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

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▼ QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended March 31, 2022

OR

	TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF	F 19.	34
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For the transition period from

to

Commission file number: 001-34852



RARE ELEMENT RESOURCES LTD. (Exact Name of Registrant as Specified in its Charter)

British Columbia		N/A	
(State of other jurisdiction of incorporation or o	organization)	(I.R.S. Employer Ide	ntification No.)
P.O. Box 271049			
Littleton, Colorado		80127	1
(Address of principal executive office	es)	(Zip Coo	de)
(720) 278-2460		Not Applic	cable
(Registrant's telephone number, including a	rea code)	(Former name, former address changed since l	2 /
Securities registered pursuant to Section 12(b) of the Act:	None		
Indicate by check mark whether the registrant (1) has file preceding 12 months (or for such shorter period that the 190 days. ☑ Yes □ No			
Indicate by check mark whether the registrant has submitt (§232.405 of this chapter) during the preceding 12 months			
Indicate by check mark whether the registrant is a large accompany. See the definitions of "large accelerated filer," "a Act.	, , , , , , , , , , , , , , , , , , ,	, , , , , , , , , , , , , , , , , , , ,	
Large accelerated filer \square	Non-accelerated filer ⊠	Smaller reporting company ⊠	Emerging growth company □
If an emerging growth company, indicate by check mark financial accounting standards provided pursuant to Section	C	to use the extended transition period for	or complying with any new or revised
Indicate by check mark whether the registrant is a shell con	mpany (as defined in Rule 12b-2	of the Exchange Act).	

Number of issuer's common shares outstanding as of May 10, 2022: 212,466,889.

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Reporting Currency, Financial and Other Information

All amounts in this report are expressed in thousands of United States ("U.S.") dollars, unless otherwise indicated.

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

References to "Rare Element," the "Company," "we," "our," and "us" mean Rare Element Resources Ltd., our predecessors and consolidated subsidiaries, or any one or more of them, as the context requires.

Cautionary Note Regarding Forward-Looking Statements

This Quarterly Report on Form 10-Q, including "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Item 2 of Part I of this report, contains "forward-looking statements" within the meaning of the 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 Quarterly Report. Forward-looking statements in this Quarterly Report include, but are not limited to, statements regarding the following:

- our business, prospects and our overall strategy;
- planned or estimated expenses and capital expenditures;
- availability of liquidity and capital resources;
- our ability to obtain additional financing/or consummate strategic alternatives;
- progress in developing our demonstration plant and the timing of that progress;
- the potential value of our projects or other interests, operations or rights; and
- government regulations, including our ability to obtain, and the timing of, necessary governmental permits, licenses and approvals.

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:

- the significant influence of our largest and majority shareholder, Synchron, on our major corporate decisions;
- our ability to protect our intellectual property rights;
- the uncertain nature of demand for and price of rare earth products;
- technological advancements, substitutes, and the establishment of new uses and markets for rare earth products;
- development risks, operational hazards and regulatory approvals;

- our reliance on the skill and expertise of third-party service providers;
- the ability of third-party service providers to meet their contractual obligations, including those caused by supply chain disruptions and the effects those disruptions could have on our timelines and costs;
- changes in legislation and regulations relating to the mining and rare earth industries, including environmental laws and regulations that impose material compliance costs and liabilities;
- governmental interventions in the mining and rare earth industries, including increases in barriers to international trade;
- uncertainties regarding our ability to maintain sufficient liquidity and attract sufficient capital resources to implement our projects;
- our ability to attract and retain key personnel;
- inflation affecting our business including the costs of implementing our projects;
- risks and uncertainties inherent in management estimates of future operating results;
- changes in competitive factors, including the development or expansion of other projects that are competitive with ours;
- our ability to complete planned financing and other transactions;
- risks related to pandemics or disease outbreaks, including the impact of COVID-19 on supply chains and resulting from COVID-19 containment measures implemented by various governments;
- risks relating to the availability and costs of goods and services we need to achieve our plans and goals resulting from military conflicts such as the Russia/Ukraine war;
- information technology system disruptions, damage or failures, or cyber-attacks;
- risks and uncertainties associated with litigation matters and opposition to our plans and operations by third parties;
- share price volatility;
- whether we deregister our common shares under the Exchange Act and/or list our common shares on another securities exchange;
- the OTCQB Venture Marketplace standards and the "penny stock" rules and the impact on trading volume and liquidity due to our trading on the OTCQB Venture Marketplace;
- risk factors discussed in our Annual Report on Form 10-K for the year ended December 31, 2021; and
- other factors, many of which are beyond our control.

