



14 April 2022

## MARCH 2022 QUARTERLY ACTIVITIES REPORT

Reach Resources Limited (ASX:RR1) ("the Company" or "Reach Resources") provides its activities report for the quarter ended 31 March 2022.

### SUMMARY

#### Strategic Investment into Cutting-edge Rare Earth Element Recycling Business

- Strategic investment of \$1.8M into REEgenerate Pty Ltd, an Australian private company that owns 100% of the Coconut Club REE exploration project in Quebec, Canada and that has subsequent to the quarter end exercised its option and acquired 100% of REEcycle Inc, a US based Rare Earth Element (REE) separation and technology Company (ASX announcement 13 April 2022)
- REEcycle has developed a process that has shown at pilot scale the ability to reclaim 15 of the 17 rare earth elements in discarded permanent NdFeB magnets, with a recovery efficiency in excess of 99%
- The patented process developed at the University of Houston uses a proprietary solvent to safely and efficiently extract REEs from permanent magnets found in wind turbines, electric vehicles (cars, bikes, scooters), MRI machines and other electronic waste with low temperatures, low pressures, and minimal energy needs and waste
- REEcycle aims to provide an alternative option to traditional mined sources of rare earth metals as well as reduce supply chain uncertainty and geopolitical risk for companies reliant on these materials
- The global permanent magnet market size was valued at USD\$17.85 billion in 2018 and is projected to reach USD\$34.70 billion by 2026, exhibiting a CAGR of 8.7% during the forecast period <sup>1</sup>, with the rare earth metals component being valued at US\$5.3 billion in 2021 with only 1% of REEs sourced from recycled end of life products <sup>2</sup>
- Shanghai Metals Market (SMM) forecast recycling of NdFeB magnets is likely to be the largest growth of neodymium and dysprosium supply from 2021 to 2025

#### Placement raises \$2.4M

- As announced on 21 March 2022, Reach Resources raised \$2.4M in new equity to fund its investment in REEgenerate and the development of its existing mineral resource exploration projects, including working capital.

#### Appointment of CEO

- On 23 March 2022 RR1 announced the appointment of Mr. Jeremy Bower as CEO of the Company.

<sup>1</sup> Advanced Materials: Permanent Magnets Market, 2020.

<sup>2</sup> Drobniak, A., and Mastalerz, M., 2022, Rare Earth Elements—A brief overview: Indiana Geological and Water Survey, Indiana Journal of Earth Sciences, v. 4.



## 1) REEgenerate Investment

Reach Resources ("Reach" or "Company") is pleased to announce that it has made a strategic investment of \$1.8M into REEgenerate Pty Ltd ("REEgenerate"), an Australian private company that owns 100% of the Coconut Club REE exploration project in Quebec, Canada. REEgenerate also had an option to acquire 100% of REEcycle Inc ("REEcycle"), a US based Rare Earth Element (REE) separation and technology Company. Subsequent to the quarter end as announced to ASX on 13 April 2022, REEgenerate exercised its option to acquire 100% of REEcycle, giving Reach Resources direct exposure to this company, whose future is aligned with current global social and political thinking of a cleaner, greener future through the circular economy principle.

New CEO Jeremy Bower commented "Our shareholding in REEgenerate represents an exciting addition to our portfolio of exploration assets, particularly our REE projects. We will continue to update the market on this investment in parallel with the development of our resource projects".

