

ASX ANNOUNCEMENT

18 July 2024

Goldsworthy East Development Update

Highlights

- Surface scree hematite mineralisation¹ found proximal to southern gravity anomaly modelled to occur within 30m of surface
- Detailed second phase mapping and sampling program planned for late July with the aim of identifying in-situ mineralisation
- Heritage survey to clear ground over entire project area complete
- High resolution magnetic survey completed and interpretation of results to commence upon delivery of data
- Combined Flora and Fauna survey scheduled for early August 2024



Figure 1: Hematite scree sample from Goldsworthy Project- Southern Gravity Target

Macro Metals Limited (**ASX:M4M**) (**Macro** or the **Company**) is pleased to provide an update on the exploration and development activities underway at the Goldsworthy East Project.

On 14 and 15 July 2024, the Company's field team opportunistically completed a campaign of mapping and sampling at Goldsworthy East while they were on site demarking the area to be covered by the heritage survey that completed today.

¹ Refer to cautionary statement on page 2 and Table 1 for further information.



The team identified a sample of scree material located within the area of the interpreted southern gravity anomaly.

The scree sample appears visually to be comprised entirely of hematite mineralisation and has patches of specular hematite making it appear visually very similar to that of which was mined from the Goldsworthy Open Pit, which is located approximately 1,800m along strike to the west of Macro's southern gravity target on Goldsworthy East².



Figure 2: Location plan of Goldsworthy East Project, Gravity Anomalies and Hematite Scree Sample (*Mt Goldsworthy* produced 55Mt at 63.5% Fe between 1965 and 1982)

The Company cautions that with respect to any visual mineralisation indicators, visual observations and estimates of mineral abundance are uncertain in nature and should not be taken as a substitute or proxy for appropriate laboratory analysis. Visual estimates also potentially provide no information regarding impurities or deleterious physical properties relevant to valuations. Refer to Table 1 below for further details of the hematite scree sample. Further systematic mapping and sampling is required in order to confirm the visually observed consistency of mineralisation. Drill testing will be required to understand the grade and extent of mineralisation and whether the scree material is representative of an in-situ target.

Mr Simon Rushton, Managing Director said: "This is an unexpected but very welcomed development from the team being on ground over the weekend to prepare for the safe completion of the heritage survey.

² Refer ASX release dated 15 June 2023 'Substantial Gravity Anomalies Defined Along Strike from BHP's Goldsworthy Iron Ore Mine' for further information.



Looking at the sheer size of the gravity targets beneath the surface at Goldsworthy East in the context of now having discovered visually very impressive hematite mineralisation above the southern target, it is very hard not to get excited.

We will continue to work collaboratively with DEMIRS to expedite the grant of the exploration licence application given BHP has withdrawn its objection and we have negotiated and executed agreements with both traditional owners of the country on which Goldsworthy East is located, being Ngarla and Nyamal, so that we can undertake the maiden drilling campaign as soon as possible.

We thank the heritage team at Wanparta for working so collaboratively with us and completing the heritage survey over the entire project area this week. As we have now completed the heritage survey and discovered rock chips confirming the presence of hematite at Goldsworthy East, we have engaged the teams at MBS Environmental Consultants and Rapello to undertake flora and fauna studies over the project area commencing in a few weeks rather than waiting to complete the maiden drilling campaign later this year before commencing environmental surveys.

We want to accelerate the collection of all relevant environmental information so that Macro is in a position to complete applications for approvals to commence mining at Goldsworthy East as soon as possible."



Figure 3: Wanparta Heritage team with Macro's Project Director, David Salt



Additional detailed magnetic survey completed

A 25m line spaced magnetic survey has been completed across the entire Goldsworthy East Project. Upon receipt of the survey data the company will commence processing and interpretation of the magnetics. The aim of the survey is to refine the structural and lithological model. Refinements of the proposed drilling program will be conducted once the model has been updated.

Mr Robert Jewson, Technical Director said: "Identification of mineralisation in scree that appears very similar to that of what was mined at Mt Goldsworthy, less than two kilometres to our west is extremely encouraging. The purpose of the site visit by our team was to assess logistics and evaluate potential tracks requiring construction ahead of commencing the heritage survey. The targets according to our gravity model did not come to surface. The location of the sample in coincidence with the gravity target and being a considerable distance from any other recognised track or road indicates a relatively localised source.

