

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

FORM 6-K

REPORT OF FOREIGN ISSUER PURSUANT TO RULE 13a-16 AND 15d-16
UNDER THE SECURITIES EXCHANGE ACT OF 1934

For the month of: October 2010

SEC File No. 000-53834

RARE ELEMENT RESOURCES LTD.

(Exact name of registrant as specified in its charter)

325 Howe St., #410, Vancouver, British Columbia, Canada V6C 1Z7

(Address of principal executive offices)

1. Exhibit 99.1 - Press Release: October 12, 2010
2. Exhibit 99.2 - Press Release: October 14, 2010
3. Exhibit 99.3 - Press Release: October 25, 2010
4. Exhibit 99.4 - Form 13-502F1, Class 1 Reporting Issuers Participation Fee

Indicate by check mark whether the Registrant files annual reports under cover of Form 20-F or Form 40-F

Form 20-F ☒ Form 40-F ☐

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1): ☐

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7): ☐

Indicate by check mark whether the Registrant by furnishing the information contained in this Form is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under Securities Exchange Act of 1934.

Yes ☐ No ☒

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this Form 6-K to be signed on its behalf by the undersigned, thereunto duly authorized.

Rare Element Resources Ltd. -- SEC File No. 000-53834
(Registrant)

Date: October 26, 2010

/s/ Winnie Wong

Winnie Wong, Corporate Secretary



NEWS RELEASE
RARE ELEMENT RESOURCES LTD
TSX-V: RES & AMEX: REE
October 12, 2010
Ref: 25-2010

Rare Element Reports Collection of Bulk Sample for Proposed Pilot Plant Test

Vancouver B.C. - Rare Element Resources Ltd. (TSX-V: RES and AMEX: REE) is pleased to announce the completion of a bulk sample collection program at the Company's 100% owned Bear Lodge rare earth element (REE) and gold property, located in northeastern Wyoming. The objective of the program was the acquisition of about 8 tons or more of oxidized, REE-mineralized FMR vein material that will be used to feed a proposed pilot plant designed to test the commercial viability of the mineral process flowsheet developed for the REE by Mountain States Research and Development, International (MSRDI), the Company's metallurgical testing consultants. A second purpose for the test is to produce a bulk mixed rare earth concentrate that can be used for marketing if the Company decides to sell concentrates initially, possibly as a first step toward eventual individual rare earth oxide separation and sale. Several laboratories with pilot plant capabilities are under consideration for the testing. The pilot plant test will be part of a preliminary feasibility study planned for completion in late 2011.

The term FMR refers to the major constituents of the highly oxidized and leached, former carbonatite dikes that occur in the depth range from the surface to 300-500 feet beneath the surface— **F** (FeOx)-**M** (MnOx)-**R** (REE minerals). The original carbonatite dikes contained high abundances of both REE and sulfides. Oxidation of the sulfides resulted in the leaching of nearly all matrix carbonates and formed residual FMR, which generally contains only bastnasite-group rare earth minerals as the residual carbonates. FMR mineralization is a loose and friable material with a clay-like consistency that disaggregates easily.

The bulk testing program consisted of a series of large-diameter PQ (diameter 85mm) and HQ (diameter 63.5) core holes that penetrated the oxide zone in the Bull Hill Southwest REE deposit. The holes were drilled from closely spaced sites in each of two areas (9-F and 9-A; Figure 1) where the FMR vein material occurs very close to the surface. Drilling was designed to collect samples that would be representative of material sent to the mill during the first five years of potential production. The deepest holes were drilled to a depth of approximately 190 feet (58 m). The areas sampled by these methods were located in the northwestern and southeastern parts of the deposit. Grades are likely to range between 2% and 15% REO, based on previous exploration holes from the same sites. Multiple holes were drilled from each site in fans at a common azimuth and different inclination angles designed to capture as much FMR as possible. A total of 40 holes were drilled, with an aggregate footage of 2117 feet (645 m) of REE-mineralized FMR material. Thirty of the drill holes are PQ-size holes for a total footage of 1753 feet (534 m) of FMR material, and ten of the holes are HQ-size, with a total footage of 364 feet (111 m) of FMR material. The aggregate weight of REE-mineralized material collected from the drilling program is about 14,000 pounds (6,364 kg).

The drill core will be augmented by bulk FMR sample material collected from a shallow trench excavated in a drill site in the northwestern part of the Bull Hill SW deposit, near site 9-F. There

are approximately 3,500 pounds (1,591kg) of FMR material from the trench collected in several 55 gallon drums. The Company has stockpiled a total of approximately 8.8 tons (8.0 tonnes) of FMR material at its core storage facility in Sundance, Wyoming. This material will be retained there until the testing laboratory is selected and the pilot plant is built and ready for operation. The program has acquired sufficient FMR feed material required for the pilot plant study.

