

## QUARTERLY ACTIVITIES REPORT DECEMBER 2023

### HIGHLIGHTS

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- Completion of Phase 2 diamond drilling and initial RC drilling at Mulga Tank Ni-Cu-PGE Project
- Exploration continues to confirm the discovery of an extensive working magmatic nickel sulphide mineral system with significant intersections of Type 2 Mt Keith-style disseminated mineralisation
- Best diamond drilling assay results to date received during the period:

MTD027 Cumulative 694m at 0.31% Ni, 141ppm Co, 68ppm Cu, 30ppb Pt+Pd with S:Ni 1.0

MTD028 Cumulative 466m at 0.35% Ni, 139ppm Co, 63ppm Cu, 43ppb Pt+Pd with S:Ni 1.0

Which included:

MTD028 140m at 0.49% Ni, 161ppm Co, 92ppm Cu, 61ppb Pt+Pd from 874m  
inc. 82m at 0.55% Ni, 173ppm Co, 114ppm Cu, 74ppb Pt+Pd from 886m

- Completion of 22 hole 7,035m RC drilling to test extent of shallow, potentially open-pitabile, nickel sulphide mineralisation over 2.5km x 1km area within the main body of the Complex
- RC assay results from 19 out of 20 holes received show broad zones of nickel sulphide mineralisation within the top ~300m including:

MTRC015 Cumulative 129m at 0.34% Ni, 156ppm Co, 163ppm Cu, 25ppb Pt+Pd with S:Ni 1.3

MTRC016 200m at 0.30% Ni, 139ppm Co, 92ppm Cu, 25ppb Pt+Pd from 103m S:Ni 1.2

- Successful EIS award of \$220,000 of Government co-funded exploration drilling at Mulga Tank
  - Consolidation of entire Mulga Tank Ultramafic Complex with bolt-on acquisition of neighbouring tenement E39/2134 from Dynamic Metals Ltd (ASX:DYM)
  - Capital raise of \$1,238,040 during the period to support and expand exploration at Mulga Tank
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Western Mines Group Ltd (WMG or Company) (ASX:WMG) is pleased to provide shareholders with the following Quarterly Activities Report, and accompanying Appendix 5B, for what has been another extremely productive quarter for the Company.

WMG's main focus for the period continued to be the flagship Mulga Tank Ni-Cu-PGE Project where results further validate the discovery of a major nickel sulphide mineral system. Assay results from holes MTD027 and MTD028 were received during the quarter, with these results being the best to date at the project (ASX, *MTD027 Best Assay Results Yet at Mulga Tank, 4 October 2023; MTD028 Disseminated Nickel Sulphide 140m at 0.49% Ni, 31 October 2023*).

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Shares on Issue: 67.57m

Share Price: \$0.19

Market Cap: \$12.84m

Cash: \$2.10m (31/12/23)

The results highlight multiple broad intersections of disseminated nickel sulphide mineralisation which cumulatively totalled:

<b>MTD027</b>	<b>694m at 0.31% Ni, 141ppm Co, 68ppm Cu, 30ppb Pt+Pd with S:Ni 1.0</b>
<b>MTD028</b>	<b>466m at 0.35% Ni, 139ppm Co, 63ppm Cu, 43ppb Pt+Pd with S:Ni 1.0</b>

Whilst the visible disseminated mineralisation, confirmed by assay results, clearly demonstrates extensive Type 2 Mt Keith-style nickel sulphide mineralisation, there is increasing evidence of a likely Type 1/2 hybrid nickel sulphide mineral system more akin to Perseverance-style mineralisation (basal massive sulphide component). This includes numerous examples of remobilised massive sulphide veinlets throughout the Complex, visible larger in-situ immiscible sulphide globules in hole MTD027 and assay results suggesting possible Perseverance-style heavily disseminated “cloud” sulphide at depth in the holes:

<b>MTD027</b>	<b>96m at 0.40% Ni, 161ppm Co, 99ppm Cu, 43ppb Pt+Pd from 1,208m</b>
	<b>inc. 38m at 0.56% Ni, 159ppm Co, 105ppm Cu, 65ppb Pt+Pd from 1,262m</b>
	<b>inc. 8m at 1.11% Ni, 181ppm Co, 143ppm Cu, 91ppb Pt+Pd from 1,270m</b>

During the quarter the Company also completed a 22 hole reverse circulation (RC) drilling program. This was the first drilling program designed to systematically test the lateral continuity of the shallow, uppermost zone of disseminated nickel sulphide mineralisation observed in the Company’s diamond holes MTD012, MTD022, MTD023, MTD026, MTD027 and MTD028 within the main body of the Mulga Tank Ultramafic Complex (ASX, *RC Drilling Program Commences at Mulga Tank, 20 September 2023; RC Drilling Expansion and Drilling for Equity, 17 October 2023; Completion of 7000m RC Drilling Program at Mulga Tank, 7 November 2023*).

The holes were spaced at approximately 500m x 300m and cover a 2,500m x 1,000m area across the centre of the Complex. Each hole was designed to a target depth of ~300m, which was achieved in all but three holes, for a total of 7,035.5m - of which the top ~60m of each hole, or 1,321m in total, was mud-rotary drilling through the sand cover.

With results from 20 of the 22 RC holes now received, the assays confirm the drilling was successful in targeting shallow mineralisation with cumulatively around ~50% of the samples from 19 of the holes showing mineralisation - with elevated Ni and S, in combination with highly anomalous Cu and PGE. This uppermost zone of disseminated mineralisation appears to be laterally very extensive and is certainly not constrained by the initial RC program.

At the beginning of the quarter the Company announced the acquisition of neighbouring tenement E39/2134 at Mulga Tank from Dynamic Metals Limited (ASX:DYM). This bolt-on acquisition consolidates the entire Mulga Tank Ultramafic Complex, now 100% owned by WGMG (ASX, *WGMG Consolidates Entire Mulga Tank Complex, 3 October 2023*). The acquisition consideration was \$20,000 cash, 100,000 ordinary shares, 200,000 options over ordinary shares and a 1% Net Smelter Royalty.

During October the Company successfully completed a capital raise of \$1,238,040 (before costs) through the issue of 4,421,571 new fully paid ordinary shares at an issue price of \$0.28 per share in order to support and expand exploration at Mulga Tank (ASX, *Capital Raise to Advance Mulga Tank Project, 25 October 2023*).

The Company also completed a \$250,000 drilling-for-equity deal with Blue Spec Drilling Pty Ltd (ASX, *RC Drilling Expansion and Drilling for Equity, 17 October 2023*).

Limited exploration work was undertaken on the Company's other projects during the period whilst the Company focused on the various Mulga Tank exploration programs.

