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"CVV" ASX Shares Outstanding: 49m

# Caravel reports significant higher grades and extended mineralisation at its Calingiri project

Caravel Minerals Limited (ASX: **CVV**) ("Caravel" or "the Company") is pleased to provide additional results from a further 10 reverse circulation (RC) holes at its Calingiri Project.

Highlighted intersections include:

**232m** @ **0.32% Cu** from 36m, 15CARC067 including: **50m** @ **0.58% Cu** from 122m and **12m** @ **1.19% Cu** from 136m

26m @ 0.47% Cu from 160m, 15CARC060

20m @ 0.40% Cu from 260m, 15CARC061

- Discovery of 1,750m continuous zone of higher grade mineralisation at Bindi East
- Leading mining industry consultants, CSA Global commissioned to carry out initial JORC Resource estimation and a Scoping Study in Q1 and Q2 2016 respectively

Caravel Chief Executive Marcel Hilmer said "These drilling results have exceeded our expectations and represent an extremely encouraging advance in our search for higher grade mineralisation, thicker zones and to confirm the bulk tonnage economics at Calingiri. The financial and technical support from our earn-in partners, First Quantum Minerals has been an important contributer to the promising outcomes".

"We remain confident that the additional drilling in progress will continue to increase the widespread mineralisation as previously reported. Importantly, all of the three established targets are open in most directions. We are also pleased to have appointed CSA Global to complete the maiden Resource estimation that will be closely followed by a Scoping Study in Q2 2016".

The reported Consolidated Exploration Target (see Appendix B for relevant background and estimation information) is as follows:

0.2% Cut-off: 435-460 Mt @ 0.35-0.37% CuEq for ~1.4Mt Cu 0.3% Cut-off: 275-335 Mt @ 0.41-0.43% CuEq for ~1.2Mt Cu

An Exploration Target is conceptual in nature and there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.

The drilling program to date has been focussed on our largest Exploration Target, the Bindi Prospect. This drilling is providing infill coverage to facilitate the estimation of JORC Resources, as well as testing for extensions. Drilling has resumed at Bindi with a further 5-7 holes underway and scheduled for completion in mid February, following which CSA Global will undertake an evaluation of JORC Resources. This evaluation will also include the Dasher and Opie Exploration Targets.

Following completion of the Bindi drilling additional RC and air core drilling programmes are planned to evaluate other high priority targets within the Calingiri Project Copper-Molybdenum Target Trend.

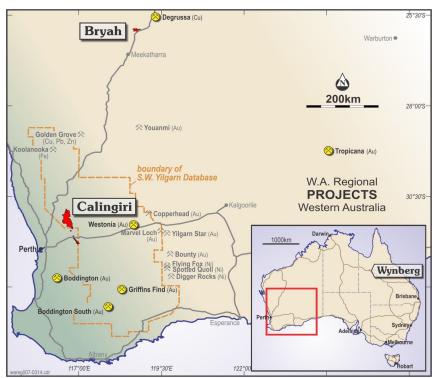


Figure 1 – Calingiri project location

## **DISCUSSION OF RESULTS**

# **Bindi Prospect**

Analytical results have been received for a further 10 holes (in addition to the 18 holes reported in November and December 2015) as detailed in Appendix A, with significant drilling intersections summarised below in Table A. Figure 2 shows all previous reported holes (86), holes with results now being reported (10), and planned holes (5-7).

Table A – Summary Bindi RC drilling intersections

Prospect	Hole ID		Interv	al (m)	Width	CuE	Cu	Мо	Ag	Au
			From	To	(m)	(CuMoAgAu)	(%)	(ppm)	(ppm)	(ppb)
Bindi	15CARC060		142	226	84	0.32	0.29	31	8.0	12
		incl	160	186	26	0.51	0.47	45	1.1	25
Bindi	15CARC061		220	320	100	0.32	0.25	58	2.4	21
		incl	260	280	20	0.54	0.40	160	4.5	35
Bindi	15CARC067		36	268	232	0.38	0.32	64	0.9	30
		incl	36	180	144	0.43	0.37	56	1.1	35
		incl	122	172	50	0.66	0.58	85	1.6	61
		incl	136	148	12	1.35	1.19	150	3.3	118

