



**H&S CONSULTANTS Pty. Ltd.**

RESOURCE ESTIMATION | FEASIBILITY STUDIES | DUE DILIGENCE

RESOURCE SPECIALISTS TO THE MINERALS INDUSTRY

# **NI 43-101 Technical Report on the Kesar Gold Project, Eastern Highlands Province, Papua New Guinea**

**Prepared for Great Pacific Gold Corp**

**by**

**H&S Consultants Pty Ltd**

**QP: Simon Tear PGeo, Eur Geol**

**Report date: 30 September 2025**

**Effective date: 09 September 2025**

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## Date and Signature Page

Signed by:

Signed as

**“Simon Tear”**

SIMON TEAR

Effective Date: 9<sup>th</sup> September 2025

Date: 30<sup>th</sup> September 2025

## Certificate of Authorship

I, Simon Tear, PGEO, MIOM3, EurGeol, as co-author of the technical report entitled “NI 43-101 Technical Report: Kesar Gold Project, Eastern Highlands Province, Papua New Guinea” dated 30<sup>th</sup> September 2025 with the effective date of 9<sup>th</sup> September 2025 and prepared for Great Pacific Gold Corp (“Issuer”), do hereby certify that:

- 1) I am currently employed as a Principal Geological Consultant and Director of H&S Consultants Pty Ltd. with offices at Level 4, 46 Edward St., Brisbane, QLD, Australia.
- 2) I graduated from the Royal School of Mines, Imperial College, London, UK in 1983 with a BSc (Hons) degree in Mining Geology.
- 3) I am registered as a Professional Geologist with the Institute of Geologists of Ireland (registration number 17) and as a European Geologist with the European Federation of Geologists (registration number 26). I have worked as a geologist in the mining industry for over 40 years. My relevant experience for the purpose of this Technical Report is:
  - a. I have extensive experience with a variety of different commodities and types of mineral deposits in Europe, Africa, South America, Asia and Australia.
  - b. I have over 25 years experience with the resource estimation process including 3.5 years minesite experience (open pit and underground) and have worked on feasibility studies. I have also been engaged to undertake property assessments for >25 deposits/projects.
  - c. I have completed over 150 resource estimations on a variety of deposit types including various hard rock deposits for a range of precious and base metals.
  - d. I have completed over 45 reports that are in accordance with either NI43-101 or the 2004 and 2012 JORC Code and Guidelines.
- 4) I have read the definition of “qualified person” set out in National Instrument 43-101 (“NI 43-101”) and certify that, by reason of my education, affiliation with a professional association as defined in NI 43-101, and past relevant work experience, I fulfil the requirements to be a “qualified person” for the purposes of NI 43-101.
- 5) I have read NI 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
- 6) I have visited the Kesar project site 18<sup>th</sup> to 20<sup>th</sup> March 2025.
- 7) I am responsible for all chapters of the technical report entitled “NI 43-101 Technical Report: Kesar Gold Project, Eastern Highlands Province, Papua New Guinea” dated 30<sup>th</sup> September 2025.
- 8) As of the effective date of the certificate, to the best of my knowledge, information, and belief, the Technical Report herein contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.
- 9) I have no personal knowledge, as of the date of this certificate, of any material fact or material change which is not reflected in this Technical Report.
- 10) I am independent of the Issuer Great Pacific Gold Corp., applying all the tests in section 1.5 of the NI 43-101 instrument.

11) I have had no prior involvement with Kesar Project. I have completed several Mineral Resource estimates for the immediately adjacent Kainantu gold mine and the Blue Lake copper/gold porphyry deposit.

Dated on 30<sup>th</sup> September 2025

Signed as

Simon Tear.

BSc (Hons); Consulting Geologist

Principal Consultant and Director at H&SC

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# 1 Summary

## 1.1 Property Description, Location, Ownership and Access

The Kesar exploration licence, EL2711, is located in the Eastern Highlands Province, Papua New Guinea with the property boundary approximately 6km west of K92's Kainantu Mine Plant Site. The Property consists of 130 sq km (38 sub-blocks) which cover a Late Miocene to Pliocene hosted gold vein and porphyry district predominantly within Miocene tonalite. The potential for discovery of structurally controlled gold deposits within the project area is prompted by the nearby occurrence of the Kainantu gold mine and the Arakompa gold vein system. The nearby Blue Lake porphyry copper/gold deposit lies on an adjacent exploration licence and provides evidence for potential porphyry copper/gold mineralization on EL2711.

The property lies within an area of mostly rugged topography, with transecting rivers forming lower lying areas. Elevations range from 900m to 2,600m above sea level. Vegetation is mostly primary rainforest with areas of shifting cultivation in the valley floors. The property area is accessed by a two-hour drive along the sealed Lae-Madang Highway from Lae, which is the capital city of the Morobe Province and second largest city in PNG. The climate at Kesar has the Köppen classification of Af (tropical rainforest) with hot temperatures and wet conditions. Daytime temperatures reach 30°C dropping to night-time lows of 20°C. A pronounced wet season occurs between November and April, although rainfall is common throughout the year.

Yaendal Minerals Limited ("Yaendal") is a PNG company holding the tenement of the Kesar Project. Great Pacific Gold Corp. ("GPAC") owns a 90% interest in Yaendal and has additional rights under an option agreement to acquire the remaining 10% upon completion of a Definitive Feasibility Study.

This independent Technical Report has been prepared by H & S Consultants Pty Ltd ("H&SC"), an independent geological consultancy based in Sydney, NSW, Australia, at the request of GPAC, as an update on exploration work completed on the property.

The historic exploration work including mapping, surface geochemistry and Helimag geophysics has identified multiple gold target areas which warrant continued exploration.

## 1.2 History and Source of Data

This report is based on a review of historical and currently available data concerning the Kesar tenement supplied by GPAC and data from the Geological Survey of Papua New Guinea ("GSPNG") open file system. Vague reports of historical work completed in the 1960s, and the 1970s suggested very limited ground based exploration was undertaken. More substantial exploration was completed by RGC in the 1980s and Highlands Gold Limited ("HGL") in the 1990s. This historical work mainly comprised localised surface mapping, a mix of reconnaissance and detailed surface geochemical sampling and an airborne magnetic survey. Barrick Gold Corp held the licence between 2008 and 2012 and completed very limited surface geochemical sampling, a Helimag survey over the whole licence and desk top studies of air photographs and Landsat imagery. GPAC has undertaken recent exploration including selective surface mapping, geochemical surveys and an airborne magnetic survey that has been followed up with diamond drilling.

### 1.3 Exploration Rights

The area is covered by one current Exploration Licence (“EL”) issued by the Papua New Guinea Mineral Resources Authority and held by Yaendal. An EL entitles the holder to carry out exploration work in accordance with an agreed work programme filed the application for the rights. The term of the EL is for two years and may be renewed for a further two years upon expiry.

### 1.4 Geology and Mineralization

The Kainantu area, including the Kesar licence, in Papua New Guinea is located in the New Guinea Thrust Belt, which is part of the Papua New Guinea Mobile Belt. The area is characterized by a complex geology that includes metamorphic rocks, volcanic units, and Cenozoic sediments. The tenement area for EL2711 and surrounding areas are underlain by greenschist to amphibolite facies metamorphic rocks of the Triassic Bena Bena Formation, which are overlain by the Triassic – Cretaceous meta-sediments of the Goroka Formation. This sequence is unconformably overlain by Miocene age Omaura Formation consisting of volcano-sedimentary units and limestone lenses. The overlying Yaveufa Formation comprises basaltic and andesitic flows, agglomerates, volcanoclastic sandstone and limestone. The mid-Miocene Akuna Intrusive Complex consists of multiple phases ranging from olivine gabbros, dolerites, hornblende gabbros and biotite diorites to tonalites and granodiorites. Late Miocene age Elandora Porphyry intrusions and breccias are associated with mineralization and usually occur within proximity to a major north-northeast trending transfer structure.

Gold and base metal mineralization occurs in veins and breccia zones hosted by fault/shear structures within the intrusives as well as the meta-sediments. The major structures appear to be predominantly northwest trending (arc-parallel) and northeast trending (arc-normal). In the Anteruno area (EL2711) a significant number of the mineralized structures display an east-west trend. These are thought to be hybrid extensional shear fractures, with slight variations in the degree of shearing and opening between them. The Hampore/Fufunambi prospect (EL2711) has characteristics of an epizonal, intermediate sulfidation lode system that most likely represents the distal part of a polymetallic hydrothermal system related to an intermediate intrusion. Intermediate sulfidation epithermal deposits are usually high grade-moderate tonnage in style.

Proximal to EL2711 is the Kainantu Gold Mine which comprises low sulfidation epithermal lodes of the previously mined Irumafimpa deposit and the currently mined more orogenic/intrusion related gold veins of the Kora and Judd deposits. Mineral Resources for the Kora consolidated area comprise Measured and Indicated Resource of 8.1Mt @ 7.83g/t Au, 20.5g/t Ag and 1.18% Cu for a total gold equivalent of 2.6Mozs (as of January 2024).