## PROJECT OVERVIEW

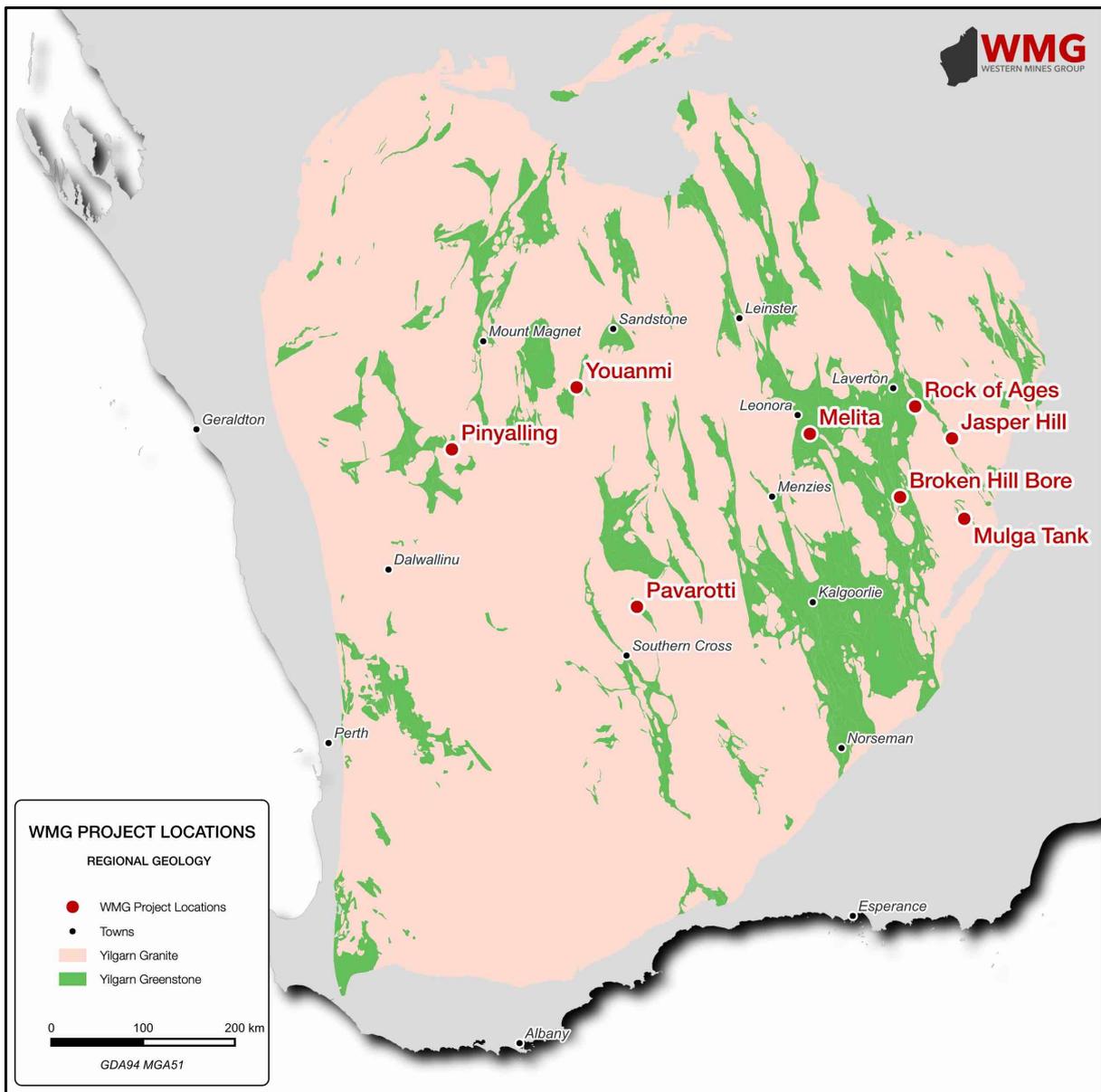


Figure 1: Map of WMG project locations

## MULGA TANK

The Mulga Tank Project comprises exploration licences E39/2132, E39/2134 and E39/2223 and exploration licence application E39/2299, covering the Minigwal Greenstone Belt, 190km east-northeast of Kalgoorlie. The Minigwal Greenstone Belt is a NNW trending linear sequence of predominantly mafic and ultramafic lithologies; it is very under explored due to the presence of shallow sand cover and presents a “frontier” exploration opportunity for major Ni-Cu-PGE and orogenic gold deposits.

WMG has been undertaking continuous drilling programs at the Mulga Tank Project since November 2022, with exciting exploration results demonstrating 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*).

A second multipurpose RC drill rig completed a systematic shallow drilling program across the centre of the main body of the Complex during the period looking to build on these results to date (*ASX, RC Drilling Program Commences at Mulga Tank, 20 September 2023; Completion of 7000m RC Drilling Program at Mulga Tank, 7 November 2023*).

### RECENT DIAMOND DRILLING RESULTS

Diamond holes MTD027 and MTD028 were completed during the previous quarter (*ASX, MTD027 Expands Mineralisation 4km Across Mulga Tank, 28 August 2023; MTD028 Further Nickel Sulphides at Mulga Tank, 2 October 2023*) with geochemical assay results received during the current quarter (*ASX, MTD027 Best Assay Results Yet at Mulga Tank, 4 October 2023; MTD028 Disseminated Nickel Sulphide 140m at 0.49% Ni, 31 October 2023*).

Hole MTD027 is located on the eastern side of the Mulga Tank Complex in an area that has had no previous drilling. The hole was designed to test a coincident gravity and magnetic high, a minor MLEM anomaly, and for the presence of nickel sulphide mineralisation in this area.

The hole was drilled to a total depth of 1,662.3m, the deepest hole drilled at the project, and intersected ~1,500m of variably serpentinised and talc-carbonate altered high MgO meso to adcumulate dunite ultramafic (84-1,630.9m), beneath 84m of sand cover (0-84m), before encountering a footwall of basalt and silicified shales at 1,630.9m depth (1,630.9-1,662.3m).

The dunite was divided by an approximately ~39m thick dolerite unit (728-766.8m) that most likely represents a later dyke/sill. This dolerite unit is becoming something of a marker horizon and was seen at a nearly identical depth and thickness in holes MTD023 (EIS1) (~1.7km to WNW) and MTD026 (EIS2) (~1km to WSW).

Disseminated magmatic sulphides (trace to 2%) were observed at numerous intervals down the hole, starting from around 216m depth. In a number of places the disseminated sulphides coalesced into interstitial blebs (3 to 5% sulphide) between former olivine crystals.

Frequent intersections of high-tenor in-situ nickel sulphide globules and remobilised massive nickel sulphide veinlets were also observed down the length of the hole. A number of good examples of high-grade nickel sulphide material filling fractures in the rock were seen, including shallow examples in the top 200m of the hole.

This is a very positive observation, in a new previously undrilled area, and opens up the eastern margin in the search for massive sulphide sources or deposits within the Complex (Perseverance-style basal massive sulphide) and not just limited to the western margin where previously encountered.

Hole MTD028 is located on the western side of the Mulga Tank Complex between previous holes MTD022 and MTD023 (EIS1). The hole was designed to test the continuity of mineralisation between these holes, possible association of mineralisation with magnetic highs and also further test the large *W Conductor* EM anomaly at depth.

