

Drill Rig On Site at Wandanya Manganese Project

Highlights

- RC drilling has commenced at Wandanya Manganese Project
- Sampling conducted across the Crossroads Prospect by Macro has returned multiple significant results, including:
 - **60.41% Mn** (MR04)
 - **50.53% Mn** (MR02)
 - **47.12% Mn** (MR01)
 - **46.15%Mn** (MR05)
- Drilling focussed on testing the scale, grade and distribution of manganese mineralisation across the Crossroads Prospect
- Program is expected to be completed by 7th December and assay results expected within six weeks
- Sampling across the Wandanya Prospect has reported significant manganese results including:
 - **62.27% Mn** (MR10)
 - **43.96% Mn** (MR09)



Figure 1: RC Drill Rig on Site at Crossroads Prospect

Macro Metals Limited (ASX:M4M) (**Macro** or the **Company**) is pleased to announce the commencement of RC drilling at the Wandanya Project, aiming to define the extent and grade distribution of mapped mineralisation at the Crossroads Prospect.

Mr Rob Jewson, Technical Director stated: "The mapping conducted across the Crossroads Prospect has indicated that manganese mineralisation appears to be 3 – 4m thick where observed. Locally the manganese mineralisation is overlain by a goethite cap obscuring the potential scale of the manganese beneath shallow cover.

The drilling program we have devised aims to determine the extent and grade of the manganese mineralisation present."



Figure 2: 50.53% Mn Rock Chip Sample (MR02) From Dense Manganese Outcrop at the Crossroads Prospect



Mr Simon Rushton, Managing Director stated: "We are extremely grateful to our valued partners at RSC for the detailed mapping of the Wandanya Project that has enabled our technical team to refine the first ever drilling programme at the Crossroads Prospect.

I also want to acknowledge the fantastic efforts of Kate George and her team at Rapallo for undertaking the targeted flora and fauna survey at late notice to enable us to finalise our responses to the DEMIRS requests for information and secure the programme of works for this drill programme.

I also want to thank Paddy and the team at K-Drill for mobilising the rig at short notice to facilitate this campaign before the wet season fully kicks in.

And finally, I wish to acknowledge the significant contribution by the board, management and heritage team at the Nyamal Aboriginal Corporation for facilitating the heritage survey at short notice and in fairly wet conditions last week. It is testament to the strong relationship we have built with the group, which has largely been facilitated by the efforts of Kellie Hill and her team at Agreement Hub.

I am looking forward to better understanding the scale of the DSO manganese mineralisation at Wandanya so we can hopefully finalise our plan to undertake a bulk sample early next year once the wet season begins to subside and thereafter aim to move towards a granted mining lease and a longer term operation should the drill results support that decision."

Drilling Program Overview

The Crossroads Prospect consists of low-level rolling hills of sub-cropping altered Pinjian Chert Breccia, and flat plains of detritals and alluvials. The Pinjian Chert Breccia is a significant host of manganese mineralisation at the nearby Woodie Woodie Manganese Operation.

Mapping indicates that the manganese mineralisation appears 3-4m thick, where observed. The manganese mineralisation is locally overlain by a surficial goethitic cap, obscuring the thickness. At the Crossroads Prospect, manganese mineralisation presents as massive pods of mineralisation; surrounding manganese-rich detrital may also represent areas of potential manganese mineralisation under cover; drilling is required to test consistency.

As an initial phase, a total of 15 RC holes have been planned across the northern quadrant of the Crossroads Prospect, located within the Wandanya Project. The drilling will be conducted on a 50m by 50m grid. If warranted, based on this drilling program, a second infill and extensional program is proposed to be conducted in Q1-2, CY2025.

Results of the drilling are expected within six weeks, which will include an update on the next phases of exploration and development activities for the Wandanya Project.