Previous explorers have interpreted parts of the tenement to have significant features indicative of potential porphyry copper/gold mineralization. The nearby Blue Lake Au/Cu porphyry deposit lies within 4km of the Kesar licence boundary with a published Inferred Mineral Resource of 549Mt @ 0.21g/t Au, 0.24% Cu and 2.4g/t Ag for a total gold equivalent of 10.8Mozs (as of the effective date of this report). Porphyry copper deposits are a major world source of copper. They comprise large volumes of rock containing low-grade copper mineralization typically extracted by bulk mining methods.

### 1.5 Exploration, Drilling, Data Verification and Quality Assurance and

## Control

Previous exploration was completed by Kennecott, RGC, Highlands Gold and Barrick. This comprised stream sediment sampling (and rock sampling), ridge-and-spur soil sampling and an airborne magnetic survey for the lower two thirds of the tenement.

Recent work by GPAC has included areas of selective soil sampling based on anomalous stream sediment and rock chip sampling results with follow up diamond drilling. The main target areas were Anteruno, Hampore and Fufunambi.

The recent diamond drilling programme completed by GPAC on the property comprised 13 holes for a total of 3,714.3m. 5 holes were completed at the Anteruno prospect and 7 holes at the Hampore prospect. One hole was drilled at Fufunambi but was terminated before reaching target depth due to disaffected landowners. Core recovery is very good (>98%) with only minor core losses associated with the top of hole weathering. All holes were logged with data uploaded to an MSAccess drillhole database. Data verification consisted of a site visit by the QP from the 18<sup>th</sup> to 20<sup>th</sup> March 2025 in which a subset of the drillcore was inspected and checked against the database, i.e. 2 holes (KDH003 and KDH006) plus a helicopter fly over of drilling sites including GPS checks on drill collars.

The drillhole database includes geological and geotechnical logs and geochemical assays. The geochemistry was carried out with industry standard QAQC procedures including the use of standards and blanks. Analysis of the QAQC results indicated no issues with the sampling and only minor issues with the assaying.

Drilling intersected, generally at moderate to shallow angles, a multiple of well scattered, but narrow, auriferous quartz-sulfide veins (0.005 to 0.5m) with phyllic alteration haloes (0.01 to 3.5m). Drilling has also shown evidence of broader auriferous phyllic-altered shear and breccia zones all within the tonalite host rock. Best result for Anteruno was 3.13m @ 3.67g/t including 0.71m @ 13.5g/t Au (KDH003) and for Hampore, the best result was 0.94m @ 3.17g/t including 0.29m @ 9.08g/t Au (KDH011). In many instances it is interpreted that the narrow to very narrow quartz veins carried significantly high gold grades of >10g/t.

GPAC completed an airborne mobile magneto-telluric survey over the whole tenement. 15 production flights were flown to complete 931 line-kilometres of the survey over a 143 sq.km area. Assembled datasets include magnetic and electro-magnetic data including measurements for conductivity and resistivity and incorporated 3D inversion modelling. Lineament Analysis, a third party proprietary technique, was used to identify structural architecture and potential mineral sites. In addition two sets of external consultants were asked to interpret the data which resulted in a 3D geological interpretation and the generation of multiple targets for both porphyry style mineralization and intermediate sulfidation epithermal deposits.

## 1.6 Mineral Resource Estimation

No Mineral Resources have been defined on the property

## 1.7 Interpretation and Conclusions

Historical surface exploration on EL2711 has been rather limited and more of a general reconnaissance nature but still with anomalous areas for gold and copper identified. The exploration methods have been surface mapping, surface geochemistry via ridge and spur soil sampling, 'trunk'

stream sediment sampling, rock chip sampling (including some trenching) and panned concentrate sampling. The licence has also had a recent Helimag survey completed with 100m and 200m line spacing at a 300m flight height. The main prospects for gold identified from the historical exploration are drainage areas associated with Kesar Creek, Agrewo Creek, Anteruno Creek, Mirenkeno Creek and Konanke Creek.

The historic work tended to focus on the exploration potential for a porphyry copper/gold mineral system. The last work on the tenement prior to GPAC was Barrick in 2008-2012 which concluded that the potential for such an exploration target was low.

Since that time K92's work on the Kora Consolidated lode system 5km to the east and SE has resulted in the discovery of a significant gold (and copper and silver) Mineral Resource which has since gone into production at a rate of 1.2Mtpa and an annual gold production of 160,000ozs. Not only that but it has also discovered a significant gold/copper porphyry Inferred Mineral Resource at Blue Lake and has reported significant gold-bearing vein intercepts from diamond drilling at Arakompa. Both of these two deposits are within a 10km radius of EL2711.

GPAC has completed a data compilation exercise and identified a number of drill targets at Anteruno, Hampore and Fufunambi, which it has tested via diamond drilling. It has established that the gold mineralization is related to an intermediate sulfidation epithermal type of deposit, potentially of a similar type and orientation to the veins reported by K92 for Arakompa. Subsequent to the drilling it has fully evaluated the results from the airborne MT survey utilising external consultants to provide a 3D geological interpretation of the property and to delineate a series of porphyry and intermediate sulfidation epithermal targets suitable for ground follow up and potential drill testing.

The available exploration datasets also indicate that the property is also prospective for economic quantities of porphyry and skarn style, bulk tonnage copper-gold mineralization.

## 1.8 Recommendations

The existing database (GIS, surface and sub-surface geochemistry, drilling, geophysics) should be audited and reviewed. Staged exploration recommendations should be prepared for each of the known target areas that warrant additional exploration work.

Specific recommendations for further work include:

1. Mapping and rock chip sampling further NW along strike of the known veins at Fufunambi
2. Trenching along known vein areas outcrop/workings to better determine grade distribution along the structure for both Hampore and Anteruno.
3. Incorporate the MT survey results, including the EM conductivity and resistivity results, into a 3D geological model.
4. Complete items 1 to 3 and look to generate field sampling follow up programs designed to uncover a Phase 2 set of drill targets.
5. Phase 2 to involve further ground truthing and target definition leading to a substantial drilling program.

A summary budget is presented in the table below:

<b>Phase 1 (remainder of 2025)</b>	
<b>ITEM</b>	<b>COST (C\$)</b>
Audit and review of existing data (GIS, geochemistry, drilling, geophysics) aiming for target ranking for follow up drill testing	60,000
Eight (8) week field program to map (geology and structure) and sample (ridge-and-spur, scout trenches and channels) targets generated from recommended item 1	250,000
Geological studies: Consultants including geophysics interpretation, structural interpretation and petrography	40,000
Landowner engagement	5,000
Camp staging on high priority targets	45,000
<b>Total</b>	<b>C\$400,000</b>

<b>Phase 2 (2026)</b>	
<b>ITEM</b>	<b>COST (C\$)</b>
Refining and confirming target ranking via desktop studies	80,000
A 3,000 metre drill program of top-ranked targets identified from the Phase 1 program.	2,750,000
Surface exploration work: ground truthing confirmed MobileMT targets, target/drill-scale mapping, sampling and trenching	655,000
Landowner engagement	15,000
<b>Total</b>	<b>C\$3,500,000</b>

## 2 Introduction

H&S Consultants Pty Ltd (“H&SC”), a geological consultancy based in Sydney, NSW, Australia was requested by Great Pacific Gold Corp (“GPAC”), to generate an independent technical report for the Kesar gold project in the Eastern Highlands of Papua New Guinea in accordance with the NI43-101 in connection with GPAC’s filing of an annual information form for the fiscal year ended December 31, 2024.

Yaendal Minerals Limited, tenement holders of the Kesar Project, is a private PNG company owned 90% by GPAC. GPAC holds an additional right under an option agreement to acquire the remaining 10% upon completion of a Definitive Feasibility Study.

The property has had limited previous exploration work carried out by a small range of companies. The on groundwork mainly consisted of selective areas of mapping and reconnaissance surface

geochemical sampling. The last phase of historic work was completed in 2012 by Barrick Gold Corp. This last phase of work included a data compilation exercise, a Helimag survey, desktop studies of air photographs and Landsat (satellite) imagery. The result of this work was a series of targets for follow up exploration that was never undertaken. GPAC are now revisiting the historic data, completing some on-ground surface mapping and geochemical sampling with follow up diamond drilling. It has also completed a tenement wide Mobile MT survey with external consultants identifying a number of exploration targets. GPAC is now in the process of assessing these targets with a view to developing follow up ground truthing and geochemical sampling in order to generate the next set of drill targets.

This Technical Report is prepared in accordance with the format specified in Form 43-101F1 Technical Report dated 24<sup>th</sup> June 2011. H&SC understands that this Technical Report will be published on or around 30<sup>th</sup> September 2025.

All measurement units used in this Technical Report are metric; units and abbreviations are summarised in Section 27. The spellings used are Canadian English conventions.

H&SC has used the following sources of information in preparing this Technical Report:

- Reports and digital files supplied by GPAC
- Reports of work done by previous explorers from open file government reports
- Public domain information obtained from Internet searches and other sources

Reference to the main sources of information used are provided in Section 27.1

Simon Tear is a director and Principal Consulting Geologist for H&SC with over 40 years experience in mineral exploration and Mineral Resource estimation. He has visited PNG on four occasions to various other properties and has recently completed updated mineral resource estimates for TSX-listed K92's Kainantu gold mine. He has completed a recent site visit dated 18<sup>th</sup> to 20<sup>th</sup> of March 2025.

