ASX ANNOUNCEMENT

MIRAMAR RESOURCES LTD.

AIRCORE DRILLING CONFIRMS IOCG POTENTIAL AT WHALESHARK

- **Aircore drilling outlines large copper and IOCG pathfinder anomalies**
- **Results comparable with data over the Ernest Henry IOCG deposit**
- **Planning underway for EM surveys and drilling to refine bedrock drill targets**

Miramar Resources Limited (ASX:M2R, "Miramar" or "the Company") is pleased to advise that aircore drilling at the Company's 100%-owned Whaleshark Cu-Au Project has outlined large copper and multi-element anomalies suggestive of buried iron oxide copper gold (IOCG) mineralisation.

The Whaleshark Project ("Whaleshark" or "the Project") is located approximately 40km east of Onslow, in the Ashburton region of Western Australia, and is characterised by a large folded Proterozoic Banded Iron Formation and granite complex under approximately 100m of later Carnarvon Basin sediments.

Miramar's Executive Chairman, Mr Allan Kelly, said the aircore drilling results had been successful in mapping the geology of the basement rocks, as well as confirming the potential for Whaleshark to host significant IOCG mineralisation.

"The first pass aircore drilling at Whaleshark has successfully outlined large multi-element anomalies in several elements generally associated with IOCG mineralisation," Mr Kelly said.

"The scale, magnitude and suite of elements seen at Whaleshark is very similar to the large Ernest Henry IOCG deposit in Queensland, which is our target at Whaleshark.

"We are therefore eager to get back to Whaleshark next year and refine targets for deeper RC and/or diamond drilling," he said.

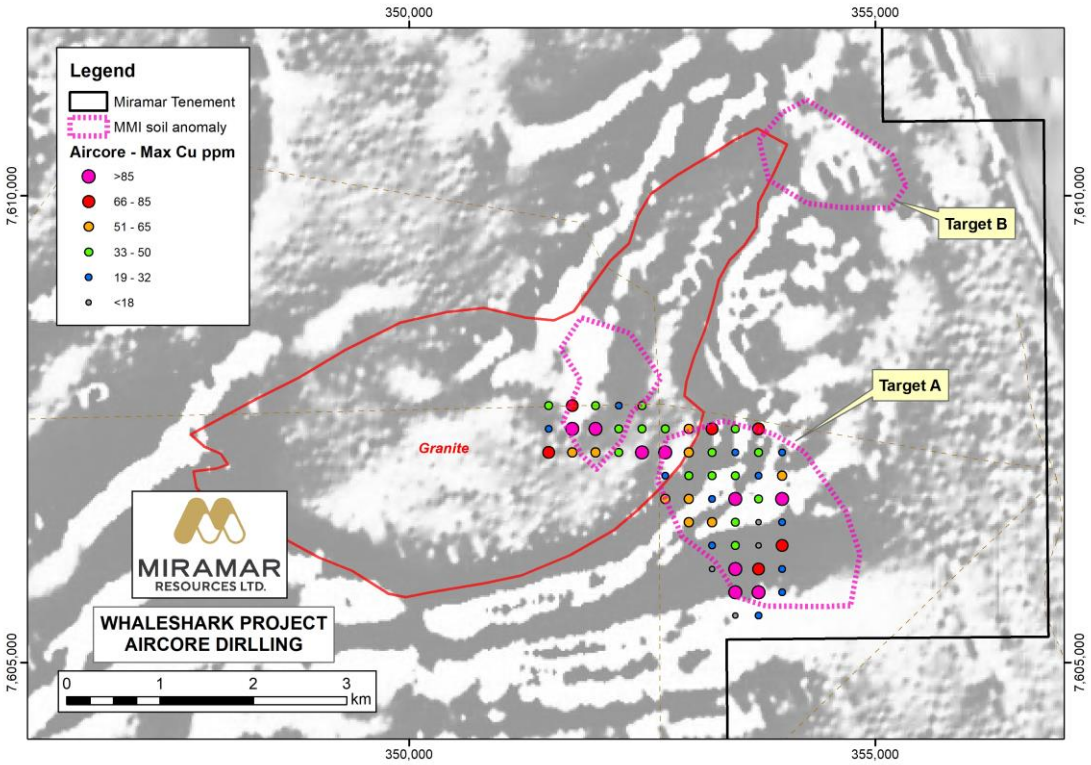

Figure 1. *Whaleshark aircore drilling showing maximum copper in hole over 2VD magnetic image.*

Aircore drilling

Aircore drilling was completed during August and September testing beneath MMI soil anomalism identified during 2021 *(see ASX Releases dated 3 September and 13 December 2021).*

Holes were drilled on a 250m x 250m grid and targeted the unconformity between the Cretaceous Carnarvon Basin sediments and the underlying Proterozoic basement.