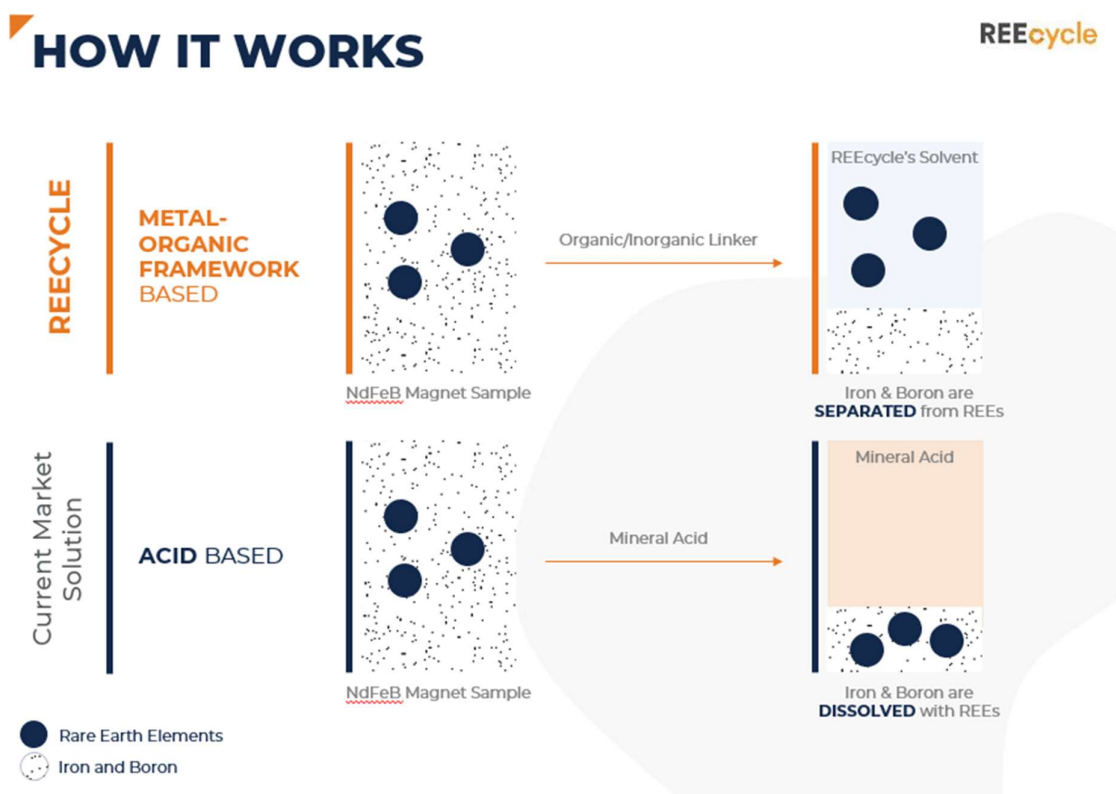


Figure 1: REEcycle Separation Technology

In pilot testing, REEcycle has been able to achieve up to **99.8% separation/recovery efficiency** of pure rare earth elements from the other materials in the magnet (Iron and Boron). The process is carried out at atmospheric pressure, under mild temperatures, producing water (pH 6) which contains Iron and Boron at concentrations compliant with those specified by municipal sewage treatment systems. **Rare Earth Oxide (REO) concentrate exists in carbonate form but can easily be converted to an oxide.**



