UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM 10-K

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 For the fiscal year ended December 31, 2016 OR			
TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF The transition period from to	THE SECURITIES EXCHANGE ACT OF 1934		
Commission file number: 001-34	852		
Rare Element R			
(Exact Name of Registrant as Specified in its C	Charter)		
British Columbia	N/A		
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)		
P.O. Box 271049			
Littleton, Colorado	80127		
(Address of Principal Executive Offices)	(Zip Code)		
(720) 278-2460			
(Registrant's Telephone Number, including Are	ea Code)		
SECURITIES REGISTERED PURSUANT TO SECTION 12(g) OF THE ACT: Title of Each Class Common Shares, No Par Value	e		
Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the S	ecurities Act. Yes □ No⊠		
Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 1	5(d) of the Act. Yes \square No \boxtimes		
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 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 days. Yes \boxtimes No \square			
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 (§ 229.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrative 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 contained, to the best of the registrant's knowledge, in definitive proxy or information statements incorpamendment to the Form 10-K. \Box			
Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-acc "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange			
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 Act).	Yes □ No⊠		
As of June 30, 2016, the aggregate market value of the registrant's voting common shares held by non-sale price of the common shares as reported by the OTCQB Venture Marketplace.	affiliates of the registrant was \$4,707,995 based upon the closing		
The number of the registrant's common shares outstanding as of March 15, 2017 was 52,941,880.			

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PRELIMINARY NOTES

As used in this Annual Report on Form 10-K ("Annual Report"), references to "Rare Element," the "Company," "we," "our," or "us" mean Rare Element Resources Ltd., our predecessors and consolidated subsidiaries, or any one or more of them, as the context requires. Rare Element is focused on advancing into production its Bear Lodge rare earth elements project (the "Bear Lodge REE Project") and further exploring its Sundance Gold Project (the "Sundance Gold Project") both located primarily on the Bear Lodge property, near the town of Sundance in the state of Wyoming (the "Bear Lodge Property"). See "Part I, Item 1. Business."

Currency

Financial information is presented in accordance with generally accepted accounting principles ("GAAP") in the United States ("U.S. GAAP").

In this Annual Report, unless otherwise specified, all dollar amounts are expressed in thousands of United States Dollars ("\$" or "US\$"). If necessary, we may disclose certain information in Canadian Dollars ("CDN\$").

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report contains "forward-looking statements" within the meaning of Securities Act of 1933, as amended (the "Securities Act"), the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and "forward-looking information" within the meaning of Canadian securities laws (collectively, "forward-looking statements"). Any statements that express or involve discussions with respect to business prospects, predictions, expectations, beliefs, plans, intentions, projections, objectives, strategies, assumptions, future events, performance or exploration and development efforts using words or phrases (including negative and grammatical variations) such as, but not limited to, "expects," "anticipates," "plans," "estimates," "intends," "forecasts," "likely," "projects," "believes," "seeks," or stating that certain actions, events or results "may," "could," "would," "should," "might" or "will" be taken, occur or be achieved, are not statements of historical fact and may be forward-looking statements. Although we believe that our plans, intentions and expectations reflected in these forward-looking statements are reasonable, we cannot be certain that these plans, intentions and expectations will be achieved. Actual results, performance or achievements could differ materially from those contemplated, expressed or implied by the forward-looking statements contained in this Annual Report. Forward-looking statements in this Annual Report include, but are not limited to, statements regarding the following:

- the limited cash resources and working capital available to the Company and our ability to continue operations beyond the next 12 months, after the filing date of this Annual Report, as a going concern;
- the possible deregistration of our common shares under the Exchange Act and/or listing of our common shares on the TSX Venture Exchange or another securities exchange;
- the potential liquidation or sale of part or all of the Company's assets and the possible loss by investors of part or all of their investment;
- anticipated losses in the operation of our business going forward;
- the narrowed focus or suspension of the Company's near-term operational and permitting activities;
- the pursuit of potential financing and strategic alternatives;
- expectations regarding the ability to raise capital or secure strategic or joint venture partners and to continue development plans at our Bear Lodge REE Project or exploration of our Sundance Gold Project (together, the "Projects");
- future expenditures to comply with environmental and other laws and regulations
- expectations regarding the global supply and demand for rare earth elements ("REE"), including the potential impact of the Chinese-dominated market;
- the timing and potential conclusions of a Feasibility Study ("FS") on the Bear Lodge REE Project;

- our ability and the timing to obtain the necessary permits and licenses, including environmental, project development, mining, beneficiation and processing operations permits;
- the estimated capital costs required to bring the Bear Lodge REE Project into commercial production and the estimated life-of-mine costs, including sustaining capital;
- expectations as to the marketability and prices of our future rare earth product(s); and
- our potential status as a "passive foreign investment company" under U.S. tax laws.

Forward-looking statements are subject to a variety of known and unknown risks, uncertainties and other factors that could cause actual events or results to differ materially from those expressed or implied by the forward-looking statements, including, without limitation, risks associated with:

- our ability to obtain additional financial resources on acceptable terms to (i) maintain our assets, (ii) conduct our Projects' activities and (iii) maintain our general and administrative expenditures at acceptable levels;
- whether we deregister our common shares under the Exchange Act and/or list our common shares on the TSX Venture Exchange or another securities exchange;
- depressed and volatile mineral markets, including fluctuations in demand for, and prices of, rare earth products and gold;
- our lack of production from our mineral properties;
- our history of losses and numerous uncertainties that could affect the profitability or feasibility of our Projects;
- the potential outcome of future feasibility studies that may indicate that the Projects' economics are less favorable than previously expected;
- our ability to resume our currently suspended federal and state permitting efforts for the Bear Lodge REE Project in a timely and cost effective manner;
- the permitting, exploration, development and operation of our Projects;
- increased costs affecting our financial condition;
- establishing adequate distribution channels to place our future suite of products;
- competition in the mining, gold and rare earth industries, including an increase in global supplies or predatory pricing and dumping by our competitors;
- technological advancements, substitutes, and the establishment of new uses and markets for rare earth products;
- the specific product(s) from the Bear Lodge REE Project potentially having a limited number of customers, which could limit our bargaining power, product pricing, and profitability;
- our proprietary, patent-pending, rare earth processing technology encountering infringement, unforeseen problems, or unexpected costs in deployment or scaling up to commercial application;
- mineral reserve and mineral resource estimation;
- the permitting, licensing and regulatory approval processes for our planned operations;
- opposition to our Projects from third parties;

- continued compliance with current environmental regulations and the possibility of new legislation, environmental regulations or permit requirements adverse to the mining industry, including measures regarding reclamation, water protection, land use and climate change;
- our dependence on and the potential difficulty of attracting and retaining key personnel, consultants and qualified management;
- a shortage of equipment and supplies;
- mining and resource exploration, development and recovery being a potentially hazardous activity;
- operating in the resource industry, which can be highly speculative and subject to market forces outside of our control;
- title to our properties or mining claims;
- insurance for our operations that could become unavailable, unaffordable or commercially unreasonable or exclude from coverage certain risks to our business;
- negative impacts to our business or operations from market factors;
- our land reclamation and remediation requirements;
- information technology system disruptions, damage or failures;
- effects of proposed legislation on the mining industry and our business;
- our executive officers, directors and consultants being engaged in other businesses;
- costs associated with any unforeseen litigation;
- enforcement of civil liabilities in the United States and elsewhere;
- our common shares continuing not to pay cash dividends;
- our securities, including in relation to both company performance and general security market conditions;
- the OTCQB standards and the "penny stock" rules and the impact on trading volume and liquidity due to our listing on the OTCQB marketplace;
- tax consequences to U.S. shareholders related to our potential status as a "passive foreign investment company";
- risk factors discussed in this Annual Report; and
- other factors, many of which are beyond our control.

This list is not exhaustive of the factors that may affect our forward-looking statements. Some of the important risks and uncertainties that could affect forward-looking statements are described further under the section headings "Item 1. Business," "Item 1A. Risk Factors" and "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations" of this Annual Report. Although we have attempted to identify important factors that could cause actual results to differ materially from those described in forward-looking statements, there may be other factors that cause results not to be as anticipated, estimated or intended. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary, possibly materially, from those anticipated, believed, estimated or expected. We caution readers not to place undue reliance on any such forward-looking statements, which speak only as of the date made. Except as required by law, we disclaim any obligation to revise any forward-looking statements to reflect events or circumstances after the date

of such statements or to reflect the occurrence of anticipated or unanticipated events. We qualify all of the forward-looking statements contained in this Annual Report by the foregoing cautionary statements.

GLOSSARY OF TERMS

Conversion Factors and Abbreviations

All units in this Annual Report are stated in metric measurements unless otherwise noted. For ease of reference, the following conversion factors are provided:

To Convert Imperial Measurement Units	To Metric Measurement Units	Multiply by
Acres	Hectares	0.4047
Feet	Meters	0.3048
Miles	Kilometers	1.6093
Tons (short)	Tonnes	0.9071
Gallons	Liters	3.7850

We report our mineralized material to meet the Canadian reporting requirements for disclosure of information regarding mineral properties, which are governed by National Instrument 43-101 ("NI 43-101"). The definitions of the various categories of mineral reserves and mineral resources in NI 43-101 have the meanings given by the Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") as the CIM Definition Standards on Mineral Resources and Mineral Reserves adopted by the CIM Council. U.S. reporting requirements for disclosure of information regarding mineral properties are governed by U.S. Securities and Exchange Commission ("SEC") Industry Guide 7. The Canadian and U.S. reporting standards have similar goals in terms of conveying an appropriate level of confidence in the disclosures being reported but embody differing approaches and definitions. Although certain terms describing mineralized material are recognized and required by Canadian regulations under NI 43-101, the SEC does not recognize them. The definitions for each reporting standard are presented below with supplementary explanations and descriptions of the similarities and differences.

NI 43-101 Definitions

Mineral Reserve

The term "Mineral Reserve" refers to the economically mineable part of a Measured or Indicated Mineral Resource demonstrated by at least a preliminary feasibility study. The study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified. A Mineral Reserve includes diluting materials and allowances for losses that may occur when the material is mined.

Proven Mineral Reserve

The term "Proven Mineral Reserve" refers to the economically mineable part of a Measured Mineral Resource demonstrated by at least a preliminary feasibility study. This study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction is justified.

Probable Mineral Reserve

The term "Probable Mineral Reserve" refers to the economically mineable part of an Indicated and, in some circumstances, a Measured Mineral Resource demonstrated by at least a preliminary feasibility study. This study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction is justified.

Mineral Resource

The term "Mineral Resource" refers to a concentration or occurrence of diamonds, natural solid inorganic material, or natural solid fossilized organic material, including base and precious metals, coal, rare earth elements and industrial minerals in or on the earth's crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge.

Measured Mineral Resource The term "Measured Mineral Resource" refers to that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough to confirm both geological and grade continuity.

Indicated Mineral Resource The term "Indicated Mineral Resource" refers to that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed.

Inferred Mineral Resource

The term "Inferred Mineral Resource" refers to that part of a Mineral Resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.

Qualified Person (1)

The term "Qualified Person" refers to an individual who is an engineer or geoscientist with at least five years of experience in mineral exploration, mine development or operation or mineral project assessment, or any combination of these, and has experience relevant to the subject matter of the mineral project and the technical report, and is a member in good standing of a professional association.

(1) SEC Industry Guide 7 does not require designation of a Qualified Person.

SEC Industry Guide 7 Definitions

Reserve

The term "Reserve" refers to that part of a mineral deposit that could be economically and legally extracted or produced at the time of the reserve determination. Reserves must be supported by a feasibility study⁽²⁾ done to bankable standards that demonstrates their economic extraction ("bankable standards" implies that the confidence attached to the costs and achievements developed in the study is sufficient for the project to be eligible for external debt financing). A reserve includes adjustments to the in-situ tonnes and grade to include diluting materials and allowances for losses that might occur when the material is mined.

Proven Reserve

The term "Proven Reserve" refers to reserves for which (a) quantity is computed from dimensions revealed in outcrops, trenches, workings or drill holes; (b) grade and/or quality are computed from the results of detailed sampling; and (c) the sites for inspection, sampling and measurement are spaced so closely and the geologic character is so well-defined that size, shape, depth and mineral content of reserves are well established.

Probable Reserve

The term "Probable Reserve" refers to reserves for which quantity and grade and/or quality are computed from information similar to that used for proven (measured) reserves, but the sites for inspection, sampling and measurement are farther apart or are otherwise less adequately spaced. The degree of assurance, although lower than that for proven reserves, is high enough to assume continuity between points of observation.

Mineralized Material⁽³⁾

The term "Mineralized Material" refers to material that is not included in the reserve as it does not meet all of the criteria for adequate demonstration for economic or legal extraction.

Non-Reserves

The term "Non-Reserves" refers to mineralized material that is not included in the reserve as it does not meet all of the criteria for adequate demonstration for economic or legal extraction.

Exploration Stage

An "Exploration Stage" prospect is one that is not in either the development or production stage.

Development Stage

A "Development Stage" project is one that is undergoing preparation of an established commercially mineable deposit for ore extraction but that is not yet in production. This stage occurs after completion of a feasibility study.

Production Stage

A "Production Stage" project is actively engaged in the process of extraction and beneficiation of Mineral Reserves to produce a marketable metal or mineral product.

- (2) For SEC Industry Guide 7 purposes, the feasibility study must include adequate information on mining, processing, metallurgical, economic and other relevant factors that demonstrate, at the time of reporting, that economic extraction is justified.
- (3) This category is substantially equivalent to the combined categories of Measured Mineral Resource and Indicated Mineral Resource specified in NI 43-101.

Additional Definitions

assay – a measure of the valuable mineral content.

bastnasite - a mixed lanthanide fluoro-carbonate mineral (LaCO₃F) that currently provides the bulk of the world's supply of the LREEs. Bastnasite and monazite are the two most common sources of cerium and other REEs. Bastnasite is found in carbonatites, carbonate rocks of igneous derivation.

beneficiation – operations that concentrate and separate mineral values in ore from waste material, and typically include, but are not limited to, crushing, grinding, washing, filtration, and leaching.

cerium ("Ce") – a soft, silvery, ductile metallic element that easily oxidizes in air. Ce is the most abundant of the REEs and is found in a number of minerals, including monazite and bastnasite. Ce has two relatively stable oxidation states (Ce3+ and Ce4+), enabling both the storage of oxygen and its widespread use in catalytic converters. Ce is also widely used in glass polishing.

concentrate – a mineral beneficiation product that generally describes the material that is produced after crushing and grinding ore, effecting significant separation of gangue (waste) minerals from the desired metal and/or metallic minerals, and discarding the waste minerals. The resulting "concentrate" of minerals typically has an order of magnitude higher content of minerals than the beginning ore material.

critical rare earth elements ("CREE") – Nd, Eu, Dy, Tb and Y were identified by the U.S. Department of Energy ("DOE") as "critical" in its 2011 Critical Materials Strategy Report. CREEs are those projected by the DOE to have the greatest economic importance for clean energy development and the highest risk of supply disruption. The Company includes Pr as a CREE because of its use in conjunction with Nd in didymium as a raw material for high-intensity permanent magnets.

cut-off grade – when determining economically viable Mineral Reserves, it is the lowest grade of mineralized material that qualifies as ore (i.e., that can be mined and processed at a profit).

didymium – a mixture of the elements praseodymium and neodymium. It is used in safety glasses for glassblowing and blacksmithing, especially when a gas (propane) powered forge is used, where it provides a filter which selectively blocks the yellowish light at 589 nm emitted by the hot sodium in the glass, without having a detrimental effect on general vision, unlike dark welder's glasses.

dysprosium (" \mathbf{Dy} ") – a soft metallic element of the lanthanide series, mainly used in high-performance, permanent magnets. Dy has a high melting point and absorbs neutrons well. It is therefore also used in nuclear control rods to help control nuclear reactions. Dy is also used in laser materials.

europium (**'Eu''**) – a very rare metallic element that is the softest member of the lanthanide series. It is used in making color television tubes and lasers and as a neutron absorber in nuclear research. It is desirable due to its photon emission. Excitation of the Eu atom, by absorption of electrons or by UV radiation, results in changes in energy levels that create a visible emission. Almost all practical uses of Eu utilize this luminescent behavior.

fault – a surface or zone of rock fracture along which there has been displacement.

Feasibility Study ("**FS**") – a comprehensive study of a mineral deposit in which all geological, engineering, legal, operating, economic, social, environmental and other relevant factors are considered in sufficient detail that it could reasonably serve as the basis for a final decision by a financial institution to finance the development of the deposit for mineral production.

FMR – mineralization that includes iron oxide, manganese oxide and rare earth elements.

formation – a distinct layer or group of layers of rock of similar composition and geological origin.

gadolinium ("Gd") – a malleable, ductile metallic element of the lanthanide series that has seven natural isotopes and 11 artificial isotopes. Two of the natural isotopes, Gd 155 and Gd 157, are the best known neutron

absorbers. Gd is used to improve the heat and corrosion resistance of iron, chromium, and various alloys in medicine as a contrast medium for magnetic resonance imaging and as a radioisotope in bone mineral analysis.

geochemical – related to the distribution and amounts of the chemical elements in minerals, ores, rocks, solids, water and the atmosphere.

geophysical – related to the mechanical, electrical, gravitational and magnetic properties of the earth's crust.

geophysical surveys – survey methods used in the mining industry as exploration tools that apply the properties and methods of physics and engineering to the earth's surface and subsurface.

grade – quantity of metal per unit weight of host rock.

heavy rare earth elements ("HREEs") – defined as the elements Tb, Dy, Ho, Er, Tm, Yb, Lu and Y.

host rock – the rock in which a mineral or an ore body is contained.

Lanthanides – a series of 15 metallic chemical elements with atomic numbers 57 through 71, from lanthanum through lutetium. These 15 lanthanide elements, along with the chemically similar elements scandium and yttrium, are often collectively known as the rare earth elements.

lanthanum ("La") – the first metallic element of the lanthanide series. La is a strategically important rare earth element due to its use in fluid cracking catalysts ("FCC"), which are used in the production of transportation and aircraft fuel. La is also used in fuel cells and batteries.

life-of-mine – a term commonly used to refer to the likely term of a mining operation and normally determined by dividing the tonnes of Mineral Reserve by the annual rate of mining and processing.

light rare earth elements ("LREEs") - defined as the elements La, Ce, Pr, Nd, Pm, Sm, Eu and Gd.

LQD-WDEQ – the Land Quality Division of the Wyoming Department of Environmental Quality.

mineral – a naturally occurring, inorganic crystalline material having a definite chemical composition.

mineralization – a natural accumulation or concentration of one or more potentially economic minerals in rocks or soil. Also the process by which minerals are introduced or concentrated in rocks or soil.

monazite – a reddish-brown rare earth phosphate mineral. Monazite-group minerals are typically accompanied by elevated concentrations of uranium and thorium. This has historically limited the processing of monazite. However, this mineral is becoming more attractive because it typically has elevated concentrations of heavier rare earth elements.

National Instrument 43-101 ("NI 43-101") – Standards of Disclosure for Mineral Projects, as prescribed by the Canadian Securities Administrators.

neodymium ("Nd") – a metallic element of the lanthanide series, occurring principally in REE fluorocarbonate and monazite minerals. Nd is a key constituent of NdFeB permanent magnets and an additive to capacitor dielectrics. NdFeB magnets maximize the power/weight ratio and are found in a large variety of motors, generators, sensors, and hard disk drives. Capacitors containing Nd are found in cellular telephones, computers and nearly all other electronic devices. A minor application of Nd is for lasers.

open pit – surface mining in which the ore is extracted from a pit or quarry. The geometry of the pit will vary with the characteristics of the ore body.

ore – mineral-bearing rock that can be mined and treated profitably under current, or immediately foreseeable, economic conditions.

 ${f ore~body}$ – a mostly solid and fairly continuous mass of mineralization estimated to be economically mineable.

ore grade – the average weight of the valuable metal or mineral contained in a specific weight of ore (i.e., 1.5% REO/tonne).

oxide – for purposes of the deposits found at the Bear Lodge Property, rare earth bearing mineralized material that results from the complete oxidation by natural processes of sulfide-bearing material.

p.a. – per annum.

praseodymium ("**Pr"**) – a metallic element that constitutes about 4% of the lanthanide content of bastnasite and has a few specific applications, based mainly on its optical properties. It is a common coloring pigment, and is used in photographic filters, airport signal lenses, and welder's glasses. Because it chemically and magnetically is so similar to its periodic chart neighbors Nd and La, it is typically found in small amounts in applications where Nd and La are popular, such as NdFeB magnets and catalysts. These latter applications are actually the largest uses for Pr because the magnet and catalyst markets are so large. Thus Pr plays an important role in extending the availability of the more popular Nd and La.

preliminary economic assessment ("PEA") – a study that includes an economic analysis of the potential viability of Mineral Resources taken at an early stage of the project prior to the completion of a preliminary feasibility study.

preliminary feasibility study or pre-feasibility study ("PFS") – each mean a comprehensive study of the viability of a mineral project that has advanced to a stage where the mining method, in the case of underground mining, or the pit configuration, in the case of an open pit, has been established and an effective method of mineral beneficiation and processing has been determined. It includes a financial analysis based on reasonable assumptions of technical, engineering, legal, operating, economic, social, and environmental factors and the evaluation of other relevant factors that are sufficient for a qualified person, acting reasonably, to determine if all or part of the Mineral Resource may be classified as a Mineral Reserve under NI 43-101 standards.

rare earth elements ("REE") – a group of metallic elements with unique chemical, catalytic, magnetic, metallurgical and phosphorescent properties.

rare earth oxide ("REO") - the oxide form of REE.

RC (reverse circulation) drilling – a rotary drilling method using either a hammer or a tri-cone bit to produce rock cuttings that are forced upward from the bottom of the drill hole to the surface through an outer tube, using liquid and/or air pressure moving downward through an inner tube.

recovery – the percentage of contained metal actually extracted from ore in the course of beneficiating/processing such ore.

samarium ("Sm") – a metallic element of the lanthanide series predominantly used to produce Sm cobalt magnets. Although these magnets are slightly less powerful than NdFeB magnets at room temperature, Sm cobalt magnets can be used over a wider range of temperatures and are less susceptible to corrosion.

sampling and analytical variance/precision – an estimate of the total error induced by sampling, sample preparation and analysis.

stockwork – complex system of structurally controlled or randomly oriented veins that can be standalone ore bodies or occur on the periphery of larger veins. They are also referred to as "stringer zones."

strike – the direction or trend that a structural surface (e.g., a bedding or fault plane) takes as it intersects the horizontal.

strip – to remove overburden in order to expose ore.

sulfide – a mineral combining sulfur and base metals, such as iron and less commonly copper, lead, zinc and/or molybdenum; metallic sulfur-bearing mineral associated with primary REE mineralization.

tailings – finely ground waste material produced from beneficiating ore to recover metals or minerals.

total rare earth oxide ("TREO") - refers to the sum total of REO present in a deposit.

vein – a sheet-like body of mineralized rock. On many properties, veins may consist largely of quartz gangue. However, on the Bear Lodge Property, veins can contain a variable assemblage that includes, but is not limited to, gangue minerals like iron and manganese oxides, quartz, calcite, clay, apatite and/or potassium feldspar with or without ore minerals.

PART I

ITEM 1. BUSINESS

CORPORATE BACKGROUND

Rare Element was incorporated under the laws of the Province of British Columbia, Canada, on June 3, 1999 as Spartacus Capital Inc. Our executive office address is P.O. Box 271049, Littleton, Colorado 80127. The telephone number for our executive office is (720) 278-2460. We maintain a corporate website at www.rareelementresources.com.

Effective as of October 8, 1999, we completed our initial public offering of 1,500,000 common shares at CDN\$0.20 per share, raising CDN\$300. The common shares began trading on the predecessor exchange to the TSX Venture Exchange ("TSX-V") in Canada on November 15, 1999 under the ticker symbol "SCI."

Originally organized as a "capital pool" company whose activities were focused on the identification and completion of a qualifying transaction as required by the rules of the TSX-V, we transitioned to a "venture company" on July 25, 2003, coincident with (1) the completion of a reverse takeover acquisition of Rare Element Holdings Ltd. (the qualifying transaction), (2) a name change of "Spartacus Capital, Inc." to "Rare Element Resources Ltd.," and (3) the completion of a CDN\$551 private placement. Rare Element Holdings Ltd.'s main asset, through its wholly owned subsidiary, Rare Element Resources, Inc., a Wyoming corporation, is its 100% interest in a group of unpatented mining claims and repurchase rights to adjacent private property, together known as the Bear Lodge Property.

On December 20, 2004, our authorized share capital was changed from 100,000,000 common shares to an unlimited number of common shares without par value. Our common shares began trading on the NYSE MKT on August 18, 2010 under the ticker symbol "REE." On May 27, 2011, we transitioned from a listing on the TSX-V to the Toronto Stock Exchange ("TSX") and traded under the ticker symbol "RES" until December 31, 2015, when we voluntarily delisted from and ceased to trade on the TSX. Our common shares traded on the NYSE MKT through February 26, 2016. Since February 29, 2016, our common shares have been trading on the OTCQB Venture Marketplace under the ticker symbol "REEMF." As of December 31, 2016, there were 52,941,880 common shares issued and outstanding.

SUBSIDIARIES

We have one direct wholly owned subsidiary, incorporated under the laws of British Columbia, Canada on July 12, 1996 under the name "Rare Element Holdings Ltd." That subsidiary has one direct wholly owned subsidiary, Rare Element Resources, Inc., incorporated on August 21, 1997 in the state of Wyoming, USA, formerly known as Paso Rico (USA), Inc.

DESCRIPTION OF BUSINESS

We have been focused on advancing the Bear Lodge REE Project located near the town of Sundance in northeast Wyoming. The Bear Lodge REE Project consists of several large, disseminated REE deposits and a

proposed hydrometallurgical plant to be located near Upton, Wyoming. The Bear Lodge REE Project is one of the highest-grade REE deposits identified in North America and one of the highest-grade europium deposits in the world. In addition, the Bear Lodge REE Project has a favorable distribution of the remaining critical rare earth elements ("CREE"), which the Company defines as neodymium, praseodymium, dysprosium, europium, terbium and yttrium.

In its development efforts for the Bear Lodge REE Project, the Company has done extensive laboratory bench-scale and pilot plant testing on appropriate metallurgical processes to recover saleable rare earth products and has filed five patents on its metallurgical innovations. Among them, it has pilot tested and filed for patent protection on a rare earth separation technique that modifies conventional solvent extraction ("SX") methods used for rare earth separation to be more efficient and environmentally sound, involving no waste effluents discharged from the process.

We have placed the Bear Lodge REE Project under care-and-maintenance, and all permitting activities have been suspended. At present, we are focused on raising capital and/or seeking strategic partners to resume our rare earth element efforts to complete elemental separation test work and technical studies. Based on current permitting timetables and other factors, the Company anticipates that it could receive all permits and licenses for the Bear Lodge REE Project approximately 18 to 30 months after resuming permitting efforts. If we obtain the requisite financing, our plan is to resume development activities, including working in parallel (with permitting activities) to advance engineering in preparation for the Feasibility Study, to gain strategic partners and off-take customers, to evaluate a modular approach to development beginning with a smaller initial production facility and to scale up its REE separation test work in further pilot plant testing. Our ability to begin construction activities on the Bear Lodge REE Project will be subject to (i) the availability of adequate capital, (ii) a positive FS, (iii) securing off-take customers, (iv) obtaining necessary permits and licenses, (v) Board approval, and (vi) other factors.

The Bear Lodge REE Project deposit is located near excellent mining infrastructure, including good road access and a power line within two kilometers of the property. The Bear Lodge REE Project site is 100 kilometers east of Gillette, Wyoming, a major infrastructure, support and logistics center for coal mines in the Powder River Basin that should provide for ready access to the required production supplies and materials as well as skilled labor. The deposit is also situated 64 kilometers from the nearest railhead at Upton, Wyoming, allowing access to major distribution channels from the proposed hydrometallurgical plant.

Additional information regarding the Bear Lodge REE Project and the Bear Lodge Property is included under the section heading "Item 2. Properties" in this Annual Report.

RECENT CORPORATE DEVELOPMENTS

Accomplishments in 2016

During 2016, the Company focused its efforts on maintaining its assets and conserving cash. By the second quarter, all but one employee had been terminated in accordance with Company policies and employment contracts. The Directors waived their annual retainer and other cost reduction strategies were aggressively pursued. The Company also continued to pursue strategic alternatives for both the Bear Lodge REE Project and the Sundance Gold Project. As the gold price increased during the 2016, the interest from third-parties in the Sundance Gold Project increased.

On October 20, 2016, the Company and Whitelaw Creek LLC, a Wyoming limited liability company ("Whitelaw Creek"), executed an asset purchase agreement (the "Asset Purchase Agreement"). On October 26, 2016, the Company and Whitelaw Creek closed the transactions contemplated by the Asset Purchase Agreement, pursuant to which the Company sold to Whitelaw Creek for approximately \$600 in cash approximately 640 acres of non-core real property located in Crook County, Wyoming, that is under consideration for a stockpile facility for the Bear Lodge REE Project (the "Land Sale"). The Company has the right to repurchase the land (i) for \$900 within three years following the Land Sale or (ii) for \$1,000 after the third anniversary following the Land Sale but on or before the fifth anniversary of the Land Sale, in each case subject to certain adjustments (the "Repurchase Price"). Payment of the Repurchase Price may be made, at Whitelaw Creek's option, in the form of cash, common shares of the Company, or a combination of cash and common shares of the Company. Payment of any common shares of the Company is subject to a beneficial ownership limitation for Whitelaw Creek and its affiliates collectively of 9.9% of the then-current total number of outstanding common shares of the Company, and in no event may the portion of the

Repurchase Price paid in common shares of the Company exceed 5 million shares. Valuation of the common shares of the Company for purposes of payment of the Repurchase Price is based on the 10-day volume-weighted average closing price of such shares as of the closing date of the Land Sale, subject to certain conditions.

Plans for 2017

We have limited cash resources on hand, and as reported above, have reduced staff to one executive employee and have implemented measures to conserve our remaining cash. The Company has narrowed the focus of its activities to only the very highest priority items that we believe have the greatest potential to preserve the value of the Projects and shareholder value, including seeking capital and actively pursuing potential strategic alternatives, such as off-take agreements, joint ventures, and the potential sale of various assets and/or part or all of the Projects.