A total of 60 holes were completed, mostly across the main MMI anomaly ("Target A") however the programme was shortened due to slow penetration rates and the discovery of potential heritage sites at the southern edge of the survey area. Target B therefore remains untested by drilling at this stage.

Hole depths ranged from 25 to 147 metres with basement intersected at depths from 20m to 126m. A total of 8 holes did not reach basement, including 7 within Target A.

The drilling intersected silcrete and/or limestone, unconsolidated black mudstone and basal gravels, which commonly contain sulphides, before intersecting Proterozoic basement rocks including biotite granodiorite, biotite schist and occasional mafic rocks (Figure 2).

Sulphides, predominantly pyrite, were observed in the basement rocks in several holes.

In each hole, samples were taken from 4m above the unconformity to the end of hole and were assayed for a multi-element suite including copper and IOCG pathfinders such as gold, silver, uranium, molybdenum and rare earth elements (REE's).

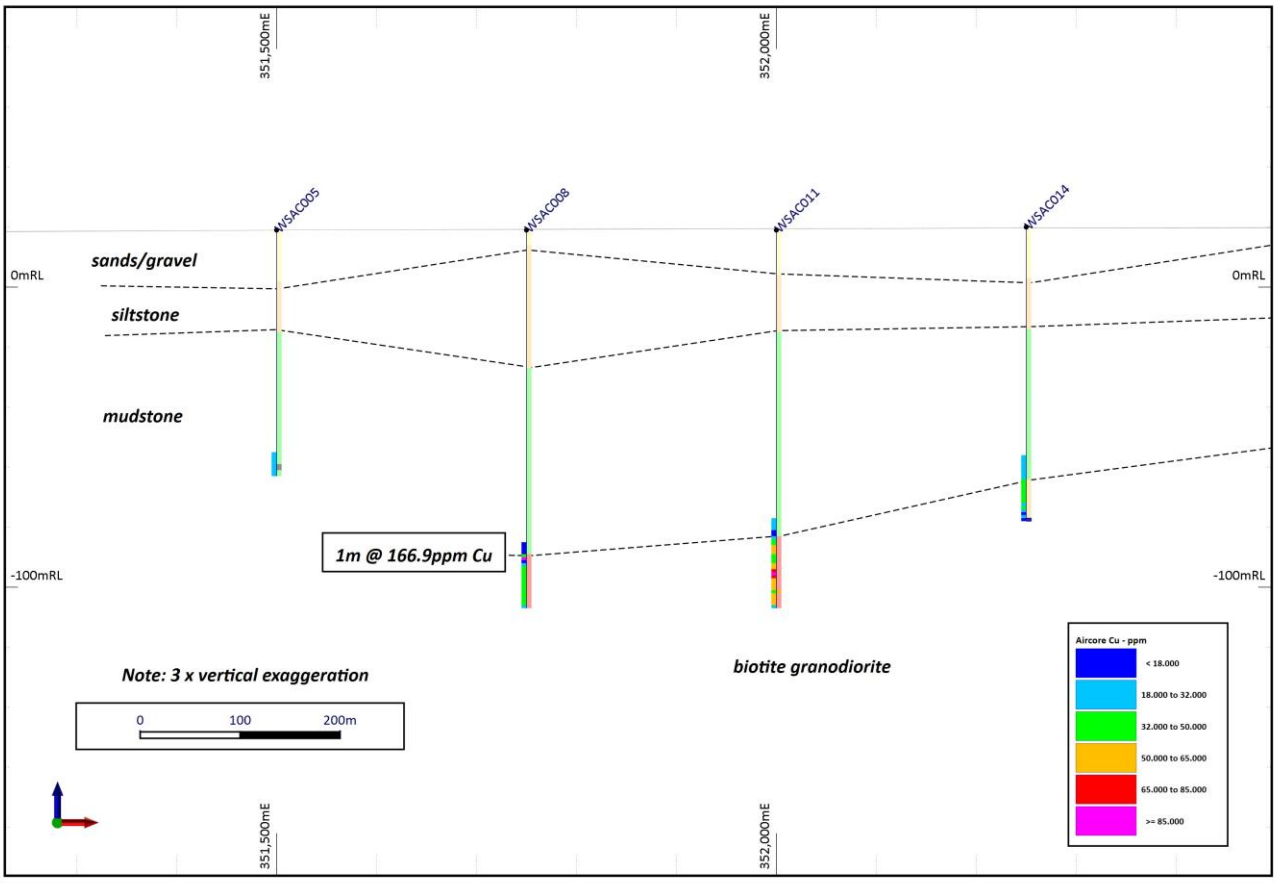

Figure 2. *Cross section (looking north) showing copper anomalism (LHS) beneath the unconformity.*

Discussion of Results

Several strongly anomalous and/or overlapping results were seen including in **Cu** (up to **166.9ppm**), **Au** (up to **0.164ppm**), **cobalt** (up to **146.8ppm**), **Mo** (up to **16.3ppm**), **U** (up to **18.62ppm**) and **tungsten** (up to **335ppm**).

