

# Substantial Resource Growth Potential at Woodlark Gold Project, PNG

## Extensive known mineralisation to underpin Resource update and revised Feasibility Study set for mid-CY2024

### Highlights

- Detailed exploration assessment has identified known mineralisation and priority drill targets with strong potential to increase the existing 1.56Moz Woodlark Resource<sup>1</sup>
- These new target areas are all close to the current Resources and the known mineralisation in each remains open and largely untested
- They include the potential for new Resources at the Great Northern and Wayai Creek prospects using existing data prior to resuming drilling
- Considerable mineralised surface footprint of up to 1 km has been identified at Little MacKenzie, located immediately along strike from the Woodlark King Mining area; this area requires infill and extensional drilling prior to any Resource estimation
- Surface mapping has identified alteration in the Bains (& South) areas with channel samples collected and analysis pending; compilation of data is well advanced and expected to be completed during April
- Project de-risking outcomes, updated Resource estimate and robust gold price environment support the updated Woodlark Feasibility Study, due for completion mid-2024

Geopacific Resources Limited (ASX: **GPR**) ("**Geopacific**", the "**Company**") is pleased to provide an update on recent exploration activities and initiatives to unlock the strong upside at its 100% owned Woodlark Gold Project in PNG ("**Woodlark**", the "**Project**").

Exploration targeting has been successful in determining priority targets and areas with the potential to host additional mineral resources through fieldwork.

The integrated geological database continues to be expanded by the exploration team with specific focus on capturing new, and digitising historic data to build out the various exploration vectors, including prospective geology, magnetics, structure, geochemistry, and historic drilling to support the key elements of the targeting process.

Of the four priority targets areas previously outlined<sup>1</sup> (**Figure 1**), Great Northern and Wayai Creek host potential for new mineral resources to be estimated using existing data. At Little MacKenzie, where a considerable gold mineralised footprint, >500 m strike extent has been delineated at surface through a combination of historic drilling, mapping, and trenching. Infill and extensional drilling is required at Little MacKenzie prior to any resource estimation.

**Geopacific CEO James Fox said:** "Following on from the recently-completed geological review which highlights the growth potential of the 1.56Moz gold resource at Woodlark, further assessment of the integrated geological database and new fieldwork has identified potential for near-surface gold mineral resources at Great Northern, Wayai Creek, and Little MacKenzie.

"We will advance these prospects, and work towards delivering an updated Project feasibility mid-year to reflect the Project de-risking outcomes, increased resource inventory, and strong gold price environment."

<sup>1</sup> Refer to ASX releases on 20 December 2023 'Exploration to target four areas of known high-grade mineralisation at the Woodlark Gold Project, PNG' and 14 September 2023 'Woodlark Mineral Resource Update - Grade Boost at Kulumadau'.

