

28 January 2021

## **QUARTERLY ACTIVITIES REPORT FOR PERIOD ENDED 31 DECEMBER 2020**

### **Highlights**

- **Caravel Minerals Limited commenced diamond drilling and continued the RC percussion drilling program at its flagship Caravel Copper Project.**
- **The Company finalised a joint venture agreement for the Mt William Ni-PGM prospect near Waroona, WA**
- **The Company was granted an exploration licence at the Toolbrunup Project**
- **Share placement completed, raising \$2.85M at 8.0c per share, before costs.**
- **Engagement continued with potential strategic partners regarding an investment in the Company's flagship Caravel Copper Project.**

### **Health & Safety**

The Company did not record any safety incidents during the quarter.

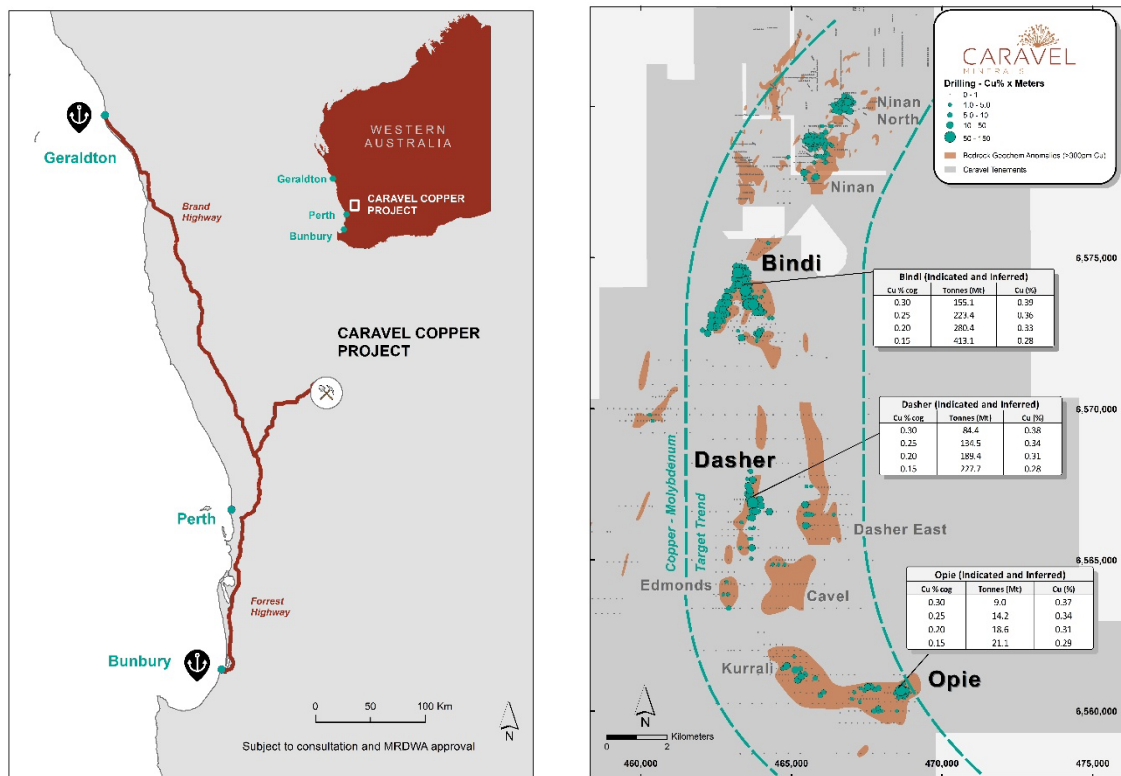
### **Caravel Copper Project**

Caravel is currently engaged in feasibility studies for the development the Caravel Copper Project, a greenfields copper mining and processing project located 150km from Perth in Western Australia's Wheatbelt region (**Figure 1**).

The project is based on an Indicated and Inferred Mineral Resource of 661.9Mt @ 0.28% Cu (at 0.15% Cu cut-off grade) for a total of 1.86Mt contained copper. This makes the Caravel Project one of the largest copper resources in Western Australia and in the top ten largest copper projects in Australia.

Metallurgical test work demonstrates the copper mineralisation can be processed using standard sulphide flotation methods and achieving very high recoveries. Initial copper concentrate analyses demonstrate a very clean product with low level of impurities. The Caravel concentrate is expected to be highly attractive to smelter customers globally.

A Scoping Study completed in 2019 by Caravel Minerals and MSP Engineering demonstrated a strong economic model for the Project and recommended proceeding with more advanced feasibility studies. Pre-Feasibility (PFS) activities are now underway with completion expected by the end of 2021.



**Figure 1:** Location diagram for the Caravel Copper Project (left) and the main prospect areas within the copper mineralised trend (right)

The Company has continued drilling programs at the Caravel Copper Project during the reporting period (**Figure 2**), aiming to extend resources and define higher grade zones of mineralisation.

