SOLITARIO EXPLORATION & ROYALTY CORP. Form 424B5 May 24, 2013

Filed Pursuant to Rule 424(b)(5) Registration Statement File Number 333-172929

PROSPECTUS SUPPLEMENT (To Prospectus dated March 29, 2011)

136,500 Shares of Common Stock

We are offering a total of up to 136,500 shares of our common stock, par value \$.01 per share ("common stock"), directly to Centennial Minerals Company LLC, a Nevada limited liability company ("CMC"), and John E. and Tammi Carrington ("Carrington") in connection with an amendment to a mineral lease between Mt. Hamilton LLC ("MH-LLC") and CMC and an amendment to a mineral lease between MH-LLC and Carrington (the "Lease Amendments") for the payments due by MH-LLC to CMC and Carrington pursuant to those mineral leases. These leases give us the right to explore, develop and process ores on certain unpatented claims that are contiguous to our Mt. Hamilton mining project that is owned by MH-LLC. The unpatented mining claims subject to the Lease Amendments, currently have no proven and probable reserves and none of the claims are included as part of our currently filed Plan of Operations with the United States Forest Service. We will not receive any cash proceeds from the issuance of the shares. See "Recent Developments" and "Plan of Distribution."

Our common stock is listed on the NYSE MKT under the symbol "XPL." On May 22, 2013, the last reported sale price of our common stock as reported on the NYSE MKT was \$1.08 per share.

Investing in our common stock involves a high degree of risk. You should review carefully the risks and uncertainties described under the heading "Risk Factors" beginning on page S-2 of this prospectus supplement and under similar headings in the other documents that are incorporated by reference into this prospectus supplement and the accompanying prospectus.

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

Per ShareTotalPublic offering price(1)\$1.08\$147,000

⁽¹⁾ The last reported sale price of our common stock as reported on the NYSE MKT on May 22, 2013. We will not receive any cash proceeds from the offering of the shares.

The date of this prospectus supplement is May 23, 2013

You should rely only on the information contained in or incorporated by reference in this prospectus supplement and the accompanying prospectus. We have not authorized anyone to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. We are not making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information appearing in this prospectus supplement, the accompanying prospectus, and the documents incorporated by reference is accurate only as of their respective dates. Our business, financial condition, results of operations and prospects may have changed since those dates.

This prospectus supplement contains summaries of certain provisions contained in some of the documents described herein, and reference is made to the actual documents filed with the United States Securities and Exchange Commission, or SEC, for complete information. You may obtain copies of those documents as described below under "Where You Can Find More Information."

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ABOUT THIS PROSPECTUS SUPPLEMENT

This document is part of the registration statement that we filed with the Securities and Exchange Commission (the "SEC") using a "shelf" registration process and consists of two parts. The first part is this prospectus supplement, including the documents incorporated by reference, which describes the specific terms of this offering. The second part, the accompanying prospectus, including the documents incorporated by reference, gives more general information, some of which may not apply to this offering. Generally, when we refer only to the "prospectus," we are referring to both parts combined. This prospectus supplement may add to, update or change information in the accompanying prospectus and the documents incorporated by reference into this prospectus supplement or the accompanying prospectus.

If information in this prospectus supplement is inconsistent with the accompanying prospectus or with any document incorporated by reference that was filed with the SEC before the date of this prospectus supplement, you should rely on this prospectus supplement. This prospectus supplement, the accompanying prospectus and the documents incorporated into each by reference include important information about us, the securities being offered and other information you should know before investing in our securities. You should also read and consider information in the documents we have referred you to in the section of this prospectus supplement and the accompanying prospectus entitled "Where you can find more information."

You should rely only on this prospectus supplement, the accompanying prospectus and the information incorporated or deemed to be incorporated by reference in this prospectus supplement and the accompanying prospectus. We have not authorized anyone to provide you with information that is in addition to or different from that contained or incorporated by reference in this prospectus supplement and the accompanying prospectus. If anyone provides you with different or inconsistent information, you should not rely on it. We are not offering to sell these securities in any jurisdiction where the offer or sale is not permitted. You should not assume that the information contained or incorporated by reference in this prospectus supplement or the accompanying prospectus is accurate as of any date other than as of the date of this prospectus supplement or the accompanying prospectus, as the case may be, or in the case of the documents incorporated by reference, the date of such documents regardless of the time of delivery of this prospectus supplement and the accompanying prospectus. Our business, financial condition, liquidity, results of operations and prospects may have changed since those dates.

Unless the context otherwise requires, all references to "Solitario," "the Company," "we," "our," "us" or "our company" in this prospectus supplement and the accompanying prospectus refer to Solitario Exploration & Royalty Corp., a Colorado corporation.

DISCLOSURE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement, the accompanying prospectus and the documents we have incorporated by reference contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 that involve risks and uncertainties, as well as assumptions that, if they never materialize or prove incorrect, could cause our results to differ materially from those expressed or implied by such forward-looking statements. All statements other than statements of historical fact are statements that could be deemed forward-looking statements, including any projections of financing needs, revenue, expenses, earnings or losses from operations, or other financial items; any statements of the plans, strategies and objectives of management for future operations; any statements concerning exploration and development plans and timelines; any statements of expectation or belief; and any statements of assumptions underlying any of the foregoing. In addition, forward looking statements may contain the words "believe," "anticipate," "expect," "estimate," "intend," "plan," "project," "will be," "will continue," "will result," "seek," "could," "may,

variations of such words or other words with similar meanings.

The forward-looking statements included in this prospectus supplement represent our estimates as of the date of this prospectus supplement. We specifically disclaim any obligation to update these forward-looking statements in the future, except as required by law. These forward-looking statements should not be relied upon as representing our estimates or views as of any date subsequent to the date of this prospectus supplement.

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(table of contents) SUMMARY

This summary highlights selected information appearing elsewhere in this prospectus supplement or in the accompanying prospectus or incorporated by reference in this prospectus supplement and the accompanying prospectus and does not contain all of the information that may be important to you and does not contain all of the information that may be important to you and does not contain all of the information that may be important to you and does not contain all of the information that may be important to you and does not contain all of the information that may be important to you and does not contain all of the information that may be important to you and does not contain all of the information that you should consider before investing in our securities. This prospectus supplement and the accompanying prospectus include or incorporate by reference information about the securities we are offering as well as information regarding our business and detailed financial data. You should read this prospectus supplement and the accompanying prospectus and the information incorporated by reference herein in their entirety, including the risk factors beginning on page S-2 and the financial statements and related notes.

Our Company

Solitario Exploration & Royalty Corp. ("Solitario") is a development stage company (prior to February 22, 2012 we were an exploration stage company) with a focus on developing the Mt. Hamilton gold project, the acquisition of precious and base metal properties with exploration potential, and the development or purchase of royalty interests. We acquire and hold a portfolio of exploration properties for future sale, joint venture, or to create a royalty prior to the establishment of proven and probable reserves.

In August 2010 we signed a Letter of Intent related to the Mt. Hamilton project and in December 2010 we signed a Limited Liability Company Operating Agreement ("MH-LLC Operating Agreement") to form MH-LLC. Furthermore, we announced on February 22, 2012 the completion of a feasibility study on our Mt. Hamilton project (the "Feasibility Study"), prepared by SRK Consulting (US), Inc. of Lakewood, Colorado ("SRK"). As a result of the completion of the Feasibility Study, we earned an 80% interest in MH-LLC, the 100% owner of the Mt. Hamilton project, and we intend to develop the Mt. Hamilton project, subject to a number of factors including obtaining necessary permits and availability of required capital, none of which is currently in place. The Mt. Hamilton project, located in Nevada, is discussed below under "Ely Gold Investment and the Mt. Hamilton Joint Venture." However, we have never developed a mineral property. We are exploring on other mineral properties that may be developed in the future by us or through a joint venture. We may also evaluate mineral properties to potentially buy a royalty.

Corporate Information

We were incorporated in Colorado on November 15, 1984 under the name Solitario Resources Corporation as a wholly-owned subsidiary of Crown Resources Corporation, or Crown. On June 12, 2008, our shareholders approved an amendment to the Articles of Incorporation to change our name from Solitario Resources Corporation to Solitario Exploration & Royalty Corp. In July 1994, Solitario became a publicly traded company on the Toronto Stock Exchange through its Initial Public Offering. On July 26, 2004, Crown completed a spin-off of its holdings of our shares to its shareholders as part of the acquisition of Crown by Kinross Gold Corporation. Our website address is www.solitarioresources.com. The information contained in, or that can be accessed through, our website is not incorporated by reference into this prospectus supplement and is not part of this prospectus supplement.

Our common stock is listed on the NYSE MKT under the symbol "XPL" and on the Toronto Stock Exchange under the symbol "SLR." Our principal executive offices are located at 4251 Kipling Street, Suite 390, Wheat Ridge, Colorado 80033. Our telephone number is (303) 534-1030.

The Offering

Issuer Solitario Exploration & Royalty Corp.

Common stock	136,500 shares
we are offering	

Common stock	34.783.058 shares of common stock (1)
to be outstanding	34,783,958 shares of common stock (1)
after this	
offering	

Use of proceeds	We will not receive any cash proceeds from the issuance of the shares offered pursuant to this prospectus supplement. The shares are being issued by us directly to CMC and Carrington in connection with an amendment to a mineral lease between MH-LLC and CMC and an amendment to a mineral lease between MH-LLC and Carrington (the "Lease Amendments") for the payments due by MH-LLC to CMC and Carrington pursuant to those mineral leases. These leases give MH-LLC the
	right to explore, develop and process ores on certain unpatented claims that are contiguous to our Mt. Hamilton mining project that is owned by MH-LLC. See "Recent Developments" and "Plan of Distribution."

Risk Factors See "Risk Factors" beginning on page S-2 of this prospectus supplement and the reports we file with the SEC pursuant to the Securities Exchange Act of 1934 (the "Exchange Act"), incorporated by reference in this prospectus supplement and the accompanying prospectus before making an investment in our common stock.

Listing Our common stock is listed on the NYSE MKT under the symbol "XPL" and on the Toronto Stock Exchange under the symbol "SLR."

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(1) The number of shares of common stock to be outstanding after this offering is based on 34,647,458 shares of common stock outstanding as of May 23, 2013 and excludes 2,598,400 shares of common stock issuable upon the exercise of outstanding options, 1,624,748 shares issuable upon the exercise of outstanding warrants and up to 150,000 shares issuable to DHI Minerals (U.S.) Ltd. ("DHI-US") pursuant to the MH-LLC Operating Agreement.

RISK FACTORS

Investing in our securities involves a high degree of risk. You should carefully consider the risks described below and in the documents incorporated by reference into this prospectus supplement and the accompanying prospectus before making a decision to invest in our securities. Some of these factors relate principally to our business and the industry in which we operate. Other factors relate principally to your investment in our securities. The risks and uncertainties described below are not the only ones facing us. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also materially and adversely affect our business and operations. The risks and uncertainties we have described are not the only ones facing our company. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also affect our business operations. The occurrence of any of these risks might cause you to lose all or part of your investment in our common stock. The discussion of risks includes or refers to forward-looking statements; you should read the explanation of the qualifications and limitations on such forward-looking statements discussed elsewhere in this prospectus.

General Risks and Uncertainties

In addition to considering the other information in this Prospectus Supplement, you should consider carefully the following factors. The risks described below are the significant risks we face and include all material risks. Additional risks not presently known to us or risks that we currently consider immaterial may also adversely affect our business.

During 2010 we entered into an agreement with Ely Gold and Minerals, Inc. ("Ely") and as a result of completion of the Feasibility Study in February 2012 have earned an 80% interest in the Mt. Hamilton project through our membership interest in MH-LLC. We currently intend to develop this property. The potential development of the Mt. Hamilton project adds new risks to Solitario including permitting, finance, mining operations and closure, for which Solitario has limited experience, resources and personnel. Failure on any of these or other components of the planned development of the Mt. Hamilton project could contribute to our inability to profitably develop, operate and close the Mt. Hamilton project, which could result in the loss of our investment in MH-LLC, and the loss of all or a significant portion of our financial reserves.

The development of mining properties involves a high degree of risk including the requirement to obtain permits, the need for significant financial resources for the construction and development of an operating mine, operational expertise and reclamation. Permitting of a mine for development can be an expensive and uncertain endeavor, with no assurance of receiving required permits in a timely manner, if ever. We do not have a history of developing or operating mines and may not be able to acquire the additional personnel to adequately manage such operatings. In addition, the financial resources required to put a mine into production and to sustain profitable operating mines are significant and far exceed our existing financial resources and there can be no assurance that we will be able to obtain such financial resources. We are permitting the Mt. Hamilton Project under an Environmental Assessment ("EA") with the United States Forest Service (the "Forest Service"). The Forest Service is currently allowing this as the appropriate regulatory process for permitting the Mt Hamilton project. However, the Forest Service could reverse its position and

require the completion of an Environmental Impact Statement ("EIS"), or a court could be petitioned to force Solitario to complete an EIS, even after approval of an EA. If such an event were to occur, it would significantly lengthen the permitting process and delay the start-up of a mine. Should we fail to timely complete any of the activities required for the planned development of the Mt. Hamilton project, or if upon completion of the development of the Mt. Hamilton project we are unable to operate the project profitably, it could result in the loss of our investment in MH-LLC, the loss of all or a significant portion of our financial reserves and be a detriment to our other exploration assets. The failure to permit, develop, operate and close the Mt. Hamilton project on a timely and profitable basis could negatively affect our stock price and our financial position and operational results.

Our development and operational plans for Mt. Hamilton as well as projected economic results rely substantially upon the Feasibility Study prepared by SRK Consulting (US). The Feasibility Study makes certain assumptions regarding the mining, processing and environmental reclamation parameters, as well as estimates for capital costs to build the mine, costs to operate the mine, environmental regulations to build, operate and reclaim the mine, and revenues generated based upon the assumed grade of ore, recovery of gold and silver, as well as future market price of gold and silver. There are significant risks that the assumptions made in the Feasibility Study may not be accurate when, and if, we build and operate the mine, or that we may not be able to achieve the results anticipated in the Feasibility Study.

The Feasibility Study relies substantially upon many assumptions, including, but not limited to, the accuracy of the estimated proven and probable reserves, the estimated versus actual recovery of gold and silver, the requirements and timing for environmental approvals, the cost to build the mine and processing plant, the cost of operating the mine, closure costs, and availability of necessary personnel to operate the mine. We can give no assurance the assumptions built into the Feasibility Study are achievable now or in the future. Costs estimated in the feasibility will change with time, and historically have escalated. Environmental requirements also will change, and usually requirements have become more strict and costly. Should we fail to timely complete any of the development components recommended in the Feasibility Study, or if upon completion of the development of the Mt. Hamilton project we are unable to operate the project as described in the Feasibility Study, it could result in the loss of our investment in MH-LLC, the loss of all or a significant portion of our financial reserves and could negatively affect our stock price, our financial position and operational results.

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Our mineral exploration activities involve a high degree of risk; a significant portion of our business model envisions the sale or joint venture of mineral properties, prior to the establishment of reserves. If we are unable to sell or joint venture these properties, the money spent on exploration may never be recovered and we could incur an impairment on our investments in our projects.

The exploration for mineral deposits involves significant financial and other risks over an extended period of time. Few properties that are explored are ultimately developed into producing mines. Major expenses are required to determine if any of our mineral properties may have the potential to be commercially viable and be salable or joint ventured. Prior to completion of the Feasibility Study, we never established reserves on any of our properties. Significant additional expense and risks, including drilling and determining the feasibility of a project, are required prior to the establishment of reserves. It is impossible to ensure that the current or proposed exploration programs on properties in which we have an interest will be commercially viable or that we will be able to sell, joint venture or develop our properties. Whether a mineral deposit will be commercially viable depends on a number of factors, some of which are the particular attributes of the deposit, such as its size and grade, costs and efficiency of the recovery methods that can be employed, proximity to infrastructure, financing costs and governmental regulations, including regulations relating to prices, taxes, royalties, infrastructure, land use, importing and exporting of gold or other minerals, and environmental protection.

We believe the data obtained from our own exploration activities or our partners' activities to be reliable; however, the nature of exploration of mineral properties and analysis of geological information is subjective and data and conclusions are subject to uncertainty. Even if our exploration activities determine that a project is commercially viable, it is impossible to ensure that such determination will result in a profitable sale of the project or development by a joint venture in the future and that such project will result in profitable commercial mining operations. If we determine that capitalized costs associated with any of our mineral interests are not likely to be recovered, we would incur an impairment of our investment in such property interest. All of these factors may result in losses in relation to amounts spent, which are not recoverable. We have experienced losses of this type from time to time including during 2012 when we wrote down our investments in our Excelsior, Triunfo and Espanola projects recording mineral property impairments totaling \$31,000 and during 2011 when we wrote down our investment in our Paria Cruz project, recoding mineral property impairment of \$10,000.

