

WESTERN MINES GROUP

AN EMERGING NICKEL SULPHIDE DISCOVERY UNDER COVER

EAST COAST NON-DEAL ROADSHOW
BRISBANE-SYDNEY-MELBOURNE
20-22 SEPTEMBER 2023

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Western Mines Group



ASX: **WMG**
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COMPETENT PERSON STATEMENT

Dr Caedmon Marriott who is a member of the Australasian Institute of Mining and Metallurgy, the Australian Institute of Geoscientists and the Society of Economic Geologists, is Managing Director of the Company. Caedmon has sufficient experience that is relevant to the styles of mineralisation and type of deposits under consideration, and to the activity being undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Caedmon consents to the inclusion in this presentation of the matters based on his information in the form and context in which it appears.

MONETARY VALUES

Unless otherwise stated, all dollar values are in Australian Dollars (A\$). The information in this presentation remains subject to change without notice.

A SMALL COMPANY WITH A BIG PROJECT



WESTERN MINES GROUP COMPANY OVERVIEW

- High-impact exploration focused on Ni-Cu-PGE and Au
- 8 projects all located in Western Australia
- **Flagship Mulga Tank Ni-Cu-PGE Project** - major komatiite nickel system undercover

- Compelling valuation and risk vs reward
- Tight capital structure - **exceptionally leveraged to exploration success**
- Recent expansion of drilling program with both RC and diamond in progress

- Experienced and successful board and management – exploration team lead by WA nickel expert Dr Ben Grguric

“An exploration driven company looking to create value through discovery”

10x

Western Mines Group Ltd	ASX:WMG
Shares Outstanding	60,552,831
Share Price (19/09/23)	\$0.27
Market Capitalisation	\$16.35 Million
Cash (30/06/23)	\$3.27 Million
Unlisted Options (\$0.30 strike)	21,116,670

Equentia Natural Resources	8.5%
Directors and Management	8.1%
Top 20 Shareholders	42.0%

SIGNIFICANT NEAR TERM NEWS FLOW | SMALL MARKET CAP | EXCITING RISK-REWARD



Rex Turkington *Non-Executive Chairman*

Capital Markets | Corporate Management

Rex is a highly experienced corporate advisor and economist who has worked extensively in the Australian financial services and stockbroking industry, specialising in the natural resources sector and participating in numerous initial public offerings and capital raising for ASX listed companies. Rex is currently Managing Director of South Pacific Securities, an advisory company offering corporate finance and investor relations advice to listed companies. He was previously Chairman of Key Petroleum (ASX:KEY) and Non-Executive Director of TNG Limited (ASX:TNG). Rex is a graduate of the Australian Institute of Company Directors (GAICD) and an associate of the Financial Services Institute of Australia (AFINSAI).



Dr Caedmon Marriott *Managing Director*

Exploration | Capital Markets

Caedmon has over 18 years experience in mineral exploration and equity capital markets. Caedmon was previously Managing Director of Western Australian gold and nickel explorer Aldoro Resources (ASX:ARN) and prior to that Managing Director of private exploration company Hanno Resources, responsible for establishing and managing the company's frontier exploration strategy in Western Sahara. Prior to Hanno, Caedmon worked as a buy-side mining analyst at GLG Global Mining Fund, Och-Ziff Capital and JPMorgan Natural Resources Fund. He holds a PhD in Geology, is a Chartered Financial Analyst and a member of the Australasian Institute of Mining and Metallurgy (MAusIMM), the Australian Institute of Geoscientists (MAIG) and the Society of Economic Geologists (MSEG).



Francesco Cannavo *Non-Executive Director*

Business Development | Capital Markets

Frank is an experienced public company director and entrepreneur with significant business and investment experience across a number of industries, including mining and natural resources. He has a strong network of investors and industry contacts throughout the Asia-Pacific region and has extensive experience in capital raising, investments and initial public offerings. Frank has been instrumental in assisting several listed and unlisted companies achieve their growth strategies through the raising of capital and the acquisition of assets. Frank is currently a Non-Executive Director of Golden Mile Resources (ASX:G88) and Lightning Metals (ASX:L1M).



















