

## Broad Sulphide Zones Intersected at Yarabrook Hill

### HIGHLIGHTS

- Multiple sulphide zones intersected over 250m in YAD0017 and 120m in YAD0018
- Disseminated copper sulphides observed, consistent with target PGE mineralisation style
- Significant scale with drill holes 1.25km apart
- Drilling complete, core samples being prepared for assay

Caspin Resources Limited (ASX: CPN) (“Caspin” or “the Company”) is pleased to provide an update on the Company’s diamond drill program at the Yarawindah Brook Ni-Cu-PGE Project in Western Australia. Drilling is now finished following the completion of two holes at Yarabrook Hill for a total of 601.6m.

Both holes have encountered significant widths of sulphides. The first hole, YAD0017, intersected several zones of disseminated sulphide, typically around 1 to 3% by volume, consistent with that observed in nearby hole, DNN05. Sulphide mineralisation occurs between 66.2m to 314.3m downhole, with distinctly more intense sulphide zones (locally up to approximately 15% based on visual inspection) at approximately 68m, 156m and 308m. Sulphide minerals include chalcopyrite (copper sulphide), pyrrhotite (iron sulphide) and pentlandite (nickel sulphide) hosted by mafic and ultramafic rocks.

The second hole, YAD0018, also encountered similar styles of sulphide mineralisation between 71.0m to 187.2m down hole, again hosted by mafic to ultramafic rocks. Mineralisation at the top of the hole appears truncated by a late-stage dolerite dyke.

Caspin Chief Executive Officer, Mr Greg Miles, said:

“The two holes at Yarabrook Hill have delivered exactly what we wanted to see, that is, mafic and ultramafic rocks with broad zones of copper and nickel sulphide mineralisation which we believe is a good visual proxy for potential PGE mineralisation. The holes are 1.25km apart, so the scale of the opportunity is significant. Now we wait with anticipation for the assay results.

“In the meantime, we are already planning the next work program. We are extremely grateful to have received a co-funded drilling grant through the WA Government Exploration Incentive



Figure 1. Coarse gabbro and sulphides at 271.6m in YAD0017.

Scheme. This is going to allow us to drill the deepest hole at Yarabrook Hill to date which will give us a huge amount of new geological information as well as another opportunity for discovery.

“While we wait for assay results, we will also commence work on our Mount Squires Project which is highly prospective for gold, copper and nickel. This is an exciting time for Caspin’s shareholders.”

A geological summary of the holes can be found in Table 1.

The information in this announcement is based solely on a visual inspection of the drill core. The core is yet to be assayed and analysed. The Company has not confirmed whether PGE mineralisation is present, given that can only be determined through laboratory analysis. However, the presence of disseminated chalcopyrite is a characteristic of PGE mineralisation at Chalice Mining’s Julimar Project.



Figure 2. Disseminated to stringer chalcopyrite-rich sulphides at 308.8m in YAD0017.



Figure 3. Disseminated chalcopyrite-rich sulphides at 70.5m in YAD0017.



Figure 4. 20cm of massive sulphide at 156.1m in YAD0017.





Figure 5. 20cm zone of massive sulphide at 130.8m in YAD0018.



Figure 6. Disseminated blebby chalcopyrite at 161.8m in YAD0018.

### Next Steps

Detailed logging is continuing before samples are submitted for assay. All holes will be surveyed by downhole electromagnetics (DHEM) to evaluate the potential for “off-hole” conductors and secondary drill targets, although it is worth noting that this style of mineralisation will likely only provide weak EM responses.

Assays for the XC-29 Prospect also remain pending.

Both holes at Yarabrook Hill terminated in a predominantly barren gabbro unit, although it is unclear if this represents the basal unit of the host intrusion or if additional mineralisation is hosted deeper in the intrusion. The Company has been awarded a co-funded drilling grant through the WA government Exploration Incentive Scheme to test this concept and planning is already underway.

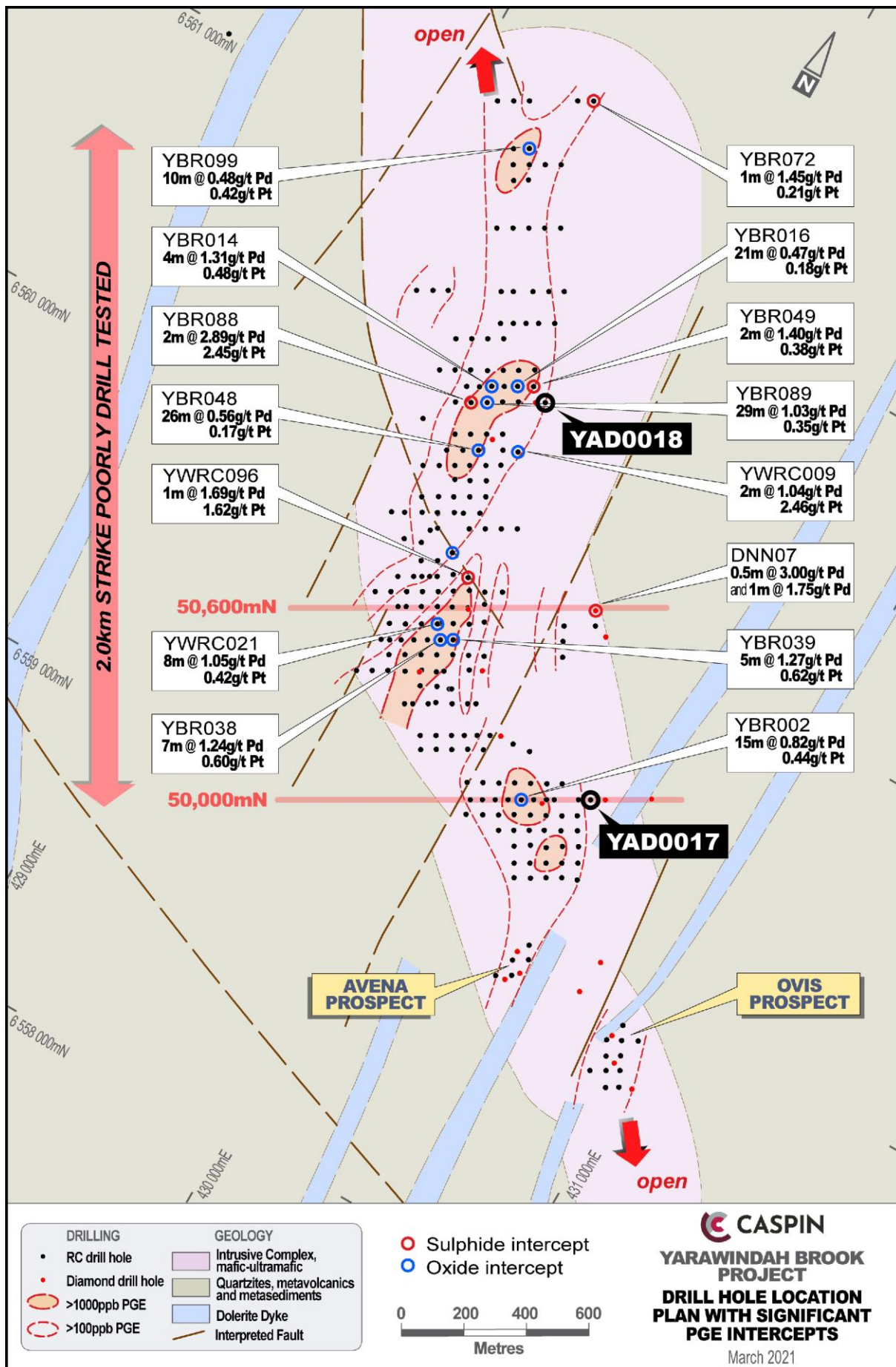


Figure 7. Drill hole locations and electromagnetic conductors at Yarabrook Hill Prospect.

**TABLE 1. DRILL HOLE LOCATION DETAILS AND OBSERVATIONS.**

Hole ID	Northing	Easting	RL	Dip	Azi	Depth (m)	Interval (m)	Observations
YAD0017	6559470	430470	308	-60	240	369.8	0-66.2	Regolith and cover sequences after meta-gabbro and pyroxenite. Minor ferruginous bands potentially after sulphides
							66.2-71.4	Undifferentiated ultramafic with disseminated to blebby chalcopyrite and pyrrhotite up to 10%, grading to massive over 0.20m intervals.
							71.4-138.1	Meta-gabbro with minor pyroxenite and serpentinite. Trace to locally 2% disseminated sulphides of pyrrhotite and chalcopyrite.
							138.1-186.6	Serpentinite with minor pyroxenite with trace to 2% disseminated pyrrhotite and chalcopyrite. Up to 10% sulphide between 150.5-156.2m with 0.2m bands of massive sulphides of pyrrhotite, chalcopyrite and pentlandite.
							186.6-248.2	Meta-pyroxenite with minor intercalated gabbro and ultramafic with trace to 3% disseminated sulphides, dominantly pyrrhotite.
							248.2-295.0	Gabbro with minor undifferentiated ultramafic. Trace disseminated sulphides.
							295.0-314.3	Coarse grained gabbro with disseminated to blebby pyrrhotite, chalcopyrite and pentlandite between 1-3%, locally up to 15% over short intervals.
							314.3-EOH	Massive gabbro. Rare, disseminated sulphides. Minor late-stage dolerite dykes
YAD0018	5650485	429730	291	-60	240	231.8	0-30.5	Regolith and cover sequences.
							30.5-71.0	Weakly to strongly weathered, late-stage dolerite dyke.
							71.0-79.3	Gabbro with minor serpentinite. Veinlets up to 3% sulphides and locally semi-massive sulphides up to 30% of pyrrhotite, pentlandite and chalcopyrite.
							79.3-125.4	Ultramafic and serpentinite with minor late-stage dolerite dykes. Trace blebs of sulphide.
							125.4-160.0	Coarse grained meta-gabbro with disseminated chalcopyrite sulphides up to 2%. Minor zones of massive pyrrhotite and chalcopyrite between 130.7-132.5m
							160.0-187.2	Serpentinite with lesser meta-gabbro with disseminated, trace to 2% chalcopyrite and pyrrhotite.
							187.2-EOH	Coarse grained massive gabbro. Rare disseminated sulphides.

This announcement is authorised for release by the Board of Caspin Resources Limited.

-ENDS-

For further details, please contact:

**Greg Miles**

Chief Executive Officer  
[admin@caspin.com.au](mailto:admin@caspin.com.au)  
Tel: +61 8 6373 2000

**Competent Persons Statement**

The information in this report that relates to Exploration Results is based on information compiled or reviewed by Mr Greg Miles, a Competent Person who is an employee of the company. Mr Miles is a Member of the Australian Institute of Geoscientists and has sufficient experience of relevance to the styles of mineralisation and the 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 Miles consents to the inclusion in this report of the matters based on information in the form and context in which it appears.

The Company confirms that it is not aware of any new information or data that materially affects the Exploration Results information included in this report from previous Company announcements (including drill results extracted from the Company's Prospectus announced to the ASX on 23 November 2020 and on 30 March 2021 and 28 April 2021).

**ABOUT CASPIN**

Caspin Resources Limited (ASX Code: **CPN**) is a new mineral exploration company based in Perth, Western Australia. Caspin's strategy is to explore and progress its mineral resource projects, and where appropriate, generate, earn into, or acquire new projects with the aim of creating value for Caspin shareholders.

At the Yarawindah Brook Project, Caspin will be exploring Australia's newest Ni-Cu-PGE province, advancing exploration on multiple fronts using soil geochemistry and Airborne EM in search of new Ni-Cu-PGE sulphide deposits. Caspin will then test the most prospective targets with drilling programs.

At the Mount Squires Project, Caspin has identified a 50km structural corridor with significant gold mineralisation. The Company will conduct further soil sampling and reconnaissance drilling to identify new targets along strike from the Handpump Prospect. Caspin will concurrently continue to evaluate the potential for Ni-Cu mineralisation along strike from the One Tree Hill Prospect and Nebo-Babel Deposits.

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## ANNEXURE 1:

The following Tables are provided to ensure compliance with the JORC Code (2012) edition requirements for the reporting of the Exploration Results at the Yarawindah Brook Project.

### SECTION 1: Sampling Techniques and Data (Criteria in this section apply to all succeeding sections)

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
<b>Sampling techniques</b>	<i>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</i>	No samples have been taken as yet.
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	Not applicable as no samples have been taken as yet.
	<i>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 (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information.</i>	Not applicable as no samples have been taken as yet.
<b>Drilling techniques</b>	<i>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic etc) and details (e.g. core diameter, triple of standard tube, depth of diamond tails, face-sampling bit or other type, whether core is orientated and if so, by what method, etc).</i>	Diamond drilling accounts for 100% of the drilling completed by Caspin and comprises HQ3 and NQ2 diameter core samples. Both holes were commenced with HQ3 but switched to NQ2 when the ground became competent.  All core was orientated, once competent rock was intersected, using a Reflex ACT III HQ digital orientation tool.
<b>Drill sample recovery</b>	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	Core recoveries are measured using standard industry best practice. Overall core recoveries are poor in the near surface lithologies but >95% from approximately 30m downhole depth.
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i>	Samples are routinely checked for recovery and any issues immediately rectified with the drilling contractor.
	<i>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.</i>	No assays have been received at time of reporting to determine potential sample bias.
<b>Logging</b>	<i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral</i>	Not applicable as mineral resources and metallurgical studies are not reported.

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
	<i>Resource estimation, mining studies and metallurgical studies.</i>	
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i>	Logging records lithology, mineralogy, mineralisation, weathering, colour and other relevant features of the samples. Logging of core is both qualitative (e.g. colour) and quantitative (e.g. mineral percentages).
	<i>The total length and percentage of the relevant intersections logged.</i>	All drillholes have been logged in full.
<b>Sub-sampling techniques and sample preparation</b>	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	No samples taken at time of reporting.
	<i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i>	Not applicable as no samples have been taken as yet.
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	No samples taken at time of reporting.
	<i>Quality control procedures adopted for all subsampling stages to maximise representivity of samples.</i>	No samples taken at time of reporting.
	<i>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.</i>	No samples taken at time of reporting.
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	No samples taken at time of reporting..
<b>Quality of assay data and laboratory tests</b>	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	No samples taken at time of reporting.
	<i>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.</i>	No samples taken at time of reporting.
	<i>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i>	No samples taken at time of reporting.
<b>Verification of sampling and assaying</b>	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	No samples taken at time of reporting.
	<i>The use of twinned holes.</i>	No twinning was completed.
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	Primary data for the Yarawindah Brook Project was collected in the field using a set of standard Field Marshal and/or excel templates on laptop computers using lookup codes. The information will be sent to



CRITERIA	JORC CODE EXPLANATION	COMMENTARY
		Geobase Australia for validation and compilation into a SQL database server.
	<i>Discuss any adjustment to assay data.</i>	No samples taken at time of reporting..
<b>Location of data points</b>	<i>Accuracy and quality of surveys used to locate drillholes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i>	Reported drill holes were located with a Garmin hand-held GPS with an accuracy of $\pm 3\text{m}$ . This is considered appropriate for exploration drill holes.  Downhole surveys were completed using north-seeking Reflex Sprint-IQ gyroscope after hole completion. Stated accuracy is $\pm 1^\circ$ in azimuth and $\pm 0.3^\circ$ in dip.
	<i>Specification of the grid system used.</i>	The grid system for the Yarawindah Brook Project is GDA94 MGA Zone 50.
	<i>Quality and adequacy of topographic control.</i>	The tenement package exhibits subdued relief with undulating hills and topographic representation is sufficiently controlled using an appropriate digital terrain model (DTM).
<b>Data spacing and distribution</b>	<i>Data spacing for reporting of Exploration Results.</i>	The holes drilled were for exploration purposes and have not been drilled on a grid pattern. Drill hole spacing is considered appropriate for exploration purposes.
	<i>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.</i>	The data spacing, distribution and geological understanding of mineralisation controls is not currently sufficient for the estimation of mineral resources.
	<i>Whether sample compositing has been applied.</i>	No samples taken at time of reporting.
<b>Orientation of data in relation to geological structure</b>	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i>	The orientation of sampling is considered appropriate for the current geological interpretation of the mineralisation style.
	<i>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.</i>	The orientation of drilling relative to key mineralised structures is not considered likely to introduce sampling bias.
<b>Sample security</b>	<i>The measures taken to ensure sample security.</i>	No samples taken at time of reporting.
<b>Audits or reviews</b>	<i>The results of any audits or reviews of sampling techniques and data.</i>	A review of data quality will be conducted upon receipt of assay data.

## Section 2: Reporting of Exploration Results (Criteria listed in the preceding section also apply to this section)

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<i>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.</i>	The Yarawindah Brook Project is located approximately 15 km south-southeast of New Norcia in the southwest of Western Australia and comprises five granted exploration licences (E70/4883, E70/5166, E70/5116, E70/5330 and E70/5335). Tenements are held under terms of the Yarawindah Brook Joint

Criteria	JORC Code explanation	Commentary
<b>Exploration done by other parties</b>		<p>Venture Agreement of which Caspin Resources Limited has acquired 80%, and Mr Scott Wilson, retains a 20% interest.</p> <p>Caspin has entered into land access and compensation agreement with the property owners on which XC-29, Yarabrook Hill, Avena, Ovis and Brassica Prospects are situated.</p> <p>Aboriginal Heritage Access Agreements are in place for all tenements.</p>
	<p><i>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.</i></p>	<p>All granted tenements are in good standing and have existing Aboriginal Heritage Access Agreements in place. No Mining Agreement has been negotiated.</p>
	<p><i>Acknowledgment and appraisal of exploration by other parties.</i></p>	<p>The Yarawindah Brook Project area has been explored for nickel-copper-platinum group element (PGE) mineralisation since the discovery of outcropping nickel-copper gossans in 1974. A series of drill programs conducted by various companies since that time mainly focused on near-surface, laterite-hosted PGE mineralisation. Later drilling programs and limited electromagnetic surveying was conducted by Washington Resources, resulting in intersections of massive nickel-copper-PGE sulphides; however, on-ground exploration on the project area has been limited since the Global Financial Crisis in 2008. The work completed by previous operators is considered by Caspin to be of a high standard.</p>
<b>Geology</b>	<p><i>Deposit type, geological setting and style of mineralisation.</i></p>	<p>The Yarawindah Brook Project is located within the Jimperding Metamorphic Belt hosted in the Lake Grace Terrane at the southwest end of the Yilgarn Craton. In the area of the Yarawindah Brook, outcrop is poor with deep regolith development. Regionally, the lithological trend is northwest, with moderate dips to the northeast.</p> <p>The western portion of the project area is dominated by metasediments and gneiss containing lenses of mafic and ultramafic rocks. It is these mafic-ultramafic lithologies that are the hosts to nickel-copper-PGE sulphide mineralisation and have been the main targets for exploration.</p> <p>The Yarawindah Brook Project is considered prospective for accumulations of massive, matrix and disseminated nickel-copper-PGE sulphides, both within the mafic-ultramafic complex and as remobilised bodies in the country rocks.</p>



Criteria	JORC Code explanation	Commentary
<b>Drillhole information</b>	<p>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:</p> <ul style="list-style-type: none"> <li>• easting and northing of the drillhole collar</li> <li>• elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar</li> <li>• dip and azimuth of the hole</li> <li>• downhole length and interception depth</li> <li>• hole length.</li> </ul>	Drillhole collar information is published in the body of the report.
	<p>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.</p>	Not applicable, all information is included.
<b>Data aggregation methods</b>	<p>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</p>	No exploration results reported.
	<p>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.</p>	No exploration results reported.
	<p>The assumptions used for any reporting of metal equivalent values should be clearly stated.</p>	No metal equivalent values are reported.
<b>Relationship between mineralisation widths and intercept lengths</b>	<p>These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drillhole 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 (e.g. 'downhole length, true width not known').</p>	No exploration results reported.
<b>Diagrams</b>	<p>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 drillhole collar locations and appropriate sectional views.</p>	Refer to Figures in body of text.
<b>Balanced reporting</b>	<p>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.</p>	No exploration results reported.
<b>Other substantive exploration data</b>	<p>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey</p>	All relevant exploration data is shown on figures, in text and in the body of the report.

Criteria	JORC Code explanation	Commentary
	<p><i>results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i></p>	
<p><b>Further work</b></p>	<p><i>The nature and scale of planned further work (e.g. 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.</i></p>	<p>A discussion of further exploration work is outlined in the body of the report. Further exploration work will be determined based on the details of the program already published and any assay results once received. All relevant diagrams and inferences have been illustrated in this report.</p>

