UR-ENERGY INC
Form 10-K
March 03, 2017
Table of Contents

United States

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(D) OF THE SECURITIES EXCHANGE ACT OF 1934

FOR THE FISCAL YEAR ENDED December 31, 2016

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(D) OF THE SECURITIES EXCHANGE ACT OF 1934

FOR THE TRANSITION PERIOD OF _____ TO _____.

Commission File Number: 001-33905

UR-ENERGY INC.

(Exact name of registrant as specified in its charter)

Canada	Not Applicable
State or other jurisdiction of incorporation or organization	(I.R.S. Employer Identification No.)

10758 West Centennial Road, Suite 200
Littleton, Colorado 80127
(Address of principal executive offices, including zip code)

Registrant's telephone number, including area code: 720-981-4588

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Name of each exchange on which registered
Common Shares, no par value	NYSE MKT

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act

Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Exchange Act.

Yes No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or smaller reporting company:

Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes No

As of March 2, 2017, there were 145,616,297 shares of the registrant's no par value Common Shares ("Common Shares"), the registrant's only outstanding class of voting securities, outstanding. As of June 30, 2016, the aggregate market value of the registrant's voting Common Shares held by non-affiliates of the registrant was approximately $72.4 million based upon the closing sale price of the Common Shares as reported by the NYSE MKT. For the purpose of this calculation, the registrant has assumed that its affiliates as of June 30, 2016, included all directors and officers and two shareholders that held approximately 21.5 million of its outstanding Common Shares.

DOCUMENTS INCORPORATED BY REFERENCE

Certain information required for Items 10, 11, 12, 13 and 14 of Part III of this Annual Report on Form 10-K is incorporated by reference to the registrant's definitive proxy statement for the 2017 Annual Meeting of Shareholders.

Table of Contents

UR-ENERGY INC.

ANNUAL REPORT ON FORM 10-K

TABLE OF CONTENTS

2

Table of Contents

When we use the terms “Ur-Energy,” “we,” “us,” “our,” or the “Company” we are referring to Ur-Energy Inc. and its subsidiaries, unless the context otherwise requires. We have included technical terms important to an understanding of our business under “Glossary of Common Terms” at the end of this section. Throughout this document we make statements that are classified as “forward-looking.” Please refer to the “Cautionary Statement Regarding Forward-Looking Statements” section of this document for an explanation of these types of assertions.

Cautionary Statement Regarding Forward-Looking Information

This annual report on Form 10-K contains "forward-looking statements" within the meaning of applicable United States and Canadian securities laws, and these forward-looking statements can be identified by the use of words such as "expect," "anticipate," "estimate," "believe," "may," "potential," "intends," "plans" and other similar expressions or statements that an action, event or result "may," "could" or "should" be taken, occur or be achieved, or the negative thereof or other similar statements. These statements are only predictions and involve known and unknown risks, uncertainties and other factors which may cause our actual results, performance or achievements, or industry results, to be materially different from any future results, performance, or achievements expressed or implied by these forward-looking statements. Such statements include, but are not limited to: (i) the ability to maintain steady state operations at Lost Creek and timing to determine future development and construction priorities; (ii) the technical and economic viability of Lost Creek; (iii) the timing and outcome of permitting and regulatory approvals of the amendment for LC East and the KM horizon; (iv) the ability to complete additional favorable uranium sales agreements including spot sales if the market warrants and production inventory is available; (v) the production rates and life of the Lost Creek Project and subsequent production from adjoining properties, including LC East; (vi) the potential of exploration targets throughout the Lost Creek Property (including the ability to expand resources); (vii) the potential of our other exploration and development projects, including Shirley Basin, as well as the technical and economic viability of Shirley Basin; (viii) the timing and outcome of applications for regulatory approval to build and operate an in situ recovery (“ISR”) mine at Shirley Basin; (ix) the outcome of our forecasts and production projections; and (x) the continuing and long-term effects on the uranium market of events in Japan in 2011 including supply and demand projections. These other factors include, among others, the following: future estimates for production, development and production ramp-up and operations, capital expenditures, operating costs, mineral resources, recovery rates, grades and market prices; business strategies and measures to implement such strategies; competitive strengths; estimates of goals for expansion and growth of the business and operations; plans and references to our future successes; our history of operating losses and uncertainty of future profitability; status as an exploration stage company; the lack of mineral reserves; risks associated with obtaining permits and other authorizations in the United States; risks associated with current variable economic conditions; our ability to service our debt and maintain compliance with all restrictive covenants related to the debt facilities and security documents; the possible impact of future financings; the hazards associated with mining production; compliance with environmental laws and regulations; uncertainty regarding the pricing and collection of accounts; the possibility for adverse results in potential litigation; uncertainties associated with changes in government policy and regulation; uncertainties associated with a Canada Revenue Agency or U.S. Internal Revenue Service audit of any of our cross border transactions; adverse changes in general business conditions in any of the countries in which we do business; changes in size and structure; the effectiveness of management and our strategic relationships; ability to attract and retain key personnel; uncertainties regarding the need for additional capital; uncertainty regarding the fluctuations of quarterly results; foreign currency exchange risks; ability to enforce civil liabilities under U.S. securities laws outside the United States; ability to maintain our listing on the NYSE MKT LLC (“NYSE MKT”) and Toronto Stock Exchange (“TSX”); risks associated with the expected classification as a "passive foreign investment company" under the applicable provisions of the U.S. Internal Revenue Code of 1986, as amended; risks associated with our investments and other risks and

