ASX ANNOUNCEMENT

MIRAMAR RESOURCES LTD.

BANGEMALL PROJECT EXPLORATION UPDATE

- **Drilling and rock chip assays from Mount Vernon provide geochemical indicators for Norilsk-style Ni-Cu-Co-PGE mineralisation**
- **New Exploration Licences granted over additional Norilsk-style targets**

Miramar Resources Limited (ASX:M2R, "Miramar" or "the Company") is pleased to provide an update on exploration activities at the Company's Bangemall Projects in the Gascoyne region of WA where it is exploring for Proterozoic mafic intrusion-hosted nickel (Ni), copper (Cu), cobalt (Co) and platinum group element (PGE) sulphide mineralisation similar to the super giant Norilsk-Talnakh deposits in Russia.

The Company advises that it has now received all assay results from the maiden RC drilling campaign at the Mount Vernon Project along with further rock chip sampling aimed at identifying potential vectors towards Norilsk-style Ni-Cu-Co-PGE mineralisation.

Miramar's Executive Chairman, Mr Allan Kelly said the drilling and rock chip sampling had provided positive indications of the potential for Norilsk-style Ni-Cu-Co-PGE mineralisation related to the 1070Ma-aged Kulkatharra Dolerite sills (the same age as the Nebo and Babel deposits in the West Musgraves).

"We didn't intersect nickel sulphide mineralisation this time but the new data, when compared with known Ni-Cu-Co-PGE deposits both within and outside Australia, shows that we are in the ballpark," he said.

"All the key ingredients for Norilsk-style mineralisation are present at Mt Vernon: the right aged mafic intrusive rocks, deep crustal-scale structures which could act as potential plumbing systems and sulphur-rich sediments in the form of pyritic siltstones and evaporite-rich dolomites," he said.

"The new data from our recent drilling and rock chip sampling has provided evidence of differentiation and mafic cumulate rocks which are a key component of this style of deposit," he added.

The 9-hole RC drilling campaign was the first targeting Norilsk-style Ni-Cu-Co-PGE mineralisation in the Capricorn Orogen and was co-funded by the WA Government's Exploration Incentive Scheme (EIS).

Miramar's drilling tested multiple geological and/or geophysical targets within south-dipping Kulkatharra Dolerite sills intruding into older sedimentary units of the Proterozoic Collier Basin (Figure 1).

The key findings from the maiden drilling programme include:

- Evidence of differentiation within the dolerite sills
- Presence of mafic cumulate rocks which are a key component of these types of deposits
- Elevated nickel, copper, platinum and palladium values (when compared to the average values for Kulkatharra Dolerite)

Likewise, further rock chip sampling also provided positive indicators including the presence of mafic cumulate rocks which are a key component of mafic intrusion hosted Ni-Cu-Co-PGE deposits.

Additional work planned includes:

- Signing up to the CSIRO's "*Indicator minerals for magmatic mafic-ultramafic ore systems (Ni, Cu, Co, PGEs, V, Ti)*" Project and providing selected samples from the recent drilling programme for further petrographic and geochemical analysis; and
- Ongoing mapping and systematic rock chip sampling across the wider Bangemall Project tenements

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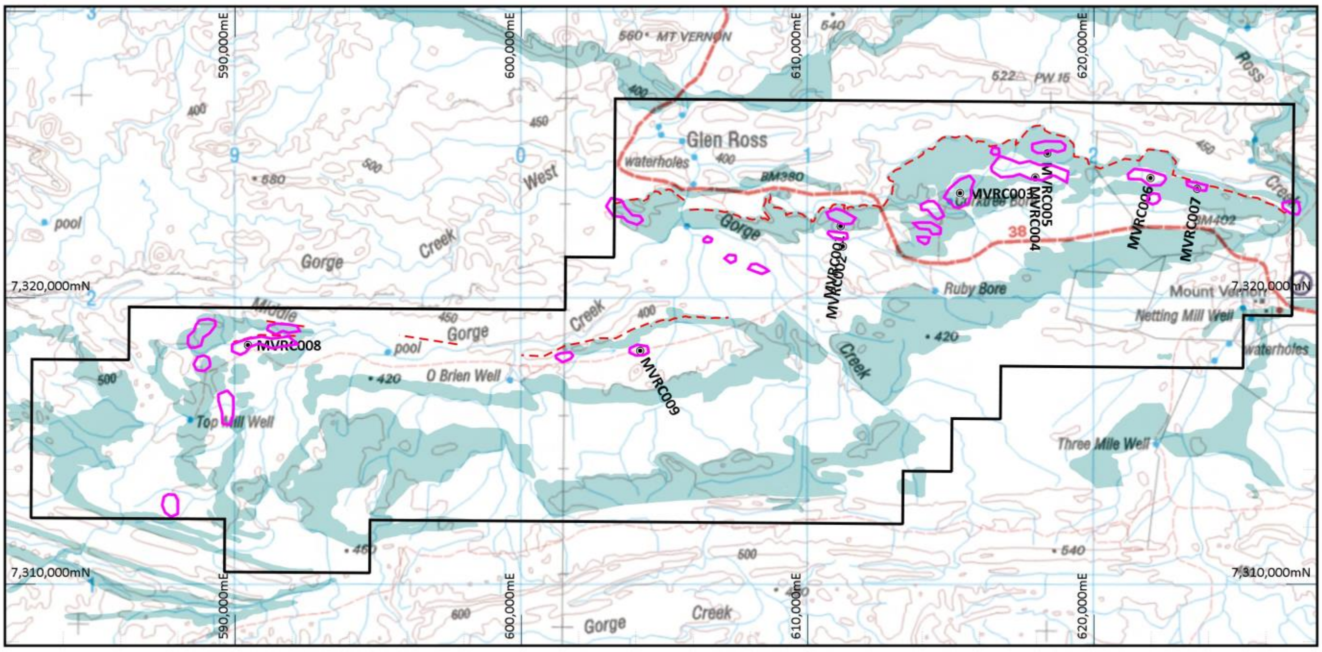

Figure 1. *Mount Vernon Project showing locations of RC drillholes in relation to dolerite sills (green polygons) and electromagnetic anomalies (pink outlines).*

Discussion of results

Downhole assay results and geological logging for each hole indicate that differentiation is occurring within the Kulkatharra Dolerite sills.

