ASX ANNOUNCEMENT

MIRAMAR RESOURCES LTD.

MULTIPLE LARGE EM ANOMALIES IDENTIFIED AT MT VERNON

- **VTEM survey completed at Mt Vernon (Bangemall Ni-Cu-PGE Project)**
- **Multiple large late-time EM conductors highlighted**
- **Survey increases prospectivity of project for Ni-Cu-PGE mineralisation**

Miramar Resources Limited (ASX:M2R, "Miramar" or "the Company") is pleased to advise that the airborne EM survey recently completed at its 100% owned **Mt Vernon** target has identified multiple large late-time EM anomalies that may indicate the presence of Ni-Cu-PGE mineralisation.

Mt Vernon is one of several Exploration Licences and/or Applications which make up the Company's "Bangemall Project", in the Gascoyne region of Western Australia, which Miramar believes is prospective for Ni-Cu-PGE (+/- REE) mineralisation.

The Mt Vernon target is characterised by several large historic PGE stream sediment and/or soil anomalies associated with Proterozoic dolerite sills and adjacent to major crustal-scale structures.

The "VTEM Max" survey was completed by UTS Geophysics and covered the tenement with N-S flight lines with a line spacing of 400m, compared with the 5km spaced government TEMPEST EM survey lines.

Preliminary data has been received and has highlighted at least 13 late-time EM anomalies that may indicate the presence of bedrock Ni-Cu-PGE sulphides associated with dolerite sills (Figure 1).