uncertainties described under the heading “Risk Factors” of this annual report.

Table of Contents

Cautionary Note to U.S. Investors Concerning Disclosure of Mineral Resources

Unless otherwise indicated, all resource estimates included in this Form 10-K have been prepared in accordance with Canadian National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101") and the Canadian Institute of Mining, Metallurgy and Petroleum Definition Standards for Mineral Resources and Mineral Reserves ("CIM Definition Standards"). NI 43-101 is a rule developed by the Canadian Securities Administrators which establishes standards for all public disclosure an issuer makes of scientific and technical information concerning mineral projects. NI 43-101 permits the disclosure of an historical estimate made prior to the adoption of NI 43-101 that does not comply with NI 43-101 to be disclosed using the historical terminology if the disclosure: (a) identifies the source and date of the historical estimate; (b) comments on the relevance and reliability of the historical estimate; (c) to the extent known, provides the key assumptions, parameters and methods used to prepare the historical estimate; (d) states whether the historical estimate uses categories other than those prescribed by NI 43-101; and (e) includes any more recent estimates or data available.

Canadian standards, including NI 43-101, differ significantly from the requirements of the United States Securities and Exchange Commission ("SEC"), and resource information contained in this Form 10-K may not be comparable to similar information disclosed by U.S. companies. In particular, the term "resource" does not equate to the term "'reserves." Under SEC Industry Guide 7, mineralization may not be classified as a "reserve" unless the determination has been made that the mineralization could be economically and legally produced or extracted at the time the reserve determination is made. SEC Industry Guide 7 does not define and the SEC's disclosure standards normally do not permit the inclusion of information concerning "measured mineral resources," "indicated mineral resources" or "inferred mineral resources" or other descriptions of the amount of mineralization in mineral deposits that do not constitute "reserves" by U.S. standards in documents filed with the SEC. U.S. investors should also understand that "inferred mineral resources" have a great amount of uncertainty as to their existence and great uncertainty as to their economic and legal feasibility. It cannot be assumed that all or any part of an "inferred mineral resource" will ever be upgraded to a higher category. Under Canadian rules, estimated "inferred mineral resources" may not form the basis of feasibility or pre-feasibility studies except in rare cases. Investors are cautioned not to assume that all or any part of an "inferred mineral resource" exists or is economically or legally mineable. Disclosure of "contained ounces" in a resource is permitted disclosure under Canadian regulations; however, the SEC normally only permits issuers to report mineralization that does not constitute "reserves" by SEC standards as in-place tonnage and grade without reference to unit measures. Accordingly, information concerning mineral deposits set forth herein may not be comparable to information made public by companies that report in accordance with U.S. standards.