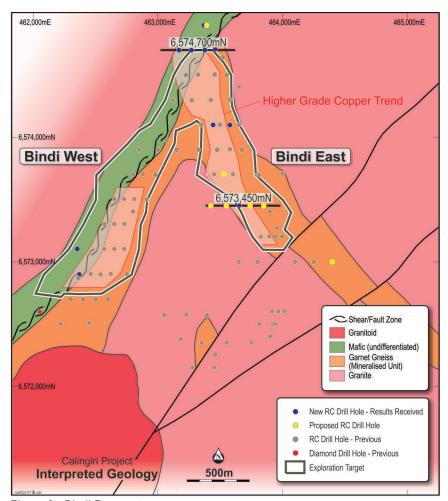


Figure 2- Bindi Prospect

15CARC067, drilled on Section 6,573,450mN (Figure 3) towards the southern end of the Bindi East zone, has significantly upgraded the interpreted mineralised zone with a continuous 232m zone of mineralisation, grading 0.32% Cu (0.38% CuEq) starting at a depth of 36m, immediately underlying the weathered clay zone. This intersection includes higher grade zones, mainly in the upper levels, including 144m @ 0.37% Cu (0.43% CuEq) from 36m, 50m @ 0.58% Cu (0.66% CuEq) from 122m and 12m @ 1.19% Cu (1.35% CuEq) from 136m. This mineralisation is open and further holes are being drilled in the current program (Figure 2).

This intersection confirms the continuity of a very significant trend of stronger mineralisation extending over a strike length of 1,750m, within the core of the Bindi East zone, This zone is now defined by multiple holes, including the recently reported holes 15CARC054 on Section 5,573,900mN (210m @ 0.33% CuEq from 36m, including 82m @ 0.44% CuEq from 36m and 14m @ 0.73% CuEq from 94m) and 15CARC057 on Section 6,574,500mN (258m @ 0.32% CuEq from 102m, including 14m @ 0.81% CuEq from 204m and 16m @ 0.67% CuEq from 272m).

It is believed that the identification of this zone will, not only increase the quantum of the Bindi mineralisation, but also define a geometry, extending from shallow depths, that will give very low strip ratios in any potential open pit development.

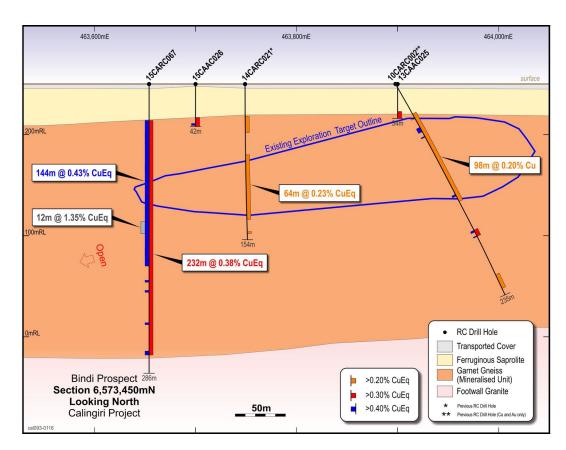


Figure 3 - Bindi Section 6,573,450mN

Previously the northern extent of the Bindi Exploration Target had been terminated at 6,574,700mN. New drilling on this section – 15CARC058, 059, 060 and 061 (Figure 4) has demonstrated further continuity of the mineralised zone in each of the 3 westernmost holes drilled. These holes were all aborted (due to high water flows associated with intrusive dolerite dykes) within mineralisation, so it is not possible to fully interpret the zone without further drilling. Nevertheless these results will again increase the size of Bindi, which is still open to the north. 15CARC062 was drilled 200m to the north but was aborted (also due to high water flows) in the hanging wall to the mineralisation. This is the only hole, currently being reported, that failed to intersect significant mineralisation.

Limited drilling within the Bindi West zone (15CARC063 and 064) has supported previous interpretations.