This list is not exhaustive of the factors that might affect our forward-looking statements. 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 could cause results not to be as anticipated, estimated, intended, or expected. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those anticipated, estimated, intended 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 or update 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 Quarterly Report on Form 10-Q by the foregoing cautionary statements. We advise you to carefully review the reports and documents we file from

time to time with the U.S. Securities and Exchange Commission (the "SEC"), particularly our Annual Report on Form 10-K for the year ended December 31, 2021. The reports and documents filed by us with the SEC are available at www.sec.gov.

PART I – FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

RARE ELEMENT RESOURCES LTD. CONDENSED CONSOLIDATED BALANCE SHEETS

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

		arch 31, 2022	Dec	ember 31, 2021
ACCRETO		(unaudited)	idited) (audi	
ASSETS: CURRENT ASSETS				
	¢.	21.466	Φ	22.247
Cash and cash equivalents	\$	21,466	\$	22,247
Restricted cash (Note 4)		347		2,700 106
Due from related party (Note 4)				106
Prepaid to related party (Note 4)		1,286		7.5
Prepaid expenses and other		38		75
Total Current Assets		23,137		25,128
Equipment, net		15		16
Right of use asset		347		372
Investment in land		600		600
Total Assets	\$	24,099	\$	26,116
LIABILITIES:				
CURRENT LIABILITIES				
Accounts payable and accrued liabilities	\$	277	\$	407
Due to related party (Note 4)	Ψ		Ψ	712
Lease liability, current		124		124
Total Current Liabilities		401		1,243
Total Cultent Liabilities				1,243
Reclamation obligation		132		132
Lease liability, long-term		233		253
Repurchase option		1,093		1,047
Total Liabilities		1,859		2,675
Commitments and Contingencies (Note 7)				
, , , , , , , , , , , , , , , , , , ,				
SHAREHOLDERS' EQUITY:				
Common shares, no par value – unlimited shares authorized; shares outstanding at				
March 31, 2022 and December 31, 2021 – 212,466,889		136,906		136,906
Additional paid in capital		26,748		25,753
Accumulated deficit		(141,414)		(139,218)
Total Shareholders' Equity		22,240		23,441
Total Liabilities and Shareholders' Equity	\$	24,099	\$	26,116
Total Diamines and Shareholders Equity	Ψ	2-1,077	Ψ	20,110

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

(Expressed in thousands of U.S. dollars, except share and per share amounts) (unaudited)

	Three Months Ended March 31,			l March 31,
		2022		2021
Operating expenses:				
Exploration and evaluation (\$138, incurred with related party during the current period)	\$	(630)	\$	(507)
Corporate administration		(1,470)		(520)
Depreciation and amortization		(26)		(1)
Total operating expenses		(2,126)		(1,028)
		<u> </u>		
Non-operating income (expense):				
Interest income		1		_
Accretion expense		(71)		(20)
Total non-operating income (expense)		(70)		(20)
Net loss	\$	(2,196)	\$	(1,048)
	· ·			
LOSS PER SHARE - BASIC AND DILUTED	\$	(0.01)	\$	(0.01)
		` ,		,
WEIGHTED AVERAGE NUMBER OF SHARES OUTSTANDING	21	12,466,889		167,774,213

RARE ELEMENT RESOURCES LTD. CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS

(Expressed in thousands of U.S. dollars) (unaudited)

	Т	Three Months Ended March 31, 2022 2021		
CASH FLOWS FROM OPERATING ACTIVITIES:				
Net loss	\$	(2,196)	\$ (1,048)	
Adjustments to reconcile net loss to net cash used in operating activities:				
Depreciation		1	1	
Accretion expense		71	20	
Right of use asset amortization		25	_	
Lease liability		(20)	_	
Stock-based compensation		995	73	
Other		(25)	<u> </u>	
		(1,149)	(954)	
Changes in working capital				
Receivables		(241)	_	
Prepaid expenses and other		(1,249)	37	
Accounts payable and accrued liabilities		(842)	259	
Net cash used in operating activities		(3,481)	(658)	
·		<u> </u>	, ,	
Decrease in cash, cash equivalents and restricted cash		(3,481)	(658)	
Cash, cash equivalents and restricted cash - beginning of the period		24,947	2,706	
Cash, cash equivalents and restricted cash - end of the period	\$		\$ 2,048	
		<u> </u>	<u> </u>	

RARE ELEMENT RESOURCES LTD. CONDENSED CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY (DEFICIT) (Expressed in thousands of U.S. dollars, except share amounts)

(unaudited)