Each of the aircore anomalies is approximately 500m x 500m.

Significantly, some of the highest copper and cobalt results occur in **WSAC008** and **011**, adjacent to a discrete gravity anomaly in the "neck" of the granitoid intrusion (Figure 4).

Results of this magnitude, for these elements, would not be expected from a granitoid, unless mineralised.

Holes **WSAC018**, **020** and **042** returned strongly anomalous results from several pathfinder elements alongside the elevated copper numbers.

WSAC055 returned strongly elevated **La** and **Ce** from a granodiorite at the eastern edge of the survey.

The highest gold result, **1m @ 0.16ppm Au** came from basal gravels in **WSAC041**, which is located towards the southern edge of the survey.

Table 1. summarises significant results for Cu and IOCG pathfinder elements and a summary of the overlapping aircore anomalism is shown in Figures 3 and 4.

The Whaleshark drilling results are potentially very significant, especially when compared with a much more comprehensive drill dataset over the large Ernest Henry IOCG deposit in Queensland (Figures 5 and 6) *(Source: James Cook University Northwest Mineral Province Deposit Atlas Prototype*).

Future work

Given the results of the recent drilling, the Company plans to conduct further work at Whaleshark in 2023, with the aim of refining targets for deeper bedrock RC and/or diamond drilling, including the following:

- completion of a comprehensive heritage survey
- moving loop EM surveys over the MMI anomalies
- further aircore drilling, including at Target B for the first time

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.