NI 43-101 Review of Technical Information: James A. Bonner, Ur-Energy Vice President Geology, P.Geo. and Qualified Person as defined by NI 43-101, reviewed and approved the technical information contained in this Annual Report.

Table of Contents

Glossary of Common Terms and Abbreviations

Mineral Resource	is a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade or quality, continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling. CIM Definition Standards; NI 43-101, Section 1.1.
Inferred Mineral Resource	is that part of a Mineral Resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. Geologic evidence is sufficient to imply but not verify geological and grade or quality continuity. An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration. CIM Definition Standards; NI 43-101, Section 1.1.
Indicated Mineral Resource	is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing and is sufficient to assume geological and grade or quality continuity between points of observation. An Indicated Mineral Resource has a lower level of confidence than that applying to a Measured Mineral Resource and may only be converted to a Probable Mineral Reserve. CIM Definition Standards; NI 43-101, Section 1.1.
Measured Mineral Resource	is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of Modifying Factors to support detailed mine planning and final evaluation of the economic viability of the deposit. Geological evidence is derived from detailed and reliable exploration, sampling and testing and is sufficient to confirm geological and grade or quality continuity between points of observation. A Measured Mineral Resource has a higher level of confidence than that applying to either an Indicated Mineral Resource or an Inferred Mineral Resource. It may be converted to a Proven Mineral Reserve or to a Probable Mineral Reserve. CIM Definition Standards; NI 43-101, Section 1.1.
Cut-off or cut-off grade	when determining economically viable mineral resources, the lowest grade of mineralized material that can be mined
Formation	a distinct layer of sedimentary or volcanic rock of similar composition
Grade	Quantity or percentage of metal per unit weight of host rock
Host Rock	the rock containing a mineral or an ore body

5

Table of Contents

Modifying Factors	are considerations used to convert Mineral Resources to Mineral Reserves. These include, but are not restricted to, mining, processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social and governmental factors. CIM Definition Standards
Lithology	is a description of a rock; generally, its physical nature. The description would address such things as grain size, texture, rounding, and even chemical composition. A lithologic description would be: coarse grained well rounded quartz sandstone with 10% pink feldspar and 1% muscovite.
Mineral	a naturally formed chemical element or compound having a definite chemical composition and, usually, a characteristic crystal form.
Mineralization	a natural occurrence, in rocks or soil, of one or more metal yielding minerals
Outcrop	is that part of a geologic formation or structure that appears at the surface of the Earth.
PFN	is a modern geologic logging method known as Prompt Fission Neutron. PFN is considered a direct measurement of true uranium concentration (% U) and is used to verify the grades of mineral intercepts previously reported by gamma logging. PFN logging is accomplished by a down-hole probe in much the same manner as gamma logs, however, only the mineralized interval plus a buffer interval above and below are logged.
Preliminary Economic Assessment (or PEA)	A Preliminary Economic Assessment performed under NI 43-101. A Preliminary Economic Assessment is a study, other than a prefeasibility study or feasibility study, which includes an economic analysis of the potential viability of mineral resources.
Reclamation	is the process by which lands disturbed as a result of mineral extraction activities are modified to support beneficial land use. Reclamation activity may include the removal of buildings, equipment, machinery, and other physical remnants of mining activities, closure of tailings storage facilities, leach pads, and other features, and contouring, covering and re-vegetation of waste rock, and other disturbed areas.
Uranium	a heavy, naturally radioactive, metallic element of atomic number 92. Uranium in its pure form is a heavy metal. Its two principal isotopes are U-238 and U-235, of which U-235 is the necessary component for the nuclear fuel cycle. However, “uranium” used in this Annual Report refers to triuranium octoxide, also called “U3O8” or “yellowcake”, and is produced from uranium deposits. It is the most actively traded uranium-related commodity.
Uranium concentrate	a yellowish to yellow-brownish powder obtained from the chemical processing of uranium-bearing material. Uranium concentrate typically contains 70% to 90% U_3O_8 by weight. Uranium concentrate is also referred to as “yellowcake.”