### Bindi Deposit Diamond Drilling

During the reporting period the Company initiated a diamond drilling program at the Bindi copper deposit. The first two holes in the series have been completed for a total of 961.9 metres drilling. Copper sulphide (chalcopyrite) and associated molybdenite mineralisation was intersected in both the western and eastern limbs of the deposit (Figure 3), confirming the geological model and extending mineralisation to greater than 500m depth.

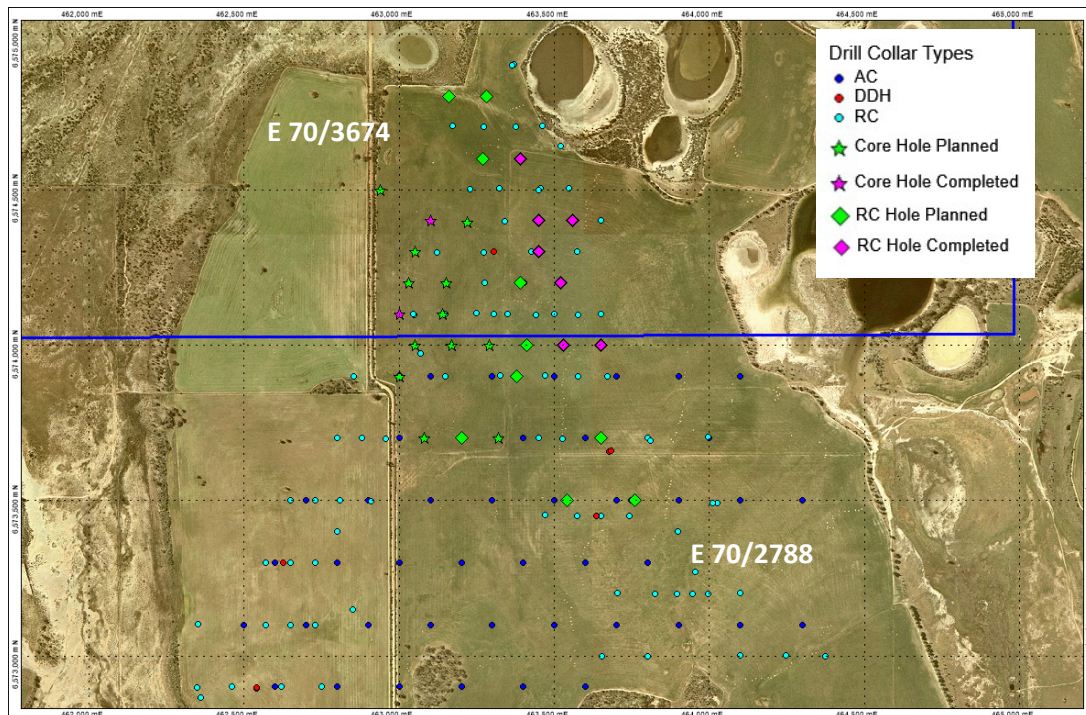
To date 210 metres of core has dispatched for cutting and sampling. More complete sections of core are in the process of being cut at site and will be dispatched in late January. Assay turnaround time is presently very slow with laboratories reporting large backlogs of samples. Initial assay results will be reported when available.

Further diamond holes are in progress. In addition to resource information the current programme will provide further additional geotechnical information and metallurgical samples for ongoing feasibility studies at the Caravel Copper Project.

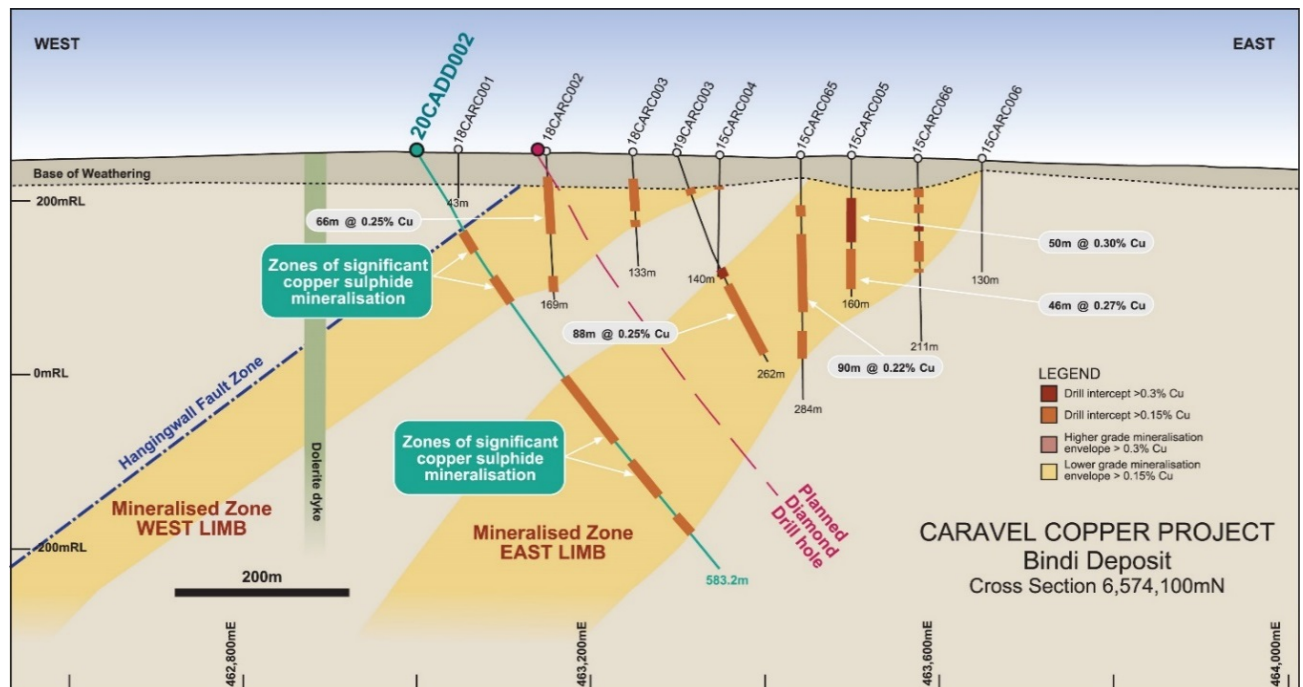
### Bindi Deposit RC Percussion Drilling

