

31 October 2022

# QUARTERLY ACTIVITIES REPORT

## FOR THE PERIOD ENDED 30 SEPTEMBER 2022

### Key Points

- **Caravel Copper Project Pre-Feasibility Study (“PFS”) update - Single Train Option was completed by Ausenco and reported in September 2022.**
- **The studies resulted in significant improvements to ‘life of mine’ project economics, primarily due to:**
  - **Adoption of high pressure grinding rolls (HGPRs) improving capital and operating costs for a large throughput single processing train**
  - **Inclusion of Coarse Particle Flotation (CPF) in the process flowsheet reducing capital and operating costs when compared to PFS flowsheet**
  - **Two train flotation circuit presented in the PFS is now reconfigured into a single train ~27Mtpa throughput plant, simplifying construction, enhancing operability and improving both capital and operating costs**
  - **Single Train design and the adoption of HGPR and CPF significantly enhance project economics including reduced processing cash unit costs by up to AUD\$1.23/t of ore, reducing installed power demand by up to 22MW and reducing water consumption by ~1.8Gipa**
- **Drilling results from Caravel’s Bindi Copper Deposit:**
  - **Assay results for diamond drill holes 22CADD001-004 demonstrate better grades than current estimates included in Ore Reserve**
  - **Results included:**
    - **20m grading 0.59% Cu from 104m including 14m grading 0.74% Cu from 110m (22CADD002)**
    - **98m grading 0.27% Cu from 94m including 12m grading 0.51% Cu from 98m (22CADD003)**
    - **74m grading 0.60% Cu from 44m (22CADD004).**
- **A \$3.0 million placement completed for Caravel Copper Project optimisation studies and critical path activities.**

## Caravel Copper Project, WA

Caravel Minerals' Copper Project is located 120km north-northeast of Perth in Western Australia's Wheatbelt region, between the towns of Calingiri and Wongan Hills. Caravel's copper deposits form part of a regional porphyry style copper-molybdenum-gold mineralised belt discovered in a previously unexplored part of the Yilgarn Craton. The Project combines the Bindi, Dasher and Opie deposits.

### Caravel Pre-Feasibility Study Update

During the quarter, Caravel announced a Pre-Feasibility Study Update ("PFS Update") (see ASX announcement 20 September 2022). This announcement was further to the Caravel Copper Project Pre-Feasibility Study and Maiden Ore Reserve announcement ("PFS") on 12 July 2022. The PFS outlined opportunities for improvements to the process plant, including consolidation of the plant into a single ~27Mtpa throughput train, the use of High-Pressure Grinding Rolls ("HPGR") to replace Semi-Autogenous Grinding ("SAG") Mills and the adoption of Coarse Particle Flotation ("CPF").

PFS Update studies into these opportunities were undertaken by the PFS engineers, Ausenco Services Pty Ltd ("Ausenco"). The PFS Update reported on the capital and operating cost savings that may be achieved from adopting these initiatives. Other elements of the Caravel Copper Project as described in the PFS are unchanged.

### Results of Single Train Option Study

The Caravel Copper Project PFS defined a robust copper project capable of producing ~62,000tpa of copper in concentrate at low cost (C1 ~US\$1.72/lb Cu), generating strong cashflows over an initial 28-year mine life (refer ASX Announcement 12 July 2022). Technical, environmental and commercial studies completed for the PFS indicate that the Project can be built and operated with low technical risks, minimal environmental impact and positive economic and social outcomes.

The PFS identified a number of options to improve project economics and operability, including:

1. Consolidation of the proposed dual train process plant into a simplified, Single Train design.
2. Replacement of Semi-Autogenous Grinding (SAG) mills with High-Pressure Grinding Rolls (HPGR) in the primary comminution circuit.
3. Inclusion of Coarse Particle Flotation (CPF) in the flotation circuit.

Ausenco investigated these options and finalised their assessment in September.

Consolidating the flotation circuit into a single train design provides significant efficiencies in construction and operation, resulting in forecast capital savings of around A\$77M and operating costs savings of around A\$0.46 /t ore.

The use of High-Pressure Grinding Rolls (HPGR) as an alternative to Semi-Autogenous Grinding (SAG) mills reduces consumption of both power and operating consumables and results in a A\$0.68/t reduction in operating costs and an estimated A\$23m saving in upfront capital.

The inclusion of CPF the circuit will further reduce operating and capital costs through lower power usage due to the coarser grind size and reduced volumes through the flotation plant. Additional benefits will accrue through improved tailings characteristics and better water returns, lowering overall water requirements, but the financial impacts of this have not yet been included in the costings.

The cumulative impact on the Project's financial model is as follows:

- Processing unit costs are reduced by A\$1.23/t ore, primarily due to lower power costs relating to the use of HPGR and CPF. This increases annual free cashflow by ~A\$35m, or A\$870m over life of mine.
- Capital costs are reduced by A\$100M, primarily due to capital efficiency in the Single Train design
- The operating cost reductions result in a C1 Cost of US\$1.54/lb and an AISC of US\$2.37/lb (see Table 2)
- The changes to cashflows and capital result in an increase in Project NPV (7%) to A\$1.5B (range A\$1.3B to A\$1.7B) (see Table 3)

- The revised 'life of mine' investment highlights incorporating the Single Train improvements are presented below in Figure 1.