Rare Element Resources Ltd (TSX-V:RES) is a publicly traded mineral resource company focused on exploration and development of rare-earth elements and gold on the Bear Lodge property.

Rare-earth elements are key components of the green energy technologies and other high-technology applications. Some of the major applications include hybrid automobiles, plug-in electric automobiles, advanced wind turbines, computer hard drives, compact fluorescent light bulbs, metal alloys, additives in ceramics and glass, petroleum cracking catalysts, and a number of critical military applications. China currently produces more than 95% of the 130,000 metric tonnes of rare-earths consumed annually worldwide, and China has been reducing its exports of rare earths each year. The rare-earth market is growing rapidly, and is projected to accelerate if the green technologies are implemented on a broad scale.

ON BEHALF OF THE BOARD

Donald E. Ranta, PhD, PGeo, President & CEO

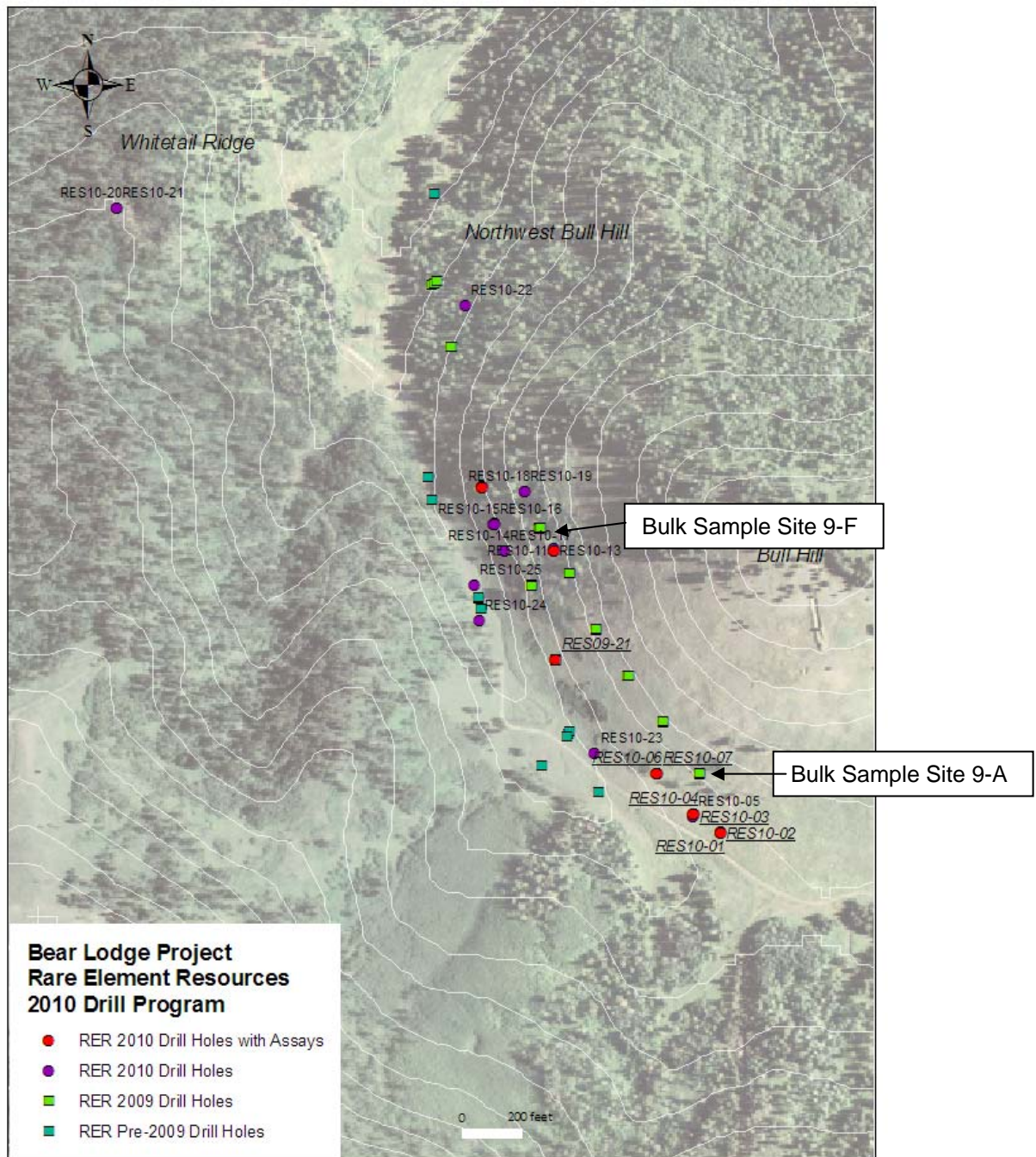
For information, refer to the Company's website at www.rareelementresources.com or contact:

Mark T Brown, CFO, (604) 687-3520 ext 242 mtbrown@pacificopportunity.com .