The effective date of this report is 9<sup>th</sup> September 2025 as this is when H&SC received the drillhole database and recent reports for the geophysical interpretation.

## **3 Reliance on Other Experts**

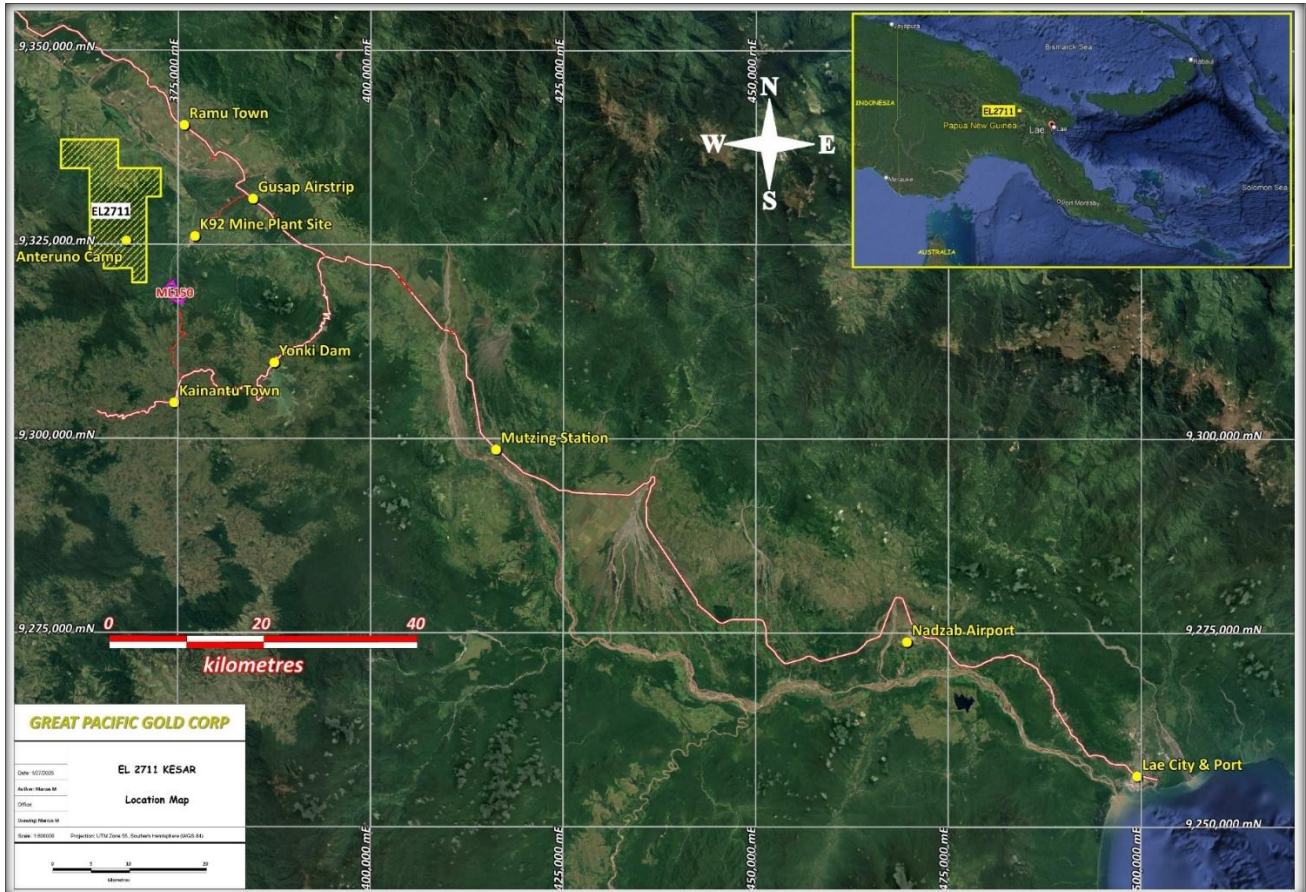
The Author has not relied on a report, opinion or statement of another expert who is not a qualified person, or on information provided by the issuer, concerning legal, political, environmental, or tax matters relevant to the technical report.

## **4 Property Description and Location**

### **4.1 Property Location**

The Kesar tenement is in Eastern Highlands Province, Papua New Guinea approximately 6km west of K92's Kainantu Mine Plant Site. The tenement package is approximately centred at 6°05'S and 145°

48°E or 366000mE and 9330000mN using the WGS84 Zone 55 grid projection (Figure 1). Previous exploration work has been done in either the Australian National Grid of AGD66 Zone 54 (1970 - 2013) or WGS84 Zone 54 (2013 - 2025).



**Figure 1 Location Map**

*(supplied by GPAC)(zoom in on image for better resolution)*

## 4.2 Tenure

Prior to undertaking any minerals exploration in Papua New Guinea an Exploration Licence (“EL”) must be obtained. Under the Papua New Guinea Mining Act 1992, minerals tenements are issued by the Mining Minister on recommendation from the Mining Advisory Council (MAC).

An EL may be granted for a term not exceeding two years, which may be extended for periods not exceeding 2 years. The area of land in respect of which an EL may be granted shall be no more than 750 sub-blocks (One Sub block = 3.41 km<sup>2</sup>). Details of EL2711 are given in Table 1.

**Table 1: Exploration Licence Tenure Details**

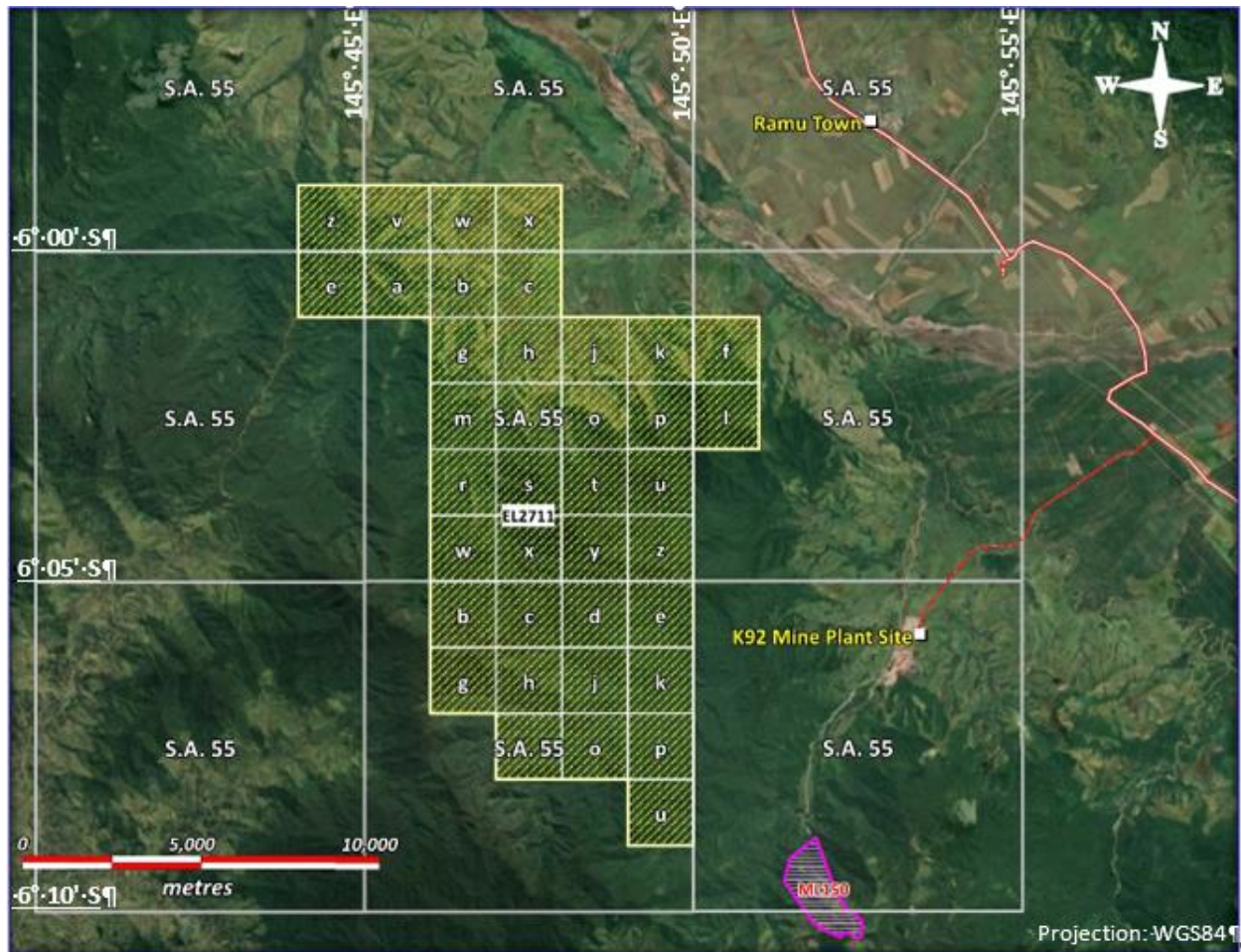
EL Number	Name	Tenure Holder	Date of 1 <sup>st</sup> Application	Date of 1 <sup>st</sup> Grant	Date Expires	Status	Area (sub-blocks)	Area (sq. km)
2711	Kesar	Yaendal Minerals Limited	2-Jun-21	30-Oct-23	30-Oct-25	Current	38	130

*(source: PNG Mining Cadastre Portal 19<sup>th</sup> February 2025)*

On July 31, 2025 GPAC applied for a renewal of EL2711 for a further two years of exploration. The renewal process was underway at the effective date of this report.

