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July 23<sup>rd</sup>, 2024

## PETROGRAPHY INDICATES COARSE MAGNETITE ACROSS THE WATERFALL PROSPECT – MORRISEY PROJECT, WA

### Key Points:

- **Preliminary petrography indicates magnetite grains up to 2mm in most holes.**
- **Similar to magnetite in MYRC01, which produced a premium product (>70% Fe).**
- **Davis Tube Recovery test-work on multiple samples initiated – results pending.**
- **Program funded under the Strategic Alliance Agreement.**

AusQuest Limited (ASX: AQD) is pleased to advise that a preliminary petrographic study of selected drill samples indicates the coarse-grained nature of magnetite occurs across the Waterfall Prospect, part of its Morrisey Project located ~120km north of Mullewa in the Midwest mining district of Western Australia. The encouraging result highlights the potential to produce a premium iron (Fe) product from this prospect.

Polished thin sections were prepared for 14 magnetite-rich samples from 12 Reverse Circulation (RC) drill-holes located across the Waterfall Prospect, to undertake an initial petrographic study of the magnetite grain characteristics and their relationship with other minerals across the prospect. Examples are shown in Figure 1.

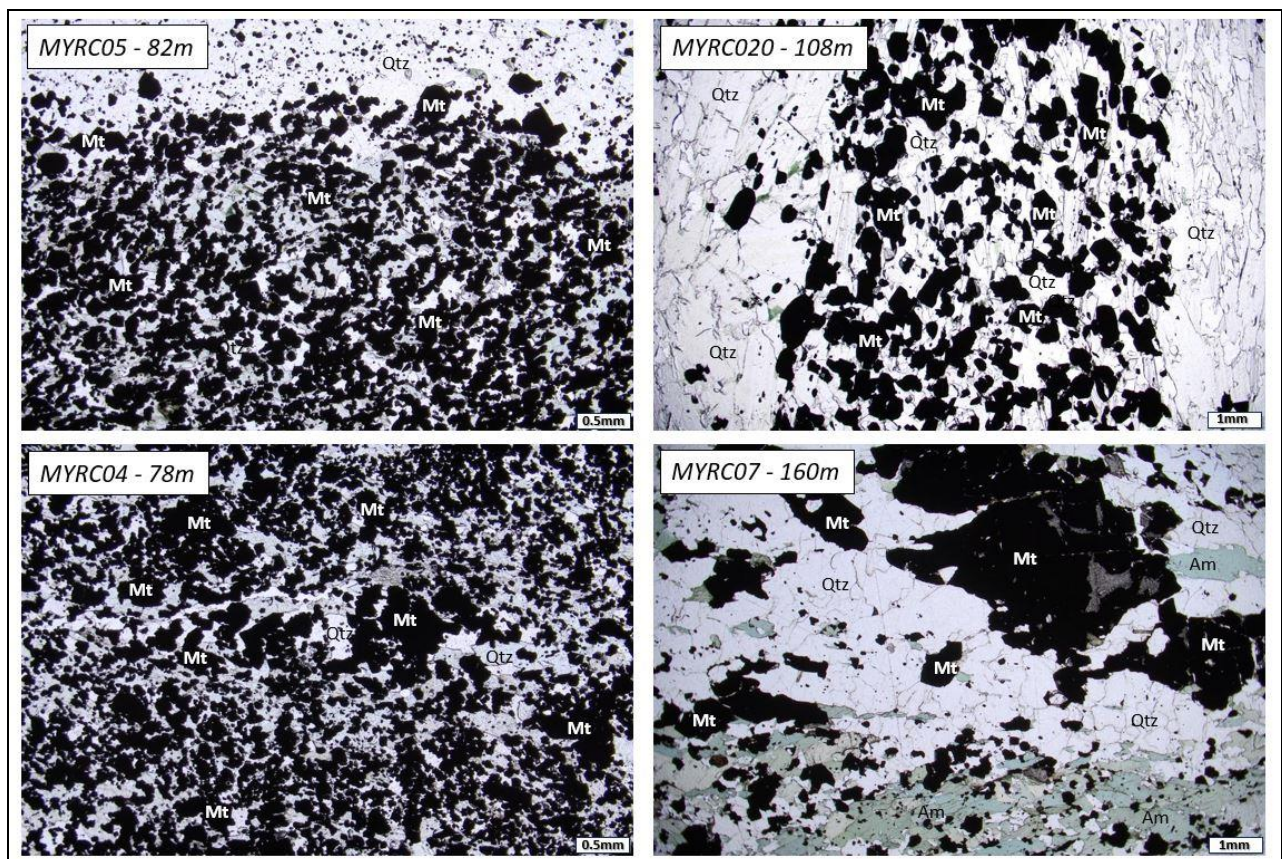


Figure 1: Photo-micrographs showing magnetite (Mt) grains (black) and ancillary quartz (white) and amphibole (green) from four drill-holes (note the scale bar in the bottom RHS of each slide).