The hole was drilled to a total depth of 1,107.5m and intersected ~950m of variably serpentinised and talc-carbonate altered high MgO meso to adcumulate dunite ultramafic (75-1,040.3m), beneath 75m of sand cover (0-75m), before encountering the usual footwall assemblage of black shale, basalt and silicified shales at 1,040.3m depth (1,040.3-1,107.5m).

The upper ~300m of the dunite was divided by three basalt-dolerite dykes/sills (one larger ~30m and two smaller <5m). These may correspond to the dolerite unit seen at around ~730m depth in holes MTD023 (EIS1), MTD026 (EIS2) and MTD027 but in a shallower position. The western portion of the Complex is interpreted to be fractured into fault blocks and these may be relatively uplifted versus the eastern portion of the Complex.

Disseminated magmatic sulphides (trace to 2%) were observed at numerous intervals down the hole, starting from around 138m depth. In a number of places the disseminated sulphides coalesced into interstitial blebs (3 to 5% sulphide) between former olivine crystals.

A number of intersections of high-tenor remobilised massive nickel sulphide veinlets were also observed in the deeper portion of the hole, similar to those seen in surrounding holes MTD012, MTD013, MTD022 and MTD022W1, and MTD023 (EIS1). This continues to confirm the basal contact of the Complex to be highly prospective for massive sulphide accumulations.

Overall hole MTD028 showed similarities with the two neighbouring holes MTD022 (~600m to the W) and MTD023 (EIS1) (~500m to the WSW). Similar intersections of disseminated sulphides were observed to MTD023 (EIS1) occurring in four broad zones, though visible mineralisation was perhaps somewhat masked by the structural overprint in this area and the presence of the shallow later stage basalt-dolerite dykes/sills. A number of examples of remobilised massive sulphide veinlets were logged in the deeper portion of the hole furthering confirming the prospectivity of the basal contact of the Complex for massive sulphide accumulations.

### **DIAMOND GEOCHEMICAL ASSAY RESULTS**

Assay results for holes MTD027 and MTD028 were received during the period (*ASX, MTD027 Best Assay Results Yet at Mulga Tank, 4 October 2023; MTD028 Disseminated Nickel Sulphide 140m at 0.49% Ni, 31 October 2023*). The results show prospective high-temperature adcumulate-extreme adcumulate dunite host rock down the length of both holes, averaging 48.4% MgO, 0.25% Al<sub>2</sub>O<sub>3</sub> (volatile free), over a cumulative 1,501m for MTD027 and 47.9% MgO, 0.35% Al<sub>2</sub>O<sub>3</sub> (volatile free), over a cumulative 935m for MTD028.

Multiple broad intersections of disseminated nickel mineralisation with elevated Ni and S, in combination with highly anomalous Cu and PGE, show strong evidence for an extensive “live” magmatic nickel sulphide mineral system, and confirm the visual observations. Significant mineralised intersections include:

**MTD027** 64m at 0.27% Ni, 133ppm Co, 55ppm Cu, 17ppb Pt+Pd from 122m  
 38m at 0.32% Ni, 154ppm Co, 114ppm Cu, 44ppb Pt+Pd from 210m  
 30m at 0.34% Ni, 157ppm Co, 112ppm Cu, 46ppb Pt+Pd from 290m  
 100m at 0.32% Ni, 136ppm Co, 49ppm Cu, 30ppb Pt+Pd from 430m  
 118m at 0.29% Ni, 136ppm Co, 60ppm Cu, 25ppb Pt+Pd from 578m  
 130m at 0.24% Ni, 127ppm Co, 81ppm Cu, 22ppb Pt+Pd from 894m  
 96m at 0.40% Ni, 161ppm Co, 99ppm Cu, 43ppb Pt+Pd from 1,208m  
 inc. 38m at 0.56% Ni, 159ppm Co, 105ppm Cu, 65ppb Pt+Pd from 1,262m  
 inc. 8m at 1.11% Ni, 181ppm Co, 143ppm Cu, 91ppb Pt+Pd from 1,270m  
 78m at 0.36% Ni, 139ppm Co, 40ppm Cu, 30ppb Pt+Pd from 1,450m  
 40m at 0.33% Ni, 151ppm Co, 18ppm Cu, 37ppb Pt+Pd from 1,556m

Which cumulatively total:

**694m at 0.31% Ni, 141ppm Co, 68ppm Cu, 30ppb Pt+Pd**

And:

**MTD028** 16m at 0.31% Ni, 139ppm Co, 16ppm Cu, 19ppb Pt+Pd from 134m  
 30m at 0.30% Ni, 124ppm Co, 10ppm Cu, 15ppb Pt+Pd from 158m  
 20m at 0.27% Ni, 116ppm Co, 29ppm Cu, 21ppb Pt+Pd from 219m  
 24m at 0.27% Ni, 111ppm Co, 23ppm Cu, 21ppb Pt+Pd from 282m  
 120m at 0.32% Ni, 137ppm Co, 65ppm Cu, 44ppb Pt+Pd from 410m  
 116m at 0.27% Ni, 127ppm Co, 59ppm Cu, 39ppb Pt+Pd from 630m  
 140m at 0.49% Ni, 161ppm Co, 92ppm Cu, 61ppb Pt+Pd from 874m  
 inc. 82m at 0.55% Ni, 173ppm Co, 114ppm Cu, 74ppb Pt+Pd from 886m

Which cumulatively total:

**466m at 0.35% Ni, 139ppm Co, 63ppm Cu, 43ppb Pt+Pd with S:Ni 1.0**

Whilst the visible disseminated mineralisation, confirmed by assay results, clearly demonstrates extensive Type 2 Mt Keith-style nickel sulphide mineralisation, there is increasing evidence of a likely Type 1/2 hybrid nickel sulphide mineral system more akin to Perseverance-style mineralisation (basal massive sulphide component). This includes numerous examples of remobilised massive sulphide veinlets throughout the Complex, visible larger in-situ immiscible sulphide globules in hole MTD027 and assay results suggesting possible Perseverance-style heavily disseminated "cloud" sulphide at depth in the holes:

**MTD027** 1.0m at 1.05% Ni, 290ppm Co, 111ppm Cu, 110ppb Pt+Pd from 504m

**MTD027** 96m at 0.40% Ni, 161ppm Co, 99ppm Cu, 43ppb Pt+Pd from 1,208m  
 inc. 38m at 0.56% Ni, 159ppm Co, 105ppm Cu, 65ppb Pt+Pd from 1,262m  
 inc. 8m at 1.11% Ni, 181ppm Co, 143ppm Cu, 91ppb Pt+Pd from 1,270m



## RC DRILLING PROGRAM

During the quarter the Company also completed a 22 hole reverse circulation (RC) drilling program. This was the first drilling program designed to systematically test the lateral continuity of the shallow, uppermost zone of disseminated nickel sulphide mineralisation observed in the Company's diamond holes MTD012, MTD022, MTD023, MTD026, MTD027 and MTD028 within the main body of the Mulga Tank Ultramafic Complex (ASX, *RC Drilling Program Commences at Mulga Tank, 20 September 2023*; *RC Drilling Expansion and Drilling for Equity, 17 October 2023*; *Completion of 7000m RC Drilling Program at Mulga Tank, 7 November 2023*).