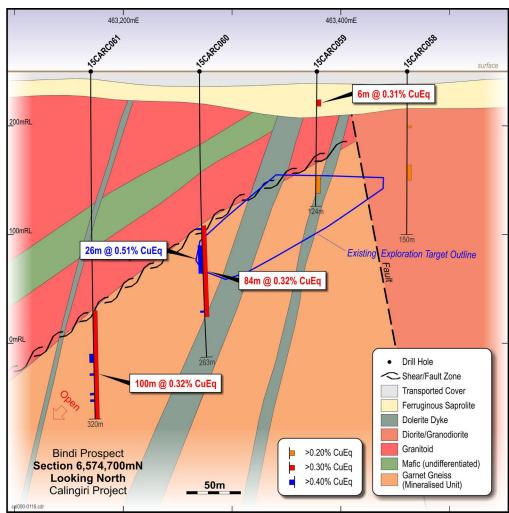


Figure 4 – Bindi Section 6,574,700mN

## **Forward Program**

The remainder of the current Bindi RC drilling program will be completed by early February 2016.

Further RC drilling is then planned to evaluate the **Ninan Prospect** and other well defined targets, including **Opie**, **Kurrali**, **Edmonds**, **and Dasher South** (Figure 5).

An extensive air core drilling program is also planned to evaluate areas between Bindi and Ninan and also to the south west of Bindi.

The Calingiri Project has now reached a stage where confidence in the geometry, grade and geological setting of the mineralisation, in particular at Bindi, is at a level where JORC Resources should be reasonably estimated. To this effect Caravel has appointed CSA Global to estimate resources at each of the current Exploration Targets (Bindi, Dasher and Opie). This work will commence when all results for the current drilling at Bindi are available, probably in mid-February.

Following completion of resource modelling and estimation, CSA Global have also been appointed to carry out a Scoping Study on the Calingiri Project. This will comprise Whittle optimisations to provide high level annual mining schedules, based on high level operating and capital cost modelling, to provide a Life of Mine cashflow model.

To facilitate the process parameter inputs, additional metallurgical testwork on the Bindi mineralisation is planned.

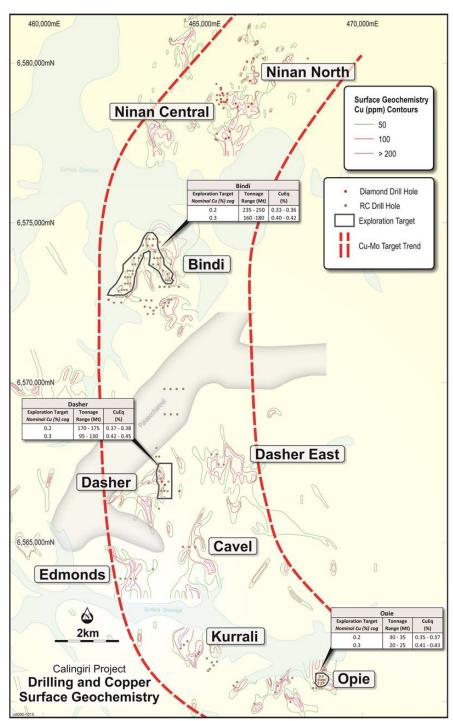


Figure 5 – Calingiri Project Overview

## **ENDS**

# For further information, please contact:

## **Investors**

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### **Summary of Assessment and Reporting Criteria**

In accordance with the 2012 JORC guidelines, a summary of information used in these exploration results is provided:

The Calingiri Project is situated within the South West Terrane of the Archaean Yilgarn Craton. While the mineralisation outlined to date has porphyry style indicators, the high grade metamorphic nature of much of the system makes it is difficult to interpret a definitive deposit classification at present.

Detailed explanations of the basis for the Bindi, Dasher and Opie Exploration Targets are provided in Appendix A. These prospects are located within tenements in which Caravel Minerals Limited has a 100% interest.

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 finish and 50g Fire Assay with an AAS finish.

Potentially deleterious elements including arsenic were assayed as part of the ICP multi-element suite.

No top or lower cut offs have been applied to the results released. Reported intersections vary in context to actual true widths.

