UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM S-8

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

EVOLUTION PETROLEUM CORPORATION

(Exact name of registrant as specified in its charter)

Nevada

(State or other jurisdiction of incorporation or organization)

41-1781991

(I.R.S. Employer Identification No.)

2500 CityWest Blvd., Suite 1300 Houston, Texas 77042

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

AMENDED AND RESTATED 2004 STOCK PLAN 2003 STOCK OPTION PLAN REVOCABLE WARRANT AGREEMENT WARRANT AGREEMENT

(Full Title of the Plan)

Robert S. Herlin Chief Executive Officer and President Evolution Petroleum Corporation 2500 City West Blvd., Suite 1300 Houston, Texas 77042

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

Copy to:

Michael T. Larkin

Adams and Reese LLP 4400 One Houston Center 1221 McKinney Street Houston, Texas 77010 (713) 652-5151

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

Large accelerated filer o

Accelerated filer x

Non-accelerated filer o

Smaller reporting company o

CALCULATION OF REGISTRATION FEE

Title of each class of securities to be registered	Amount to be registered(1)	Proposed maximum offering price per share	Proposed maximum aggregate offering price	Amount of registration fee
Common Stock, par value \$0.001 per share	1,000,000 shares	\$ 8.03(2)	\$ 8,030,000(2)	\$ 920.24
Total	1,000,000 shares			

- (1) This Registration Statement also covers such indeterminable additional number of shares as may be issuable under the plans by reason of any adjustments in the number of shares to prevent dilution from any future stock splits, stock dividends and similar transactions. This Registration Statement covers any such additional shares in accordance with Rule 416(a).
- (2) Estimated solely for the purposes of calculating the registration fee pursuant to Rule 457(c) and Rule 457(h)(l) under the Securities Act of 1933, as amended, and based on the average of the high and low sales prices of the Registrant's common stock reported on the NYSE MKT on August 29,

Pursuant to Rule 429 under the Securities Act of 1933, as amended, the reoffer prospectus that is a part of this Registration Statement will also be used in connection with the offer and sale of Registrant's common stock previously registered under the Registrant's Registration Statement on Form S-8 (Commission File No. 333-140182).

Table of Contents

EXPLANATORY NOTE

Evolution Petroleum Corporation (formerly named Natural Gas Systems, Inc.) (the "Registrant" or the "Company"), previously registered 5,402,500 shares of the Company's common stock \$0.001 par value ("Common Stock") issuable under the Company's 2004 Stock Plan, the 2003 Stock Option Plan, Revocable Warrant Agreement and Warrant Agreement. The registration of such shares of Common Stock was filed on a Form S-8 Registration Statement (the "First Registration Statement") with the Securities and Exchange Commission (the "Commission") on January 24, 2007 (File No. 333-140182) in accordance with the Securities Act of 1933, as amended (the "Securities Act").

The Company's Board of Directors adopted, and on December 4, 2007, the Company's stockholders approved an amendment to the 2004 Stock Plan, as amended (the "Amended and Restated 2004 Stock Plan") to increase by 1,500,000 shares the amount of Common Stock available for issuance pursuant to the Amended and Restated 2004 Stock Plan. On July 3, 2008, the Company filed a Form S-8 Registration Statement (File No. 333-152136) for the purpose of registering the additional 1,500,000 shares of the Company's Common Stock relating to the Company's Amended and Restated 2004 Stock Plan, in accordance with the Securities Act (the "Second Registration Statement," together with the First Registration Statement, the "Prior Registration Statements").

The Company's Board of Directors adopted, and on December 5, 2011, the Company's stockholders approved an amendment to the Company's Amended and Restated 2004 Stock Plan to increase by 1,000,000 shares the amount of Common Stock available for issuance pursuant to the Amended and Restated Stock Plan.

Pursuant to General Instruction E to Form S-8 under the Securities Act, this Registration Statement registers additional securities of the same class as those registered under the currently effective Prior Registration Statements relating to the registration of 6,902,500 shares of the Common Stock issuable under the Company's Amended and Restated 2004 Stock Plan, the 2003 Stock Option Plan, Revocable Warrant Agreement and Warrant Agreement. The contents of the Prior Registration Statements, including any amendments thereto or filings incorporated therein, are incorporated herein by reference and made apart of this Registration Statement, except as amended hereby.

This Registration Statement also includes, pursuant to General Instruction E to Form S-8 and Rule 429 of the Securities Act, a re-offer prospectus in Part I (the "Revised Reoffer Prospectus"), which has been revised to update the reoffer prospectus that was filed with the Second Registration Statement (File No. 333-152136). The Revised Reoffer Prospectus may be utilized for reofferings and resales by certain executive officers and directors listed in the Revised Reoffer Prospectus who may be deemed "affiliates" of the Company on a continuous or a delayed basis in the future of up to 5,229,326 shares of Common Stock. These shares constitute "control securities" or "restricted securities" which have been issued prior to or issuable after the filing of this Registration Statement. The Revised Reoffer Prospectus does not contain all of the information included in the Registration Statement, certain items of which are contained in schedules and exhibits to the Registration Statement, as permitted by the rules and regulations of the Commission. Statements contained in this Revised Reoffer Prospectus as to the contents of any agreement, instrument or other document referred to are not necessarily complete. With respect to each such agreement, instrument or other document filed as an exhibit to the Registration Statement, we refer you to the exhibit for a more complete description of the matter involved, and each such statement shall be deemed qualified in its entirety by this reference.

PART I

INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

As permitted by the rules and regulations of the Commission, this Registration Statement omits certain information specified in Part I of Form S-8. The documents containing the information specified in Part I of this Registration Statement will be sent or given to eligible employees, directors or consultants as specified in Rule 428(b)(1) promulgated under the Securities Act. Such documents are not being filed with the Commission either as part of this Registration Statement or as prospectuses or prospectus supplements pursuant to Rule 424 promulgated under the Securities Act. These documents and the documents incorporated by reference in this Registration Statement pursuant to Item 3 of Part II of this Registration Statement, taken together, constitute a prospectus that meets the requirements of Section 10(a) of the Securities Act.

Table of Contents

Reoffer Prospectus

5,229,326 Shares

EVOLUTION PETROLEUM CORPORATION

Common Stock

This reoffer prospectus relates to offers and sales by certain of our executive officers and directors (also called Selling Shareholders) who may be deemed "affiliates" of the Company of our common stock that have or may be acquired by such persons upon the exercise of stock options, the vesting of restricted common stock or the exercise of previously granted warrants. This prospectus covers 879,336 shares of our currently outstanding shares of common stock that are owned by the Selling Stockholders, up to 3,312,490 shares issuable upon the exercise of currently outstanding options and up to 1,037,500 shares of our common stock issuable upon the exercise of outstanding common stock purchase warrants held by some of our warrant holders.

For a list of the Selling Stockholders, please see "Selling Stockholders." We are not selling any shares of common stock in this offering and therefore will not receive any proceeds from this offering. We will, however, receive the exercise price of the options or warrants in cash, or in equivalent tendered or net exercised shares, if and when those options or warrants are exercised by the Selling Stockholders. We will pay the expenses of registering these shares.

Our common stock is traded under the symbol "EPM" on the NYSE MKT. The closing sale price for our common stock on September 5, 2012 was \$7.93 per share.

The shares included in this prospectus may be offered and resold directly by the Selling Stockholders in the open market at prevailing prices or in individually negotiated transactions, through agents designated from time to time or through underwriters or dealers. We will not control or determine the price at which a Selling Stockholder decides to sell its shares. Brokers or dealers effecting transactions in these shares should confirm that the shares are registered under applicable state law or that an exemption from registration is available.

You should understand the risks associated with investing in our common stock before making an investment, read the "Risk Factors," which begin on page 1 of this prospectus.

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

The date of this reoffer prospectus is September 6, 2012.

Table of Contents

TABLE OF CONTENTS

COMPANY OVERVIEW	1
RISK FACTORS	1
FORWARD-LOOKING STATEMENTS	10
USE OF PROCEEDS	11
SELLING STOCKHOLDERS	11
PLAN OF DISTRIBUTION	12
LEGAL MATTERS	14
<u>EXPERTS</u>	14
INFORMATION INCORPORATED BY REFERENCE	15
GLOSSARY OF SELECTED PETROLEUM TERMS	15
WHERE YOU CAN FIND MORE INFORMATION	19
DISCLOSURE OF COMMISSION POSITION ON INDEMNIFICATION FOR SECURITIES ACT LIABILITIES	19

You should rely only on the information contained in or incorporated by reference into this prospectus or any prospectus supplement. We have not authorized any person to give any information or to make any representations other than those contained or incorporated by reference in this prospectus, and, if given or made, you must not rely upon such information or representations as having been authorized. This prospectus does not constitute an offer to sell or the solicitation of an offer to buy any securities other than our shares of common stock described in this prospectus or an offer to sell or the solicitation to buy such securities in any circumstances in which such offer or solicitation is unlawful. You should not assume that the information we have included in this prospectus is accurate as of any date other than the date of this prospectus or that any information we have incorporated by reference is accurate as of any date other than the date of the document incorporated by reference regardless of the time of delivery of this prospectus or of any securities registered hereunder.

i

Table of Contents

COMPANY OVERVIEW

Throughout this prospectus, the terms "we," "us," "our," and "our company" refer to Evolution Petroleum Corporation, a Nevada corporation formerly known as Natural Gas Systems, Inc. and, unless the context indicates otherwise, also includes our wholly-owned subsidiaries.

General

We are a petroleum company engaged primarily in the acquisition, exploitation and development of properties for the production of crude oil and natural gas.

Our principal executive offices are located at 2500 CityWest Blvd, Suite 1300, Houston, Texas 77042, and our telephone number is (713) 935-0122. We maintain a website at www.evolutionpetroleum.com, but information contained on our website does not constitute part of this document.

Business Strategy

We are a petroleum company engaged primarily in the acquisition, exploitation and development of properties for the production of crude oil and natural gas, onshore in the United States. We acquire known, underdeveloped oil and natural gas resources and exploit them through the application of capital, sound engineering and modern technology to increase production, ultimate recoveries, or both.

We are focused on increasing underlying asset values on a per share basis. In doing so, we depend on a conservative capital structure, allowing us to maintain control of our assets for the benefit of our shareholders, including approximately 21% beneficially owned by all of our employees.

Our strategy is intended to generate scalable, low unit cost, development and re-development opportunities that minimize or eliminate exploration risks. These opportunities involve the application of modern technology, our own proprietary technology and our specific expertise in overlooked areas of the United States.

The assets we exploit currently fit into three types of project opportunities:

- · Enhanced Oil Recovery (EOR),
- · Bypassed Primary Resources, and
- · Unconventional Development.