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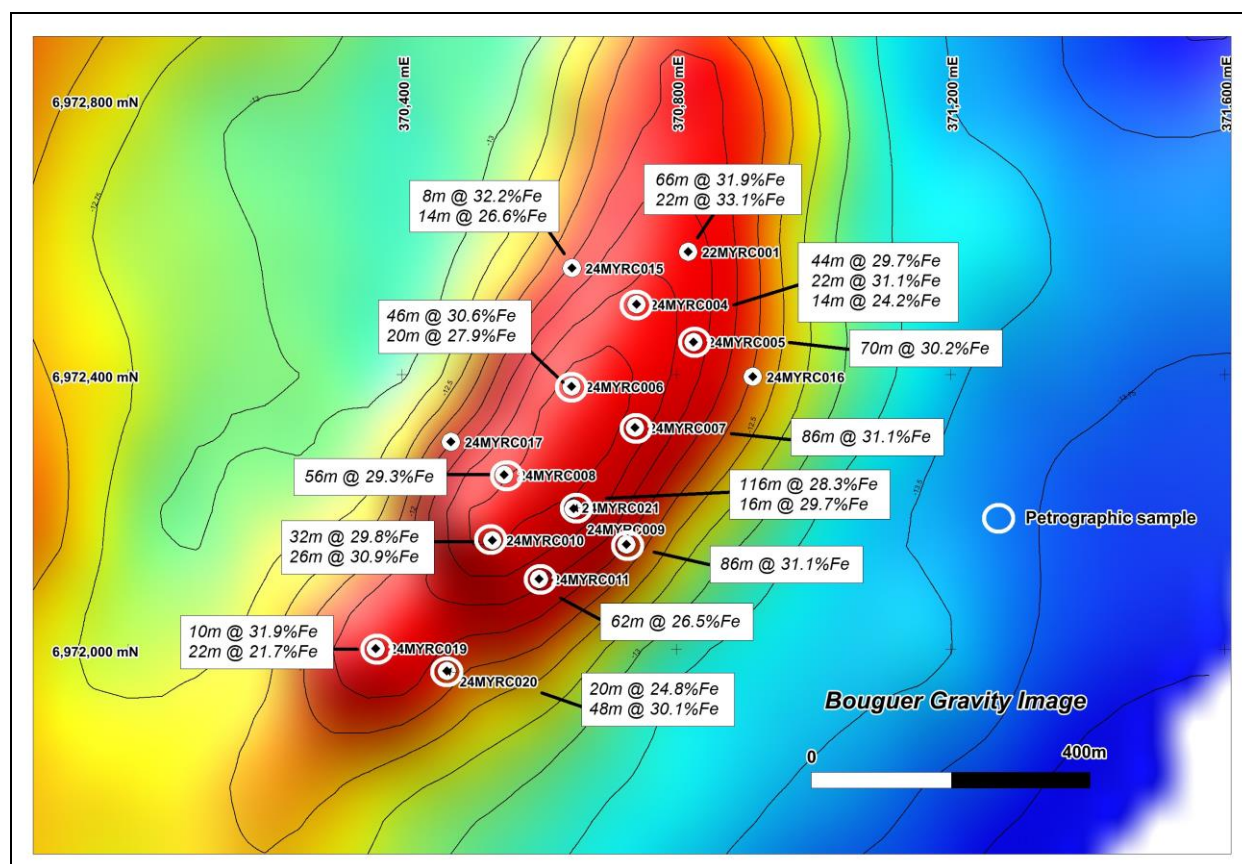


Magnetite grains are disseminated and occur within layers with quartz and amphibole as the other main minerals. Grain sizes were found to vary up to a maximum of 2mm, with magnetite grains having sharp boundaries and internal fractures, which is believed will assist with the separation of magnetite from other minerals in the rock (quartz and lesser amphibole) using magnetic separation methods and a grind size of 75 micron (0.075mm) or greater.