Using MVRC004 as an example, MgO contents increase from the upper chilled margin towards the base of the sill, reaching as high as 13% before decreasing towards the bottom contact of the sill (Figure 2).

The increase in MgO corresponds with an increase in Ni and a decrease in TiO2 and V results. Magnetic susceptibility readings also highlight the differentiation within the sill.

A summary of MgO and Ni values in dolerite for all holes drilled at Mount Vernon is shown in Figure 3.

This geochemical profiles seen at Mount Vernon are similar to those seen in dolerite sills within the Siberian Traps, which host the giant Norilsk-Talnakh Ni-Cu-Co-PGE deposits (Figure 4).

Plotting Ni, Cr and Ti data indicates the presence of mafic cumulate rocks, which are an important component of mafic intrusion hosted Ni-Cu-Co-PGE mineralisation, including at Norilsk (Figure 5).

Figure 6 shows a comparison of the Mount Vernon drilling data with published data from the Albany Fraser Orogen (Nova-Bollinger), the Halls Creek Orogen (Savannah, Merlin etc) and the Ntaka Hill nickel deposit in Tanzania.

The presence of mafic cumulate rocks at Mount Vernon compares favourably with those provinces known to host significant Ni-Cu-Co-PGE deposits.

Conversely, according to Barnes (2022), "*the Hart Dolerite represents a very high-volume Large Igneous Province almost completely devoid of cumulate rocks and has so far proved entirely barren for this deposit type,*"

In general, Ni, Cu and PGE values observed within the dolerite sills at Mount Vernon are elevated with respect to average values for the Kulkatharra Dolerite, as shown in Figure 7.

Analysis of rock chip samples at Mount Vernon confirms the presence of mafic cumulate rocks (Figure 8), which is a positive indicator when compared with provinces containing known Ni-Cu-Co-PGE mineralisation (Figure 9).

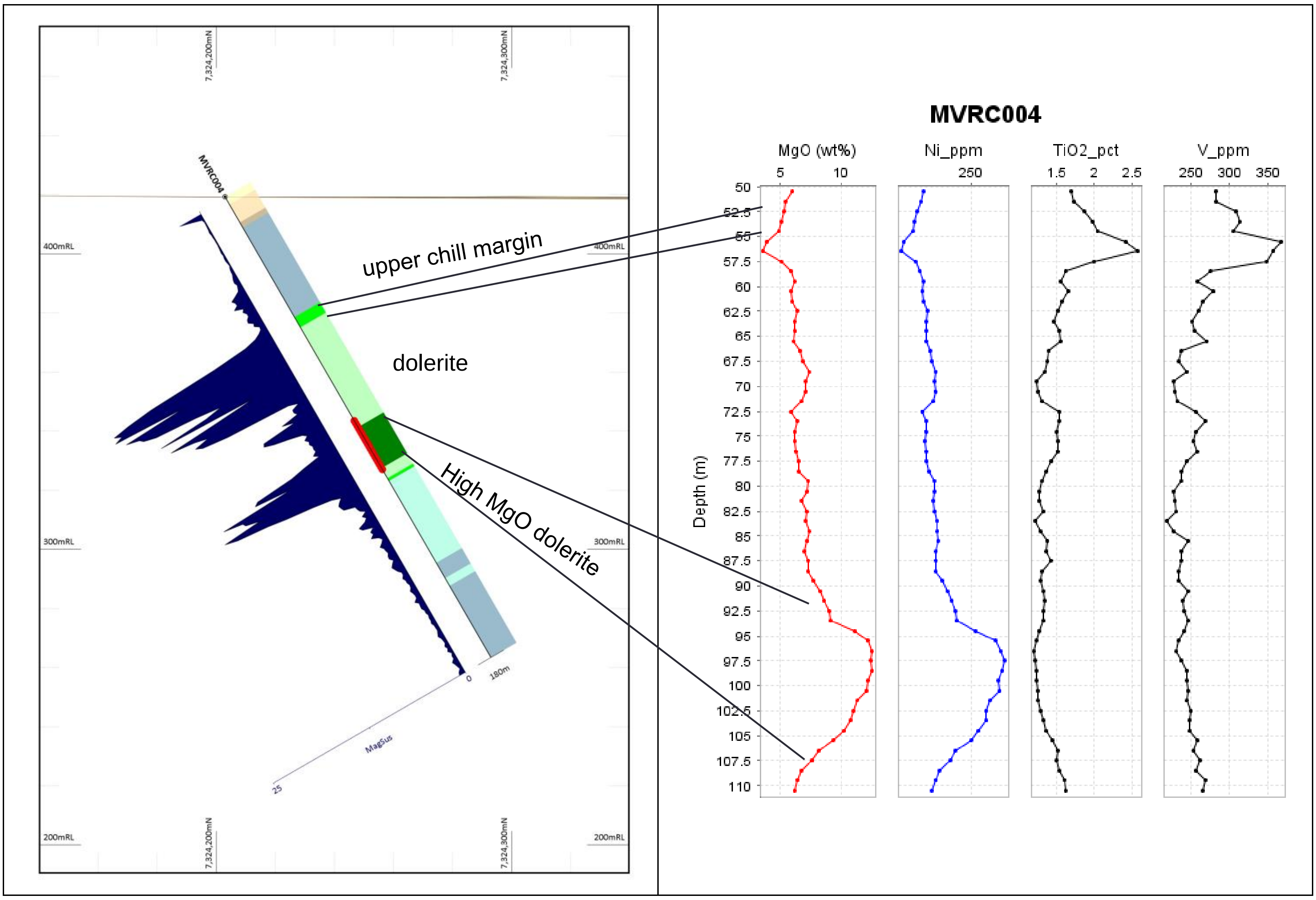

Figure 2. *Cross Section and strip log of MVRC004 showing evidence of differentiation within the dolerite sill and mafic cumulate rocks highlighted in red towards the base of the sill.*