We have a significant investment in Kinross Gold Corporation ("Kinross") common stock. We have no control over fluctuations in the price of Kinross common stock, and reductions in the value of this investment could have a negative impact on the market price of our common stock.

We have a significant investment in Kinross. As of May 22, 2013, the price of Kinross common stock has fallen to \$5.68, which is below our assumed price for 2013 for budgeting purposes of \$10 per share. As a result of the reduction of the price of a share of Kinross common stock we have taken steps to significantly reduce our exploration expenditures in Mexico and Peru and to reduce certain administrative expenditures, however such reductions may not be sufficient to offset the reduction in the value of Kinross, upon which we intend to rely as a source of funds for a significant portion of our planned 2013 expenditures. Additional significant fluctuation in the market value of Kinross common stock could have a material impact on the market price of our common stock and our liquidity and capital

resources.

Our substantial debt could adversely affect our financial condition; and our related debt service obligations may adversely affect our cash flow and ability to invest in and grow our businesses.

We have, and for the foreseeable future will continue to have, a significant amount of indebtedness. As of May 23, 2013 we had \$4,700,000 in short and long term indebtedness, including \$3,500,000 in indebtedness pursuant to the Facility Agreement with RMB Australia Holdings Limited and RMB Resources Inc., which permits us to borrow up to \$5,000,000 (the "Facility Agreement"). We likely will seek to draw down additional amounts under the terms of the Facility Agreement. Amounts outstanding under the Facility Agreement incur interest at the 90-day LIBOR rate plus 5% with interest being payable quarterly. Accordingly, if LIBOR rates increase the corresponding interest rate under the Facility Agreement will increase. The servicing of this debt will require the Company to devote a substantial portion of its financial resources to its repayment, and as a result such funds will not be available to use in future operations, or investing in our businesses. Further, loans extended under the Facility Agreement are secured by substantially all of the Company's assets and therefore if the Company defaults under the Facility Agreement it could result in the lender attempting to foreclose on those assets to satisfy the Company's debt obligations.

During 2013, 2012 and 2011 we have borrowed money using short-term margin accounts secured by our investment in Kinross. In the event this borrowing increases, or the price of a share of Kinross common stock decreases, we may be subject to a margin call against our investment in Kinross.

As of May 23, 2013, we have outstanding borrowing of \$1,200,000 using short-term margin accounts, secured by our investment in Kinross. These margin accounts provide that if the net equity in our investment in Kinross, defined as the market value our equity holdings, consisting primarily of Kinross common stock, falls below a minimum margin equity level, the lenders of the short-term margin loans may demand immediate payment or sell as much Kinross stock as necessary to repay the margin loans (a "Margin Call"). A significant decline in the market value of Kinross could result in the sale of some or all our investment in Kinross at a steep discount to the current investment balance. Such a Margin Call could have a negative effect on our liquidity, capital resources and results of operations.

The market for shares of our common stock has limited liquidity and the market price of our common stock has fluctuated and may decline.

An investment in our common stock involves a high degree of risk. The liquidity of our shares, or ability of a shareholder to buy or sell our common stock, may be significantly limited for various unforeseeable periods. The average combined daily volume of our shares traded on the Toronto Stock Exchange and NYSE MKT during 2012 was approximately 54,000 shares, with no shares traded on many days. The market price of our shares has historically fluctuated within a wide range. The price of our common stock may be affected by many factors, including an adverse change in our business, a decline in gold or other commodity prices, and general economic trends.

Our mineral exploration and development activities are inherently dangerous and could cause us to incur significant unexpected costs including legal liability for loss of life, damage to property and environmental damage, any of which could materially adversely affect our financial position or results of operations.

Our operations are subject to the hazards and risks normally related to exploration or development of a mineral deposit including mapping and sampling, drilling, road building, trenching, assaying and analyzing rock samples, transportation over primitive roads or via small contract aircraft or helicopters and severe weather conditions, any of which could result in damage to life or property, environmental damage and possible legal liability for such damage. Any of these risks could cause us to incur significant unexpected costs that could have a material adverse effect on our financial condition and ability to finance our exploration and development activities.

We have a history of losses and if we do not operate profitably in the future it could have a material adverse effect on our financial position or results of operations and the trading price of our common stock would likely decline.

We have reported losses in 17 of our 19 years of operations. We reported losses of \$3,297,000 and \$3,377,000, respectively, for the years ended December 31, 2012 and 2011. We can provide no assurance that we will be able to operate profitably in the future. We have had net income in only two years in our history, during 2003, as a result of a \$5,438,000 gain on derivative instrument related to our investment in certain Crown Resources Corporation warrants and during 2000, when we sold our Yanacocha property. We cannot predict when, if ever, we will be profitable again. If we do not operate profitably, the trading price of our common stock will likely decline.

Our operations outside of the United States of America may be adversely affected by factors outside our control, such as changing political, local and economic conditions, any of which could materially adversely affect our financial position or results of operations.

Our mineral properties located in Latin America consist primarily of mineral concessions granted by national governmental agencies and are held 100% by us or in conjunction with our joint venture partners, or under lease, option or purchase agreements. Our mineral properties are located in Peru, Mexico and Brazil. We act as operator on all of our mineral properties that are not held in joint ventures. The success of projects held under joint ventures that are not operated by us is substantially dependent on the joint venture partner, over which we have limited or no control.

Our exploration activities and mineral properties located outside of the United States of America ("United States") are subject to the laws of Peru, Brazil and Mexico, where we operate. Exploration and potential development activities in these countries are potentially subject to political and economic risks, including:

£ cancellation or renegotiation of contracts;

£ disadvantages of competing against companies from countries that are not subject to US laws and regulations, including the Foreign Corrupt Practices Act;

- £ changes in foreign laws or regulations;
- £ changes in tax laws;
- £ royalty and tax increases or claims by governmental entities, including retroactive claims;
- £ expropriation or nationalization of property;
- £ currency fluctuations (particularly related to declines in the US dollar compared to local currencies);
- £ foreign exchange controls;
- £ restrictions on the ability for us to hold US dollars or other foreign currencies in offshore bank accounts;
- £ import and export regulations;
- £ environmental controls;
- £ risks of loss due to civil strife, acts of war, guerrilla activities, insurrection and terrorism; and
- £ other risks arising out of foreign sovereignty over the areas in which our exploration activities are conducted.



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Due to ongoing uncertainty regarding Bolivian mining law and mining rights, during 2012 we decided to cease operations in Bolivia and wrote-off our two Bolivian properties, Triunfo and Espanola, recording a mineral property write-down of \$25,000. During the three months ended March 31, 2013, Solitario recorded \$10,000 of mineral property write-downs related to its Atico and Jaripo projects in Mexico.

Accordingly, our current exploration activities outside of the United States may be substantially affected by factors beyond our control, any of which could materially adversely affect our financial position or results of operations. Furthermore, in the event of a dispute arising from such activities, we may be subject to the exclusive jurisdiction of courts outside of the United States or may not be successful in subjecting persons to the jurisdictions of the courts in the United States, which could adversely affect the outcome of a dispute.

We may not have sufficient funding for exploration and development, which may impair our profitability and growth.

The capital required for exploration and development of mineral properties is substantial. We have financed operations through utilization of joint venture arrangements with third parties (generally providing that the third party will obtain a specified percentage of our interest in a certain property or a subsidiary owning a property in exchange for the expenditure of a specified amount), the sale of interests in properties or other assets, the sale of strategic investments in other companies such as Kinross, short-term margin loans, a three year credit facility and the issuance of common stock. At some point in the future, we will need to raise additional cash, or enter into joint venture arrangements, in order to fund the exploration activities required to determine whether mineral deposits on our projects are commercially viable and in the case of MH-LLC, potential funding for development activities to place the project into production. New financing or acceptable joint venture partners may or may not be available on a basis that is acceptable to us. Inability to obtain new financing or joint venture partners on acceptable terms may prohibit us from continued exploration or development of such mineral properties. Without successful sale or future development of our mineral properties through joint ventures, or on our own, we will not be able to realize any profit from our interests in such properties, which could have a material adverse effect on our financial position and results of operations.

Our investment in MH-LLC includes the obligation to make payments necessary to provide Ely with the funds to repay a long-term loan secured by the assets of the Mt. Hamilton project; failure to make all of the payments associated with MH-LLC including those due to underlying leaseholders may result in losing all of our interest in the Mt. Hamilton project.

In connection with the formation of MH-LLC, the Mt. Hamilton properties contributed by DHI-US to MH-LLC were subject to a security interest granted to Augusta Resource Corporation ("Augusta") related to Ely's acquisition of the Mt. Hamilton properties. Pursuant to the MH-LLC Operating Agreement, as part of our earn-in we agreed to make cash payments in the form of private placement investments in Ely common stock, the remaining amount of which is \$1,750,000 as of May 23, 2013. These payments to Ely are being made to provide Ely with the funds necessary for

Ely to make the loan payments due to Augusta. Failure to make any of the payments or investments necessary to provide Ely with funds to make the required payments due to Augusta may result in the loss of our majority interest in the Mt. Hamilton project. In addition as of May 23, 2013, we have agreed to make additional payments of \$750,000 to DHI-US in cash and to deliver 150,000 shares of our common stock to DHI-US, and to make certain payments to underlying holders of leases at Mt. Hamilton as further described below in Item 2 to our Annual Report on Form 10-K, "Mineral Properties." Failure to make any of these additional payments to either Ely, DHI-US or to underlying leaseholders may result in our losing all or part of our 80% interest in MH-LLC and the Mt. Hamilton project.

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A large number of companies are engaged in the exploration and development of mineral properties, many of which have substantially greater technical and financial resources than us and, accordingly, we may be unable to compete effectively in the mining industry which could have a material adverse effect on our financial position or results of operations.

We may be at a disadvantage with respect to many of our competitors in the acquisition and exploration and development of mining projects. The marketing of mineral properties is affected by numerous factors, many of which are beyond our control. These include the price of the raw or refined minerals in the marketplace, imports of minerals from other countries, the availability of adequate milling and smelting facilities, the number and quality of other mineral properties that may be for sale or are being explored. Our competitors with greater financial resources than us will be better able to withstand the uncertainties and fluctuations associated with sustained downturns in the market. In addition, we compete with other mining companies to attract and retain key executives and other employees with technical skills and experience in the mineral exploration business. We also compete with other mineral exploration and development companies for exploration projects. There can be no assurance that we will continue to attract and retain skilled and experienced employees or to acquire additional exploration projects. The realization of any of these risks from competitors could have a material adverse effect on our financial position or results of operations.

The title to our mineral properties may be defective or challenged which could have a material adverse effect on our financial position or results of operations.

In connection with the acquisition of our mineral properties, we conduct limited reviews of title and related matters, and obtain certain representations regarding ownership. These limited reviews do not necessarily preclude third parties from challenging our title and, furthermore, our title may be defective. Consequently, there can be no assurance that we hold good and marketable title to all of our mineral interests. If any of our mineral interests were challenged, we could incur significant costs in defending such a challenge. These costs or an adverse ruling with regards to any challenge of our titles could have a material adverse effect on our financial position or results of operations.

We have no reported mineral reserves, other than at our Mt. Hamilton project, and if we are unsuccessful in identifying mineral reserves in the future, we may not be able to realize any profit from these property interests.

None of our Latin American projects have reported mineral reserves. Any mineral reserves on these projects will only come from extensive additional exploration, engineering and evaluation of existing or future mineral properties. The lack of reserves on these mineral properties could prohibit us from sale or joint venture of our mineral properties and we would not be able to realize any profit from our interests in such mineral properties, which could materially adversely affect our financial position or results of operations. Additionally, if we or partners to whom we may joint venture these mineral properties are unable to develop reserves on our mineral properties we may be unable to realize any profit from our interests in such properties, which could have a material adverse effect on our financial position or results of operations.

Our operations could be negatively affected by existing as well as potential changes in laws and regulatory requirements that we are subject to, including regulation of mineral exploration and land ownership, environmental regulations and taxation.

The exploration and development of mineral properties is subject to federal, state, provincial and local laws and regulations in the countries in which we operate in a variety of ways, including regulation of mineral exploration and land ownership, environmental regulation and taxation. These laws and regulations, as well as future interpretation of or changes to existing laws and regulations, may require substantial increases in capital and operating costs to us and delays, interruptions, or a termination of operations.

In the countries in which we operate, in order to obtain permits for exploration or potential future development of mineral properties, environmental regulations generally require a description of the existing environment, both natural, archeological and socio-economic, at the project site and in the region; an interpretation of the nature and magnitude of potential environmental impacts that might result from such activities; and a description and evaluation of the effectiveness of the operational measures planned to mitigate the environmental impacts. The total expenditures on our Mt. Hamilton project are budgeted to be approximately \$2,042,000 during 2013, which are directly and indirectly related to permitting, and could increase as a result of permitting delays or challenges in the years to come, which we cannot accurately predict. Currently the expenditures to obtain exploration permits to conduct our exploration activities are not material to our total exploration cost.

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The laws and regulations in all the countries in which we operate are continually changing and are generally becoming more restrictive, especially environmental laws and regulations. As part of our ongoing exploration activities, we have made expenditures to comply with such laws and regulations, but such expenditure could substantially increase our costs to achieve compliance in the future. Delays in obtaining or failure to obtain government permits and approvals or significant changes in regulation could have a material adverse effect on our exploration activities, our ability to locate economic mineral deposits, and our potential to sell, joint venture or eventually develop our properties, which could have a material adverse effect on our results of operations.

Occurrence of events for which we are not insured may materially adversely affect our business.

Mineral exploration is subject to risks of human injury, environmental liability and loss of assets. We maintain limited insurance coverage to protect ourselves against certain risks related to loss of assets for equipment in our operations; however, we have elected not to have insurance for other risks because of the high premiums associated with insuring those risks or for various other reasons including those risks where insurance may not be available. There are additional risks in connection with investments in parts of the world where civil unrest, war, nationalist movements, political violence or economic crisis are possible. These countries may also pose heightened risks of expropriation of assets, business interruption, increased taxation and a unilateral modification of concessions and contracts. We do not maintain insurance against political risk. Occurrence of events for which we are not insured could have a material adverse effect on our financial position or results of operations.

Severe weather or violent storms could materially affect our operations due to damage or delays caused by such weather.

Our exploration and development activities in Peru, Brazil, Mexico and at Mt. Hamilton (Nevada) are subject to normal seasonal weather conditions that often hamper and may temporarily prevent exploration or development activities. There is a risk that unexpectedly harsh weather or violent storms could affect areas where we conduct these activities. Delays or damage caused by severe weather could materially affect our operations or our financial position.

Our business is extremely dependent on the market price of gold and other commodities and currency exchange rates over which we have no control.

Our operations are significantly affected by changes in the market price of gold and other commodities since the evaluation of whether a mineral deposit is commercially viable is heavily dependent upon the market price of gold and other commodities. The price of commodities also affects the value of exploration projects we own or may wish to acquire or joint venture. These prices of commodities fluctuate on a daily basis and are affected by numerous factors beyond our control. The supply and demand for gold and other commodities, the level of interest rates, the rate of inflation, investment decisions by large holders of these commodities, including governmental reserves, and stability

of exchange rates can all cause significant fluctuations in prices. Currency exchange rates relative to the United States dollar can affect the cost of doing business in a foreign country in United States dollar terms, which is our functional currency. Consequently, the cost of conducting exploration in the countries where we operate, accounted for in United States dollars, can fluctuate based upon changes in currency exchange rates and may be higher than we anticipate in terms of United States dollars because of a decrease in the relative strength of the United States dollar to currencies of the countries where we operate. We currently do not hedge against currency fluctuations. The prices of commodities have fluctuated widely and future significant price declines could have a material adverse effect on our financial position or results of operations.

Our business is dependent on key executives and the loss of any of our key executives could adversely affect our business, future operations and financial condition.

We are dependent on the services of key executives, including our Chief Executive Officer, Christopher E. Herald, our Chief Financial Officer, James R. Maronick, and our Chief Operating Officer, Walter H. Hunt. All of the above named officers have many years of experience and an extensive background in Solitario and the mining industry in general. We may not be able to replace that experience and knowledge with other individuals. We do not have "Key-Man" life insurance policies on any of our key executives. The loss of these persons or our inability to attract and retain additional highly skilled employees may adversely affect our business, future operations and financial condition.