We have committed to a second phase of detailed mapping and sampling to be completed with the hope of finding in-situ mineralisation. We look forward to providing further updates to the market upon interpretation of the magnetic survey and from our field further reconnaissance."

Overview of Goldsworthy East

- The Goldsworthy East project is located:
 - adjacent to BHP's Mining Lease, directly along strike from Mt Goldsworthy which produced 55Mt at 63.5% Fe between 1965 and 1982.
 - less than 100kms from the multi-user, Utah Point Bulk Handling Facility along sealed, all weather Great Northern Highway.
- A previous gravity survey has defined two substantial targets at Goldsworthy East:
 - Northern Target: 1,600m strike, 200m wide and depth extent of 450m modelled to occur within 25m of surface
 - Southern Target: 1,100m strike, 215m wide and depth extent of 400m, modelled to occur within 30m of surface



Goldsworthy Schedule of works for balance of CY2024

Activity	Expected Timing				
	Jul	Aug	Sep	Oct	Nov
• Magnetic Survey	\checkmark				
• Heritage Survey	~				
• Flora & Fauna					
• Tenement Grant*					
• POW Approval*					
Drilling*					

* indicated Tenement Grant, POW Approval and Drilling is based upon four month statutory right to negotiate period from removal of BHP objection and 20 day POW approval process. Macro is actively working with DEMIRS to reduce right to negotiate period noting Traditional Owners of Coldsworthy East have executed heritage agreements.

This announcement has been authorised for release by the Board of Directors.

For further information, please contact:

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About Macro Metals Limited

Macro's Iron Ore portfolio has the potential for multiple sources of iron ore production utilising the well-established and proven export infrastructure of the Pilbara and emerging infrastructure in the West Pilbara.

The Company is focussing on expediting the development of its Cane Bore, Catho Well, Turner and Goldsworthy projects.

Utilising a fit for purpose, safety and results focused, rapid development approach across the Macro assets the Board sees substantial scale and the real potential for Macro to quickly become a multi mine iron ore producer.



Competent Person's Statement

The information in this announcement that relates to exploration results (being the hematite scree sample identified at Macro's Goldsworthy Project) is based on and fairly represents information compiled by Mr Robert Jewson, who is a Member of the Australian Institute of Geoscientists and Executive Director of Macro Metals Limited. Mr Jewson has sufficient experience relevant to the style of mineralisation and type of deposit under consideration, and to the activity which he has undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Jewson consents to the inclusion in this report of the matters based on this information in the form and context in which it appears. Mr Jewson is a shareholder of Macro Metals Ltd.

The information in this announcement that relates to previously reported exploration results were announced by the Company in accordance with listing rule 5.7 on 15 June 2023. The Company confirms it is not aware of any new information or data that materially affects the information included in the original announcements.

Forward Looking Statements

This announcement may include forward-looking statements. Forward-looking statements are only predictions and are subject to risks, uncertainties and assumptions which are outside the control of the Company. Actual values, results or events may be materially different to those expressed or implied in this announcement. Given these uncertainties, recipients are cautioned not to place reliance on forward looking statements. Any forward-looking statements in this announcement speak only at the date of issue of this announcement. Subject to any continuing obligations under applicable law, the Company does not undertake any obligation to update or revise any information or any of the forward-looking statements in this announcement or any changes in events, conditions, or circumstances on which any such forward looking statement is based.



Table 1: Goldsworthy East- Hematite Scree Sample Information

Sample	Easting	Northing	Lithology	Comments
24GW001	767,747	7,747,650	Hematite	Sample comprised entirely of hematite (estimated 100%), patches of specular texture

Notes:

- Coordinates are reported using MGA94 Zone 50 Projection
- Sample will be assayed and results expected during August 2024.