The holes were spaced at approximately 500m x 300m and cover a 2,500m x 1,000m area across the centre of the Complex. Each hole was designed to a target depth of ~300m, which was achieved in all but three holes, for a total of 7,035.5m - of which the top ~60m of each hole, or 1,321m in total, was mud-rotary drilling through the sand cover.

Geochemical assay results have now been received for 20 of the 22 initial RC holes (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*). Of these 20 holes, 19 holes demonstrate significant evidence for "live" magmatic sulphide chemical processes and nickel sulphide mineralisation. Zones of mineralisation 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.

A summary of the RC assay results announced to date are listed below:

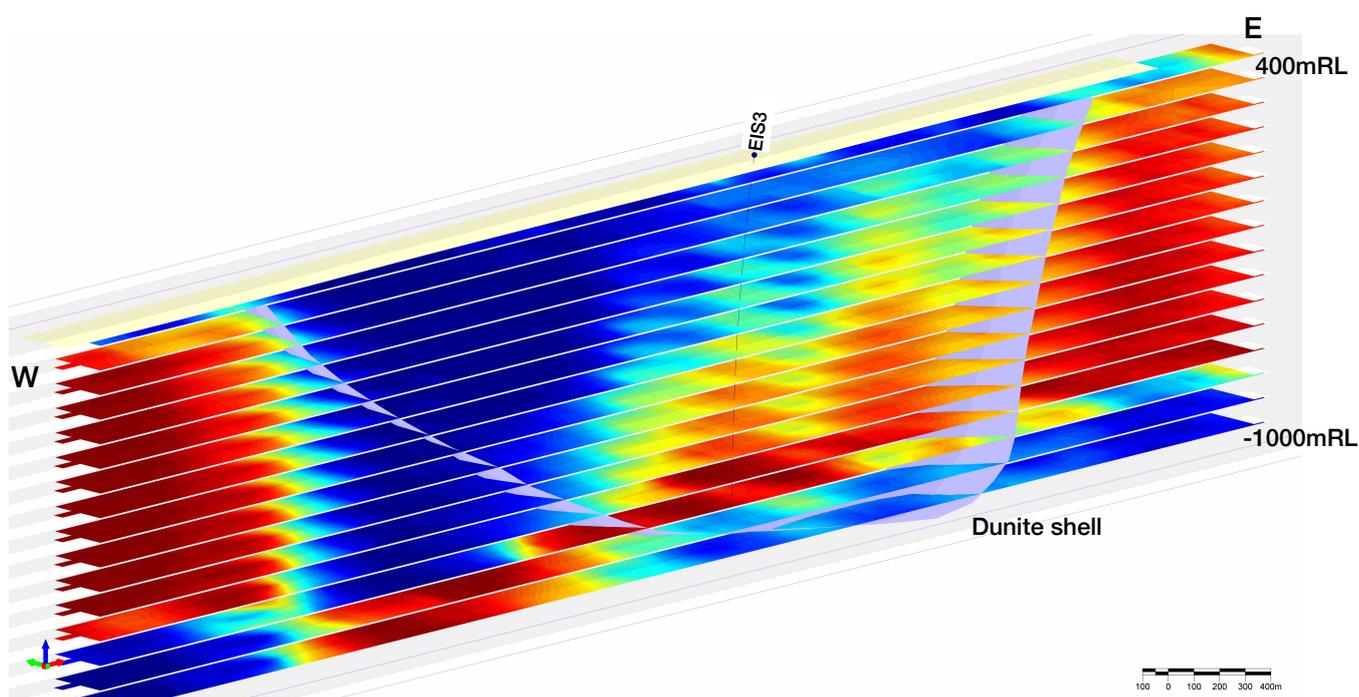
MTRC001	Cumulative	253m at 0.24% Ni, 128ppm Co, 76ppm Cu, 27ppb Pt+Pd with S:Ni 1.4
MTRC002	Cumulative	111m at 0.31% Ni, 136ppm Co, 69ppm Cu, 37ppb Pt+Pd with S:Ni 0.7
MTRC003	Cumulative	175m at 0.26% Ni, 114ppm Co, 18ppm Cu, 19ppb Pt+Pd with S:Ni 0.6
MTRC004		No significant mineralisation
MTRC005	Cumulative	164m at 0.26% Ni, 134ppm Co, 114ppm Cu, 20ppb Pt+Pd with S:Ni 1.3*
MTRC006	Cumulative	159m at 0.29% Ni, 125ppm Co, 29ppm Cu, 12ppb Pt+Pd with S:Ni 0.6*
MTRC007	Cumulative	168m at 0.29% Ni, 125ppm Co, 29ppm Cu, 12ppb Pt+Pd with S:Ni 1.0*
MTRC008	Cumulative	91m at 0.24% Ni, 122ppm Co, 53ppm Cu, 15ppb Pt+Pd with S:Ni 1.1
MTRC009	Cumulative	367m at 0.26% Ni, 133ppm Co, 74ppm Cu, 25ppb Pt+Pd with S:Ni 1.3
MTRC010	Cumulative	106m at 0.25% Ni, 119ppm Co, 25ppm Cu, 15ppb Pt+Pd with S:Ni 1.0
MTRC011	Cumulative	110m at 0.24% Ni, 128ppm Co, 75ppm Cu, 26ppb Pt+Pd with S:Ni 1.9
MTRC012	Cumulative	190m at 0.22% Ni, 124ppm Co, 68ppm Cu, 21ppb Pt+Pd with S:Ni 1.8
MTRC013	Cumulative	149m at 0.29% Ni, 131ppm Co, 42ppm Cu, 30ppb Pt+Pd with S:Ni 1.0
MTRC014	Cumulative	158m at 0.26% Ni, 121ppm Co, 37ppm Cu, 20ppb Pt+Pd with S:Ni 0.5
MTRC015	Cumulative	129m at 0.34% Ni, 156ppm Co, 163ppm Cu, 25ppb Pt+Pd with S:Ni 1.3
MTRC016		200m at 0.30% Ni, 139ppm Co, 92ppm Cu, 25ppb Pt+Pd from 103m S:Ni 1.2
MTRC017	Cumulative	183m at 0.26% Ni, 132ppm Co, 165ppm Cu, 16ppb Pt+Pd with S:Ni 1.6
MTRC018	Cumulative	209m at 0.28% Ni, 129ppm Co, 381ppm Cu, 18ppb Pt+Pd with S:Ni 1.3*
MTRC019		186m at 0.28% Ni, 135ppm Co, 78ppm Cu, 22ppb Pt+Pd from 90m S:Ni 1.2
MTRC020	Cumulative	220m at 0.28% Ni, 132ppm Co, 112ppm Cu, 18ppb Pt+Pd with S:Ni 1.1*

\* Ending in mineralisation



The Company received final 3D inversion modelling results during the period and this exciting new dataset is progressively being used in the Company's systematic exploration strategy - combined with the Company's existing 3D datasets, such as magnetics, gravity and the extensive geological information gained from the recent deep EIS holes.