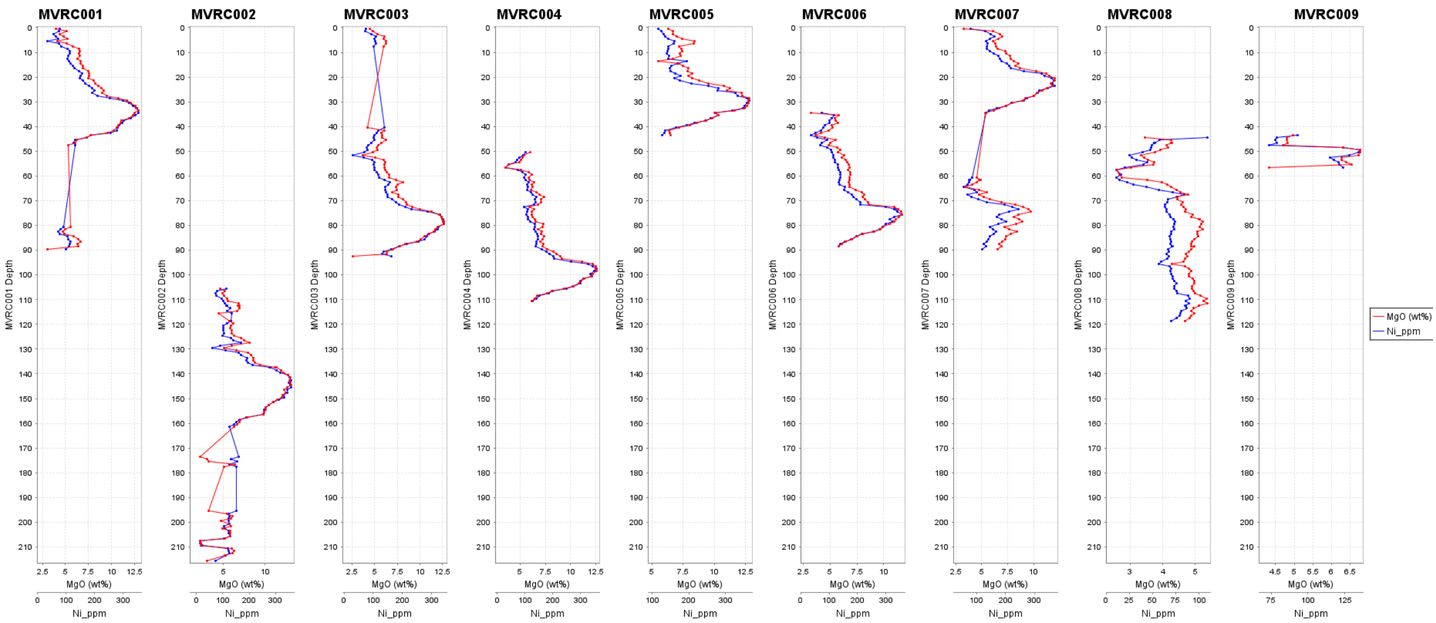

Figure 3. *MgO and Ni results for all holes showing evidence of differentiation within the dolerite sills.*

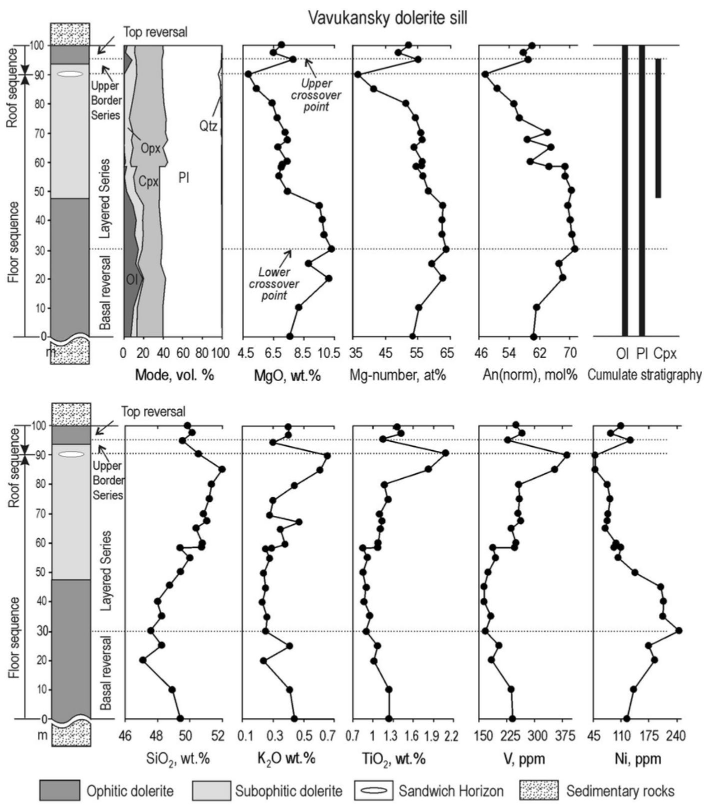

Figure 4. *Simplified section through the Vavukansky dolerite sill showing its stratigraphic subdivision and whole-rock geochemistry (Latypov and Egorova, 2013).*

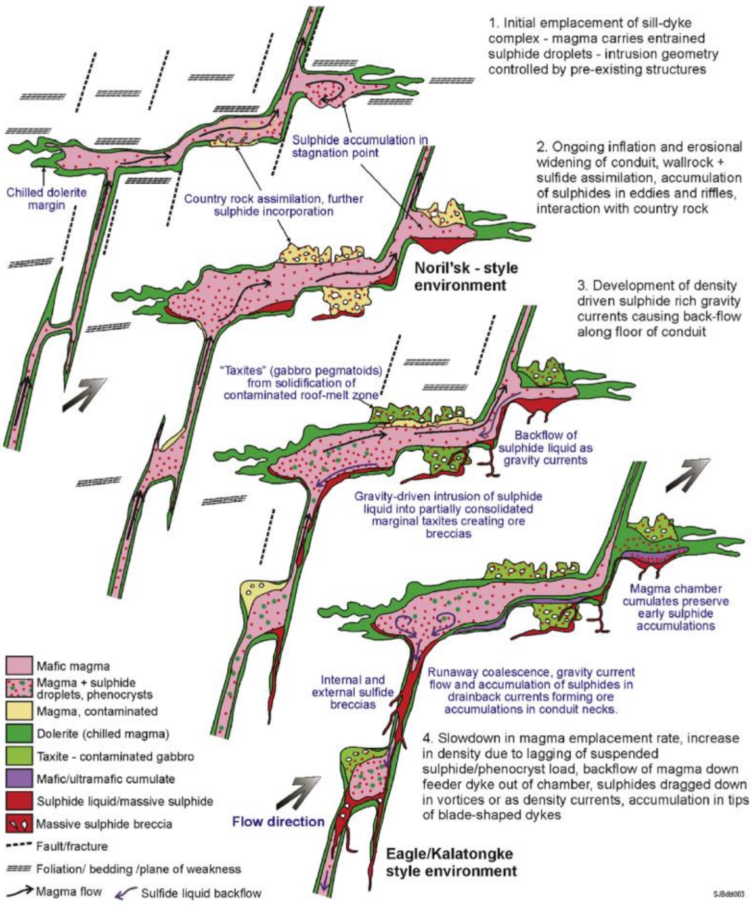

Figure. 5. *Schematic illustration of formation of Noril'sk, Eagle–Kalatongke and Voisey's Bay-style Ni-Cu-Co-PGE mineralisation (Barnes 2023).*