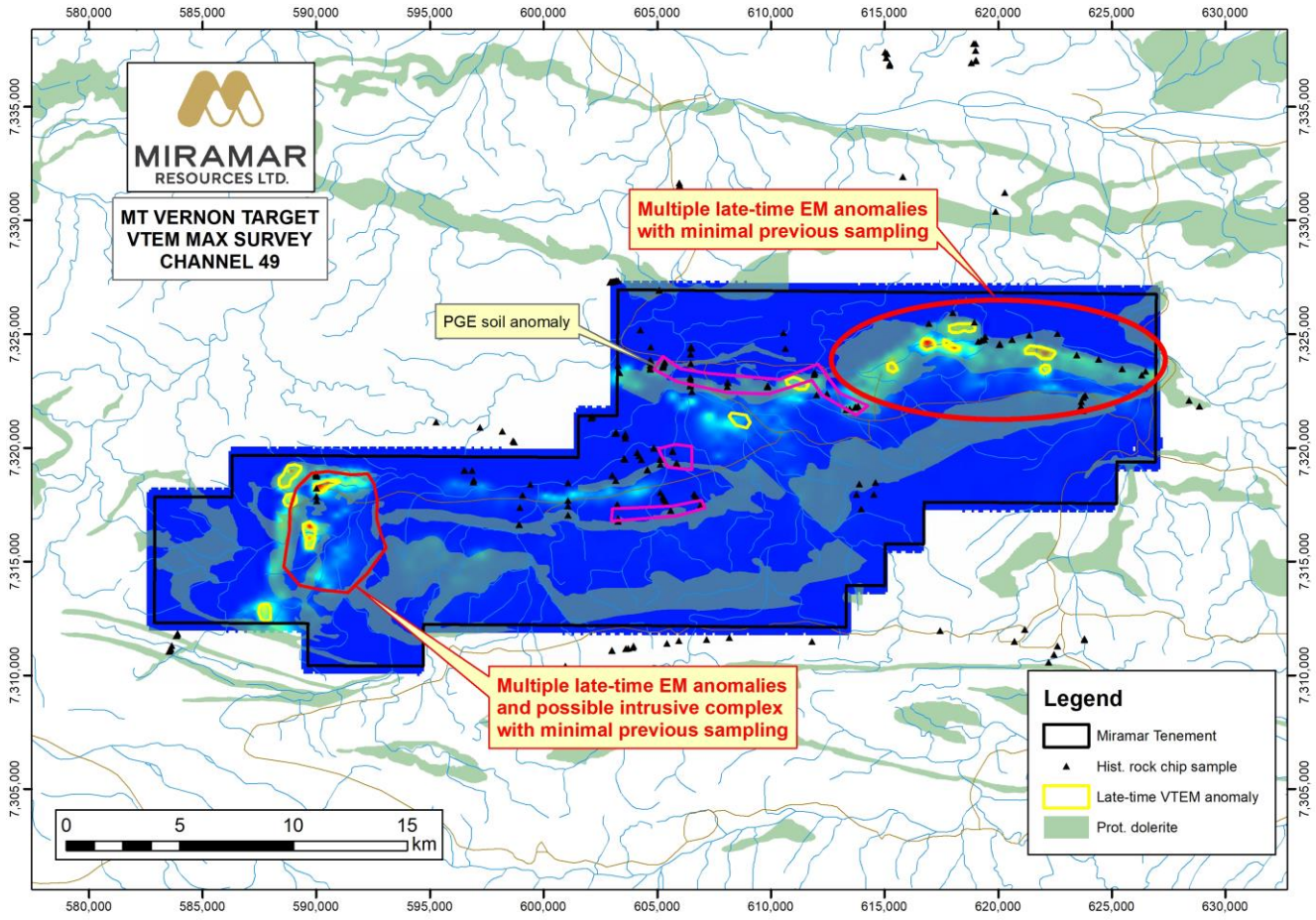


Figure 1. *Mt Vernon target showing preliminary VTEM survey data (B-Field Z Channel 49).*

In the northeast corner of the tenement, several large late-time EM anomalies are seen associated with a dolerite sill (Figure 2). The anomalies range in strike length from 500m to over 1.2km.

Historical soil sampling to the west of these anomalies outlined a large, almost 10km long, PGE anomaly with Pd results up to 25ppb, however there is limited previous sampling, and no recorded drilling, in the vicinity of the new EM anomalies.

Miramar's Executive Chairman, Mr Allan Kelly, said the Company was very excited about the results of the survey and looked forward to following them up on the ground.

"We've outlined a number of large late-time EM anomalies, apparently associated with Ni, Cu and PGE anomalism, in a virtually unexplored area," Mr Kelly said.

"These results are exactly what we would have hoped to see from this survey, validate our views on the prospectivity of this project and give us numerous targets for follow-up work," he added.

