



MIRAMAR
RESOURCES LTD.

ASX ANNOUNCEMENT

WHALESHARK SOIL SURVEY OUTLINES NUMEROUS LARGE TARGETS

Miramar Resources Limited (ASX:M2R, "Miramar" or "the Company") is pleased to advise that it has received results from first pass surface geochemical sampling recently completed at the Company's 100%-owned Wwhaleshark Project in the Gascoyne region of Western Australia.

Analysis of soil samples by the Mobile Metal Ion (MMI) technique has identified several large multi-element anomalies that may be associated with bedrock mineralisation.

The multi-element soil anomalism at Wwhaleshark appears similar to that observed over the recently discovered Havieron Au-Cu deposit (52Mt @ 2.0g/t Au, 0.31% Cu for 3.4Moz Au and 160Kt Cu¹).

Miramar's Executive Chairman, Mr Allan Kelly, said the Company was excited about the scale and tenor of the anomalism at Wwhaleshark.

"The Wwhaleshark magnetic anomaly is a large target, so a technique like MMI potentially enables us to focus in on areas of interest before progressing to more expensive bedrock drill testing," Mr Kelly said.

"To obtain strong and coherent anomalies like these, similar to Havieron, gives us the confidence to progress to the next stage of exploration," he added.

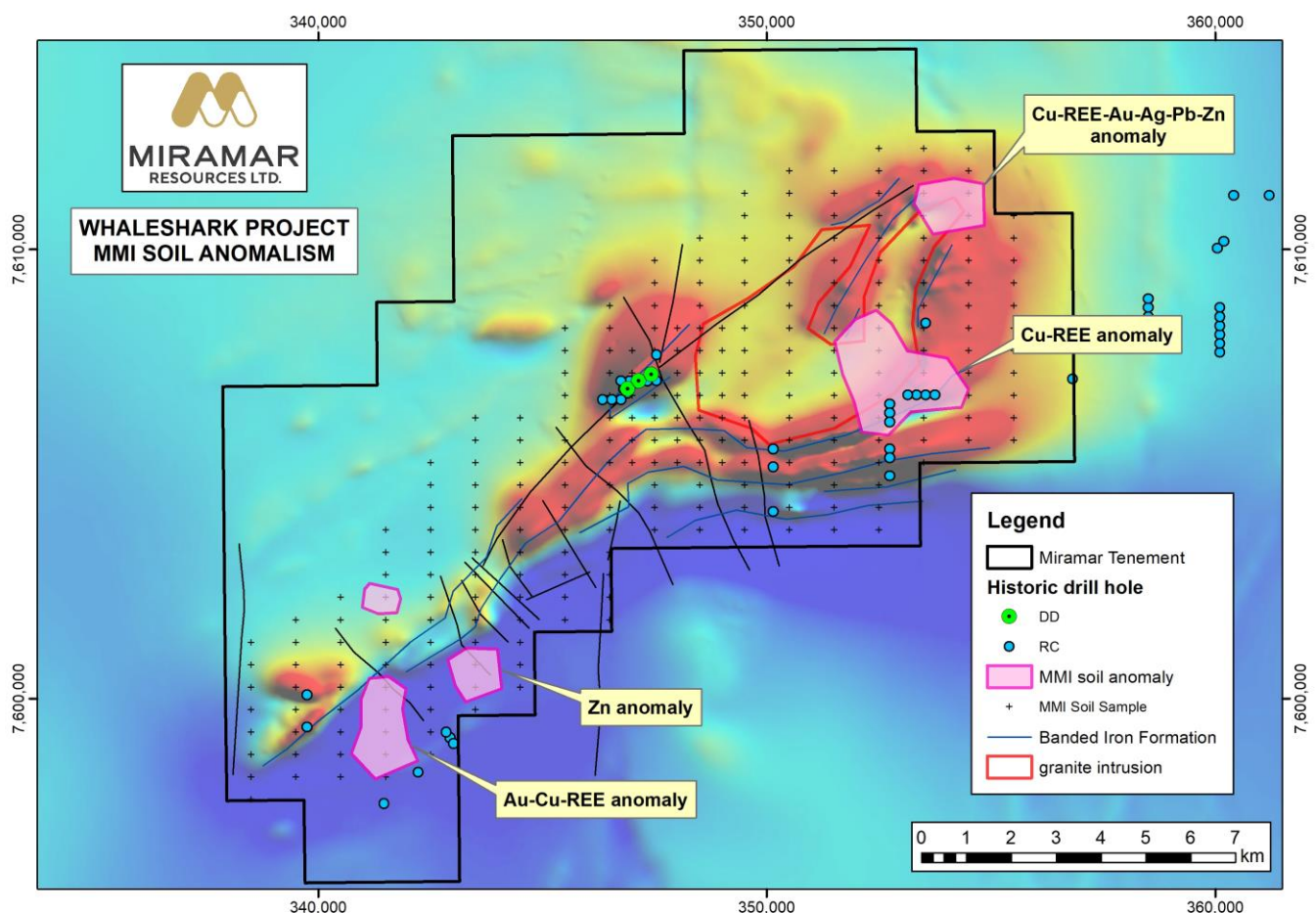


Figure 1. Wwhaleshark Project showing MMI anomalism over magnetics and interpreted geology.

¹ Source: Greatland Gold PLC



MMI Soil Survey Results

During July, the Company completed a first pass soil sampling survey at Whaleshark comprising 272 samples collected on a wide-spaced 1000m x 500m grid with lines orientated in a N-S direction.

The survey covered the prominent magnetic anomaly related to a large complexly folded Banded Iron Formation (BIF) beneath approximately 120m of sediments of the Carnarvon Basin.

Given the depth of cover, and orientation geochemical surveys previously carried out at Whaleshark in the 1990's, the soil samples were analysed using Mobile Metal Ion (MMI) analysis.