RISK FACTORS

Risks Related to the Company

You should carefully consider the following risks relating to us as well as other information contained in this prospectus before deciding to invest in shares of our common stock. Our business, financial condition or results of operations have been, or could be, materially adversely affected by the following risks. The value of your investment may decrease and could result in a loss.

Operating results from oil and natural gas production may decline.

In the near term, our production is almost totally dependent on our working interests in the Giddings Field and our 7.4% royalty interests on early stage EOR production that began during March 2010 by the operator in the Delhi Field. The targeted reservoirs in the Giddings Field typically experience flush initial production, followed by steep harmonic decline rates that steadily flatten to much shallower decline rates. Although EOR production from proved reserves at Delhi has and is expected to grow over time, without further development activities in the Giddings Field, Delhi or our other properties, or without acquisitions of producing properties, our net production of oil and natural gas could decline significantly over time, which could have a material adverse effect on our financial condition.

1

Table of Contents

The types of resources we focus on have substantial operational risks.

Our business plan focuses on the acquisition and development of known resources in partially depleted reservoirs, naturally fractured or low permeability reservoirs, or relatively shallow reservoirs. Shallower reservoirs usually have lower pressure, which translates into fewer natural gas volumes in place; low permeability reservoirs require more wells and substantial stimulation for development of commercial production; naturally fractured reservoirs require penetration of sufficient undepleted fractures to establish commercial production; and depleted reservoirs require successful application of newer technology to unlock incremental reserves.

Our CO2-EOR project in the Delhi Field, operated by a subsidiary of Denbury Resources Inc., requires significant amounts of CO 2 reserves, development capital and technical expertise, the sources of which have been committed by the Operator. Although initial CO 2 injection began at Delhi in November 2009, initial oil production response began in March 2010 and a large part of the capital budget has already been expended, substantial capital remains to be invested to fully develop the EOR project and further increase production. The Operator's failure to manage these and other technical, strategic, financial and logistical risks may cause ultimate enhanced recoveries from the planned CO2-EOR project to fall short of our expectations in volume and/or timing. Such occurrences would have a material adverse effect on the Company and its results of operations.

The existing well bores we are re-entering in the Giddings Field were originally drilled as far back as the 1980's. As such, they contain older casing that could be more subject to failure, or the well files, if available, may be incomplete or incorrect. Such problems can result in the complete loss of a well or a much higher drilling and completion cost. Our proved undeveloped locations in the Giddings Field are direct offsets to current or previously producing wells, and there may be unusually long fractures that will connect our well to another producing or depleted well, thus reducing the potential recovery, increasing our drilling costs, or delaying production due to recovery of drilling fluid lost during drilling into the depleted fractures.

Our other projects in Oklahoma and Texas, although believed to have oil and/or gas resources, have yet to exhibit significant proved reserves. Therefore, their economic outcome is uncertain.

Our projects generally require that we acquire new leases in and around established fields or other known resources, and drill and complete wells, some of which may be horizontal, as well as negotiate the purchase of existing well bores and production equipment or install our proprietary artificial lift technology that has yet to be universally proven. Leases may not be available and required oil field services may not be obtainable on the desired schedule or at the

expected costs. While the projected drilling results may be considered to be low to moderate in risk, there is no assurance as to what productive results may be obtained, if any.

Our limited operating history and limited production makes it difficult to predict future results and increases the risk of an investment in our company.

We commenced our crude oil and natural gas operations in late 2003 and have a limited operating history, particularly in our currently producing fields. All of our current production is the result of recent operational activities, thus our future production retains substantial variability. Therefore, we face all the risks common to companies in their early stage of development, including uncertainty of funding sources, high initial expenditure levels and uncertain revenue streams, an unproven business model, and difficulties in managing growth. Our prospects must be considered in light of the risks, expenses, delays and difficulties frequently encountered in establishing a new business. Any forward-looking statements in this report do not reflect any possible effects on us from the outcome of these types of uncertainty. Prior to the Delhi Farmout, we had incurred significant losses since the inception of our oil and natural gas operations and we have since resumed incurring losses until the quarters ended March 31, 2011 and June 30, 2011, which were profitable. We cannot assure future profitability or success. While members of our management team have previously carried out or been involved with acquisition and production activities in the crude oil and natural gas industry while employed by us and other companies, we cannot assure you that our intended acquisition targets and development plans will lead to the successful development of crude oil and natural gas production or additional revenue.

2

Table of Contents

The loss of a large single purchaser of our oil and natural gas could reduce the competition of our production.

For the year ended June 30, 2012, seven purchasers each accounted for all of our oil and natural gas revenues. The loss of a large single purchaser for our oil and natural gas production could negatively impact the prices we receive.

We may be unable to continue licensing from third parties the technologies that we use in our business operations.

As is customary in the crude oil and natural gas industry, we utilize a variety of widely available technologies in the crude oil and natural gas development and drilling process. We do not have any patents or copyrights for the technology we currently utilize, except for the trademark and patent pending on our GARPTM artificial lift technology that has yet to reach commercial development. We generally license or purchase services from the holders of such technology, or outsource the technology integral to our business from third parties. Our commercial success will depend in part on these sources of technology and assumes that such sources will not infringe on the proprietary rights of others. We cannot be certain whether any third-party patents will require us to utilize or develop alternative technology or to alter our business plan, obtain additional licenses, or cease activities that infringe on third-parties' intellectual property rights. Our inability to acquire any third-party licenses, or to integrate the related third-party products into our business plan, could result in delays in development unless and until equivalent products can be identified, licensed, and integrated. Existing or future licenses may not continue to be available to us on commercially reasonable terms or at all. Litigation, which could result in substantial cost to us, may be necessary to enforce any patents licensed to us or to determine the scope and validity of third-party obligations.

Our proprietary technology may not result in a commercial service or product.

We have developed and field tested our artificial lift technology, GARPTM (Gas Assisted Rod Pump), that we hope to commercialize, though it may not generate material value. Our success in commercializing the technology will depend upon additional positive field tests, acceptance by industry and our ability to defend the technology from competitors through confidentiality and patent protection.

Regulatory and accounting requirements may require substantial reductions in reporting proven reserves.

We review on a periodic basis the carrying value of our crude oil and natural gas properties under the applicable rules of the various regulatory agencies, including the SEC. Under the full cost method of accounting that we use, the after-tax carrying value of our oil and natural gas properties may not exceed the present value of estimated future net after-tax cash flows from proved reserves, discounted at 10%. Application of this "ceiling" test requires pricing future revenues at the previous 12-month average beginning-of-month price and requires a write down of the carrying value for accounting purposes if the ceiling is exceeded. We may in the future be required to write down the carrying value of our crude oil and natural gas properties when crude oil and natural gas prices are depressed or unusually volatile. Whether we will be required to take such a charge will depend in part on the prices for crude oil and natural gas during the previous period and the effect of reserve additions or revisions and capital expenditures during such period. If a write down is required, it would result in a current charge to our earnings but would not impact our current cash flow from operating activities.

Our profitability is highly dependent on the prices of crude oil, natural gas, and natural gas liquids, which have historically been very volatile.

Our estimated proved reserves, revenues, profitability, operating cash flow and future rate of growth are highly dependent on the prices of crude oil, natural gas and NGLs, which are affected by numerous factors beyond our control. Historically, these prices have been very volatile and are likely to remain volatile in the future. A significant and extended downward trend in commodity prices would have a material adverse effect on our revenues, profitability and cash flow, and could result in a reduction in the carrying value of our oil and natural gas properties and the amounts of our estimated proved oil and natural gas reserves. To the extent that we have not hedged our production with derivative contracts or fixed-price contracts, any significant and extended decline in oil and natural gas prices may adversely affect our financial position.

3

Table of Contents

We may be unable to acquire and develop the additional oil and natural gas reserves that are required in order to sustain our business operations.

In general, the volumes of production from crude oil and natural gas properties decline as reserves are depleted, with the rate of decline depending on reservoir characteristics. Except to the extent we acquire properties containing proved reserves or conduct successful development activities, or both, our proved reserves will decline. Our future crude oil and natural gas production is, therefore, highly dependent upon our level of success in finding or acquiring

additional reserves. Due to decline characteristics of our Giddings wells, our near-term future growth and financial condition are dependent upon our ability to realize production increases expected at Delhi, and /or the development of additional oil and natural gas reserves.

We are subject to substantial operating risks that may adversely affect our results of operations.

The crude oil and natural gas business involves numerous operating hazards such as well blowouts, mechanical failures, explosions, uncontrollable flows of crude oil, natural gas or well fluids, fires, formations with abnormal pressures, hurricanes, flooding, pollution, releases of toxic gas and other environmental hazards and risks. We could suffer substantial losses as a result of any of these events. While we carry general liability, control of well, and operator's extra expense coverage typical in our industry, we are not fully insured against all risks incident to our business.

We may not be the operator of some of our wells in the future, and we are not the operator of our high value assets in the Delhi Field or in the Mississippian Lime play in Oklahoma. As a result, our operating risks for those wells and our ability to influence the operations for these wells will be less subject to our control. Operators of these wells may act in ways that are not in our best interests. If this occurs, the development of, and production of crude oil and natural gas from, some wells may not occur timely or at all, which would have an adverse affect on our results of operations.

The loss of key personnel could adversely affect us.

We depend to a large extent on the services of certain key management personnel, including our executive officers, the loss of any of whom could have a material adverse affect on our operations. In particular, our future success is dependent upon Robert S. Herlin, our Chairman, President and Chief Executive Officer, Sterling H. McDonald, our Vice President and Chief Financial Officer, and Daryl V. Mazzanti, our Vice-President of Operations, for sourcing, evaluating and closing deals, capital raising, and oversight of development and operations. Presently, the Company is not a beneficiary of any key man insurance.

The loss of any of our skilled technical personnel could adversely affect our business.

We depend to a large extent on the services of skilled technical personnel to lease, drill, complete, operate and maintain our crude oil and natural gas fields. We do not have the resources to perform all of these services and therefore we outsource many of our requirements. Additionally, as our production increases, so does our need for such services. Generally, we do not have long-term agreements with our drilling and maintenance service providers. Accordingly, there is a risk that any of our service providers could discontinue servicing our crude oil and natural gas fields for any reason. Although we believe that we could establish alternative sources for most of our operational and maintenance needs, any delay in locating, establishing relationships, and training our sources could result in production shortages and maintenance problems, with a resulting loss of revenue to us. We also rely on third-party carriers for the transportation and distribution of our production, the loss of any of which could have a material adverse affect on our operations.

We may have difficulty managing future growth and the related demands on our resources and may have difficulty in achieving future growth.