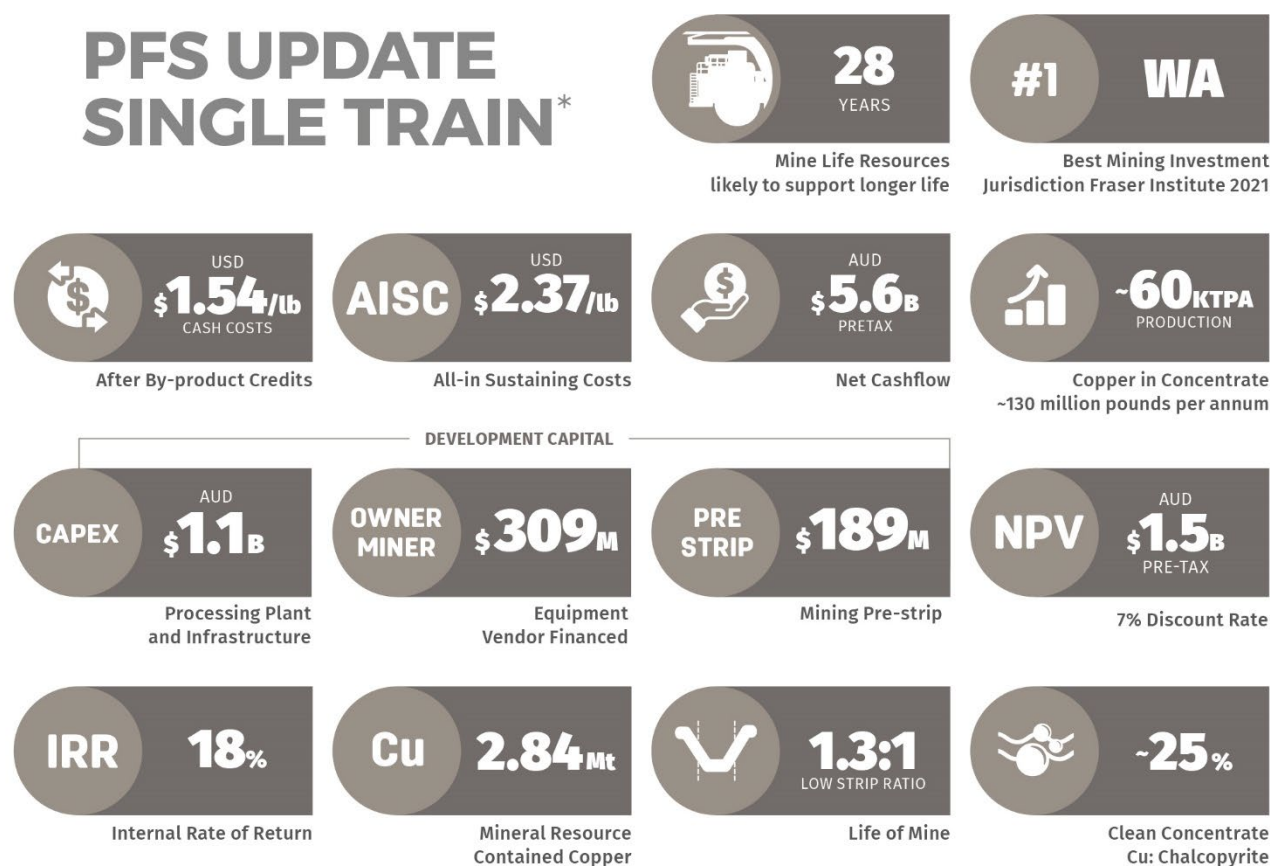


Figure 1: PFS Update 'life of mine' investment highlights for the Caravel Copper Project Single Train.

The three options studied all demonstrated substantial benefits to the Project and are now incorporated into the project base case design and financial model to be used in the DFS. There is no change (or delay) to project or mine scheduling resulting from the improvements.

The study outcomes presented in the PFS Update were based on changes to the comminution and flotation circuits within the process plant. All other study areas including Ore Reserves, Mineral Resources, Mining Operations, Infrastructure studies reported in the July PFS remain unchanged as presented in Figure 2. The material assumptions in respect of the PFS financial forecasts and production targets continue to apply with no material change to the assumptions. As previously reported, a total of 81.6% of the Project's mine life remains in Ore Reserve with 18.4% as Inferred Mineral Resources (see ASX Announcement – 20 September 2022).

	JULY 2022	SEPTEMBER 2022
STUDY AREA	PRE-FEASIBILITY STUDY	PFS UPDATE
Tenements	E70/2788, E70/3674, E70/3680, R70/0063, MLA70/1410, MLA70/1411, GPLA70/262, GPLA70/263	No change
Mineralisation	Porphyry-style chalcopyrite sulphide mineralisation associated with foliated granitic gneiss	No change
Ore Reserve	583.4Mt at 0.24% copper	No change
Mineral Resources	1.18 Billion tonnes @ 0.24% Cu and 48 ppm Mo for 2.84Mt of contained copper (0.1% Cu cut-off)	No change
Mining Method	Conventional open-pit using ACE technologies including: diesel-electric haul trucks and electric drills and shovels	No change
Operating Structure	Owner-miner	No change
Processing Capacity	27.8Mtpa throughput	27Mtpa throughput
Processing Flowsheet	Primary crushing, secondary crushing, <b>grinding by SAG</b> and ball mill <b>with a pebble crushing circuit</b> , followed by conventional rougher and cleaning flotation, thickening and filtering	Primary crushing, secondary crushing, <b>grinding by HGPR</b> and ball mill, followed by conventional rougher, <b>CPF</b> , cleaning flotation, thickening and filtering
Recovery	~92% Cu	No change
Production	~62,000tpa (copper in concentrate)	~60,000tpa (copper in concentrate)
Power	Existing access to grid-power from WA State (SWIS) grid, with renewable energy mix	No change
Water	Borefield ~60km to the west with associated pipeline	No change
Concentrate Export	Concentrate trucked by public road 340km to Bunbury Port or 400km to Geraldton Port	No change

Figure 2: PFS and PFS Update project comparison including replacement of Semi-Autogenous Grinding (SAG) mills with High-Pressure Grinding Rolls (HPGR) in the primary comminution circuit and inclusion of Coarse Particle Flotation (CPF) in the float circuit.

## Processing Plant Description

The processing plant described in the July 2022 PFS is a conventional copper concentrator suitable for treating low sulphur copper porphyry style ores such as the Caravel ores. The updated processing plant described in the September 2022 PFS Update reflects the replacement of SAG with HPGR and the inclusion of CPF as well as modifications for a single train process plant with 27 Mtpa capacity and is described at the same level of detail as reported in the Pre-Feasibility Study (July) below:



## Crushing and Grinding

ROM ore is crushed in two stages using a primary gyratory crusher and secondary crusher, with crushed ore reporting to the crushed ore stockpile. Crushed ore is reclaimed from the stockpile and fed to the HPGR and ball milling circuit, consisting of two HPGR units, two wet screens and two ball mills. HPGR discharge reports to the HPGR discharge screen, with the oversize material recycling back to HPGR feed. HPGR discharge screen undersize is combined with ball mill discharge and flotation collector and is pumped to the primary cyclone cluster. Cyclone underflow reports to ball mill feed for further size reduction whilst cyclone overflow from both ball mill circuits reports to a single flotation circuit.

## Flotation

The copper flotation circuit consists of six forced air mechanical rougher/scavenger flotation cells followed by rougher concentrate regrind and three stages of cleaner flotation. For rougher flotation, Huntsman W22 frother and SIBX collector are added. Copper rougher tailings reports to a coarse particle flotation circuit (CPF). The copper rougher tailings reports to the cyclone cluster. CPF cyclone overflow reports to a combined CPF tailings stream. The CPF cyclone underflow is fed to two HydroFloat® aerated fluidised bed flotation cells, where Huntsman W22 frother and PAX and diesel collectors are used to recover a coarse particle concentrate. The coarse particle concentrate is dewatered in a cyclone cluster and reground in a ball mill before being circulated back to copper rougher feed. The combined coarse particle flotation tailings and scavenger tailings report to the tailings thickener.

Copper rougher and scavenger concentrate reports to the regrind circuit where a tower mill regrinds the concentrate to affect further mineral liberation. The regrind circuit product is fed to the copper cleaner flotation circuit.

The copper cleaner circuit consists of three stages of cleaning and one bank of cleaner scavenger cells. The first and second cleaners together with the cleaner scavenger cells are forced air mechanical tank cells. The third cleaning stage consists of a single Jameson Cell with 70% tailings recycle. Hydrated lime slurry, SIBX collector and Huntsman W22 frother addition is adjusted across the cleaning circuit to maximise recovery. Concentrate recovered from the first copper cleaner is pumped to the second copper cleaner flotation cells for further upgrading, with the first cleaner tailings gravitating to the cleaner scavenger cells. The copper cleaner scavenger cells recover a low-grade concentrate which is pumped to the regrind circuit. The cleaner scavenger tailings stream reports to the flotation tailings thickener.