The MMI technique reports low-level results for 53 elements, including base metals, pathfinders and rare earth elements (REE). Interpretation of the results involves:

- calculation of "response ratios" (anomaly to background ratios) for each element;
- calculation of univariate, bivariate and multivariate statistics to determine correlation between various elements; and
- plotting of single and "stacked" response ratios to determine potential areas of interest.

Examination of the data from Whaleshark identified positive correlations between Cu and several REE's and also, to a lesser extent, with Au and Ag. This group of elements is suggestive of iron-oxide copper-gold (IOCG) mineralisation which was the original target of historic exploration by Western Mining Corporation in the 1990's.

Importantly, this group of elements is apparently similar to that seen in MMI sampling over the Havieron target by Greatland Gold PLC prior to the discovery of the 3.4Moz Au deposit (*source: Greatland Gold Announcement, 6 December 2017*).

Plotting various elements shows several large anomalies ranging in size from 1km to over 2.5km in radius (Figures 2 to 5). Results for several elements from the anomaly at the far north eastern end of the survey compare favourably with peak values obtained over Havieron before the discovery (Table 1).

The size of the anomaly footprints also compare favourably with Havieron.

The north eastern anomaly and the larger Cu-REE anomaly both coincide with areas of structural complexity at the margin of the granite intrusion. Gravity station spacing is variable in both these areas.

The Company will field check the anomalies and plan infill sampling. Existing gravity data will also be re-examined and extended/infilled if deemed necessary.

Table 1. Comparison of Whaleshark MMI results with Havieron (*source Greatland Gold PLC*).

Element	Whaleshark (NE anomaly)	Havieron (peak value)
Au	0.65ppb	25ppb
Ag	8.5ppb	4ppb
Ce	907ppb	834ppb
La	405ppb	284ppb
Cu	4620ppb	710ppb
Pb	151ppb	860ppb
U	37ppb	112ppb