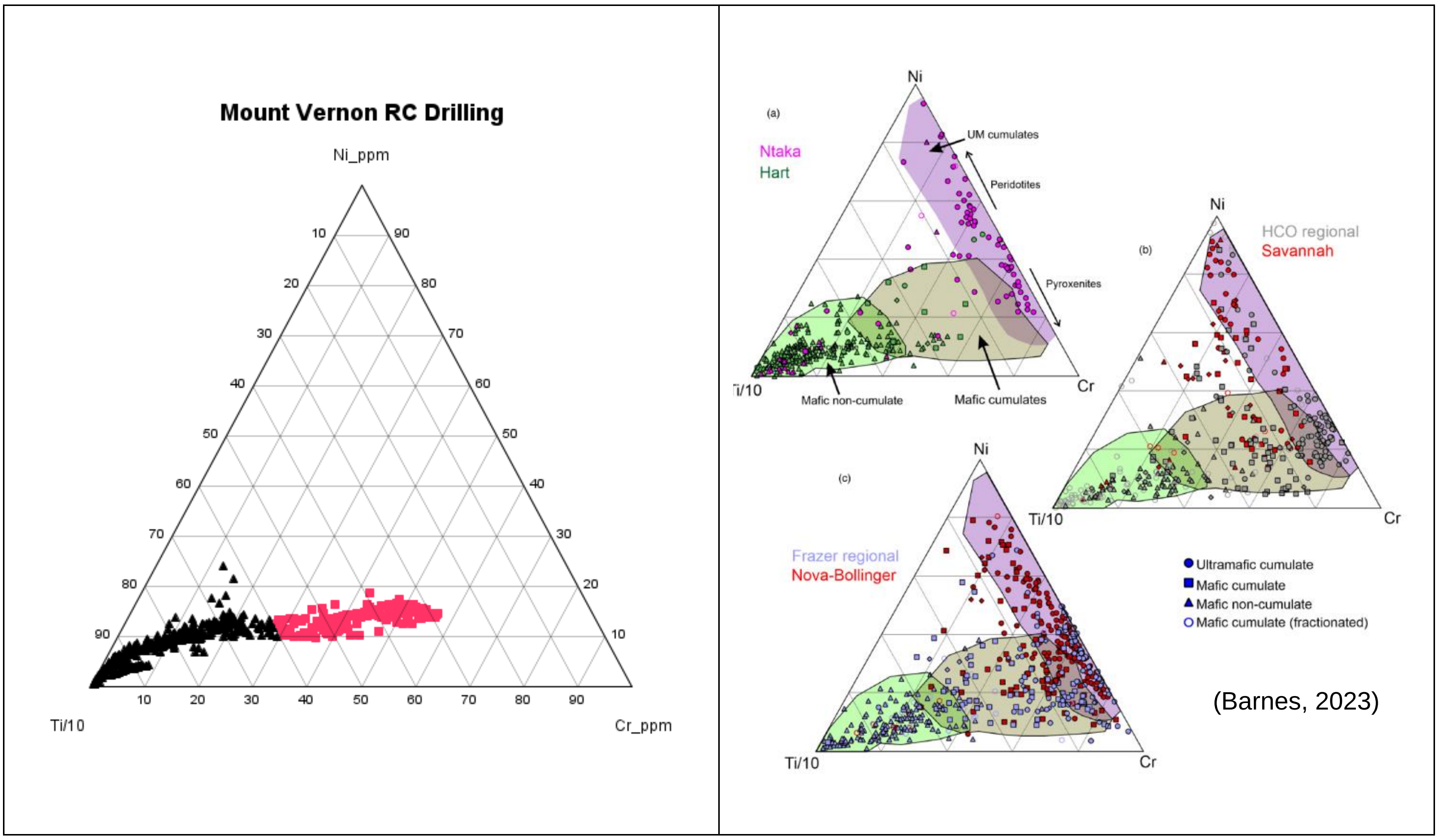

Figure 6. *Mount Vernon drilling results showing evidence of mafic cumulate rocks (red squares) compared with known Ni-Cu-PGE deposits and districts.*

