



# DRILLING RESULTS CONFIRM HIGHER-GRADE ZONES AT BINDI RESOURCE

# Highlights

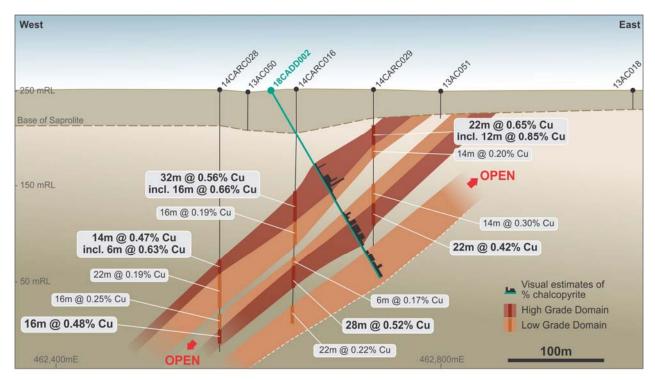
- Core drilling results at the Bindi deposit confirm continuity of higher-grade domains within the current resource.
- Results from the current drilling campaign will be used to construct a new geology model defining higher and lower grade domains.
- The new multi-domain geology model will allow variations to be considered for mine development including earlier scheduling of higher-grade ore as well as potential reduction of plant size and staged development to reduce initial capital cost.

Two diamond core holes drilled at the Bindi West deposit have confirmed that the resource at Bindi can be modelled as discrete domains comprising higher-grade ores around 0.5% Cu or higher, lower-grade ores below 0.5% Cu and some narrow zones of internal waste. Mineralisation predominately occurs as sulphide veins or layers, typically 10-100mm thick, which are aligned within a well-developed foliation fabric (Figure 1). Variations in grade between the domains are due to the width and spacing of these veins, which are mostly comprised of chalcopyrite (~80%) with lesser pyrite. The orientation of the veins and associated foliation fabric aligns with the interpreted continuity of grade domains between holes, providing support for the structural model of grade continuity.



**Figure 1:** Chalcopyrite mineralisation from higher grade domain within Bindi West resource, intersected in diamond drill core from hole 18CAD001 at 62m depth.

Initial assessments are based on visual observations of chalcopyrite distribution, which provide an indication of copper grade as chalcopyrite accounts for all significant copper mineralisation at the Bindi deposit. The accompanying cross section and table (Figure 2 and Table 1) shows visual estimates for 18CADD002, intercepts calculated from laboratory assays for the adjacent RC holes and the new interpretation of the higher and lower grade domains. The location of the drill holes are shown in Figures 3 and 4 below plus detailed in Table 2.



**Figure 2:** Cross Section through Bindi West (6,573,300mN) showing new domain interpretations and visual estimates of percentage chalcopyrite. For further detail regarding visual chalcopyrite estimates, refer to Table 1.

In relation to the disclosure of visual mineralisation, the Company cautions that visual estimates of sulphide material abundance should never be considered a proxy or substitute for laboratory analysis. Laboratory assay results are required to determine the widths and grade of the visible mineralisation reported in preliminary geological logging. The Company will update the market when laboratory analytical results become available.

The core from the current drill programme will be used for metallurgical and geotechnical testwork and final assays are expected to be available in late October.

Hole 18CAD002 was still in ore when it was stopped due to drilling equipment problems. It is intended a rig will return and continue this hole as the extent of mineralisation into the footwall is outside current ore boundaries.

Further drilling is planned and will take place over the next month to allow completion of the new geology model and an updated resource estimate. The resource estimate will provide the basis for new pit designs and mine schedules. These will then be used to assess new models for mine development, including scheduling of higher-grade ores early in the mine life to improve early cash flows or alternatively reducing the size of the plant to treat only higher-grade ores in the initial stages of the project.



In any development scenario the potential to develop ore at significantly higher grades than previously contemplated is expected to offer material improvements to the project economics and provide new development options.

Drilling is continuing at the Dasher deposit and regular updates will be provided. The current drilling campaign is part of a broader work programme for which further details will be provided in the near future.