Although we hope to experience growth through acquisitions and development activity, any such growth may place a significant strain on our financial, technical, operational and administrative resources. Our ability to grow will depend upon a number of factors, including:

· our ability to identify and acquire new development or acquisition projects;

4

Table of Contents

- · our ability to develop existing properties;
- · our ability to continue to retain and attract skilled personnel;
- the results of our development program and acquisition efforts;
- the success of our technologies;
- hydrocarbon prices;
- · drilling, completion and equipment prices;
- \cdot $\,$ our ability to successfully integrate new properties;
- · our access to capital; and
- the Delhi Field operator's ability to: deliver sufficient quantities of CO2 from its reserves in the Jackson Dome, secure all of the development capital necessary to fund its and Evolution's cost interests and to successfully manage technical, strategic and logistical development and operating risks.

We can not assure you that we will be able to successfully grow or manage any such growth.

We face strong competition from larger oil and gas companies.

Our competitors include major integrated crude oil and natural gas companies and numerous independent crude oil and natural gas companies, individuals and drilling and income programs. Many of our competitors are large, well-established companies with substantially larger operating staffs and greater capital resources than ours. We may not be able to successfully conduct our operations, evaluate and select suitable properties and consummate transactions in this highly competitive environment. Specifically, these larger competitors may be able to pay more for development projects and productive crude oil and natural gas properties and may be able to define, evaluate, bid for and purchase a greater number of properties and prospects than our financial or human resources permit. In addition, such companies may be able to expend greater resources on hiring contract service providers, obtaining oilfield equipment and acquiring the existing and changing technologies that we believe are and will be increasingly important to attaining success in our industry.

Our crude oil and natural gas reserves are only estimates and may prove to be inaccurate.

There are numerous uncertainties inherent in estimating crude oil and natural gas reserves and their estimated values. Our reserves are only estimates that may prove to be inaccurate because of these uncertainties. Reservoir engineering is a subjective and inexact process of estimating underground accumulations of crude oil and natural gas that cannot be measured in an exact manner. Estimates of economically recoverable crude oil and natural gas reserves depend upon a number of variable factors, such as historical production from the area compared with production from other producing areas and assumptions concerning effects of regulations by governmental agencies, future crude oil and natural gas product prices, future operating costs, severance and excise taxes,

development costs and work-over and remedial costs. Some or all of these assumptions may in fact vary considerably from actual results. For these reasons, estimates of the economically recoverable quantities of crude oil and natural gas attributable to any particular group of properties, classifications of such reserves based on risk of recovery, and estimates of the future net cash flows expected there from prepared by different engineers or by the same engineers but at different times, may vary substantially. Accordingly, reserve estimates may be subject to downward or upward adjustment. Actual production, revenue and expenditures with respect to our reserves will likely vary from estimates, and such variances may be material. The information regarding discounted future net cash flows included in this report should not be considered as the current market value of the estimated crude oil and natural gas reserves attributable to our properties. The estimated discounted future net cash flows from proved reserves are based on the 12-month average price, calculated as the unweighted arithmetic average of the first-day-of-the-month price for each month within the 12-month period prior to the end of the reporting period, and costs as of the date of the estimate, while actual future prices and costs may be materially higher or lower. Actual future net cash flows also will be affected by factors such as the amount and timing of actual production, supply and demand for crude oil and natural gas, increases or decreases in consumption, and changes in governmental regulations or taxation. In addition, the 10% discount factor, which is required by the SEC to be used in calculating discounted future net cash flows for reporting purposes, is not necessarily the most appropriate discount factor based on interest rates in effect from time to time and risks associated with us or the crude oil and natural gas industry in general. PV-10 does not necessarily correspond to market value.

5

Table of Contents

We cannot market the crude oil and natural gas that we produce without the assistance of third parties.

The marketability of the crude oil and natural gas that we produce depends upon the proximity of our reserves to, and the capacity of, facilities and third-party services, including crude oil and natural gas gathering systems, pipelines, trucking or terminal facilities, and processing facilities necessary to make the products marketable for end use. The unavailability or lack of capacity of such services and facilities could result in the shut-in of producing wells or the delay or discontinuance of development plans for properties. A shut-in or delay or discontinuance could adversely affect our financial condition. In addition, federal and state regulation of crude oil and natural gas production and transportation could affect our ability to produce and market our crude oil and natural gas on a profitable basis.

Our operations require significant amounts of capital and additional financing may be necessary in order for us to continue our exploration activities, including meeting certain drilling obligations under our existing lease obligations.

Our cash flow from our reserves may not be sufficient to fund our ongoing activities at all times. From time to time, we may require additional financing in order to carry out our oil and gas acquisitions, exploitation and development activities. Certain of our undeveloped leasehold acreage is subject to leases that will expire unless production is established. If our revenues from our reserves decrease as a result of lower oil and natural gas prices or otherwise, it will affect our ability to expend the necessary capital to replace our reserves or to maintain our current production. If our cash flow from operations is not sufficient to satisfy our capital expenditure requirements, there can be no assurance that additional debt or equity financing will be available to meet these requirements or available to us on favorable terms.

Risks Relating to the Oil and Gas Industry

Crude oil and natural gas development, re-completion of wells from one reservoir to another reservoir, restoring wells to production and drilling and completing new wells are speculative activities and involve numerous risks and substantial uncertain costs.

Our growth will be materially dependent upon the success of our future development program. Drilling for crude oil and natural gas and re-working existing wells involve numerous risks, including the risk that no commercially productive crude oil or natural gas reservoirs will be encountered. The cost of drilling, completing and operating wells is substantial and uncertain, and drilling operations may be curtailed, delayed or cancelled as a result of a variety of factors beyond our control, including:

- · unexpected drilling conditions;
- · pressure fluctuations or irregularities in formations;
- · equipment failures or accidents;
- · inability to obtain leases on economic terms, where applicable;
- · adverse weather conditions;
- · compliance with governmental requirements; and
- · shortages or delays in the availability of drilling rigs or crews and the delivery of equipment.

Drilling or re-working is a highly speculative activity. Even when fully and correctly utilized, modern well completion techniques such as hydraulic fracturing, horizontal drilling or CO2 injection or other injectants do not guarantee that we will find and produce crude oil and/or natural gas in our wells in economic quantities. Our future drilling activities may not be successful and, if unsuccessful, such failure would have an adverse affect on our future results of operations and financial condition. We cannot assure you that our overall drilling success rate or our drilling success rate for activities within a particular geographic area will not decline. We may identify and develop prospects through a number of methods, some of which do not include horizontal drilling, hydraulic fracturing or tertiary injectants, and some of which may be unproven. The drilling and results for these prospects may be particularly uncertain. Our drilling schedule and costs may vary from our capital budget. The final determination with respect to the drilling of any scheduled or budgeted prospects will be dependent on a number of factors,

6

Table of Contents

including, but not limited to:

- the results of previous development efforts and the acquisition, review and analysis of data;
- the availability of sufficient capital resources to us and the other participants, if any, for the drilling of the prospects;
- the approval of the prospects by other participants, if any, after additional data has been compiled;

- · economic and industry conditions at the time of drilling, including prevailing and anticipated prices for crude oil and natural gas and the availability of drilling rigs and crews;
- our financial resources and results;
- the availability of leases and permits on reasonable terms for the prospects; and
- the success of our drilling technology and our ability to control these operations. .

We cannot assure you that these projects can be successfully developed or that the wells discussed will, if drilled, encounter reservoirs of commercially productive crude oil or natural gas. There are numerous uncertainties in estimating quantities of proved reserves, including many factors beyond our control.

Crude oil and natural gas prices are highly volatile in general and low prices will negatively affect our financial results.

Our revenues, operating results, profitability, cash flow, future rate of growth and ability to borrow funds or obtain additional capital, as well as the carrying value of our properties, are substantially dependent upon prevailing prices of crude oil and natural gas. Lower crude oil and natural gas prices also may reduce the amount of crude oil and natural gas that we can produce economically. Historically, the markets for crude oil and natural gas have been very volatile, and such markets are likely to continue to be volatile in the future. Prices for crude oil and natural gas are subject to wide fluctuation in response to relatively minor changes in the supply of and demand for crude oil and natural gas, market uncertainty and a variety of additional factors that are beyond our control, including:

- worldwide and domestic supplies of crude oil, natural gas and NGLs;
- · the level of consumer product demand;
- · weather conditions:
- · domestic and foreign governmental regulations;
- the price and availability of alternative fuels;
- political instability or armed conflict in oil-producing regions;
- · the price and level of foreign imports; and
- · overall domestic and global economic conditions.

It is extremely difficult to predict future crude oil and natural gas price movements with any certainty. Declines in crude oil and natural gas prices may materially adversely affect our financial condition, liquidity, ability to finance planned capital expenditures and results of operations. Further, crude oil and natural gas prices do not move in tandem. Because approximately 84% of our proved reserves at June 30, 2011 are crude oil reserves and 5% are natural gas liquids reserves, we are heavily impacted by movements in crude oil prices, which also influence natural gas liquids prices.

Oil field service and materials' prices may increase, and the availability of such services may be inadequate to meet our needs.

Our business plan to develop or redevelop crude oil and natural gas resources requires third party oilfield service vendors and various materials such as steel tubulars, which we do not control. Long lead times and spot shortages may prevent us from, or delay us in, maintaining or increasing the production volumes we expect. In addition, if costs for such services and materials increase, it may render certain or all of our projects uneconomic, as compared to the earlier prices we may have assumed when deciding to redevelop newly purchased or existing properties. Further adverse economic outcomes may result from the long lead times often necessary to execute and complete our redevelop plans.

7

Table of Contents

Government regulation and liability for environmental matters may adversely affect our business and results of operations.

Crude oil and natural gas operations are subject to extensive federal, state and local government regulations, which may be changed from time to time. Matters subject to regulation include discharge permits for drilling operations, drilling bonds, reports concerning operations, the spacing of wells, unitization and pooling of properties and taxation. From time to time, regulatory agencies have imposed price controls and limitations on production by restricting the rate of flow of crude oil and natural gas wells below actual production capacity in order to conserve supplies of crude oil and natural gas. There are federal, state and local laws and regulations primarily relating to protection of human health and the environment applicable to the development, production, handling, storage, transportation and disposal of crude oil and natural gas, by-products thereof and other substances and materials produced or used in connection with crude oil and natural gas operations. In addition, we may inherit liability for environmental damages, whether actual or not, caused by previous owners of property we purchase or lease or nearby properties. As a result, we may incur substantial liabilities to third parties or governmental entities. We are also subject to changing and extensive tax laws, the effects of which cannot be predicted. The implementation of new, or the modification of existing, laws or regulations could have a material adverse affect on us, such as diminishing the demand for our products through legislative enactment of proposed new penalties, fines and/or taxes on carbon that could have the effect of raising prices to the end user.