Since obtaining the Exploration Licence grant on October 30, 2023, GPAC has spent an estimated C\$5.83 million (based on Form 23 filings with the PNG MRA for the first 18 month period and an estimate by GPAC for the last 6 months) or approximately 17.7 million PNG Kina on exploration activity at the Kesar Project.

A representative map of the ELs as per the PNG MRA website “PNG Mining Cadastre Portal” <https://portal.mra.gov.pg/Map/> last checked 19<sup>th</sup> February 2025 is included as Figure 2.



**Figure 2 Location Map showing sub-blocks for Kesar Tenement**

*(supplied by GPAC)*

### 4.3 Royalties & Other Payments

Pursuant to the 1992 Mining Act, a 2% Net Smelter Return (“NSR”) royalty is paid to the Papua New Guinea national government from active mining operations.

The Project is not subject to any third-party royalties or encumbrances.

During the exploration phase of the Project, compensation is payable to certain groups. The property lies on ground belonging to a number of traditional landowner groups for which a compensation amount has been agreed and compensation for past work has been paid in full. Compensation rates

are based on rates published in the PNG *Valuer-General Compensation Schedule for Trees and Plants, All Regions* (August, 2013) and the *Papua New Guinea Chamber of Mines Compensation Schedule for Land Use and Land Damage and Man-Made Structures in the Mining and Petroleum Sectors* (2008).

#### **4.4 Environmental Liabilities**

There are no environmental liabilities associated with the project based on past activities.

#### **4.5 Mining Permits**

There are no past or current mining leases covering the tenement area and none have been applied for at this stage of exploration.

#### **4.6 Significant Factors to Mining Operations**

Activities on the Kesar EL are still at the exploration stage. Hence it is not possible to undertake any mining operation until a Mining Lease or Special Mining Lease has been granted by the PNG government. This typically requires the submission of a Feasibility Study.

No planning or applications have been made with regards to mining operations.

## **5 Accessibility, Climate, Local Resources, Infrastructure and Physiography**

### **5.1 Physiography**

The property lies within an area of mostly rugged topography with elevations ranging between 2600m and 900m above sea level, with transecting rivers forming lower lying areas. The elevated region to the south, west and northeast of the tenement is dominated by thickly vegetated tropical rainforest (Figure 3). To the northwest the area is dominated by savannah grassland (Ramu Valley). Secondary growth and shifting cultivation are apparent within the forested areas of the license area.



**Figure 3 Typical Terrain for the Kesar Property**

## **5.2 Accessibility**

The property area is accessed by a two-hour drive along the sealed Lae-Madang Highway from Lae, the capital city of the Morobe Province and the second largest city in PNG. It is serviced by daily flights from Port Moresby and other PNG centres and also hosts the largest cargo port in PNG.

There are no roads within the tenements. Primary access to the tenement is via helicopter then by foot to the prospect areas. An alternate access is by foot along bush tracks from the villages to the south of the property. Roads can be easily built into the main prospect areas to support any drilling program.

The general area is serviced by a small airstrip at Gusap, that is limited to helicopter and short take-off and landing fixed-wing aircraft like a Twin Otter.

### 5.3 Climate

The climate at Kainantu has the Köppen classification of Af (tropical rainforest) with hot temperatures and wet conditions. Daytime temperatures reach 30°C dropping to night-time lows of 20°C. A pronounced wet season occurs between November and April, although rainfall is common throughout the year. Rainfall averages 235 mm/month during the November to April wet season, and 137 mm/month during the dry season. Annual rainfall averages approximately 2,000 mm. Project operation/exploration is subject to the weather eg there is reduced visibility when cloudy conditions prevail preventing the operation of helicopters and heavy rainfall or earthquakes can trigger landslides.

### 5.4 Local Resources

The property site offices are located 180 km from Lae, 21 km from the Kainantu township and 56 km from Goroka. Goroka is the Capital of Eastern Highlands Province and contains Local and Provincial Level Government Offices.

The area of the tenement is lightly populated. The local people mostly live in small (<50 people) villages scattered along the valleys at the base of the steep mountains. The majority are subsistence farmers with limited opportunities for employment in the cash economy.

### 5.5 Infrastructure

The Kainantu mine is located within ML150 and the main Kainantu mine camp and processing plant are located within LMP78 which is located on the adjacent exploration licence to Kesar.

Yonki Dam provides water for the Ramu Hydro Power Station and the Yonki Toe of Dam Power Station operated by PNG Power Ltd. Currently the Ramu 1 Hydro Power station is supplying 54 MW from three generators on to the Ramu Grid while the Yonki Toe of Dam supplies 14 MW. They are supplemented by 4 MW from the Pauanda Hydro Power station, 10 MW from the Baiune Hydro Power station at Bulolo in Morobe Province and a combined thermal generation capacity of 20 MW from the diesel power stations in Lae, Madang, and the Highlands centres, giving a total generation capacity of 102 MW into the Ramu Grid (PNG Power website, 2014).

The primary source of power to the property is the PNG Power national grid (PPL) from the Ramu sub-station, located 20 km from the K92 mine processing plant site. Power from the national grid is reticulated to site via 22 kV overhead line and services the plant, mine, and camp area. The property also has standby diesel generators capable of supplying the total requirements of the operation.

There are no roads into the tenement area. There is a nearby airstrip, the Gusap Airstrip, that is a licenced grass landing strip located in the Ramu Valley and is maintained jointly by K92 and Ramu Agricultural Industries. Its main use is for emergencies and for charter flights.

### 5.6 Cultural Heritage

Habitation and gardens are mainly restricted to the broad valleys such as the Ilam River. To date no sacred or taboo sites have been identified on the property that have affected exploration activities.

## 6 History

### 6.1 Sources of Historical Exploration Data

The information in this report is based on annual technical reports submitted by the previous tenement holders i.e. Kennecott, RGC, Highlands Gold (“HGL”) Barrick and reports published by the Geological Survey of Papua New Guinea (“GSPNG”).

Table 2 contains a summary of all historical exploration work completed in the Kesar Creek area.

**Table 2: Summary of Mineral Exploration Work in the Kesar Creek Area**

Period	EL	Company/Group	Comments
1920	n/a	Various Companies	Began investigating for both alluvial and lode mineralization.
1960s	n/a	Kennecott	Systematic exploration was conducted. Close spaced regional stream sediment survey in Bena Bena, Dunantina and Karmanuntina drainages.
1970s	n/a	Consolidated Mining Highlands Gold Development Nippon Mining Co. Minjur Mines	Conducted investigations but no details available.
1980s	n/a	RGC	Explored the area for precious and base metals. Black and white aerial photography and airborne magnetic surveys were flown. RGC follow-up was limited to Bilimoia and Maniape (EL470) and Arakompa (EL693).
1989	916	HGL-RGC JV	Data review by HGL which revealed many unexplored areas within EL470 and EL916. Sunava was covered in EL916 held by RGC.
1990	916	HGL	First pass reconnaissance. Visible gold colours panned in Konanke Creek.
1991	916	HGL	Work program delineated several drainage anomalies. Soil samples taken to define 800m x 1000m copper anomaly.
1992	916	HGL	Filtering of low-level aeromagnetics. Follow up work expanded into tributaries of several highly significant gold and silver values.
1993	916	HGL	Follow up work ended after a fatal accident. No work was conducted since by HGL.
Late 1990s	n/a	Indo Pacific	Data review of Kesar Creek area. No details available
2009-11	2711	Barrick (PNG) Exploration	Data review. Geologic mapping of creeks. Rock chip sampling of outcrops. Helimag survey completed; Desk top interpretations of air photographs and Landsat satellite imagery incorporated into a revised geological map
2012	2711	Heritage Manda Gold Ltd	Application submitted in Jan 2012. Never granted. Put on hold until 2021 when placed under moratorium.

## 6.2 Previous Exploration

### 6.2.1 Kennecott 1960s

Systematic exploration was conducted over the general area which comprised close spaced regional stream sediment survey in the Bena Bena, Dunantina and Karmanuntina drainages (general Kesar area).

### 6.2.2 Consortium 1970s

A consortium including Consolidated Mining, Highlands Gold Development, Nippon Mining Co, and Minjur Mines undertook exploration in the 1970s. No details of any exploration are available.

### 6.2.3 RGC 1980s

The property was joint ventured with HGL in 1989, and the property was subject to a data review before RGC withdrew from the JV at the end of 1989.

### 6.2.4 Highlands Gold 1989-1993

Initial data compilation identified a number of target areas with an emphasis on porphyry Cu/Au style of mineralization. Identified target areas include Kesar Creek, Anteruno Creek, Mirenkeno Creek, Agrewo Creek and Konanke Creek. As a result various surface geochemical programmes were undertaken comprising ridge and spur soil sampling, stream sediment sampling, rock chip sampling and the collection of panned concentrate data. Some follow up trenching was completed on anomalous outcrop material. A total of 1002 samples were collected consisting of 540 soil samples, 371 rock samples (including trenching material), 44 stream sediment samples and 47 panned concentrates.

