INITIAL COPPER CONCENTRATE ANALYSES – ADDITIONAL INFORMATION

- **Initial copper concentrate analyses demonstrates a very clean product with low level of impurities.**
- **The Caravel concentrate is anticipated to comply with smelter specifications free from penalties due to deleterious elements.**
- **Caravel concentrate likely to be attractive to smelter customers globally to blend with complex concentrates.**

Following on from the announcement of 29 April 2019 titled "Caravel Copper Resource and Project Update", which detailed metallurgical results, Caravel Minerals completed initial copper concentrate analyses on composite samples from the Caravel Copper Project. Analyses have demonstrated a very clean copper concentrate product with low level of impurities.

As smelting capacity increases globally, smelters are increasingly seeking clean concentrate to blend with complex concentrates (concentrates containing impurities above threshold levels). Based on the level of impurities of the Caravel concentrate, the Project's concentrate is likely to be a sought-after product by copper smelters.

Initial copper concentrate analyses are provided in Table 1:

Table 1: *Copper Concentrate Analyses*

Element	Caravel Concentrate
Cu (%)	~25%
As (%)	<0.01
Bi (%)	0.01
Cd (ppm)	<5
Cl (%)	<0.01
Fe (%)	26.5
Hg (ppm)	0.5
Pb (%)	<0.01
S (%)	29.3
Sb (ppm)	0.70
Se (ppm)	40.0
Zn (%)	0.20

Arsenic (As) is one key impurity element that is undesirable to smelters and is increasingly being seen in high concentration in many copper concentrates. Penalties for As usually start above 0.1-0.2% and concentrates >0.5% are not permitted to be imported to some countries.

Caravel copper concentrate levels for arsenic are <0.01%, at least ten times lower than the threshold level penalties that would apply, making it ideal for blending. Other impurities such as Cadmium (Cd), Selenium (Se), Antimony (Sb) and Lead (Pb) are similarly an order of magnitude or more under the typical threshold limits for smelters.

The Caravel Copper Project's clean copper concentrate analyses will allow discussions to progress with potential concentrate off-take parties.

For concentrate sample details and location of drill holes, refer to Diagram 1, Table 1 and Appendix 1.