Dr Benjamin Grguric *Technical Director*

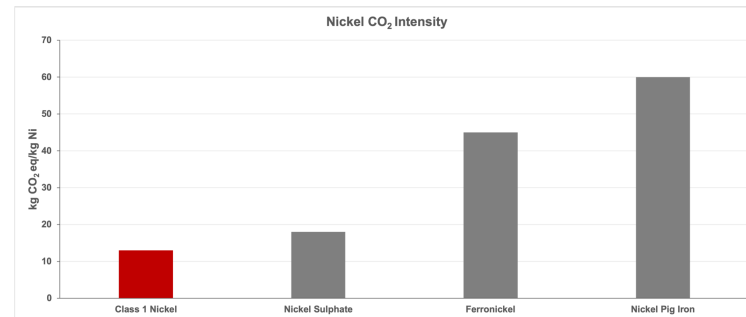
Exploration | Corporate Management

Ben has extensive experience in mineral exploration and scientific research, with direct involvement in a number of gold and nickel discoveries over the last 30 years. Ben is considered a leading expert on WA nickel sulphide exploration with over 50 peer-reviewed scientific papers. Ben spent his early career with WMC Resources/BHP, in particular at the Mt Keith Nickel Operation, managing brownfield and greenfield nickel sulphide exploration in Western Australia. As Geoscience Manager – Australia for Norilsk Nickel, Ben was responsible for exploration strategy across their portfolio of WA nickel assets and directly involved in the discovery of the West Jordan Type 2 nickel sulphide deposit. Ben holds a PhD in Earth Sciences and is a fellow of the Australian Institute of Geoscientists (AIG) and the Society of Economic Geologists (FSEG).

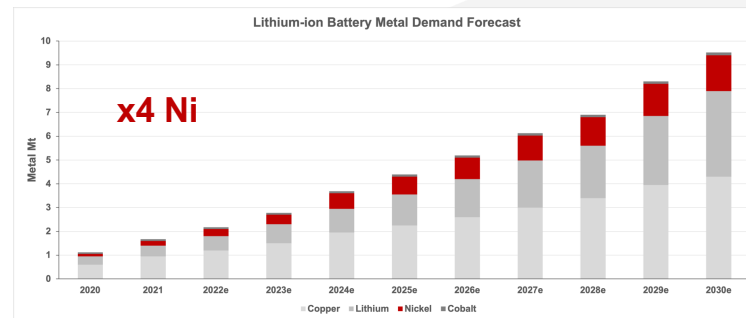
NICKEL: KEY COMPONENT OF THE GLOBAL ENERGY TRANSITION

LARGE LOW-GRADE NICKEL SULPHIDE WILL INCREASINGLY BECOME AN ESSENTIAL NEW SUPPLY

NICKEL LATERITE		
	Around four times more energy and CO ₂ intensive than sulphide	
	Large surficial deposits, often in tropical regions, can be very environmentally destructive	
HIGH-GRADE MASSIVE SULPHIDE		
	High value per tonne deposits	
	Hard to find on a size and scale that will meet supply shortfall e.g. major Nova Bollinger discovery "only" ~325,000t contained Ni	
LARGE LOW-GRADE DISSEMINATED NICKEL SULPHIDE		
	Largest nickel mines in the world – nickel "equivalent" of copper porphyry	
	Deposits >1Mt contained Ni able to supply +30kt/yr Ni for multiple decades	
	Readily produce high-grade Ni concentrate	
	Potential for NetZero Carbon Nickel – waste rock from dunite/serpentinite bodies can spontaneously carbonate and absorb CO ₂	