The main outcomes were an 800m by 1000m copper soil anomaly at Agrewo Creek coincident with a magnetic low interpreted as being indicative of a blind porphyry copper mineral body. Exposed gold mineralization from trenching yielded a peak value of 1.43g/t over 8m associated with quartz veining including visible gold and phyllic alteration. Molybdenite was also recorded with the quartz veins.

Petrographic analysis produced ambiguities with the mineralization and alteration styles.

Anomalous gold in stream sediment samples were reported at Konanke Creek some 4km north of Agrewo Creek and offered the possibility of sediment hosted gold mineralization, possibly Carlin style.

Exploration work was suspended in 1993 due to two fatalities amongst the field crew.

### 6.2.5 Highlands Pacific 2002-2003

Exploration work by HPL comprised updating the geochemical database with newly acquired digital data. A data review was completed that identified a NW trending corridor transcending PNG hosting a range of gold deposits including Wafi, Hidden Valley and Yanderra, also passed through EL2711. The corridor is related to the boundary between the Australian and Pacific plates known as the Ramu-Markham fault system and has associated N-S and NE-SW trending faults and offsets. No field work was undertaken.

### 6.2.6 Barrick 2009-2011

Initially in joint venture with HPL exploration, Barrick completed a number of data compilation exercises and data reviews. Field work comprised limited amounts of mapping, 9 line km, and 141

rock samples, as all other programmes were held up due to landowners refusing to grant ground access. A geological summary from the mapping concluded that alteration in the mapped areas was weak, mainly related to narrow quartz sulfide veins. Faulting tended to be 0.5 to 1.5m in width comprising clay gouge with orientations of N-S, NE-SW and E-W which was the same for jointing. Mineralization comprised polymetallic quartz sulfide veining and veinlets, generally 5 -20cm thick with an E-W strike.

A Helimag survey was completed in 2009 for 511 line kms with a flight height of 50m and line spacing of 100m in the southern section of the licence (NW-SE lines), and 200m line spacing in the northern section (N-S lines).

Further data compilations and data reviews included an air photo and Landsat interpretations leading to a revised geological map for the property. Further work included reprocessing the Helimag data (inversion models) and updating the geochemical database with recently acquired stream sediment data. The latter item allowed for the definition of a new area of anomalism spatially associated with the northern contact of the Akuna Intrusive Complex and the Omaura Formation.

The scope for the presence for Cu/Au porphyry style mineralization was downplayed.

It is worth pointing out that the Barrick EL1277 licence had an area of 68.4km<sup>2</sup> consisting of 20 sub-blocks in contrast to the GPAC tenement of 130km<sup>2</sup> (38 sub-blocks). Most of the new GPAC area is to the north of the tenement above 9,331,000mN.

### 6.2.7 Government Surveys

Regional mapping by the Australian BMR began in 1956 and was completed by the Geological Survey of Papua New Guinea (“GSPNG”) in 1982 (Rogerson et al).

## 7 Geological Setting and Mineralization

### 7.1 Regional Geology

The Kainantu area in Papua New Guinea is located in the New Guinea Thrust Belt, which is part of the Papua New Guinea Mobile Belt. The area is characterized by a complex geology that includes metamorphic rocks, volcanic units and Cenozoic sediments (Figure 4). The Kainantu region is in the north-eastern flank of the northwest trending Papuan Mobile Belt which is a major foreland thrust belt (Rogerson et al., 1987). The regional structural package of the Kainantu district is bounded in the northeast by the northwest trending Ramu-Markham Fault, a major suture zone that marks the northern margin of the Australian Craton, and in the southeast by the Aure Deformation Zone (Figure 4).

Many of the major structures in the New Guinea Thrust Belt represent crustal scale thrust faults and host fragments of obducted oceanic crust. The belt is characterised by sub-horizontal to shallowly north-dipping late Miocene stacked thrust sheets of regionally metamorphosed and strongly cleaved Triassic to Eocene fine-grained sedimentary rocks and minor volcanic rocks. Following a middle Oligocene hiatus, siliciclastic sediments, carbonates, and volcanic rocks were deposited until thrusting began in the middle Miocene (Rogerson et al, 1987; Dobmeier et al, 2012) accompanied by

middle Miocene intrusions. A mild orogeny in late Tertiary time folded and faulted Tertiary rocks and has continued to the present day (Dow and Plane, 1965). The belt is characterised by several north-northeast trending fault zones that commonly host major ore deposits (Williamson & Hancock, 2005).

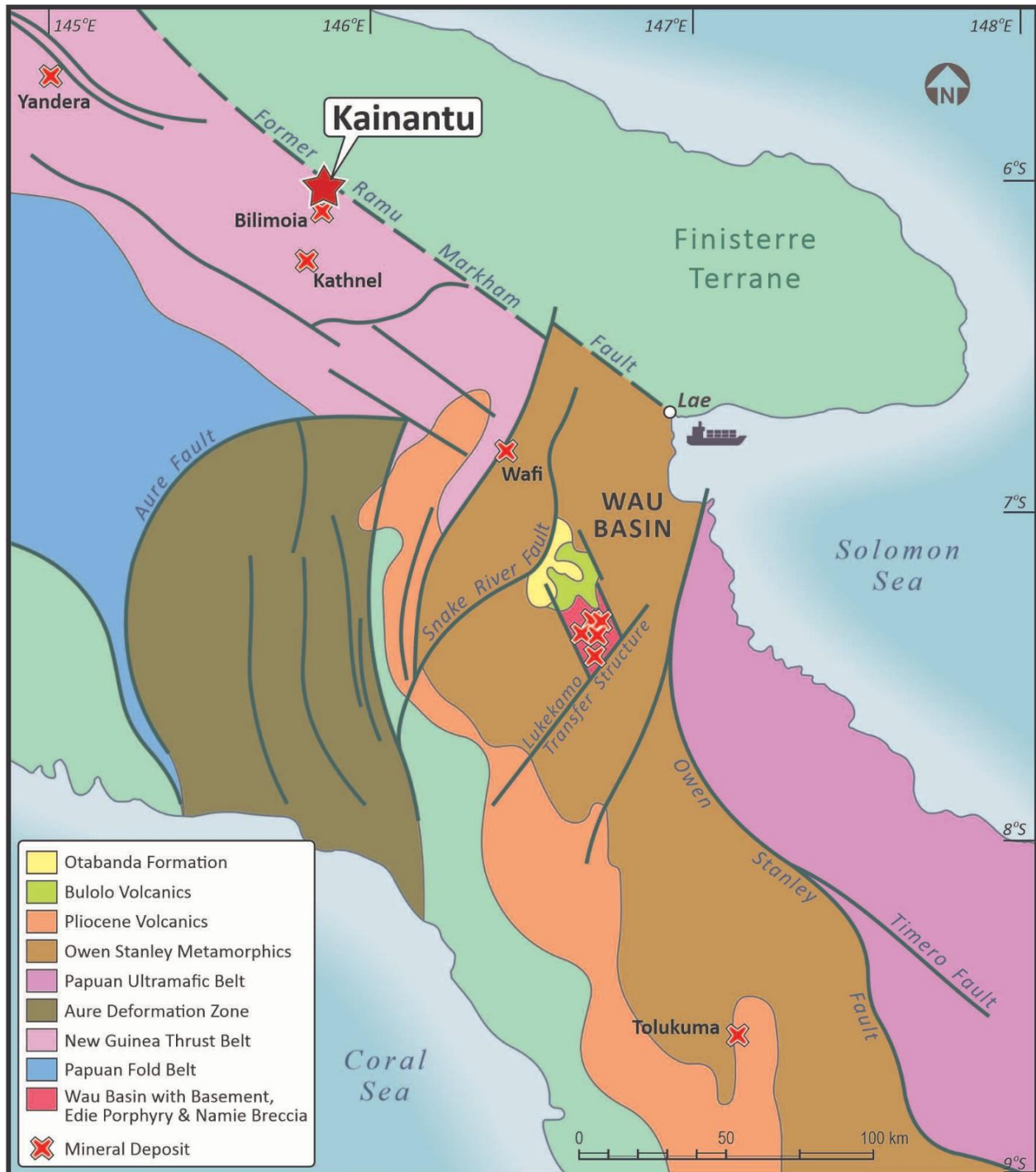


Figure 4 Geological Location Map for the Kainantu Area

(supplied by GPAC)

The tenement area and surrounding areas are underlain by greenschist to amphibolite facies metamorphic rocks of the Triassic Bena Bena Formation, which are overlain by the Triassic to Cretaceous meta-sediments of the Goroka Formation (Figure 5). This sequence is unconformably overlain by the Miocene age Omaura Formation consisting of volcano-sedimentary units and limestone lenses. The overlying Yaveufa Formation comprises basaltic and andesitic flows, agglomerates, volcanoclastic sandstone and limestone. The mid-Miocene Akuna Intrusive Complex consists of multiple intrusive phases ranging from olivine gabbros, dolerites, hornblende gabbros and biotite diorites to granodiorites and tonalites. Late Miocene age Elandora Porphyry intrusions and breccias are associated with mineralization and usually occur within proximity to a major north-northeast trending transfer structure.