Balance, December 31, 2020 Stock-based compensation Net loss Balance, March 31, 2021	Number of Shares 104,895,245 — — — 104,895,245	Amount \$ 111,823 — — \$ 111,823	Additional Paid in Capital \$ 24,217 73 — \$ 24,290	Accumulated Deficit \$ (133,816) (1,048) \$ (134,864)	Total \$ 2,224 73 (1,048) \$ 1,249
Balance, December 31, 2021 Stock-based compensation	212,466,889 —	\$ 136,906 —	\$ 25,753 995	\$ (139,218) —	\$ 23,441 995
Net loss Balance, March 31, 2022	212,466,889	\$ 136,906	\$ 26,748	(2,196) \$ (141,414)	(2,196) \$ 22,240

(all amounts stated in thousands of U.S. dollars except share and per share amounts) (unaudited)

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 is the 100%-holder of the Bear Lodge rare earth elements project (the "Bear Lodge REE Project") located near the town of Sundance in northeast Wyoming. The Bear Lodge REE Project consists of several large, disseminated rare earth elements ("REE") deposits that comprise one of the highest-grade REE deposits identified in North America and one of the highest-grade europium (Eu) deposits in the world. In addition, the Bear Lodge REE Project has a favorable distribution of the remaining critical rare earth elements. The Company also holds a 100% interest in the Sundance gold project (the "Sundance Gold Project") that is adjacent to the Bear Lodge REE Project and contains a historical inferred mineral resource primarily composed of three gold targets within the area of the Bear Lodge property. Given the Company's longstanding focus on the Bear Lodge REE Project and the current interest in REE, the advancement of the Sundance Gold Project has been on hold since 2011 and will likely remain so for the foreseeable future.

The Company is currently focused on the advancement of a rare earth processing and separation demonstration plant ("Demonstration Plant") project. In January 2021, a consortium of companies, of which the Company is a part, received notice from the United States Department of Energy ("DoE") that the consortium had been selected for negotiation of a potential financial award for the engineering, construction and operation of a Demonstration Plant. The consortium of companies is led by General Atomics, an affiliate of Synchron, and includes certain of General Atomics' affiliates, and LNV, an Ardurra Group, Inc. company, as engineering and construction subcontractor. A formal proposal was submitted by the consortium in response to a published Funding Opportunity Announcement in mid-2020 for the construction and operation of Demonstration Plant utilizing proprietary technology to produce commercial grade products. The DoE finalized the award, and an agreement was executed by the DoE's grants/agreement officer on September 27, 2021, with an effective date of October 1, 2021. The Company, as a subrecipient of the award, along with the other consortium members, commenced work on the planning and design of the Demonstration Plant project in November 2021, with the Company's contractual arrangement with General Atomics finalized in December 2021. The DoE funding is in the amount of \$21,900 and represents approximately one-half of the total estimated costs for the project. The Demonstration Plant will process already stockpiled high-grade material from the Bear Lodge REE Project.

To address the Company's funding needs, during December 2021, the Company completed a rights offering for gross proceeds of approximately \$25,400. The Company plans to use the net proceeds from the rights offering for the permitting, licensing, engineering, construction and operation of the Demonstration Plant near the Company's Bear Lodge Project. The previously discussed \$21,900 financial award from the DoE will fund approximately one-half of the expected total cost of the Demonstration Plant, with the balance of the required funding being provided by the Company utilizing the proceeds of the rights offering.

During the three months ended March 31, 2022, the Company continued work on the Company's Demonstration Plant project (see Note 4 for a complete discussion). The Company, along with the consortium members, plans to further advance the Demonstration Plant project which includes completing the final plant design, continuing the licensing and permitting, commencing procurement of long lead-time equipment, and initiating early construction activities. For additional information on the Company's Demonstration Plant project, including the project's timeline, readers should see Item 2 in our Annual Report on Form 10-K for the year ended December 31, 2021. The Demonstration Plant will be located in Upton, Wyoming on leased facilities. In addition, the Company plans to update its baseline environmental data for the Bear Lodge REE Project.

The Company does not have sufficient funds to progress with longer-term activities beyond the Demonstration Plant project, including feasibility studies, permitting and licensing, development and construction related to the Bear Lodge REE Project. Therefore, the achievement of these longer-term activities will be dependent upon securing additional funds through financings, off-take agreements, joint ventures, strategic transactions, or sales of various assets. There is no assurance, however, that the Company will be successful in completing any such other financings or transactions. Ultimately, in the event the Company cannot secure additional financial resources, or complete a strategic transaction in the longer term, it may need to suspend its operational plans or even have to liquidate its business interests, and investors may lose all or part of their investment.

(all amounts stated in thousands of U.S. dollars except share and per share amounts) (unaudited)

The Company has incurred losses since inception, and further losses are anticipated in the development of its business. As of March 31, 2022, the Company had cash and cash equivalents of \$21,466 and our cash used in operations during the three months ended March 31, 2022 was \$3,481, the majority of which was related to costs associated with the Demonstration Plant project and general and administrative expenses.