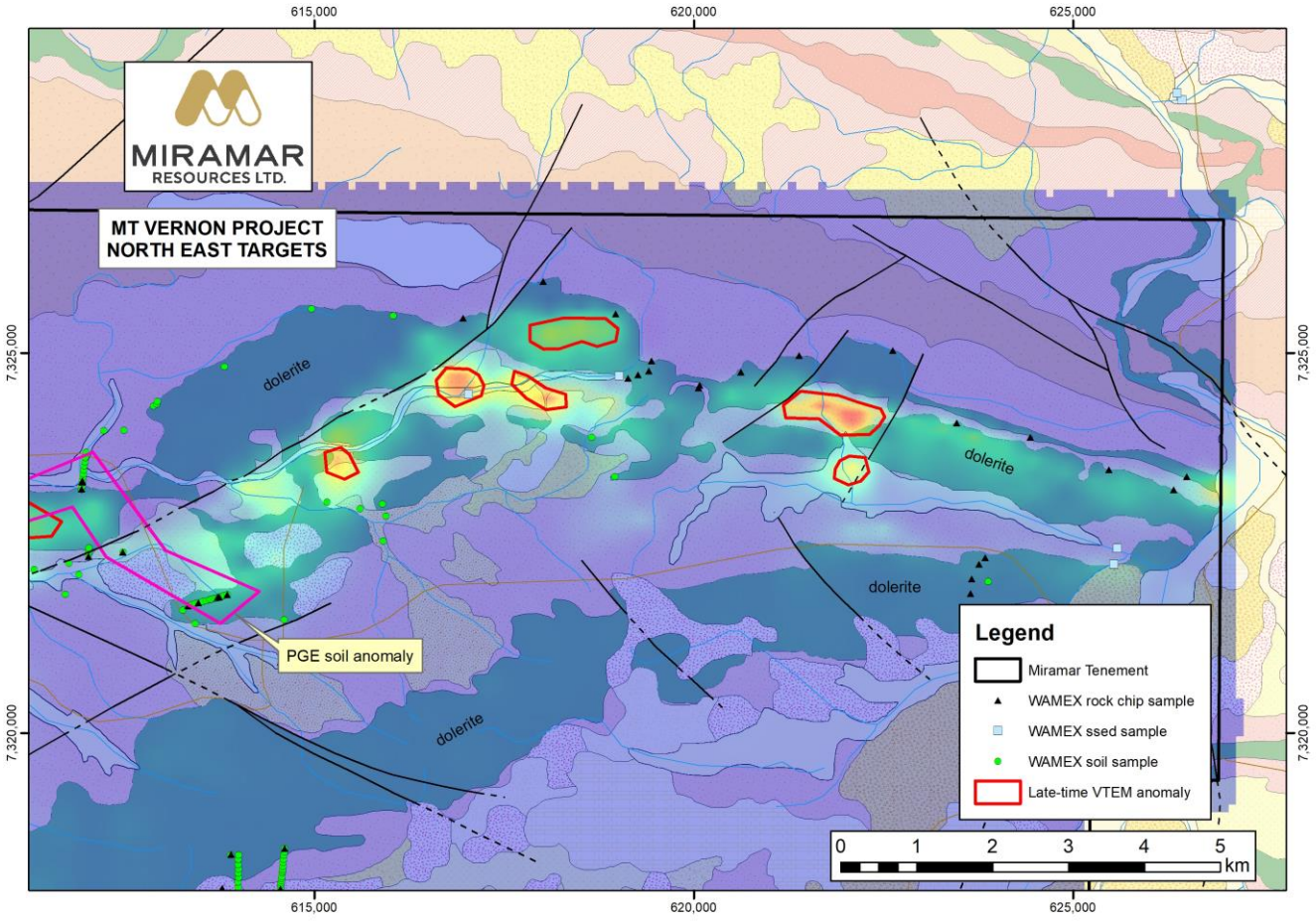


Figure 2. *Late-time EM anomalies, historic sampling and GSWA geology in the NE corner of Mt Vernon.*

Magnetic data collected with the EM survey also shows a large elliptical feature in the west of the project which may represent an unmapped intrusion (Figure 3). Gravity data is too widely spaced to provide any useful information about this feature.

Proposed further work

The Company is waiting on the final data from the Contractor and will model the most prospective anomalies once this data is received.

Future work will include field checking of the anomalies, along with surface geochemical sampling and prospecting, with a view to conducting ground EM surveys in order to define potential drill targets.