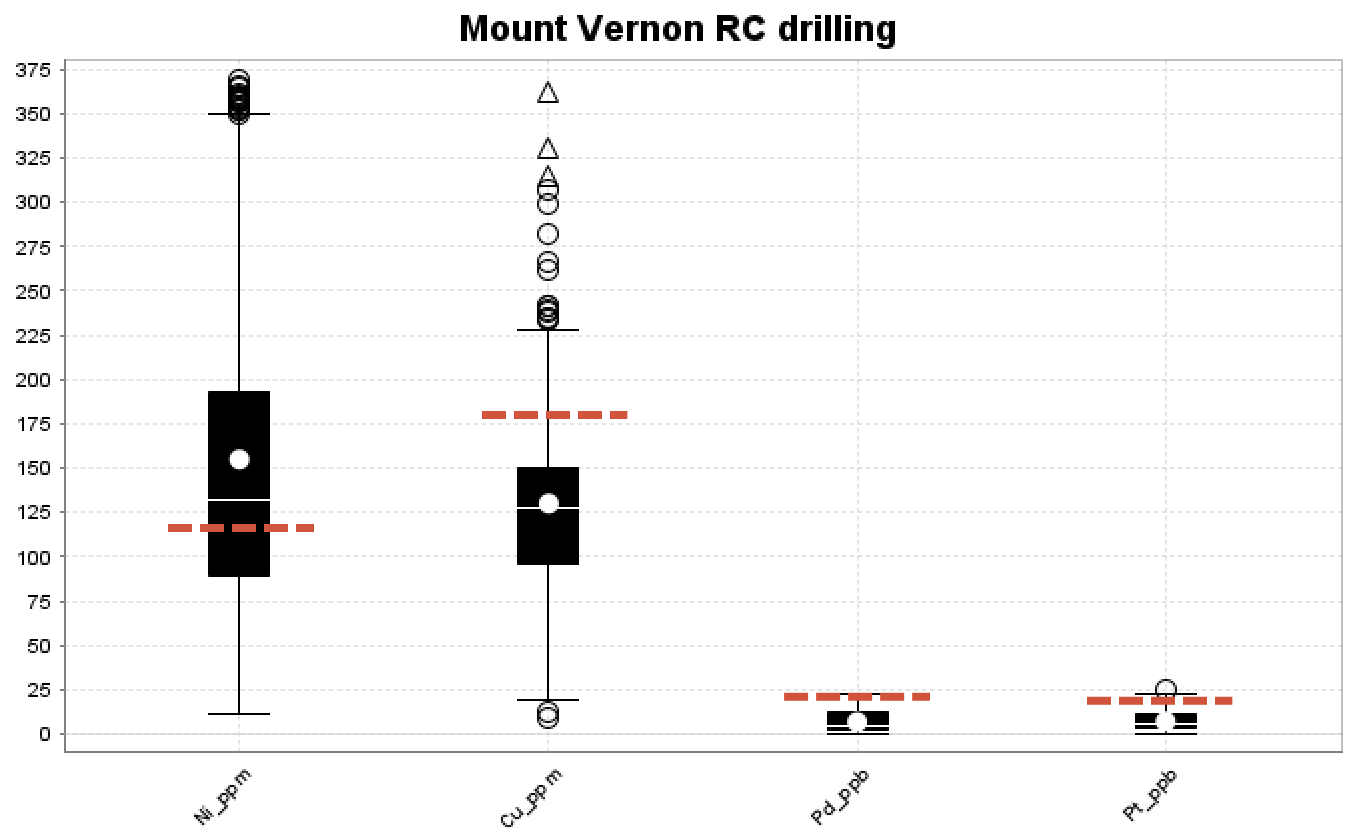

Figure 7. *Box plots for Ni, Cu, Pd and Pt showing range of values observed in the RC drilling compared with "average values for 1070Ma Western Bangemall dolerite sills" (dashed red lines) (Morris and Pirajno, 2005).*

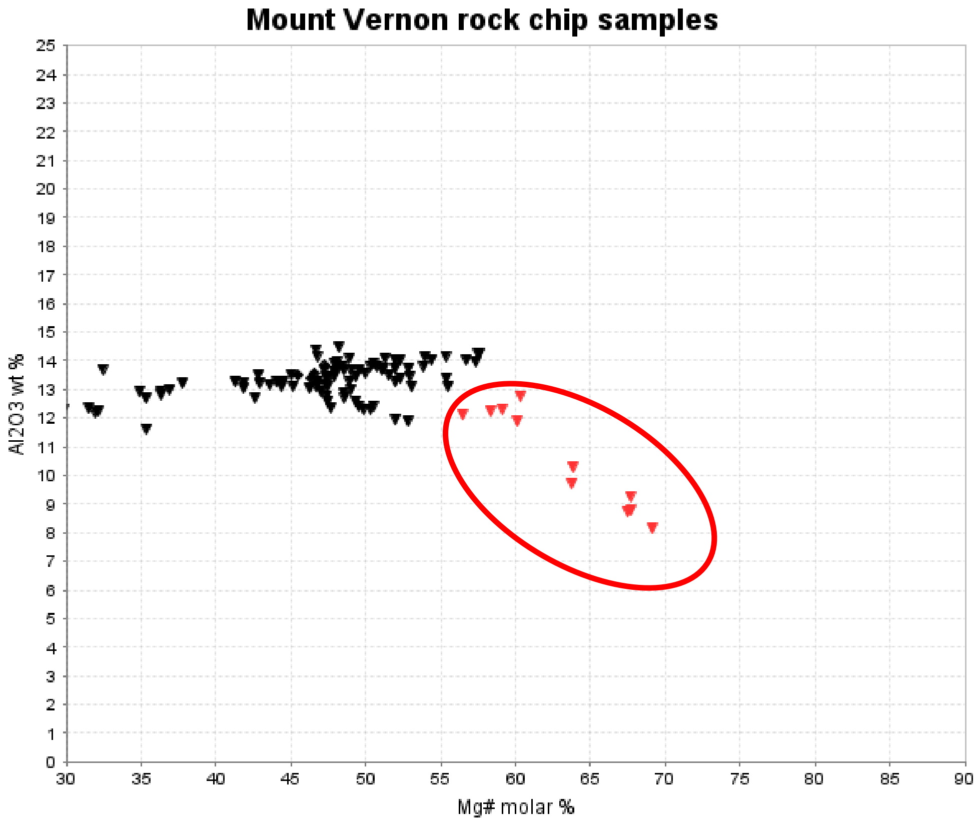

Figure 8. *Discriminant plot for Mount Vernon rock chip samples showing rocks classified as "mafic cumulates" highlighted in red (compare with Figure 9).*

