

Rosetta Resources Inc.
Form 424B5
March 11, 2015
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Filed Pursuant to Rule 424(b)(5)
Registration No. 333-202611

CALCULATION OF REGISTRATION FEE

Class of securities registered	Amount to be registered	Offering price per share	Aggregate offering price	Amount of registration fee(1)
Common stock, par value \$0.001 per share	13,800,000	\$17.20	\$237,360,000	\$27,581.24

- (1) The filing fee, calculated in accordance with Rule 457(r), has been transmitted to the SEC in connection with the securities offered from Registration Statement File No. 333-202611 by means of this prospectus supplement.

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PROSPECTUS SUPPLEMENT TO PROSPECTUS DATED MARCH 9, 2015

12,000,000 Shares

Rosetta Resources Inc.

Common Stock

We are offering 12,000,000 shares of our common stock.

Our common stock is listed on the NASDAQ Global Select Market under the symbol ROSE. On March 9, 2015, the last reported sale price of our common stock on the NASDAQ Global Select Market was \$17.96 per share.

The underwriter has an option for a period of 30 days to purchase a maximum of 1,800,000 additional shares of our common stock.

Investing in our common stock involves risks. Please read Risk Factors beginning on page S-8 of this prospectus supplement and in the documents incorporated by reference in this prospectus supplement.

The underwriter has agreed to purchase the common stock from us at a price of \$17.04 per share, resulting in approximately \$204.5 million in aggregate proceeds, before expenses, to us.

The underwriter may offer the shares of common stock from time to time to purchasers in one or more transactions directly or through agents, or through brokers in brokerage transactions on the NASDAQ Global Select Market, in the over-the-counter market or to dealers in negotiated transactions or in a combination of such methods of sale, at a fixed price or prices, which may be changed, or at market prices prevailing at the time of sale, at prices related to such prevailing market prices or at negotiated prices. See Underwriting (Conflicts of Interest).

Delivery of the shares of common stock will be made on or about March 13, 2015.

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

Morgan Stanley
The date of this prospectus is March 9, 2015

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ABOUT THIS PROSPECTUS SUPPLEMENT

This document is in two parts. The first part is the prospectus supplement, which describes the specific terms of this offering. The second part, the accompanying prospectus, including the documents incorporated by reference, provides more general information, some of which may not apply to this offering. The accompanying prospectus was filed as part of our registration statement on Form S-3 with the Securities and Exchange Commission (the "SEC") on March 9, 2015, as part of a "shelf" registration process. Under the shelf registration process, we may offer to sell senior debt securities, subordinated debt securities, common stock, preferred stock, and guarantees of debt securities, from time to time, in one or more offerings in an unlimited amount. Generally, when we refer to this prospectus supplement, we are referring to both parts of this document combined. We urge you to carefully read this prospectus supplement, the information incorporated by reference, the accompanying prospectus, and any free writing prospectus that we authorize to be distributed to you before buying any of the securities being offered under this prospectus supplement. This prospectus supplement may supplement, update or change information contained in the accompanying prospectus. To the extent that any statement that we make in this prospectus supplement is inconsistent with statements made in the accompanying prospectus or any documents incorporated by reference therein, the statements made in this prospectus supplement will be deemed to modify or supersede those made in the accompanying prospectus and such documents incorporated by reference therein.

You should rely only on the information contained in or incorporated by reference in this prospectus supplement and the accompanying prospectus and in any written communication from us or the underwriter, including any free writing prospectus. If information in this prospectus supplement is inconsistent with the accompanying prospectus, you should rely on this prospectus supplement. We have not, and the underwriter has not, authorized anyone to provide you with different information. We are not, and the underwriter is not, making an offer of these securities in any state where the offer or sale is not permitted. You should not assume that the information provided by this prospectus supplement, the accompanying prospectus or the documents incorporated by reference in this prospectus supplement and in the accompanying prospectus is accurate as of any date other than their respective dates. Our business, financial condition, results of operations and prospects may have changed since those dates.

Before you invest in our common stock, you should carefully read the registration statement described in the accompanying prospectus (including the exhibits thereto) of which this prospectus supplement and the accompanying prospectus form a part, as well as this prospectus supplement, the accompanying prospectus and the documents incorporated by reference into this prospectus supplement and the accompanying prospectus. The incorporated documents are described in this prospectus supplement under "Incorporation By Reference."

Unless otherwise indicated or the context otherwise requires, all references to "Rosetta," the "Company," "we," "us" and "our" in this prospectus supplement refer to Rosetta Resources Inc. and its direct and indirect subsidiaries on a consolidated basis.

INCORPORATION BY REFERENCE

The SEC allows us to "incorporate by reference" the information that we file with it, which means that we can disclose important information to you by referring you to other documents. The information incorporated by reference is an important part of this prospectus supplement, and information that we file later with the SEC will automatically update and supersede this information. We incorporate by reference the following documents and all documents that we subsequently file 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") (other than information furnished rather than filed):

our Annual Report on Form 10-K for the year ended December 31, 2014, filed on February 24, 2015;

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our Definitive Proxy Statement on Schedule 14A filed on March 26, 2014; and

the description of our common stock set forth in the registration statement on Form 8-A filed with the SEC on February 9, 2006, and including any other amendments and reports filed for the purpose of updating such description.

FORWARD-LOOKING STATEMENTS

This prospectus supplement includes forward-looking statements within the meaning of the Private Securities Litigation Reform Act, Section 27A of the Securities Act of 1933, as amended (the Securities Act), and Section 21E of the Exchange Act that are subject to risks and uncertainties. All statements other than statements of historical fact included in this prospectus supplement are forward-looking statements, including, without limitation, all statements regarding future plans, business objectives, strategies, expected future financial position or performance, expected future operational position or performance, budgets and projected costs, future competitive position, or 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, would, expect, plan, project, intend, anticipate, be estimate, predict, 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 reflect certain estimates and assumptions made by our management. These estimates and assumptions reflect our best judgment based on currently known market conditions, operating trends, and other factors. Although we believe such estimates and assumptions to be reasonable, they are inherently uncertain and involve a number of risks and uncertainties that are beyond our control. As such, management's assumptions about future events may prove to be inaccurate. For a more detailed description of the risks and uncertainties involved, see Risk Factors beginning on page S-8 of this prospectus supplement and on page 3 of the accompanying prospectus, as well as Risk Factors in our Annual Report on Form 10-K for the year ended December 31, 2014. 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 you that the forward-looking statements contained in this prospectus supplement, the accompanying prospectus or the documents incorporated by reference herein and therein are not guarantees of future performance, and we cannot assure you 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 maintain leasehold positions that require exploration and development activities and material capital expenditures;

unexpected difficulties in integrating our operations as a result of any significant acquisitions;

the supply and demand for oil, natural gas liquids (NGLs) and natural gas;

changes in the price of oil, NGLs and natural gas;

general economic conditions, either internationally, nationally or in jurisdictions where we conduct business;

conditions in the energy and financial markets;

our ability to obtain credit and/or capital in desired amounts and/or on favorable terms;

the ability and willingness of our current or potential counterparties 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 and/or lease operating expenses;

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failure of joint interest partners to pay us our share of revenue;

the occurrence of property acquisitions or divestitures;

reserve levels;

inflation or deflation;

competition in the oil and natural gas industry;

the availability and cost of relevant raw materials, equipment, goods, services and personnel;

changes or advances in technology;

potential reserve revisions;

the availability and cost, as well as limitations and constraints on infrastructure required, to gather, transport, process and market oil, NGLs and natural gas;

performance of contracted markets and companies contracted to provide transportation, processing and trucking of oil, NGLs and natural gas;

developments in oil-producing and natural gas-producing countries;

drilling, completion, production and facility risks;

exploration risks;

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

present and possible future claims, litigation and enforcement actions;

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;

factors that could impact the cost, extent and pace of executing our capital program, including but not limited to, access to oilfield services, access to water for hydraulic fracture stimulations and permitting delays, unavailability of required permits, lease suspensions, drilling, exploration and production moratoriums and other legislative, executive or judicial actions by federal, state and local authorities, as well as actions by private citizens, environmental groups or other interested persons;

sabotage, terrorism and border issues, including encounters with illegal aliens and drug smugglers;

electronic, cyber or physical security breaches; and

any other factors that impact or could impact the exploration and development of oil, NGL 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, NGLs and natural gas.

All written and oral forward-looking statements attributable to us are expressly qualified in their entirety by such factors. For additional information with respect to these factors, see [Incorporation by Reference](#).

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MARKET AND INDUSTRY DATA

Market and industry data and forecasts included or incorporated by reference in this prospectus supplement have been obtained from independent industry sources, as well as from research reports prepared for other purposes. Although we believe these third-party sources to be reliable, we have not independently verified the data obtained from these sources and we cannot assure you of the accuracy or completeness of the data. Forecasts and other forward-looking information obtained from these sources are subject to the same qualifications and uncertainties as the other forward-looking statements included or incorporated by reference in this prospectus supplement.

NON-GAAP FINANCIAL MEASURES

We refer to the terms EBITDA and Adjusted EBITDA in this prospectus supplement. EBITDA is calculated as net income, excluding income tax expense, interest expense, net of interest capitalized, other income (expense), net, and depreciation, depletion and amortization. Adjusted EBITDA is calculated earnings before interest expense, income taxes and depreciation, depletion and amortization expense and other similar non-cash or non-recurring charges. EBITDA and Adjusted EBITDA are supplemental financial measures that are not prepared in accordance with U.S. generally accepted accounting principles (GAAP). Any analysis of non-GAAP financial measures should be used only in conjunction with results presented in accordance with GAAP. We believe that EBITDA and Adjusted EBITDA are widely accepted financial indicators that provide additional information about our financial performance and our ability to meet our future requirements for debt service, capital expenditures and working capital, but EBITDA and Adjusted EBITDA should not be considered in isolation or as a substitute for net income, operating income, net cash provided by operating activities or any other measure of financial performance presented in accordance with GAAP or as a measure of a company's profitability or liquidity. EBITDA and Adjusted EBITDA are used by our management for various purposes, including as measures of operating performance, as a basis for planning, in presentations to our board of directors, and with certain adjustments, by our lenders pursuant to covenants under our revolving credit agreement. Our calculations of EBITDA and Adjusted EBITDA may not be comparable to similarly titled measures used by other companies.

We also refer to PV-10 in this prospectus supplement. PV-10 is a non-GAAP financial measure and represents the present value of estimated future cash inflows from proved oil, NGL and natural gas reserves, less future development and production costs, discounted at 10% per annum to reflect timing of future cash inflows using the twelve month unweighted arithmetic average of the first-day-of-the-month price for each of the preceding twelve months. PV-10 differs from the standardized measure of discounted future net cash flows because it does not include the effects of income taxes. Neither PV-10 nor standardized measure represents an estimate of fair market value of our oil, NGL and natural gas properties. PV-10 is used by the industry and our management as an arbitrary reserve asset value measure to compare against past reserve bases and the reserve bases of other business entities that are not dependent on the taxpaying status of the entity.

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PROSPECTUS SUPPLEMENT SUMMARY

*This summary highlights information from this prospectus supplement and the accompanying prospectus to help you understand the offering. You should read carefully the entire prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein and therein for a more complete understanding of this offering. You should read **Risk Factors** beginning on page S-8 of this prospectus supplement and on page 3 of the accompanying prospectus, as well as **Risk Factors** in our Annual Report on Form 10-K for the year ended December 31, 2014, for more information about important risks that you should consider before making an investment in our common stock.*

*We have defined certain oil and gas industry terms used in this document in the **Glossary of Oil and Gas Terms** beginning on page S-24 of this prospectus supplement. Unless otherwise indicated or the context requires otherwise, references to **Rosetta**, the **Company**, **we**, **us** and **our** mean **Rosetta Resources Inc.** and its direct and indirect subsidiaries on a consolidated basis.*

Rosetta Resources Inc.

We are an independent exploration and production company engaged in the acquisition and development of onshore energy resources in the United States of America. Our operations are located in the Eagle Ford shale in South Texas, where we hold approximately 63,000 net acres, 50,000 net acres of which are located in the liquids-rich area of the play, and in the Permian Basin in West Texas, where we hold approximately 57,000 net acres.

The Eagle Ford area is our largest producing area. For 2014, the Eagle Ford area provided approximately 90% of our total production, with approximately 62% of that production attributable to crude oil, condensate and NGLs. Our 2014 activities within the Eagle Ford targeted the delineation and development of four core areas: the Gates Ranch, central Dimmit County, northern LaSalle County and Briscoe Ranch areas. We believe these areas provide us with a multi-year project inventory of attractive investment opportunities, and we intend to continue to exploit the resource potential within these areas.

As part of our long-term strategy to pursue new growth opportunities, in 2013 and 2014 we acquired producing and undeveloped oil, NGL and natural gas interests in the Permian Basin in Reeves and Gaines Counties, Texas. For 2014, the Permian Basin area provided approximately 10% of our total production, with approximately 88% of that production attributable to crude oil, condensate and NGLs. Our operations in the Permian Basin are primarily focused in Reeves County in the southern Delaware Basin. Our strategy involves the disciplined delineation of our Delaware Basin potential and testing of optimal Permian horizontal well spacing to grow our reserves, production and project inventory.

As of December 31, 2014, we had an estimated 282 MMBoe of proved reserves, of which approximately 61% were liquids and 49% were classified as proved developed. Our reserves had an estimated standardized measure of discounted future net cash flows of \$2.6 billion and a PV-10 value of \$3.2 billion as of December 31, 2014. See **Non-GAAP Financial Measures** for a definition of PV-10 and **Summary Historical Reserve and Operating Data** for a reconciliation to our standardized measure. Our Eagle Ford production averaged 59.3 MBoe per day in 2014, an increase of 25% from the prior year. As part of our strategic decision to focus on the Eagle Ford area and to explore prospective basins, over the past few years we divested certain natural gas-based assets that we believe did not offer the same investment opportunities or rates of return as our unconventional resources.

Our principal executive offices are located at 1111 Bagby Street, Suite 1600, Houston, Texas 77002, and our telephone number is (713) 335-4000. Our website is www.rosettaresources.com. The information included on our

website is not part of, or incorporated by reference into, the prospectus supplement.