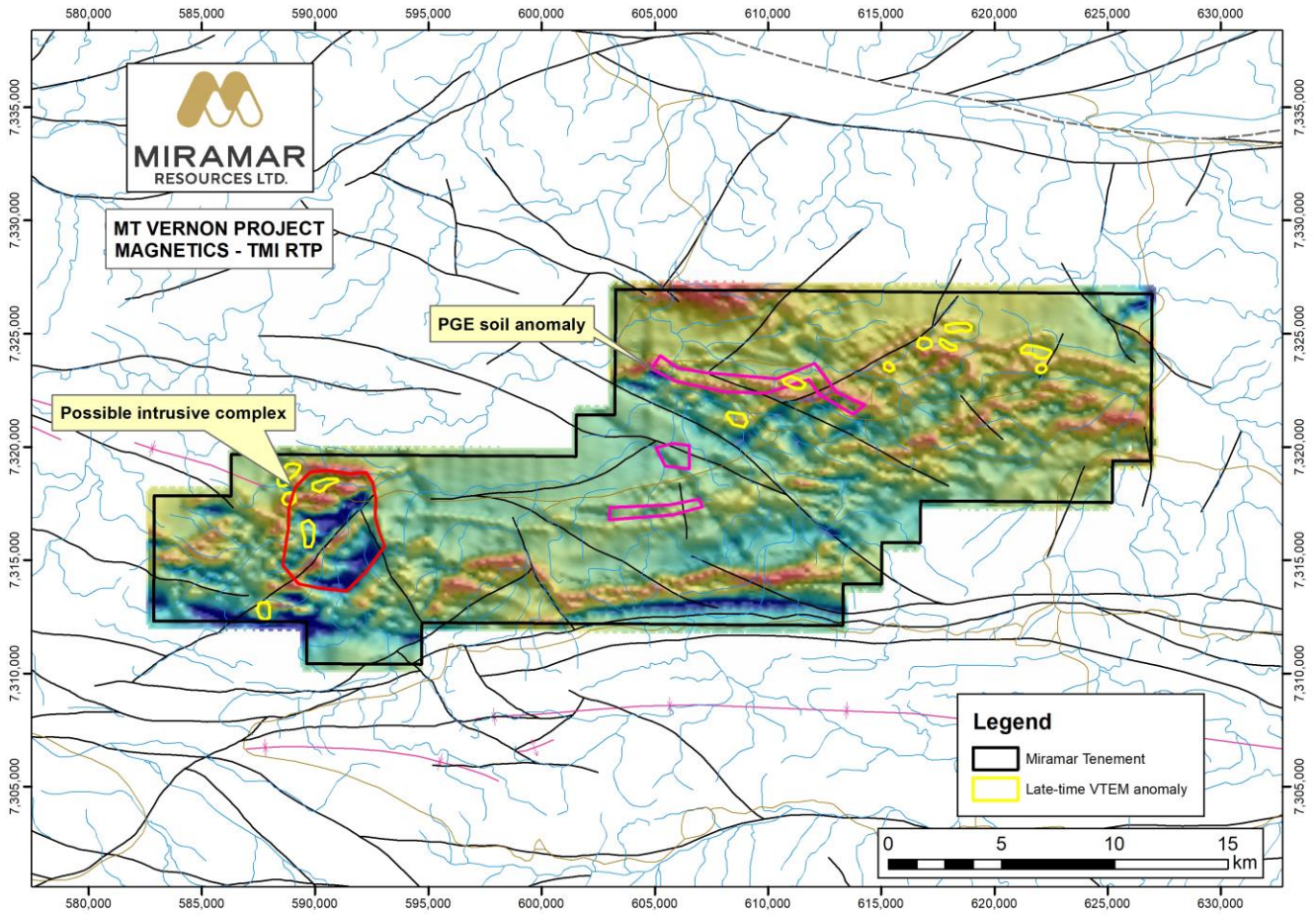


Figure 3. *New preliminary magnetic data from VTEM survey showing potential unmapped intrusion.*

For more information on Miramar Resources Limited, visit the company's website at www.miramarresources.com.au, follow the company on social media on social media (Twitter @MiramarRes and LinkedIn @Miramar Resources Ltd) or contact:

Allan Kelly
Executive Chairman
info@miramarresources.com.au

Margie Livingston
Ignite Communications
margie@ignitecommunications.com.au

This announcement has been authorised for release by Mr Allan Kelly, Executive Chairman, on behalf of the Board of Miramar Resources Limited.

About the Bangemall Project

The Bangemall Project is located in the Gascoyne region of Western Australia and comprises a number of granted Exploration Licences and/or Applications within the Proterozoic Capricorn Orogen (Figure 4).

The Bangemall region has been identified by both the Geological Survey of Western Australia and Geoscience Australia as having high prospectivity for Proterozoic craton margin-related Ni-Cu-PGE mineralisation like that seen in the Albany-Fraser Province (e.g., Nova-Bollinger, Mawson), the West Musgraves (e.g., Nebo-Babel) and the recent discovery at Julimar (Figure 5).

The Bangemall region has seen minimal exploration for this style of mineralisation.

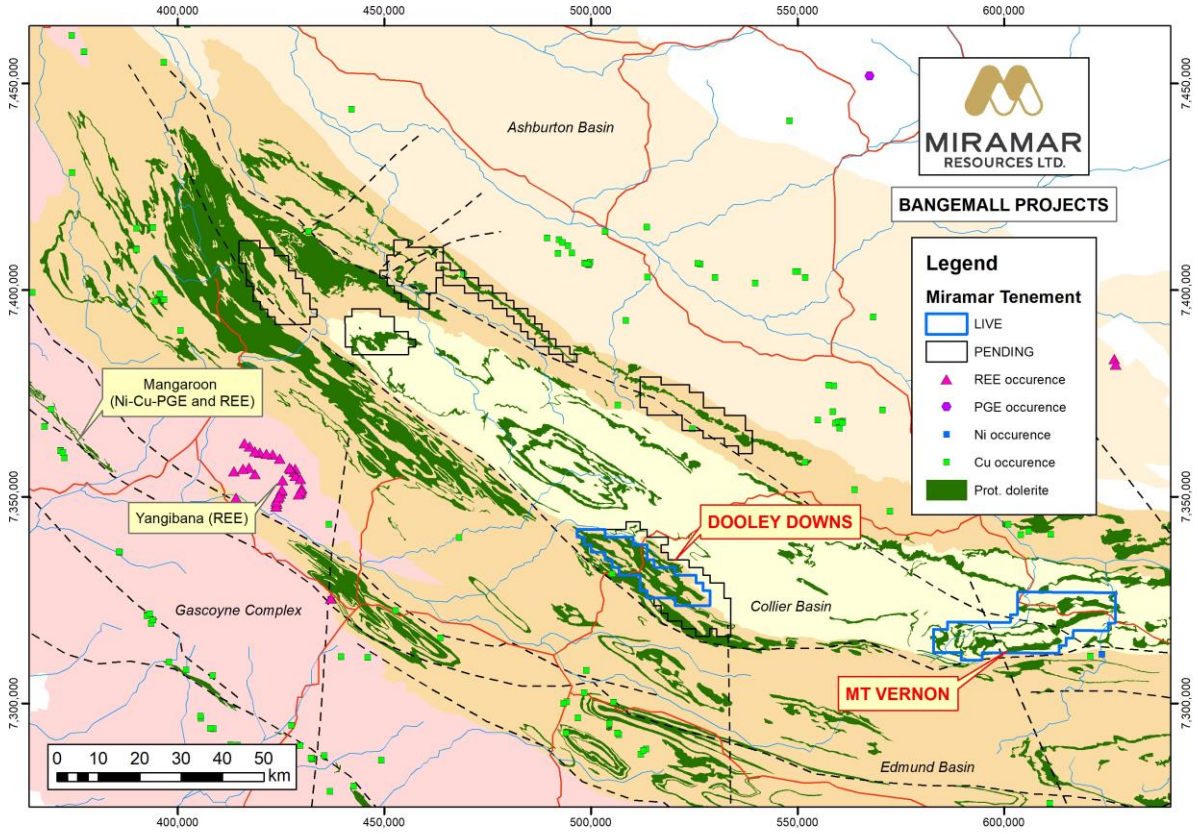


Figure 4. *Location of Miramar's Bangemall Project tenements.*