These visual observations are consistent with those from the initial drill-hole (22MYRC001), which was able to produce a premium iron product (>70% Fe) from previously completed Davis Tube Recovery (DTR) test work (see ASX release – 24 January 2023). *(It should be noted that visual estimates of mineral abundance should never be considered a proxy or substitute for laboratory analyses where concentrations or grades are the factor of principal economic interest. Visual estimates also potentially provide no information regarding impurities or deleterious physical properties relevant to valuations).*

DTR test work has been initiated on 95 composite samples (6m-10m composites) from the recent RC drilling program at Waterfall, to better understand potential recoveries and product grades that could be produced by beneficiation across the prospect. The samples were selected on the basis of high Fe assay results (>20% Fe) and high magnetic susceptibility readings (>0.2 SI units).

Results from the DTR test work, which are expected around the middle of August, will determine the future direction of the project including drilling priorities.



**Figure 2.** Waterfall Prospect: Gravity image showing the location of RC drill-holes and significant Fe assays. Drill-holes included in the petrographic study are highlighted

Quartz-magnetite rocks have now been intersected over a strike length of 750 metres at Waterfall, with the mineralisation remaining open in all directions (Figure 2). The mineralisation appears to have a relatively shallow easterly dip (~30 to 45°) and occurs

below the depth of oxidation at shallow depths (<50 metres) on most sections (see ASX release 12 June 2024).

The Morrisey Project, which is located within high-grade metamorphic rocks of the Narryer Terrane, approximately 120km north of Mullewa in WA, is subject to the Strategic Alliance Agreement with a wholly-owned subsidiary of South32 Limited.

AusQuest's Managing Director, Graeme Drew, said: *"Having confirmed abundant coarse-grained magnetite at the Morrisey Project, we are looking forward to receiving results from the Davis Tube Recovery test work, which will determine recoveries and product grades across the whole Waterfall prospect and enable us to assess the commercial potential of this prospect.*

*"The Board looks forward to providing further updates to shareholders over the coming weeks as results from the beneficiation test work become available."*

A handwritten signature in black ink, appearing to read 'G Drew'.

Graeme Drew  
Managing Director

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#### **COMPETENT PERSON'S STATEMENT**

*The details contained in this report that pertain to exploration results are based upon information compiled by Mr Graeme Drew, a full-time employee of AusQuest Limited. Mr Drew is a Fellow of the Australasian Institute of Mining and Metallurgy (AUSIMM) and has sufficient experience in the activity which he is undertaking to qualify as a Competent Person as defined in the December 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (JORC Code). Mr Drew consents to the inclusion in the report of the matters based upon his information in the form and context in which it appears*

#### **FORWARD LOOKING STATEMENT**

*This report contains forward looking statements concerning the projects owned by AusQuest Limited. Statements concerning mining reserves and resources may also be deemed to be forward looking statements in that they involve estimates based on specific assumptions. Forward-looking statements are not statements of historical fact and actual events and results may differ materially from those described in the forward looking statements as a result of a variety of risks, uncertainties and other factors. Forward looking statements are based on management's beliefs, opinions and estimates as of the dates the forward looking statements are made and no obligation is assumed to update forward looking statements if these beliefs, opinions and estimates should change or to reflect other future developments.*

# JORC Code, 2012 Edition – Table 1 Report: Petrographic Study of Magnetite intersected in RC drilling at the Morrisey Project

## 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"> <li>Nature and quality of sampling (eg 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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>RC drilling was used to obtain 1m split samples which were composited over 2m using an onboard cone splitter.</li> <li>Sample depths were determined by the length of the rod string and confirmed by counting the number of samples and rows as per standard industry practice.</li> <li>Sample weight of each 2m composite submitted for analysis was approximately 3kg.</li> <li>Samples for the initial petrographic study were selected from chip trays based on high Fe assays (&gt;20%Fe) and magnetic susceptibility readings &gt; 0.2 SI units.</li> <li>One or two samples were selected from each of the 12 drill-holes for polished thin section preparation (a total of 14 samples), to provide an early indication of the characteristics of the magnetite grains and their relationship with other minerals in the rock.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>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).</li> </ul>	<ul style="list-style-type: none"> <li>Reverse circulation (RC) drilling with 4.5 inch face sampling bit.</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Experienced RC drillers and an appropriate rig size were used to ensure maximum sample recovery.</li> <li>Sample quality and recovery was noted for each metre.</li> <li>At this early stage of exploration it is not possible to identify any relationship between sample recovery and assay grade.</li> </ul>