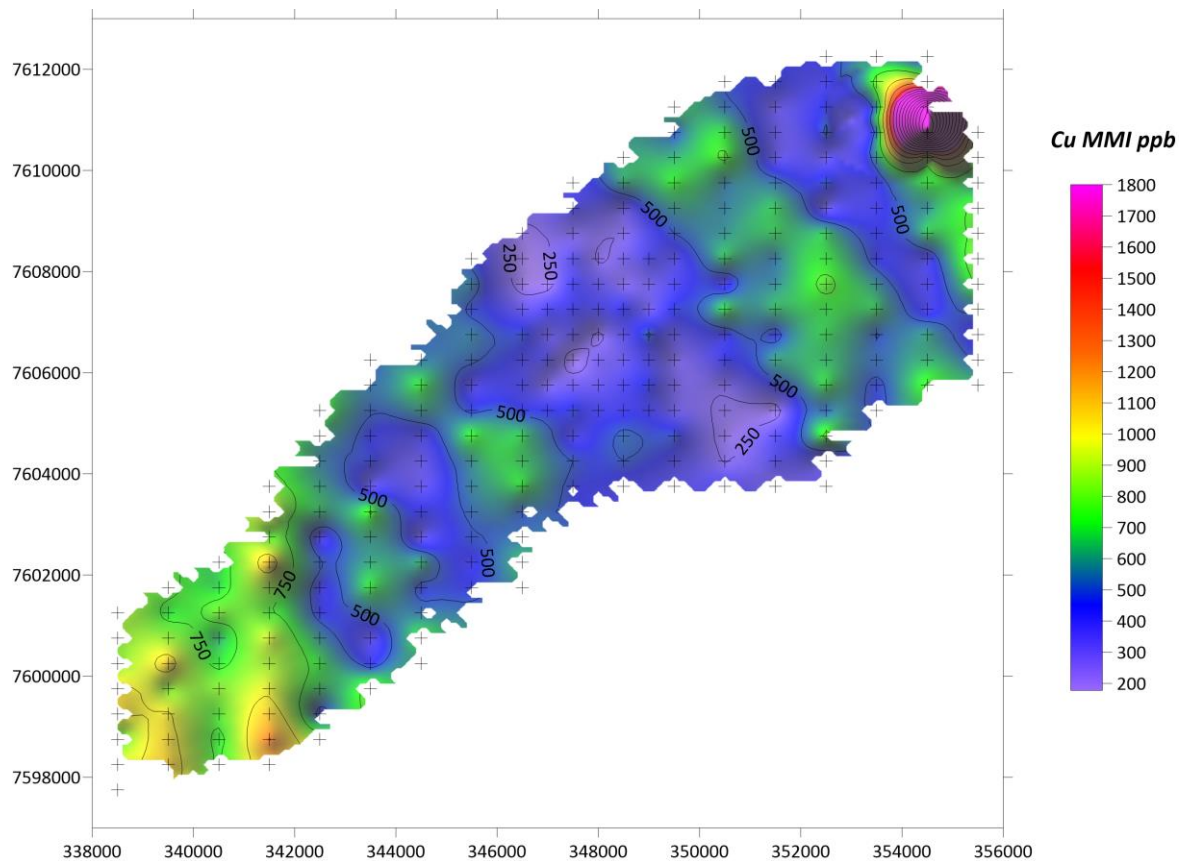
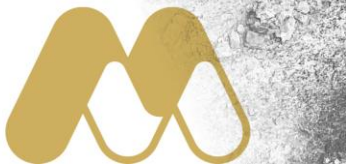


Figure 2. Gridded image of MMI Cu (ppb).

