

#### 31 January 2019

# **QUARTERLY ACTIVITIES REPORT FOR PERIOD ENDED 31 DECEMBER 2018**

#### **COMPANY OVERVIEW**

Caravel Minerals Limited (ASX:CVV, "Caravel" or "Company") is focussed on development of the Caravel Copper Project, located 150km from Perth in Western Australia's well-serviced Wheatbelt region near the regional town of Wongan Hills. The project prefeasibility studies commenced in H2 2018 and these are continuing with recent work confirming the projects potential to be a large scale, low cost copper producer.

The convenient location provides excellent infrastructure and access to services. The project will provide an important opportunity for economic diversification in the local economy and the Company aims to be an employer of choice for people seeking to live and work in a rural community 1 hour drive from Perth's northern suburbs. The projects large scale, simplicity of mining and processing and close access to support centres will allow the use of many recent advances in mining and processing technology, helping to ensure a safe, efficient and long life project.

#### **SUMMARY**

#### **Caravel Copper Project**

- ➤ Diamond core drilling program commenced in August 2018 has confirmed the presence of higher grade copper ore zones at Bindi and Dasher.
- > There higher grade zones allow new mine development options to deliver higher grades early in the mine schedule, add substantial value through bringing forward revenue and potentially reducing initial capex.
- ➤ Pre-feasibility studies continued on other key areas including new resource modelling, metallurgical test work, engineering, infrastructure and logistics studies, groundwater, land tenure, social and environmental studies.
- ➤ Majority of work to date has either confirmed or improved upon assumptions from previous studies and is progressing well towards a pre-feasibility report in 2019.
- ➤ The company progressed stakeholder and community engagement with key local landowners and other interested parties.

#### Corporate

- Announced a 1 for 7 non-renounceable rights issue at an issue price of 5 cents to raise up to \$1.1m
- ➤ A claim for a tax offset, under the Research and development tax incentive for year to 30 June 2018, was submitted to ATO in January. A refund of approximately \$150,000 is expected to be received in February.
- ➤ At 31 December 2018, the Company had cash reserves of approximately AU\$0.83m.

# **Caravel Copper Project**

#### **Resource Drilling**

During the quarter the Company completed a 7-hole diamond drilling program at the Bindi and Dasher deposits (Figure 1). The drill holes targeted interpreted higher-grade domains and are part of a work program established by the Company to interrogate and update the previous resource model. Drill core from the program is also being used for geotechnical and metallurgical studies.

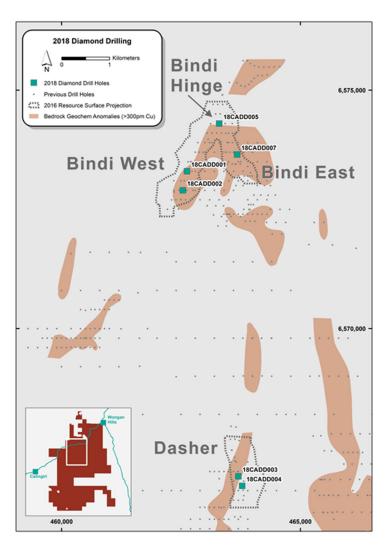


Figure 1: Location of 2018 core drill holes at the Caravel Copper Project

Drilling at Bindi was designed to confirm the continuity of stacked higher-grade zones at Bindi West and to help develop a better understanding of the geology in the Bindi Hinge zone where mineralisation from Bindi West and Bindi East merge.

At Bindi West, two higher grade zones were intersected in 18CADD001 and 18CADD002 drilled 400m apart, providing confidence in the interpretation and demonstrating continuity (Figure 2).

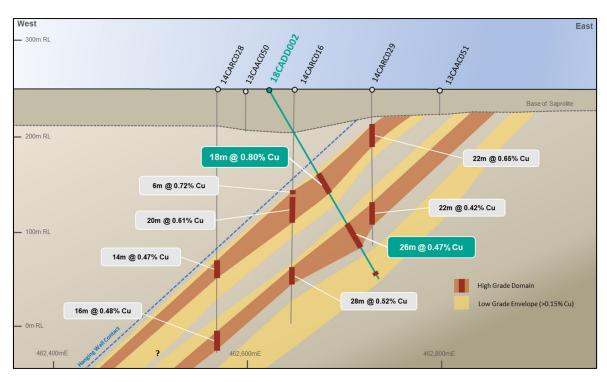
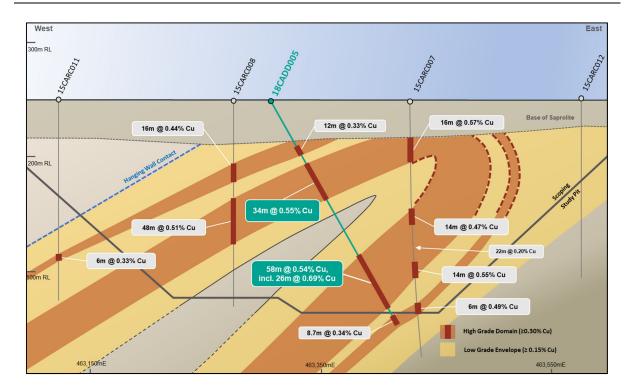


