# ASX RELEASE

28 APRIL 2021

CASPIN

# Sulphides Intersected at Yarawindah Brook Project

## HIGHLIGHTS

- **Significant zones of sulphides intersected in diamond drilling at XC-29**
- **Encouraging observations of copper and possible nickel mineralisation**
- **Drill rig now moving to test the new PGE sulphide target at Yarabrook Hill**

Caspin Resources Limited **(ASX: CPN) ("Caspin" or "the Company")** is pleased to provide an update on the Company's maiden drill program at the Yarawindah Brook Ni-Cu-PGE Project in Western Australia.

The maiden drill program at the XC-29 Prospect is now complete with three holes drilled for 438.1m.

The second hole, YAD0015, is highly encouraging with a broad zone of sulphides intersected over 26m including an upper zone of stringer to semi-massive sulphides over 6m. The sulphides are predominantly pyrrhotite (iron sulphide), with minor (locally up to 5% by volume) chalcopyrite (copper sulphide) and possible traces of pentlandite (nickel sulphide). A lower zone of similar sulphide abundances was also intersected over approximately 2m. Both sulphide zones correspond with the modelled positions of electromagnetic conductors.

The first hole, YAD0014, intersected a 10m zone of stringer to matrix textured sulphide, pyrrhotite dominant with rare chalcopyrite.

**Figure 1. Interval at 100.05m in YAD0015.**

Caspin Resources Limited
ABN 33 641 813 587

Ground Floor, 16 Ord Street
West Perth WA 6005, Australia

PO Box 558, West Perth WA 6872

www.caspin.com.au
ASX Code: **CPN**

E admin@caspin.com.au
T +61 (8) 6373 2000


**Figure 2. Core sample at 121.7m in YAD0015.**

**Figure 3. Core sample at 108.0m in YAD0014.**

The final hole in the current campaign at XC-29, YAD0016, intersected a narrow zone of semi-massive sulphide dominated by pyrrhotite, within a broad 17m zone of significant stringer sulphide.

The Company has no estimate of potential PGE and gold mineralisation which can only be confidently determined through laboratory analysis.

Host lithologies comprise meta-sediments and strongly deformed mafic/ultramafic rocks. A summary of the holes can be found in Table 1.

Caspin Chief Executive Officer, Mr Greg Miles, said “This is a great start to our drilling program. Whilst still early days at XC-29, hitting broad zones of potentially mineralised sulphide in our first drilling program is very encouraging. The results so far suggest that not only is XC-29 prospective, but so too is the entire Brassica trend. Now we look forward to drilling a new PGE target at Yarabrook Hill which presents another excellent opportunity for discovery”.

Detailed logging is continuing before samples are submitted for assay. All holes will be surveyed by downhole electromagnetics to evaluate the potential for “off-hole” conductors and secondary drill targets. The rig has now moved to test a new PGE target at Yarabrook Hill as outlined in the Company’s ASX announcement released on 30 March 2021 (Drilling Update - Yarawindah Brook Project).

The Company looks forward to providing further updates on the drilling program as they come to hand.

