

## MTRC032 ASSAYS - MATRIX SULPHIDE 6M AT 1.01% Ni 0.32% Cu

## **HIGHLIGHTS**

- Geochemical assay results received for Phase 2 RC holes MTRC030 to MTRC032 at Mulga Tank
- All holes show broad zones of nickel sulphide mineralisation elevated Ni and S coincident with highly anomalous Cu and PGE:

MTRC030 Cumulative 179m at 0.28% Ni, 126ppm Co, 41ppm Cu, 10ppb Pt+Pd with S:Ni 0.7

MTRC031 210m at 0.28% Ni, 137ppm Co, 104ppm Cu, 24ppb Pt+Pd with S:Ni 1.2

MTRC032 198m at 0.28% Ni, 145ppm Co, 249ppm Cu, 28ppb Pt+Pd from 108m S:Ni 1.6

 High-grade results from MTRC032 confirm visual observations and logging of matrix to semimassive sulphide with assay results:

MTRC032 198m at 0.28% Ni, 145ppm Co, 249ppm Cu, 28ppb Pt+Pd from 108m

inc. 3m at 0.60% Ni, 337ppm Co, 0.1% Cu, 44ppb Pt+Pd from 131m that inc. 1m at 1.08% Ni, 602ppm Co, 379ppm Cu, 83ppb Pt+Pd from 131m and inc. 11m at 0.40% Ni, 161ppm Co, 160ppm Cu, 57ppb Pt+Pd from 142m and inc. 6m at 1.01% Ni, 443ppm Co, 0.32% Cu, 0.12g/t Pt+Pd from 254m

- Several zones or pods of higher grade matrix-massive sulphide mineralisation discovered around the Complex are emerging as priority follow-up targets
- Phase 2 RC drilling aims to infill around the higher grade core area of JORC Exploration Target designed to de-risk, improve confidence and aid resource evaluation
- WMG continues to de-risk a potentially globally significant, large-scale, open-pitable nickel sulphide deposit at Mulga Tank

Western Mines Group Ltd (WMG or Company) (ASX:WMG) is pleased to update shareholders on geochemical assay results recently received for three Phase 2 reverse circulation (RC) drill holes MTRC030 to MTRC032 at the Mulga Tank Project, on the Minigwal Greenstone Belt, in Western Australia's Eastern Goldfields.

An initial 17 hole, 5,534m Phase 2 RC program has recently been completed at the project focused on infilling the higher grade core area identified by the Company's JORC Exploration Target modelling (ASX, 2024 Exploration Programs Commence at Mulga Tank, 29 January 2024; Completion of Phase 2 RC Drilling Commencing EIS3, 8 April 2024).

Assay results have been received for three further holes MTRC030 to MTRC032 which all highlight broad intersections of nickel sulphide mineralisation. MTRC032 is of particular interest with another continuous interval of 198m at 0.28% Ni, 145ppm Co from 108m (ending in mineralisation) that included 6m at 1.01% Ni, 0.32% Cu from 254m - confirming visual observations and logging of matrix to semi-massive sulphide.

## **Western Mines Group Ltd**

Telephone: +61 475 116 798
Email: contact@westernmines.com.au
www.westernmines.com.au

**Shares on Issue:** 75.08m **Share Price:** \$0.155 **Market Cap:** \$11.64m **Cash:** \$2.10m (31/12/23)

### ASX RELEASE | MTRC032 ASSAYS - MATRIX SULPHIDE 6M AT 1.01% Ni 0.32% Cu



These assay results from the Phase 2 program continue to validate the Company's approach of infill drilling the higher grade core area identified in the Phase 1 program. Assays from 10 of the 17 Phase 2 holes have been received to date with results from all 10 holes confirming the drilling was successful in targeting broad zones of shallow mineralisation.

Five of the Phase 2 holes show continuous mineralised intervals of ~200m or more - with recent results from hole MTRC031 returning 210m at 0.28% Ni, 137ppm Co, 104ppm Cu, 24ppb Pt+Pd from 87m with S:Ni 1.2 and MTRC032 returning 198m at 0.28% Ni, 145ppm Co, 249ppm Cu, 28ppb Pt+Pd from 108m with S:Ni 1.6 (MTRC032 ended in mineralisation).

