

MTD022 MINERALOGICAL WORK CONFIRMS ABUNDANT PENTLANDITE

HIGHLIGHTS

- Four samples from recent Phase 2 hole MTD022 taken for sulphide species identification
 - Mineralogical work confirms abundant high-tenor disseminated pentlandite mineralisation with minimal pyrrhotite and pyrite observed
 - Further evidence for an extensive “live” magmatic nickel sulphide mineral system with a significant “footprint” across the Mulga Tank Ultramafic Complex
 - Assay results for hole MTD022 anticipated during February
 - Drilling of Phase 2 hole EIS1 still in progress at >900m depth after several delays due to rig issues
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Western Mines Group Ltd (WMG or Company) (**ASX:WMG**) is pleased to update shareholders on the results of mineralogical investigation work completed on samples from recent Phase 2 hole MTD022 at the Mulga Tank Ni-Cu-PGE Project, on the Minigwal Greenstone Belt, in Western Australia’s Eastern Goldfields.

Phase 2 hole MTD022 (and wedge MTD022W1) was drilled to a depth of 647.1m and intersected a ~506m thick package of high MgO adcumulate dunite ultramafic containing disseminated magmatic sulphides (trace to 2%) that in places coalesced into interstitial blebs (3 to 5% sulphide) (*ASX, Nickel Sulphide Mineralisation Seen in Hole MTD022, 14 December 2022*). The disseminated sulphides started from ~120m downhole. Towards the end of the hole, near the basal contact of the complex, three intersections of high-tenor remobilised massive nickel sulphide were observed (confirmed by spot pXRF readings).

Four samples of core were collected from different depths down the hole and prepared for mineralogical section analysis and identification of sulphide species present. Results of this work confirms the presence abundant high-tenor disseminated pentlandite in the samples, with little-to-no pyrrhotite and pyrite observed. This has very positive implications for the potential of an extensive working mineral system for Type 2 Mt Keith-style disseminated nickel sulphide mineralisation. Combined with observations from previous holes there is evidence of a significant mineralisation “footprint” across the Mulga Tank Ultramafic Complex.

Commenting on the mineralogical work, WMG Managing Director Dr Caedmon Marriott said:

“Technical Director Dr Ben Grguric has helped complete further thin section work which confirms abundant pentlandite through-out the system - both as disseminated interstitial blebs and in remobilised veins. The results continue to show evidence for an extensive working magmatic nickel sulphide mineral system throughout the Mulga Tank Ultramafic Complex.”

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Shares on Issue: 49.05m
Share Price: \$0.17
Market Cap: \$8.34m
Cash: \$2.57m (31/12/22)

MINERALOGICAL INVESTIGATION WORK

WGM has recently completed mineralogical thin section work to help characterise the rock types and sulphide species observed in Phase 2 diamond drill hole MTD022. This work has been led by the Company’s Technical Director Dr Ben Grguric.

HOLE MTD022

The hole was drilled to a depth of 558.5m before the drill rods became stuck in broken ground. The drilling largely confirmed WGM’s geological modelling work with the hole intersecting 474.2m of variably serpentinised and talc-carbonate altered high MgO adcumulate dunite ultramafic (from 84.3-558.5m), beneath 84.3m of sand cover (0-84.3m).

A wedge was inserted in hole MTD022 at 460.1m depth and the hole was extended to a total depth of 647.1m; the deepest hole ever drilled at the Mulga Tank Project. Variably serpentinised and talc-carbonate altered adcumulate dunite ultramafic was intersected (460.5-588.7m) before the basal contact with the footwall consisting of basalt and interbedded cherts and shales (588.7-647.1m) at 588.7m depth.

Disseminated magmatic sulphides (trace to 2%) were observed down the majority of the hole, starting from around 120m depth. In places the disseminated sulphides coalesced into interstitial blebs (3 to 5% sulphide) between olivine crystals (ASX, *Nickel Sulphide Mineralisation Seen in Hole MTD022, 14 December 2022*). Four samples of core were taken and prepared for polished section from a range of depths down the hole (120.15m, 279.15m, 337.1m and 446m) with descriptions given in Table 1 below.