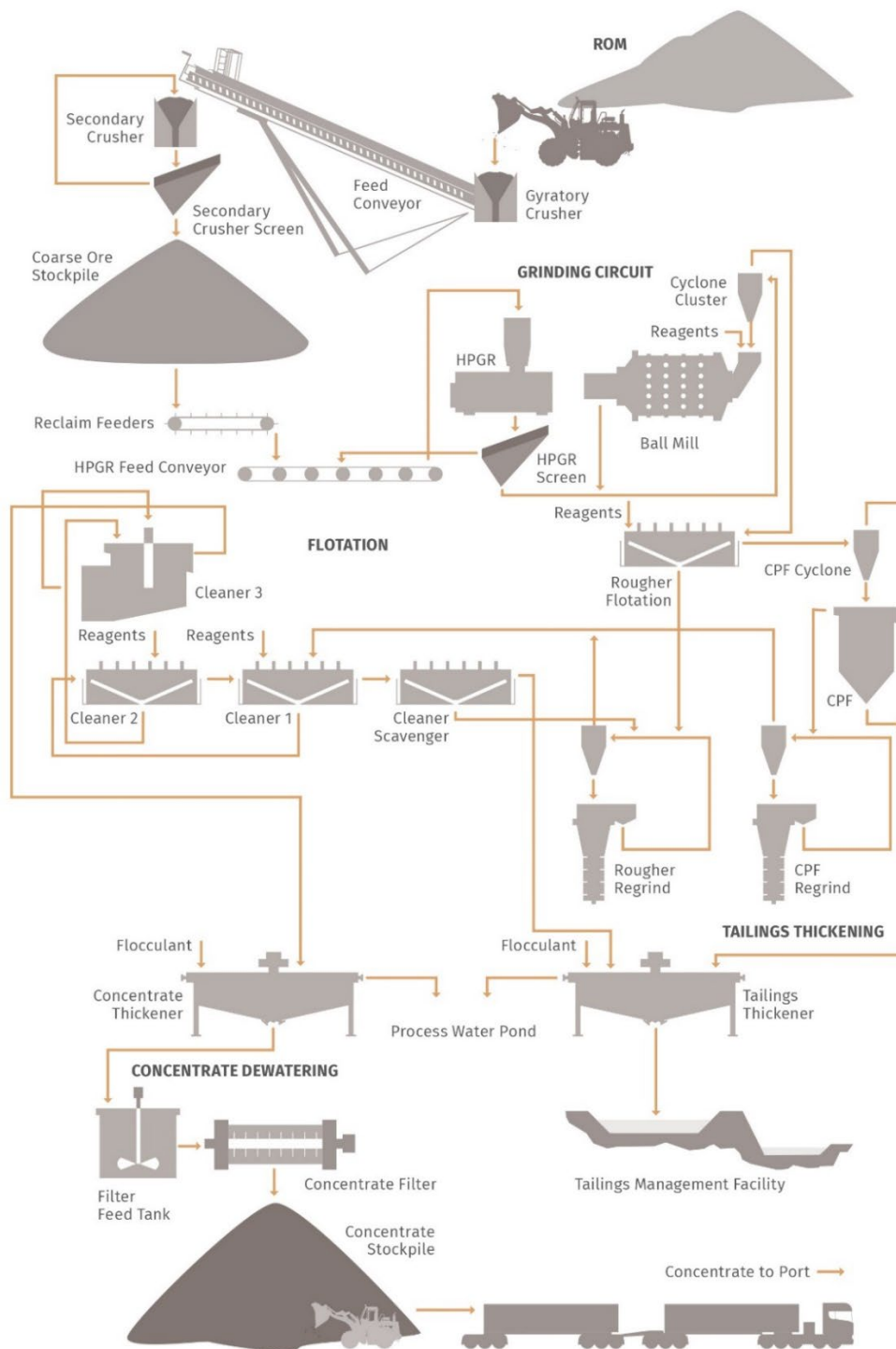
The second copper cleaner concentrate is pumped to the Jameson cell for further upgrading, producing final copper concentrate. The tailings from the second copper cleaner cells report back to the head of the first copper cleaner bank and the tailings from the Jameson cell reports to the head of the second copper cleaner bank. The Jameson cell final copper concentrate reports to a copper concentrate thickener with the underflow product reporting to agitated filter feed tanks. This slurry is then pumped to a pressure filter to produce a copper concentrate filter cake product which is loaded into covered containers for transportation by road to port.

## Tailings Thickening

Flotation tailings report to the tailings thickener and the thickened tailings are then pumped to the tailings management (TMF) facility. Water reclaimed from TMF is returned to the process water storage pond.

A schematic diagram of the process flowsheet is illustrated in Figure 3.

## REVISED PROCESS FLOWSHEET



**Figure 3: Updated process flowsheet incorporating High-Pressure Grinding Rolls (HPGR) in the primary comminution circuit, inclusion of Coarse Particle Flotation (CPF) in the float circuit as well as single train modifications.**

## Material Assumptions and Financial Modelling

### Capital Expenditure

The adoption of a single train processing plant with revised comminution and flotation circuits resulted in savings of approximately \$100M from capital expenditure that was reported in the PFS. Initial capital expenditure is now estimated to total \$1.1B (PFS: \$1.205M) for the construction of the process plant, site infrastructure, tailings storage and borefield.

Capital expenditure in relation to the comminution circuit have been estimated to an accuracy of  $\pm 35\%$ . Other capital expenditure is unchanged from the PFS and is estimated to an accuracy of  $\pm 25\%$  and is equivalent to an AACE Class 4 estimate.

**Table 1: Caravel Copper Project Initial Capital costs**

Initial Capital Expenditure A\$m	PFS Update (September 2022)	PFS (July 2022)
	Year 0 to 3	Year 0 to 3
<b>Process plant and site infrastructure</b>		
Plant direct costs	585	680
Site infrastructure	112	113
Tailings storage management	51	51
Water supply	66	69
Owner costs and indirects	176	172
Contingencies	101	111
Mine infrastructure	8	8
	<b>1,100</b>	<b>1,205</b>
Mining equipment	309	309
Mining pre-strip	176	189
<b>Total Initial Capital Expenditure</b>	<b>1,584</b>	<b>1,702</b>

### Operating Costs

The modification of the flow sheet from SAGB to HPGRB, and the addition of CPF, have reduced C1 Processing costs by ~ 11% to an estimated US\$1.54 /lb of copper (PFS: US\$1.72/lb). Reduced costs are primarily from lower consumption of power and operating consumables.

Mining and other processes are unchanged and costs remain as reported in the PFS.

**Table 2: Caravel Copper Project C1 Costs**

Life of Mine Unit C1 Costs	PFS Update (September 2022)	PFS (July 2022)
	US\$/lb Sold	US\$/lb Sold
Mining Costs	0.44	0.44
Processing Cost	0.82	1.01
Site & General Administration	0.09	0.09
Logistics	0.21	0.21
Treatment and Refining Costs	0.16	0.16
By-Product Credits	(0.19)	(0.19)
<b>Total</b>	<b>1.54</b>	<b>1.72</b>

### Project Financial Assumptions and Analysis

Utilising a USD\$4.00 /lb copper price and USD/AUD 0.72 exchange rate, the reduced costs result in an additional \$1.0B in net pre-tax Project cashflows, which over 28-years mine life are estimated to be \$5.6B (PFS: \$4.622B) on revenues of \$17.6B (unchanged from PFS).