TRENDS AND DESCRIPTION OF THE REE MARKET

Uses for REE products

REEs are used in computers, cellular telephones, television screens, wind turbines, fuel cells, magnetic refrigeration technologies, energy-efficient lighting, petroleum-refining catalysts and numerous other modern specialty technologies including military applications. REEs are also used in hybrid-electric vehicles and all-electric vehicles, many of which contain REE-bearing nickel-metal-hydride batteries and REE "super" magnets within electrical motors and generators. Prices of REEs are affected by the supply and demand fundamentals of the market.

Trends affecting REE Supply, Demand and Prices

Global REE supply continues to be dominated by production from China, which produced an estimated 90% of the world's REE output in 2016. Illegal or unauthorized Chinese REE production remained one of the main themes for China, accounting for 44,000 to 46,000t REO, around one-third of global production. China, once again announced plans to crack down on illegal mining. China's exports increased by almost 50% in 2016, most of which was lanthanum and yttrium and other rare earth compounds excluding cerium. The Baiyun Obo iron ore mine was historically responsible for about one-third of global rare earth production remained closed.

Following the WTO ruling against Chinese trade practices, in May, 2015, China eliminated its export taxes on rare earths and replaced them with a system of *ad valorem* taxes. REE export prices immediately declined to approximate Chinese domestic prices for most REEs and continued to decline during 2016. During the first two months of 2017 this trend appears to have reversed and China has announced recent price increases for neodymium and praseodymium.

Rare earth production in the rest of the world, though only 10% of estimated 2016 production, is expected to grow as Lynas Corporation ("Lynas") expands production. In 2016, Lynas reached its Phase I design production capacity of 11,000 tonnes per annum while Molycorp's Mountain Pass operation remained on care-and-maintenance under bankruptcy protection.

The global economy and the speed of technological innovation play key roles in the continuation and pace of increased demand for REEs. If the global economy experiences a prolonged period of modest growth, then the projected increases in total REE product demand will occur at a similar pace except for the demand for permanent rare earth magnets, which are expected to outstrip overall growth. Nd and Pr are expected to remain in relatively short supply for the next few years. Several market experts believe that demand growth for some REEs is supply constrained (e.g., magnet materials are often mentioned) and that an increase in global availability and production of these rare earths could accelerate demand growth. Since REEs are used for many new technologies, the pace of technology innovation could also continue to boost REE demand.

Overall rare earth prices remained subdued in 2016, with one non-Chinese producer reporting lower prices in the second half of 2016 including NdPr (10 percent decline). While all rare earth producers have faced challenging market conditions for the last 18-24 months, market demand growth has remained positive. Demand for rare earth permanent magnets using NdPr has continued to grow reflecting continued demand in technology, consumer products, and military applications.

In the first months of 2017, there have been some signs of improving trends in published market prices for NdPr.

Supply and demand factors for REE products that could positively impact REE prices include the following, among other factors:

- the use of Nd, Pr, Tb and Dy in high-strength magnets that are critical to hybrid and electric vehicles and the increased construction of wind power generation facilities, particularly large off-shore installations;
- the use of Sm in high-performance Sm-cobalt permanent magnets;
- the use of La and Ce for NiMH batteries that are utilized in hybrid and electric vehicles;
- the use of Eu, Tb, Y and Ce in the production of compact fluorescent and LED light bulbs;
- the use of high-strength NdFeB magnets in the miniaturization of electronic products;
- the use of La in FCCs by refineries processing lower quality crude oil that consumes greater quantities of the catalysts;
- the increased use of REEs in the drive to improve energy efficiency and reduce greenhouse gases, ("GHGs") by the United States, China and the European Union;
- China consolidating its REE industry and closing small, inefficient and polluting REE producers;
- the stockpiling of certain REE products, tightening control of export volumes through licensing and increases in production taxes by China;
- changes in trade policies, including changes in taxes or import duties for REE materials by the U.S. government;
- the use of Ce in glass, ceramics, glass polishing, and advanced water filtration applications;
- the continued research and commercialization of new applications for REE products; and
- the rising costs in China due to stricter environmental controls and rising wages.

Supply and demand factors for REE products that could negatively impact REE prices include the following, among other factors:

- the potential for oversupply of certain REEs due to new production outside of China and/or increased exports from China;
- strong demand for selected REEs like magnet materials, driving overproduction of other co-product REEs and creating oversupply conditions for the less desired REEs;
- the potential substitution of other materials for high-priced REEs;
- economization by intermediate and end-users to reduce their usage of REEs in end-products;
- the potential for increased recycling of high-priced REEs;
- continued low oil, gas and coal prices that could reduce the demand for technologies using REEs;
- static or lower global economic growth, reducing overall demand growth for REEs; and

• potential by-product production of REEs that may increase supply irrespective of the normal economics of REE production.

The feasibility of the Bear Lodge REE Project and our ability to raise additional funds to develop the Bear Lodge REE Project may be impacted by global supply and demand and future prices of REEs.

SEASONALITY

Seasonality in the state of Wyoming is not a material factor to exploration activities and any future development and operating activities on the Bear Lodge Property. Snowfall in the winter may temporarily limit our access to the Bear Lodge Property and our ability to drill or operate from approximately November through June, but it is not a material issue at this time.

COMPETITION

The industry in which we operate is highly competitive. We compete with other mining and exploration companies in connection with the exploration and development of mineral properties. There is competition for the limited number of opportunities, some involving companies having substantially greater financial resources, staff and facilities than we do. We also compete with other mining and exploration companies in our efforts to hire and retain experienced professionals. As a result, we may have difficulty attracting or retaining key personnel or securing outside technical resources.

In 2016, China accounted for an estimated 90% of global REE production and 60% of worldwide demand. While REE projects exist outside of China, current non-Chinese production is relatively limited. Further, even though one large mine outside of China is in production, it is likely that the Chinese will be able to dominate the market for REEs for the foreseeable future. This gives the Chinese producers a competitive advantage in controlling the supply and processing of REEs and an opportunity to reduce prices to discourage competition. Any increase in the amount of REEs exported from other nations increases competition and may result in price reductions, reduced margins and loss of potential market share, any of which could materially adversely affect our business. As a result of these factors, the Company may not be able to compete effectively against current and future competitors. See "Item 1A. Risk Factors" of this Annual Report.

PATENTS, TRADEMARKS AND LICENSES

We plan to rely on a combination of trade secret protection, nondisclosure agreements, trademarks and patents-pending to establish and protect our proprietary intellectual property rights. We utilize trade secret protection and nondisclosure agreements to protect our proprietary rare earth technology. As of December 31, 2016, we had filed six U.S. provisional patent applications relating to processing methods, including (1) selective recovery of REEs from mixed chloride leach solutions using oxalic acid, (2) thorium extraction process technology and (3) separation of cerium from bulk REEs in an SX process. Two of these provisional applications were converted to a single utility application and an application under the international Patent Cooperation Treaty ("PCT"). This PCT application was nationalized in several foreign jurisdictions in 2015. During 2015, we converted another one of these provisional applications into a single utility application and an application under the PCT, and combined another three of these provisional patent applications into a single PCT application that also designates the United States for patent protection. It is our intention that this PCT application will be filed in the United States and several foreign jurisdictions in the first half of 2017. If allowed, a U.S. patent granted from the utility patent application would have a term of 20 years measured from the filing date of the utility patent application. See "Item 1A. Risk Factors" of this Annual Report. Several of these technologies have potential value for application in other industries, and the Company is evaluating this potential.

ENVIRONMENTAL REGULATION

Our exploration and planned development and mining activities are subject to extensive and costly environmental laws and regulations under various federal, state, county and local laws relating to the protection of the environment, which generally includes air and water quality, hazardous waste management, radionuclide handling and reclamation. Failure to comply with these requirements can result in civil and/or criminal liability for non-compliance, fines and penalties, clean-up costs and other environmental damages. Also, unanticipated developments or changes in the law could require us to make environmental expenditures significantly greater than

those we currently expect. Environmental legislation has evolved in a manner that may require stricter standards and enforcement, increased fines and penalties for non-compliance, more stringent environmental assessments of proposed projects and a heightened degree of responsibility for companies and their officers, directors and employees. Current and future laws, regulations and permits will impose significant costs, liabilities or obligations or could limit or prevent our ability to continue operations or undertake new operations. Environmental hazards may exist on the properties in which we hold interests that are unknown to us at present and that have been caused by previous owners of the properties.

Our Bear Lodge Property in Wyoming is subject to federal and state environmental laws, regulations, and permits. The federal agency with primary regulatory jurisdiction is the U.S. Forest Service (the "USFS"), Bearlodge Ranger District, Sundance, Wyoming. The state agency with regulatory jurisdiction is the Wyoming Department of Environmental Quality. We operate under approvals and permits granted by these two agencies and have established a surety bond to ensure environmental reclamation of areas disturbed. As of December 31, 2016, the Company was able to reduce its surety bond with the state of Wyoming from \$430to \$241, a reduction of \$189. Prior to operating, we will require several other permits and licenses including those issued by the Nuclear Regulatory Commission (the "NRC"), U.S. Army Corps of Engineers and others.

In 2009, the EPA announced that it would develop financial assurance requirements under CERCLA Section 108(b) for the hard rock mining industry. On January 29, 2016, the U.S. District Court for the District of Columbia issued an order requiring that if the EPA intends to prepare such regulations, it must do so by December 1, 2016. The EPA issued its proposed rule on January 11, 2017. Under the proposed rule, owners and operators of facilities subject to the rule would be required to (i) notify the EPA that they are subject to the rule; (ii) calculate a level of financial responsibility for their facility using a formula provided in the rule; (iii) obtain a financial responsibility instrument, or qualify to self-assure, for the amount of financial responsibility; (iv) demonstrate that they have obtained such evidence of financial responsibility; and (v) update and maintain financial responsibility until the EPA releases the owner or operator from the CERCLA Section 108(b) regulations. If such requirements are retained in the final rule, they could require significant additional financial assurance for our Projects, which could have a material adverse effect on our project development and business operations.

MINERALS EXPLORATION REGULATION

Mining operations and exploration and development activities are subject to various national, state, county and local laws and regulations in the United States that govern prospecting, development, mining, production, exports, taxes, labor standards, occupational health, waste disposal, protection of the environment, mine safety, hazardous substances and other matters. The Company believes that it is in compliance in all material respects with applicable mining, health, safety and environmental statutes and the regulations. There are no current orders or notices of violations relating to the Company under applicable laws and regulations.

Compliance with these laws and regulations may impose substantial costs on the Company and could subject it to significant potential liabilities. Changes in these laws or regulations could require us to expend significant resources to comply with new laws or regulations, or changes to current requirements, and could have a material adverse effect on our business operations.

MINE SAFETY AND HEALTH REGULATIONS

Pursuant to Section 1503(a) of the Dodd–Frank Wall Street Reform and Consumer Protection Act (the "Dodd–Frank Act"), issuers that are operators, or that have a subsidiary that is an operator, of a coal or other mine in the United States are required to disclose in their periodic reports filed with the SEC information regarding specified health and safety violations, orders and citations, related assessments and legal actions, and mining-related fatalities. During the year ended December 31, 2016, our Bear Lodge Property was not subject to regulation by the federal Mine Safety and Health Administration under the Federal Mine Safety and Health Act of 1977.

EMPLOYEES

At December 31, 2016, we had one full-time employee and no part-time employees as a result of the Company's cost containment measures. Our employee is not covered by collective bargaining agreements. The remaining activities are being provided through consulting or service agreements with third-parties as needed.

AVAILABLE INFORMATION

We make available, free of charge, on or through our Internet website, at www.rareelementresources.com, our annual reports on Form 10-K, our quarterly reports on Form 10-Q and our current reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act. Our Internet website and the information contained therein or connected thereto are not intended to be, and are not, incorporated into this Annual Report.

Our reports and other information can be inspected on the SEC's website at www.sec.gov and such information can also be inspected, and copies ordered, at the public reference facilities maintained by the SEC at the following location: 100 F Street NE, Washington, D.C. 20549. Information regarding the operation of the SEC's public reference facilities may be obtained by calling the SEC at 1-800-SEC-0330. The Company also files reports under Canadian regulatory requirements on the System for Electronic Document Analysis and Retrieval ("SEDAR"). You may access our reports filed on SEDAR by accessing the Company's profile on SEDAR's website at www.sedar.com.

ITEM 1A. RISK FACTORS

The following sets forth certain risks and uncertainties that could have a material adverse effect on our business, financial condition and/or results of operations and the trading price of our common shares, which may decline, and investors may lose all or part of their investment. Additional risks and uncertainties that we do not presently know or that we currently deem immaterial also may impair our business operations. We cannot assure you that we will successfully address these risks.

There is substantial doubt about whether we can continue as a going concern.

We incurred net losses of \$3,426 and \$9,768 during the fiscal years ended December 31, 2016 and 2015, respectively. Our accumulated deficit at December 31, 2016 was \$126,574. In addition, we have limited financial resources. As of December 31, 2016, we had cash and cash equivalents of \$927 and working capital of \$791.

We have no revenues from operations, and we anticipate that we will have no operating revenues until we place the Bear Lodge REE Project into production. Furthermore, we do not have sufficient funds to complete feasibility studies, permitting, development and construction of the Bear Lodge REE Project. Therefore, our continuation as a going concern is dependent upon our completion of a future financing, off-take agreement, joint venture, merger or other strategic transaction. However, there is no assurance that we will be successful in completing such a financing or strategic transaction. As a result, there is substantial doubt as to whether our existing cash resources and working capital are sufficient to enable us to continue our operations beyond the next 12 months, after the filing date of this Annual Report, as a going concern. Ultimately, in the event that we cannot obtain additional financial resources or a strategic transaction, we may have to liquidate our business interests and investors may lose their investment.

The audit opinion and notes that accompany our consolidated financial statements for the year ended December 31, 2016, refer to the substantial doubt regarding our ability to continue as a going concern. The accompanying financial statements have been prepared assuming that we will continue as a going concern. Our financial statements do not include any adjustments that may result from the outcome of this uncertainty. We do not have sufficient cash to fund planned operations and meet obligations beyond the next 12 months, after the filing date of this Annual Report, without raising additional funds.

Liquidity and Insolvency Risk

The Company's ability to continue as a going concern is dependent upon the ability of the Company to obtain additional financing or other satisfactory arrangements for the development of our Projects and to curtail expenditures to fund its operating expenses until development and production allows it to be self-sufficient. The Company's cash is insufficient to meet its operational requirements beyond the next 12 months, after the filing date of this Annual Report. The Company is exploring financing and other strategic transactions. Other strategic transactions may involve the commencement of proceedings under applicable restructuring legislation or liquidating some or all of the Company's assets. Failure to obtain additional financing or other strategic relationships could

result in delay or indefinite postponement of further exploration and development activities, the loss of the Company's interests in the Bear Lodge Property and the impairment of the Company's ability to continue as a going concern or to implement any or all of its strategic plans, which could result in a total loss of investment for investors in the Company.

We may elect to deregister our common shares under the Exchange Act. Deregistration will result in less disclosure about us and may negatively affect the liquidity and trading prices of our common shares.

Due to the relatively high cost of being a public company in the United States, our Board of Directors may elect to voluntarily deregister our common shares under the Exchange Act and suspend our reporting obligations in the United States, possibly in combination with an effort to list our common shares on the TSX Venture Exchange or another securities exchange. No definitive Board approval of deregistration has taken place, but after the filing of this Annual Report, the Board may authorize the Company to file with the SEC a Form 15 to voluntarily deregister our common shares under Section 12(g) of the Exchange Act and suspend our reporting obligations under Section 15(d) of the Exchange Act. If the Board approves such deregistration, we would file a Form 15 and our obligations to file periodic reports, such as Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K, would be suspended immediately upon the filing of the Form 15 with the SEC, and our proxy statement, Section 16 and other Section 12(g) reporting responsibilities would terminate effective 90 days after the filing of the Form 15. We believe that we are eligible to deregister under the Exchange Act. If we were to file a Form 15, we expect that our common shares, which currently trade on the OTCOB, would not continue to be quoted on the OTCOB. Following any deregistration, we would not expect to publish periodic financial information or furnish such information to our shareholders except as may be required by applicable laws or stock exchange rules. As a result of the foregoing factors, deregistration would result in less disclosure about us and may negatively affect the liquidity and trading prices of our common shares. If the Company elects to deregister under the Exchange Act, it is our current intention to list our securities on the TSX Venture Exchange, subject to acceptance by the exchange.

Market factors outside of our control could have significant adverse impacts on our business, operations and/or prospects.

Operating in the volatile and cyclical natural resource industry subjects us to numerous market factors outside of our control that could have significant and sometimes adverse impacts on our business. Such factors could include significant price declines for key rare earth materials, inflationary impacts on capital and operating costs, public opposition, poor financial and operating performance of other companies in the same industry sector, environmental incidents from resource projects, major technological advances that reduce demand for key rare earth products, and unforeseen regulation or geopolitical factors that broadly impact the industry. To the extent that such factors affect attitudes toward investments in the natural resource sector generally or the rare earths industry specifically, they could affect our ability to raise the additional capital needed to continue to advance our Projects and business plan.

We have no history of producing mineral products from our properties. Any future revenues and profits are uncertain.

We have no history of mining or refining any mineral products, and our Bear Lodge REE Project is not currently producing. There can be no assurance that the Bear Lodge REE Project will be successfully developed or placed into production, produce minerals in commercial quantities or otherwise generate operating earnings. Advancing properties from the exploration stage into development and commercial production requires significant capital and time and will be subject to further feasibility studies, permitting requirements and construction of the mine, processing plants, roads and related works and infrastructure. We will continue to incur losses until our mining activities successfully reach commercial production levels and generate sufficient revenue to fund continuing operations. There is no certainty that we will produce revenue from any source, operate profitably or provide a return on investment in the future. If we are unable to generate revenues or profits, our shareholders might not be able to realize returns on their investment in our common shares.

The planned development of our Bear Lodge REE Project involves numerous uncertainties that could affect the feasibility or profitability of such project.

Mine development projects typically require a number of years and significant expenditures during the exploration and development phases before production is possible. The economic feasibility of exploration and development projects is based on many factors, such as the following:

- completion of feasibility studies to further verify Mineral Resources and establish Mineral Reserves and commercial viability;
- the timing and cost, which can be considerable, of further exploration, preparation of feasibility studies, and permitting and construction of infrastructure, mining, beneficiation and processing facilities;
- our ability to utilize our proprietary process technologies, which could encounter problems or costs in scale-up;
- securing a commercially viable sales outlet for our REE products;
- the potential need to enter into joint venture or other partnership arrangements to develop the Projects;
- the availability and costs of equipment and skilled labor, as required;
- the availability and cost of appropriate processing and/or refining arrangements, if required;
- compliance with environmental and other governmental approval and permit requirements;
- the availability of funds to finance exploration, development and construction activities, as warranted;
- future prices for rare earth minerals and gold;
- potential opposition from non-governmental organizations, environmental groups or local groups or inhabitants that may delay or prevent development activities;
- potential increases in exploration, construction and operating costs due to changes in the cost of fuel, power, materials or supplies;
- potential shortages of mineral beneficiation, processing, construction or other facilities-related equipment or supplies; and
- the ability to attract and retain talent for development and operation of the Bear Lodge REE Project and the Sundance Gold Project.

It is common in exploration programs and in development, construction and mine start-up to experience unexpected problems and delays. Accordingly, our activities may not result in profitable mining operations, and we may not succeed in establishing mining operations or profitably producing minerals from our Projects at all or in the anticipated timeframe.

We have suspended our federal and state permitting progression and there is a risk to resumption of the efforts in a timely and cost effective manner.

We have placed the Bear Lodge REE Project under care-and-maintenance, and all permitting activities have been suspended, including the environmental impact statement ("EIS") process, state permitting, and the NRC licensing process. Our ability to obtain financing or attract a strategic partner to fund the continuation of the permitting is uncertain. If we are unable to timely progress our permitting while the information is still deemed adequate by the agencies, we may have to restart the permitting process which would be time consuming and costly.

Joint ventures and other partnerships may expose us to risks.

We are currently seeking to secure joint ventures or other partnership arrangements with other parties in relation to the development of our Projects. Although such arrangements may lessen our financial burden in exploring and developing the Projects, they will likely also dilute our interest therein or affect our ability to control development of the Projects. Further, any failure of such joint venture or other partners to meet their obligations to us or to third parties, or any disputes with respect to the parties' respective rights and obligations, could have a material adverse effect on the joint venture and, in turn, on our business performance and on our ability to develop the Projects.

Subject to further financing, we expect to commence a FS on our Bear Lodge REE Project, and the results of this FS are uncertain.

We completed a PFS for our Bear Lodge REE Project in October 2014 that updated our Mineral Resource estimate and refined our process technology at that time. Subject to further financing, we anticipate we will resume work on the FS in 2017. The results of this study are uncertain and may indicate project economics that are more or less favorable than previously reported. As our project optimization efforts continue, we cannot ensure that the FS will be based upon all of the same inputs used in the PFS. As a result, we may need to update our beneficiation and/or processing technology and/or project development plans to enhance economics or further study aspects of the Bear Lodge REE Project. This could result in significant additional delays and expenses or could make financing efforts with respect to such efforts more difficult or not possible.

Our viability as a rare earth company depends on the financing, permitting, development and operation of our Bear Lodge REE Project, which is our only rare earth project.

Our only rare earth exploration project at this time is our Bear Lodge REE Project. Our continued viability is based on successfully implementing our strategy, including completion of a FS, permitting and construction of a mine and beneficiation and processing facilities in an expected timeframe. If we are unable to secure additional capital or enter into a strategic transaction and implement our strategy, or in the event of the imposition of significant additional regulatory burdens or delays or a significant deterioration of the market for rare earth products, our ability to develop a sustainable or profitable business would be materially adversely affected.

Increased costs could affect our ability to bring the Bear Lodge REE Project into production and, once in production, to be profitable.

We have estimated the initial capital costs required to bring the Bear Lodge REE Project into commercial production in our PFS, dated October 9, 2014, at approximately \$290,000. Our FS, once completed, may suggest that our actual costs may be higher than we presently anticipate, which could make it more difficult to finance the Project or to successfully establish mining operations at the Bear Lodge REE Project.

We anticipate that our future operating costs at the Bear Lodge REE Project will vary from year to year due to a number of factors, such as changing ore grade, metallurgy and revisions to mine plans in response to the physical shape and location of the ore body. In addition, costs are affected by the price of commodities such as oil, gas, reagents/chemicals, steel, rubber and electricity. Such commodities are at times subject to volatile price movements, including increases that could make production less profitable or not profitable at all. A material increase in costs could also impact our ability to commence or maintain future development or mining operations.

We may be adversely affected by fluctuations in demand for, and prices of, rare earth products.

Because our primary focus currently is the advancement and development of the Bear Lodge REE Project, changes in demand for, and the market price of, REE products could significantly affect our ability to develop or finance the Bear Lodge REE Project and eventually attain commercial production or profitability. REE product prices may fluctuate and are affected by numerous factors beyond our control such as interest rates, exchange rates, inflation or deflation, fluctuation in the relative value of the U.S. dollar against foreign currencies on the world market, global and regional supply and demand for REE products, and the political and economic conditions of countries that produce and use REEs.

As a result of the global economic crisis, REE prices declined by approximately 50% between 2008 and the end of the third quarter of 2009. REE prices then increased significantly during 2010 and most of 2011 only to again experience declines from 2012 through 2016. Protracted periods of low prices for REE products could significantly reduce our ability to develop the Bear Lodge REE Project and, if we attain commercial production, to maintain profitable operations.

Demand for REE products is impacted by demand for downstream products incorporating rare earths, including hybrid and electric vehicles, wind power equipment and other clean technology products, as well as demand in the general automotive and electronics industries. Lack of growth in these markets could adversely affect the demand for REE products, which would have a material adverse effect on our Bear Lodge REE Project and our business. In contrast, periods of high REE prices are generally beneficial to us; however, strong REE prices, as well as real or perceived disruptions in the supply of REE, also create economic pressure to identify or create non-REE alternate technologies that ultimately could reduce future long-term demand for REE products, and at the same time may incentivize development of otherwise marginal mining properties. For example, automobile manufacturers have previously announced plans to develop motors for electric and hybrid cars that do not require REE products due to concerns about the available supply of rare earths. If the automobile industry or other industries reduce their reliance on rare earth products, the resulting change in demand could have a material adverse effect on our business. In particular, if prices or demand for rare earths were to decline, our share price would likely decline, and this could also impair our ability to obtain capital needed for our Bear Lodge REE Project and our ability to find purchasers for our products at prices acceptable to us or at all.

An increase in the global supply of rare earth products, dumping and/or predatory pricing by our competitors may materially adversely affect our ability to raise capital, develop our Bear Lodge REE Project or operate profitably.

The pricing and demand for REE products is affected by a number of factors beyond our control, including growth of economic development and the global supply and demand for REE products. REE supply markets continue to be dominated by production from China, which produced an estimated 90% of the global REE production in 2016. China also dominates the manufacture of metals, NdFeB magnets and other products from rare earths. The threat of increased competition may lead our competitors to engage in predatory pricing behavior or manipulation of the available supply of REEs. Advanced technology in recycling REEs may also impact supply and prices. Any increase in the amount of rare earth products exported from other nations and increased competition may result in price reductions, reduced margins or loss of potential market share, any of which could materially adversely affect our business. As a result of these factors, we may not be able to compete effectively against our future competitors.

The success of our business may depend, in part, on the establishment of new uses and markets for rare earth products.

The success of our business may depend, in part, on the establishment of new markets by us or third parties for certain rare earth products. Although we plan to produce rare earth products for use in end-products such as NdFeB magnets, which are used in critical existing and emerging technologies such as hybrid and electric vehicles and wind power turbines, oil refining catalysts and compact fluorescent lighting, the success of our business may depend on the creation of new markets and the successful commercialization of REE products in existing and emerging markets. Any unexpected costs or delays in the commercialization of any of the foregoing products or applications could have a material adverse effect on our ability to develop our Bear Lodge REE Project or operate our business profitably.

We rely on our proprietary technology and processes to further our Bear Lodge REE Project.

We plan to rely on a combination of trade secret protection, nondisclosure agreements, trademarks and patents-pending to establish and protect our proprietary intellectual property rights. We utilize trade secret protection, patent-pending filings, and nondisclosure agreements to protect our proprietary rare earth technology. As of December 31, 2016, we had filed six U.S. provisional patent applications relating to rare earth processing and separation methods. Two of these provisional applications were converted to a single utility application and an application under the international PCT. This PCT application was nationalized in several foreign jurisdictions in 2015. Also during 2015, we converted another one of these provisional applications into a single utility application and an application under the PCT, and combined another three of these provisional patent applications into a single

PCT application that also designates the United States as the jurisdiction for patent protection. It is our intention that this PCT application will be filed in the United States and several foreign jurisdictions in the first half of 2017. These intellectual property rights may be challenged or infringed upon by third parties or we may be unable to maintain, renew or enter into new license agreements with third-party owners of intellectual property on reasonable terms. In addition, our intellectual property could be subject to infringement or other unauthorized use outside of the United States. In such case, our ability to protect our intellectual property rights by legal recourse or otherwise may be limited, particularly in countries where laws or enforcement practices are undeveloped or do not recognize or protect intellectual property rights to the same extent as does the United States. Unauthorized use of our intellectual property rights or inability to preserve existing intellectual property rights could adversely impact our competitive position or results of operations. The loss of our patents could reduce the value of the related products.

The success of our business depends, in part, on our ability to utilize our proprietary process technologies, and we could encounter unforeseen problems or costs, or both, in scaling up our technologies to commercial applications.

Our Mineral Resource estimates may be inaccurate and any material change in these estimates could affect the economic viability of placing our Bear Lodge REE Project into production.

Unless otherwise indicated, our Mineral Resources are based upon estimates made by independent geologists. When making determinations about whether to advance the Bear Lodge REE Project or the Sundance Gold Project to development, we must rely upon such estimated calculations as to the quantity and grades of mineralization on the property as well as estimates about mining and processing costs and future prices. Until mineralized material is actually mined and processed, Mineral Resources and grades of such mineralization must be considered estimates only, which may prove to be unreliable.

Because we have not completed a FS on the Bear Lodge REE Project and have not commenced actual production, mineralization estimates, including Mineral Resource estimates, for the Bear Lodge REE Project may require adjustments, including potential downward revisions. In addition, the grade of material ultimately mined, if any, may differ from that indicated in our Mineral Resource estimates or in future feasibility studies. The Sundance Gold Project is in the exploration stage and it is too early to estimate the gold production potential of the property.

Our Mineral Resource estimates for the Bear Lodge REE Project have been determined based on assumed cut-off grades that depend upon estimated REE prices, recovery rates and project operating costs. Any significant change in cut-off grades could reduce our estimates of mineralization, or the amount of mineralization to be extracted, and could have a material adverse effect on our share price and the value of our Bear Lodge REE Project.

We are subject to significant governmental regulations, including permitting, licensing and approval processes that affect our operations and could impact the cost and timing of conducting our business.

Our current and future activities will be governed by laws and regulations, including the following among others:

- laws and regulations governing mineral concession acquisition, prospecting, development, mining and production;
- laws and regulations related to exports, taxes and fees;
- labor standards and regulations related to occupational health and mine safety;
- laws and regulations relating to environmental protection concerning waste management, transportation, and disposal of toxic and radioactive substances, land use and the protection of threatened and endangered species; and
- other matters.

We believe that we hold, or are in the process of obtaining, all licenses and permits necessary to carry on the activities we currently are conducting or propose to conduct in the near term under applicable laws and regulations. Such licenses and permits are subject to changes in regulations and changes in various operating circumstances.

There can be no guarantee that we will be able to obtain all necessary licenses and permits that may be required to maintain the current or planned exploration, development and mining activities, including constructing mines and/or beneficiation and processing facilities, and commencing operations at the Bear Lodge REE Project. In addition, if we proceed to production on the Bear Lodge REE Project, we must obtain and comply with permits and licenses that may contain specific operating or other conditions. There can be no assurance that we will be able to obtain such permits and licenses or that we will be able to comply with any such conditions. Our Sundance Gold Project, previously in the active exploration stage, but on hold since 2014, does not currently have any of the permits or licenses that would be necessary to carry on further activities on the project. Costs related to applying for and obtaining permits and licenses may be prohibitive and could delay planned exploration and development activities. Failure to comply with applicable laws, regulations and permitting requirements may result in enforcement actions, including orders issued by regulatory or judicial authorities causing operations to cease or be curtailed, and may include corrective measures requiring capital expenditures, installation of additional equipment or remedial actions.

