ASX ANNOUNCEMENT

MIRAMAR RESOURCES LTD.

LARGE REE TARGETS IDENTIFIED AT DOOLEY DOWNS

- **Detailed magnetic/radiometric survey highlights multiple large anomalies**
- **Coincident magnetic/radiometric anomalism indicates REE potential**

Miramar Resources Limited (ASX:M2R, "Miramar" or "the Company") is pleased to advise that a detailed aeromagnetic and radiometric survey recently flown over the Dooley Downs Project has identified several large magnetic and/or radiometric anomalies indicating the potential for unmapped igneous intrusions, including carbonatites capable of hosting rare earth element (REE) mineralisation.

The Dooley Downs Project, part of the Miramar's larger Bangemall Project, is located within the rapidly emerging Capricorn Orogen mineral province, which hosts Hastings Technology Metals' Yangibana REE Project and recent REE discoveries by Dreadnought Resources Ltd and Lanthanein Resources Ltd.

Miramar field staff immediately mobilised to the Project to conduct initial reconnaissance of the targets.

Miramar's Executive Chairman, Mr Allan Kelly, said the new survey data had highlighted several large targets worthy of systematic follow-up work.

"We are seeing numerous large radiometric anomalies which appear to be spatially related to potentially unmapped intrusions, something unexpected for this area" he said.

"Given the REE discoveries being made by some of our neighbours nearby, the new results are highly significant for the overall prospectivity of our Bangemall Project tenements," he added.