Figures 1A and 1B: Photo showing examples of visible disseminated sulphides in hole MTD022 with disseminated sulphide forming interstitial blebs between olivine grains

Note: core is NQ2 being 2 inches or 50mm diameter

SULPHIDE IDENTIFICATION

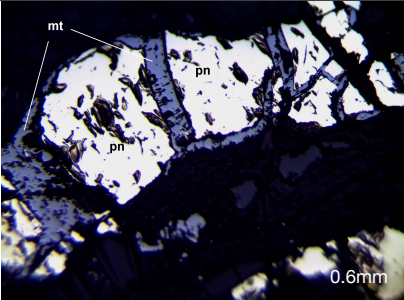
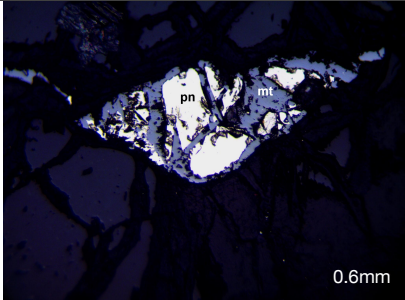
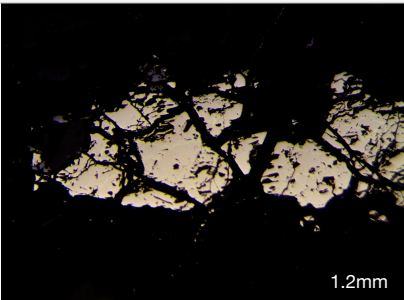
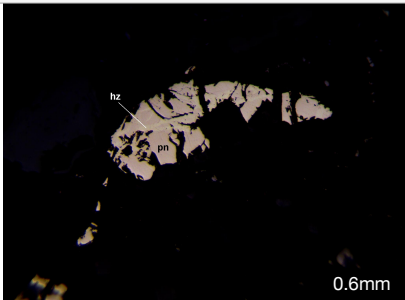
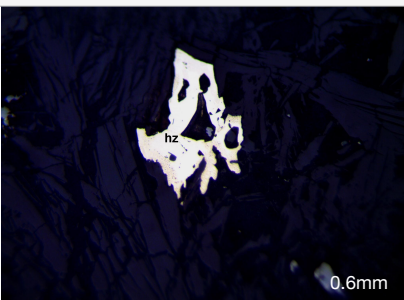
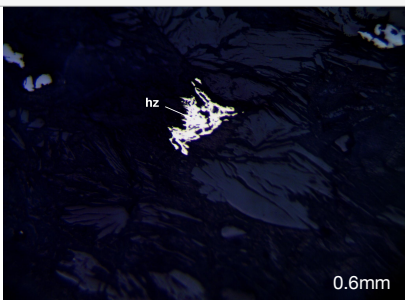
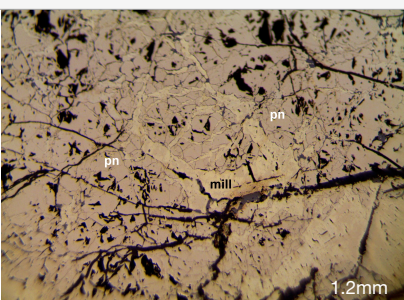
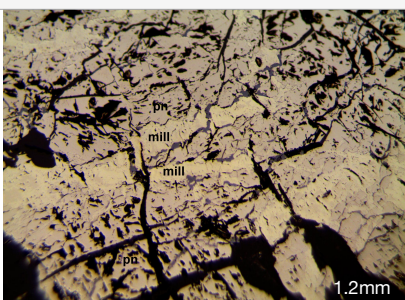
Hole MTD022 Mineralogical Investigation			
			
120.15m: Abundant pentlandite blebs with the usual magnetite rims and crossbars			
			
279.15m: Moderately abundant pentlandite with microveinlets of heazlewoodite. No magnetite rims.			
			
337.1m: Sparse sulphide blebs which are predominantly heazlewoodite.			
			
446m: Very coarse sulphide blebs in ultramafic. Blebs consist of pentlandite with veinlets of millerite and minor magnetite.			

Table 1: Polished section descriptions for hole MTD022
 (pn=pentlandite, mill=millerite, hz=heazlewoodite, mt=magnetite)
 Field of view either 1.2mm or 0.6mm

Overall, the sulphide component of the MTD022 samples examined is dominated by relatively coarse pentlandite blebs suggesting a high tenor assemblage which would likely yield a high-grade nickel concentrate.

The observation of abundant pentlandite, with minimal amounts of other sulphide species, such as pyrrhotite and pyrite, is positive for the potential of the Mulga Tank complex to host an extensive working mineral system for Type 2 Mt Keith-style disseminated nickel sulphide mineralisation.

WMG is greatly encouraged by the results of the exploration work to date and the potential of the Mulga Tank Ultramafic Complex to host multiple nickel sulphide deposits. The Company looks forward to the ongoing results of the Phase 2 drilling program and will update shareholders on significant news flow as the program progresses.

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

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Capital Structure

Shares: 49.05m
Options: 21.85m
Share Price: \$0.17
Market Cap: \$8.34m
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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-Cu-PGE Project, a major dunite intrusive found on the under-explored Minigwal Greenstone Belt. Previous work shows significant evidence for a working sulphide mineral system and is considered highly prospective for Ni-Cu-PGE mineralisation.

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.

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