

Significant Porphyry Cu-Au Potential Identified on Woodlark Island Gold Project

Unlocking a new phase of exploration on Woodlark Island

Highlights:

- Ongoing DFS and defining additional epithermal gold resources remain key priorities, with parallel porphyry targeting unlocking a new phase of district-scale exploration potential
- Independent expert review identifies 14 untested porphyry Cu-Au target environments on Woodlark Island
- Historical exploration activity has focused on near-surface and epithermal gold systems; new findings highlight substantial untested deeper porphyry opportunity
- Three high priority porphyry targets identified in close proximity to the Kulamadau, Busai, and Little Mackenzie gold deposits
- All 14 porphyry copper-gold target environments require further investigations to assess their potential with fieldwork to be completed over the next 6 months as part of the current exploration program

Geopacific Resources Limited (ASX: GPR) ('GPR', or the 'Company') is pleased to announce the results of a recent desktop study assessing the porphyry copper-gold (Cu-Au) potential ('Study') at its 100% owned, 1.67 Moz¹ Woodlark Gold Project in Papua New Guinea ('Woodlark', the 'Project').

The study was completed by Dr Bruce Rohrlach, a leading independent porphyry specialist and was designed to identify areas with potential for deeper porphyry-style mineralisation, complementing the Company's ongoing epithermal gold exploration and Project development planning. Woodlark Island is situated within a tectonically complex region where Cu-Au-fertile magmatism has produced significant porphyry deposits regionally, including the Tier 1 epithermal-porphyry Cu-Au deposit pair at the Wafi-Golpu project (Figure 1).

The porphyry work has been advanced in parallel with the refinement of near-mine and regional epithermal gold targets undertaken by the Company, which is the focus of the upcoming 30,000 m regional diamond and RC drilling programs and are scheduled to commence in Q2 2025.

This program marks a strategic expansion of the Company's exploration focus and is designed to unlock the deeper mineral potential of the Woodlark district while enhancing the understanding of its broader mineral system architecture.

Significant Exploration Upside

The presence of 14 porphyry Cu-Au target environments has been identified, three of which are considered high priority (Figures 2, and 3). These targets are proximal to existing epithermal deposits and have the potential to significantly upgrade the mineral endowment of the broader district.

The independent assessment reinforces the potential for deeper porphyry systems to exist beneath and adjacent to the well-established epithermal gold deposits on Woodlark Island, such as, Kulumadau, Busai, and Woodlark King, and supports additional focus on exploration for this style of mineralisation.

A work program is underway to further assess the targets and involves detailed compilation and interpretation of alteration styles from existing datasets plus regional detailed alteration mapping. These results will guide drill targeting in upcoming exploration campaigns.

Geopacific CEO James Fox said: "The positive review of deeper copper-gold porphyry potential near our core epithermal gold deposits is a major development for the Woodlark Gold Project. Our understanding of

¹ Refer ASX announcement on 13 August 2024 for full details including JORC tables "Mineral Resource increased to 1.67 Moz as growth strategy delivers early results".

the mineralising system on Woodlark Island has been enhanced, hence significantly broadening our exploration horizon. The identification of multiple porphyry targets provides additional upside for copper-gold discoveries while supporting the continued expansion of our epithermal gold resources.”

“Most historic exploration has focused on near-surface epithermal systems which continue to provide exciting growth opportunities. Historic drilling at Woodlark is considered shallow with a mean depth of 125 m, with little exploration drilling at depth, or outside of the key epithermal gold deposits.

This new work highlights the significant porphyry potential on our Woodlark tenement package and delivers a clear framework to pursue it systematically. The Company remains well-funded with the flexibility to advance any prospective target areas.”