For example, currently proposed federal legislation, that, if adopted, could adversely affect our business, financial condition and results of operations, includes the following:

· Hydraulic Fracturing. The U.S. Congress, the EPA and various states are currently considering legislation that could adversely affect the use of the hydraulic-fracturing process. Currently, regulation of hydraulic fracturing is primarily conducted at the state level through permitting and other compliance requirements. This legislation, if adopted, could establish an additional level of regulation, permitting and restrictions at the federal level, that could adversely affect the development of unconventional oil and natural gas resources.

We could be adversely affected by a weak domestic or global economy.

The current anemic recovery from a recessionary economic environment has limited the recovery in demand for oil and natural gas and, therefore, in commodity prices, particularly natural gas. If the current economic environment continues, lower realized prices may result in our continued or increased operating losses. These factors could negatively impact our operations and may limit our growth.

Risks Associated with Our Stock and the Offering

Our stock price has been and may continue to be very volatile.

Our common stock is thinly traded and the market price has been, and is likely to continue to be, highly volatile. For example, during the year prior to June 30, 2012, our stock price as traded on the NYSE MKT ranged from \$6.01 to \$10.14. The variance in our stock price makes it extremely difficult to forecast with any certainty the stock price at which an investor may be able to buy or sell shares of our common stock. The market price for our common stock could be subject to wide fluctuations as a result of factors that are out of our control, such as:

- · actual or anticipated variations in our results of operations;
- · naked short selling of our common stock and stock price manipulation;
- changes or fluctuations in the commodity prices of crude oil and natural gas;
- · general conditions and trends in the crude oil and natural gas industry; and
- · general economic, political and market conditions.

Our executive officers, directors and affiliates may be able to control the election of our directors and all other matters submitted to our stockholders for approval.

Our executive officers and directors, in the aggregate, beneficially own approximately 6.2 million shares, or

8

Table of Contents

approximately 19% of our beneficial common stock base. JVL Advisors LLC controls approximately 4.5 million shares or approximately 16% of our outstanding common stock. As a result, these holders, could exercise significant influence over matters submitted to our stockholders for approval (including the election and removal of directors and any merger, consolidation or sale of all or substantially all of our assets). This concentration of ownership may have the effect of delaying, deferring or preventing a change in control of our company, impede a merger, consolidation, takeover or other business combination involving our company or discourage a potential acquirer from making a tender offer or otherwise attempting to obtain control of our company, which in turn could have an adverse effect on the market price of our common stock.

The market for our common stock is limited and may not provide adequate liquidity.

Our common stock is currently thinly traded on the NYSE MKT. In the year prior to June 30, 2012, the actual daily trading volume in our common stock ranged from 20,900 shares of common stock to a high of 390,300 shares of common stock traded, with 194 days exceeding a trading volume of 50,000 shares. On most days, this trading volume means there is limited liquidity in our shares of common stock. Selling our shares is more difficult because smaller quantities of shares are bought and sold and news media coverage about us is limited. These factors result in a limited trading market for our common stock and therefore holders of our stock may be unable to sell shares purchased, should they desire to do so.

If securities or industry analyst do not publish research reports about our business, or if they downgrade our stock, the price of our common stock could decline.

Small, relatively unknown companies can achieve visibility in the trading market through research and reports that industry or securities analysts publish. However, to our knowledge, only three independent analysts cover our company. The lack of published reports by independent securities analysts could limit the interest in our common stock and negatively affect our stock price. We do not have any control over the research and reports these analysts publish or whether they will be published at all. If any analyst who does cover us downgrades our stock, our stock price could decline. If any analyst ceases coverage of our company or fails to regularly publish reports on us, we could lose visibility in the financial markets, which in turn could cause our stock price to decline.

The issuance of additional common stock and preferred stock could dilute existing stockholders.

From time to time, we may have an effective shelf registration that allows us to publicly offer various securities, including common or preferred stock, and at any time we may make private offerings of our securities. We are authorized to issue up to 100,000,000 shares of common stock. To the extent of such authorization, our board of directors has the ability, without seeking stockholder approval, to issue additional shares of common stock in the future for such consideration as our board may consider sufficient. The issuance of additional common stock in the future would reduce the proportionate ownership and voting power of the common stock now outstanding. We are also authorized to issue up to 5,000,000 shares of preferred stock, the rights and preferences of which may be designated in series by our board of directors, of which, at least 317,319 shares of Series A Preferred Stock are issued and outstanding as of August 31, 2012. Such designation of new series of preferred stock may be made without stockholder approval, and could create additional securities which would have dividend and liquidation preferences over the common stock now outstanding. Preferred stockholders could adversely affect the rights of holders of common stock by:

- · exercising voting, redemption and conversion rights to the detriment of the holders of common stock;
- · receiving preferences over the holders of common stock regarding our surplus funds in the event of our dissolution, liquidation or the payment of dividends to Preferred stockholders;
- · delaying, deferring or preventing a change in control of our company; and
- · discouraging bids for our common stock.

We do not plan to pay any cash dividends on our common stock.

We have not paid any dividends on our common stock to date and do not anticipate that we will be paying dividends in the foreseeable future. Any payment of cash dividends on our common stock in the future will be dependent upon

9

Table of Contents

the amount of funds legally available, our earnings, if any, our financial condition, restrictions contained in our Series A preferred stock and any debt instruments, our anticipated capital requirements and other factors that our board of directors may think are relevant. However, we currently intend for the

foreseeable future to follow a policy of retaining all of our earnings, if any, to finance the development and expansion of our business and, therefore, do not expect to pay any dividends on our common stock in the foreseeable future.

FORWARD-LOOKING STATEMENTS

This document contains forward-looking statements, which reflect the views of our management with respect to future events and financial performance. Certain of the statements contained in all parts of this document including, but not limited to, those relating to our acquisition and development plans, the effect of changes in strategy and business discipline, our project portfolio, future general and administrative expenses on a per unit of production basis, increases in wells operated, future growth, expansion and acquisitions, future exploration, future seismic data (including timing and results), purchase of technology licenses and their value and application, expansion of operations, generation of additional prospects, review of outside generated prospects and acquisitions, additional reserves and reserve increases, enhancement of visualization and interpretation strengths, expansion and improvement of capabilities, integration of new technology into operations, credit facilities, attraction of new members to our exploration team, future compensation programs, new focus on core areas, new prospects and drilling locations, future capital expenditures (or funding thereof), sufficiency of future working capital, borrowings and capital resources and liquidity, projected cash flows from operations, expectation or timing of reaching payout, outcome, effects or timing of any legal proceedings, drilling plans, including scheduled and budgeted wells, the number, timing or results of any wells, the plans for timing, interpretation and results of new or existing seismic surveys or seismic data, future production or reserves, future acquisition of leases, lease options or other land rights and any other statements regarding future operations, financial results, opportunities, growth, business plans and strategy and other statements that are not historical facts are forward looking.

These forward-looking statements reflect our current view of future events and financial performance. When used in this document, the words "budgeted," "anticipate," "estimate," "expect," "may," "project," "believe," "intend," "plan," "potential" and similar expressions are intended to be among the statements that identify forward looking statements. These forward-looking statements speak only as of their dates and should not be unduly relied upon. We undertake no obligation to update or review any forward-looking statement, whether as a result of new information, future events, or otherwise. Such statements involve risks and uncertainties, including, but not limited to, the numerous risks and substantial and uncertain costs associated with drilling of new wells, the volatility of crude oil and natural gas prices and the effects of relatively low prices for our products, conducting successful exploration and development in order to maintain reserves and revenue in the future, operating risks of crude oil and natural gas operations, our dependence on key personnel, our ability to utilize changing technology and the risk of technological obsolescence, the significant capital requirements of our exploration and development and technology development programs, governmental regulation and liability for environmental matters, results of litigation, management of growth and the related demands on our resources and the ability to achieve future growth, competition from larger crude oil and natural gas companies, the potential inaccuracy of estimates of crude oil and natural gas reserve data, property acquisition risks, and other factors detailed in this prospectus. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual outcomes will likely vary materially from those indicated. For a discussion of some of the factors that may cause actual results to differ materially from those suggested by the forward-looking statements, please read carefully the informa

You may rely only on the information contained in this prospectus. We have not authorized anyone to provide information different from that contained in this prospectus. Neither the delivery of this prospectus nor the sale of common stock means that information contained in this prospectus is correct after the date of this prospectus. This prospectus is not an offer to sell or solicitation of an offer to buy these securities in any circumstances under which the offer or solicitation is unlawful.

10

Table of Contents

USE OF PROCEEDS

We will not receive any proceeds from the resale of our common stock by the Selling Stockholders pursuant to this prospectus. However, we will receive the sale price of any common stock we sell to the Selling Stockholders upon exercise by them of their warrants. If options to purchase all of the underlying 3,312,490 shares are exercised for cash, we would receive a maximum of approximately \$5,930,760 of total proceeds. If warrants to purchase all of the underlying 1,037,500 shares are exercised for cash, we would receive a maximum of approximately \$1,615,000 of total proceeds. These amounts, and the number of shares issued upon exercise of the options and warrants, may be reduced to the extent that the holders elect to pay for the exercise by canceling a portion of the options or warrants as may be provided under some of the agreements or as may be approved by the Plan Administrator on a case-by-case basis. We would expect to use these proceeds, if any, for general working capital purposes. We have agreed to pay the expenses of registration of these shares, including specified legal and accounting fees.

SELLING STOCKHOLDERS

We are registering our shares of common stock in order to permit the Selling Stockholders to offer the shares for resale from time to time. The table below lists the Selling Stockholders and other information regarding the beneficial ownership of our shares of common stock by each of the Selling Stockholders, including the number of shares of our common stock beneficially owned by each Selling Stockholder as of September 5, 2012.

Each of the Selling Stockholders is currently, or has been within the past three years, an employee, officer, director or consultant of ours or of our predecessors or affiliates. The shares being registered for reoffer and resale were acquired by the Selling Stockholders named below pursuant to the Amended and Restated 2004 Stock Plan, the 2003 Stock Option Plan, Revocable Warrant Agreement or Warrant Agreement.