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Business Strategies

Our strategy is to increase shareholder value by delivering sustainable growth from unconventional onshore domestic basins through sound stewardship, wise capital resource management, taking advantage of business cycles and emerging trends and minimizing liabilities through governmental compliance and protecting the environment. We recognize that there are industry cycles, such as the current commodity price downturn, that will impact our ability to fully execute this strategy in the near term. However, we believe our strategy is fundamentally sound, and we are currently focused on maintaining financial strength and flexibility; executing our business plan; leveraging our core asset base; and testing growth opportunities. Below is a discussion of the key elements of our strategy.

Maintain Financial Strength and Flexibility. We operate nearly all of our estimated proved reserves, which allows us to more effectively manage expenses, control the timing of capital expenditures and provide flexibility to adjust our capital program to prudently manage our resources. We expect internally generated cash flows and cash on hand to provide financial flexibility to fund our operations. In addition, we may supplement our operating cash flow through borrowings under our revolving credit facility and may consider accessing the capital markets. As of December 31, 2014, we had \$200 million outstanding and \$600 million available for borrowing under our revolving credit facility. We intend to continue to actively manage our exposure to commodity price risk in the marketing of our oil, NGL and natural gas production. For example, as of December 31, 2014, we had entered into a series of commodity derivative contracts through 2016. These notional financial instruments, such as swaps and costless collars, have the effect of hedging our exposure to commodity price fluctuations. The notional volumes hedged equate to a substantial portion of our 2015 projected equivalent production and a portion of our 2016 projected equivalent production.

Successfully Execute Our Business Plan. We have increased our total production and diversified our production base to include a more balanced commodity mix. In addition, we manage all elements of our cost structure, including drilling and operating costs and general and administrative overhead costs. We strive to minimize our drilling and operating costs by concentrating our activities within existing and new unconventional resource play areas where we can achieve efficiencies through economies of scale. As part of our strategy, we have taken aggressive steps to ensure access to transportation and processing facilities in our operating areas where infrastructure and midstream services are in high demand. In the current commodity price environment, we are intensifying our focus on managing our cost structure to improve cash margins.

Leverage Core Asset Base. Our inventory of investment opportunities in the Eagle Ford area, which is a major source of our production and reserves, provides projects with higher economic returns. With the addition of our Permian Basin assets, we have increased our portfolio of long-lived, oil-rich horizontal resource projects that will further drive our long-term growth and sustainability. We recognize that the value of our project inventory is sensitive to commodity prices. In the current price environment, we are reducing capital spending to a level that delivers our targets while preserving the value of our inventory for a commodity price recovery.

Test Future Growth Opportunities. Our strategy involves the disciplined delineation of our Delaware Basin potential and the testing of optimal Permian horizontal well spacing. In South Texas, we identify opportunities to expand recoveries from our current Eagle Ford assets. When commodity prices recover, we plan to test drilling both upper and lower Eagle Ford wells in a staggered pattern pilot program that will access new resource if successful. We intend to maintain, further develop and apply the technological expertise that helped us establish a major production base in the Eagle Ford area. We use advanced geological and geophysical technologies, detailed petrophysical analyses, advanced reservoir engineering and sophisticated drilling, completion and stimulation techniques to grow our reserves, production and project inventory. We intend to prudently manage our operational footprint in the Eagle Ford and Permian areas. Over the long term, as industry market conditions dictate, we may evaluate new areas within the United States characterized by a significant presence of resource potential that can be exploited utilizing our

technological expertise.

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The Offering

Issuer	Rosetta Resources Inc.
Common Stock Offered by the Issuer	12,000,000 shares of our common stock, or 13,800,000 shares of our common stock if the underwriter exercises its option to purchase additional shares of common stock in full.
Common Stock Outstanding after this Offering(1)	73,882,778 shares of our common stock, or 75,682,778 shares of our common stock if the underwriter exercises its option to purchase additional shares of common stock in full.
Use of Proceeds	We expect to receive net proceeds from this offering of approximately \$204.0 million, or approximately \$234.7 million if the underwriter exercises its option to purchase additional shares of common stock in full, in each case after deducting the underwriting discounts and commissions and estimated offering expenses. We intend to use the net proceeds from this offering to repay outstanding borrowings under our revolving credit facility and for general corporate purposes. See Use of Proceeds.
Conflicts of Interest	An affiliate of the underwriter is a lender under our revolving credit agreement. Because a portion of the net proceeds from this offering will be used to repay indebtedness under our revolving credit agreement, we expect that more than 5% of the net proceeds will be directed to the underwriter (or its affiliate), which would be considered a conflict of interest under Financial Regulatory Authority, Inc. (FINRA) Rule 5121. As such, this offering is being conducted in accordance with FINRA Rule 5121. See Underwriting (Conflicts of Interest).
Risk Factors	Investing in our common stock involves risks. Please read Risk Factors beginning on page S-8 of this prospectus supplement and on page 3 of the accompanying prospectus, as well as Risk Factors in our Annual Report on Form 10-K for the year ended December 31, 2014, for more information about important risks that you should consider before making an investment in our common stock.
Dividend Policy	The terms of our revolving credit facility and the indentures governing our senior notes (the existing notes) limit our ability to pay dividends. If we achieve investment grade ratings by both Moody s Investors Service,

- (1) Based on shares of common stock outstanding on March 5, 2015, and excludes (a) 97,506 shares issuable as of March 5, 2015 under outstanding options at a weighted average exercise price of \$13.61 and (b) 1,155,758 unvested restricted shares as of March 5, 2015 with a weighted average grant date fair value price of \$28.22.

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Rating Service (Standard & Poor's) and no default or event of default has occurred or is continuing under such revolving credit facility or indentures, we will no longer be subject to the covenant restricting the payment of dividends. We cannot assure you that any dividends will be declared or paid by us. Please read Dividend Policy.

NASDAQ Symbol

ROSE

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The following table sets forth our summary historical consolidated financial information. The historical consolidated financial information has been derived from our audited statements of income and cash flows for each of the years ended December 31, 2012, 2013 and 2014 and our audited balance sheets as of December 31, 2013 and 2014.

You should read this historical financial information in conjunction with Management's Discussion and Analysis of Financial Condition and Results of Operations in our Annual Report on Form 10-K for the year ended December 31, 2014, as well as our historical financial statements and notes thereto, all of which are incorporated by reference into this prospectus supplement. Historical results are not necessarily indicative of results that may be expected for any future period.

(Dollars in thousands, except per share amounts)	Year Ended December 31,		
	2012	2013	2014
Income Statement Data:			
Revenues:			
Oil sales	\$ 318,782	\$ 475,119	\$ 574,552
NGL sales	160,461	198,966	222,682
Natural gas sales	93,711	147,028	213,609
Derivative instruments	40,545	(7,095)	293,836
Total revenues	613,499	814,018	1,304,679
Operating costs and expenses:			
Lease operating expenses	35,138	53,336	93,202
Treating and transportation	51,826	71,338	88,501
Taxes, other than income	24,013	31,075	45,956
Depreciation, depletion and amortization	154,223	218,571	415,823
Reserve for commercial disputes		20,450	5,800
General and administrative costs	68,731	73,043	79,297
Total operating costs and expenses	333,931	467,813	728,579
Operating income	279,568	346,205	576,100
Other expense (Income):			
Interest expense, net of interest capitalized	24,316	35,957	75,292
Interest income	(7)	(2)	(15)
Other expense, net	60	314	12,379
Total other expense	24,369	36,269	87,656
Income before provision of income taxes	255,199	309,936	488,444
Income tax expense	95,904	110,584	174,882
Net income	\$ 159,295	\$ 199,352	\$ 313,562

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(Dollars in thousands, except per share amounts)	Year Ended December 31,		
	2012	2013	2014
Earnings per share:			
Basic	\$ 3.03	\$ 3.40	\$ 5.10
Diluted	\$ 3.01	\$ 3.39	\$ 5.09
Weighted average shares outstanding:			
Basic	52,496	58,571	61,455
Diluted	52,887	58,830	61,649
Other Financial Data:			
Net cash provided by operating activities	\$ 370,630	\$ 591,009	\$ 648,605
Net cash used in investing activities	(533,641)	(1,829,288)	(1,297,553)
Net cash provided by financing activities	152,747	1,395,277	489,561
EBITDA(1)	433,798	564,778	991,938
Adjusted EBITDA(1)	432,668	592,100	708,979

(Dollars in thousands)	As of December 31,	
	2013	2014
Balance Sheet Data		
Cash and cash equivalents	\$ 193,784	\$ 34,397
Total assets	3,276,618	4,250,667
Total liabilities	1,928,284	2,581,554
Total stockholders' equity	1,348,334	1,669,113

- (1) EBITDA is calculated as net income excluding income tax expense, interest expense, net of interest capitalized, other income (expense), net, and depreciation, depletion and amortization. Adjusted EBITDA is calculated as earnings before interest expense, income taxes and depreciation, depletion and amortization expense and other similar non-cash or non-recurring charges. For more information relating to these non-GAAP measures, see Non-GAAP Financial Measures.

The following table provides a reconciliation of net income to EBITDA and Adjusted EBITDA:

(Dollars in thousands)	Year Ended December 31,		
	2012	2013	2014
Net income	\$ 159,295	\$ 199,352	\$ 313,562
Income tax expense	95,904	110,584	174,882
Interest expense, net of interest capitalized	24,316	35,957	75,292
Other expense, net	60	314	12,379
Depreciation, depletion and amortization	154,223	218,571	415,823
EBITDA	\$ 433,798	\$ 564,778	\$ 991,938
Unrealized derivative (gain)/loss	(19,662)	16,345	(282,250)(1)
Stock-based compensation expense	18,539	10,979	8,806

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Interest income	(7)	(2)	(15)
Cash premium on debt extinguishment			(9,500)
Adjusted EBITDA	\$ 432,668	\$ 592,100	\$ 708,979

- (1) Reflects 2014 unrealized derivative gain due to changes in the fair value of the Company's commodity derivative contracts as a result of recent declining commodity prices.

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The following table sets forth certain information with respect to our historical consolidated oil, NGL and natural gas reserves as of December 31, 2013 and 2014 and production for the years ended December 31, 2013 and 2014.

The historical reserve information included in this table is based upon reserve reports prepared by Rosetta and audited by Netherland, Sewell & Associates, Inc., our independent petroleum engineers. The reserve volumes and values were determined using the methods prescribed by the SEC.

This information should be read in conjunction with our Annual Report on Form 10-K for the year ended December 31, 2014, which is incorporated by reference into this prospectus supplement.

	Year Ended December 31,	
	2013	2014
Estimated net proved reserves (at period end):		
Oil (MMBbls)	66.5	67.9
NGLs (MMBbls)	99.3	104.6
Natural gas (Bcf)	676.6	655.1
Total (MMBoe)	278.5	281.7
Percent proved developed	32%	49%
PV-10 value (dollars in millions)(1)	\$ 3,008	\$ 3,237
Standardized measure (dollars in millions)	\$ 2,294	\$ 2,617
Production Data:		
Oil (MBbls)	4,999	6,955
NGLs (MBbls)	6,398	8,408
Natural gas (MMcf)	40,343	51,616
Total (MBoe)	18,121	23,966
Average sales price		
Oil, excluding derivatives (per Bbl)	\$ 95.04	\$ 82.61
Oil, including realized derivatives (per Bbl)	93.74	83.10
NGL, excluding derivatives (per Bbl)	31.10	26.48
NGL, including realized derivatives (per Bbl)	32.83	27.78
Natural gas, excluding derivatives (per Mcf)	3.64	4.14
Natural gas, including realized derivatives (per Mcf)	3.76	4.09
Costs and expenses (per Boe of production)		
Lease operating expenses (production costs)	\$ 2.94	\$ 3.89
Treating and transportation	3.94	3.69
Taxes, other than income	1.71	1.92
Depreciation, depletion and amortization	12.06	17.35
General and administrative costs	4.03	3.31
General and administrative costs, excluding stock-based compensation	3.42	2.94

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(1) PV-10 is a non-GAAP financial measure. For more information relating to this non-GAAP measure, see Non-GAAP Financial Measures.

The following table provides a reconciliation of our PV-10 value to our standardized measure:

(Dollars in millions)	Year Ended December 31,	
	2013	2014
PV-10	\$ 3,008	\$ 3,237
Income tax effect	714	620
Standardized measure	\$ 2,294	\$ 2,617

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RISK FACTORS

An investment in our common stock involves risks. You should consider carefully the following risks, as well as the risk factors discussed under the caption Risk Factors in our Annual Report on Form 10-K for the year ended December 31, 2014, together with all of the other information included in, or incorporated by reference into, this prospectus supplement and the accompanying prospectus, when evaluating an investment in our common stock.

Risks Relating to our Common Stock

The market price of our common stock may be volatile or may decline.

The market price of our common stock has historically experienced and may continue to experience volatility. For example, during the 12 months ended December 31, 2014, the high sales price per share of our common stock on the NASDAQ Global Select Market was \$55.45 and the low sales price per share was \$16.67. The price of our common stock could be subject to wide fluctuations in the future in response to the following events or factors:

changes in oil, NGL and natural gas prices;

demand for oil, NGLs and natural gas;

the success of our drilling program;

changes in our drilling schedule;

adjustments to our reserve estimates and differences between actual and estimated production, revenue and expenditures;

competition from other oil and gas companies;

governmental regulations and environmental risks;

general market, political and economic conditions;

our failure to meet financial analysts' performance expectations;

changes in recommendations by financial analysts; and

changes in market valuations of other companies in our industry.

Other risks described elsewhere under **Risk Factors** in this prospectus supplement and the accompanying prospectus and in the documents incorporated by reference in this prospectus supplement also could materially and adversely affect our share price.

There may be future sales or other dilution of our equity which may adversely affect the market price of our common stock.

Except as described herein under **Underwriting (Conflicts of Interest)**, we are not restricted from issuing additional common stock, including securities that are convertible into or exchangeable for, or that represent the right to receive, common stock. Sales of a substantial number of shares of our common stock could depress the market price of our common stock and impair our ability to raise capital through the sale of additional equity securities. We cannot predict the effect that future sales of our common stock or other equity-related securities would have on the market price of our common stock.

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Because we have no plans to pay dividends on our common stock, investors must look solely to stock appreciation for a return on their investment in us.

We have never declared or paid cash dividends on our common stock. We currently intend to retain all future earnings and other cash resources, if any, for the operation and development of our business and do not anticipate paying cash dividends in the foreseeable future. Payment of any future dividends will be at the discretion of our board of directors after taking into account many factors, including our financial condition, operating results, current and anticipated cash needs and plans for expansions. In addition, we are currently prohibited from paying dividends under the terms of our revolving credit facility and the indenture governing our existing notes. Any future dividends may also be restricted by any debt agreements that we may enter into from time to time and by the terms of any preferred stock that we may issue in the future.