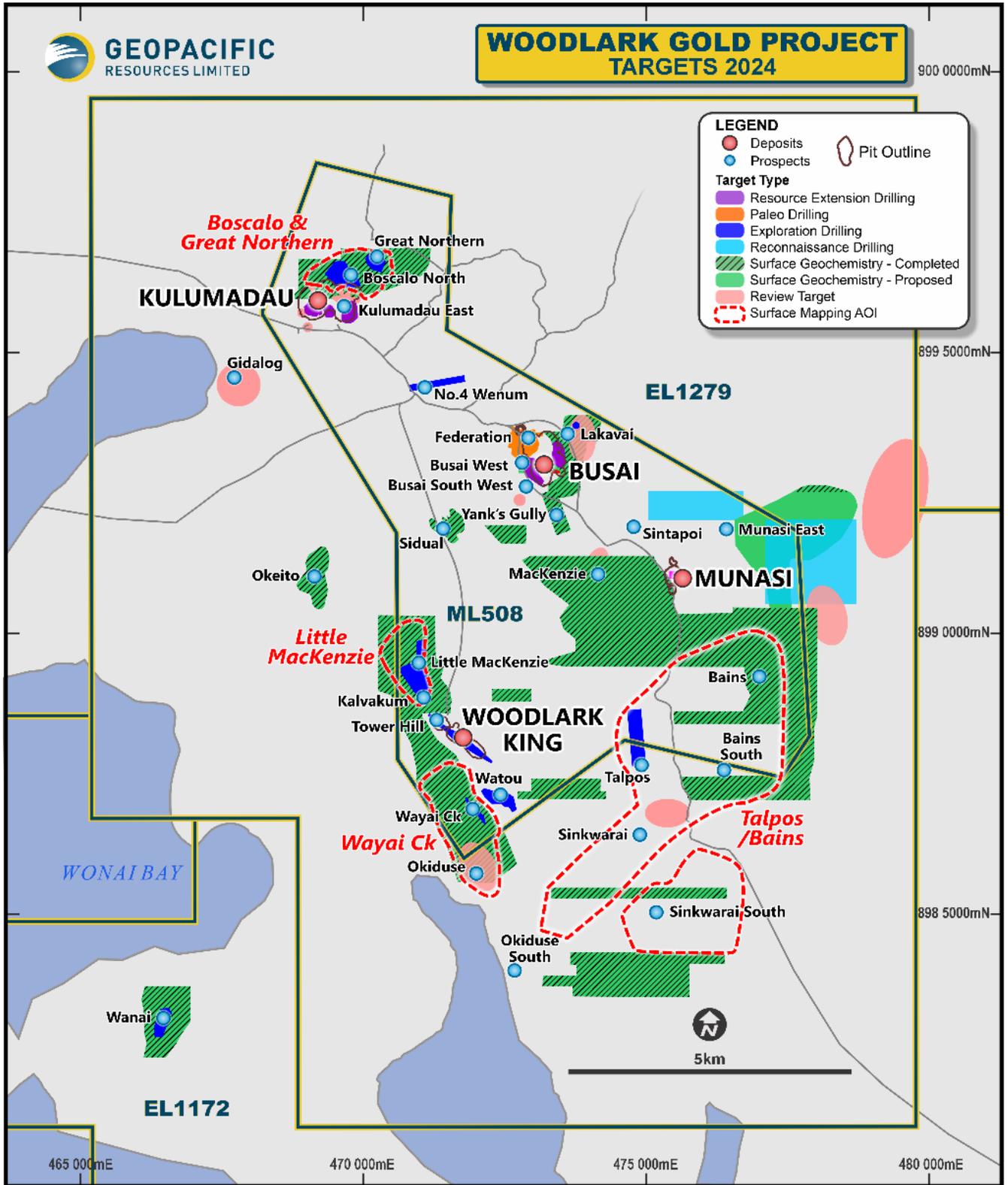


Figure 1: Location of exploration target areas

## Planned Work Program

The exploration team has been focussed on capturing new, and digitising historic data, to build out the various exploration vectors to support the key elements of the targeting process. These include:

- **Prospective geology** – Historic focus on Okiduse Volcanics that window out through later cover
- **Aeromagnetics** – Magnetic gradients, and magnetic lows synonymous with gold mineralisation
- **Structure** – Known controls to mineralisation, complex structural framework that underpins the mineralisation at Woodlark. The main gold deposits of Kulumadai and Busai are situated within, and define, a northwest structural corridor
- **Geochemistry** – Multi-element vectors to blind/buried mineralisation, evidence of overprinting
- **Biogeochemistry** – Coincident with alteration and associated mineralisation
- **Pan-concentrates** – Several untested target areas which are part of the current review
- **Historic drilling** – Numerous near-surface, high-grade, open intercepts that warrant follow up trenching and drilling

Over the next three months field mapping will continue over areas that have favourable host lithology, complex magnetic responses, favourable structures, and anomalous geochemistry, each with the potential to host economic gold mineralisation. The new field mapping will aim to validate existing data and support further testing through trenching and drilling.