Source: Nickel Institute, Goldman Sachs Global Investment Research



Source: Bloomberg NEF

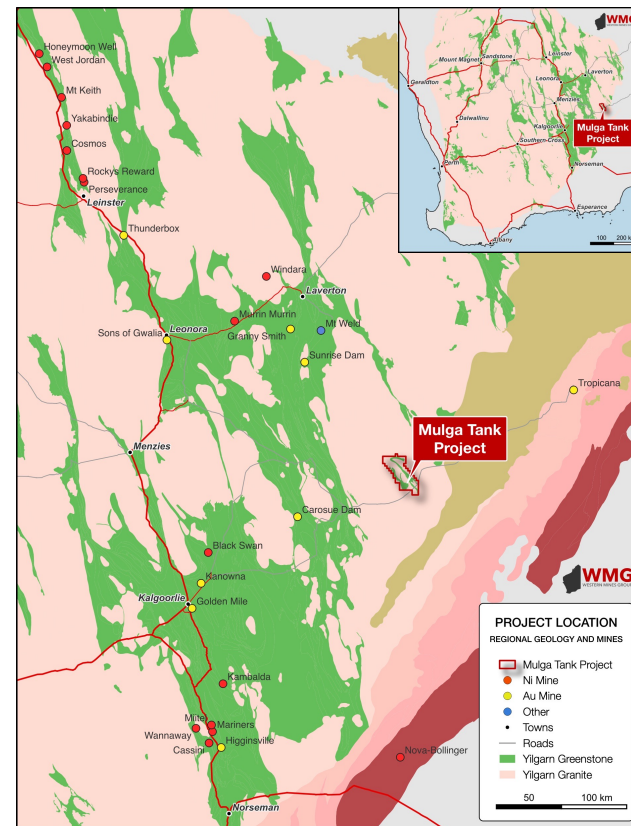
FRONTIER EXPLORATION IN A WORLD CLASS NICKEL PROVINCE

YILGARN CRATON WESTERN AUSTRALIA

- One of the world's major nickel provinces
- World-class examples of komatiite-hosted nickel deposits – Kambalda (35Mt @ 3.1% Ni), Perseverance (50Mt @ 2.3% Ni) and Mt Keith (643.7Mt @ 0.58% Ni)

MULGA TANK NI-CU-PGE PROJECT

- Frontier exploration play for major komatiite-hosted Ni-Cu-PGE deposits under cover
- Recent discovery of significant nickel sulphide mineral system
- Strategically assembled 395km² position on the under-explored Minigwal Greenstone Belt
- Mulga Tank Ultramafic Complex (WGM 100%) comparable scale (29km²) to the Kambalda Dome camp



EMERGING DISCOVERY AND BELT SCALE OPPORTUNITY

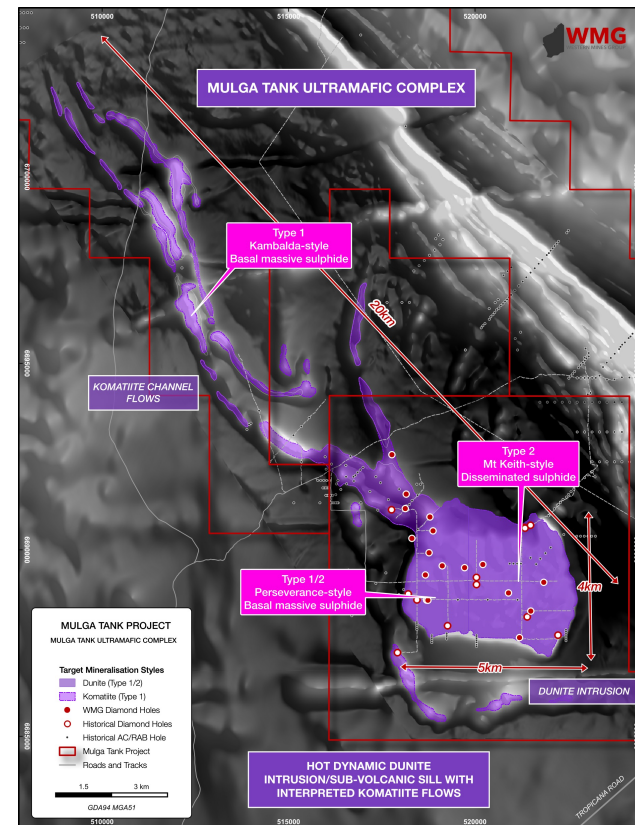
MAJOR KOMATIITE NICKEL SYSTEM UNDER COVER

- Large adcumulate dunite body (~15km²) with interpreted komatiite channel flows extending NW over >12km
- Limited drilling has penetrated ultramafic system through cover - **23 out of 29 holes show nickel sulphide mineralisation**
- **ALL THREE MINERALISATION STYLES PRESENT**



CRITICAL ELEMENTS OF A LARGE-SCALE WORKING SYSTEM

Critical Process	Description	Evidence
Source	Komatiite magma	✓
Pathway	Transport of komatiite magma through the crust	✓
Sulphur saturation	Addition of sulphur and sulphur saturation of undersaturated magma	✓
Chemical and physical trap	Sequestering metals into sulphides	✓
Physical concentration	Concentration of metal-rich sulphides into deposits	?

