otherwise indicated in the prospectus supplement, the following provisions will apply to the Subsidiary Guarantee of the Subsidiary Guarantor.

Subject to the limitations described below and in the prospectus supplement, one or more of the Subsidiary Guarantors will jointly and severally, fully and unconditionally guarantee the punctual payment when due, whether at Stated Maturity, by acceleration or otherwise, of all our payment obligations under the Indentures and the Debt Securities of a series, whether for principal of, premium, if any, or interest on the Debt Securities or otherwise (all such obligations guaranteed by a Subsidiary Guarantor being herein called the Guaranteed Obligations). The Subsidiary Guarantors will also pay all expenses (including reasonable counsel fees and expenses) incurred by the applicable Trustee in enforcing any rights under a Subsidiary Guarantee with respect to a Subsidiary Guarantor.

In the case of Subordinated Debt Securities, a Subsidiary Guarantor's Subsidiary Guarantee will be subordinated in right of payment to the Senior Debt of such Subsidiary Guarantor on the same basis as the Subordinated Debt Securities are subordinated to our Senior Debt. No payment will be made by any Subsidiary Guarantor under its Subsidiary Guarantee during any period in which payments by us on the Subordinated Debt Securities are suspended by the subordination provisions of the Subordinated Indenture.

Each Subsidiary Guarantee will be limited in amount to an amount not to exceed the maximum amount that can be guaranteed by the relevant Subsidiary Guarantor without rendering such Subsidiary Guarantee voidable under applicable law relating to fraudulent conveyance or fraudulent transfer or similar laws affecting the rights of creditors generally.

Each Subsidiary Guarantee will be a continuing guarantee and will:

- (1) remain in full force and effect until either (a) payment in full of all the applicable Debt Securities (or such Debt Securities are otherwise satisfied and discharged in accordance with the provisions of the applicable Indenture) or (b) released as described in the following paragraph;
- (2) be binding upon each Subsidiary Guarantor; and

(3) inure to the benefit of and be enforceable by the applicable Trustee, the Holders and their successors, transferees and assigns. In the event that (a) a Subsidiary Guarantor ceases to be a Subsidiary, (b) either legal defeasance or covenant defeasance occurs with respect to the series or (c) all or substantially all of the assets or all of the Capital Stock of such Subsidiary Guarantor is sold, including by way of sale, merger, consolidation or otherwise, such Subsidiary Guarantor will be released and discharged of its obligations under its Subsidiary Guarantee without any further action required on the part of the Trustee or any Holder, and no other person acquiring or owning the assets or Capital Stock of such Subsidiary Guarantor will be required to enter into a Subsidiary Guarantee. In addition, the prospectus supplement may specify additional circumstances under which a Subsidiary Guarantor can be released from its Subsidiary Guarantee.

Form, Exchange and Transfer

The Debt Securities of each series will be issuable only in fully registered form, without coupons, and, unless otherwise specified in the applicable prospectus supplement, only in denominations of \$1,000 and integral multiples thereof.

Table of Contents

At the option of the Holder, subject to the terms of the applicable Indenture and the limitations applicable to Global Securities, Debt Securities of each series will be exchangeable for other Debt Securities of the same series of any authorized denomination and of a like tenor and aggregate principal amount.

Subject to the terms of the applicable Indenture and the limitations applicable to Global Securities, Debt Securities may be presented for exchange as provided above or for registration of transfer (duly endorsed or with the form of transfer endorsed thereon duly executed) at the office of the Security Registrar or at the office of any transfer agent designated by us for such purpose. No service charge will be made for any registration of transfer or exchange of Debt Securities, but we may require payment of a sum sufficient to cover any tax or other governmental charge payable in that connection. Such transfer or exchange will be effected upon the Security Registrar or such transfer agent, as the case may be, being satisfied with the documents of title and identity of the person making the request. The Security Registrar and any other transfer agent initially designated by us for any Debt Securities will be named in the applicable prospectus supplement. We may at any time designate additional transfer agents or rescind the designation of any transfer agent or approve a change in the office through which any transfer agent acts, except that we will be required to maintain a transfer agent in each Place of Payment for the Debt Securities of each series.