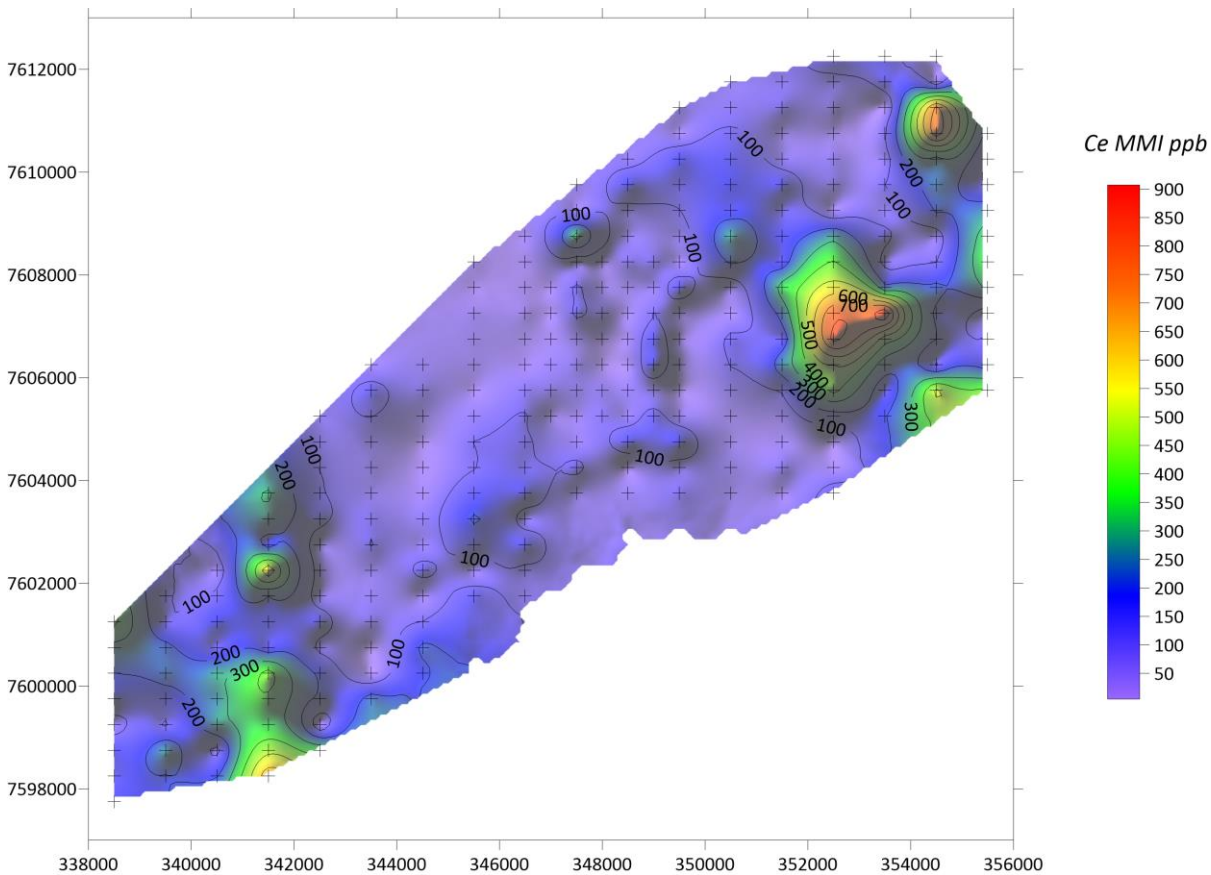


Figure 3. Gridded image of MMI Ce (ppb), which is representative of