At a 7% real discount rate the Project cashflows generate a pre-tax Net Present Value (NPV) of \$1.5B (within a range of \$1.3B to \$1.7B) (PFS: \$1.066B) and pre-tax IRR of 18% (within a range of 16% to 20%) (PFS:14.7%).

The Project is forecast to repay up-front development capital in 5.6 years (PFS: 6.8 years) from the start of production.

**Table 3: Life of Mine Financial Economics**

Life Of Mine Financial Economics (A\$)	PFS Update (September 2022)	PFS (July 2022)
Cu Revenue (net of payability and TCs/RCs)	<b>\$17.6B</b>	<b>\$17,555m</b>
Net cash flow (pre-tax)	<b>\$5.6B</b>	<b>\$4,622m</b>
Pre-tax NPV (7% discount rate)	<b>\$1.5B (range from 1.3B to 1.7B)</b>	<b>\$1,066m</b>
Pre-tax IRR	<b>18% (range of 16% to 20%)</b>	<b>14.7%</b>
Capital payback period	<b>5.6 years</b>	<b>6.8 years</b>

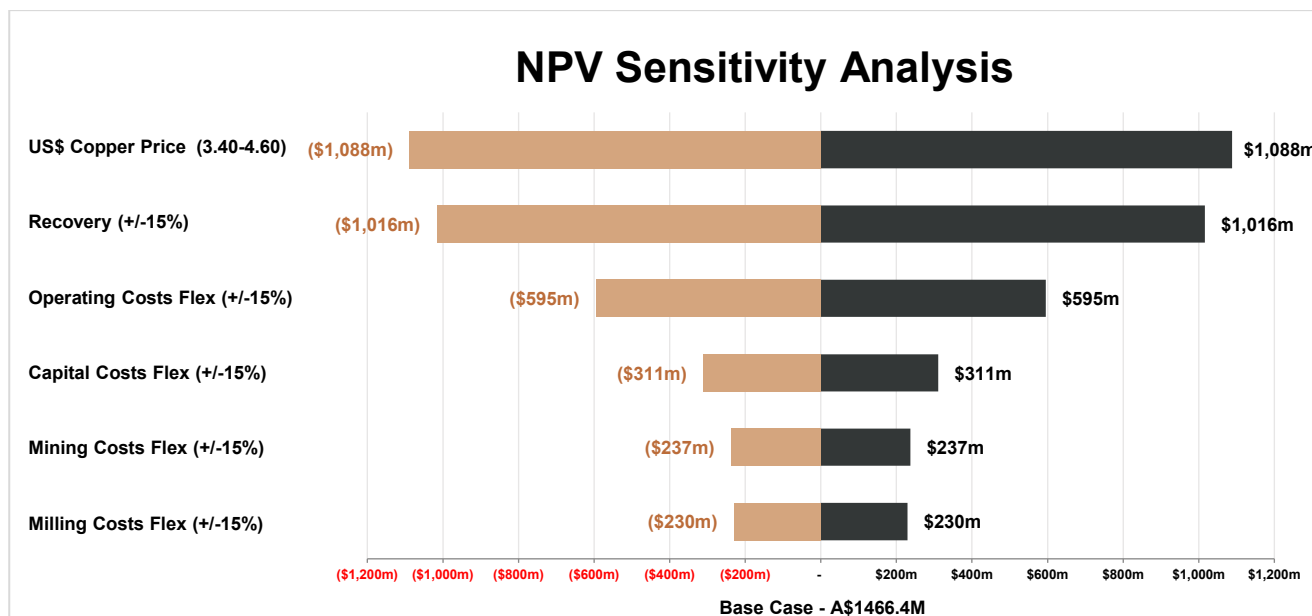
Assumptions remain consistent with the PFS unless noted.

### Sensitivity

The following are the major sensitivities of the project.

Sensitivity Analysis of NPV Outcome (A\$M- pre-tax basis @ 7%)							
Sensitivity Analysis	-15%	-10%	-5%	Base	+5%	+10%	+15%
Cu Price	378	741	1,104	1,466	1,829	2,192	2,554
Cu Grade	450	789	1,128	1,466	1,805	2,144	2,482
All Operating Costs	871	1,070	1,268	1,466	1,665	1,863	2,062
Capital Costs	1,156	1,259	1,363	1,466	1,570	1,673	1,777
Milling Costs	1,237	1,313	1,390	1,466	1,543	1,619	1,696
Mining Costs	1,229	1,308	1,387	1,466	1,545	1,625	1,704





## Bindi Copper Deposit

### Metallurgical core drilling

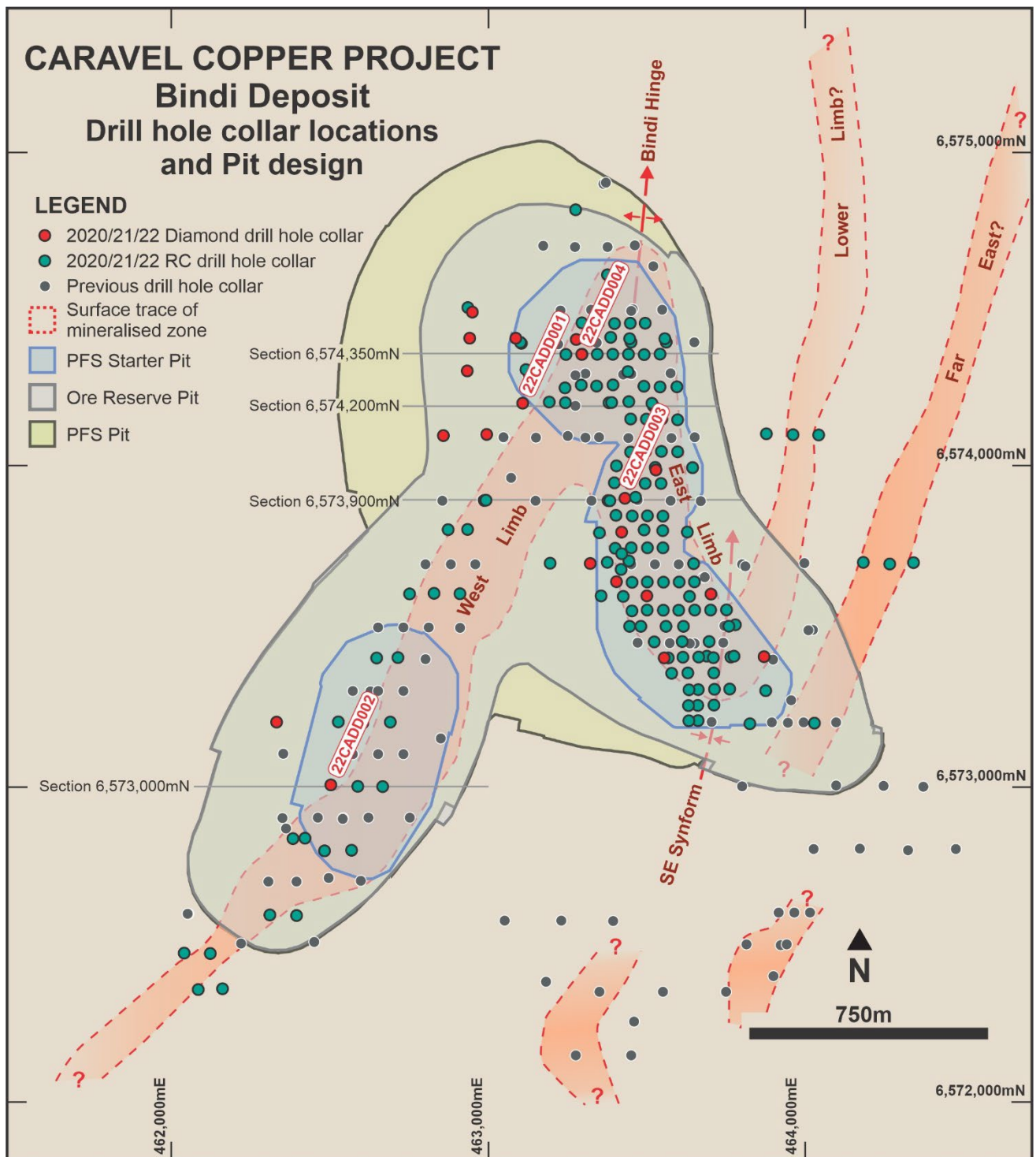
During the quarter, Caravel received assay results for four diamond core holes (22CADD001-004) completed within the proposed Bindi starter pits to provide material for metallurgical testing. Hole 22CADD001 targeted the Bindi Hinge where it transitions into the West Limb, hole 22CADD002 targeted the West Limb, hole 22CADD003 was completed into the East Limb and hole 22CADD004 tested the Bindi Hinge (see ASX announcement 18 August 2022).