Figure 2: Cross Section through Bindi West (6,573,300mN)

At the Bindi Hinge zone, diamond hole 18CADD005 intersected two significant higher-grade zones interpreted to be the upper and lower limbs of an overturned fold (Figure 3). The high-grade zones identified at Bindi West are interpreted to be the upper limb of the overturned fold seen in 18CADD005, while Bindi East is interpreted to be the continuation of the steeper west dipping lower (overturned) limb.



**Figure 3:** Cross Section through the Bindi Hinge Zone (6,574,300mN).

Mineralisation at Bindi East was previously interpreted as dipping to the east, so the new model for an overturned fold with both limbs dipping west has significant implications for the modelling of the resource and mine planning.

To follow-up the new ideas from the diamond core programme a Reverse Circulation drilling program was designed to test for down-dip extensions at Bindi East where previous drilling was too shallow to intersect the overturned limb. The program commenced in mid-January 2019 and assay results are expected in February 2019.

Select significant intersections from the 2018 diamond drilling program at Bindi are shown below in Table 1:

<b>Tab</b> le 1: Select intersections from 2018 diamond drilling at the Bindi Deposit (0.3% Cu cut-off)						
	Hole ID	From	To	Interval (m)	Cu %	

Hole ID	From	То	Interval (m)	Cu %
18CADD001	44	74	30	0.43
18CADD001	108	114	6	1.03
18CADD002	102	120	18	0.80
18CADD002	154	180	26	0.47
18CADD005	64	98	34	0.55
18CADD005	150	208	58	0.54
including	182	208	26	0.69

In mid-January the Company reported the results from two diamond holes completed at the Dasher Deposit. Significant sulphide copper was intersected from near surface in 18CADD003, returning **56m** 

@ 0.53% Cu from 18m. At 74m, the hole intersected a younger poorly mineralised granite that includes minor zones of remnant mineralised gneiss. The hole passed through the granite at 114m and intersected further copper mineralisation, returning 31.7m @ 0.42% Cu from 146m, including 13.7m @ 0.61% Cu from 164m (Figure 4). The footwall zone intersected in 18CADD003 lies outside the extents of mineralisation in the previous resource model and indicates that more copper bearing gneiss may exist at Dasher.

A second diamond hole, 18CADD004, was drilled on approximately 200m to the south of 18CADD003. Mineralised granitic gneiss was intersected from approximately 8m downhole. From 114m, 18CADD004 intersected numerous younger granite and pegmatite intrusions interspersed with moderately mineralised granitic gneiss, followed by what has been interpreted as footwall granite from 160m to end of hole.

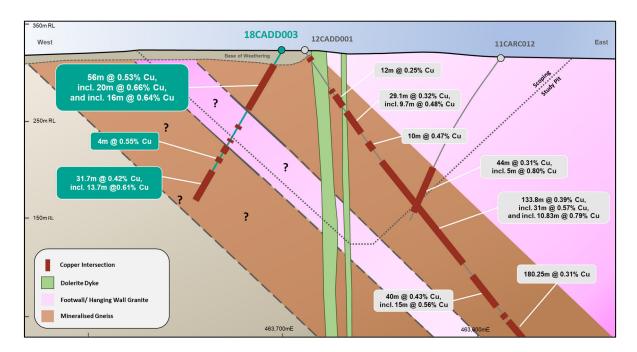


Figure 4: Cross Section through Dasher deposit showing results for 18CADD003 and revised interpretation (6,566,900mN)

Select significant intersections from the 2018 diamond drilling program at Dasher are shown below in Table 2:

Table 1: Select intersections from 2018 diamond drilling at the Dasher Deposit (0.15% Cu cut-off)