Donald E Ranta, (604) 687-3520 don@rareelementresources.com

Donald E. Ranta, PhD, PGeo, serves the Board of Directors of the Company as an internal, technically Qualified Person. Technical information in this news release has been reviewed by Dr. Ranta and has been prepared in accordance with Canadian regulatory requirements that are set out in National Instrument 43-101. This news release was prepared by Company management, who take full responsibility for content. Neither TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release.

Figure 1 **Location of Bulk Sample Sites 9-A and 9-F**
and part of 2010 exploration drill-hole collar sites.



NEWS RELEASE



TSX-V: RES
Ref: 26-2010



Medallion Resources Ltd.

TSX.V: MDL

Rare Element and Medallion expand Eden Rare-Earth Claims

October 14, 2010, Vancouver, BC – Rare Element Resources Ltd (AMEX: REE, TSX-V: RES) and Medallion Resources Ltd (TSX-V: MDL) today announced that they have significantly expanded their Eden Lake rare-earth-element (REE) property in western Manitoba by staking six additional mineral claims. Medallion is exploring the Eden Lake property under a joint venture option agreement with Rare Element that gives Medallion the right to earn a 65% interest.

As reported earlier, the current exploration program is focused on mapping and sampling surface areas of REE-bearing mineralized and fenitized syenite and related REE-bearing rocks. Recent 2010 exploration and re-evaluation of past data has significantly enlarged the prospective area of this type of mineralization, which has a potential for cost-effective surface-mining techniques.

The new claims cover a southern extension of the surface exposure of this REE-bearing rock and total 1329 hectares. Also claimed is the location of a magnetic anomaly that was discovered by the airborne geophysical survey conducted for Medallion by Aeroquest in December 2009. The Eden Lake property now comprises 14 contiguous claims for a total of 3200 hectares, or 32 square kilometres.

Dr. Bill Bird, Medallion's President commented: "Our goal is to discover large-tonnage neodymium or heavy rare-earth deposits that are easily processed and occur in low-cost mining and milling venues. Our Eden REE Project has the potential to meet these criteria. We have increased our land position to cover all prospective ground."

Rare Element Resources Ltd (TSX-V: RES & AMEX: REE) is a publicly traded mineral-resource company focused on exploration and development of rare-earth elements and gold on the Bear Lodge property.

Rare-earth elements are key components of the green-energy technologies and other high-technology applications. Some of the major applications include hybrid automobiles, plug-in electric automobiles, advanced wind turbines, computer hard drives, compact fluorescent light bulbs, metal alloys, additives in ceramics and glass, petroleum cracking catalysts, and a number of critical military applications. China currently produces more than 97% of the 130,000 metric tonnes of rare-earths consumed annually worldwide. China has been reducing its exports of rare earths each year. The rare-earth market is growing rapidly, and is projected to accelerate if the green technologies are implemented on a broad scale.

For information, refer to Rare Element's website at www.rareelementresources.com or contact:
Mark T Brown, CFO, (604) 687-3520 ext 242 mtbrown@pacificopportunity.com
Donald E Ranta, (604) 687-3520 don@rareelementresources.com

Medallion Resources Ltd (TSX-V: MDL) explores for low-production-cost, large-tonnage heavy rare-earth-element (REE) deposits with a clear metallurgical path and cost-effective infrastructure. REE's are key components required by many new energy-saving technologies including wind turbines, electric and hybrid vehicles, super magnets and all modern electronics. Medallion is headed by REE veteran Dr. Bill Bird with support from an expert technical team that can meet the challenges of evaluating and cost-effectively exploring the best REE projects.

Medallion explores the Eden Lake REE property in western Manitoba, under an option agreement with Rare Element Resources Ltd (AMEX: REE, TSX-V: RES) that gives Medallion the right to earn a 65% interest in the exploration joint venture. Eden Lake is a recent REE discovery with potential for high neodymium values and significant heavy REE by-products.