Numerous intervals of interpreted nickel sulphide mineralisation based on geochemical signature (elevated Ni and S, in combination with highly anomalous Cu and PGE) were identified down the holes including:

MTRC030 70m at 0.30% Ni, 133ppm Co, 65ppm Cu, 20ppb Pt+Pd from 102m

inc. 20m at 0.41% Ni, 160ppm Co, 168ppm Cu, 39ppb Pt+Pd from 102m

110m at 0.26% Ni, 121ppm Co, 26ppm Cu, 3ppb Pt+Pd from 202m\*

inc. 5m at 0.40% Ni, 179ppm Co, 95ppm Cu, 9ppb Pt+Pd from 246m

Cumulative 179m at 0.28% Ni, 126ppm Co, 41ppm Cu, 10ppb Pt+Pd with S:Ni 0.7\*

MTRC031 210m at 0.28% Ni, 137ppm Co, 104ppm Cu, 24ppb Pt+Pd from 87m S:Ni 1.2

inc. 7m at 0.40% Ni, 159ppm Co, 124ppm Cu, 34ppb Pt+Pd from 100m

and inc. 6m at 0.40% Ni, 159ppm Co, 127ppm Cu, 0.15g/t Pt+Pd from 125m

and inc. 5m at 0.41% Ni, 179ppm Co, 219ppm Cu, 38ppb Pt+Pd from 141m

and inc. 5m at 0.40% Ni, 180ppm Co, 128ppm Cu, 33ppb Pt+Pd from 166m

and inc. 22m at 0.40% Ni, 140ppm Co, 179ppm Cu, 21ppb Pt+Pd from 215m

that inc. 3m at 0.49% Ni, 168ppm Co, 285ppm Cu, 57ppb Pt+Pd from 216m

and inc. 3m at 0.59% Ni, 198ppm Co, 455ppm Cu, 10ppb Pt+Pd from 229m

MTRC032 198m at 0.28% Ni, 145ppm Co, 249ppm Cu, 28ppb Pt+Pd from 108m S:Ni 1.6\*

inc. 3m at 0.60% Ni, 337ppm Co, 0.1% Cu, 44ppb Pt+Pd from 131m

that inc. 1m at 1.08% Ni, 602ppm Co, 379ppm Cu, 83ppb Pt+Pd from 131m

and inc. 11m at 0.40% Ni, 161ppm Co, 160ppm Cu, 57ppb Pt+Pd from 142m

and inc. 6m at 1.01% Ni, 443ppm Co, 0.32% Cu, 0.12g/t Pt+Pd from 254m

## Commenting on the RC assay results, WMG Managing Director Dr Caedmon Marriott said:

"Yet more great assay results from our Phase 2 RC program as we infill the higher grade core area and increase confidence in this zone. Holes MTRC031 and MTRC032 showed robust ~200m intervals of consistent nickel sulphide mineralisation highlighting what an extensive mineral system we are dealing with.

Most excitingly, the results confirm another zone of high grade mineralisation in hole MTRC032, returning 6m at 1.01% Ni and 0.32% Cu, validating visual logging of matrix to semi-massive sulphide. A number of these high grade pods/zones are starting to emerge as we increase drilling density and will no doubt become priority follow-up targets for richer massive sulphide deposits."

<sup>\*</sup> Ending in mineralisation



## **MULGA TANK RC DRILLING PROGRAM**

Exploration results from the Company's various drilling programs at the Mulga Tank Project over the last 12 months have demonstrated significant nickel sulphide mineralisation and an extensive nickel sulphide mineral system within the Mulga Tank Ultramafic Complex (ASX, MTD023 Assays Confirm Discovery of Significant Nickel Sulphide System, 5 April 2023; MTD026 Assays - 840m of Nickel Sulphide Mineralisation, 30 August 2023; MTD027 Expands Mineralisation 4km Across Mulga Tank, 28 August 2023).

Results from an initial 22 hole RC program confirmed extensive shallow disseminated nickel sulphide mineralisation within the main body of the Complex, culminating in the estimation of a JORC Exploration Target for this mineralisation (ASX, First RC Assays Show Broad Zones of Mineralisation, 14 November 2023; MTRC009 Assays Confirm 367m of Nickel Mineralisation, 30 November 2023; MTRC015 Assays Reveal Multiple Intersections Over 1% Ni, 4 December 2023; MTRC018 Assays Confirm Massive Sulphide 1.8% Ni, 4.9% Cu, 6 December 2023; First RC Without Mineralisation Found at Mulga Tank, 21 December 2023; More Intersections over 1% Ni at Mulga Tank, 11 January 2024; Mulga Tank JORC Exploration Target, 5 February 2024).

The Company has commenced a series of drilling programs for the first half of 2024 involving both further RC and diamond drilling. The Phase 2 RC drilling is focused on infilling the higher grade core of the Exploration Target and extending the shallow mineralisation to the south of the Phase 1 area (ASX, 2024 Exploration Programs Commence at Mulga Tank, 29 January 2024; Completion of Phase 2 RC Drilling Commencement of EIS3, 8 April 2024).