Adapted from: GSWA, Komatiite-Hosted Ni-Cu-PGE Deposits: A Mineral Systems Analysis, LL Grech, 2022



EXPLORATION MODELS ARE PERSEVERANCE AND MT KEITH

MULGA TANK ULTRAMAFIC COMPLEX OF COMPARABLE SIZE/SCALE TO PERSEVERANCE AND MT KEITH		
Model	PERSEVERANCE	MT KEITH
Type	Type 1 Stratiform Basal Massive Sulphide*	Type 2 Interstitial Disseminated Sulphide*
Resource	50Mt at 2.3% Ni	643.7Mt at 0.58% Ni
Notes	High value per tonne deposits amenable to deep underground mining	Large open pit economies of scale – net >0.2% Ni payable
Size	 650m x 160m	 1,900m x 400m
Target	Basal contact of the complex	Shallow depths within the main body of the complex
How much “free” nickel in sulphide form?		

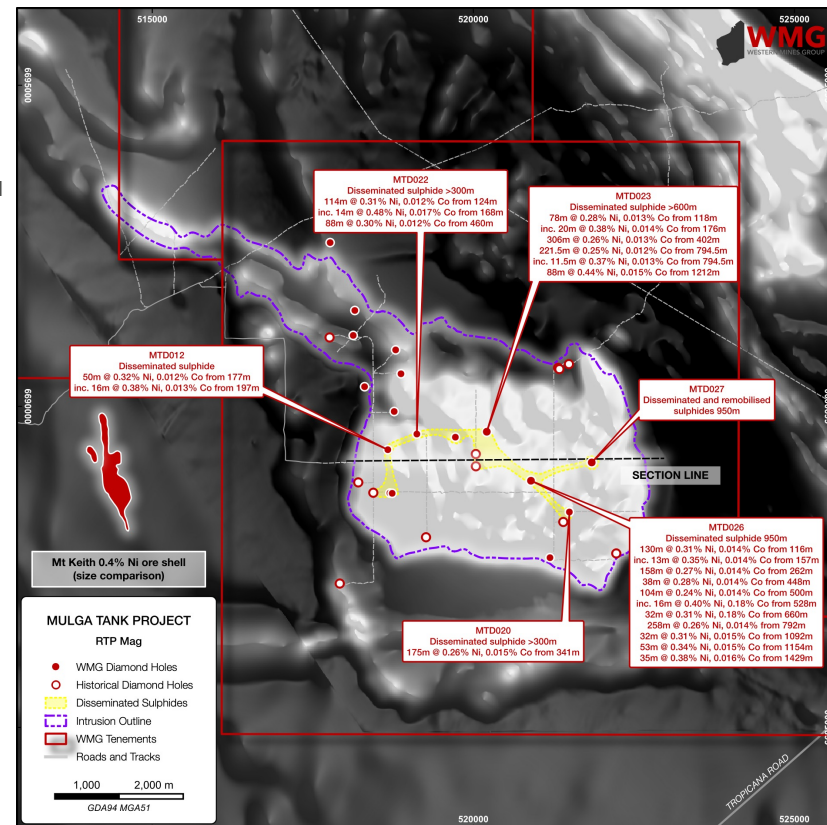
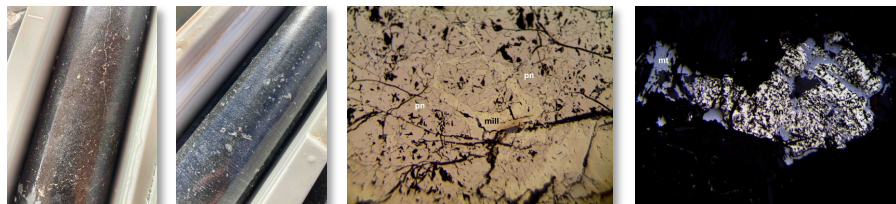
*Deposit classifications from: Komatiite-associated Ni-Cu-PGE Deposits, Leshar and Keays, 2002