Criteria	JORC Code explanation	Commentary
Logging	<ul style="list-style-type: none"> <li>• <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></li> <li>• <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> <li>• <i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<ul style="list-style-type: none"> <li>• RC sample chips were logged by an experienced geologist to identify key rock types and mineralisation styles.</li> <li>• Sample logging was qualitative with visual estimates of mineral composition made for later comparison with assay results.</li> <li>• All samples were logged.</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<ul style="list-style-type: none"> <li>• RC samples were collected every 1 metre and presented in rows corresponding to sample depth.</li> <li>• Assay samples were collected every 2m utilising a cone splitter on the rig's cyclone to produce a representative composite sample for assay.</li> <li>• Certified standards or blanks were inserted every twentieth sample for initial quality control purposes.</li> <li>• The sample sizes are considered appropriate for the geological materials sampled.</li> <li>• Assay results were reported in AusQuest ASX release dated 12<sup>th</sup> June 2024.</li> <li>• Samples for petrographic study were selected from the drill chip trays based on Fe assays and strength of magnetic susceptibility reading. Chip size was also considered given the process required to prepare polished thin sections.</li> <li>• Samples were sent to Minerex Services Pty Ltd for preparation of the polished thin sections.</li> </ul>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li>• <i>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.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The polished thin sections were observed by a qualified geologist using an Olympus Petrological microscope and basic descriptions prepared.</li> <li>• The polished thin sections were observed under transmitted and reflected light at various magnification levels, and photomicrographs prepared.</li> </ul>



Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>No verification of petrographic descriptions was undertaken.</li> <li>Sample details were compiled into Excel spreadsheets for merging with assay data.</li> <li>Digital data is regularly backed-up on the company's servers.</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>Drill hole collar locations were established with a handheld GPS to +/- 5m accuracy.</li> <li>Down hole surveys were carried out below the collar and at the bottom of each hole using a multi-shot gyro system.</li> <li>Grid system used is GDA94 Zone 50S.</li> <li>Petrographic samples were collected from 12 drill-holes located across the prospect to provide an initial assessment of the magnetite mineralogy.</li> <li>Sample locations are provided in the table below</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>Drill holes were spaced ~ 150m x 100m apart along five grid sections and drilled to depths of ~200m (see table below).</li> <li>Data spacing is considered sufficient to provide an indication of geological and possibly grade continuity within the area drilled.</li> <li>Petrographic samples were collected from selected intervals (high Fe and magnetic susceptibility) from 12 drill holes across the prospect</li> </ul>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Any bias due to the orientation of the drilling or sample selection for petrology is unknown at this early stage of exploration.</li> </ul>
Sample security	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>Samples collected for preparation of polished thin sections were sent to Minerex Services Pty Ltd by registered post and all samples were returned to AusQuest together with the polished thin sections at the completion of the preparation.</li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>No audits or reviews have been carried out on the sampling.</li> </ul>

## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The Morrisey Project is located approximately 150 km north-east of Geraldton in Western Australia.</li> <li>• Tenement holdings consist of four granted Exploration Licences E70/5383, E09/2397, E59/2525 and E59/2526 held 100% by AusQuest.</li> <li>• The Morrisey Project is subject to a Strategic Alliance Agreement whereby South32 have the right to earn a 70% interest by spending US\$4.5M.</li> <li>• The tenements are located partly within (WC2004/010) Wajarri Yamatji #1 Native Title Claim (partially determined) and partially within (WC1996/093) Mullewa Wadjari Community Native Title Claim.</li> <li>• Aboriginal heritage surveys are routinely completed ahead of ground disturbing activities.</li> </ul>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li>• <i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Previous exploration is very limited and was mainly focused on iron ore and gold targets together with some regional diamond exploration by Stockdale Prospecting and CRA Ltd.</li> <li>• Limited aircore drilling and surface lag sampling was reported by several companies that were targeting magnetic anomalies as possible iron ore or nickel prospects but no RC or diamond drilling has been reported.</li> <li>• Detailed aeromagnetic data was acquired over the northern half of EL 70/5383 and the southern part of EL 70/2397 as part of a search for iron ore. This data is being used by the current exploration in the area</li> </ul>
<i>Geology</i>	<ul style="list-style-type: none"> <li>• <i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The Morrisey Project is targeting coarse-grained magnetite mineralization that can be beneficiated to produce a high grade product (&gt;70% Fe). The Narryer terrane is a complex structural area containing high grade metamorphic rocks including banded iron formations which appear to be the protoliths to the</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>mineralization being sought.</p> <ul style="list-style-type: none"> <li>Nickel-copper-PGE mineralisation is also being targeted within mafic/ultramafic intrusions in the Narryer Terrane which forms the NW margin of the Yilgarn Craton.</li> </ul>
<i>Drill hole Information</i>	<ul style="list-style-type: none"> <li>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"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>All relevant drill hole data and petrographic sample locations are provided below.</li> </ul>
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>Intersections quoted in the 12<sup>th</sup> June ASX release (Table 1) are based on an Fe cut-off grade of 20%Fe, an average magnetic susceptibility &gt;0.2SI units, a minimum width of 4 metres and maximum internal waste of 4 metres.</li> </ul>
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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’).</li> </ul>	<ul style="list-style-type: none"> <li>Down hole lengths are reported - the relationship between mineralization widths and intercept widths is not known at this stage, although drill directions appear to provide a reasonable estimate of mineralization thickness.</li> </ul>
<i>Diagrams</i>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Drill hole locations and drill holes sampled for petrographic study are shown on appropriate plans and included in the ASX release.</li> </ul>