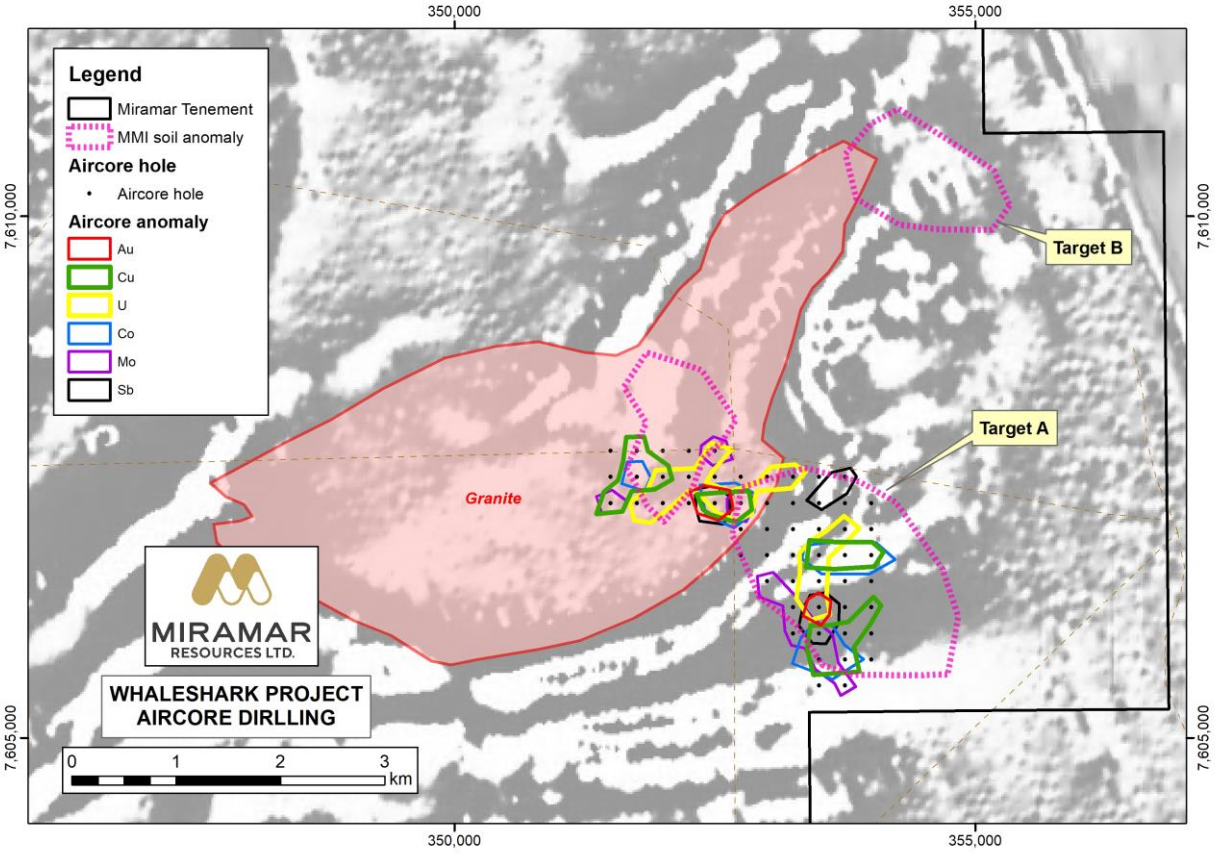


Figure 3. *Summary of aircore anomalism over 2VD magnetic image.*

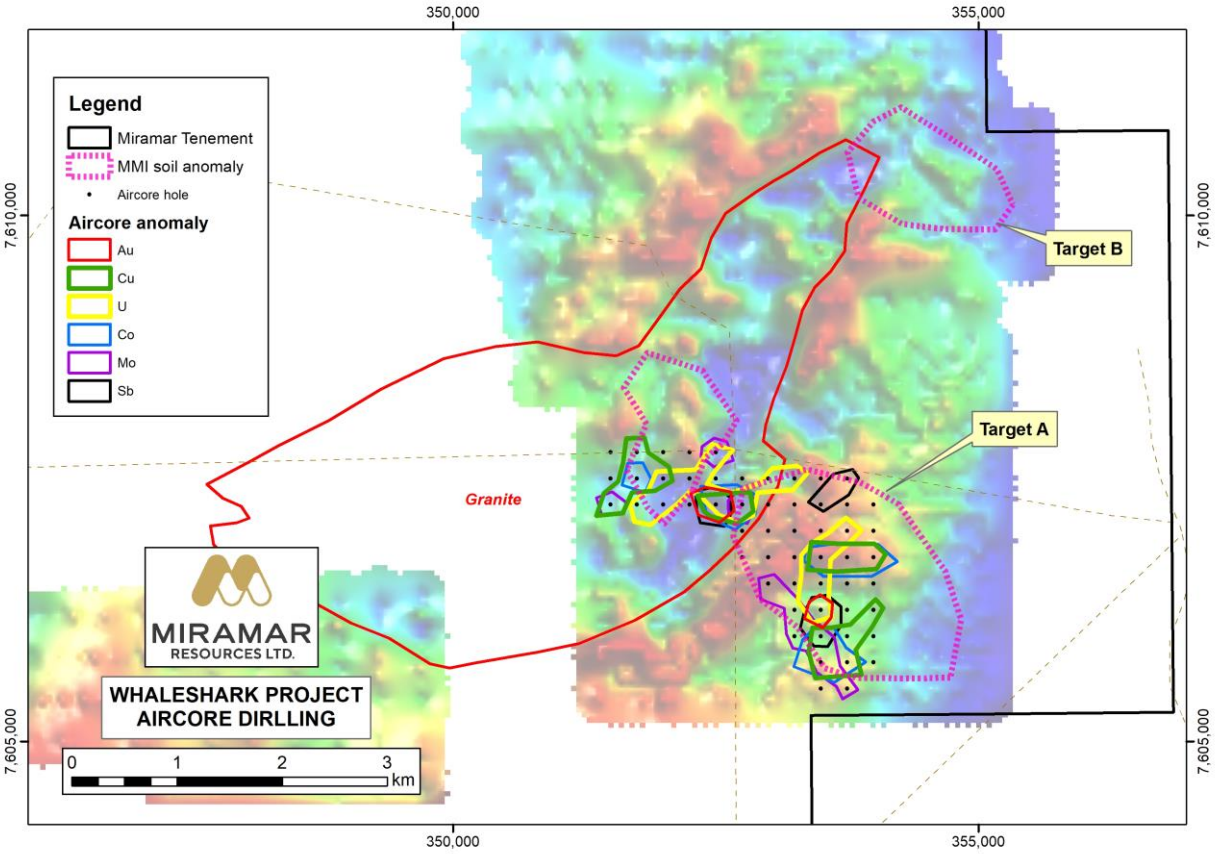


Figure 4. *Summary of aircore anomalism over 1VD gravity image.*

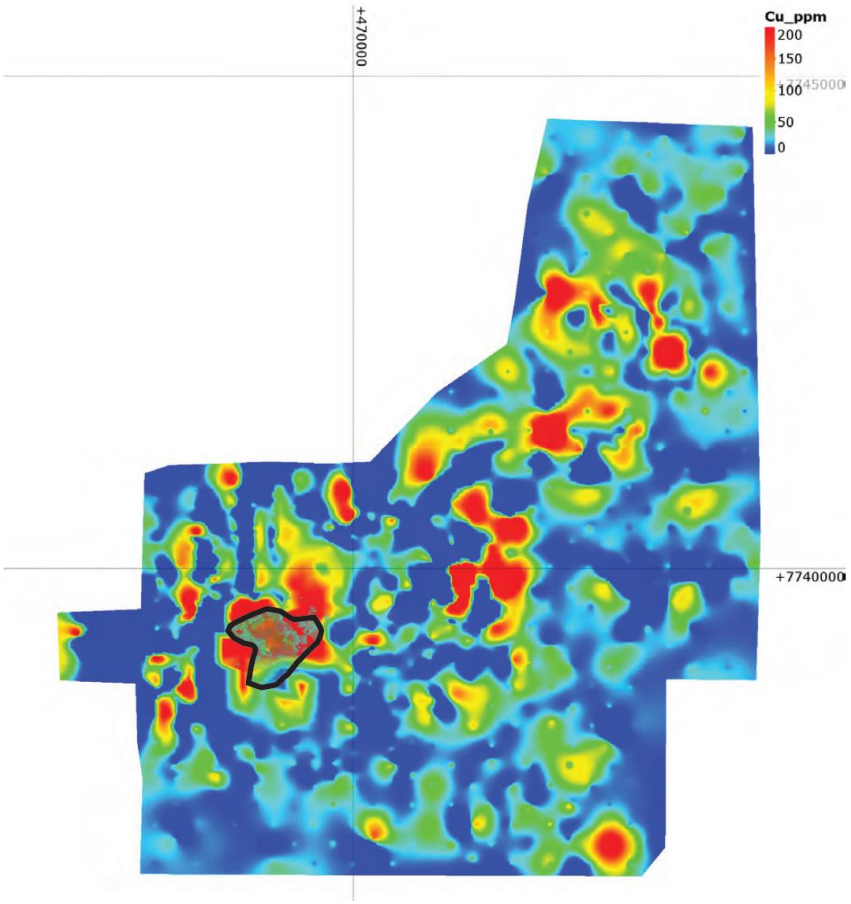


Figure 5. *Gridded Cu values at the unconformity