## HOW IT WORKS

REEcycle

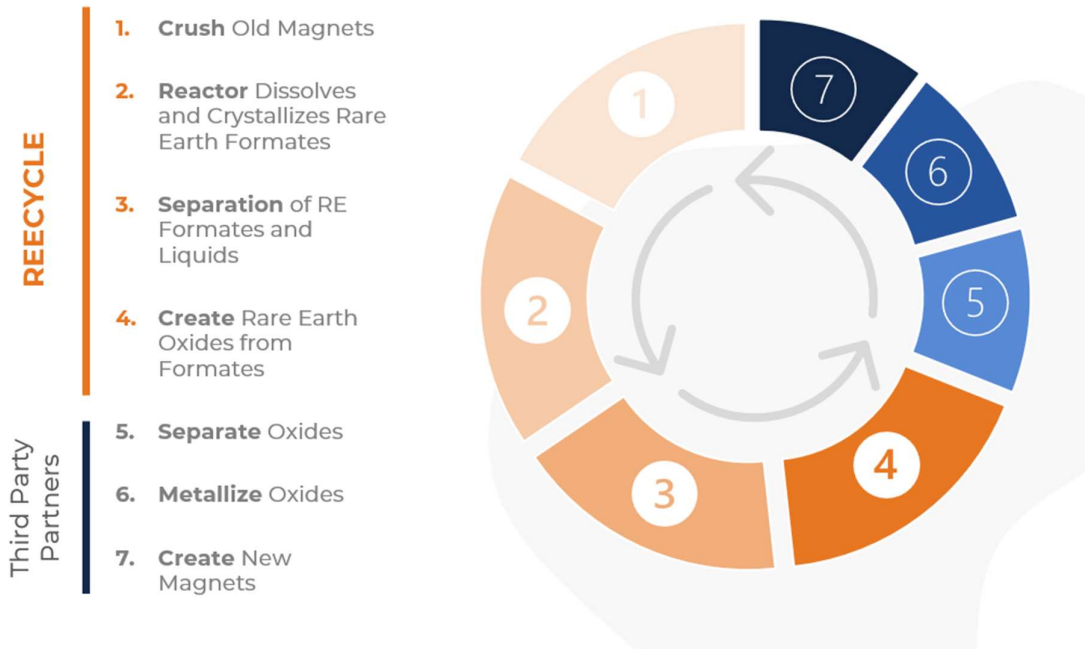


Figure 2: REEcycle Flow Sheet



### REEcycle PROCESS

- Extracts using Metal-organic Frameworks (MOFs)
- Uses controlled temperatures  $< 100^{\circ}\text{C}$
- Uses autogenous pressure
- REEs selectively grouped in crystalline structure
- Allows for simple gravity separation
- Leaves behind no acidic waste

### PROCESS ADVANTAGES

- High Selectivity
- Ease of REE Isolation
- Purity of Raw Materials

### ENVIRONMENTAL BENEFITS

- Low Temperature Requirements
- Low Disposal Costs
- Low Hazardous Waste
- Low Energy Consumption

Figure 3: REEcycle Technology Characteristics





REEcycle aims to provide an alternative option to traditional mined sources of rare earth metals as well as reduce supply chain uncertainty and geopolitical risk for companies reliant on these materials. Some benefits of this process include:

- New revenue stream from electronic waste
- Dependable, renewable, secure source of REEs
- Source REEs domestically
- Reduce landfill waste and support sustainable end-of-life process
- Truly circular and sustainable product
- Very low carbon footprint process.

REEcycle has received significant positive support from reputable sources like the Scientific American, stating *“With their innovative (and proprietary) approach to recycling a pair of critical rare earth materials, the REEcycle team introduced the energy industry to an innovative way to turn waste into a domestic stream of rare earth elements.”*

## OUR STRATEGY

End-of-Life Products to REE Recovery

REEcycle

### 01 MAGNET PROCUREMENT

**Hard Drive:**  
Lease DDM to e-scrap facilities, ship magnets to our plant to input into process

**Electric Vehicles:**  
License existing retrieval technology to expedite this pathway to market

**Wind Turbines:** Direct Shipment

**MRI:** Direct Shipment

### 02 REE RECOVERY HUB

Recover REE Concentrate from magnets with patented technology.  
**99.8% recover efficiency**

- Extracts using Metal-organic Frameworks (MOFs)
- Uses controlled temperatures < 100 °C
- Uses autogenous pressure
- REEs selectively grouped in crystalline structure
- Allows for simple gravity separation
- Leaves behind no acidic waste

### 03 RARE EARTH SEPERATION & METALLIZATION

### 04 MAGNET MANUFACTURERS

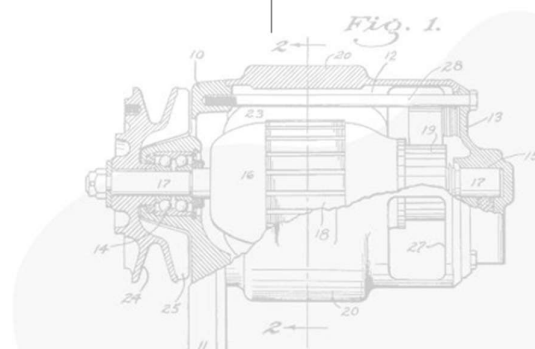


Figure 4: REEcycle Strategy



## REECYCLING VS MINING

	REECYCLE	MINING
Capital Intensity	Low	High - Very High
Carbon Footprint	Very Low	High - Very High
Element Location	Collection at Source Final Process at Central Hub	At the Deposit
Impact on First Nations	Nil	Potentially Large
Permitting	Limited and Fast	Extensive and Long
Time to Market	Fast	Slow