results for other REE's.

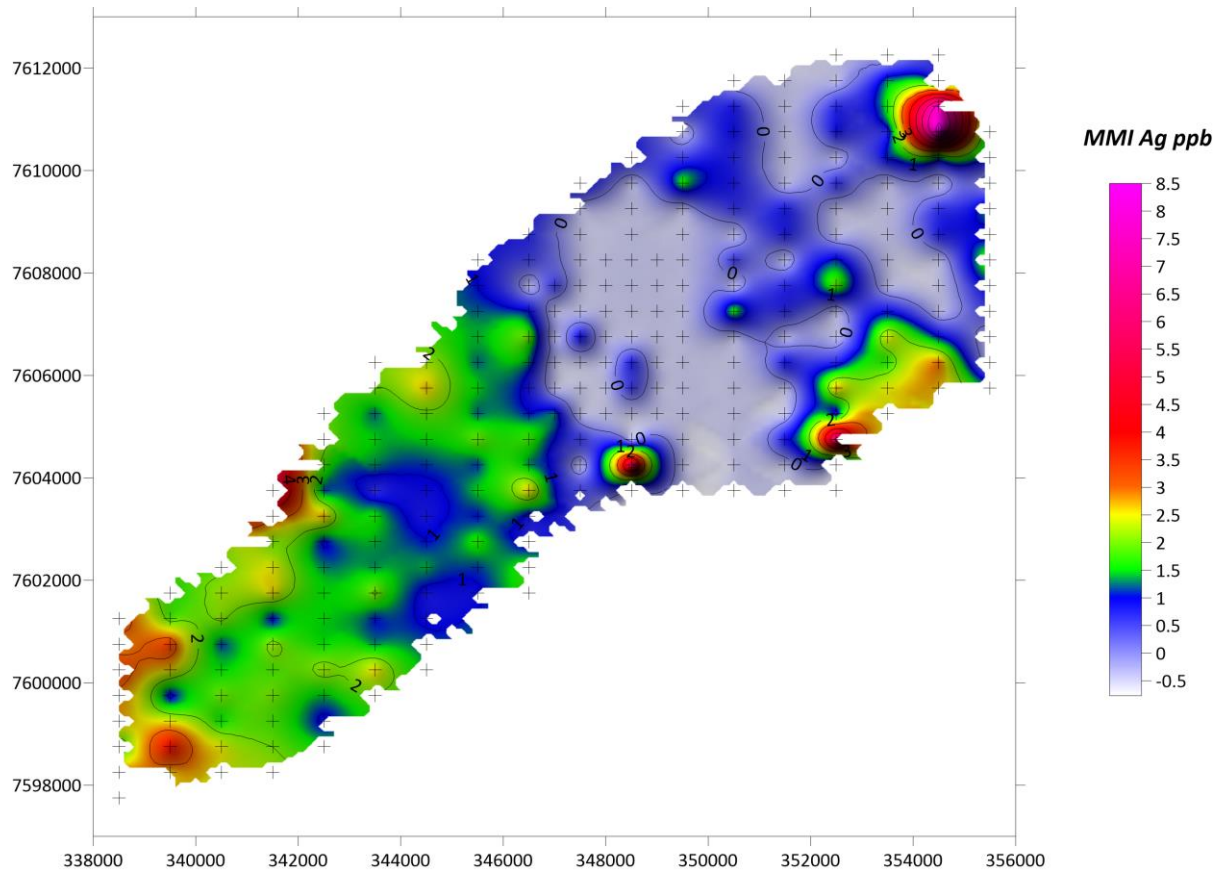
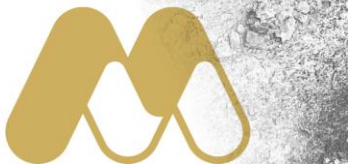