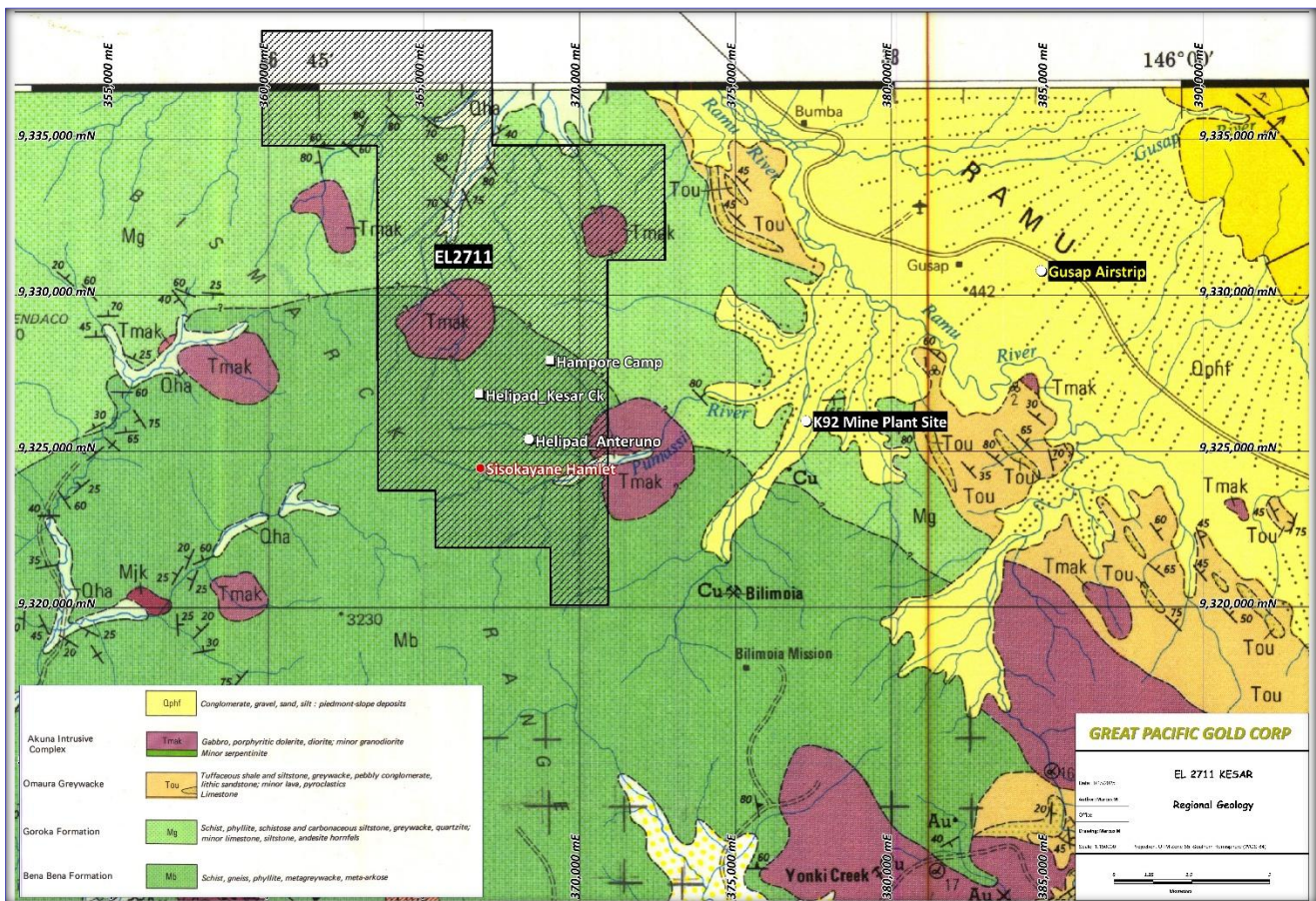


Figure 5 Regional Geology Map for Tenement EL2711

(supplied by GPAC; zoom for better resolution)

## 7.2 Local Geology & Mineralization

The main stratigraphic rock units present in the area are shown in Table 3 and in Figure 6. In the southern part of the tenement, the geology consists predominantly of granodiorites/tonalites and minor mafic intrusions of the Akuna Intrusive Complex. Sediments and meta-sediments (phyllites) of the Goroka Formation crop out in the north and northwestern areas of the tenement. The Omaura Formation and metamorphic units of the Bena Bena Formation crop in the central section of the tenement, the latter as a discrete inlier at the junction of the two main zones.

**Table 3: Local Stratigraphy for the Tenement Area**

Stratigraphic Unit	Age	Description
Elandora Porphyry	Late-Miocene	Group of intermediate intrusives postdating all other units. An unnamed diatreme postdates the Akuna Intrusive Complex (Rogerson et al., 1982), appears to be structurally controlled. Both units display some degree of acid alteration and weak acid mineralization (Lohan, 1996).
Akuna Intrusive Complex	Early to Mid Miocene	Comprises a number of compositional varieties ranging from olivine clinopyroxenites, olivine gabbros and dolerites, hornblende gabbros and hornblende-biotite-diorites to granodiorites/tonalites (Rogerson et al. 1982). Weakly foliated in places.
Omaura Formation	Early-Miocene to Late Oligocene	Thinly bedded siltstone and mudstone. Quartz veining at contact with Intrusive Complex.
Goroka Formation	Mid-Triassic to Cretaceous	Schist, slate, phyllite, quartzite, greywacke, siltstone & hornfels.
Bena Bena Metamorphics	Triassic	Comprises foliated regionally metamorphosed pelites, psammites, conglomerates and marl. Subject to low grade metamorphism, at times silicified and sericitized in places. Forms the basement of the sequence.

Based on subsequent airborne geophysical surveys it should be noted that there is a considerable difference between the older regional geology in Figure 5 and the more up to date property scale geology of Figure 6.

### 7.2.1 Intrusives

The granodiorite/tonalite of the Akuna Intrusive Complex observed within the tenement contains plagioclase, quartz, biotite, hornblende and magnetite of around 1 to 5mm grain size. It is texturally massive, unfoliated and generally unaltered except adjacent to fractures. Biotite and magnetite are ubiquitous and are considered primary minerals rather than being indicative of hydrothermal potassic alteration.

Xenoliths of hornblende-feldspar porphyry are observed throughout the granodiorite. They range from a few centimetres to about 1m across.

Felsic aplite dykes ranging from 3 to 30cm thick, cut the granodiorite locally. They are composed mainly of fine-grained quartz and feldspar with less than 5% biotite.

### 7.2.2 Sediments and Metasediments

The sediments/metasediments exposed in the tenement area are usually grey phyllites of either the Bena Bena Formation, which host the Kainantu gold lodes, or the Goroka Formation which in turn is unconformably overlain by shale and siltstones of the Omaura Formation.