All the diamond core holes intersected good mineralisation in the target zones confirming the continuity and tenor of mineralisation within the Ore Reserve reported as part of the Caravel Copper Project PFS (refer ASX Announcement 12 July 2022). Hole 22CADD002 intersected a significant dolerite in the lower half which has stoped out the mineralisation in that area. The subvertical dolerite can be seen to trend northwest in the airborne magnetic imagery. Supergene mineralisation seen in holes 22CARC008 and 22CARC023 (refer ASX Announcement of 3 May 2022 and ASX Announcement of 19 May 2022) was not seen in 22CADD002 on the same section, suggesting there has been little lateral movement of copper within the weathering profile in this area.

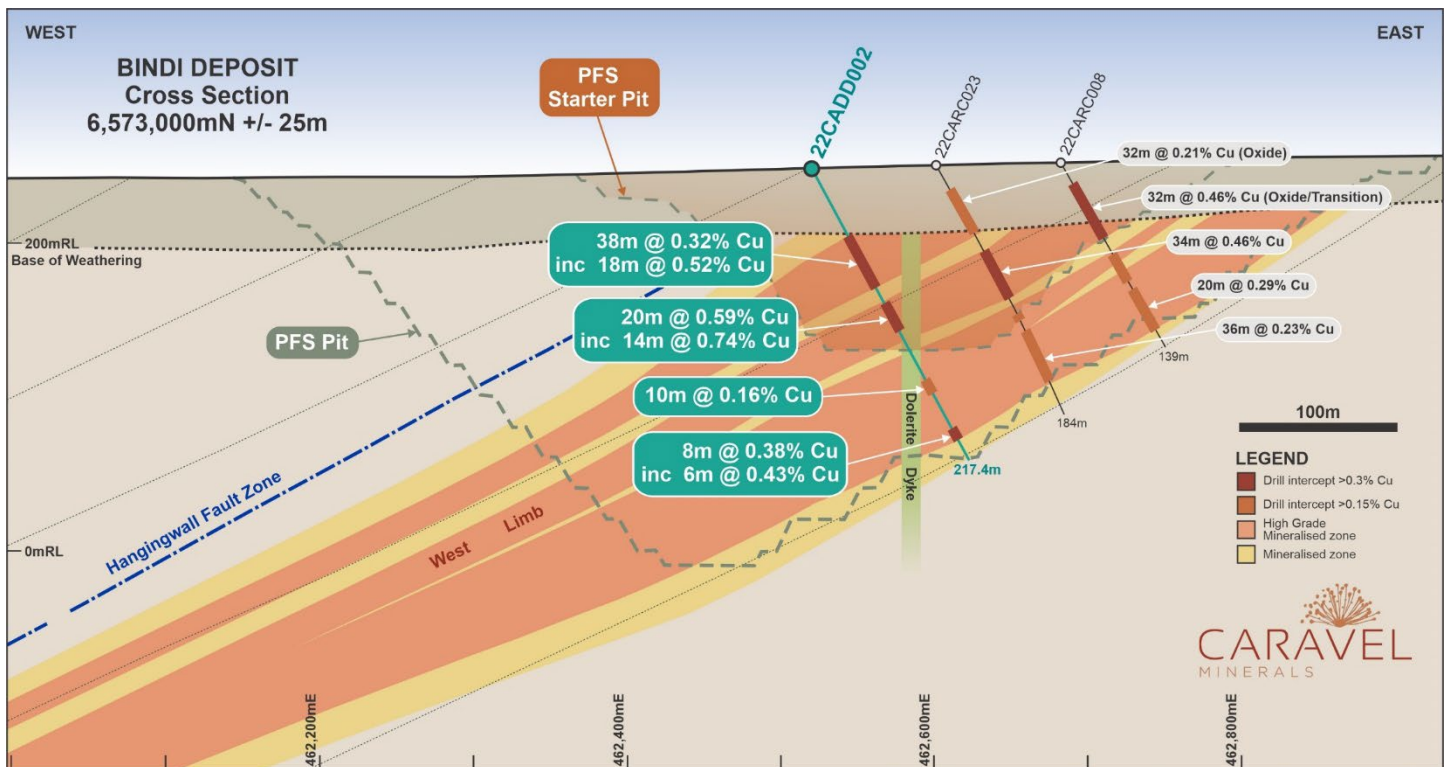
Hole 22CADD004 intersected strong mineralisation through the nose of the Bindi Hinge, this correlates well with higher grade mineralisation seen in the broad intersection in hole 21CARC118.

Collar locations for all holes reported are illustrated in Figure 4. The downhole extent of mineralisation is illustrated on schematic cross sections in Figure 5-8.