Parties engaged in mining operations may be required to compensate those suffering loss or damage relating to mining activities and may be subject to civil or criminal liability, fines or penalties imposed for violations of applicable laws or regulations. Amendments to current laws, regulations and permits governing operations and activities of mining companies, or more stringent implementation thereof, could have a material adverse impact on our operations, cause increases in capital expenditures or production costs, or require abandonment or delays in the exploration of the Sundance Gold Project or the development of the Bear Lodge REE Project.

Our activities are subject to environmental risks and compliance with environmental regulations that are increasing and costly.

Our business and activities are subject to environmental regulation in the jurisdictions in which we operate. Environmental legislation at the local, state and federal level is evolving in a manner that may require stricter standards and enforcement, increased fines and penalties for non-compliance, more stringent environmental assessments of proposed projects and a heightened degree of responsibility for companies and their officers, directors and employees. These laws address emissions into the air, discharges into water, management of waste and hazardous substances, protection of natural resources, antiquities and endangered species and reclamation of lands disturbed by mining operations. Compliance with environmental laws and regulations at the local, state and federal level and future changes in these laws and regulations may require significant capital outlays and may cause material changes or delays in our current and planned operations and future activities. It is possible that future changes in these laws or regulations could have a significant adverse impact on our Projects or some portion of our business, causing us to reevaluate those activities at that time.

Examples of some of the current U.S. federal laws that may affect our business and planned operations include, but are not limited to, the following:

- The National Environmental Policy Act of 1969 ("NEPA") requires federal agencies to integrate environmental considerations into their decision-making processes by evaluating the environmental impacts of proposed actions, including issuance of permits to mining facilities, and assessing alternatives to those actions. Under NEPA, a federal agency must prepare an environmental impact statement detailing the environmental impacts of "major federal actions significantly affecting the quality of the human environment." The U.S. Environmental Protection Agency will, and other federal agencies and any interested third parties can, review and comment on the scope of the EIS and the adequacy of and findings set forth in the draft and final EIS. As required, we began in 2012 to undertake the NEPA process for the Bear Lodge REE Project. However, we have since placed the Bear Lodge REE Project under care-and-maintenance, and all permitting activities have been suspended, including the EIS process. The NEPA process can cause delays in issuance of required permits or result in changes to a project to mitigate potential environmental impacts, which in turn can impact the economic feasibility of a proposed project, including the ability to construct or operate the Bear Lodge REE Project or other projects entirely.
- The NRC, pursuant to its authority under the Atomic Energy Act, oversees the regulatory framework governing the control of radioactive materials, including mining, beneficiation and processing of rare earth elements that contain radioactive source materials such as uranium and thorium. The NRC is responsible for issuing licenses for source material involving concentrations of uranium or thorium that exceed 0.05% by weight. If a proposed action, including waste generation, results in materials with

concentrations of uranium and thorium that equal or exceed 0.05% by weight, a license to receive title to, possess, use, transfer, or deliver source and byproduct materials may be required. We are required to follow the regulations pertaining to a license application for the Bear Lodge REE Project. The licensing process, including NEPA review relating to the NRC licensing, may cause delays or result in changes to the Project design to mitigate impacts as required under the license.

- Under CERCLA and similar state laws, responsibility for the entire cost of cleanup of a contaminated site, as well as natural resource damages, can be imposed upon current or former site owners or operators, or upon any party who released one or more designated "hazardous substances" at the site, regardless of the lawfulness of the original activities that led to the contamination. CERCLA also authorizes the EPA and, in some cases, third parties to take actions in response to threats to public health or the environment and to seek to recover from the potentially responsible parties the costs of such action. We may also be an owner or operator of facilities at which hazardous substances have been released by previous owners or operators. We may be responsible under CERCLA for all or part of the costs of cleaning up facilities at which such substances have been released and for natural resource damages. We have not, to our knowledge, been identified as a potentially responsible party under CERCLA, nor are we aware of any prior owners or operators of our properties that have been so identified with respect to their ownership or operation of those properties.
- The Resource Conservation and Recovery Act, as amended ("RCRA"), and comparable state statutes, govern the disposal of "solid" and "hazardous" waste and authorize the imposition of substantial fines and penalties for noncompliance, as well as requirements for corrective actions. Although certain mining, beneficiation, and mineral processing wastes currently are exempt from regulation as hazardous wastes under RCRA, the EPA has limited the disposal options for certain wastes designated as hazardous wastes under RCRA. It is possible that certain wastes generated by our potential future operations that currently are exempt from regulation as hazardous wastes may in the future be designated as hazardous wastes, and may therefore become subject to more rigorous and costly management, disposal and clean-up requirements.
- The Clean Air Act, as amended ("CAA"), and comparable state statutes, restricts the emission of air pollutants from many stationary and mobile sources, including mining, beneficiation, and processing activities. Our planned mining operations may produce air emissions, including fugitive dust and other air pollutants, from stationary equipment, storage facilities, and the use of mobile sources such as trucks and heavy construction equipment that are subject to review, monitoring, control requirements and emission limits under the CAA and state air quality laws. New facilities may be required to obtain permits before work can begin, and existing facilities may be required to incur capital costs to remain in compliance. In addition, permitting rules and issued permits may impose limitations on production levels or result in additional capital expenditures to comply with such rules or permits. In certain circumstances, private citizens may also sue sources of pollutants for alleged violations of the CAA.
- The Clean Water Act ("CWA") and comparable state statutes impose restrictions and controls on the discharge of pollutants into waters of the United States. These controls generally have become more stringent over time, and it is possible that additional restrictions will be imposed in the future. Violation of the CWA and similar state regulatory programs can result in civil, criminal and administrative penalties for unauthorized discharges of hazardous substances and other pollutants. They also can impose substantial liability for the costs of removal or remediation associated with such discharges. The CWA also regulates stormwater handling at mining facilities, requires a stormwater discharge permit for certain activities, and requires the implementation of a Stormwater Pollution Prevention Plan establishing best management practices, training, periodic monitoring of covered activities, and monitoring and sampling of stormwater run-off. The CWA and regulations implemented thereunder also prohibit discharges of dredged and fill material in wetlands and other waters of the United States unless authorized by a permit issued by the U.S. Army Corps of Engineers.
- The Safe Drinking Water Act ("SDWA") and the Underground Injection Control ("UIC") program promulgated thereunder regulate the drilling and operation of subsurface injection wells. The EPA directly administers the UIC program in some states, and in others the responsibility for the program has been delegated to the state. Violation of these regulations and/or contamination of groundwater by

mining related activities may result in fines, penalties, and/or remediation costs, among other sanctions and liabilities under the SDWA and state laws.

• The Endangered Species Act ("ESA") regulates activities that could have an adverse effect on threatened and endangered species, including the habitat and ecosystems upon which they depend. The ESA protects threatened and endangered species primarily by prohibiting the unauthorized "taking" of listed species. The ESA also requires consultation with other agencies in certain circumstances. Compliance with ESA requirements can significantly delay, limit, or even prevent the development of projects, including the development of mining claims, and can also result in increased development costs. In addition, civil and criminal penalties for violations of the ESA are provided, and citizen suits against any person alleged to be in violation of the ESA are authorized.

Regulations and pending legislation governing issues involving climate change could result in increased operating costs that could have a material adverse effect on our business.

Climate change has become an important topic in public policy debate. It is a complex issue, with the majority of scientific research suggesting that rising global temperatures are the result of an increase in GHGs. A number of governments or governmental bodies have adopted or are contemplating regulatory changes in response to the potential impact of climate change. For example, the EPA has issued a notice of finding and determination that emissions of carbon dioxide, methane, and other GHGs present an endangerment to human health and the environment, which has allowed the EPA to begin regulating emissions of GHGs under existing provisions of the Clean Air Act. Legislation and increased regulation regarding climate change could impose significant costs on us and/or our suppliers, including costs related to increased energy requirements, capital equipment, environmental monitoring and reporting and/or other costs to comply with such regulations. Any adopted future climate change regulations could also negatively impact our ability to compete with companies situated in areas not subject to such regulations. Despite the current administration's apparent desire to focus less on climate change than the Obama administration, given the political significance and uncertainty around the impact of climate change and how it should be dealt with, we cannot predict how legislation and regulation will affect our financial condition, operating performance or ability to compete.

Even without such regulation, increased awareness or any adverse publicity in the global marketplace about the mining or rare earth industries' potential impacts on climate change could harm our reputation.

The potential physical impacts of climate change on our operations are highly uncertain and would be particular to the geographic circumstances in areas in which we operate. These may include changes in precipitation, storm patterns and intensities, water shortages and changing temperatures. These factors may have an adverse impact on the cost, production or financial performance of our operations.

We depend on key personnel, and the absence of any of these individuals could adversely affect our business.

Our success is currently largely dependent on the performance, retention and abilities of our directors, CEO and consultants. The loss of the services of these persons could have a material adverse effect on our business and prospects. There is no assurance that we can maintain the services of our directors, CEO, or other qualified personnel required to operate our business. Failure to do so could have a material adverse effect on us and our prospects. We do not maintain "key man" life insurance policies on any of our employee, directors or consultants.

A shortage of equipment and supplies could adversely affect our ability to operate our business.

We depend on various supplies and equipment to carry out our exploration and, if warranted, future development and mining operations. A shortage of such supplies, equipment or parts could have a material adverse effect on our ability to carry out our planned activities or increase our operating costs and expenses.

Mineral exploration and development and mining are potentially hazardous and subject to conditions or events beyond our control, which could have a material adverse effect on our business or plans.

Mineral exploration, development and mining involve various types of risks and hazards, including, but not limited to the following:

- environmental hazards:
- power outages;
- metallurgical and other processing problems;
- unusual or unexpected geological formations;
- personal injury, flooding, fire, explosions, cave-ins, earthquakes, landslides and rock-bursts;
- mineral exploration or mining accidents;
- concentrate losses;
- fluctuations in exploration, development and production costs;
- labor disputes;
- unanticipated variations in grade;
- mechanical equipment failure;
- periodic interruptions due to inclement or hazardous weather conditions; and
- regulatory delays, curtailments or shutdowns.

These risks could result in damage to, or destruction of, mineral properties, production equipment, facilities or other properties, personal injury, environmental damage, delays in mining, increased production costs, monetary losses or possible legal liability. We may not be able to obtain insurance to cover these risks at economically feasible premiums or at all. Insurance against certain environmental risks, including potential liability for pollution or other hazards resulting from the disposal of waste products from production, may be prohibitively expensive or not available. Any losses we incur related to any significant events that are not covered by insurance policies may have a material adverse effect on our business.

Mineral exploration and development is highly speculative, and certain inherent risks could have a negative effect on our business.

Our long-term success depends on our ability to develop mineral deposits on existing properties that can then be developed into commercially viable mining operations. Resource exploration is a highly speculative business, characterized by a number of significant risks, including, among other things, unprofitable efforts resulting not only from the failure to discover mineral deposits but from finding mineral deposits which, though present, are insufficient in quantity and quality to return a profit from production. Substantial expenditures are required to establish Proven and Probable Mineral Reserves through drilling and analysis, to develop metallurgical processes to extract metal, and to develop the mining, beneficiation and processing facilities and infrastructure at any site chosen for mining. The marketability of minerals discovered by us may be affected by numerous factors that are beyond our control and cannot be accurately predicted, such as market pricing fluctuations, the proximity and capacity of milling facilities, mineral markets demand, available supply and processing equipment, and other factors such as government regulations, including regulations relating to royalties, allowable production, importing and exporting of minerals, and environmental protection. Any one or a combination of these factors may result in a failure to receive an adequate return on our investment capital. The decision to abandon a project may have a material adverse effect on the market value of our common shares or our ability to complete future financings.

Title to our Bear Lodge Property may be subject to other claims, or we may lose our interest in our claims, which could affect our property rights and claims.

There are risks that title to our Bear Lodge Property may be challenged or impugned. Our Bear Lodge Property is located in the state of Wyoming and may be subject to prior unrecorded agreements, transfers or native land claims, and title may be affected by undetected defects. There may be valid challenges to the title of our Bear Lodge Property which, if successful, could impair or result in the cessation of development and/or operations.

The vast majority of the mineral rights to our Bear Lodge Property consist of "unpatented" mining claims created and maintained in accordance with the U.S. General Mining Law. Unpatented mining claims are unique property interests and are generally considered to be subject to greater title risk than other real property interests because the validity of unpatented mining claims can be uncertain. This uncertainty arises, in part, out of the complex federal and state laws and regulations an owner of an unpatented mining claim must comply with to locate and maintain a valid claim. Also, unpatented mining claims are always subject to possible challenges by third parties or validity contests by the federal government. The validity of an unpatented mining claim, in terms of both its location and its maintenance, is dependent on strict compliance with not only a complex body of U.S. federal and state statutory law, but also administrative and judicial decisions interpreting those statutes and case law. In addition, there may be limitations as to the completeness of public records that determine prior claimants that could impact the validity or ownership of unpatented mining claims. The Company's right to continue activities on the Bear Lodge Property is dependent upon our ability to pay annual claim maintenance fees.

Our operations are subject to significant uninsured risks that could negatively impact future profitability as we maintain limited insurance against our operations.

The exploration of our Bear Lodge Property entails certain risks including unexpected or unusual operating conditions, such as rock slides, cave-ins, flooding, fire and earthquakes. It is not always possible to insure against these risks. Should events such as these arise, they could reduce or eliminate our assets and shareholder equity as well as result in increased costs and/or a decline in the value of our assets or common shares. We expect to maintain general liability, director and officer insurance, and some insurance against our assets but not with the expectation of full replacement value. We may decide to update or amend our insurance portfolio in the future if coverage is available at economically viable rates.

Increased competition could adversely affect our ability to attract necessary capital funding.

The mining industry is intensely competitive and we must compete with other individuals and companies, many of which have greater financial resources, operational experience and technical capabilities than we have. This competition from other mining companies could adversely impact our efforts to hire experienced mining professionals. Competition for resources at all levels can be very intense, particularly affecting the availability of manpower, drill rigs, mining equipment and production equipment. Increased competition could adversely affect our ability to attract necessary capital funding or attract or retain key personnel or outside technical resources.

Land reclamation requirements for our properties may be burdensome or too expensive.

Although land reclamation requirements vary depending on the location and governing authority, such requirements generally are imposed on mineral exploration companies as well as companies with mining operations to minimize long-term effects of land disturbance.

Reclamation requirements may include the following, among other things:

- control dispersion of potentially deleterious effluents;
- reduce mine pit slope angles;
- treat ground and surface water to drinking water standards; and
- reasonably re-establish pre-disturbance vegetation and land forms.

To carry out reclamation obligations imposed on us in connection with the potential future development activities at the Bear Lodge Property, we must allocate financial resources that might otherwise be spent on further exploration and future development programs. We have set up a provision for reclamation obligations as currently anticipated for exploration completed on the Bear Lodge Property, as appropriate, but this provision may not be adequate. If we are required to carry out unanticipated reclamation work, our financial position could be adversely affected.

Legislation and regulations have been proposed that would significantly affect the mining industry and our business.

The U.S. Congress from time to time has considered proposed revisions to the General Mining Law of 1872. If these proposed revisions are enacted, such legislation could change the cost of holding unpatented mining claims or could significantly impact our ability to develop mineralized material on unpatented mining claims. Such bills have proposed, among other things, to (i) impose a federal royalty on production from unpatented mining claims, (ii) impose a fee on the amount of material displaced at a mine, (iii) impose time limits on the effectiveness of plans of operation that may not coincide with mine life, (iv) impose more stringent environmental compliance and reclamation requirements on activities on unpatented mining claims, (v) establish a mechanism that would allow states, localities and Native American tribes to petition for the withdrawal of identified tracts of federal land from the operation of the U.S. general mining laws, (iv) replace the location of mining claims with federal leases for locatable minerals, and (vii) allow for administrative determinations that mining would not be allowed in situations where undue degradation of the federal lands in question could not be prevented. Although we cannot predict what legislated royalties might be, the enactment of a federal royalty or other provisions contained in these proposed bills could adversely affect the potential for development of our unpatented mining claims, and could adversely affect our ability to operate or our financial performance. The effect of any proposed revision of the General Mining Law on operations cannot be determined until enactment. However, it is possible that revisions would materially increase the carrying and operating costs of mineral properties located on federal unpatented mining claims.

In 2009, the EPA announced that it would develop financial assurance requirements under CERCLA Section 108(b) for the hard rock mining industry. On January 29, 2016, the U.S. District Court for the District of Columbia issued an order requiring that if the EPA intends to prepare such regulations, it must do so by December 1, 2016. The EPA issued its proposed rule on January 11, 2017. Under the proposed rule, owners and operators of facilities subject to the rule would be required to (i) notify the EPA that they are subject to the rule; (ii) calculate a level of financial responsibility for their facility using a formula provided in the rule; (iii) obtain a financial responsibility instrument, or qualify to self-assure, for the amount of financial responsibility; (iv) demonstrate that they have obtained such evidence of financial responsibility; and (v) update and maintain financial responsibility until the EPA releases the owner or operator from the CERCLA Section 108(b) regulations. If such requirements are retained in the final rule, they could require significant additional financial assurance, which could have a material adverse effect on our business operations.

In 2015, U.S. President Obama issued a Presidential Memorandum to the Secretary of Interior and other federal agencies requiring them to undertake rulemaking regarding avoidance, minimization, and compensation for impacts to natural resources, among other public lands impact items. The U.S. Fish and Wildlife Service (the "FWS") and the Bureau of Land Management (the "BLM") released their final policies regarding mitigation of impacts to public lands and resources in December 2016. The BLM's regional mitigation strategy is designed to guide agency officials in avoiding and minimizing impacts of development on federal lands. The strategy requires BLM officials to mitigate impacts "through a landscape-scale approach, utilize best management practices, maintain durability for mitigation measures, monitor mitigation measures for compliance and effectiveness, and adaptively manage mitigation measures." The FWS's new policy provides guidance to offset development impacts to atrisk species and their habitats. The policy calls for mitigation measures, such as permittee-responsible mitigation, conservation banking, in-lieu fee programs, and habitat credit exchanges. Any potential changes to the Obama Presidential Memorandum and resulting policies due to the transition in January 2017 to U.S. President Trump's administration, or any impact from the policy on our Projects is uncertain.

Our directors and senior management may be engaged in other businesses. Potential conflicts of interest or other obligations of management could interfere with corporate operations.

Some of our directors, officers and key contractors may be engaged in additional businesses, or situations may arise where our directors, officers and contractors could be in direct competition with us. Conflicts, if any, will be dealt with in accordance with the relevant provisions of applicable policies, regulations and legislation. Some of

our directors and officers are or may become directors or officers of other entities engaged in other business ventures. As a result of their other business endeavors, our directors, officers and contractors may not be able to devote sufficient time to our business affairs, which may negatively affect our ability to conduct ongoing operations or to generate revenues.

We are subject to the risk of litigation, the causes and costs of which are not always known.

We are subject to litigation arising in the normal course of business and may be involved in disputes that may result in litigation. Although we are not aware of any material pending or threatened litigation or of any legal proceedings known to be contemplated which are, or would be, likely to have a material adverse effect upon us or our operations, taken as a whole, the causes of potential future litigation cannot be known and may arise from, among other things, business activities, environmental and health and safety concerns, share price volatility or failure to comply with disclosure obligations. The results of litigation cannot be predicted with certainty but could include costly damage awards or settlements, fines, and the loss of licenses, concessions or rights, among other things. If we are unable to resolve a dispute favorably, either by judicial determination or settlement, it may have a material adverse effect on our financial condition, cash flow or results of operations.

We depend upon information technology systems, which are subject to disruption, damage, or failure and have risks associated with implementation and integration.

We depend upon information technology systems in the conduct of our operations. Our information technology systems are subject to disruption, damage or failure from a variety of sources, including, without limitation, computer viruses, security breaches, cyber-attacks, natural disasters and defects in design. Cybersecurity incidents, in particular, are evolving and include, but are not limited to, malicious software, attempts to gain unauthorized access to data and other electronic security breaches that could lead to disruptions in systems, unauthorized release of confidential or otherwise protected information or the corruption of data. Various measures have been implemented to manage our risks related to information technology systems and network disruptions. However, given the unpredictability of the timing, nature and scope of information technology disruptions, we could potentially be subject to downtimes, operational delays, the compromising of confidential or otherwise protected information, destruction or corruption of data, security breaches, other manipulation or improper use of our systems and networks or financial losses from remedial actions, any of which could have a material adverse effect on our cash flows, competitive position, financial condition or results of operations.

U.S. investors may not be able to enforce their civil liabilities against us or our directors, controlling persons and officers.

It may be difficult to bring and enforce suits against us. We are incorporated in the province of British Columbia, Canada under the *Business Corporations Act* (British Columbia). Some of our directors are residents of Canada, and a substantial portion of their assets are located outside of the United States. As a result, it may be difficult for U.S. holders of our common shares to effect service of process on these persons within the United States or to recover in the United States on judgments rendered against them. In addition, a shareholder should not assume that the courts of Canada (i) would enforce judgments of U.S. courts obtained in actions against us or such persons predicated upon the civil liability provisions of the U.S. federal securities laws or other laws of the United States, or (ii) would enforce, in original actions, liabilities against us or such persons predicated upon the U.S. federal securities laws or other laws of the United States.

We do not currently intend to pay cash dividends.

We have not declared any dividends since our incorporation and do not anticipate that we will do so in the foreseeable future. Our present policy is to retain all available funds for use in our business development, operations and expansion. Payment of future cash dividends, if any, will be at the discretion of the Board of Directors and will depend on our financial condition, results of operations, contractual restrictions, capital requirements, business prospects and other factors that the Board of Directors considers relevant. In the absence of dividends, investors will only see a return on their investment if the value of our common shares appreciates.

Dilution through outstanding common share options and warrants could adversely affect the trading price of our common shares.

Because our success is highly dependent upon our employee, consultants and directors, we have granted to some or all of our key employee, directors and consultants options to purchase common shares as non-cash incentives. To the extent that significant numbers of such options may be granted and exercised, the interests of the other shareholders may be diluted. We also issued warrants to purchase up to a total of 4,349,481 common shares in September 2013 and April 2015. During September 2016, 1,472,557 warrants expired unexercised. As of December 31, 2016, there were 2,876,924 common share purchase warrants and 3,694,900 stock options outstanding, which, if exercised, would result in an additional 6,571,824 common shares being issued and outstanding, which equals approximately 12.4% of our common shares outstanding as of December 31, 2016.

Future sales of our securities in the public or private markets could adversely affect the trading price of our common shares or our ability to continue to raise funds in new equity offerings.

It is likely that we will sell common shares, or securities exercisable or convertible into common shares, in order to finance our planned development activities. Future sales of substantial amounts of our securities in the public or private markets would dilute our existing shareholders and potentially adversely affect the trading prices of our common shares or could impair our ability to raise capital through future offerings of securities. Alternatively, we may rely on debt financing and assume debt obligations that require us to make substantial interest and principal payments that could adversely affect our business or future growth potential.

Price volatility of our publicly traded securities could adversely affect investors' portfolios.

In recent years and months, the securities markets in the United States and Canada have experienced high levels of price and volume volatility, and the market prices of securities of many companies have experienced wide fluctuations that have not necessarily been related to the operating performance, underlying asset values or prospects of such companies. There can be no assurance that continual fluctuations in the market price of our common shares will not occur. It may be anticipated that any quoted market for the common shares will be subject to market trends and conditions generally, notwithstanding any potential success we have in creating revenues, cash flows or earnings. The price of our common shares has been subject to price and volume volatility in the past and will likely continue to be subject to such volatility in the future.

Because our common shares are not listed on a national securities exchange, a broker-dealer may find it more difficult to trade our common shares, and an investor may find it more difficult to acquire or dispose of our common shares in the secondary market.

We are subject to the so-called "penny stock" rules. The SEC has adopted regulations that define a "penny stock" to be any equity security that has a market price per share of less than \$5.00, subject to certain exceptions, such as any securities listed on a national securities exchange. For any transaction involving a "penny stock," unless exempt, the rules impose additional sales practice requirements on broker-dealers, subject to certain exceptions. A broker-dealer may find it more difficult to trade, and an investor may find it more difficult to acquire or dispose of, our common shares on the OTCQB marketplace. These factors could significantly negatively affect the market price of our common shares and our ability to raise capital.

We may have been a "passive foreign investment company" ("PFIC") for the year ended December 31, 2016, and may be a PFIC in subsequent years, which could have adverse U.S. federal income tax consequences for U.S. shareholders.

Investor s in our common shares that are U.S. taxpayers (referred to as a U.S. shareholder) should be aware that we may have been a "passive foreign investment company" (a "PFIC") for the period ended December 31, 2016, and based on current business plans and financial expectations, we might be a PFIC for the year ending December 31, 2017, and in subsequent years. We will use commercially reasonable efforts to provide information regarding our status as a PFIC and the PFIC status of any subsidiary in which the Company owns more than 50% of such subsidiary's total aggregate voting power to U.S. shareholders who make a written request for such information. Adverse rules apply to U.S. shareholders who own our common shares if we are a PFIC and have a non-U.S. subsidiary that is itself a PFIC, as may be the case with our wholly owned subsidiary, Rare Earth Holdings, Ltd. Each U.S. shareholder should consult its own tax advisor regarding the U.S. federal, U.S. federal alternative

minimum, U.S. federal estate and gift, and U.S. state and local tax consequences of the PFIC rules and the acquisition, ownership, and disposition of our common shares if we are or become a PFIC. For additional information regarding PFIC tax consequences, see "Part II, Item 5. Passive Foreign Investment Company Rules."

ITEM 1B. UNRESOLVED STAFF COMMENTS

Not applicable.

ITEM 2. PROPERTIES

BEAR LODGE PROPERTY (Wyoming, USA)

The Bear Lodge Property contains two projects, the Bear Lodge REE Project and the Sundance Gold Project. The Bear Lodge REE Project consists of the Bull Hill Mine, inclusive of the Bull Hill and Whitetail Ridge deposits and the exploration targets of East Taylor and Carbon, all of which are located near Sundance, Wyoming. The Bear Lodge REE Project also includes the proposed hydrometallurgical plant site to be located on private property in Upton, Wyoming that the Company currently has an option to purchase. Additional details on each of these areas are set forth below under the heading "Bear Lodge REE Project" and in the Technical Report (as defined below). We hold our interest in the Bear Lodge Property through our indirect wholly owned subsidiary, Rare Element Resources, Inc., a Wyoming corporation.

The Bear Lodge Property is located in central Crook County, northeast Wyoming, and is approximately 19 kilometers northwest of Sundance, Wyoming. The Bear Lodge Property is accessible by paved and well-maintained gravel roads. The Bear Lodge Property lies within the Black Hills National Forest along the crest of the northern part of the Bear Lodge Mountains, a narrow northwest-trending range. Physiographically, it is the northwest extension of the Black Hills in western South Dakota and is characterized by rolling grass and pine-covered mountains that reach elevations of 1,950 meters within the Bear Lodge Property. The mountains have moderate slopes covered by western yellow pine forest interspersed with dense thickets of brush. Narrow grassy meadows cover the upper reaches of seasonal drainages. The lowest point within the Bear Lodge Property is about 1,768 meters in elevation. The climate during the summer is warm and relatively dry, followed by cold winters with variable amounts of snow.

We control 100% of the mineral rights at the Bear Lodge Property, consisting of unpatented mining claims and a right of repurchase on adjacent private land. We hold 499 unpatented mining claims located on land administered by the USFS. The Bear Lodge Property is located within parts of Sections 5, 7 through 9, Sections 14 through 23 and Sections 26 through 35 in Township 52 North and Range 63 West, Sixth Principal Meridian, Crook County, Wyoming. All of the public property mining claims are unpatented, such that the paramount title to the land is held by the United States of America. To be valid, an unpatented mining claim must contain a discovery of valuable mineral deposit. In addition, claim maintenance payments must be timely paid on an annual basis and related documents must be filed annually with the Wyoming State Office of the BLM and recorded with the Crook County, Wyoming Clerk and Recorder to keep the claims from terminating by operation of law, and the claims can be maintained in good standing so long as those requirements are met. All of our Mineral Resources are located on mining claims that we hold.

On October 20, 2016, the Company and Whitelaw Creek LLC, a Wyoming limited liability company ("Whitelaw Creek"), executed an asset purchase agreement (the "Asset Purchase Agreement"). On October 26, 2016, the Company and Whitelaw Creek closed the transactions contemplated by the Asset Purchase Agreement, pursuant to which the Company sold to Whitelaw Creek for approximately \$600 in cash approximately 640 acres of non-core real property located in Crook County, Wyoming, that is under consideration for a stockpile facility for the Bear Lodge REE Project (the "Land Sale"). The Company as the right to repurchase the land (i) for \$900 within three years following the Land Sale or (ii) for \$1,000 after the third anniversary following the Land Sale but on or before the fifth anniversary of the Land Sale, in each case subject to certain adjustments (the "Repurchase Price"). Payment of the Repurchase Price may be made, at Whitelaw Creek's option, in the form of cash, common shares of the Company, or a combination of cash and common shares of the Company.

Our 100% interest in the 499 unpatented mining claims was, in part, acquired from Phelps Dodge Exploration Company (now a subsidiary of Freeport-McMoRan Copper Inc. ("Freeport")) by way of a Mineral Lease and Option for Deed in 2000, and 404 claims were transferred from Newmont Mining Corporation ("Newmont") to us in May 2010. A portion of the Newmont-transferred claims had been held in a joint venture between Newmont and the Company since 2006 until such joint venture was terminated in May 2010. A portion of the Newmont-transferred claims (i.e. approximately 327 claims) are subject to a perpetual 0.5% production Net Smelter Return ("NSR") royalty on minerals except for rare earth minerals, which are excluded from any royalty obligation. In addition, and in connection with the Newmont joint venture termination, we assumed all obligations of Newmont under a consulting agreement with Bronco Creek Exploration and Mining, Inc. ("Bronco Creek") requiring us to pay as a finder's fee, 3% of exploration expenditures made during each quarter until a cap of \$500 has been paid. The claims covered by the Bronco Creek consulting agreement, which are located outside of the rare earth deposits, are further subject to a 0.25% NSR royalty with a cap of \$3,000. We located additional unpatented mining claims in 2011 and 2012, and now have a 100% interest in 499 total unpatented mining claims.