If the Debt Securities of any series (or of any series and specified tenor) are to be redeemed in part, we will not be required to (1) issue, register the transfer of or exchange any Debt Security of that series (or of that series and specified tenor, as the case may be) during a period beginning at the opening of business 15 days before the day of mailing of a notice of redemption of any such Debt Security that may be selected for redemption and ending at the close of business on the day of such mailing or (2) register the transfer of or exchange any Debt Security so selected for redemption, in whole or in part, except the unredeemed portion of any such Debt Security being redeemed in part.

Global Securities

Some or all of the Debt Securities of any series may be represented, in whole or in part, by one or more Global Securities that will have an aggregate principal amount equal to that of the Debt Securities they represent. Each Global Security will be registered in the name of a Depository or its nominee identified in the applicable prospectus supplement, will be deposited with such Depository or nominee or its custodian and will bear a legend regarding the restrictions on exchanges and registration of transfer thereof referred to below and any such other matters as may be provided for pursuant to the applicable Indenture.

Notwithstanding any provision of the Indentures or any Debt Security described in this prospectus, no Global Security may be exchanged in whole or in part for Debt Securities registered, and no transfer of a Global Security in whole or in part may be registered, in the name of any Person other than the Depository for such Global Security or any nominee of such Depository unless:

- (1) the Depository has notified us that it is unwilling or unable to continue as Depository for such Global Security or has ceased to be qualified to act as such as required by the applicable Indenture, and in either case we fail to appoint a successor Depository within 90 days;
- (2) an Event of Default with respect to the Debt Securities represented by such Global Security has occurred and is continuing and the Trustee has received a written request from the Depository to issue certificated Debt Securities;
- (3) subject to the rules of the Depository, we shall have elected to terminate the book-entry system through the Depository; or
- (4) other circumstances exist, in addition to or in lieu of those described above, as may be described in the applicable prospectus supplement.

All certificated Debt Securities issued in exchange for a Global Security or any portion thereof will be registered in such names as the Depository may direct.

Table of Contents

As long as the Depositary, or its nominee, is the registered holder of a Global Security, the Depositary or such nominee, as the case may be, will be considered the sole owner and Holder of such Global Security and the Debt Securities that it represents for all purposes under the Debt Securities and the applicable Indenture. Except in the limited circumstances referred to above, owners of beneficial interests in a Global Security will not be entitled to have such Global Security or any Debt Securities that it represents registered in their names, will not receive or be entitled to receive physical delivery of certificated Debt Securities in exchange for those interests and will not be considered to be the owners or Holders of such Global Security or any Debt Securities that it represents for any purpose under the Debt Securities or the applicable Indenture. All payments on a Global Security will be made to the Depositary or its nominee, as the case may be, as the Holder of the security. The laws of some jurisdictions may require that some purchasers of Debt Securities take physical delivery of such Debt Securities in certificated form. These laws may impair the ability to transfer beneficial interests in a Global Security.

Ownership of beneficial interests in a Global Security will be limited to institutions that have accounts with the Depositary or its nominee (participants) and to persons that may hold beneficial interests through participants. In connection with the issuance of any Global Security, the Depositary will credit, on its book-entry registration and transfer system, the respective principal amounts of Debt Securities represented by the Global Security to the accounts of its participants. Ownership of beneficial interests in a Global Security will be shown only on, and the transfer of those ownership interests will be effected only through, records maintained by the Depositary (with respect to participants interests) or any such participant (with respect to interests of Persons held by such participants on their behalf). Payments, transfers, exchanges and other matters relating to beneficial interests in a Global Security may be subject to various policies and procedures adopted by the Depositary from time to time. None of us, the Subsidiary Guarantors, the Trustees or the agents of us, the Subsidiary Guarantors or the Trustees will have any responsibility or liability for any aspect of the Depositary s or any participant s records relating to, or for payments made on account of, beneficial interests in a Global Security, or for maintaining, supervising or reviewing any records relating to such beneficial interests.

Payment and Paying Agents

Unless otherwise indicated in the applicable prospectus supplement, payment of interest on a Debt Security on any Interest Payment Date will be made to the Person in whose name such Debt Security (or one or more Predecessor Securities) is registered at the close of business on the Regular Record Date for such interest.