MAIN DUNITE BODY: MT KEITH-STYLE MINERAL SYSTEM

DISSEMINATED SULPHIDES OVER >500M INTERVALS

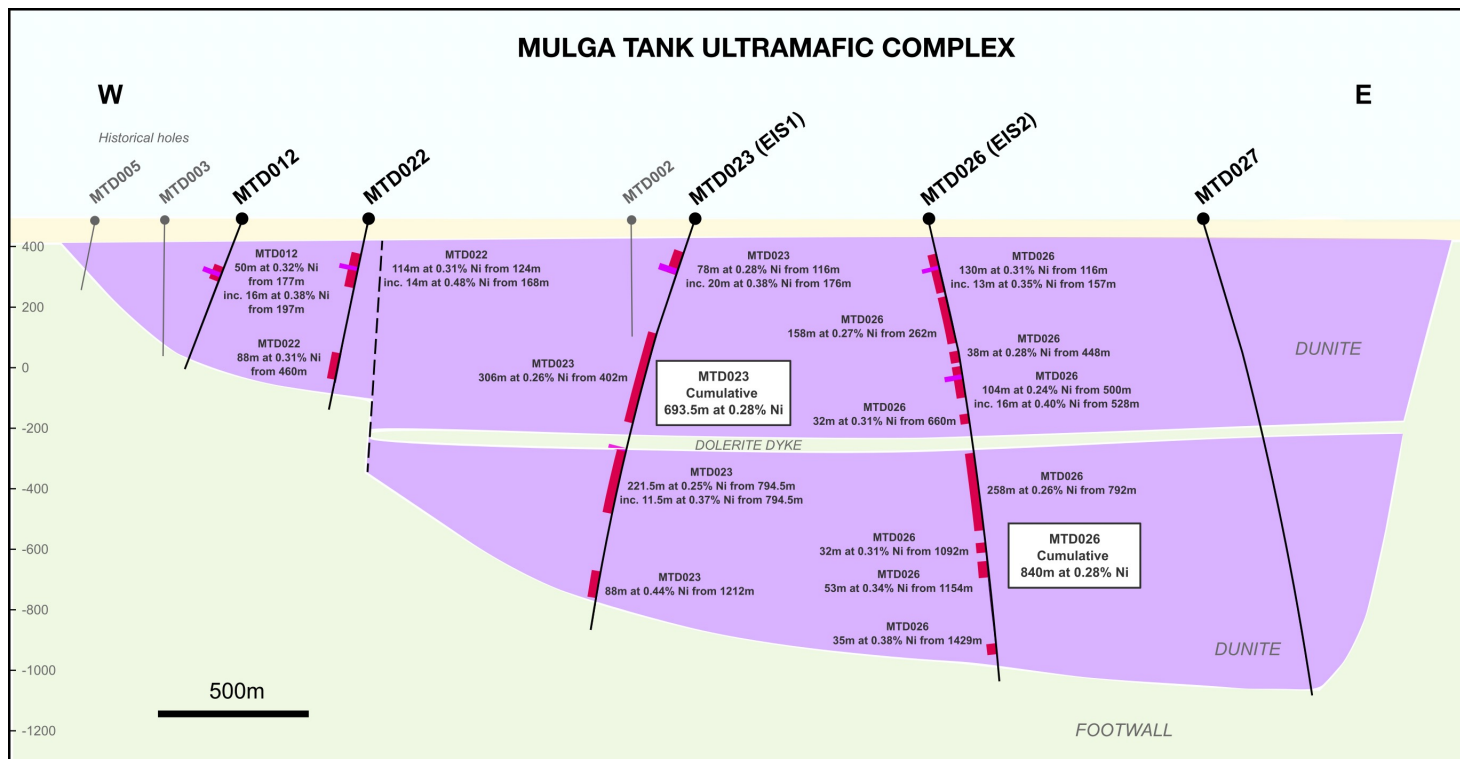
- Deep EIS holes MTD023 and MTD026 intersected extensive disseminated magmatic sulphides
 - MTD023: Cumulative 693.5m at 0.28% Ni, 128ppm Co, 61ppm Cu, 27ppb Pt+Pd with S:Ni 1.1
 - MTD026: Cumulative 840m at 0.28% Ni, 140ppm Co, 103ppm Cu, 24ppb Pt+Pd with S:Ni 1.6
- INCLUDING SHALLOW MINERALISED INTERVALS:

- MTD012: 50m at 0.32% Ni, 25ppm Cu, 124ppm Co from 177m inc. 16m at 0.38% Ni, 38ppm Cu, 132ppm Co from 197m
- MTD022: 114m at 0.31% Ni, 121ppm Co, 33ppm Cu from 124m inc. 14m at 0.48% Ni, 171ppm Co, 152ppm Cu from 168m
- MTD023: 78m at 0.28% Ni, 131ppm Co, 70ppm Cu from 118m inc. 20m at 0.38% Ni, 137ppm Co, 57ppm Cu from 176m
- MTD026: 130m at 0.31% Ni, 136ppm Co, 122ppm Cu from 116m inc. 13m at 0.35% Ni, 142ppm Co, 301ppm Cu from 157m
- Mineralogical work confirms abundant coarse grained pentlandite