#### **About Caravel Minerals Limited**

Caravel Minerals is a gold, copper and base metals exploration and resource development company with projects located in Queensland and Western Australia. Caravel has a technically strong and well established exploration and mine development team.

#### **Competent Person's Statement**

The information in this report that relates to Exploration Targets and Exploration Results is based on and fairly represents information and supporting documentation compiled by Tony Poustie, a Competent Person who is a full-time employee of Caravel Minerals Limited and a Fellow of the Australasian Institute of Mining and Metallurgy. Mr. Poustie has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Poustie consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

# **APPENDIX A – Bindi Intersection Table**

Hole ID	Coordinates	Dip	Azimuth	Total	Interva	al (m)	Width	CuE	Cu	Мо	Ag	Au
HOIC ID	N/E	Dip	Azimutii	Depth	From	То	(m)	(CuMoAgAu)	(%)	(ppm)	(ppm)	(ppb)
15CARC058	6574707N /	-90	335	118	50	52	2	0.24	0.23	10	0.3	10
	463461E				86	100	14	0.22	0.18	16	1.6	3
15CARC059	6574701N /	-89	206	124	26	32	6	0.31	0.30	2	0.3	7
	463378E				96	112	16	0.25	0.22	34	0.7	8
15CARC060	6574700N /	-90	123	263	142	226	84	0.32	0.29	31	0.8	12
	463270E			incl	142	188	46	0.42	0.38	38	0.9	17
					160	186	26	0.51	0.47	45	1.1	25
					220	226	6	0.43	0.39	13	2.0	30
15CARC061	6574700N /	-90	158	320	220	320	100	0.32	0.25	58	2.4	21
	463170E			incl	224	318	94	0.32	0.26	60	2.5	22
15CARC062	6574900N / 463370E	-90	193	165	110	112	2	0.24	0.23	4	0.5	5
15CARC063	6573103N /	-70	101	322	178	322	144	0.23	0.20	41	0.8	6
	462353E			incl	178	190	12	0.36	0.33	40	0.4	9
					204	206	2	0.28	0.25	42	0.3	10
					228	256	28	0.44	0.38	80	1.7	14
					280	300	20	0.26	0.21	47	1.3	14
					320	322	2	0.28	0.23	30	1.6	30
15CARC064	6572900N /	-68	270	249	160	240	80	0.23	0.20	32	1.0	6
	462370E			incl	162	196	34	0.27	0.24	30	0.7	7
					218	240	22	0.25	0.20	44	1.9	11
15CARC065	6574099N /	-90	164	284	56	232	176	0.23	0.20	29	0.9	11
	463444E			incl	56	66	10	0.25	0.21	26	0.9	26
					88	172	84	0.26	0.23	43	0.6	14
					200	232	32	0.29	0.25	8	2.4	16
					216	218	2	1.06	0.94	9	9.3	60
15CARC066	6574098N /	-90	161	211	42	64	22	0.20	0.17	10	0.9	10
	463578E				80	84	4	0.36	0.32	11	1.4	30
					98	116	18	0.28	0.23	30	1.7	22
15CARC067	6573451N /	-90	0	286	36	268	232	0.38	0.32	64	0.9	30
	463654E			incl	36	180	144	0.43	0.37	56	1.1	35
					122	172	50	0.66	0.58	85	1.6	61
					194	268	74	0.33	0.27	85	0.7	26

## **APPENDIX B – Exploration Targets**

The two tables below show the Calingiri Exploration Targets at nominal 0.2% and 0.3% Cu cut-off grades.