Name of Selling Stockholder	Position	Number of Shares Beneficially Owned	Number of Shares Offered	Number of Shares Beneficially Owned After Offering (12)	Percentage of Shares Beneficially Owned After Offering (1)
Robert Herlin (2)	Chief Executive Officer and				
	President	3,097,955(3)	2,097,955(4)	1,000,000	3.6%
Sterling McDonald (2)	Chief Financial Officer, Vice				
	President & Treasurer	1,271,108(5)	1,271,108	0	*
Daryl Mazzanti (2)	Vice President Operations	1,136,626(6)	1,136,626	0	*
Gene Stoever (2)	Director	250 974(7)	250 974	0	*

Edward DiPaolo (2)	Director	250,974(8)	250,974	0	*
William Dozier (2)	Director	197,974(9)	197,974	0	*
Laird Cagan (2)	Director	83,292(10)	16,866	66,426	*
Kelly Loyd (2)	Director	6,849(11)	6,849	0	*

^{*} Less than 1%

- (1) Based on 27,897,736 shares outstanding on September 5, 2012.
- (2) Address: c/o Evolution Petroleum Corporation, 2500 CityWest Boulevard, Suite 1300, Houston, Texas 77042.
- (3) Includes (i) 1,000,000 shares directly held by Mr. Herlin; (ii) 1,097,210 shares which are issuable upon exercise of options that are presently exercisable or exercisable by September 5, 2012; (iii) 687,500 shares which are issuable upon exercise of warrants that are presently exercisable or exercisable by September 5, 2012; and (iv) 313,245 shares of restricted stock of which 109,859 shares are subject to forfeiture.

11

Table of Contents

- (4) Includes (i) 1,097,210 shares which are issuable upon exercise of options; (ii) 687,500 shares which are issuable upon exercise of warrants; and (iii) 314,044 shares of restricted stock of which 109,859 shares are subject to forfeiture.
- (5) Includes (i) 967,140 shares which are issuable upon exercise of options that are presently exercisable or exercisable by September 5, 2012; (ii) 150,000 shares which are issuable upon exercise of warrants that are presently exercisable or exercisable by September 5, 2012; and (iii) 153,968 shares of restricted stock of which 54,144 shares are subject to forfeiture.
- (6) Includes (i) 25,000 shares directly held by Mr. Mazzanti; (ii) 767,140 shares which are issuable upon exercise of options that are presently exercisable or exercisable by September 5, 2012; (iii) 200,000 shares which are issuable upon exercise of warrants that are presently exercisable by September 5, 2012; and (iv) 144,486 shares of restricted stock of which 54,144 shares are subject to forfeiture.
- (7) Includes (i) 72,974 shares directly held by Mr. Stoever; of which 6,849 shares are subject to forfeiture provision through December 5, 2012 and (ii) 178,000 shares which are issuable upon exercise of options that are presently exercisable.
- (8) Includes (i) 72,974 shares directly held by Mr. DiPaolo; of which 6,849 shares are subject to forfeiture provision through December 5, 2012 and (ii) 178,000 shares which are issuable upon exercise of options that are presently exercisable.
- (9) Includes (i) 72,974 shares directly held by Mr. Dozier; of which 6,849 shares are subject to forfeiture provision through December 5, 2012 and (ii) 125,000 shares which are issuable upon exercise of options that are presently exercisable.
- (10) Includes (i) 82,127 shares directly held by Mr. Cagan; of which 6,849 shares are subject to forfeiture provision through December 5, 2012 and (ii) 1,165 shares which are issuable upon exercise of warrants that are presently exercisable.
- (11) Includes 6,849 shares directly held by Mr. Loyd, of which 6,849 shares are subject to forfeiture provision through December 5, 2012.
- (12) Assumes all the shares offered hereby are sold to persons who are not affiliates of the Selling Stockholders and the Selling Stockholders sell no other shares they beneficially own.

PLAN OF DISTRIBUTION

We are registering shares of our common stock to permit the resale of these shares of our common stock by the holders of such shares of our common stock from time to time after the date of this prospectus. We will not receive any of the proceeds from the sale by the Selling Stockholders of the shares of our common stock, other than the sale price of any common stock we sell to Selling Stockholders upon the exercise of their options or warrants. We will bear all fees and expenses incident to our obligation to register the shares of our common stock.

The Selling Stockholders may sell all or a portion of the shares of our common stock owned by them and offered hereby from time to time directly or through one or more underwriters, broker-dealers or agents. If the shares of our common stock are sold through underwriters or broker-dealers, the Selling Stockholders will be responsible for underwriting discounts or commissions or agent's commissions. The shares of our common stock may be sold in one or more transactions at fixed prices, at prevailing market prices at the time of the sale, at varying prices determined at the time of sale, or at negotiated prices. These sales may be effected in transactions, which may involve crosses or block transactions,

- · on any national securities exchange or quotation service on which the securities may be listed or quoted at the time of sale;
- · in the over-the-counter market;

12

Table of Contents

- · in transactions otherwise than on these exchanges or systems or in the over-the-counter market;
- · through the writing of options, whether such options are listed on an options exchange or otherwise;
- · in ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;

- · block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- · purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- · an exchange distribution in accordance with the rules of the applicable exchange;
- · privately negotiated transactions;
- · short sales (provided that no short sales shall occur prior to the effectiveness of this Registration Statement and prospectus);
- · sales pursuant to Rule 144;
- · broker-dealers may agree with the Selling Stockholders to sell a specified number of such shares at a stipulated price per share;
- · a combination of any such methods of sale; and
- · any other method permitted pursuant to applicable law.

If the Selling Stockholders effect such transactions by selling shares of our common stock to or through underwriters, broker-dealers or agents, such underwriters, broker-dealers or agents may receive commissions in the form of discounts, concessions or commissions from the Selling Stockholders or commissions from purchasers of the shares of our common stock for whom they may act as agent or to whom they may sell as principal (which discounts, concessions or commissions as to particular underwriters, broker-dealers or agents may be in excess of those customary in the types of transactions involved). In connection with sales of the shares of our common stock or otherwise, the Selling Stockholders may enter into hedging transactions with broker-dealers or others, which may in turn engage in short sales of the shares of our common stock in the course of hedging in positions they assume. The Selling Stockholders may also sell shares of our common stock short and deliver shares of our common stock covered by this prospectus to close out short positions and to return borrowed shares in connection with such short sales. The Selling Stockholders may also loan or pledge shares of our common stock to broker-dealers or others that in turn may sell such shares.

The Selling Stockholders may pledge or grant a security interest in some or all of the shares of our common stock owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell the shares of our common stock from time to time pursuant to this prospectus or any amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act of 1933, amending, if necessary, the list of Selling Stockholders to include the pledgee, transferee or other successors in interest as Selling Stockholders under this prospectus. The Selling Stockholders also may transfer and donate the shares of our common stock in other circumstances in which case the transferees, donees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this prospectus.

The Selling Stockholders and any broker-dealer participating in the distribution of the shares of our common stock may be deemed to be "underwriters" within the meaning of the Securities Act, and any commission paid, or any discounts or concessions allowed to, any such broker-dealer may be deemed to be underwriting commissions or discounts under the Securities Act. At the time a particular offering of the shares of our common

13

Table of Contents

stock is made, a prospectus supplement, if required, will be distributed which will set forth the aggregate amount of shares of our common stock being offered and the terms of the offering, including the name or names of any broker-dealers or agents, any discounts, commissions and other terms constituting compensation from the Selling Stockholders and any discounts, commissions or concessions allowed or reallowed or paid to broker-dealers.

Under the securities laws of some states, the shares of our common stock may be sold in such states only through registered or licensed brokers or dealers. In addition, in some states the shares of our common stock may not be sold unless such shares have been registered or qualified for sale in such state or an exemption from registration or qualification is available and is complied with.

We cannot assure you that any Selling Stockholder will sell any or all of the shares of our common stock registered pursuant to the shelf Registration Statement, of which this prospectus forms a part.

The Selling Stockholders and any other person participating in such distribution will be subject to applicable provisions of the Securities Exchange Act of 1934, as amended, and the rules and regulations there under, including, without limitation, Regulation M of the Exchange Act, which may limit the timing of purchases and sales of any of the shares of our common stock by the Selling Stockholders and any other participating person. Regulation M may also restrict the ability of any person engaged in the distribution of the shares of our common stock to engage in market-making activities with respect to the shares of our common stock and the ability of any person or entity to engage in market-making activities with respect to the shares of our common stock.

We will pay all expenses of the registration of the shares of our common stock pursuant to various registration rights agreements, including, without limitation, Commission filing fees and expenses of compliance with state securities or "blue sky" laws; provided, however, that a Selling Stockholder will pay all underwriting discounts and selling commissions, if any.

Once sold under the shelf Registration Statement, of which this prospectus forms a part, the shares of our common stock will be freely tradable in the hands of persons other than our affiliates.

LEGAL MATTERS

The law firm of Adams and Reese LLP will render an opinion with respect to the validity of the shares of our common stock covered by this prospectus.

EXPERTS

Our financial statements for the twelve month period ended June 30, 2011 and the twelve month period ended June 30, 2010 have been audited by Hein & Associates, LLP to the extent and for the periods indicated in their report thereon which is incorporated by reference into this prospectus. Such financial statements are incorporated by reference into this prospectus in reliance upon the report of Hein & Associates, LLP and upon the authority of such firm as experts in auditing and accounting.

Oil and gas reserve quantities and future net revenues information incorporated by reference in this prospectus and Registration Statement were extracted from reports prepared by W. D. Von Gonten & Co., DeGolyer and MacNaughton, and Lee Keeling & Associates, Inc., our independent petroleum engineers.

14

Table of Contents

INFORMATION INCORPORATED BY REFERENCE

The Commission allows us to incorporate by reference the information we file with it, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus, and information that we later file with the Commission will automatically update and supersede that information.

We incorporate by reference into this prospectus the following documents:

- · Our Current Report on Form 8-K filed on November 14, 2011 December 9, 2011, February 9, 2012, March 6, 2012, April 23, 2012, August 10, 2012 and August 21, 2012;
- · Our Quarterly Report on Form 10-Q for the quarter ended March 31, 2012 filed on May 10, 2012;
- · Our Quarterly Report on Form 10-Q for the quarter ended December 31, 2011 filed on February 9, 2012;
- · Our Quarterly Report on Form 10-Q for the quarter ended September 30, 2011 filed on November 9, 2011;
- · Our Annual Report on Form 10-K for the fiscal year ended June 30, 2011 filed on September 13, 2011;
- · The description of our preferred stock as described in our Registration Statement on Form 8-A filed on June 29, 2011 and any amendment or report filed for the purpose of updating any such description; and
- The description of our common stock as described in our Registration Statement on Form 8-A filed on July 13, 2006 and any amendment or report filed for the purpose of updating any such description.

Additionally, all documents that we file pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Securities Exchange Act of 1934, as amended, after the date of this prospectus and before the termination or completion of this offering shall be deemed to be incorporated by reference into this prospectus from the respective dates of filing of such documents. Any information that we subsequently file with the Commission that is incorporated by reference as described above will automatically update and supersede any previous information that is part of this prospectus.