Unless otherwise indicated in the applicable prospectus supplement, principal of and any premium and interest on the Debt Securities of a particular series will be payable at the office of such Paying Agent or Paying Agents as we may designate for such purpose from time to time, except that at our option payment of any interest on Debt Securities in certificated form may be made by check mailed to the address of the Person entitled thereto as such address appears in the Security Register. Unless otherwise indicated in the applicable prospectus supplement, the corporate trust office of the Trustee under the Senior Indenture in The City of New York will be designated as sole Paying Agent for payments with respect to Senior Debt Securities of each series, and the corporate trust office of the Trustee under the Subordinated Indenture in The City of New York will be designated as the sole Paying Agent for payment with respect to Subordinated Debt Securities of each series. Any other Paying Agents initially designated by us for the Debt Securities of a particular series will be named in the applicable prospectus supplement. We may at any time designate additional Paying Agents or rescind the designation of any Paying Agent or approve a change in the office through which any Paying Agent acts, except that we will be required to maintain a Paying Agent in each Place of Payment for the Debt Securities of a particular series.

All money paid by us to a Paying Agent for the payment of the principal of or any premium or interest on any Debt Security which remains unclaimed at the end of two years after such principal, premium or interest has become due and payable will be repaid to us, and the Holder of such Debt Security thereafter may look only to us for payment.

Table of Contents

Consolidation, Merger and Sale of Assets

Unless otherwise specified in the prospectus supplement, we may not consolidate with or merge into, or transfer, lease or otherwise dispose of all or substantially all of our assets to, any Person (a successor Person), and may not permit any Person to consolidate with or merge into us, unless:

- (1) the successor Person (if not us) is a corporation, partnership, trust or other entity organized and validly existing under the laws of any domestic jurisdiction and assumes our obligations on the Debt Securities and under the Indentures;
- (2) immediately before and after giving pro forma effect to the transaction, no Event of Default, and no event which, after notice or lapse of time or both, would become an Event of Default, has occurred and is continuing; and
- (3) several other conditions, including any additional conditions with respect to any particular Debt Securities specified in the applicable prospectus supplement, are met.

The successor Person (if not us) will be substituted for us under the applicable Indenture with the same effect as if it had been an original party to such Indenture, and, except in the case of a lease, we will be relieved from any further obligations under such Indenture and the Debt Securities.

Events of Default

Unless otherwise specified in the prospectus supplement, each of the following will constitute an Event of Default under the applicable Indenture with respect to Debt Securities of any series:

- (1) failure to pay principal of or any premium on any Debt Security of that series when due, whether or not, in the case of Subordinated Debt Securities, such payment is prohibited by the subordination provisions of the Subordinated Indenture;
- (2) failure to pay any interest on any Debt Securities of that series when due, continued for 30 days, whether or not, in the case of Subordinated Debt Securities, such payment is prohibited by the subordination provisions of the Subordinated Indenture;
- (3) failure to deposit any sinking fund payment, when due, in respect of any Debt Security of that series, whether or not, in the case of Subordinated Debt Securities, such deposit is prohibited by the subordination provisions of the Subordinated Indenture;
- (4) failure to perform or comply with the provisions described under Consolidation, Merger and Sale of Assets;
- (5) failure to perform any of our other covenants in such Indenture (other than a covenant included in such Indenture solely for the benefit of a series other than that series), continued for 60 days after written notice has been given by the applicable Trustee, or the Holders of at least 25% in principal amount of the Outstanding Debt Securities of that series, as provided in such Indenture;
- (6) any Debt of ourself, any Significant Subsidiary or, if a Subsidiary Guarantor has guaranteed the series, such Subsidiary Guarantor, is not paid within any applicable grace period after final maturity or is accelerated by its holders because of a default and the total amount of such Debt unpaid or accelerated exceeds \$25.0 million;

Edgar Filing: Gastar Exploration Inc. - Form 424B5

- (7) any judgment or decree for the payment of money in excess of \$25.0 million is entered against us, any Significant Subsidiary or, if a Subsidiary Guarantor has guaranteed the series, such Subsidiary Guarantor, remains outstanding for a period of 60 consecutive days following entry of such judgment and is not discharged, waived or stayed;

- (8) certain events of bankruptcy, insolvency or reorganization affecting us, any Significant Subsidiary or, if a Subsidiary Guarantor has guaranteed the series, such Subsidiary Guarantor; and

Table of Contents

- (9) if any Subsidiary Guarantor has guaranteed such series, the Subsidiary Guarantee of any such Subsidiary Guarantor is held by a final non-appealable order or judgment of a court of competent jurisdiction to be unenforceable or invalid or ceases for any reason to be in full force and effect (other than in accordance with the terms of the applicable Indenture) or any Subsidiary Guarantor or any Person acting on behalf of any Subsidiary Guarantor denies or disaffirms such Subsidiary Guarantor's obligations under its Subsidiary Guarantee (other than by reason of a release of such Subsidiary Guarantor from its Subsidiary Guarantee in accordance with the terms of the applicable Indenture).