Hole_ID	mFrom	mTo	Length (m)	Cu %
18CADD003	12	18	6	0.69*
18CADD003	18	74	56	0.53
including	18	38	20	0.66
	58	74	16	0.64
18CADD003	128	132	4	0.55

Hole_ID	mFrom	mTo	Length (m)	Cu %
18CADD003	146	177.7	31.7	0.42
including	164	177.7	13.7	0.61
18CADD004	8	60	52	0.28
18CADD004	70	114	44	0.25

<sup>\*</sup> Oxide Copper Intersection

A new resource estimate incorporating recent results is scheduled to be completed in early 2019. The new estimate will provide the basis for revised pit designs and mine schedules, which will then be used to assess new project development options.

The results to date have improved geological models for the resource and demonstrated significant extensions and upside from previous resource models. The existence of higher-grade domains has also been confirmed and will allow alternative development models to be evaluated based on mining of the higher-grade zones earlier in the mine schedule.

#### **Feasibility Studies**

#### **Environmental**

During the quarter Caravel progressed initial environmental studies that are anticipated to be required for regulatory approvals processes. Studies included baseline flora and fauna surveys with results to be used for project planning and scheduling purposes. The studies were completed to standards according to current regulatory guidelines. The company is also consulting with stakeholders on the potential project area, the vast majority of which is cleared farmland.

Figure 1: Spring season fauna consultant field visit – December 2018



Figure 2: Spring season flora survey team in field – November 2018



#### Community

The company continued to liaise with local landowners regarding exploration and field surveys over the period. The company also held its first landowner information event at its operational base in Calingiri (120km north east of Perth) sharing exploration results and facilitating discussion on the company's exploration and feasibility activities. Further events are proposed for early 2019.

## Metallurgy

A comprehensive metallurgical program is currently underway utilising diamond core from Bindi and Dasher as detailed under Resources above. The program entails comminution, flotation and material characterisation test work. Although the work will be ongoing, initial results should be available early 2019.

#### Process Design

Perth-based firm MSP Engineering commenced studies on process and plant layout options. Included in the scope is an option of treating high-grade ore through a smaller initial plant to reduce the early capital requirements of the project.

#### Infrastructure

Investigations and studies have commenced into the suitability of groundwater systems west of the project area to provide a sustainable, lower-quality (saline) industrial water supply to the project. Initial drilling and test work is expected to take place in the first quarter of 2019.

Global civil engineering consultants Knight Piesold have a commenced a study into the options for tailings location and design which will progress in line with other studies being undertaken as part of the Caravel Copper Project's pre-feasibility work program.

# FORWARD PROGRAM - 1st QUARTER 2019

#### Resource

- > Extensional resource drilling at Bindi East based on updated geological interpretation.
- > Infill drilling at the Bindi Hinge zone targeting a potential higher-grade starter pit.
- > Drilling of high priority IP exploration target located East of Bindi.
- ➤ Completion of updated resource estimate which will provide the basis for the new pit designs and mine schedules.

## **Feasibility Studies**

- Mine optioneering studies
- Ongoing metallurgical test work to develop flow sheet and produce concentrate specifications for marketing
- > Engineering design layouts and costing
- > Tailings options and geochemistry analysis
- Hydrological drilling and analysis
- ➤ Land tenure, social and environmental planning and processes
- > Transport logistic study from plant to port.
- > Progression of partnership/financing options.

### Health & Safety

The Company incurred zero LTI's during the quarter.

## Corporate

Since the last quarterly report;

- Caravel issued 1,405,522 new shares to Orbit Drilling as part payment for drilling services provided.
- 3,000,000 incentive options were issued to Directors as part of the company remuneration and incentives approved by shareholders at the 2018 AGM.