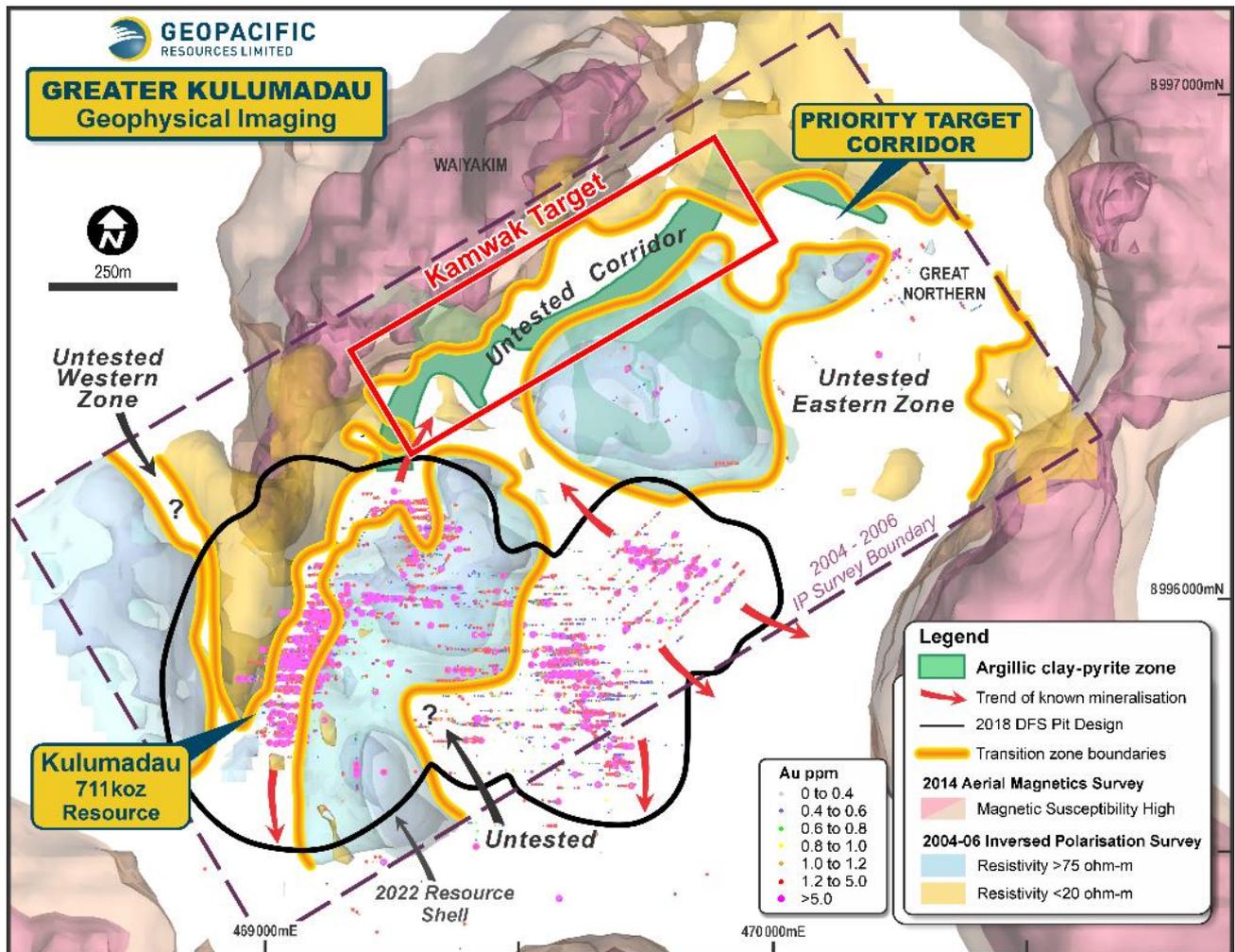
Soils collected in 2023 are being scanned with a PXRF and anomalous samples will be dispatched for gold and multi-element analysis. Drill chips over Woodlark prospective targets will then be scanned with PXRF to provide improved mineral chemistry from outside of the known deposits which will provide vectors to blind or buried mineralisation.

The 2014 heliborne magnetic survey will be re-processed, and surface geochemistry reviewed to generate new surface and/or buried targets that have not been previously recognised in Central Woodlark Okiduse volcanics.

Gold in soils results will be available in late-April 2024 from the original 2018 soils sample sieved rejects. A selection of approximately 40% of original survey samples have been sent for analysis, with the selection basis on elevated multi-element results.

## Priority exploration target areas

### Kulumadau – Large-scale target corridor at Kamwak, including the Great Northern prospect



**Figure 2:** Geophysical anomaly, Kamwak target, Boscalo North and Great Northern prospects shown with current Kulumadau pit-shell outline

The **Kamwak** target is located over an untested geophysical corridor trending NE (1,000 m in strike by 100 m wide) (Figure 2). Recent mapping has highlighted a continuous argillic clay-pyrite zone which extends through the untested Kamwak target, and correlates with the previously reported geophysical anomaly (modelled as a demag zone with a similar geophysical response to Kulumadau West main zone).

There is no known drilling over the Kamwak target and it may represent a significant concealed mineral resource of equivalent size and grade to Kulumadau West that hosts 1.78 Mt @ 4.9 g/t for 279,600 oz Au<sup>2</sup>. Additional fieldwork is scheduled to map out the argillic alteration and potential mineralisation within the Kamwak demag corridor to the NE.