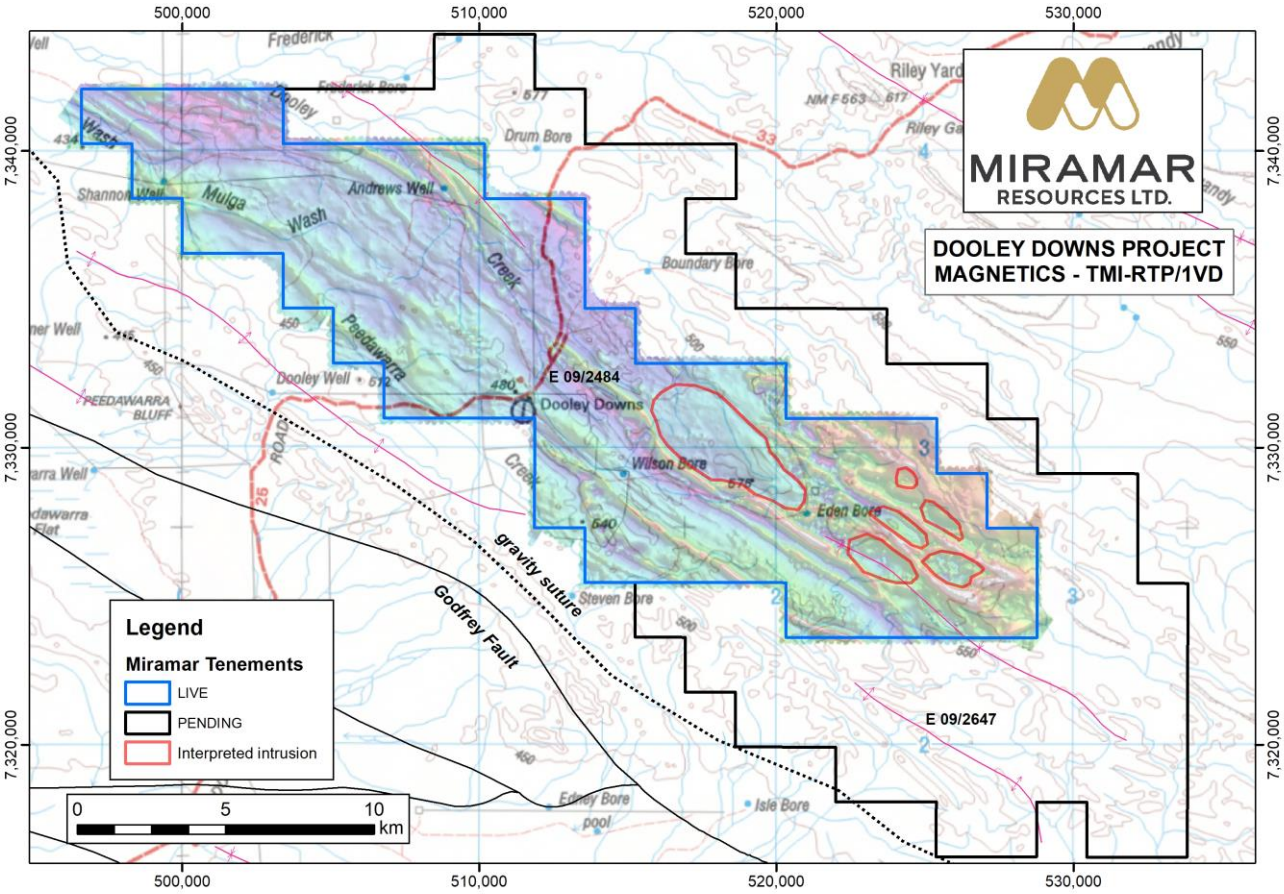

Figure 1. *Dooley Downs showing new magnetic data (TMI-RTP) and interpreted intrusions.*

Magnetic/Radiometric Survey

The Company recenly commissioned a detailed airborne magnetic and radiometric survey across the large Dooley Downs Exploration Licence, E09/2484.

The survey, completed for the Company by Thomson Airborne, highlighted a number of magnetic and/or radiometric features which resemble igneous intrusions within the Edmund Basin sediments.

A number of ovoid magnetic features, ranging in size from 600m x 600m to 6km x 2km, have been identified in the southeastern part of the Project, surrounding Eden Bore (Figures 1 and 2).

The largest of the magnetic anomalies has been previously mapped as an anticline within sediments of the Edmund Basin, however the new magnetic data, along with a large radiometric anomaly (Figure 3), suggests the presence of a later intrusion, possibly beneath the centre of the anticline.

A number of smaller but stronger coincident Thorium and Uranium anomalies are seen southeast of Eden Bore and are located within and/or on the margin of the intrusions interpreted from the magnetic data.

The most obvious of the smaller anomalies is also located over a circular magnetic low (Figures 2 and 3).

Miramar field staff visited the Project after the new data was received and visited several of the anomalous areas, but no obvious surficial or topographic features were seen that could explain the anomalism.

Scintillometer readings were elevated over the “Eden Bore” target and several samples of ironstone float were taken which will be sent for analysis of a multi-element suite, including REE’s (Figure 4).