The Company will provide to each person to whom this prospectus is delivered, upon written or oral request by such person, a copy of any or all of the information that has been incorporated by reference in this prospectus but not delivered with this prospectus. You may make such requests at no cost to you by writing or calling our Corporate Secretary at the following address or telephone number: Evolution Petroleum Corporation, 2500 CityWest Blvd., Suite 1300, Houston, Texas 77042; (713) 935-0122. Our website is http://www.evolutionpetroleum.com.

GLOSSARY OF SELECTED PETROLEUM TERMS

The following abbreviations and definitions are terms commonly used in the crude oil and natural gas industry and throughout this prospectus:

- "BBL." A standard measure of volume for crude oil and liquid petroleum products; one barrel equals 42 U.S. gallons.
- "BCF." Billion Cubic Feet of natural gas at standard temperature and pressure.
- "BOE." Barrels of oil equivalent. BOE is calculated by converting 6 MCF of natural gas to 1 BBL of oil.
- "BTU" or "British Thermal Unit." The standard unit of measure of energy equal to the amount of heat required to raise the temperature of one pound of water 1 degree Fahrenheit. One Bbl of crude is typically 5.8 MMBTU, and one standard MCF is typically one MMBTU.
- "CO2." Carbon dioxide, a gas that can be found in naturally occurring reservoirs, typically associated with ancient volcanoes, and also is a major byproduct from manufacturing and power production also utilized in enhanced oil recovery through injection into an oil reservoir.
- "Developed Reserves." Reserves of any category that can be expected to be recovered (i) through existing

15

Table of Contents

wells with existing equipment and operating methods or in which the cost of the required equipment is relatively minor compared to the cost of a new well; and (ii) through installed extraction equipment and infrastructure operational at the time of the reserves estimate if the extraction is by means not

involving a well.

- "EOR." Enhanced Oil Recovery projects involve injection of heat, miscible or immiscible gas, or chemicals into oil reservoirs, typically following full primary and secondary waterflood recovery efforts, in order to gain incremental recovery of oil from the reservoir.
- "Field ." An area consisting of a single reservoir or multiple reservoirs all grouped on or related to the same individual geologic structural feature and/or stratigraphic feature. *
- "Farmout." Sale or transfer of all or part of the operating rights from the working interest owner (the assignor or farm-out party), to an assignee (the farm-in party) who assumes all or some of the burden of development, in return for an interest in the property. The assignor may retain an overriding royalty or any other type of interest. For Federal tax purposes, a farm-out may be structured as a sale or lease, depending on the specific rights and carved out interests retained by the assignor.
- "Gross Acres or Gross Wells." The total acres or number of wells participated in, regardless of the amount of working interest owned.
- "Horizontal Drilling" Involves drilling horizontally out from a vertical well bore, thereby potentially increasing the area and reach of the well bore that is in contact with the reservoir.
- "Hydraulic Fracturing" Involves pumping a fluid with or without particulates into a formation at high pressure, thereby creating fractures in the rock and leaving the particulates in the fractures to ensure that the fractures remain open, thereby potentially increasing the ability of the reservoir to produce oil or gas.
- "LOE." Means lease operating expense(s), a current period expense incurred to operate a well.
- "MBOE." One thousand barrels of oil equivalent.
- "MCF." One thousand cubic feet of natural gas at standard conditions, being approximately sea level pressure and 60 degrees Fahrenheit temperature. Standard pressure in the state of Louisiana is deemed to be 15.025 psi by regulation, but varies in other states.
- "MMBTU." One million British thermal units.
- "MMCF." One million cubic feet of natural gas at standard temperature and pressure.
- "Mineral Royalty Interest." A royalty interest that is retained by the owner of the minerals underlying a lease. See "Royalty Interest".
- "Net Acres or Net Wells." The sum of the fractional working interests owned in gross acres or gross wells.
- "NGL." Natural gas liquids, being the combination of ethane, propane, butane and natural gasolines that can be removed from natural gas through processing, typically through refrigeration plants that utilize low temperatures, or through J-T plants that utilize compression, temperature reduction and expansion to a lower pressure.
- "NYMEX." New York Mercantile Exchange.
- "Operator." An oil and gas joint venture participant that manages the joint venture, pays venture costs and bills the venture's non-operators for their share of venture costs. The operator is also responsible to market all oil and gas production, except for those non-operators who take their production in-kind.

16

Table of Contents

- "Overriding Royalty Interest or ORRI." A royalty interest that is created out of the operating or working interest. Unlike a royalty interest, an overriding royalty interest terminates with the operating interest from which it was created or carved out of. See "Royalty Interest".
- "Permeability." The measure of ease with which a fluid can move through a reservoir. The unit of measure is a darcy, or any metric derivation thereof, such as a millidarcy, where one darcy equals 1,000 millidarcys. Extremely low permeability of 10 millidarcys, or less, are often associated with source rocks, such as shale, making extraction of hydrocarbons more difficult, than say sandstone traps, where permeability can be one to two darcys or more.
- "Porosity." (of sand or sandstone). The relative volume of the pore space (or open area) compared to the total bulk volume of the reservoir, stated in percent. Higher porosity rocks provide more storage space for hydrocarbon accumulations than lower porosity rocks in a given cubic volume of reservoir.
- "Probable Developed Producing Reserves." Probable Reserves that are Developed and Producing. *
- "Probable Reserves." Additional reserves that are less certain to be recovered than Proved Reserves but which, together with Proved Reserves, are as likely as not to be recovered. *
- "Producing Reserves." Any category of reserves that have been developed and production has been initiated. *
- "Proved Developed Reserves." Proved Reserves that can be expected to be recovered (i) through existing wells with existing equipment and operating methods or in which the cost of the required equipment is relatively minor compared to the cost of a new well; and (ii) through installed extraction equipment and infrastructure operational at the time of the reserves estimate if the extraction is by means not involving a well.
- "Proved Developed Nonproducing Reserves ("PDNP")." Proved Reserves that have been developed and no material amount of capital expenditures are required to bring on production, but production has not yet been initiated due to timing, markets, or lack of third party completed connection to a

gas sales pipeline. *

"Proved Developed Producing Reserves ("PDP")." Proved Reserves that have been developed and production has been initiated. *

"Proved Reserves." Estimated quantities of crude oil, natural gas, and natural gas liquids which geological and engineering data demonstrate with reasonable certainty to be recoverable in future years from known reservoirs under existing economic, operating methods, and government regulations prior to the time at which contracts providing the right to operate expire, unless evidence indicates that renewal is reasonably certain, regardless of whether deterministic or probabilistic methods are used for the estimation. The project to extract the hydrocarbons must have commenced or the operator must be reasonably certain that it will commence the project within a reasonable time. *

"Proved Undeveloped Reserves ("PUD")." Proved 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. *

- (i) Reserves on undrilled acreage shall be limited to those directly offsetting development spacing areas that are reasonably certain of production when drilled, unless evidence using reliable technology exists that establishes reasonable certainty of economic producibility at greater distances.
- (ii) Undrilled locations can be classified as having undeveloped reserves only if a development plan has been adopted indicating that they are scheduled to be drilled within five years, unless the specific circumstances, justify a longer time.
- (iii) Under no circumstances shall estimates for undeveloped reserves be attributable to any acreage

17

Table of Contents

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.

"PSI," or pounds per square inch, a measure of pressure. Pressure is typically measured as "psig", or the pressure in excess of standard atmospheric pressure.

"Present Value." When used with respect to oil and gas reserves, present value means the estimated future net revenues computed by applying current prices of oil and gas reserves (with consideration of price changes only to the extent provided by contractual arrangements) to estimated future production of proved oil and gas reserves as of the date of the latest balance sheet presented, less estimated future expenditures (based on current costs to be incurred in developing and producing the proved reserves) computed using a discount factor and assuming continuation of existing economic conditions.

"Productive Well." A well that is producing oil or gas or that is capable of production.

"PV-10." Means the present value, discounted at 10% per annum, of future net revenues (estimated future gross revenues less estimated future costs of production, development, and asset retirement costs) associated with reserves and is not necessarily the same as market value. PV-10 does not include estimated future income taxes. Unless otherwise noted, PV-10 is calculated using the pricing scheme as required by the Securities and Exchange Commission ("SEC"). PV-10 of proved reserves is calculated the same as the standardized measure of discounted future net cash flows, except that the standardized measure of discounted future net cash flows includes future estimated income taxes discounted at 10% per annum. See the definition of standardized measure of discounted future net cash flows.

"Royalty" or "Royalty Interest." 1) The mineral owner's share of oil or gas production (typically between 1/8 and 1/4), free of costs, but subject to severance taxes unless the lessor is a government. In certain circumstances, the royalty owner bears a proportionate share of the costs of making the natural gas saleable, such as processing, compression and gathering. 2) When a royalty interest is coterminous with and carved out of an operating or working interest, it is an "Overriding Royalty Interest," which also may generically be referred to as a Royalty.

"Shut-in Well." A well that is not on production, but has not yet been plugged and abandoned. Wells may be shut-in in anticipation of future utility as a producing well, plugging and abandonment or other use.

"Standardized Measure." The standardized measure of discounted future net cash flows (the "Standardized Measure") is an estimate of future net cash flows associated with proved reserves, discounted at 10% per annum. Future net cash flows is calculated by reducing future net revenues by estimated future income tax expenses and discounting at 10% per annum. The Standardized Measure and the PV-10 of proved reserves is calculated in the same exact fashion, except that the Standardized Measure includes future estimated income taxes discounted at 10% per annum. The Standardized Measure is in accordance with accounting standards generally accepted in the United States of America ("GAAP").

"Undeveloped Reserves." 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. *

"Working Interest." The interest in the oil and gas in place which is burdened with the cost of development and operation of the property. Also called the operating interest.

"Workover." A remedial operation on a completed well to restore, maintain or improve the well's production.

^{*} This definition may be an abbreviated version of the complete definition as defined by the SEC in Rule 4-10(a) of Regulation S-X.

WHERE YOU CAN FIND MORE INFORMATION

We are subject to the information and periodic reporting requirements of the Exchange Act, and, in accordance with that act, file periodic reports, proxy statements and other information with the Commission. The periodic reports, proxy statements and other information filed by us are available for inspection and copying at prescribed rates at the Commission's Public Reference Room at Headquarters Office, 100 F Street, NE, Room 1580, Washington, DC 20549. Please call the Commission at 1-800-SEC-0330 for further information about the operation of the Commission's Public Reference Room. The Commission also maintains an Internet site that contains all reports, proxy statements and other information that we file electronically with the Commission. The address of that website is http://www.sec.gov. You may obtain a copy of any of these documents at no cost, by writing or calling us at the following address or telephone number: Evolution Petroleum Corporation, 2500 CityWest Blvd., Suite 1300, Houston, Texas 77042; (713) 935-0122. Our website is http://www.evolutionpetroleum.com.