COVID-19 Impact on Business

In response to the COVID-19 pandemic, the Company implemented travel restrictions, both domestically and internationally, and its employee and consultants abided by government guidance and orders. As a result, the Company saw delays in the metallurgical studies conducted by Umwelt-und Ingenieurtechnik GmbH Dresden ("UIT") that slowed the progression of the prior test work. Any continued pandemic impact may be material to the completion of the design inputs needed for the Demonstration Plant. Any further economic downturn triggered by COVID-19 and any resulting direct and indirect negative impact on us could have a material adverse impact on our future activities, cash flows and liquidity. The Company may experience higher prices for the equipment and raw materials for the Demonstration Plant due to shortages, commodity inflation and supply chain issues, including transportation delays as a result of COVID-19 and other economic factors. Further, it is unknown what, if any, impact COVID-19 and any resulting economic factors will have on rare earth prices and market supply and demand fundamentals.

2. BASIS OF ACCOUNTING AND PRESENTATION

In accordance with U.S. GAAP for interim financial statements, these unaudited condensed consolidated financial statements do not include certain information and note disclosures that are normally included in annual financial statements prepared in conformity with U.S. GAAP. Accordingly, these unaudited condensed consolidated financial statements should be read in conjunction with our audited consolidated financial statements as of December 31, 2021, which were included in the Company's Annual Report on Form 10-K for the year ended December 31, 2021. In the opinion of management, the accompanying unaudited condensed consolidated financial statements contain all adjustments (which are of a normal, recurring nature) necessary to present fairly in all material respects the Company's financial position as of March 31, 2022, and the results of its operations and cash flows for the three months ended March 31, 2022 and 2021 in conformity with U.S. GAAP. These interim results of operations for the three months ended March 31, 2022 may not be indicative of results that will be realized for the full year ending December 31, 2022.

Recently Issued Accounting Pronouncements

Financial Disclosures of Government Assistance

In November 2021, ASU No. 2021-10 was issued which provides guidance for required annual disclosures about transactions with a government that are accounted for by applying a grant or contribution accounting model by analogy. The guidance is effective for all entities for annual periods beginning after December 15, 2021. The Company is still completing its evaluation of the impact of ASU 2021-10.

3. FAIR VALUE OF FINANCIAL INSTRUMENTS

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.

(all amounts stated in thousands of U.S. dollars except share and per share amounts) (unaudited)

- 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.

Financial assets and liabilities subject to fair value measurements on a recurring basis and the level of inputs used in such measurements by major security type as of March 31, 2022 and December 31, 2021 are presented in the following table:

Fair value at March 31, 2022							
		Total		Level 1		Level 2	Level 3
Assets:							
Money market funds	\$	21,120	\$	21,120	\$	_	\$ _
I	Fair value at D	ecember 31	, 2021				
		Total		Level 1		Level 2	Level 3
Assets:							
Money market funds	\$	22,700	\$	22,700	\$	_	\$ _

4. RELATED PARTY

Cost Share Agreement with General Atomics

In January 2021, a consortium of companies, of which the Company is a part, received notice from the DoE that the consortium had been selected for negotiation of a potential financial award for the engineering, construction and operation of a Demonstration Plant. The consortium of companies is led by General Atomics, an affiliate of Synchron (the Company's largest and majority shareholder), and includes certain of General Atomics' affiliates, and LNV, an Ardurra Group, Inc. company, as engineering and construction subcontractor. A formal proposal was submitted by the consortium in response to a published Funding Opportunity Announcement in mid-2020 for the construction and operation of a Demonstration Plant utilizing proprietary technology to produce commercial grade products. The DoE funding is in the amount of \$21,900 and represents approximately one-half of the total estimated costs for the demonstration plant project. The demonstration plant is planned to process already stockpiled high-grade material from the Bear Lodge REE Project. The DoE agreement was executed by the DoE's grants/agreement officer on September 27, 2021, with an effective date of October 1, 2021. The DoE award was finalized through a cooperative agreement dated October 1, 2021 (the "Cooperative Agreement") that was awarded by the DoE for the Demonstration Plant. The Cooperative Agreement provides that up to approximately \$43,900 in allowable costs for the Demonstration Plant would be funded on a cost-share basis, 50% by the DoE and 50% by a nonfederal entity.

On November 30, 2021, the Company and General Atomics entered into a Cost Share Funding Assumption Agreement (the "Cost Share Agreement") pursuant to which the Company agreed to assume and pay for certain costs incurred by, and on behalf of, General Atomics for the design, construction, and operation of a Demonstration Plant near the Bear Lodge REE Project in Upton, Wyoming.

