



## **Calingiri Project, WA**

The Company was pleased to announce in November 2017 that bulk ore sorting results exceeded expectations and that the goal of confirming a “Proof of Concept” was successfully reported. The highest-grade sample product reflected an increase in overall grade of 139% resulting in an encouraging 71% reduction in feed with only a 34% deferral or loss of contained copper. Molybdenum and silver were also upgraded by 111%.

The potential to materially reduce plant size and related Capex, decrease cash costs and maintain material annual production that could result in vastly improved project economics is now the subject of Phase 2 testwork. The Company also remains focused on the potential for significantly higher feed grades from sorted ore in the early years of production.

In December 2017 the Company announced a large Summer Work Program that includes:

- A 5,000 metre Reverse Circulation (RC) drilling program to evaluate extensions to current JORC Resources
- Drilling to evaluate water resources
- The second phase of the bulk ore sorting testwork utilising more than 1 tonne of representative mineralisation with core crushed in early January 2018 and laboratory sorting to follow
- Advanced metallurgical testwork to further confirm initial positive metal recovery and concentrate results
- Commencement of design of a revised front-end flowsheet and integrating technical and environmental studies required for mining and development approvals as completed

## **Entitlement Issue**

On 27<sup>th</sup> November 2017 the Company announced a Non-Renounceable Rights Issue to raise up to approximately \$1,100,000 at \$0.05 per share, plus one new unlisted option for every two new shares issued, exercisable at \$0.07, expiry 30 June 2019.

Directors and Executives underwrote a maximum of \$600,000 and a Shortfall Facility allowed eligible shareholders to apply for additional shares in excess of their entitlement. The rights issue closed on 12 January 2018.

## **Quarterly Activities Report For the period ended 31 December 2017**

Caravel Minerals Limited (“Caravel”) is an Australian-based gold, copper and base metals exploration and resource development company with projects located in Western Australia. The Company is listed on the Australian Securities Exchange (code: CVV). Caravel has a technically strong and well established exploration and mine development team backed by an experienced Board and panel of advisors.

The Company is an emerging growth story with compelling projects in WA. The Company’s flagship is the Calingiri Copper Project, 120km from Perth, with a JORC Scoping Study that was released in June 2016. The study confirmed Calingiri’s potential as a low-cost mid-tier copper producer with low Capex and robust economics. The second project in WA is the Bryah Project that comprises 50 km<sup>2</sup> of the Lower Narracook Sequence that host the Degruusa and Monty VHS deposits.

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# CALINGIRI

## Advancing a World Class Scale Copper Project with Proven, Innovative Green Technologies

### Calingiri Project WA

#### Bulk Ore Sorting Testwork Q4 2017

The bulk ore sorting testwork results exceeded the Company's expectations with the potential for a major project update. A summary of those results, as reported on 8 November 2017, as follows:

- Calingiri's representative bulk ore sorted material copper grades were beneficiated by an average of 81%. The highest sample product increase in overall grade of 139% resulted in an encouraging 71% reduction in feed with only a 34% deferral or loss of contained copper
- Molybdenum and silver were also upgraded by 111% in the high grade product
- Potential to materially reduce plant size and related Capex, decrease cash costs and maintain annual production that could result in vastly improved project economics
- Significant potential for higher feed grades from sorted ore in the early years of production
- Further bulk ore sorting testwork with larger bulk samples of approximately a tonne is underway
- Potential to replace reduced ore feed from:
  - re-optimisations of the existing Bindi, Dasher and Opie JORC Resources
  - exploration for extensions of the existing JORC resources and
  - exploration of recently discovered targets within the Calingiri trend
- Additional physical testwork indicated lower than expected crushing work indices
- Studies to support the next technical report are ongoing and on schedule
- Continued utilisation of environmentally innovative technologies going forward

The Summer Work Program was announced on 18 December 2017 and includes:

- A 5,000 metre Reverse Circulation (RC) drilling program to evaluate extensions to current JORC Resources. This is part of a planned 20,000 metre drilling program to test a series of targets within the Calingiri Project trend
- Drilling to evaluate water resources
- The second phase of the bulk ore sorting testwork utilising more than 1 tonne of representative mineralisation with core being crushed in early January 2018 and laboratory sorting to follow
- Advanced metallurgical testwork to further confirm initial positive metal recovery and concentrate results
- Culminating in a revised Calingiri Scoping Study incorporating ore sorting as part of the front-end flowsheet and integrating technical and environmental studies required for mining and development approvals

Bulk ore sorting is a proven pre-concentration technology in which barren gangue is separated from mineralisation based on the grade as measured or inferred from a sensor measurement. With bulk ore sorting, ore that previously didn't qualify for processing may be upgraded, making it economic to treat and improving the resource utilisation. More valuable metal may be extracted from the resource while the processing plant treats less tonnes at higher feed grade, reducing consumption of water and power as well as lower tailings output. Significant capital reductions may also be achieved through smaller back end milling and processing requirements.