Reverse circulation (RC) percussion drilling continued at Bindi completing a total of 7 holes for 1,236 metres. The programme was designed to better define the grade and continuity in up-dip extensions of mineralisation at Bindi East (Figure 2).

Copper sulphide mineralisation has been intersected over wide zones at shallow depths, in line with geological model (Figure 3). A total of 662 drilling samples (including QA/QC samples) have been submitted for assay and results will be reported when available.



**Figure 2:** Drill status plan of the Bindi Deposit area showing location of recent Diamond and RC percussion drill hole collars and historical drilling locations UPDATE



**Figure 3:** Schematic cross section of the Bindi Deposit (6,574,100mN) showing location of recent diamond and RC percussion drill hole collars and historical drilling intersections. Note that zones of significant sulphide mineralisation are based on visual estimates only and that assay results for these zones are still pending.



## **Dasher Deposit RC Percussion Drilling**

Assay results were received during the quarter for the four reverse circulation (RC) percussion holes completed at the Dasher copper-gold deposit, located approximately 5km south of the Bindi deposit (see Caravel ASX announcement dated 12 November 2020). Laboratory assays confirmed low-grade sulphide copper intersections however the holes failed to locate the higher-grade zone that was targeted. Further drilling is planned to improve the model for mineralisation in this area.

## **Further Work**

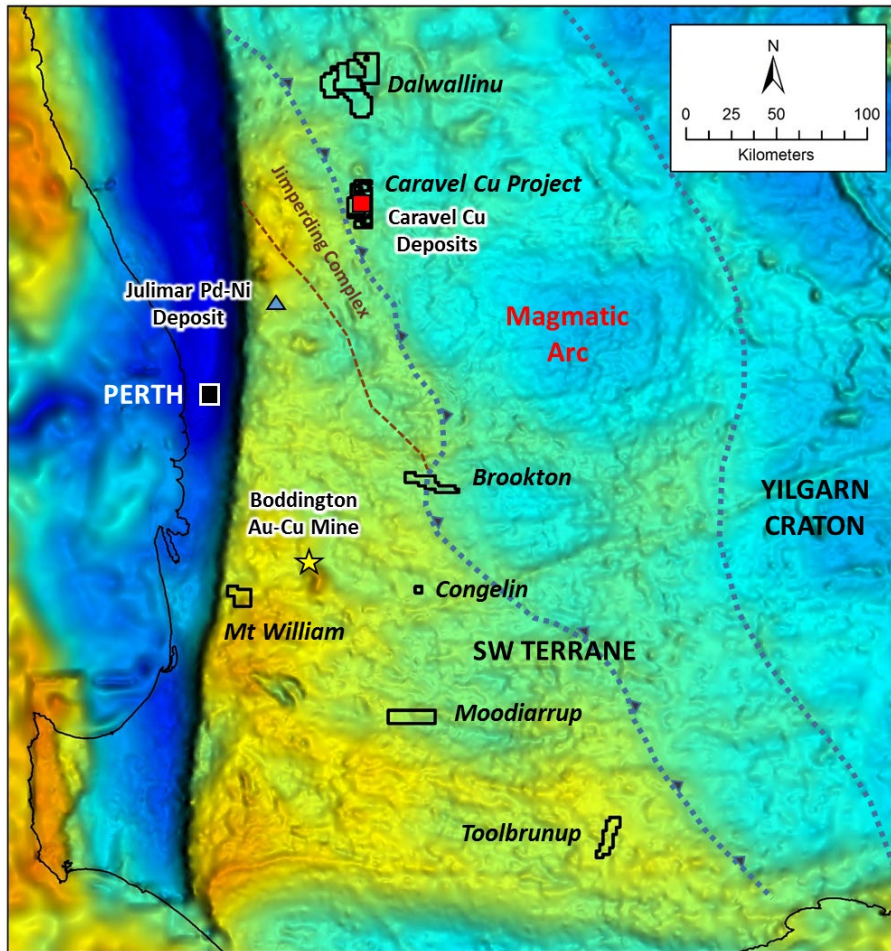
The results from the drill holes recently completed at Bindi are expected to provide sufficient information to undertake an updated resource estimate for the copper-gold mineralisation. This resource will then be incorporated into the ongoing feasibility studies for the Caravel Copper Project.