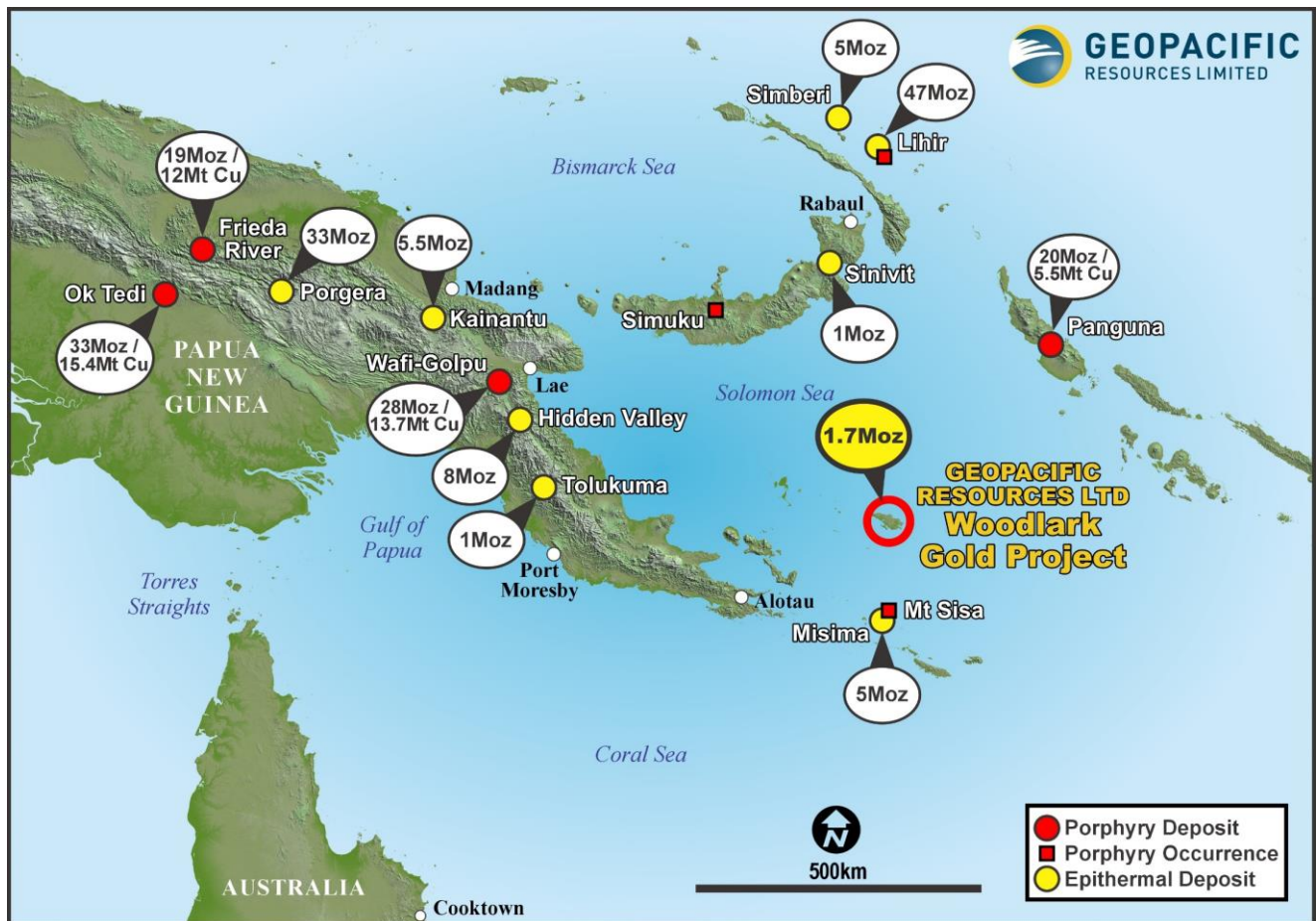


Figure 1: Regional map showing location of significant Porphyry and Epithermal deposits in PNG

Background and Geological Context

Woodlark Island is situated within a tectonically complex region where Cu-Au-fertile magmatism of Late Cenozoic age, linked to the Maramuni magmatic event, has produced significant mineral systems regionally.