over the Ernest Henry IOCG deposit (black outline).*

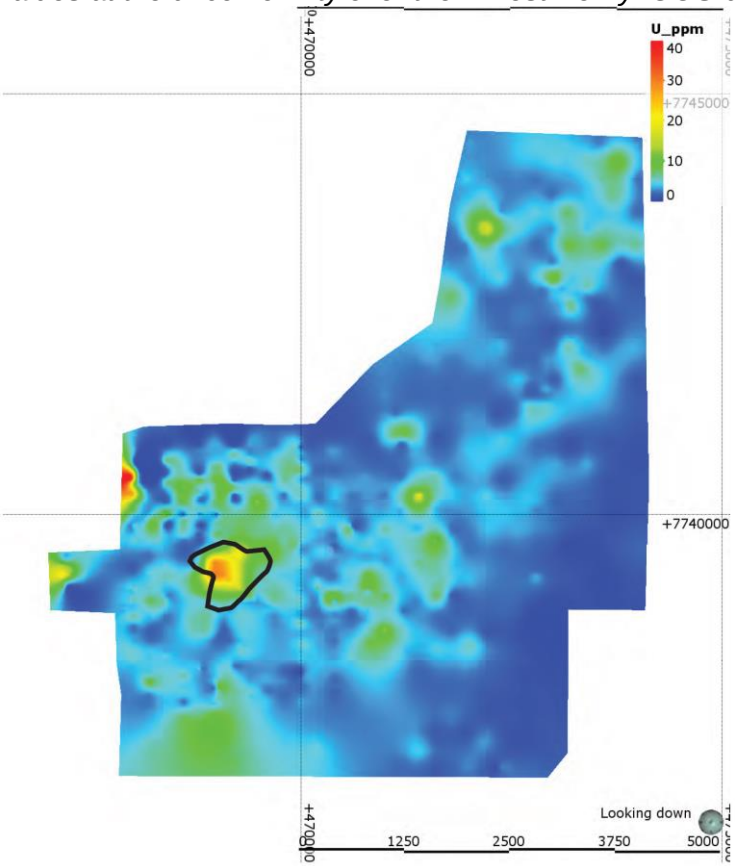


Figure 6. *Gridded U values at the unconformity over the Ernest Henry IOCG deposit (black outline).*

Table 1. *Significant results from Whaleshark aircore drilling (**bold type** denotes highest result in survey).*