Some of our mining claims and a portion of a defined area of influence surrounding the claims were previously subject to a production royalty of 2% of NSR royalty payable to Freeport, but the Company purchased the royalty in March 2009. As a result of the agreements above, we hold an unencumbered rare earth project, including all 499 unpatented mining claims, free of third-party royalties for rare earth production.

Exploration has been carried out on the Bear Lodge Property since 1949. In addition to Freeport, several mining companies have conducted exploration and drilling programs at or near the Bear Lodge Property since the discovery of mineralization. No mining or operations were conducted at the Bear Lodge Property by any of the prior owners.

Necessary infrastructure, such as housing, food and fuel is available in communities in close proximity to the Bear Lodge Property. Supplies can be delivered on both U.S. Interstate Highway 90 and rail lines. A Burlington Northern rail transport line also runs through Moorcroft, 55 kilometers west of Sundance, and through Upton, the site of the proposed hydrometallurgical plant, 64 kilometers south of Sundance. The Gillette, Wyoming area, located approximately 89 kilometers to the west, has two coal-fired power plants and is currently a major logistics center for Powder River Basin coal mining activity and will serve as such for any development at the Bear Lodge Property. The current size of the Bear Lodge Property is sufficiently large to support a mining operation, with no foreseeable obstacles regarding expansion, subject to a favorable outcome with regard to permitting.

We are not aware of any outstanding environmental liabilities associated with the Bear Lodge Property, except for required reclamation work associated with our exploration and drilling activities. Previous exploration activities were approved by both the USFS and the Wyoming Department of Environmental Quality. We have an approved reclamation plan and a posted surety bond to cover the required reclamation.

Additional local, state and federal permits will be required for exploration, mining, beneficiation and processing operations, should we decide to proceed with further exploration or mine development and operations.



Geological Setting

The Bear Lodge Mountains of northeast Wyoming are composed primarily of the upper levels of a

mineralized tertiary alkaline-igneous complex that is a component of the Black Hills Uplift of western South Dakota

and northeast Wyoming. Tertiary alkaline intrusive bodies in the northern Black Hills occur along a N70-80W trending belt that extends from Bear Butte in South Dakota, through the Bear Lodge Mountains, to Devil's Tower and Missouri Buttes in northeast Wyoming. The Bear Lodge mining district is in the Bear Lodge Mountains, near the western end of the northern Black Hills intrusive belt. The Bear Lodge Mountains expose and are underlain by multiple alkaline plugs, sills, and dikes and intruded into Precambrian basement and Paleozoic and Mesozoic sedimentary rocks approximately 38–52 million years ago. Rare earth and gold mineralization are found in separate areas of the central crest and northern part of the Bear Lodge Mountains.

The Bear Lodge alkaline-igneous complex is a northwest-trending alkaline intrusive dome with dimensions of approximately 10 kilometers NW-SE by 6 kilometers NE-SW. The complex consists predominantly of multiple intrusions of phonolite, trachyte, and other alkaline igneous rocks, and a variety of associated breccias and diatremes.

Exploration and Drilling

Historical exploration in the Bear Lodge district, including REE exploration carried out by the Company from 2004 through 2012, is summarized in the Technical Report. Exploration activities carried out by the Company in 2013 through 2015 were limited as the focus turned to development drilling at the Bull Hill and Whitetail Ridge deposits. These exploration activities included geochemical, geophysical, geological and mineralogical modeling of the district and individual deposits.

The 2013 drilling program was conducted in two phases. The first phase took place in June and July and involved infill drilling at the Whitetail Ridge deposit in order to upgrade a significant portion of the resource from the Inferred Mineral Resource category to the Indicated Mineral Resource category. During this phase, 14 core holes were drilled for a total of 3,556.3 meters (11,697.5 feet). The second phase was designed to upgrade part of the high-grade resource at the Bull Hill deposit to the Measured Mineral Resource category, develop a more detailed model of the REE grade distribution and provide additional material for bulk metallurgical testing. It consisted of 21 core holes totaling 3,247.1 meters (10,650.5 feet) and six reverse circulation ("RC") twin holes totaling 832.3

meters (2,730 feet). The RC twin holes were drilled using a center return hammer with the objective of minimizing hole erosion and obtaining assay data directly correlative to that from the adjacent core holes.

The 2014 program consisted of the excavation of a test trench along the southwestern flank of Bull Hill in August. The main mineralized zone (Bull Hill Main) was exposed and exploited for the collection of geological information including dike dimension and structural continuity, grade variation, ore and gangue mineralogy, pit slope stability engineering and confirmation of parameters utilized in ore resource calculations. The program netted 907 tonnes (1,000 tons) of material that is stored for future metallurgical work. Bulk samples were taken from the material average 10.1% TREO. Additional crosscut excavation provided 45 tonnes (50 tons) of material to determine physical upgrading potential of lower grades.

The 2015 condemnation program consisted of six rotary holes, and a total of 3,000 feet was drilled in September of 2015 to complete a program that was halted by the USFS in 2012 due to an archeological discovery. The program evaluated the subsurface for carbonatite-hosted REE mineralization and followed up on gold mineralization discovered in 2010 within and adjacent to the proposed physical upgrade ("PUG") site. Based on results from the 2015 condemnation program, the PUG area is considered void of economic mineralization.

No drilling was performed in 2016.

Bear Lodge REE Project

The Bear Lodge REE Project comprises several REE resource areas within the Bear Lodge Property. REE mineralization at the Bear Lodge Property occurs in the central lobe of the Bear Lodge alkaline-igneous complex. Most of the important identified REE deposits and occurrences within the Bear Lodge alkaline complex are contained within the Company's block of unpatented lode mining claims. The REE deposits are located primarily in the vicinity of the Bull Hill deposit.

REE mineralized bodies occur as dikes, veins, and stockworks within the Bull Hill and Whitetail deposit areas of the Bear Lodge Property. The mineralization includes a well-defined, near-surface, oxidized FMR zone; a near-surface, oxidized, but incompletely leached, carbonatite zone (oxide-carbonate zone); a transitional or mixed zone (oxide + sulfide); and a deeper sulfide-bearing carbonatite (a high-carbonate igneous rock) zone. The oxide-carbonate and transitional zones were referred to collectively as a "transitional zone" in some prior news releases and technical reports. The mineralized zones were subsequently sub-classified, based on key characteristics of those zones. The FMR dikes and veins contain no matrix carbonates or sulfides. The sulfides are completely oxidized to hydrous iron oxides, and the non-REE bearing carbonate minerals (calcite and strontianite) show near-complete leaching from the zone, which ranges from the surface to depths of about 90–150 meters. The oxide-carbonate zone generally occurs beneath the oxide zone but approaches the surface locally in select dikes. It is characterized by the near absence of sulfides, with the residual iron oxides formed during almost complete oxidation of the former sulfide minerals, and by variable amounts of relict matrix carbonates (calcite ± strontianite) and the REE mineral, ancylite (a hydrous Sr-REE carbonate).

Bull Hill Mine

The Bull Hill Mine contains the Mineral Resources reported in our Technical Report, as discussed below. The Bull Hill Mine Mineral Resources, for purposes of this Annual Report, comprise mineralized material from both the Bull Hill and Whitetail Ridge deposit resource areas. The mineralized bodies occur as steeply dipping, FMR-carbonatite dike swarms and associated stockwork. Geological interpretation of results from the 2010–2014 drill and trench programs indicates that the Bull Hill resource area is dominated by northwest-striking mineralized bodies in the southern two-thirds of the resource area, while the northern part of the resource area exhibits a transitional change in strike from dominantly northwesterly to almost due north. The dike swarm primarily intrudes heterolithic intrusive breccia of the Bull Hill diatreme and adjacent trachytic and phonolitic intrusive rocks. Carbonatite dikes at depth are interpreted to transition toward the surface into oxide-carbonate and FMR bodies. The mineralized structures range in size from veinlets to large dikes more than 30 meters in width. The Bull Hill deposit resource consists of one dominant dike set and several subsidiary dike sets in a swarm that has dimensions of more than 457 meters along strike and less than 100 meters in width. The dikes appear to pinch and swell in both strike and dip directions, and they can be traced in drill holes more than 305 meters down dip.

The Whitetail Ridge deposit occurs about 700 meters northwest of the Bull Hill deposit. The REE mineralization consists of northwest- and north-striking FMR dikes, and an FMR stockwork zone that is also elongated northeasterly, with dimensions of roughly 380 meters by 290 meters. The enveloping gravity and radiometric geophysical anomalies and coincident soil geochemical anomalies are larger and may indicate a broader distribution of REE mineralization beneath the extensive soil and colluvial cover. Drilling conducted in 2011 through 2013 indicates that much of the mineralization is confined within the volume of the Whitetail Ridge diatreme. Preliminary mineralogical studies by the Company indicate that the REE mineralization occurs in REE fluorocarbonates (bastnasite, parisite, and synchysite), cerianite, and subordinate monazite (an REE-Th phosphate). The Whitetail Ridge deposit mineralization is enriched in HREE, relative to the Bull Hill deposit, and both are enriched in CREE.

Prefeasibility Study

In 2013 and 2014, we worked on optimizing the Bull Hill Mine plan, the mineral process methods and the Bear Lodge REE Project economics. This resulted in the Company undertaking and completing an updated PFS to reflect these significant changes.

The Company's PFS as reported in the Technical Report for the Bear Lodge REE Project was authored principally by Norda Stelo, formerly Roche Engineering Inc. ("Roche"), which undertook the process engineering and mine and mill capital and operating cost estimation for the Bear Lodge REE Project at that time.

The technical report for the Bear Lodge REE Project dated October 9, 2014 is titled "Rare Element Resources Inc. Bear Lodge Project Canadian National Instrument 43-101; Pre-Feasibility Study Report; Technical Report on the Mineral Reserves and Resources and Development of the Bull Hill Mine" (the "Technical Report") and is available under our profile at www.sedar.com. The Technical Report was authored by Peter S. Dahlberg P.E. of Roche in Sandy, Utah, and all sections of the Technical Report were prepared under his supervision. Mr. Dahlberg is an independent Qualified Person, as defined by NI 43-101. Other Qualified Persons, as defined by NI 43-101, who participated in the preparation of the Technical Report are Jaye T. Pickarts, P.E., former Chief Operating Officer of Rare Element, who confirmed that the NI 43-101 and Form 43-101F1 documents and Items 4, 5, 6, 19, and 20 of the Technical Report were prepared in compliance with the instrument and form; Alan C. Noble, P.E. of Ore Reserves Engineering in Lakewood, Colorado, who contributed to the preparation of Chapters 7, 8, 9, 10, and 14 of the Technical Report; William L. Rose P.E. of WLR Consulting Inc. in Lakewood, Colorado, who contributed Item 15 and portions of Item 16 (subsections 16.1, 16.2, 16.3 and 16.4) of the Technical Report; and Jeffrey A. Jaacks C.P.G of Centennial, Colorado, who contributed Chapter 11 of the Technical Report, all under the supervision of Mr. Dahlberg, the primary author.

The PFS estimated initial capital costs of approximately \$290,000 and life-of-mine capital costs (including sustaining capital) of approximately \$453,000.

Permitting Progress

The USFS is the lead agency in the NEPA process to prepare an EIS on the Bear Lodge REE Project. This process is essential to securing the permits and approvals necessary to move into production. In early 2012, we submitted the Plan of Operations for the Bear Lodge REE Project, which the USFS accepted as complete in May 2013. The USFS selected a project manager and prime contractor for preparation of the EIS, published notice in the Federal Register and completed necessary scoping work. The USFS issued a draft EIS on January 15, 2016, outlining plan alternatives and proffering a preferred alternative. The U.S. Army Corps of Engineers and the appropriate state and local government agencies are involved in the EIS process as cooperating agencies. On January 22, 2016, the Board of Directors directed the Company to continue to conserve cash due to the current difficult market conditions and suspend all permitting and licensing efforts, including the EIS process. The Company notified the USFS and cooperating agencies, the NRC and the state of Wyoming of its decision to suspend permitting and licensing efforts, and the parties acknowledged receipt of the notice. Assuming permitting efforts resume within a reasonable time, the final EIS and draft Record of Decision (ROD), the decision document that establishes the acceptable operating conditions, would be expected within 18 to 30 months.

Mineral Resources Estimates

The Mineral Resources estimates were developed by Alan C. Noble, P.E. of Ore Reserves Engineering and approved by the Rare Element management team.

Cautionary Note to U.S. Investors Concerning Estimates of Measured and Indicated Mineral Resources

This Annual Report uses the terms "Measured Mineral Resources" and "Indicated Mineral Resources." We advise U.S. investors that while those terms are recognized and required by Canadian regulations, the SEC does not recognize them. U.S. investors are cautioned not to assume that any part or all of the mineral deposits in these categories will ever be converted into Mineral Reserves.

Measured and Indicated Resource Estimate for the Bull Hill Mine (1) effective as of October 9, 2014 (2)								
Cut-off Grade (3)	Bull Hill		Whiteta	ail	Total			
Resource Classification	Tonnes (in millions)	Average Grade (% TREO)	Tonnes (in millions)	Average Grade (% TREO)	Tonnes (in millions) Average Grade (% TREO)			
Measured	2.7	3.81	-	-	2.7	3.81		
Indicated	9.7	3.10	3.9	2.49	13.6	2.93		
Measured & Indicated	12.4	3.25	3.9	2.49	16.3	3.07		

- (1) Bull Hill Mine includes both the Bull Hill and Whitetail Ridge deposits.
- (2) Inclusive of previously reported Mineral Reserves under NI 43-101.
- (3) Cut-off grade of 1.5% was developed using estimated operating costs, forecast recoveries and internal assumed long-term REO prices as of June 30, 2014.

Cautionary Note to U.S. Investors Concerning Estimates of Inferred Mineral Resources

This Annual Report uses the term "Inferred Mineral Resources." We advise U.S. investors that while this term is recognized and required by NI 43-101, the SEC does not recognize it. "Inferred Mineral Resources" have significant 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 Inferred Mineral Resources will ever be upgraded to a higher category. In accordance with Canadian rules, estimates of Inferred Mineral Resources cannot form the basis of feasibility or other economic studies. U.S. investors are cautioned not to assume that part or all of the Inferred Mineral Resource exists or is economically or legally mineable.

Inferred Mineral Resources Estimate for the Bull Hill Mine (1) effective as of October 9, 2014 (2)						
Cut-off Grade	Oxides >1.5					
Resource Classification	Tonnes (in millions)	Average Grade (% TREO)				
Inferred (3)	28.9	2.58				

- (1) Bull Hill Mine includes both the Bull Hill and Whitetail Ridge deposits.
- (2) Cut-off grade of 1.5% was developed using estimated operating costs, forecast recoveries and internal assumed long-term REO prices as of June 30, 2014.
- (3) Includes Ox and OxCa (oxidized) mineralization only.

High-Grade Mineral Resource

High-grade Mineral Resources, which are those resources above a cutoff grade of 3% TREO, are particularly important, since they are the focus of mining in the first nine years of production. The high-grade Mineral Resource is summarized below. It occurs predominantly on the flank of Bull Hill, which contains 78% of the Measured and Indicated, high-grade resource.

Summary of High-Grade Measured and Indicated Mineral Resource (1) effective as of October 9, 2014 (2)									
Cut-off Grade (3)	Bull Hill		Whiteta	ail	Total				
		Average		Average		Average			
Resource	Tonnes (in	Grade (%	Tonnes (in	Grade (%	Tonnes (in	Grade (%			
Classification	millions)	TREO)	millions)	TREO)	millions)	TREO)			
Measured	1.5	5.01	-	-	1.5	5.01			
Indicated	4.0	4.43	0.7	3.93	4.7	4.36			
Measured & Indicated	5.5	4.59	0.7	3.93	6.2	4.52			

- (1) Bull Hill Mine includes both the Bull Hill and Whitetail Ridge deposits from NI-43-101 (2014).
- (2) Inclusive of previously reported Mineral Reserves under NI 43-101 (2014).
- (3) Cut-off grade of 3.0%.

Quality Assurance

The Mineral Resource estimate was completed by Mr. Alan C. Noble, P.E., principal engineer of Ore Reserves Engineering, and is based on geological interpretations supplied by the Company to Ore Reserves Engineering and subsequently modified by Ore Reserves Engineering. Mr. Noble is an independent Qualified Person for the purposes of NI 43-101 and verified the data disclosed herein.

Rare Element's field programs prior to 2014 were carried out under the supervision of Dr. James G. Clark, formerly the Company's Vice President of Exploration. Dr. Clark is a senior geologist and previously was exploration supervisor for Hecla Mining Company during the late 1980s and early 1990s, and was responsible for that company's exploration of Bull Hill and the Bear Lodge district, and its initial discovery of the Bull Hill resource area. In 2014, John T. Ray, the Company's Chief Geologist and a Qualified Person as a SME Registered Member, directed our exploration efforts. Mr. Ray was a consultant to Newmont Mining Company during its operations in the Bear Lodge REE Project area from 2004 to 2010. A detailed QA/QC program was implemented for the 2007 through 2013 drill programs. The QA/QC program was organized by Dr. Jeffrey Jaacks. Drs. Jaacks and Clark verified the sampling procedures and QA/QC data delivered to Ore Reserves Engineering. They share the opinion that the data are of good quality and suitable for use in the Mineral Resource estimate.

Metallurgy and Mineralization

The Mineral Resource size is sensitive to an assumed cut-off grade and to metallurgical operating costs. The mineable pit includes the known Measured and Indicated (M&I) Mineral Resource as disclosed in the Technical Report and is inclusive of the adjacent Whitetail Resource Area that extends towards the northwest.

A PUG plant, located within the Bear Lodge REE Project area, is designed to maximize concentration of the rare earth minerals and produce a mineral concentrate using a crushing, screening, and gravity separation process depending on the material type. The PUG process is designed to concentrate the rare earth-bearing fines and reduce the physical mass. There are areas of the mineable pit that contain variable amounts of weathered oxide material or oxide-carbonate (OxCa) mineralized material, and that contain variable grades of stockwork mineralization adjacent to the higher-grade material. Each of these material types will have a different upgrade percentage and mass reduction in the PUG circuit. The mining plan anticipates exploitation of a distinct high-grade zone early in the Bear Lodge REE Project that will allow for preferential mining in the initial years of the mine. Low and mid-grade material will also be mined and stockpiled for future PUG processing.

Reclamation of mining-related facilities will occur during mine operations, where applicable, and upon completion of mining and stockpiling of materials. Other facilities, including the PUG plant, will be reclaimed as soon as the stockpiled materials are depleted.

The mineral concentrate produced at the PUG plant is planned to be transported to a proposed hydrometallurgical plant near Upton, Wyoming via covered trucks. The hydrometallurgical plant will process the mineral concentrate by acid leaching followed by additional chemical processing to remove impurities and precipitation to produce the final TREO product. The tailings produced from the process will be filtered, neutralized and stored in a double-lined tailings storage facility (TSF) adjacent to the hydrometallurgical plant.

The Company conducts metallurgical test work primarily at SGS Lakefield of Lakefield, Ontario, Canada, which is independent from the Company.

Other Exploration Target Areas at the Bear Lodge REE Project

Discovery of high-grade REE mineralization at the East Taylor and Carbon target areas expanded the area of known REE mineralization outside of the Bull Hill and Whitetail Ridge deposits, and further delineate a "district" underlain by significant and potentially economic REE mineralization. The data indicate that the Bear Lodge REE Project area covers a crudely elliptical area that extends approximately 1,750 meters northwest-southeast by 1,300 meters northeast-southwest. The Carbon exploration target area is located northwest of the Bull Hill deposit, and the East Taylor target is located west of the Bull Hill deposit. Drill assay data from the East Taylor and Carbon exploration targets identify these areas as zones of HREE-enrichment relative to the Bull Hill deposit. All are enriched in CREEs. These two exploration target areas, along with the Whitetail Ridge deposit, are peripheral to the Bull Hill deposit. They are characterized both by high TREO grades, and by some of the highest initial HREE grades of any known North American deposit. They are particularly enriched in Eu, Tb, Dy and Y.

The discovery of these target areas indicates good potential for additional deposits of high-grade REE in the western half of the Bear Lodge REE Project, and those deposits appear to be particularly enriched in HREE.

Sundance Gold Project

The Sundance Gold Project is the second project located on our Bear Lodge Property. The Gold Project consists of 288 unpatented lode mining claims adjacent to the Bull Hill Rare Earth Project in Crook County, Wyoming.

On June 1, 2006, Paso Rico (USA), Inc. (Company predecessor) and Newmont signed the Sundance gold-exploration venture agreement (Venture) on the Company's Bear Lodge Property. Newmont spent approximately \$2.85 million in exploration by May 2010 and chose to terminate the Venture prior to earning any interest and returned the original claims to Paso Rico, predecessor company to Rare Element Resources, Inc. In addition, Newmont transferred 327 unpatented lode mining claims held outside the Venture to the Company. Newmont continues to hold a 0.5% NSR royalty on the 327 claims it previously held independent of the Venture.

In addition, and with respect to the Newmont Venture termination, the Company assumed all obligations of Newmont in a Consulting Agreement with Bronco Creek Exploration and Mining, Inc. requiring the Company to pay as a finder's fee, 3% of exploration expenditures made during each quarter until a cap of \$500 has been paid. The claims covered by the Consulting Agreement are also subject to a 0.25% Net Smelter Returns Royalty with a cap of \$3,000. The finder's fee obligation is not yet achieved. There was no exploration work in 2015 or 2016 for the Gold Project and no exploration work is currently planned in 2017. The Company is in the process of evaluating its options related to the Gold Project, including a potential joint venture, sale or disposition.

Mineral Resources Estimates

The Sundance Gold Project contains an NI 43-101 compliant Inferred Mineral Resource with an effective date of March 15, 2011, prepared by Ore Reserves Engineering of Lakewood, Colorado. Total Inferred Mineral Resources assuming a \$1,200/oz. gold price were 69,300,000 tonnes with a grade of 0.42/g/t Au. The Technical Report summarizes the project and is available on SEDAR at www.sedar.com.

ITEM 3 LEGAL PROCEEDINGS

We are not aware of any material pending or threatened litigation or of any proceedings known to be contemplated by governmental authorities which are, or would be, likely to have a material adverse effect upon the

Company or our operations, taken as a whole. There are no material proceedings pursuant to which any of our directors, officers or affiliates or any owner of record or beneficial owner of more than 5% of our securities or any associate of any such director, officer or security holder is a party adverse to the Company or has a material interest adverse to it.

ITEM 4. MINE SAFETY DISCLOSURES

We consider health, safety and environmental stewardship to be a core value for Rare Element.

Pursuant to Section 1503(a) of the Dodd–Frank Act, issuers that are operators, or that have a subsidiary that is an operator, of a coal or other mine in the United States are required to disclose in their periodic reports filed with the SEC information regarding specified health and safety violations, orders and citations, related assessments and legal actions, and mining-related fatalities from the Federal Mine Safety and Health Administration ("MSHA") under the Federal Mine Safety and Health Act of 1977 (the "Mine Act"). During the year ended December 31, 2016, the Company was not subject to regulation by MSHA under the Mine Act.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

MARKET INFORMATION

Our common shares began trading on the TSX-V in Toronto, Ontario, Canada, on November 15, 1999 under the former name Spartacus Capital Ltd. under the ticker symbol "SCI." The Company graduated to the TSX on May 27, 2011, under the ticker symbol "RES," where our common shares traded through December 31, 2015, after which time they were voluntarily delisted by us and ceased to trade on the TSX. Our common shares traded on the NYSE MKT under the ticker symbol "REE" from August 18, 2010 through February 26, 2016. Our common shares currently trade on the OTCQB marketplace under the ticker symbol "REEMF."

The following table sets forth the intraday high and low sales prices of our common shares for each quarterly period:

<u>Period</u>	<u>High US\$</u>	Low US\$
Fiscal year ended December 31, 2016		
First Quarter	0.28	0.06
Second Quarter	0.14	0.08
Third Quarter	0.11	0.06
Fourth Quarter	0.09	0.03
Fiscal year ended December 31, 2015		
First Quarter	1.06	0.24
Second Quarter	0.89	0.42
Third Quarter	0.48	0.28
Fourth Quarter	0.33	0.15

As of March 15, 2017, the closing price per share for our common shares as reported by the OTCQB marketplace was \$0.29.

As of March 15, 2017, we had 52,941,880 common shares issued and outstanding, held by approximately 42 shareholders of record.

DIVIDEND POLICY

We have not declared any dividends since our incorporation and do not anticipate that we will do so in the foreseeable future. Payment of any future dividends, if any, will be at the discretion of the Board after taking into account many factors, including operating results, financial conditions and anticipated cash needs.

REPURCHASES OF EQUITY SECURITIES

During the quarter ended December 31, 2016, neither the Company nor any affiliate of the Company repurchased any common shares of the Company registered under Section 12 of the Exchange Act.

RECENT SALES OF UNREGISTERED SECURITIES

There were no sales of unregistered securities during the year ended December 31, 2016.

EQUITY COMPENSATION PLAN INFORMATION

As of December 31, 2016, we had one equity compensation plan under which our common shares have been authorized for issuance to our officers, directors, employees and non-employee consultants: our 10% Rolling Stock Option Plan (the "RSOP") which was adopted by our shareholders on December 2, 2011.

The following table sets out those securities of the Company which have been authorized for issuance under our equity compensation plan, as at December 31, 2016:

Equity Compensation Plan Information

Plan category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
Equity compensation plans approved by security holders	3,694,900	\$0.94	1,599,288
Equity compensation plans not approved by security holders	-	-	-
Total	3,694,900	\$0.94	1,599,288

OUTSTANDING EQUITY AWARDS AT FISCAL YEAR-END

The following table sets forth the outstanding option awards held by the NEO of the Company as of December 31, 2016. All grants were made under the RSOP.

Outstanding Equity Awards at Fiscal Year-End

	Option awards								
Name	Number of securities underlying unexercised options (#) exercisable	Number of securities underlying unexercised options (#) unexercisable	Option exercise price (\$)	Option expiration date					
	-	200,000	0.04	12/29/2021					
Randall J. Scott	100,000	50,000	0.04	12/13/2021					
	100,000	_	0.32	1/22/2020					
	75,000	-	1.24	12/17/2018					
	85,000	_	3.61	12/20/2017					

CERTAIN U.S. FEDERAL INCOME TAX CONSIDERATIONS

The following discussion is a general summary of the material U.S. federal income tax consequences of the ownership and disposition of our common shares by a holder of our common shares that is a U.S. Holder (as defined below). This summary is general in nature and does not address the effects of any state or local taxes, U.S. federal estate, gift, or generation-skipping taxes, or the tax consequences in jurisdictions other than the United States. In addition, this discussion does not discuss all aspects of U.S. federal income taxation that may be relevant to investors subject to special treatment under U.S. federal income tax law (including, for example, owners of 10% or more of the voting shares of the Company, U.S. expatriates, insurance companies, tax-exempt entities, financial institutions, persons subject to the alternative minimum tax, regulated investment companies, securities broker-dealers or dealers, traders in securities who elect to apply a mark-to-market method of accounting, partnerships or other pass-through entities and investors in such an entity; persons holding our securities as part of a larger

integrated transaction, persons who acquire our securities as compensation; and, persons whose functional currency is not the U.S. dollar). This summary is based on the U.S. Internal Revenue Code of 1986, as amended (which we refer to as the "Code"), the regulations promulgated thereunder, court decisions and published rulings of the Internal Revenue Service (the "IRS"), as in effect on the date hereof, and the Convention between the United States of America and Canada with Respect to Taxes on Income and on Capital signed on September 26, 1980, as amended and currently in force (which we refer to as the "Treaty"), and does not take into account the possible effect of future legislative or administrative changes or court decisions. We will not request any rulings from the IRS or obtain any opinions from counsel on the tax consequences described below, or on any other issues. The IRS or a court might reach a contrary conclusion with respect to the issues addressed herein if the matter were to be contested. Future legislative or administrative changes or court decisions may significantly change the conclusions expressed herein, and any such changes or decisions may have a retroactive effect with respect to the matters discussed herein. This discussion assumes that we are not, and will not become, a controlled foreign corporation as determined for U.S. federal income tax purposes.

YOU SHOULD CONSULT YOUR OWN ADVISOR REGARDING THE U.S. FEDERAL INCOME TAX CONSEQUENCES OF THE ACQUISITION, OWNERSHIP AND DISPOSITION OF OUR COMMON SHARES IN LIGHT OF YOUR PARTICULAR CIRCUMSTANCES.

Definition of a U.S. Holder

As used herein, the term "U.S. Holder" means a beneficial owner of our securities that is (a) an individual citizen or resident of the United States for U.S. federal income tax purposes; (b) a corporation (or other entity taxable as a corporation for U.S. federal income tax purposes) created or organized in or under the laws of the United States or any state thereof or the District of Columbia; (c) an estate the income of which is subject to U.S. federal income taxation regardless of its source; or (d) a trust, if (i) a court within the United States can exercise primary supervision over the administration of the trust and one or more U.S. persons are authorized to control all substantial decisions of the trust or (ii) a valid election is in effect under applicable Treasury Regulations to treat such trust as a U.S. person.

Passive Foreign Investment Company Rules

We will be classified as a passive foreign investment company (a "PFIC") in any taxable year in which, after taking into account the income and assets of certain subsidiaries, either (i) at least 75% of our gross income is passive income, or (ii) at least 50% of the average value of our assets is attributable to assets that produce or are held for the production of passive income. Whether we will be classified as a PFIC in any taxable year is a factual determination and will depend upon our assets, the market value of our common shares, and our activities in each year and is therefore subject to change.

We may have been a PFIC for the period ended December 31, 2016, and may be a PFIC in subsequent years. The tests for determining PFIC status depend upon a number of factors, some of which are beyond our control and can be subject to uncertainties. Accordingly, we cannot provide certainty to U.S. Holders that we were or were not a PFIC for the period ended December 31, 2016, or any future year. We will use commercially reasonable efforts to provide information as to our status as a PFIC and the PFIC status of any subsidiary in which the Company owns more than 50% of such subsidiary's total aggregate voting power to U.S. Holders who make a written request for such information.