In addition to our Mt. Hamilton project, we may look to joint venture with another mining company in the future to develop and/or operate one of our foreign projects; therefore, in the future, our results may become subject to additional risks associated with development and production of our foreign mining projects.

We are not currently involved in mining development or operating activities at any of our properties located outside of the United States. In order to realize a profit from these mineral interests we either have to: (1) sell such properties outright at a profit; (2) form a joint venture for the project with a larger mining company with greater resources, both technical and financial, to further develop and/or operate the project at a profit; (3) develop and operate such projects at a profit on our own; or (4) create and retain a royalty interest in a property with a third party that agrees to advance the property toward development and mining. In the future, if our exploration results show sufficient promise in one of our foreign projects, we may either look to form a joint venture with another mining company to develop and/or operate the project. Therefore, in the future, our results may become subject to the additional risks associated with development and production of mining projects in general.

In the future, we may participate in a transaction to acquire a property, royalty or another company that requires a substantial amount of capital or Solitario equity to complete. Our acquisition costs may never be recovered due to changing market conditions, or our own miscalculation concerning the recoverability of our acquisition investment. Such an occurrence could adversely affect our business, future operations and financial condition.

We have been involved in evaluating a wide variety of acquisition opportunities involving mineral properties and companies for acquisition and we anticipate evaluating potential acquisition opportunities in the future. Some of these opportunities may involve a substantial amount of capital or Solitario equity to successfully acquire. As many of these opportunities do not have reliable feasibility-level studies, we may have to rely on our own estimates for investment analysis. Such estimates, by their very nature, contain substantial uncertainty. In addition, economic assumptions, such as future costs and commodity prices, also contain significant uncertainty. Consequently, if we are successful in acquiring any new acquisitions and our estimates prove to be in error, either through miscalculations or changing market conditions, this could have a material adverse effect on our financial position or results of operations.

Failure to comply with the United States Foreign Corrupt Practices Act (FCPA) could subject us to penalties and other adverse consequences.

As a Colorado corporation, we are subject to the FCPA and similar worldwide anti-bribery laws, which generally prohibit United States companies and their intermediaries from engaging in bribery or other improper payments to foreign officials for the purpose of obtaining or retaining business. Foreign companies, including some that may compete with our company, are not subject to U.S. laws and regulations, including the FCPA, and therefore our exploration, development, production and mine closure activities are subject to the disadvantage of competing against companies from countries that are not subject to these prohibitions.

In addition, we could be adversely affected by violations of the FCPA and similar anti-bribery laws in other jurisdictions. Corruption, extortion, bribery, pay-offs, theft and other fraudulent practices may occur from time-to-time in the countries outside of the United States in which we operate. Our mineral properties are located in countries that may have experienced governmental corruption to some degree and, in certain circumstances, strict compliance with anti-bribery laws may conflict with local customs and practices. Our policies mandate compliance with these anti-bribery laws; however, we cannot assure you that our internal controls and procedures always will protect us from the reckless or criminal acts committed by our employees or agents. We can make no assurance that our employees or other agents will not engage in such conduct for which we might be held responsible. If our employees or other agents are found to have engaged in such practices or we are found to be liable for FCPA violations, we could suffer severe criminal or civil penalties or other sanctions and other consequences that may have a material adverse effect on our business, financial condition and results of operations.

Risks Relating to this Offering and our common stock

Approximately 26.6% of our common stock is controlled by two significant shareholders and management.

Approximately 14.5% of our common stock is controlled by two significant shareholders. In addition, our directors and officers are the beneficial owners of approximately 12.1% of our common stock. This includes, with respect to our directors and officers, shares that may be purchased upon the exercise of outstanding options. Should these shareholders decide to act together, they may be able to substantially influence the management, affairs and operations of our company and all matters requiring approval by our shareholders, including the election of directors and the approval of mergers or other business combination transactions. Accordingly, the concentration of ownership by such shareholders may have the effect of delaying, deferring, preventing or facilitating a sale of our company or a business combination with a third party. Further, circumstances may arise in which the interests of these shareholders could conflict with the interests of our other shareholders.

The availability for sale of a large amount of shares may depress the market price of our common stock.

As of May 23, 2013, 34,647,458 shares of our common stock were currently outstanding, substantially all of which are registered or otherwise transferable. The availability for sale of a large amount of shares by any one or several shareholders may depress the market price of our common stock and impair our ability to raise additional capital through the public sale of our common stock. We have no arrangement with any of the holders of the foregoing shares to address the possible effect on the price of our common stock of the sale by them of their shares.

You will experience immediate dilution in the book value per share of the common stock in this offering.

Because the price per share of our common stock being offered is substantially higher than the book value per share of our common stock, you will suffer substantial dilution in the net tangible book value of the common stock in this offering. After giving effect to the sale by us of 136,500 shares of common stock in this offering, and based on an assumed public offering price of \$1.08 per share, based upon the closing price of a share of our common stock as of May 22, 2013 on NYSE MKT, in this offering and a pro forma net tangible book value per share of our common stock of \$0.2169 as of March 31, 2013, as adjusted to give effect this offering, you will suffer immediate and substantial dilution of \$0.8631 per share in the net tangible book value of the common stock in this offering. See "Dilution" for a more detailed discussion of the dilution you will incur in connection with this offering.

Terms of subsequent financings may adversely impact our shareholders.

In order to finance our working capital needs, we may have to raise funds through the issuance of equity or debt securities in the future. Depending on the type and the terms of any financing we pursue, shareholder's rights and the value of their investment in our common stock could be reduced. For example, if we issue secured debt securities, the holders of the debt would have a claim to our assets that would be prior to the rights of shareholders until the debt is paid. Interest on these debt securities would increase costs and negatively impact operating results. If the issuance of new securities results in diminished rights to holders of our common stock, the market price of our common stock could be negatively impacted.

Shareholders could be diluted if we were to use common stock to raise capital.

We may need to seek additional capital to carry out our business plan. This financing could involve one or more types of securities including common stock, preferred stock, convertible debt or warrants to acquire common stock. These securities could be issued at or below the then prevailing market price for our common stock. Any issuance of

additional shares of our common stock could be dilutive to existing shareholders and could adversely affect the market price of our common stock.

We do not intend to pay any cash dividends in the foreseeable future.

We have never paid cash dividends and any future decision as to the payment of cash dividends will be at the discretion of our board of directors and will depend upon our earnings, financial position, capital requirements, plans for expansion and such other factors as our board of directors deems relevant. We intend to retain our earnings, if any, to finance the growth and development of our business. Any return on an investment in our common stock will come from the appreciation, if any, in the value of our common stock.

USE OF PROCEEDS

We will not receive any cash proceeds from the issuance of the shares offered pursuant to this prospectus supplement. The shares are being issued by us directly to CMC and Carrington in connection with the Lease Amendments. See "Recent Developments" and "Plan of Distribution."

RECENT DEVELOPMENTS

The following table sets forth our capitalization as of March 31, 2013 (i) on an actual basis (ii) as adjusted to reflect the issuance of shares of common stock in this offering. You should read this table in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our Form 10-Q and our unaudited financial statements and related notes for the period ended March 31, 2013, included in our Form 10-Q and "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our Form 10-Q and unaudited financial statements and related notes for the period ended December 31, 2012, included in our Form 10-K

(in thousands of US dollars, except share and per share amounts)

	March 31, 2013	
	Actual	As Adjusted (2)
Total Assets	\$ 21,982	\$ 22,129
Total Liabilities	14,585	14,585
Solitario shareholders' equity		
Preferred stock, \$0.01 par value, authorized 10,000,000 shares (none issued and		
outstanding at		
March 31, 2013)		
Common stock, \$0.01 par value, authorized, 100,000,000 shares (34,647,458 shares issued	l	
and	346	360
outstanding at March 31, 2013; 34,783,958 issued and outstanding, as adjusted for this	540	300
offering) (1)		
Additional paid-in capital (1)	47,491	47,624
Accumulated deficit	(43,669)	(43,669)
Accumulated other comprehensive income	3,030	3,030
Total Solitario shareholders' equity	7,198	7,345
Noncontrolling interest, net	199	199
Total shareholders' equity	7,397	7,544
Total liabilities and shareholders' equity	\$ 21,982	\$ 22,129

Excludes 2,598,400 shares of common stock issuable upon exercise of stock options outstanding at March 31, 2013, at a weighted average exercise price of Cdn\$2.22 per share. As of March 31, 2013, an additional 250 shares

- (1) of common stock were reserved for issuance under our stock option plan. Also excludes, as of March 31, 2013, the issuance of up to 1,624,748 shares issuable upon exercise of outstanding warrants and 150,000 shares issuable to DHI-US pursuant to the MH-LLC Operating Agreement.
 Asymptote 126,500 shares of stock issuade at a price of \$1,08 per share the slacing price of common stock or March 31, 2013, the issuance of the stock of th
- Assumes 136,500 shares of stock issued at a price of \$1.08 per share, the closing price of common stock on May (2)22, 2013 for an assumed value of \$147,000, which is recorded to mineral property in total assets and with \$14,000 credited to Common Stock and \$133,000 to credited additional paid-in-capital.

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We entered into the Lease Amendments on May 23, 2013. Previously, CMC and Carrington were entitled to annual lease payments of \$80,000 each from MH-LLC on their respective leases. Pursuant to the Lease Amendments, the amount of the cash lease payments due to CMC from MH-LLC have been reduced to \$20,000 due June 1, 2013, \$20,000 due June 1, 2014, and \$40,000 due June 1, 2015. In addition, Solitario has agreed to issue shares of its common stock (to be delivered by Solitario for the benefit of MH-LLC) to CMC as follows: 14,000 shares on or before June 1, 2013 (the "CMC Tranche One Shares"); 14,000 shares on or before June 1, 2014 (the "CMC Tranche Two Shares"); and 28,000 shares on or before June 1, 2015 (the "CMC Tranche Three Shares"). If on the date of delivery the actual value of the CMC Tranche One Shares is less than \$20,000, or on the date of delivery the actual value of the CMC Tranche Two Shares is less than \$20,000, or on the date of delivery the actual value of the CMC Tranche Three Shares is less than \$40,000 (each a "CMC Target Value"), then MH-LLC shall pay the amount of the difference between the actual value and the CMC Target Value to CMC not later than June 15, 2013, June 15, 2014 and June 15, 2015, respectively. Solitario may also elect that the entire amount of the CMC Target Value of any of the CMC Tranche One Shares, the CMC Tranche Two Shares or the CMC Tranche Three Shares be paid in cash in lieu of the delivery of shares (a "CMC Cash Election"). If Solitario makes a CMC Cash Election, MH-LLC shall make the actual cash payment to CMC. The actual value of each of the CMC Tranche One Shares, the CMC Tranche Two Shares and the CMC Tranche Three Shares shall be based on the 20-day average closing price of the applicable shares on the NYSE MKT calculated for the twenty (20) trading days immediately preceding the relevant date. Pursuant to the Lease Amendments, the amount of the cash lease payments due to Carrington from MH-LLC have been reduced to \$30,000 due June 1, 2013, \$30,000 due June 1, 2014, and \$55,000 due June 1, 2015. In addition, Solitario has agreed to issue shares of its common stock (to be delivered by Solitario for the benefit of MH-LLC) to Carrington as follows: 21,000 shares on or before June 1, 2013 (the "Carrington Tranche One Shares"); 21,000 shares on or before June 1, 2014 (the "Carrington Tranche Two Shares"); and 38,500 shares on or before June 1, 2015 (the "Carrington Tranche Three Shares"). If on the date of delivery the actual value of the Carrington Tranche One Shares is less than \$30,000, or on the date of delivery the actual value of the Carrington Tranche Two Shares is less than \$30,000, or on the date of delivery the actual value of the Carrington Tranche Three Shares is less than \$55,000 (each a "Carrington Target Value"), then MH-LLC shall pay the amount of the difference between the actual value and the Carrington Target Value to Carrington not later than June 15, 2013, June 15, 2014 and June 15, 2015, respectively. Solitario may also elect that the entire amount of the Carrington Target Value of any of the Carrington Tranche One Shares, the Carrington Tranche Two Shares or the Carrington Tranche Three Shares be paid in cash in lieu of the delivery of shares (a "Carrington Cash Election"). If Solitario makes a Carrington Cash Election, MH-LLC shall make the actual cash payment to Carrington. The actual value of each of the Carrington Tranche One Shares, the Carrington Tranche Two Shares and the Carrington Tranche Three Shares shall be based on the 20-day average closing price of the applicable shares on the NYSE MKT calculated for the twenty (20) trading days immediately preceding the relevant date. Solitario has no obligation to issue the shares issuable pursuant to the Lease Amendments until such shares have been approved for listing by the NYSE MKT and the TSX. The payments due to CMC from MH-LLC after June 1, 2015 of \$80,000 per annum are payable in cash. The payments due to Carrington from MH-LLC after June 1, 2015 of \$110,000 per annum are payable in cash and after June 1, 2016 escalate at the rate of \$2,000 per year for the term of the lease. Pursuant to the Lease Amendments, MH-LLC may terminate either the CMC or the Carrington leases after June 1, 2015. If MH-LLC terminates either lease, Carrington or CMC (or both, if both leases are terminated) have the right to enter into MH-LLC's Buchanan property at the Mt. Hamilton project to conduct exploration activities, so long as such activities do not unreasonably interfere with MH-LLC's current or planned activities on the Buchanan property or other properties at the Mt. Hamilton project. If MH-LLC ceases all activities at the Buchanan property for a period of two years, Carrington has the right to acquire the Buchanan property for nominal consideration, and if Carrington declines to exercise that right, CMC then has the same right. Pursuant to the Lease Amendments, Carrington has provided MH-LLC exclusive mining and mineral rights to an additional 32 mining claims contiguous to the Mt. Hamilton project and MH-LLC and Carrington have agreed to modify MH-LLC's option to buy-down the existing 4.5% Net Royalty ("NR") on the Carrington Lease such that it may only be bought down by a maximum of 3.5% to a 1.0 % NR in a series of optional payments now totaling \$3,600,000 instead of the previous a maximum buy down of

4.0% NR to a 0.5% NR in a series of optional payments of \$3,000,000.

The Lease Amendments provide for future work commitments on the properties subject to the CMC and Carrington leases whereby there is no work commitment for the lease years ending June 1, 2013, June 1, 2014 or June 1, 2015. During each lease year beginning with the lease year that commences on June 1, 2015, MH-LLC shall incur not less than \$75,000 of work expenses (\$150,000 in the aggregate) in conducting work on each property. Such work will be related to exploration and development activities on the properties subject to the leases.

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The Lease Amendments define the term of each lease agreement to be for a period of ten (10) years from June 1, 2005 through the tenth anniversary date (the "Primary Term") unless sooner terminated or canceled as provided in each lease agreement, and may be extended in equal ten (10) year increments thereafter so long as exploration, development and/or mining activities are ongoing at the end of the Primary Term (or at the end of any subsequent 10-year period), and all other terms and conditions of the agreements are being met.

We entered into a letter agreement with DHI-US on May 23, 2013, with respect to the Lease Amendments pursuant to which DHI-US has acknowledged and agreed to the obligations of MH-LLC to fund the work requirements and cash payments due under the CMC and Carrington leases as amended by the Lease Amendments and to reimburse Solitario for the actual value of any shares of Solitario common stock delivered to CMC or Carrington, up to their Target Value, pursuant to the Lease Amendments.

DILUTION

If you invest in our common stock, you will experience dilution to the extent of the difference between the price per share you pay in this offering and the net tangible book value per share of our common stock immediately after this offering.

Our net tangible book value as of March 31, 2013, was approximately \$7,397,000, or approximately \$0.2135 per share of common stock. Net tangible book value per share is equal to our total tangible assets minus total liabilities, divided by the number of shares of common stock outstanding as of March 31, 2013. After giving effect to the sale by us in this offering of 136,500 shares of common stock at an assumed price of \$1.08 per share, the quoted price of a share of our common stock on the NYSE MKT on May 22, 2013, our adjusted net tangible book value would have been approximately \$7,544,000, or approximately \$0.2169 per share of common stock as of March 31, 2013. As a result, the completion of this offering is estimated, based upon the closing price of our common stock as quoted on the NYSE MKT on May 22, 2013, to increase our net tangible book value by \$0.0034 per share to our existing shareholders and result in an immediate dilution of \$0.8631 per share to you in this offering. The following table illustrates this calculation on a per share basis:

Estimated Public offering price per share	\$1.0800
Net tangible book value per share as of March 31, 2013	\$0.2135
Increase per share attributable to this offering	\$0.0034
Adjusted net tangible book value per share as of March 31, 2013 after giving effect to this offering	\$0.2169
Dilution per share to you	\$0.8631

The foregoing table is based on 34,647,458 shares of common stock outstanding as of March 31, 2013, which does not take into effect further dilution to you that could occur upon the exercise of outstanding options or outstanding warrants, both of which have an exercise price above the assumed offering price and the issuance of up to 150,000 shares issuable to DHI-US pursuant to the MH-LLC Operating Agreement.