Drilling will continue next quarter at other areas at the Caravel Project where there is potential for both expanding the resource and delineating higher grade material. Crop harvesting has now been completed and the Company now has access in all the key areas of interest.

## **EXPLORATION PROJECTS**

Caravel has a portfolio of exploration projects in the South West Yilgarn Terrane (Figure 4) that are prospective for copper, gold, nickel and platinum group metals (PGM). The mineral potential of the South West Terrane has been highlighted by the recent high-grade PGM-Ni-Cu discovery at the Julimar Project by Chalice Gold Mines Ltd (ASX:CHN). The Julimar discovery, about 60km to the southwest of the Caravel Copper Project, has shown that significant mineralisation may be concealed below the surface weathering zone with no surface indications except subtle geochemical responses. The Caravel copper deposits were discovered in 2010 by the same process of surface sampling and identification of low level anomalous geochemical responses.

Caravel owns a comprehensive database of surface samples over the South West Yilgarn Terrane, comprising approximately 250,000 samples of which over 100,000 samples have been collected by Caravel and its predecessor Dominion Mining. The geochemical database, along with Caravel's models for surface expressions of mineralisation zones based on the Caravel deposits, have been used to identify other areas of interest with the region.

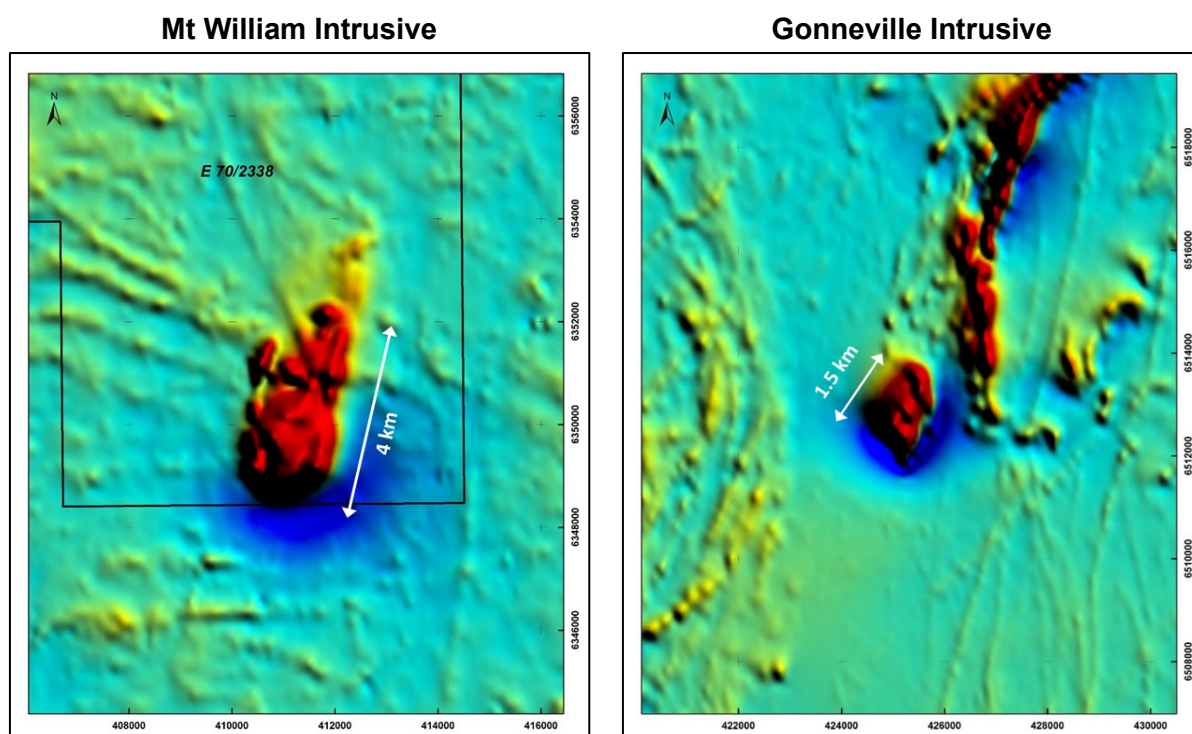


**Figure 4:** Location Caravel projects in the emerging Southwest Yilgarn Terrane mineral province. Image of regional gravity (Geological Survey of Western Australia)

## Mt William Ni-Cu-PGM Project

Subsequent to the end of the reporting period, the Company executed a joint venture agreement ("JV Agreement") with Round Oak Minerals Pty Limited (Round Oak) for the Mt William Ni-PGM prospect ("Mt William"). Round Oak is a wholly owned subsidiary of Washington H. Soul Pattinson & Co Ltd, a Sydney-based ASX-listed investment house.