Hole ID	From	To	Interval	Cu ppm	Other
WSAC006	102	103	1		9.5ppm Mo
WSAC008	109	110	1	**167**	0.27ppm Ag
WSAC009	101	102	1		**1.15ppm Ag**
WSAC011	103	104	1		**146.8ppm Co**
WSAC016	74	78	4		15.4ppm Mo
	79	80	1		**16.3ppm Mo**
WSAC018	90	91	1		**5.94ppm Sb**
	98	99	1		28ppb Au
	103	105	2	122	61.5ppm Co 221ppm La
WSAC019					
WSAC020	78	79	1		**18.6ppm U**
	80	81	1		13.7ppm U
	83	84	1	117	
WSAC039	35	36	1	138	
WSAC041	**88**	**89**	**1**		**0.16ppm Au**
WSAC042	95	96	1		132.9ppm Co
	101	102	1		**3.75% Mn**
	106	107	1	91	1.94ppm Bi
	110	111	1		**5.33ppm Bi**
WSAC043	122	123	1	129	
WSAC045	115	116	1	108	
WSAC055	97	98	1		642ppm Ce
	99	100	1		**674ppm Ce** **325ppm La**
WSAC056	92	93	1	99	

Table 2. *Collar information for Whaleshark aircore holes.*

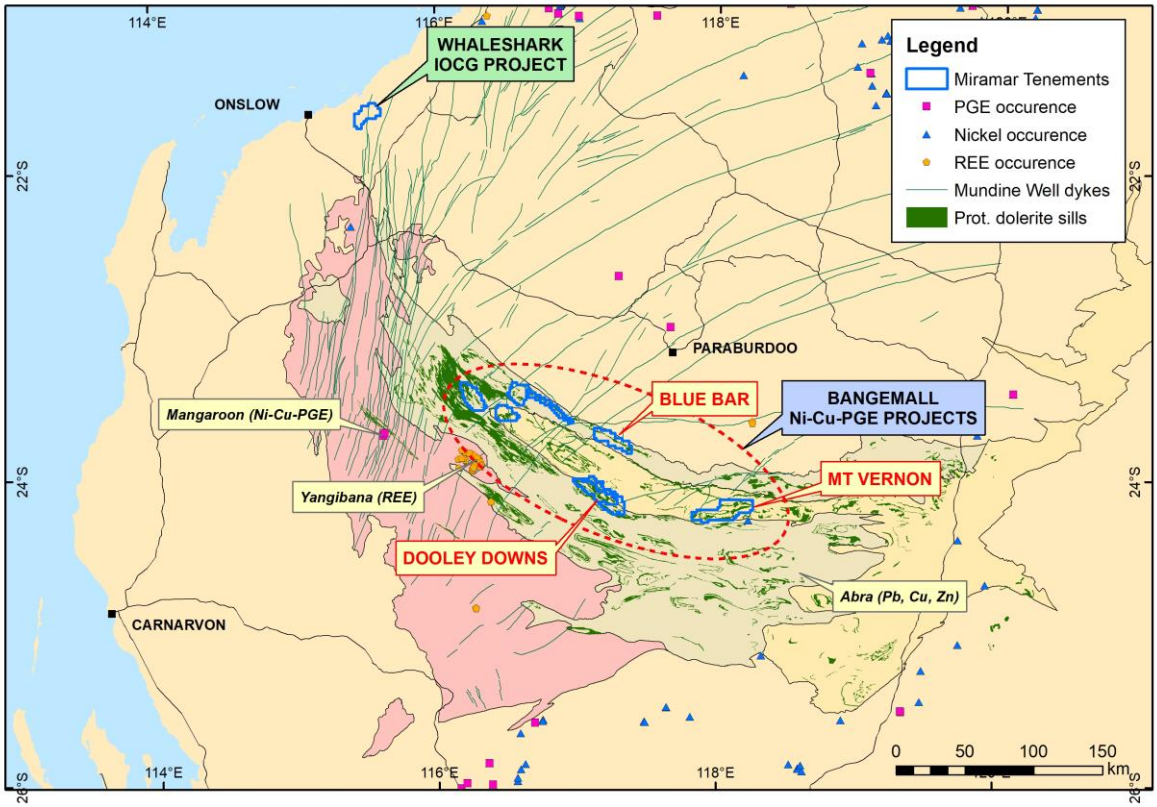
Target	Hole ID	Easting	Northing	EOH Depth	Effective?	Basement
Pressure Shadow	WSAC001	347260	7606600	132	y	120
	WSAC002	347260	7606400	126	y	126
	WSAC003	347260	7606200	115	n	
Target A	WSAC004	351500	7607750	102	y	95
	WSAC005	351500	7607500	82	y	78
	WSAC006	351500	7607250	104	y	100
	WSAC007	351750	7607250	102	y	96
	WSAC008	351750	7607500	126	y	108
	WSAC009	351750	7607750	104	y	106
	WSAC010	352000	7607750	80	y	79
	WSAC011	352000	7607500	126	y	101
	WSAC012	352000	7607250	114	y	102
	WSAC013	352250	7607250	107	y	106
	WSAC014	352250	7607500	98	y	97
	WSAC015	352250	7607750	38	y	38
	WSAC016	352500	7607750	92	y	91
	WSAC017	352500	7607500	75	y	75
	WSAC018	352500	7607250	119	y	118
	WSAC019	352750	7607500	70	y	71
	WSAC020	352750	7607250	88	y	73
	WSAC021	352750	7607000	40	y	35
	WSAC022	353000	7607500	68	y	59
	WSAC023	353000	7607250	37	y	30
	WSAC024	353000	7607000	25	y	24
	WSAC025	353000	7606750	35	y	30
	WSAC026	352750	7606750	30	y	27
	WSAC027	353000	7606500	28	y	24
	WSAC028	353000	7606250	17	n	
	WSAC029	353250	7606000	98	y	96
	WSAC030	353250	7606250	82	y	77
	WSAC031	353250	7606500	60	y	55
	WSAC032	353250	7606750	30	y	20
	WSAC033	353250	7607000	39	y	20
	WSAC034	353250	7607250	33	y	24
	WSAC035	353250	7607500	67	y	57
	WSAC036	353500	7607500	40	y	39
	WSAC037	353500	7607250	40	y	39
	WSAC038	353500	7607000	40	y	30