If securities or industry research analysts do not publish or cease publishing research or reports about our business or if they issue unfavorable commentary or downgrade our common stock, our share price and trading volume could decline.

The trading market for our common stock relies in part on the research and reports that securities and industry research analysts publish about us, our industry, our competitors and our business. We do not have any control over these analysts. Our share price and trading volumes could decline if one or more securities or industry analysts downgrade our common stock, issue unfavorable commentary about us, our industry or our business, cease to cover our company or fail to regularly publish reports about us, our industry or our business.

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USE OF PROCEEDS

We expect to receive net proceeds from this offering of approximately \$204.0 million, or approximately \$234.7 million if the underwriter exercises its option to purchase additional shares of common stock in full, in each case after deducting the underwriting discounts and commissions and estimated offering expenses. We intend to use the net proceeds from this offering to repay outstanding borrowings under our revolving credit facility and for general corporate purposes.

As of March 5, 2015, the outstanding balance under our revolving credit facility was \$240 million, bearing an effective interest rate of 5.5%. Amounts borrowed under our revolving credit facility were used to fund capital expenditures relating to our Eagle Ford and Permian operations. Our revolving credit facility matures in April 2018.

An affiliate of the underwriter is a lender under our revolving credit facility and as such will receive its pro rata share of the amount used from the net proceeds of this offering to repay indebtedness under the revolving credit facility. See Underwriting (Conflicts of Interest).

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The following table sets forth our cash and cash equivalents and capitalization as of December 31, 2014:

on a consolidated historical basis; and

on an as adjusted basis to give effect to the issuance and sale of 12,000,000 shares of our common stock in this offering and the application of net proceeds therefrom as described in Use of Proceeds.

You should read our historical consolidated financial statements and accompanying notes included in our Annual Report on Form 10-K for the year ended December 31, 2014 filed with the SEC on February 24, 2014, that are incorporated by reference into this prospectus supplement.

(Dollars in thousands)	As of December 31, 2014	
	Historical	As Adjusted
Cash and cash equivalents	\$ 34,397	\$ 38,377
Long-term debt:		
Revolving credit facility(1)	200,000	
5.625% senior notes due 2021	700,000	700,000
5.875% senior notes due 2022	600,000	600,000
5.875% senior notes due 2024	500,000	500,000
Total long-term debt	2,000,000	1,800,000
Total stockholders' equity	1,669,113	1,873,093
Total capitalization	\$ 3,669,113	\$ 3,673,093

- (1) As of March 5, 2015, we had \$240 million outstanding under our revolving credit facility and \$560 million of borrowing capacity under such facility.

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We have not paid any cash dividends since our inception. Holders of our common stock may receive dividends when, as and if declared by our board of directors out of funds lawfully available for the payment of dividends. As a Delaware corporation, we may pay dividends out of surplus or, if there is no surplus, out of net profits for the fiscal year in which a dividend is declared and/or the preceding fiscal year. Section 170 of the Delaware General Corporation Law also provides that dividends may not be paid out of net profits if, after the payment of the dividend, capital is less than the capital represented by the outstanding stock of all classes having a preference upon the distribution of assets. The terms of our revolving credit facility and the indentures governing our existing notes limit our ability to pay dividends. If we achieve investment grade ratings by both Moody's and Standard & Poor's and no default or event of default has occurred and is continuing under such revolving credit facility or indentures, we will no longer be subject to the covenant restricting the payment of dividends.

Price Range of Our Common Stock

The following table sets forth the high and low sales prices per share of our common stock as reported on the NASDAQ Global Select Market since January 1, 2013.

	High	Low
Fiscal Year 2015:		
Quarter ending March 31, 2015 ⁽¹⁾	\$ 25.16	\$ 15.92
Fiscal Year 2014:		
Quarter ended December 31, 2014	\$ 45.86	\$ 16.67
Quarter ended September 30, 2014	\$ 55.36	\$ 43.17
Quarter ended June 30, 2014	\$ 55.45	\$ 43.10
Quarter ended March 31, 2014	\$ 49.61	\$ 39.33
Fiscal Year 2013:		
Quarter ended December 31, 2013	\$ 65.30	\$ 45.26
Quarter ended September 30, 2013	\$ 55.15	\$ 42.04
Quarter ended June 30, 2013	\$ 50.10	\$ 40.83
Quarter ended March 31, 2013	\$ 54.61	\$ 44.50

⁽¹⁾ For the period from January 1, 2015 through March 9, 2015.

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U.S. FEDERAL INCOME TAX CONSIDERATIONS TO NON-U.S. HOLDERS

The following discussion is a summary of the U.S. federal income tax considerations to non-U.S. holders (as defined below) of the purchase, ownership and disposition of our common stock issued pursuant to this offering, but does not purport to be a complete analysis of all potential tax effects. The effects of other U.S. federal tax laws, such as estate and gift tax laws, and any applicable state, local or foreign tax laws are not discussed. This discussion is based on the Internal Revenue Code of 1986, as amended (the "Code"), Treasury regulations promulgated thereunder, judicial decisions, and published rulings and administrative pronouncements of the U.S. Internal Revenue Service ("IRS") in effect as of the date of this offering. These authorities may change or be subject to differing interpretations. Any such change or differing interpretation may be applied retroactively in a manner that could adversely affect a non-U.S. holder of our common stock. We have not sought and will not seek any rulings from the IRS regarding the matters discussed below. There can be no assurance the IRS or a court will not take a contrary position regarding the tax consequences of the purchase, ownership and disposition of our common stock.

This discussion is limited to non-U.S. holders that hold our common stock as a "capital asset" within the meaning of Section 1221 of the Code (property held for investment). This discussion does not address the Medicare contribution tax imposed on net investment income or all U.S. federal income tax consequences relevant to a non-U.S. holder's particular circumstances. In addition, it does not address consequences relevant to non-U.S. holders subject to particular rules, including, without limitation:

U.S. expatriates and former citizens or long-term residents of the United States;

persons subject to the alternative minimum tax;

persons holding our common stock as part of a hedge, straddle or other risk reduction strategy or as part of a conversion transaction or other integrated investment;

banks, insurance companies, and other financial institutions;

real estate investment trusts or regulated investment companies;

brokers, dealers or traders in securities;

controlled foreign corporations, "passive foreign investment companies," and corporations that accumulate earnings to avoid U.S. federal income tax;

partnerships, or other entities or arrangements treated as partnerships for U.S. federal income tax purposes (and investors therein);

tax-exempt organizations or governmental organizations;

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

persons who hold or receive our common stock pursuant to the exercise of any employee stock option or otherwise as compensation; and

tax-qualified retirement plans.

If an entity taxed as a partnership for U.S. federal income tax purposes holds our common stock, the tax treatment of a partner in the partnership will depend on the status of the partner, upon the activities of the partnership, and upon certain determinations made at the partner level. Accordingly, partnerships considering an investment in our common stock and partners in such partnerships should consult their tax advisors regarding the U.S. federal income tax consequences to them.

THIS DISCUSSION IS FOR INFORMATION PURPOSES ONLY AND IS NOT INTENDED AS TAX ADVICE. YOU SHOULD CONSULT YOUR TAX ADVISOR WITH RESPECT TO THE APPLICATION OF THE U.S. FEDERAL INCOME TAX LAWS TO YOUR PARTICULAR

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SITUATION AS WELL AS ANY TAX CONSEQUENCES OF THE PURCHASE, OWNERSHIP AND DISPOSITION OF OUR COMMON STOCK ARISING UNDER THE OTHER U.S. FEDERAL TAX LAWS OR UNDER THE LAWS OF ANY STATE, LOCAL, NON-U.S. OR OTHER TAXING JURISDICTION OR UNDER ANY APPLICABLE INCOME TAX TREATY.

Definition of a Non-U.S. Holder

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

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

a corporation created or organized 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 that (1) is subject to the primary supervision of a U.S. court and the control of one or more U.S. persons, or (2) has made a valid election under applicable Treasury Regulations to continue to be treated as a U.S. person.

Distributions

As described in the section entitled Dividend Policy and Market for Common Stock Dividend Policy, we do not anticipate declaring or paying dividends to holders of our common stock in the foreseeable future. However, if we do make distributions of cash or property (other than certain stock distributions) 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 such distributions exceed both our current and accumulated earnings and profits, they will first constitute a return of capital and first be applied against and reduce a non-U.S. holder's adjusted tax basis in its common stock (determined on a share by share basis), but not below zero. Any excess will be treated as capital gain and will be treated as described below under Sale or Other Taxable Disposition.

Dividends paid to a non-U.S. holder of our common stock that are not effectively connected with the non-U.S. holder's conduct of a trade or business within the United States will generally be subject to U.S. federal withholding tax at a rate of 30% of the gross amount of the dividends (or such lower rate specified by an applicable income tax treaty). U.S. federal withholding tax may be imposed on the gross amount of a distribution, due to the difficulty of determining the amount of our earnings and profits and, therefore, the extent to which the distribution will constitute a dividend for U.S. federal income tax purposes.

Non-U.S. holders may be entitled to a reduction in or an exemption from withholding tax as a result of either (a) an applicable income tax treaty or (b) the non-U.S. holder holding our common stock in connection with the conduct of a trade or business within the United States and dividends being paid in connection with that trade or business within the United States. To claim such a reduction or exemption from withholding, the non-U.S. holder must provide the

applicable withholding agent with a properly executed (a) IRS Form W-8BEN or W-8BEN-E (or other applicable documentation) claiming an exemption from or reduction of the withholding tax under the benefit of an income tax treaty between the United States and the non-U.S. holder's country of residence, or (b) IRS Form W-8ECI stating that the dividends are not subject to withholding tax because they are effectively connected with the conduct by the non-U.S. holder of a trade or business within the United States, as may be applicable. These certifications must be provided to the applicable withholding agent prior to the payment of dividends and must be updated periodically. Non-U.S. holders that do not timely provide the applicable withholding agent the required certification, but that qualify for a reduced income tax treaty rate, may obtain a refund of any excess amounts withheld by timely filing an appropriate claim for refund with the IRS.

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If dividends on our common stock paid to a non-U.S. holder are effectively connected with the non-U.S. holder's conduct of a trade or business within the United States, then, although exempt from U.S. federal withholding tax (provided the non-U.S. holder provides appropriate certification, as described above), the non-U.S. holder will be subject to U.S. federal income tax on such dividends on a net income basis at the same graduated U.S. federal income tax rates as U.S. persons (unless an applicable tax treaty provides otherwise). In addition, if the non-U.S. holder is a corporation, the non-U.S. holder may be subject to a branch profits tax at a rate of 30% (or such lower rate specified by an applicable income tax treaty) of its effectively connected earnings and profits for the taxable year, as adjusted for certain items. Non-U.S. holders should consult their tax advisors regarding their entitlement to benefits under any applicable income tax treaties that may provide for different rules.

Sale or Other Taxable Disposition

Subject to the discussions below on backup withholding and foreign accounts, a non-U.S. holder will not be subject to U.S. federal income or withholding tax on any gain realized upon the sale, exchange or other taxable disposition of our common stock unless:

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

the non-U.S. holder is a nonresident alien present in the United States for 183 days or more during the taxable year of the disposition and certain other requirements are met; or

our common stock constitutes a U.S. real property interest ("USRPI") by reason of our status as a U.S. real property holding corporation (a "USRPHC"). Generally, a corporation is a USRPHC if the fair market value of its USRPIs equals or exceeds 50% of the sum of the fair market value of its worldwide real property interests plus its other assets used or held for use in its trade or business.

Gain described in the first bullet point above will generally be subject to U.S. federal income tax on a net income basis at the same graduated U.S. federal income tax rates applicable to U.S. persons. A non-U.S. holder that is a foreign corporation also may be subject to a branch profits tax at a flat rate of 30% (or such lower rate specified by an applicable income tax treaty) of a portion of its effectively connected earnings and profits for the taxable year, as adjusted for certain items.

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

With respect to the third bullet point above, we believe that we currently are, and expect to remain for the foreseeable future, a USRPHC. Even if we are considered a USRPHC, so long as our common stock is regularly traded on an established securities market, a non-U.S. holder will be subject to U.S. federal net income tax on a disposition of our common stock only if the non-U.S. holder actually or constructively holds or held (at any time during the shorter of the five year period preceding the date of disposition or the holder's holding period) more than 5% of our common stock. We believe that our common stock is currently regularly traded on an established securities market. If we are considered a USRPHC and our common stock is not considered to be so traded, all non-U.S. holders would generally

be required to file a U.S. federal income tax return and generally would be subject to U.S. federal income tax on any gain realized on the disposition of our common stock on a net income basis. In addition, a 10% withholding tax may apply to the gross proceeds from the sale or other disposition of our common stock by a non-U.S. holder and any distribution in excess of our current and accumulated earnings and profits (the FIRPTA withholding). Any FIRPTA withholding may be credited against the U.S. federal income tax liability owed by the non-U.S. holder. Non-U.S. holders should consult their own tax advisor regarding our possible status as a U.S. real property holding corporation and its possible consequences in the non-U.S. holders particular circumstances.

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Non-U.S. holders should also consult their tax advisors regarding potentially applicable income tax treaties that may provide for different rules.

Information Reporting and Backup Withholding

A non-U.S. holder generally will not be subject to backup withholding with respect to payments of dividends on our common stock we make to the non-U.S. holder, provided we (or other applicable withholding agent) do not have actual knowledge or reason to know such holder is a United States person, within the meaning of the Code, and the holder certifies its non-U.S. status, such as by providing a valid IRS Form W-8BEN, W-8BEN-E or W-8ECI, or other applicable certification. However, we must report annually to the IRS and to each non-U.S. holder the amount of dividends on our common stock paid to such holder, the name and address of the recipient, and the amount of any tax withheld with respect to those dividends, even in instances when no tax is actually withheld. Copies of these information returns may also be made available under the provisions of a specific treaty or agreement to the tax authorities of the country in which the non-U.S. holder resides or is established.

Information reporting and backup withholding may apply to the proceeds of a sale of our common stock within the United States, and information reporting may (although backup withholding generally will not) apply to the proceeds of a sale of our common stock outside the United States conducted through certain U.S.-related financial intermediaries, in each case, unless the beneficial owner certifies under penalty of perjury that it is a non-U.S. holder on IRS Form W-8BEN, W-8BEN-E or other applicable form (and the payor does not have actual knowledge or reason to know that the beneficial owner is a United States person) or such owner otherwise establishes an exemption.