If we are classified as a PFIC for any taxable year, the so-called "excess distribution" regime will apply to any U.S. Holder of common shares that does not make a QEF election or mark-to-market election, as described below. Under the excess distribution regime, (i) any gain the U.S. Holder realizes on the sale or other disposition of the common shares (possibly including a gift, exchange in a corporate reorganization, or grant as security for a loan) and any "excess distribution" that we make to such U.S. Holder (generally, any distributions to such holder in respect of the common shares during a single taxable year that are greater than 125% of the average annual distributions received by such U.S. Holder in the three preceding years or, if shorter, such holder's holding period for the common shares), will be treated as ordinary income that was earned ratably over each day in such U.S. Holder's holding period for the common shares; (ii) the portion of any excess distributions allocated to the current year or prior years before the first day of the first taxable year beginning after December 31, 1986, in which we became a PFIC would be includible by the U.S. Holder as ordinary income in the current year; (iii) the portion of such gain or distribution that is allocable to prior taxable years during which we were a PFIC will be subject to tax at

the highest rate applicable to ordinary income for the relevant taxable years, regardless of the tax rate otherwise applicable to such U.S. Holder and without reduction for deductions or loss carryforwards; and (iv) the interest charge generally applicable to underpayments of tax will be imposed with respect of the tax attributable to each such year. The interest charge discussed above generally will be non-deductible interest expense for individual U.S. Holders.

Certain elections may be available with respect to our common shares (the so-called "QEF," "mark-to-market," and "deemed sale" elections) if we are a PFIC, but these elections may accelerate the recognition of taxable income and may result in the recognition of ordinary income.

If a U.S. Holder makes for any tax year a timely election to treat the Company as a "qualifying electing fund" or "QEF" (a "QEF election") with respect to such U.S. Holder's interest therein, the above-described rules regarding excess distributions generally will not apply. Instead, the electing U.S. Holder would include annually in its gross income its pro rata share of our ordinary earnings and any net capital gain regardless of whether such income or gain was actually distributed. Special rules apply to U.S. Holders who own their interests in a PFIC through intermediate entities or persons.

A U.S. Holder may make a QEF election only if the U.S. Holder receives certain information (known as a "PFIC annual information statement") from us annually. We will use commercially reasonable efforts to make available to U.S. Holders, upon written request, an accurate PFIC annual information statement for each year in which the Company is a PFIC. A QEF election is generally timely filed only if it is made on a timely filed federal income tax return for the first year in the U.S. Holder's holding period for our common shares in which we were a PFIC. A U.S. Holder for whom a QEF election would otherwise be untimely may be able to make a special "deemed sale" election pursuant to which the U.S. Holder recognizes any gain inherent in the U.S. Holder's common shares and restarts the U.S. Holder's holding period in our common shares for purposes of making a QEF election. A deemed sale election generally can be made only if the U.S. Holder owns common shares on the first day of our taxable year in which the election is to be effective.

Alternatively, a U.S. Holder of common shares may elect to recognize any gain or loss on its common shares on a mark-to-market basis at the end of each taxable year, so long as the common shares are regularly traded on a qualified exchange. The OTCQB marketplace, on which our common shares currently trade, is not a qualified exchange for this purpose. Therefore, we do not believe that our common shares are regularly traded on a qualified exchange for PFIC purposes, and we provide no assurance that our common shares will be regularly traded on a qualified exchange for this or any subsequent year in which we may be a PFIC.

If a mark-to-market election is made, the excess distribution regime will not apply to amounts received with respect to our common shares from and after the effective time of the election, and any mark-to-market gains or gains on disposition will be treated as ordinary income. Mark-to-market losses and losses on disposition will be treated as ordinary losses to the extent of the U.S. Holder's unrecovered prior net mark-to-market gains. Losses in excess of prior net mark-to-market gains will generally not be recognized. The mark-to-market election must be made by the due date (as may be extended) for filing the U.S. Holder's federal income tax return for the first year in which the election is to take effect. A mark-to-market election applies to all future years of an electing U.S. Holder during which the stock is regularly traded on a qualifying exchange, unless revoked with the IRS's consent.

The QEF election and mark-to-market election rules are complex. U.S. Holders should consult their tax advisor regarding the availability and procedure for making these elections.

Special adverse rules apply to U.S. Holders of our common shares for any year in which we are a PFIC and own or dispose of shares in another corporation that is also a PFIC (a "lower-tier PFIC"), as might be the case with our wholly owned subsidiary, Rare Element Holdings, Ltd. A U.S. Holder who owned our common shares while we were a PFIC will be taxable under the excess distribution rules described above with respect to any gain that we recognize from a disposition of shares in a lower-tier PFIC, or if the U.S. Holder disposes of all or part of its common shares. Moreover, a QEF election or mark-to-market election that is made for our common shares would not apply to a lower-tier PFIC. While a separate QEF election may be made for a lower-tier PFIC, we may not be in possession of and thus may not be able to provide the financial information to U.S. Holders that would allow them to make a QEF election for any lower-tier PFIC. A mark-to-market election generally may not be made with respect to a lower-tier PFIC.

A U.S. Holder who makes a QEF election for our common shares will be taxable under the excess distribution regime on gain that we recognize on the sale of shares of a lower-tier PFIC, but will not also be taxable on such gain under the QEF rules. However, any U.S. Holder who makes a mark-to-market or deemed sale election for our common shares could be subject to the PFIC rules with respect to income of the lower-tier PFIC, even though the value of the lower-tier PFIC already was subject to tax via mark-to-market or deemed sale adjustments.

The IRS has issued proposed regulations that, subject to certain exceptions, would treat as taxable certain transfers of PFIC stock by a U.S. Holder that has not made a timely QEF election or mark-to-market election that are generally not otherwise taxed, such as gifts, exchanges pursuant to corporate reorganizations, and transfers at death. Generally, in such cases, the basis of our common shares in the hands of the transferee and the basis of any property received in the exchange for those shares would be increased by the amount of gain recognized. The specific tax effect to the U.S. Holder and the transferee may vary based on the manner in which the common shares are transferred. Each U.S. Holder should consult a tax advisor with respect to how the PFIC rules affect their tax situation prior to transferring PFIC shares.

Special adverse rules that impact certain estate planning goals could apply to our common shares if we are a PFIC. Special rules apply with respect to the calculation of the amount of the foreign tax credit with respect to excess distributions by a PFIC.

Each U.S. Holder that has a direct or indirect interest in our common shares generally must file IRS Form 8621 reporting distributions received and gain realized with respect to our common shares. Each U.S. Holder should consult its tax advisor regarding these and any other applicable information or other reporting requirements.

If we are a PFIC in the taxable year in which we pay a dividend or the immediately preceding taxable year, dividends on our common shares will not be "qualified dividend income," and such dividends received by individual U.S. Holders generally will be taxed at ordinary income tax rates, subject to the tax rules that apply to excess distributions from PFICs, as discussed above.

Sale or Other Disposition of Our Common Shares

The tax treatment of a sale or other disposition of our common shares by a U.S. Holder will differ based upon whether the PFIC rules apply and whether the U.S. Holder has made any of the elections described above.

If the excess distribution regime discussed above applies to the sale or disposition of our common shares, the rules regarding the taxation of excess distributions will generally apply upon a sale or other disposition of the common shares.

If the excess distribution regime discussed above does not apply to the sale or disposition of our common shares, the difference between the amount received and the adjusted tax basis of the common shares will be a gain or loss. If, as usually is the case, the common shares are a capital asset in the hands of the U.S. Holder, such gain or loss will be a capital gain. If the U.S. Holder has made a QEF election with respect to the shares, the adjusted basis will be increased by the U.S. Holder's proportionate share of income and capital gains taken into account each year as a result of the QEF election. If the U.S. Holder has made a mark-to-market election with respect to the shares, the adjusted basis will be increased by the net income recognized on the common shares as a result of the mark-to-market election. Capital gain or loss with respect to common shares generally will be long-term capital gain or loss if the holding period for the shares giving rise to such gain or loss exceeds one year. Under current law, long-term capital gains realized by individual U.S. Holders are taxed at reduced rates. Short-term capital gains are taxed at ordinary income rates. The deductibility of capital losses is subject to significant limitations.

Distributions

We do not expect to pay dividends in the foreseeable future. However, subject to the PFIC rules discussed below, a U.S. Holder must include in gross income as dividend income the gross amount of any distribution (including the amount of any Canadian withholding tax thereon) paid by the Company out of its current or accumulated earnings and profits (as determined for U.S. federal income tax purposes) with respect to our common shares. A distribution on our common shares in excess of current or accumulated earnings and profits will be treated as a tax-free return of capital to the extent of the U.S. Holder's adjusted basis in such common shares (thus reducing,

but not below zero, the adjusted tax basis of such common shares), and thereafter as gain from the sale or exchange of common shares. See "Sale or Other Disposition of Our Common Shares" above.

If we are a PFIC in the taxable year in which we pay a dividend or the immediately preceding taxable year, dividends received by individual U.S. Holders generally will be taxed at ordinary income tax rates, subject to the rules that apply to excess distributions from PFICs, as discussed above.

If we are not a PFIC in the taxable year in which we pay a dividend or the immediately preceding taxable year, dividends received by individual U.S. Holders will be taxed to such U.S. Holder at the rates applicable to long-term capital gains as "qualified dividend income" if (i) we are eligible for benefits of the Treaty or (ii) our common shares are readily tradable on an established securities market. We have not determined if we are eligible for such benefits, and our common shares are not currently readily tradable on an established securities market. However, dividend income will not be qualified dividend income (and will be taxed at ordinary income rates) if the U.S. Holder has not held its common shares for at least 61 days during the 121-day period beginning 60 days before the ex-dividend date (or as noted above, if we are a PFIC for the taxable year in which the dividend is paid or in the preceding taxable year).

Dividends paid to a corporate U.S. Holder will be taxed as ordinary income and will not generally be eligible for the dividends received deduction.

Surcharge on Net Investment Income; Other Tax Rules

A surtax of 3.8% (the "unearned income Medicare contribution tax") is imposed on the "net investment income" of certain U.S. citizens and resident aliens, and on the undistributed "net investment income" of certain estates and trusts, in each case in excess of a certain threshold amount. Net investment income generally includes dividends and net gain from the disposition of property (other than property held in a "non-passive" trade or business). Net investment income is reduced by deductions that are properly allocable to such income. Special rules determine when the unearned income Medicare contribution tax applies to distribution or income with respect to PFICs. U.S. Holders should consult with their U.S. tax advisors concerning how these rules would apply to an investment in our common shares.

Foreign Currency Transactions

Generally, amounts received by a U.S. Holder in foreign currency (including dividends paid in foreign currency) will be valued at the rate of exchange on the date of receipt. The subsequent disposition of any foreign currency received (including an exchange for U.S. currency) will generally give rise to ordinary gain or loss should the rate of exchange subsequently change.

Foreign Tax Credit or Deduction

A U.S. Holder who pays (or has withheld from distributions) Canadian income tax with respect to the ownership of our common shares may be entitled, at the option of the U.S. Holder, to either receive a deduction or a tax credit for U.S. federal income tax purposes with respect to such foreign tax paid or withheld. Significant and complex limitations apply to the foreign tax credit, including the general limitation that the credit cannot exceed the proportionate share of the U.S. Holder's U.S. income tax liability that the U.S. Holder's "foreign source" income bears to his or its worldwide taxable income. In applying this limitation, the various items of income and deduction must be classified as either "foreign source" or "U.S. source." Complex rules govern this classification process.

In lieu of a credit, a U.S. Holder who itemizes deductions may elect to deduct all of such holder's foreign taxes in the taxable year. A deduction does not reduce U.S. tax on a dollar-for-dollar basis like a tax credit, but the deduction for foreign taxes is not subject to the same limitations applicable to foreign tax credits. U.S. Holders are urged to consult their own tax advisors regarding the availability of foreign tax credits.

A U.S. Holder's ability to use foreign tax credits could be adversely affected if we are a PFIC.

Information Reporting and Backup Withholding

Certain U.S. Holders are required to report information relating to an interest in our common shares, subject to certain exceptions, by attaching a completed IRS Form 8938, Statement of Specified Foreign Financial Assets, with their tax return for each year in which they hold an interest in our common shares or warrants. U.S. Holders are urged to consult their own tax advisors regarding information reporting requirements relating to their ownership of our common shares.

Dividend payments made with respect to our common shares and proceeds from the sale or other disposition of our common shares may be subject to information reporting requirements and to U.S. backup withholding.

In general, backup withholding will apply with respect to reportable payments made to a U.S. Holder unless (i) the U.S. Holder is a corporation or other exempt recipient, and if required, demonstrates such exemption, or (ii) the U.S. Holder furnishes the payor with a taxpayer identification number on IRS Form W-9 in the manner required, certifies under penalty of perjury that such U.S. Holder is not currently subject to backup withholding and otherwise complies with the backup withholding requirements.

Backup withholding is not an additional tax. Rather, the amount of any backup withholding imposed on a payment to a holder will be allowed as a refund or a credit against such holder's U.S. federal income tax liability, provided that the required information is timely furnished to the IRS.

ITEM 6. SELECTED FINANCIAL DATA

As a smaller reporting company, we are not required to provide this information. See "Item 8. Financial Statements and Supplementary Data."

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

You should read the following discussion and analysis of our financial condition and results of operations together with our financial statements and related notes appearing elsewhere in this Annual Report. This discussion and analysis contains forward-looking statements that involve risks, uncertainties and assumptions. See "Cautionary Note Regarding Forward-Looking Statements." Our actual results may differ materially from those anticipated in these forward-looking statements as a result of many factors, including, but not limited to, those set forth in "Item 1A. Risks and Uncertainties" and elsewhere in this Annual Report.

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our Consolidated Financial Statements and accompanying notes included in Item 8 of this Annual Report. This Management's Discussion and Analysis (this "MD&A") has been prepared based on information known to management as of March 15, 2017. This MD&A is intended to help the reader understand the consolidated audited financial statements of the Company.

All currency amounts are expressed in thousands of U.S. dollars, except per share and common share amounts, unless otherwise noted.

OUTLOOK

We have limited cash resources on hand, have reduced staff to one executive employee and have implemented measures to conserve our remaining cash. The Company has narrowed the focus of its activities to only the very highest priority items that we believe have the greatest potential to preserve the value of the Projects and shareholder value, including seeking capital and actively pursuing potential strategic alternatives, including off-take agreements, joint ventures, and the potential sale of various assets and/or part or all of the Projects.

RISKS AND UNCERTAINTIES

Our activities are subject to certain risks and uncertainties that might impact our financial results. For a more detailed list of such risks and uncertainties, please see "Item 1A. Risk Factors" of this Annual Report.

Our failure to successfully address these risks and uncertainties could have a material adverse effect on our business, financial condition and/or results of operations. Consequently, the trading price of our common shares may decline, and investors may lose part of or all their investment in the Company. We cannot assure you that we will successfully address these risks and uncertainties or other unknown risks and uncertainties that may affect our business.

RESULTS OF OPERATIONS

Year Ended December 31, 2016 Compared to Year Ended December 31, 2015

Summary

Our consolidated net loss for the year ended December 31, 2016 was \$3,426, or \$0.07 per share, compared with our consolidated net loss of \$9,678, or \$0.19 per share, for the same period in 2015. For the year ended December 31, 2016, the decrease in consolidated net loss was primarily the result of a decrease in exploration and evaluation expenses of \$4,676, a decrease in corporate administration expenses of \$1,436, and a positive variance of \$476 related to currency translation, partially offset by an impairment charge of \$407.

Exploration and evaluation

Exploration and evaluation costs were \$394 for the year ended December 31, 2016, compared with \$5,070 for the same period in 2015. The decrease from the prior period was the result of decreased activities on the Bear Lodge REE Project as we suspended the majority of permitting activities while continuing the work necessary to maintain our assets.

Corporate administration

Corporate administration costs decreased to \$2,606 for year ended December 31, 2016, compared with \$4,042 for the same period in 2015, a decrease of \$1,436. During the year ended December 31, 2016, corporate administration includes one-time severance expenses incurred in placing the Bear Lodge REE Project on care-and-maintenance and severing all but one of our full-time employees. Absent this non-recurring cost of approximately \$950, corporate administration costs would have been lower by approximately \$1,656 for the year ended December 31, 2016. Corporate and administrative costs for the year ended December 31, 2016, included a voluntary delisting from the NYSE MKT and listing our common shares on the OTCQB, outside legal expenses relating to our regulatory and proprietary patent-pending filings, and completing the remaining office lease obligations at our Lakewood, Colorado location. We continue to seek opportunities to further reduce corporate overhead and administration costs, including outsourcing of certain additional administrative functions.

Non-operating income and expenses

Impairment charges

On October 20, 2016, we executed an Asset Purchase Agreement whereby the Company agreed to sell its Section 16 real property to a private party, retaining a five-year repurchase option. We evaluated the carrying value of Section 16 based on the sale price of \$600. As a result, we reduced the carrying value of the land by \$380 to \$600 in the third quarter of 2016. On October 26, 2016, the parties closed the asset sale, and the Company received net proceeds of approximately \$595. Additionally, As the Bear Lodge Property is on care -and-maintenance, we have recorded an impairment charge of \$27 for the year ended December 31, 2016 to reduce the capitalized acquisition costs to zero.

There were no similar impairment charges in 2015.

FINANCIAL POSITION, LIQUIDITY AND CAPITAL RESOURCES

Operating Activities

Net cash used in operating activities was \$3,637 for the year ended December 31, 2016, as compared with \$9,335 for the same period in 2015. The decrease in cash used of \$5,698 from the prior period was primarily the result of decreased spending on exploration and evaluation activities and corporate administration expenses, partially offset by timing in vendor payments affecting accounts payable.

Investing Activities

Net cash provided by investing activities was \$83 for the year ended December 31, 2016, as compared with net cash used of nil for the same period in 2015. The cash received in the 2016 period was related to the sale of small equipment and office furniture.

Financing Activities

Net cash provided by financing activities was \$595 for the year ended December 31, 2016 and net cash provided by financing activities was \$3,077 for the year ended December 31, 2015. The cash received in 2016 was the result of closing the sale on October 26, 2016 of approximately 640 acres on non-core real property located in Crook County, Wyoming (Section 16 real property). The cash received in the 2015 period was the result of the Company's registered direct offering, which closed on April 29, 2015.

Liquidity and Capital Resources

At December 31, 2016, our total current assets were \$1,008, compared with \$4,053 at December 31, 2015. The decrease of \$3,045 is primarily due to a decrease in the combination of cash and cash equivalents of \$2,954 due to funding operations as well as reduced prepaid expenses of \$91.

Our working capital at December 31, 2016 was \$791, compared with working capital of \$2,992 at December 31, 2015.

We have placed the Bear Lodge REE Project under care-and-maintenance, and all permitting activities have been suspended. Additionally, corporate cost containment measures have been implemented to preserve remaining cash balances as we pursue additional financings, asset sales and/or strategic alternatives, including joint ventures and the potential sale of all, or a portion of, the Bear Lodge REE Project and/or the Sundance Gold Project. We continue to seek further opportunities to reduce corporate overhead and administrative costs, including outsourcing of additional administrative functions.

We do not have sufficient funds to complete feasibility studies, permitting, development and construction of the Bear Lodge REE Project. Therefore, our continuation as a going concern is dependent upon our completion of a future financing, off-take agreement, joint venture, strategic transaction, or sale of various assets and/or one or both of the Projects. However, there is no assurance that we will be successful in completing such a financing or strategic transaction. As a result, there is substantial doubt as to whether our existing cash resources and working capital are sufficient to enable us to continue our operations beyond the next 12 months, after the filing date of this Annual Report, as a going concern.

The audit opinion and notes that accompany our consolidated financial statements for the year ended December 31, 2016, refer to the substantial doubt regarding our ability to continue as a going concern. The accompanying financial statements have been prepared assuming that we will continue as a going concern. Our financial statements do not include any adjustments that may result from the outcome of this uncertainty. We do not have sufficient cash to fund planned operations and meet obligations beyond the next 12 months, after the filing date of this Annual Report, without raising additional funds.

If we are unable to continue as a going concern or in order to preserve shareholder value, we may have to liquidate our assets, the proceeds from which may be less than the value at which those assets are carried on our consolidated financial statements. As a result, investors may lose part or all of their investment.

Off-Balance Sheet Arrangements

We have no off-balance sheet arrangements required to be disclosed in this Annual Report.

Contractual Obligations

As of December 31, 2016 we had no material contractual obligations required to be disclosed in this Annual Report.

CRITICAL ACCOUNTING ESTIMATES

Exploration and development costs

Exploration costs are expensed as incurred. When it is determined that a mining deposit can be economically and legally extracted or produced based on established proven and probable reserves, development costs related to such reserves and incurred after such determination will be considered for capitalization. The establishment of proven and probable reserves is based on results of feasibility studies that indicate whether a property is economically feasible. Upon commencement of commercial production, capitalized costs will be transferred to the appropriate asset category and amortized over their estimated useful lives. Capitalized costs, net of salvage values, relating to a deposit that is abandoned or considered uneconomic for the foreseeable future, will be written off.

Stock-based compensation

We account for stock-based compensation under the provisions of Financial Accounting Standards Board ("FASB") Accounting Standards Certification ("ASC") 718, "Compensation – Stock Compensation." Under the fair value recognition provisions, stock-based compensation expense is measured at the grant date for all stock-based awards to employees and directors and is recognized as an expense over the requisite service period, which is generally the vesting period. The Black-Scholes option valuation model is used to calculate fair value.

We account for stock-based compensation arrangements with non-employees in accordance with ASC 718 and ASC 505-15, "Equity," which require that such equity instruments are recorded at their fair value on the measurement date. The measurement of stock-based compensation is subject to periodic adjustment as the underlying equity instruments vest. Non-employee stock-based compensation charges are amortized over the vesting period on a straight-line basis. For stock options granted to non-employees, the fair value of the stock options is also estimated using a Black-Scholes valuation model.

Asset retirement obligations

Our mining and exploration activities are subject to various laws and regulations, including legal and contractual obligations to reclaim, remediate, or otherwise restore properties at the time the property is removed from service. Asset retirement obligations are recognized when incurred and recorded as liabilities at fair value. The reclamation obligation is based on when spending for an existing disturbance will occur. We reclaim the disturbance from our exploration programs on an ongoing basis and, therefore, the portion of our asset retirement obligation corresponding to our exploration programs will be settled in the near term and is classified as a current liability. The remaining reclamation associated with environmental monitoring programs is classified as a long-term liability; however, because we have not declared proven and probable reserves as defined by SEC Industry Guide 7, the timing of these reclamation activities is uncertain. The estimated fair value of the outstanding liability at the end of the period approximates the cost of the asset retirement obligation. For exploration stage properties that do not qualify for asset capitalization, the costs associated with the obligation are charged to operations. For development and production stage properties, the costs are added to the capitalized costs of the property and amortized using the units-of-production method. We review, on a quarterly basis, unless otherwise deemed necessary, the asset retirement obligation in connection with the Bear Lodge Property.

Asset retirement obligations are secured by surety bonds held for the benefit of the state of Wyoming in amounts determined by applicable federal and state regulatory agencies.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Market risk. Market risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in market prices. Our market risk is comprised of various types of risk: interest rate risk, commodity price risk and other price risk.

Interest rate risk. Our cash and cash equivalents consist of cash held in bank accounts and, at times, guaranteed investment certificates that earn interest at variable interest rates. Due to the short-term nature of these financial instruments, fluctuations in market rates did not have a significant impact on estimated fair values as of December 31, 2016. Future cash flows from interest income on cash and cash equivalents will be affected by interest rate fluctuations. We manage interest rate risk by maintaining an investment policy that focuses primarily on preservation of capital and liquidity.

Commodity price risk. We are indirectly exposed to commodity price risk of rare earth products and gold, which are, in turn, influenced by the price of and demand for the end products produced with rare earth and gold mineral resources. A significant decrease in the global demand for these products may have a material adverse effect on our business. None of our mineral properties are in production, and we do not currently hold any commodity derivative positions.

Other price risk. Other price risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices, other than those arising from interest rate risk, or commodity price risk.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The following Consolidated Financial Statements and Report of Independent Registered Public Accountants are filed as part of this Item 8 and are included in this Annual Report.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareholders Rare Element Resources, LTD Littleton, Colorado

We have audited the accompanying consolidated balance sheets of Rare Element Resources Ltd. and subsidiaries (the "Company") as of December 31, 2016 and 2015, and the related consolidated statements of operations and comprehensive loss, cash flows, and shareholders' equity, and for each of the years then ended. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Rare Element Resources Ltd. and subsidiaries as of December 31, 2016 and 2015, and the results of their operations and their cash flows for each of the years then ended in conformity with accounting principles generally accepted in the United States of America.

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the consolidated financial statements, the Company has had no revenue since inception, has incurred significant recurring losses, and has inadequate liquidity to support future operations, which raises substantial doubt about its ability to continue as a going concern. Management's plan in regards to these matters is also described in Note 1. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

EKS&H LLLP

March 29, 2017 Denver, Colorado

RARE ELEMENT RESOURCES LTD. CONSOLIDATED BALANCE SHEETS

(Expressed in thousands of U.S. Dollars, except shares outstanding)

	Decem	ber 31,
	2016	2015
ASSETS:		
CURRENT ASSETS:		
Cash and cash equivalents	\$ 927	\$ 3,881
Prepaid expenses and other	81	172
Total Current Assets	1,008	4,053
Equipment, net	106	227
Investment in land	600	980
Mineral properties		27
Total Assets	\$ 1,714	\$ 5,287
LIABILITIES AND SHAREHOLDERS' EQUITY:		
CURRENT LIABILITIES:		
Accounts payable and accrued liabilities	\$ 65	\$ 909
Asset retirement obligation	<u>152</u>	152
Total Current Liabilities	217	1,061
Asset retirement obligation	205	205
Repurchase option	600	_
Total Liabilities	1,022	1,266
Commitments and Contingencies		
SHAREHOLDERS' EQUITY:		
Common shares, no par value – unlimited shares authorized; shares		
outstanding December 31, 2016 and 2015 – 52,941,880	103,640	103,640
Additional paid in capital	23,626	23,529
Accumulated deficit	(126,574)	(123,148)
Total Shareholders' Equity	692	4,021
Total Liabilities and Shareholders' Equity	\$ 1,714	\$ 5,287

See accompanying notes to consolidated financial statements.

RARE ELEMENT RESOURCES LTD. CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS

(Expressed in thousands of U.S. Dollars, except per share and common share amounts)

	Year Ended December 31,			
	2016	2015		
Operating income and (expenses):				
Exploration and evaluation	\$ (394)	\$ (5,070)		
Corporate administration	(2,606)	(4,042)		
Depreciation	(38)	(118)		
Impairment of land and mineral property	(407)			
Total operating expenses	(3,445)	(9,230)		
Non-operating income and (expenses):				
Interest income	_	28		
Loss on currency translation	_	(476)		
Other income	19	-		
Total non-operating income (expenses)		(448)		
Net loss	\$ (3,426)	\$ (9,678)		
LOSS PER SHARE – BASIC AND DILUTED	\$ (0.07)	\$ (0.19)		
WEIGHTED AVERAGE NUMBER OF SHARES OUTSTANDING	52,491,880	51,234,725		

See accompanying notes to consolidated financial statements.

RARE ELEMENT RESOURCES LTD. CONSOLIDATED STATEMENTS OF CASH FLOWS

(Expressed in thousands of U.S. Dollars)

	For the year ended	l December 31,
	2016	2015
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net loss for the period	\$ (3,426)	\$ (9,678)
Adjustments to reconcile loss for the period to net cash and cash equivalents used in		
operations:		
Depreciation	38	118
Asset retirement obligation	_	(9)
Impairment of land and mineral property	407	
Stock-based compensation	97	254
	(2,884)	(9,315)
Changes in working capital:		
Prepaid expenses and other	91	170
Accounts payable and accrued liabilities	(844)	(190)
Net cash and cash equivalents used in operating activities	(3,637)	(9,335)
CASH FLOWS FROM INVESTING ACTIVITIES:		
Proceeds from sale of equipment	88	_
Net cash and cash equivalents provided by investing activities	88	_
CASH FLOWS FROM FINANCING ACTIVITIES:		
Share issuance, net		3,077
Repurchase option	595	3,077
Net cash and cash equivalents provided by financing activities	595	3,077
Their cash and cash equivalents provided by financing activities		3,077
Decrease in cash and cash equivalents	(2,954)	(6,258)
Cash and cash equivalents – beginning of the period	3,881	10,139
Cash and cash equivalents – end of the period	\$ 927	\$ 3,881

Supplemental disclosure with respect to cash flows – Note 9

See accompanying notes to the consolidated financial statements.

RARE ELEMENT RESOURCES LTD. CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY

(Expressed in thousands of U.S. Dollars)

	Number of Shares	Amo	Amount		Additional Paid in Capital		Accumulated Deficit		Total	
Balance, December 31, 2014	47,707,216	\$	100,652	\$	23,186	\$	(113,470)	\$	10,368	
Shares issued:										
For private placement	5,230,770		2,985		91		-		3,076	
Exercise of options	3,894		3		(2)		-		1	
Stock-based compensation	-		-		254		-		254	
Net loss for the period	-		-		-		(9,678)		(9,678)	
Balance, December 31, 2015	52,941,880	\$	103,640	\$	23,529	\$	(123,148)	\$	4,021	
Stock-based compensation	-		_		97		-		97	
Net loss for the period	-		-		-		(3,426)		(3,426)	
Balance, December 31, 2016	52,941,880	\$	103,640	\$	23,626	\$	(126,574)	\$	692	

See accompanying notes to consolidated financial statements.

RARE ELEMENT RESOURCES LTD. NOTES TO FINANCIAL STATEMENTS

DECEMBER 31, 2016

1. NATURE OF OPERATIONS

Rare Element Resources Ltd. ("we," "us," "Rare Element" or the "Company") was incorporated under the laws of the Province of British Columbia, Canada, on June 3, 1999.