### HIGH MGO ADCUMULATE DUNITE

Assay results for MTRC030 averaged 45.4% MgO and 0.53%  $Al_2O_3$  (volatile free) over the 247m ultramafic portion of the hole, MTRC031 averaged 47.1% MgO and 0.52%  $Al_2O_3$  (volatile free) over 241m of ultramafic and MTRC032 averaged 47.1% MgO and 0.51%  $Al_2O_3$  (volatile free) over 241m of ultramafic. Using  $Al_2O_3$  as a proxy for interstitial material and MgO as a proxy for temperature, geochemical characterisation shows the host rock to be nearly entirely high-temperature, adcumulate to extreme adcumulate dunite with  $Al_2O_3$  generally between 0.1% and 0.5% and MgO greater than 40%.

This observation of extensive intersections of high MgO adcumulate dunite within the Complex, starting essentially immediately under the sand cover, has positive implications for the targeting of large volume, low grade Type 2 Mt-Keith style disseminated nickel sulphide deposits within the Mulga Tank Complex.

### **NICKEL SULPHIDE MINERALISATION**

Broad intersections of visible disseminated nickel sulphide mineralisation, grading up to semi-massive in some intersections, were observed and logged in the Phase 2 RC program (ASX, Semi-Massive Sulphide in Mulga Tank Phase 2 RC Holes, 29 February 2024).

In the absence of magmatic sulphide processes nickel is incorporated into olivine during crystallisation and essentially trapped within the dunite host rock. Whereas, in "live" sulphur saturated mineral systems the nickel will partition into potentially "recoverable" nickel sulphide form.



The Company uses a number of elements, such as Cu and PGE's (Pt and Pd), that have high affinity for sulphide (chalcophile), in combination with S (and the S:Ni ratio) as geochemical indicators to confirm the presence of active magmatic sulphide processes and the geochemical signature of nickel sulphide mineralisation.

The geochemical assay results for holes MTRC030 to MTRC032 demonstrate significant evidence for "live" magmatic sulphide chemical processes and show a number of broad zones of highly anomalous Cu and PGE's in combination with elevated S, and a S:Ni ratio greater than 0.5 (Figures 2 to 7).

These anomalous zones provide strong evidence for nickel sulphide mineralisation and were generally defined by a combination of the various geochemical indicators and cut-off grades (Ni >0.16%, Cu >20ppm, Pt+Pd >20ppb, S >0.1% and S:Ni >0.5), with only minimal inclusion of unmineralised material below mineable width.

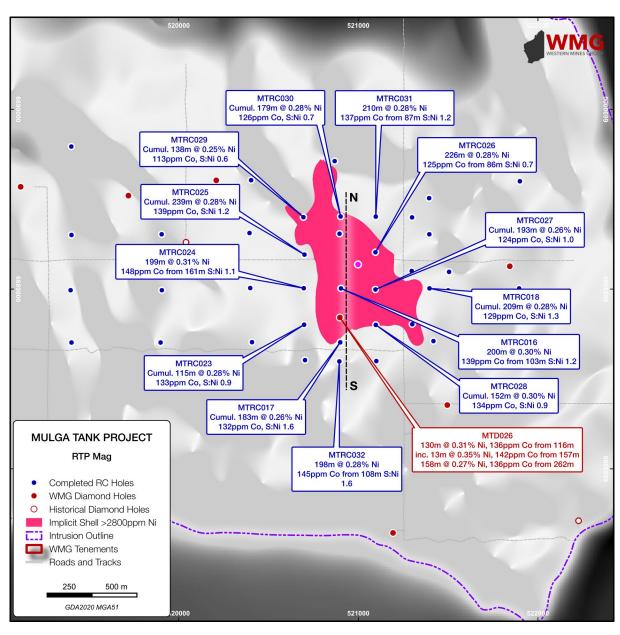


Figure 1: Phase 2 assay results for shallow disseminated nickel sulphide mineralisation around the core area