One of the first uses of the MobileMT dataset has been in the exact planning and drilling targeting of the Company's next EIS co-funded deep diamond hole EIS3 (ASX, *2024 Exploration Programs Commence at Mulga Tank, 29 January 2023*). This hole will look to test for a sulphide enriched keel in the deepest part of the Complex, based on the Company's previous deep diamond drilling, and also tests a compelling coincident MobileMT anomaly around -700m RL, near the basal contact.



**Figure 5: Stacked depth slices of MobileMT conductivity showing drill trace of EIS3 and outline dunite shell of the Mulga Tank Complex**

### **CONSOLIDATION OF THE ENTIRE MULGA TANK ULTRAMAFIC COMPLEX**

At the beginning of the quarter WGM entered into a binding agreement to acquire 100% of neighbouring tenement E39/2134 held by Dynamic Metals (ASX:DYM), contiguous to the Company's current Mulga Tank project area. The acquisition expands WGM's project area to 425km<sup>2</sup>, covering approximately 37km strike and the entire under explored Minigwal Greenstone Belt (ASX, *WGM Consolidates Entire Mulga Tank Complex, 3 October 2023*).

Acquisition consideration of \$20,000 cash, 100,000 fully paid ordinary shares in the Company, 200,000 options over ordinary shares (with an exercise price of \$0.60 per share, exercisable 3 years from the date of issue) and a 1% Net Smelter Royalty. The acquisition was completed in November following shareholder approval for the issue of shares and options at the Company's AGM (ASX, *Results of Annual General Meeting, 21 November 2023*).

The new ground contains a number of interpreted ultramafic bodies thought to represent potential komatiite channels emanating from the main Mulga Tank dunite intrusion. These interpreted ultramafic bodies have never been drill tested but are very likely extensions of the komatiite sequences drilled by WMG in the *Panhandle* area of the Mulga Tank Complex. WMG’s recent holes MTD016 and MTD024 and historical hole MTD006 show these komatiite sequences contain evidence for high-grade nickel sulphide mineralisation (ASX, *First Assay Results Confirm Ni-Cu-PGE Mineralisation, 15 August 2022*) and could potentially host Kambalda-style massive nickel sulphide deposits. These komatiite channels are interpreted to extend through the new tenement E39/2134 and up into WMG’s northern tenement application E39/2299 (Figure 6).

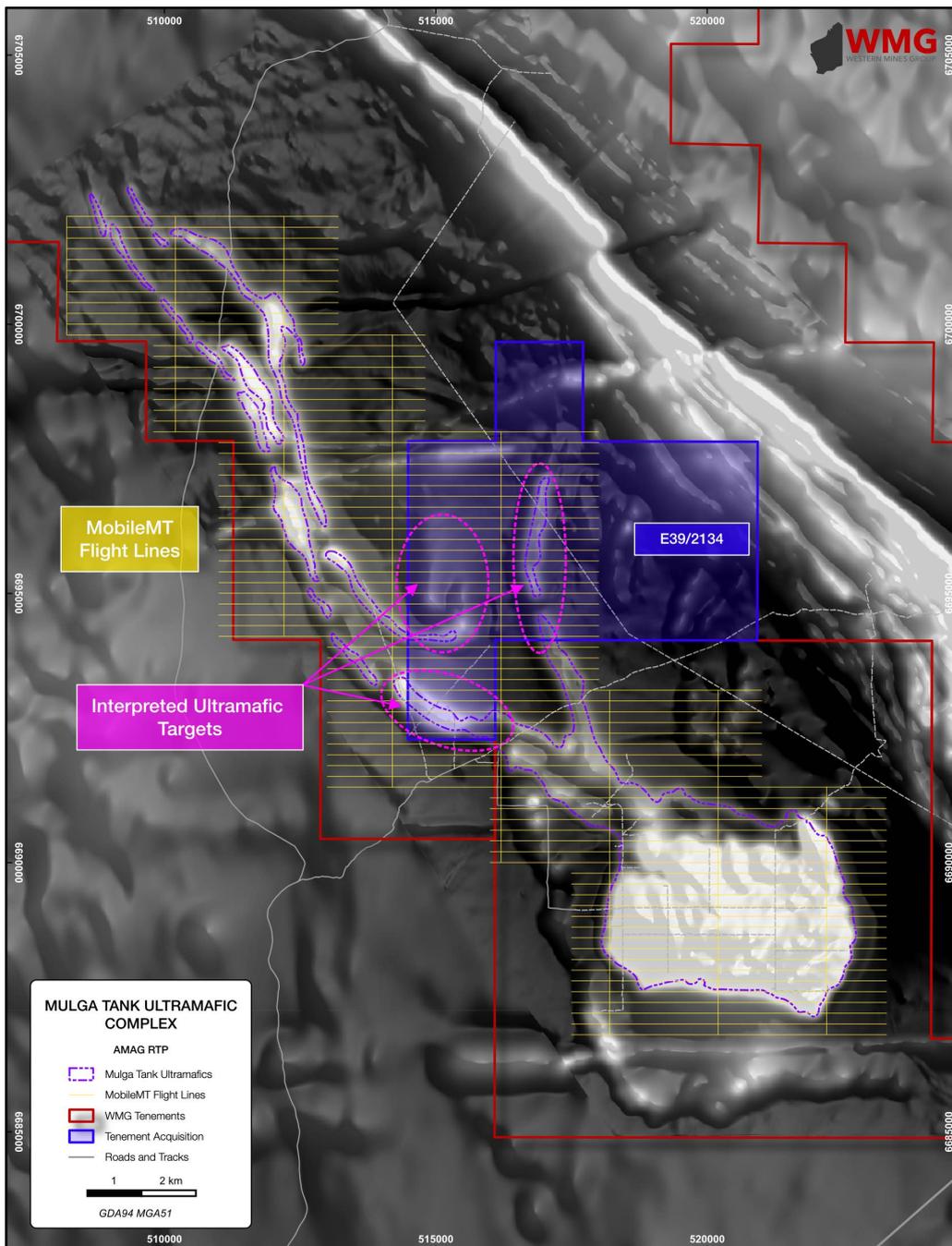


Figure 6: Mulga Tank acquisition of tenement E39/2134

## **DISCUSSION**

It was another great quarter and remarkable calendar year 2023 for the Company. Having demonstrated a major nickel sulphide mineral system at Mulga Tank with our first EIS hole MTD023 April, the Company backed this up with progressively better results from MTD026 (EIS2) and a further deep holes MTD027 and MTD028. Combined, the drilling to date at the project highlights an extensive magmatic nickel sulphide mineral system within the Mulga Tank Ultramafic Complex. Significant Type 2 Mt Keith-style disseminated nickel sulphide mineralisation has been demonstrated across the majority of the main body of the Complex, over some ~4km.

The 22 RC hole program, over an area of approximately 2,500m x 1,000m, was clearly very successful in confirming the continuity of the broad intervals of shallow disseminated nickel sulphide mineralisation, within the top 300 vertical metres. Very interesting higher grade results are emerging in the central part of the main body.