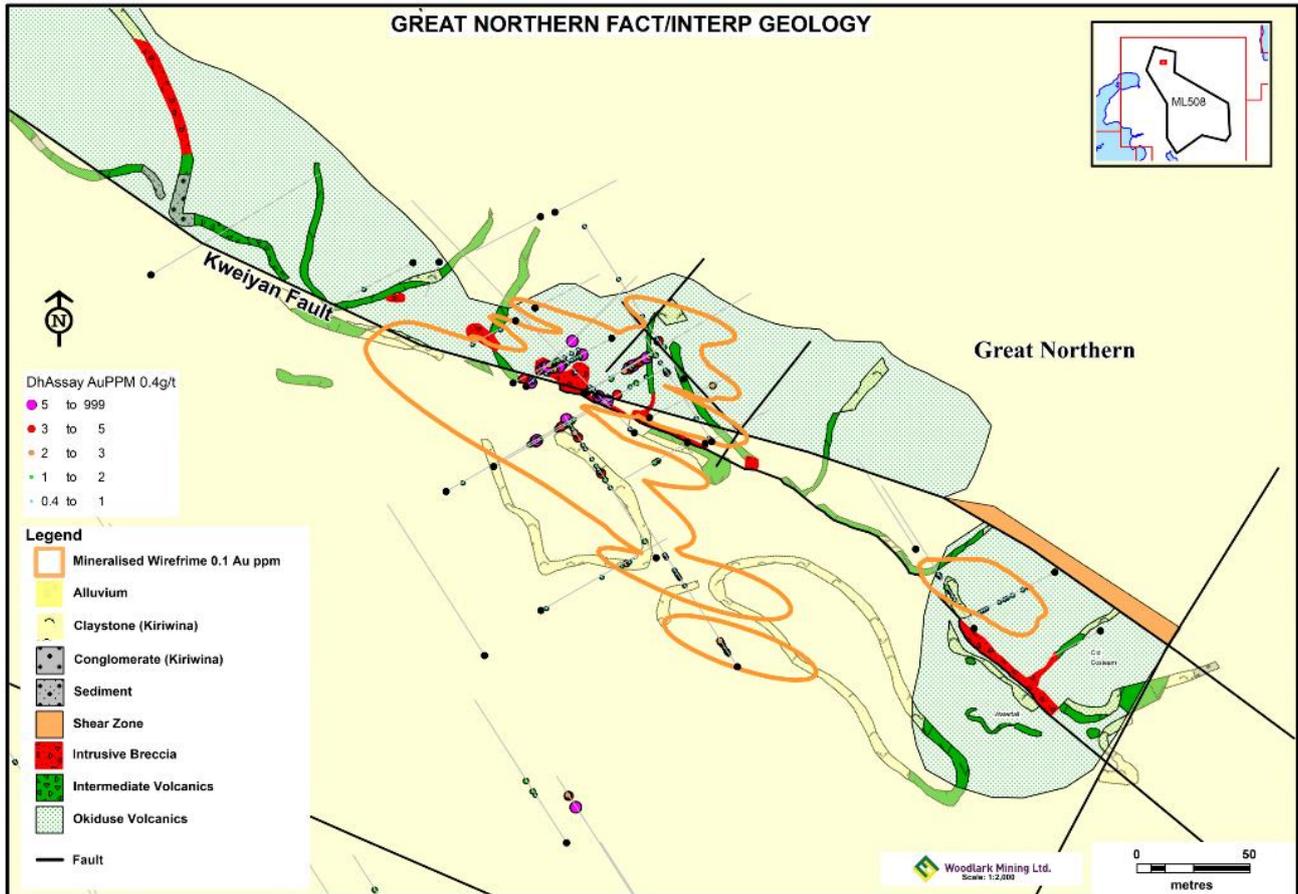
The previously intersected high-grade mineralisation at **Great Northern** (Figures 2 and 3) is near surface and focused along the Kweiyuan Fault (of WSW to ESE control) over an approximate 300 m strike extent that remains open. Limited drilling exists along the structural zone and post-mineralised faulting may have down faulted the southern zone of mineralisation, which has not yet been tested with drilling.

Sufficient information exists to estimate a mineral resource at Great Northern, which is expected to be completed during the June 2024 quarter, with future drilling to target extensions to the high-grade near-surface southwest dipping mineralisation and test along strike.