Rare Element has historically been focused on advancing the Bear Lodge REE Project and the Sundance Gold Project both located near the town of Sundance in northeast Wyoming. The Bear Lodge REE Project consists of several large disseminated REE deposits and a proposed hydrometallurgical plant to be located near Upton, Wyoming. The Sundance Gold Project contains an inferred mineral resource primarily composed of three main gold targets within the area of the Bear Lodge Property. Based upon prior economic conditions for gold, no drilling or exploration on the Sundance Gold Project has been conducted since the end of 2011.

The Company previously announced extensive cost cutting measures and the placement of the Bear Lodge REE Project on care-and-maintenance to enable us to move the Bear Lodge REE Project forward when market conditions improve. In the interim, we have been and will continue pursuing potential financings and strategic alternatives such as off-take agreements, joint ventures and the potential sale of various assets, including all or part of the Bear Lodge REE Project or the Sundance Gold Project. We continue to pursue opportunities to further reduce corporate and administration costs, including outsourcing of certain additional administrative functions.

More recently, with gold markets improving, the Company has turned its attention to the gold potential of the Bear Lodge Property. The area with gold potential is mostly separate from the known rare earth deposits, including the Bull Hill deposit. However, there may be significant gold occurrences in some of the identified satellite rare earth deposits. Only further exploration will define the extent of overlapping occurrences, if any. Several parties have expressed an interest in exploring the gold potential of the Bear Lodge Property, and the Company is currently considering alternative proposals.

The financial statements have been prepared on a going concern basis, which assumes the Company will be able to realize its assets and discharge its liabilities in the normal course of business for the foreseeable future. The Company has incurred losses since inception and further losses are anticipated in the development of its business, raising substantial doubt about the Company's ability to continue as a going concern within one year from the filing date of these financial statements. The ability to continue as a going concern is dependent upon the Company obtaining the necessary financing to meet its obligations and pay its liabilities arising from normal business operations when they come due. Management intends to finance operating costs with existing cash on hand, asset sales, strategic alliances and potential issuances of common stock. There can be no assurance that we will be able to raise the necessary financing or complete a strategic transaction on acceptable terms or at all. In order to continue as a going concern and/or preserve shareholder value, we may have to liquidate our assets. If the Company decides to sell part or all of its assets, the sale proceeds may be less than the value at which those assets are carried on our consolidated financial statements. As a result, investors may lose part or all of their investment.

2. BASIS OF PRESENTATION

Principles of consolidation

These consolidated financial statements have been prepared in accordance with U.S. GAAP and are inclusive of the accounts of Rare Element Resources Ltd. and its directly and indirectly held wholly owned subsidiaries, which consist of its wholly owned subsidiary Rare Element Holdings Ltd. ("Holdings") and Holdings' wholly owned subsidiary, Rare Element Resources, Inc. Certain comparative figures have been reclassified to conform to the financial statement presentation adopted for the current year. Rare Element Resources Ltd. was incorporated under the laws of the Province of British Columbia on June 3, 1999.

Recent Accounting Pronouncements

In August 2014, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2014-15, "Presentation of Financial Statements-Going Concern (Subtopic 205-40): Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern" ("ASU 2014-15"). ASU 2014-15 is intended to define management's responsibility to evaluate whether there is substantial doubt about an organization's ability to continue as a going concern and to provide related footnote disclosures. The amendments in this ASU are effective for reporting periods ending after December 15, 2016, with early adoption permitted. We adopted ASU 2014-15 as of December 31, 2016 and have made the required disclosures in the notes to our consolidated financial statements, as necessary.

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Use of estimates

The preparation of consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of expenses during the reporting period. Actual results could differ from those estimates. The amounts which involve significant estimates include asset retirement obligations, stock-based compensation, derivative liabilities, and impairments.

Cash and cash equivalents

Cash and cash equivalents consist of cash and liquid investments with an original maturity of three months or less. At December 31, 2016 and 2015, cash and cash equivalents consisted of \$927 and \$3,881, respectively, of funds held in bank accounts with financial institutions in both Canada and the United States.

Mineral properties

Mineral property acquisition costs, including indirectly related acquisition costs, are capitalized when incurred. Acquisition costs include cash consideration and the fair market value of common shares issued as consideration. Properties acquired under option agreements, whereby payments are made at the sole discretion of the Company, are capitalized as mineral property acquisition costs at such time as the payments are made. Exploration costs are expensed as incurred. When it is determined that a mining deposit can be economically and legally extracted or produced based on established proven and probable reserves under SEC Industry Guide 7, development costs related to such reserves and incurred after such determination will be considered for capitalization. The establishment of proven and probable reserves is based on results of feasibility studies, which indicate whether a property is economically feasible. Upon commencement of commercial production, capitalized costs will be amortized over their estimated useful lives or units of production, whichever is a more reliable measure. Capitalized amounts relating to a property that is abandoned or otherwise considered uneconomic for the foreseeable future will be written off.

Asset retirement obligations

Our mining and exploration activities are subject to various laws and regulations, including legal and contractual obligations to reclaim, remediate, or otherwise restore properties at the time the property is removed from service. Asset retirement obligations are recognized when incurred and recorded as liabilities at fair value. The reclamation obligation is based on when spending for an existing disturbance will occur. We reclaim the disturbance from our exploration programs on an ongoing basis; therefore, the portion of our asset retirement obligation corresponding to our exploration programs will be settled in the near term and is classified as a current liability. The remaining reclamation associated with environmental monitoring programs is classified as a long-term liability; however, because we have not declared proven and probable reserves under SEC Industry Guide 7, the timing of these reclamation activities is uncertain. The fair value of the outstanding liability at the end of the period approximates the cost of the asset retirement obligation. For exploration stage properties that do not qualify for asset capitalization, the costs associated with the obligation are charged to operations. For development and production stage properties, the costs are added to the capitalized costs of the property and amortized using the

units-of-production method. We review, on a quarterly basis, unless otherwise deemed necessary, the asset retirement obligation in connection with the Bear Lodge Property.

Asset retirement obligations are secured by surety bonds held for the benefit of the state of Wyoming in amounts determined by applicable federal and state regulatory agencies.

Changes in our asset retirement obligations are summarized in the following table:

	Year ended December 31,							
	2	016	201	5				
Balance, beginning of period	\$	357	\$	366				
Additions		_		16				
Releases				(25)				
Balance, end of period	\$	357	\$	357				

Common shares

Common shares issued for non-monetary consideration are recorded at fair market value based upon the trading price of our shares on the share issuance date. Common shares issued for monetary consideration are recorded at the amount received, less issuance costs.

Depreciation

Depreciation is based on the straight-line method. We depreciate computer equipment, furniture and fixtures and geological equipment over a period of three years. We depreciate vehicles over a period of five years.

Stock-based compensation

The fair value of stock-based compensation awards issued to employees and directors of the Company is measured at the date of grant and amortized over the requisite service period, which is generally the vesting period. The Company uses the Black-Scholes option valuation model to calculate the fair value of awards granted.

The fair value of stock-based compensation awards issued to non-employees is determined on the measurement date of such awards. The measurement date is typically the vesting date. Upon vesting, the fair value of share-based compensation awards issued to non-employees is calculated using the Black-Scholes option valuation model, and the amount is recorded as an expense with a corresponding increase in additional paid-in-capital.

When a stock-based compensation award is exercised and the resulting common shares are issued, the fair value of such award as determined on the date of grant or date of vesting (in the case of a non-employee exercise) is transferred to common shares. In the case of a share-based compensation award that is either cancelled or forfeited prior to vesting, the amortized expense associated with the unvested awards is reversed.

Income taxes

The Company accounts for income taxes under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. Under the asset and liability method, the effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. A valuation allowance is recognized if it is more likely than not that the entire or some portion of the deferred tax asset will not be recognized.

Loss per share

The loss per share is computed using the weighted average number of shares outstanding during the period. To calculate diluted loss per share, the Company uses the treasury stock method and the if-converted method. Diluted loss per share is not presented, as the effect on the basic loss per share would be anti-dilutive. At December 31, 2016 and 2015, we had 6,571,824 and 8,928,181 of potentially dilutive securities, respectively.

Fair value of financial instruments

Our financial instruments may at times consist of cash and cash equivalents, short-term investments, accounts receivable, restricted cash, accounts payable and accrued liabilities. U.S. GAAP defines fair value as the price that would be received to sell an asset or be paid to transfer a liability in an orderly transaction between market participants at the measurement date (exit price) and establishes a fair-value hierarchy that prioritizes the inputs used to measure fair value using the following definitions (from highest to lowest priority):

- Level 1 Unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities.
- Level 2 Observable inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly, including quoted prices for similar assets and liabilities in active markets; quoted prices for identical or similar assets and liabilities in markets that are not active; or other inputs that are observable or can be corroborated by observable market data by correlation or other means.
- Level 3 Prices or valuation techniques requiring inputs that are both significant to the fair-value measurement and unobservable.

The Company continually monitors its cash positions with, and the credit quality of, the financial institutions with which it invests. The Company maintains balances in various U.S. financial institutions in excess of U.S. federally insured limits.

The following table presents information about financial instruments recognized at fair value on a recurring basis as of December 31, 2016 and 2015, and indicates the fair value hierarchy:

	December 31, 2016					De	cemb	er 31, 2	015	
	Level	1	Leve	el 2	Tota	ıl	Level 1	Le	vel 2	Total
<u>Assets</u>							•			_
Cash and cash equivalents	\$	927	\$	_	\$	927	\$ 3,881	\$	_	\$ 3,881
Total financial assets	\$	927	\$	_	\$	927	\$ 3,881	\$	_	\$ 3,881
Liabilities Accounts payable and accrued liabilities Repurchase option Asset retirement obligation	\$	65 600 –	\$	- - 357	\$	65 600 357	\$ 909 	\$	- - 357	\$ 909 - 357
Total financial liabilities	\$	665	\$	357	\$:	1,022	\$ 909	\$	357	\$ 1,266

4. MINERAL PROPERTIES

The amounts shown represent acquisition costs, net of impairment charges, and do not necessarily represent present or future values as these are entirely dependent upon the economic recovery of future ore reserves. A summary of current property interests is as follows:

Bear Lodge Property, Wyoming, USA

The Company, through our indirectly held, wholly owned subsidiary, Rare Element Resources, Inc., holds a 100% interest in 499 unpatented mining claims located on land administered by the USFS and a repurchase option (see Note 5 for discussion) on approximately 640 acres (257 hectares) of fee property, together which contain (1) the Bear Lodge REE Project that contains REE mineralization; and (2) the Sundance Gold Project that contains gold mineralization. The property is situated in the Bear Lodge Mountains of Crook County, in northeast Wyoming. As the Bear Lodge property is on care -and-maintenance, we have recorded an impairment charge of \$27 for the year ended December 31, 2016 to reduce the capitalized acquisition costs to zero.

5. EQUIPMENT AND LAND

At December 31, 2016 and 2015, equipment consisted of the following:

		D	ecembe	r 31, 2016)			De	ecembe	er 31, 2015	5	
	C	ost		nulated eciation	bo	et ook lue	(Cost		mulated eciation		book lue
Computer equipment	\$	61	\$	61	\$	_	\$	186	\$	178	\$	8
Furniture		13		13		_		106		72		34
Geological equipment		437		344		93		488		371		117
Vehicles		87		74		13		221		153		68
	\$	598	\$	492	\$	106	\$	1,001	\$	774	\$	227

Depreciation expense for the year ended December 31, 2016 and 2015 was \$38 and \$118, respectively. We evaluate the recoverability of the carrying value of equipment when events and circumstances indicate that such assets might be impaired.

On April 29, 2013, we completed a land acquisition from the state of Wyoming in conjunction with a third-party land exchange, resulting in approximately 640 acres being owned by the Company and subject to a royalty retained by the state of Wyoming. The royalty is a non-participating interest at the royalty rate commensurate with the state or federal royalty rate, whichever is higher, for any such mineral(s), at the time of development. The property is immediately adjacent to our mine site, and the cash consideration paid was \$980.

On October 26, 2016, we sold the approximately 640 acres of non-core real property to Whitelaw Creek LLC, a Wyoming limited liability company ("Whitelaw Creek"), for net proceeds of \$595 in cash (the "Land Sale"). We have the right to repurchase the land (i) for \$900 within three years following the Land Sale or (ii) for \$1,000 after the third anniversary following the Land Sale but on or before the fifth anniversary of the Land Sale, in each case subject to certain adjustments (the "Repurchase Price"). Payment of the Repurchase Price may be made, at Whitelaw Creek's option, in the form of cash, common shares of the Company, or a combination of cash and common shares of the Company. Payment of any common shares of the Company is subject to a beneficial ownership limitation for Whitelaw Creek and its affiliates collectively of 9.9% of the then-current total number of outstanding common shares of the Company, and in no event may the portion of the Repurchase Price paid in common shares of the Company exceed 5 million shares. Valuation of the common shares of the Company for purposes of payment of the Repurchase Price is based on the 10-day volume-weighted average closing price of such shares as of the closing date of the Land Sale, subject to certain conditions. As a result, we reduced the carrying value of the land by \$380 to \$600.

For accounting purposes, we are utilizing the profit-sharing method for real estate transactions under U.S. GAAP as it is unlikely we will repurchase the land given our current financial condition. Under this method, we have classified our value in the land as an asset on our Consolidated Balance Sheet titled "Investment in land" and the value of the Repurchase Price as a liability on our Consolidated Balance Sheet titled "Repurchase option".

6. ADDITIONAL PAID IN CAPITAL

Stock-based compensation

We have options outstanding and exercisable that were issued under the 10% Rolling Stock Option Plan ("RSOP"). The terms of the RSOP were approved by our shareholders at the annual meeting of shareholders on December 2, 2011. The RSOP established the maximum number of common shares which may be issued under the RSOP as a variable amount equal to 10% of the issued and outstanding common shares on a non-diluted basis. Under the RSOP, our Board of Directors may from time to time grant stock options to individual eligible directors, officers, employees or consultants. The maximum term of any stock option is 10 years. The exercise price of a stock option is not less than the closing price on the last trading day preceding the grant date. The Board retains the discretion to impose vesting periods on any options granted.

The fair value of stock option awards granted to directors, officers, employees and/or consultants of the Company are estimated on the grant date using the Black-Scholes option pricing model and the closing price of our common shares on the grant date. The significant assumptions used to estimate the fair value of stock option awards using the Black-Scholes model are as follows:

_	For the years ended December 31,				
	2016	2015			
Risk-free interest rate	1.9%	1.0 – 1.1%			
Expected volatility	91 - 109%	73 - 80%			
Expected dividend yield	Nil	Nil			
Expected term in years	5.0	3.4 - 3.5			
Estimated forfeiture rate	nil%	3.4 - 3.6%			

The following table summarizes stock option activity for each of the years ended December 31, 2016 and 2015:

	For the years ended December 31,				
	2016		2015		
		Weighted Average		Weighted Average	
	Number of Stock Options	Exercise Price	Number of Stock Options	Exercise Price	
Outstanding, beginning of period	4,578,700	\$4.61	4,345,500	\$5.16	
Granted	1,600,000	0.04	999,000	0.45	
Exercised	=	=	(12,600)	0.32	
Cancelled/Expired	(2,483,800)	6.12	(753,200)	3.17	
Outstanding, end of period	3,694,900	\$0.94	4,578,700	\$3.99	
Exercisable, end of period	3,232,400	\$1.06	3,896,500	\$4.61	
Weighted-average fair value per share of options granted during period	\$0.03		\$0.24		

A summary of stock option activity as of December 31, 2016 and changes during the year then ended are presented below.

		w eightea A	0
Non-vested Stock Options	Number Outstanding_	Grant Date Fa	nir Value
Non-vested at December 31, 2015	682,200	\$	0.25
Granted	1,600,000		
Vested	(1,819,700)		
Non-vested at December 31, 2016	462,500	\$	0.03

The stock-based compensation cost recognized in our consolidated statements of operations and comprehensive loss for the years ended December 31, 2016 and 2015 was \$97 and \$254, respectively. As of December 31, 2016, there was \$21 of unrecognized compensation cost related to 725,000 unvested stock options. This cost is expected to be recognized over a weighted-average remaining period of approximately 0.5 years. At December 31, 2016, the intrinsic value of outstanding and exercisable stock options was \$32 and \$17, respectively.

Warrants

Each outstanding warrant is exercisable for one of the Company's common shares and was issued to investors in connection with the registered direct offering of the Company that closed on April 29, 2015. In addition, the Company issued warrants to a placement agent in connection with the offering, under the same terms as those issued to investors. The exercise price and exercise period of the warrants are outlined below:

		Placement		Exercise	
	Investor	Agent	Total	Price per	Expiration
Financing	Warrants	Warrants	Warrants	Share	Date
April 29, 2015 offering	2.615.385	261.539	2.876.924	\$0.85	4/29/18

The value of the warrants issued to the placement agent (non-employee) for its services in connection with the April 29, 2015 offering was offset against the proceeds of the financing. The Company used a Black-Scholes model with inputs including a market price of the Company's common shares of \$0.72, an exercise price of \$0.85 per share, a three-year term, volatility of 81.0%, a risk-free rate of 0.91% and no assumed dividends. The value of the warrants issued to the placement agent for its services in connection with the April 29, 2015 offering was estimated at \$91.

On September 27, 2016, 1,472,557 warrants that were issued as part of the September 27, 2013 registered direct offering of the Company expired unexercised.

The following table summarizes activity for warrants for the years ended December 31, 2016 and 2015:

	For the ye Decemb 201	oer 31,	Decem	year ended nber 31, 015	
	Number of Options and Warrants	Weighted -Average Exercise Price (USD\$)	-Average of Exercise Options Price and		
Outstanding, beginning of period	4,349,481	\$ 1.97	1,472,557	(USD\$) \$ 4.15	
Granted Expired	1,472,557	4.15	2,876,924	0.85	
Outstanding, end of period	2,876,924	\$ 0.85	4,349,481	\$ 1.97	

7. INCOME TAX

We recognize future tax assets and liabilities for each tax jurisdiction based on the difference between the financial reporting and tax bases of assets and liabilities using the enacted tax rates expected to be in effect when the taxes are paid or recovered. A valuation allowance is provided against net future tax assets for which we do not consider the realization of such assets to meet the required "more likely than not" standard.

Our future tax assets and liabilities at December 31, 2016 and 2015 include the following components:

	ember 31, 16	As of December 31, 2015	
Deferred tax assets:			
Current:			
Accrued vacation	\$ 10	\$	26
Reclamation provision	 52		52
	 62		78
Non-current:			
Noncapital loss carryforwards, Canada	2,671		2,640
Capital loss carryforwards, Canada	7		7
Net operating loss carryforwards, U.S.	17,743		14,784
Mineral properties	11,076		13,017
Reclamation provision	70		70
Equipment	254		131
Share based compensation	1,032		3,362
Research and development	 2,358		2,358
	 35,211		36,369
Deferred tax assets	35,273		36,447
Valuation allowance	(35,273)		(36,447)
Net	\$ -	\$	-
Deferred tax liabilities:			
Non-Current:			
Other	-		-
Deferred tax liabilities	-		-
Net deferred tax asset/(liability)	 -	_	_
• • • • • • • • • • • • • • • • • • • •			

The composition of our valuation allowance by tax jurisdiction is summarized as follows:

	As of December 31,				
	201	16	201	5	
Canada	\$	3,186	\$	3,148	
United States		32,087		33,299	
Total valuation allowance	\$	35,273	\$	36,447	

The valuation allowance decreased \$1,174 from the period ended December 31, 2015 to the calendar year ended December 31, 2016. This was the result of an increase in the net deferred tax assets, primarily net operating loss ("NOL") carryforwards, equity compensation for U.S. residents, exploration spending on mineral properties, research and experimental spending, and change in tax rates. Because we are unable to determine whether it is more likely than not that the net deferred tax assets will be realized, we continue to record a 100% valuation against the net deferred tax assets.

At December 31, 2016, we had U.S. NOL carryforwards of approximately \$52,186, which expire from 2018 to 2036. In addition, we had Canadian non-capital loss carryforwards of approximately CDN\$10,941, which expire from 2017 to 2036. As of December 31, 2016, there were Canadian capital loss carryforwards of CDN\$59. A full valuation allowance has been recorded against the tax effected U.S. and Canadian loss carryforwards as we do not consider realization of such assets to meet the required "more likely than not" standard.

Section 382 of the Internal Revenue Code could apply and limit our ability to utilize a portion of the U.S. NOL carryforwards. No Section 382 study has been completed; therefore, the actual usage of U.S. NOL carryforwards has not been determined.

Deferred tax assets relating to equity compensation have been reduced to reflect tax deductions in excess of previously recorded tax benefits through the year ended December 31, 2015. Our NOL carryforwards referenced above at December 31, 2016 and 2015 include \$538 of income tax deductions in excess of previously recorded tax benefits. Although these additional tax deductions are reflected in the NOL carryforwards referenced above, the related tax benefit of \$140 will not be recognized until the deductions reduce taxes payable. Accordingly, since the tax benefit does not reduce our current taxes payable for the periods ending December 31, 2016 or 2015, these tax benefits are not reflected in the deferred tax assets presented above. The tax benefit of these excess deductions will be reflected as a credit to additional paid-in capital when recognized.

For financial reporting purposes, income/(loss) from continuing operations before income taxes consists of the following components:

	For	For the years ended December 31,		
	20	116	20	15
Canada	\$	(38)	\$	(617)
United States		(3,388)		(9,061)
	\$	(3,426)	\$	(9,678)

A reconciliation of expected income tax on net income at statutory rates is as follows:

	ember 31, 016	As of December 31, 2015	
Net income (loss)	\$ (3,426)	\$	(9,678)
Statutory tax rate	26.00%		26.00%
Tax expense (recovery) at statutory rate	(891)		(2,516)
Foreign tax rates	(266)		(591)
Change in tax rates	548		166
Share issuance costs amortization	(21)		(103)
Stock-based compensation	1,807		569
Nondeductible expenses	_		17
Prior year true-up for loss carryovers	4		43
Prior year true-up for property basis	(7)		-
adjustments			
Change in valuation allowance	(1,174)		2,415
Income tax expense (recovery)	\$ -	\$	-

We do not have any unrecognized income tax benefits. Should we incur interest and penalties relating to tax uncertainties, such amounts would be classified as a component of the interest expense and operating expense, respectively.

Rare Element and its wholly owned subsidiary, Rare Element Holdings Ltd., file income tax returns in the Canadian federal jurisdiction and provincial jurisdictions, and its wholly owned subsidiary, Rare Element Resources, Inc., files in the U.S. federal jurisdiction and various state jurisdictions. The years still open for audit are generally the current year plus the previous three. However, because we have NOLs carrying forward, certain items attributable to closed tax years are still subject to adjustment by applicable taxing authorities through an adjustment to tax losses carried forward to open years.

8. COMMITMENTS AND CONTINGENCIES

Potential environmental contingency

Our exploration and development activities are subject to various federal and state laws and regulations governing the protection of the environment. These laws and regulations are continually changing and generally have become more restrictive. The Company conducts its operations to protect public health and the environment and believes its operations are materially in compliance with all applicable laws and regulations. We have made, and expect to make in the future, expenditures to comply with such laws and regulations. The ultimate amount of reclamation and other future site-restoration costs to be incurred for existing mining interests is uncertain.

9. SUPPLEMENTAL DISCLOSURE WITH RESPECT TO CASH FLOWS

During the years ended December 31, 2016 and 2015, the Company received interest of \$nil and \$35, respectively.

10. SEGMENT INFORMATION

The Company operates in a single reportable operating segment, being the exploration of mineral properties.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

The principal executive officer and principal financial officer, with the supervision of the Board of Directors and Audit Committee and participation of management, have evaluated the effectiveness of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Exchange Act), as of December 31, 2016. Based on the evaluation, the principal executive officer and principal financial officer concluded that the disclosure controls and procedures in place are effective to ensure that information required to be disclosed by the Company in reports that the Company files or submits under the Exchange Act is recorded, processed, summarized and reported within time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by the Company in reports that it files or submits under the Exchange Act is accumulated and communicated to our management, including our principal executive and financial officers, or persons performing similar functions, as appropriate, to allow timely decisions regarding required disclosure.

Management's Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting of the Company. Internal control over financial reporting is defined in Rule 13a-15(f) promulgated under the Exchange Act as a process designed by, or under the supervision of, our principal executive and principal financial officers, and effected by our Board of Directors, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with GAAP. Our internal control over financial reporting includes those policies and procedures that:

- pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of our assets;
- provide reasonable assurance that transactions are recorded as necessary to permit preparation of
 financial statements in accordance with GAAP, and that our receipts and expenditures are being made
 only in accordance with authorizations of our management and directors; and
- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on the financial statements.

Because of their inherent limitations, internal controls over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Our management assessed the effectiveness of our internal control over financial reporting as of December 31, 2016. In making this assessment, our management used the criteria set forth in the Internal Control—Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on our management assessment, we have concluded that, as of December 31, 2016, our internal control over financial reporting was effective.

Changes in Internal Control over Financial Reporting

There has been no change in our internal control over financial reporting during the quarter ended December 31, 2016 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Board of Directors

Our Board of Directors (the "Board of Directors or "Board") currently consists of five members. The following table sets out the names and ages of our directors; their provinces or states and country of residence; the offices they hold within the Company, if any; their occupations; and the dates since which they have served as directors of the Company:

Name, Age, Province or State and Country of Residence and Current Positions, if any, held in the Company	Served as director since
RANDALL J. SCOTT, 65 (1)	
Colorado, USA	
Director	February 3, 2012
President and Chief Executive Officer, Rare Element Resources	
GERALD W. GRANDEY, 70 (1)(3)(4)	
Saskatchewan, Canada	
Director	August 2, 2013
Former Chief Executive Officer, Cameco Corporation	
F. STEVEN MOONEY, 82 (2)	
Colorado, USA	
Director	October 17, 2013
Former Chairman and Chief Executive Officer, Thompson Creek Metals Company	
PAUL J. SCHLAUCH, 74 (2)(3)	
Colorado, USA	
Director	July 5, 2011
Retired Partner, Holland & Hart LLP	
LOWELL A. SHONK, 67 (1)(3)	
Arizona, USA	A 11.00 0010
Director	April 23, 2013
Vice Chairman, Cupric Canyon Capital LP/LLC	

- (1) Current member of the Finance Committee, of which Lowell A. Shonk is the chair.
- (2) Current member of the Nominating, Corporate Governance and Compensation Committee, of which Paul J. Schlauch is the chair.
- (3) Current member of the Company's Audit Committee, of which Lowell A. Shonk is the chair.
- (4) Gerald Grandey was elected Chairman of the Board on June 10, 2015.

The following are brief biographies of the Company's directors:

Randall J. Scott currently serves as President and Chief Executive Officer of the Company. Mr. Scott is a metallurgical engineer with over 35 years of experience in the mining industry. His experience includes leading performance teams in operations, administration, project development, program management, business development and major improvement initiatives. Mr. Scott was appointed as a director of the Company in February 2012 and as President and Chief Executive Officer in December 2011. Mr. Scott previously worked for Thompson Creek Metals Company Inc. as Vice President, Corporate Responsibility and Strategy from May 2011 to November 2011, as Director, Strategic Management from August 2010 to May 2011 and as Project Sponsor, Enterprise Resource Planning Implementation from January 2010 to August 2010. Prior to that, he served as Vice President of Metals Norwest Corporation during January 2010. From 2002 until 2009, he served as the Principal Real Estate Agent and Team Leader for Scott Home and Land Real Estate Team. Mr. Scott held senior management positions with Cyprus Amax Coal Company and RAG American Coal Company from 1995 to 2001, and prior to that Mr. Scott held senior management positions with Cyprus Metals Company from 1989 until 1995. Mr. Scott received his Bachelor of Science degree in metallurgical engineering from the Colorado School of Mines and his Masters of Business Administration from the University of Arizona.

Mr. Scott's background in metallurgical engineering at operating mines and extensive high-level executive experience with producing mining companies are valuable assets to the Board. His understanding of mining operations, including production elements, key operating metrics, corporate responsibility and safety, presents a unique contribution to the Board.

Gerald W. Grandey has over 30 years of executive leadership in the mining industry. He is the former Chief Executive Officer and past member of the board of directors of Canadian-based Cameco Corporation, one of the world's largest uranium producers, accounting for 20% of global production. In 2010, Harvard Business Review recognized Mr. Grandey as being one of the Top 100 CEOs in the world because of the value created for shareholders through the growth in market capitalization during his tenure at Cameco. After 18 years with Cameco, he retired as Chief Executive Officer and as a director in 2011. Previously, he held senior executive positions with Concord Services and Energy Fuels Nuclear. Mr. Grandey was recognized in 2014 for leadership in the nuclear industry with the U.S. Nuclear Energy Institutes' William S. Lee Award; inducted into the Canadian Mining Hall of Fame in 2013; awarded the Canadian Nuclear Association's Ian McRae Award in 2012 for his work in advancing nuclear energy in Canada; and was nominated for the 2011 Oslo Business for Peace Award in recognition of his efforts to facilitate nuclear disarmament. He is on the Colorado School of Mines Foundation, Board of Governors; the Dean's Advisory Council of the University of Saskatchewan's Edwards School of Business and is Chairman Emeritus for the London-based World Nuclear Association. Currently, Mr. Grandey serves on the board of Potash Corporation of Saskatchewan (2011-present). Mr. Grandey is a former board member of Cameco Corporation (1999–2011), Centerra Gold Inc. (2004–2010), Inmet Mining Corporation (2012–2013), Sandspring Resources Ltd. (2010-2015) and Canadian Oil Sands Limited (2011-2016). He has a degree in geophysical engineering from the Colorado School of Mines and a law degree from Northwestern University.

Mr. Grandey has extensive high-level executive leadership experience in the mining industry, as well as experience and education in geophysical engineering. He brings to the Board key leadership, technical and related market expertise.