Figure 4. Gridded image of MMI Ag (ppb).

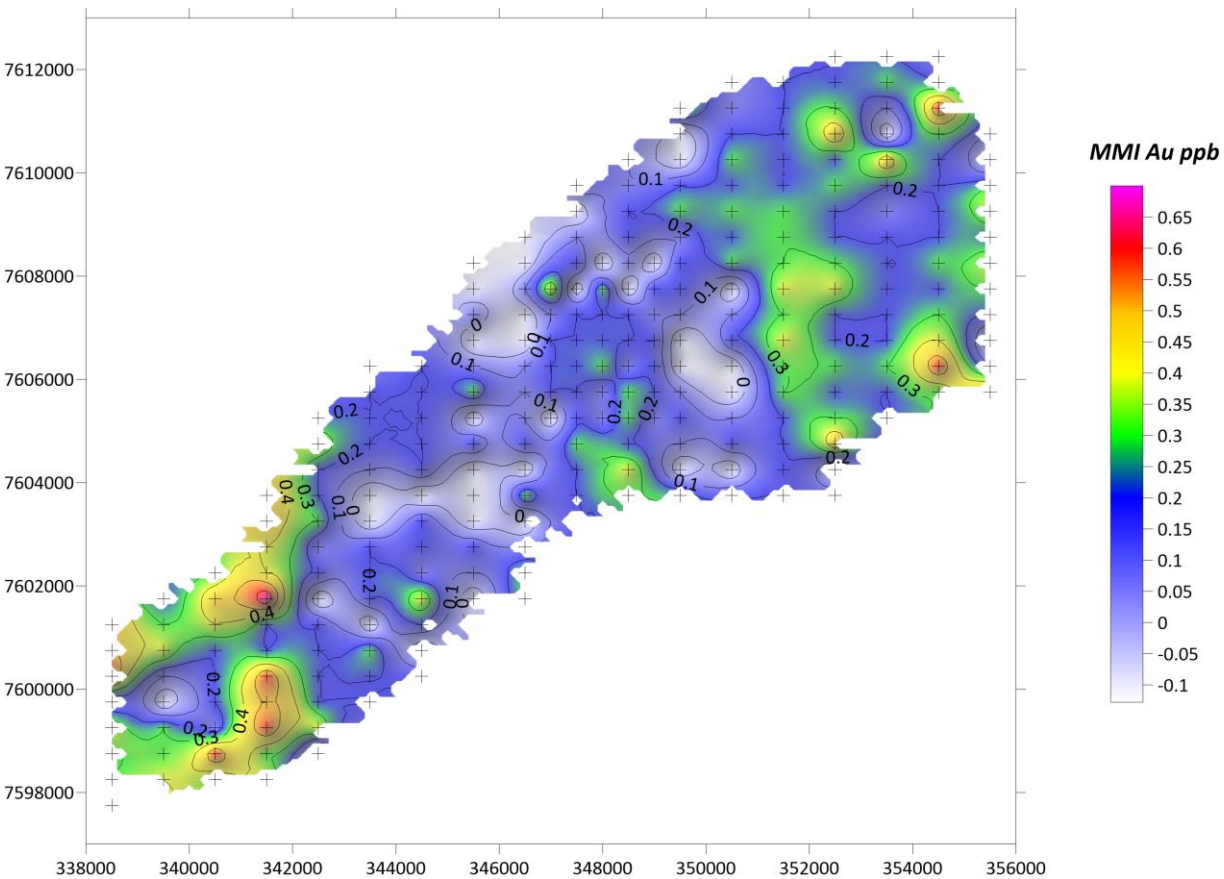


Figure 5. Gridded image of MMI Au (ppb).



For more information on Miramar Resources Limited, please visit the company's website at www.miramarresources.com.au 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 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 presentation of the matters based on his information and in the form and context in which it appears.

Information on historical exploration results for the Whaleshark Project, including JORC Table 1 and 2 information, is included in the Miramar Prospectus dated 4 September 2020.