The technology is based on industry proven, high capacity industrial sorting machines from major international equipment suppliers, with well established businesses in industrial minerals and material recycling.

## **JORC Scoping Study June 2016**

The June 2016 Scoping Study has determined that Calingiri demonstrates robust project fundamentals with low technical risk. It contemplates the co-development of three open pits, located 120km to the northeast of Perth in Western Australia. Central to the project is the construction of a stand-alone 15 million tonne per annum (Mtpa) ore processing facility. The Company considers the project is economically viable based on its ability to pay back project start-up capital and provide ongoing positive operational cash flows. Details of the material assumptions utilised are available for download from the Company's Website.

## **Entitlement Issue**

The Company was pleased to announce on 27 November 2017 that it would undertake a Non-Renounceable Rights Issue that was closed on 12 January 2018.

A total of 23.4m shares and 11.7m attaching options were issued for gross proceeds of \$1.17m across Entitlement Shares (12.1m), Shortfall Offer Shares (1.7m) and Underwriters Shares (9.6m).

The funds raised from the issue are being used for completion of Phase 2 Bulk Ore Sorting testwork, metallurgical testwork on the products from the ore sorting testwork, completion of a Revised Scoping Study taking into account the modified inputs of applying ore sorting beneficiation as part of the ore processing flowsheet, evaluation, including initial hydrogeological drilling and air lift testing, of potential project water resources, drilling to evaluate extensions to existing JORC Resources, consulting fees for search for strategic partner, expenses of the Offer and for Working Capital purposes.