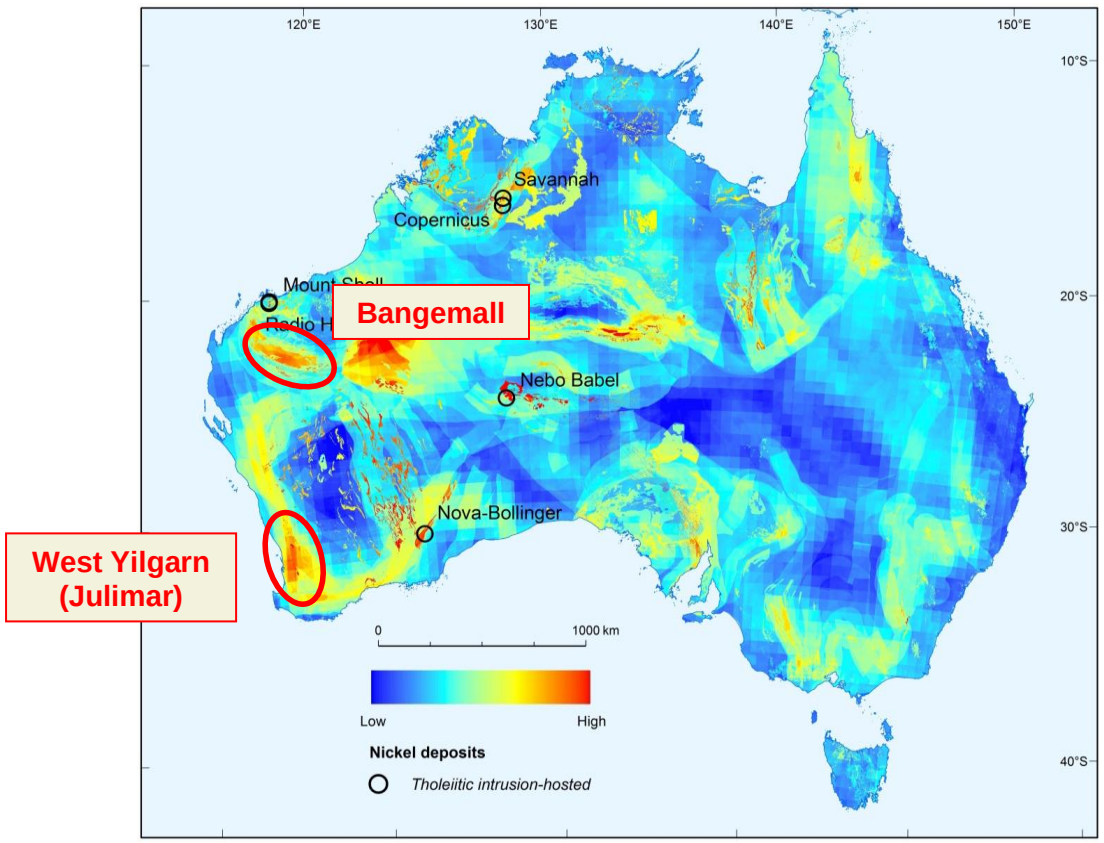
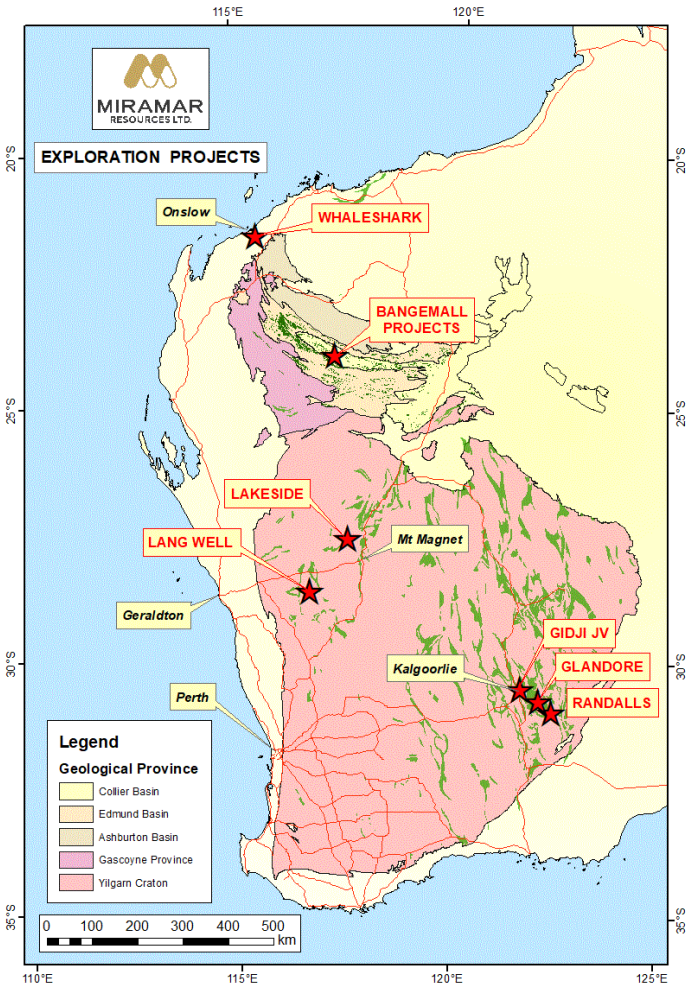