Table of Contents

Abbreviations:

BLM	U.S. Bureau of Land Management
CERCLA	Comprehensive Environmental Response and Liability Act
CIM	Canadian Institute of Mining, Metallurgy and Petroleum
DDW	Deep Disposal Well
eU_3O_8	Equivalent U_3O_8 as measured by a calibrated gamma instrument
EMT	East Mineral Trend, located within our LC East Project (Great Divide Basin, Wyoming)
EPA	U.S. Environmental Protection Agency
GDB	Great Divide Basin, Wyoming
GPM	Gallons per minute
GT	Grade x Thickness product (% ft.) of a mineral intercept (expressed without units)
HH	Header house
IX	Ion Exchange
ISR	In Situ Recovery (literally, 'in place' recovery) (also known as in situ leach or ISL)
LT	Long-term (as relates to long-term pricing in the uranium market)
MMT	Main Mineral Trend, located within our Lost Creek Project (Great Divide Basin, Wyoming)
MU	Mine Unit (also referred to as wellfield)
NEPA	U.S. National Environmental Policy Act
NI 43-101	Canadian National Instrument 43-101 (Standards of Disclosure for Mineral Properties)
NRC	U.S. Nuclear Regulatory Commission
PEA	Preliminary Economic Assessment
PPM	Parts per million
RCRA	Resource Conservation and Recovery Act
SEC	U.S. Securities Exchange Commission
UIC	Underground Injection Control (pursuant to U.S. Environmental Protection Agency regulations)
U_3O_8	A standard chemical formula commonly used to express the natural form of uranium mineralization. U represents uranium and O represents oxygen.
URP	Wyoming Uranium Recovery Program (WDEQ Program name for Agreement State Program under development)
USFWS	U.S. Fish and Wildlife Service
WDEQ	Wyoming Department of Environmental Quality (and its various divisions, LQD/Land Quality Division, WQD/Water Quality Division; AQD/Air Quality Division; and SHWD/Solid and Hazardous Waste Division)
WEQC	Wyoming Environmental Quality Council
WGFD	Wyoming Game and Fish Department

Metric/Imperial Conversion Table

The imperial equivalents of the metric units of measurement used in this annual report are as follows:

Imperial Measure	Metric Unit	Metric Unit	Imperial Measure
2.4711 acres	1 hectare	0.4047 hectares	1 acre
2.2046 pounds	1 kilogram	0.4536 kilograms	1 pound
0.6214 miles	1 kilometer	1.6093 kilometers	1 mile
3.2808 feet	1 meter	0.3048 meters	1 foot
1.1023 short tons	1 tonne	0.9072 tonnes	1 short ton

Table of Contents

Reporting Currency

All amounts in this report are expressed in United States (U.S.) dollars, unless otherwise indicated. The Financial Statements are presented in accordance with accounting principles generally accepted in the United States.

PART I

Items 1 and 2. BUSINESS AND PROPERTIES

Overview and Corporate Structure

Incorporated on March 22, 2004, Ur-Energy is an exploration stage mining company, as that term is defined in Securities and Exchange Commission ("SEC") Industry Guide 7. We are engaged in uranium mining, recovery and processing activities, including the acquisition, exploration, development and operation of uranium mineral properties in the United States. We began operation of our first in situ recovery uranium mine at our Lost Creek Project, Wyoming in 2013. Ur-Energy is a corporation continued under the Canada Business Corporations Act on August 8, 2006. Our Common Shares are listed on the TSX under the symbol "URE" and on the NYSE MKT under the symbol "URG."

Ur-Energy has one direct wholly-owned subsidiary: Ur-Energy USA Inc. ("Ur-Energy USA"), a company incorporated under the laws of the State of Colorado.

