

ASX:CVV

29 April 2022

## QUARTERLY ACTIVITIES REPORT FOR PERIOD ENDED 31 MARCH 2022

Caravel Minerals Limited ('Caravel' or 'the Company') is pleased to provide the following update on business activities during the March 2022 quarter.

### **Highlights**

- Project Pre-Feasibility Studies continued to progress or be finalised during the quarter
- Engineering studies increased mill throughput capacity by 1.9Mtpa to 13.9Mtpa (Stage One) and 3.8Mtpa to 27.6Mtpa (Stage Two)
- Increased throughput equates to an additional ~5,000tpa of Cu in concentrate –
  increasing Stage One production to ~40,000tpa and Stage Two production to
  ~61,000tpa
- Final evaluation of throughput increases is underway
- Caravel PFS expected delivery in May 2022 with a Bankable Feasibility Study (BFS) planned to commence in June 2022
- Bindi drilling east of the current resource defined a ~1km long copper mineralisation extension corridor trending north northeast
- Dasher drilling demonstrates significant strike extension to the south with potential for additional resources
- Caravel announced Rights Issue to raise up to \$4.52 million for BFS and working capital.

### Caravel Pre-Feasibility Study

In April, Caravel provided an update on the Caravel Copper Project Pre-Feasibility Study ("PFS"), outlining the opportunity to increase the throughput of the plant by approximately 16% from the Scoping Study with the addition of secondary crushing. The reduced size of the feed to the SAG mill circuit enables throughput to increase to 1.9Mtpa for a total ~13.9Mtpa in Stage One expanding to 27.8Mtpa in Stage Two of the Project. The capital cost is expected to be low in relation to revenue increases as a result. The additional throughput equates to an additional 5,000 tonnes of Cu in concentrate per annum, increasing annual production to ~40,000tpa Cu in Stage One and ~61,000tpa in Stage Two.

The higher throughput scenarios are expected to be readily accommodated with only minor amendments to the schedules and no significant variation to designs.

A key change between the 2021 Scoping Study and the PFS has been the utilisation of ACE technologies (Automation, Electrification and Communication). The most important aspect of ACE is the use of diesel-electric drive haul trucks and electric drive drills and shovels which draw power directly from the grid and offer improved performance and reduced operating costs. The ACE studies have indicated haulage cost

savings compared to a manned diesel fleet estimated at around 14% or around \$630M over 28 years. The ACE fleet would also reduce carbon emissions by approximately 56% before power usage is calculated. Diesel price increases have a much lower impact (around 50% less) on the ACE fleet compared to the conventional fleet and mining personnel costs reduce by around 28%. The reduction in operator roles is offset by an increase in higher skilled technical support roles where there are opportunities for more diverse recruitment and more attractive work conditions.

Caravel will publish a Maiden Ore Reserve with the upcoming PFS release expected in May 2022. Further studies are in progress to evaluate the potential for larger pit options based on the Inferred Resources of 1.17 Mt contained copper, which are largely located below the current PFS pit. Initial studies indicate that most of the Inferred Resources may be included in a larger pit based on the same economic assumptions used in the current study. On this basis further work is being investigated to convert the Inferred Resources to Indicated so they may then be brought into the reserves in the future, which would in turn either substantially increase the mine life or allow further substantial increases in plant throughput for a similar mine life.

PFS metallurgical test work based on the 2021 Scoping Study flowsheet continues to demonstrate that Caravel's ore is very amenable to conventional flotation practices. Some metallurgical studies were delayed due to slow laboratory turnaround; however, results to date remain in line with the 2021 Scoping Study.

There will be no substantive changes to the flow sheet and plant design from the 2021 Scoping Study other than the addition of secondary crushing. Overall processing costs remain in line with the scoping study costs. Capital costs, particularly labour and material costs, will increase in line with market conditions.

WA-based construction firm CIVMEC is reviewing the Ausenco engineering design work and provided input into the constructability of the project with an assessment of the following for inclusion in the PFS:

- The opportunity for pre-assembly and modularisation
- Transportation of modules to site
- Bulk material pricing e.g. earthworks, civils, structural, platework and mechanical
- Construction manning and labour rates.

CIVMEC operates Australia's largest heavy engineering facility at Henderson (30km south of Perth, WA) within the Australian Marine Complex and is working with Caravel and Ausenco to provide ongoing support including during the BFS.