Mt William is subject to Exploration License application E70/2338 and is located near Waroona, 100km south of Perth, in the South West Yilgarn Terrane (Figure 4). The main target at Mt William is a 3.5km long, very prominent magnetic feature that is interpreted to be a layered mafic complex analogous to the Gonnerville intrusive that hosts the recent Julimar PGE-Ni-Cu-Co-Au discovery made by Chalice Mining Limited (Chalice) (Figure 5).



**Figure 5:** Comparison of airborne magnetics at the Mt William (left) and Gonneville (right) intrusives (TMI Magnetic Image, Geological Survey of Western Australia) at the same scale.

Key terms of the Farm-in and Option Agreement between Caravel and Round Oak (the “Parties”):

- The Parties will work together to progress the grant of E70/2338 application;
- Upon the grant of E70/2338, Caravel may earn a 51% interest in Mt William by spending \$500,000 within two years (“Farm-In”); and
- Upon completion of the Farm-In, Caravel may elect to enter the Mt William JV Agreement with Round Oak with an initial 51% interest.

Key terms of the Mt William JV Agreement between the Parties:

- Caravel is the manager of the joint venture whilst it holds a joint venture Interest of 51% or greater;
- The Parties may elect to contribute to joint venture expenditure according to their respective interests or dilute according to a standard dilution formula;
- If Round Oak has elected to dilute its Joint Venture Interest, it maintains a right to clawback up to 30% project interest at any time up to 30 days after the completion of a Pre-feasibility Study, by making certain payments to Caravel (2 x Caravel expenditure for 10% clawback interest, 3 x expenditure for 20% and 4 x expenditure for 30%). Round Oak may not increase its Joint Venture Interest above 49% by this clawback; and
- If Round Oak’s joint venture interest dilutes to below 10%, its remaining joint venture interest will convert to a royalty.

Objections have been received in relation to grant of E70/2338 and the Company is engaged with the relevant government departments in order to try and resolve the objections and secure grant of the licence.