Ur-Energy USA has three wholly-owned subsidiaries: NFU Wyoming, LLC ("NFU Wyoming"), a limited liability company formed under the laws of the State of Wyoming to facilitate acquisition of certain property and assets and, currently, to act as our land holding and exploration entity; Lost Creek ISR, LLC, a limited liability company formed under the laws of the State of Wyoming to hold and operate our Lost Creek Project and certain other of our Lost Creek properties and assets; and Pathfinder Mines Corporation ("Pathfinder"), a company incorporated under the laws of the State of Delaware, which holds, among other assets, the Shirley Basin and Lucky Mc properties in Wyoming.

Ur-Energy USA has two jointly held subsidiaries with NFU Wyoming: NFUR Bootheel, LLC ("NFUR Bootheel"), a limited liability company formed under the laws of the State of Colorado to facilitate participation in an exploration, mining and development agreement with Jet Metal Corp.; and NFUR Hauber, LLC ("NFUR Hauber"), a limited liability company formed under the laws of the State of Colorado to facilitate participation in a venture project at our Hauber

project.

NFUR Hauber has one wholly-owned subsidiary: Hauber Project LLC, a limited liability company formed under the laws of the State of Colorado to hold our Hauber project. NFUR Hauber is the sole member and manager of Hauber Project LLC.

NFUR Bootheel holds an interest in The Bootheel Project, LLC, a limited liability company formed under the laws of the State of Colorado to hold the Bootheel property (and, formerly, the Buck Point property), a venture with Jet Metal Corp., in which, at December 31, 2016, we own a 19.115% interest.

Table of Contents

Currently, and at December 31, 2016, our principal direct and indirect subsidiaries, and affiliated entities, and the jurisdictions in which they were incorporated or organized, are as follows:

We are engaged in uranium mining, recovery and processing operations, in addition to the exploration and development of uranium mineral properties. Our wholly-owned Lost Creek Project in Sweetwater County, Wyoming is our flagship property. The project has been fully permitted and licensed since October 2012. We received operational approval from the U.S. Nuclear Regulatory Commission ("NRC"), and started production operation activities in August 2013. Our first sales of production from Lost Creek were made in December 2013; and in the three years since, sales have been made in every quarter.

Currently, we have multiple term uranium sales agreements in place with U.S. utilities for the sale of Lost Creek production or other yellowcake product at contracted pricing. Combined, these multi-year sales agreements represent a significant portion of our anticipated production into 2021. These agreements, individually, do not represent a substantial portion of our annual projected production, and our business is therefore not substantially dependent upon any one of the agreements.

The Company has contractually committed to sell 600,000 pounds of uranium yellowcake during 2017, at an average price of approximately $51 per pound. During 2016, we worked with our customers to establish our delivery schedule for these 2017 commitments, with distribution of sales throughout the year. This schedule was created in an attempt to avoid uneven cash flows that could result from uneven delivery schedules. Subsequently, we have taken advantage of the low prices at the end of 2016 and in early 2017 to enter into purchase agreements for 410,000 pounds at an average cost of $22 per pound. We have already delivered a portion of the pounds and can readily deliver the remaining pounds from our current inventory and anticipated production as detailed below.

Table of Contents

Our other material asset, Shirley Basin, is one of the assets we acquired as a part of the Pathfinder transaction which closed in December 2013. We also acquired all the historic geologic and engineering data for the project. During 2014, we completed a drill program of a limited number of confirmatory holes in order to complete an NI 43 101 mineral resource estimate which was released in August 2014; subsequently, an NI 43 101 Preliminary Economic Assessment for Shirley Basin was completed in January 2015. Baseline studies necessary for the permitting and licensing of the project commenced in 2014 and were completed in 2015. In December 2015, our application for a permit to mine was submitted to the State of Wyoming Department of Environmental Quality ("WDEQ").

Work is well underway on other applications for all necessary authorizations to mine at Shirley Basin. We have monitored the development of the Wyoming "agreement state" program, by which the NRC will delegate its authority for source material licensure and other radiation safety issues to the WDEQ. We understand that the development of the Uranium Recovery Program ("URP") remains on schedule for full implementation and transition likely occurring in 2018. Based upon that timing, we currently anticipate submitting our application for a source material license for Shirley Basin to the State URP.

