

NEW Ni-Cu-PGE TARGETS IDENTIFIED AT BANGEMALL

- New Exploration Licence Application over large Ni-Cu-PGE targets
- Multiple anomalous Ni and Cu results identified in historical surface sampling
- High Ni-Cu rock chip result associated with Mundine Well dyke swarm

Miramar Resources Limited (ASX:M2R, "Miramar" or "the Company") is pleased to advise that the Company has expanded its land position within the "Bangemall Project", in the Gascoyne region of Western Australia, which Miramar believes is prospective for Ni-Cu-PGE (+/- REE) mineralisation.

The Company has pegged a new application, **E08/3498**, immediately adjacent to an earlier application which is currently progressing to grant. Together, the two applications cover Proterozoic dolerite sills and the contact between the Edmund and Collier Basins (Figure 1).

In addition, several later NE-trending dolerite dykes of the Mundine Well suite are seen in the vicinity.

These later dykes are apparently related to the Money Intrusion which hosts the high-grade Ni-Cu-PGE mineralisation discovered at Dreadnought Resources Limited's "Mangaroon" project.

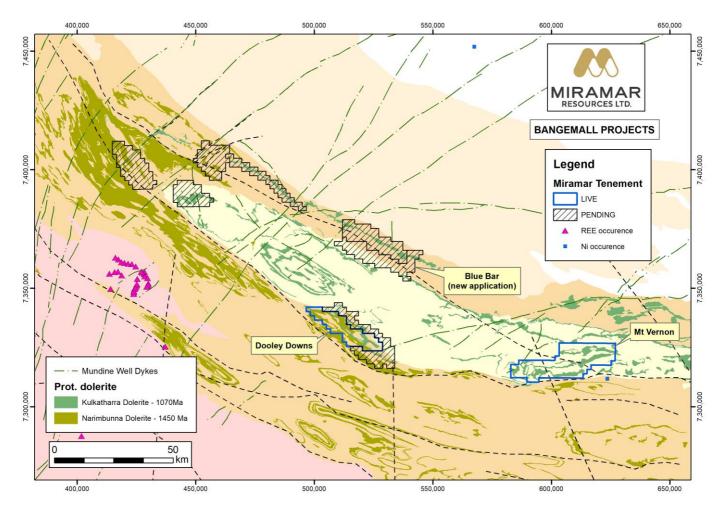
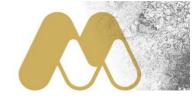


Figure 1. Bangemall Project tenements showing the new application at "Blue Bar".



Summary of historical exploration results

A compilation of historic rock chip and stream sediment samples over the "Blue Bar" target has revealed several strongly anomalous Ni and Cu results (Figure 2).

Of note, are several rock chip samples with strongly elevated Ni and Cu results (up to 738ppm Ni and 218ppm Cu respectively) in a "strongly weathered ironstone" located at the contact between the Edmund Basin and the Collier Basin (reference WAMEX a078053). No Au, Pt or Pd assays are recorded.

No dolerite is mapped is this area, but the regional magnetic data suggests the presence of a dolerite sill, and outcropping dolerite is recorded to the southeast. A cluster of strongly anomalous rock chips is also recorded along strike to the northwest and outside of Miramar's tenement.

Sampling within Miramar's tenements is sporadic and the total potential strike length is over 30km.

In the northwestern corner of the project tenements, a single rock chip sample, **CAPR0428**, returned **2,970ppm Ni** and **1,230ppm Cu** (reference WAMEX a081037). No geological information is recorded about the sample and no Au, Pt or Pd assays are recorded.

Based on the regional magnetic and geological data, this strongly anomalous sample lies close to or within one of the NE-trending Mundine Well dykes (Figure 3).

Historical stream sediment sampling parallel to the northern margin of the Kulkatharra dolerite sill shows multiple coincident anomalous Ni and Cu results in streams draining off the dolerite over a strike extent of approximately 8km (reference WAMEX a053636). No Pd or Pt assays are recorded for these samples.

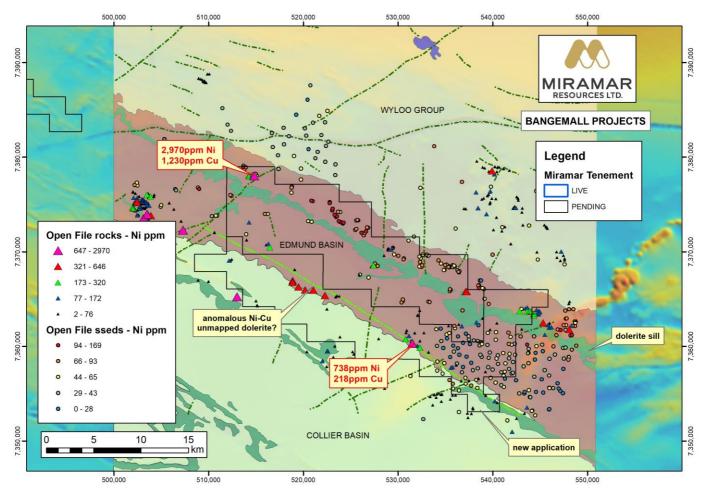
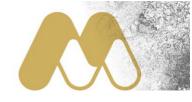


Figure 2. Blue Bar target highlighting significant historic rock chip and stream sediment results.



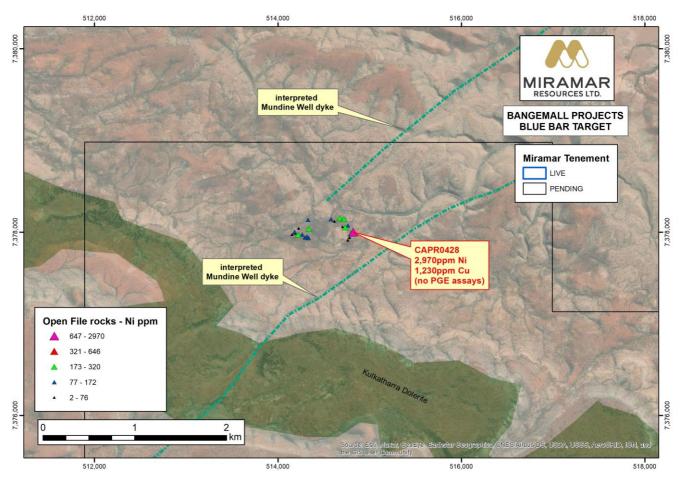


Figure 3. NW corner of Blue Bar target showing historic rock chips adjacent to Mundine Well dykes.

Miramar's Executive Chairman, Mr Allan Kelly, said the presence of highly anomalous nickel and copper results apparently associated with Mundine Well dykes was extremely significant given the recent results coming from Dreadnought Resources Limited's Mangaroon Project.

"Blue Bar has the most significant historical nickel and copper assay results of any of the targets we have identified at Bangemall to date," he said.

"The apparent spatial association of the results with the later Mundine Well dykes adds a further dimension to the prospectivity of our strategic Bangemall landholding and we look forward to getting on the ground and examining the opportunity further," Mr Kelly added.

Upcoming Work Plans

The Company is finalising plans for a helicopter-supported geochemical sampling campaign over the multiple late-time EM anomalies outlined at Mt Vernon (see ASX Release dated 3 February 2022) and will conduct a reconnaissance field visit to the Blue Bar target as part of this work programme.

Following grant of the Blue Bar tenements, the Company plans to conduct an airborne EM survey over the project and follow up with surface geochemical sampling.



For more information on Miramar Resources Limited, visit the company's website at <u>www.miramarresources.com.au</u>, 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.

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.

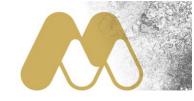
Mr Kelly has sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration and to the activity being undertaken to Qualify as a "Competent Person" as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources 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.

Historical data identified in this release was extracted from the following historical technical reports stored in WAMEX:

- a053636 "Combined Annual Mineral Exploration Report, Ford Creek Project", RGC Exploration Limited, January 1998.
- a078053 "Annual Technical Report, Capricorn Report, Bangemall Basin", Aurora Minerals Limited, March 2008
- a081037 "Surrender Report, Capricorn Report, Bangemall Basin", Aurora Minerals Limited, February 2009



About the Bangemall Project

Miramar's 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.

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 4).