<sup>2</sup> Refer GPR ASX release 14 September 2023 'Woodlark Mineral Resource Update – Grade Boost at Kulumadau'

Numerous existing near-surface high-grade gold drillhole intercepts exist at Great Northern, supporting a potentially higher resource grade, including:

- 20 m @ 4.39 g/t Au from 40 m (92HKG061)
- 18 m @ 4.40 g/t Au from 22 m (92HKG062)
- 8 m @ 2.81 g/t Au from 41 m (14WGND001)
- 3 m @ 4.65 g/t Au from 5 m (KU188DD002)
- 5.3 m @ 7.77 g/t Au from 23.9 m (KU18DD002)
- 3 m @ 9.54 g/t Au from 91 m (KU18DD003)
- 10 m @ 5.41 g/t Au from 74 m (KU18DD005)



**Figure 3:** Great Northern Fact & Interp. Geology, Includes MHGEO Au PPM Indicator 0.1 Wireframes

Woodlark King Mining Centre - includes Wayai Creek & Little MacKenzie prospects

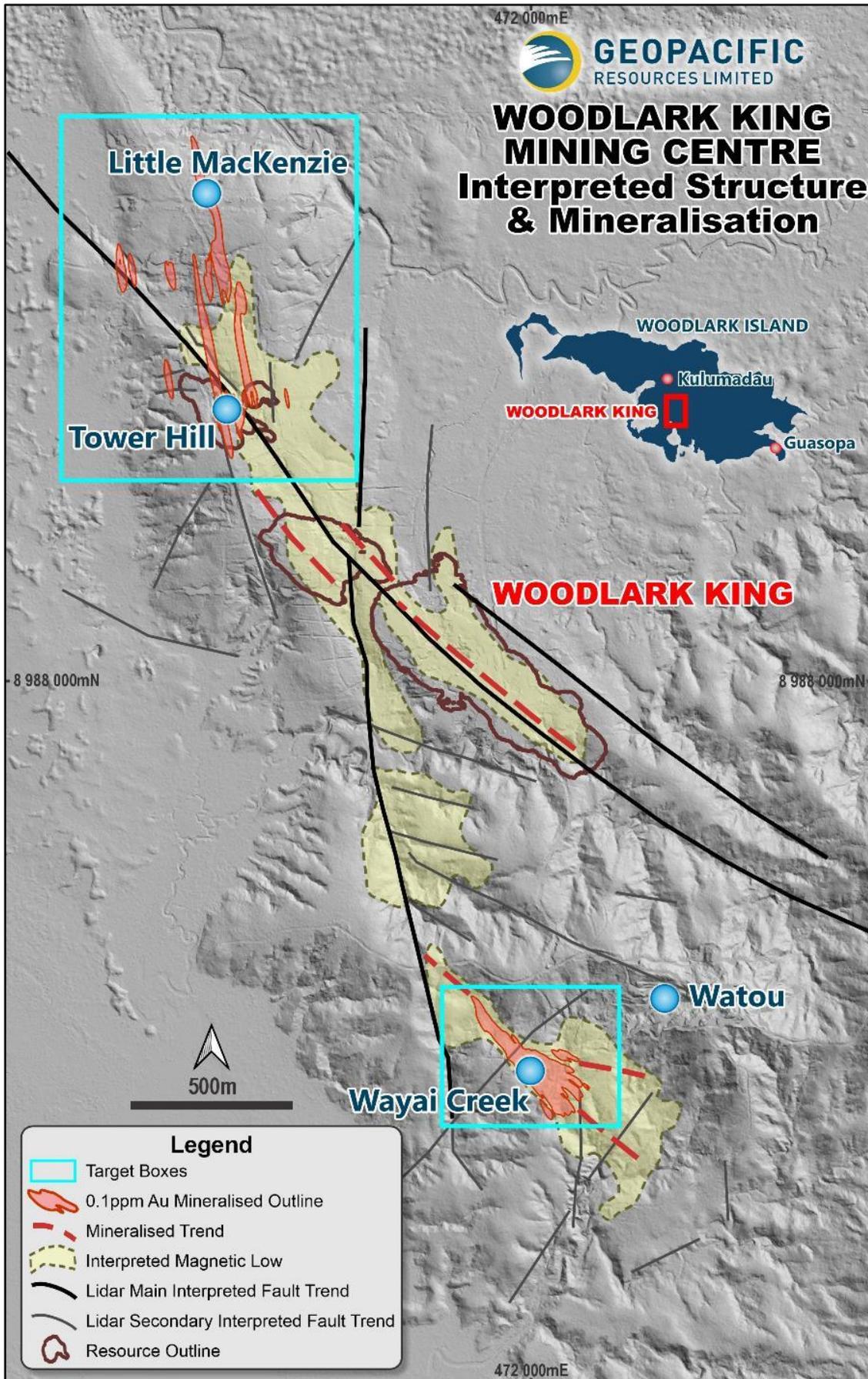
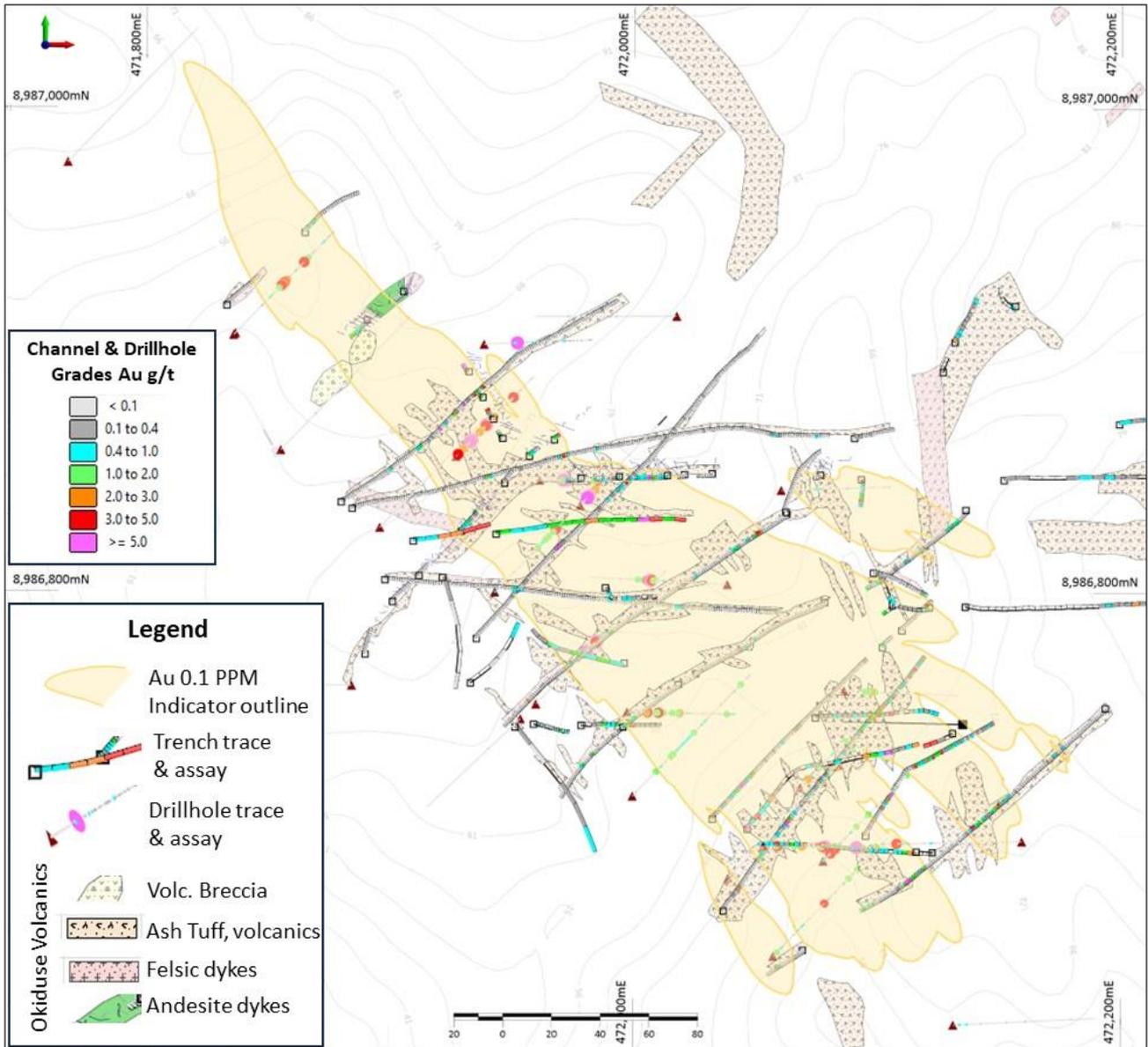