We have filed with the Commission a Registration Statement on Form S-8 under the Securities Act for the common stock offered under this prospectus. The Registration Statement, including the exhibits to the Registration Statement, contains additional information about us and the common stock offered by this prospectus. The rules and regulations of the Commission allow us to omit from this prospectus certain information that is included in the Registration Statement. For further information about us and our common stock, you should review the Registration Statement and the exhibits filed with the Registration Statement.

DISCLOSURE OF COMMISSION POSITION ON INDEMNIFICATION FOR SECURTIES ACT LIABILITIES

Pursuant to Nevada Revised Statutes Section 78.751 and 78.7502, we must indemnify any of our directors, officers, employees or agents who is successful on the merits or otherwise in defense of any action or suit. This indemnification includes expenses, including attorney's fees actually or reasonably incurred. Nevada law also provides for discretionary indemnification for each person who serves as or at our request as our officer or director. We may indemnify these individuals against all costs, expenses, and liabilities incurred in a threatened, pending, or completed action, suit or proceeding brought because the individual is our director or officer. The individual must have conducted himself in good faith and reasonably believed that his conduct was in, or not opposed to, our best interests. In a criminal action he must not have had a reasonable cause to believe his conduct was unlawful.

Our Articles of Incorporation provide that no officer or director shall be personally liable to our corporation or our stockholders for monetary damages except as provided pursuant to Nevada law. Our Bylaws and Articles of Incorporation also provide that we shall indemnify and hold harmless each person who serves at any time as a director, officer, employee or agent of our company from and against any and all claims, judgments and liabilities to which such person shall become subject by reason of the fact that he is or was a director, officer, employee or agent of our company, and shall reimburse such person for all legal and other expenses reasonably incurred by him or her in connection with any such claim or liability. In addition, we may maintain liability insurance for those persons. We also have the power to defend such person from all suits or claims in accord with Nevada law. The rights accruing to any person under our Bylaws and Articles of Incorporation do not exclude any other right to which any such person may lawfully be entitled, and we may indemnify or reimburse such person in any proper case, even though not specifically provided for by our bylaws or articles of incorporation.

Further, we have outstanding indemnification agreements with our officers and directors. In general, the indemnification agreements provide that the Company will, to the fullest extent permitted by Nevada law and subject to certain limitations, indemnify the director or officer against certain expenses (including attorneys' fees), judgments, fines, penalties and settlement amounts that may be incurred in connection with the defense or settlement of any claim, criminal, civil or administrative action or proceeding to which the director or officer becomes subject in connection with his service as a director or officer of the Company. The agreements provide for indemnification rights regarding both third-party claims and proceedings brought by or in the right of the Company. In addition, each indemnification agreement provides for the advancement of expenses incurred by the indemnitee in connection with any proceeding covered by the agreement to the fullest extent permitted by Nevada law. The indemnification agreements supersede all prior indemnification agreements entered into with the directors and officers. The

19

Table of Contents

indemnification agreements do not exclude any other rights to indemnification or advancement of expenses to which the indemnitees may be entitled, including any rights arising under the Articles of Incorporation or By-Laws of the Company, or Nevada law.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the Company pursuant to the foregoing provisions, or otherwise, the Company has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933 and is, therefore, unenforceable.

20

Table of Contents

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The following documents previously filed by Evolution Petroleum Corporation (formerly named Natural Gas Systems, Inc.), a Nevada corporation (the "Company"), with the Securities and Exchange Commission (the "Commission") under the Securities Exchange Act of 1934, as amended, are incorporated by reference into this Registration Statement:

- · Our Current Report on Form 8-K filed on November 14, 2011 December 9, 2011, February 9, 2012, March 6, 2012, April 23, 2012, August 10, 2012 and August 21, 2012;
- Our Quarterly Report on Form 10-Q for the quarter ended March 31, 2012 filed on May 10, 2012;
- · Our Quarterly Report on Form 10-Q for the quarter ended December 31, 2011 filed on February 9, 2012;
- · Our Quarterly Report on Form 10-Q for the quarter ended September 30, 2011 filed on November 9, 2011;
- · Our Annual Report on Form 10-K for the fiscal year ended June 30, 2011 filed on September 13, 2011;
- · The description of our preferred stock as described in our Registration Statement on Form 8-A filed on June 29, 2011 and any amendment or report filed for the purpose of updating any such description; and
- The description of our common stock as described in our Registration Statement on Form 8-A filed on July 13, 2006 and any amendment or report filed for the purpose of updating any such description.
- · All documents that we file pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Securities Exchange Act of 1934 subsequent to the date hereof and prior to the filing of a post-effective amendment that indicates that all securities offered have been sold or that deregisters all securities then remaining unsold shall be deemed to be incorporated by reference into this Registration Statement and to be part hereof from the date of filing such documents. Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part hereof.

Item 4. Description of Securities.

Not applicable.

Item 5. Interest of Named Experts and Counsel.

None.

Item 6. Indemnification of Directors and Officers.

Pursuant to Nevada Revised Statutes Section 78.751 and 78.7502, we must indemnify any of our directors, officers, employees or agents who is successful on the merits or otherwise in defense of any action or suit. This indemnification includes expenses, including attorney's fees actually or reasonably incurred. Nevada law also provides for discretionary indemnification for each person who serves as or at our request as our officer or director.

21

Table of Contents

We may indemnify these individuals against all costs, expenses, and liabilities incurred in a threatened, pending, or completed action, suit or proceeding brought because the individual is our director or officer. The individual must have conducted himself in good faith and reasonably believed that his conduct was in, or not opposed to, our best interests. In a criminal action he must not have had a reasonable cause to believe his conduct was unlawful.

Our Articles of Incorporation provide that no officer or director shall be personally liable to our corporation or our stockholders for monetary damages except as provided pursuant to Nevada law. Our Bylaws and Articles of Incorporation also provide that we shall indemnify and hold harmless each person who serves at any time as a director, officer, employee or agent of our company from and against any and all claims, judgments and liabilities to which such person shall become subject by reason of the fact that he is or was a director, officer, employee or agent of our company, and shall reimburse such person for all legal and other expenses reasonably incurred by him or her in connection with any such claim or liability. In addition, we may maintain liability insurance for those persons. We also have the power to defend such person from all suits or claims in accord with Nevada law. The rights accruing to any person under our Bylaws and Articles of Incorporation do not exclude any other right to which any such person may lawfully be entitled, and we may indemnify or reimburse such person in any proper case, even though not specifically provided for by our bylaws or articles of incorporation.

Further, we have outstanding indemnification agreements with our officers and directors. In general, the indemnification agreements provide that the Company will, to the fullest extent permitted by Nevada law and subject to certain limitations, indemnify the director or officer against certain expenses (including attorneys' fees), judgments, fines, penalties and settlement amounts that may be incurred in connection with the defense or settlement of any claim, criminal, civil or administrative action or proceeding to which the director or officer becomes subject in connection with his service as a director or officer of the Company. The agreements provide for indemnification rights regarding both third-party claims and proceedings brought by or in the right of the Company. In addition, each indemnification agreement provides for the advancement of expenses incurred by the indemnitee in connection with any proceeding covered by the agreement to the fullest extent permitted by Nevada law. The indemnification agreements supersede all prior indemnification agreements entered into with the directors and officers. The indemnification agreements do not exclude any other rights to indemnification or advancement of expenses to which the indemnitees may be entitled, including any rights arising under the Articles of Incorporation or By-Laws of the Company, or Nevada

Item 7. Exemption from Registration Claimed.

Not applicable.

Item 8. Exhibits.

The following exhibits are filed with this Registration Statement by the Company (formerly named Natural Gas Systems, Inc.) or are incorporated by reference as a part of this Registration Statement:

Natural Gas Systems, a Delaware Corporation, 2003 Stock Option Plan (previously filed on January 24, 2007 as an exhibit to the Company's Form S-8 and incorporated herein by reference).
 Evolution Petroleum Amended and Restated 2004 Stock Plan (previously filed on October 29, 2007 as an exhibit to the Company's Definitive Proxy Statement on Form DEF14A and incorporated herein by reference).
 Amendment to Evolution Petroleum Amended and Restated 2004 Stock Plan (previously filed on October 28, 2011 as an exhibit to the Company's Definitive Proxy Statement on Form DEF14A and incorporated herein by reference).
 Form of Stock Option Agreement for the Natural Gas Systems 2004 Stock Plan (previously filed on April 8, 2005 as an exhibit to

22

Table of Contents

- 4.5 Form of Warrant Agreement (previously filed on April 8, 2005 as an exhibit to the Company's Current Report on Form 8-K and incorporated herein by reference).
- 4.6 Revocable Warrant Agreement (previously filed on June 29, 2005 as an exhibit to the Company's Current Report on Form 8-K and incorporated herein by reference).
- 4.7 Form of Stock Grant Agreement (previously filed on June 29, 2005 as an exhibit to the Company's Current Report on Form 8-K and incorporated herein by reference).
- 4.8 Form of Restricted Stock Agreement (previously filed on May 15, 2009 as an exhibit to the Schedule TO and incorporated herein by reference).
- 5.1 Opinion of Adams and Reese LLP (included with this Registration Statement).

the Current Report on Form 8-K and incorporated herein by reference).

- 23.1 Consent of Hein & Associates LLP (included with this Registration Statement).
- 23.2 Consent of W. D. Von Gonten & Co. (included with this Registration Statement).
- 23.3 Consent of DeGolyer and MacNaughton (included with this Registration Statement).
- 23.4 Consent of Lee Keeling & Associates, Inc. (included with this Registration Statement).
- 23.5 Consent of Adams and Reese LLP (included in the opinion filed as Exhibit 5.1).
- 24.1 Power of Attorney (included on the signature page of this Registration Statement).

Item 9. Undertakings

- (a) The undersigned registrant hereby undertakes:
 - (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:
 - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;
- (ii) To reflect in the prospectus any facts or events arising after the effective date of this Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in this Registration Statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement;
- (iii) To include any material information with respect to the plan of distribution not previously disclosed in this Registration Statement or any material change to such information in this Registration Statement; provided, however, that paragraphs (a)(1)(i) and (a)(1)(ii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed with or furnished to the Commission by the Company pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in this Registration Statement;

23

Table of Contents

- (2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new Registration Statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof; and
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered that remain unsold at the termination of the offering.

- (b) The Company hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the Company's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in this Registration Statement shall be deemed to be a new Registration Statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.
- (c) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the Company pursuant to the foregoing provisions, or otherwise, the Company has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933 and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Company of expenses incurred or paid by a director, officer or controlling person of the Company in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Company will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act of 1933 and will be governed by the final adjudication of such issue.