Pursuant to the terms of the Cost Share Agreement, the Company made a prepayment to General Atomics of \$2,700 in January 2022 for the first \$2,700 of Company-assumed costs for the Demonstration Plant, with the number and amount of additional prepayments to be subject to the mutual written agreement of the parties. At December 31, 2021, the \$2,700 was classified on the Company's balance sheet as restricted cash.

(all amounts stated in thousands of U.S. dollars except share and per share amounts) (unaudited)

The term of the Cost Share Agreement will continue until the date of completion of the Demonstration Plant, unless terminated earlier by either party. Either party may terminate the Cost Share Agreement immediately upon written notice to the other party if any of the following events occurs: (a) the Cooperative Agreement is terminated for any reason prior to the completion of the Demonstration Plant; (b) the other party commits a material breach of its obligations under the Cost Share Agreement and fails to cure such breach within 30 days; or (c) the other party makes an assignment for the benefit of its creditors, files a petition in bankruptcy, is adjudicated insolvent or bankrupt, or commences any insolvency or bankruptcy proceedings. Upon any early termination of the Cost Share Agreement, the Company must pay for all costs incurred by or on behalf of General Atomics to wind down the Demonstration Plant other than any allowable costs for such wind-down paid for by the DoE.

The following table summarizes transactions under the Cost Share Agreement during the three months ended March 31, 2022:

Balance of funds paid under the Cost Share Agreement at December 31, 2021	\$ _
Funds transferred to General Atomics in January 2022	2,700
Company's share of Demonstration Plant project costs incurred through March 31, 2022	(1,414)
Balance of funds remaining on deposit with General Atomics as of March 31, 2022	\$ 1,286

As of March 31, 2022 and December 31, 2021, the Company had also recorded related party payables to General Atomics of nil and \$712, respectively, for amounts owing to General Atomics under the Cost Share Agreement.

The following table summarizes related party receivables due from General Atomics for reimbursable costs incurred by the Company under the Cost Share Agreement during the three months ended March 31, 2022:

Balance of receivables due from General Atomics as of December 31, 2021 (1)	\$ 106
Reimbursable costs incurred by the Company under the Cost Share Agreement through March 31, 2022	241
Balance of receivables due from General Atomics as of March 31, 2022 (1)	\$ 347

(1) Because the Company had not yet advanced any funds under the Cost Share Agreement at December 31, 2021, the amounts due from General Atomics at December 31, 2021 represented just the portion of those amounts expected to be paid from DoE sourced funds under the Cooperative Agreement whereas at March 31, 2022 the amounts owing from General Atomics included the full 100% share of all amounts billed by the Company under the Cost Share Agreement; including those amounts to be repaid from the \$2,700 advanced by the Company to General Atomics in January 2022.

During April 2022, the Company received \$286 from General Atomics under the Cost Share Agreement.

5. LEASES

The Company accounts for leases in accordance with ASC 842 – *Leases*. This accounting standard requires all lessees to record the impact of leasing contracts on the balance sheet as a right to use asset and corresponding liability. This is measured by taking the present value of the remaining lease payments over the lease term and recording a right to use asset ("ROU") and corresponding lease obligation for lease payments. Rent expense is realized on a straight-line basis and the lease obligation is amortized based on the effective interest method. The amounts recognized reflect the present value of the remaining lease payments for all leases that have a lease term greater than 12 months. The discount rate used is an estimate of the Company's incremental borrowing rate based on information available at lease commencement in determining the present value of lease payments.

In considering the lease asset value, the Company considers fixed or variable payment terms, prepayments and options to extend, terminate or purchase. Renewal, termination or purchase options affect the lease term used for determining lease asset value only if the option is reasonably certain to be exercised.

(all amounts stated in thousands of U.S. dollars except share and per share amounts) (unaudited)

Effective September 21, 2021, the Company entered into a lease agreement for real property including land, a facility and office space in Upton, Wyoming for the Demonstration Plant. The lease is a 12-month lease with annual renewal terms. The agreement, which is classified as an operating lease, generally provides for base rent and requires the Company to pay all insurance, taxes and other maintenance costs. The lease agreement does not include variable lease payments, nor does it contain residual value guarantees or contain restrictive covenants.

Total future minimum lease payments as of March 31, 2022 are as follows:

Remainder of 2022	\$ 93
2023	124
2024	124
2025	93
Total	434
Less interest	77
Present value of lease payments	\$ 357

During the three months ended March 31, 2022, \$30 was included in operating cash flows for amounts paid for operating leases.

The weighted average lease term for operating leases is 3.5 years (including renewal options) and the weighted average discount rate is 12%.