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

Additional Withholding Tax on Payments Made to Foreign Accounts

U.S. federal withholding taxes may be imposed under Sections 1471 to 1474 of the Code (such Sections commonly referred to as the Foreign Account Tax Compliance Act, or FATCA) on certain types of payments made to non-U.S. financial institutions and certain other non-U.S. entities. Specifically, a 30% U.S. federal withholding tax may be imposed on dividends on and, on or after January 1, 2017, on gross proceeds from the sale or other disposition of, our common stock paid to a foreign financial institution or a non-financial foreign entity (each as defined in the Code, and whether such foreign financial institution or non-financial foreign entity is the beneficial owner or an intermediary), unless (1) the foreign financial institution undertakes certain diligence and reporting obligations, (2) the non-financial foreign entity either certifies it does not have any substantial United States owners (as defined in the Code) or furnishes identifying information regarding each substantial United States owner, or (3) the foreign financial institution or non-financial foreign entity otherwise qualifies for an exemption from these rules. If the payee is a foreign financial institution and is subject to the diligence and reporting requirements in (1) above, it must enter into an agreement with the U.S. Department of the Treasury requiring, among other things, that it undertake to identify accounts held by certain specified United States persons or United States-owned foreign entities (each as defined in the Code), annually report certain information about such accounts, and withhold 30% on certain payments to non-compliant foreign financial institutions and certain other account holders. Foreign financial institutions located in jurisdictions that have an intergovernmental agreement with the United States governing FATCA may be subject to different rules.

Prospective investors should consult their tax advisors regarding the potential application of withholding under FATCA to their investment in our common stock.

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UNDERWRITING (CONFLICTS OF INTEREST)

Under the terms and subject to the conditions contained in an underwriting agreement dated the date of this prospectus supplement, we have agreed to sell to the underwriter named below, and the underwriter has agreed to purchase, the number of shares indicated below:

Underwriter	Number of Shares
Morgan Stanley & Co. LLC	12,000,000

The underwriting agreement provides that the obligations of the underwriter to pay for and accept delivery of the shares of common stock offered by this prospectus supplement are subject to the approval of certain legal matters by its counsel and to certain other conditions. The underwriter is obligated to take and pay for all of the shares of common stock offered by this prospectus supplement if any such shares are taken. The underwriter, however, is not required to take or pay for the shares covered by the underwriter's option described below.

The offering of the shares by the underwriter is subject to receipt and acceptance and subject to the underwriter's right to reject any order in whole or in part.

We have granted to the underwriter an option, exercisable for 30 days from the date of this prospectus supplement, to purchase up to 1,800,000 additional shares of common stock at the public offering price listed on the cover page of this prospectus supplement, less underwriting discounts and commissions. To the extent the option is exercised, the underwriter will become obligated, subject to certain conditions, to purchase all such additional shares of common stock.

The underwriter may offer the shares of common stock from time to time for sale in one or more transactions on the NASDAQ Global Select Market, in the over-the-counter market, through negotiated transactions or otherwise at market prices prevailing at the time of sale, at prices related to prevailing market prices or at negotiated prices, subject to receipt and acceptance by it and subject to its right to reject any order in whole or in part. In connection with the sale of the shares of common stock offered hereby, the underwriter may be deemed to have received compensation in the form of underwriting discounts. The underwriter may effect such transactions by selling shares of common stock to or through dealers, and such dealers may receive compensation in the form of discounts, concessions or commissions from the underwriter and/or purchasers of shares of common stock for whom they may act as agents or to whom they may sell as principal.

The estimated offering expenses payable by us, exclusive of the underwriting discounts and commissions, are approximately \$500,000.

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We have agreed that we will not (i) offer, pledge, sell, contract to sell, grant any option, right or warrant to purchase or otherwise transfer or dispose of, directly or indirectly, or file with the SEC a registration statement under the Securities Act relating to, any shares of our common stock or any securities convertible into or exercisable or exchangeable for our common stock, or publicly disclose the intention to make any offer, sale, pledge, disposition or filing or (ii) enter into any swap or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of our shares of common stock or any such other securities, whether any such transaction described in (i) or (ii) above is to be settled by delivery of our common stock or such other securities, in cash or otherwise, without the prior written consent of the underwriter for a period of 90 days after the date of this prospectus supplement, except grants of employee stock options, restricted stock units, restricted stock or other equity-based awards in the ordinary course of business pursuant to the terms of an employee benefit plan or similar arrangement, issuances of our common stock pursuant to the exercise or vesting of such options, restricted stock units or equity awards or vesting of previously issued awards and our filing of any registration statement on Form S-8.

Our directors and executive officers have agreed that they will not, without the prior written consent of the underwriter, offer, sell, contract to sell, pledge or otherwise dispose of, directly or indirectly, any shares of our common stock or securities convertible into or exercisable or exchangeable for our common stock, enter into a transaction which would have the same effect, or enter into any swap, hedge or other arrangement that transfers, in whole or in part, any of the economic consequences of ownership of our common stock, whether any such transaction is to be settled by delivery of shares of our common stock or such other securities, in cash or otherwise, publicly disclose the intention to make such offer, sale, pledge or disposition, or to enter into any such transaction, swap, hedge or other arrangement or make any demand for or exercise any right with respect to, the registration of any shares of our common stock or any security convertible into or exercisable or exchangeable for common stock, for a period of 90 days following the date of this prospectus supplement. These lockup agreements are subject to certain exceptions, including with respect to transactions in shares purchased in the open market after completion of this offering, certain bona fide gifts, transfers of shares pursuant to existing 10b5-1 sales plans (provided that such 10b5-1 sales plans may not be amended or otherwise modified during the lockup period and that any filing under Section 16(a) of the Exchange Act reporting a reduction in beneficial ownership of shares of our common stock will state that such transfer is pursuant to an existing 10b5-1 sales plan), transfers to certain family trusts, partnerships or other similar entities, net exercises of stock options under any employee benefit plan or similar arrangement and the withholding of shares to pay income taxes upon vesting or awards under such employee benefit plans or similar arrangements.

We have agreed to indemnify the underwriter against liabilities under the Securities Act, or contribute to payments that the underwriter may be required to make in that respect. We have agreed to contribute to payments made by the underwriter for liabilities under the Securities Act if our indemnification of such liabilities is unavailable or insufficient to hold harmless the underwriter.

Our common stock is listed on the NASDAQ Global Select Market under the symbol ROSE. On March 9, 2015 the closing price of our common stock as reported on the NASDAQ Global Select Market was \$17.96.

In connection with the offering the underwriter may engage in stabilizing transactions, over-allotment transactions, syndicate covering transactions and penalty bids in accordance with Regulation M under the Exchange Act.

Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum.

Over-allotment involves sales by the underwriter of shares in excess of the number of shares the underwriter is obligated to purchase, which creates a syndicate short position. The short position may be either a covered short position or a naked short position. In a covered short position, the number of shares over-allotted by the underwriter is not greater than the number of shares that it may purchase in the underwriter's option. In a naked short position, the number of shares involved is greater than the number of shares in the option. The underwriter may close out any covered short position by either exercising its option and/or purchasing shares in the open market.

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Syndicate covering transactions involve purchases of the common stock in the open market after the distribution has been completed in order to cover syndicate short positions. In determining the source of shares to close out the short position, the underwriter will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the underwriter's option. If the underwriter sells more shares than could be covered by its option, a naked short position, the position can only be closed out by buying shares in the open market. A naked short position is more likely to be created if the underwriter is concerned that there could be downward pressure on the price of the shares in the open market after pricing that could adversely affect investors who purchase in the offering.

Penalty bids permit the underwriting syndicate to reclaim a selling concession from a syndicate member when the common stock originally sold by the syndicate member is purchased in a stabilizing or syndicate covering transaction to cover syndicate short positions.

In passive market making, market makers in the common stock who is an underwriter or a prospective underwriter may, subject to limitations, make bids for or purchases of our common stock until the time, if any, at which a stabilizing bid is made.

These stabilizing transactions, syndicate covering transactions and penalty bids may have the effect of raising or maintaining the market price of our common stock or preventing or retarding a decline in the market price of the common stock. As a result the price of our common stock may be higher than the price that might otherwise exist in the open market. These transactions may be effected on the NASDAQ Global Select Market and if commenced, may be discontinued at any time.

This prospectus supplement and the accompanying prospectus in electronic format may be made available on the web sites maintained by the underwriter, and the underwriter may distribute this prospectus and the accompanying prospectus electronically. The underwriter may allocate a number of shares for sale to its online brokerage account holders.

The underwriter and its affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, investment research, principal investment, hedging, financing and brokerage activities. From time to time, the underwriter and its affiliates have directly and indirectly provided investment banking, commercial banking and financial advisory services to us for which they have received customary compensation and expense reimbursement. The underwriter and its affiliates may in the future provide similar services.

In the ordinary course of their various business activities, the underwriter and its affiliates may make or hold a broad array of investments, including serving as counterparties to certain derivative and hedging arrangements, and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers and may have in the past and at any time in the future hold long and short positions in such securities and instruments. Such investment and securities activities may have involved, and in the future may involve, our securities and instruments. The underwriter and its affiliate may also make investment recommendations and/or publish or express independent research views in respect of such securities or instruments and may at any time hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

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Conflicts of Interest

An affiliate of the underwriter is a lender under our credit facility. Because a portion of the net proceeds from this offering will be used to repay indebtedness under our credit facility, we expect that more than 5% of the net proceeds will be directed to the underwriter (or its affiliate), which would be considered a conflict of interest under FINRA Rule 5121. As such, this offering is being conducted in accordance with the applicable requirements of Rule 5121 regarding the underwriting of securities of a company with a member that has a conflict of interest within the meaning of those rules. Rule 5121 requires prominent disclosure of the nature of the conflict of interest in the prospectus supplement for the public offering. Pursuant to Rule 5121(a)(1)(B), the appointment of a qualified independent underwriter is not necessary in connection with this offering, as the offering is of equity securities that have a bona fide public market.

Selling Restrictions

European Economic Area

In relation to each Member State of the European Economic Area which has implemented the Prospectus Directive (each, a Relevant Member State), the underwriter has represented and agreed that with effect from and including the date on which the Prospectus Directive is implemented in that Relevant Member State (the Relevant Implementation Date) it has not made and will not make an offer of common stock which are the subject of the offering contemplated by this prospectus supplement to the public in that Relevant Member State other than:

- (a) to any legal entity which is a qualified investor as defined in the Prospectus Directive;
- (b) to fewer than 100 or, if the Relevant Member State has implemented the relevant provision of the 2010 PD Amending Directive, 150, natural or legal persons (other than qualified investors as defined in the Prospectus Directive), as permitted under the Prospectus Directive, subject to obtaining the prior consent of the underwriter nominated by us for any such offer; or
- (c) in any other circumstances falling within Article 3(2) of the Prospectus Directive, provided that no such offer of shares of common stock shall require us or any underwriter to publish a prospectus pursuant to Article 3 of the Prospectus Directive.

For the purposes of this provision, the expression an offer to the public in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and the securities to be offered so as to enable an investor to decide to purchase or subscribe the securities, as the same may be varied in that Member State by any measure implementing the Prospectus Directive in that Member State, the expression Prospectus Directive means Directive 2003/71/EC (and amendments thereto, including the 2010 PD Amending Directive, to the extent implemented in the Relevant Member State), and includes any relevant implementing measure in the Relevant Member State and the expression 2010 PD Amending Directive means Directive 2010/73/EU.

We have not authorized and do not authorize the making of any offer of common stock through any financial intermediary on our behalf, other than offers made by the underwriter with a view to the final placement of our common stock as contemplated in this prospectus supplement and the accompanying prospectus. Accordingly, no purchaser of our common stock, other than the underwriter, is authorized to make any further offer of our common stock on our behalf or on behalf of the underwriter.

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United Kingdom

The underwriter has represented and agreed that:

(a) (i) it is a person whose ordinary activities involve it in acquiring, holding, managing or disposing of investments (as principal or agent) for the purposes of its business and (ii) it has not offered or sold and will not offer or sell the shares of common stock other than to persons whose ordinary activities involve them in acquiring, holding, managing or disposing of investments (as principal or as agent) for the purposes of their businesses or who it is reasonable to expect will acquire, hold, manage or dispose of investments (as principal or agent) for the purposes of their businesses where the issue of the shares of common stock would otherwise constitute a contravention of Section 19 of the FSMA by us;

(b) it has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of Section 21 of the FSMA) received by it in connection with the issue or sale of the shares of common stock in circumstances in which Section 21(1) of the FSMA does not apply to us; and

(c) it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to the shares of common stock in, from or otherwise involving the United Kingdom.

Switzerland

We have not and will not register with the Swiss Financial Market Supervisory Authority (FINMA) as a foreign collective investment scheme pursuant to Article 119 of the Federal Act on Collective Investment Scheme of 23 June 2006, as amended (CISA), and accordingly the shares being offered pursuant to this prospectus supplement and the accompanying prospectus have not and will not be approved, and may not be licenseable, with FINMA. Therefore, the shares have not been authorized for distribution by FINMA as a foreign collective investment scheme pursuant to Article 119 CISA and the shares offered hereby may not be offered to the public (as this term is defined in Article 3 CISA) in or from Switzerland. The shares may solely be offered to qualified investors, as this term is defined in Article 10 CISA, and in the circumstances set out in Article 3 of the Ordinance on Collective Investment Scheme of 22 November 2006, as amended (CISO), such that there is no public offer. Investors, however, do not benefit from protection under CISA or CISO or supervision by FINMA. This prospectus supplement, the accompanying prospectus and any other materials relating to the shares are strictly personal and confidential to each offeree and do not constitute an offer to any other person. This prospectus supplement and the accompanying prospectus may only be used by those qualified investors to whom it has been handed out in connection with the offer described herein and may neither directly or indirectly be distributed or made available to any person or entity other than its recipients. It may not be used in connection with any other offer and shall in particular not be copied and/or distributed to the public in Switzerland or from Switzerland. This prospectus supplement and the accompanying prospectus do not constitute an issue prospectus as that term is understood pursuant to Article 652a and/or 1156 of the Swiss Federal Code of Obligations. We have not applied for a listing of the shares on the SIX Swiss Exchange or any other regulated securities market in Switzerland, and consequently, the information presented in this prospectus supplement and the accompanying prospectus does not necessarily comply with the information standards set out in the listing rules of the SIX Swiss Exchange and corresponding prospectus schemes annexed to the listing rules of the SIX Swiss Exchange.