MTRC030 70m at 0.30% Ni, 133ppm Co, 65ppm Cu, 20ppb Pt+Pd from 102m

inc. 20m at 0.41% Ni, 160ppm Co, 168ppm Cu, 39ppb Pt+Pd from 102m

110m at 0.26% Ni, 121ppm Co, 26ppm Cu, 3ppb Pt+Pd from 202m\*

inc. 5m at 0.40% Ni, 179ppm Co, 95ppm Cu, 9ppb Pt+Pd from 246m

Cumulative 179m at 0.28% Ni, 126ppm Co, 41ppm Cu, 10ppb Pt+Pd with S:Ni 0.7\*

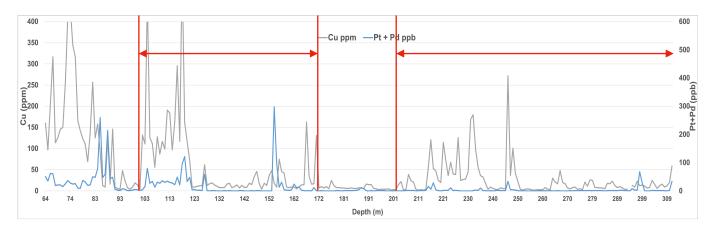


Figure 2: MTRC030 Cu and Pt+Pd

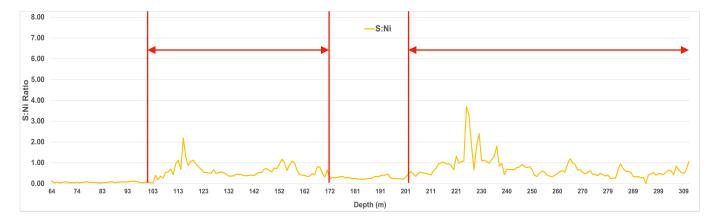


Figure 3: MTRC030 S:Ni Ratio

MTRC031 210m at 0.28% Ni, 137ppm Co, 104ppm Cu, 24ppb Pt+Pd from 87m S:Ni 1.2

inc. 7m at 0.40% Ni, 159ppm Co, 124ppm Cu, 34ppb Pt+Pd from 100m and inc. 6m at 0.40% Ni, 159ppm Co, 127ppm Cu, 0.15g/t Pt+Pd from 125m and inc. 5m at 0.41% Ni, 179ppm Co, 219ppm Cu, 38ppb Pt+Pd from 141m and inc. 5m at 0.40% Ni, 180ppm Co, 128ppm Cu, 33ppb Pt+Pd from 166m and inc. 22m at 0.40% Ni, 140ppm Co, 179ppm Cu, 21ppb Pt+Pd from 215m that inc. 3m at 0.49% Ni, 168ppm Co, 285ppm Cu, 57ppb Pt+Pd from 216m and inc. 3m at 0.59% Ni, 198ppm Co, 455ppm Cu, 10ppb Pt+Pd from 229m