6. SHAREHOLDERS' EQUITY

Stock-based compensation

As of March 31, 2022, the Company had 4,010,000 options outstanding that were issued under the 10% Rolling Stock Option Plan, as amended and restated (the "RSOP").

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 valuation model and the closing price of our common shares on the business day prior to the grant date. There were 1,830,000 and nil options granted during the three months ended March 31, 2022 and 2021, respectively. The significant assumptions used to estimate the fair value of stock option awards using the Black-Scholes option valuation model are as follows for the three months ended March 31, 2022:

Risk-free interest rate	1.71 %
Expected volatility	135 - 144 %
Expected dividend yield	Nil
Expected term in years	8

(all amounts stated in thousands of U.S. dollars except share and per share amounts) (unaudited)

The following table summarizes our stock option activity for each of the three months ended March 31, 2022 and 2021:

	Three Months Ended March 31,						
	2022	2022		2021			
	N. 1 60, 1	Weighted Average				Weighted Average	
	Number of Stock Options	Exercise Number of Stock Price Options		Exercise Price			
Outstanding, beginning of period	2,180,000	\$	1.18	3,100,000	\$	0.28	
Granted	1,830,000	\$	1.40	_	\$	_	
Outstanding, end of period	4,010,000	\$	1.28	3,100,000	\$	0.28	
Exercisable, end of period	1,752,500	\$	0.92	2,725,000	\$	0.19	
Non-vested, end of period	2,257,500	\$	1.56	375,000	\$	0.83	

The following table summarizes the intrinsic value and weighted average remaining life for stock options as of March 31, 2022:

		Weighted	
		Average	
As of March 31, 2022:	Intrinsic Value	Remaining Life	
Stock options outstanding	\$ 908	3.4	
Stock options exercisable	\$ 908	0.2	
Stock options non-vested	\$ _	7.2	

For the three months ended March 31, 2022 and 2021, the Company recognized compensation expense related to stock option awards of \$995 and \$73, respectively. As of March 31, 2022, there was approximately \$1,990 of total unrecognized compensation cost related to the 2,257,500 unvested stock options that is expected to be recognized over a weighted-average remaining vesting period of approximately 0.7 years.

The weighted-average grant-date fair value of options granted during the three months ended March 31, 2022 was \$1.40.

7. COMMITMENTS AND CONTINGENCIES

Our commitments and contingencies include the following items:

Potential environmental contingency

The Company's 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 that its operations are materially in compliance with all applicable laws and regulations. The Company has made, and expects 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.

(all amounts stated in thousands of U.S. dollars except share and per share amounts) (unaudited)

Contract commitment - related party

Pursuant to the Cost Share Agreement between the Company and General Atomics and as discussed more fully in Note 4, the Company has agreed to assume and pay for approximately one-half of the costs incurred by General Atomics and the other consortium members for the design, construction, and operation of the Demonstration Plant.

Asset purchase agreement

On October 25, 2021, the Company and Whitelaw Creek LLC, a Wyoming limited liability company ("Whitelaw Creek"), entered into an amendment (the "Amendment") to the previously announced asset purchase agreement dated October 20, 2016 between the Company and Whitelaw Creek (the "APA"). The Amendment modified certain provisions of the APA related to the terms and conditions of the Company's option to repurchase (the "Repurchase Option") 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. Pursuant to and subject to the terms of the Amendment, among other things the term of the Repurchase Option (which was to expire on October 26, 2021) was extended for up to three additional years, subject to annual option extension payments from the Company to Whitelaw Creek of \$25 in cash per year (each, a "Repurchase Option Extension Payment"); and the exercise price of the Repurchase Option was increased from \$1,000 to a price to be determined by a mutually agreed upon real estate appraiser (the "Repurchase Price"), provided that (i) the Repurchase Price must not be less than \$1,200 or greater than \$1,850 and (ii) any Repurchase Option Extension Payments paid by the Company to Whitelaw Creek must be credited toward the Company's payment of the Repurchase Price if the Repurchase Option is later exercised.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following management's discussion and analysis of the consolidated financial results and condition of Rare Element Resources Ltd. (collectively, "we," "us," "our," "Rare Element" or the "Company") for the three months ended March 31, 2022, has been prepared based on information available to us as of May 12, 2022. This discussion should be read in conjunction with the unaudited Condensed Consolidated Financial Statements and notes thereto included herewith and the audited Consolidated Financial Statements of Rare Element for the year ended December 31, 2021, and the related notes thereto filed with our Annual Report on Form 10-K, which have been prepared in accordance with U.S. GAAP. This discussion and analysis contains forward-looking statements that involve risks, uncertainties and assumptions. 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 elsewhere in this report. See "Cautionary Note Regarding Forward-Looking Statements."