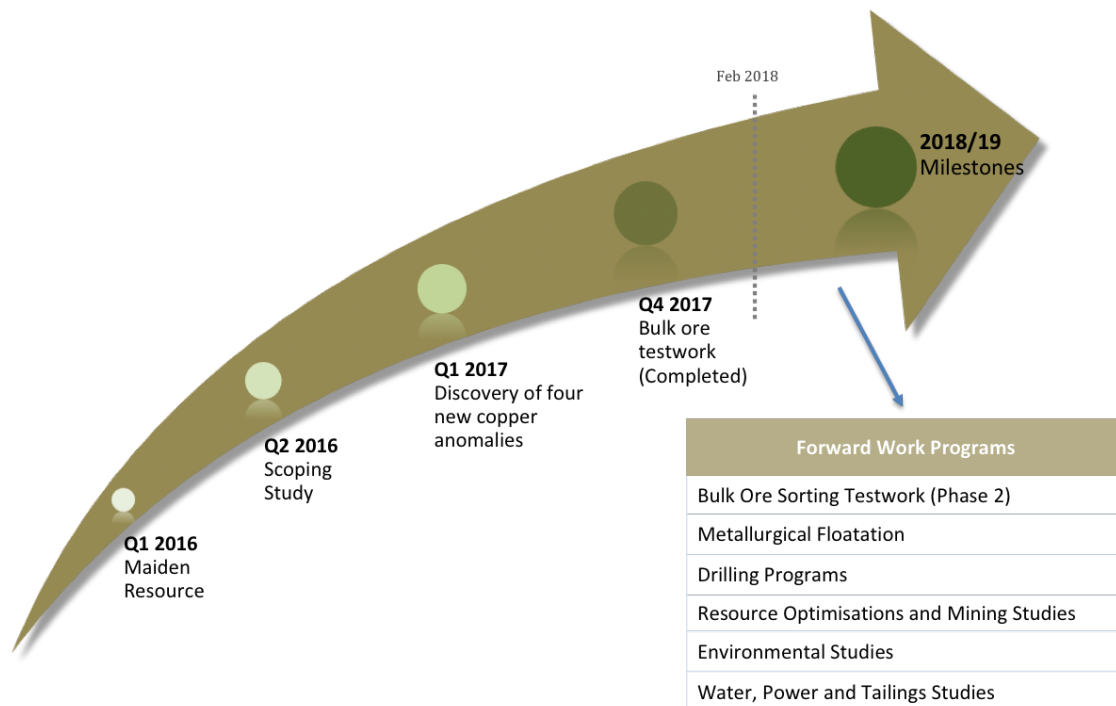
## **Corporate Advisors**

On 27 November 2017 the Company announced the appointment of PCF Capital as the strategic and corporate financial advisor. The initial focus has been on a search for a strategic partner. The tender phase is nearing completion and there has been significant interest from large listed corporations and other interested parties. The Company will provide an update to the market later in Q1 2018.

## **Occupational Health & Safety**

The Company incurred zero LTI's during the quarter and the Company's 12 month moving average Lost Time Injury Frequency Rate (LTIFR) was also zero. The Company's recent safety record remains unblemished and can be attributed to the diligence and training of all staff and contractors together with initiatives and continuous improvements that have been undertaken.

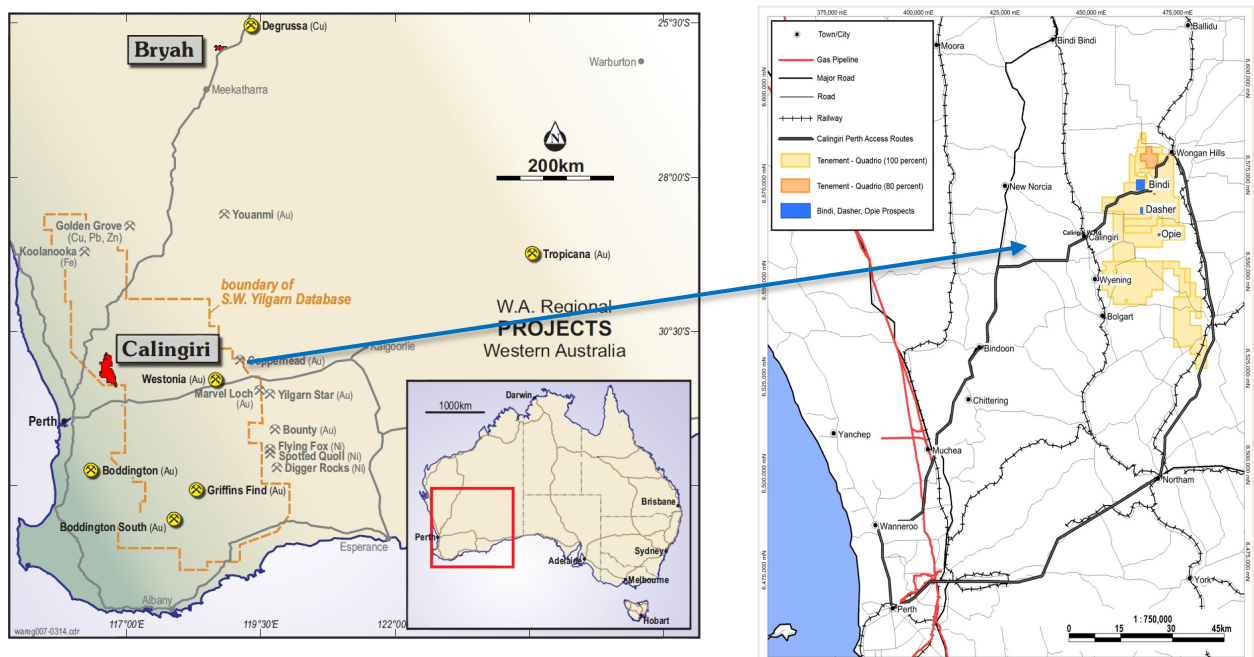
## Calingiri Project Schedule:



**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, [www.caravelminerals.com.au](http://www.caravelminerals.com.au) and [www.asx.com.au](http://www.asx.com.au)). The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the Mineral Resource estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person’s findings are represented have not been materially modified from the original market announcement.

**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](http://www.caravelminerals.com.au) and [www.asx.com.au](http://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.