This shallow mineralisation could potentially be amenable to large scale open pit mining, especially considering the top 50-70m of sand cover is essentially “free-dig”, easily removable overburden. The Company is in the process of modelling all the drilling results to date at the project with the aim of producing a JORC Exploration Target for this shallow disseminated Mt Keith-style mineralisation.

Whilst the Company continues to de-risk the extensive shallow disseminated mineralisation, there is increasing evidence of a likely Type 1/2 hybrid nickel sulphide mineral system more akin to Perseverance-style mineralisation (basal massive sulphide component). This includes numerous examples of remobilised massive sulphide veinlets throughout the Complex, visible larger in-situ immiscible sulphide globules in hole MTD027 and assay results suggesting possible Perseverance-style heavily disseminated “cloud” sulphide at depth in the holes. This considerably enhances the prospectivity of the project and the Company will continue investigating this aspect of the Company with further diamond drilling, including co-funded deep diamond hole EIS3.

## **JASPER HILL**

The Jasper Hill Project comprises exploration licences E39/2073, E39/2079 and prospecting licence application P39/6267. The project is located approximately 80km southeast of Laverton and covers part of the poorly exposed Merolia Greenstone Belt, a NNW trending belt, up to 20km wide, that can be traced over 110km in a SSE direction from the Burtville Mining Centre. The project area is lightly explored, due to being partly under shallow cover, but is contiguous to the historical producing mines of Lord Byron (160,000oz at 1.0g/t Au) and Fish (87,000oz at 4.1g/t Au).

Jasper Hill is the Company’s primary gold project containing a mineralised gold trend over 3km strike. The Company has completed field reconnaissance work involving geological mapping, high-resolution ground magnetic survey and locating historical drill collars significant aboriginal heritage sites. The Company plans to complete a litho-structural interpretation and drill targeting work, to advance the project ready for an initial RC drilling program.

The Company engaged remote sensing specialists Earthscan Pty Ltd to complete satellite based remote sensing work over the project area, using ASTER multispectral imagery. This work focused on mapping alteration signatures of possible gold targets. Numerous new and existing alteration targets were identified by the work which will be ground-truthed during the next field visit.

During the period the Company reached agreement on industry standard access agreements with neighbouring miscellaneous licence holders in order to proceed with the grant of prospecting licence application P39/6267 and standard access agreements across the project area.

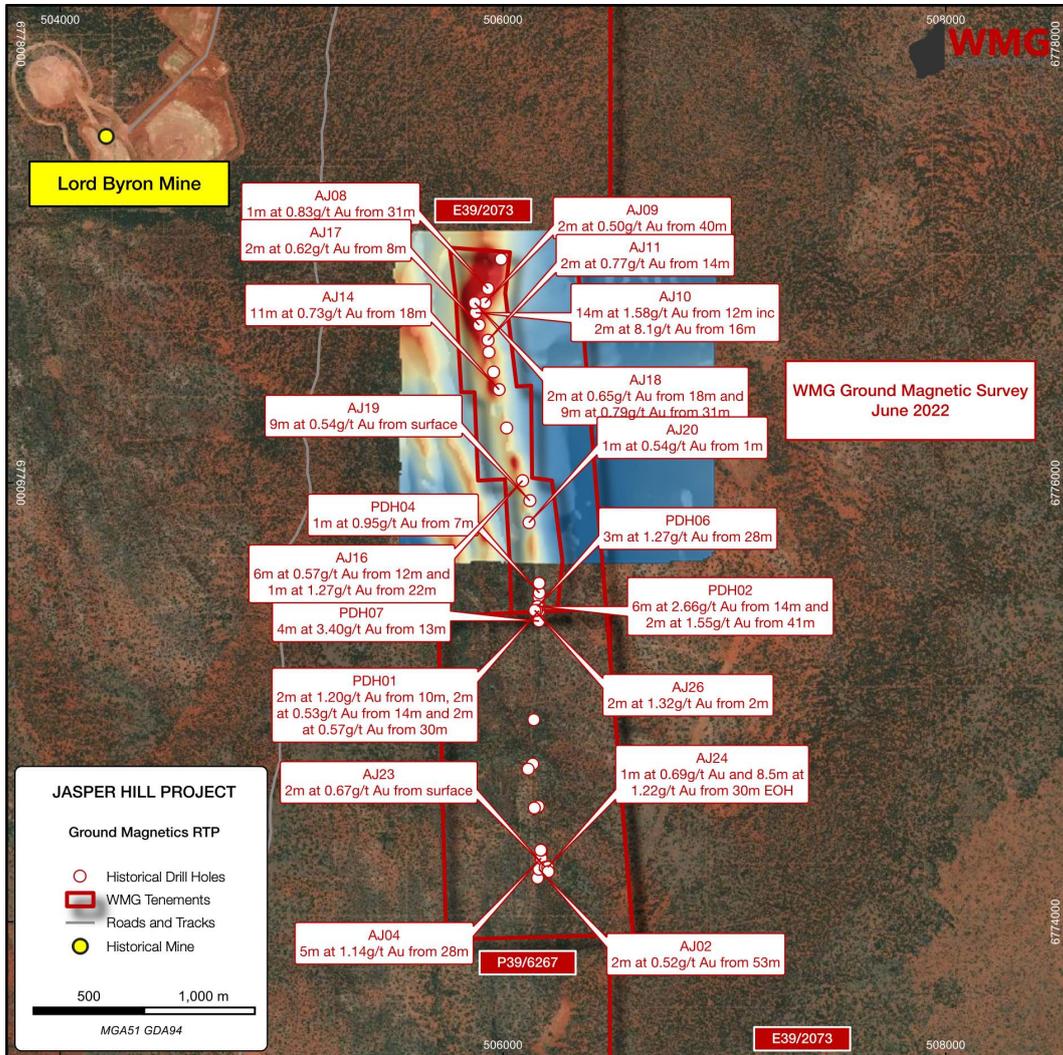


Figure 7: WMG ground magnetic survey and significant historical drill intersections (E39/2073 and P39/6267)

## PINYALLING

The Pinyalling Project comprises exploration licence E59/2486 covering 55km<sup>2</sup>. The project is located approximately 25km NW of Paynes Finds and lies at the south-eastern end of the Yalgoo-Singleton Greenstone Belt, within an area known as the Warriedar Fold Belt that comprises a folded sequence of gabbro and dolerite intercalated with basalt, ultramafics, sediments and BIF. The Warriedar Fold Belt hosts a number of historic gold workings at the Pinyalling Mining Centre, 3km north of the tenement area, as well as the Baron Rothschild prospect drilled by Thundelarra Exploration during the 1990s.

The Company engaged remote sensing specialists Earthscan Pty Ltd to complete satellite based remote sensing work over the project area, using ASTER multispectral imagery. This work was principally focused on mapping pegmatite sequences that could potentially host lithium mineralisation.

The Company notes the upswing in lithium focused exploration in the area at Golden State Mining’s (ASX:GSM) nearby Paynes Find Lithium Project (ASX:GSM, *Lithium Exploration and Drilling Update, 22 December 2022; Pegmatite Dykes Identified at Paynes Find, 8 November 2023*).