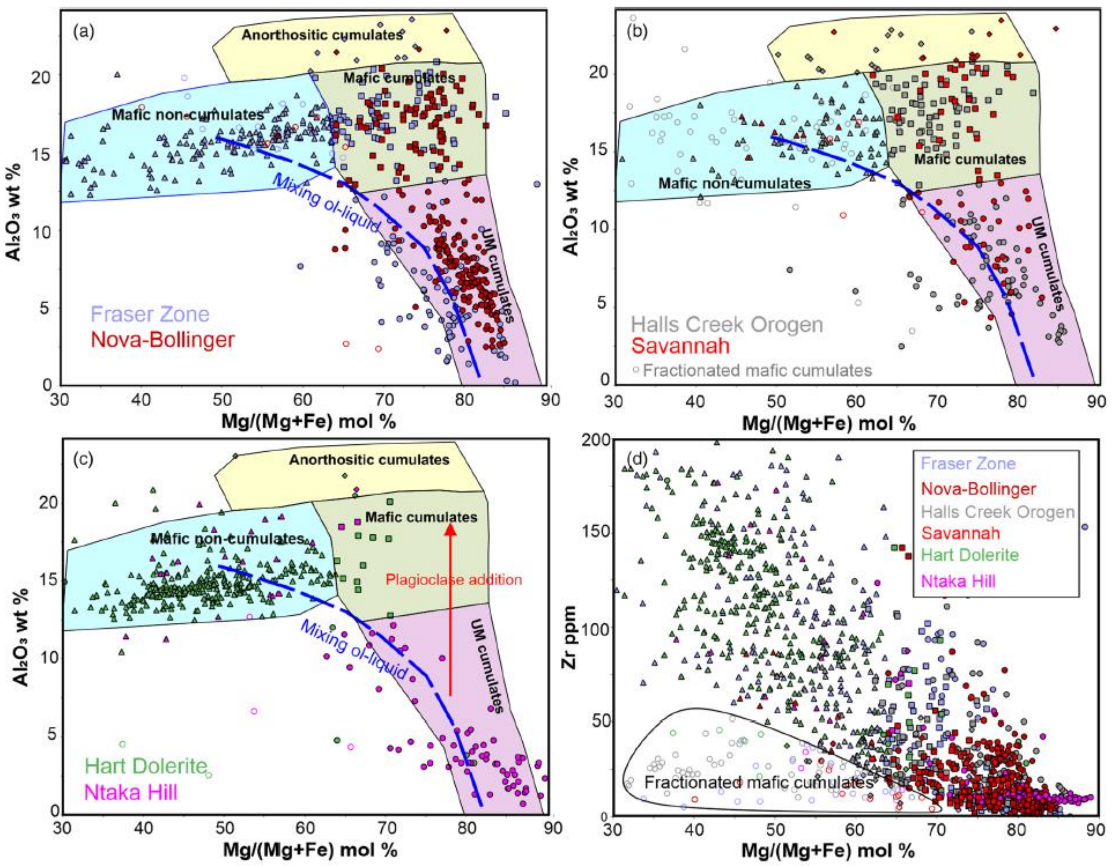

Figure 9. *Discriminant plot for ultramafic (UM) cumulates, mafic cumulates and non-cumulate mafic rocks in known Ni-Cu-PGE provinces (Barnes, 2023).*

Table 1. *Drill Hole Locations*

Project	Hole ID	MGA_E	MGA_N	RL	Dip	Azimuth	EOH depth	Comments
Mount Vernon	MVRC001	611152	7322501	382.0	-60	10	235	
	MVRC002	611229	7321793	355.0	-60	10	235	
	MVRC003	615324	7323654	428.0	-90	0	180	
	MVRC004	617951	7324203	422.0	-60	0	180	
	MVRC005	618373	7325044	443.0	-60	0	210	
	MVRC006	621975	7324180	412.7	-60	15	180	
	MVRC007	623600	7323800	439.7	-60	10	180	
	MVRC008	590450	7318350	425.2	-90	0	150	
	MVRC009	604150	7318150	391.6	-60	330	180	
Trouble Bore	TBRC001	642551	7328650	387.0	-60	45	140*	abandoned
	TBRC002	642540	7328642	387.0	-90	0	250*	abandoned

New Exploration Licences granted over prospective Ni-Cu-Co-PGE targets

Miramar advises that two Exploration Licence Applications, E52/4380 and E52/4387, have recently been granted adjacent to the Mount Vernon and Trouble Bore Projects (Figure 10).

The newly granted tenements cover interpreted Kulkatharra Dolerite and areas that have been highlighted by both Geoscience Australia and the CSIRO as being highly prospective for mafic intrusion-hosted Ni-Cu-Co-PGE mineralisation (Figures 11 and 12 respectively)

Regional gravity data also suggests potential for a buried magma chamber beneath E52/4380.