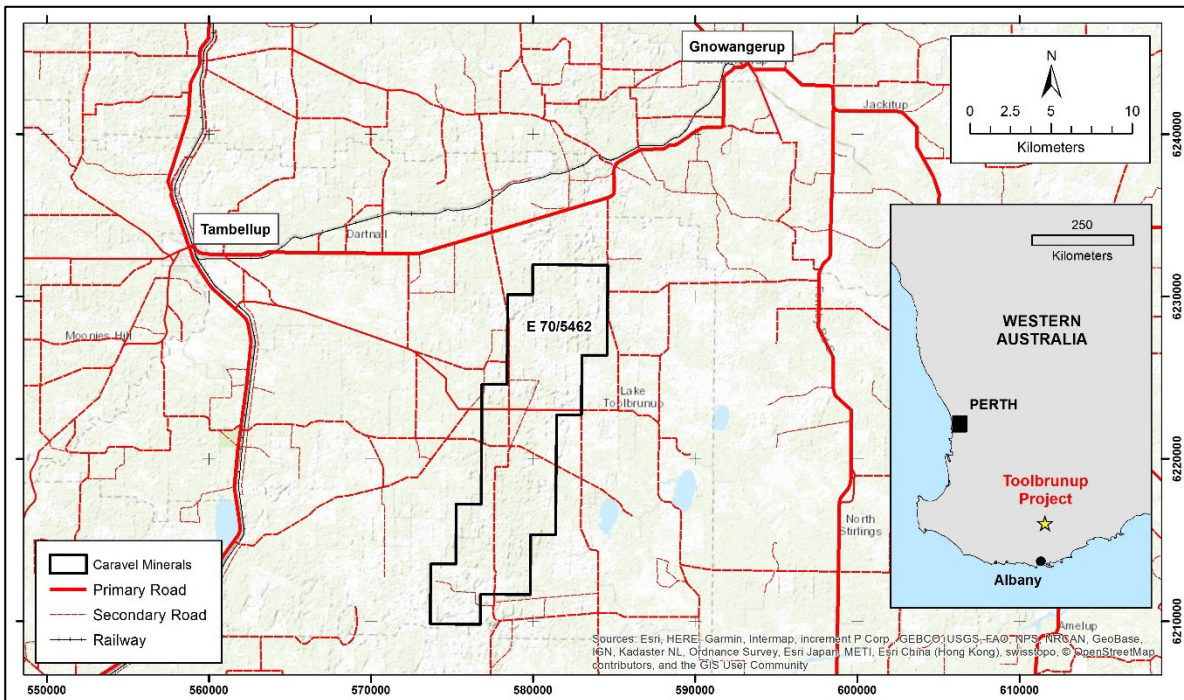


## Toolbrunup Ni-Cu-PGM Project

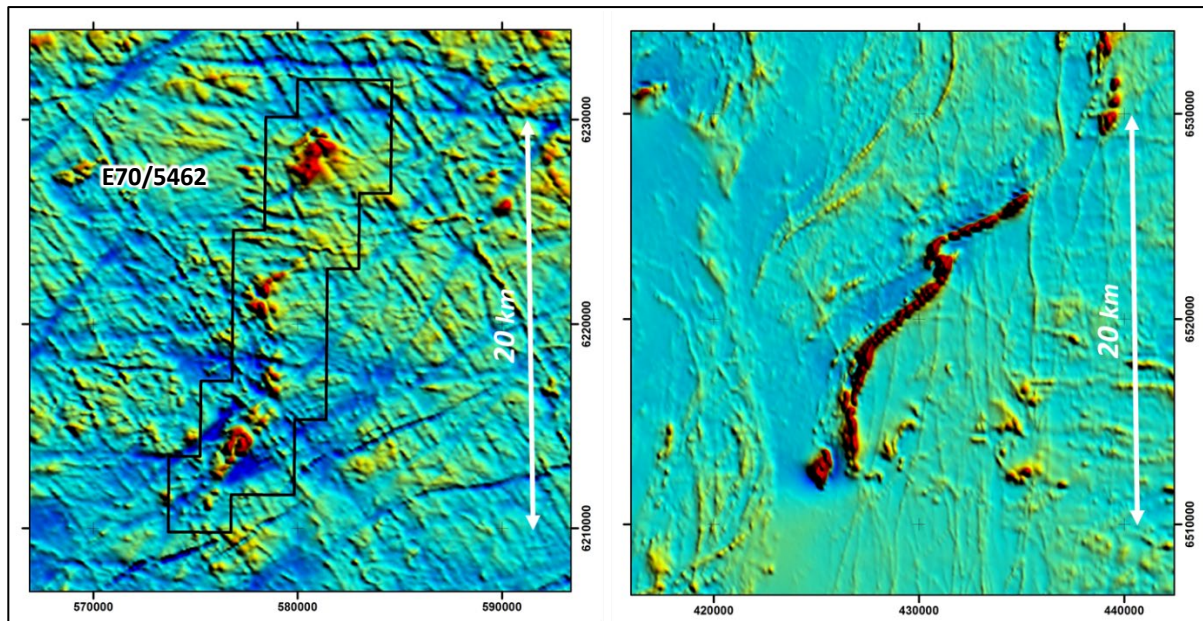
Exploration Licence 70/5462 at the Toolbrunup nickel-copper-PGM project was granted by the WA Department of Mines, Industry Relations and Safety (DMIRS) on 5 January 2021 for a 5 year term. The licence is located between Tambellup and Gnowangerup in southern WA (Figure 6) and has an area of 40 graticular blocks (approximately 114km<sup>2</sup>). The licence mainly covers cleared farmland in close vicinity to good infrastructure.

The Toolbrunup Project is based on a previously unrecognised mafic sill or dyke structure interpreted from airborne magnetic survey data. The magnetic feature is approximately 15km long but has no surface exposure due to surface weathering and shallow cover.

Geochemical sampling results from both open file reports and the proprietary Caravel database shows significant anomalies for both nickel, copper and platinum over the magnetic anomaly. The magnetic anomaly is also similar in style and scale to that seen at the Gonneville intrusive complex (Figure 7), at Chalice's Julimar Project. Julimar has similar reported levels of anomalous geochemistry within the surface weathering profile, which is highly unusual in the SW Yilgarn and a strong indication of the prospectivity of the Toolbrunup project.



**Figure 6:** Location of the Toolbrunup Ni-Cu-PGM project in the southwest of Western Australia



**Figure 7:** Toolbrunup Project TMI magnetic anomaly (left) and Gonneville (Julimar) magnetic anomaly (right) at same scale (source GSWA)

Consultation with landholders in the project area was initiated during the reporting period and field reconnaissance was undertaken.

The initial work programme at Toolbrunup will comprise geological mapping and further surface geochemical sampling. Subject to results of the initial work confirming the prospectivity of the area, it is expected the magnetic anomalies will be surveyed with ground or airborne electromagnetic (EM) surveys for direct detection of magmatic sulphide bodies and drill targeting.

## Dalwallinu Cu-Au Project

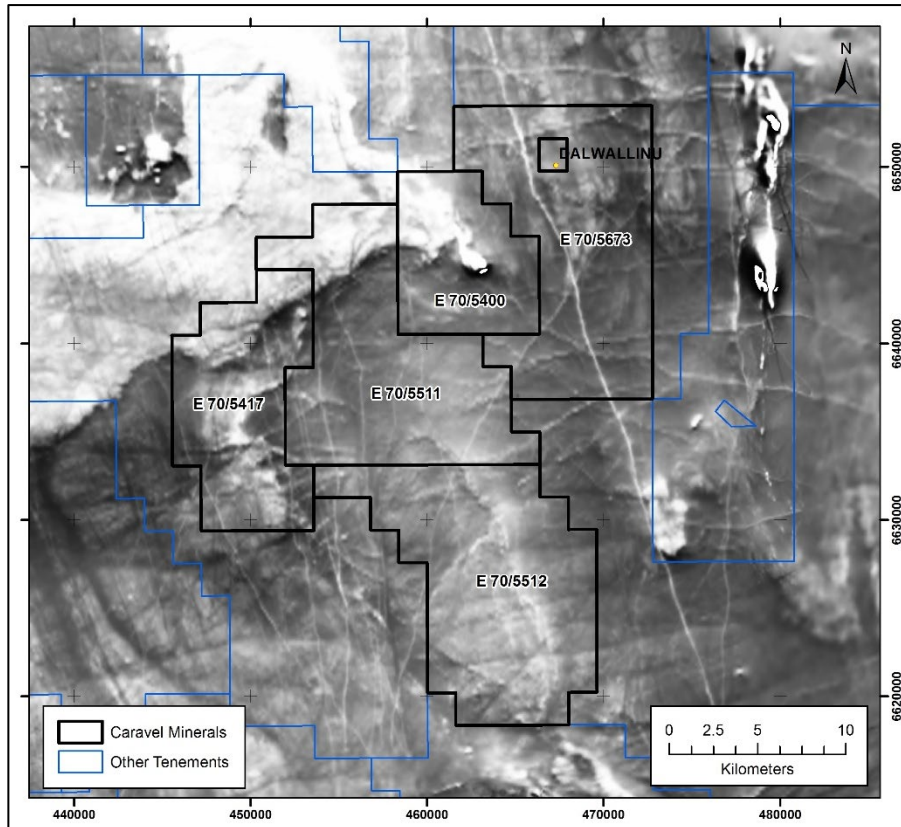
The Dalwallinu Copper-Gold Project is located adjacent to the town of Dalwallinu in the northern Wheatbelt of Western Australia, approximately 180km north-northeast of Perth. The project area is located over farmland and is easily accessible from the Great Northern Highway.