We utilize in situ recovery of the uranium at Lost Creek and will do so at other projects where this is possible. The ISR technique is employed in uranium extraction because it allows for a lower cost and effective recovery of roll front mineralization. The in situ technique does not require the installation of tailings facilities or significant surface disturbance. This mining method utilizes injection wells to introduce a mining solution, called lixiviant, into the mineralized zone. The lixiviant is made of natural groundwater fortified with oxygen as an oxidizer, sodium bicarbonate as a complexing agent, and carbon dioxide for pH control. The complexing agent bonds with the uranium to form uranyl carbonate, which is highly soluble. The dissolved uranyl carbonate is then recovered through a series of production wells and piped to a processing plant where the uranyl carbonate is removed from the solution using Ion Exchange ("IX") and captured on resin contained within the IX columns. The groundwater is re-fortified with the oxidizer and complexing agent and sent back to the wellfield to recover additional uranium. A low-volume bleed is permanently removed from the lixiviant flow. A reverse osmosis (RO) process is available to minimize the waste water stream generated. Brine from the RO process, if used, and bleed are disposed of by means of injection into deep disposal wells. Each wellfield is made up of dozens of injection and production wells installed in patterns to optimize the areal sweep of fluid through the uranium ore body.

Our Lost Creek processing facility includes all circuits for the capture, concentration, drying and packaging of uranium yellowcake for delivery into sales. Our processing facility, in addition to the IX circuit, includes dual processing trains with separate elution, precipitation, filter press and drying circuits (this is in contrast to certain other uranium in situ recovery facilities which operate as a capture plant only, and rely on agreements with other producers for the finishing, drying and packaging of their yellowcake end-product). Additionally, a restoration circuit including a RO unit was installed during initial construction to complete groundwater restoration once mining is complete.

The elution circuit (the first step after ion exchange) is utilized to transfer the uranium from the IX resin and concentrate it to the point where it is ready for the next phase of processing. The resulting rich eluate is an aqueous solution containing uranyl carbonate, salt and sodium carbonate and/or sodium bicarbonate. The precipitation circuit follows the elution circuit and removes the carbonate from the concentrated uranium solution and combines the uranium with peroxide to create a yellowcake crystal slurry. Filtration and washing is the next step, in which the slurry is loaded into a filter press where excess contaminants such as chloride are removed and a large portion of the water is

removed. The final stage occurs when the dewatered slurry is moved to a yellowcake dryer, which will further reduce the moisture content, yielding the final dried, free-flowing, product. Refined, salable yellowcake is packaged in 55-gallon steel drums.

Table of Contents

The restoration circuit may be utilized in the production as well as the post-mining phases of the operation. The RO may initially be utilized as a part of our Class V recycling circuit to minimize the waste water stream generated during production. Once production is complete, the groundwater must be restored to its pre-mining class of use by removing a small portion of the groundwater and disposing of it (commonly known as sweep). Following sweep, the groundwater is treated utilizing RO and re-injecting the clean water. Finally, the groundwater is homogenized and sampled to insure the cleanup is complete, thus ending the mining process.

Our Lost Creek processing facility was constructed during 2012 – 2013, with production operations commencing in August 2013. Our first sales were made in December 2013. Nameplate design and NRC-licensed capacity of our Lost Creek processing plant is two million pounds per year, of which approximately one million pounds per year may be produced from our wellfields. The Lost Creek plant and the allocation of resources to mine units and resource areas were designed to generate approximately one million pounds of production per year at certain flow rates and uranium concentrations subject to regulatory and license conditions. Production of refined yellowcake was 561,094 pounds and 727,245 pounds in 2016 and 2015, respectively. The excess capacity in the design of the processing circuits of the plant is intended, first, to facilitate routine (and, non-routine) maintenance on any particular circuit without hindering production operational schedules. The capacity was also designed to permit us to process uranium from other of our mineral projects in proximity to Lost Creek if circumstances warrant in the future (e.g., Shirley Basin Project), or, alternatively to be able to contract to toll mill/process product from other in situ uranium mine sites in the region. This design would permit us to conduct either of these activities while Lost Creek is producing and processing uranium and/or in years following Lost Creek production from wellfields during final restoration activities.