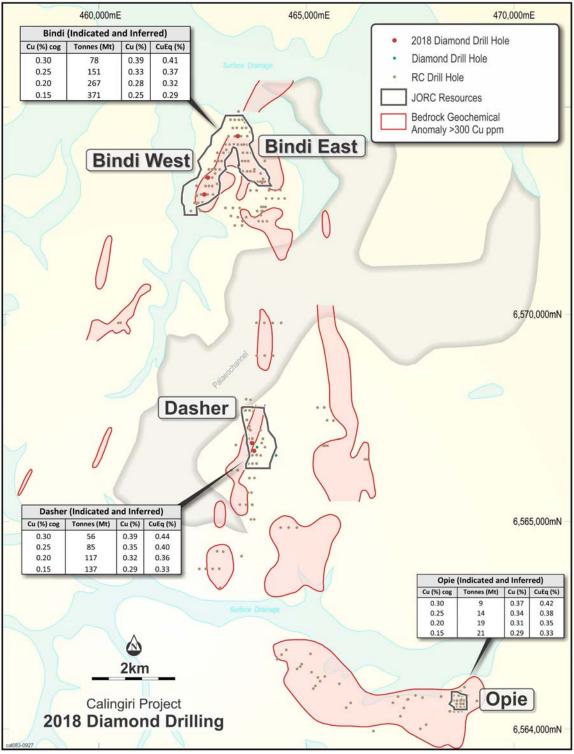


Figure 3: Prospect Collar Plan showing planned and completed 2018 diamond holes.



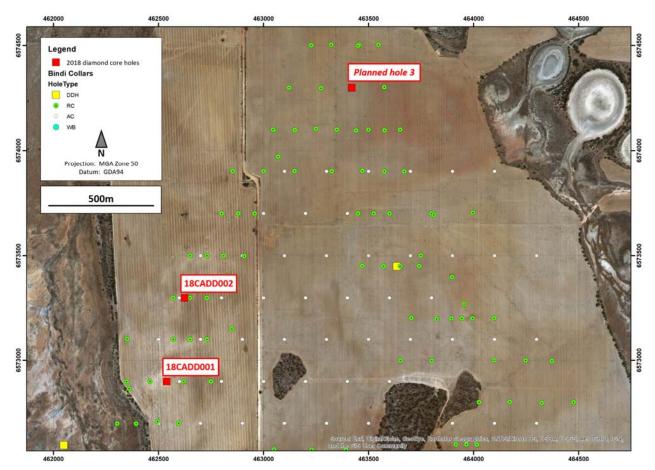


Figure 4: Detailed Collar Plan showing diamond holes drilled at Bindi West.

Table 1: Summary log of 18CADD002 with visual estimates of percentage chalcopyrite

Hole ID	mFrom	mTo	Interval (m)	% Chalcopyrite*	Summary
18CADD002	92.2	119.8	27.6	0.2% - 6%	Predominantly quartz-feldspar-biotite gneiss with scattered to abundant stringer sulphides (chalcopyrite >> pyrite)
18CADD002	119.8	129.6	9.8	0.1% - 0.2%	Quartz-feldspar-biotite gneiss with minor stringers to disseminated sulphides (chalcopyrite >= pyrite)
18CADD002	129.6	147	17.4	0.1% - 0.2%	Largely barren quartz-feldspar-biotite-garnet gneiss ± silimanite
18CADD002	147	155.5	8.5	0.2% - 2%	Quartz-feldspar-biotite-garnet gneiss with minor sulphide stringers (pyrite >= chalcopyrite)
18CADD002	155.5	182.8	27.3	0.5% - 2%	Quartz-feldspar-biotite-garnet gneiss with scattered to abundant sulphide stringers (chalcopyrite >> pyrite), often parallel to foliation. Contains rare clots of molybdenum
18CADD002	182.8	189.6	6.8	0.1% - 0.2%	Quartz-feldspar-biotite-chlorite-garnet gneiss with minor dolerite, minor quartz veins
18CADD002	189.6	219.7	30.1	0.5% - 2%	Quartz-feldspar-biotite ± garnet gneiss with stringer sulphides (chalcopyrite > pyrite). Rare specks of molybdenum. Occasional folding of foliation. Retrograde chlorite decreasing downhole.