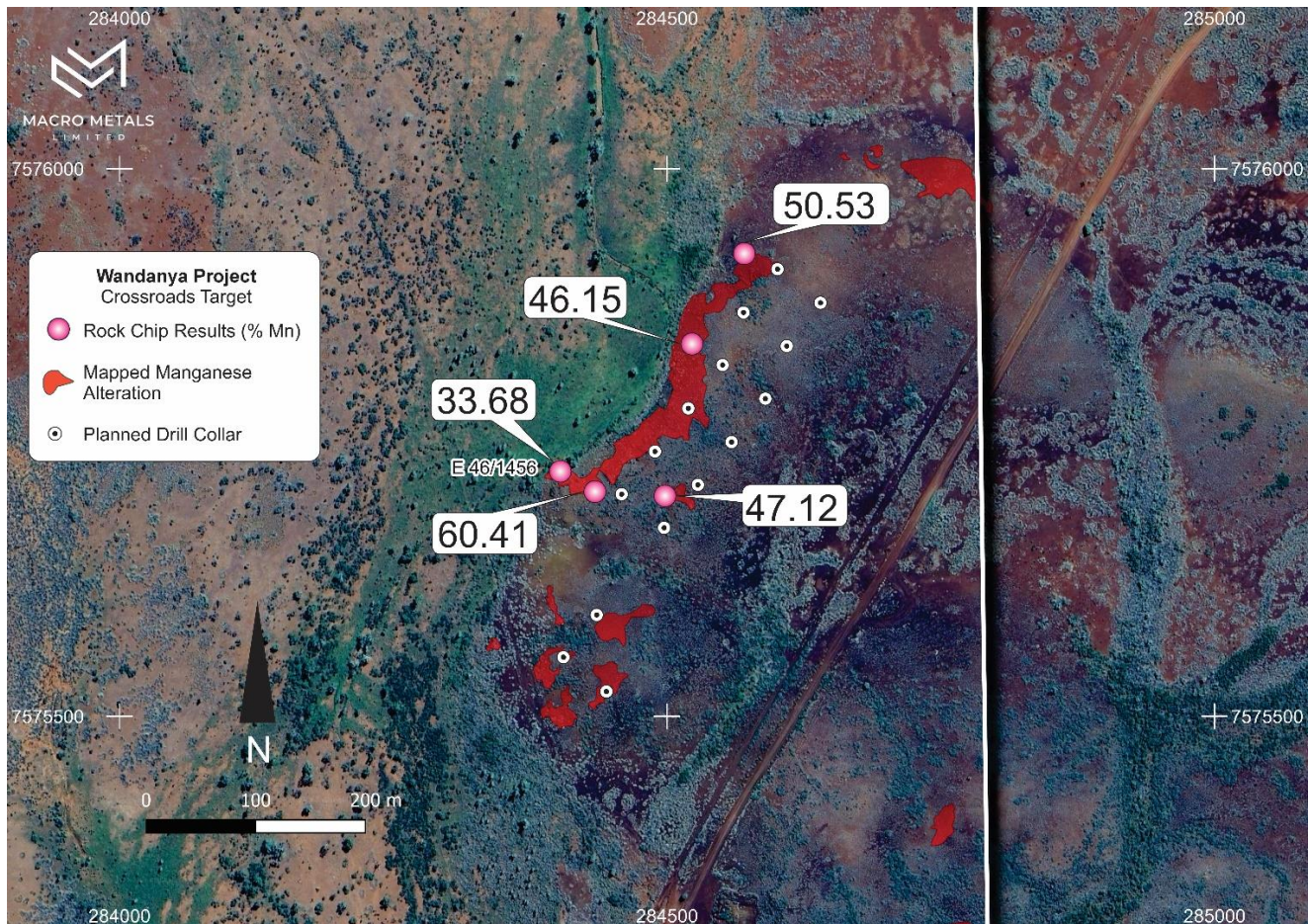


Figure 3: Rock Chip Results and Planned Drilling at Crossroads Prospect

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

For further information, please contact:

Simon Rushton

Managing Director

Macro Metals Limited

+61 3 6143 6707

info@macrometals.com.au

About Macro Metals Limited

Macro is a mineral exploration, development and mining services company focussed on delivery of shareholder value through the economic development of natural resource assets.

Macro owns directly a portfolio of iron ore and manganese assets which are undergoing active exploration programs, with the aim of providing future production opportunities.

Separately, through its wholly owned subsidiary, Macro Mining Services Pty Ltd (MMS), the Company offers bespoke, safe and highly value accretive mining services across a range of commodity groups and through the entire pit to customer supply chain, including mining, crushing and screening, processing, haulage, ship loading and shipping services.

Macro is a diversified mining and mining services business.



Competent Person's Statements

The information in this announcement that relates to exploration results is based on information compiled and fairly represented 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.