Medallion also explores over 42 square kilometres of the Red Wine peralkaline intrusion in southern Labrador under an agreement to option a 100% interest in six mineral licenses (subject to a 3% royalty). The portions of the Red Wine intrusion that are covered by the six licenses are known to host the mineral eudialyte, which contains elevated values of the heavy REE's.

**ON BEHALF OF THE RARE ELEMENT
RESOURCES BOARD OF DIRECTORS**

*"Donald E. Ranta", PhD, PGeo, President &
CEO*

For information, refer to Rare Element's
web site www.rareelementresources.com
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don@rareelementresources.com

**ON BEHALF OF THE MEDALLION
RESOURCES BOARD OF DIRECTORS**

*"William H Bird", PhD, PGeo, President &
CEO*

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Donald E Ranta, PhD, PGeo, serves the Rare Element Board of Directors as an internal, technically Qualified Person. Technical information in this news release has been reviewed by Dr Ranta and has been prepared in accordance with Canadian regulatory requirements that are set out in National Instrument 43-101. This news release was prepared by Rare Element management, who take full responsibility for content. Neither TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release.

Medallion Management, which takes full responsibility for content, prepared this news release. The TSX Venture Exchange has not reviewed and does not accept responsibility for the adequacy or accuracy of this release. Some of the statements contained in this release are forward-looking statements, such as estimates and statements that describe medallion's future exploration and financing plans, objectives or goals, including words to the effect that Medallion or management expects a stated condition or result to occur. Since forward-looking statements address future events and conditions, by their very nature, they involve inherent risks and uncertainties. Actual results in each case could differ materially from those currently anticipated in these statements. Such risks include expectations that may be raised by discussing potential acquisitions or exploration plans. Also, in order to proceed with Medallion's exploration plans, additional funding is necessary and, depending on market conditions, this funding may not be forthcoming on a schedule or on terms that facilitate Medallion's plans.



NEWS RELEASE
RARE ELEMENT RESOURCES LTD
NYSE-Amex: REE & TSX-V: RES
October 25, 2010
Ref: 27-2010

Rare Element Reports Financial Results for the Year Ended June 30, 2010

Vancouver B.C. - Rare Element Resources Ltd. (TSX-V: RES and NYSE-Amex: REE) (the "Company" or "Rare Element") announced that its audited financial statements and Management's Discussion and Analysis for the fourth quarter and year ended June 30, 2010 have been filed on www.sedar.com.

These financial results for the year ended June 30, 2010 include the following accomplishments:

- The completion of the Company's largest ever Rare Earth Element ("REE") drilling program in November 2009;
- The completion of an updated NI 43-101 compliant REE inferred mineral resource estimate which increase the prior year's estimate by 50% which was announced on May 26, 2010;
- The completion of three financings totaling US\$13.3 million, including a US\$8.3 million short-form prospectus offering;
- The signing of an agreement with Newmont America Exploration Limited ("Newmont"), for the Sundance Gold Project, allowing the Company to maintain its 100% in the mineral potential within the entire property;
- The advancement of the metallurgical testing of the near surface oxide portion of the REE deposit;
- The acquisition of two rare-earth properties in Canada, one of which was optioned to a third party; and
- Commencement in June 2010 of the largest REE drilling and exploration program to date at Bear Lodge.

Subsequent to the June 30, 2010 year end, Rare Element also completed the following:

- Commencement of a gold drilling and exploration program on the Sundance Gold Project at Bear Lodge;
- Listing of the Company's shares on the NYSE-Amex Stock Exchange under the symbol "REE"; and,
- Completion of the NI 43-101 compliant Preliminary Economic Analysis of the Bear Lodge REE deposit as announced on September 28, 2010.

Rare Element currently has 34,770,965 common shares outstanding, and 39,327,823 common shares outstanding on a fully diluted basis. Rare Element has approximately \$12 million in cash and no debt. The Company has managed to maintain its share structure by the use of tight cash

controls and hiring the best contractors for the periods of work needed. As Rare Element moves the project ahead, many of the 17 contractors will be converted to employees to focus 100% of their efforts on the Bear Lodge REE project. The Company believes that the Bear Lodge REE project is one of the only two NI43-101 compliant resources in the United States of America.

For the three and twelve month periods ended June 30, 2010, the Company incurred over US\$644,000 and US\$2.65 million in exploration expenditures and related equipment respectively. Administrative expenditures, including the non-cash stock-based compensation, amounted to over US\$874,000 and US\$1.7 million for the three and twelve months ended June 30, 2010, respectively.

During the quarter ended June 30, 2010, the Company raised US\$8.3 million in a short-form prospectus offering, and as at June 30, 2010, the Company had approximately US\$12 million cash on hand.