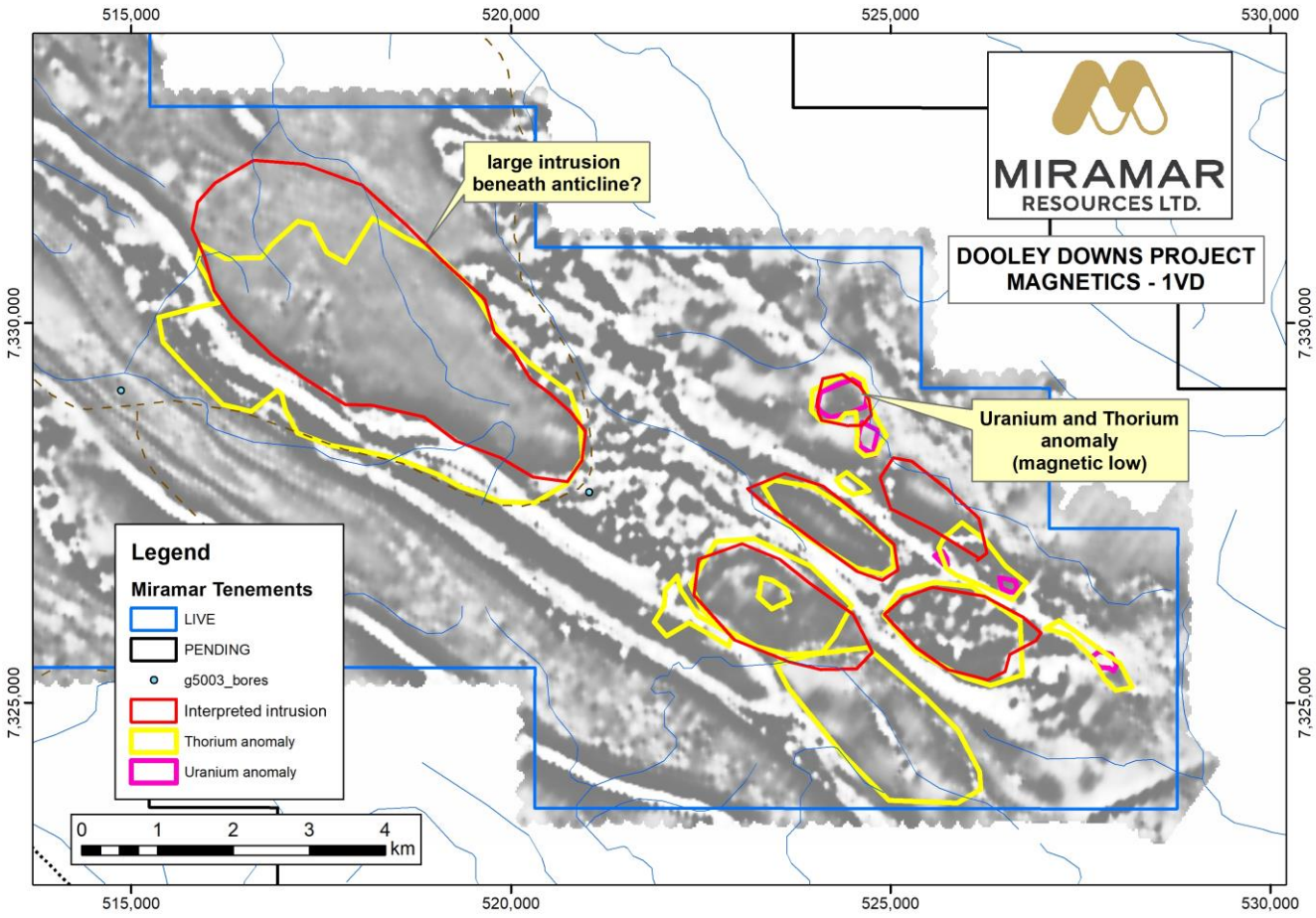

Figure 2. *1VD magnetic image of south-eastern part of the Dooley Downs Project with radiometric anomalies and interpreted intrusions highlighted.*