MULTIPLE BROAD ZONES OF DISSEMINATED MINERALISATION

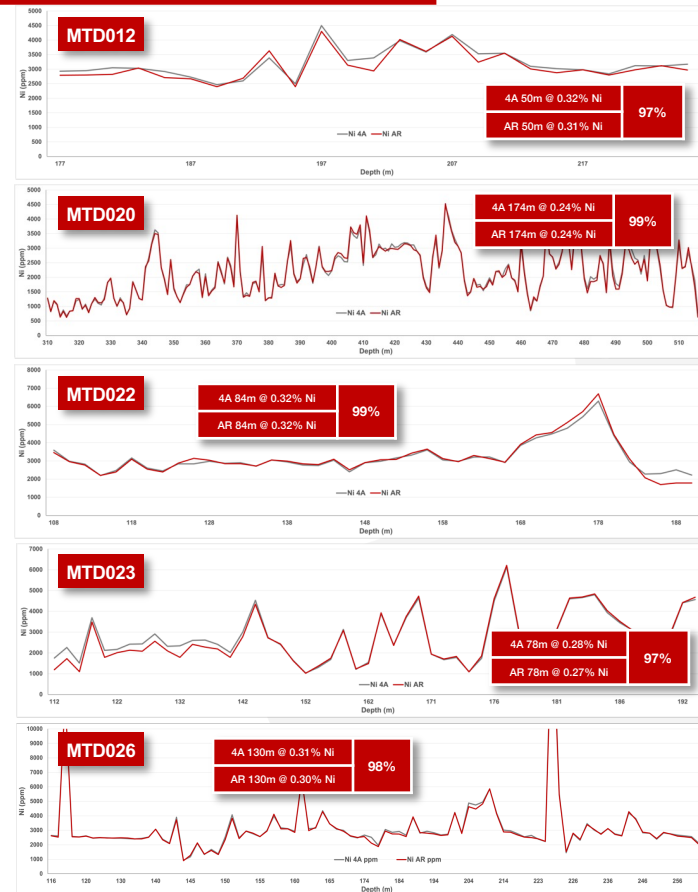
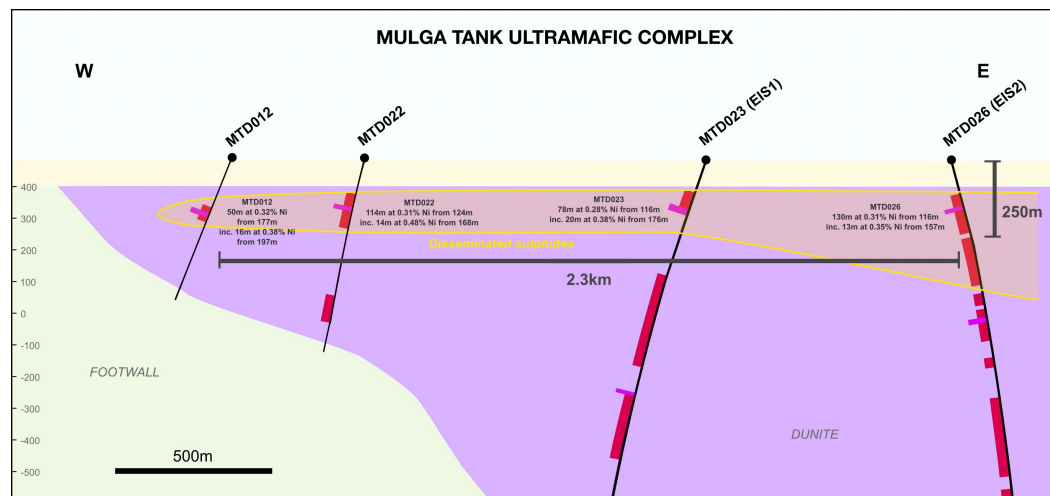
CROSS SECTION W-E ACROSS MAIN BODY OF COMPLEX