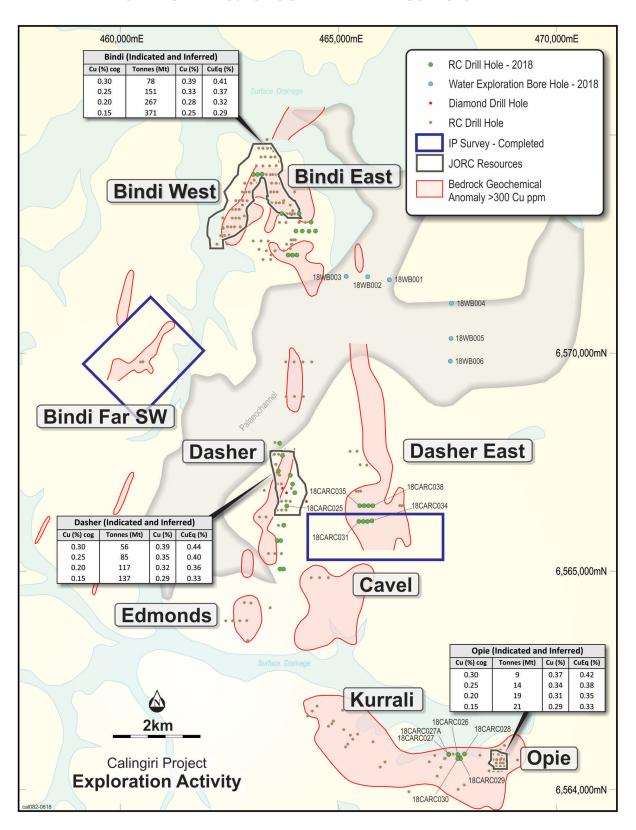
At 31 December 2018 the Company had;

- 154,521,987 shares on issue
- 36,310,413 options on issue (strike price between 6.8c and 10c)
- \$0.83m held in cash reserves
- Nil debt

# **APPENDIX A - TENEMENT SCHEDULE**

Project	Location	Tenement	Equity at 1 Oct 2018	Equity at 31 Dec 2018	Changes in Quarter
Calingiri	Wongan/Goomalling	E70/2788	100	100	-
Calingiri	Goomalling	E70/2789	100	100	-
Calingiri	Goomalling	E70/4674	100	100	-
Calingiri	Wongan	E70/3674	100	100	-
Calingiri	Goomalling	E70/3680	100	100	-
Calingiri	Goomalling	E70/3755	100	100	-
Calingiri	Goomalling	E70/4746	100	100	-
Calingiri	Goomalling	E70/4732	100	100	-
Calingiri	Wongan	E70/4476	100	100	-
Calingiri	Wongan	E70/4517	100	100	-
Calingiri	Wongan	P70/1593	100	100	-
Calingiri	Wongan	E70/4675	100	100	-
Calingiri	Wongan	E70/4676	100	100	-
Calingiri	Wongan	E70/2343	80	80	-

# APPENDIX B - CALINGIRI PROJECT OUTLINE AND PROSPECTS



#### APPENDIX C - MINERAL RESOURCES

The following table presents the Calingiri Resource sensitivity to various lower and higher cut-off grades.

Calingiri Project Mineral Resources Categories at Various Cut-off Grades										
		Indicated	i	Infe	Inferred		т	Total Resource		
Cut-off Grade	Tonnes (MT)	Grade Cu %	Cu Metal (T)	Tonnes (MT)	Grade Cu %	Cu Metal (T)	Tonnes (MT)	Grade Cu %	Cu Metal (T)	
0.30	106	0.38	405,047	38	0.39	144,751	143	0.38	549,798	
0.25	187	0.34	626,279	64	0.34	218,022	251	0.34	844,301	
0.20	297	0.30	874,905	105	0.30	307,600	402	0.30	1,182,506	
0.15	390	0.27	1,039,787	139	0.28	368,129	530	0.27	1,407,918	

- 1. Competent Persons Statements The information in this report that relates to the Calingiri Mineral Resource estimates is extracted from an ASX Announcement dated 4 April 2016, (see ASX Announcement 4 April 2016 "Calingiri Maiden JORC Resource" and in relation to the Aircore Drilling, results is extracted from ASX Announcements dated 14 March and 4 April 2017, <a href="www.caravelminerals.com.au">www.caravelminerals.com.au</a> and <a href="www.caravelminerals.com.au</a> and <a href="www.caravelminerals.com.au">www.caravelminerals.com.au</a> and <a href="www.caravelminerals.com.au</a> and <a href="www
- 2. 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.
- 3. Production Targets and Financial Information. Information in relation to the Calingiri Project Scoping Study, including production targets and financial information, included in this report is extracted from an ASX Announcement dated 28 June 2016, (see ASX Announcement 28 June 2016, "Scoping Study Confirms Outstanding WA Copper Project", www.caravelminerals.com.au and www.asx.com.au. The Company confirms that all material assumptions underpinning the production target and financial information set out in the announcement released on 28 June 2016 continue to apply and have not materially changed.