<sup>\*</sup> Ending in mineralisation



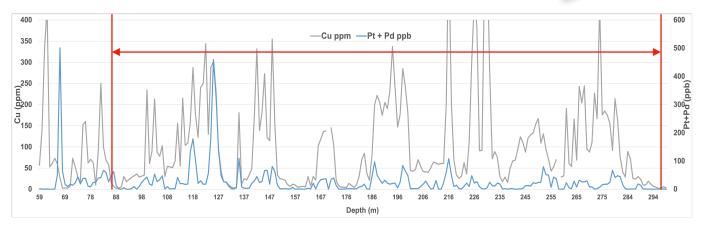


Figure 4: MTRC031 Cu and Pt+Pd



Figure 5: MTRC031 S:Ni Ratio

MTRC032 198m at 0.28% Ni, 145ppm Co, 249ppm Cu, 28ppb Pt+Pd from 108m S:Ni 1.6\*

inc. 3m at 0.60% Ni, 337ppm Co, 0.1% Cu, 44ppb Pt+Pd from 131m

that inc. 1m at 1.08% Ni, 602ppm Co, 379ppm Cu, 83ppb Pt+Pd from 131m

and inc. 11m at 0.40% Ni, 161ppm Co, 160ppm Cu, 57ppb Pt+Pd from 142m

and inc. 6m at 1.01% Ni, 443ppm Co, 0.32% Cu, 0.12g/t Pt+Pd from 254m

## \* Ending in mineralisation

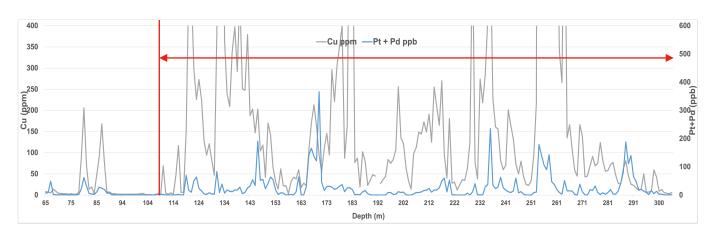


Figure 6: MTRC032 Cu and Pt+Pd



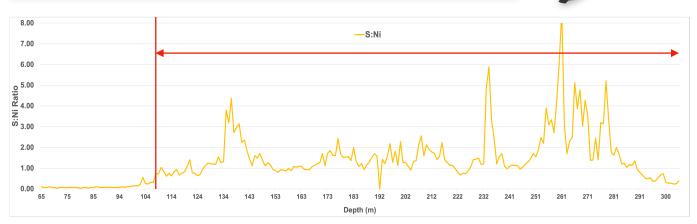


Figure 7: MTRC032 S:Ni Ratio

## **DISCUSSION**

These latest results from the Phase 2 RC program contain some very robust intersections of disseminated nickel sulphide mineralisation. Holes MTRC031 and MTRC032 in particular showed further intervals over ~200m widths, with S:Ni and chalcophile elements (Cu and PGE's) clearly highlighting strong mineralisation down the length of the holes (Figures 4 to 7).

MTRC032 is close to being one of the best holes drilled to date across the two phases of the RC program containing both strong disseminated mineralisation 198m at 0.28% Ni, 145ppm Co, 249ppm Cu, 28ppb Pt+Pd from 108m with S:Ni of 1.6 (ending in mineralisation) along with intersections of higher grade material confirming geological logging of matrix-semi massive sulphide (10-20% sulphide content) (ASX, Semi-Massive Sulphide in Mulga Tank Phase 2 RC Holes, 29 February 2024), returning 1m at 1.08% Ni from 131m and 6m at 1.01% Ni, 0.32% Cu from 254m. This hole was located on the very southern edge of the area tested to date, confirming mineralisation to certainly be open in this direction.

A number of holes across both the Phase 1 and Phase 2 RC, and diamond drilling programs have returned higher grade assay results between 1% to 4.5% Ni. These intervals have generally been logged as matrix to semi-massive sulphide in RC chips and/or zones of remobilised massive sulphide veining in diamond core. Relatively shallow results within the central core area of the Mulga Tank Complex include:

MTRC006	1m at 1.19% Ni, 424ppm Co, 234ppm Cu, 21ppb Pt+Pd from 277m
MTRC007	1m at 1.58% Ni, 574ppm Co, 708ppm Cu, 39ppb Pt+Pd from 197m
MTRC015	1m at 1.11% Ni, 379ppm Co, 0.45% Cu, 62ppb Pt+Pd from 172m 3m at 1.32% Ni, 516ppm Co, 0.10% Cu, 34ppb Pt+Pd from 184m 2m at 1.71% Ni, 836ppm Co, 0.10% Cu, 0.4g/t Pt+Pd from 229m
MTRC018	1m at 1.84% Ni, 0.10% Co, 4.88% Cu, 26ppb Pt+Pd from 293m
MTRC023	1m at 1.14% Ni, 455ppm Co, 232ppm Cu, 94ppb Pt+Pd from 220m
MTRC024 that inc.	1m at 1.28% Ni, 890ppm Co, 427ppm Cu, 37ppb Pt+Pd from 202m 3m at 2.19% Ni, 777ppm Co, 597ppm Cu, 9ppb Pt+Pd from 253m 1m at 4.51% Ni, 0.16% Co, 0.14%
MTRC032	1m at 1.08% Ni, 602ppm Co, 379ppm Cu, 83ppb Pt+Pd from 131m 6m at 1.01% Ni, 443ppm Co, 0.32% Cu, 0.12g/t Pt+Pd from 254m



MTD023
 1.5m at 1.88% Ni, 670ppm Co, 439ppm Cu, 76ppb Pt+Pd from 402m
 MTD026
 0.5m at 1.21% Ni, 490ppm Co, 0.15% Cu, 93ppb Pt+Pd from 116.5m
 0.3m at 1.88% Ni, 846ppm Co, 762ppm Cu, 0.21g/t Pt+Pd from 224.3m
 MTD027
 0.5m at 1.35% Ni, 379ppm Co, 107ppm Cu, 0.16g/t Pt+Pd from 504.5m

These results are distributed across the central area of the Complex, some of which can start to be correlated between drill holes over several hundreds of metres. The Company will look to target thicker intervals of this material with follow-up work - just a modest improvement in the width of these high grade intersections could really change the value proposition of the project.