F. Steven Mooney is a 50-year veteran in the mining industry. He is the former Chairman and Chief Executive Officer of Thompson Creek Metals Company, a previously privately owned mining and metallurgical company that he founded in 1993 with the purchase of molybdenum assets from Cyprus Minerals Company and AMAX Inc. Over the next 13 years, not only did he successfully restart operations, but he also significantly expanded production with the purchase of the Endako Project in British Columbia, Canada. When sold in 2006, Thompson Creek Metals Company was the second largest primary molybdenum producer in the world. Since 2007, Mr. Mooney has been the principal of a private equity and investment firm with holdings in oil and gas, minerals and real estate. During his career, he has held executive positions with Cyprus Copper Company, a division of Cyprus Minerals, and Gulf Mineral Resources Company, a division of Gulf Oil Corporation. He has a degree in geological engineering from the Colorado School of Mines ("CSM") and served on its Board of Trustees for two terms, his second one as President. In 1990, Mr. Mooney was awarded the Distinguished Achievement Medal by CSM in recognition of his significant career achievements, which were deemed to have enhanced the reputation and mission of CSM.

Mr. Mooney has extensive entrepreneurial experience as a founder of a mining company, including holding the top executive office and chairman position, as well as technical education and experience in geological engineering. He brings to the Board key leadership vision and technical and related market expertise.

Paul J. Schlauch has more than 40 years of experience in legal issues relating to the mining industry. He was a practicing attorney at Holland & Hart LLP from February 1995 until his retirement as a Partner in December 2009 and as Of Counsel in July 2011. His former practice included providing legal counsel on diverse mining issues, including operational and regulatory matters, litigation, arbitration, structuring and negotiation of mining related transactions, and many other legal activities associated with mining, and exploration and development activities. After retiring from Holland & Hart, Mr. Schlauch continued to provide legal consulting for the Company until July 2012. Mr. Schlauch has worked extensively on public land legal issues as they relate to location, maintenance and patenting of mining and mill site claims, land exchanges, acquisition of various property use rights and the resolution of claim conflicts. From 2000 to 2010, he served as an Adjunct Professor of Law at the University of Denver School of Law, where he taught courses on mineral law and policy. Mr. Schlauch has been active in natural resource industry professional organizations and is the past President of the Rocky Mountain Mineral Law Foundation, as well as the past President of the International Mining Professionals Society. Mr. Schlauch graduated cum laude with an A.B. in chemistry from Colgate University in 1963 and completed a law degree in 1966 at the University of Virginia. He also holds an appointment as an Honorary Lecturer and Course Director on the Faculty of the Centre for Energy, Petroleum and Minerals Law and Policy at the University of Dundee, Scotland. Accordingly, the Board believes Mr. Schlauch should be re-elected to serve on the Board.

Mr. Schlauch has specialized knowledge on mining law in the United States and mineral law and policy generally. Mr. Schlauch's experience in the legal community with a practice focused on counseling mining companies regarding a wide array of mineral law issues brings unique knowledge to the Company's Board that is valuable to the Board's oversight of its current Bear Lodge Property and execution of its business plan.

Lowell A. Shonk has more than 38 years of experience in the copper, molybdenum, gold, coal, iron ore, industrial minerals and lithium extractive and processing industries, holding positions as a financial executive at operational, divisional and corporate levels. Mr. Shonk currently serves as the Vice Chairman of Cupric Canyon Capital LP/LLC ("Cupric"), a private equity company in partnership with Global Natural Resource Investments (formerly a unit of Barclays Bank PLC) focused on investing in early-stage copper projects worldwide, after having served as its Chief Executive Officer from February 2012 to March 2013 and its Chief Financial Officer from January 2010 to February 2012. He also serves as a director of each of Hana Mining Co. Ltd., an entity that Cupric acquired in 2013, and its wholly owned Botswana affiliate, Khoemacau Copper Mining, which holds its feasibilitystage copper-silver project in Botswana. Mr. Shonk is also the Chairman of Eiseb Exploration and Mining, Ltd., a privately owned company, conducting copper and silver exploration in Namibia. Prior to his current positions, Mr. Shonk served as Vice President of Financial and Operational Analysis at Phelps Dodge Corporation and Freeport-McMoRan Copper & Gold Inc. from 1999 through 2009. Mr. Shonk has also served as Controller and/or Chief Financial Officer at various divisions of Cyprus Amax and its predecessor mining companies since he began his career in 1979. Mr. Shonk is the former chairman of the audit committee of the Society of Mining, Metallurgy and Exploration (2010-2016). He also served on the board of directors and as chairman of the audit committee of Apache Nitrogen Products Inc. for eight years, from 2001 to 2009. He obtained his undergraduate degree in Economics from Indiana University, a master's degree in Mineral Economics from Colorado School of Mines and an MBA from the University of Colorado - Denver with an emphasis in Finance and Accounting.

Mr. Shonk has extensive high-level executive mining experience, specifically in the financial, strategic and valuation areas. His specialized financial background brings to the Board experience with financial and accounting statements, audit oversight and controls. He further brings to the Board a background in mining mergers and acquisitions and business combinations.

Executive Officers

Our executive officer as of March 15, 2017 is set forth in the table below. All executive officers are appointed by and serve at the pleasure of the Board of Directors. The following table sets out the name and age of the Company's current executive officer, his state and country of residence, the offices he holds within the Company, and the dates since which he has served as an officer of the Company:

Name, Age, Province or State and Country of Residence and Positions, current and former, if any, held in the Company	Served as officer since
RANDALL J. SCOTT, 65	
Colorado, USA	December 15, 2011
Director, President and Chief Executive Officer	

The following is a brief biography of the Company's executive officer:

Randall J. Scott is a metallurgical engineer with over 35 years of experience in the mining industry. His experience includes leading performance teams in operations, administration, project development, program management, business development and major improvement initiatives. Mr. Scott was appointed as a director of the Company in February 2012 and as President and Chief Executive Officer in December 2011. Mr. Scott previously worked for Thompson Creek Metals Company Inc. as Vice President, Corporate Responsibility and Strategy from May 2011 to November 2011, as Director, Strategic Management from August 2010 to May 2011 and as Project Sponsor, Enterprise Resource Planning Implementation from January 2010 to August 2010. Prior to that, he served as Vice President of Metals Norwest Corporation during January 2010. From 2002 until 2009, he served as the Principal Real Estate Agent and Team Leader for Scott Home and Land Real Estate Team. Mr. Scott held senior management positions with Cyprus Amax Coal Company and RAG American Coal Company from 1995 to 2001, and prior to that Mr. Scott held senior management positions with Cyprus Metals Company from 1989 until 1995. Mr. Scott received his Bachelor of Science degree in metallurgical engineering from the Colorado School of Mines and his Masters of Business Administration from the University of Arizona.

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Exchange Act requires the Company's officers and directors and persons who own more than 10% of a registered class of our equity securities to file initial reports of ownership of our equity securities on Form 3 and reports of changes in ownership on Form 4 or Form 5, as appropriate. Persons subject to Section 16 are required by SEC regulations to furnish us with copies of all Section 16(a) forms that they file. Based solely on a review of such forms furnished to the Company, we believe that for the fiscal year ended December 31, 2016 all required reports were filed on a timely basis under Section 16(a).

Code of Business Conduct and Ethics

We are committed to maintaining high standards for honest and ethical conduct in all of our business dealings complying with applicable laws, rules and regulation. In furtherance of this commitment, our Board of Directors adopted a Code of Business Conduct and Ethics for Directors, Officers and Employees ("Code of Conduct") to encourage and promote a culture of ethical business conduct. It also promotes ethical business conduct through the nomination of Board members it considers ethical, through avoiding and minimizing conflicts of interest and by having a majority of its Board members independent of corporate matters.

A copy of the Code of Conduct may be found on our website at www.rareelementresources.com. We will post any amendments to the Code of Conduct, or waivers of any provisions thereof, to our corporate website.

Nomination Process and Qualifications for Director Nominees

Under the Business Corporations Act (British Columbia) ("BCA"), the statute under which the Company is incorporated, shareholder proposals, including director nominees, must be received at the registered office of the Company at least three months before the anniversary of the previous year's annual meeting of shareholders. Under Rule 14a-8(e) of Regulation 14A to the Exchange Act, subject to certain exceptions, shareholder proposals must be received at the Company's principal executive offices not less than 120 calendar days before the one-year anniversary of the Company's release to shareholders of its management information and proxy circular in connection with the previous year's annual meeting. Because the shareholder proposal deadline under the BCA is more stringent for the Company and more favourable for shareholders, the Company will abide by it.

Advance Notice Policy

The Board adopted an advance notice policy (the "Policy") on November 7, 2012. The purpose of the Policy is to (i) facilitate an orderly and efficient annual or, where the need arises, special meeting process, (ii) ensure that all shareholders receive adequate notice of the director nominations and sufficient information regarding all director nominees, and (iii) allow shareholders to register an informed vote after having been afforded reasonable time for appropriate deliberation.

The Policy, among other things, includes a provision that requires advance notice to the Company in certain circumstances where nominations of persons for election to the Board are made by shareholders of the Company. The Policy fixes a deadline by which director nominations must be submitted to the Company prior to any annual or special meeting of shareholders and sets forth the information that must be included in the notice to the Company for the notice to be in proper written form.

In the case of an annual meeting of shareholders, notice to the Company must be made not less than 30 days nor more than 65 days prior to the date of the annual meeting; provided, however, that in the event that the annual meeting is to be held on a date that is less than 50 days after the date on which the first public announcement of the date of the annual meeting was made, notice may be made not later than the close of business on the 10th day following such public announcement.

In the case of a special meeting of shareholders, which is not also an annual meeting, called for the purpose of electing directors (whether or not called for other purposes), notice to the Company must be made not later than the close of business on the 15th day following the day on which the first public announcement of the date of the special meeting was made. The full text of the Policy is available under the Company's profile at www.sedar.com.

Qualifications for Director Nominees

The Board, through its Nominating, Corporate Governance and Compensation Committee ("NCG&C") Committee, considers its size each year when it considers the number of directors to recommend to the shareholders for election at the annual meeting of shareholders, taking into account the number required to carry out the Board's duties effectively and to maintain a diversity of views and experience. The NCG&C Committee is composed entirely of independent directors.

The Board believes that, as a whole, it should possess a combination of skills, professional experience and diversity of viewpoints necessary to oversee the Company's business. In addition, the Board believes that there are certain attributes that every director should possess, as reflected in the Board's membership criteria (further described below). Accordingly, the Board and the NCG&C consider the qualifications of director and director candidates individually and in the broader context of the Board's overall composition and the Company's current and future needs.

The NCG&C Committee reviews and makes recommendations regarding the composition and size of the Board in order to ensure that the Board has the requisite expertise and its membership consists of persons with sufficiently diverse and independent backgrounds. Board membership criteria include items relating to ethics, integrity and values, sound business judgment, professional experience, industry knowledge, and diversity of viewpoints, all in the context of an assessment of the perceived needs of the Board at that point in time. The Board, as a whole, should possess a variety of skills, occupational and personal backgrounds, experiences and perspectives necessary to oversee the Company's business. In addition, Board members generally should have relevant technical skills or financial acumen that demonstrates an understanding of the financial and operational aspects of a rare earth and gold mining exploration and development company.

In evaluating director candidates and considering incumbent directors for re-nomination, the Board and the NCG&C Committee have not formulated any specific minimum qualifications, but, rather, consider a variety of factors. These include each nominee's independence, financial acumen, personal accomplishments, career specialization, and experience in light of the needs of the Company. For incumbent directors, the factors also include past performance on the Board. The Board determines the Chairman among the directors fooling the election of directors at the annual meeting of shareholders.

Board Committees

The Company's Board has three standing committees: (i) the Audit Committee; (ii) the NCG&C Committee; and (iii) the Finance Committee.

Audit Committee

The Company has a separately designated, standing Audit Committee established in accordance with Section 3(a)(58)(A) of the Exchange Act. Under Canadian securities laws, the Company is required to have an audit committee comprised of not less than three directors. Each member of the Audit Committee must be independent within the meaning of Rule 10A-3 of the Exchange Act and not an employee, officer or affiliate of the Company. The Company's current Audit Committee consists of Lowell A. Shonk (Chair), Paul J. Schlauch, and Gerald W. Grandey. The Audit Committee's functions are to oversee the accounting and financial reporting process and the audit of the annual financial statements of the Company.

The Company's Audit Committee, under the guidance of the Audit Committee Charter approved by the Board, assists the Board in fulfilling its oversight responsibilities by reviewing (i) the financial statements, reports and other information provided to shareholders, regulators and others; (ii) the independent auditor's qualifications, independence and performance; (iii) the internal controls that management and the Board of Directors have established; (iv) the audit, accounting and financial reporting processes generally; and (v) compliance by the Company with legal and regulatory requirements. The text of the Audit Committee's Charter is available on the Company's website at www.rareelementresources.com.

On March 15, 2016, the Company's Board amended the Audit Committee Charter to reflect that the Company's common shares currently trade on the OTCQB marketplace, among other things. A copy of the amended Audit Committee Charter reflecting these changes is attached hereto as Exhibit 99.1.

The Company's Board has determined that all of the members of the Company's Audit Committee are independent within the meaning of Rule 10A-3 of the Exchange Act and National Instrument 52-110 – *Audit Committees* ("NI 52-110"). In addition, the Company's Board has determined that Lowell A. Shonk, Chair of the Audit Committee, satisfies the requirement of an "audit committee financial expert," as defined under Item 407 of the Regulation S-K, and Messrs. Shonk, Schlauch and Grandey each are "financially literate" within the meaning thereof set forth in NI 52-110.

Nominating, Corporate Governance and Compensation Committee

The Company's NCG&C Committee is governed by a charter which sets forth the NCG&C Committee functions, which are, among other things, to establish procedures for the director nomination process and recommend nominees for election to the Board; to develop and periodically review the effectiveness of the Board's corporate governance guidelines; and to determine and recommend to the independent members of the Board the base salaries and annual incentive awards, including cash and equity-based incentive awards for the Chief Executive Officer, and in consultation with the Chief Executive Officer, for other senior officers, on an annual basis.

Finance Committee

The Company's Finance Committee is governed by a charter and its primary function is to assist the Board in discharging its obligations for (i) financial policies and strategies, including capital structure; (ii) financial risk management practices and activities; and (iii) financing transactions or circumstances which could materially affect the financial profile of the Company.

Additional information regarding the above committees, and their charters, is on the Company's website at www.rareelementresources.com.

Nominating, Corporate Governance and Compensation Committee Interlocks and Insider Participation

None of the members of the NCG&C Committee is a current executive officer or employee of the Company or any of its subsidiaries or affiliates. No executive officer of the Company is or has been a director or a

member of the compensation committee of another entity having an executive officer who is or has been a director or a member of the NCG&C Committee of the Board of the Company.

ITEM 11: EXECUTIVE COMPENSATION

Named Executive Officers

"Named Executive Officer" or "NEO" means (a) all individuals who served as Chief Executive Officer of the Company during the fiscal year ended December 31, 2016, (b) each of the two most highly compensated executive officers, or the two most highly compensated individuals acting in a similar capacity, other than the Chief Executive Officer, at the end of the fiscal year ended December 31, 2016; and (c) each individual who would be an NEO under clause (b) above but for the fact that the individual was neither an executive officer of the Company, nor acting in a similar capacity, at the end of that fiscal year.

During the fiscal year ended December 31, 2016, the Company had three NEOs: Randall J. Scott, President and Chief Executive Officer ("CEO") of the Company; Paul H. Zink, former Senior Vice President and Chief Financial Officer ("CFO") of the Company; and Jaye T. Pickarts, former Chief Operating Officer ("COO") of the Company. Each of Messrs. Pickarts and Zink ceased to be an executive officer of the Company as of March 31, 2016.

Compensation Discussion and Analysis

Executive Compensation Program Objectives

The compensation of the Company's NEOs is determined by the Company's Board, with consideration given to the recommendations of the NCG&C Committee. The Company's compensation program is designed to provide competitive levels of compensation, a significant portion of which is dependent upon individual and corporate performance and contribution to increasing shareholder value. The Board recognizes the need to provide a total compensation package that will attract and retain qualified and experienced executives as well as align the compensation level of each executive to that executive's level of responsibility and to the best interests of the Company and its shareholders. In general, an NEO's compensation is comprised of three components: (i) cash compensation, consisting of base salary, wages or consulting payments; (ii) stock option grants; and (iii) a discretionary incentive bonus.

The NCG&C Committee selected these three components due to standards in the Company's industry, the desire to maintain an effective but straightforward compensation program, and the need to reward executives for past performance while still providing incentive for future performance. The NCG&C Committee believed that salary and stock options were sufficient to remain competitive with peers and provide incentive for future performance without adding the burden of administering complex compensation structures in a small, growing company. In addition, the equity-based compensation aligns the Company's NEOs' interests with those of our shareholders. The limited discretionary incentive bonus permits the Company to reward exemplary past performance, while conserving the Company's cash for project needs. The objectives and reasons for this system of compensation are generally to allow the Company to remain competitive among its peers in attracting and retaining experienced personnel, while conserving the cash of the Company.

Determining Executive Compensation

Executive officers' compensation is established through the thorough review and comparison of compensation paid to executives at similar companies as established through a determined peer group as well as consideration of other market factors and performance criteria at the corporate and individual performance level. Compensation levels are typically negotiated with the candidate for a position prior to his or her final selection as an executive officer. Cash compensation levels, comprised of base salary and discretionary incentive bonus, for executive officers are reviewed annually and adjusted to reflect external factors, such as inflation, as well as overall corporate performance and the results of internal performance reviews.

Role of Executive Officers in Determining Compensation

The NCG&C Committee reviews and recommends compensation policies and programs to the Board, as well as individual salary and benefit levels for its executives. At the discretion of the NCG&C Committee, the President and Chief Executive Officer provides input to the NCG&C Committee as to the compensation of other executive officers. The NCG&C Committee, with the independent input of its compensation consultant, reviews, approves and makes a recommendation to the Board regarding the executive officer compensation.

The President and Chief Executive Officer may not be present during meetings of the NCG&C Committee at which his compensation is being discussed. The NCG&C Committee recommends to the independent members of the Board the compensation of the President and Chief Executive Officer. The independent members of the Board make decisions as to the President and Chief Executive Officer's compensation. The Board makes the final determination regarding the Company's compensation programs and practices.

Competitive Market Assessments and Other Factors

The NCG&C Committee may retain the services of a compensation consultant to obtain industry comparables, through the peer group analysis, or an industry compensation survey. This information assists the NCG&C Committee in its consideration of a variety of factors when determining both compensation policies and programs and individual compensation levels. These factors include the long-range interests of the Company and its shareholders, overall technical, professional and experience needs of the Company, the competitive requirements to attract and hold key employees, and the NCG&C Committee's assessment of the position requirements for each executive's role in the Company. The NCG&C Committee does not weigh any of these factors more heavily than others and does not use any formula to assess these factors, but rather considers each factor in its judgment and at its discretion. Superior performance is recognized through the Company's incentive bonus policy.

Compensation Components

Base Salary

The NCG&C Committee reviews and approves the base salaries for the NEOs and reviews them annually. The President and CEO's base salary is recommended by the NCG&C Committee and approved by the independent members of the Board. The CEO is paid a salary that is lower than the comparative salary levels for a person of his experience and capabilities because the Company expects that stock options should constitute a significant part of the CEO's total compensation. As of March 31, 2016, the Company no longer employs any executives other than the President and CEO as a result of cost conservation initiatives determined by the Board to be in the best interest of the Company. In addition, any potential severance compensation payable to the President and CEO under the Severance Compensation Agreement as a result of a "qualifying termination" prior to a "change in control" (in each case, as defined in the Severance Compensation Agreement) will be reduced by the amount of salary paid to the President and CEO during his employment with the Company beginning on January 1, 2016. Please see the section entitled "Employment and Severance Compensation Agreements" for additional details about the severance benefit reductions.

The Company's prior CFO and other prior executive officers of the Company except the CEO have historically had salaries that the Board believes are competitive within the industry. The salary of the prior CFO and other prior executive officers took into account the grant of stock options in considering the overall compensation paid to the executive in determining whether the salary is or was competitive.

Base salaries for the NEOs for calendar year 2016 and 2015 are set forth below. The NCG&C Committee and Board of Directors, upon due consideration of the exploration stage of the Company, use of cash focused on development activities, and compensation survey data, froze executive salaries in 2014.

Named Executive Officer	2016 Base Salary	2015 Base Salary
Randall J. Scott	252,000	252,000
Jaye T. Pickarts ¹	238,800	238,800

Named Executive Officer	2016 Base Salary	2015 Base Salary
Paul H. Zink ¹	230,000	230,000

⁽¹⁾ Jaye T. Pickarts, former Chief Operating Officer, and Paul. H. Zink, former Chief Financial Officer, ceased to be employed by the Company as of March 31, 2016.

Option-Based Awards

Stock option grants are designed to reward the NEOs for the success of the Company on a similar basis as the shareholders of the Company.

Stock option grants are made on the basis of the number of stock options currently held by the executive, position, overall individual performance, anticipated contribution to the Company's future success and the individual's ability to influence corporate and business performance. The purpose of granting such stock options is to assist the Company in compensating, attracting, retaining and motivating the officers, directors and employees of the Company and to closely align the personal interest of such persons to the interest of the shareholders. The exercise price of the stock options granted is determined by the market price of our common shares at the time of grant.

The chart below sets forth the 2016 option-based awards to the NEOs:

Grants of Plan-Based Awards

Name	Grant date	Number of securities price of option		Grant date fair value of stock and option awards (\$)
Randall J. Scott	12/13/2016	150,000	0.04	4,256
	12/29/2016	200,000	0.04	6,291

Incentive Bonus Program

The Company's incentive bonus policy generally allows executive officers and management personnel to be considered for a discretionary incentive bonus payment, provided the executive officer was employed by the Company at the end of the fiscal year in which the bonus is earned. Bonus amounts are not based on a percentage of the executive's base salary and have typically been rather modest and limited, often historically ranging between 10% and 25% of base salary.

In considering executive incentive bonus compensation, the NCG&C Committee typically makes the determination on the basis of the following three primary factors: (1) Company cash balances and past stock-based compensation performance; (2) achievement of overall corporate goals, which are established at the start of each year; and (3) individual performance.

The NCG&C Committee has not historically set specific corporate goals or individual performance goals. Instead, the NCG&C Committee evaluates the progress of the Company in relation to the implementation of the Company's overall plan of operations for the fiscal year and considers the individual NEO's role within the Company in implementing the plan of operations. Bonuses are awarded based on the NCG&C Committee's discretionary judgment as to whether the performance of the NEO in a given fiscal year in accomplishing the tasks of his or her role within the Company's plan of operation has been to a level to warrant an incentive bonus. The amount of the bonus is also based entirely on the NCG&C Committee's subjective judgment of the contributions of the NEO.

The NCG&C Committee considered but did not grant any cash incentive bonus for the NEOs for 2016 or 2015 given market conditions and the Company's cash position.

In January 2016, the Board established specific corporate and individual performance goals for the CEO and the executive officers for 2016 performance. These benchmarks will be utilized for further compensation evaluations, including incentive bonus awards. 2016 corporate goals include the following: achieve zero lost time accidents and maintain a "safety first" culture; achieve zero environmental incidents and non-compliance orders; execute a defined financing strategy; seek off-take agreements, joint venture and other strategic alliances;, conserve cash within budget levels; preserve environmental permitting process during suspension status and complete defined product test work, among other business benchmarks.

Perquisites and Other Personal Benefits

The primary benefits for the Company's executives have historically included participation in the Company's broad-based plans: the 401(k) plan (which has previously included matching Company contributions); health, dental and vision coverage; life insurance; paid time off; and paid holidays. The Company terminated its health, dental and vision plan, as well as its 401(k) plan in the first quarter of 2016 as one of its cost-conservation measures. The Company's NEOs are not generally entitled to significant perquisites or other personal benefits not offered generally to the Company's employees.

Summary Compensation Table

Set out below is a summary of compensation paid to the Company's NEOs during the year ended December 31, 2016 and the year ended December 31, 2015:

All other Option Total compensation Awards (1) (\$) Name and principal position Year Bonus (\$) (\$) ⁽²⁾ Salary (\$) (\$) Randall J. Scott, 198,000 10,547 208,547 2016 President and CEO 2015 252,000 16,213 3,780 271,993 Jaye T. Pickarts, 2016 270,802 270,802 COO (3) 2015 238,800 8,107 4,092 250,999 Paul H. Zink, 2016 241,471 241,471 SVP and CFO (4) 3,067 230,000 8,107 2015 241,173

Summary Compensation Table

- (1) The grant date fair value of option-based awards is determined by the Black-Scholes Option Pricing Model with certain assumptions for the risk-free interest rate, dividend yields, volatility factors of the expected market price of the Company's common shares and expected life of the options.
- (2) All other compensation includes 401(k) matching by the Company.
- (3) Jaye T. Pickarts, former Chief Operating Officer, ceased to be employed by the Company as of March 31, 2016. Amount includes severance costs of \$211,102.
- (4) Paul. H. Zink, former Chief Financial Officer, ceased to be employed by the Company as of March 31, 2016. Amount includes severance costs of \$193.971.

Narrative Discussion of Compensation and Plan-Based Awards

Employment and Severance Compensation Agreements

The Company has maintained employment agreements with its executive officers, including each of the NEOs, Messrs. Scott, Zink and Pickarts (collectively, the "Employment Agreements"). The material terms of these Employment Agreements have included (a) employment for an indefinite term unless employment is terminated as provided in the agreement; (b) severance arrangements, including upon a change in control; (c) a base salary; and (d) participation in the stock option plans of the Company (as described below), the incentive bonus, and in such of the

Company's benefit plans as are from time to time available to executive officers of the Company. See section entitled "Base Salary" above for current base salary information.

In December 2012, the NCG&C Committee recommended, and the Board approved, a form of Severance Compensation Agreement to be offered to the Company's executives and certain key employees. These agreements were offered as a replacement to prior employment agreements as described above. On April 24, 2013, Mr. Scott entered into a Severance Compensation Agreement with the Company. Mr. Zink entered into his Severance Compensation Agreement on June 16, 2014, following a six-month waiting period after his appointment on December 12, 2013. Mr. Pickarts did not enter into a Severance Compensation Agreement, but was subject to his employment agreement dated March 1, 2011.

The key terms of the Severance Compensation Agreement include (a) defined benefits for a qualified termination, defined as one without cause or a resignation with good reason; (b) defined benefits for a qualified termination within 12 months following a change of control; and (c) coverage under the Consolidated Omnibus Budget Reconciliation Act of 1985 ("COBRA") for 12 months following a qualifying termination. Mr. Pickarts' employment agreement had some variation in the benefits, as further set forth in the section entitled "Potential Payments upon Termination or Change of Control." See that section below for a further description of the benefits upon a qualifying termination.

On January 11, 2016, Rare Element Resources, Inc., a wholly owned subsidiary of the Company, entered into an Amendment to Severance Compensation Agreement with each of Messrs. Scott and Zink. On January 18, 2016, Rare Element Resources, Inc. entered into an Amendment to Employment Agreement with Mr. Pickarts. Pursuant to each amendment, any potential severance compensation payable to the officer under the applicable Severance Compensation Agreement or Employment Agreement as a result of a "qualifying termination" prior to a "change in control" (in each case, as defined in the applicable Severance Compensation Agreement or Employment Agreement) will be reduced by the amount of salary paid to such officer during his employment with the Company in the first three months of 2016. This potential decrease in severance compensation would not reduce any severance compensation payable as a result of a qualifying termination on or after a change in control, or if, in the discretion of the Board, the Company achieves key objectives in the first quarter of 2016.

On March 18, 2016, the Company notified certain executive officers, including Messrs. Zink and Pickarts, of their termination of employment as of March 31, 2016, subject to benefits contained within their Severance and Compensation Agreements. The liability associated with the payments due upon the qualified terminations totaled approximately \$974,000, which was paid on or before April 30, 2016. In addition, the Company entered into consulting agreements with several of its departing executives and employees to allow the Company to meet its objectives. Also on March 18, 2016, the Company entered into a Second Amendment to Severance Compensation Agreement with Mr. Scott that extended the term of his January 11, 2016 amendment from March 31, 2016 to June 30, 2016.

On July 8, 2016, the Company entered into a Third Amendment to Severance Compensation Agreement with Mr. Scott that (i) reduced his salary from \$21,000 to \$12,000 per month and (ii) extended the term of his March 18, 2016 amendment from June 30, 2016 to December 31, 2016.

On December 30, 2016, the Company entered into a Fourth Amendment to Severance Compensation Agreement with Mr. Scott that extended the term of his July 8, 2016 amendment from December 31, 2016 to May 31, 2017. In addition, pursuant to the Fourth Amendment, the separation compensation to be received by Mr. Scott under the Severance Compensation Agreement as a result of a qualifying termination on or after a change in control was reduced from two times to one times the sum of (a) Mr. Scott's base salary as of January 1, 2016 plus (b) the greater of (i) the average of Mr. Scott's annual bonus amount for the two fiscal years prior to January 1, 2016 or (ii) the target bonus amount established for Mr. Scott for the fiscal year in which the date of termination occurs, or, if none, an amount equal to 20% of Mr. Scott's base salary for such fiscal year. Mr. Scott agreed to the severance compensation reductions set forth in the Fourth Amendment in exchange for the receipt of a stock option grant to purchase 200,000 common shares, half of which will vest on each of March 31, 2017 and June 30, 2017.

Equity Plans

As of the December 31, 2016, stock option grants are outstanding under the RSOP pursuant to which there are currently 3,694,900 stock options outstanding, representing approximately 7% of the current outstanding common shares of the Company. Material terms of the RSOP are set out below.

The NCG&C Committee may, subject to ratification from the Board, from time to time grant to directors, employees or consultants options to acquire shares of the Company under the RSOP. The maximum number of shares issuable under the RSOP, together with the number of shares issuable under the Fixed Stock Option Plan, shall not in the aggregate exceed 10% of the issued and outstanding shares (calculated as at the award date of such options). The Company is prohibited from granting options (i) to any one person where the grant would result in such person holding options to acquire shares in excess of 5% of the issued and outstanding shares of the Company; or (ii) that will result in the number of shares issuable to insiders of the Company at any time being in excess of 10% of the issued and outstanding shares as at the award date or that will result in the number of shares issued to insiders of the Company within any one-year period being in excess of 10% of the issued and outstanding shares as at the award date under the RSOP or when combined with all of the Company's other security-based compensation arrangements.

The exercise price of options shall be determined by the NCG&C Committee as of the award date and shall not be less than the closing price of the shares on the stock exchange where the majority of the trading volume and value of the shares occurs on the last day immediately preceding the award date. The NCG&C Committee retains the discretion to impose vesting periods on any options granted. The Company does not offer financial assistance in respect of the exercise of options.