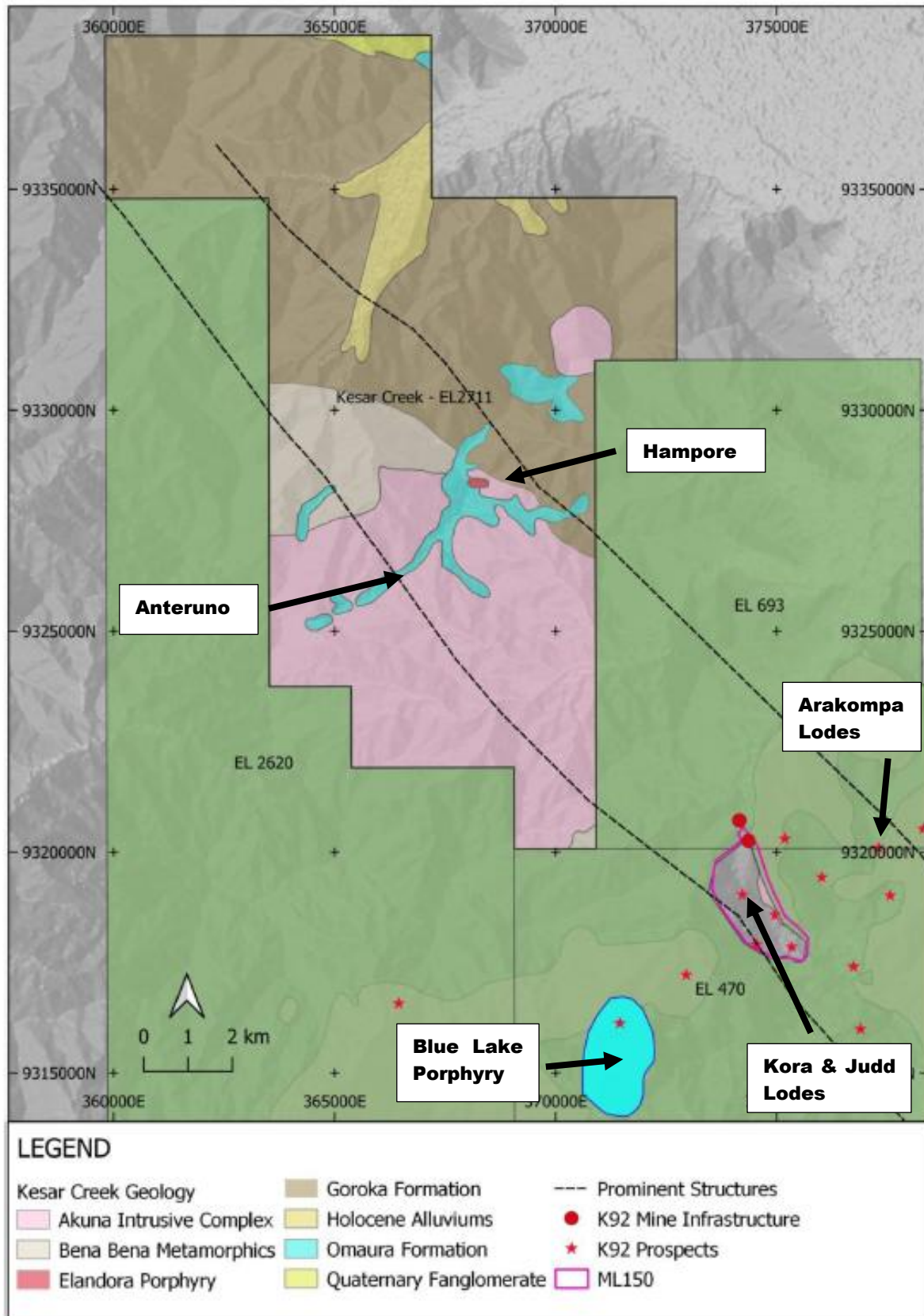


Figure 6 Geology Map for EL2711

(supplied by GPAC)

### 7.2.3 Structure and Mineralization

Gold and base metal mineralization occurs in veins and breccia zones hosted by fault/shear structures within the intrusives as well as the meta-sediments. The major structures appear to be predominantly northwest trending (arc-parallel) and northeast trending (arc-normal). In the Anteruno area a significant number of the mineralized structures display an east-west trend. These are thought to be hybrid extensional shear fractures, with slight variations in the degree of shearing and opening between them (Corvino, 2024).

A NW structural corridor has been inferred by both GPAC and previous explorers to transect the property in effect linking anomalous gold mineralization on EL2711 to the structurally controlled mineralization found at the Kainantu gold mine approximately 5km to the southeast. Mapping by GPAC also identified a WNW trending mineralization within the NW structural corridor.

The main mineralization style on EL2711 has been interpreted as an intermediate sulfidation epithermal lode system related to an intermediate intrusive. Characteristic mineral assemblages e.g. sphalerite and galena indicate some degree of metal zonation typical of these types of deposits.

In the Anteruno area, the mineralised veins are usually narrow (less than half a metre wide) and consist of quartz, carbonate and base metals including arsenopyrite, chalcopyrite, galena, molybdenite and sphalerite. In the Hampore and Fufunambi areas, wider mineralised zones consisting of mineralised hydrothermal breccia veins (up to 1.5m wide) have been reported, some with bonanza-type gold values. The breccia zones and veins usually consist of quartz, carbonate, arsenopyrite, sphalerite and lesser galena. Molybdenite though common in the southern area is conspicuously absent in the northern/northeastern areas.

At the Hampore/Fufunambi prospects the lode samples represent brittle shear zones with phyllic (quartz-sericite-pyrite) alteration, fine crystalline quartz veins and hydrothermal breccia fill with iron (pyrite) and base metal sulfides and probable carbonate gangue. There is an enriched suite of elements for the gold veins comprising As Au Sb Ag Pb (Cd & Bi) [ Zn, Sn, Cu]. High gold grades are characterised as late stage infill by arsenopyrite and galena compared to late stage pyrite.

There seems to be two types of gold mineralization at Hampore/Fufunambi:

1. Free bonanza gold with possible Bi-Te-Se anomalism but little or no base metals and
2. Lower grade electrum in base metal sulfide rich veins with notable Ag-As-Sb-Pb-Zn enhancement.

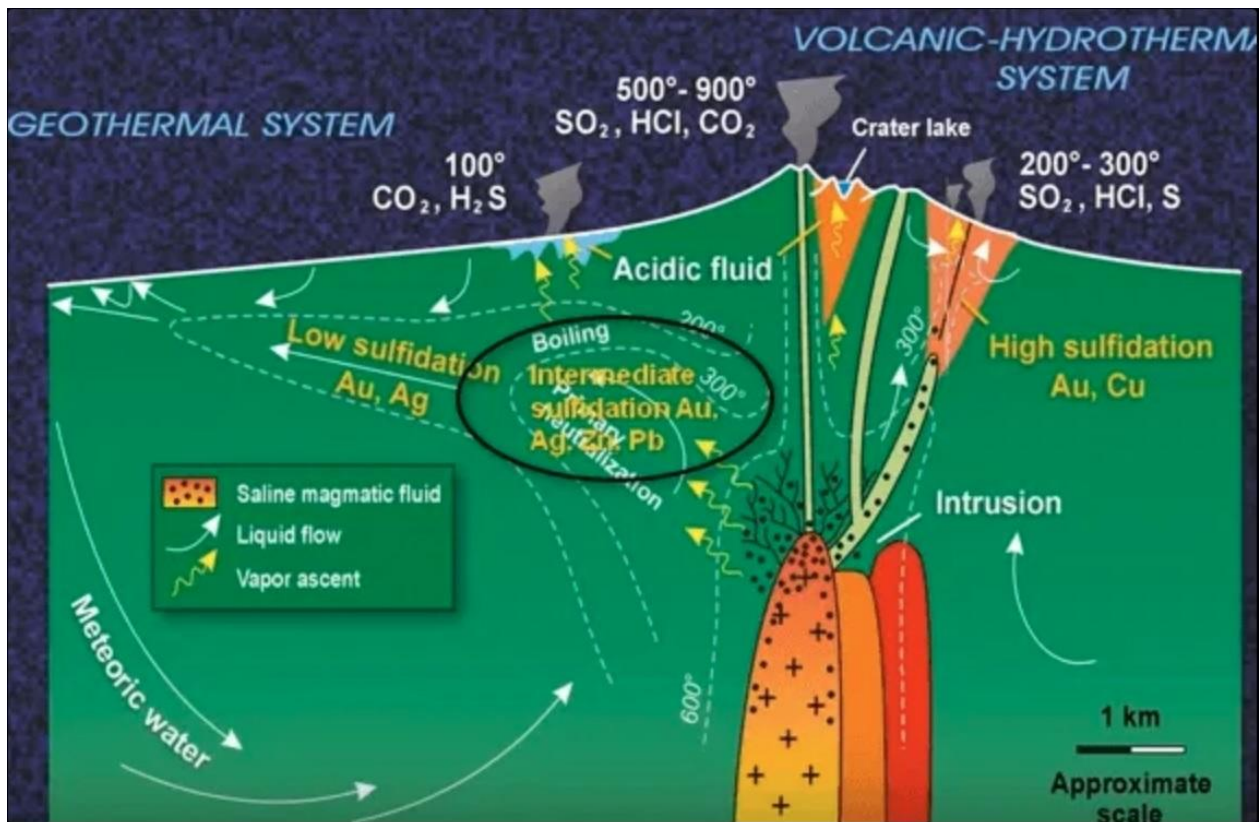
It is likely these are two paragenetically separate stages of mineralization with the bonanza grade in discrete veins overprinting the more extensive but lower gold grade electrum-base metal type lodes. Importantly the gradation in metal zones in the lode gives confidence that the Au-Ag mineralization may extend below the Pb-Zn-Ag zone into the more Cu-rich zone, albeit at possible lower gold grades. This is reflected in the metal associations for different Au grade intervals.

Manganiferous-calcite is a likely to be a good surface guide to any underlying auriferous sulfide mineralization.

The small occurrence of the Elandora porphyry in the centre of the tenement may be significant as it is a porphyry of a younger age compared to the older granodiorites of the Akuna Intrusive Complex and may have a more significant relationship with gold mineralization and possible Au porphyry style mineralization.

## 8 Deposit Type

A review of 13 selected auriferous rock samples from the Hampore/Fufunambi prospects was completed by GPAC. The review consisted of hand specimen inspection of vein textures detailing likely paragenesis of the specimens in conjunction with preliminary portable X-Ray Fluorescence (“pXRF”) analyses. The conclusion was that the Hampore/Fufunambi prospects are part of an epizonal, intermediate-sulfidation lode system that most likely represents the distal part of a polymetallic hydrothermal system related to an intermediate intrusion. Its geologic position is shown in the black ellipse in Figure 7.



**Figure 7 Example of the Formation & Location of Intermediate Sulfidation Mineral Lodes**

(Source: 911Metallurgist article on Epithermal Gold Deposits Characteristics)

The intermediate sulfidation hydrothermal system has recognisable metal zonation comprising Fe, As-Sb-Au, Sb-As-Zn-Pb-Au, Pb-Zn-Ag, Cu-Ag and possibly Mo-Bi-W-Sn zones with complete gradation between the zones. These gradational zones would suggest a good vertical extent to the mineralization within the hydrothermal system. The examined samples from Kesar are characteristic of this type of hydrothermal system being exposed in the As-Sb and Pb-Zn-Ag zones and with the best Au in the As-Sb zone. Whilst the Cu-Ag and Mo zones are weakly displayed at Hampore/Fufunambi they are still indicative of a possible underlying intermediate intrusion whose felsic fractions were responsible for the mineralization. The metal correlations from the pXRF work are consistent with the intermediate sulfidation polymetallic hydrothermal system.