Appendix 1: Rock Chip Sampling Results and Location Information

Sample ID	Prospect	Easting	Northing	Mn (%)	Fe (%)	Si (%)	Al ₂ O ₃ (%)	P (%)	Description
MR01	Crossroads	284,498	7,575,700	47.12	21.79	1.97	1.97	0.066	Dense Mn subcrop
MR02	Crossroads	284,571	7,575,922	50.53	16.6	3.41	2.42	0.053	Dense Mn Outcrop
MR03	Crossroads	284,404	7,575,723	33.68	23.71	7.43	7.88	0.053	Locally goethitic Mn-altered breccia
MR04	Crossroads	284,437	7,575,708	60.41	8.45	1.53	4.54	0.029	Dense Mn oxide, below goethite
MR05	Crossroads	284,523	7,575,840	46.15	20.26	3.8	2.31	0.044	More siliceous Mn Oxide subcrop
MR06	Crossroads	284,773	7,575,250	25.57	26.04	10.85	9.66	0.037	Mn altered breccia
MR07	Wandanya	281,057	7,570,916	64.68	3.19	4.33	2	0.045	Massive Mn after chert
MR08	Wandanya	280,713	7,569,660	0.64	<u>60.93</u>	5.17	2.82	0.036	Hematite subcrop adjacent to Mn breccia
MR09	Wandanya	314,563	7,550,707	43.96	12.95	14.86	3.77	0.357	Mn altered layered chert from outcrop
MR10	Wandanya	280,239	7,570,010	62.27	3.49	3.54	4.67	0.016	Mn mount, dense bedded Mn oxide layers

Notes:

- Coordinates are reported using MGA94 Zone 50 Projection
- All samples were analysed by XRF techniques for utilising FB1/XRF (Fused Disk preparation for XRF analysis Analysed by XRF Spectrometry)



Appendix 2: 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.	Rock chip sampling was completed on an irregular pattern aiming to determine the tenor and deleterious element profile of manganese mineralisation based on mapping.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Sampling was conducted on outcropping manganese and was selective in nature to represent differing styles and mineralogy of observed mineralisation.
	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.	2-3kg samples were submitted to Intertek Laboratories. Samples were prepared and pulverised using Intertek standard practice. Pulp material was analysed using XRF technique (Intertek Code: FBI/XRF). The sample preparation and analysis methods are considered industry standard for the style of mineralisation being tested.
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.	All rock chip samples were photographed and were geologically logged. The rock chip samples are for the purposes of understanding the nature of mineralisation, not for the inclusion in a mineral resource estimation.



Criteria	JORC Code explanation	Comments
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Logging included colour, composition and alteration. Geological logging is both qualitative and where relevant quantitative.
	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.	Samples were dried, pulverised and split at Intertek Laboratory.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	The sampling protocol implemented is considered to be appropriate and industry standard for dealing with rock chip samples.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	QAQC protocols included the use of internal lab standards. Further QAQC including field duplicate samples, company standard reference samples and umpire laboratory analysis will be utilised in future more extensive sampling programs.
	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.	Samples selected were representative of each of the observed mineralisation styles. Due to the limited scale of program undertaken, no duplicate or second half sampling was conducted.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	The sample sizes are appropriate for the grain size of the material.
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.	The assay methods utilised are considered industry standard.
	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.	Due to the limited number of samples, only internal lab duplicate tests and lab standards were utilised for analysis purposes. Further systematic sampling is planned which will incorporate rigorous QAQC protocols.
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.



Criteria	JORC Code explanation	Comments
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.	Samples were located using a hand held GPS.
	Specification of the grid system used.	All samples are reported in MGA94-Z51 grid system.
	Quality and adequacy of topographic control.	The topographic control on rock chip sampling was derived from GPS.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	Rock chip sampling was completed on an irregular spacing.
	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.	Rock chip sampling undertaken 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	<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>	The Wandanya Project consists of two granted exploration licences (E46/1456 and 1457) located 40km WSW of the Woodie Woodie Manganese Mine in the Eastern Pilbara Region of Western Australia. Macro has entered into an agreement to acquire 80% of the Project from Firebird Metals Ltd. Mining Equities Pty Ltd holds a 1% Net Smelter Royalty, Mr Robert Jewson is a shareholder and director of Mining Equities Pty Ltd and a shareholder and a director of Macro Metals Ltd No known impediments exist with respect to exploration and development of the Wandanya Project.
	<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>	Open file verification has been conducted to confirm licences are in full force.
Exploration done by other parties	<i>Acknowledgment and appraisal of exploration by other parties.</i>	Historic exploration of relevance has been undertaken by Pilbara Manganese Pty Ltd and Talisman Mining Ltd. Work completed within E46/1456 and 1457 consisted of rock chip sampling, aircore drilling and RC drilling.
Geology	<i>Deposit type, geological setting and style of mineralisation.</i>	Manganese mineralisation in the eastern Pilbara is hosted by the Jeerinah Formation, Carawine Dolomite and parts of the Manganese Subgroup.
Drill hole Information	<i>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:</i> - 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.
	<i>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.</i>	All information including samples with no significant results has been included in the body of this results.
Data aggregation methods	<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>	All sample results have been reported including those with no significant results.



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 including those with no significant 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.



Criteria	JORC Code explanation	Commentary
Further work	<i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i>	RC drilling on a 50x50m regular grid across the Crossroads Prospect is underway.
	<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>	Maps including the location of samples taken are included in the body of this release.