Figure 5: REEcycle vs Rare Earth Mining

## OUTPUT BREAKDOWN

Per kilogram from patented REE Process

REEcycle



**86.5%** Nd<sub>2</sub>O<sub>3</sub>  
Neodymium

**5.7%** Pr<sub>2</sub>O<sub>3</sub>  
Praseodymium

**4.4%** Dy<sub>2</sub>O<sub>3</sub>  
Dysprosium

**1.63%** Tb<sub>2</sub>O<sub>3</sub>  
Terbium

**0.73%** Fe<sub>2</sub>O<sub>3</sub>  
Ferric Oxide

**1.04%**  
Combination of Cu, Ni, Cu, and B

Figure 6: Pilot Plant REE Output Breakdown per kg



Rare Earth Elements are a part of the unstoppable macro-environment movement with the global economy transitioning to cleaner energy sources. Market applications of NdFeB magnets include wind turbines, electric vehicles, electric bikes and air conditioning with demand increasing by 17.5% annually <sup>3</sup>. REEcycle is positioned to take advantage of growing applications of NdFeB magnets by recycling end-of-life products and supply ethically sourced REEs to the market.

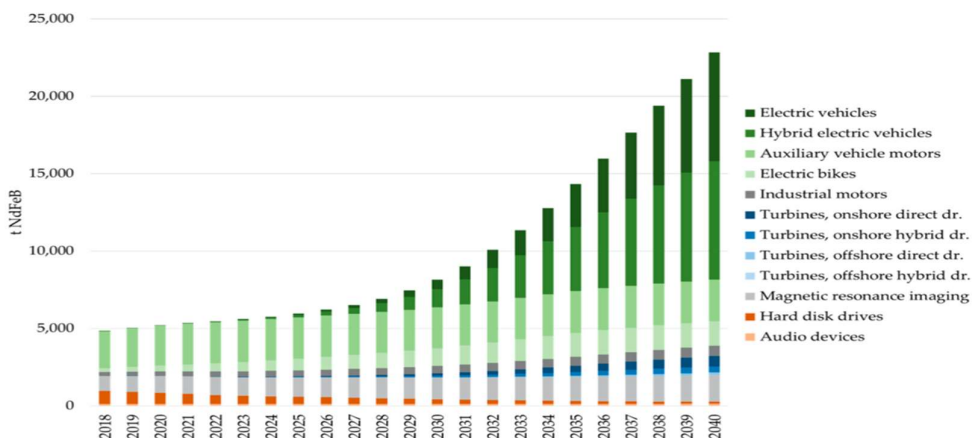


Figure 7: Potential Return Flows by Application / Tons of NdFeB Magnets <sup>4</sup>

<sup>3</sup> Green Car Congress, 2021, Roskill: rare earth magnet applications to account for ~40% of total RE demand by 2030, up from 29% in 2020.

<sup>4</sup> Reimer, Maximilian, 2018, "Recycling Decisions in 2020, 2030, and 2040—When Can Substantial NdFeB Extraction be Expected in the EU?", Metals - Open Access Metallurgy Journal

## 2) Placement for \$2.4M

The Company successfully raised \$2.4M via a Placement to sophisticated and professional investors. Settlement of funds occurred on 23 March 2022 with the shares allotted the following day, 24 March 2022. Funding was used to execute the acquisition of 10% of REEgenerate Pty Ltd and additionally, will provide working capital and cash to develop the Company's mineral resource exploration projects.