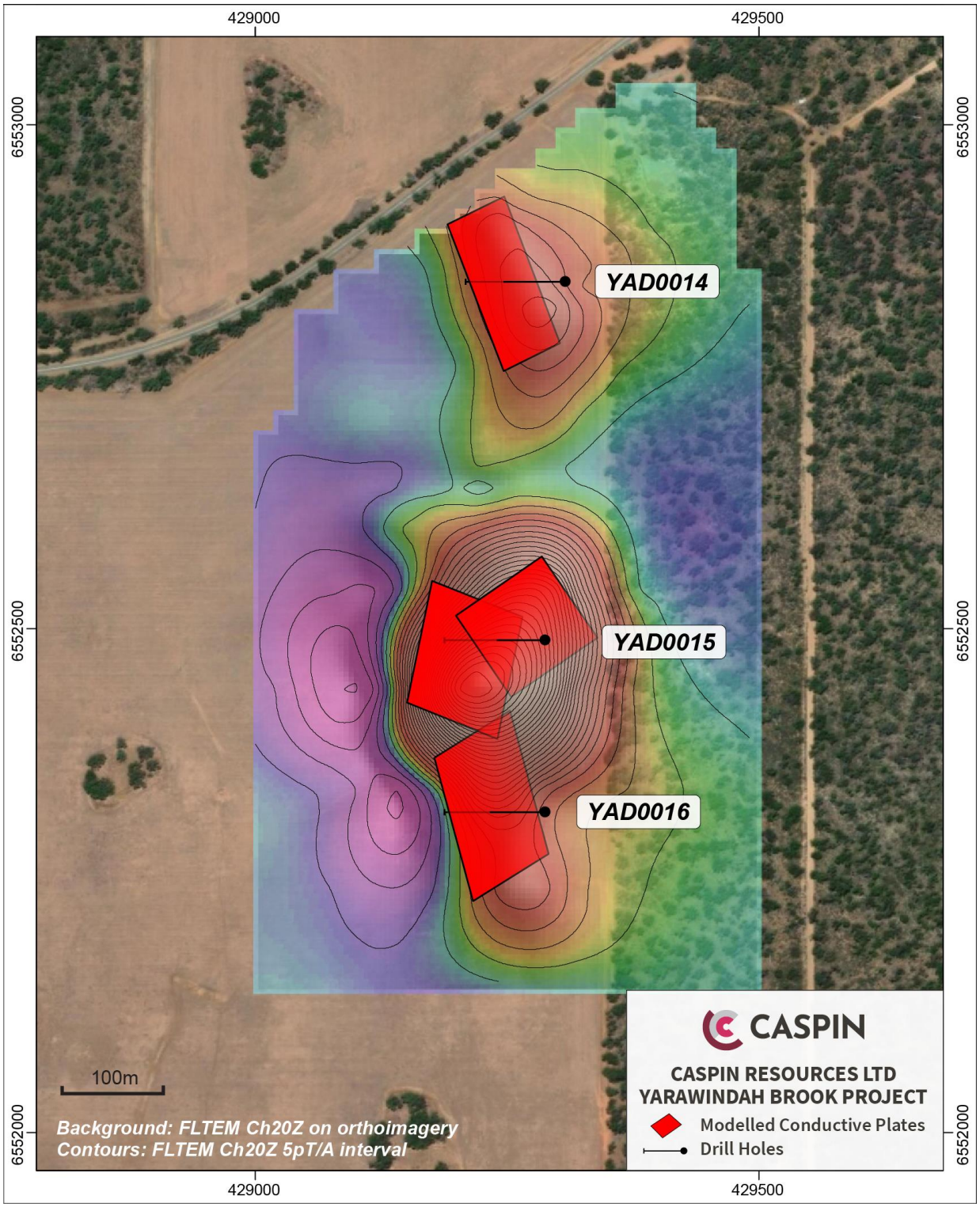



Figure 4. Drill hole locations and electromagnetic conductors at XC-29 Prospect.

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

| Hole ID | Northing | Easting | RL | Dip | Azi | Depth (m) | Interval (m) | Observations |
|---|---|---|---|---|---|---|---|---|
| **YAD0014** | 6552845 | 429310 | 335 | -60 | 270 | 162.6 | 0-106 | Regolith and cover sequences of meta-sediment, meta-basalt, ultramafic and paragneiss |
| | | | | | | | 106-108 | Paragneiss and minor marble with disseminated to semi-massive pyrrhotite locally up to 10% |
| | | | | | | | 108.0-108.3 | Net-textured to semi-massive sulphides pyrrhotite dominant with trace chalcopyrite |
| | | | | | | | 108.3-110.4 | Marble with pyrrhotite-rich blebs, locally up to 10% |
| | | | | | | | 110.4-115.9 | Ultramafic with abundant fine disseminated pyrrhotite and pyrite |
| | | | | | | | 115.9-EOH | Footwall sequences with rare stringers of pyrrhotite and lesser chalcopyrite |
| **YAD0015** | 6552490 | 429290 | 330 | -60 | 270 | 140.7 | 0-48.5 | Regolith and saprolitic meta-sediment |
| | | | | | | | 48.5-96.9 | Magnetite bearing, BIF sequence with minor late-stage dolerite dyke |
| | | | | | | | 96.9-100.05 | Magnetite BIF with stringer sulphides to 10%, minor chalcopyrite and possible pentlandite |
| | | | | | | | 100.05-100.8 | Semi-massive to massive pyrrhotite-rich sulphide, minor chalcopyrite 3-5% with possible pentlandite |
| | | | | | | | 100.8-103.35 | Magnetite poor banded meta-sediment with disseminated to stringer pyrrhotite-pyrite mineralisation 2-3% |
| | | | | | | | 103.35-109.2 | Variably altered BIF and felsic paragneiss |
| | | | | | | | 109.2-121 | Strongly laminated meta-sediments with abundant stringers and blebs of pyrrhotite and pyrite, locally 10-15% with trace to minor chalcopyrite |
| | | | | | | | 121-122 | Sulphide rich laminated meta-sediment with pyrrhotite-pyrite up to 15% with 2% chalcopyrite and possible pentlandite |
| | | | | | | | 122-122.7 | Sulphide-bearing, laminated meta-sediment |
| | | | | | | | 122.7-EOH | Altered BIF and strongly laminated chlorite altered meta-sediments with mafic content and thin dolerite dyke |
| **YAD0016** | 6552320 | 429290 | 325 | -60 | 270 | 134.8 | 0-45.9 | Regolith and saprolitic ultramafic after talc-chlorite schist |
| | | | | | | | 45.9-91.1 | Weakly weathered to fresh mafic to ultramafic, talc-chlorite schist |
| | | | | | | | 91.1-106.3 | Laminated, magnetite BIF with stringers of Pyrrhotite-pyrite to 10% with rare chalcopyrite. Minor late-stage dolerite dyke |
| | | | | | | | 106.3-108.5 | Laminated magnetite BIF with 15% laminated sulphides, 5cm bands of semi-massive sulphide to 30%. |
| | | | | | | | 108.5-108.7 | Semi-massive pyrrhotite within laminated magnetite BIF (30% sulphide) |
| | | | | | | | 108.7-EOH | Strongly foliated, chlorite-magnetite meta-sediment with trace pyrite-pyrrhotite and late-stage dolerite dyke |

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
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, 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.

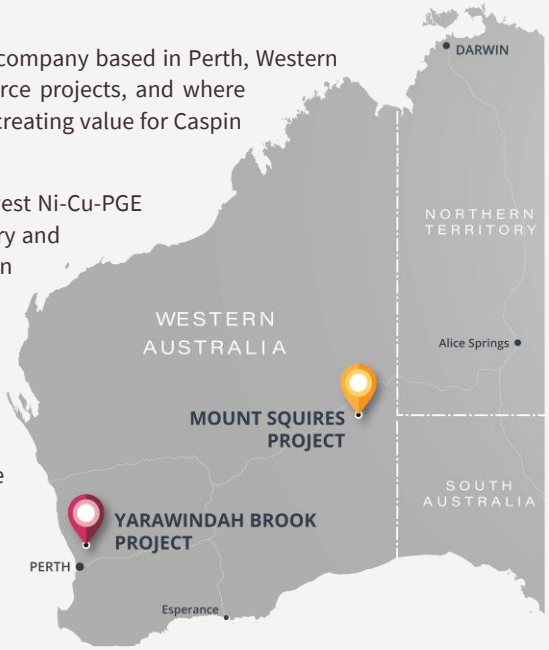
The Company confirms that it is not aware of any new information or data that materially affects the Exploration Results information included in this report and that all material assumptions and parameters underpinning Exploration Results, as reported in the market announcements dated 30 March 2021 continue to apply and have not materially changed.

## 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.




## FOLLOW US

**LinkedIn:** https://www.linkedin.com/company/caspin-resources-limited
**Twitter:** https://twitter.com/CaspinRes

## 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 |
|---|---|---|
| **Sampling techniques** | *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.* | No samples have been taken as yet. |
| | *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* | Not applicable. No samples have been taken as yet. |
| | *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.* | Not applicable. No samples have been taken as yet. |
| **Drilling techniques** | *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).* | Diamond drilling accounts for 100% of the drilling completed by Caspin and comprises HQ3 diameter core samples..<br>All core was orientated, once competent rock was intersected, using a Reflex ACT III HQ digital orientation tool. |
| **Drill sample recovery** | *Method of recording and assessing core and chip sample recoveries and results assessed.* | 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. |
| | *Measures taken to maximise sample recovery and ensure representative nature of the samples.* | Samples are routinely checked for recovery and any issues immediately rectified with the drilling contractor. |
| | *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.* | No assays have been received at time of reporting to determine potential sample bias. |
| **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.* | Not applicable as mineral resources and metallurgical studies are not reported. |

| CRITERIA | JORC CODE EXPLANATION | COMMENTARY |
|---|---|---|
| | *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* | 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). |
| | *The total length and percentage of the relevant intersections logged.* | All drillholes have been logged in full. |
| **Sub-sampling techniques and sample preparation** | *If core, whether cut or sawn and whether quarter, half or all core taken.* | No samples taken at time of reporting. |
| | *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* | Not applicable. No samples have been taken as yet. |
| | *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* | No samples taken at time of reporting. |
| | *Quality control procedures adopted for all subsampling stages to maximise representivity of samples.* | No samples taken at time of reporting. |
| | *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.* | No samples taken at time of reporting. |
| | *Whether sample sizes are appropriate to the grain size of the material being sampled.* | No samples taken at time of reporting.. |
| **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.* | No samples taken at time of reporting. |
| | *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 samples taken at time of reporting. |
| | *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.* | No samples taken at time of reporting. |
| **Verification of sampling and assaying** | *The verification of significant intersections by either independent or alternative company personnel.* | No samples taken at time of reporting. |
| | *The use of twinned holes.* | No twinning was completed. |
| | *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* | 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 Geobase Australia for validation and compilation into a SQL database server. |
| | *Discuss any adjustment to assay data.* | No samples taken at time of reporting.. |

| CRITERIA | JORC CODE EXPLANATION | COMMENTARY |
|---|---|---|
| **Location of data points** | *Accuracy and quality of surveys used to locate drillholes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* | Reported drill holes were located with a Garmin hand-held GPS with an accuracy of ±3m. This is considered appropriate for exploration drill holes.<br>Downhole surveys were completed using north-seeking Reflex Sprint-IQ gyroscope after hole completion. Stated accuracy is ± 1° in azimuth and ± 0.3° in dip. |
| | *Specification of the grid system used.* | The grid system for the Yarawindah Brook Project is GDA94 MGA Zone 50. |
| | *Quality and adequacy of topographic control.* | The tenement package exhibits subdued relief with undulating hills and topographic representation is sufficiently controlled using an appropriate digital terrain model (DTM). |
| **Data spacing and distribution** | *Data spacing for reporting of Exploration Results.* | 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. |
| | *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.* | The data spacing, distribution and geological understanding of mineralisation controls is not currently sufficient for the estimation of mineral resources.. |
| | *Whether sample compositing has been applied.* | No samples taken at time of reporting. |
| **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 sampling is considered appropriate for the current geological interpretation of the mineralisation style. |
| | *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.* | The orientation of drilling relative to key mineralised structures is not considered likely to introduce sampling bias. |
| **Sample security** | *The measures taken to ensure sample security.* | No samples taken at time of reporting. |
| **Audits or reviews** | *The results of any audits or reviews of sampling techniques and data.* | 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 |
|---|---|---|
| **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 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 Venture Agreement of which Caspin Resources Limited has acquired 80%, and Mr Scott Wilson, retains a 20% interest. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | 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.<br>Aboriginal Heritage Access Agreements are in place for all tenements. |
| | *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 granted tenements are in good standing and have existing Aboriginal Heritage Access Agreements in place. No Mining Agreement has been negotiated. |
| **Exploration done by other parties** | *Acknowledgment and appraisal of exploration by other parties.* | 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. |
| **Geology** | *Deposit type, geological setting and style of mineralisation.* | 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.<br>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.<br>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. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| **Drillhole information** | *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:*<br>• *easting and northing of the drillhole collar*<br>• *elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar*<br>• *dip and azimuth of the hole*<br>• *downhole length and interception depth*<br>• *hole length.* | Drillhole collar information is published in the body of the report. |
| | *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.* | Not applicable, all information is included. |
| **Data aggregation methods** | *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.* | No exploration results reported. |
| | *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.* | No exploration results reported. |
| | *The assumptions used for any reporting of metal equivalent values should be clearly stated.* | No metal equivalent values are reported. |
| **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 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').* | No exploration results reported. |
| **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 drillhole collar locations and appropriate sectional views.* | Refer to Figures in 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.* | No exploration results reported. |
| **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* | All relevant exploration data is shown on figures, in text and in the body of the report. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | *results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.* | |
| **Further work** | *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).*<br>*Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.* | 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.<br>All relevant diagrams and inferences have been illustrated in this report. |