#### Calingiri Project Exploration Targets (nominal 0.2% Cu cut-off grade)

Exploration Target Nominal 0.2% Cu cog	Tonnage Range (Mt)	Cu Range (%)	Mo Range (ppm)	Ag Range (ppm)	Au range (ppb)	CuEq (%)
Bindi	235 - 250	0.29 - 0.32	61 - 69	1.4 – 1.5	24 - 27	$0.33 - 0.36^{1}$
Dasher	170 – 175	0.32 - 0.33	57 - 58	1.8 – 1.8	40 – 40	$0.37 - 0.38^2$
Opie	30 – 35	0.30 - 0.32	58 - 63	1.6 - 1.7	31 - 33	$0.35 - 0.37^3$
Consolidated	435 - 460	0.30 - 0.32	58 - 63	1.6 – 1.7	31 - 33	0.35 - 0.37

## Calingiri Project Exploration Targets (nominal 0.3% Cu cut-off grade)

Exploration Target Nominal 0.3% Cu cog	Tonnage Range (Mt)	Cu Range (%)	Mo Range (ppm)	Ag Range (ppm)	Au range (ppb)	CuEq (%)
Bindi	160 - 180	0.34 - 0.36	75 - 78	1.8 – 1.9	29– 31	$0.40 - 0.42^{1}$
Dasher	95 - 130	0.36 - 0.39	63 – 68	2.0 – 2.2	40 – 48	$0.42 - 0.45^2$
Opie	20 - 25	0.35 - 0.37	68 - 73	1.9 - 2.1	34 - 38	$0.41 - 0.43^3$
Consolidated	275 - 335	0.35 - 0.37	68 - 73	1.9 – 2.1	34 - 38	0.41 - 0.43

<sup>&</sup>lt;sup>1</sup> Bindi: CuEq = Cu ppm + (Mo ppm\*4.50)+(Ag ppm\*82.8)+(Au\*5,720). Assumptions: Cu \$2.61/lb, Mo \$8/lb, Ag \$16/oz, Au \$1,200/oz; Cu rec 95%, Mo rec 93%, Ag rec 88%, Au recovery 81%.

## A. Bindi

The Bindi West mineralisation (western limb of the fold structure), is developed within a very consistent gneissic unit between 150 - 200m thick and dipping at approximately 35-45 degrees to the west has been intersected over a strike length of over 2,000m, from near surface to a vertical depth of 275m. Importantly, the mineralisation is open in all directions. The consistent nature of the mineralisation has allowed the construction of a robust geological model from which tonnage and grade estimates can be established. Mineralisation at Bindi East (eastern limb of the fold structure), is also developed within gneiss however its geometry is interpreted to be flat dipping with no current constraints yet identified on dip and dip direction.

3D wireframe modeling techniques have been applied to generate weighted average grades of the mineralised bodies within the host gneiss. While Caravel believes that the drilling completed to date could permit the estimation of an Inferred Resource within the more closely drilled sections of the mineralised zones, the density of drilling is insufficient to permit resource estimation for much of the interpreted mineralisation.

The Company believes that the Exploration Target is supported by the extensive drilling results and subsequent geological modeling.

This target is based on the geological model that has been extended 100-150m beyond both the most northerly and southerly drill sections (i.e. a total strike length of 2150m) and to a vertical depth of 300m (275m was the deepest drill intersection) at Bindi West and 100m beyond both the most northerly and southerly drill sections (i.e. a total strike length of 1650m) and to a vertical depth of 300m (250m was the deepest drill intersection) at Bindi East.

The visual appearance of mineralisation is considered very similar to that seen at Dasher and dominated by coarse grained chalcopyrite (copper sulphide) and molybdenite (molybdenum sulphide) being the dominant sulphide species. Also, a geostatistical study has indicated that silver values show a very strong correlation with copper values. Furthermore, multi-element analyses have shown relatively low values of elements, such as arsenic, that can be metallurgically deleterious. Caravel notes that this style of mineralisation, coupled with the

<sup>&</sup>lt;sup>2</sup> Dasher: CuEq = Cu ppm + (Mo ppm\*4.69)+(Ag ppm\*74.5)+(Au\*3,280). Assumptions: Cu \$2.61/lb, Mo \$8/lb, Ag \$16/oz, Au \$1,200/oz; Cu rec 96%, Mo rec 98%, Ag rec 80%, Au recovery 47%.

<sup>&</sup>lt;sup>3</sup> Opie: CuEq = Cu ppm + (Mo ppm\*4.41)+(Ag ppm\*88.47)+(Au\*4770). Assumptions: Cu \$2.61/lb, Mo \$8/lb, Ag \$16/oz, Au \$1,200/oz; Cu rec 96%, Mo rec 98%, Ag rec 80%, Au recovery 47%.

conceptual size and grade ranges, is indicative of a significant number of deposits worldwide that are currently under exploration or in production.