Appendix 1: JORC Tables

JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Comments
Sampling techniques	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.	Single rock chip sample taken of scree material.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Sample was selective on the basis of it representing scree material.
	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.	1kg sample was taken and has been held as a reference sample. No laboratory analysis has been conducted.
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.	No drilling reported.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	No drilling reported.
	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.	Sample was photographed and geologically logged. The rock chip sample was taken for the purposes of understanding the nature of mineralisation, not for the inclusion in a mineral resource estimation.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Logging included colour, composition, textual analysis and pisolite size quantification. Geological logging is both qualitative and where relevant quantitative.



Criteria	JORC Code explanation	Comments
	The total length and percentage of the relevant intersections logged.	No drilling reported.
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	No drilling reported.
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	No laboratory analysis has been conducted.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	No laboratory analysis has been conducted.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	No laboratory analysis has been conducted.
	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.	Sample taken was of scree material and is not necessarily representative of in-situ material. Further field mapping and sampling is proposed to be completed in order to determine whether in-situ mineralisation is present within the gravity anomaly target areas.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Sample size was limited by the fact it was a scree 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.	No laboratory analysis has been conducted.
	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.	No geophysical tools or portable XRF instruments were utilised.
	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 laboratory analysis has been conducted.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Samples were taken under the supervision of the Competent Person and results were reviewed by the Company's consultant geologist.
	The use of twinned holes.	No drilling reported.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	All data was recorded digitally and imported into a validated database.
	Discuss any adjustment to assay data.	No adjustments were made to the 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.	The sample was located using a hand-held GPS.
	Specification of the grid system used.	The sample was reported in MGA94-Z50 grid system.
	Quality and adequacy of topographic control.	The topographic control was derived from GPS.

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Criteria	JORC Code explanation	Comments
Data spacing and distribution	Data spacing for reporting of Exploration Results.	Single sample taken.
	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.	Sample is not proposed to be included within any future resource estimations.
	Whether sample compositing has been applied.	No sample compositing was 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.	Rock chip sampling is only point samples and as such is not effected by orientations.
	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.	No drilling reported.
Sample security	The measures taken to ensure sample security.	Samples were taken by geological consultants engaged by the Company and were delivered by the consultants directly to the laboratory.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audits are documented to have occurred in relation to sampling techniques or data.



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	E45/6365 is an exploration licence application 100% owned by Macro Metals Ltd. A 1% NSR exists to original vendors including current Macro Metals Directors Simon Rushton, Rob Jewson, Evan Cranston and Tolga Kumova. Objections to the Exploration Licence Application have been withdrawn
	time of reporting along with any known impediments to obtaining a licence to operate in the area.	by all relevant parties, and there is no known impediments towards the grant of the Licence.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	No known exploration has been conducted with respect to iron ore across the tenure.
Geology	Deposit type, geological setting and style of mineralisation.	The Goldsworthy East Project is situated within the Goldsworthy greenstone belt, separated by the Carlindi and Muccan granitoid batholiths from the Yarrie Greenstone Belt. The adjacent Mt Goldsworthy deposits are hosted by greenschist facies, steeply N-dipping jaspilites and quartz- magnetite BIF of the Goldsworthy greenstone belt. The deposits are located along the southern limb of a district-scale, tight, upright, NE-trending syncline that plunges steeply to the W; the northern limb is truncated by a subvertical, E-W-trending fault. The greenstone belt comprises mafic and ultramafic rocks of the Warrawoona Group, which are in faulted contact with younger Farrel Quartzite, three main BIF units of the Cleaverville Formation (Lower, Middle, and Upper units), and overlying Lalla Rookh Sandstone. Iron ore deposits are located at the intersection between the 200 m-thick, fold-thickened, Middle BIF unit and cross- cutting E- to ENE-trending fault
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: o easting and northing of the drill hole collar o elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar o dip and azimuth of the hole o down hole length and interception depth o hole length.	No drilling reported.
	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.	All information has been included in the body of this release.
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.	No data aggregation methods applied.



Criteria	JORC Code explanation	Commentary
	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.	No drilling reported.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalence are 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.	Maps and plans have been included in body of the announcement.
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 results have been 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 exploration data is considered meaningful and material to this announcement.
Further work	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).	Follow up mapping and sampling is proposed. Upon receipt of the magnetic survey data, interpretation of the magnetics and updating of the geological model will be completed.



Criteria	JORC Code explanation	Commentary
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Maps including the location of the sample are included in the body of this release.