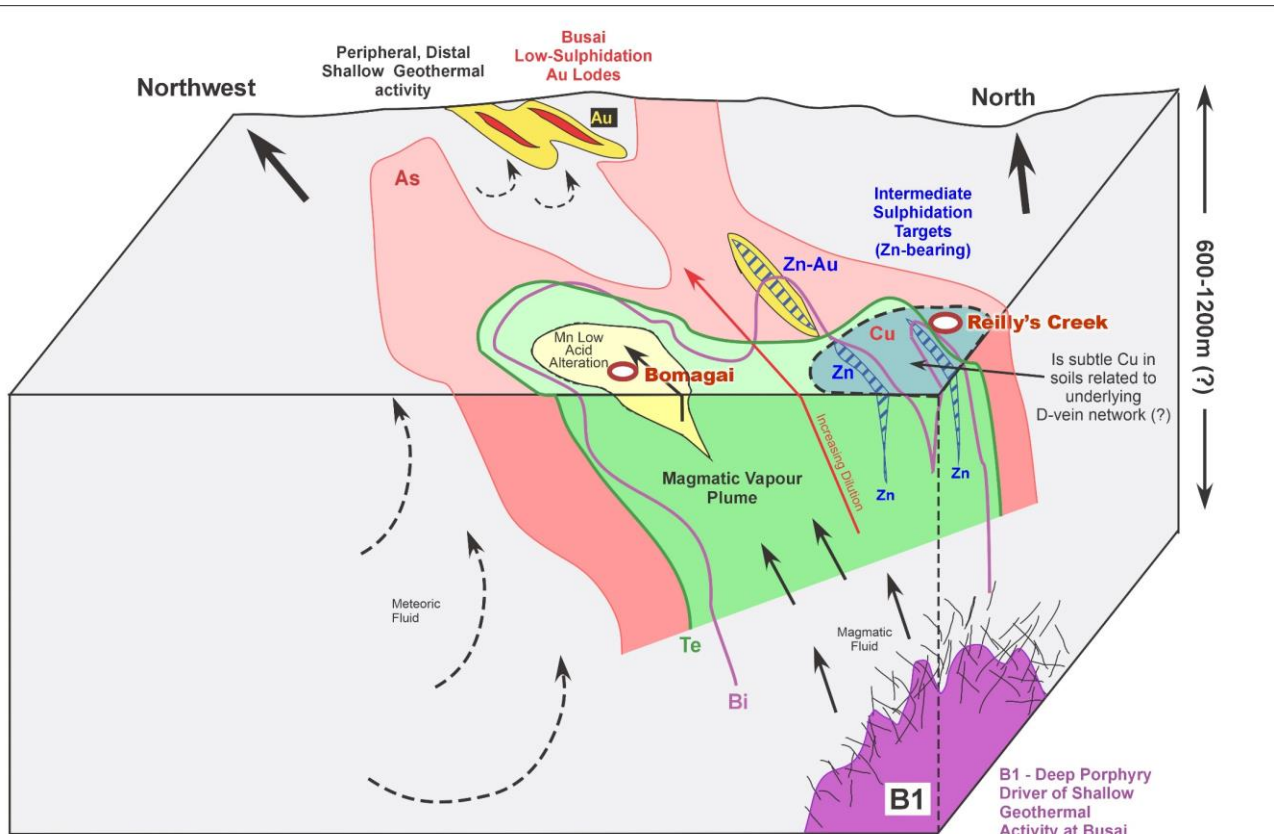
On Woodlark, mineralisation is hosted by late Miocene Okiduse Volcanics and associated intrusives across four eruptive centres trending north-south through the island’s central corridor.

The porphyry review indicates a likely genetic link between the intrusive rocks of the Okiduse volcanic suite and deeper copper-gold mineral systems. This interpretation is further supported by the presence of known epithermal systems aligned along key fault structures that may have acted as fluid conduits from deeper porphyry sources.

Key Study components included:

- Regional tectonic analysis to better understand porphyry metallogenic context;
- Copper fertility analysis using open-file geochemical data;
- Review of analogues on nearby islands (e.g., Lihir, Misima);

- Structural, geophysical, and geochemical integration for mineral systems interpretation and modelling;
- Identification of key fault orientations controlling mineralising fluid pathways from deep porphyry environments to the current near-surface epithermal deposits;
- Interpretation of multi-element geochemical anomalies to infer likely fluid flow directions; and
- Delineation of prospective zones for deep underlying centres of porphyry mineralised systems.



Schematic Model and Relationship of Features Around the Broader Busai Region

Figure 2: Schematic model illustrating relationship between a deep porphyry target (B1) SSE of Busai and multi-element geochemical zonation.

An independent structural lineament analysis incorporating airborne magnetic data, LiDAR and satellite imagery, identified four main fault trends; 060°-070° 'the Nubara Trend', 310° (WNW-ESE), 030° (NNE-SSW), and 350°-360° (NNW-SSE). All four of these structural fault trends play a role in localising the geothermal/epithermal systems and newly defined porphyry targets in the central outcropping part of Woodlark Island (Figure 4).