Hong Kong

The shares may not be offered or sold by means of any document other than (i) in circumstances which do not constitute an offer to the public within the meaning of the Companies Ordinance (Cap.32, Laws of Hong Kong), or

(ii) to professional investors within the meaning of the Securities and Futures Ordinance (Cap.571, Laws of Hong Kong) and any rules made thereunder, or (iii) in other circumstances which do not result in the document being a prospectus within the meaning of the Companies Ordinance (Cap.32, Laws of Hong Kong), and no advertisement, invitation or document relating to the shares may be issued or may be in the

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possession of any person for the purpose of issue (in each case whether in Hong Kong or elsewhere), which is directed at, or the contents of which are likely to be accessed or read by, the public in Hong Kong (except if permitted to do so under the laws of Hong Kong) other than with respect to shares which are or are intended to be disposed of only to persons outside Hong Kong or only to professional investors within the meaning of the Securities and Futures Ordinance (Cap. 571, Laws of Hong Kong) and any rules made thereunder.

Singapore

This prospectus supplement and the accompanying prospectus have not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus supplement, the accompanying prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the shares may not be circulated or distributed, nor may the shares be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor under Section 274 of the Securities and Futures Act, Chapter 289 of Singapore (the SFA), (ii) to a relevant person, or any person pursuant to Section 275(1A), and in accordance with the conditions, specified in Section 275 of the SFA or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the shares are subscribed or purchased under Section 275 by a relevant person which is: (a) a corporation (which is not an accredited investor) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or (b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary is an accredited investor, shares, debentures and units of shares and debentures of that corporation or the beneficiaries' rights and interest in that trust shall not be transferable for 6 months after that corporation or that trust has acquired the shares under Section 275 except: (1) to an institutional investor under Section 274 of the SFA or to a relevant person, or any person pursuant to Section 275(1A), and in accordance with the conditions, specified in Section 275 of the SFA; (2) where no consideration is given for the transfer; or (3) by operation of law.

Japan

The shares have not been and will not be registered under the Financial Instruments and Exchange Law of Japan (the Financial Instruments and Exchange Law) and the underwriter has agreed that it will not offer or sell any shares, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan (which term as used herein means any person resident in Japan, including any corporation or other entity organized under the laws of Japan), or to others for re-offering or resale, directly or indirectly, in Japan or to a resident of Japan, except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the Financial Instruments and Exchange Law and any other applicable laws, regulations and ministerial guidelines of Japan.

Notice to Prospective Investors in the Dubai International Financial Centre

This prospectus supplement relates to an Exempt Offer in accordance with the Offered Securities Rules of the Dubai Financial Services Authority (DFSA). This prospectus supplement is intended for distribution only to persons of a type specified in the Offered Securities Rules of the DFSA. It must not be delivered to, or relied on by, any other person. The DFSA has no responsibility for reviewing or verifying any documents in connection with Exempt Offers. The DFSA has not approved this prospectus supplement nor taken steps to verify the information set forth herein and has no responsibility for the prospectus supplement. The shares to which this prospectus supplement relates may be illiquid and/or subject to restrictions on their resale. Prospective purchasers of the shares offered should conduct their own due diligence on the shares. If you do not understand the contents of this prospectus supplement you should

consult an authorized financial advisor.

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LEGAL MATTERS

The validity of the issuance of the common stock covered by this prospectus supplement will be passed upon for Rosetta Resources Inc. by Latham & Watkins LLP, Houston, Texas. Certain legal matters in connection with this offering will be passed upon for the underwriter by Cahill Gordon & Reindel LLP, New York, New York.

EXPERTS

The consolidated financial statements and management's assessment of the effectiveness of internal control over financial reporting (which is included in Management's Report on Internal Control Over Financial Reporting) incorporated in this prospectus supplement by reference to the Annual Report on Form 10-K of Rosetta Resources Inc. for the year ended December 31, 2014 have been so incorporated in reliance on the report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

Certain information with respect to the oil and gas reserves associated with our oil and gas prospects is confirmed in the audit reports of Netherland, Sewell & Associates, Inc., an independent petroleum consulting firm, and has been included in this prospectus supplement, and incorporated by reference herein, upon the authority of said firm as experts with respect to the matters covered by such reports and in giving such reports.

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GLOSSARY OF OIL AND GAS TERMS

We are in the business of exploring for and producing oil, NGLs and natural gas. Oil, NGL and natural gas exploration is a specialized industry. Many of the terms used to describe our business are unique to the oil and natural gas industry. The following is a description of the meanings of some of the oil and natural gas industry terms used in this prospectus supplement.

Analogous reservoir. Analogous reservoirs, as used in resource assessments, have similar rock and fluid properties, reservoir conditions (depth, temperature, and pressure) and drive mechanisms, but are typically at a more advanced stage of development than the reservoir of interest and thus may provide concepts to assist in the interpretation of more limited data and estimation of recovery. When used to support proved reserves, analogous reservoir refers to a reservoir that shares all of the following characteristics with the reservoir of interest: (i) the same geological formation (but not necessarily in pressure communication with the reservoir of interest; (ii) the same environment of deposition; (iii) similar geologic structure; and (iv) the same drive mechanism.

Bbl. One stock tank barrel, or 42 U.S. gallons liquid volume, of oil or other liquid hydrocarbons.

Bcf. One billion cubic feet of natural gas.

Boe. One barrel of oil equivalent determined using the ratio of six Mcf of natural gas to one barrel of crude oil, condensate or natural gas liquids.

Completion. The installation of permanent equipment for the production of oil, NGLs or natural gas.

Condensate. We define condensate as oil with an API gravity higher than 55 degrees.

Deterministic estimate. The method of estimating reserves or resources is called deterministic when a single value for each parameter (from the geoscience, engineering or economic data) in the reserves calculation is used in the reserves estimation procedure.

Developed acreage. The number of acres that are allocated or assignable to productive wells or wells capable of production.

Developed oil, NGL and natural gas reserves. Developed oil, NGL and natural gas reserves are reserves of any category that can be expected to be recovered: (i) through existing wells with existing equipment and operating methods or in which the cost of the related equipment is relatively minor compared to the cost of a new well; and (ii) through installed extraction equipment and infrastructure operational at the time of the reserves estimate if the extraction is by means not involving a well.

Development project. A development project is the means by which petroleum resources are brought to the status of economically producible. As examples, the development of a single reservoir or field, an incremental development in a producing field or the integrated development of a group of several fields and associated facilities with a common ownership may constitute a development project.

Economically producible. The term economically producible, as it relates to a resource, means a resource that generates revenue that exceeds, or is reasonably expected to exceed, the costs of the operation. The value of the products that generate revenue shall be determined at the terminal point of oil, NGL and natural gas producing activities.

Estimated ultimate recovery. Estimated ultimate recovery is the sum of reserves remaining as of a given date and cumulative production as of that date.

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Exploitation. Optimizing oil, NGL and natural gas production from producing properties or establishing additional reserves in producing areas through additional drilling or the application of new technology.

Field. An area consisting of either a single reservoir or multiple reservoirs all grouped on or related to the same individual geological structural feature and/or stratigraphic condition.

Fracking or fracture stimulation technology. The technique of improving a well's production or injection rates by pumping a mixture of fluids into the formation and rupturing the rock, creating an artificial channel. As part of this technique, sand, ceramics or other material may also be injected into the formation to keep the channel open, so that fluids or natural gases may more easily flow through the formation.

Gas. Natural gas.

Gross acres or gross wells. The total acres or wells, as the case may be, in which a working interest is owned.

Hydraulic Fracturing. See Fracking or fracture stimulation technology above.

Injection well or injection. A well which is used to place liquids or natural gases into the producing zone during secondary/tertiary recovery operations to assist in maintaining reservoir pressure and enhancing recoveries from the field.

Lease operating expenses. The expenses of lifting oil, NGLs or natural gas from a producing formation to the surface, constituting part of the current operating expenses of a working interest, and also including labor, superintendence, supplies, repairs, short-lived assets, maintenance, allocated overhead costs, workover, insurance and other expenses incidental to production, but excluding lease acquisition or drilling or completion expenses.

MBbls. One thousand barrels of crude oil.

MBoe. One thousand barrels of crude oil equivalent, determined using the ratio of six Mcf of natural gas to one barrel of oil, condensate or NGLs.

Mcf. One thousand cubic feet of natural gas.

MMBbls. One million barrels of oil or other liquid hydrocarbons.

MMBoe. One million barrels of crude oil equivalent, determined using the ratio of six Mcf of natural gas to one barrel of oil, condensate or NGLs.

MMcf. One million cubic feet of natural gas.

Net acres or net wells. The sum of the fractional working interests owned in gross acres or wells, as the case may be.

NGL. Natural gas liquid. Hydrocarbons which can be extracted from wet natural gas and become liquid under various combinations of increasing pressure and lower temperature. NGLs consist primarily of ethane, propane, butane and natural gasolines.

Permeability. The ability, or measurement of a rock's ability, to transmit fluids, typically measured in darcies or millidarcies. Formations that transmit fluids readily are described as permeable and tend to have many large,

well-connected pores.

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PV-10 or present value of estimated future net revenues. An estimate of the present value of the estimated future net revenues from proved oil, NGL and natural gas reserves at a date indicated after deducting estimated production and ad valorem taxes, future capital costs and operating expenses, but before deducting any estimates of federal income taxes. The estimated future net revenues are discounted at an annual rate of 10%, in accordance with the Securities and Exchange Commission's practice, to determine their present value. The present value is shown to indicate the effect of time on the value of the revenue stream and should not be construed as being the fair market value of the properties. Estimates of future net revenues are made using oil and natural gas prices and operating costs at the date indicated and held constant for the life of the reserves.

Productive well. A well that is producing or is capable of production, including natural gas wells awaiting pipeline connections to commence deliveries and oil wells awaiting connection to production facilities.

Probabilistic estimate. The method of estimation of reserves or resources is called probabilistic when the full range of values that could reasonably occur for each unknown parameter (from the geoscience and engineering data) is used to generate a full range of possible outcomes and their associated probabilities of occurrence.

Proved oil, NGL and natural gas reserves or Proved reserves. Proved oil, NGL and natural gas reserves are those quantities of oil, NGL and natural gas, which, by analysis of geoscience and engineering data, can be estimated with reasonable certainty to be economically producible from a given date forward, from known reservoirs, and under existing economic conditions, operating methods, and government regulation prior to the time at which contracts providing the right to operate expire, unless evidence indicates that renewal is reasonably certain, regardless of whether deterministic or probabilistic methods are used for estimation. The project to extract the hydrocarbons must have commenced, or the operator must be reasonably certain that it will commence the project, within a reasonable time.

The area of the reservoir considered as proved includes all of the following: (i) the area identified by drilling and limited by fluid contacts, if any; and (ii) adjacent undrilled portions of the reservoir that can, with reasonable certainty, be judged to be continuous with it and to contain economically producible oil, NGL and natural gas on the basis of available geoscience and engineering data.

In the absence of data on fluid contacts, proved quantities in a reservoir are limited by the lowest known hydrocarbons as seen in a well penetration unless geoscience, engineering or performance data and reliable technology establish a lower contact with reasonable certainty. Where direct observation from well penetrations has defined a highest known oil elevation and the potential exists for an associated gas cap, proved oil reserves may be assigned in the structurally higher portions of the reservoir only if geoscience, engineering or performance data and reliable technology establish the higher contact with reasonable certainty.

Reserves which can be produced economically through application of improved recovery techniques (including, but not limited to, fluid injection) are included in the proved classification when: (i) successful testing by a pilot project in an area of the reservoir with properties no more favorable than in the reservoir as a whole, the operation of an installed program in the reservoir or an analogous reservoir or other evidence using reliable technology establishes the reasonable certainty of the engineering analysis on which the project or program was based; and (ii) the project has been approved for development by all necessary parties and entities, including governmental entities.

Existing economic conditions include prices and costs at which economic producibility from a reservoir is to be determined. The price shall be the twelve-month first day of the month historical average price during the twelve-month period prior to the ending date of the period covered by the report, determined as an unweighted arithmetic average of the first-day-of-the-month price for each month within such period, unless prices are defined by

contractual arrangements, excluding escalations based upon future conditions.

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Proved undeveloped reserves. Proved undeveloped oil, NGL and natural gas reserves are reserves that are expected to be recovered from new wells on undrilled acreage, or from existing wells where a relatively major expenditure is required for recompletion. Reserves on undrilled acreage are limited to those drilling units offsetting productive units that are reasonably certain of production when drilled. Proved reserves for other undrilled units are claimed only where it can be demonstrated with certainty that there is continuity of production from the existing productive formation. Estimates for proved undeveloped reserves will not be attributable to any acreage for which an application of fluid injection or other improved recovery technique is contemplated, unless such techniques have been proved effective by actual tests in the area and in the same reservoir.

Reasonable certainty. If deterministic methods are used, reasonable certainty means a high degree of confidence that the quantities will be recovered. If probabilistic methods are used, there should be at least a 90% probability that the quantities actually recovered will equal or exceed the estimate. A high degree of confidence exists if the quantity is much more likely to be achieved than not, and, as changes due to increased availability of geoscience (geological, geophysical and geochemical), engineering and economic data are made to estimated ultimate recovery with time, reasonably certain estimated ultimate recovery is much more likely to increase or remain constant than to decrease.

Recompletion. The process of re-entering an existing wellbore that is either producing or not producing and completing new reservoirs in an attempt to establish or increase existing production.

Reliable technology. Reliable technology is a grouping of one or more technologies (including computational methods) that has been field tested and has been demonstrated to provide reasonably certain results with consistency and repeatability in the formation being evaluated or in an analogous formation.

Reserves. Reserves are estimated remaining quantities of oil, NGLs and natural gas and related substances anticipated to be economically producible, as of a given date, by application of development projects to known accumulations. In addition, there must exist, or there must be a reasonable expectation that there will exist, the legal right to produce or a revenue interest in the production, installed means of delivering oil, NGLs and natural gas or related substances to market and all permits and financing required to implement the project.

Reservoir. A porous and permeable underground formation containing a natural accumulation of producible oil and/or natural gas that is confined by impermeable rock or water barriers and is individual and separate from other reservoirs.

Resources. Resources are quantities of oil, NGLs and natural gas estimated to exist in naturally occurring accumulations. A portion of the resources may be estimated to be recoverable and another portion may be considered unrecoverable. Resources include both discovered and undiscovered accumulations.