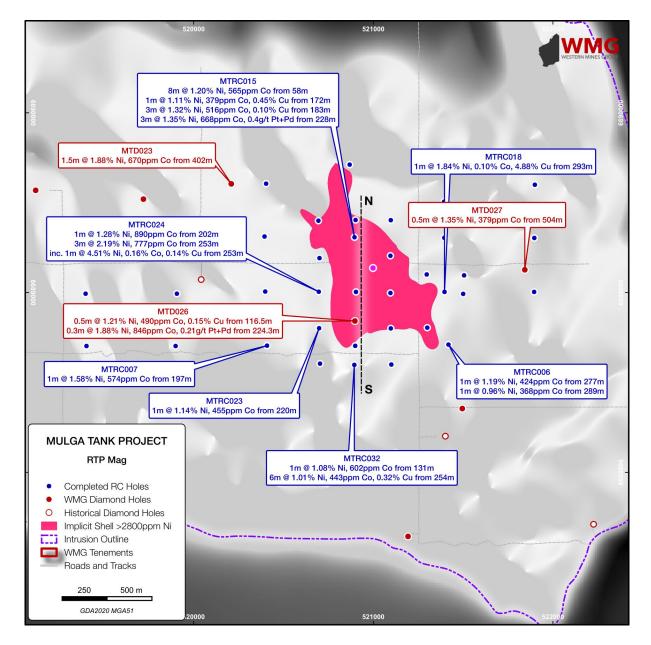


Figure 8: Higher-grade assay results over 1% Ni within the core of the Mulga Tank Ultramafic Complex



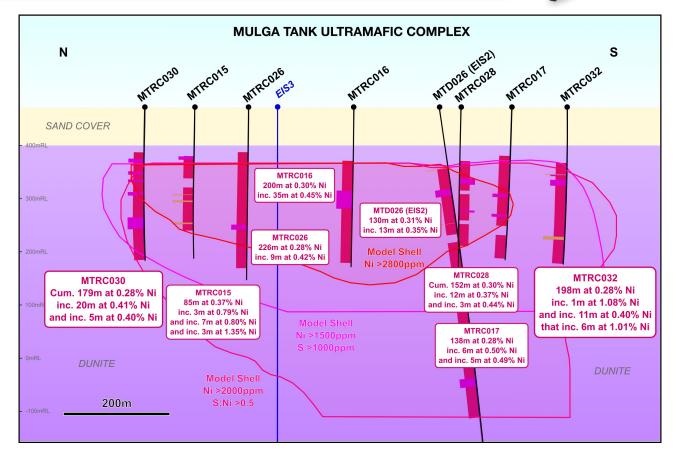


Figure 9: Cross section N-S through the Mulga Tank Ultramafic Complex

Exploration at the project continues to clearly show all the necessary geological processes are working to produce high-grade/high-tenor massive sulphide material and add further evidence that Mulga Tank is not just a Type 2 disseminated sulphide system and is more likely a Perseverance-style hybrid Type 1/2 system with a basal massive sulphide component.

The calculated nickel tenor of the matrix to semi-massive sulphide mineralisation, for example the interval 253-256m in hole MTRC024, was 23 weight % Ni, assuming a pyrrhotite, pentlandite, chalcopyrite sulphide assemblage (as visually logged). This is considered high tenor in komatiitic nickel systems and augurs well for the potential grade and tenor of any larger intersections of high grade massive sulphide mineralisation that could be discovered in the Mulga Tank Complex.

The Company looks forward to regularly updating shareholders on further assay results from the Phase 2 RC drilling program as they become available, along with the progress of deep diamond hole MTD029 (EIS3).

For further information please contact: Dr Caedmon Marriott

Managing Director
Tel: +61 475 116 798

Email: contact@westernmines.com.au

This announcement has been authorised for release to the ASX by Dr Caedmon Marriott, Managing Director



## **APPENDIX**

HoleID	From (m)	To (m)	Interval (m)	Ni (%)	Co (ppm)	Cu (ppm)	Pt + Pd (ppb)
MTRC030	102	172	70	0.30	133	65	20
	inc.102	122	20	0.41	160	168	39
MTRC030	202	312	110	0.26	121	26	3
	inc. 246	251	5	0.40	179	95	9
MTRC031	87 inc. 100 inc. 125 inc. 141 inc. 166 inc. 215 that in 216 inc. 229	297 107 131 146 172 237 219 232	210 7 6 5 6 22 3 3	0.28 0.40 0.40 0.41 0.40 0.40 0.49	137 159 159 179 180 140 168 198	107 124 127 219 128 179 285 455	25 34 147 38 33 21 57
MTRC032	108	306	198	0.28	145	249	28
	inc. 131	134	3	0.60	337	965	44
	<b>that inc. 131</b>	<b>132</b>	<b>1</b>	<b>1.08</b>	<b>602</b>	<b>379</b>	<b>83</b>
	inc. 142	153	11	0.40	161	160	57
	<b>inc. 254</b>	<b>260</b>	<b>6</b>	<b>1.01</b>	<b>443</b>	<b>3166</b>	<b>118</b>