Areas of rock alteration are elongate along a number of these fault zones, and epithermal gold-mineralised structures are also commonly parallel to several of these trends. This implies that ongoing exploration for further epithermal mineralisation should follow these fault trends, and in some cases at sufficient depth they may lead to porphyry Cu-Au mineralisation.

Complementary analysis of regional soil geochemistry highlighted large-scale anomalies in Au, As, Sb plus Cu, Zn, Bi and Mn, consistent with patterns observed above known porphyry systems. These clustered gold, arsenic, and antimony anomalies appear to map out the areas of geothermal or hydrothermal fluid flow on Woodlark and contain the currently defined epithermal systems (Figures 3 and 4).

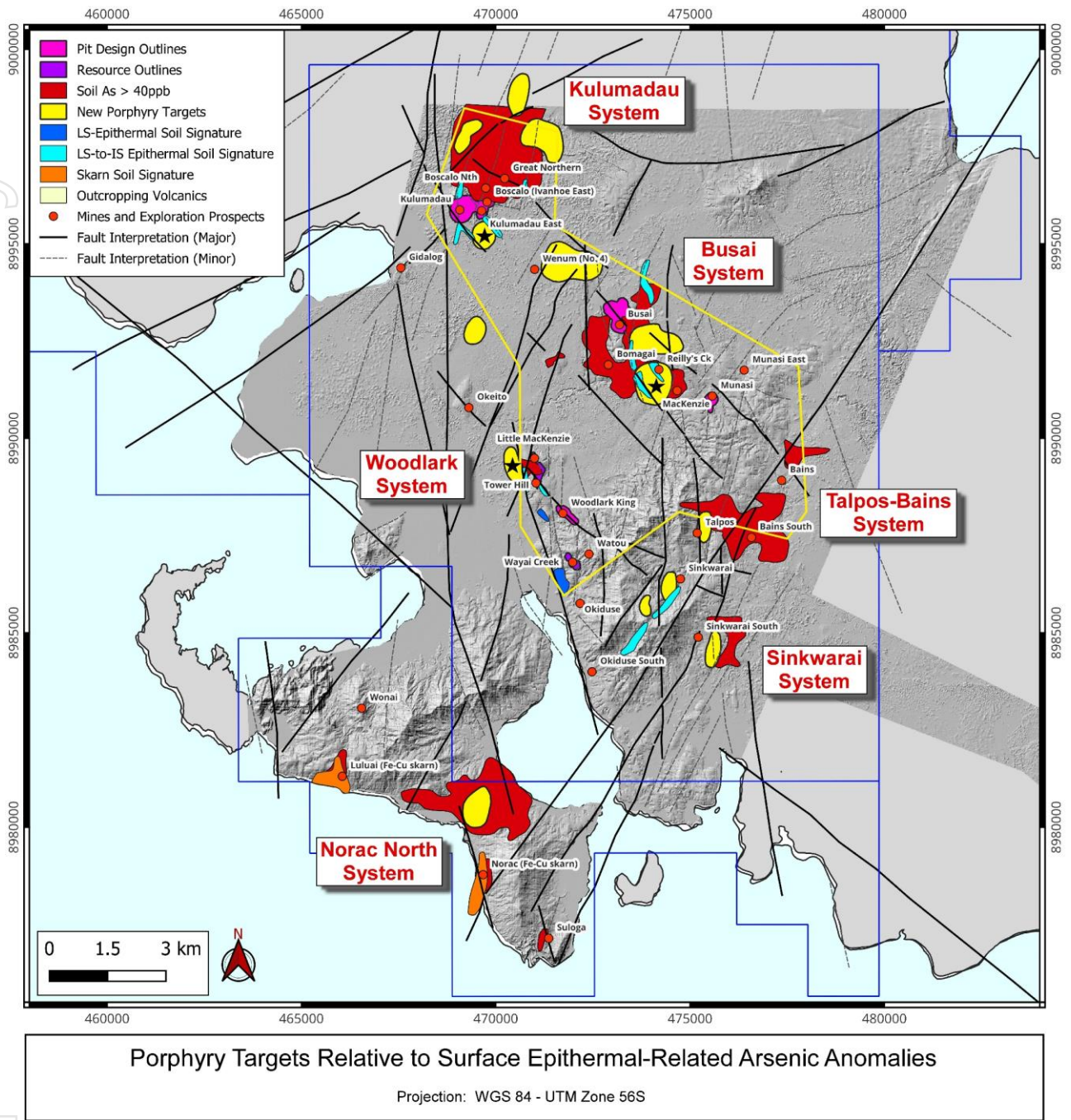


Figure 3: Porphyry Target Areas (yellow) with interpreted fault lineaments on Woodlark Island and spatial relationship to existing deposits, zones of As-in-soil anomalism (red)

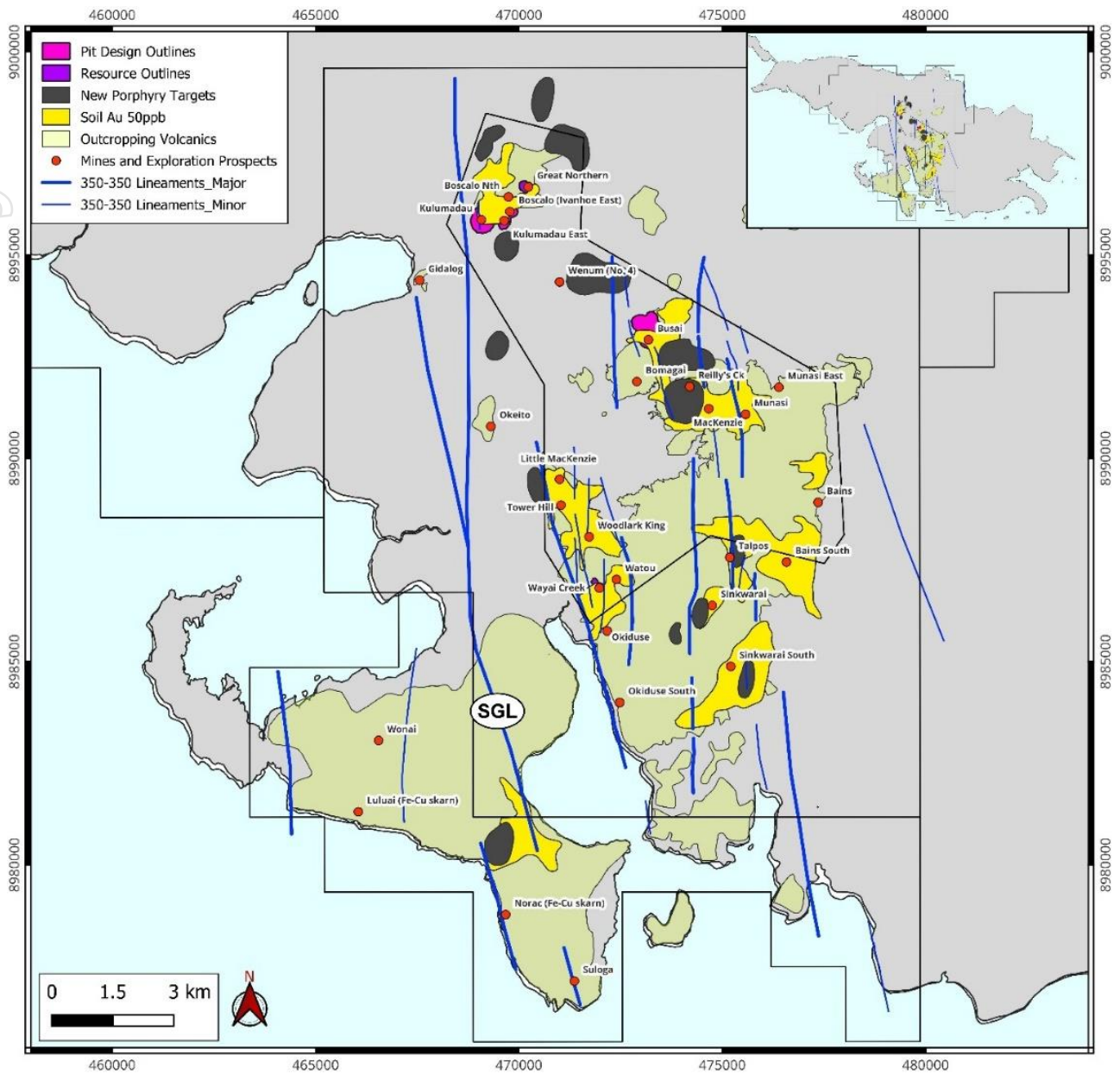


Figure 4: 350°-360° fault lineaments on Woodlark Island and spatial relationship to existing prospects, zones of Au-in-soil anomalism (yellow polygons) and newly defined porphyry Cu-Au target domains (black polygons).