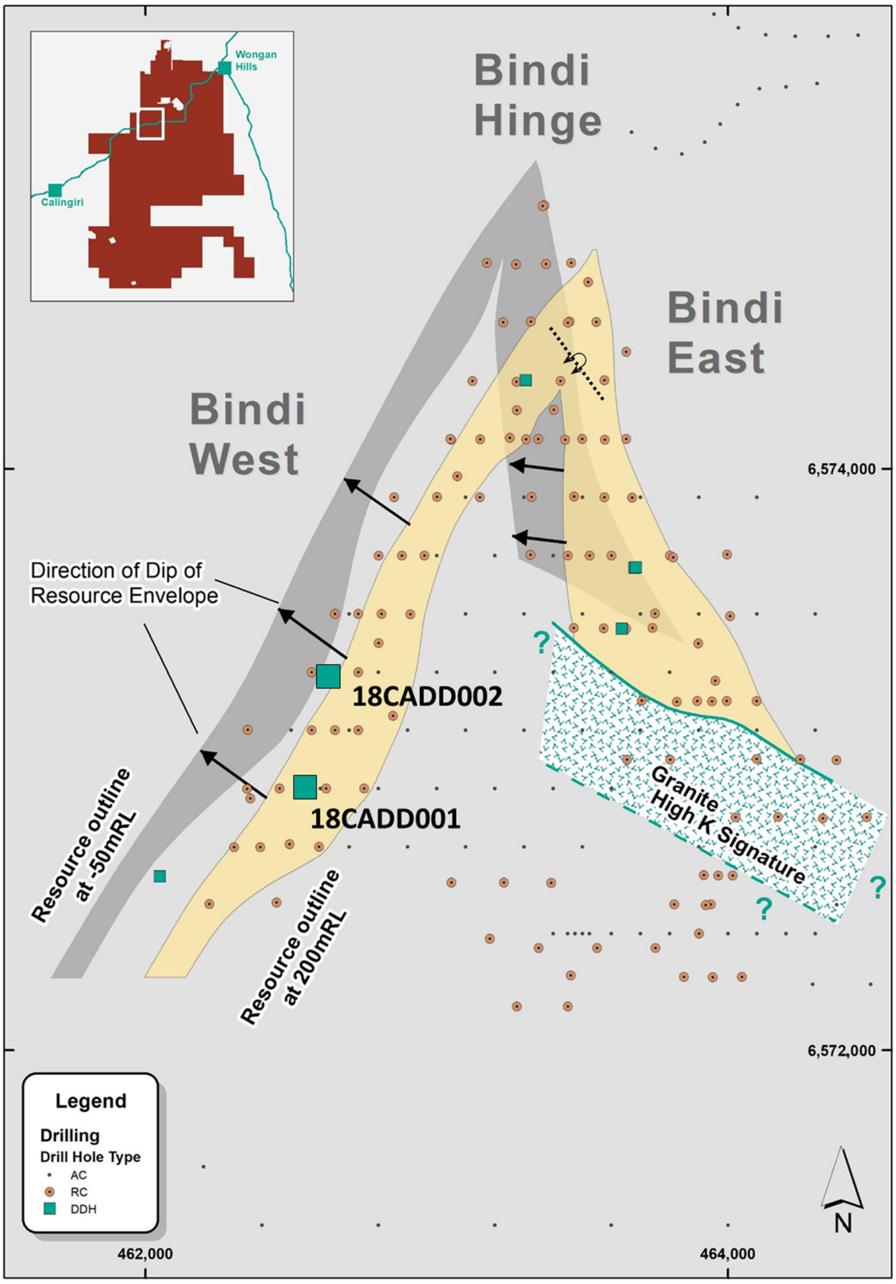

Diagram 1: *Collar plan showing location of diamond core holes used in metallurgical testwork*

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Master composites for metallurgical test work purposes were prepared for diamond holes 18CADD001 (CV-01MC) and 18CADD002 (CV-02MC) once multi-element assay analyses and geological logging had been completed. The intervals used to create the master composites are shown in Table 2.

The majority of metallurgical test work to date has been carried out on the master composites. The concentrate analysis in this announcement is for a composite consisting of 4kg CV01MC and 6kg CV02MC.

Table 2: Master composites used in metallurgical testwork.

Composite ID	Hole ID	Interval from (m)	Interval to (m)
CV01MC	18CADD001	44	50
	18CADD001	50	64
	18CADD001	64	70
	18CADD001	70	74
	18CADD001	96	102
	18CADD001	106	114
CV02MC	18CADD002	100	114
	18CADD002	114	120
	18CADD002	154	166
	18CADD002	166	172
	18CADD002	172	180
	18CADD002	196	202
	18CADD002	204	212

The composite sample was ground to a P80 of 150um before passing through three stages of rougher flotation for a cumulative float time of 12 minutes (4g/t of 3418A collector was added to the second stage and 5 g/t of kero to the third stage). The concentrate was then re-ground to a P80 of 42um before two stages of cleaner flotation with the addition of 67g/t of lime to control the pH to 10 and a further addition of 5g/t of kero the second stage (cum float 10 minutes). The concentrate then went under a molybdenum float to remove the molybdenum from the copper concentrate. The tail from the first stage of the molybdenum float is the final copper concentrate (float time 4 min).

This announcement replaces the announcement released on 11 June 2019 titled "Initial Copper Concentrate Specification".