Table 1: Significant intersections holes MTRC030 to MTRC032

HoleID	Easting (MGA51)	Northing (MGA51)	Total Depth (m)	Azimuth	Dip
MTRC030	520901	6689404	312	270	-70
MTRC031	521097	6689403	300	270	-70
MTRC032	520894	6688598	306	270	-70

Table 2: Collar details for holes MTRC030 to MTRC032



## **Western Mines Group Ltd**

ACN 640 738 834 Level 3, 33 Ord Street West Perth WA 6005

#### **Board**

**Rex Turkington** Non-Executive Chairman

**Dr Caedmon Marriott** Managing Director

Francesco Cannavo Non-Executive Director

Dr Benjamin Grquric Technical Director

### **Capital Structure**

Shares: 75.08m Options: 20.52m Share Price: \$0.155 Market Cap: \$11.64m Cash (31/12/23): \$2.10m

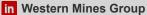
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### **ABOUT WMG**

Western Mines Group Ltd (ASX:WMG) is a mineral exploration company driven by the goal to create significant investment returns for our shareholders through exploration and discovery of high-value gold and nickel sulphide deposits across a portfolio of highlyprospective projects located on major mineral belts of Western Australia.

Our flagship project and current primary focus is the Mulga Tank Ni-Co-Cu-PGE Project, a major ultramafic complex found on the under-explored Minigwal Greenstone Belt. WMG's exploration work has discovered significant nickel sulphide mineral system and is considered highly prospective for globally significant Ni-Co-Cu-PGE deposits.

The Company's primary gold project is Jasper Hill, where WMG has strategically consolidated a 3km mineralised gold trend with walk-up drill targets. WMG has a diversified portfolio of other projects including Melita (Au, Cu-Pb-Zn), midway between Kookynie and Leonora in the heart of the WA Goldfields; Youanmi (Au), Pavarotti (Ni-Cu-PGE), Rock of Ages (Au), Broken Hill Bore (Au) and Pinyalling (Au, Cu, Li).

#### **COMPETENT PERSONS STATEMENT**

The information in this announcement that relates to Exploration Results and other technical information complies with the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code) and has been compiled and assessed under the supervision of Dr Caedmon Marriott, Managing Director of Western Mines Group Ltd. Caedmon is a Member of the Australian Institute of Geoscientists, a Member of the Society of Economic Geologists and a Member of the Australasian Institute of Mining and Metallurgy. He has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the JORC Code. Caedmon consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

### **DISCLAIMER**

Some of the statements appearing in this announcement may be in the nature of forward looking statements. You should be aware that such statements are only predictions and are subject to inherent risks and uncertainties. Those risks and uncertainties include factors and risks specific to the industries in which WMG operates and proposes to operate as well as general economic conditions, prevailing exchange rates and interest rates and conditions in the financial markets, among other things. Actual events or results may differ materially from the events or results expressed or implied in any forward looking statement. No forward looking statement is a guarantee or representation as to future performance or any other future matters, which will be influenced by a number of factors and subject to various uncertainties and contingencies, many of which will be outside WMG's control.

WMG does not undertake any obligation to update publicly or release any revisions to these forward looking statements to reflect events or circumstances after today's date or to reflect the occurrence of unanticipated events. No representation or warranty, express or implied, is made as to the fairness, accuracy, completeness or correctness of the information, opinions or conclusions contained in this announcement. To the maximum extent permitted by law, none of WMG, its Directors, employees, advisors or agents, nor any other person, accepts any liability for any loss arising from the use of the information contained in this announcement. You are cautioned not to place undue reliance on any forward looking statement. The forward looking statements in this announcement reflect views held only as at the date of this announcement.