Criteria	JORC Code explanation	Commentary
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Significant assay results were provided in the ASX release on 12<sup>th</sup> June 2024.</li> <li>Petrographic samples were collected from drill holes across the prospect and are believed to provide a good guide to the characteristics of the magnetite mineralization across the prospect.</li> </ul>
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The area was selected for drilling based on modelled magnetic and gravity data in conjunction with geological and geochemical interpretations by the company.</li> </ul>
<i>Further work</i>	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>Proposals of further work will be done after a thorough analysis of the current data including the pending DTR test work is completed.</li> </ul>

## Drilling Details:

Hole_No	Prospect	Easting	Northing	RL	Datum	Zone	Azimuth	Inc	RC_Depth
24MYRC004	Waterfall	370741	6972503	302	GDA94	50	313	-59.7	225
24MYRC005	Waterfall	370825	6972448	298	GDA94	50	322	-60	225
24MYRC006	Waterfall	370647	6972383	309	GDA94	50	303.3	-58.8	225
24MYRC007	Waterfall	370739	6972323	301	GDA94	50	301.06	-59.39	225
24MYRC008	Waterfall	370549	6972254	313	GDA94	50	307	-59	228
24MYRC009	Waterfall	370650	6972206	304	GDA94	50	302.8	-58.8	225
24MYRC010	Waterfall	370531	6972159	309	GDA94	50	300.66	-59.28	228
24MYRC011	Waterfall	370599	6972102	306	GDA94	50	299.22	-59.17	225
24MYRC012	Bilga South	391773	7013772	289	GDA94	50	319.7	-59.2	228
24MYRC013	Toola Well	400867	6989501	275	GDA94	50	87.51	-60.59	200
24MYRC014	Toola Well	401349	6989689	276	GDA94	50	273.4	-59.4	162

24MYRC015	Waterfall	370647	6972555	307	GDA94	50	303.4	-60.9	210
24MYRC016	Waterfall	370911	6972397	294	GDA94	50	301.99	-60.42	152
24MYRC017	Waterfall	370471	6972302	311	GDA94	50	305.5	-58.5	180
24MYRC018	Waterfall	370727	6972153	298	GDA94	50	301.7	-60.5	114
24MYRC019	Waterfall	370361	6972001	305	GDA94	50	306.3	-58.99	174
24MYRC020	Waterfall	370465	6971969	303	GDA94	50	295.14	-60.49	220
24MYRC021	Waterfall	370650	6972205	304	GDA94	50	239.7	-89.16	204

### Petrographic sample Details:

Hole/Sample ID	From (m)	To (m)	Fe%	Magsus SI
24MYRC004	76	78	33.22	0.563
24MYRC004	138	140	28.55	0.503
24MYRC005	80	82	33.28	0.679
24MYRC006	60	62	33.74	0.651
24MYRC006	86	88	35.97	0.833
24MYRC007	158	160	37.67	0.918
24MYRC008	60	62	34.06	0.805
24MYRC009	64	66	32.22	0.649
24MYRC010	110	112	37.09	0.780
24MYRC011	164	166	30.93	0.594
24MYRC018	48	50	34.34	0.742
24MYRC019	48	50	36.91	0.733
24MYRC020	106	108	36.78	0.590
24MYRC021	148	150	14.85	0.059