Participants in the Placement will receive 1 free attaching listed option (ASX: RR1O) for every 2 shares subscribed, exercisable at \$0.01 per Option on or before 20 May 2024. The free attaching listed options will be issued under a prospectus and the Company is seeking shareholder approval in order for the issue of options to not use the Company's 7.1 capacity (see Notice of Meeting lodged on ASX, dated 7 April 2022).

## 3) Appointment of CEO

On 23 March 2022 RR1 announced the appointment of Mr. Jeremy Bower as CEO of the Company. Mr Bower's appointment as CEO follows the Company's successful \$2.4M placement as mentioned above.

Mr Bower is an experienced executive and project manager demonstrated across the mining, agricultural and industrial sectors and in particular brings a unique skill set that is highly relevant to RR1. Jeremy brings over 15 years' experience dealing with the government, key stakeholders and engineers to obtain project approvals, in addition to strong ESG credentials, which is now demanded by investors and communities alike across the globe. His appointment comes at a time when the Company is focussed on driving a detailed plan to assess and deliver more value from its assets.

Mr Bower's appointed as CEO is on a permanent part time basis of 2 days per week. If the Company requires a full time CEO, the parties agree to discuss and negotiate appropriate terms at the relevant time.



## Primrose Gold project – Blue Heaven

Since the announcement of the Company's Maiden Mineral Resource estimate reported in November 2021, in compliance with JORC (2012), for the Blue Heaven Prospect within the Primrose Gold Project, the Company continues to pursue and fast track the potential monetisation of the Resource.

**Table 1 – Paynes Find November 2021 Mineral Resource Estimate**

Cut Off (Au g/t)	Thousand Tonnes	Au (g/t)	Au (Koz)
5.0	62	24.1	48
4.0	86	18.6	52
3.0	164	11.4	60
2.0	340	6.8	74
1.5	582	4.7	87
1.0	1,035	3.2	105
0.5	1,755	2.2	123
0.0	2,347	1.7	127

NB- Differences in sum totals of tonnages and grades may occur due to rounding

## CORPORATE

The Company will hold a General Meeting of shareholders on 18 May 2022, as announced on ASX, 7 April 2022.

The Company retains the potential for deferred consideration relating to the sale of Albury Heath, being an additional \$400,000 and further \$200,000 of cash or Westgold shares, if the Albury Heath project achieves performance targets, as outlined in the 23 April 2020 ASX release.

The Company's Quarterly Cashflow Report (Appendix 5B) follows this activities report. The Company had approximately \$1.5 million in cash as at 31 March 2022. The company is adequately funded to continue its current activities and will continue to demonstrate appropriate fiscal management.

## MATERIAL EVENTS SUBSEQUENT TO THE END OF QUARTER

None, with the exception of REEgenerate exercising its option to acquire 100% of REEcycle, as announced to ASX on 13 April 2022 and mentioned above.

## ASX DISCLOSURE REQUIREMENTS

The proportion of expenditure incurred during the quarter ended 31 March 2022, in relation to the 'REEcycle Waste Recycling Technology', was \$Nil, noting that the Company paid \$1.8 million for the acquisition of REEgenerate Pty Ltd during the quarter as disclosed throughout this quarterly report.





## **GUIDANCE NOTE 23 DISCLOSURES**

### **Details of mining exploration activities**

Details of exploration activities during the quarter are set out above.

The \$75,000 of exploration and evaluation expenditure largely geological staff salaries and consulting fees.

### **Details of mining production and development activities**

No production and development activities were undertaken during the quarter.

### **Details of tenement activities**

The tenement schedule included below shows all holdings and any change for the Company and its subsidiaries.

### **Details of related party payments**

The aggregate amount of payments to related parties and their associates included in the current quarter cash flows from operating activities was \$27,000, comprising Directors fees and superannuation.