The project is interpreted to be on a northern extension of the same major structural corridor as the Caravel Copper Project to the south and is being targeted for similar porphyry-style copper and gold mineralisation. The project shows many of the geological features consistent with known porphyry copper deposits with large, multi-phase granite intrusions and mapped porphyry granites (Figure 8). Regional geochemical programmes show the area to be one of the most significant broad scale copper and gold anomalies in the SW Yilgarn region.

Compilation of regional geological information and any available historical exploration was undertaken during the reporting period. A reconnaissance field trip was undertaken to assess the project area and to plan further exploration on exploration tenements that have recently been granted.

The Company applied to DMIRS for an additional exploration licence during the quarter (E70/5673). Caravel is currently awaiting the grant of this tenement and several other exploration licence applications (E70/5511 and E70/5512) and is negotiating access agreements with key landholders.





**Figure 8:** Dalwallinu project tenements overlain on TMI magnetic image (Geological Survey of Western Australia)

## Brookton Cu-Au (Zn) Project

The Brookton copper-gold project is located on farmland adjacent to the town of Brookton, approximately 120km east of Perth. The area is easily accessible using major sealed regional highways. Subsequent to the end of the quarter, exploration Licence 70/5506 at the Brookton project was granted by DMIRS on 22 January 2021 for a 5 year term.

The project comprises two main prospective areas which shows outcropping gossans over approximately 6km strike and a broad base metal geochemical anomaly (rock chip and soils >300ppm Cu) over a similar area and 0.5km width. The geology, alteration and surface geochemistry are interpreted to be similar to those at the Ninan Prospect within the Caravel Copper Project, with parallels also drawn with the deposits at Golden Grove, Western Australia and Noranda, Canada. The area was initially explored in the 1970's and 1980's by Otter Exploration NL and then Shell but has received no systematic modern exploration.

No fieldwork was completed during the reporting period as the Company was awaiting the grant of the exploration licence application. A field exploration programme can now be undertaken after initial landowner consultations.

## Congelin Cu-Au Project

The Congelin Project is located over a prominent circular magnetic anomaly with a diameter of approximately 1km and is interpreted to be a possible kimberlite pipe. The project area is located in farmland approximately 10km north of the town of Williams and is easily accessible by road.

No exploration was undertaken and the Company is currently awaiting the grant of the exploration licence application (E70/5542). Reconnaissance of the area was completed during the reporting period.

## **Moodiarrup Cu-Au Project**

The Moodiarrup Project is located over farmland approximately 80km to the southeast of the Boddington Au-Cu mine and 25km southwest of Arthur River. This area has been selected utilising Caravel's proprietary regional geochemical database, which indicates that it contains a broad, surficial copper anomaly. The copper anomaly is similar in size and magnitude to early results from the Company's flagship Caravel Copper Project, where porphyry copper deposits were discovered after follow-up of anomalies generated by the same regional sampling method.

Based on a review of open-file information, limited historical exploration appears to have been completed over the new tenement areas and the Company is confident that the project areas have not been fully evaluated with modern exploration methods. The Archaean bedrock within the areas are extensively covered by laterite and recent colluvial deposits.

No exploration was undertaken and the Company is currently awaiting the grant of the exploration licence application (E70/5596). Reconnaissance of the area was completed during the reporting period.

## **CORPORATE**

Mr Alex Sundich resigned as a Director of the Company. Mr Sundich retains an association with Caravel as an Executive Director of corporate advisor Bridge Street Capital Partners and as a shareholder.

Since the previous quarterly report:

- 34,375,000 ordinary shares were issued at \$0.08 to raise \$2.75M, before costs;
- 1,562,000 shares were issued to a drilling contractor in consideration for drilling services provided to the Company;
- 1,000,000 options were exercised at \$0.08;
- 1,250,000 unlisted options exercisable at \$0.08 expiring 30 September 2022 were issued under the Company's employee incentive scheme; and
- 250,000 unlisted options exercisable at \$0.10 expiring 31 December 2022 were issued under the Company's employee incentive scheme.