For and on behalf of the board

For further information please contact:

Dan Davis
Company Secretary
Caravel Minerals Limited
Suite 1, 245 Churchill Avenue, Subiaco WA 6010
Telephone: 08 9426 6400

COMPETENT PERSON'S STATEMENT

The information in this report that relates to Metallurgical Test Work Results is based on and fairly represents information and test work managed by Mr Stuart Smith (consultant to Caravel Minerals Limited). Mr Smith is a Fellow of the Australian Institute of Mining and Metallurgy and has sufficient experience of relevance for management and interpretation of test work activities undertaken so as 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 Smith consents to the inclusion in this report of the matters based on his information in the form and context in which they appear.

APPENDIX 1: JORC 2012 Compliance Table

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	*Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.*	• Drill holes were sampled via conventional Reverse Circulation (RC) or Diamond drilling (DD).
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	• Sampling was carried out under Caravel's standard protocols and QAQC procedures and is considered standard industry practice.
	Aspects of the determination of mineralisation that are Material to the Public Report. *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• Reverse Circulation drilling was used to obtain 1m samples. ~3kg samples were combined to form 2m composite samples for assay. Samples are riffle split to 3.2kg and pulverised to nominal 85% passing 75 microns and sent for assay. Reverse Circulation samples were weighed, dried and pulverized to 85% passing 75 microns to form a sub-sample. All RC samples were sampled on 2m composites and sent for a multi-element suite using multi-acid (4 acid) digestion with an ICP/OES and/or MS finish and selected samples for 50g Fire Assay for gold with an AAS finish. • HQ3 diamond core was halved at ALS in Perth. Nominal 2m half core samples were collected at ALS Ammtec, where the entire 2m sample was control crushed using a jaw, followed by a cone crusher. A 500g split was collected from the entire crushed sample and submitted to ALS Geochemistry in Perth where samples were weighed and pulverized to 85% passing 75 microns to form a sub-sample. A multi-element suite was completed using multi-acid (4 acid) digestion with an ICP-OES/MS finish and 50g Fire Assay for gold with an AAS finish.
Drilling techniques	*Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• RC (reverse circulation) drilling was used using a 5 to 5.5 inch face sampling hammer. Diamond drilling was by conventional HQ techniques. HQ triple tube was used in more weathered zones. Core was oriented using a Reflex ACT 3 instrument.
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.*	• RC sample recoveries remained relatively consistent throughout the program and are estimated to be 100% for 95% of drilling. Any poor (low) recovery intervals were logged and entered into the database. Diamond recoveries in fresh rock consistently approximated 100%.

Criteria	JORC Code explanation	Commentary
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	• The RC rotating cone splitter and or riffle splitter was routinely cleaned and inspected during drilling. Care was taken to ensure calico samples were of consistent volume. Diamond samples were cut on the same core side to improve assay representivity.
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	• There is negligible to no relationship observed between grade and recovery.
Logging	*Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*	• RC and DD holes were logged geotechnically and geologically including but not limited to weathering, regolith, lithology, structure, texture, alteration, mineralisation and magnetic susceptibility. Logging was at an appropriate quantitative standard to support future geological, engineering and metallurgical studies. • Geological logging information was recorded directly onto digital logging system and information validated and transferred electronically to Database administrators in Perth.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	• Logging is considered quantitative in nature. • The Caravel rock-chip trays and core trays are all stored in racks in a secure facility close to the project areas. • All core has been photographed at appropriate image resolution and forms part of the drillhole database.
	The total length and percentage of the relevant intersections logged.	• All holes were geologically logged in full.
Sub-sampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.* *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*	• 1 meter RC samples were split off the drill rig into 1 calico bag using a rotating cone or riffle splitter. For each two meter interval, the 1m split samples were fully combined to make one 2m composite. >95% of the samples were dry in nature. • Reverse Circulation samples were weighed, dried, pulverized to 85% passing 75 microns. This is considered industry standard and appropriate. • All core is half cut and sampled. Duplicate samples were collected by ALS Geochem by splitting the 500g crushed sample submitted for analysis in two and analysing each sample separately. Diamond Drilling samples were weighed and pulverized to 85% passing 75 microns to form the sub-sample. • Master composites for metallurgical test work purposes were prepared by ALS Ammtec by combining and homogenising selected intervals. Subsamples of composites for flotation work were collected and milled to the specified grind sizes selected for individual flotation test (either 80% passing 150 microns or 80% passing 106 microns).