Our Lost Creek processing facility includes all circuits for the production, drying and packaging of uranium yellowcake for delivery into sales. As contemplated in the Preliminary Economic Assessment of Shirley Basin, we expect that the Lost Creek processing facility may be utilized for the drying and packaging of uranium from Shirley Basin, for which we currently anticipate the need only for a satellite plant. However, the Shirley Basin permit application contemplates the construction of a full processing facility, providing greater construction and operating flexibility as may be dictated by market conditions.

Our Mineral Properties

Our current land portfolio includes 13 projects in Wyoming. Ten of these projects are in the Great Divide Basin, Wyoming, including our flagship project, Lost Creek Project, which began production operations in August 2013. Currently we control more than 1,900 unpatented mining claims and three State of Wyoming mineral leases for a total of more than 37,500 acres (~15,500 hectares) in the area of the Lost Creek Property, including the Lost Creek permit area (the “Lost Creek Project” or “Lost Creek”) and certain adjoining properties which we refer to as LC East, LC West, LC North, LC South and EN project areas (collectively, with the Lost Creek Project, the “Lost Creek Property”). Five of the projects at the Lost Creek Property contain NI 43-101 compliant mineral resources: Lost Creek, LC East, LC West, LC South and LC North. See Resource Summary below in

11

Table of Contents

Technical Developments. Below is a map showing our Wyoming projects and the geologic basins in which they are located.

Our Wyoming properties together total more than 55,000 acres (approximately 22,250 hectares) and include two properties, Shirley Basin and Lucky Mc, obtained through our acquisition of Pathfinder Mines Corporation in 2013.

Table of Contents

Operating Properties

Lost Creek Project – Great Divide Basin, Wyoming

The Lost Creek Project area was acquired in 2005, and is located in the Great Divide Basin, Wyoming. The Main Mineral Trend of the Lost Creek uranium deposit (the "MMT") is located within the Lost Creek Project. The permit area of the Lost Creek Project covers 4,254 acres (1,722 hectares), comprising 201 lode mining claims and one State of Wyoming mineral lease section. Regional access relies almost exclusively on existing public roads and highways. The local and regional transportation network consists of primary, secondary, local and unimproved roads. Direct access to Lost Creek is mainly on two crown-and-ditched gravel paved access roads to the processing plant. One road enters from the west off of Sweetwater County Road 23N (Wamsutter-Crooks Gap Road); the other enters from the east off of U.S. Bureau of Land Management ("BLM") Sooner Road. On a wider basis, from population centers, the Property area is served by an Interstate Highway (Interstate 80), a US Highway (US 287), Wyoming state routes (SR 220 and 73 to Bairoil), local county roads, and BLM roads. The Lost Creek Property is located as shown here:

The basic infrastructure (power, water, and transportation) necessary to support our ISR operation is located within reasonable proximity. Generally, the proximity of Lost Creek to paved roads is beneficial with respect to transportation of equipment, supplies, personnel and product to and from the property. Existing regional

Table of Contents

overhead electrical service is aligned in a north-to-south direction along the western boundary of the Lost Creek Project. A new overhead power line, approximately two miles in length, was constructed to bring power from the existing Pacific Power line to the Lost Creek plant. Power drops have been made to the property and distributed to the plant, offices, wellfields, and other facilities. Additional power drops will be installed as we expand the wellfield operations.

Following the purchase of an existing production royalty with respect to 20 claims of the Lost Creek Project in 2013, there are no remaining royalties at the Lost Creek Project, except for the royalty on the State of Wyoming section mineral lease as provided by law. Currently, there is only limited production planned from the State lease section. There is a production royalty of one percent on certain claims of the LC East Project, and other royalties on other claims within the other adjoining projects (LC South and EN projects) as well as the other State sections on which we maintain mineral leases (LC West and EN projects).