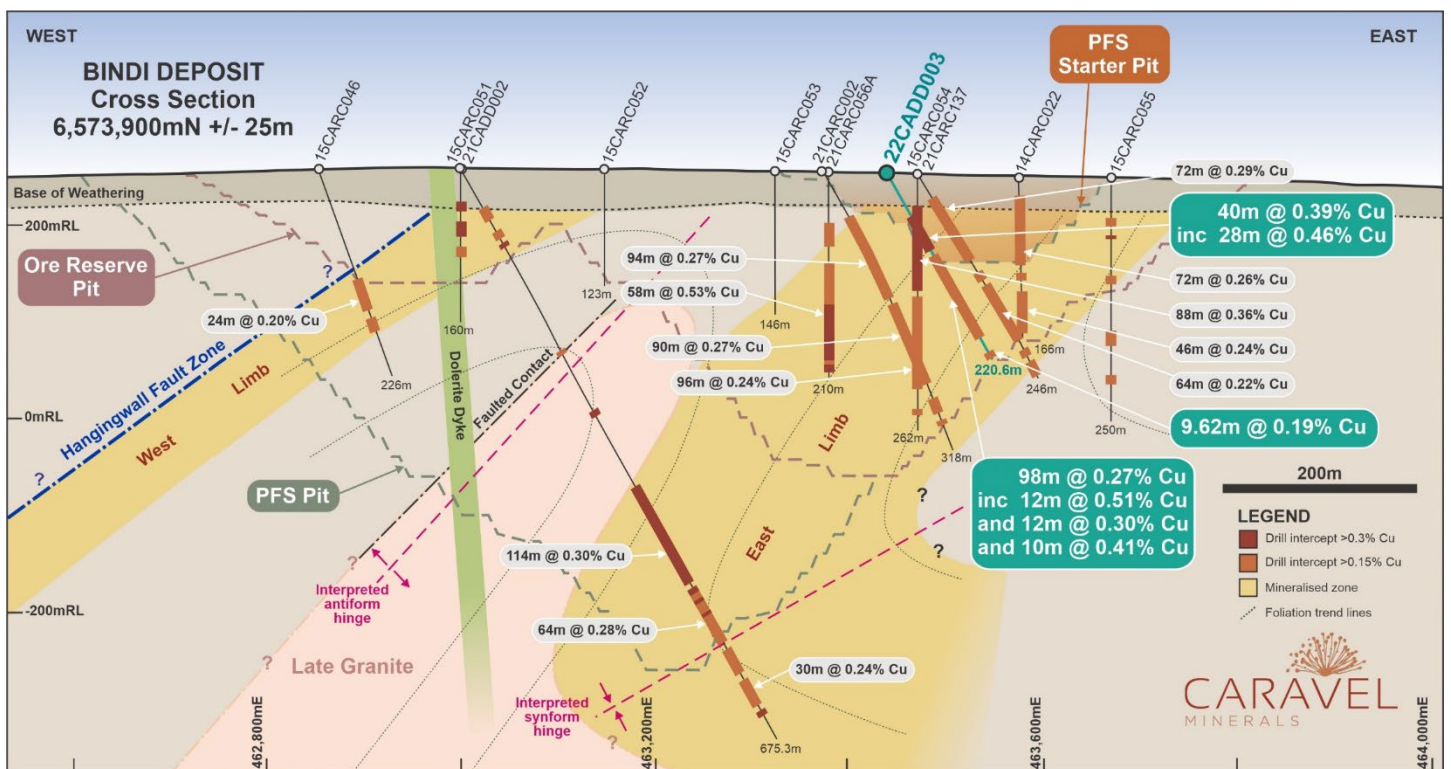
An additional seven diamond core holes (22CADD005-011) have been completed to provide geotechnical data to assist Definitive Feasibility Study design work of the Bindi Deposit starter pits and mine infrastructure. Assay results are awaited for all of these holes.



**Figure 4: Drilling status plan of the Bindi copper deposit showing the locations of the reported diamond core drill holes. Drill holes from the 2021/22 program, previous drill collars, simplified geology and the 2022 PFS optimised pits are shown for reference.**

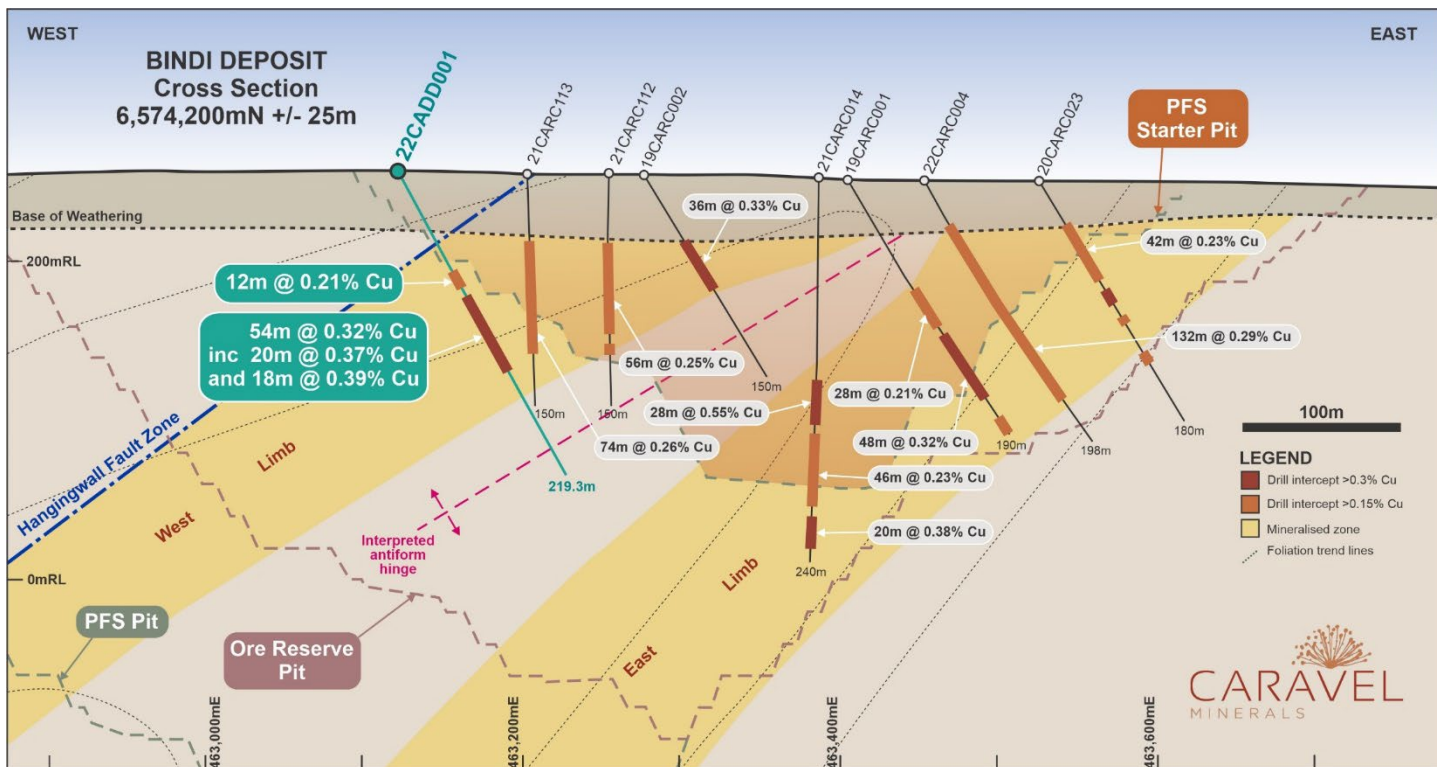


**Figure 5: Schematic geological cross section of the Bindi Deposit West Limb (6,573,000mN) showing location of recent Diamond Core (CADD prefix) drill hole and mineralised intersections.**