Metallurgical testwork has been carried out by SGS Lakefield Oretest Pty Ltd. A representative composite sample of Bindi mineralisation (grading 0.32% Cu, 77 ppm Mo, 1.6 ppm Ag and 40ppb gold) were subject to rougher flotation testwork which produced recoveries of 95% Cu, 93 % Mo, 88% Ag and 81% Au. This testwork was primarily designed to maximize copper recoveries and additional testwork is needed to optimize recoveries of other elements.

These metallurgical results strongly support the potential for the Bindi mineralisation to yield both high recoveries and potentially premium quality, concentrates. Further testwork is planned to more specifically evaluate potential process parameters and concentrate grades.

On the basis of these results Caravel believes that there is a reasonable potential for the recovery and sale of copper, molybdenum and silver and that these elements can, therefore, be used to calculate a copper equivalent grade.

The assumptions and the formula used for the calculation are as follows:

Metal price assumptions (US\$) – Cu \$2.61/lb, Mo \$8/lb, Ag \$16/oz, Au \$1,200/oz Recovery assumptions – Cu 95%, Mo 93%, Ag 88%, Au 81% Formula CuEq = Cu ppm + (Mo ppm\*4.50)+(Ag ppm\*82.8)+(Auppm\*5720)

#### B. Dasher

Caravel initially referred to the Dasher Exploration Target in its release of 10 July 2013 (subsequently clarified on 2 August 2013) — Exploration Confirms Significant Potential of Calingiri Copper-Molybdenum Project. In a subsequent release of 17 March 2014 — Latest Results Confirm Potential of Calingiri Copper Project the Exploration Target was amended to include copper equivalent grades. The latest modelling (November 2014) includes new diamond drill hole data and assumptions on metal recoveries based on recent metallurgical testwork. There has been no additional data that affects the relevant interpretation and assumptions, which are summarised below:

The Dasher mineralisation, which is developed within a very consistent gneissic unit between 50 - 150m thick and dipping at approximately 45 degrees to the east, has been intersected over a strike length of over 1,000m, from near surface to a vertical depth of 500m. Importantly, the mineralisation is open in all directions. The consistent nature of the mineralisation has allowed the construction of a robust geological model from which tonnage and grade estimates can be made.

Ordinary Kriging Block modeling techniques have been applied to interpolate grade within the mineralised host gneiss. While Caravel believes that the drilling completed to date could permit the estimation of an Inferred Resource within the more closely drilled sections of the mineralised zone, the density of drilling is insufficient to permit resource estimation for much of the interpreted mineralisation.

The Company believes that the Exploration Target is supported by the extensive drilling results, block modeling techniques and early stage metallurgical results.

This target is based on the geological model that has been extended only 100 m beyond both the most northerly and southerly drill sections (i.e. a total strike length of 1,250m) and to a vertical depth of 450m (500m was the deepest drill intersection).

Mineralogical studies have indicated that copper and molybdenum values are related to sulphide mineralisation and that chalcopyrite (copper sulphide) is the dominant sulphide species. Also, a geostatistical study has indicated that the gold and silver values show a very strong correlation with copper values. Furthermore, multi-element analyses have shown relatively low values of elements, such as arsenic, that can be metallurgically deleterious. Caravel notes that this style of mineralisation, coupled with the conceptual size and grade ranges, is indicative of a significant number of deposits worldwide that are currently under exploration or in production.

Metallurgical testwork has been carried out by SGS Lakefield Oretest Pty Ltd. Two representative composite samples of Dasher mineralisation (respectively grading 0.39% Cu, 130 ppm Mo, 1.9 ppm Ag, 40 ppb Au and 0.49% Cu, 43 ppm Mo, 4.8 ppm Ag, 50 ppb Au) were subject to rougher flotation testwork which produced recoveries of 96-96.4% Cu, 93-98.2% Mo, 76.1-80.2% Ag and 42-51% Au. This testwork was primarily designed to maximize copper recoveries and additional testwork is needed to optimize recoveries of other elements.

Mineralogical examination of the concentrate samples (Report by R. N. England Consulting Geologist) has indicated that chalcopyrite is 5 times more abundant than all other sulphides combined (mainly pyrite and pyrrhotite as well as molybdenite), with the rest of the concentrate samples consisting of silicates.

These metallurgical and mineralogical results strongly support the potential for the Dasher mineralisation to yield both high recoveries, in particular of copper and molybdenum, as well as high grade, and potentially premium quality, concentrates. Further testwork is planned to more specifically evaluate potential process parameters and concentrate grades.

On the basis of these results Caravel believes that there is a reasonable potential for the recovery and sale of copper, molybdenum, silver and gold and that these elements can, therefore, be used to calculate a copper equivalent grade.

The assumptions and the formula used for the calculation are as follows:

Metal price assumptions (US\$) – Cu 2.61/lb, Mo 8/lb, Ag 16/oz, Au 1.200/oz. Recovery assumptions – Cu 96%, Mo 98%, Ag 80%, Au 47% Formula CuEq = Cu ppm + (Mo ppm\*4.69)+(Ag ppm\*74.5)+(Auppm\*3280).

## C. Opie

The Opie mineralisation is developed within a consistent gneissic unit between 50 - 150m thick and dipping at approximately 35-45 degrees to the north has been intersected over a strike length of over 200m, from near surface to a vertical depth of 240m. Importantly, the mineralisation is open in most directions. The consistent nature of the mineralisation has allowed the construction of a robust geological model from which tonnage and grade estimates can be established.

3D wireframe modeling techniques have been applied to generate weighted average grades of the mineralised bodies within the host gneiss. While Caravel believes that the drilling completed to date could permit the estimation of an Inferred Resource within the more closely drilled sections of the mineralised zones, the density of drilling is insufficient to permit resource estimation for much of the interpreted mineralisation.

The Company believes that the Exploration Target is supported by the extensive drilling results and subsequent geological modeling.

This target is based on the geological model that has been extended 50-100m beyond both the most northerly and southerly drill sections (i.e. a total strike length of 350m) and to a vertical depth of 300m (240m was the deepest drill intersection).

The visual appearance of mineralisation is considered very similar to that seen at Dasher and Bindi and dominated by coarse grained chalcopyrite (copper sulphide) and molybdenite (molybdenum sulphide) being the dominant sulphide species. Also, a geostatistical study has indicated that silver values show a very strong correlation with copper values. Furthermore, multi-element analyses have shown relatively low values of elements, such as arsenic, that can be metallurgically deleterious. Caravel notes that this style of mineralisation, coupled with the conceptual size and grade ranges seen collectively at Dasher, Bindi and Opie, is indicative of a significant number of deposits worldwide that are currently under exploration or in production.

Metallurgical testwork has been carried out by SGS Lakefield Oretest Pty Ltd. A representative composite sample of Opie mineralisation (grading 0.32% Cu, 1.34 ppm Ag and 50ppb gold) were subject to rougher flotation testwork which produced recoveries of 97% Cu, 96% Ag and 69.4% Au. This testwork was primarily designed to maximize copper recoveries and additional testwork is needed to optimize recoveries of other elements.

These metallurgical results strongly support the potential for the Opie mineralisation to yield both high recoveries and potentially premium quality, concentrates. Further testwork is planned to more specifically evaluate potential process parameters and concentrate grades.

On the basis of these results Caravel believes that there is a reasonable potential for the recovery and sale of copper, molybdenum and silver and that these elements can, therefore, be used to calculate a copper equivalent grade.