To the extent that any of our outstanding options are exercised, we grant additional options under our stock option plan or issue additional shares of common stock in the future, there may be further dilution to you.

DESCRIPTION OF SECURITIES WE ARE OFFERING

Common Stock

In this offering, we are offering 136,500 shares of our common stock. The following description does not purport to be complete and is subject to and qualified by our Amended and Restated Articles of Incorporation, as amended, or the "Articles", and our amended and restated by-laws, or the "By-laws", which are incorporated by reference.

Our Articles authorize us to issue 100,000,000 shares of common stock, par value \$.01 per share. As of May 23, 2013, there were 34,647,458 shares of our common stock issued and outstanding. There are 2,598,400 shares of common stock issuable upon the exercise of outstanding options, 1,624,748 shares issuable upon the exercise of outstanding warrants and up to 150,000 shares issuable to DHI-US pursuant to the MH-LLC Operating Agreement.

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Except as otherwise provided in any resolution providing for the issue of any series of preferred stock, holders of our common stock have exclusive voting rights for the election of directors and for all other purposes. Holders of our common stock are entitled to one vote per share on all matters to be voted upon by our shareholders. Neither our Articles nor our By-laws authorize cumulative voting. The holders of our common stock are entitled to receive dividends, if any, as may be declared from time to time by our board of directors out of funds legally available for the payment of dividends, subject to the rights of any series of preferred stock. In the event of a liquidation, dissolution or winding up of Solitario, the holders of our common stock are entitled to share ratably in all assets remaining after payment of the preferential amounts, if any, to which the holders of our preferred stock, if any, are entitled. Our common stock has no preemptive, conversion or other subscription rights. There are no redemption or sinking fund provisions applicable to our common stock. All of our outstanding shares of common stock are fully paid and non-assessable.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock in the United States is Computershare Trust Company, N.A. and in Canada is Computershare Investor Services Inc.

Listing on NYSE MKT and Toronto Stock Exchange

Our common stock is listed on the NYSE MKT under the symbol "XPL" and on the Toronto Stock Exchange under the symbol "SLR."

PLAN OF DISTRIBUTION

We are offering an aggregate of up to 136,500 shares of our common stock directly to CMC and Carrington in connection with the Lease Amendments, as such shares may be issued from time to time in accordance with the terms of the Lease Amendments and as further described under the heading "Recent Developments" above. Solitario has no obligation to issue the shares offered by this prospectus supplement and issuable pursuant to the Lease Amendments until such shares have been approved for listing by the NYSE MKT and the TSX. We will not receive any cash proceeds from the issuance of the shares.

LEGAL MATTERS

The validity of the common stock offered by this prospectus supplement will be passed upon for us by Polsinelli PC, Denver, Colorado.

EXPERTS

The consolidated financial statements of Solitario Exploration & Royalty Corp. as of December 31, 2012 and 2011 and for each of the two years ended December 31, 2012 included in Solitario Exploration & Royalty Corp.'s Annual Report (Form 10-K) for the year ended December 31, 2012, have been audited by EKS&H LLLP, independent registered public accounting firm, as set forth in their report thereon, included therein, and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

Certain information regarding our Mt. Hamilton project incorporated by reference in this prospectus is included in reliance on portions of an independent technical report prepared by SRK Consulting (US), Inc., completed in 2009 and 2012, concerning the Mt. Hamilton project and has been included herein in reliance on the authority of such firm as experts in geology and engineering.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and special reports, proxy statements and other information with the SEC. You may read, without charge, and copy the documents we file at the SEC's public reference rooms in Washington, D.C., New York, New York and Chicago, Illinois. You can request copies of these documents by writing to the SEC and paying a fee for the copying cost. Please call the SEC at 1-800-SEC-0330 for further information on the public reference rooms. Our SEC filings are also available to the public at no cost from the SEC's website at http://www.sec.gov.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

Information that we have previously filed with the SEC can be "incorporated by reference" into this prospectus supplement and the accompanying prospectus. The process of incorporation by reference allows us to disclose important information to you without duplicating that information in this prospectus supplement and the accompanying prospectus. The information we incorporate by reference is considered a part of this prospectus supplement and the accompanying prospectus. The information in this prospectus supplement and the accompanying prospectus. The information in this prospectus supplement and the accompanying prospectus, including any information that we incorporate by reference, will be updated and superseded automatically by our filings with the SEC after the date of this prospectus supplement and the accompanying prospectus and prior to our sale of the common stock covered by this prospectus supplement. We are incorporating by reference the filed information contained in documents listed below:

(a) Our Annual Report on Form 10-K for the fiscal year ended December 31, 2012, as amended by Form 10-K/A filed with the SEC on May 21, 2013;

- (b) Our Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2013;
- (c) Our Current Report on Form 8-K, as filed with the SEC on March 22, 2013;
- (d) Our Current Report on Form 8-K, as filed with the SEC on April 25, 2013;
- (e) Our Proxy Statement, as filed with the SEC on April 29, 2013; and

(f) The description of our common stock contained in our registration statement on Form 8-A, which was filed with the SEC on August 9, 2006, including any amendment or report filed for the purpose of updating such description.

We are also incorporating by reference any filed information in filings we make with the SEC pursuant to Sections 13(a), 13(c), 14, or 15(d) of the Exchange Act after the date of this prospectus supplement and prior to our sale of the common stock covered by this prospectus supplement, except in each case for information contained in any such filing where we indicate that such information is being furnished and is not to be considered "filed" under the Exchange Act.

Upon request, we will provide, without charge, to each person, including any beneficial owner, to whom a copy of this prospectus supplement is delivered a copy of the documents incorporated by reference into this prospectus supplement and the accompanying prospectus. You may request a copy of these filings, and any exhibits we have specifically incorporated by reference as an exhibit in this prospectus supplement and the accompanying prospectus, at no cost by writing or telephoning us at the following address:

Solitario Exploration & Royalty Corp.

Attn: Corporate Secretary

4251 Kipling Street, Suite 390

Wheat Ridge, Colorado 80033

(303) 534-1030

Prospectus

SOLITARIO EXPLORATION & ROYALTY CORP.

\$75,000,000 Debt Securities Preferred Stock Common Stock Warrants

Units

This prospectus provides you with a general description of debt and equity securities that Solitario Exploration & Royalty Corp. may offer and sell, from time to time, either individually or in units. Each time we sell securities we will provide a prospectus supplement that will contain specific information about the terms of any debt or equity securities we offer and the specific manner in which we will offer the debt or equity securities. The prospectus supplement will also contain information, where appropriate, about material United States federal income tax consequences relating to, and any listing on a securities exchange of, the debt or equity securities covered by the prospectus supplement. The prospectus supplement may also add, update or change information contained in this prospectus. You should read this prospectus and the applicable prospectus supplement carefully before you invest in our securities.

We may offer these securities in amounts, at prices and on terms determined at the time of offering. We may sell the securities directly to you, through agents we select, or through underwriters and dealers we select. If we use agents, underwriters or dealers to sell the securities, we will name them and describe their compensation in a prospectus supplement.

Our common stock is listed on the NYSE Amex Equities under the symbol "XPL." On March 24, 2011, the closing price for our common stock as reported on the NYSE Amex Equities was \$3.59 per share. Our principal executive offices are located at 4251 Kipling Street, Suite 390, Wheat Ridge, Colorado 80033.

Investing in our securities involves a high degree of risk. You should review carefully the risks and uncertainties described under the heading "Risk Factors" contained in this prospectus beginning on page 2 and the applicable prospectus supplement, and under similar headings in the other documents that are incorporated by reference into this prospectus.

The date of this prospectus is March 29, 2011.

(i)

Unless the context otherwise requires, all references to "Solitario," "the Company," "we," "our," "us" or "our company" in this prospectus refer to Solitario Exploration & Royalty Corp., a Colorado corporation.

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement filed with the Securities and Exchange Commission, or SEC, utilizing a shelf registration process. Under this shelf registration process, we may sell any combination of the securities described in this prospectus, either individually or in units, in one or more offerings, up to a total dollar amount of \$75,000,000.

This prospectus provides you with a general description of the securities we may offer. Each time we sell securities, we will provide a prospectus supplement that will contain specific information about the terms of that specific offering. The prospectus supplement may also add, update or change information contained in this prospectus. You should read this prospectus and the applicable prospectus supplement together with the additional information described under the heading "Where You Can Find More Information."

ABOUT SOLITARIO EXPLORATION & ROYALTY CORP.

Solitario is an exploration stage company with a focus on the acquisition of precious and base metal properties with exploration potential and the development or purchase of royalty interests. We acquire and hold a portfolio of exploration properties for future sale, joint venture, or to create a royalty prior to the establishment of proven and probable reserves. Although our mineral properties may be developed in the future on our own or through a joint venture, Solitario has never developed a mineral property. However, in August 2010 and December 2010, respectively, Solitario signed a Letter of Intent and a Limited Liability Company Operating Agreement to earn up to an 80% interest in and develop the Mt. Hamilton project located in Nevada and we intend to develop the Mt. Hamilton project. Solitario may also evaluate mineral properties to potentially buy a royalty. At December 31, 2010, Solitario's mineral properties are located in the State of Nevada in the United States and in Mexico, Brazil, Bolivia and Peru.

Corporate Information

We were incorporated in Colorado on November 15, 1984 under the name Solitario Resources Corporation as a wholly-owned subsidiary of Crown Resources Corporation, or Crown. On June 12, 2008, our shareholders approved an amendment to the Articles of Incorporation to change our name from Solitario Resources Corporation to Solitario Exploration & Royalty Corp. In July 1994, Solitario became a publicly traded company on the Toronto Stock Exchange through its Initial Public Offering. On July 26, 2004, Crown completed a spin-off of its holdings of our shares to its shareholders as part of the acquisition of Crown by Kinross Gold Corporation. Our website address is www.solitarioxr.com. The information contained in, or that can be accessed through, our website is not incorporated by reference into this prospectus and is not part of this prospectus.

Our common stock is listed on the NYSE Amex Equities under the symbol "XPL" and on the Toronto Stock Exchange under the symbol "SLR." Our principal executive offices are located at 4251 Kipling Street, Suite 390, Wheat Ridge, Colorado 80033. Our telephone number is (303) 534-1030.

RISK FACTORS

Investing in our securities involves a high degree of risk. Please see the risk factors under the heading "Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2010, on file with the SEC, which are incorporated by reference into this prospectus. Before you invest in our securities, you should carefully consider these risks as well as other information we include or incorporate by reference into this prospectus and the applicable prospectus supplement. The risks and uncertainties we have described are not the only ones facing our company. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also affect our business operations. The occurrence of any of these risks might cause you to lose all or part of your investment in the offered securities. The discussion of risks includes or refers to forward-looking statements; you should read the explanation of the qualifications and limitations on such forward-looking statements discussed elsewhere in this prospectus.

FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 that involve risks and uncertainties, as well as assumptions that, if they never materialize or prove incorrect, could cause our results to differ materially from those expressed or implied by such forward-looking statements. All statements other than statements of historical fact are statements that could be deemed forward-looking statements, including any projections of financing needs, revenue, expenses, earnings or losses from operations, or other financial items; any statements of the plans, strategies and objectives of management for future operations; any statements concerning exploration and development plans and timelines; any statements of expectation or belief; and any statements of assumptions underlying any of the foregoing. In addition, forward looking statements may contain the words "believe," "anticipate," "expect," "estimate," "intend," "plan," "project," "will be," "will con "will result," "seek," "could," "may," "might," or any variations of such words or other words with similar meanings.

The forward-looking statements included in this prospectus represent our estimates as of the date of this prospectus. We specifically disclaim any obligation to update these forward-looking statements in the future, except as required by law. These forward-looking statements should not be relied upon as representing our estimates or views as of any date subsequent to the date of this prospectus.

RATIOS OF EARNINGS TO FIXED CHARGES

If we offer debt securities and/or preference equity securities under this prospectus, then we will, at that time, provide a ratio of earnings to fixed charges and/or ratio of combined fixed charges and preference dividends to earnings, respectively, in the applicable prospectus supplement for such offering.

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HOW WE INTEND TO USE THE PROCEEDS

Unless otherwise provided in the applicable prospectus supplement, we intend to use the net proceeds from the sale of the securities under this prospectus to fund exploration and development of our mineral properties, to repay any outstanding indebtedness and for general corporate purposes, including capital expenditures and working capital. We may use a portion of our net proceeds to invest in or acquire additional mineral properties or royalty interests. We will set forth in the prospectus supplement our intended use for the net proceeds received from the sale of any securities. Pending the application of the net proceeds, we intend to invest the net proceeds in investment-grade, interest-bearing securities.

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DESCRIPTION OF THE SECURITIES

We may offer, from time to time, in one or more offerings, up to \$75,000,000 of the following securities:

• senior debt securities;

• subordinated debt securities;

•preferred stock;

common stock;

•warrants;

•units; or

•any combination of the foregoing securities.

The aggregate initial offering price of the offered securities that we may issue will not exceed \$75,000,000. If we issue debt securities at a discount from their principal amount, then, for purposes of calculating the aggregate initial offering price of the offered securities issued under this prospectus, we will include only the initial offering price of the debt securities and not the principal amount of the debt securities.

This prospectus contains a summary of the general terms of the various securities that we may offer. The prospectus supplement relating to any particular securities offered will describe the specific terms of the securities, which may be in addition to or different from the general terms summarized in this prospectus. Because the summary in this prospectus and in any prospectus supplement does not contain all of the information that you may find useful, you should read the documents relating to the securities that are described in this prospectus or in any applicable prospectus supplement. Please read "Where You Can Find More Information" to find out how you can obtain a copy of those documents.

The applicable prospectus supplement will also contain the terms of a given offering, the initial offering price and our net proceeds. Where applicable, a prospectus supplement will also describe any material United States federal income tax consequences relating to the securities offered and indicate whether the securities offered are or will be quoted or listed on any quotation system or securities exchange.

DESCRIPTION OF DEBT SECURITIES

This prospectus describes the general terms and provisions of the debt securities we may issue. When we offer to sell a particular series of debt securities, we will describe the specific terms of the securities in a supplement to this prospectus, including any additional covenants or changes to existing covenants relating to such series. The prospectus supplement also will indicate whether the general terms and provisions described in this prospectus apply to a particular series of debt securities. You should read the actual indenture if you do not fully understand a term or the way we use it in this prospectus.

We may offer senior or subordinated debt securities. Each series of debt securities may have different terms. The senior debt securities will be issued under one or more senior indentures, dated as of a date prior to such issuance, between us and the trustee identified in the applicable prospectus supplement, as amended or supplemented from time to time. We will refer to any such indenture throughout this prospectus as the "senior indenture." Any subordinated debt securities will be issued under one or more separate indentures, dated as of a date prior to such issuance, between us and the trustee identified in the applicable prospectus supplement, as amended or supplemented from time to time. We will refer to any such indenture throughout this prospectus as the "subordinated indenture" and to time. We will refer to any such indenture throughout this prospectus as the "subordinated indenture" and to the trustee under the senior or subordinated indenture as the "trustee." The senior indenture and the subordinated indenture are sometimes collectively referred to in this prospectus as the "indentures." The indentures will be subject to and governed by the Trust Indenture Act of 1939, as amended. We included copies of the forms of the indentures as exhibits to our registration statement and they are incorporated into this prospectus by reference.

If we issue debt securities at a discount from their principal amount, then, for purposes of calculating the aggregate initial offering price of the offered securities issued under this prospectus, we will include only the initial offering price of the debt securities and not the principal amount of the debt securities.

We have summarized below the material provisions of the indentures and the debt securities, or indicated which material provisions will be described in the related prospectus supplement. The prospectus supplement relating to any particular securities offered will describe the specific terms of the securities, which may be in addition to or different from the general terms summarized in this prospectus. Because the summary in this prospectus and in any prospectus supplement does not contain all of the information that you may find useful, you should read the documents relating to the securities that are described in this prospectus or in any applicable prospectus supplement. Please read "Where You Can Find More Information" to find out how you can obtain a copy of those documents. Except as otherwise indicated, the terms of the indentures are identical. As used under this caption, the term "debt securities" includes the debt securities being offered by this prospectus and all other debt securities issued by us under the indentures.

General

The indentures:

•do not limit the amount of debt securities that we may issue;

•allow us to issue debt securities in one or more series;

•do not require us to issue all of the debt securities of a series at the same time;

allow us to reopen a series to issue additional debt securities without the consent of the holders of the debt securities of such series; and

• provide that the debt securities will be unsecured, except as may be set forth in the applicable prospectus supplement.