Caravel continues to progress approvals and site assessments for the project. Baseline flora, vegetation, aquatic ecology, fauna, soil, geological, physical and geochemical mine waste and indigenous heritage field studies have been completed providing a scientific, evidence-based level of understanding of the local environment. In addition, soil, geological, physical and geochemical mine waste laboratory analysis have also been completed. Approval submissions are being prepared for the formal environmental assessment process.

The existing powerline from Moora to Wongan Hills has been constructed to 132kV capacity although only is currently energised to 33kV. An application to access this power line has been submitted to Western Power which is progressing the design to upgrade and extend the power infrastructure required to supply 65MW of power to the Caravel site to meet the Project's stage one power requirements. The increased power network capacity is expected to provide cost, decarbonisation and reliability benefits to the broader region. Caravel is also working with Western Power and other stakeholders on energy requirements for the Project's potential borefield to abstract and pump the required volumes of water via a new pipeline to the mining and processing site.

Groundwater field work and associated licence applications are well progressed. A number of areas with sustainable yields potential have been evaluated with test bore holes and pump testing. Work is ongoing to further define and secure these resources.

A LiDAR and photogrammetry survey of the general project area and surrounds is near completion. The acquired data will be used to produce a 'digital elevation model' and topographical feature information to be used during detailed project planning.

Cultural heritage surveys have been completed with the Yued Traditional Owners and Caravel's heritage consultants. Caravel continues to work in accordance with Heritage Protection agreements and relevant legislation.

Engagement is continuing with landowners and a range of project stakeholders to obtain input into project design. Opportunities to maximise the use of local providers of goods and services in the Project are being actively explored.

#### Bindi drilling

Caravel reported a number of assay results from its diamond core drilling program at the Bindi Deposit during the quarter.

Two diamond core holes (21CADD016, 21CADD017) returned significant copper intersections in January 2022. 21CADD016 results confirm that the hanging wall fault is shallower than previously interpreted. This provides a larger window of mineralised granite gneiss beneath it. Furthermore, the 21CADD017 results confirm the continuity of mineralisation along strike at depth in the Bindi Copper Deposit.

The assays returned included significant intersections:

• 21CADD016:

192-208m
 21CADD017:
 202-276m
 396-514m
 Incl 398-444m
 16m @ 0.38% Cu
 74m @ 0.24% Cu
 118m @ 0.28% Cu
 46m @ 0.36% Cu

Drilling results from February indicated that bottom of hole samples from seven air core holes into fresh rock returned high copper mineralisation between 0.12-0.50% Cu. This defines an approximate 1,000m long corridor trending north-northeast to the east of the project. The results also show a broad supergene Cu enriched blanket within the weathered regolith profile. This zone extends up to 600m east of the main deposit at Bindi and includes intersections of up to 12m @ 0.21% Cu (22CAAC009 18-30m).

Assay results returned in March show significant copper mineralisation in the Bindi East Limb and Bindi South-East Synform positions. Drill hole 19CADT004 returned significant assays including:

19CADT004

Structural measurements from the diamond core defined a synformal fold below the East Limb, consistent with the position of the South-East Synform seen in previous drilling. Only five holes have so far penetrated into the Lower Limb, results to date appear to indicate better grades are associated with more complexly folded zones as seen in the East Limb.

RC percussion drilling (22CARC009-014) was undertaken to target the surface projection of the Lower Limb to the east. The target area was coincident with a new zone of mineralisation identified by air core drilling at the Bindi Far East prospect (reported 8 February 2022).

The RC drilling confirmed the presence of a new zone of primary sulphide mineralisation, consistent with an "up-dip" extension of the Bindi Lower Limb. The mineralisation intersected to date is associated with zones showing low to moderate development of chalcopyrite sulphides, similar to that seen at Bindi East although with some differences in host rock appearance.

Caravel awaits assays for the RC percussion drilling, after which further drill testing will be required to confirm the interpretation model and the extent and tenor of mineralisation in this new area of mineralisation.