Figure 4: Woodlark King Mining Centre prospect locations, target boxes represent Figures 5 and 6

## Wayai Creek Prospect



**Figure 5:** Wayai Creek, Surface Trench, geology, drilling and MHGEO CDV 0.1 wireframe over approximately 500 m strike length ( $320^{\circ} / -70^{\circ}$  to  $-85^{\circ}$  dip to SW).

Gold mineralisation at **Wayai Creek** (Figures 4 and 5) falls within a broad historical 0.1 g/t Au in surface anomaly that was originally defined by Placer (Misima Mines, 2000). Subsequent trenching (2014/15) and recent wide spaced drilling (2022) along the strike of the target zone has demonstrated that the mineralisation is continuous over a 350 m strike extent with grades of between 2 to 17 g/t Au over moderate widths.

The mineralised zones contain hydrothermal breccias with silicification and veining up to 10 m in width. Three main zones with a steep dip to the SW have been identified from historical surface trenching and drilling.

The geometry to Wayai Creek mineralisation is in a similar orientation to Woodlark King deposit which is potentially controlled by a regional N-S structure that is interpreted from the Lidar survey data. This survey added credibility and support to the Wayai Creek mineralisation, and several other targets in the greater Woodlark King, Watou and Wayai Creek area.

Several of these structural targets correlate with historical surface geochemistry which to-date have not been tested by drilling. The recent compilation highlights these historical targets which were not followed up due to the focus on the main deposits.

High-grade gold intercepts include:

- 5 m @ 16.69 g/t Au from 14 m and 9 m @ 1.20 g/t Au from 35 m (00MWMR001)
- 13 m @ 2.06 g/t Au from 52 m (00MWMR005)
- 3 m @ 3.72 g/t Au from 23 m (00MWMR007)
- 8 m @ 2.63 g/t Au from 16 m, 5 m @ 2.97 g/t (WT18RC001)
- 4 m @ 6.60 g/t Au from 8 m (WT18RC002)
- 3 m @ 2.66 g/t Au from 32 m (WTRC22003)
- 10 m @ 2.80 g/t Au from 68 m (WTRC22006B)

Approximately 270 m to the SSW of Wayai is an intercept of 8 m at 1.05 g/t Au from hole 90BWM007, this location is still essentially untested by this single hole and further drilling is warranted.