At the date of this report, the Company had:

- 289,941,913 shares on issue;
- 15,900,000 unlisted options exercisable at \$0.08 expiring 30 September 2021 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;
- 250,000 unlisted options exercisable at \$0.10 expiring 31 December 2022 on issue;
- \$3.77M held in cash reserves; and
- Nil debt.

The approximately \$545,000 of exploration and evaluation expenditure expensed during the quarter predominantly comprised:

- Direct drilling costs;
- Technical staff costs; and
- Tenement rents and rates.

The aggregate amount of payments to related parties and their associates during the quarter of approximately \$121,000 (refer Item 6 of the accompanying Appendix 5B) comprises the following:

- Director fees (\$113k);
- Mitchell River Group consulting services (\$5k); and
- Mitchell River Group serviced office (\$3k)

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

This announcement is authorised for release by Managing Director, Steve Abbott.

**For further information, please contact:**

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## ABOUT CARAVEL MINERALS

Caravel Minerals is currently engaged in feasibility studies for the development the Caravel Copper Project, a greenfields copper mining and processing project located 150km north-east of Perth in Western Australia's Wheatbelt region. The project is based on an Indicated and Inferred Mineral Resource of 661.9Mt @ 0.28% Cu (at 0.15% Cu cut-off) for a total of 1.86Mt contained copper, making it one of the largest undeveloped copper resources in Western Australia. A Scoping Study completed in 2019 by Caravel Minerals and MSP Engineering demonstrated a strong economic model for the Project and recommended proceeding with more advanced feasibility studies.

Caravel also holds a suite of exploration projects in the prospective South West Yilgarn Terrane and is rapidly advancing an exploration program to test these areas for gold and base metals.





## APPENDIX A - TENEMENT SCHEDULE

Project	Location	Tenement	Equity at 1 Oct 2020	Equity at 31 Dec 2020	Changes During Quarter
Calingiri	Wongan/Victoria Plains	E70/2788	100	100	-
Calingiri	Goomalling	E70/2789	100	100	-
Calingiri	Wongan	E70/3674	100	100	-
Calingiri	Goomalling	E70/3680	100	100	-
Calingiri	Goomalling	E70/4732	100	0	Surrendered
Calingiri	Wongan	E70/5228	100	100	-
Calingiri	Wongan	E70/5229	100	100	-
Dalwallinu	Dalwallinu	E70/5400	100	100	-
Dalwallinu	Moora	E70/5417	100	100	-
Toolbrunup	Tambellup	E70/5462	0	100	Granted
Mt William	Harvey	EA70/2338	-	0*	Acquired
Brookton	Brookton	EA70/5506	-	-	-
Dalwallinu	Dalwallinu	EA70/5511	-	-	-
Dalwallinu	Dalwallinu	EA70/5512	-	-	-
Congelin	Williams	EA70/5542	-	-	-
Moodiarrup	Darkan	EA70/5596	-	-	-
Dalwallinu	Dalwallinu	EA70/5673	-	-	Application
Calingiri	Wongan	R70/0060	80	80	-
Calingiri	Goomalling	RA70/0063	-	-	Application

\* Caravel can earn a 51% interest

## APPENDIX B - MINERAL RESOURCES

The following table presents the Caravel Copper Project Mineral Resources Estimate and the 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	153.8	0.40	608,200	94.6	0.37	354,000	248.5	0.39	962,200
0.25	224.7	0.36	802,900	147.3	0.34	498,700	372.1	0.35	1,301,600
0.20	290.4	0.33	950,600	198.0	0.31	613,000	488.5	0.32	1,563,600
0.15	393.4	0.29	1,128,800	268.6	0.27	734,000	661.9	0.28	1,862,800

**1. Competent Persons Statements** The information in this report that relates to Exploration Results is based on and fairly represents information compiled by Mr Lachlan Reynolds. Mr Reynolds is a consultant to Caravel Minerals and is a member of both the Australasian Institute of Mining and Metallurgy and the Australasian Institute of Geoscientists. Mr Reynolds has sufficient experience of relevance to the styles of mineralisation and types of deposits under consideration, and to the activities undertaken to qualify as Competent Persons 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 Reynolds 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 Competent Persons 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.

**2. 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) :

- 29 April 2019 "Caravel Copper Resource and Project Update"
- 13 October 2020 "Option Agreement for Mt William Ni-PGM Prospect"
- 12 November 2020 "Drilling Update – Bindi and Dasher Deposits"
- 08 December 2020 "Drilling Update – Bindi Copper Deposit"
- 23 December 2020 "Final 2020 Drilling Update – Bindi Copper Deposit"
- 11 January 2021 "Toolbrunup Exploration – Licence Granted"
- 18 January 2021 "Mt William Exploration – Joint Venture Agreement"
- 25 January 2021 "Drilling Update – Bindi Copper Deposit"

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 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.

**3. 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 statement.