Figure 5. *Potential for tholeiitic intrusion-hosted Ni-Cu-PGE sulphide deposits in Australia with known deposits labelled (Source Geoscience Australia Record 2016/001).*

About Miramar Resources Ltd

Miramar Resources Limited is a WA-focused mineral exploration company actively exploring projects in the Eastern Goldfields, Murchison and Gascoyne regions and listed on the ASX in October 2020, following a heavily oversubscribed $8 million IPO.

Miramar's Board has a track record of discovery, development and production within Australia, Africa, and North America, and aims to create shareholder value through discovery of high-quality mineral deposits.



COMPETENT PERSON STATEMENT

The information in this report that relates to Exploration Results is based on information compiled by Allan Kelly, a "Competent Person" who is a Member of The Australian Institute of Geoscientists. Mr Kelly is the Executive Chairman of Miramar Resources Ltd. He is a full-time employee of Miramar Resources Ltd and holds shares and options in the company.

Mr Kelly 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 Kelly consents to the inclusion in this Announcement of the matters based on his information and in the form and context in which it appears.

Historical exploration results for the Bangemall Project, including JORC Table 1 and 2 information, are included in the Miramar Prospectus dated 4 September 2020.

JORC 2012 Table 1 – Mt Vernon EM Survey

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 down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.*
	• *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*
	• *Aspects of the determination of mineralisation that are Material to the Public Report.*
	• *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*
		• The "VTEM Max" survey was flown over the Mt Vernon Project with the following specifications:
		  ○ Approx. 1,101-line km
		  ○ Lines oriented N-S
		  ○ Line spacing 400m
		  ○ EM sensor height 35m
		• Magnetic and EM data was collected
		• The survey was completed by UTS Geophysics Pty Ltd
		• Preliminary data has been received

Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• No drilling data presented
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *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 drilling data presented
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.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.*	• No drilling data presented

Criteria	JORC Code explanation	Commentary
	• *The total length and percentage of the relevant intersections logged.*	
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *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.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• No drilling data presented
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.* • *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.* • *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.*	• No drilling data presented
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• No drilling data presented
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.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• No drilling data presented • Position data recorded in MGA Zone 50S
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *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.*	• 400m line spacing appropriate given the area being covered by this survey • Infill EM may be required

Criteria	JORC Code explanation	Commentary
	• *Whether sample compositing has been applied.*	
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.* • *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.*	• Lines were oriented N-S at 90 degrees to the general orientation of geology
Sample security	• *The measures taken to ensure sample security.*	• Not Applicable
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No audit or review undertaken

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 security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• Exploration was conducted on E52/3893, which is 100% owned by Miramar Resources Limited.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Previous exploration, mostly for Mn and Cu-Pb-Zn, has been undertaken by numerous other parties, including CRA, Aurora and IGO.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The target is intrusion-related Ni-Cu-PGE's associated with Proterozoic dolerite.

Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*
	  ○ *easting and northing of the drill hole collar*
	  ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  ○ *dip and azimuth of the hole*
	  ○ *down hole length and interception depth*
	  ○ *hole length.*
	• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*
		• No drilling data presented

Criteria	JORC Code explanation	Commentary
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.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• No drilling data presented
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• No drilling data presented
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.*	• Figures show location of survey and anomalies detected to date.
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 drilling data presented
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.*	• Minimal other relevant data for Ni-Cu-PGE's exists
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Field checking of EM anomalies along with mapping, geochemical sampling and prospecting • Modelling of EM data and ground EM follow up