## **MULGA TANK PROJECT**

## JORC CODE, 2012 EDITION - TABLE 1 SECTION 1: SAMPLING TECHNIQUES AND DATA

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <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> <li>Reverse circulation (RC) drilling was completed using standard industry best practice</li> <li>Individual 1m samples were collected directly from the rig sampling system. Samples were crushed and pulverised to produce a subsample for analysis by either multi-element ICP-AES (ME-ICP61 and ME-ICP41), precious metals fire assay (Au-AA25 or PGM-ICP23) and loss on ignition at 1,000°C (ME-GRA05)</li> </ul>
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).	Reverse circulation percussion drilling rig with a 5.25inch face sampling bit
Drill sample recovery	<ul> <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>	Standard drilling techniques using "best practice" to maximise sample recovery     Information not available to assess relationship between sample recovery and grade





Criteria	JORC Code explanation	Commentary
Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	Logging is to a level of detail sufficient to support a Mineral Resource estimation, though further information would be required
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all subsampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>Individual 1m samples were collected directly from the rig sampling system. Samples were crushed and pulverised to produce a subsample for analysis by either multi-element ICP-AES (ME-ICP61 and ME-ICP41), precious metals fire assay (Au-AA25 or PGM-ICP23) and loss on ignition at 1,000°C (ME-GRA05)</li> <li>Majority of samples were dry however some ground water was encountered and some samples were taken wet</li> <li>Industry standard sample preparation techniques were undertaken and considered appropriate for the sample type and material sampled</li> <li>The sample size is considered appropriate to the grain size of the material being sampled</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<ul> <li>Samples analysed by four-acid digest multi- element ICP-AES (ME-ICP61) or precious metals fire assay (Au-AA25 or PGM-ICP23) are considered total or near total techniques</li> <li>Samples analysed by aqua regia digest multi- element ICP-AES (ME-ICP41) is considered a partial technique of soluble sulphide</li> <li>Standards, blanks and duplicate samples were introduced through-out the sample collection on a 1:20 ratio to ensure quality control</li> <li>ALS also undertake duplicate analysis and run internal standards as part of their assay regime</li> </ul>
Verification of sampling and assaying	<ul> <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>	Ocris logging system on a laptop computer,  • Significant reported assay results were verified by multiple alternative company personnel

# ASX RELEASE | MTRC032 ASSAYS - MATRIX SULPHIDE 6M AT 1.01% Ni 0.32% Cu



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Criteria	JORC Code explanation	Commentary
Location of data points	<ul> <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> <li>Drill holes located using a handheld GPS with accuracy of +/-3m</li> <li>Downhole surveys were performed at collar and end of hole</li> <li>Coordinates are in GDA94 UTM Zone 51</li> </ul>
Data spacing and distribution	<ul> <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>	The drilling completed was reconnaissance in nature designed to test specific geological targets for first pass exploration purposes only
Orientation of data in relation to geological structure	<ul> <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>	The drilling was planned to be approximately perpendicular to the interpreted stratigraphy and mineralisation
Sample security	The measures taken to ensure sample security.	Samples were delivered to the laboratory by company personnel
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	<ul> <li>No audits or reviews of drilling sampling techniques or data by external parties at this stage of exploration</li> <li>Significant drilling intersections reviewed by company personnel</li> <li>An internal review of sampling techniques and data will be completed</li> </ul>

## **SECTION 2: REPORTING OF EXPLORATION RESULTS**

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>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.</li> <li>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.</li> </ul>	





Criteria	JORC Code explanation	Commentary
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>The geology of the project area is dominated by the irregular shaped Mulga Tank serpentinised metadunite intrusive body measuring ~5km x 5km, hosted within metasediments, mafic to felsic schists and foliated metagranite of the northwest trending Archean Minigwal Greenstone Belt</li> <li>Previous drilling intersected disseminated and narrow zones of massive nickel-copper sulphide mineralisation within the dunite intrusion</li> <li>The intrusion is concealed under variable thicknesses of cover (up to 70 m in places) with the interpretation of the bedrock geology based largely on aeromagnetic data and limited drilling</li> </ul>
Drill hole information	<ul> <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:</li> <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 hole length.</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> <li>A listing of the drill hole information material to the understanding of the exploration results provided in the body of this announcement</li> <li>The use of any data is recommended for indicative purposes only in terms of potential Ni-Cu-PGE mineralisation and for developing exploration targets</li> </ul>
Data aggregation methods	<ul> <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> <li>No metal equivalent values have been quoted</li> <li>Results where stated have been normalised to a volatile free sample based on the LOI at 1,000°C results using the formula M(VF) = M / (100%-LOI%)</li> </ul>

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Criteria	JORC Code explanation	Commentary
Relationship between mineralisation widths and intercept lengths	<ul> <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>	perpendicular to the mineralisation or stratigraphy
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.	Appropriate maps, photos and tabulations are presented in the 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.	<ul> <li>Reporting of significant intersections in Table 1</li> <li>Reporting of majority of all sample results on charts within the document</li> </ul>
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.	Not applicable
Further work	<ul> <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> <li>Future exploration planned includes further drill testing of targets identified</li> <li>Exploration is at an early stage and future drilling areas will depend on interpretation of results</li> </ul>