Target	Hole ID	Easting	Northing	EOH Depth	Effective?	Basement
	WSAC039	353500	7606750	41	y	30
	WSAC040	353500	7606500	88	y	85
	WSAC041	353500	7606250	94	y	93
	WSAC042	353500	7606000	118	y	97
	WSAC043	353500	7605750	124	y	102
	WSAC044	353500	7605500	98	n	
	WSAC045	353750	7605500	138	y	100
	WSAC046	353750	7605750	147	y	114
	WSAC047	353750	7606000	140	y	102
	WSAC048	353750	7606250	97	n	
	WSAC049	353750	7606500	95	n	
	WSAC050	353750	7606750	68	y	65
	WSAC051	353750	7607000	72	y	65
	WSAC052	353750	7607250	62	y	61
	WSAC053	353750	7607500	62	y	60
	WSAC054	354000	7607250	72	n	
	WSAC055	354000	7607000	108	y	96
	WSAC056	354000	7606750	94	y	92
	WSAC057	354000	7606500	82	n	
	WSAC058	354000	7606250	103	y	102
	WSAC059	354000	7606000	101	n	
	WSAC060	354000	7605750	102	y	101

ABOUT THE WHALESHARK PROECT

The Whaleshark project is located 40km east of Onslow, WA, and is characterised by a large, folded BIF complex intruded by a granite and buried under approximately 100m of Carnarvon Basin sediments.