The expiry date of an option shall be determined in the discretion of the NCG&C Committee and shall not exceed the tenth anniversary of the award date of such option subject to extensions in the case of a trading blackout. Unless the NCG&C Committee decides otherwise, options granted under the RSOP will expire (i) one year after the option holder's death or disability, and any options which are unvested as of the date of death or disability will not vest; (ii) 90 days after an option holder who is a director ceases to be a director of the Company other than by reason of death or disability, in which case all unvested options shall immediately vest and become exercisable unless the option holder continues to be an employee or consultant, in which case the options will not so vest and the expiry date will remain unchanged; (iii) on the date the option holder ceases to be a director as the result of certain prescribed circumstances, in which case any unvested options will not vest; (iv) 90 days after the option holder ceases to be employed by the Company (other than by reason of death, disability, mandatory retirement, a change of control, termination for cause or as a result of an order of a regulatory body) unless the employee continues to be a director or consultant, in which case the expiry date remains unchanged, or unless the option holder ceases to be an employee (a) as a result of termination for cause; or (b) by order of the British Columbia Securities Commission, the Ontario Securities Commission, or any other regulatory body having jurisdiction to so order, in which case the expiry date shall be the date the option holder ceases to be an employee (all options which are not vested as of the date the employee ceases to be employed shall not vest unless the option holder continues to be a director or consultant of the Company, in which case the vesting of the options shall be unchanged; if the employee ceases to be an employee by reason of mandatory retirement, all unvested options will immediately vest and become exercisable and the expiry date will be one year from the date of retirement); (v) 90 days after an option holder who is a consultant of the Company ceases to be a consultant by reason of the completion or termination of the contract under which the consultant provides services to the Company unless the option holder continues to be engaged as a director or employee of the Company, in which case the expiry date shall be 90 days after the date the option holder ceases to be a director or employee. Any options which are unvested as of the date the option holder ceases to be a consultant will not vest unless the option holder continues to be engaged as a director or employee, in which case the vesting of the options shall be unchanged. If upon completion of the contract under which the consultant provided services to the Company the consultant is subsequently hired by the Company as an employee, the options previously granted to the consultant will flow through to the employee on the same terms and conditions as the original grant of options.

In the case of an employee or consultant (who is not also a director or officer) ceasing to be an employee or a consultant as a result of a change of control at any time within six months after the effective date of the change of control, notwithstanding the vesting provisions of the option, all unvested options of the option holder will immediately vest and become immediately exercisable, and the expiry date shall be the earlier of the pre-existing

expiry date and the date 90 days following the date on which the employee or consultant ceased to be such. In the case of a director or officer who ceases to be an employee, director or consultant under these circumstances, all unvested options of the option holder will immediately vest and become immediately exercisable, and the expiry date shall be the earlier of the pre-existing expiry date and the date two years following the date on which the employee, director or consultant ceased to be such. In the event that the Company enters into an agreement with another entity which may result in a change of control, or a "takeover bid" within the meaning of the Securities Act (British Columbia) is made for the Company by another entity which may result in a change of control, all unvested options of the option holders will immediately vest and become immediately exercisable as of the date of the agreement or takeover bid.

Options are non-assignable and non-transferable. Notwithstanding the foregoing, an option holder may transfer an option to a corporation which is 100% owned by the option holder provided that the transfer is permitted by, and is effected in accordance with, the applicable securities laws.

The Board shall have the power, without shareholder approval, at any time and from time to time, either prospectively or retrospectively, to amend, suspend or terminate the RSOP or any option granted under the RSOP provided always that any such amendment shall not, without the consent of the option holder, alter the terms or conditions of any option or impair any right of any option holder pursuant to any option awarded prior to such amendment in a manner materially prejudicial to such option holder. Additionally, such termination shall be subject to any necessary stock exchange, regulatory or shareholder approval.

The RSOP was initially approved by shareholders of the Company at the annual and special meeting of shareholders on December 2, 2011.

Equity Compensation Plan Information

For information in tabular format regarding those securities of the Company which have been authorized for issuance under equity compensation plans as at December 31, 2016, see Part II, Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities – Equity Compensation Plan Information."

Outstanding Equity Awards at Fiscal Year-End

The following table sets forth the outstanding option awards held by the NEOs of the Company as of December 31, 2016.

Outstanding Equity Awards at Fiscal Year-End

	Option awards			
Name	Number of securities underlying unexercised options (#) exercisable	Number of securities underlying unexercised options (#) unexercisable	Option exercise price (\$)	Option expiration date
	-	200,000	0.04	12/29/2021
	100,000	50,000	0.04	12/13/2021
Randall J. Scott	100,000	_	0.32	1/22/2020
	75,000	_	1.24	12/17/2018
	85,000	_	3.61	12/20/2017

Option Exercises

There were no options exercised by any NEO during the year ended December 31, 2016.

Pension Benefits and Non-Qualified Deferred Compensation

The Company does not have a pension plan that provides for payments or benefits to the NEOs at, following or in connection with retirement. During the year ended December 31, 2016, the Company did not have any nonqualified deferred compensation.

Potential Payments upon Termination or Change of Control

The Company entered into Severance Compensation Agreements with each of its executives, including Messrs. Scott and Zink. Mr. Pickarts had an employment agreement as further discussed in the section above entitled "Employment and Severance Compensation Agreements." Under the Severance Compensation Agreements with Messrs. Scott and Zink, an officer is or was entitled to separation benefits in the event that the officer's employment is or was terminated by the Company without cause or by the NEO due to certain reasons, including a material change in title or duties, a material reduction in compensation or a material geographic relocation, after the Company has had an opportunity to cure such reason for an officer's departure. The separation benefits to be received by an officer upon termination under the circumstances described above, prior to a change in control of the Company, will be or were equal to the officer's base salary plus the average of the officer's annual bonus amount for the past two fiscal years. If such a termination occurs or occurred within 12 months following a change in control, the separation benefits to be received by Mr. Scott will be or equal to one time (or, in the case of Mr. Zink, was equal to two times) (i) the officer's base salary plus (ii) the average of the officer's annual bonus amount for the past two fiscal years. In either case, the separation benefits will be or were to be paid to the officer in a lump sum 60 days after the date of such termination. In addition, the officer's equity incentive awards will or were to vest automatically upon such termination, and the officer shall remain entitled to the election of continuation of certain benefits under COBRA, if health insurance is or was offered by the Company.

Under the Employment Agreement with Mr. Pickarts, he was entitled to lump-sum severance payments upon termination without cause by the Company equal to twelve (12) months of salary. If a change of control occurred and a subsequent qualifying termination took place within one year thereafter, the executive would have been entitled to lump sum severance payments equal to two (2) years of salary.

"Change in control" is defined under the Severance Compensation Agreements as, subject to certain exceptions, the accumulation in any consecutive 12-month period, by any individual, entity or group of 50.1% or more of the outstanding common shares of the Company; a sale of all or substantially all of the assets of the Company; or the failure, during any period of 12 consecutive months, of the incumbent Board to maintain at least a majority membership on the Board.

The table below sets out the estimated payments due to the NEO employed by the Company as of December 31, 2016 on a qualifying termination without cause, not associated with a change of control, assuming termination on December 31, 2016 and pursuant to the individual's Severance Compensation Agreement.

Name	Base Salary ⁽¹⁾ (\$)	Bonus ⁽¹⁾ (\$)	All Other Compensation (\$)	Total (\$)
Randall J. Scott	252,000	-	- -	252,000

(1) Salary and bonus payments, if applicable, are made in lump sum for upon a qualifying termination.

The table below sets out the estimated payments due to the NEO employed by the Company as of December 31, 2016 upon a qualifying termination or resignation within 12 months following a change of control assuming termination or resignation on December 31, 2016.

Name Base Salary ⁽¹⁾ Bonus ⁽¹⁾		Bonus ⁽¹⁾	All Other Compensation	Total
	(\$)	(\$)	(\$)	(\$)
Randall J. Scott	252,000	-	-	252,000

(1) Salary and bonus payments, if applicable, are made in lump sum upon a qualifying termination. The Base Salary amount was reduced to one year's salary from two year's salary per the amended severance agreement dated December 30, 2016.

Director Compensation

In December 2015, the Board determined that director annual compensation would be suspended beginning in January 2016 until further notice to support the Company's cash conservation measures. The directors of the Company are encouraged to hold common shares in the Company, thereby aligning their interests with those of the shareholders.

The following table sets forth information regarding the compensation received by each of the Company's outside directors during the year ended December 31, 2016:

Director Compensation

Name (1)	Fees earned or paid in cash (\$)	Option awards (2) (\$)	All other compensation (\$)	Total (\$)
M. Norman Anderson	1	3,000	_	3,000
Norman W. Burmeister	ı	6,000	_	6,000
Paul J. Schlauch (3)	_	3,000	_	3,000
Lowell Shonk	-	7,500	_	7,500
Gerald W. Grandey	_	9,000	_	9,000
F. Steven Mooney	ı	6,000	_	6,000

- (1) Mr. Scott's director compensation is included in the NEO Summary Compensation Table.
- (2) The grant date fair value of option-based awards which are granted during the year ended December 31, 2016 is determined by the Black-Scholes Option Pricing Model with certain assumptions for the risk-free interest rate, dividend yields, volatility factors of the expected market price of the Company's common shares and the expected life of the options. All options granted expire five years after the grant date. All options have the same vesting schedule: 75% vested December 13, 2016, 12.5% vests on March 31, 2017 and 12.5% vests on June 30, 2017, with the exception of the options granted to Mr. Anderson and Mr. Schlauch whose options vested on December 13, 2016.
- (3) Subsequent to December 31, 2016, Mr. Schlauch received an option grant with a fair value of \$29,723 as determined by the Black-Scholes Option Pricing Model with certain assumptions for the risk-free interest rate, dividend yields, volatility factors of the expected market price of the Company's common shares and the expected life of the options. The option vests 50% on March 31, 2017 and 50% on June 30, 2017.

ITEM 12: SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

Security Ownership of Certain Beneficial Owners

The following table sets forth certain information regarding beneficial ownership, control or directly or indirectly, of the Company's Common Shares, as of March 15, 2017 by (i) each of the Company's NEOs and directors and (ii) the Company's NEOs and directors as a group.

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	Common Shares	
	Beneficially	Percentage
Name and Position (1)	Owned (2)	of Class (3)
Randall J. Scott – Chief Executive Officer and President, Director		
Littleton, CO, USA	511,500 ⁽⁴⁾	0.97%
Paul J. Schlauch – <i>Director</i>		_
Greenwood Village, CO, USA	315,000 ⁽⁵⁾	0.59%
Lowell A. Shonk – <i>Director</i>		_
Paradise Valley, Arizona, USA	433,750 ⁽⁶⁾	0.82%
F. Steven Mooney – <i>Director</i>		_
Denver, CO, USA	440,000 (7)	0.83%
Gerald W. Grandey - Director and Chairman		
Saskatoon, SK, Canada	647,500 ⁽⁸⁾	1.22%
Paul H. Zink – Former Senior Vice President and Chief Financial		
Officer		
Centennial, CO, USA	175,000 ⁽⁹⁾	0.33%
Jaye T. Pickarts – Former Chief Operating Officer		
Littleton, CO, USA	155,253 (10)	0.29%
All named executive officers and directors as a group	2,678,003	5.06%

⁽¹⁾ Mailing address for all directors and executive officers is c/o Rare Element Resources, Ltd., P.O. Box 271049, Littleton, CO 80127

⁽²⁾ Includes Common Shares held as of March 15, 2017, plus Common Shares which may be acquired pursuant to the exercise of stock options exercisable within 60 days after March 15, 2017.

⁽³⁾ In accordance with Rule 13d-3(d)(1) under the Exchange Act, the applicable percentage of ownership for each person is based on 52,941,880 Common Shares outstanding as of March 15, 2017.

⁽⁴⁾ Includes 14,000 Common Shares and 497,500 Common Shares subject to options held by Mr. Scott personally.

⁽⁵⁾ Includes 10,000 Common Shares and 305,000 Common Shares subject to options held by Mr. Schlauch personally.

⁽⁶⁾ Includes 30,000 Common Shares and 403,750 Common Shares subject to options held by Mr. Shonk personally.

⁽⁷⁾ Includes 80,000 Common Shares and 360,000 Common Shares subject to options held by Mr. Mooney personally.

⁽⁸⁾ Includes 200,000 Common Shares and 447,500 Common Shares subject to options held by Mr. Grandey personally.

⁽⁹⁾ Includes 25,000 Common Shares and 150,000 Common Shares subject to options held by Mr. Zink personally.

Includes 5,253 Common Shares and 150,000 Common Shares subject to options held by Mr. Pickarts personally. Another 2,000 Common Shares are held by his spouse.

ITEM 13: CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS; AND DIRECTOR INDEPENDENCE

Transactions with Related Persons

Interest of Informed Persons in Material Transactions

None of the persons who were directors or executive officers of the Company or a subsidiary of the Company at any time during the Company's last fiscal year, any person or company who beneficially owns, directly or indirectly, or who exercises control or direction over (or a combination of both) more than 10% of the issued and outstanding common shares of the Company, nor any associate or affiliate of those persons, has any material interest, direct or indirect, by way of beneficial ownership of securities or otherwise, in any transaction or proposed transaction which has materially affected or would materially affect the Company.

Indebtedness of Directors and Executive Officers

None of the current or former directors, executive officers of the Company, nor any associate or affiliate of the foregoing persons, are or have been indebted to the Company since the beginning of the year ended December 31, 2016.

Management Contracts

No management functions of the Company are, to any substantial degree, performed by a person or company other than the directors or executive officers of the Company, in their roles as such.

Review, Approval or Ratification of Transactions with Related Persons

The Company's written corporate governance policies generally discourage transactions involving a potential conflict of interest. The NCG&C Committee is generally responsible for overseeing compliance with the Company's Corporate Governance Policies, which require that transactions that could reasonably be considered to present a conflict of interest be reported to the NCG&C Committee. However, the Audit Committee is responsible for overseeing compliance with the Code of Conduct contained in the Company's Corporate Governance Policies. Specifically, the Audit Committee is responsible for reviewing and overseeing any transaction or contract exceeding or likely to exceed \$35 (i.e., the lesser of \$120 or one percent of the average of the Company's total assets at yearend for the last two completed fiscal years) involving the Company and a related party, including transactions subject to disclosure under Item 404 of Regulation S-K. Generally, in reviewing such transactions, the Audit Committee considers the relevant facts and circumstances available and deemed relevant to each determination.

There are no material interests, direct or indirect, of any other director nominee or any of the current directors, executive officers, or any shareholder who beneficially owns, directly or indirectly, more than 5% of the outstanding Common Shares, or immediate family members of such persons, in any transaction since January 1, 2015, or in any proposed transaction in which the amount involved exceeded \$35.

Director Independence

The Board reviewed and determined independence under National Instrument 58-101 – Disclosure of Corporate Governance Practices ("NI 58-101") of each current director. In making its independence determination, the Board considered the circumstances described below.

Based upon his position as an executive officer of the Company, the Board determined that Mr. Scott is not independent.

The Board has concluded that each of Messrs. Grandey, Mooney, Schlauch and Shonk are independent.

As a result of these analyses, the Board has determined that the five directors constitute a Board consisting of a majority of independent directors, as required under NI 58-101.

Family Relationships

There are no family relationships among any directors, officers or persons among our directors of the Company.

Individual Bankruptcies

No director or proposed director of the Company has, within the 10 years prior to the date of this Annual Report, become bankrupt or made a proposal under any legislation relating to bankruptcy or insolvency, or been subject to or instituted any proceedings, arrangement or compromise with creditors, or had a receiver, receiver manager or trustee appointed to hold the assets of that individual.

Penalties or Sanctions

None of the directors has been subject to any penalties or sanctions imposed by a court relating to securities legislation or by a securities regulatory authority, has entered into a settlement agreement with a securities regulatory authority or has been subject to any other penalties or sanctions imposed by a court or regulatory body that would likely be considered important to a reasonable security holder making a decision about whether to vote for the proposed director or in making an investment decision.

ITEM 14: PRINCIPAL ACCOUNTING FEES AND SERVICES

Audit Committee Pre-Approval Policies and Procedures

The Audit Committee has not adopted any specific policies and procedures for the engagement of non-audit services. Consistent with applicable laws, other than audit, review or attestation services, all other services provided by the Company's auditor are to be approved by one or more members of the Audit Committee pursuant to authority delegated by the Audit Committee, provided that the Audit Committee is informed of each particular service. All of the engagements and fees discussed below under the heading "Audit Fees" for the fiscal years ended December 31, 2016 and 2015 were pre-approved by the Audit Committee.

Since the commencement of the Company's most recently completed financial year, the Audit Committee has not made any recommendations to nominate or compensate an external auditor which were not adopted by the Board of the Company.

Audit Fees

The following table sets forth the fees paid by the Company to EKS&H for services rendered in the fiscal years ended December 31, 2016 and 2015:

2010	2015
\$60,960	\$88,215
3,250	5,050
_	_
_	
\$64,210	\$93,265
	3,250 - -

"Audit Fees" represent fees for the audit of the Company's annual financial statements and attestation services that are provided in connection with statutory and regulatory filings or engagements.

[&]quot;Audit-Related Fees" represent fees for professional services.

"Tax Fees" represent fees for professional services rendered for tax compliance, tax advice and tax planning on actual or contemplated transactions.

"All Other Fees" consist of fees for products and services other than the services reported above.

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

Documents filed as part of this Annual Report on Form 10-K or incorporated by reference:

- (1) The consolidated financial statements are presented in "Item 8. Financial Statements and Supplementary Data".
- (2) Financial Statement Schedules (omitted because they are either not required, not applicable, or the required information is disclosed in the Notes to the Consolidated Financial Statements or related notes).
- (3) Reference is made to the Exhibit Index that follows the signature pages on this report.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Adria Hutchison, (Principal Financial Officer)

RARE ELEMENT RESOURCES LTD.

By:/s/ Randall J. Scott By/s/ Adria Hutchison

Randall J. Scott, President, Chief Executive Officer and Director

(Principal Executive Officer)

Date: March 29, 2017 Date: March 29, 2017

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

By: /s/ Gerald W. Grandey

Gerald W. Grandey, Chairman of the Board of

Directors

Date: March 29, 2017

By: /s/ Frank S. Mooney

Frank S. Mooney, Director Date: March 29, 2017

By: /s/ Paul J. Schlauch

Paul J. Schlauch, Director Date: March 29, 2017

By: /s/ Lowell A. Shonk

Lowell A. Shonk, Director Date: March 29, 2017

By: /s/ Randall J. Scott

Randall J. Scott, President, CEO and Director

(Principal Executive Officer)

Date: March 29, 2017

By: /s/ Adria Hutchison

Adria Hutchison, (Principal Financial Officer)

Date: March 29, 2017

INDEX TO EXHIBITS

Exhibit Number	Description
3.1	Certificate of Incorporation (incorporated by reference to Exhibit 1.1 to the Company's Form 20-F as filed with the SEC on November 17, 2009)
3.2	Certificate of Name Change (incorporated by reference to Exhibit 1.2 to the Company's Form 20-F as filed with the SEC on November 17, 2009)
3.3	Articles (incorporated by reference to Exhibit 1.3 to the Company's Form 20-FR as filed with the SEC on November 17, 2009)
4.1	Form of Common Share Purchase Warrant (incorporated by reference to Exhibit 10.3 ot the Company's Form 8-K as filed with the SEC on April 27, 2015)
10.1	Purchase and Sale Agreement with VMS Ventures Inc., Strider Resources Limited and Daniel Ziehlke to acquire Eden Lake REE Project, dated October 30, 2009 (incorporated by reference to Exhibit 4 to the Company's Form 20-FR/A as filed with the SEC on December 22, 2009)
10.2	Agreement with Altius Resources Inc. whereby the Company acquired the Nuiklavik Property, dated January 6, 2010 (incorporated by reference to Exhibit 99.1 to the Company's Form 6-K as filed with the SEC on October 27, 2010)
10.3	Mining Option Agreement between Medallion Resources Ltd. and the Company, dated February 17, 2010, whereby Medallion could acquire a 65% interest in the Eden Lake Property (incorporated by reference to Exhibit 99.2 to the Company's Form 6-K as filed with the SEC on October 27, 2010)
10.4	Agreement between Newmont North American Exploration Limited and Paso Rico (USA), Inc. / the Company whereby Newmont North American Exploration Limited terminated its right to acquire a 65% interest in the Bear Lodge Property, dated May 14, 2010 (incorporated by reference to Exhibit 99.3 to the Company's Form 6-K as filed with the SEC on October 27, 2010)
10.5	Amendment to Mining Option Agreement with Medallion Resources Ltd., dated September 15, 2010 (incorporated by reference to Exhibit 99.4 to the Company's Form 6-K as filed with the SEC on October 27, 2010)
10.6*	Incentive Share Option Plan of the Company dated December 11, 2002, as amended (incorporated by reference to Exhibit 4.1 to the Company's Form S-8 as filed with the SEC on October 19, 2010)
10.7*	Addendum to Incentive Share Option Plan of the Company, dated November 23, 2006 (incorporated by reference to Exhibit 4.2 to the Company's Form S-8 as filed with the SEC on October 19, 2010)
10.8*	Addendum to Incentive Share Option Plan of the Company, dated December 3, 2007 (incorporated by reference to Exhibit 4.3 to the Company's Form S-8 as filed with the SEC on October 19, 2010)
10.9*	Addendum to Incentive Share Option Plan of the Company, dated December 5, 2008 (incorporated by reference to Exhibit 4.4 to the Company's Form S-8 as filed with the SEC on October 19, 2010)
10.10*	Addendum to Incentive Share Option Plan of the Company, dated December 7, 2009 (incorporated by reference to Exhibit 4.5 to the Company's Form S-8 as filed with the SEC on October 19, 2010)
10.11*	Employment Agreement with George G. Byers, Vice President, Government and Community Relations, dated February 11, 2011 (incorporated by reference to Exhibit 10.10 to the Company's Form 10-K as filed with the SEC on September 13, 2012)
10.12*	Employment Agreement with Jaye T. Pickarts, Chief Operating Officer, dated March 1, 2011 (incorporated by reference to Exhibit 10.11 to the Company's Form 10-K as filed with the SEC on September 28, 2011), as amended by Amendment to Employment Agreement with Jaye T. Pickarts, effective as of January 18, 2016 (incorporated by reference to Exhibit 10.1 to the Company's Form 8-K as filed with the SEC on January 21, 2016)
10.13*	10% Rolling Stock Option Plan of the Company (incorporated by reference to Schedule C of the Company's Definitive Proxy Statement on Schedule 14A filed with the SEC on October 28, 2011)

Exhibit Number	Description
10.14*	Form of Stock Option Agreement under 10% Rolling Stock Option Plan (incorporated by reference to Schedule C of the Company's Definitive Proxy Statement on Schedule 14A filed with the SEC on October 28, 2011)
10.15*	Employment Agreement with Randall J. Scott, dated December 15, 2011 (incorporated by reference to Exhibit 10.1 to the Company's Form 8-K as filed with the SEC on December 19, 2011)
10.16*	Form of Severance Compensation Agreement with Randall J. Scott, dated April 23, 2013 (incorporated by reference to Exhibit 10.1 to the Company's Form 8-K as filed with the SEC on April 26, 2013), as amended by Form of Amendment to Severance Compensation Agreement, dated January 11, 2016 (incorporated by reference to Exhibit 10.1 to the Company's Form 8-K as filed with the SEC on January 13, 2016), as amended by Second Amendment to Severance Compensation Agreement, dated March 18, 2016 (incorporated by reference to Exhibit 10.1 to the Company's Form 8-K filed with the SEC on March 22, 2016), as amended by Third Amendment to Severance Compensation Agreement, dated July 8, 2016 (incorporated by reference to Exhibit 10.1 to the Company's Form 8-K filed with the SEC on July 11, 2016), as amended by Fourth Amendment to Severance Compensation Agreement, dated December 30, 2016 (incorporated by reference to Exhibit 10.1 to the Company's Form 8-K filed with the SEC on January 3, 2017)
10.17*	Change in Control Agreement, dated January 27, 2014, between Paul H. Zink and the Company (incorporated by reference to Exhibit 10.1 to the Company's Form 8-K as filed with the SEC on January 29, 2014)
10.18*	Severance Compensation Agreement, dated June 16, 2014, between Paul H. Zink and the Company (incorporated by reference to Exhibit 10.1 to the Company's Form 8-K filed with the SEC on June 17, 2014), as amended by Form of Amendment to Severance Compensation Agreement, dated January 11, 2016 (incorporated by reference to Exhibit 10.1 to the Company's Form 8-K as filed with the SEC on January 13, 2016)
10.19	Placement Agent Agreement, dated April 21, 2015, as amended on April 24, 2015, by and between the Company and H.C. Wainwright & Co., LLC (incorporated by reference to Exhibit 10.1 to the Company's Form 8-K as filed with the SEC on April 27, 2015)
10.20	Securities Purchase Agreement, dated April 24, 2015, by and among the Company and certain investors (incorporated by reference to Exhibit 10.2 to the Company's Form 8-K as filed with the SEC on April 27, 2015)
10.21	Professional Services Agreement between Rare Element Resources, Inc. and Kelli C. Kast-Brown, dated May 15, 2015 and effective as of June 1, 2015 (incorporated by reference to Exhibit 10.1 to the Company's Form 10-Q as filed with the SEC on August 7, 2015)
10.22*	Form of Amendment to Severance Compensation Agreement with George Byers, dated January 11, 2016 (incorporated by reference to Exhibit 10.1 to the Company's Form 8-K as filed with the SEC on January 13, 2016)
10.23	Asset Purchase Agreement between Rare Element Resources, Inc. and Whitelaw Creek LLC, dated October 20, 2016 (incorporated by referenced to Exhibit 10.1 to the Company's Form 8-K filed with the SEC on October 26, 2016)
21.1	Subsidiaries of the Company (incorporated by reference to Exhibit 21.1 to the Company's Form 10-K as filed with the SEC on September 28, 2011)
23.1+	Consent of EKS&H, LLLP
23.2+	Consent of Alan Noble, Ore Reserves Engineering
23.3+	Consent of Jaye Pickarts
31.1+	Certification of the Principal Executive Officer pursuant to Rule 13a-14 of the Exchange Act
31.2+	Certification of the Principal Financial Officer pursuant to Rule 13a-14 of the Exchange Act

Exhibit	
Number	Description
32.1+	Certification of the Principal Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2+	Certification of the Principal Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101.INS+	XBRL Instance Document
101.SCH-	+XBRL Taxonomy Extension Schema Document
101.CAL	+XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF-	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	+XBRL Taxonomy Extension Label Linkbase Document
101.PRE+	-XBRL Taxonomy Extension Presentation Linkbase Document

⁺ Filed herewith.
* Indicates a management contract or compensatory plan or arrangement.

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Rare Element Resources Ltd.'s Registration Statements on Form S-8 (File Nos. 333-170022 and 333-184983) of our report dated March 29, 2017, relating to the consolidated financial statements, which appears in this Annual Report on Form 10-K.

EKS&H LLLP

March 29, 2017 Denver, Colorado

CONSENT OF ORE RESERVES ENGINEERING

We hereby consent to the incorporation by reference of the mineral resource estimates performed by us in our capacity as an independent consultant to Rare Element Resources Ltd. (the "Company"), which are set forth in the Company's Annual Report on Form 10-K for the year ended December 31, 2016, in the Company's Registration Statements Form S-8 (Nos. 333-170022 and 333-184983), any prospectuses or amendments or supplements thereto, and in any amendment to any of the foregoing.

Date: March29, 2017

ORE RESERVES ENGINEERING

/s/ Alan Noble

Name: Alan C. Noble

Title: Owner

CONSENT OF JAYE PICKARTS

I hereby consent to the incorporation by reference of the technical report for the Bear Lodge REE Project dated October 9, 2014 is titled "Rare Element Resources Inc. Bear Lodge Project Canadian National Instrument 43-101; Pre-Feasibility Study Report; Technical Report on the Mineral Reserves and Resources and Development of the Bull Hill Mine" (Technical Report) performed by me in my capacity as an independent consultant to Rare Element Resources Ltd. (the "Company"), and participated in the preparation of the Technical Report and confirmed that the NI 43-101 and Form 43-101F1 documents and Items 4, 5, 6, 19, and 20 of the Technical Report were prepared in compliance with the instrument and form; which are set forth in the Company's Annual Report on Form 10-K for the year ended December 31, 2016, in the Company's Registration Statements Form S-8 (Nos. 333-170022 and 333-184983), any prospectuses or amendments or supplements thereto, and in any amendment to any of the foregoing.

Date: March 29, 2017

/s/ Jay Pickarts

Name: Jaye Pickarts

CERTIFICATIONS

I, Randall J. Scott, certify that:

Date: March 29, 2017

- 1. I have reviewed this Annual Report on Form 10-K of Rare Element Resources Ltd.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - All significant deficiencies and material weaknesses in the design or operation of internal control
 over financial reporting which are reasonably likely to adversely affect the registrant's ability to
 record, process, summarize and report financial information; and
 - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Randall J. Scott

Randall J. Scott President, Chief Executive Officer and Director (Principal Executive Officer) Date: March 29, 2017

CERTIFICATION OF THE CHIEF EXECUTIVE OFFICER PURSUANT TO 18 U.S.C. SECTION 1350 AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (Section 1350 of Chapter 63 of Title 18 of the United States Code), the undersigned officer of Rare Element Resources Ltd. (the "Company") does hereby certify, based on my knowledge, with respect to the Annual Report on Form 10-K of the Company for the period ended December 31, 2016 (the "Report") that:

- 1. The Report fully complies with the requirements of Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934; and
- 2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Randall J. Scott

Randall J. Scott
President, Chief Executive Officer and Director

(Principal Executive Officer)

The foregoing certification is being furnished solely pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (Section 1350 of Chapter 63 of Title 18 of the United States Code). It shall not be deemed filed for purposes of Section 18 of the Securities Exchange Act of 1934 (15 U.S.C. Section 78r) or otherwise subject to the liability of that section. It shall also not be deemed incorporated by reference into any filing under the Securities Exchange Act of 1934, as amended, or the Securities Act of 1933, as amended, except to the extent that the Company specifically incorporates it by reference.