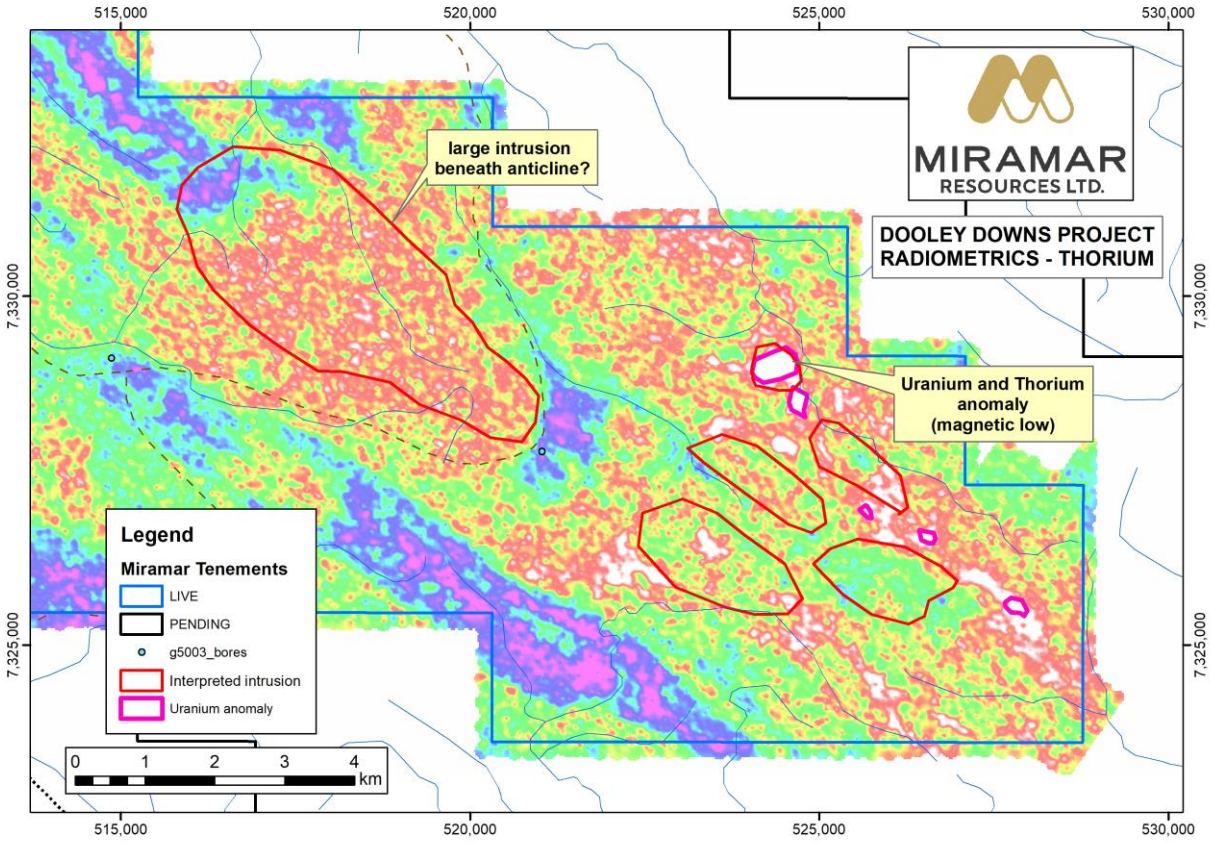

Figure 3. *Thorium image, Uranium anomalies and interpreted intrusions.*

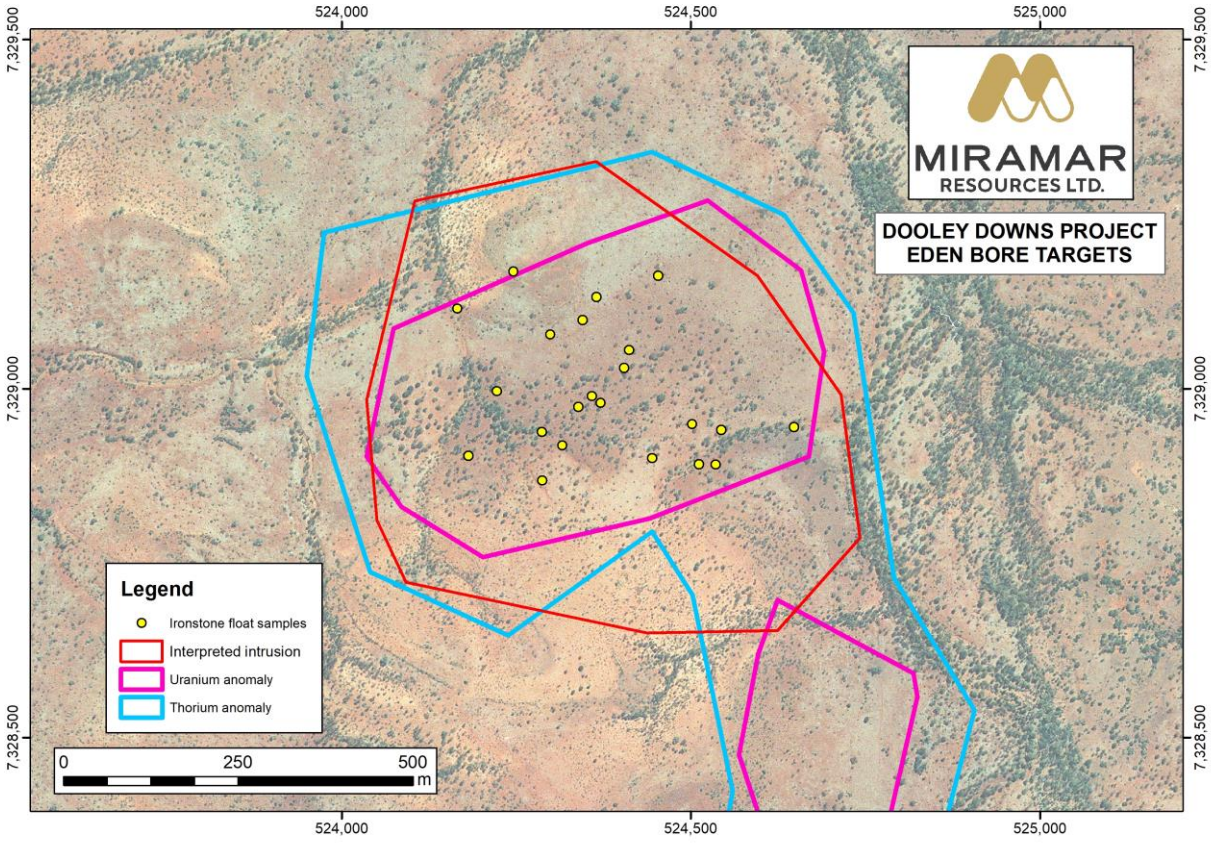

Figure 4. *"Eden Bore" target showing radiometric anomalies and ironstone float sampling.*

Miramar's Executive Chairman, Mr Allan Kelly, said that, given the size and number of the targets generated from this survey, the Company was planning to conduct further work, including more detailed ground geophysics and geochemical surveys with the aim of defining drill targets for testing.

"If these anomalies in the Edmund Basin are caused by igneous intrusions, and potentially carbonatites, it would be extremely significant for the prospectivity of the wider Gascoyne region," he said.

The Company plans to fly similar magnetic and radiometric surveys over its other Bangemall Project tenements once granted.

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:

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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.

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'.