Criteria	JORC Code explanation	Commentary
		• The composite sample was ground to a P80 of 150um before passing through three stages of rougher flotation for a cumulative float time of 12 minutes (4g/t of 3418A collector was added to the second stage and 5 g/t of kero to the third stage). The concentrate was then re-ground to a P80 of 42um before two stages of cleaner flotation with the addition of 67g/t of lime to control the pH to 10 and a further addition of 5g/t of kero the second stage (cum float 10 minutes). The concentrate then went under a molybdenum float to remove the molybdenum from the copper concentrate. The tail from the first stage of the molybdenum float is the final copper concentrate (float time 4 min).
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	• Caravel has its own internal QAQC procedure involving the use of certified reference materials (standards), blanks and duplicates which accounts for 6% of the total submitted samples. QAQC has been checked with no apparent issues.
	Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.	• Field duplicate data suggests there is general consistency in the drilling results. • Head assays conducted
	Whether sample sizes are appropriate to the grain size of the material being sampled.	• The sample sizes are considered appropriate for the style of base and precious metal mineralisation observed which is typically coarse grained disseminated and blebby copper and molybdenum.
Quality of assay data and laboratory tests	*The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	• All pre-2012 RC samples were sent for multi-element analysis via Aqua Regia digestion and Atomic Absorption Spectrometry (AAS). • All post-2011 RC samples were sent for multi-element analysis via multi (4) acid digestion, ICP Atomic Emission Spectrometry (ICP-OES) and/or Mass Spectrometry and selected samples for 50g Fire Assay for gold. • All post-2011 diamond drill samples were sent for multi-element analysis via multi (4) acid digestion, ICP Atomic Emission Spectrometry (ICP-OES) and Mass Spectrometry (MS) and 50g FA/AAS for gold. • Concentrates are analysed using either multi (4) acid digestion, ICP Atomic Emission Spectrometry (ICP-OES) and Mass Spectrometry (MS), or a fused disc XRF Scan or both. A slow, low temperature acid digest is used for Sb, Hg, Se and Te instead of multi (4) acid digestion in order to ensure any volatiles are retained. Gold is determined through FA/AAS. • These techniques are considered appropriate and are considered industry best standard. All assay results are considered reliable and total.
	For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	• No such instruments have been used for reported intersections.

Criteria	JORC Code explanation	Commentary
	Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	• Caravel has its own internal QAQC procedure involving the use of certified reference materials (standards), blanks and duplicates which accounts for 6% of the total submitted samples. The certified reference materials used had a representative range of values typical of low, moderate and high grade copper mineralisation. Standard results for drilling demonstrated assay values are both accurate and precise. Blank results demonstrate there is negligible cross-contamination between samples. Duplicate results suggest there is reasonable repeatability between samples. • An umpire laboratory check was completed on 107 samples from the Bindi and Dasher Deposits in March 2019.
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.* *The use of twinned holes.*	• No dedicated twin holes have yet been drilled for comparative purposes. • The 2017 and 2018 diamond holes reported were drilled amidst previous RC and core holes and intersected mineralisation that compares well with the widths and grades intersected in the RC drilling.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	• Primary data was collected via digital logging hardware using in house logging methodology and codes. The data was sent to the Perth based office where the data is validated and entered into an industry standard master database by Caravel's database administrator.
	Discuss any adjustment to assay data.	• There has been no adjustment to assay data.
Location of data points	*Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*	• Hole collar locations have been picked up by Caravel employees whilst in the field using a GPS accurate to within ± 3m. Easting and Northing coordinates for a selection of holes have been checked using a DGPS and are considered reliable to within ± 3m which is acceptable considering the current drill spacing and the scale of the deposits. • Downhole surveys on all angled RC and DD holes used single shot or multishot readings at downhole intervals at approximately every 30m.
	Specification of the grid system used.	• The grid system used for location of all drill holes as shown on all figures is MGA Zone 50, GDA94.
	Quality and adequacy of topographic control.	• Hole collar RLs were determined from digital terrain models derived from detailed aeromagnetic survey data. DTM derived RL data has been field checked with a decimetre accuracy DGPS and has found to be accurate to within 2m vertically.
Data spacing and distribution	*Data spacing for reporting of Exploration Results.*	• Drill hole spacing is variable. 2m (RC) drill composite samples were sent for elemental analysis. Diamond Drill samples in the 2018 program were sampled nominally at 2m intervals. Diamond Drilling in previous programs were sampled