All currency amounts are expressed in thousands of U.S. dollars, unless otherwise noted.

Outlook

During the three months ended March 31, 2022, we continued our work on the rare earth processing and separation demonstration plant ("Demonstration Plant") project. For the remainder of 2022, the Company, along with the consortium members, plans to further progress the Demonstration Plant project which includes completing the final plant design, continuing the licensing and permitting of the plant, commencing procurement of long lead-time equipment, and initiating early construction activities. The Company also plans to update its baseline environmental data for the Bear Lodge REE Project.

Longer term, the Company does not have sufficient funds to progress with activities beyond the Demonstration Plant project, including feasibility studies, permitting and licensing, development and construction related to the Bear Lodge REE Project. Therefore, the achievement of these longer-term activities will be dependent upon receipt of additional funds through financings, off-take agreements, joint ventures, strategic transactions, or sales of various assets. There is no assurance, however, that the Company will be successful in completing any such other financings or transactions. Ultimately, in the event the Company cannot secure additional financial resources, or complete a strategic transaction in the longer term, it may need to suspend its operational plans or even have to liquidate its business interests, and investors may lose all or part of their investment.

COVID-19 Impact on Business

In response to the COVID-19 pandemic, we implemented travel restrictions, both domestically and internationally, and our employee and consultants abided by government guidance and orders. As a result, we saw delays in the metallurgical studies conducted by UIT that slowed the progression of the prior test work. Any continued pandemic impact may be material to the completion of the design inputs needed for the Demonstration Plant. Any further economic downturn triggered by COVID-19 and any resulting direct and indirect negative impact on us could have a material adverse impact on our future activities, cash flows and liquidity. We may experience higher prices for the equipment and raw materials for the Demonstration Plant due to shortages, commodity inflation and supply chain issues, including transportation delays as a result of COVID-19 and other economic factors. Further, it is unknown what, if any, impact COVID-19 and any resulting economic factors will have on rare earth prices and market supply and demand fundamentals. For further discussion of this matter, refer to "Item 1A. Risk Factors" in Part II of the Company's Annual Report on Form 10-K as filed on March 23, 2022.

Results of Operations

Summary

Our consolidated net loss for the three months ended March 31, 2022 was \$2,196, or \$0.01 per share, compared with our consolidated net loss of \$1,048, or \$0.01 per share, for the same period in 2021. See the discussion below for the primary drivers of this change.

Exploration and evaluation

Our exploration and evaluation costs increased by \$123 over the comparative period, rising from \$507 for the three months ended March 31, 2021 to \$630 for the three months ended March 31, 2022. This increase was largely attributable to the activities on our Bear

Lodge REE Project as work progressed under the Cost Share Agreement that was entered into with General Atomics in November 2021. See Note 4 to the Condensed Consolidated Financial Statements for a more complete discussion of this Cost Share Agreement.

Corporate administration

Our corporate administrative costs increased by \$950 over the comparative period rising from \$520 for the three months ended March 31, 2021 to \$1,470 for the three months ended March 31, 2022. This increase was largely driven by the increase of \$922 in stock-based compensation.

Accretion expense

The Company's accretion expense increased by \$51 over the comparative period, rising from \$20 for the three months ended March 31, 2021 to \$71 for the three months ended March 31, 2022. This accretion expense is related to the Company's option to repurchase approximately 640 acres of non-core real property in Wyoming for not less than \$1,200 or greater than \$1,850 in the form of cash, common shares of the Company, or a combination of cash and common shares of the Company. Accretion expense is recorded each reporting period to increase the repurchase option liability to the maximum exercise price of \$1,850, less any annual option payments of \$25. See Note 7 to the Condensed Consolidated Financial Statements for a more complete discussion of the repurchase plan.

Cash Flows, Financial Position, Liquidity and Capital Resources

Cash Flows from Operating Activities

Net cash used in operating activities was \$3,481 for the three months ended March 31, 2022, compared with \$658 for the same period in 2021. This increase of \$2,823 was mostly driven by an increase in prepaid expenses of \$1,286 related to the Company's prepayment of funds to General Atomics under the Cost Share Agreement and a decrease in accounts payable and accrued liabilities of \$1,101 largely stemming from the payment of a \$712 amount owing to General Atomics, a related party, during the three months ended March 31, 2022.

Financial Position, Liquidity and Capital Resources

At March 31, 2022, we had a working capital balance of \$22,736 which represented a decrease of \$1,149 to our December 31, 2021 working capital balance of \$23,885. This decrease was largely the result of amounts paid by the Company during the March 31, 2022 quarter under the Cost Share Agreement.