The annual audited financial statements and management discussion and analysis are available through the Canadian securities regulatory authorities at www.sedar.com, and with the Securities and Exchange Commission at www.sec.gov. They are also available on the Company's website at www.rareelementresources.com. Hard copies of the audited financial statements and notes are available, free of charge, to shareholders upon written request.

The annual general meeting of the Company's shareholders will be held on Monday, December 13, 2010 at 10:00 a.m. (Pacific time) at the Company's office, located at 410-325 Howe Street, Vancouver, BC. Shareholders of record as at the close of business on October 28, 2010 are entitled to notice of, and to vote at, the meeting.

Rare Element Resources Ltd (TSX-V: RES & NYSE-Amex: REE) is a publicly traded mineral resource company focused on exploration and development of rare-earth elements and gold on the Bear Lodge property.

Rare-earth elements are key components of the green energy technologies and other high-technology applications. Some of the major applications include hybrid automobiles, plug-in electric automobiles, advanced wind turbines, computer hard drives, compact fluorescent light bulbs, metal alloys, additives in ceramics and glass, petroleum cracking catalysts, and a number of critical military applications. China currently produces more than 95% of the 130,000 metric tonnes of rare-earths consumed annually worldwide, and China has been reducing its exports of rare earths each year. The rare-earth market is growing rapidly, and is projected to accelerate if the green technologies are implemented on a broad scale.

ON BEHALF OF THE BOARD

Donald E. Ranta, PhD, PGeo, President & CEO

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Forward Looking Statements

Except for statements of historical fact, certain information contained herein constitutes forward-looking statements. Forward looking statements are usually identified by our use of certain terminology, including "will", "believes", "may", "expects", "should", "seeks", "anticipates", "has potential to", or "intends" or by discussions of strategy or intentions. Such forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause our actual results or achievements to be materially different from any future results or achievements expressed or implied by such forward-looking statements. Forward-looking statements are statements that are not historical facts,

and include but are not limited to, estimates and their underlying assumptions; statements regarding plans, objectives and expectations with respect to the effectiveness of the Company's business model; future operations, products and services; the impact of regulatory initiatives on the Company's operations; the size of and opportunities related to the market for the Company's products; general industry and macroeconomic growth rates; expectations related to possible joint and/or strategic ventures and statements regarding future performance.

Forward-looking statements used in this discussion are subject to various risks and uncertainties, most of which are difficult to predict and generally beyond the control of the Company. If risks or uncertainties materialize, or if underlying assumptions prove incorrect, our actual results may vary materially from those expected, estimated or projected. Forward-looking statements in this document are not a prediction of future events or circumstances, and those future events or circumstances may not occur. Given these uncertainties, users of the information included herein, including investors and prospective investors are cautioned not to place undue reliance on such forward-looking statements.

Donald E. Ranta, PhD, PGeo, serves the Board of Directors of the Company as an internal, technically Qualified Person. Technical information in this news release has been reviewed by Dr. Ranta and has been prepared in accordance with Canadian regulatory requirements that are set out in National Instrument 43-101.

This news release was prepared by Company management, who take full responsibility for content. Neither TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release.

FORM 13-502F1

CLASS 1 REPORTING ISSUERS -- PARTICIPATION FEE

Reporting Issuer Name: Rare Element Resources Ltd.End date of last completed fiscal year: June 30, 2010

<<Market value of listed or quoted securities>>:

Total number of securities of a class or series outstanding as at the end of the issuer's last completed fiscal year

32,142,737

Simple average of the closing price of that class or series as of the last trading day of each month in the last completed fiscal year (See clauses 2.7(a)(ii)(A) and (B) of the Rule)

3.27 (ii)

Market value of class or series

(i) X
(ii) = 105,106,750 (A)

(Repeat the above calculation for each other class or series of securities of the reporting issuer that was listed or quoted on a marketplace in Canada or the United States of America at the end of the last completed fiscal year)

(B)

<<Market value of other securities at end of the last completed fiscal year>>:

(See paragraph 2.7(b) of the Rule)

(Provide details of how value was determined)

(C)

(Repeat for each other class or series of securities to which paragraph 2.7(b) of the Rule applies)

(D)

Capitalization for the last completed fiscal year

(Add market value of all classes and series of securities)

(A) + (B) + (C) + (D) =

- 105,106,750

Participation Fee

(From Appendix A of the Rule, select the participation fee beside the capitalization calculated above)

\$7,850

Late Fee, if applicable

(As determined under section 2.5 of the Rule)