An example of an intermediate sulfidation gold mine is Frute Del Norte in Ecuador owned by Lundin Gold Inc. Published Mineral Resources for the mine in December 2024 were Measured & Indicated

30.6Mt @ 7.17g/t Au and 11g/t Ag with Inferred Resources at 13.9Mt @5.27g/t Au and 12.2g/t Ag (commercial production began in 2020).

A more speculative but reasonable deposit type would be a porphyry gold-copper mineral body. Figure 8 shows the relationship between intermediate sulfidation lodes (red circle in Figure 8) and an intermediate intrusive stock capable of generating a porphyry copper deposit. It should also be borne in mind that less than 10km to the south-east of Kesar Creek is the Kainantu gold mine with the almost adjacent Blue Lake Porphyry copper/gold deposit.

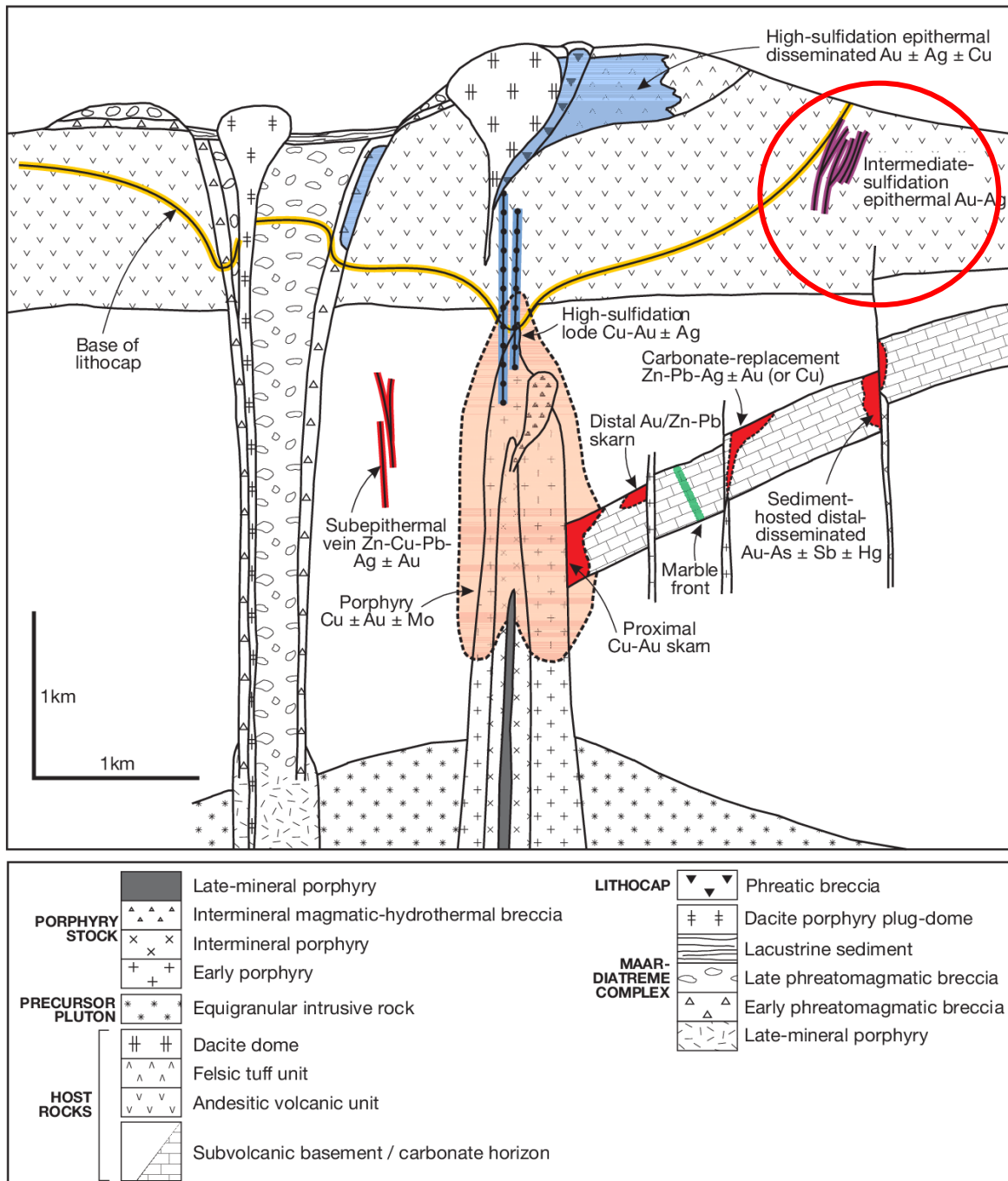
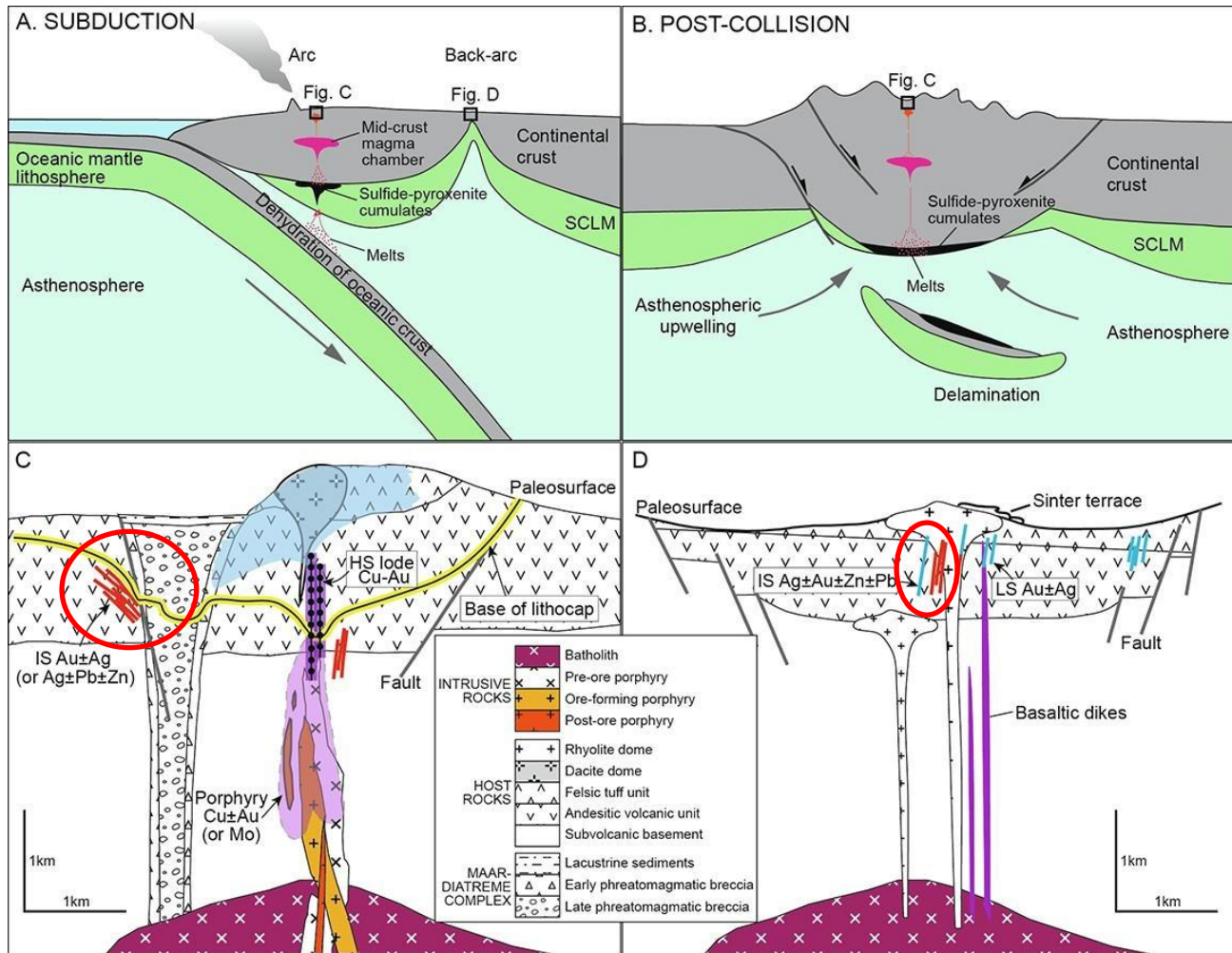


Figure 8 Anatomy of a Telescoped Porphyry Cu - Skarn - Epithermal system (Sillitoe, 2010)

Figure 9 shows two possible geological settings for the formation of intermediate sulfidation deposits (red ellipses in diagrams C and D).



**Figure 9 Schematic Geologic Settings for Intermediate Sulfidation Gold Deposits**

(Source: Sciencedirect paper 1-s2.0-S0169136818309405-ga1\_lrg)

Porphyry copper deposits are a major world source of copper (also molybdenum, silver and gold) with the best-known examples being concentrated around the Pacific Rim i.e. in North America, South America, and areas such as the Philippines, Papua New Guinea and Indonesia. New Guinea and the surrounding islands host several significant porphyry copper and skarn deposits for example Panguna, