

**ASX Announcement:**

**29 March 2021**

## **VTEM™ Survey Discovers Significant Bedrock Conductors at the Darling Range Project**

- **Thirteen Significant Electro Magnetic (EM) Conductors Discovered on the Darling Range Project from Initial Processing**
  - **Black Hills Tenement – five significant bedrock conductors identified**
  - **Mistake Creek Tenement – five significant bedrock conductors identified**
  - **Batty Bog Tenement – three significant bedrock conductors identified**
- **The combined strike-length of the conductors is over 7,350m**
- **Detailed modelling of each Conductor is now underway with planning for ground based EM follow-up and geochemical sampling progressing**
- **A new tenement application has been lodged, south of the Mistake Creek Tenement**

Mamba Exploration Limited (ACN 644 571 826) ("**Mamba**", "**M24**" or the "**Company**") is pleased to announce that the Electro Magnetic (EM) survey over the Darling Range Project has identified thirteen "late time" conductors which are consistent with a bedrock source.

The "late time" bedrock VTEM Max conductors are associated with magnetic anomalies that are consistent with signatures of mafic or ultramafic rocks, which are known to host PGE Ni Cu sulphide mineralisation in the region - including at the Gonville intrusion on Chalice Mining Limited's (ASX: CHN) Julimar Project (See Chalice Mining ASX announcement titled "*New highly prospective EM conductors and nickel – copper soil anomalies defined at Hartog Target, Julimar Project*" dated 25 March 2021).

Mamba's Managing Director Mr Mike Dunbar commented:

*"The use of VTEM for rapid appraisal of our Darling Range Project has paid immediate dividends with 13 significant bedrock EM anomalies defined from our first field program. This is a fantastic result and confirms our belief that this under-explored region of Western Australia has excellent exploration potential which is yet to be full appreciated."*

*We are very encouraged by the presence of bedrock conductors on each of our tenements and pleased to be expanding our tenement package with an additional tenement application to the south of our Mistake Creek tenement."*

*With the initial processing and interpretation complete, our Geophysical Consultants, Southern Geoscience, will now move to detailed modelling and interpretation of data. With so many conductors to model and interpret, this process will take at least three weeks to complete."*

*Achieving these results, in such a short time from listing, is a significant milestone for the Company, and leaves us in a financially strong position to continue our exploration, not only at our Darling Range project, but also at the Great Southern and Ashburton Gold projects, and the Kimberley Copper, Silver, Nickel and Cobalt projects as well."*



### **Darling Range PGE-Ni-Cu Project – Airborne EM Survey**

The western margin of the Yilgarn Craton is considered to be highly prospective for Platinum Group Elements (“PGE”) and Nickel (Ni) – Copper (Cu) sulphide mineralisation associated with intrusive mafic to ultramafic rocks. The discovery of PGE-Ni-Cu mineralisation on the Julimar Project held by Chalice Mining Limited (see Chalice Mining ASX Announcement 23 March 2020), is the first significant PGE-Ni-Cu discovery in the region. These mafic-ultramafic intrusions which host the Julimar PGE-Ni-Cu mineralisation appear to be far more widespread than previously thought in the Darling Range region.

The PGE-Ni-Cu mineralisation at the Gonneville was discovered by drilling a discrete moving-loop electromagnetic (“EM”) anomaly associated with an aeromagnetic anomaly. The aeromagnetic anomaly is due to the mafic-ultramafic intrusion which hosts the PGE-Ni-Cu mineralisation (see Chalice Mining ASX Announcement 23 March 2020). The PGE-Ni-Cu mineralisation at Gonneville is strongly conductive and produces a significant EM anomaly. Chalice Mining’s success has demonstrated that the exploration approach of identifying prospective mafic-ultramafic intrusions from aeromagnetic data and then generating drill targets from EM surveys, is an effective exploration technique for targeting PGE-Ni-Cu sulphide mineralisation within the West Yilgarn province.

The Darling Range Project airborne VTEM Max helicopter based EM survey was designed to locate conductors related to massive sulphide PGE-Ni-Cu mineralisation associated with mafic and ultramafic intrusions.

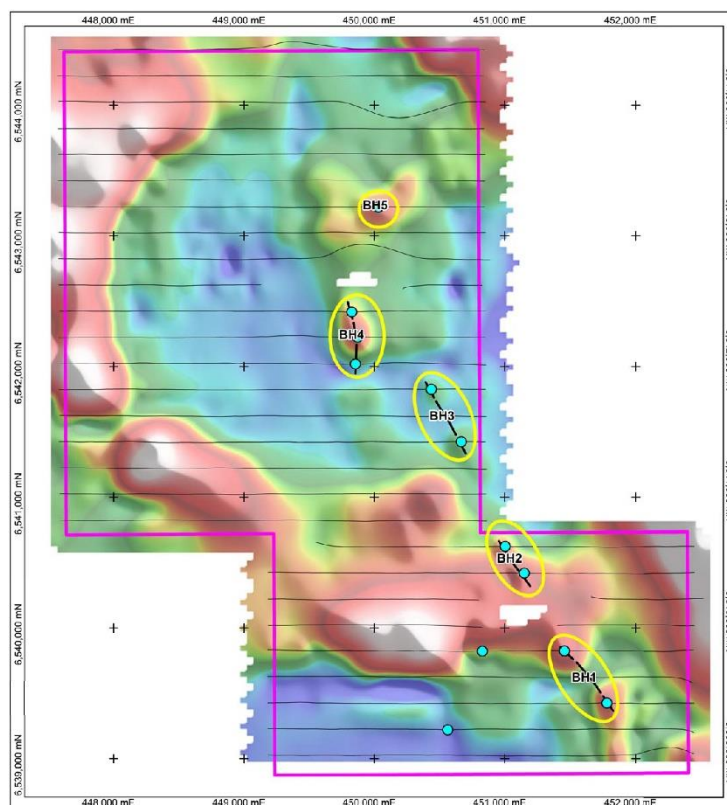
Preliminary VTEM data has been received for each of the Darling Range tenements and have highlighted thirteen “late-time” EM anomalies which are interpreted to be consistent with a bedrock response. Five strong anomalies have been identified on the Black Hills tenement (see Figure one), three strong anomalies defined at the Batty Bog tenement (see Figure two) and five strong later time conductors at the Mistake Creek tenement (see Figure three).

The conductors have a combined strike extent of approximately 7,350m.

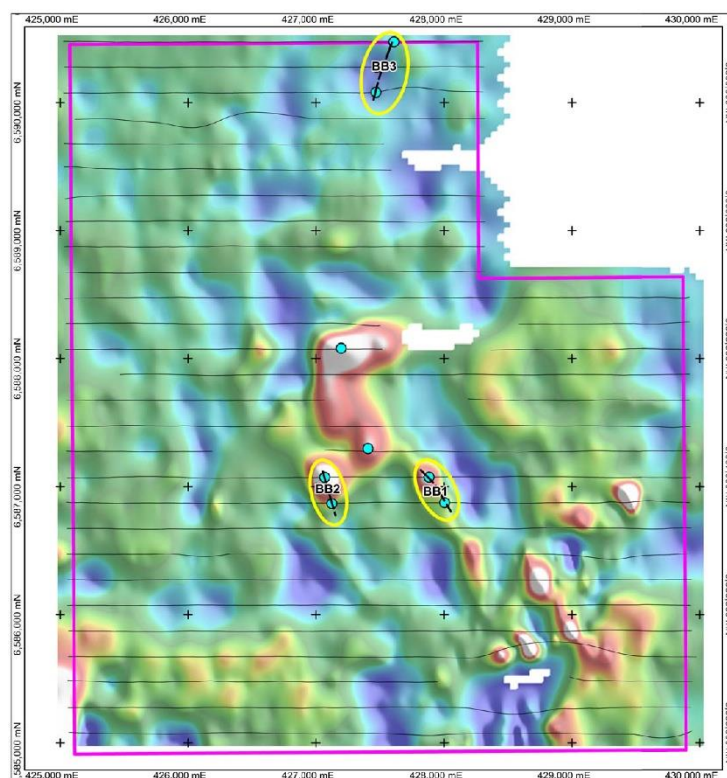
As a result of the conductors identified at the Mistake Creek tenement, a new tenement application (ELA 70/5753) has been lodged covering the southern extension to the Mistake Creek tenement, adding a further 23km<sup>2</sup> to the project area.

Detailed processing of the data, full interpretation and modelling of the conductors (and target prioritisation) is now underway by Mamba’s geophysical consultants, Southern Geoscience, and is expected to be completed in late April.

Subject to approvals and land access, ground follow up of identified targets with geochemical sampling as well as moving loop and fixed loop ground EM and drilling is expected to commence during the second and third quarter of 2021.

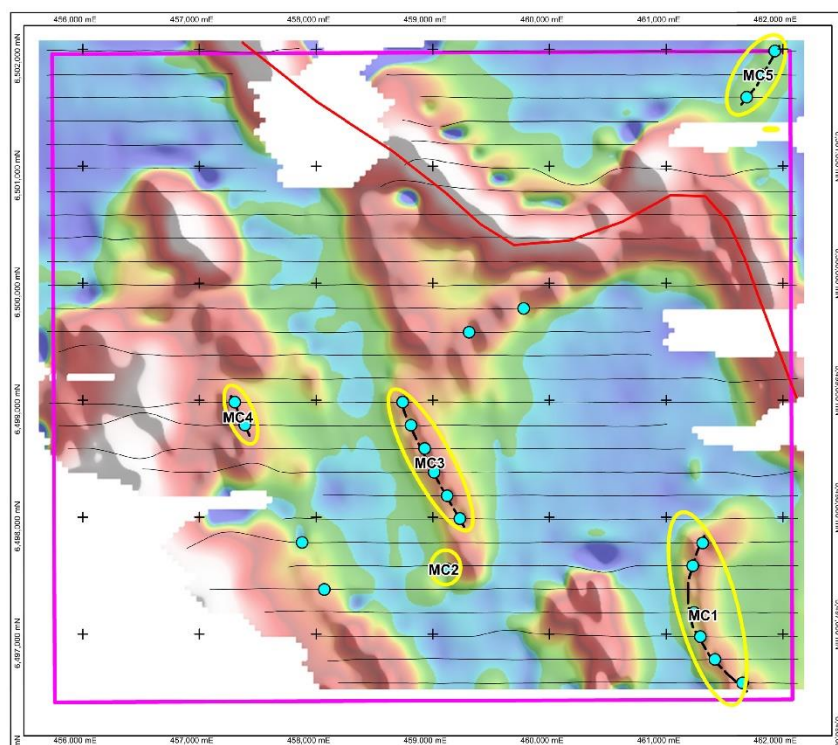


**Figure 1:** Mamba Exploration's Black Hills Tenement with VTEM data (Channel 35) highlighting the late time bedrock Conductors.



**Figure 2:** Mamba Exploration's Batty Bog Tenement with VTEM data (Channel 40) highlighting the late time bedrock Conductors.





**Figure 3:** Mamba Exploration's Mistake Creek Tenement with VTEM data (Channel 25) highlighting the late time bedrock Conductors.



**Figure 4:** Mamba Exploration's 100% owned Darling Range Project.

The Company looks forward to updating the market of progress as new information and results are received.

This Announcement has been authorised for release by Mr Mike Dunbar, Managing Director and CEO, on behalf of the Board of Mamba Exploration.

**For more information on Mamba Exploration Limited, please visit the Company's website at [www.mambaexploration.com.au](http://www.mambaexploration.com.au) or contact:**

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#### **Competent Person Statement**

The information in this report that relates to Exploration Targets or Exploration Results is based on information compiled by Mr Mike Dunbar, a "Competent Person" who is a Member of Australasian Institute of Mining and Metallurgy (AusIMM). Mr Dunbar is the Managing Director and CEO of Mamba Exploration Limited. He is a full-time employee of Mamba Exploration Limited and holds shares and options in the company. Mr Dunbar has sufficient experience that is relevant to the style of mineralisation and type of deposits 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 Dunbar consents to the inclusion in this announcement of the matters based on his information and in the form and context in which it appears. Information on historical exploration results for the Darling Range Project, including JORC Table 1 and 2 information, is included in the Mamba Exploration Prospectus dated 14 December 2020.

#### **Background on Mamba Exploration:**

Mamba Exploration is a Western Australian focused exploration Company, with four 100% owned geographically diverse projects which provide year-round access. The projects are highly prospective mineral exploration assets in the Ashburton, Kimberley, Darling Range and Great Southern regions of Western Australia (see Figure 5). The projects in the Ashburton and Great Southern are prospective for gold whilst those in the Kimberley and Darling Range are prospective for base metals such as copper, nickel, PGE's and manganese.

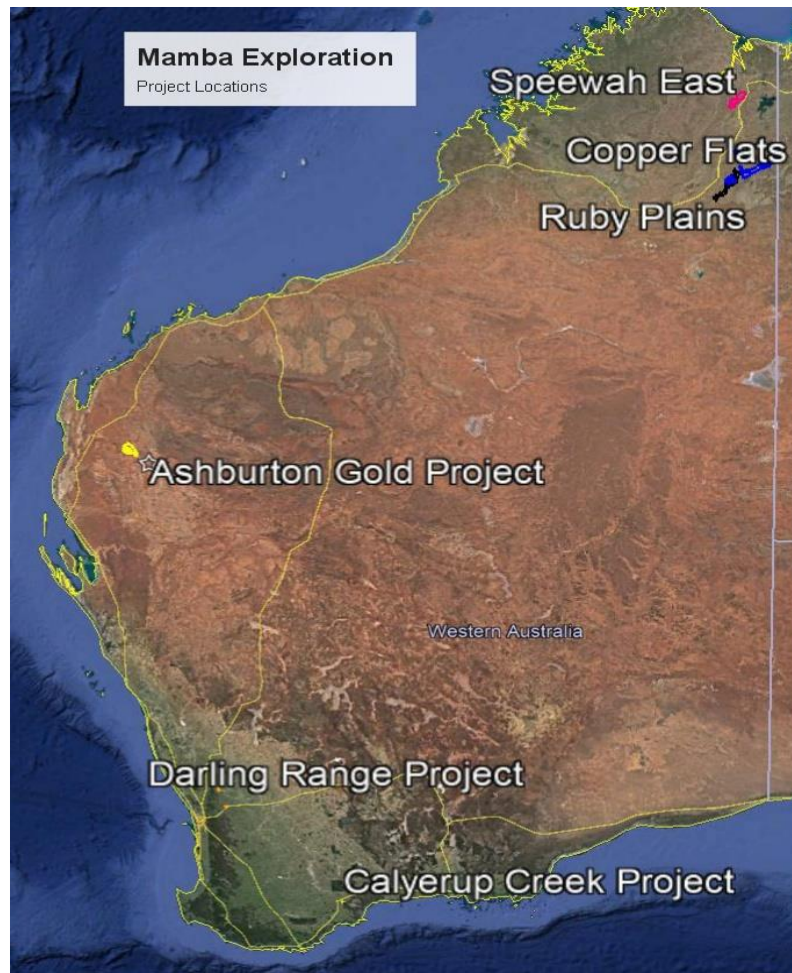
Mamba's initial focus is to explore the Calyerup Creek and Darling Range Projects. Calyerup Creek contains historical gold workings and several exciting gold targets that the Company plan to systematically test, while the Darling Range project is prospective for nickel, copper and PGE's and is located nearby Chalice Mining Limited's (ASX: CHN) recent Julimar discovery. The Darling Range Project is located close to Perth and associated infrastructure.

The exploration focus will shift to the Ashburton and Kimberley projects in the June quarter of 2021, when the field season in northern Western Australia allows and the winter rains limit activity in southern regions of Western Australia. The Ashburton project is prospective for Gold, while the Kimberley Project are prospective for sedimentary hosted copper and silver mineralisation, along with intrusive related nickel and copper deposits.



Mamba's Board comprises of Directors who have significant experience across sectors including mineral exploration, resource discover, corporate finance, commodities trading and mine development.

The Companies objective is to add significant shareholder wealth through the exploration of its projects and the discovery of economic Mineral Resources.



**Figure 5:** Mamba Exploration's 100% owned Western Australian Project Locations

## JORC Code (2012) Table 1 - Darling Range Project

### Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>An airborne electromagnetic survey <b>VTEM MAX<sup>TM</sup></b> (VTEM) in regular (long) pulse mode has been acquired over the Mistake Creek, Black Hills and Batty Bog tenements.</li> <li>A total of 369 line-Km have been flown.</li> <li>Flight lines are orientated 090°/270° spaced 200m.</li> <li><b>VTEM</b> Configuration <ul style="list-style-type: none"> <li>Transmitter loop diameter = 35 m</li> <li>Transmitter Frequency = 25 Hz</li> <li>Transmitter Pulse Width = 7 ms</li> <li>Transmitter Dipole Moment = 700,000 NIA</li> <li>EM Receivers measure Z, X and Y components</li> <li>Magnetic Sensor – Towed Bird</li> <li>Mean Flying height = 83 m</li> <li>Mean EM Transmitter and Receiver height = 35 m</li> <li>Mean Magnetic Sensor height = 73 m</li> </ul> </li> <li>Survey has been completed and is currently being processed, initial results are presented and full modelling and processing of the data is underway.</li> <li>The <b>VTEM</b> survey was completed by UTS Geophysics Pty Ltd operating Geotech Ltd's Versatile Time-Domain Electromagnetic system (<b>VTEM</b>).</li> <li>The survey has been supervised by Southern Geoscience Consultants.</li> </ul>
	<ul style="list-style-type: none"> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> </ul>	<ul style="list-style-type: none"> <li>N/A as no drilling is being reported</li> </ul>
	<ul style="list-style-type: none"> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> </ul>	<ul style="list-style-type: none"> <li>N/A as no drilling is being reported</li> </ul>
	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>N/A as no drilling is being reported</li> </ul>

Drilling techniques	<ul style="list-style-type: none"> <li>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul style="list-style-type: none"> <li>N/A as no drilling is being reported</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>N/A as no drilling is being reported</li> </ul>
Logging	<ul style="list-style-type: none"> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>N/A as no drilling is being reported</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>N/A as no drilling is being reported</li> </ul>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>N/A as no drilling is being reported</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>The VTEM and magnetic geophysical data has been reviewed by UTS Geophysics for QA/QC purposes, prior to the data being supplied and processed by Southern Geoscience and reviewed by Mamba Exploration. Lines were reflowed if an issue was identified (during the QA/QC process) with the data captured.</li> </ul>



Location of data points	<ul style="list-style-type: none"> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li><b>VTEM</b>: real time (WAAS) GPS Navigation System with an in-flight accuracy up to 1.5 m</li> <li>Data location is recorded in WGS84-UTM Zone 50 south.</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li><b>VTEM</b> flight line nominal spacing of 200 m</li> <li>On line data sample spacing approximately 3 m.</li> </ul>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li><b>VTEM</b> flight orientation is perpendicular to general strike of geological formations.</li> </ul>
Sample security	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>N/A</li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li><b>VTEM</b> system was calibrated prior to commencement of data acquisition.</li> <li>All data was inspected daily by the UTS site crew and verified daily by UTS in Canada and reviewed by a consulting geophysicist at Southern Geoscience.</li> <li>Information presented here is the initial data, full modelling, processing and interpretation is ongoing.</li> </ul>

## Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The Darling Range Project covers an area of approximately 100km<sup>2</sup> on four tenements. Two granted Exploration licences (E 70/5147 – Black Hills and E 70/5329 – Batty Bog) and two exploration licence application (and E 70/5403 – Mistake Creek) and a recent application E70/5753 south of Mistake Creek. The project is located between 100km and 120km north-east of Perth. The nearby country towns include Northam, Toodyay and New Norcia and Gingin being 40km to the west. The project is closely located to Perth and, therefore, it has multiple logistic corridors to get to and around the project area.</li> <li>Mamba owns 100% of the project.</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>Access to the project is via numerous sealed roads.</li> <li>The project is covered by the Yued (30) (for Black Hills and Batty Bog) and Ballardong People (921) (for Mistake Creek) native title claim areas</li> </ul>
Exploration done by other parties	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>See Section 3.5 of the Mamba Prospectus (dated 14 December 2020) for full details of previous exploration activities on the project.</li> </ul>
Geology	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>The western margin of the Archean Yilgarn Craton is highly prospective for Platinum Group Elements ("PGE") and Nickel (Ni) – Copper (Cu) mineralisation associated with intrusive mafic to ultramafic rocks. The discovery of PGE-Ni-Cu mineralisation on the Julimar Project held by Chalice Gold Mines Limited (see Chalice Gold Mines ASX Announcement 23 March 2020) in 2020, is the first significant PGE-Ni-Cu discovery in the region which previously only had early-stage indications of mineralisation (Yarawindah, Bindi- Bindi). The PGE-Ni-Cu mineralisation hosted by the ultramafic-mafic Gonneville intrusion on Chalice's Julimar Project, has the potential to be the most important deposit of PGE's in Australia. Increasingly it is becoming apparent that the prospective ultramafic-mafic intrusions are far more widespread than previously thought throughout the western margin of the Yilgarn Craton. The project area is located within the &gt;3Ga age Western Gneiss Terrane of the Archean Yilgarn Block, which comprises a strongly deformed belt of gneisses, schists, quartzites, Banded Iron Formation, intruded by mafic to ultramafic rocks. The terrane is up to 70km wide, and possibly wider, and is bounded to the west of the Darling Fault and younger Archean rocks to the east. The general geological strike in northwest. The bedrock Archean metasedimentary gneisses, migmatites and intrusive mafic and ultramafic rocks occur in structurally complex settings. Dolerite dykes of Proterozoic Age also occur. Outcrops are rare and the basement geology is largely obscured by lateritic ironstones and deep saprolitic weathering.</li> </ul>
Drill hole Information	<ul style="list-style-type: none"> <li>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: <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information</li> </ul>	<ul style="list-style-type: none"> <li>N/A as no drilling is being reported</li> </ul>

Criteria	JORC Code explanation	Commentary
	<i>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.</i>	
Data aggregation methods	<ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> <li>• The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>• N/A</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <li>• These relationships are particularly important in the reporting of Exploration Results.</li> <li>• If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>• If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>• N/A as no drilling is being reported</li> </ul>
Diagrams	<ul style="list-style-type: none"> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• Appropriate plans are included in this body of this announcement</li> </ul>
Balanced reporting	<ul style="list-style-type: none"> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• N/A</li> </ul>
Other substantive exploration data	<ul style="list-style-type: none"> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• N/A</li> </ul>
Further work	<ul style="list-style-type: none"> <li>• The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>• Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>• Follow up moving loop (and fixed loop) ground based EM surveys are planned to verify and better define the responses identified by the <b>VTEM</b> survey.</li> <li>• Geochemical sampling will also be undertaken over the defined anomalies prior to any drill testing of the conductive anomalies.</li> </ul>