<sup>\*</sup> Visual estimates of sulphide and native metal material abundance should never be considered a proxy or substitute for laboratory analysis. Laboratory assay results are required to determine the widths and grade of the visible mineralisation reported in preliminary geological logging. The Company will update the market when laboratory analytical results become available.



**Table 2:** Drill hole collar details for new Bindi West drill holes (MGA Zone 50)

Hole ID	Hole Type	Easting	Northing	Elevation	Depth	Dip	Azimuth
18CADD001	DDH	462538	6572900	251	114.5	-60	090
18CADD002	DDH	462628	6573300	255	219.7	-60	090

For and on behalf of the board

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#### **COMPETENT PERSON'S STATEMENT**

The information in this report that relates to Exploration Results is based on and fairly represents information and supporting documentation prepared by Mr Lauritz Barnes (consultant to Caravel Minerals Limited). Mr Barnes is a shareholder of Caravel Minerals. Mr Barnes is a member of the Australian Institute of Geoscientists and 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 his information in the form and context in which they appear.

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", <a href="www.caravelminerals.com.au">www.caravelminerals.com.au</a> and <a href="www.asx.com.au">www.asx.com.au</a>). 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.



# **APPENDIX 1 - JORC 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.  Include reference to measures taken to	Drill holes were sampled via conventional Reverse Circulation (RC) or Diamond drilling (DD).  Sampling was carried out under
	ensure sample representivity and the appropriate calibration of any measurement tools or systems used.  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.	Caravel's standard protocols and QAQC procedures and is considered standard industry practice.  Reverse Circulation samples were weighed, dried and pulverized to 85% passing 75 microns to form a subsample. 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. Diamond Drilling samples were weighed, dried crushed and pulverized to 85% passing 75 microns to form a sub-sample. All DD samples were sampled on nominal 1m samples and sent for a multi-element suite using multi-acid (4 acid) digestion with an ICP-OES/MS finish and 50g Fire Assay for gold with an AAS finish. 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. The same sample prep applies for diamond drill samples which are additionally crushed before pulverising.
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. 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 averaged 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 geologically including but not limited to weathering, regolith, lithology, structure, texture, alteration and mineralisation. Logging was at an appropriate quantitative standard to support future geological, engineering and metallurgical studies.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Logging is considered quantitative in nature.
	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.	All core is half cut and sampled. Duplicate samples were quarter cut and sampled.  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. Diamond Drilling samples were weighed, dried crushed and pulverized to 85% passing 75 microns to form the sub-sample
	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 8% 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. The mineralisation does not appear to be 'nuggety' in nature.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	The sample sizes are considered to be appropriate for the style of base and precious metal mineralisation observed which is typically coarse



Criteria	JORC Code explanation	Commentary
		grained disseminated 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 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 DD 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. 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.
	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 8% 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.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes.	No twin holes have yet been drilled for comparative purposes. The above mentioned diamond holes have been drilled to test specific grade continuity expected between existing RC holes with positive visual results. Formal assays are pending.
	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.



Criteria	JORC Code explanation	Commentary
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 DGPS accurate to within ± 1m. Easting and Northing coordinates are considered reliable (± 1m). Downhole surveys on all angled RC and DD holes used single shot or multishot readings at downhole intervals at approximately every 50m.
	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.	RL data is considered unreliable at present although topography around the drill areas is relatively flat and hence should not have any considerable effect on the current interpretation of data.
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. DD samples were sampled 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.
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 mineralisation is largely disseminated and stringer/blebby on a large scale.
	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.
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	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 EL's 70/3674, 70/2788 and 70/3680
	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.
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 Tables in announcement above. See representative drill collar plans and cross-section.
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. The assumptions used for any reporting of metal equivalent values should be clearly stated.	Length weighed averages used for exploration results. Cutting of high grades was not applied in the reporting of intercepts.



Criteria	JORC Code explanation	Commentary
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 in this announcement.
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 Figures included in the release.
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 drilling and geological evaluations are in progress to infill, potentially extend and further understand the Bindi and Dasher deposits, in particular the geological continuity and modelling of higher and lower grade zones within the mineralised systems. Collection of geotechnical data and sample material for metallurgical test-work is also part of the drilling program.