Spacing. The distance between wells producing from the same reservoir. Spacing is often expressed in terms of acres, e.g., 40-acre spacing, and is often established by regulatory agencies.

Trap. A configuration of rocks suitable for containing hydrocarbons and sealed by a relatively impermeable formation through which hydrocarbons will not escape.

Unconventional resource. A term used in the oil and natural gas industry to refer to a play in which the targeted reservoirs generally fall into one of four categories: (1) tight sands, (2) coal beds, (3) gas shales, or (4) oil shales. These reservoirs tend to cover large areas and lack the readily apparent traps, seals and discrete hydrocarbon-water boundaries that typically define conventional reservoirs. These reservoirs generally require fracture stimulation treatments or other special recovery processes in order to produce economic flow rates.

Undeveloped acreage. Lease acreage on which wells have not been drilled or completed to a point that would permit the production of commercial quantities of oil or natural gas regardless of whether or not such acreage contains proved reserves.

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Undeveloped oil, NGL and natural gas reserves or Undeveloped reserves. Undeveloped oil, NGL and natural gas reserves are reserves of any category that are expected to be recovered from new wells on undrilled acreage, or from existing wells where a relatively major expenditure is required for recompletion. Reserves on undrilled acreage shall be limited to those directly offsetting development spacing areas that are reasonably certain of production when drilled, unless evidence using reliable technology exists that establishes reasonable certainty of economic producibility at greater distances. Undrilled locations can be classified as having undeveloped reserves only if a development plan has been adopted indicating that they are scheduled to be drilled within five years, unless the specific circumstances justify a longer time. Under no circumstances shall estimates for undeveloped reserves be attributable to any acreage for which an application of fluid injection or other improved recovery technique is contemplated, unless such techniques have been proved effective by actual projects in the same reservoir or an analogous reservoir, or by other evidence using reliable technology establishing reasonable certainty.

Working interest. The operating interest that gives the owner the right to drill, produce and conduct operating activities on the property and receive a share of production.

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PROSPECTUS

Senior Debt Securities

Subordinated Debt Securities

Preferred Stock

Common Stock

We may offer, issue and sell, from time to time, senior debt securities, subordinated debt securities, preferred stock and common stock. Our subsidiaries may guarantee the senior or subordinated debt securities offered by this prospectus. We refer to the senior debt securities, subordinated debt securities, preferred stock and common stock offered by this prospectus collectively as the securities.

We will provide additional terms of our securities in one or more prospectus supplements to this prospectus. You should read this prospectus and the related prospectus supplement carefully before you invest in our securities.

The securities may be offered and sold directly by us or by any selling security holder, through agents designated from time to time by us or to or through underwriters or dealers on a continuous or delayed basis. If any agents, dealers or underwriters are involved in the sale of any of the securities, their names and any applicable purchase price, fee, commission or discount arrangement between or among them will be set forth, or will be calculable from the information set forth, in the applicable prospectus supplement. See the sections entitled About This Prospectus and Plan of Distribution for more information.

Our common stock is listed on the NASDAQ Global Select Market under the symbol ROSE.

You should read carefully the section entitled Risk Factors on page 3 of this prospectus before investing in our securities.

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

You should rely only on the information contained or incorporated by reference in this prospectus, any prospectus supplement and any written communication from us or any underwriter specifying the final terms of a particular offering. We have not authorized anyone to provide you with additional or different information. You should not assume that the information in this prospectus, any prospectus supplement or any written communication from us or any underwriter specifying the final terms of a particular offering is accurate as of any date other than the date on its cover page and that any information we have incorporated by reference is accurate only as of the date of the documents incorporated by reference. We are not making an offer to sell in any jurisdiction in which the offer is not permitted. Our business, financial condition, results of operations and prospects may have changed since those dates.

This date of this prospectus is March 9, 2015.

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ABOUT THIS PROSPECTUS

This prospectus is part of an automatic shelf registration statement that we have filed with the Securities and Exchange Commission (the "SEC") as a well-known seasoned issuer as defined in Rule 405 under the Securities Act of 1933, as amended (the "Securities Act"), using a shelf registration process. Using this process, we may offer the securities described in this prospectus in one or more offerings. In addition, selling security holders to be named in a prospectus supplement may sell certain of our securities from time to time. This prospectus provides you with a general description of the securities we may offer.

Each time we use this prospectus to offer securities, we will provide a prospectus supplement and, if applicable, a pricing supplement. The prospectus supplement and any pricing supplement will describe the specific terms of that offering. The prospectus supplement and any pricing supplement may also add to, update or change the information contained in this prospectus. Please carefully read this prospectus, the prospectus supplement and any pricing supplement together with the information contained in the documents we refer to under the headings "Where You Can Find More Information" and "Incorporation by Reference."

As used in this prospectus, all references to "Rosetta," "us," "we" or "our" mean Rosetta Resources Inc. only, unless we state otherwise or the context clearly indicates otherwise.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC. You can read and copy any materials we file with the SEC at the SEC's public reference room at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. You can obtain information about the operation of the SEC's public reference room by calling the SEC at 1-800-732-0330. The SEC also maintains a website that contains information we file electronically with the SEC at <http://www.sec.gov>, which you can access free of charge.

This prospectus does not contain all the information the registration statement sets forth or includes in its exhibits and schedules, in accordance with the rules and regulations of the SEC, and we refer you to that omitted information. The statements this prospectus makes pertaining to the content of any contract, agreement or other document that is an exhibit to the registration statement necessarily are summaries of their material provisions, and we qualify them in their entirety by reference to those exhibits for complete statements of their provisions. The registration statement and its exhibits and schedules are available at the SEC's public reference room or through its website.

INCORPORATION BY REFERENCE

The SEC allows us to incorporate by reference the information that we file with it, which means that we can disclose important information to you by referring you to other documents. The information we incorporate by reference is an important part of this prospectus, and information that we file later with the SEC will automatically update and supersede that information. Any information so updated or superseded will not be deemed, except as so updated or superseded, to be a part of this prospectus. We incorporate by reference the documents listed below and any filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act") (excluding information deemed to be furnished and not filed with the SEC), after the date of this prospectus. The documents we incorporate by reference are:

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our annual report on Form 10-K for the year ended December 31, 2014 filed with the SEC on February 24, 2015, including the information specifically incorporated by reference into the annual report on Form 10-K from our definitive proxy statement for the 2015 Annual Meeting of Stockholders; and

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the description of our common stock set forth in the registration statement on Form 8-A filed with the SEC on February 9, 2006, and including any other amendments and reports filed for the purpose of updating such description.

We will provide without charge to each person, including any beneficial owner, to whom a copy of this prospectus has been delivered, upon written or oral request, a copy of any or all of the documents we incorporate by reference in this prospectus, other than any exhibit to any of those documents, unless we have specifically incorporated that exhibit by reference into the information this prospectus incorporates. You may request copies by visiting our website at www.rosettaresources.com or by writing or telephoning us at the following address:

Rosetta Resources Inc.

Attention: Corporate Secretary

1111 Bagby Street, Suite 1600

Houston, Texas 77002

(713) 335-4000

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ABOUT US

We are an independent exploration and production company engaged in the acquisition and development of onshore energy resources in the United States of America. Our operations are primarily located in the Eagle Ford shale in South Texas and in the Permian Basin in West Texas. For additional information about our business, operations and financial results, please read the documents listed under [Where You Can Find More Information](#) and [Incorporation By Reference](#).

Our principal executive offices are located at 1111 Bagby, Suite 1600, Houston, Texas 77002, and our telephone number at that address is (713) 335-4000.

RISK FACTORS

Our business is influenced by many factors that are difficult to predict and that involve uncertainties that may materially affect actual operating results, cash flows and financial condition. These risk factors include those described as such in [Item 1A. Risk Factors](#) of our most recent annual report on Form 10-K and other documents that are incorporated by reference in this prospectus, and could include additional uncertainties not presently known to us or that we currently do not consider material. The occurrence of any of these risks might cause you to lose all or part of your investment in the offered securities. Before making an investment decision, you should carefully consider these risks as well as any other information we include or incorporate by reference in this prospectus or include in any applicable prospectus supplement.

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CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

The information in this prospectus includes 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 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, would, expect, plan, project, intend, anticipate, believe, estimate, forecast, predict, or continue, the negative of such terms or variations thereon, or other comparable terminology.

The forward-looking statements contained in this prospectus are largely based on our expectations for the future, which reflect certain estimates and assumptions made by our management. These estimates and assumptions reflect our best judgment based on currently known market conditions, operating trends, and other factors. Although we believe such estimates and assumptions to be reasonable, they are inherently uncertain and involve a number of risks and uncertainties that are beyond our control. As such, management's assumptions about future events may prove to be inaccurate. When considering forward-looking statements you should keep in mind the risk factors and other cautionary statements described under the heading Risk Factors included in this prospectus, as well as the risk factors and other cautionary statements described in Item 1A. Risk Factors of our most recent annual report on Form 10-K. 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 investors that the forward-looking statements contained in this prospectus are not guarantees of future performance, and we cannot assure any investor 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 maintain leasehold positions that require exploration and development activities and material capital expenditures;

unexpected difficulties in integrating our operations as a result of any significant acquisitions;

the supply and demand for oil, natural gas liquids (NGLs) and natural gas;

changes in the price of oil, NGLs and natural gas;

general economic conditions, either internationally, nationally or in jurisdictions where we conduct business;

conditions in the energy and financial markets;

our ability to obtain credit and/or capital in desired amounts and/or on favorable terms;

the ability and willingness of our current or potential counterparties 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 and/or lease operating expenses;

failure of joint interest partners to pay us our share of revenue;

the occurrence of property acquisitions or divestitures;

reserve levels;

inflation or deflation;

competition in the oil and natural gas industry;

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the availability and cost of relevant raw materials, equipment, goods, services and personnel;

changes or advances in technology;

potential reserve revisions;

the availability and cost, as well as limitations and constraints on infrastructure required, to gather, transport, process and market oil, NGLs and natural gas;

performance of contracted markets, and companies contracted to provide transportation, processing and trucking of oil, NGLs and natural gas;

developments in oil-producing and natural gas-producing countries;

drilling, completion, production and facility risks;

exploration risks;

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

present and possible future claims, litigation and enforcement actions;

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;

factors that could impact the cost, extent and pace of executing our capital program, including but not limited to, access to oilfield services, access to water for hydraulic fracture stimulations and permitting delays, unavailability of required permits, lease suspensions, drilling, exploration and production moratoriums and other legislative, executive or judicial actions by federal, state and local authorities, as well as actions by private citizens, environmental groups or other interested persons;

sabotage, terrorism and border issues, including encounters with illegal aliens and drug smugglers;

electronic, cyber or physical security breaches; and

any other factors that impact or could impact the exploration and development of oil, NGL 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, NGLs and natural gas.

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USE OF PROCEEDS

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

funding working capital requirements;

capital expenditures;

repayment or refinancing of indebtedness;

repurchases and redemptions of securities; and

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 a prospectus supplement. Pending any specific application, we may initially invest proceeds in short-term marketable securities. We will not receive any of the proceeds from the sale of securities offered by any selling security holder.

Table of Contents**RATIO OF EARNINGS TO FIXED CHARGES**

The following table sets forth our ratio of earnings to fixed charges for each of the periods indicated.

	Year Ended December 31,				
	2010	2011	2012	2013	2014
Ratio of earnings to fixed charges	2.2	6.1	9.4	5.2	5.2

We have computed the ratios of earnings to fixed charges by dividing earnings by fixed charges. For this purpose, earnings consist of income before income taxes, fixed charges and amortization of capitalized interest, less capitalized interest and equity income or loss from equity investees. Fixed charges consist of interest expensed, interest capitalized and an estimate of interest within rental expense.

We had no preferred stock outstanding for any period presented, and accordingly, the ratio of earnings to combined fixed charges and preferred stock dividends is the same as the ratio of earnings to fixed charges.

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DESCRIPTION OF DEBT SECURITIES

The debt securities covered by this prospectus will be our general unsecured obligations. The debt securities will be either senior debt securities or subordinated debt securities. Subject to compliance with our credit facility and the indentures related to our outstanding senior notes, we will issue senior debt securities under an indenture, dated as of May 2, 2013, between Rosetta and Wells Fargo Bank, National Association, as Trustee (the "senior indenture") and subordinated debt securities under a separate indenture to be entered into between us and a trustee that we will name in the prospectus supplement (the "subordinated indenture"). In this description, we sometimes call the senior indenture and the subordinated indenture the "indentures." The terms of the debt securities include those stated in the senior indenture and those that will be stated in the subordinated indenture, as well as those made part of the senior indenture and those that will be made part of the subordinated indenture by reference to the Trust Indenture Act of 1939, as amended (the "Trust Indenture Act").

We have summarized the provisions of the indentures and the debt securities below. You should read the indentures for more details regarding the provisions we describe below and for other provisions that may be important to you. We have filed the senior indenture and the form of the subordinated indenture with the SEC as exhibits to this registration statement, and we will include the final subordinated indenture and any other instrument establishing the terms of any debt securities we offer as exhibits to a filing we will make with the SEC in connection with that offering. Please read "Incorporation by Reference."

In this summary description of the debt securities, all references to "Rosetta," "us," "we" or "our" mean Rosetta Resources Inc. only, unless we state otherwise or the context clearly indicates otherwise.

General

The senior debt securities will constitute senior debt and will rank equally with all our unsecured and unsubordinated debt. The subordinated debt securities will be subordinated to, and thus have a junior position to, any senior debt securities and all our other senior debt. The indentures will not limit the amount of debt we may issue under the indentures, and, unless we inform you otherwise in the prospectus supplement, they will not limit the amount of other unsecured debt or securities we may incur or issue. We may issue debt securities under either indenture from time to time in one or more series, each in an amount we authorize prior to issuance.

The senior indenture does not contain and, unless we inform you otherwise in the prospectus supplement, the subordinated indenture and the debt securities will not contain:

any covenants or other provisions designed to protect holders of the debt securities in the event we participate in a highly leveraged transaction; or

provisions that give holders of the debt securities the right to require us to repurchase their securities in the event of a decline in our credit rating resulting from a takeover, recapitalization or similar restructuring or otherwise.