During the quarter, the Company completed an initial field reconnaissance visit to the project area to ground-truth targets identified by the remote sensing work. A number of sub-cropping and outcropping pegmatites were encountered and sampled. In general the tenement area contained a lot more remnant greenstone belt lithologies than the simple granitic terrane shown on the GSWA geological mapping of the area. These possible extensions of the nearby Warriedar Fold Belt increase the gold potential of the project area than first thought.



Figure 7: Example of outcropping pegmatite at the Pinyalling Project



Figure 8: Example of sub-cropping pegmatite at the Pinyalling Project

## PAVAROTTI

The Pavarotti Project comprises exploration licence E77/2478 and exploration licence application E77/2746. The project is located approximately 50km north-northeast of Southern Cross and lies on the western side of the Koolyanobbing Greenstone Belt, a northwest trending sequence of mafic and ultramafic volcanic and intrusive rocks with lesser sediments intercalated with BIF horizons forming prominent ridges. The BIF horizons have been exploited since the 1960s, with several open pit iron ore mines that are currently owned by Mineral Resources (ASX:MIN).

Historical rock chip samples from Jock's Fury show anomalous results of up to **0.74% Ni, 0.11% Cu and 0.22g/t Pt+Pd over 140m strike**. BHP drilled several shallow holes at Jocks Fury in the late 1960's including **H202 intersecting 4.6m at 1.28% Ni, 597ppm Cu, 293ppm Co** from 42.7m to the end of hole (EOH) and **H273 intersecting 16.8m at 0.78% Ni, 360ppm Cu, 285ppm Co** from 12.2m, including **3.1m at 1.60% Ni, 865ppm Cu, 700ppm Co** from 24.4m.

No exploration work was done on the project during the quarter. The Company continues to wait on the grant of tenement application E77/2746, containing Jock's Fury, in order to commence exploration.

## YOUANMI

The Youanmi Project comprises exploration licence E57/1119. The project is located 70km southwest of Sandstone and lies on the eastern side of the Youanmi Greenstone Belt, along the major Youanmi Shear.

The tenement is located 7km from the historic Youanmi Gold Mining Centre, which has produced over 600,000oz of gold since its discovery in the late 1800's, currently owned by Rox Resources (ASX:RXL) and Venus Metals (ASX:VMC). The area has seen a resurgence in exploration activity with the recent discovery of the high-grade Penny North (ASX:RMS) and Grace (ASX:RXL) deposits along the Youanmi Shear.

A site visit for field reconnaissance and a high-resolution ground magnetic survey were completed during previous quarter. Data from this fieldwork fed into a review of the project. Based on the review, the Company took the decision to surrender prospecting licence P57/1450 during the quarter end but will maintain exploration licence E39/1119.

## MELITA

The Melita Project comprises exploration licence E40/379, covering an area of approximately 105km<sup>2</sup>. The project is located 20km south-southeast of Leonora and to the north of the Kookynie, Niagara and Orient Well-Butterfly gold mining centres, in the heart of the WA Goldfields. The Kookynie area has seen recent upswing in exploration activity, with WMG's Melita Project surrounded by the likes of Genesis Minerals (ASX:GMD), Saturn Metals (ASX:STN), Azure Minerals (ASX:AZS), KIN Mining (ASX:KIN) and the recently listed Mt Malcolm Mines (ASX:M2M) and Iris Metals (ASX:IR1).

The Company notes the increase in M&A activity around the Leonora-Kookynie area and undertook a review of the project, including soil geochemical and ground magnetic data collected during a series of WMG field campaigns (*ASX, Major Field Program Commences at Melita, 11 August 2021; Completion of Initial Field Program at Melita, 16 September 2021*).

## ROCK OF AGES

The Rock of Ages Project comprises prospecting licence P38/4203 and is located approximately 32km southeast of Laverton. The project lies on the Laverton Greenstone Belt, around 4.5km south of the historical Burtville Mining Centre. The tenement contains the historical Rock of Ages workings, a series of shallow mine workings over approximately 600m strike, associated with quartz veining and ferruginous cherts, within felsic volcanic schists. Historical records indicate 2,074oz Au was mined from the workings between 1902 and 1911 at an average grade of 50g/t Au.

No exploration work was done on the project during the quarter.

## BROKEN HILL BORE

The Broken Hill Bore Project comprises exploration licence E31/1222 and is located approximately 160km northeast of Kalgoorlie, near Edjudina. The Edjudina region hosts a number of significant gold deposits such as Northern Star's (ASX:NST) Carosue Dam Project, the Edjudina Gold Camp, 9km south of the project and the Patricia workings along strike. The Yarri and Porphyry Gold Camps are located in the Murrin Domain 18km to the west and the Deep South Deposits in the Linden Domain to the north east.

No exploration work was done on the project during the quarter.

**For further information please contact:**

Dr Caedmon Marriott  
Managing Director  
Tel: +61 475 116 798  
Email: [contact@westernmines.com.au](mailto:contact@westernmines.com.au)

*This announcement has been authorised for release to the ASX by the Board of Western Mines Group Ltd*

## QUARTERLY ACTIVITY REPORTS BY MINING EXPLORATION ENTITIES ASX LISTING RULE 5.3

### ASX LISTING RULE 5.3.1 - EXPLORATION ACTIVITIES

Exploration and Evaluation during the quarter was \$573,471, a decrease from the previous quarter as the Phase 2 diamond drilling program at Mulga Tank was completed. Major items of expenditure were the Mulga Tank diamond drilling, core cutting and geochemical assay costs and initial RC drilling program.

### ASX LISTING RULE 5.3.2 - MINING PRODUCTION AND DEVELOPMENT ACTIVITIES

No mining production or development activities during the quarter.

### ASX LISTING RULE 5.3.3 - TENEMENT TABLE

Tenement	Holder	Status	Grant (Application)	Expiry	Area	Interest
E31/1222	Western Mines Group Ltd	Granted	09/09/20	08/09/25	1BL	100%
P38/4203	Western Mines Group Ltd	Granted	12/01/21	28/12/24	9.71Ha	100%
E39/2073	Thomas Williams Neelesh Bhasin	Granted	07/06/19	06/06/24	14BL	100%
E39/2079	Bruce Legendre	Granted	28/07/21	27/07/26	11BL	100%
E39/2132	Western Mines Group Ltd	Granted	22/07/20	21/07/25	27BL	100%
E39/2134	Western Mines Group Ltd	Granted	13/08/21	12/08/26	10BL	100%
E39/2223	Western Mines Group Ltd	Granted	8/3/23	7/3/28	11BL	100%
E39/2299	Western Mines Group Ltd	Application	(05/11/21)	-	95BL	100%
P39/6267	Western Mines Group Ltd	Application	(28/07/21)	-	119Ha	100%
E40/379	Western Mines Group Ltd	Granted	03/04/19	02/04/24	35BL	100%
E57/1119	Western Mines Group Ltd	Granted	04/12/19	03/12/24	4BL	100%
E59/2486	Western Mines Group Ltd	Granted	18/03/22	17/03/27	15BL	100%
E77/2478	Western Mines Group Ltd	Granted	24/01/19	23/01/24	5BL	100%
E77/2746	Bruce Legendre	Application	(03/12/20)	-	1BL	100%

**Tenement Table:** Tenements held at quarter end, all tenements located in Western Australia.

**Tenements relinquished during the quarter:** P57/1450

**Tenements interests acquired during the quarter:** E39/2134

**Farm-in or farm-out agreements entered into during the quarter:** None

**Beneficial interests held in farm-in or farm-out agreements at end of quarter:** N/A

**ASX LISTING RULE 5.3.5 - PAYMENTS TO RELATED PARTIES**

Payments to related parties of the entity and their associates are shown below:

Related Party	Amount	Description
Directors	\$113,253	Director fees and salaries
Directors	\$2,072	Exploration services paid to Director related entities

**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 Grguric**  
*Technical Director*

**Capital Structure**

Shares: 67.57m  
 Options: 20.12m  
 Share Price: \$0.19  
 Market Cap: \$12.84m  
 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 highly-prospective 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.