For the remainder of 2022, the Company, along with General Atomics and the other consortium members, plan to further advance the Demonstration Plant project which includes completing the final plant design, continuing the licensing and permitting of the Demonstration Plant, commencing procurement of long lead-time equipment, and initiating early construction activities. The Company also plans to update its baseline environmental data for the Bear Lodge REE Project.

Inclusive of amounts already advanced, the Company's share of the total cost under the Cost Share Agreement are expected to equal or exceed \$22,000 over the life of the project. As a result, the Company will not have sufficient funds to progress with longer-term activities, including feasibility studies, permitting, development and construction related to the Bear Lodge REE Project. Therefore, the achievement of these longer-term activities will be dependent upon additional financings, off-take agreements, joint ventures, strategic transactions, or sales of various assets. There is no assurance, however, that the Company will be successful in completing any such other financings or transactions. Ultimately, in the event the Company cannot secure additional financial resources, or complete a strategic transaction in the longer term, it may need to suspend its operational plans or even have to liquidate its business interests, and investors may lose all or part of their investment.

Contractual Obligations

During the three months ended March 31, 2022, there were no material changes to the contractual obligations disclosed in Item 8 of Part II of our Annual Report on Form 10-K for the year ended December 31, 2021.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Not applicable.

ITEM 4. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

As of the end of the period covered by this Quarterly Report on Form 10-Q, an evaluation was carried out under the supervision of, and with the participation of the Chief Executive Officer ("CEO") and Chief Financial Officer ("CFO"), of the effectiveness of the design and operations of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act")). Based on that evaluation, the CEO and the CFO have concluded that, as of the end of the period covered by this Quarterly Report on Form 10-Q, our disclosure controls and procedures were effective in ensuring that (i) information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms and (ii) information required to be disclosed by us in the reports that we file or submit under the Exchange Act is accumulated and communicated to our CEO and CFO, as appropriate, to allow timely decisions regarding required disclosure.

Changes in Internal Controls

There has been no change in our internal control over financial reporting during the quarter ended March 31, 2022, that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II - OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

We are not aware of any material pending or threatened litigation or of any proceedings known to be contemplated by governmental authorities that are, or would be, likely to have a material adverse effect upon us or our operations, taken as a whole.

ITEM 1A. RISK FACTORS

During the three months ended March 31, 2022 there were no material changes to the risk factors disclosed in Item 1A of Part I of our Annual Report on Form 10-K for the year ended December 31, 2021.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

None.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None.

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 Wall Street Reform and Consumer Protection Act of 2010, 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 under the regulation of the Federal Mine Safety and Health Administration ("MSHA") under the

Federal Mine Safety and Health Act of 1977 (the "Mine Act"). During the quarter ended March 31, 2022, the Company was not subject to regulation by MSHA under the Mine Act.

ITEM 5. OTHER INFORMATION

None.

ITEM 6. EXHIBITS

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Number	Description
10.1	Employment Agreement dated as of March 28, 2022 by and between Rare Element Resources, Inc. and Wayne Rich
	(incorporated by reference to Exhibit 10.1 to the Company's Form 8-K filed with the SEC on March 31, 2022)
31.1+	Certification of Chief Executive Officer pursuant to Rule 13a-14 promulgated under the Securities and Exchange Act
	of 1934, as amended
31.2+	Certification of Chief Financial Officer pursuant to Rule 13a-14 promulgated under the Securities and Exchange Act
	of 1934, as amended
32.1++	Certification of Chief Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2++	Certification of Principal Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101.INS+	Inline XBRL Instance Document - the instance document does not appear in the Interactive Data File because its
	XBRL tags are embedded within the Inline XBRL document
101.SCH+	XBRL Schema Document
101.CAL+	XBRL Calculation Linkbase Document
101.DEF+	XBRL Definition Linkbase Document
101.LAB+	XBRL Label Linkbase Document
101.PRE+	XBRL Presentation Linkbase Document
104	Cover Page Interactive Data File (formatted as Inline XBRL with applicable taxonomy extension information
	contained in Exhibits 101).

⁺ Filed herewith.

⁺⁺ Furnished herewith.

^{*} Indicated a management contract or compensatory plan, contract or arrangement.

SIGNATURES

Pursuant to the requirements 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.

RARE ELEMENT RESOURCES LTD.

By: /s/ Randall J. Scott

Randall J. Scott

President, Chief Executive Officer and Director

(Principal Executive Officer)

Date: May 12, 2022

By: /s/ Wayne Rich

Wayne Rich

Chief Financial Officer (Principal Financial Officer)

Date: May 12, 2022

XBRL-Only Content Section

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Element		
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