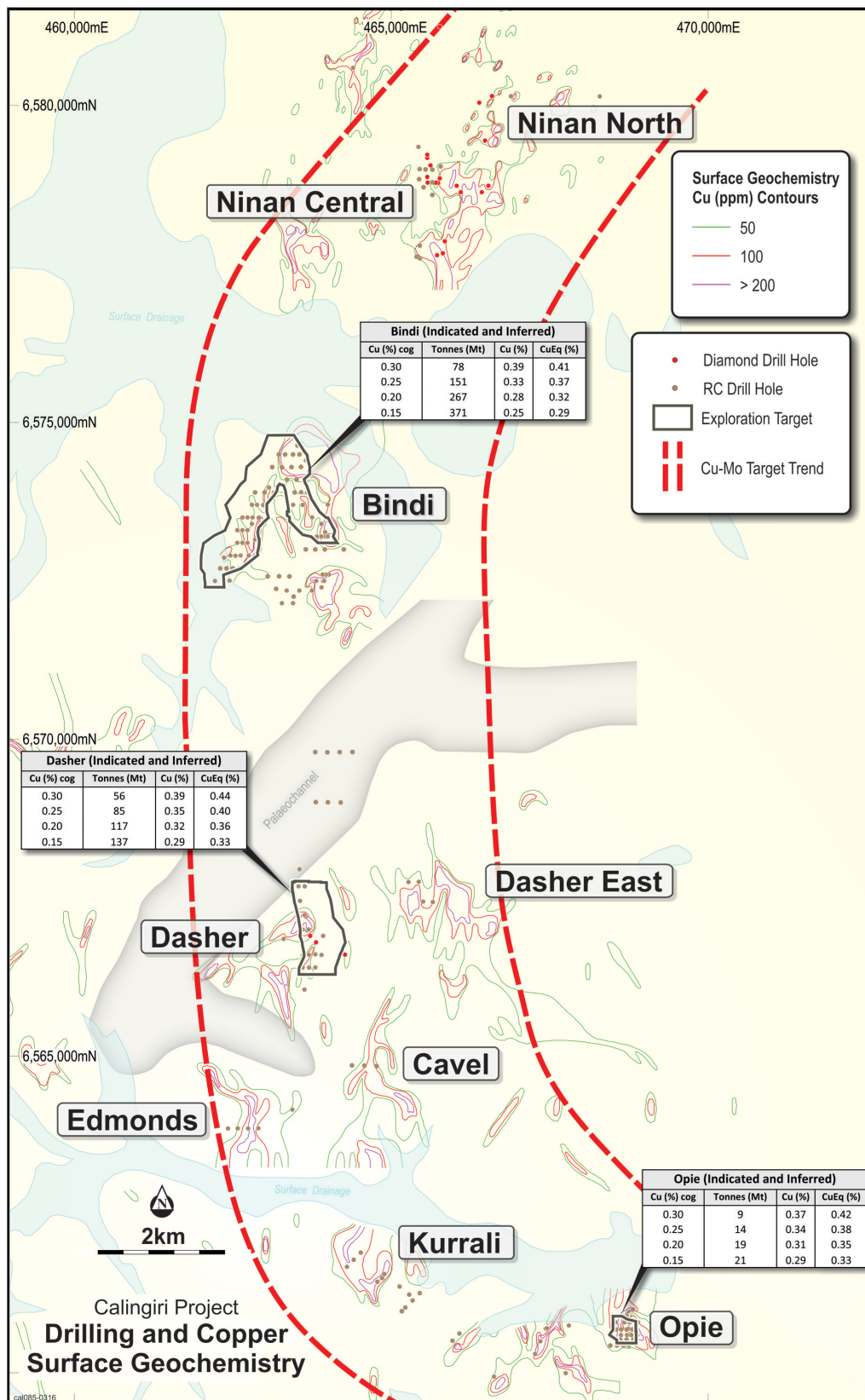


## Appendix A – Tenement Status

Project	Location	Tenement	Equity at 1 Oct 17	Equity at 31 Dec 17	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



Calingiri Project / JORC Resource estimates

## Appendix C – Calingiri Project Mineral Resources at Various Cut-off Grades

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			Inferred			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
<b>0.25</b>	<b>187</b>	<b>0.34</b>	<b>626,279</b>	<b>64</b>	<b>0.34</b>	<b>218,022</b>	<b>251</b>	<b>0.34</b>	<b>844,301</b>
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

*Please refer to the Competent Persons Statements on page 4 for more information*