Target Areas

The key exploration targets for potential porphyry systems on Woodlark are presented below, and Figure 5. All are at a relatively early stage with the near-term exploration focus being to advance the high-priority target environments towards a drill-test decision.

Porphyry Target Environment Priority		
High	Medium	Low
B1 - 1.5 km SSE of Busai	K3 - 3.2 km NNE of Kulumadau	S1 - 0.3 km SW of Sinkwarai
K1 - 0.8 km SE of Kulumadau	T1 - 0.2 km NE of Talpos	S3 - 0.5 km SE of Sinkwarai South
L1 - 0.6 km WSW of Little Mackenzie	W1 - 0.8 km E of Wenum	K2 - 1.9 km N of Kulumadau
	N1 - 1.6 km N of Norac	K4 - 2.8 km NE of Kulumadau
		K5 - 3.1 km SSE of Kulumadau
		B2 - 0.7 km SE of Busai
		S2 - 1.1 km SW of Sinkwarai

High-Level Fault Geometry and Controls on Dilational Linking Faults within Dilational Jogs

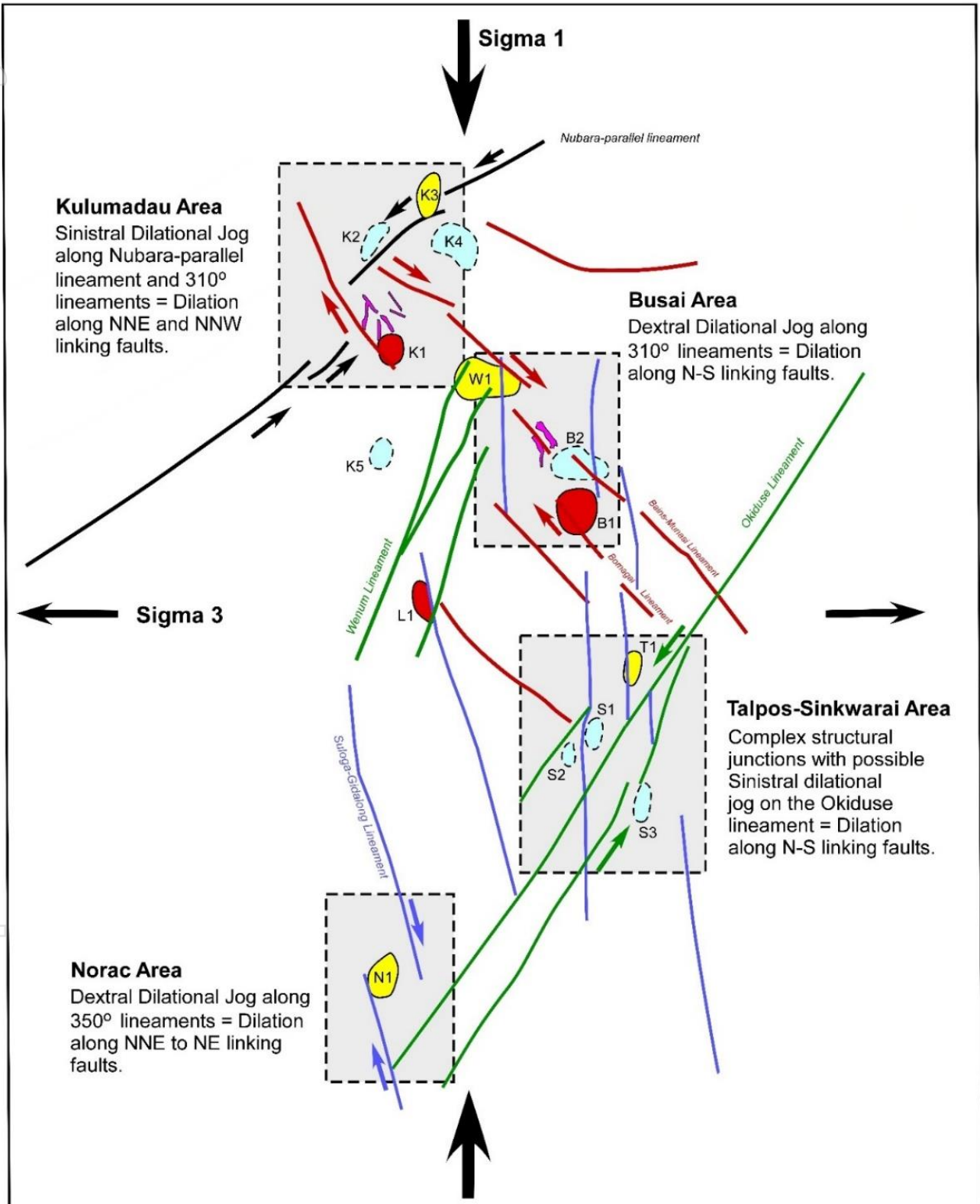


Figure 5: Priority 1 (red), Priority 2 (yellow) and Priority 3 (light blue) deep porphyry target environments in relation to key structural lineaments. Targets selected based on magnetics, alteration, mineralisation and surface geochemistry also appear to have a relationship to dilational jogs or releasing stepover bends as indicated by the interpreted coloured displacement arrows that pertain to a north-south orientation for the principal axial stress direction (σ_1).

Next Steps

An exploration program has been developed to further assess and refine the porphyry Cu-Au potential on Woodlark over the next 6 months. This program is aimed at advancing the highest-priority targets identified in the recent review and includes the following key initiatives:

- **3D alteration modelling** – Comprehensive 3D plotting and interpretation of all alteration data from historical drilling to define the geometric zonation of cooler to hotter alteration assemblages (propylitic, intermediate argillic, argillic, phyllic and potassic) of the system.
- **Historic alteration mapping** - Compilation of existing alteration maps from legacy reports to support 3D modelling and identify key areas.
- **Focused alteration mapping** – A targeted field mapping campaign around the two highest-ranked porphyry targets: Target K1 (southeast of Kulumadau), and Target B1 (southeast of Busai and east of Bomagai) (Figure 4). The K1 target is undercover and the mapping will extend across the adjacent outcrops of the Okiduse volcanics. High-resolution spectral analysis by an external consultant will assist in characterising alteration mineralogy.