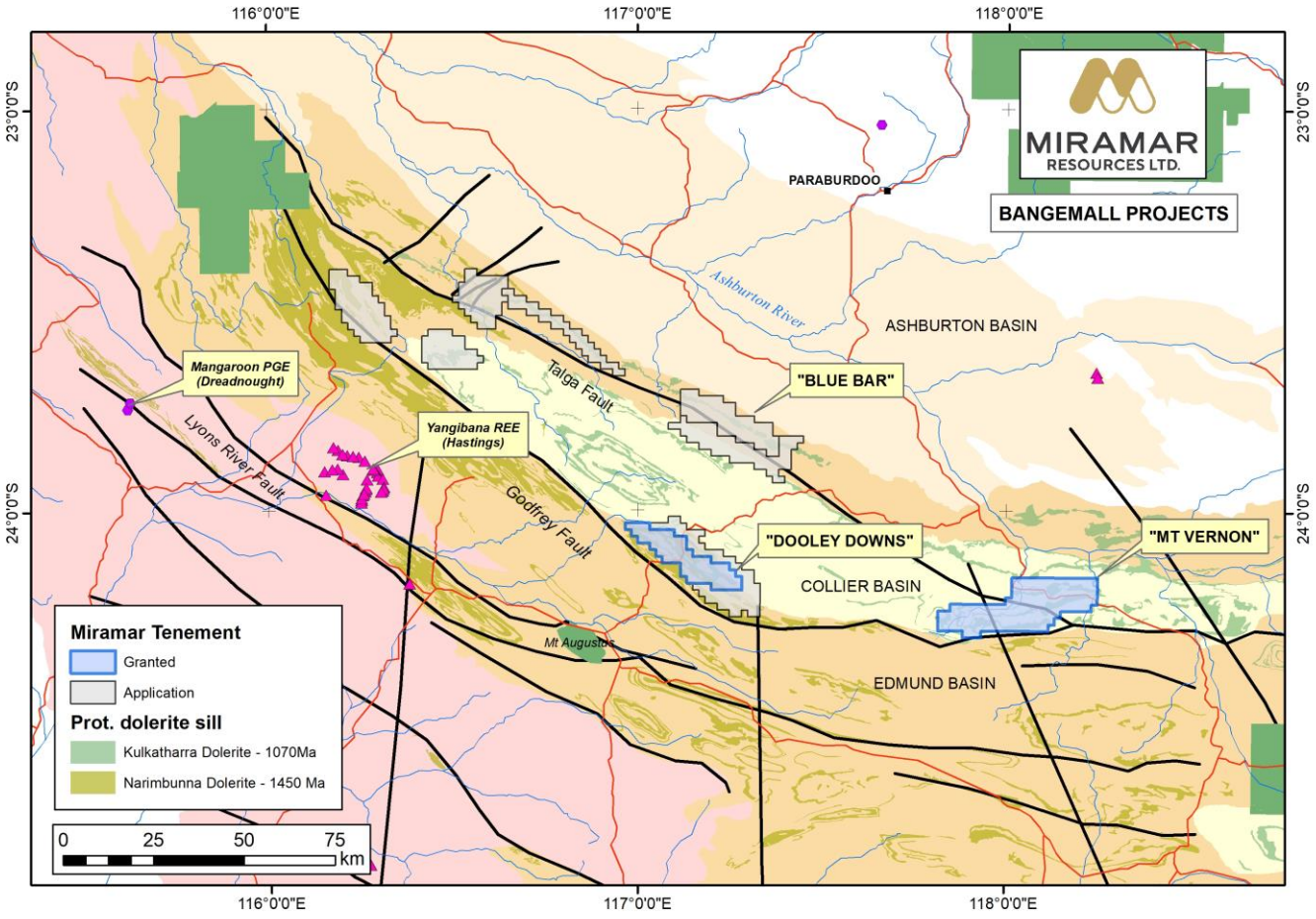
Mr Kelly consents to the inclusion in this Announcement of the matters based on his information and in the form and context in which it appears.

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

About the Bangemall Project

Miramar's 100% owned Bangemall Project includes several granted Exploration Licences and Applications covering approximately 1,970 km^2 within the Proterozoic Capricorn Orogen in the Gascoyne region of Western Australia.