The prospectus supplement relating to any series of debt securities being offered will include specific terms relating to the offering. These terms will include some or all of the following:

the title of the debt securities;

the total principal amount of the debt securities;

the price or prices (expressed as a percentage of the principal amount) at which we will sell the debt securities;

whether the debt securities are senior debt securities or subordinated debt securities;

whether we will issue the debt securities in individual certificates to each holder or in the form of temporary or permanent global securities held by a depository on behalf of holders;

the date or dates on which the principal of and any premium on the debt securities will be payable;

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any interest rate, the date from which interest will accrue, interest payment dates and record dates for interest payments;

whether and under what circumstances any additional amounts with respect to the debt securities will be payable;

the place or places where payments on the debt securities will be payable;

any provisions for redemption or early repayment;

any sinking fund or other provisions that would obligate us to redeem, purchase or repay the debt securities prior to maturity;

the dates on which, the price at which and the conditions (if any) under which we will repurchase debt securities at the option of the holders or the holders of debt securities;

the denominations in which we may issue the debt securities;

whether payments on the debt securities will be payable in foreign currency or currency units or another form, and whether payments on the debt securities will be payable by reference to any index or formula;

the portion of the principal amount of the debt securities that will be payable if the maturity is accelerated, if other than the entire principal amount;

any additional means of defeasance of the debt securities, any additional conditions or limitations to defeasance of the debt securities or any changes to those conditions or limitations;

any changes or additions to the events of default or covenants this prospectus describes;

any restrictions or other provisions relating to the transfer or exchange of the debt securities;

any terms for the conversion or exchange of the debt securities for other securities issued by us; and

any other terms of the debt securities, whether in addition to, or by modification or deletion of, the terms described herein.

We may sell the debt securities at a discount, which may be substantial, below their stated principal amount. Those debt securities may bear no interest or may bear interest at a rate that at the time of issuance is below market rates.

Subordination

Under the subordinated indenture, payment of the principal, interest and any premium on the subordinated debt securities will generally be subordinated and junior in right of payment to the prior payment in full of all Senior Debt (as defined below). Unless we inform you otherwise in the prospectus supplement, we may not make any payment of principal, interest or any premium on the subordinated debt securities if:

we fail to pay the principal of, premium, if any, interest or any other amounts on any Senior Debt when due;
or

we default in performing any other covenant (a covenant default) in any Senior Debt that we have designated if the covenant default allows the holders of that Senior Debt to accelerate the maturity of the Senior Debt they hold.

Unless we inform you otherwise in the prospectus supplement, a covenant default will prevent us from making payments on the subordinated debt securities only for up to 179 days after holders of the Senior Debt give the trustee for the subordinated debt securities notice of the covenant default.

The subordination provisions will not affect our obligation, which will be absolute and unconditional, to pay, when due, principal of, premium, if any, and interest on the subordinated debt securities. In addition, the subordination provisions will not prevent the occurrence of any default under the subordinated indenture.

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Unless we inform you otherwise in the prospectus supplement, the subordinated indenture will not limit the amount of Senior Debt that we may incur. As a result of the subordination of the subordinated debt securities, if we became insolvent, holders of subordinated debt securities may receive less on a proportionate basis than our other creditors.

Unless we inform you otherwise in the prospectus supplement, Senior Debt will mean all notes or other indebtedness, including guarantees, of Rosetta for money borrowed and similar obligations, unless the terms of such indebtedness state that it is not senior to the subordinated debt securities or our other junior debt.

Subsidiary Guarantees

If specified in the prospectus supplement, our subsidiaries may guarantee our obligations relating to our debt securities issued under this prospectus. The specific terms and provisions of each subsidiary guarantee, including any provisions relating to the subordination of any subsidiary guarantee, will be described in the applicable prospectus supplement. The obligations of each subsidiary guarantor under its subsidiary guarantee will be limited as necessary to seek to prevent that subsidiary guarantee from constituting a fraudulent conveyance or fraudulent transfer under applicable federal or state law.

Consolidation, Merger and Sale of Assets

The senior indenture generally permits and the subordinated indenture generally will permit a consolidation or merger between us and another entity. They also permit or will permit, as applicable, the sale by us of our assets substantially as an entirety. The indentures provide or will provide, as applicable, however, that we may consolidate with another entity to form a new entity or merge into any other entity or transfer or dispose of our assets substantially as an entirety to any other entity only if:

the resulting or surviving entity assumes the due and punctual payments on the debt securities and the performance of our covenants and obligations under the applicable indenture and the debt securities;

immediately after giving effect to the transaction, no default or event of default would occur and be continuing; and

we deliver an officer's certificate and opinion of counsel stating that such transaction complies with the applicable indenture.

Events of Default

Unless we inform you otherwise in the prospectus supplement, the following will be events of default with respect to a series of debt securities:

our failure to pay interest or any required additional amounts on any debt securities of that series for 30 days;

our failure to pay principal of or any premium on any debt securities of that series when due;

our failure to deposit any mandatory sinking fund payment for that series of debt securities when due for 30 days;

our failure to comply with any of our covenants or agreements in the debt securities of that series or the applicable indenture, other than an agreement or covenant that we have included in that indenture solely for the benefit of other series of debt securities, for 90 days after written notice by the trustee or by the holders of at least 25% in principal amount of all the outstanding debt securities issued under that indenture that are affected by that failure;

specified events involving our bankruptcy, insolvency or reorganization; and

any other event of default provided for that series of debt securities.

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A default under one series of debt securities will not necessarily be a default under another series. The trustee may withhold notice to the holders of the debt securities of any default or event of default, except in any payment on the debt securities, if the trustee in good faith determines that withholding notice is in the interest of the holders of the debt securities.

If an event of default for any series of debt securities occurs and is continuing, the trustee or the holders of at least 25% in principal amount of the outstanding debt securities of the series affected by the default, or, in some cases, 25% in principal amount of all senior debt securities or subordinated debt securities affected, voting as one class, may declare the principal of and all accrued and all unpaid interest on those debt securities to be immediately due and payable. If an event of default relating to events of bankruptcy, insolvency or reorganization occurs, the principal of and all accrued and unpaid interest on all debt securities will become immediately due and payable without any action on the part of the applicable trustee or any holder. The holders of a majority in principal amount of the outstanding debt securities of the series affected by the default, or of all senior debt securities or subordinated debt securities affected, voting as one class, may in some cases rescind this accelerated payment requirement. Depending on the terms of our other indebtedness, an event of default under either of the indentures may give rise to cross defaults on our other indebtedness.

A holder of a debt security of any series will be able to pursue any remedy under the applicable indenture only if:

the holder gives the trustee written notice of a continuing event of default for that series;

the holders of at least 25% in principal amount of the outstanding debt securities of that series make a written request to the trustee to pursue the remedy;

the holder or holders offer to the trustee indemnity reasonably satisfactory to it;

the trustee fails to act for a period of 60 days after receipt of notice and offer of indemnity; and

during that 60-day period, the holders of a majority in principal amount of the debt securities of that series do not give the trustee a direction inconsistent with the request.

This provision will not, however, affect the right of a holder of a debt security to sue for enforcement of any overdue payment.

In most cases, holders of a majority in principal amount of the outstanding debt securities of a series, or of all debt securities affected, voting as one class, will be able to direct the time, method and place of:

conducting any proceeding for any remedy available to the applicable trustee; and

exercising any trust or power conferred on the applicable trustee not relating to or arising under an event of default.

The senior indenture requires and the subordinated indenture will require us to file with the trustee each year a written statement as to our compliance with the covenants contained in that indenture.

Modification and Waiver

We may amend or supplement either indenture if the holders of a majority in principal amount of the outstanding debt securities of all series issued under the applicable indenture and affected by the amendment or supplement, acting as one class, consent to it. Without the consent of the holder of each debt security affected, however, no amendment or supplement may:

reduce the amount of debt securities whose holders must consent to an amendment, supplement or waiver;

reduce the rate of or change the time for payment of interest on any debt security;

reduce the principal of, premium on or any mandatory sinking fund payment for any debt security;

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change the stated maturity of any debt security;

reduce any premium payable on the redemption of any debt security or change the time at which any debt security may or must be redeemed;

change any obligation to pay additional amounts on any debt security;

make the payments on any debt security payable in any currency or currency unit other than as the debt security originally states;

impair the holder's right to institute suit for the enforcement of any payment on any debt security;

make any change in the percentage of principal amount of debt securities necessary to waive compliance with specified provisions of the applicable indenture or to make any change in the applicable indenture's provisions for modification;

waive a continuing default or event of default regarding any payment on any debt security; or

with respect to the subordinated indenture, modify the provisions relating to the subordination of any subordinated debt security in a manner adverse to the holder of that security.

We and the applicable trustee may agree to amend or supplement either indenture or waive any provision of either indenture without the consent of any holders of the applicable debt securities in some circumstances, including:

to cure any ambiguity, omission, defect or inconsistency;

to provide for the assumption of our obligations under the applicable indenture by a successor upon any merger, consolidation or asset transfer;

to provide for uncertificated debt securities in addition to or in place of certificated debt securities or to provide for bearer debt securities;

to provide any security for or add guarantees of any series of debt securities;

to comply with any requirement to effect or maintain the qualification of the indenture under the Trust Indenture Act;

to add covenants that would benefit the holders of any debt securities or to surrender any rights we have under the indentures;

to add events of default with respect to the applicable debt securities;

to make any change that does not adversely affect any outstanding debt securities of any series in any material respect;

to establish the form or terms of any series of debt securities;

to facilitate the defeasance or discharge of any series of debt securities if that change does not adversely affect the holders of debt securities of that series or any other series under the applicable indenture in any material respect; and

to provide for the acceptance of a successor or another trustee.

The holders of a majority in principal amount of the outstanding debt securities of any series, or of all senior debt securities or subordinated debt securities affected, voting as one class, may waive any existing or past default or event of default with respect to those debt securities. Those holders may not, however, waive any default or event of default in any payment on any debt security or compliance with a provision that cannot be amended or supplemented without the consent of each holder affected.

The consent of the holders is not necessary under either indenture to approve the particular form of any proposed amendment. It is sufficient if such consent approves the substance of the proposed amendment. After

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an amendment under an indenture becomes effective, we are required to mail to the holders of debt securities thereunder a notice briefly describing such amendment. However, the failure to give such notice to all such holders, or any defect therein, will not impair or affect the validity of the amendment.

Discharge and Defeasance

We will be discharged from all obligations under the applicable indenture with respect to any series of debt securities, except for surviving obligations relating to any conversion rights and to register the transfer or exchange of the debt securities, if:

all debt securities of the series previously authenticated and delivered under the relevant indenture have been delivered to the indenture trustee for cancellation; or

all debt securities of that series have become due and payable or will become due and payable within one year, at maturity or by redemption, and we irrevocably deposit with the applicable trustee funds or government securities sufficient in the opinion of a nationally recognized firm of independent public accountants to make payments on the debt securities of that series on the dates those payments are due.

To exercise our right to be discharged, we must deliver to the applicable trustee an opinion of counsel and an officers certificate stating that all conditions precedent to the satisfaction and discharge of the applicable indenture have been complied with.

In addition to our right of discharge described above, we may deposit with the applicable trustee funds or government securities sufficient to make payments on the debt securities of a series on the dates those payments are due and payable, then, at our option, either of the following will occur:

we will be discharged from our obligations with respect to the debt securities of that series (legal defeasance); or

we will no longer have any obligation to comply with the restrictive covenants under the applicable indenture, and the related events of default will no longer apply to us, but some of our other obligations under the applicable indenture and the debt securities of that series, including our obligation to make payments on those debt securities, will survive (covenant defeasance).

If we defease a series of debt securities, the holders of the debt securities of the series affected will not be entitled to the benefits of the applicable indenture, except for our obligations to:

register the transfer or exchange of debt securities;

replace stolen, lost or mutilated debt securities; and

maintain paying agencies and hold moneys for payment in trust.

Unless we inform you otherwise in the prospectus supplement, we will be required to deliver to the applicable trustee an opinion of counsel that the deposit and related defeasance would not cause the holders of the debt securities to recognize income, gain or loss for United States federal income tax purposes. If we elect legal defeasance, that opinion of counsel must be based on a ruling from the United States Internal Revenue Service or a change in law to that effect.

Governing Law

The senior indenture is and the subordinated indenture and the debt securities will be governed by and construed in accordance with the laws of the State of New York.

Trustee

If an event of default occurs and is continuing, the trustee will be required to use the degree of care and skill of a prudent person in the conduct of his own affairs. The trustee will become obligated to exercise any of its

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powers under the applicable indenture at the request of any of the holders of any debt securities only after those holders have offered the trustee indemnity reasonably satisfactory to it.

The senior indenture limits and the subordinated indenture will limit the right of the trustee, if it becomes one of our creditors, to obtain payment of claims or to realize on certain property received for any such claim, as security or otherwise. The trustee may engage in other transactions with us. If it acquires any conflicting interest, however, it must eliminate that conflict or resign.

Form, Exchange, Registration and Transfer

We will issue the debt securities in registered form, without interest coupons. We will not charge a service charge for any registration of transfer or exchange of the debt securities. We may, however, require the payment of any tax or other governmental charge payable for that registration.

Debt securities of any series will be exchangeable for other debt securities of the same series with the same total principal amount and the same terms but in different authorized denominations in accordance with the applicable indenture. Holders may present debt securities for registration of transfer at the office of the security registrar or any transfer agent we designate. The security registrar or transfer agent will effect the transfer or exchange when it is satisfied with the documents of title and identity of the person making the request.

Unless we inform you otherwise in the prospectus supplement, we will appoint the trustee under each indenture as security registrar for the debt securities we issue under that indenture. If the prospectus supplement refers to any transfer agents initially designated by us, we may at any time rescind that designation or approve a change in the location through which any transfer agent acts. We will be required to maintain an office or agency for transfers and exchanges in each place of payment. We may at any time designate additional transfer agents for any series of debt securities or rescind the designation of any transfer agent.

In the case of any redemption, neither the security registrar nor the transfer agent will be required to register the transfer or exchange of any debt security:

during a period beginning 15 business days before the day of mailing of the relevant notice of redemption and ending on the close of business on that day of mailing; or

if we have called the debt security for redemption in whole or in part, except the unredeemed portion of any debt security being redeemed in part.

Payment and Paying Agents

Unless we inform you otherwise in the prospectus supplement, we will make payments on the debt securities in U.S. dollars at the office of the applicable trustee or any paying agent we designate. At our option, we may make payments by check mailed to the holder's registered address or, with respect to global debt securities, by wire transfer. Unless we inform you otherwise in the prospectus supplement, we will make interest payments to the person in whose name the debt security is registered at the close of business on the record date for the interest payment.

Unless we inform you otherwise in the prospectus supplement, we will designate the trustee under each indenture as our paying agent for payments on debt securities we issue under that indenture. 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.