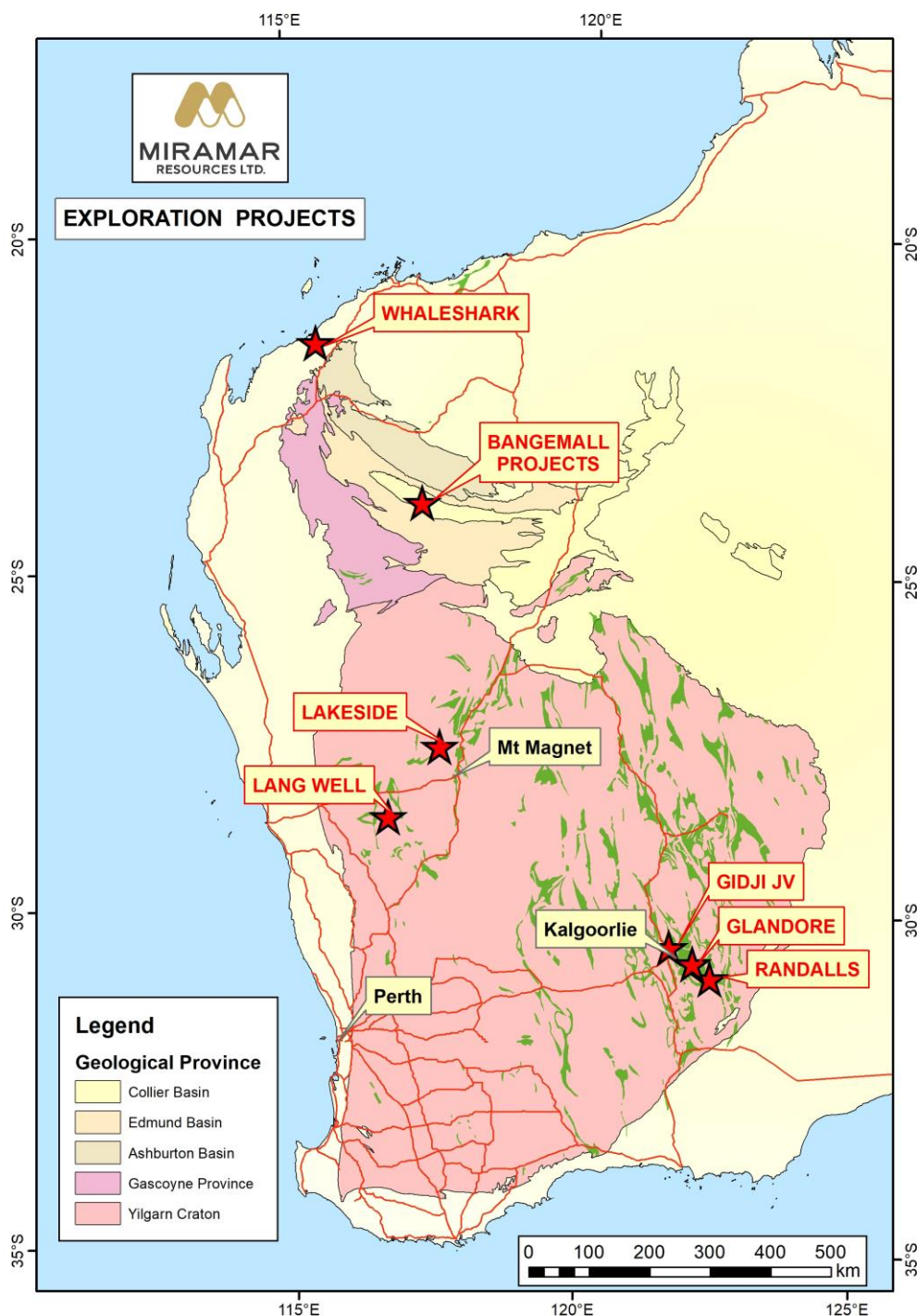


ABOUT MIRAMAR RESOURCES LIMITED

Miramar Resources Limited is a WA-focused mineral exploration company with highly prospective exploration projects in the Eastern Goldfields, Murchison and Gascoyne regions of Western Australia.

Miramar listed on the ASX in October 2020, following a heavily oversubscribed \$8 million IPO.

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





JORC 2012 Table 1 – Whaleshark MMI sampling

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <i>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.</i> <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i> <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i> <i>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.</i> 	<ul style="list-style-type: none"> Approximately 200g of sample was taken from directly beneath the A-horizon The sample was sieved with a plastic garden sieve Samples were then placed in plastic press-seal bags
Drilling techniques	<ul style="list-style-type: none"> <i>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).</i> 	<ul style="list-style-type: none"> Not applicable
Drill sample recovery	<ul style="list-style-type: none"> <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i> <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i> <i>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.</i> 	<ul style="list-style-type: none"> Not applicable
Logging	<ul style="list-style-type: none"> <i>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.</i> <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i> <i>The total length and percentage of the</i> 	<ul style="list-style-type: none"> Description of sample location and photograph taken at each sample location



Criteria	JORC Code explanation	Commentary
	<i>relevant intersections logged.</i>	
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Not applicable
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> MMI analysis at SGS No standards submitted, but duplicates taken at a frequency of 1 duplicate/25 samples
Verification of sampling and assaying	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> No verification undertaken at this stage
Location of data points	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Sample locations recorded with handheld GPS
Data spacing and distribution	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Sample spacing is very wide and considered suitable for first pass sampling over the entire project



Criteria	JORC Code explanation	Commentary
	<i>applied.</i>	
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Sample lines were oriented N-S which is roughly orthogonal to the strike of the underlying geology
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> Samples were under the control of Miramar staff at all times and transported directly from the project to SGS
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> No audits or reviews completed as yet

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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Sampling was conducted on E08/3166 which is owned 100% by Miramar Resources Limited
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> Previous work includes orientation geochemistry, grid geophysical surveys and limited RC and Diamond drilling
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> Targeting Proterozoic BIF-hosted gold and/or IOCG mineralisation
Drill hole Information	<ul style="list-style-type: none"> 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"> 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. 	<ul style="list-style-type: none"> Not applicable to this release



Criteria	JORC Code explanation	Commentary
Data aggregation methods	<ul style="list-style-type: none"> <i>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.</i> <i>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.</i> <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i> 	<ul style="list-style-type: none"> Not applicable to this release
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <i>These relationships are particularly important in the reporting of Exploration Results.</i> <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> <i>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').</i> 	<ul style="list-style-type: none"> Not applicable to this release
Diagrams	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> All sample locations shown and gridded images of anomalous elements
Balanced reporting	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> All sample locations shown
Other substantive exploration data	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> No other relevant data
Further work	<ul style="list-style-type: none"> <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i> 	<ul style="list-style-type: none"> Infill MMI soil sampling planned Examination of existing gravity data followed by extension/infill surveys