Criteria	JORC Code explanation	Commentary
		nominally at 1m intervals and between 0.3 and 1.3 mtrs dictated by geological boundaries.
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	• Drill and sample spacing is considered sufficient as to make geological and grade continuity assumptions.
	Whether sample compositing has been applied.	• 2 meter sample compositing (i.e. from two 1 meter samples) of the RC drilling was used. • Master composites for metallurgical test work purposes were prepared for diamond holes 18CADD001 (CV-01MC) and 18CADD002 (CV-02MC) once multi-element assay analyses and geological logging had been completed. The majority of metallurgical test work has been carried out on the master composites. The concentrate analysis in this announcement is for a composite consisting of 40% CV01MC and 60% CV02MC.
Orientation of data in relation to geological structure	*Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	• The orientation of drilling and sampling is not considered to have any significant biasing effects. The majority of drill holes have been completed perpendicular or oblique to the interpreted mineralised systems.
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	• As above
Sample security	*The measures taken to ensure sample security.*	• Chain of custody is managed by Caravel. Sampling is carried out by Caravel's experienced field staff. Samples are stored on site and transported to the Perth laboratory by Caravel's employees. • All diamond core used in the metallurgical test work program is in cold storage at ALS Ammtec.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	• No review has been carried out to date.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	*Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.*	• The results relate to E70/2788 and E70/3674.
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	• All applicable tenements are held securely by Caravel with no impediments identified.
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	• N/A
Geology	*Deposit type, geological setting and style of mineralisation.*	• The mineralisation at all prospects is believed to be of porphyry and/or skarn deposit style which occurs within a possible larger scale Archean subduction related geological setting. • The mineralisation at Bindi, Dasher and Opie typically consists of chalcopyrite + molybdenite + magnetite, disseminated within a coarse-grained, garnet-biotite gneiss, of likely granitic origin. Garnet abundance has a broad spatial association with mineralisation. • The garnet-biotite gneiss, and associated mineralisation, typically forms broad tabular zones in the order of 50-200m true thickness for the Bindi west limb, up to 475m for the Bindi east limb) and up to 250m for Dasher.
Drill hole Information	*A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes, including Easting and northing of the drill hole collar, Elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar, dip and azimuth of the hole, down hole length and interception depth plus hole length.* *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	• Refer to Diagram 1 and ASX Announcement of 27/11/2018 titled "Assays Confirm Multiple High Grade Zones at Bindi West."
Data aggregation methods	*In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.*	• Length weighted averages used for exploration results. Cutting of high grades was not applied in the reporting of intercepts.

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Criteria	JORC Code explanation	Commentary
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	
Relationship between mineralisation widths and intercept lengths	*These relationships are particularly important in the reporting of Exploration Results.* *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• Downhole lengths are reported. Diamond holes reported were drilled approximately perpendicular to the interpreted mineralised system and downhole widths are interpreted to approximate true widths.
Diagrams	*Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• Refer to Diagram 1
Balanced reporting	*Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• All significant results are reported with no intended bias.
Other substantive exploration data	*Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• Multi-element assaying was conducted on all samples which include potentially deleterious elements including arsenic.
Further work	*The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Further infill and extensional drilling at Bindi is planned for the coming year. Additional diamond core drilling is likely to be completed in order to provide material that can be used for metallurgical variability test work.