The assumptions and the formula used for the calculation are as follows:

Metal price assumptions (US\$) – Cu \$2.61/lb, Mo \$8/lb, Ag \$16/oz, Au \$1,200/oz Recovery assumptions – Cu 97%, Mo 93%, Ag 96%, Au 69% Formula CuEq = Cu ppm + (Mo ppm\*4.41)+(Ag ppm\*82.5)+(Auppm\*4770)

# **APPENDIX C - JORC Compliance Table**

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
	<ul> <li>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.</li> </ul>	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.
Sampling techniques	Aspects of the determination of mineralisation that are Material to the Public Report.	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.  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.
	• 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 1 mtr samples. "3kg samples were combined to form 2 mtr 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, facesampling 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.
	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%.
Drill sample recovery	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.
	If core, whether cut or sawn and whether quarter, half or all core taken.	All core was half cut and sampled.  Duplicate samples were quarter cut and sampled.
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	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.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	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
Sub-sampling techniques and sample preparation	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 grained disseminated copper and molybdenum.
	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.	• n/a
Quality of assay data and laboratory tests	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.      The verification of significant intersections by either independent or alternative company personnel.	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.  Significant intersections are checked by the Exploration Director and Exploration Manager at Caravel. Where possible, significant intersections are also verified/cross-checked by portable XRF data collected whilst in the field.
Verification of sampling and assaying	The use of twinned holes.	No twin holes have been drilled for comparative purposes. The prospect is still considered to be in a relatively early exploration stage.

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	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 the master database by the Caravels database administrator.  There has been no adjustment to assay
	Discuss any adjustment to assay data.	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 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.
Eccusion of data points	Specification of the grid system used.	The grid system used for location of all drill holes as shown on all figures is MGA_GDA94, Zone 50.
	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 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.
Data spacing and distribution	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 on a large scale.
Saucare	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 field 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 Dasher prospect is located within E70/2788. The Bindi prospect is located within E70/2788 and E70/3674. The Opie prospect is located within E70/2789. All tenements are 100% owned by Caravel.  The Ninan prospect is located across E70/2788 and E70/2343. E70/2343 is 80% owned by Quadrio with the remaining 20% owned by a private third party – G. Doust who is free carried to a decision to mine.
	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.
	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:	
	o easting and northing of the drill hole  collar  o elevation or RL (Reduced Level –	
	elevation above sea level in metres) of the drill hole collar	Refer to Table Appendix B
Drill hole Information	o dip and azimuth of the hole	read to rubic Appendix B
	<ul> <li>down hole length and interception depth</li> <li>hole length.</li> </ul>	
	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.	
Data aggregation methods	<ul> <li>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.</li> </ul>	All results reported in Appendix B are based on intervals calculated using no lower or top cut and using no maximum internal dilution.

	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.	• n/a
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	The assumptions and the formula used for the calculation are as follows: Bindi Metal price assumptions (US\$) – Cu \$2.61/lb, Mo \$8/lb, Ag \$16/oz, Au \$1,200/oz Recovery assumptions – Cu 95%, Mo 93%, Ag 88%, Au 81% Formula CuEq = Cu ppm + (Mo ppm*4.50)+(Ag ppm*82.8)+(Au ppb*5.72)  Dasher Metal price assumptions (US\$) – Cu \$2.61/lb, Mo \$8/lb, Ag \$16/oz, Au \$1,200/oz. Recovery assumptions – Cu 96%, Mo 98%, Ag 80%, Au 47% Formula CuEq = Cu ppm + (Mo ppm*4.69)+(Ag ppm*74.5)+(Au ppb*3.28).  Opie Metal price assumptions (US\$) – Cu \$2.61/lb, Mo \$8/lb, Ag \$16/oz, Au \$1,200/oz. Recovery assumptions – Cu 97%, Mo 93%, Ag 96%, Au 69% Formula CuEq = Cu ppm + (Mo ppm*4.41)+(Ag ppm*88.47)+(Au ppb*4.77).
	These relationships are particularly important in the reporting of Exploration Results.	
Relationship between mineralisation widths and intercept lengths	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	The mineralisation at Opie is typically 50- 150m wide and dips ~35-45 degrees to the north. Drill intersections reported are of variable true widths. Refer to figures for estimated true widths.
	<ul> <li>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').</li> </ul>	
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 in the body of text
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.
	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).	Further geological evaluations are in process. Follow up drilling will be considered once the geological evaluation is finalised.
Further work	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Refer to figures in the body of text