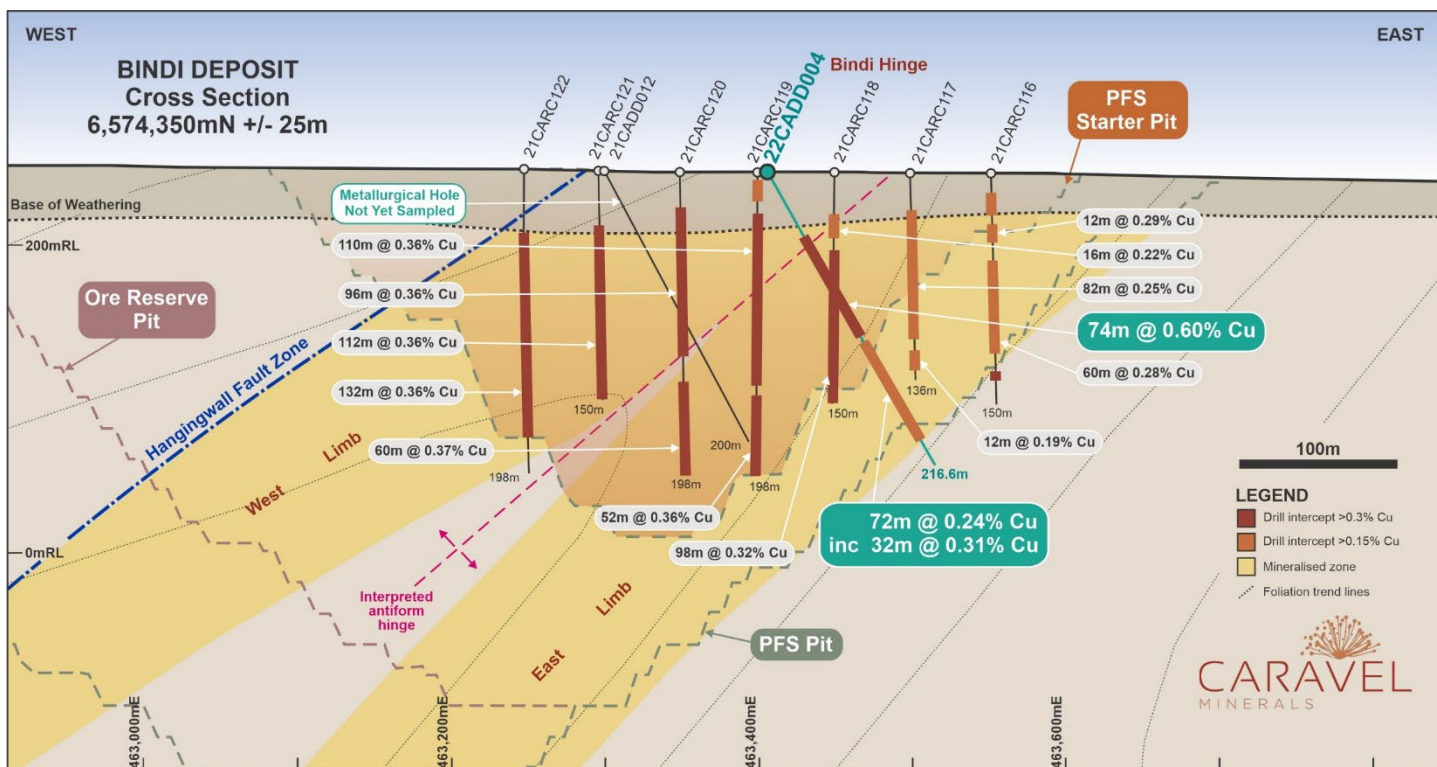


**Figure 6: Schematic geological cross section of the Bindi Deposit East Limb (6,573,900mN) showing location of recent Diamond Core (CADD prefix) drill holes and mineralised intersections.**

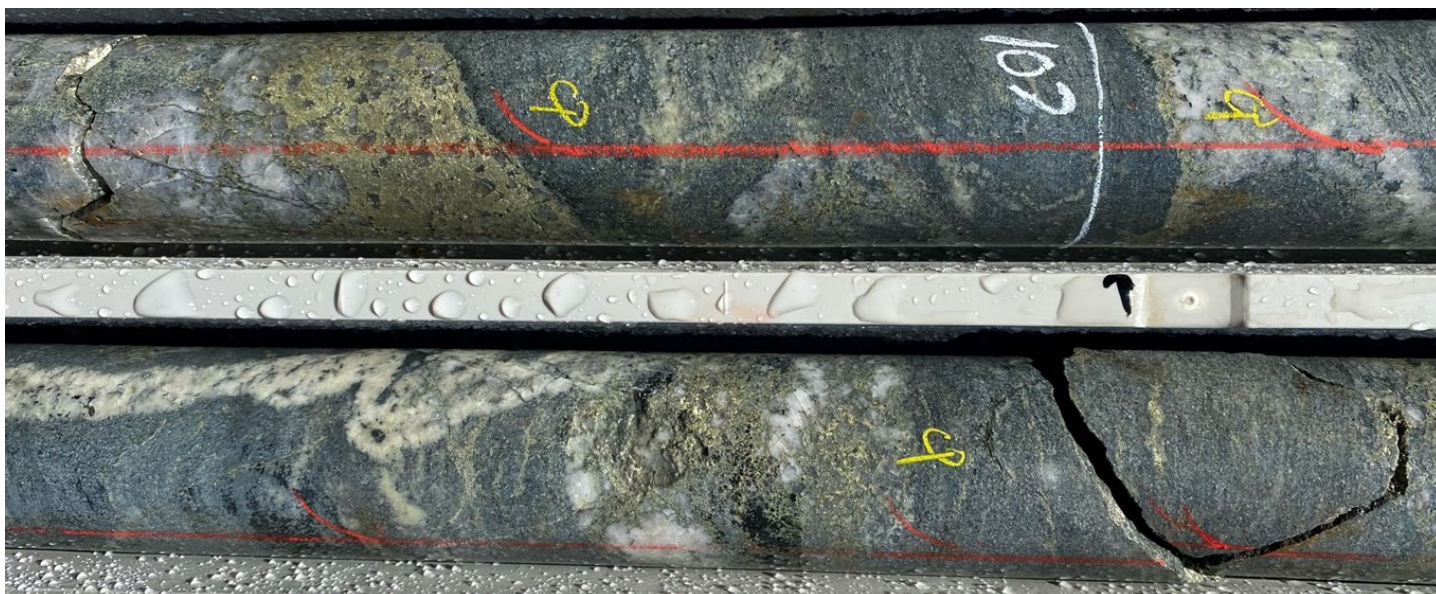




**Figure 7: Schematic geological cross section of the Bindi Deposit West Limb (6,574,200mN) showing location of recent Diamond Core (CADD prefix) drill holes and mineralised intersections.**



**Figure 8: Schematic geological cross section of the Bindi Deposit Hinge Zone (6,574,350mN) showing location of recent Diamond Core (CADD prefix) drill holes and mineralised intersections.**



**Figure 9: Diamond core from 22CADD004 (Bindi Hinge) 107-109m showing strong chalcopyrite stringer mineralisation.**

## Further Work

Caravel has suspended drilling activities during the cropping season and it is anticipated that major field work will resume in December 2022 after harvest.