#### Dasher drilling

Caravel received assay results for diamond core drilling (21CADD018-019) in the Dasher deposit and RC percussion drilling (21CARC128-132) 2.3km south of the Dasher deposit. Significant intersections:

21CADD018

8-78m
 Incl 10-48m
 and 60-76m
 240-244m
 70m @ 0.42% Cu
 38m @ 0.52% Cu
 16m @ 0.35% Cu
 4m @ 0.98% Cu

21CADD019

o 252-302m **50m @ 0.48% Cu** 

• 21CARC129a

o 98-112m 14m @ 0.19% Cu

21CARC132

o 138-156m 18m @ 0.27% Cu

Structural measurements from the diamond core showed strongly developed parasitic folding defined within the Dasher mineralised system. The parasitic fold hinge zone plunges to the north northeast which is consistent with smaller scale folding seen elsewhere at Dasher. The parasitic folding is more substantial than previously identified at Dasher and the fold zone hosts wider intervals of higher grade mineralisation which is a feature of fold hinge zones seen at Bindi.

RC percussion drilling (22CARC128-132) was undertaken to target a potential southern strike extension to the Dasher mineralised system. Previous drilling north of the latest work, shows the Dasher mineralised system to be striking toward this area which hosts scattered small but strong IP chargeability features. Surface geochemistry is very subdued in the area however this is likely due to the increasing thickness of transported material over the usual weathered bedrock profile. The new drilling confirms the presence of significant mineralisation through the area, the mineralised zone is interpreted to dip to the east which is consistent with the main Dasher Deposit. A smaller secondary mineralised zone was also identified west of the extension to the Dasher mineralisation.

RC percussion drilling results demonstrate the continuity of the Dasher mineralised system which has now been drill defined for 3,200m along strike. There is increasing evidence to support the interpretation that the mineralised system is continuous between Dasher and Opie. The correlation of parasitic folding with wider intersections of strong mineralisation at Dasher is consistent with observations elsewhere in the project area most notably at Bindi. Further work will be required to target parasitic fold zones along

the strike length of the mineralised trend to Opie. Assays are awaited for one further diamond core hole (21CADD020) completed into the Dasher Deposit. The new drilling data will be included in an updated geological model for the Dasher Deposit and subsequently a new mineral resource.

#### **Corporate**

#### Non-renounceable Rights Issue

On 12 April 2022, Caravel announced a non-renounceable Rights Issue to raise up to \$4,522,260 in additional working capital to allow the company to commence a BFS for Caravel Copper Project.

Caravel offered Eligible Shareholders the opportunity to acquire up to 15,594,001 shares on the basis of 1 share for every 25 shares held, at an issue price of 29 cents per New Share. Eligible Shareholder can also apply for shares in excess of their entitlements under a shortfall offer. The rights issue closes on 12 May 2022.

At the date of this report, the Company had:

- 389,850,017 shares on issue;
- 4,465,100 unlisted options exercisable at \$0.08 expiring 30 June 2022 on issue;
- 1,250,000 unlisted options exercisable at \$0.08 expiring 30 September 2022 on issue;
- 6,506,716 unlisted options exercisable at \$0.30 expiring 30 June 2023
- \$2.36M held in cash reserves; and
- Nil debt.

Approximately \$2,509,000 of exploration and evaluation expenditure expensed during the quarter predominantly comprised:

- Direct drilling costs;
- Mining and Processing studies
- Technical staff costs; and

The aggregate amount of payments to related parties and their associates during the quarter of approximately \$286,000 (refer Item 6 of the accompanying Appendix 5B) comprises the following:

- Director fees (\$162,850);
- Mitchell River Group consulting services (\$98,864); and
- Mitchell River Group serviced office (\$24,000)

There were no substantive mining production and development activities during the quarter.

This announcement was authorised for release by the Board of Directors.

#### For further information, please contact:

Dan Davis
Company Secretary
Caravel Minerals Limited
Suite 1, 245 Churchill Avenue, Subiaco WA 6010

Telephone: 08 9426 6400

Email: investors@caravelminerals.com.au

# ABOUT CARAVEL MINERALS

Caravel Minerals Limited (ASX:CVV) is advancing Pre-Feasibility Studies for the Caravel Copper Project – a large-scale, long-life copper mining and processing project located 150km northeast of Perth in Western Australia's Wheatbelt region. Current mineral resources for Measured, Indicated and Inferred are 1.18 billion tonnes at 0.24% Cu for 2.84Mt contained Cu (0.1% cut-off), making Caravel Australia's largest undeveloped copper project based on contained Cu. The Project will use conventional open-pit mining and simple flotation processing methods to process 12Mtpa of ore from years 1 to 5 ramping up to 24Mtpa from year 6. Copper will be sold as a concentrate and exported via road through local ports with ~35,000 tpa copper in concentrate in years 1 to 5 and ~65,000 tpa copper in concentrate from year 6. Current mine life is >25 years.