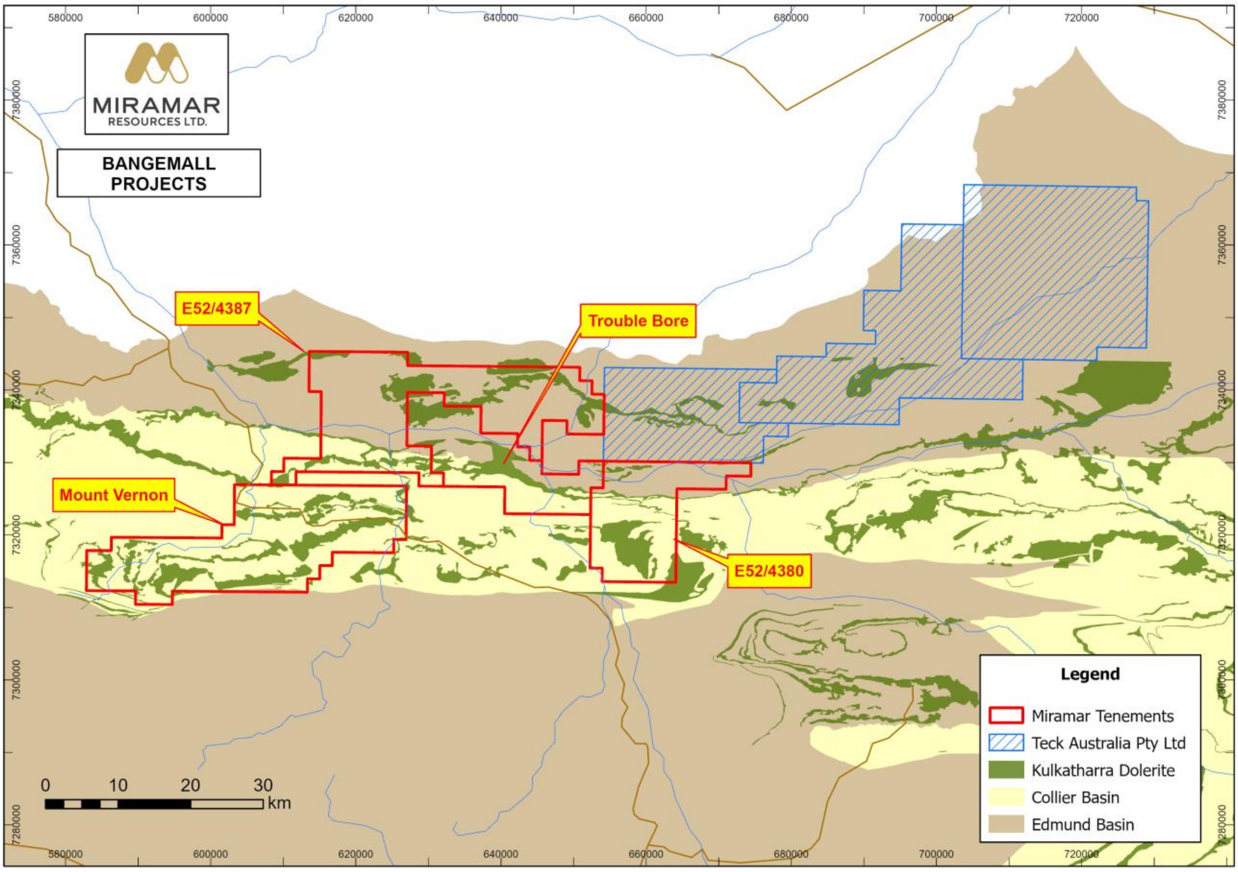

Figure 10. *Mount Vernon and Trouble Bore Projects showing newly granted tenements.*

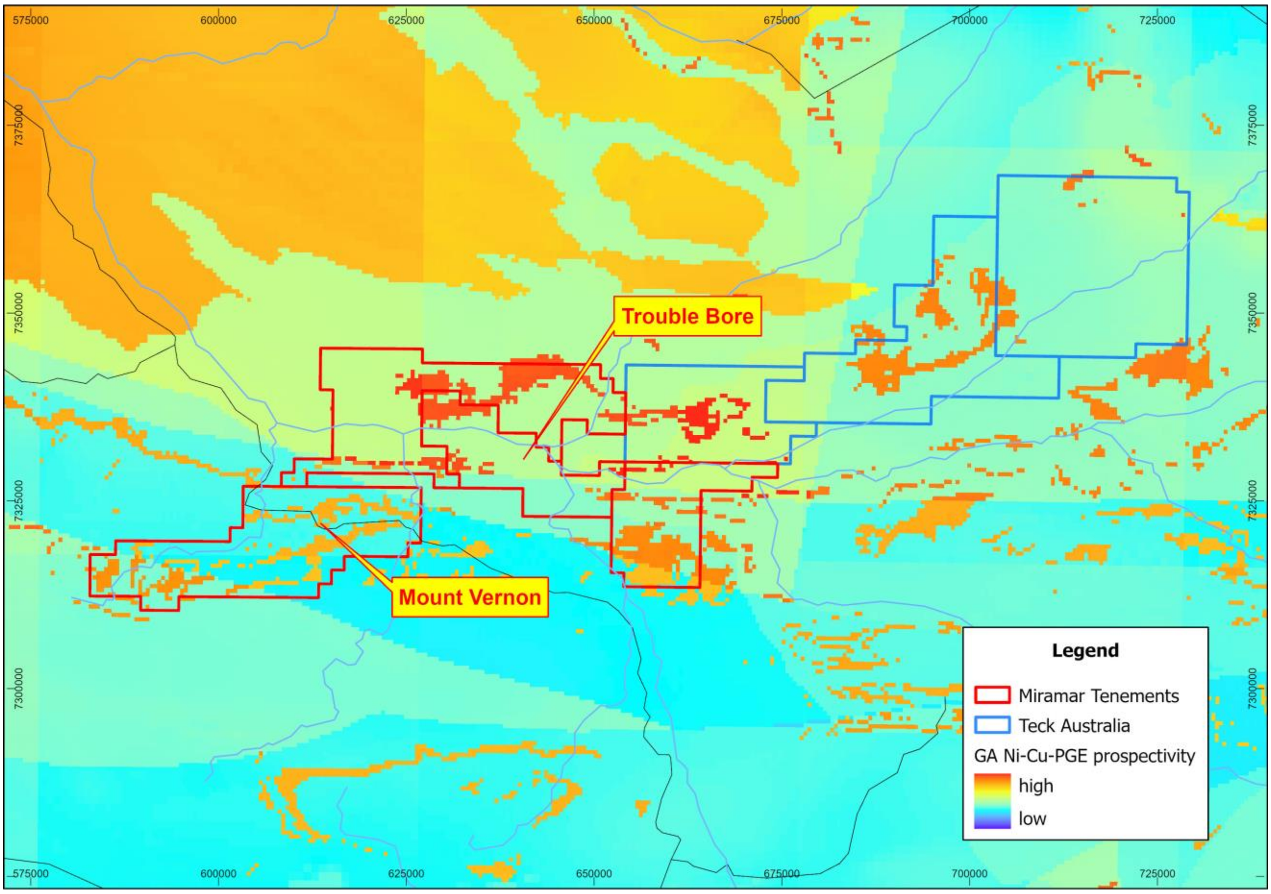

Figure 11. *Geoscience Australia Ni-Cu-PGE prospectivity mapping results (Record 2016/01).*