Subject to the requirements of any applicable abandoned property laws, the trustee and paying agent will repay to us upon written request any funds held by them for payments on the debt securities that remain unclaimed for two years after the date upon which that payment has become due. After repayment to us, holders entitled to those funds must look only to us for payment.

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Book-Entry Debt Securities

We may issue the debt securities of a series in the form of one or more global debt securities that would be deposited with a depository or its nominee identified in the prospectus supplement. We may issue global debt securities in either temporary or permanent form. We will describe in the prospectus supplement the terms of any depository arrangement and the rights and limitations of owners of beneficial interests in any global debt security.

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DESCRIPTION OF CAPITAL STOCK

As of the date of this prospectus, we are authorized to issue up to 150,000,000 shares of common stock, \$0.001 par value per share, and 5,000,000 shares of preferred stock, \$0.001 par value per share.

Common Stock

As of March 5, 2015, we had 63,038,536 shares of common stock outstanding (including 1,155,758 shares of unvested restricted common stock), all of which is voting common stock.

Holders of our common stock are entitled to one vote for each share held on all matters submitted to a vote of stockholders and do not have cumulative voting rights in the election of directors.

Holders of our common stock are entitled to receive proportionately any dividends if and when such dividends are declared by our board of directors, subject to any preferential dividend rights of outstanding preferred stock. Upon the liquidation, dissolution or winding up of our company, the holders of our common stock are entitled to receive ratably our net assets available after the payment of all debts and other liabilities and subject to the prior rights of any outstanding preferred stock. Holders of our common stock have no preemptive, subscription, redemption or conversion rights. The rights, preferences and privileges of holders of our common stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of preferred stock that we may designate and issue in the future.

Our common stock is listed on the NASDAQ Global Select Market under the symbol ROSE.

Preferred Stock

Under the terms of our certificate of incorporation, our board of directors is authorized to designate and issue shares of preferred stock in one or more series without stockholder approval. Our board of directors has discretion to determine the rights, preferences, privileges and restrictions, including voting rights, dividend rights, conversion rights, redemption privileges and liquidation preferences, of each series of preferred stock. It is not possible to state the actual effect of the issuance of any shares of preferred stock upon the rights of holders of the common stock until the board of directors determines the specific rights of the holders of the preferred stock. However, these effects might include:

restricting dividends on the common stock;

diluting the voting power of the common stock;

impairing the liquidation rights of the common stock; and

delaying or preventing a change in control of our company.

Limitations on Liability and Indemnification of Officers and Directors

Our certificate of incorporation provides that none of our directors will be personally liable to us or our stockholders for monetary damages for breach of fiduciary duty as a director, except liability for:

any breach of the director's duty of loyalty to us or our stockholders;

acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law;

unlawful payments as they relate to Section 174 of the General Corporation Law of the State of Delaware (the "DGCL"); and

any transaction from which the director derived any improper personal benefit.

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This provision of our certificate of incorporation eliminates our right and the rights of our stockholders to recover monetary damages against a director for breach of the director's fiduciary duty of care, including breaches resulting from negligent or grossly negligent behavior, except in the situations described above. This provision does not limit or eliminate our rights or the rights of any stockholder to seek non-monetary relief, such as an injunction or rescission in the event of a breach of a director's duty of care.

Our amended and restated bylaws also provide that we will indemnify officers and directors against losses that they may incur in investigations and legal proceedings resulting from their services to us.

Our amended and restated bylaws also provide that:

we will be required to indemnify our directors and officers to the fullest extent permitted by Delaware law;

we may indemnify our other employees and agents to the extent that we indemnify our officers and directors, unless otherwise required by law, our certificate of incorporation, our amended and restated bylaws or agreements to which we are a party; and

we will be required to advance expenses, as incurred, to our directors and officers in connection with a legal proceeding to the fullest extent permitted by law.

We also have entered into indemnification agreements with each of our directors and officers to give them additional contractual assurances regarding the scope of the indemnification set forth in our certificate of incorporation and amended and restated bylaws and to provide additional procedural protections.

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

Our certificate of incorporation and amended and restated bylaws contain the following additional provisions, some of which are intended to enhance the likelihood of continuity and stability in the composition of our board of directors and in the policies formulated by our board of directors. In addition, some provisions of the DGCL, if applicable to us, may hinder or delay an attempted takeover without prior approval of our board of directors.

Provisions of our certificate of incorporation and amended and restated bylaws and of the DGCL could discourage attempts to acquire us or remove incumbent management. These provisions could, therefore, prevent stockholders from receiving a premium over the market price for the shares of common stock they hold.

Filling Board of Directors Vacancies; Removal. Our amended and restated bylaws provide that vacancies and newly created directorships resulting from any increase in the authorized number of directors may be filled by a majority of the directors then in office, though less than a quorum, or by a sole remaining director, and the directors so chosen will hold office until their successors are duly elected and qualified.

Our amended and restated bylaws provide that directors may be removed, with or without cause, by a majority vote of the shares entitled to vote at an election of directors, if notice of the intention to act upon such matter is given in the notice calling such meeting.

Stockholder Action by Written Consent. Our certificate of incorporation provides that no action required or permitted to be taken at any annual or special meeting of the stockholders of the Company may be taken by written consent without a meeting of such stockholders, unless the board of directors authorizes such action in advance.

Call of Special Meetings. Our amended and restated bylaws provide that special meetings of the stockholders (i) may be called by the chairman of the board or the chief executive officer of the Company and (ii) will be called by the chief executive officer or the secretary of the Company at the request in writing of a majority of the board of directors. Our stockholders may not call special meetings.

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Advance Notice Requirements for Stockholder Proposals and Director Nominations. Our amended and restated bylaws provide that stockholders seeking to bring business before or to nominate candidates for election as directors at an annual meeting or a special meeting of stockholders must provide timely notice of their proposal in writing to the corporate secretary. With respect to stockholder proposals and director nominations at an annual meeting, to be timely, a stockholder's notice to the secretary of the Company with respect to such business must be received at the Company's principal executive offices not later than the close of business on the 90th day nor earlier than the opening of business on the 120th day before the anniversary date of the immediately preceding annual meeting of stockholders. In the case of a special meeting of stockholders called for the purpose of electing directors, to be timely, a stockholder's notice to the secretary of the Company must be received at the Company's principal executive offices not earlier than the opening of business on the 120th day before the meeting and not later than the later of (x) the close of business on the 90th day before the meeting or (y) the close of business on the 10th day following the day on which public announcement of the date of the special meeting is first made by the Company.

No Cumulative Voting. Under cumulative voting, a minority stockholder holding a sufficient percentage of a class of shares may be able to ensure the election of one or more directors. Under the DGCL, cumulative voting rights may be provided for in a corporation's certificate of incorporation. Our certificate of incorporation specifically prohibits cumulative voting by our stockholders at any election of our board of directors.

Authorized but Unissued Shares; No Preemptive Rights. Our certificate of incorporation provides for authorized but unissued shares of common stock and preferred stock that may be available for future issuance without stockholder approval. These additional shares may be utilized for a variety of corporate purposes, including future public offerings to raise additional capital, corporate acquisitions and employee benefit plans. The existence of authorized but unissued shares of common stock and preferred stock could make it more difficult or discourage an attempt to obtain control of our company by means of a proxy contest, tender offer, merger or otherwise. Additionally, our certificate of incorporation expressly denies preemptive rights to any stockholder.

Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws. Pursuant to the DGCL, our certificate of incorporation may not be repealed or amended, in whole or in part, without the approval of the holders of at least a majority of the outstanding shares of our capital stock.

Our amended and restated bylaws may be altered, amended, repealed, or replaced by the stockholders, or by the board of directors when such power is conferred upon the board of directors by the certificate of incorporation, at any annual stockholders meeting or annual or regular meeting of the board of directors, or at any special meeting of the stockholders or of the board of directors.

Delaware Law. We are subject to Section 203 of the DGCL, an anti-takeover provision. In general, the provision prohibits a publicly held Delaware corporation from engaging in a business combination with an interested stockholder for a period of three years after the date of the transaction in which the person became an interested stockholder. A business combination includes a merger, sale of 10% or more of our assets and certain other transactions resulting in a financial benefit to the stockholder. For purposes of Section 203, an interested stockholder is defined to include any person that is:

the owner of 15% or more of the outstanding voting stock of the corporation;

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an affiliate or associate of the corporation and the owner of 15% or more of the voting stock outstanding of the corporation, at any time within three years immediately prior to the relevant date; or

an affiliate or associate of the persons described in the foregoing bullet points.

However, the above provisions of Section 203 do not apply if:

our board of directors approves the transaction that made the stockholder an interested stockholder prior to the date of that transaction;

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after the completion of the transaction that resulted in the stockholder becoming an interested stockholder, that stockholder owned at least 85% of our voting stock outstanding at the time the transaction commenced, excluding shares owned by our officers and directors; or

on or subsequent to the date of the transaction, the business combination is approved by our board and authorized at a meeting of our stockholders by an affirmative vote of at least two-thirds of the outstanding voting stock not owned by the interested stockholder.

Stockholders may, by adopting an amendment to the corporation's certificate of incorporation or bylaws, elect for the corporation not to be governed by Section 203, effective 12 months after adoption. Neither our certificate of incorporation nor our amended and restated bylaws exempts us from the restrictions imposed under Section 203. It is anticipated that the provisions of Section 203 may encourage companies interested in acquiring us to negotiate in advance with our board.

Transfer Agent and Registrar

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

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PLAN OF DISTRIBUTION

We and/or any selling security holder may sell the offered securities in and outside the United States (1) through underwriters or dealers, (2) directly to purchasers, (3) through agents or (4) a combination of any of these methods. The prospectus supplement will set forth the following information:

the terms of the offering;

the names of any underwriters or agents;

the name or names of any managing underwriter or underwriters;

the purchase price of the securities from us;

the net proceeds we will receive from the sale of the securities;

any delayed delivery arrangements;

any underwriting discounts, commissions and other items constituting underwriters' compensation;

the initial public offering price;

any discounts or concessions allowed or reallocated or paid to dealers; and

any commissions paid to agents.

Sale Through Underwriters or Dealers

If we and/or any selling security holder use underwriters in the sale of the offered securities, the underwriters will acquire the securities for their own account. The underwriters may resell the securities from time to time in one or more transactions, including negotiated transactions, at a fixed public offering price, which may be changed from time to time, at market prices prevailing at the time of sale, at prices related to the prevailing market prices 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, and the underwriters will be obligated to purchase all the offered securities if they purchase any of them. The underwriters may sell securities to or through dealers, and the dealers may receive compensation in the form of discounts, concessions or commissions from the underwriters and/or

commissions from the purchasers for whom they may act as agent. The underwriters may change from time to time the public offering price and any discounts, concessions or commissions allowed or reallocated or paid to dealers.

During and after an offering through underwriters, the underwriters may purchase and sell the securities in the open market. These transactions may include overallotment and stabilizing transactions and purchases to cover syndicate short positions created in connection with the offering. The underwriters may also impose a penalty bid, which means that selling concessions allowed to syndicate members or other broker-dealers for the offered securities sold for their account may be reclaimed by the syndicate if the offered securities are repurchased by the syndicate in stabilizing or covering transactions. These activities may stabilize, maintain or otherwise affect the market price of the offered securities, which may be higher than the price that might otherwise prevail in the open market. If commenced, these activities may be discontinued at any time.

If we and/or any selling security holder use dealers in the sale of securities, we and/or any selling security holder may sell the securities to them as principals. They may then resell those securities to the public at varying prices determined by the dealers at the time of resale. The dealers participating in any sale of the securities may be deemed to be underwriters within the meaning of the Securities Act with respect to any sale of these securities. We will include in the prospectus supplement the names of the dealers and the terms of the transaction.

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Direct Sales and Sales Through Agents

We and/or any selling security holder may sell the securities directly. In that event, no underwriters or agents would be involved. We and/or any selling security holder may also sell the securities through agents we designate from time to time. In addition, we and/or any selling security holder may offer securities through at-the-market transactions. 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 by us to the agent. Unless we inform you otherwise in the prospectus supplement, any agent will agree to use its reasonable best efforts to solicit purchases for the period of its appointment.

We and/or any selling security holder 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.

Delayed Delivery Contracts

If we and/or any selling security holder so indicate in the prospectus supplement, we and/or any selling security holder may authorize agents, underwriters or dealers to solicit offers from selected types of institutions to purchase securities from us and/or any selling security holder at the public offering price under delayed delivery contracts. These contracts would provide for payment and delivery on a specified date in the future. The contracts would be subject only to those conditions described in the prospectus supplement. The prospectus supplement will describe the commission payable for solicitation of those contracts.

General Information

We and/or any selling security holder may have agreements with firms, agents, dealers and underwriters to indemnify them against civil liabilities, including liabilities under the Securities Act, or to contribute with respect to payments that the firms, agents, dealers or underwriters may be required to make. Such firms, agents, dealers and underwriters may be customers of, engage in transactions with or perform services for us and/or any selling security holder in the ordinary course of their businesses.

Each series of offered securities will be a new issue, and other than our common stock, which is listed on the NASDAQ Global Select Market, will have no established trading market. We may elect to list any series of offered securities on an exchange, but we are not obligated to do so. It is possible that one or more underwriters may make a market in a series of offered securities. However, they will not be obligated to do so and may discontinue market making at any time without notice. We cannot assure you that a liquid trading market for any of our offered securities will develop.

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LEGAL MATTERS

Unless otherwise indicated in the applicable prospectus supplement, the validity of the securities offered under this prospectus and certain other legal matters will be passed upon for us by Latham & Watkins LLP, Houston, Texas. Additional legal matters may be passed on for us, or any underwriters, dealers or agents, by counsel we will name in the applicable prospectus supplement.

EXPERTS

The financial statements and management's assessment of the effectiveness of internal control over financial reporting (which is included in Management's Report on Internal Control over Financial Reporting) incorporated in this prospectus by reference to the Annual Report on Form 10-K of Rosetta Resources Inc. for the year ended December 31, 2014 have been so incorporated in reliance on the report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

Information with respect to estimates of oil and gas reserves associated with our oil and gas properties was prepared by us. Our reserves estimates were audited by Netherland, Sewell & Associates, Inc., independent consulting petroleum engineers, as stated in its audit report with respect thereto. Such report is incorporated by reference herein upon the authority of said firm as experts with respect to the matters covered by such report and in giving such report.

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12,000,000 Shares

PROSPECTUS

Morgan Stanley

March 9, 2015