## Appendix 5B

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

Name	of	en	tity
------	----	----	------

Caravel Minerals Limited		
ABN	Quarter ended ("current quarter")	
41 120 069 089	31 March 2022	

Con	solidated statement of cash flows	Current quarter (3-months) \$A'000	Year to date (9-months) \$A'000
1.	Cash flows from operating activities		
1.1	Receipts from customers	-	-
1.2	Payments for		
	(a) exploration & evaluation	(2,509)	(8,502)
	(b) development	-	-
	(c) production	-	-
	(d) staff costs	(350)	(952)
	(e) administration and corporate costs	(10)	(691)
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
1.8	Other (provide details if material)	-	-
1.9	Net cash from / (used in) operating activities	(2,869)	(10,144)

2. Ca	sh flows from investing activities	
2.1 Pa	yments to acquire or for:	
(a)	entities	-
(b)	tenements	-
(c)	property, plant and equipment	(14)
(d)	exploration & evaluation	-
(e)	investments	-
(f)	other non-current assets	-

ASX Listing Rules Appendix 5B (17/07/20)

Con	solidated statement of cash flows	Current quarter (3-months) \$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)	-	-
2.6	Net cash from / (used in) investing activities	(14)	(44)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	-
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	-	971
3.4	Transaction costs related to issues of equity securities or convertible debt securities	-	(5)
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)	-	-
3.10	Net cash from / (used in) financing activities	-	966

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	6,910	13,249
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(2,869)	(10,144)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(14)	(44)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	-	966

Con	solidated statement of cash flows	Current quarter (3-months) \$A'000	Year to date (9-months) \$A'000
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of period	4,027	4,027

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	4,007	6,890
5.2	Call deposits	20	20
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	4,027	6,910

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	286
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.

- Directors remuneration \$162,850
- Payment for provision of serviced office and geological services of \$122,864 to Mitchell River Group, a party related by director Alasdair Cooke.

7.	Financing facilities  Note: the term "facility' includes all forms of financing arrangements available to the entity.  Add notes as necessary for an understanding of the sources of finance available to the entity.	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
7.1	Loan facilities	-	-
7.2	Credit standby arrangements	-	-
7.3	Other (please specify)	-	-
7.4	Total financing facilities	-	-
7.5	Unused financing facilities available at qu	uarter end	-
7.6	Include in the box below a description of each rate, maturity date and whether it is secured facilities have been entered into or are proposinclude a note providing details of those facilities.	or unsecured. If any add osed to be entered into af	itional financing

8.	Estimated cash available for future operating activities	\$A'000
8.1	Net cash from / (used in) operating activities (item 1.9)	(2,869)
8.2	(Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	-
8.3	Total relevant outgoings (item 8.1 + item 8.2)	(2,869)
8.4	Cash and cash equivalents at quarter end (item 4.6)	4,027
8.5	Unused finance facilities available at quarter end (item 7.5)	-
8.6	Total available funding (item 8.4 + item 8.5)	4,027
8.7	Estimated quarters of funding available (item 8.6 divided by item 8.3)	1.4

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.

- 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?

Answer: Caravel Minerals had a had a higher cash burn rate in the quarter whilst it completed drilling programs and major project studies. PFS Drilling is completed and PFS is largely complete and the Company does not expect to have this level of cash outflows until commencement of BFS.

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?

Answer: Caravel has initiated a 1 for 25 rights issue to raise up to \$4.5 as interim funding and expects to pursue a larger capital raising before commencing major BFS activities in the second half of 2022 and the board is confident of a successful outcome.

- 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?
- Answer: Caravel expects to be able to continue its operations on the basis that it will raise appropriate levels of funding to complete project studies as and when required.
  - 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**

- 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:	29 April 2022
Authorised by:	Board of Directors
	(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.
- 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.