## Appendix 5B

### Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Name of entity

Western Mines Group Ltd

ABN

59 640 738 834

Quarter ended ("current quarter")

31 December 2023

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (6 months) \$A'000
<b>1. Cash flows from operating activities</b>		
1.1 Receipts from customers		
1.2 Payments for		
(a) exploration & evaluation		
(b) development		
(c) production		
(d) staff costs	(108)	(193)
(e) administration and corporate costs	(142)	(280)
1.3 Dividends received (see note 3)		
1.4 Interest received	19	45
1.5 Interest and other costs of finance paid		
1.6 Income taxes paid		
1.7 Government grants and tax incentives		
1.8 Other (provide details if material)		
<b>1.9 Net cash from / (used in) operating activities</b>	<b>(231)</b>	<b>(428)</b>

<b>2. Cash flows from investing activities</b>		
2.1 Payments to acquire or for:		
(a) entities		
(b) tenements	(22)	(22)
(c) property, plant and equipment		(58)
(d) exploration & evaluation	(573)	(1,987)
(e) investments		
(f) other non-current assets		

<b>Consolidated statement of cash flows</b>	<b>Current quarter \$A'000</b>	<b>Year to date (6 months) \$A'000</b>
2.2 Proceeds from the disposal of:		
(a) entities		
(b) tenements		
(c) property, plant and equipment		
(d) investments		
(e) other non-current assets		
2.3 Cash flows from loans to other entities		
2.4 Dividends received (see note 3)		
2.5 Other (provide details if material)		194
<b>2.6 Net cash from / (used in) investing activities</b>	<b>(595)</b>	<b>(1,873)</b>

2.5 relates to a government grant received in relation to exploration expenditure incurred.

<b>3. Cash flows from financing activities</b>		
3.1 Proceeds from issues of equity securities (excluding convertible debt securities)	1,163	1,163
3.2 Proceeds from issue of convertible debt securities		
3.3 Proceeds from exercise of options		75
3.4 Transaction costs related to issues of equity securities or convertible debt securities	(105)	(105)
3.5 Proceeds from borrowings		
3.6 Repayment of borrowings		
3.7 Transaction costs related to loans and borrowings		
3.8 Dividends paid		
3.9 Other (provide details if material)		
<b>3.10 Net cash from / (used in) financing activities</b>	<b>1,058</b>	<b>1,133</b>

<b>4. Net increase / (decrease) in cash and cash equivalents for the period</b>		
4.1 Cash and cash equivalents at beginning of period	1,872	3,272
4.2 Net cash from / (used in) operating activities (item 1.9 above)	(231)	(428)
4.3 Net cash from / (used in) investing activities (item 2.6 above)	(595)	(1,873)
4.4 Net cash from / (used in) financing activities (item 3.10 above)	1,058	1,133

Appendix 5B

**Mining exploration entity or oil and gas exploration entity quarterly cash flow report**

<b>Consolidated statement of cash flows</b>		<b>Current quarter \$A'000</b>	<b>Year to date (6 months) \$A'000</b>
4.5	Effect of movement in exchange rates on cash held		
<b>4.6</b>	<b>Cash and cash equivalents at end of period</b>	<b>2,104</b>	<b>2,104</b>

<b>5.</b>	<b>Reconciliation of cash and cash equivalents</b> at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	<b>Current quarter \$A'000</b>	<b>Previous quarter \$A'000</b>
5.1	Bank balances	1,304	372
5.2	Call deposits	800	1,500
5.3	Bank overdrafts		
5.4	Other (provide details)		
<b>5.5</b>	<b>Cash and cash equivalents at end of quarter (should equal item 4.6 above)</b>	<b>2,104</b>	<b>1,872</b>

<b>6.</b>	<b>Payments to related parties of the entity and their associates</b>	<b>Current quarter \$A'000</b>
6.1	Aggregate amount of payments to related parties and their associates included in item 1	113
6.2	Aggregate amount of payments to related parties and their associates included in item 2	2

*Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments.*

6.1 Includes payment of directors fees, salaries and superannuation and investor relations fee paid to a directors

6.2 Includes payment of exploration expenditure to director related entities.

## Mining exploration entity or oil and gas exploration entity quarterly cash flow report

<b>7. Financing facilities</b>	<b>Total facility amount at quarter end \$A'000</b>	<b>Amount drawn at quarter end \$A'000</b>
<i>Note: the term "facility" includes all forms of financing arrangements available to the entity.</i>		
<i>Add notes as necessary for an understanding of the sources of finance available to the entity.</i>		
7.1 Loan facilities	-	-
7.2 Credit standby arrangements	-	-
7.3 Other (please specify)	-	-
7.4 <b>Total financing facilities</b>	-	-
7.5 <b>Unused financing facilities available at quarter end</b>		-
7.6	Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.	

<b>8. Estimated cash available for future operating activities</b>	<b>\$A'000</b>
8.1 Net cash from / (used in) operating activities (item 1.9)	(231)
8.2 (Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	(573)
8.3 Total relevant outgoings (item 8.1 + item 8.2)	(804)
8.4 Cash and cash equivalents at quarter end (item 4.6)	2,104
8.5 Unused finance facilities available at quarter end (item 7.5)	-
8.6 Total available funding (item 8.4 + item 8.5)	2,104
8.7 <b>Estimated quarters of funding available (item 8.6 divided by item 8.3)</b>	2.62
<i>Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3, answer item 8.7 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.7.</i>	
8.8 If item 8.7 is less than 2 quarters, please provide answers to the following questions:	
8.8.1 Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?	
Answer: N/A	
8.8.2 Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?	
Answer: N/A	

## Mining exploration entity or oil and gas exploration entity quarterly cash flow report

8.8.3 Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?

Answer: N/A

Note: where item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 above must be answered.

## Compliance statement

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

31 January 2024

Date: .....

The Board of Western Mines Group Ltd

Authorised by: .....  
(Name of body or officer authorising release – see note 4)

## Notes

1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, *AASB 6: Exploration for and Evaluation of Mineral Resources* and *AASB 107: Statement of Cash Flows* apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee – eg Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.