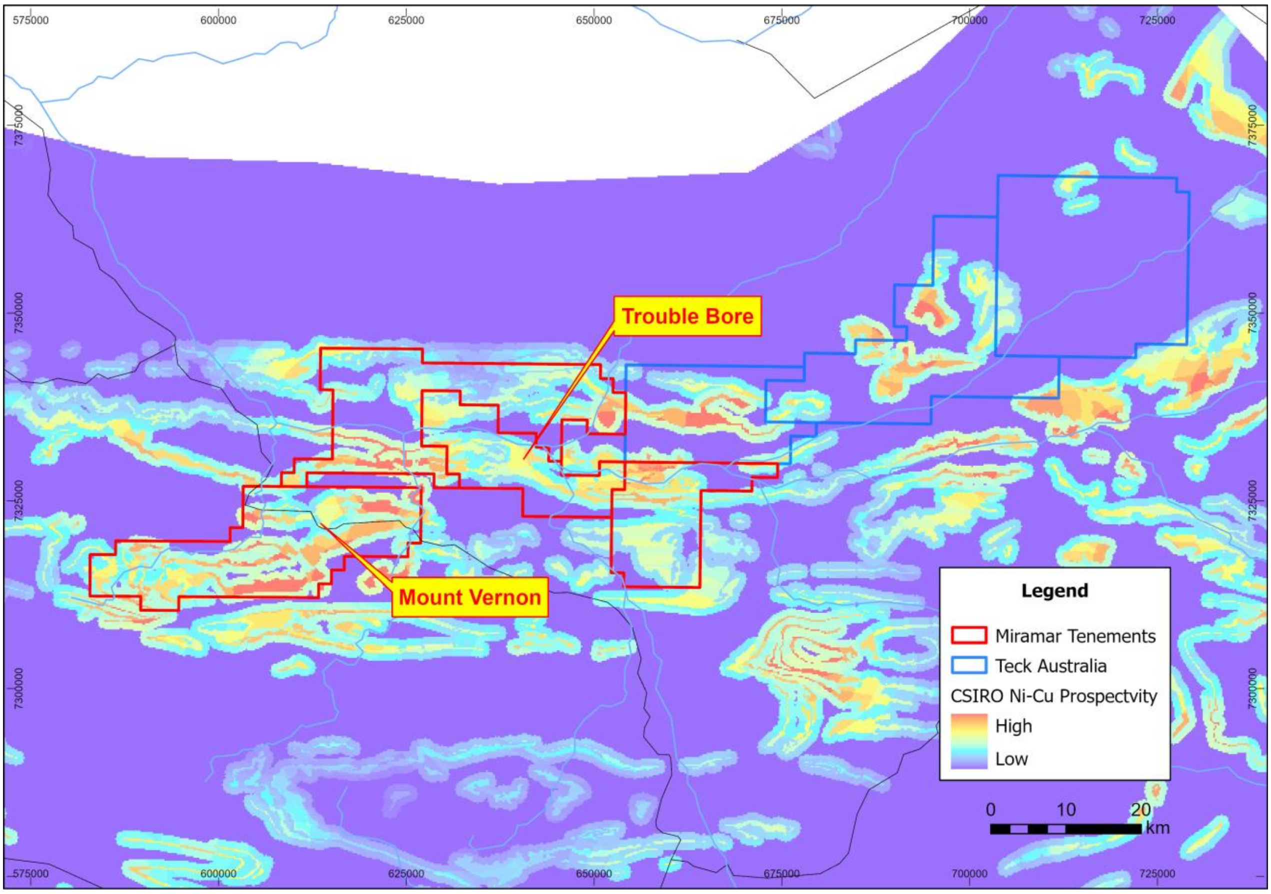

Figure 12. *CSIRO Ni-Cu-PGE prospectivity mapping results (RP04-063-M436).*

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

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

References:

Barnes, S. J. 2022. "Whole-rock geochemistry for intrusion-hosted magmatic Ni-Cu-Co exploration: identifying prospective host rocks." Explore No 195. June 2022.

Barnes, S.J., 2023. "Lithogeochemistry in exploration for intrusion-hosted magmatic Ni-Cu-Co deposits." Geochemistry: Exploration, Environment, Analysis, Vol 23.

CSIRO Prospectivity analysis using a mineral systems approach - Capricorn case study project (RP04-063-M436)

Dulfer, H., Skirrow, R.G., Champion, D.C., Highet, L.M., Czarnota, K., Coghlan, R. and Milligan, P.R "Potential for intrusion-hosted Ni-Cu-PGE sulfide deposits in Australia - A continental-scale analysis of mineral system prospectivity" GEOSCIENCE AUSTRALIA RECORD 2016/01

Latypov and Egorova, 2013. "Mafic-Ultramafic Sills: New Insights from M- and S-shaped Mineral and Whole-rock Compositional Profiles" Journal of Petrology 54(10).

Morris, P.A, and Pirajno, F., 2005. "Mesoproterozoic sill complexes in the Bangemall Supergroup, Western Australia: geology, geochemistry, and mineralisation potential". GSWA Report 99.

COMPETENT PERSON STATEMENT

The information in this report that relates to Exploration Targets or 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.

JORC 2012 Table 1 – Bangemall RC Drilling

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.*	• 1m samples collected from 1m piles • Sampling was limited to the logged dolerite sills +/-1-2m, except MVRC001 where the entire hole was sampled • Samples average 3kg in weight
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).*	• RC drilling with hammer bit
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.*	• Sample recovery was generally excellent
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*	• Samples were logged for colour, weathering, grain size, geology, alteration and mineralisation where possible

Criteria	JORC Code explanation	Commentary
	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.*	• Samples collected from 1m sample piles to achieve approximately 3kg of sample
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.*	• Samples were assayed a four-acid digest followed by ICP-MS for multi-element suite and by 50g fire assay for Au, Pt and Pd • QAQC samples inserted at frequency of 4 QAQC samples (i.e. standard, blank duplicate) per 100 samples
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.*	
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.*	• Hole collar locations were recorded with a handheld GPS in MGA Zone 51S • RL was also recorded with handheld GPS but accuracy is variable
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*	• Single RC holes were drilled across various EM anomalies • The hole spacing is not sufficient for calculation of a Mineral Resource or Ore Reserve\No sample compositing occured

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.*	• Drill holes were angled perpendicular to the trend of the main geological units and parallel to previous drill lines. • It is highly likely that the mineralized structures trend at a different orientation to the regional geology
Sample security	• *The measures taken to ensure sample security.*	• Samples were transported from site directly to the laboratory by Miramar staff
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No audits have been 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 exploration was conducted on E52/3893 which is owned 100% by MQ Minerals Pty Ltd • MQ Minerals Pty Ltd is a wholly owned subsidiary of Miramar Resources Limited
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Limited historical RC drilling has been conducted for sediment-hosted Pb-Zn mineralisation
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The target is Norilsk-style magmatic intrusion hosted Ni-Cu-Co-PGE mineralisation

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.*
		• Table 1 shows all a summary of drill collar information for all drilling completed to date.
		• Figure 1 shows the location of all drill holes

Criteria	JORC Code explanation	Commentary
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg 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 significant results 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 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 assumptions about true width or orientation of mineralisation can be made from the current programme
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.*	• See attached Tables and Figures
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.*	• All holes shown in Figure 1 • Table 1 shows collar information for all holes • No significant 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 results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• No other relevant data
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.*	• Further RC and/or diamond drilling planned

About Miramar Resources Limited

Miramar Resources Limited is an active, WA-focused mineral exploration company exploring for gold, copper and Ni-Cu-PGE deposits in the Eastern Goldfields and Gascoyne regions of WA.

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.