*This announcement has been authorised by the Board of Reach Resources Limited.*

-ENDS-

### **For Further information please contact:**

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Company Secretary  
(08) 6268 2641  
[admin@reachresources.com.au](mailto:admin@reachresources.com.au)

### **About Reach Resources Limited**

*Reach Resources is an emerging gold explorer and aspiring gold miner and more recently has broadened its strategy to increase its land holdings focussing on areas prospective for rare earth elements.*

### **Competent Person's Statement**

*The details contained in this report that pertain to exploration results are based upon information compiled by Mr Philip A. Jones, geological consultant. Mr Jones is a Member of the Australasian Institute of Mining and Metallurgy (AusIMM) and Australian Institute of Geoscientists (AIG) and has sufficient experience in the activity which he is undertaking to qualify as a Competent Person as defined in the December 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (JORC Code). Mr Jones consents to the inclusion in the report of the matters based upon his information in the form and context in which it appears.*

### **No New Information**

*Except where explicitly stated, this announcement contains references to prior exploration results, all of which have been cross-referenced to previous market announcements made by the Company. The Company confirms that it is not aware of any new information or data that materially affects the information included in the relevant market announcements.*





### Forward Looking Statement

*This report contains forward looking statements concerning the projects owned by Reach Resources Limited. If applicable, statements concerning mining reserves and resources may also be deemed to be forward looking statements in that they involve estimates based on specific assumptions. Forward-looking statements are not statements of historical fact and actual events and results may differ materially from those described in the forward looking statements as a result of a variety of risks, uncertainties and other factors. Forward looking statements are based on management's beliefs, opinions and estimates as of the dates the forward looking statements are made and no obligation is assumed to update forward looking statements if these beliefs, opinions and estimates should change or to reflect other future developments.*

### SCHEDULE OF TENEMENTS

As at 31 March 2022

Project / Tenement		Interest at Start of Quarter	Interest at End of Quarter	Acquired During the Quarter	Disposed During the Quarter
<b>Primrose Project - Western Australia</b>					
Paynes Find	M59/002	100%	100%	-	-
Paynes Find	M59/010	100%	100%	-	-
Paynes Find	M59/235	100%	100%	-	-
Paynes Find	M59/244	100%	100%	-	-
Paynes Find	M59/396	100%	100%	-	-
Paynes Find	M59/662	100%	100%	-	-
Paynes Find	M59/663	100%	100%	-	-
Paynes Find	P59/2076	100%	100%	-	-
Paynes Find	P59/2094	100%	100%	-	-
Paynes Find	P59/2101	100%	100%	-	-
Paynes Find	P59/2130	100%	100%	-	-
Paynes Find	P59/2151	100%	100%	-	-
Paynes Find	P59/2152	100%	100%	-	-
Paynes Find	P59/2153	100%	-	-	100%
Paynes Find	P59/2159	100%	100%	-	-
Paynes Find	P59/2160	100%	100%	-	-
Paynes Find	P59/2161	100%	100%	-	-
Paynes Find	P59/2174	100%	100%	-	-
Paynes Find	L59/184	100%	100%	-	-
<b>Skyline Rare Earth Project - Western Australia</b>					
Gascoyne	*ELA 09/2643	100%	100%	-	-
<b>Critical Elements Rare Earth Project - Western Australia</b>					
Yinnietharra	EL 09/2354	100%	100%	-	-
Yinnietharra	EL 09/2377	100%	100%	-	-

\*Application pending

## Appendix 5B

### Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Name of entity

Reach Resources Ltd

ABN

79 079 982 235

Quarter ended ("current quarter")

31 March 2022

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (9 months) \$A'000
<b>1.</b>	<b>Cash flows from operating activities</b>		
1.1	Receipts from customers	-	-
1.2	Payments for		
	(a) exploration & evaluation (if expensed)	-	-
	(b) development	-	-
	(c) production	-	-
	(d) staff costs	-	(3)
	(e) administration and corporate costs	(89)	(322)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	-	-
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	-	-
1.8	Other (provide details if material)	-	-
<b>1.9</b>	<b>Net cash from / (used in) operating activities</b>	<b>(89)</b>	<b>(325)</b>
<b>2.</b>	<b>Cash flows from investing activities</b>		
2.1	Payments to acquire:		
	(a) entities	-	(20)
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	(d) exploration & evaluation	(75)	(738)
	(e) investments	(1,800)	(1,800)
	(f) other non-current assets	-	-