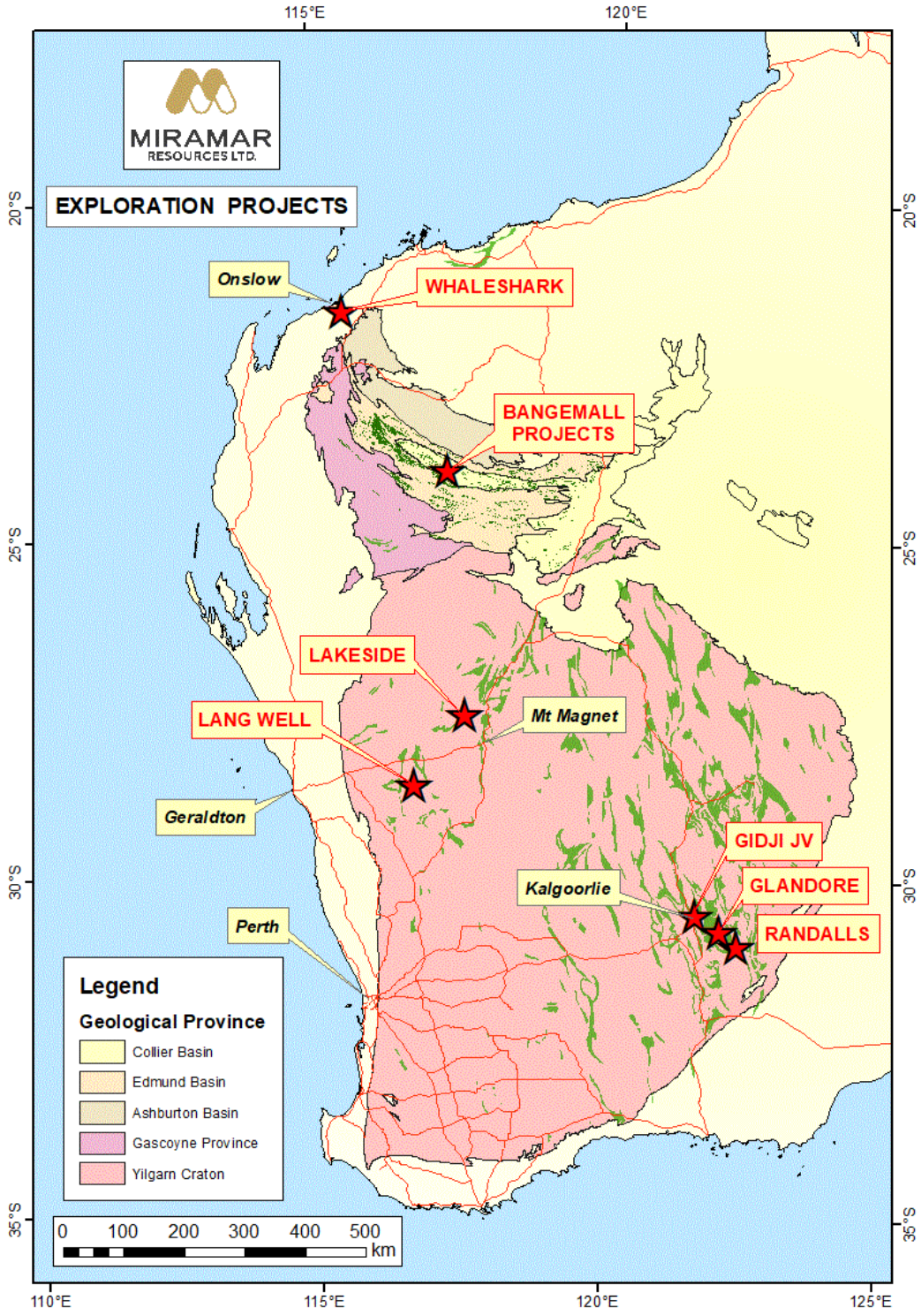
The region has been identified by both the Geological Survey of Western Australia and Geoscience Australia as having high prospectivity for numerous mineral deposit types, including Proterozoic craton margin-related Ni-Cu-PGE mineralisation and REE mineralisation.



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 – Dooley Downs Magnetic/radiometric 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.*	• No drilling reported
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 reported
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 reported
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 reported

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.*	• No drilling reported
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 reported
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 reported
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.*	• Lines were flown at 100m line spacing and with lines oriented 035 – 215 degrees • Tie lines were flown at 1000m spacing and oriented perpendicular to the flight lines • Sensor height was 45m above the ground
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*	• Magnetic sample rate was 0.05 seconds, approximately 3m spacing • Radiometric sample rate was 0.5 seconds approximately 30m spacing

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.*	• Lines were flown at 100m line spacing and with lines oriented 035 – 215 degrees • Flight lines were oriented roughly perpendicular to the main geology • Tie lines were flown at 1000m spacing and oriented perpendicular to the flight lines • Sensor height was 45m above the ground
Sample security	• *The measures taken to ensure sample security.*	• No drilling reported
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No reviews completed

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.*	• Survey completed on E09/2484 which is 100% owned by MQ Minerals Pty Ltd, a subsidiary of Miramar Resources Limited
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Ro relevant work in the area
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Potential for Ni-Cu-PGE's associated with Proterozoic dolerite sills and REE mineralisation associated with carbonatite intrusions

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*
		• No drilling reported

Criteria	JORC Code explanation	Commentary
	clearly explain why this is the case.	
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 stated.*	• No drilling 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 drilling 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 drill hole collar locations and appropriate sectional views.*	• See attached 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.*	• No drilling 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 at this stage
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.*	• Mapping, sampling and drill testing of targets