- **Magnetic modelling** - Selective modelling of the depth to top of discrete magnetic anomalies to help prioritise potential porphyry centres and refine drill targeting.
- **Prioritised target analysis** – Following the above work, a deeper level of data analysis will focus on the most prospective porphyry targets to support future planned exploration activities, including drill-testing.

This ASX announcement was approved and authorised for release by the Board of Geopacific Resources Limited.

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Additional Information

Woodlark Mineral Resource Estimate

Refer to GPR's ASX Announcement dated 13 August 2024 titled "[Mineral Resource increased to 1.67 Moz](#)" for further details, including JORC² Tables.

The total Woodlark Mineral Resource hosts **48.3 Mt at 1.07 g/t Au for 1.67 Moz Au**. A breakdown of the Woodlark Mineral Resource by JORC classification is outlined in the table below and estimated using a cut-off grade of 0.4 g/t Au which is consistent with the assumed open-cut mining method.

Category (>0.4g/t lower cut)	2024 Woodlark Mineral Resource		
	Tonnes* (Million)	Grade (g/t Au)	Ounces (Thousand)
Measured	2.25	3.00	217
Indicated	39.44	0.98	1,241
Inferred	6.49	0.98	205
Total	48.28	1.07	1,663

**Tonnages are dry metric tonnes. Minor discrepancies may occur due to rounding*

The Company confirms that it is not aware of any new information, or data, that materially affects the information included, and that all material assumptions and technical parameters underpinning the estimate continue to apply and have not changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.

Competent Persons Statement

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 mineralization 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 GPR and consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

² Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. The JORC Code, 2012 Edition. Prepared by: The Joint Ore Reserves Committee of The Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia (JORC)