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (9 months) \$A'000
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	(d) investments	-	-
	(e) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	100	100
<b>2.6</b>	<b>Net cash from / (used in) investing activities</b>	<b>(1,775)</b>	<b>(2,458)</b>

<b>3.</b>	<b>Cash flows from financing activities</b>		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	2,400	2,400
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	-	-
3.4	Transaction costs related to issues of equity securities or convertible debt securities	(160)	(162)
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	-	-
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
<b>3.10</b>	<b>Net cash from / (used in) financing activities</b>	<b>2,240</b>	<b>2,238</b>

<b>4.</b>	<b>Net increase / (decrease) in cash and cash equivalents for the period</b>		
4.1	Cash and cash equivalents at beginning of period	1,113	2,034
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(89)	(325)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(1,775)	(2,458)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	2,240	2,238

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (9 months) \$A'000
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	<b>Cash and cash equivalents at end of period</b>	<b>1,489</b>	<b>1,489</b>

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1	Bank balances	1,489	1,113
5.2	Call deposits	-	-
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	<b>Cash and cash equivalents at end of quarter (should equal item 4.6 above)</b>	<b>1,489</b>	<b>1,113</b>

6.	Payments to related parties of the entity and their associates	Current quarter \$A'000
6.1	Aggregate amount of payments to related parties and their associates included in item 1	27
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-
Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments		

Payments included in item 6.1 are related to fees and remuneration (inclusive of superannuation) paid to Directors.



<b>7. Financing facilities</b> <i>Note: the term “facility” includes all forms of financing arrangements available to the entity.</i> <i>Add notes as necessary for an understanding of the sources of finance available to the entity.</i>	<b>Total facility amount at quarter end \$A’000</b>	<b>Amount drawn at quarter end \$A’000</b>
7.1 Loan facilities	*450	450
7.2 Credit standby arrangements	-	-
7.3 Other	-	-
7.4 <b>Total financing facilities</b>	450	450
7.5 <b>Unused financing facilities available at quarter end</b>	<b>-</b>	
7.6 Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.		
<div><p>*</p><p>Lender: Bath Resources Pty Ltd</p><p>Interest free</p><p>Unsecured</p><p>Maturity date – The Lender and the Company agreed to forbear the Loan for a period of 12 months from the date the Company’s securities were reinstated to quotation on the ASX (4 June 2021). The Lender and the Company agreed to negotiate in good faith the terms of the repayment of the Loan during the 12 month period following reinstatement (until 4 June 2022).</p></div>		

<b>8. Estimated cash available for future operating activities</b>	<b>\$A'000</b>
8.1 Net cash from / (used in) operating activities (Item 1.9)	(89)
8.2 (Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	(75)
8.3 Total relevant outgoings (Item 8.1 + Item 8.2)	(164)
8.4 Cash and cash equivalents at quarter end (Item 4.6)	1,489
8.5 Unused finance facilities available at quarter end (Item 7.5)	-
8.6 Total available funding (Item 8.4 + Item 8.5)	1,489
8.7 <b>Estimated quarters of funding available (Item 8.6 divided by Item 8.3)</b>	9.08
<p><i>Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3, answer item 8.7 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.7.</i></p>	
8.8 If Item 8.7 is less than 2 quarters, please provide answers to the following questions:	
8.8.1 Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?	
N/A	
8.8.2 Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?	

N/A

8.8.3 Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?

N/A

*Note: where item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 above must be answered.*

## Compliance statement

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Date: 14 April 2022

Authorised by: "By the Board"

(Name of body or officer authorising release – see note 4)

## Notes

1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, *AASB 6: Exploration for and Evaluation of Mineral Resources* and *AASB 107: Statement of Cash Flows* apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee – eg Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.== == == == ==