If an Event of Default (other than an Event of Default with respect to Gastar described in clause (8) above) with respect to the Debt Securities of any series at the time Outstanding occurs and is continuing, either the applicable Trustee or the Holders of at least 25% in principal amount of the Outstanding Debt Securities of that series by notice as provided in the Indenture may declare the principal amount of the Debt Securities of that series (or, in the case of any Debt Security that is an Original Issue Discount Debt Security, such portion of the principal amount of such Debt Security as may be specified in the terms of such Debt Security) to be due and payable immediately, together with any accrued and unpaid interest thereon. If an Event of Default with respect to Gastar described in clause (8) above with respect to the Debt Securities of any series at the time Outstanding occurs, the principal amount of all the Debt Securities of that series (or, in the case of any such Original Issue Discount Security, such specified amount) will automatically, and without any action by the applicable Trustee or any Holder, become immediately due and payable, together with any accrued and unpaid interest thereon. After any such acceleration and its consequences, but before a judgment or decree based on acceleration, the Holders of a majority in principal amount of the Outstanding Debt Securities of that series may, under certain circumstances, rescind and annul such acceleration if all Events of Default with respect to that series, other than the non-payment of accelerated principal (or other specified amount), have been cured or waived as provided in the applicable Indenture. For information as to waiver of defaults, see Modification and Waiver below.

Subject to the provisions of the Indentures relating to the duties of the Trustees in case an Event of Default has occurred and is continuing, no Trustee will be under any obligation to exercise any of its rights or powers under the applicable Indenture at the request or direction of any of the Holders, unless such Holders have offered to such Trustee reasonable security or indemnity. Subject to such provisions for the indemnification of the Trustees, the Holders of a majority in principal amount of the Outstanding Debt Securities of any series will have the right to direct the time, method and place of conducting any proceeding for any remedy available to such Trustee or exercising any trust or power conferred on the Trustee with respect to the Debt Securities of that series.

No Holder of a Debt Security of any series will have any right to institute any proceeding with respect to the applicable Indenture, or for the appointment of a receiver or a trustee, or for any other remedy thereunder, unless:

- (1) such Holder has previously given to the Trustee under the applicable Indenture written notice of a continuing Event of Default with respect to the Debt Securities of that series;
- (2) the Holders of at least 25% in principal amount of the Outstanding Debt Securities of that series have made written request, and such Holder or Holders have offered reasonable security or indemnity, to the Trustee to institute such proceeding as trustee; and
- (3) the Trustee has failed to institute such proceeding, and has not received from the Holders of a majority in principal amount of the Outstanding Debt Securities of that series a direction inconsistent with such request, within 60 days after such notice, request and offer.

However, such limitations do not apply to a suit instituted by a Holder of a Debt Security for the enforcement of payment of the principal of or any premium or interest on such Debt Security on or after the applicable due date specified in such Debt Security or, if applicable, to convert such Debt Security.

We will be required to furnish to each Trustee annually a statement by certain of our officers, to their knowledge, as to whether or not we are in default in the performance or observance of any of the terms, provisions and conditions of the applicable Indenture and, if so, specifying all such known defaults.

Table of Contents

Modification and Waiver

We may modify or amend an Indenture without the consent of any holders of the Debt Securities in certain circumstances, including:

- (1) to evidence the succession under the Indenture of another Person to us or any Subsidiary Guarantor and to provide for its assumption of our or such Subsidiary Guarantor's obligations to holders of Debt Securities;
 - (2) to make any changes that would add any additional covenants of us or the Subsidiary Guarantors for the benefit of the holders of Debt Securities or that do not adversely affect the rights under the Indenture of the Holders of Debt Securities in any material respect;
 - (3) to add any additional Events of Default;
 - (4) to provide for uncertificated notes in addition to or in place of certificated notes;
 - (5) to secure the Debt Securities;
 - (6) to establish the form or terms of any series of Debt Securities;
 - (7) to evidence and provide for the acceptance of appointment under the Indenture of a successor Trustee;
 - (8) to cure any ambiguity, defect or inconsistency;
 - (9) to add Subsidiary Guarantors; or
 - (10) in the case of any Subordinated Debt Security, to make any change in the subordination provisions that limits or terminates the benefits applicable to any Holder of Senior Debt.
- Other modifications and amendments of an Indenture may be made by us, the Subsidiary Guarantors, if applicable, and the applicable Trustee with the consent of the Holders of a majority in principal amount of the Outstanding Debt Securities of each series affected by such modification or amendment; provided, however, that no such modification or amendment may, without the consent of the Holder of each Outstanding Debt Security affected thereby:

- (1) change the Stated Maturity of the principal of, or any installment of principal of or interest on, any Debt Security;
- (2) reduce the principal amount of, or any premium or interest on, any Debt Security;
- (3)

Edgar Filing: Gastar Exploration Inc. - Form 424B5

reduce the amount of principal of an Original Issue Discount Security or any other Debt Security payable upon acceleration of the Maturity thereof;

- (4) change the place or currency of payment of principal of, or any premium or interest on, any Debt Security;
- (5) impair the right to institute suit for the enforcement of any payment due on or any conversion right with respect to any Debt Security;
- (6) modify the subordination provisions in the case of Subordinated Debt Securities, or modify any conversion provisions, in either case in a manner adverse to the Holders of the Subordinated Debt Securities;
- (7) except as provided in the applicable Indenture, release the Subsidiary Guarantee of a Subsidiary Guarantor;
- (8) reduce the percentage in principal amount of Outstanding Debt Securities of any series, the consent of whose Holders is required for modification or amendment of the Indenture;
- (9) reduce the percentage in principal amount of Outstanding Debt Securities of any series necessary for waiver of compliance with certain provisions of the Indenture or for waiver of certain defaults;
- (10) modify such provisions with respect to modification, amendment or waiver; or
- (11) following the making of an offer to purchase Debt Securities from any Holder that has been made pursuant to a covenant in such Indenture, modify such covenant in a manner adverse to such Holder.

Table of Contents

The Holders of a majority in principal amount of the Outstanding Debt Securities of any series may waive compliance by us with certain restrictive provisions of the applicable Indenture. The Holders of a majority in principal amount of the Outstanding Debt Securities of any series may waive any past default under the applicable Indenture, except a default in the payment of principal, premium or interest and certain covenants and provisions of the Indenture which cannot be amended without the consent of the Holder of each Outstanding Debt Security of such series.

Each of the Indentures provides that in determining whether the Holders of the requisite principal amount of the Outstanding Debt Securities have given or taken any direction, notice, consent, waiver or other action under such Indenture as of any date:

- (1) the principal amount of an Original Issue Discount Security that will be deemed to be Outstanding will be the amount of the principal that would be due and payable as of such date upon acceleration of maturity to such date;
- (2) if, as of such date, the principal amount payable at the Stated Maturity of a Debt Security is not determinable (for example, because it is based on an index), the principal amount of such Debt Security deemed to be Outstanding as of such date will be an amount determined in the manner prescribed for such Debt Security;
- (3) the principal amount of a Debt Security denominated in one or more foreign currencies or currency units that will be deemed to be Outstanding will be the United States-dollar equivalent, determined as of such date in the manner prescribed for such Debt Security, of the principal amount of such Debt Security (or, in the case of a Debt Security described in clause (1) or (2) above, of the amount described in such clause); and
- (4) certain Debt Securities, including those owned by us, any Subsidiary Guarantor or any of our other Affiliates, will not be deemed to be Outstanding.

Except in certain limited circumstances, we will be entitled to set any day as a record date for the purpose of determining the Holders of Outstanding Debt Securities of any series entitled to give or take any direction, notice, consent, waiver or other action under the applicable Indenture, in the manner and subject to the limitations provided in the Indenture. In certain limited circumstances, the Trustee will be entitled to set a record date for action by Holders. If a record date is set for any action to be taken by Holders of a particular series, only persons who are Holders of Outstanding Debt Securities of that series on the record date may take such action. To be effective, such action must be taken by Holders of the requisite principal amount of such Debt Securities within a specified period following the record date. For any particular record date, this period will be 180 days or such other period as may be specified by us (or the Trustee, if it set the record date), and may be shortened or lengthened (but not beyond 180 days) from time to time.