24

Table of Contents

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in Houston, Texas, on September 6, 2012.

EVOLUTION PETROLEUM CORPORATION

By: /s/ Robert S. Herlin

Robert S. Herlin Chief Executive Officer

POWER OF ATTORNEY

Each person whose signature appears below constitutes and appoints each of Robert S. Herlin and Sterling H. McDonald as his or her true and lawful attorney-in-fact and agent, with full power of substitution, for him or her in any and all capacities, to sign this Registration Statement on Form S-8 and any amendments hereto (including post-effective amendments), and to file the same, with all exhibits thereto and other documents in connection therewith, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agent full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as he or she might do or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent, or his substitute or substitutes, may do or cause to be done by virtue of this power of attorney.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date		
/s/ Robert S. Herlin Robert S. Herlin	Director, Chairman of the Board, Chief Executive Officer and President (Principal Executive Officer)	September 6, 2012		
/s/ Sterling H. McDonald Sterling H. McDonald	Chief Financial Officer, Vice President and Treasurer (Principal Financial Officer and Principal Accounting Officer)	September 6, 2012		
/s/ Laird Q. Cagan Laird Q. Cagan	Director	September 6, 2012		
/s/ William Dozier William Dozier	Director	September 6, 2012		
/s/ Edward DiPaolo Edward DiPaolo	Director	September 6, 2012		
/s/ Gene Stoever Gene Stoever	Director	September 6, 2012		
/s/ Kelly Loyd Kelly Loyd	Director	September 6, 2012		
	25			

EXHIBIT INDEX

The following exhibits are filed with this Registration Statement by the Company (formerly named Natural Gas Systems, Inc.) or are incorporated by reference as a part of this Registration Statement:

Natural Gas Systems, a Delaware Corporation, 2003 Stock Option Plan (previously filed on January 24, 2007 as an exhibit to the 4.1 Company's Form S-8 and incorporated herein by reference). 4.2 Evolution Petroleum Amended and Restated 2004 Stock Plan (previously filed on October 29, 2007 as an exhibit to the Company's Definitive Proxy Statement on Form DEF14A and incorporated herein by reference). Amendment to Evolution Petroleum Amended and Restated 2004 Stock Plan (previously filed on October 28, 2011 as an exhibit to 4.3 the Company's Definitive Proxy Statement on Form DEF14A and incorporated herein by reference). Form of Stock Option Agreement for the Natural Gas Systems 2004 Stock Plan (previously filed on April 8, 2005 as an exhibit to 4.4 the Current Report on Form 8-K and incorporated herein by reference). Form of Warrant Agreement (previously filed on April 8, 2005 as an exhibit to the Company's Current Report on Form 8-K and 4.5 incorporated herein by reference). 4.6 Revocable Warrant Agreement (previously filed on June 29, 2005 as an exhibit to the Company's Current Report on Form 8-K and incorporated herein by reference). Form of Stock Grant Agreement (previously filed on June 29, 2005 as an exhibit to the Company's Current Report on Form 8-K 4.7 and incorporated herein by reference). 4.8 Form of Restricted Stock Agreement (previously filed on May 15, 2009 as an exhibit to the Schedule TO and incorporated herein by reference). 5.1 Opinion of Adams and Reese LLP (included with this Registration Statement). 23.1 Consent of Hein & Associates LLP (included with this Registration Statement). 23.2 Consent of W. D. Von Gonten & Co. (included with this Registration Statement). 23.3 Consent of DeGolyer and MacNaughton (included with this Registration Statement). 23.4 Consent of Lee Keeling & Associates, Inc. (included with this Registration Statement). 23.5 Consent of Adams and Reese LLP (included in the opinion filed as Exhibit 5.1). 24.1 Power of Attorney (included on the signature page of this Registration Statement).

Opinion on Legality

September 6, 2012

Board of Directors Evolution Petroleum Corporation 2500 City West Blvd. Suite 1300 Houston, Texas 77042

RE: Registration Statement on Form S-8 of Evolution Petroleum Corporation — Evolution Petroleum Corporation Amended and Restated 2004 Stock Plan, as amended (the "Plan")

Ladies and Gentlemen:

We have acted as counsel for Evolution Petroleum Corporation, a Nevada corporation (the "Company"), in connection with the referenced Registration Statement on Form S-8 (the "Registration Statement") being filed by the Company with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended, and covering 1,000,000 shares of the Company's common stock, \$0.001 par value per share ("Common Stock") that may be offered and sold pursuant to the grant and exercise of awards under the Plan. We have been requested to furnish this Opinion Letter to be included as Exhibit 5.1 to the Registration Statement.

In the capacity described above, we have considered such matters of law and of fact, including the examination of originals or copies, certified or otherwise identified to our satisfaction, of such records and documents of the Company, certificates of public officials and such other documents as we have deemed appropriate as a basis for the opinion hereinafter set forth. Without limiting the foregoing, we have assumed without verification the genuineness of all signatures on all documents, the authority of the parties (other than the Company) executing such documents, the authenticity of all documents submitted to us as originals, and the conformity to original documents of all documents submitted to us as copies. The opinions set forth herein are based on existing laws, ordinances, rules, regulations, and judicial and administrative decisions as they presently have been interpreted, and we can give no assurances that our opinions would not be different after any change in any of the foregoing occurring after the date hereof. We have assumed without verification that, with respect to the minutes of any meetings of the Board of Directors or any committees thereof of the Company or of the shareholders of the Company that we have examined, due notice of the meetings was given or duly waived, the minutes accurately and completely reflect all actions taken at the meetings and a quorum was present and acting throughout the meetings. We have assumed without verification the accuracy and completeness of all corporate records made available to us by the Company. We express no opinion as to the effect or application of any laws or regulations other than the federal securities law of the United States of America, the laws of the State of Texas, the Nevada Corporation Statutes, and applicable provisions of the Nevada Constitution as in effect on this date.

Based upon the foregoing, upon the assumption that there will be no material changes in the documents we have examined and the matters investigated referred to above, we are of the opinion that the shares of Common Stock to be issued pursuant to the Plan have been duly authorized by all requisite action on the part of the Company and, when issued in accordance with the terms and conditions of the Plan and for legal consideration not less than the consideration the Board of Directors of the Company has determined is adequate, will be legally and validly issued, fully paid and nonassessable.

This Opinion Letter is provided to you for your sole benefit, and may not be relied upon by any other person or for any other purpose without our prior written consent. This letter speaks only as of the date hereof and we have no responsibilities to update or supplement it after such date.

We hereby consent to the filing of this opinion as exhibit 5.1 to the Registration Statement and further consent to the use of our name wherever appearing in the Registration Statement. By giving such consent we do not thereby admit we are in the category of persons where consent is required under Section 7 of the Securities Act of 1933, as amended, or the rules and regulations promulgated thereunder.

Sincerely,

/s/ ADAMS AND REESE LLP

Adams and Reese LLP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this Registration Statement on Form S-8 and related Prospectus of Evolution Petroleum Corporation of our report dated June 30, 2011, relating to our audit of the consolidated financial statements and internal control over financial reporting, which appears in the Annual Report on Form 10-K of Evolution Petroleum Corporation for the year ended June 30, 2011.

We also consent to the reference to our firm under the caption "Experts" in such Prospectus.

Hein & Associates LLP

Houston, Texas September 6, 2012

CONSENT OF INDEPENDENT PETROLEUM ENGINEERS

Evolution Petroleum Corporation 2500 City West Blvd., Suite 1300 Houston, Texas 77042

The firm of W.D. Von Gonten & Co. consents to the incorporation by reference in this Registration Statement on Form S-8 of the use of its name and to the use of its report regarding Evolution Petroleum Corporation Proved Reserves and Future Net Revenues "as of July 1, 2005 through July 1, 2011" in the relevant pages of the 10-K of Evolution Petroleum Corporation for the fiscal year ended June 30, 2011.

W.D. Von Gonten & Co. has no interests in Evolution Petroleum Corporation or in any affiliated companies or subsidiaries and is not to receive any such interest as payment for such reports and has no director, officer or employee otherwise connected with Evolution Petroleum Corporation. Evolution Petroleum Corporation does not employ us on a contingent basis.

Yours truly,

W.D. VON GONTEN & CO. /s/ William D. Von Gonten, Jr.

By: William D. Von Gonten, Jr.

TX #73244 Its: President September 5, 2012

DEGOLYER AND MACNAUGHTON

5001 SPRING VALLEY ROAD SUITE 800 EAST DALLAS, TEXAS 75244

September 4, 2012

Evolution Petroleum Corporation 2500 CityWest Blvd. Suite 1300 Houston, Texas 77042

Ladies and Gentlemen:

We hereby consent to the incorporation by reference "Appraisal Report as of June 30, 2011 on Certain Delhi Field Properties owned by Evolution Petroleum Corporation" (our Report), to the inclusion of information taken from our Report, and to the use of our name in the Registration Statement on Form S-8 of Evolution Petroleum Corporation dated on or about this date.

DeGolyer and MacNaughton has no interests in Evolution Petroleum Corporation or in any affiliated companies or subsidiaries and is not to receive any such interest as payment for such reports. Further, we have no officer or employee otherwise connected with Evolution Petroleum Corporation. Evolution Petroleum Corporation does not employ us on a contingent basis.

Very truly yours,

/s/DeGolyer and MacNaughton/

DeGOLYER and MacNAUGHTON Texas Registered Engineering Firm F-716

LEE KEELING AND ASSOCIATES, INC.

PETROLEUM CONSULTANTS
First Place Tower
15 East Fifth Street, Suite 3500
Tulsa, Oklahoma 74103-4350
(918) 587-5521 Telefax (918) 587-2881

September 5, 2012

CONSENT OF INDEPENDENT PETROLEUM CONSULTANTS

The firm of Lee Keeling & Associates, Inc. consents to the incorporation by reference in this Registration Statement on Form S-8 of the use of its name and to the use of its report entitled "Estimated Reserves and Future Net Revenue Interests Owned By Evolution Petroleum Corporation" with an effective date of June 30, 2011, which appears in the Annual Report on Form 10-K of Evolution Petroleum Corporation for the year ended June 30, 2011.

Lee Keeling & Associates, Inc. has no interests in Evolution Petroleum Corporation or in any affiliated companies or subsidiaries and is not to receive any such interest as payment for such reports and has no director, officer or employee otherwise connected with Evolution Petroleum Corporation. Evolution Petroleum Corporation does not employ us on a contingent basis.

/s/ Lee Keeling & Associates, Inc.

Lee Keeling & Associates, Inc. Oklahoma Registered Engineering Firm CA 49 PE Tulsa, Oklahoma USA