Unless we give you different information in the applicable prospectus supplement, the senior debt securities will be unsubordinated obligations and will rank equally with all of our other unsecured and unsubordinated indebtedness. Payments on the subordinated debt securities will be subordinated to the prior payment in full of all

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of our senior indebtedness, as described under "Description of the Debt Securities—Subordination" and in the applicable prospectus supplement.

Each indenture provides that we may, but need not, designate more than one trustee under an indenture. Any trustee under an indenture may resign or be removed and a successor trustee may be appointed to act with respect to the series of debt securities administered by the resigning or removed trustee. If two or more persons are acting as trustee with respect to different series of debt securities, each trustee shall be a trustee of a trust under the applicable indenture separate and apart from the trust administered by any other trustee. Except as otherwise indicated in this prospectus, any action described in this prospect to be taken by each trustee may be taken by each trustee with respect to, and only with respect to, the one or more series of debt securities for which it is trustee under the applicable indenture.

The prospectus supplement for each offering will provide the following terms, where applicable:

•the title of the debt securities and whether they are senior or subordinated;

the aggregate principal amount of the debt securities being offered, the aggregate principal amount of the debt • securities outstanding as of the most recent practicable date and any limit on their aggregate principal amount, including the aggregate principal amount of debt securities authorized;

the price at which the debt securities will be issued, expressed as a percentage of the principal and, if other than the principal amount thereof, the portion of the principal amount thereof payable upon declaration of acceleration of the maturity thereof or, if applicable, the portion of the principal amount of such debt securities that is convertible into common stock or preferred stock or the method by which any such portion shall be determined;

if convertible, the terms on which such debt securities are convertible, including the initial conversion price or rate • and the conversion period and any applicable limitations on the ownership or transferability of common stock or preferred stock received on conversion;

the date or dates, or the method for determining the date or dates, on which the principal of the debt securities will be payable;

the fixed or variable interest rate or rates of the debt securities, or the method by which the interest rate or rates is determined;

•the date or dates, or the method for determining the date or dates, from which interest will accrue;

•the dates on which interest will be payable;

•the record dates for interest payment dates, or the method by which we will determine those dates;

•the persons to whom interest will be payable;

•the basis upon which interest will be calculated if other than that of a 360-day year of twelve 30-day months;

any make-whole amount, which is the amount in addition to principal and interest that is required to be paid to the •holder of a debt security as a result of any optional redemption or accelerated payment of such debt security, or the method for determining the make-whole amount;

the place or places where the principal of, and any premium, or make-whole amount, and interest on, the debt securities will be payable;

•where the debt securities may be surrendered for registration of transfer or conversion or exchange;

•where notices or demands to or upon us in respect of the debt securities and the applicable indenture may be served;

•the times, prices and other terms and conditions upon which we may redeem the debt securities;

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any obligation we have to redeem, repay or purchase the debt securities pursuant to any sinking fund or analogous •provision or at the option of holders of the debt securities, and the times and prices at which we must redeem, repay or purchase the debt securities as a result of such an obligation;

the currency or currencies in which the debt securities are denominated and payable if other than United States dollars, which may be a foreign currency or units of two or more foreign currencies or a composite currency or currencies and the terms and conditions relating thereto, and the manner of determining the equivalent of such foreign currency in United States dollars;

whether the principal of, and any premium, or make-whole amount, or interest on, the debt securities of the series
are to be payable, at our election or at the election of a holder, in a currency or currencies other than that in which the debt securities are denominated or stated to be payable, and other related terms and conditions;

whether the amount of payments of principal of, and any premium, or make-whole amount, or interest on, the debt •securities may be determined according to an index, formula or other method and how such amounts will be determined;

whether the debt securities will be in registered form, bearer form or both and (1) if in registered form, the person to whom any interest shall be payable, if other than the person in whose name the security is registered at the close of business on the regular record date for such interest, or (2) if in bearer form, the manner in which, or the person to whom, any interest on the security shall be payable if otherwise than upon presentation and surrender upon maturity;

any restrictions applicable to the offer, sale or delivery of securities in bearer form and the terms upon which •securities in bearer form of the series may be exchanged for securities in registered form of the series and vice versa if permitted by applicable laws and regulations;

whether any debt securities of the series are to be issuable initially in temporary global form and whether any debt securities of the series are to be issuable in permanent global form with or without coupons and, if so, whether beneficial owners of interests in any such permanent global security may or shall be required to exchange their interests for other debt securities of the series, and the manner in which interest shall be paid;

•the identity of the depositary for securities in registered form, if such series are to be issuable as a global security;

the date as of which any debt securities in bearer form or in temporary global form shall be dated if other than the original issuance date of the first security of the series to be issued;

the applicability, if any, of the defeasance and covenant defeasance provisions described in this prospectus or in the applicable indenture;

whether and under what circumstances we will pay any additional amounts on the debt securities in respect of any •tax, assessment or governmental charge and, if so, whether we will have the option to redeem the debt securities in lieu of making such a payment;

• whether and under what circumstances the debt securities being offered are convertible into common stock or preferred stock, as the case may be, including the conversion price or rate or manner or calculation thereof;

the circumstances, if any, specified in the applicable prospectus supplement, under which beneficial owners of interests in the global security may obtain definitive debt securities and the manner in which payments on a permanent global debt security will be made if any debt securities are issuable in temporary or permanent global form;

any provisions granting special rights to holders of securities upon the occurrence of such events as specified in the applicable prospectus supplement;

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if the debt securities of such series are to be issuable in definitive form only upon receipt of certain certificates or •other documents or satisfaction of other conditions, then the form and/or terms of such certificates, documents or conditions;

the name of the applicable trustee and the nature of any material relationship with us or any of our affiliates, and the percentage of debt securities of the class necessary to require the trustee to take action;

• any deletions from, modifications of, or additions to our events of default or covenants and any change in the right of any trustee or any of the holders to declare the principal amount of any of such debt securities due and payable;

• applicable CUSIP numbers; and

•any other terms of such debt securities not inconsistent with the provisions of the applicable indenture. We may issue debt securities at a discount below their principal amount and provide for less than the entire principal amount thereof to be payable upon declaration of acceleration of the maturity of the debt securities. We refer to any such debt securities throughout this prospectus as "original issue discount securities." The applicable prospectus supplement will describe the United States federal income tax consequences and other relevant considerations applicable to original issue discount securities.

We also may issue indexed debt securities. Payments of principal of and premium and interest on, indexed debt securities are determined with reference to the rate of exchange between the currency or currency unit in which the debt security is denominated and any other currency or currency unit specified by us, to the relationship between two or more currencies or currency units or by other similar methods or formulas specified in the prospectus supplement.

Except as described under "—Merger, Consolidation or Sale of Assets" or as may be set forth in any prospectus supplement, the debt securities will not contain any provisions that (1) would limit our ability to incur indebtedness or (2) would afford holders of debt securities protection in the event of (a) a highly leveraged or similar transaction involving us, or (b) a change of control or reorganization, restructuring, merger or similar transaction involving us that may adversely affect the holders of the debt securities. In the future, we may enter into transactions, such as the sale of all or substantially all of our assets or a merger or consolidation, that may have an adverse effect on our ability to service our indebtedness, including the debt securities, by, among other things, substantially reducing or eliminating our assets.

Neither the Colorado Business Corporation Act nor our governing instruments define the term "substantially all" as it relates to the sale of assets. Additionally, Colorado cases interpreting the term "substantially all" rely upon the facts and circumstances of each particular case. Consequently, to determine whether a sale of "substantially all" of our assets has occurred, a holder of debt securities must review the financial and other information that we have disclosed to the public.

We will provide you with more information in the applicable prospectus supplement regarding any deletions, modifications, or additions to the events of default or covenants that are described below, including any addition of a covenant or other provision providing event risk or similar protection.

Payment

Unless we give you different information in the applicable prospectus supplement, the principal of, and any premium, or make-whole amount, and interest on, any series of the debt securities will be payable at the corporate trust office of the trustee. We will provide you with the address of the trustee in the applicable prospectus supplement. We may also pay interest by mailing a check to the address of the person entitled to it as it appears in the applicable register for the debt securities or by wire transfer of funds to that person at an account maintained within the United States.

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All monies that we pay to a paying agent or a trustee for the payment of the principal of, and any premium, or make-whole amount, or interest on, any debt security will be repaid to us if unclaimed at the end of two years after the obligation underlying payment becomes due and payable. After funds have been returned to us, the holder of the debt security may look only to us for payment, without payment of interest for the period which we hold the funds.

Denomination, Interest, Registration and Transfer

Unless otherwise described in the applicable prospectus supplement, the debt securities of any series will be issuable in denominations of \$1,000 and integral multiples of \$1,000.

Subject to the limitations imposed upon debt securities that are evidenced by a computerized entry in the records of a depository company rather than by physical delivery of a note, a holder of debt securities of any series may:

exchange them for any authorized denomination of other debt securities of the same series and of a like aggregate •principal amount and kind upon surrender of such debt securities at the corporate trust office of the applicable trustee or at the office of any transfer agent that we designate for such purpose; and

surrender them for registration of transfer or exchange at the corporate trust office of the applicable trustee or at the office of any transfer agent that we designate for such purpose.

Every debt security surrendered for registration of transfer or exchange must be duly endorsed or accompanied by a written instrument of transfer satisfactory to the applicable trustee or transfer agent. Payment of a service charge will not be required for any registration of transfer or exchange of any debt securities, but we or the trustee may require payment of a sum sufficient to cover any tax or other governmental charge payable in connection therewith. If in addition to the applicable trustee, the applicable prospectus supplement refers to any transfer agent initially designated by us for any series of debt securities, we may at any time rescind the designation of any such transfer agent or approve a change in the location through which any such transfer agent acts, except that we will be required to maintain a transfer agent in each place of payment for such series. We may at any time designate additional transfer agents for any series of debt securities.

Neither we, nor any trustee, will be required to:

issue, register the transfer of or exchange debt securities of any series during a period beginning at the opening of
business 15 days before the day that the notice of redemption of any debt securities selected for redemption is mailed and ending at the close of business on the day of such mailing;

register the transfer of or exchange any debt security, or portion thereof, so selected for redemption, in whole or in part, except the unredeemed portion of any debt security being redeemed in part; and

issue, register the transfer of or exchange any debt security that has been surrendered for repayment at the option of the holder, except the portion, if any, of such debt security not to be so repaid.

Merger, Consolidation or Sale of Assets

The indentures provide that we may, without the consent of the holders of any outstanding debt securities, (1) consolidate with, (2) sell, lease or convey all or substantially all of our assets to, or (3) merge with or into, any other entity provided that:

either we are the continuing entity, or the successor entity, if other than us, assumes the obligations (A) to
pay the principal of, and any premium (or make-whole amount) and interest on, all of the debt securities and (B) to duly perform and observe all of the covenants and conditions contained in each indenture;

• after giving effect to the transaction, there is no event of default under the indentures and no event which, after notice or the lapse of time, or both, would become such an event of default, occurs and continues; and

•an officers' certificate and legal opinion covering such conditions are delivered to each applicable trustee. **Covenants**

Existence. Except as permitted under "—Merger, Consolidation or Sale of Assets," the indentures require us to do or cause to be done all things necessary to preserve and keep in full force and effect our existence, rights and franchises. However, the indentures do not require us to preserve any right or franchise if we determine that any right or franchise is no longer desirable in the conduct of our business.

Payment of taxes and other claims. The indentures require us to pay, discharge or cause to be paid or discharged, before they become delinquent (1) all taxes, assessments and governmental charges levied or imposed on us, our subsidiaries or our subsidiaries' income, profits or property, and (2) all lawful claims for labor, materials and supplies which, if unpaid, might by law become a lien upon our property or the property of our subsidiaries. However, we will not be required to pay, discharge or cause to be paid or discharged any such tax, assessment, charge or claim whose amount, applicability or validity is being contested in good faith by appropriate proceedings.

Provision of financial information. The indentures require us to (1) within 15 days of each of the respective dates by which we are required to file our annual reports, quarterly reports and other documents with the SEC, file with the trustee copies of the annual report, quarterly report and other documents that we file with the SEC under Section 13 or 15(d) of the Exchange Act, (2) file with the trustee and the SEC any additional information, documents and reports regarding compliance by us with the conditions and covenants of the indentures, as required, and (3) within 30 days after the filing with the trustee, mail to all holders of debt securities, as their names and addresses appear in the applicable register for such debt securities, without cost to such holders, summaries of any documents and reports required to be filed by us pursuant to (1) and (2) above.

Additional covenants. The applicable prospectus supplement will set forth any additional covenants of Solitario relating to any series of debt securities.

Events of Default, Notice and Waiver

Unless the applicable prospectus supplement states otherwise, when we refer to "events of default" as defined in the indentures with respect to any series of debt securities, we mean:

•default in the payment of any installment of interest on any debt security of such series continuing for 30 days;

default in the payment of principal of, or any premium, or make-whole amount, on any debt security of such series at its stated maturity;

•default in making any sinking fund payment as required for any debt security of such series;

•default in the performance or breach of any covenant or warranty in the debt securities or in the indenture by Solitario continuing for 60 days after written notice specifying such default, but not of a covenant added to the indenture solely for the benefit of a series of debt securities issued thereunder other than such series. Such notice

shall be given to us by the trustee, or to us and the trustee by the holders of at least 25% in principal amount of the outstanding debt securities of that series. The written notice specifying such default or breach and requiring it to be remedied and shall state that such notice is a "Notice of Default" under such indenture;

a default under any bond, debenture, note, mortgage, indenture or instrument under which there may be issued, secured or evidenced any existing or later created indebtedness for money borrowed by us or our subsidiaries, if we are directly responsible or liable as obligor or guarantor, having an aggregate principal amount of at least \$30,000,000, under which there may be issued, secured or evidenced any existing or later created indebtedness for money borrowed by us or our subsidiaries, if we are directly responsible or liable as obligor or guarantor, having an aggregate principal amount of at least \$30,000,000, if the default responsible or liable as obligor or guarantor, having an aggregate principal amount of at least \$30,000,000, if the default results in the indebtedness becoming or being declared due and payable prior to the date it otherwise would have, without such indebtedness having been discharged, or such acceleration having been rescinded or annulled, within 30 days after notice to the issuing company specifying such default. Such notice shall be given to us by the trustee, or to us and the trustee by the holders of at least 10% in principal amount of the outstanding debt securities of that series. The written notice specifying such default and requiring us to cause such indebtedness to be discharged or cause such acceleration to be rescinded or annulled and shall state that such notice is a "Notice of Default" under such indenture;

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bankruptcy, insolvency or reorganization, or court appointment of a receiver, liquidator or trustee of Solitario or any significant subsidiary of Solitario; and

• any other event of default provided with respect to a particular series of debt securities. When we use the term "significant subsidiary," we refer to the meaning ascribed to such term in Rule 1-02 of Regulation S-X promulgated under the Securities Act of 1933, as amended, or Securities Act.

If an event of default occurs and is continuing with respect to debt securities of any series outstanding, then the applicable trustee or the holders of 25% or more in principal amount of the debt securities of that series will have the right to declare the principal amount of all the debt securities of that series to be due and payable. If the debt securities of that series are original issue discount securities or indexed securities, then the applicable trustee or the holders of 25% or more in principal amount of the debt securities of that series will have the right to declare the portion of the debt securities of that series will have the right to declare the portion of the principal amount of the debt securities of that series will have the right to declare the portion of the principal amount as may be specified in the terms thereof to be due and payable. However, at any time after such a declaration of acceleration has been made, but before a judgment or decree for payment of the money due has been obtained by the applicable trustee, the holders of at least a majority in principal amount of outstanding debt securities of such series or of all debt securities then outstanding under the applicable indenture may rescind and annul such declaration and its consequences if:

we have deposited with the applicable trustee all required payments of the principal, any premium, or make-whole • amount, interest and, to the extent permitted by law, interest on overdue installment of interest, plus applicable fees, expenses, disbursements and advances of the applicable trustee; and

all events of default, other than the non-payment of accelerated principal, or a specified portion thereof, and any premium, or make-whole amount, have been cured or waived.