Satisfaction and Discharge

Each Indenture will be discharged and will cease to be of further effect as to all outstanding Debt Securities of any series issued thereunder, when:

(1) either:

(a) all outstanding Debt Securities of that series that have been authenticated (except lost, stolen or destroyed Debt Securities that have been replaced or paid and Debt Securities for whose payment money has theretofore been deposited in trust and thereafter repaid to us) have been delivered to the Trustee for cancellation; or

(b) all outstanding Debt Securities of that series that have been not delivered to the Trustee for cancellation have become due and payable or will become due and payable at their Stated Maturity within one year or are to be called for redemption within one year under arrangements satisfactory to the Trustee and in any case we have

Table of Contents

irrevocably deposited with the Trustee as trust funds money in an amount sufficient, without consideration of any reinvestment of interest, to pay the entire indebtedness of such Debt Securities not delivered to the Trustee for cancellation, for principal, premium, if any, and accrued interest to the Stated Maturity or redemption date;

(2) we have paid or caused to be paid all other sums payable by us under the Indenture with respect to the Debt Securities of that series; and

(3) we have delivered an Officers Certificate and an Opinion of Counsel to the Trustee stating that all conditions precedent to satisfaction and discharge of the Indenture with respect to the Debt Securities of that series have been satisfied.

Legal Defeasance and Covenant Defeasance

To the extent indicated in the applicable prospectus supplement, we may elect, at our option at any time, to have our obligations discharged under provisions relating to defeasance and discharge of indebtedness, which we call legal defeasance, or relating to defeasance of certain restrictive covenants applied to the Debt Securities of any series, or to any specified part of a series, which we call covenant defeasance .

Legal Defeasance. The Indentures provide that, upon our exercise of our option (if any) to have the legal defeasance provisions applied to any series of Debt Securities, we and, if applicable, each Subsidiary Guarantor will be discharged from all our obligations, and, if such Debt Securities are Subordinated Debt Securities, the provisions of the Subordinated Indenture relating to subordination will cease to be effective, with respect to such Debt Securities (except for certain obligations to convert, exchange or register the transfer of Debt Securities, to replace stolen, lost or mutilated Debt Securities, to maintain paying agencies and to hold moneys for payment in trust) upon the deposit in trust for the benefit of the Holders of such Debt Securities of money or U.S. Government Obligations, or both, which, through the payment of principal and interest in respect thereof in accordance with their terms, will provide money in an amount sufficient (in the opinion of a nationally recognized firm of independent public accountants) to pay the principal of and any premium and interest on such Debt Securities on the respective Stated Maturities in accordance with the terms of the applicable Indenture and such Debt Securities. Such defeasance or discharge may occur only if, among other things:

- (1) we have delivered to the applicable Trustee an Opinion of Counsel to the effect that we have received from, or there has been published by, the United States Internal Revenue Service a ruling, or there has been a change in tax law, in either case to the effect that Holders of such Debt Securities will not recognize gain or loss for federal income tax purposes as a result of such deposit and legal defeasance and will be subject to federal income tax on the same amount, in the same manner and at the same times as would have been the case if such deposit and legal defeasance were not to occur;
- (2) no Event of Default or event that with the passing of time or the giving of notice, or both, shall constitute an Event of Default shall have occurred and be continuing at the time of such deposit or, with respect to any Event of Default described in clause (8) under Events of Default, at any time until 121 days after such deposit;
- (3) such deposit and legal defeasance will not result in a breach or violation of, or constitute a default under, any agreement or instrument (other than the applicable Indenture) to which we are a party or by which we are bound;
- (4) in the case of Subordinated Debt Securities, at the time of such deposit, no default in the payment of all or a portion of principal of (or premium, if any) or interest on any Senior Debt shall have occurred and be continuing, no event of default shall have resulted in the acceleration of any Senior Debt and no other event of default with respect to any Senior Debt shall have occurred and be continuing permitting after notice or the lapse of time, or both, the acceleration thereof; and
- (5) we have delivered to the Trustee an Opinion of Counsel to the effect that such deposit shall not cause the Trustee or the trust so created to be subject to the Investment Company Act of 1940.