For any queries please contact the Company Secretary, Mr Daniel Davis on +61 8 9426 6400

# Name of entity

Caravel Minerals Limited

ABN

Quarter ended ("current quarter")

41 120 069 089 31 December 2018

Cons	olidated statement of cash flows	Current quarter (three months) \$'000	Year to date (six months) \$'000
1.	Cash flows from operating activities		
1.1	Receipts from customers		
1.2	Payments for		
	(a) exploration & evaluation	(632)	(764)
	(b) development	-	-
	(c) production	-	-
	(d) staff costs	(141)	(290)
	(e) administration and corporate costs	(88)	(263)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	-	1
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Research and development refunds	-	-
1.8	Other (refund of security deposit)	-	44
1.9	Net cash from / (used in) operating activities	(861)	(1,272)

2.	Cash flows from investing activities		
2.1	Payments to acquire:		
	(a) property, plant and equipment	(24)	(69)
	(b) tenements (see item 10)	-	-
	(c) investments	-	-
	(d) other non-current assets	-	-
2.2	Proceeds from the disposal of:	-	-
	(a) property, plant and equipment	35	35
	(b) tenements (see item 10)	-	-
	(c) investments	-	42
	(d) other non-current assets	30	30
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	41	38

<sup>+</sup> See chapter 19 for defined terms

<sup>1</sup> September 2016

Consolidated statement of cash flows		Current quarter (three months) \$'000	Year to date (six months) \$'000
3.	Cash flows from financing activities		
3.1	Proceeds from issues of shares	-	1,625
3.2	Proceeds from issue of convertible notes	-	-
3.3	Proceeds from exercise of share options	-	-
3.4	Transaction costs related to issues of shares,	(11)	(110)
	convertible notes or options	(11)	(119)
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 (Payments for Share buyback)	-	-
3.10	Net cash from / (used in) financing activities	(11)	1,506

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	1,666	563
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(861)	(1,272)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	41	38
4.4	Net cash from / (used in) financing activities (item 3.10 above)	(11)	1,506
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of period	835	835

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 \$'000	Previous quarter \$'000
5.1	Bank balances	835	1,666
5.2	Call deposits	-	-
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)	835	1,666

<sup>+</sup> See chapter 19 for defined terms 1 September 2016

6.	Payments to directors of the entity and their associa-	Current quarter \$'000			
6.1	Aggregate amount of payments to these parties include	ded in item 1.2	76		
6.2	Aggregate amount of cash flow from loans to these paitem 2.3	arties included in	-		
6.3	Include below any explanation necessary to understar items 6.1 and 6.2	nd the transactions	included in		
Payme	nt of director fees				
			[		
7.	Payments to related entities of the entity and their a	ssociates	Current quarter \$'000		
7.1	Aggregate amount of payments to these parties include	ded in item 1.2	73		
7.2	Aggregate amount of cash flow from loans to these parties included in item 2.3				
7.3	Include below any explanation necessary to understaritems 7.1 and 7.2	nd the transactions	included in		
	ell River Group, a related party of Mr Alasdair Cooke, warviced office and technical services during the quarter.	as paid \$65,723 plus	s GST for provision		
8.	Financing facilities available	Total facility	Amount drawn		
		amount at	at quarter end		
		quarter end \$'000	\$ <b>'</b> 000		
8.1	Loan facilities	-	-		
8.2	Credit standby arrangements	-	_		
8.3	Other (please specify)	-	-		
8.4	Include below a description of each facility above, include whether it is secured or unsecured. If any additional fare proposed to be entered into after quarter end, included well.	acilities have been e	entered into or		

<sup>+</sup> See chapter 19 for defined terms 1 September 2016

9.	Estimated cash outflows for next quarter	\$'000
9.1	Exploration and evaluation	290
9.2	Development	-
9.3	Production	_
9.4	Staff costs	299
9.5	Administration and corporate costs	55
9.6	Other (provide details if material)	_
9.7	Total estimated cash outflows	644

10.	Changes in tenements (items 2.1(b) and 2.2(b) above)	Tenement reference and location	Nature of interest	Interest at beginning of quarter	Interest at end of quarter
10.1	Interests in mining tenements and petroleum tenements lapsed, relinquished or reduced	-			
10.2	Interests in mining tenements and petroleum tenements acquired or increased	_			

### **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.

**Daniel Davis** 

Company Secretary
Date: 31 January 2019

#### **Notes**

- 1. The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity that wishes to disclose additional information is encouraged to do so, in a note or notes included in or attached to this report.
- 2. If this quarterly 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 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.

<sup>+</sup> See chapter 19 for defined terms