INITIAL TESTWORK CONFIRMS SIGNIFICANT NICKEL IN SULPHIDE

EXTENSIVE NICKEL SULPHIDE MINERALISATION

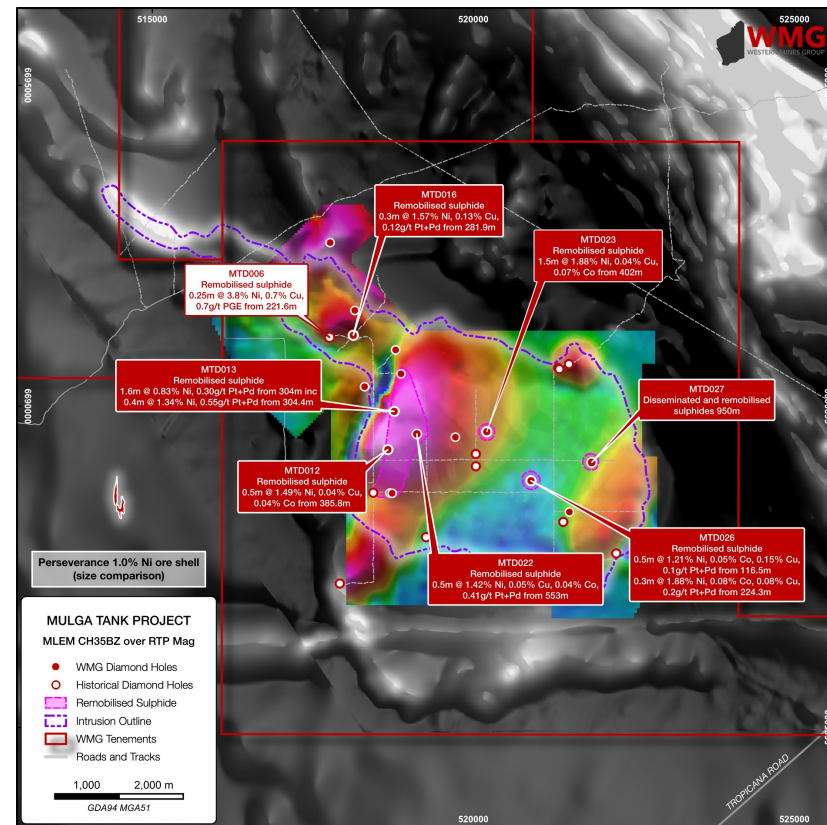
- Aqua regia (AR) versus four acid (4A) demonstrates nickel mineralisation in sulphide
- Shallow mineralisation over 2.3km MTD012-MTD022-MTD023-MTD026
- Visible sulphides in MTD027 on eastern margin – further 1km



EVIDENCE FOR PERSEVERANCE-STYLE HYBRID SYSTEM

REMOBILISED MASSIVE NICKEL SULPHIDE VEINING

- Multiple zones of remobilised massive nickel sulphide veinlets seen across the Complex
- MTD012: 0.5m at 1.49% Ni, 0.04% Cu and 0.04% Co from 385.8m
- MTD013: 1.6m at 0.83% Ni and 0.30g/t Pt+Pd from 304m inc. 0.4m at 1.34% Ni, 0.04% Co and 0.55g/t Pt+Pd from 304.4m and 0.4m at 1.29% Ni and 0.43g/t Pt+Pd from 153.6m
- MTD022: 0.5m at 1.42% Ni, 0.05% Cu, 0.04% Co and 0.41g/t Pt+Pd from 553m
- MTD022W1: 0.15m at 2.73% Ni, 0.08% Cu, 0.06% Co and 0.10g/t Pt+Pd from 525.15m
- MTD023: 1.5m at 1.88% Ni, 0.04% Cu, 0.07% Co from 402m
- MTD026: 0.5m at 1.21% Ni, 0.05% Co, 0.15% Cu, 0.1g/t Pt+Pd from 116.5m and 0.3m at 1.88% Ni, 0.08% Co, 0.08% Cu, 0.2g/t Pt+Pd from 224.3m
- Sulphide material migrates along faults and fractures – *from where?*