Table of Contents

Covenant Defeasance. The Indentures provide that, upon our exercise of our option (if any) to have the covenant defeasance provisions applied to any Debt Securities, we may fail to comply with certain restrictive covenants (but not with respect to conversion, if applicable), including those that may be described in the applicable prospectus supplement, and the occurrence of certain Events of Default, which are described above in clause (5) (with respect to such restrictive covenants) and clauses (6), (7) and (9) under Events of Default and any that may be described in the applicable prospectus supplement, will not be deemed to either be or result in an Event of Default and, if such Debt Securities are Subordinated Debt Securities, the provisions of the Subordinated Indenture relating to subordination will cease to be effective, in each case with respect to such Debt Securities. In order to exercise such option, we must deposit, in trust for the benefit of the Holders of such Debt Securities, money or U.S. Government Obligations, or both, which, through the payment of principal and interest in respect thereof in accordance with their terms, will provide money in an amount sufficient (in the opinion of a nationally recognized firm of independent public accountants) to pay the principal of and any premium and interest on such Debt Securities on the respective Stated Maturities in accordance with the terms of the applicable Indenture and such Debt Securities. Such covenant defeasance may occur only if we have delivered to the applicable Trustee an Opinion of Counsel to the effect that Holders of such Debt Securities will not recognize gain or loss for federal income tax purposes as a result of such deposit and covenant defeasance and will be subject to federal income tax on the same amount, in the same manner and at the same times as would have been the case if such deposit and covenant defeasance were not to occur, and the requirements set forth in clauses (2), (3), (4) and (5) above are satisfied. If we exercise this option with respect to any series of Debt Securities and such Debt Securities were declared due and payable because of the occurrence of any Event of Default, the amount of money and U.S. Government Obligations so deposited in trust would be sufficient to pay amounts due on such Debt Securities at the time of their respective Stated Maturities but may not be sufficient to pay amounts due on such Debt Securities upon any acceleration resulting from such Event of Default. In such case, we would remain liable for such payments.

If we exercise either our legal defeasance or covenant defeasance option, any Subsidiary Guarantee will terminate.

No Personal Liability of Directors, Officers, Employees and Stockholders

No director, officer, employee, incorporator, stockholder, member, partner or trustee of the Company or any Subsidiary Guarantor, as such, shall have any liability for any obligations of the Company or any Subsidiary Guarantor under the Debt Securities, the Indentures or any Subsidiary Guarantees or for any claim based on, in respect of, or by reason of, such obligations or their creation. By accepting a Debt Security, each Holder shall be deemed to have waived and released all such liability. The waiver and release shall be a part of the consideration for the issue of the Debt Securities. The waiver may not be effective to waive liabilities under the federal securities laws, and it is the view of the SEC that such a waiver is against public policy.

Notices

Notices to Holders of Debt Securities will be given by mail to the addresses of such Holders as they may appear in the Security Register.

Title

We, the Subsidiary Guarantors, the Trustees and any agent of us, the Subsidiary Guarantors or a Trustee may treat the Person in whose name a Debt Security is registered as the absolute owner of the Debt Security (whether or not such Debt Security may be overdue) for the purpose of making payment and for all other purposes.

Governing Law

The Indentures and the Debt Securities will be governed by, and construed in accordance with, the law of the State of New York.

Table of Contents

The Trustee

We will enter into the Indentures with a Trustee that is qualified to act under the Trust Indenture Act of 1939, as amended, and with any other Trustees chosen by us and appointed in a supplemental indenture for a particular series of Debt Securities. We may maintain a banking relationship in the ordinary course of business with our Trustee and one or more of its affiliates.

Resignation or Removal of Trustee. If the Trustee has or acquires a conflicting interest within the meaning of the Trust Indenture Act, the Trustee must either eliminate its conflicting interest or resign, to the extent and in the manner provided by, and subject to the provisions of, the Trust Indenture Act and the applicable Indenture. Any resignation will require the appointment of a successor Trustee under the applicable Indenture in accordance with the terms and conditions of such Indenture.

The Trustee may resign or be removed by us with respect to one or more series of Debt Securities and a successor Trustee may be appointed to act with respect to any such series. The holders of a majority in aggregate principal amount of the Debt Securities of any series may remove the Trustee with respect to the Debt Securities of such series.