Production Operations

Following receipt of the final regulatory authorization in October 2012, we commenced construction at Lost Creek. Construction included the plant facility and office building, installation of all process equipment, installation of two access roads, additional power lines and drop lines, deep disposal wells, construction of two holding ponds, warehouse building, and drill shed building. In August 2013 we were given operational approval by the NRC and commenced production operation activities. See also discussion of the operational methods used at Lost Creek, above, under heading “Business and Properties.”

For the Lost Creek PEA, in order to accurately reflect existing resources, all resources produced through September 30, 2015 (1,358,407 pounds) were subtracted from total Measured Resources from the HJ Horizon in Mine Unit 1 (“MU1”). All the wells to support the originally-planned 13 header houses (“HHs”) have been completed. HHs 1-1 through 1-11 were operational as of the effective date of the Lost Creek PEA, October 15, 2015. Subsequently, the last two of the originally-planned header houses were brought online (HH 1-12 (November 2015) and HH 1-13 (May 2016)).

All monitor ring wells have been installed and pump-tested in Mine Unit 2 (“MU2”). As of October 15, 2015, the effective date for the Lost Creek PEA, 138 pattern wells have been piloted within HHs 2-1, 2-2 and 2-3. Additionally, two applications for amendments to the license and permits have been submitted. The two applications seek to authorize production in the KM Horizon within the Lost Creek Project and to authorize production in the HJ and KM Horizons within the EMT in the LC East Project.

During 2016, 538,004 pounds of U_3O_8 were captured within the Lost Creek plant; 561,094 pounds U_3O_8 were packaged in drums; and 579,179 pounds U_3O_8 of drummed inventory were shipped from the Lost Creek processing

plant to the converter. At December 31, inventory at the conversion facility was approximately 84,689 pounds U_3O_8.

From production, Lost Creek sold 562,000 pounds U_3O_8 during calendar 2016 at an average price of $39.49 per pound. After assigning two contract deliveries to a third-party trader as a part of our cash management strategy to offset sales which were rescheduled to the end of the year by one of our customers, contract sales were as expected (462,000 pounds at an average price of $41.38 per pound); however, spot sales were lower than expected (100,000 pounds at an average price of $30.75) due to the continuing low spot price environment.

After more than three years of operations, the 2016 average plant head grade remained at 58 ppm despite having somewhat lower head grades for the fourth quarter. The lower head grade during this period of operation, as

Table of Contents

well as varying month-to-month grades, is a typical result as the mine matures and older operating patterns remain in the flow regime while newer patterns are brought online.

Updated Preliminary Economic Assessment for Lost Creek Property

In January 2016, we issued an updated Preliminary Economic Assessment for the Lost Creek Property Sweetwater County Wyoming (January 19, 2016 (TREC, Inc.)), which was then amended February 8, 2016 to include two additional tables to supplement the Cash Flow and OPEX tables as set forth in the prior document (as amended, the "Lost Creek PEA"). The Lost Creek PEA was prepared for the Company and its subsidiary, Lost Creek ISR, LLC, by Douglass H. Graves, P.E., TREC, Inc. ("TREC") and James A. Bonner, C.P.G., Vice President Geology of the Company in accordance with NI 43-101.

According to the Lost Creek PEA, the mineral resources at the Lost Creek Property are as follows:

Lost Creek Property - Resource Summary

	MEASURED			INDICATED			INFERRED		
PROJECT	AVG GRADE	SHORT TONS	POUNDS	AVG GRADE	SHORT TONS	POUNDS	AVG GRADE	SHORT TONS	POUNDS
	% eU_3O_8	(X 1000)	(X 1000)	% eU_3O_8	(X 1000)	(X 1000)	% eU_3O_8	(X 1000)	(X 1000)
LOST CREEK	0.048	8,339	7,937	0.046	3,831	3,491	0.046	3,116	2,844
MU1 production through 9/30/15	(0.048)	(1,415)	(1,358)						
LC EAST	0.052	1,392	1,449	0.041	1,891	1,567	0.042	2,954	2,484
LC NORTH	-----	-----	-----	-----	-----	-----	0.045	645	581
LC SOUTH	-----								