Future drilling will include:

- Additional RC percussion drilling for to provide increased confidence in an updated resource estimate currently underway;
- Further geotechnical diamond drill core holes; and
- Aircore sterilisation drilling for proposed mine infrastructure.

## Corporate

### Completion of share placement

During the quarter, Caravel completed a \$3.0 million share placement, by the issue of 17,647,049 ordinary shares at 17c, to complete optimisation studies and continue critical path activities. The share placement was in advance of raising funding in the second half of 2022 for definitive feasibility studies.

A further \$100,000 was raised upon the exercise of 1,250,000 8c strike options by Richard Monti, a director.

### Annual General Meeting

Caravel's Annual General Meeting will be held at Suite 1, 245 Churchill Avenue, Subiaco, WA on 17 November 2022 at 10:00am (AWST). Caravel lodged a Notice of Meeting on 14 October 2022.



## Financials

At the date of this report, the Company had:

- 419,184,373 shares on issue;
- 17,575,811 unlisted options exercisable at \$0.30
- \$2.96M held in cash reserves; and
- Nil debt

Approximately \$1,208,000 of exploration and evaluation expenditure expensed during the quarter comprised payments to:

- Drilling contractors; (for work completed in prior quarter)
- Optimisation Study consultants;
- Environmental surveys; and
- Water investigations

The aggregate amount of payments to related parties and their associates during the quarter of approximately \$262,000 (refer Item 6 of the accompanying Appendix 5B) comprises the following:

- Director fees (\$142,000);
- Mitchell River Group consulting services (\$87,000); and
- Mitchell River Group serviced office (\$33,000).

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:**

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Company Secretary  
Caravel Minerals Limited  
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Telephone: 08 9426 6400  
Email: [investors@caravelminerals.com.au](mailto:investors@caravelminerals.com.au)

## Competent Persons Statements

*The information in this report that relates to Exploration Results is based on and fairly represents information compiled by Mr Peter Pring. Mr Pring is a Senior Exploration Geologist with Caravel Minerals. Mr Pring is a shareholder of Caravel Minerals and is a member of the Australasian Institute of Mining and Metallurgy. Mr Pring has sufficient experience of relevance to the styles of mineralisation and types of deposits under consideration, and to the activities undertaken to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Pring consents to the inclusion in this report of the matters based on information in the form and context in which they appear.*

*The information in this report that relates to Mineral Resources is based on and fairly represents information compiled by Mr Lauritz Barnes, (Consultant with Trepanier Pty Ltd). Mr Barnes is a shareholder of Caravel Minerals. Mr Barnes is a member of both the Australasian Institute of Mining and Metallurgy and the Australasian Institute of Geoscientists. Mr Barnes has sufficient experience of relevance to the styles of mineralisation and types of deposits under consideration, and to the activities undertaken to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Barnes consents to the inclusion in this report of the matters based on information in the form and context in which they appear.*

*The information in this report that relates to Ore Reserves is based upon information and supporting documentation prepared by and mine planning work prepared by Mr Steve Craig (CEO of Orelogy Consulting Pty Ltd). Mr Craig is a member of the Australasian Institute of Mining and Metallurgy and has sufficient experience relevant to the style of mineralization and type of deposit under consideration to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Craig consents to the inclusion in this report of the matters based on their information in the form and context in which they appear.*

## Forward Looking Statements

*This document may include forward looking statements. Forward looking statements include, but are not necessarily limited to, statements concerning Caravel Minerals planned exploration programmes, studies and other statements that are not historic facts. When used in this document, the words such as “could”, “indicates”, “plan”, “estimate”, “expect”, “intend”, “may”, “potential”, “should” and similar expressions are forward looking statements. Such statements involve risks and uncertainties, and no assurances can be provided that actual results or work completed will be consistent with these forward-looking statements.*

## Previous Disclosure

*The information in this report is based on the following Caravel Minerals ASX Announcements, which are available from the Caravel Minerals website [www.caravelminerals.com.au](http://www.caravelminerals.com.au) and the ASX website [www.asx.com.au](http://www.asx.com.au):*

- 25 August 2021 “Bindi Deposit – Updated Geological Model”
- 23 November 2021 “Major Mineral Resource Upgrade – Caravel Copper Project”
- 12 July 2022 “Caravel Copper Project Pre-Feasibility Study Highlights Robust, Executable Project and Reports Maiden Ore Reserve”
- 20 September 2022 “Pre-feasibility Study Update - Caravel Copper Project”

## Appendix 5B

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

Name of entity

Caravel Minerals Limited

ABN

41 120 069 089

Quarter ended ("current quarter")

30 September 2022

Consolidated statement of cash flows		Current quarter (3-months) \$A'000	Year to date (3-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	(1,208)	(1,208)
	(b) development	-	-
	(c) production	-	-
	(d) staff costs	(369)	(369)
	(e) administration and corporate costs	(187)	(187)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	1	1
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	18	18
1.8	Other (provide details if material)	-	-
<b>1.9</b>	<b>Net cash from / (used in) operating activities</b>	<b>(1,745)</b>	<b>(1,745)</b>
<b>2.</b>	<b>Cash flows from investing activities</b>		
2.1	Payments to acquire or for:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	(2)	(2)
	(d) exploration & evaluation	-	-
	(e) investments	-	-
	(f) other non-current assets	-	-

<b>Consolidated statement of cash flows</b>		<b>Current quarter (3-months) \$A'000</b>	<b>Year to date (3-months) \$A'000</b>
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)	-	-
<b>2.6</b>	<b>Net cash from / (used in) investing activities</b>	<b>(2)</b>	<b>(2)</b>

<b>3.</b>	<b>Cash flows from financing activities</b>		
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	3,100	3,100
3.4	Transaction costs related to issues of equity securities or convertible debt securities	(121)	(121)
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>2,979</b>	<b>2,979</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	2,448	2,448
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(1,745)	(1,745)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(2)	(2)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	2,979	2,979

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

Consolidated statement of cash flows		Current quarter (3-months) \$A'000	Year to date (3-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>3,680</b>	<b>3,680</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	3,660	2,428
5.2	Call deposits	20	20
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>3,680</b>	<b>2,448</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	262
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-
<i>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.</i>		



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

<b>7.</b>	<b>Financing facilities</b> <i>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.</i>	<b>Total facility amount at quarter end \$A'000</b>	<b>Amount drawn at quarter end \$A'000</b>
7.1	Loan facilities	-	-
7.2	Credit standby arrangements	-	-
7.3	Other (please specify)	-	-
7.4	<b>Total financing facilities</b>	-	-
7.5	<b>Unused financing facilities available at quarter end</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.		

<b>8.</b>	<b>Estimated cash available for future operating activities</b>	<b>\$A'000</b>
8.1	Net cash from / (used in) operating activities (item 1.9)	(1,745)
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)	(1,745)
8.4	Cash and cash equivalents at quarter end (item 4.6)	3,680
8.5	Unused finance facilities available at quarter end (item 7.5)	-
8.6	Total available funding (item 8.4 + item 8.5)	3,680
8.7	<b>Estimated quarters of funding available (item 8.6 divided by item 8.3)</b>	2.1
<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>		
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:	
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:	

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

- |   |   |
|---|---|
| - | 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:   |
| - | 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: 31 October 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.
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.