The indentures also provide that the holders of at least a majority in principal amount of the outstanding debt securities of any series or of all debt securities then outstanding under the applicable indenture may, on behalf of all holders, waive any past default with respect to such series and its consequences, except a default:

• in the payment of the principal, any premium, or make-whole amount, or interest;

• in respect of a covenant or provision contained in the applicable indenture that cannot be modified or amended without the consent of the holders of the outstanding debt security that is affected by the default; or

•in respect of a covenant or provision for the benefit or protection of the trustee, without its express written consent. The indentures require each trustee to give notice to the holders of debt securities within 90 days of a default unless such default has been cured or waived. However, the trustee may withhold notice if specified persons of such trustee consider such withholding to be in the interest of the holders of debt securities. The trustee may not withhold notice of a default in the payment of principal, any premium or interest on any debt security of such series or in the payment of any sinking fund installment in respect of any debt security of such series.

The indentures provide that holders of debt securities of any series may not institute any proceedings, judicial or otherwise, with respect to such indenture or for any remedy under the indenture, unless the trustee fails to act for a period of 60 days after the trustee has received a written request to institute proceedings in

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respect of an event of default from the holders of 25% or more in principal amount of the outstanding debt securities of such series, as well as an offer of indemnity reasonably satisfactory to the trustee. However, this provision will not prevent any holder of debt securities from instituting suit for the enforcement of payment of the principal of, and any premium, or make-whole amount, and interest on, such debt securities at the respective due dates thereof.

The indentures provide that, subject to provisions in each indenture relating to its duties in the case of a default, a trustee has no obligation to exercise any of its rights or powers at the request or direction of any holders of any series of debt securities then outstanding under the indenture, unless the holders have offered to the trustee reasonable security or indemnity. The holders of at least a majority in principal amount of the outstanding debt securities of any series or of all debt securities then outstanding under an indenture shall have the right to direct the time, method and place of conducting any proceeding for any remedy available to the applicable trustee, or of exercising any trust or power conferred upon such trustee. However, a trustee may refuse to follow any direction which:

• is in conflict with any law or the applicable indenture;

• may involve the trustee in personal liability; or

•may be unduly prejudicial to the holders of debt securities of the series not joining the proceeding. Within 120 days after the close of each fiscal year, we will be required to deliver to each trustee a certificate, signed by one of our several specified officers, stating whether or not that officer has knowledge of any default under the applicable indenture. If the officer has knowledge of any default, the notice must specify the nature and status of the default.

Modification of the Indentures

The indentures provide that modifications and amendments may be made only with the consent of the affected holders of at least a majority in principal amount of all outstanding debt securities issued under that indenture. However, no such modification or amendment may, without the consent of the holders of the debt securities affected by the modification or amendment:

change the stated maturity of the principal of, or any premium, or make-whole amount, on, or any installment of principal of or interest on, any such debt security;

reduce the principal amount of, the rate or amount of interest on or any premium, or make-whole amount, payable on redemption of any such debt security;

reduce the amount of principal of an original issue discount security that would be due and payable upon declaration • of acceleration of the maturity thereof or would be provable in bankruptcy, or adversely affect any right of repayment of the holder of any such debt security;

change the place of payment or the coin or currency for payment of principal of, or any premium, or make-whole amount, or interest on, any such debt security;

• impair the right to institute suit for the enforcement of any payment on or with respect to any such debt security; • if such debt security is convertible, adversely affect the right of the holder to convert such debt security;

reduce the percentage in principal amount of any outstanding debt securities necessary to modify or amend the applicable indenture with respect to such debt securities, to waive compliance with particular provisions thereof or defaults and consequences thereunder or to reduce the quorum or voting requirements set forth in the applicable indenture; and

modify any of the foregoing provisions or any of the provisions relating to the waiver of particular past defaults or • covenants, except to increase the required percentage to effect such action or to provide that some of the other provisions may not be modified or waived without the consent of the holder of such debt security.

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The holders of a majority in aggregate principal amount of the outstanding debt securities of each series may, on behalf of all holders of debt securities of that series, waive, insofar as that series is concerned, our compliance with material restrictive covenants of the applicable indenture.

We and our respective trustee may make modifications and amendments of an indenture without the consent of any holder of debt securities for any of the following purposes:

- •to evidence the succession of another person to us as obligor under such indenture;
- to add to our covenants for the benefit of the holders of all or any series of debt securities or to surrender any right or power conferred upon us in such indenture;
- •to add events of default for the benefit of the holders of all or any series of debt securities;

to add or change any provisions of an indenture (1) to change or eliminate restrictions on the payment of principal of, or premium, or make-whole amount, or interest on, debt securities in bearer form, or (2) to permit or facilitate the issuance of debt securities in uncertificated form, provided that such action shall not adversely affect the interests of the holders of the debt securities of any series in any material respect;

to change or eliminate any provisions of an indenture, provided that any such change or elimination shall become •effective only when there are no debt securities outstanding of any series created prior thereto which are entitled to the benefit of such provision;

- •to secure the debt securities;
- •to establish the form or terms of debt securities of any series;
- to provide for the acceptance of appointment by a successor trustee or facilitate the administration of the trusts under an indenture by more than one trustee;

to cure any ambiguity, defect or inconsistency in an indenture, provided that such action shall not adversely affect the interests of holders of debt securities of any series issued under such indenture;

to supplement any of the provisions of an indenture to the extent necessary to permit or facilitate defeasance and discharge of any series of such debt securities, provided that such action shall not adversely affect the interests of the •holders of the outstanding debt securities of any series; and

•to make provisions with respect to holders' rights of conversion with respect to the debt securities of any series. **Voting**

The indentures provide that in determining whether the holders of the requisite principal amount of outstanding debt securities of a series have given any request, demand, authorization, direction, notice, consent or waiver under the indentures or whether a quorum is present at a meeting of holders of debt securities:

the principal amount of an original issue discount security that shall be deemed to be outstanding shall be the • amount of the principal thereof that would be due and payable as of the date of such determination upon declaration of acceleration of the maturity thereof;

the principal amount of any debt security denominated in a foreign currency that shall be deemed outstanding shall be the United States dollar equivalent, determined on the issue date for such debt security, of the principal amount or, in the case of an original issue discount security, the United States dollar equivalent on the issue date of such debt security of the amount determined as provided in the preceding bullet point;

the principal amount of an indexed security that shall be deemed outstanding shall be the principal face amount of • such indexed security at original issuance, unless otherwise provided for such indexed security under such indenture; and

debt securities owned by us or any other obligor upon the debt securities or by any affiliate of ours or of such other obligor shall be disregarded.

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The indentures contain provisions for convening meetings of the holders of debt securities of a series. A meeting will be permitted to be called at any time by the applicable trustee, and also, upon request, by us or the holders of at least 25% in principal amount of the outstanding debt securities of such series, in any such case upon notice given as provided in such indenture. Except for any consent that must be given by the holder of each debt security affected by the modifications and amendments of an indenture described above, any resolution presented at a meeting or adjourned meeting duly reconvened at which a quorum is present may be adopted by the affirmative vote of the holders of a majority of the aggregate principal amount of the outstanding debt securities of that series represented at such meeting.

Notwithstanding the preceding paragraph, except as referred to above, any resolution relating to a request, demand, authorization, direction, notice, consent, waiver or other action that may be made, given or taken by the holders of a specified percentage, which is less than a majority of the aggregate principal amount of the outstanding debt securities of a series, may be adopted at a meeting or adjourned meeting duly reconvened at which a quorum is present by the affirmative vote of such specified percentage.

Any resolution passed or decision taken at any properly held meeting of holders of debt securities of any series will be binding on all holders of such series. The quorum at any meeting called to adopt a resolution, and at any reconvened meeting, will be persons holding or representing a majority in principal amount of the outstanding debt securities of a series. However, if any action is to be taken relating to a consent or waiver which may be given by the holders of at least a specified percentage in principal amount of the outstanding debt securities of a series, the persons holding such percentage will constitute a quorum.

Notwithstanding the foregoing provisions, the indentures provide that if any action is to be taken at a meeting with respect to any request, demand, authorization, direction, notice, consent, waiver or other action that such indenture expressly provides may be made, given or taken by the holders of a specified percentage in principal amount of all outstanding debt securities affected by such action, or of the holders of such series and one or more additional series:

•there shall be no minimum quorum requirement for such meeting; and

the principal amount of the outstanding debt securities of such series that vote in favor of such request, demand, authorization, direction, notice, consent, waiver or other action shall be taken account in determining whether such request, demand, authorization, direction, notice, consent, waiver or other action has been made, given or taken under such indenture.

Subordination

•

Unless otherwise provided in the applicable prospectus supplement, subordinated securities will be subject to the following subordination provisions.

Upon any distribution to our creditors in a liquidation, dissolution or reorganization, the payment of the principal of and interest on any subordinated securities will be subordinated to the extent provided in the applicable indenture in right of payment to the prior payment in full of all senior debt. However, our obligation to make payments of the principal of and interest on such subordinated securities otherwise will not be affected. No payment of principal or interest will be permitted to be made on subordinated securities at any time if a default on senior debt exists that permits the holders of such senior debt to accelerate its maturity and the default is the subject of judicial proceedings or we receive notice of the default. After all senior debt is paid in full and until the subordinated securities are paid in full, holders of subordinated securities will be subrogated to the rights of holders of senior debt to the extent that

distributions otherwise payable to holders of subordinated securities have been applied to the payment of senior debt. The subordinated indenture will not restrict the amount of senior debt or other indebtedness of Solitario and its subsidiaries. As a result of these subordination provisions, in the event of a distribution of assets upon insolvency, holders of subordinated securities may recover less, ratably, than our general creditors.

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The term "senior debt" will be defined in the applicable indenture as the principal of and interest on, or substantially similar payments to be made by us in respect of, other outstanding indebtedness, whether outstanding at the date of execution of the applicable indenture or subsequently incurred, created or assumed. The prospectus supplement may include a description of additional terms implementing the subordination feature.

No restrictions will be included in any indenture relating to subordinated securities upon the creation of additional senior debt.

If this prospectus is being delivered in connection with the offering of a series of subordinated securities, the accompanying prospectus supplement or the information incorporated in this prospectus by reference will set forth the approximate amount of senior debt outstanding as of the end of our most recent fiscal quarter.

Discharge, Defeasance and Covenant Defeasance

Unless otherwise indicated in the applicable prospectus supplement, the indentures allow us to discharge our obligations to holders of any series of debt securities issued under any indenture when:

either (1) all securities of such series have already been delivered to the applicable trustee for cancellation; or (2) all securities of such series have not already been delivered to the applicable trustee for cancellation but (A) have become due and payable, (B) will become due and payable within one year, or (C) if redeemable at our option, are to be redeemed within one year, and we have irrevocably deposited with the applicable trustee, in trust, funds in such currency or currencies, currency unit or units or composite currency or currencies in which such debt securities are payable, an amount sufficient to pay the entire indebtedness on such debt securities in respect of principal and any premium, or make-whole amount, and interest to the date of such deposit if such debt securities have become due and payable or, if they have not, to the stated maturity or redemption date;

•we have paid or caused to be paid all other sums payable; and

an officers' certificate and an opinion of counsel stating the conditions to discharging the debt securities have been satisfied has been delivered to the trustee.

Unless otherwise indicated in the applicable prospectus supplement, the indentures provide that, upon our irrevocable deposit with the applicable trustee, in trust, of an amount, in such currency or currencies, currency unit or units or composite currency or currencies in which such debt securities are payable at stated maturity, or government obligations, or both, applicable to such debt securities, which through the scheduled payment of principal and interest in accordance with their terms will provide money in an amount sufficient to pay the principal of, and any premium, or make-whole amount, and interest on, such debt securities, and any mandatory sinking fund or analogous payments thereon, on the scheduled due dates therefor, the issuing company may elect either:

•to defease and be discharged from any and all obligations with respect to such debt securities; or

•to be released from its obligations with respect to such debt securities under the applicable indenture or, if provided in the applicable prospectus supplement, its obligations with respect to any other covenant, and any omission to

comply with such obligations shall not constitute an event of default with respect to such debt securities. Notwithstanding the above, we may not elect to defease and be discharged from the obligation to pay any additional amounts upon the occurrence of particular events of tax, assessment or governmental charge with respect to payments on such debt securities and the obligations to register the transfer or exchange of such debt securities, to replace temporary or mutilated, destroyed, lost or stolen debt securities, to maintain an office or agency in respect of such debt securities, or to hold monies for payment in trust.

The indentures only permit us to establish the trust described in the paragraph above if, among other things, it has delivered to the applicable trustee an opinion of counsel to the effect that the holders of such debt securities will not recognize income, gain or loss for United States federal income tax purposes as a result of such defeasance or covenant defeasance and will be subject to United States federal income tax on the same amounts, in the same manner and at the same times as would have been the case if such defeasance or covenant defeasance had not occurred. Such opinion of counsel, in the case of defeasance, will be required to refer to and be based upon a ruling received from or published by the Internal Revenue Service or a change in applicable United States federal income tax law occurring after the date of the indenture. In the event of such defeasance, the holders of such debt securities would be able to look only to such trust fund for payment of principal, any premium, or make-whole amount, and interest.

When we use the term "government obligations," we mean securities that are:

direct obligations of the United States or the government that issued the foreign currency in which the debt securities of a particular series are payable, for the payment of which its full faith and credit is pledged; or

obligations of a person controlled or supervised by and acting as an agency or instrumentality of the United States or other government that issued the foreign currency in which the debt securities of such series are payable, the payment of which is unconditionally guaranteed as a full faith and credit obligation by the United States or such other government, which are not callable or redeemable at the option of the issuer thereof and shall also include a depository receipt issued by a bank or trust company as custodian with respect to any such government obligation or a specific payment of interest on or principal of any such government obligation held by such custodian for the account of the holder of a depository receipt. However, except as required by law, such custodian is not authorized to make any deduction from the amount payable to the holder of such depository receipt from any amount received by the custodian in respect of the government obligation or the specific payment of interest on or principal of such depository receipt from any amount received by the custodian in respect of the government obligation or the specific payment of interest on or principal of the specific payment of interest on or principal of the specific payment of interest on or principal of the specific payment of interest on or principal of the holder of such depository receipt from any amount received by the custodian in respect of the government obligation or the specific payment of interest on or principal of the government obligation evidenced by such depository receipt.

Unless otherwise provided in the applicable prospectus supplement, if after we have deposited funds and/or government obligations to effect defeasance or covenant defeasance with respect to debt securities of any series, (1) the holder of a debt security of such series is entitled to, and does, elect under the terms of the applicable indenture or the terms of such debt security to receive payment in a currency, currency unit or composite currency other than that in which such deposit has been made in respect of such debt security, or (2) a conversion event occurs in respect of the currency, currency unit or composite currency in which such deposit has been made, the indebtedness represented by such debt security will be deemed to have been, and will be, fully discharged and satisfied through the payment of the principal of, and premium, or make-whole amount, and interest on, such debt security as they become due out of the proceeds yielded by converting the amount so deposited in respect of such debt security into the currency, currency unit or composite currency in which such debt security becomes payable as a result of such election or such cessation of usage based on the applicable market exchange rate.

When we use the term "conversion event," we mean the cessation of use of:

a currency, currency unit or composite currency both by the government of the country that issued such currency • and for the settlement of transactions by a central bank or other public institutions of or within the international banking community;

• the European Currency Unit both within the European Monetary System and for the settlement of transactions by public institutions of or within the European Communities; or

• any currency unit or composite currency other than the European Currency Unit for the purposes for which it was established.

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The applicable prospectus supplement may further describe the provisions, if any, permitting such defeasance or covenant defeasance, including any modifications to the provisions described above, with respect to the debt securities of or within a particular series.

Conversion Rights

The terms and conditions, if any, upon which the debt securities are convertible into common stock or preferred stock will be set forth in the applicable prospectus supplement. The terms will include whether the debt securities are convertible into shares of common stock or preferred stock, the conversion price, or manner of calculation thereof, the conversion period, provisions as to whether conversion will be at the issuing company's option or the option of the holders, the events requiring an adjustment of the conversion price and provisions affecting conversion in the event of the redemption of the debt securities and any restrictions on conversion.

Global Securities

The debt securities of a series may be issued in whole or in part in the form of one or more global securities that will be deposited with, or on behalf of, a depository identified in the applicable prospectus supplement relating to such series. Global securities, if any, issued in the United States are expected to be deposited with The Depository Trust Company, or DTC, as depository. We may issue global securities in either registered or bearer form and in either temporary or permanent form. We will describe the specific terms of the depository arrangement with respect to a series of debt securities in the applicable prospectus supplement relating to such series. We expect that unless the applicable prospectus supplement provides otherwise, the following provisions will apply to depository arrangements.

Once a global security is issued, the depository for such global security or its nominee will credit on its book-entry registration and transfer system the respective principal amounts of the individual debt securities represented by such global security to the accounts of participants that have accounts with such depository. Such accounts shall be designated by the underwriters, dealers or agents with respect to such debt securities or by us if we offer such debt securities directly. Ownership of beneficial interests in such global security will be limited to participants with the depository or persons that may hold interests through those participants.

We expect that, under procedures established by DTC, ownership of beneficial interests in any global security for which DTC is the depository will be shown on, and the transfer of that ownership will be effected only through, records maintained by DTC or its nominee, with respect to beneficial interests of participants with the depository, and records of participants, with respect to beneficial interests of persons who hold through participants with the depository. Neither we nor the trustee will have any responsibility or liability for any aspect of the records of DTC or for maintaining, supervising or reviewing any records of DTC or any of its participants relating to beneficial ownership interests in the debt securities. The laws of some states require that certain purchasers of securities take physical delivery of such securities in definitive form. Such limits and laws may impair the ability to own, pledge or transfer beneficial interest in a global security.

So long as the depository for a global security or its nominee is the registered owner of such global security, such depository or such nominee, as the case may be, will be considered the sole owner or holder of the debt securities represented by the global security for all purposes under the applicable indenture. Except as described below or in the applicable prospectus supplement, owners of beneficial interest in a global security will not be entitled to have any of the individual debt securities represented by such global security registered in their names, will not receive or be entitled to receive physical delivery of any such debt securities in definitive form and will not be considered the owners or holders thereof under the applicable indenture. Beneficial owners of debt securities evidenced by a global security will not be considered the owners or holders thereof under the applicable indenture for any purpose, including with respect to the giving of any direction, instructions or approvals to the trustee under the indenture. Accordingly, each person owning a beneficial interest in a global security with respect to which DTC is the depository must rely on the procedures of DTC and, if such person is not a participant with the depository, on the procedures of the participant through which such person owns its interests, to exercise any rights of a holder under the applicable indenture. We understand that, under existing industry practice, if DTC requests any action of holders or if an owner of a beneficial interest in a global security desires to give or take any action which a holder is entitled to give or take under the applicable indenture, DTC would authorize the participants holding the relevant beneficial interest to give or take such action, and such participants would authorize beneficial owners through such participants to give or take such actions or would otherwise act upon the instructions of beneficial owners holding through them.

Payments of principal of, and any premium, or make-whole amount, and interest on, individual debt securities represented by a global security registered in the name of a depository or its nominee will be made to or at the direction of the depository or its nominee, as the case may be, as the registered owner of the global security under the applicable indenture. Under the terms of the applicable indenture, we and the trustee may treat the persons in whose name debt securities, including a global security, are registered as the owners thereof for the purpose of receiving such payments. Consequently, neither we nor the trustee have or will have any responsibility or liability for the payment of such amounts to beneficial owners of debt securities including principal, any premium, or make-whole amount, or interest. We believe, however, that it is currently the policy of DTC to immediately credit the accounts of relevant participants with such payments, in amounts proportionate to their respective holdings of beneficial interests in the relevant global security as shown on the records of DTC or its nominee. We also expect that payments by participants to owners of beneficial interests in such global security held through such participants will be governed by standing instructions and customary practices, as is the case with securities held for the account of customers in bearer form or registered in street name, and will be the responsibility of such participants. Redemption notices with respect to any debt securities represented by a global security will be sent to the depository or its nominee. If less than all of the debt securities of any series are to be redeemed, we expect the depository to determine the amount of the interest of each participant in such debt securities to be redeemed to be determined by lot. Neither we, the trustee, any paying agent nor the security registrar for such debt securities will have any responsibility or liability for any aspect of the records relating to or payments made on account of beneficial ownership interests in the global security for such debt securities or for maintaining any records with respect thereto.

Neither we nor the trustee will be liable for any delay by the holders of a global security or the depository in identifying the beneficial owners of debt securities, and we and the trustee may conclusively rely on, and will be protected in relying on, instructions from the holder of a global security or the depository for all purposes. The rules applicable to DTC and its participants are on file with the SEC.

If a depository for any debt securities is at any time unwilling, unable or ineligible to continue as depository and we do not appoint a successor depository within 90 days, we will issue individual debt securities in exchange for the global security representing such debt securities. In addition, we may at any time and in their sole discretion, subject to any limitations described in the applicable prospectus supplement relating to such debt securities, determine not to have any of such debt securities represented by one or more global securities and in such event will issue individual debt securities in exchange for the global security or securities representing such debt securities. Individual debt

securities so issued will be issued in denominations of \$1,000 and integral multiples of \$1,000.

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The debt securities of a series may also be issued in whole or in part in the form of one or more bearer global securities that will be deposited with a depository, or with a nominee for such depository, identified in the applicable prospectus supplement. Any such bearer global securities may be issued in temporary or permanent form. The specific terms and procedures, including the specific terms of the depositary arrangement, with respect to any portion of a series of debt securities to be represented by one or more bearer global securities will be described in the applicable prospectus supplement.

No Recourse

There is no recourse under any obligation, covenant or agreement in the applicable indenture or with respect to any security against any past, present or future stockholders, employees, officers, directors or agents, as such, of ours or of any successor.

DESCRIPTION OF PREFERRED STOCK

We are authorized to issue 10,000,000 shares of preferred stock. As of the date of this prospectus, no shares of our preferred stock were outstanding. The following summary of certain provisions of our preferred stock does not purport to be complete. You should refer to our Amended and Restated Articles of Incorporation, as amended, or the Articles, and our amended and restated by-laws, or the By-laws, both of which are included as exhibits to the registration statement we have filed with the SEC in connection with this offering. The summary below is also qualified by provisions of applicable law.

General Terms

Our board of directors may, without further action by our stockholders, from time to time, direct the issuance of shares of preferred stock in series and may, at the time of issuance, determine the rights, preferences and limitations of each series, including voting rights, dividend rights and redemption and liquidation preferences. Satisfaction of any dividend preferences of outstanding shares of preferred stock would reduce the amount of funds available for the payment of dividends on shares of our common stock. Holders of shares of preferred stock may be entitled to receive a preference payment in the event of any liquidation, dissolution or winding-up of our company before any payment is made to the holders of shares of our common stock. In some circumstances, the issuance of shares of preferred stock may render more difficult or tend to discourage a merger, tender offer or proxy contest, the assumption of control by a holder of a large block of our securities or the removal of incumbent management as discussed below. Upon the affirmative vote of our board of directors, without stockholder approval, we may issue shares of preferred stock with voting and conversion rights which could adversely affect the holders of shares of our common stock.

If we offer a specific series of preferred stock under this prospectus, we will describe the terms of the preferred stock in the prospectus supplement for such offering and will file a copy of the articles of amendment to the Articles establishing the terms of the preferred stock with the SEC. To the extent required, this description will include:

- •the title and stated value;
- •the number of shares offered, the liquidation preference per share and the purchase price;
- •the dividend rate(s), period(s) and/or payment date(s), or method(s) of calculation for such dividends;
- whether dividends will be cumulative or non-cumulative and, if cumulative, the date from which dividends will accumulate;
- •the procedures for any auction and remarketing, if any;
- the provisions for a sinking fund, if any;
- •the provisions for redemption, if applicable;

• any listing of the preferred stock on any securities exchange or market;

• whether the preferred stock will be convertible into our common stock, and, if applicable, the conversion price (or how it will be calculated) and conversion period;

• whether the preferred stock will be exchangeable into debt securities, and, if applicable, the exchange price (or how it will be calculated) and exchange period;

•voting rights, if any, of the preferred stock;

• a discussion of any material and/or special United States federal income tax considerations applicable to the preferred stock;

the relative ranking and preferences of the preferred stock as to dividend rights and rights upon liquidation, dissolution or winding up of the affairs of Solitario; and

any material limitations on issuance of any class or series of preferred stock ranking senior to or on a parity with the series of preferred stock as to dividend rights and rights upon liquidation, dissolution or winding up of Solitario. The preferred stock offered by this prospectus will, when issued not have, or be subject to, any preemptive or similar rights.

Transfer Agent and Registrar

The transfer agent and registrar for our preferred stock in the United States will be Computershare Trust Company, N.A. and in Canada is Computershare Investor Services Inc.

DESCRIPTION OF COMMON STOCK

The following summary of certain provisions of our common stock does not purport to be complete. You should refer to our Articles, and our By-laws, both of which are included as exhibits to the registration statement we have filed with the SEC in connection with this offering. The summary below is also qualified by provisions of applicable law.

General Terms

We are authorized to issue 100,000,000 shares of common stock. On March 24, 2011, we had 29,783,342 shares of common stock outstanding and approximately 2,700 stockholders of record. Except as otherwise provided in any resolution providing for the issue of any series of preferred stock, holders of our common stock have exclusive voting rights for the election of directors and for all other purposes. Holders of our common stock are entitled to one vote per share on all matters to be voted upon by our stockholders. Neither our Articles nor our By-laws authorize cumulative voting. The holders of our common stock are entitled to receive dividends, if any, as may be declared from time to time by our board of directors out of funds legally available for the payment of dividends, subject to the rights of any series of preferred stock. In the event of a liquidation, dissolution or winding up of Solitario, the holders of our common stock are entitled. Our common stock has no preemptive, conversion or other subscription rights. There are no redemption or sinking fund provisions applicable to our common stock. All of our outstanding shares of common stock are fully paid and non-assessable.

Our Board of Directors

Our board of directors currently has five (5) members. Our Articles and our By-laws provide that the number of directors shall be fixed from time to time by resolution adopted by the vote of a majority of the directors then in office, but shall in no event be less than three (except that there need be only as many directors as there are stockholders in the event the outstanding shares are held of record by fewer than three stockholders) nor more than nine. Our Articles provide that, upon the first election of directors by the stockholders after an increase in the number of directors to nine or more, the board of directors shall be divided into three nearly equal classes, with each classes' term expiring on a staggered basis. Vacancies and newly created directorships may be filled by a majority of the directors then in office, though less than a quorum. Directors may be removed with or without cause by the affirmative vote of a majority of the outstanding shares of capital stock entitled to vote generally in the election of directors cast at a meeting of the stockholders called for that purpose. If a director is elected by a voting group of stockholders, only the stockholders of that voting group may participate in the vote to remove that director.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock in the United States is Computershare Trust Company, N.A. and in Canada is Computershare Investor Services Inc.

NYSE Amex Equities and Toronto Stock Exchange

Our common stock is listed for quotation on the NYSE Amex Equities under the symbol "XPL" and on the Toronto Stock Exchange under the symbol "SLR."

DESCRIPTION OF WARRANTS

As of the date of this prospectus, no warrants to purchase shares of our common stock, preferred stock and/or debt securities were outstanding. We may issue warrants to purchase shares of our common stock, preferred stock and/or debt securities in one or more series together with other securities or separately, as described in the applicable prospectus supplement. Below is a description of certain general terms and provisions of the warrants that we may offer. Particular terms of the warrants will be described in the warrant agreements and the prospectus supplement to the warrants.

The applicable prospectus supplement will contain, where applicable, the following terms of and other information relating to the warrants:

- •the specific designation and aggregate number of, and the price at which we will issue, the warrants;
- •the currency or currency units in which the offering price, if any, and the exercise price are payable;
- •the designation, amount and terms of the securities purchasable upon exercise of the warrants;
- if applicable, the exercise price for shares of our common stock and the number of shares of common stock to be received upon exercise of the warrants;
- if applicable, the exercise price for shares of our preferred stock, the number of shares of preferred stock to be received upon exercise, and a description of that series of our preferred stock;
- if applicable, the exercise price for our debt securities, the amount of debt securities to be received upon exercise, and a description of that series of debt securities;
- the date on which the right to exercise the warrants will begin and the date on which that right will expire or, if you •may not continuously exercise the warrants throughout that period, the specific date or dates on which you may exercise the warrants;

whether the warrants will be issued in fully registered form or bearer form, in definitive or global form or in any
combination of these forms, although, in any case, the form of a warrant included in a unit will correspond to the form of the unit and of any security included in that unit;

• any applicable material United States federal income tax consequences;

the identity of the warrant agent for the warrants and of any other depositaries, execution or paying agents, transfer agents, registrars or other agents;

the proposed listing, if any, of the warrants or any securities purchasable upon exercise of the warrants on any securities exchange;

if applicable, the date from and after which the warrants and the common stock, preferred stock and/or debt securities will be separately transferable;

•if applicable, the minimum or maximum amount of the warrants that may be exercised at any one time;

•information with respect to book-entry procedures, if any;

•the anti-dilution provisions of the warrants, if any;

• any redemption or call provisions;

•whether the warrants are to be sold separately or with other securities as parts of units; and

• any additional terms of the warrants, including terms, procedures and limitations relating to the exchange and exercise of the warrants.

Transfer Agent and Registrar

The transfer agent and registrar for any warrants will be set forth in the applicable prospectus supplement.

DESCRIPTION OF UNITS

This section outlines some of the provisions of the units and the unit agreements. This information may not be complete in all respects and is qualified entirely by reference to the unit agreement with respect to the units of any particular series. The specific terms of any series of units will be described in the applicable prospectus supplement. If so described in a particular supplement, the specific terms of any series of units may differ from the general description of terms presented below.

We may issue units comprised of shares of preferred stock, shares of common stock, warrants and debt securities in any combination. Each unit will be issued so that the holder of the unit is also the holder of each security included in the unit. Thus, the holder of a unit will have the rights and obligations of a holder of each included security. The unit agreement under which a unit is issued may provide that the securities included in the unit may not be held or transferred separately, at any time or at any time before a specified date.

The applicable prospectus supplement may describe:

•the designation and terms of the units and of the securities comprising the units, including whether and under what circumstances those securities may be held or transferred separately;

- any provisions of the governing unit agreement;
- •the price or prices at which such units will be issued;
- •the applicable United States federal income tax considerations relating to the units;
- any provisions for the issuance, payment, settlement, transfer or exchange of the units or of the securities comprising the units; and

• any other terms of the units and of the securities comprising the units.

The provisions described in this section, as well as those described under "Description of Preferred Stock," "Description of Common Stock," "Description of Warrants" and "Description of Debt Securities" will apply to the securities included in each unit, to the extent relevant.

Issuance in Series

We may issue units in such amounts and in as many distinct series as we wish. This section summarizes terms of the units that apply generally to all series. Most of the financial and other specific terms of your series will be described in the applicable prospectus supplement.

Unit Agreements

We will issue the units under one or more unit agreements to be entered into between us and a bank or other financial institution, as unit agent. We may add, replace or terminate unit agents from time to time. We will identify the unit agreement under which each series of units will be issued and the unit agent under that agreement in the applicable prospectus supplement.

The following provisions will generally apply to all unit agreements unless otherwise stated in the applicable prospectus supplement.

Modification Without Consent

We and the applicable unit agent may amend any unit or unit agreement without the consent of any holder:

•to cure any ambiguity; any provisions of the governing unit agreement that differ from those described below;

•to correct or supplement any defective or inconsistent provision; or

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to make any other change that we believe is necessary or desirable and will not adversely affect the interests of the affected holders in any material respect.

We do not need any approval to make changes that affect only units to be issued after the changes take effect. We may also make changes that do not adversely affect a particular unit in any material respect, even if they adversely affect other units in a material respect. In those cases, we do not need to obtain the approval of the holder of the unaffected unit; we need only obtain any required approvals from the holders of the affected units.

Modification With Consent

We may not amend any particular unit or a unit agreement with respect to any particular unit unless we obtain the consent of the holder of that unit, if the amendment would:

impair any right of the holder to exercise or enforce any right under a security included in the unit if the terms of •that security require the consent of the holder to any changes that would impair the exercise or enforcement of that right; or

reduce the percentage of outstanding units or any series or class the consent of whose holders is required to amend that series or class, or the applicable unit agreement with respect to that series or class, as described below. Any other change to a particular unit agreement and the units issued under that agreement would require the following approval:

If the change affects only the units of a particular series issued under that agreement, the change must be approved by the holders of a majority of the outstanding units of that series; or

If the change affects the units of more than one series issued under that agreement, it must be approved by the

•holders of a majority of all outstanding units of all series affected by the change, with the units of all the affected series voting together as one class for this purpose.

These provisions regarding changes with majority approval also apply to changes affecting any securities issued under a unit agreement, as the governing document.

In each case, the required approval must be given by written consent.

Unit Agreements Will Not Be Qualified Under Trust Indenture Act

No unit agreement will be qualified as an indenture, and no unit agent will be required to qualify as a trustee, under the Trust Indenture Act. Therefore, holders of units issued under unit agreements will not have the protections of the Trust Indenture Act with respect to their units.

Mergers and Similar Transactions Permitted; No Restrictive Covenants or Events of Default

The unit agreements will not restrict our ability to merge or consolidate with, or sell our assets to, another corporation or other entity or to engage in any other transactions. If at any time we merge or consolidate with, or sell our assets

substantially as an entirety to, another corporation or other entity, the successor entity will succeed to and assume our obligations under the unit agreements. We will then be relieved of any further obligation under these agreements.

The unit agreements will not include any restrictions on our ability to put liens on our assets, including our interests in our subsidiaries, nor will they restrict our ability to sell our assets. The unit agreements also will not provide for any events of default or remedies upon the occurrence of any events of default.

Form, Exchange and Transfer

We anticipate that we will issue each unit in global—i.e., book-entry—form only. Units in book-entry form will be represented by a global security registered in the name of a depositary, which will be the holder of all the units represented by the global security. Those who own beneficial interests in a unit will do so through participants in the depositary's system, and the rights of these indirect owners will be governed solely by the applicable procedures of the depositary and its participants. We will describe book-entry securities, and other terms regarding the issuance and registration of the units in the applicable prospectus supplement.

Each unit and all securities comprising the unit will be issued in the same form.

If we issue any units in registered, non-global form, the following will apply to them.

The units will be issued in the denominations stated in the applicable prospectus supplement. Holders may exchange their units for units of smaller denominations or combined into fewer units of larger denominations, as long as the total amount is not changed.

Holders may exchange or transfer their units at the office of the unit agent. Holders may also replace lost, stolen, •destroyed or mutilated units at that office. We may appoint another entity to perform these functions or perform them ourselves.

Holders will not be required to pay a service charge to transfer or exchange their units, but they may be required to pay for any tax or other governmental charge associated with the transfer or exchange. The transfer or exchange, and any replacement, will be made only if our transfer agent is satisfied with the holder's proof of legal ownership. The transfer agent may also require an indemnity before replacing any units.

If we have the right to redeem, accelerate or settle any units before their maturity, and we exercise our right as to less than all those units or other securities, we may block the exchange or transfer of those units during the period beginning 15 days before the day we mail the notice of exercise and ending on the day of that mailing, in order to • freeze the list of holders to prepare the mailing. We may also refuse to register transfers of or exchange any unit selected for early settlement, except that we will continue to permit transfers and exchanges of the unsettled portion of any unit being partially settled. We may also block the transfer or exchange of any unit in this manner if the unit includes securities that are or may be selected for early settlement.

Only the depositary will be entitled to transfer or exchange a unit in global form, since it will be the sole holder of the unit.

Payments and Notices

In making payments and giving notices with respect to our units, we will follow the procedures as described in the applicable prospectus supplement.

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HOW WE PLAN TO SELL THE SECURITIES

We may sell the securities in any one or more of the following methods from time to time:

•directly to investors, directly to agents, or to investors through agents;

through underwriting syndicates led by one or more managing underwriters, or through one or more underwriters acting alone, for resale to the public or investors;

•purchases by a broker or dealer as principal and resale by such broker or dealer for its own account;

through a block trade (which may involve crosses) in which the broker or dealer so engaged will attempt to sell the securities as agent but may position and resell a portion of the block as principal to facilitate the transaction;

•ordinary brokerage transactions and transactions in which the broker solicits purchasers;

• in "at the market offerings," within the meaning of Rule 415(a)(4) of the Securities Act, to or through a market maker or into an existing trading market, on an exchange or otherwise;

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

• exchange distributions and/or secondary distributions;

•by delayed delivery contracts or by remarketing firms;

•transactions in options, swaps or other derivatives that may or may not be listed on an exchange; or

•through a combination of any such methods of sale. The distribution of the securities may be effected from time to time in one or more transactions:

•at a fixed price or prices, which may be changed;

•at market prices prevailing at the time of sale;

at prices related to such prevailing market prices; or

•at negotiated prices.

Any of the prices may represent a discount from the prevailing market prices.

Any underwritten offering may be on a best efforts or a firm commitment basis. If underwriters are used in the sale, the securities acquired by the underwriters will be for their own account. The underwriters may resell the securities in one or more transactions, including without limitation negotiated transactions, at a fixed public offering price or at a varying price determined at the time of sale. The obligations, if any, of the underwriter to purchase any securities will be subject to certain conditions. We may offer the securities to the public through underwriting syndicates represented by managing underwriters or by underwriters without a syndicate. Subject to certain conditions, the underwriters will be obligated to purchase all of the securities if any are purchased, other than securities covered by any over-allotment option. Any public offering price and any discounts or concessions allowed, reallowed or paid to dealers may be changed from time to time.

If a dealer is used in an offering of securities, we may sell the securities to the dealer, as principal. The dealer may then resell the securities to the public at varying prices to be determined by the dealer at the time of sale.

We may sell securities directly or through agents we designate from time to time. We will name any agent involved in the offering and sale of securities and we will describe any commissions we will pay the agent in the prospectus supplement. Unless the prospectus supplement states otherwise, our agent will act on a best-efforts basis for the period of its appointment.

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We may also sell securities directly to one or more purchasers without using underwriters, dealers or agents.

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

In the sale of the securities, underwriters, dealers or agents may receive compensation from us or from purchasers of the securities, for whom they may act as agents, in the form of discounts, concessions or commissions. Underwriters may sell the securities to or through dealers, and such dealers may receive compensation in the form of discounts, concessions or commissions from the underwriters and/or commissions from the purchasers for whom they may act as agents. Underwriters, dealers and agents that participate in the distribution of the securities may be deemed to be underwriters under the Securities Act and any discounts or commissions they receive from us and any profit on the resale of securities they realize may be deemed to be underwriting discounts and commissions under the Securities Act. The applicable prospectus supplement will, where applicable:

•identify any such underwriter or agent;

describe any compensation in the form of discounts, concessions, commissions or otherwise received from us by each of such underwriter, dealer or agent and in the aggregate to all underwriters, dealers and agents;

•identify the purchase price and proceeds from such sale;

• identify the amounts underwritten;

•identify the nature of the underwriter's obligation to take the securities;

•identify any over-allotment option under which the underwriters may purchase additional securities from us; and

•identify any quotation systems or securities exchanges on which the securities may be quoted or listed. Unless otherwise specified in the related prospectus supplement, each series of securities will be a new issue with no established trading market, other than the common stock, which is listed on the NYSE Amex Equities and the Toronto Stock Exchange. Any common stock sold pursuant to a prospectus supplement will be listed on the NYSE Amex Equities and the Toronto Stock Exchange, subject to applicable notices. We may elect to apply for quotation or listing of any other class or series of our securities, on a quotation system or an exchange but we are not obligated to do so. It is possible that one or more underwriters may make a market in a class or series of our securities, but such underwriters will not be obligated to do so and may discontinue any market making at any time without notice. Therefore, no assurance can be given as to the liquidity of, or the trading market for, any other class or series of our securities.

In connection with an offering, an underwriter may purchase and sell securities in the open market. These transactions may include short sales, stabilizing transactions and purchases to cover positions created by short sales. Short sales involve the sale by the underwriters of a greater number of securities than they are required to purchase in the offering. "Covered" short sales are sales made in an amount not greater than the underwriters' option to purchase additional securities, if any, from us in the offering. If the underwriters have an over-allotment option to purchase additional securities from us, the underwriters may close out any covered short position by either exercising their over-allotment option or purchasing securities in the open market. In determining the source of securities available for purchase in the open market as compared to the price at which they may purchase securities through the over-allotment option. "Naked" short sales are any sales in excess of such option or where the underwriters do not have an over-allotment option. The underwriters must close out any naked short position by purchasing securities in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the securities in the open market after pricing that could adversely affect investors who purchase in the offering.

Accordingly, to cover these short sales positions or to otherwise stabilize or maintain the price of the securities, the underwriters may bid for or purchase securities in the open market and may impose penalty bids. If penalty bids are imposed, selling concessions allowed to syndicate members or other broker-dealers participating in the offering are reclaimed if securities previously distributed in the offering are repurchased, whether in connection with stabilization transactions or otherwise. The effect of these transactions may be to stabilize or maintain the market price of the securities at a level above that which might otherwise prevail in the open market. The impositions of a penalty bid may also affect the price of the securities to the extent that it discourages resale of the securities. The magnitude or effect of any stabilization or other transactions is uncertain. These transactions may be effected on the NYSE Amex Equities or otherwise and, if commenced, may be discontinued at any time.

We do not make any representation or prediction as to the direction or magnitude of any effect that the transactions described above might have on the price of the securities. In addition, we do not make any representation that underwriters will engage in such transactions or that such transactions, once commenced, will not be discontinued without notice at any time.

Under agreements into which we may enter, underwriters, dealers and agents who participate in the distribution of the securities may be entitled to indemnification by us against certain civil liabilities, including liabilities under the Securities Act, or contribution from us to payments which the underwriters, dealers or agents may be required to make.

Underwriters, dealers and agents may engage in transactions with us or perform services for us in the ordinary course of business.

If indicated in the applicable prospectus supplement, securities may also be offered or sold by a "remarketing firm" in connection with a remarketing arrangement contemplated by the terms of the securities. Remarketing firms may act as principals for their own accounts or as agents. The applicable prospectus supplement will identify any remarketing firm and the terms of its agreement, if any, with us. It will also describe the remarketing firms compensation. Remarketing firms may be deemed to be underwriters in connection with the remarketing of the securities.

If indicated in the applicable prospectus supplement, we will authorize underwriters, dealers or other persons acting as our agents to solicit offers by particular institutions to purchase securities from us at the public offering price set forth in such prospectus supplement pursuant to delayed delivery contracts providing for payment and delivery on such future date or dates stated in such prospectus supplement. Each delayed delivery contract will be for an amount no less than, and the aggregate principal amounts of securities sold under delayed delivery contracts shall be not less nor more than, the respective amounts stated in the applicable prospectus supplement. Institutions with which such delayed delivery contracts, when authorized, may be made include commercial and savings banks, insurance companies, pension funds, investment companies, educational and charitable institutions and others, but will in all cases be subject to our approval. The obligations of any purchaser under any such contract will be subject to the conditions that (1) the purchase of the securities shall not at the time of delivery be prohibited under the laws of any jurisdiction in the United States to which the purchaser is subject, and (2) if the securities are being sold to underwriters, we shall have sold to the underwriters the total principal amount of the securities less the principal amount thereof covered by the delayed delivery contracts. The underwriters and such other agents will not have any responsibility in respect of the validity or performance of such delayed delivery contracts.

With respect to the sale of any securities under this prospectus, the maximum compensation to be received by any member of the Financial Industry Regulatory Authority, Inc. or independent broker or dealer will not be greater than eight percent (8%).

To comply with applicable state securities laws, the securities offered by this prospectus will be sold, if necessary, in such jurisdictions only through registered or licensed brokers or dealers. In addition, securities may not be sold in some states unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.

CERTAIN PROVISIONS OF COLORADO LAW AND OF OUR

ARTICLES AND BY-LAWS

Anti-Takeover Provisions of our Articles By-laws

In addition to the board of directors' ability to issue shares of preferred stock, our Articles and our By-laws contain other provisions that are intended to enhance the likelihood of continuity and stability in the composition of the board of directors and which may have the effect of delaying, deferring or preventing a future takeover or change in control of our company unless such takeover or change in control is approved by our board of directors. These provisions include the possibility of a classified board of directors as discussed above in "Description of Common Stock – Our Board of Directors" and advance notice procedures for stockholder proposals.

Classified Board. The provision for a classified board could prevent a party who acquires control of a majority of our outstanding common stock from obtaining control of the board until our second annual stockholders meeting following the date the acquirer obtains the controlling stock interest. The classified board provision could have the effect of discouraging a potential acquirer from making a tender offer or otherwise attempting to obtain control of us and could increase the likelihood that incumbent directors will retain their positions.

Advance Notice Procedures for Stockholder Proposals. Our By-laws establish an advance notice procedure for stockholder proposals to be brought before an annual meeting of our stockholders, including proposed nominations of persons for election to our board. Stockholders at our annual meeting may only consider proposals or nominations specified in the notice of meeting or brought before the meeting by or at the direction of our board or by a stockholder who was a stockholder of record on the record date for the meeting, who is entitled to vote at the meeting and who has given to our secretary timely written notice, in proper form, of the stockholder's intention to bring that business before the meeting. Although our By-laws do not give our board the power to approve or disapprove stockholder nominations of candidates or proposals regarding other business to be conducted at a special or annual meeting, our By-laws may have the effect of precluding the conduct of some business at a meeting if the proper procedures are not followed or may discourage or defer a potential acquirer from conducting a solicitation of proxies to elect its own slate of directors or otherwise attempting to obtain control of us.

Limitations on Liability and Indemnification of Officers and Directors

Our Articles limit the liability of our directors to the fullest extent permitted by Colorado law and provide that we are authorized to indemnify them to the fullest extent permitted by such law. Our By-laws provide that we are authorized to indemnify our officers to the fullest extent permitted by Colorado law.

INFORMATION INCORPORATED BY REFERENCE

The SEC allows us to incorporate by reference the information and reports we file with it, which means that we can disclose important information to you by referring you to these documents. Our SEC file number is 001-32978. The information incorporated by reference is an important part of this prospectus, and information that we file later with the SEC will automatically update and supersede the information already incorporated by reference. We are incorporating by reference the documents listed below, which we have already filed with the SEC, and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, except as to any portion of any future report or document that is not deemed filed under such provisions, until we sell all of the securities:

•Annual Report on Form 10-K for the fiscal year ended December 31, 2010; and

The description of our common stock contained in our registration statement on Form 8-A, which was filed with the SEC on August 9, 2006, including any amendment or report filed for the purpose of updating such description. Upon request, we will provide, without charge, to each person, including any beneficial owner, to whom a copy of this prospectus is delivered a copy of the documents incorporated by reference into this prospectus. You may request a copy of these filings, and any exhibits we have specifically incorporated by reference as an exhibit in this prospectus, at no cost by writing or telephoning us at the following address:

Solitario Exploration & Royalty Corp.

Attn: Corporate Secretary

4251 Kipling Street, Suite 390

Wheat Ridge, Colorado 80033

(303) 534-1030

This prospectus is part of a registration statement we filed with the SEC. We have incorporated exhibits into this registration statement. You should read the exhibits carefully for provisions that may be important to you.

You should rely only on the information incorporated by reference or provided in this prospectus or any prospectus supplement. We have not authorized anyone to provide you with different information. We are not making an offer of these securities in any state where the offer is not permitted. You should not assume that the information in this prospectus or in the documents incorporated by reference is accurate as of any date other than the date on the front of this prospectus or those documents.

WHERE YOU CAN FIND MORE INFORMATION

We are subject to the information requirements of the Securities Exchange Act of 1934, as amended, or the Exchange Act, and in accordance with the Exchange Act, file annual, quarterly and special reports, proxy statements and other information with the SEC. You may read and copy any document we file at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. You may call the SEC at 1-800-SEC-0330 for further information on the operation of the Public Reference Room. These documents also may be accessed through the SEC's electronic data gathering, analysis and retrieval system, or EDGAR, via electronic means, including the SEC's home page on the Internet (www.sec.gov).

We have the authority to designate and issue more than one class or series of stock having various preferences, conversion and other rights, voting powers, restrictions, limitations as to dividends, qualifications, and terms and conditions of redemption. See "Description of Preferred Stock" and "Description of Common Stock." We will furnish a full statement of the relative rights and preferences of each class or series of our stock which has been so designated and any restrictions on the ownership or transfer of our stock to any stockholder upon request and without charge. Written requests for such copies should be directed to Solitario Exploration & Royalty Corp., Attn: Corporate Secretary, 4251 Kipling Street, Suite 390, Wheat Ridge, Colorado 80033. Our telephone number is (303) 534-1030. Our website is located at www.solitarioxr.com. Information contained on our website is not incorporated by reference into this prospectus and, therefore, is not part of this prospectus or any accompanying prospectus supplement.

EXPERTS

Ehrhardt Keefe Steiner & Hottman PC, independent registered public accounting firm, has audited our consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2010, as set forth in their report, which is incorporated by reference in this prospectus and elsewhere in the registration statement. Our financial statements are incorporated by reference in reliance on Ehrhardt Keefe Steiner & Hottman PC's report, given on their authority as experts in accounting and auditing.

Certain information regarding our Mt. Hamilton project incorporated by reference in this prospectus is included in reliance on portions of an independent technical report prepared by SRK Consulting (US), Inc., completed in 2009, concerning the Mt. Hamilton project and has been included herein in reliance on the authority of such firm as experts in geology and engineering.

LEGAL MATTERS

Certain legal matters, including the legality of the securities offered, will be passed upon for us by Hensley Kim & Holzer, LLC, Denver, Colorado.

136,500 Shares of Common Stock

PROSPECTUS SUPPLEMENT

May 23, 2013