Limitations on Trustee if It Is Our Creditor. Each Indenture will contain certain limitations on the right of the Trustee, in the event that it becomes our creditor, to obtain payment of claims in certain cases, or to realize on certain property received in respect of any such claim as security or otherwise.

Certificates and Opinions to Be Furnished to Trustee. Each Indenture will provide that, in addition to other certificates or opinions that may be specifically required by other provisions of an Indenture, every application by us for action by the Trustee must be accompanied by an Officers Certificate and an Opinion of Counsel stating that, in the opinion of the signers, all conditions precedent to such action have been complied with by us.

Table of Contents

DESCRIPTION OF RIGHTS

We may issue rights to purchase common stock or other securities. These rights may be issued independently or together with any other security offered hereby and may or may not be transferable by the shareholder receiving the rights in such offering. In connection with any offering of such rights, we may enter into a standby arrangement with one or more underwriters or other purchasers pursuant to which the underwriters or other purchasers may be required to purchase any securities remaining unsubscribed for after such offering.

Each series of rights will be issued under a separate rights agreement which we will enter into with a bank or trust company, as rights agent, all as set forth in the applicable prospectus supplement. The rights agent will act solely as our agent in connection with the certificates relating to the rights and will not assume any obligation or relationship of agency or trust with any holders of rights certificates or beneficial owners of rights. We will file the rights agreement and the rights certificates relating to each series of rights with the SEC and incorporate them by reference as an exhibit to the registration statement of which this prospectus is a part on or before the time we issue a series of rights.

The applicable prospectus supplement will describe the specific terms of any offering of rights for which this prospectus is being delivered, including the following:

the date of determining the shareholders entitled to the rights distribution;

the number of rights issued or to be issued to each shareholder;

the exercise price payable for each share of debt securities, preferred stock, common stock or other securities upon the exercise of the rights;

the number and terms of the shares of common stock or other securities which may be purchased per each right;

the extent to which the rights are transferable;

the date on which the holder's ability to exercise the rights shall commence, and the date on which the rights shall expire;

the extent to which the rights may include an over-subscription privilege with respect to unsubscribed securities;

if applicable, the material terms of any standby underwriting or purchase arrangement entered into by us in connection with the offering of such rights; and

any other terms of the rights, including the terms, procedures, conditions and limitations relating to the exchange and exercise of the rights.

The description in the applicable prospectus supplement of any rights that we may offer will not necessarily be complete and will be qualified in its entirety by reference to the applicable rights certificate, which will be filed with the SEC.

Table of Contents

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 one or more purchasers, including existing shareholders;

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 securities 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 securities pursuant to this prospectus, in which case such broker-dealer or affiliate may use securities received from us to close out its short positions;

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

Edgar Filing: Gastar Exploration Inc. - Form 424B5

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

loan or pledge the securities to a broker-dealer or an affiliate thereof, who may sell the loaned securities or, in an event of default in the case of a pledge, sell the pledged securities 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 or amount 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 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.

Table of Contents

Market Making and Stabilization

Unless the applicable prospectus supplement states otherwise, each series of offered securities will be a new issue and will have no established trading market, other than shares of our common stock, Series A Preferred Stock and Series B Preferred Stock, which are listed on the NYSE MKT LLC. We may elect to list any series of offered securities on an exchange and any such listing with respect to these other securities will be described in the applicable prospectus supplement. 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.

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.

Subscription Offerings

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

Table of Contents

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 securities may be deemed to be underwriters and any commissions received or profit realized by them on the resale of the securities 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.

The maximum commission or discount received by any Financial Industry Regulatory Authority (FINRA) member or independent broker/dealer may not exceed the amount set forth in the FINRA rules at the time of any sale of securities being made pursuant to this prospectus or an applicable prospectus supplement. 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, 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, 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 registered public accounting firm, given upon the authority of said firm as experts in accounting and auditing.

The information included in or incorporated by reference into this prospectus 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 in reliance upon the authority of each firm as experts in petroleum engineering.

The information included in or incorporated by reference into this prospectus 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.

Table of Contents

50,000,000 Shares

Gastar Exploration Inc.

Common Stock

Prospectus Supplement

May 12, 2016

Joint Book-Running Managers

Seaport Global Securities

Johnson Rice & Company L.L.C.

Co-Managers

Canaccord Genuity

Heikkinen Energy Advisors

IBERIA Capital Partners L.L.C.

Imperial Capital

Wunderlich