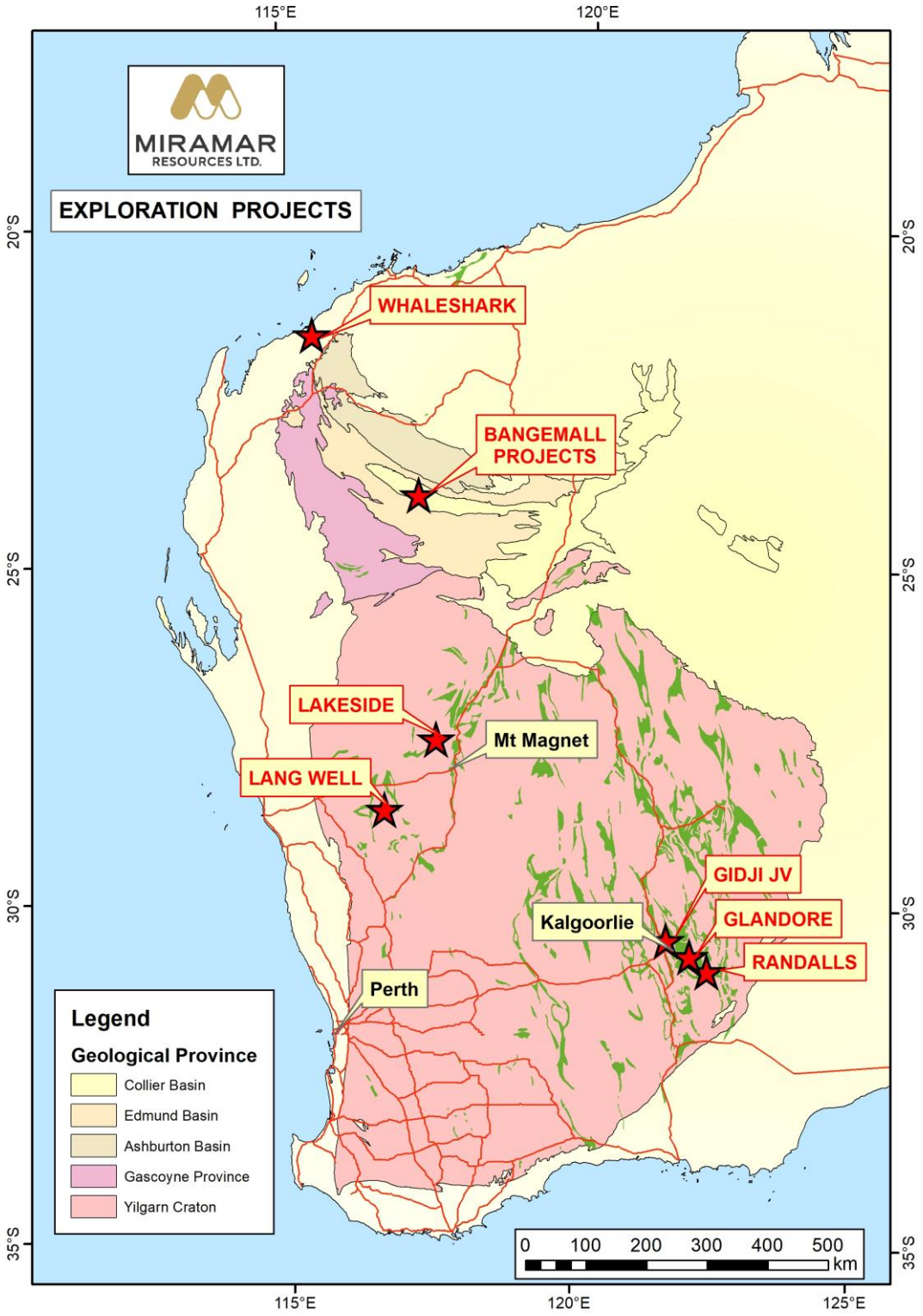
The project is located at the northwestern end of the Proterozoic Capricorn Orogen and has potential for IOCG and Proterozoic BIF-hosted gold mineralisation.



ABOUT MIRAMAR RESOURCES LIMITED

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

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.



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.

Information on recent exploration carried out by Miramar Resources Limited, including JORC Table 1 and 2 information, is included in the following ASX Announcements:

- 18 Aug 2022 – *“Drilling underway at Whaleshark Copper-Gold Project”*
- 13 Dec 2021 – *“Large IOCG targets outlined at Whaleshark”*
- 3 Sept 221 - “*Whaleshark Soil Survey Outlines Numerous Large Targets*”.

JORC 2012 Table 1 – Whaleshark Aircore 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.*	• Samples were collected from individual 1m sample piles • Sampling commences 4m above the interpreted uniformity between Cretaceous sediments and Proterozoic basement • Samples above the unconformity were combined into a 4m composite sample • Samples below the unconformity were taken as 1m samples to bottom of hole • 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).*	• Aircore drilling to recognizable Proterozoic basement
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.*	• Comments recorded for samples with low recovery
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 were collected from individual 1m sample piles • Sampling commences 4m above the interpreted uniformity between Cretaceous sediments and Proterozoic basement • Samples above the unconformity were combined into a 4m composite sample • Samples below the unconformity were taken as 1m samples to bottom of hole • Samples average 3kg in weight
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 using an aqua-regia digest followed by analysis of gold and multi-elements by ICPMS with lower detection limit of 1ppb Au • 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.*	• No verification conducted to date
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 50 • 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*	• Drill holes were completed on a 250m x 250m grid • The spacing is appropriate for the stage of exploration

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 lines were planned on a square gird covering the MMI soil anomalism • It is 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 to Onslow by Miramar staff • Samples were then shipped to the laboratory by a road freight contractor
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 E08/3166 which is owned 100% by "MQ Minerals Pty Ltd", a wholly owned subsidiary of Miramar Resources Limited
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Exploration has been previously completed by other companies including WMC Resources Limited and Spectrum Minerals Limited, and included RC and diamond drilling, along with various geophysical surveys
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The target is IOCG mineralisation +/- BIF-hosted gold 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*
		• See Table 1 and 2 and Figures which show all drilling completed to date.

Criteria	JORC Code explanation	Commentary
	detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	
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 stated.*	• Intervals reported over 85ppm Cu with maximum of 1 sample of internal dilution
Relationship between mineralisation widths and intercept lengths	• *These relationships are 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 2 shows collar information for all holes completed
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 aircore drilling planned, followed by geophysics and diamond drilling of basement targets