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

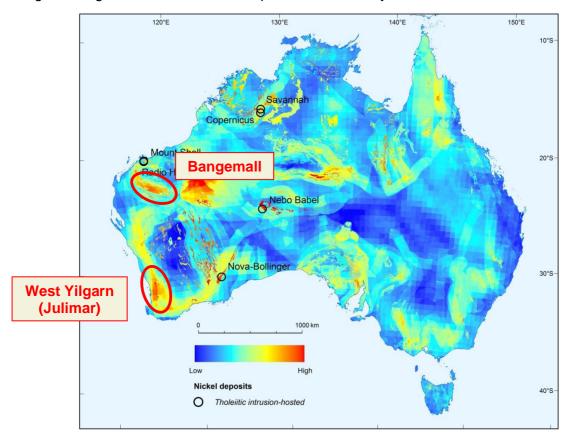
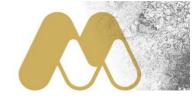


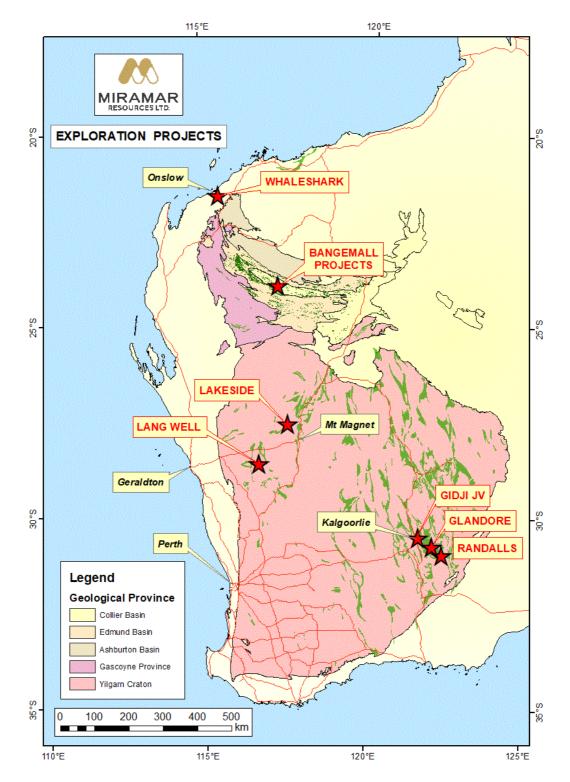
Figure 4. Potential for tholeiitic intrusion-hosted Ni-Cu-PGE sulphide deposits in Australia with known deposits labelled (Source Geoscience Australia Record 2016/001).

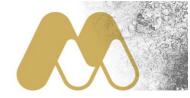


About Miramar Resources Ltd

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.

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.





JORC 2012 Table 1 – Blue Bar historic geochemical data

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. 	
Drilling techniques	 Drill type (eg core, reverse circulation, openhole 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. The total length and percentage of the 	 No drilling data presented



Criteria	JORC Code explanation	Commentary
Sub- sampling techniques and sample preparation	 relevant intersections logged. 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 	No drilling data presented
Quality of assay data and laboratory tests	 the grain size of the material being sampled. 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. 	 Rock chip samples were assayed for Au by 30g fire assay, with a 1ppb Au detection limit and for multi-elements by a mixed acid digest followed by ICPMS analysis The above analytical techniques are deemed suitable for this type of sampling. Stream sediment samples were analysyed for au by fire assay and multi-element suite by mixed acid digest followed by ICP analysis.
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 verification has been undertaken at this stage
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
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. Whether sample compositing has been 	 Historical sampling is reconnaissance in nature and the spacing is sporadic



Criteria	JORC Code explanation	Commentary
	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. 	 Historical sampling is reconnaissance in nature and the spacing is sporadic
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. 	 The historical results are within current Exploration Licence Applications E08/3284 and E08/3498 E08/3284 is owned 100% by Miramar Resources Limited E08/3498 is owned 100% by MQ Minerals Pty Ltd, which is a wholly owned subsidiary of 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 current tenements and historical rock chip and stream sediment results.
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 data relevant to Ni-Cu-PGE's exploration 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. 	 Airborne EM survey geochemical sampling and prospecting Modelling of EM data and ground EM follow up