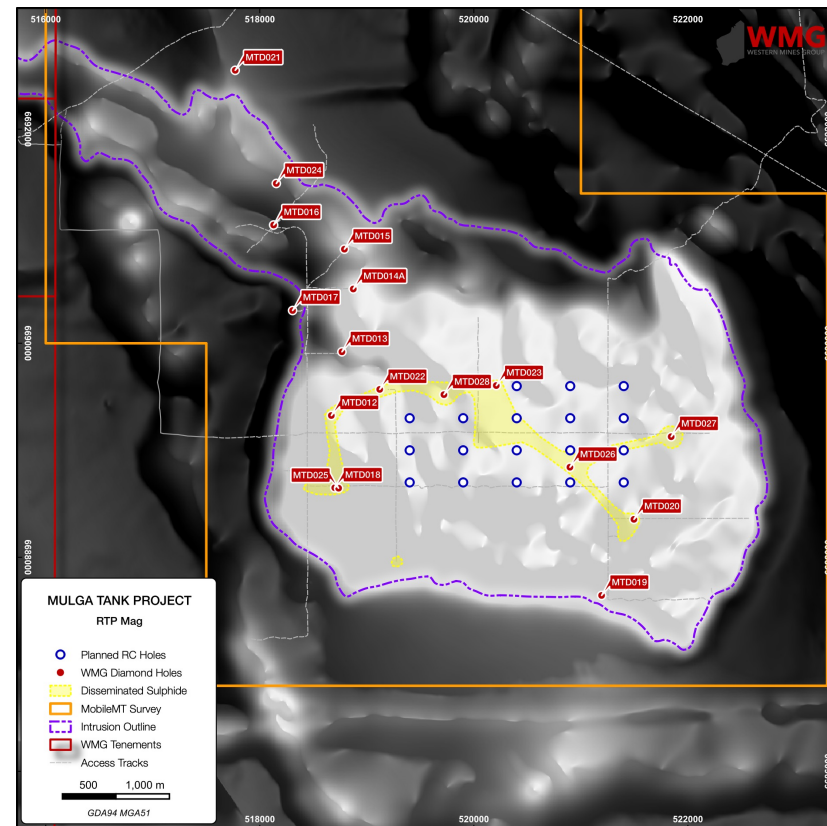
EXPANSION OF DRILLING PROGRAM

SECOND RIG STARTS NEW EXPLORATION PHASE

- 18 hole 5,400m RC program recently commenced in September
- Covering 2km x 1km area across centre of main body
- Systematically targeting shallow disseminated mineralisation to 300m
- Possibility to extend holes with diamond tails to deeper targets

RECENT MOBILEMT SURVEY

- MobileMT airborne MagnetoTellurics survey completed over entire Complex in August
- Preliminary results received – 3D inversion and modelling in progress
- Latest airborne electromagnetic technology capability of deep resistivity mapping to ~1km depth
- Combined with existing 3D dataset to produce new improved model and interpretation of Complex



CARBON CAPTURE POTENTIAL OF FUTURE MINE TAILINGS

- High MgO ultramafic rocks spontaneously carbonate when exposed to atmosphere
- Reconnaissance XRD testwork on 13 samples from Mulga Tank Complex show up to 8% brucite and 12% Hydrotalcite Group minerals
- Brucite is key mineral in passive carbon capture of 40kt/yr CO₂ in tailings at major Mt Keith Nickel Mine
- Significant potential for Mulga Tank host rock to capture economically important volumes of CO₂ if mined and processed

GREEN NICKEL FOR THE GLOBAL ENERGY TRANSITION



Hole MTD020 Tray 81 – 7 August 2022



Hole MTD020 Tray 81 – 13 September 2023

MULTIPLE DRIVERS TO COMPANY SUCCESS OVER 6-12 MONTHS

PATHWAYS TO SHAREHOLDER VALUE

1 MT KEITH-STYLE

**EXTENDING DISSEMINATED
SULPHIDE MINERALISATION**

Systematic RC drill program

Confirm lateral extent of disseminated mineralisation

Initial exploration target estimate

RESOURCE DRILL OUT
Criteria: >500,000t [Ni], >0.25% Ni, top 200-300m

2 PERSEVERANCE-STYLE

**TARGETING BASAL MASSIVE
SULPHIDE MINERALISATION**

MobileMT 3D interpretation of the Mulga Tank Complex

Targeted diamond drill program

DHEM surveys

AIM TO DISCOVER SOURCE OF REMOBILISED MASSIVE SULPHIDE

3 KAMBALDA-STYLE

**HIGH-GRADE CHANNEL
MINERALISATION**

Grant of tenement E39/2299

Belt wide geophysics and targeting

First exploration drilling

**FIRST BELT WIDE DRILLING OF KAMBALDA-STYLE
KOMATIITE CHANNELS >12KM**

Company's exploration plans subject to change without notice

EXCITING DISCOVERY OPPORTUNITY



EXPLORATION PHILOSOPHY

- We believe multiple significant nickel deposits could be found at Mulga Tank
- We strive to do high-quality technical exploration work
- We are frugal with overheads to maximise exploration spend and minimise equity dilution
- We want to change shareholders lives through share price increase not be a lifestyle
- We offer a compelling risk vs reward and leverage to exploration success

FOR FURTHER INFORMATION PLEASE CONTACT

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