### Little MacKenzie and Tower Hill Prospects

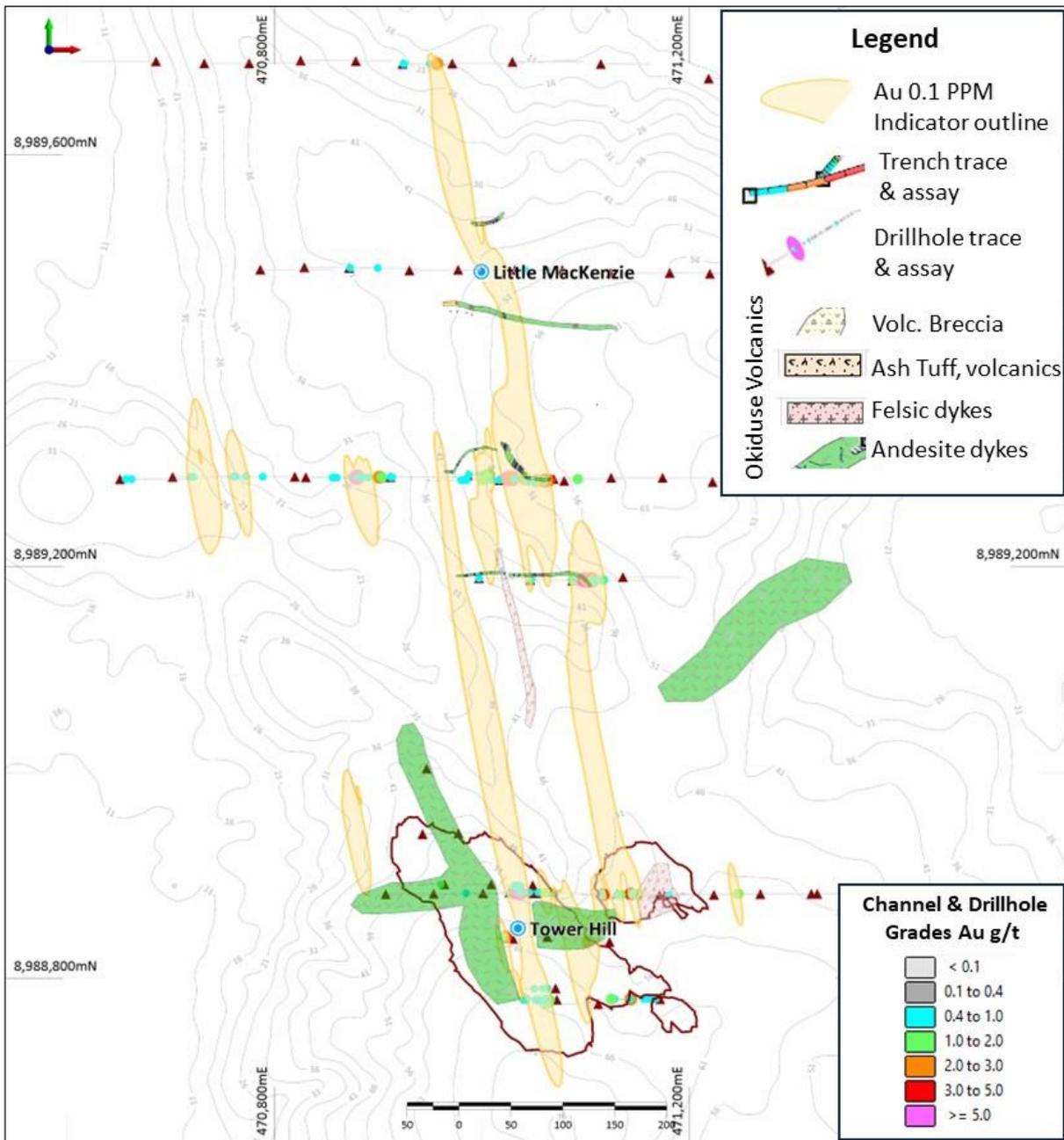


Figure 6: Little MacKenzie and Tower Hill prospects

Mineralisation at Little **MacKenzie/Tower Hill** (Figures 4 and 6) is interpreted to be a northerly extension of the Woodlark King deposit (MII 5,257,020 t @ 0.87 g/t Au for 142,346 ounces<sup>3</sup>) and is hosted within narrow SSW trending zones of near vertical dip that remain open to the north

The currently defined mineralised envelope is extensive, over 1 km in strike. Drill lines are spaced from 100 m to 300 m with mineralisation able to be traced with confidence between the sections. New infill drilling is required to define a resource.

Additionally, high-grade gold drill intercepts (21 m @ 3.47 g/t Au from 102 m (10WWT095), and 4 m @ 5.05 g/t Au from surface (10WWT066) are located 300 m north-north-east of the northern edge of the proposed Woodlark King pit, are open, and warrant further testing.

Surface mapping, trenching, and drilling help in defining a wireframe > 0.1 Au with a northwest strike and steep dip to the mineralisation. Surface mapping is planned over the target in May 24 to assist with better defining the extent and geometry of mineralisation for drill planning.

Exploration Activities	Dec	Jan	Feb	Mar	Apr	May	Jun
Structure/Vein Capture	Busai						
Mapping	Kulumadau		Bains/Talpos		Sinkwarai	Wayai Ck	EL1465
Compilation & Targeting			Kulu	Bains/Talpos	Sinkwarai	Wayai Ck	
Soil/Auger	Lt. McKenzie Busai, Kulumadau		Infill programs (TBC)				
Sample Preparation	2018 Soils		2018 Soils	2023 Soils			
PXRF Alteration Mapping		Setup / 2018 Soils		2023 Soils	Historical drill chips/pulps (RC/DD)		
Geophysics				Pending			
Geochemistry				Pending			

Fields in **green** are complete; **orange** are in-progresses & **blue** have not commenced

**Figure 7:** Planned exploration work program over the next 3 months

## References

1. ASX release 28 November 2023 'Investor Presentation'
2. ASX release 14 September 2023 'Woodlark Mineral Resource Update – Grade Boost at Kulumadau'
3. ASX release 7 October 2022 'Woodlark drilling program delivers 6 m x 300g/t at Busai'
4. ASX releases 28 July 2022 'Watou and Talpos drilling'
5. ASX release 30 May 2022 'Drilling success continues to highlight upside potential'
6. ASX release 19 September 2018 'Great Northern drilling results'

<sup>3</sup> GPR ASX release 14 September 2023 'Woodlark Mineral Resource Update – Grade Boost at Kulumadau'.

## Competent Persons Statement

The information in this announcement that relates to exploration results is based on information compiled by or under the supervision of Michael Woodbury, a Competent Person who is a Fellow, and Chartered Professional (CP) of The Australasian Institute of Mining and Metallurgy, and Member of Australian Institute of Geoscientists. Mr Woodbury has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and the activity he is undertaking 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". Mr Woodbury consents to the inclusion in the announcement of the matters based on his information in the form and context in which it appears.

The information in this report that relates to Woodlark Mineral Resources is based on information compiled and reviewed by Mr Chris De-Vitry, a Competent Person who is a Member of the Australian Institute of Geoscientists and a full-time employee of Manna Hill Geoconsulting Pty Ltd. Mr De-Vitry has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activity which he has undertaken to qualify as a Competent Person as defined in the JORC Code 2012 and is a qualified person for the purposes of NI43-101. Mr De-Vitry has no economic, financial or pecuniary interest in the Company and consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

This announcement was authorised by the Board of Geopacific.

For further information, please visit [www.geopacific.com.au](http://www.geopacific.com.au) or contact James Fox GPR CEO.

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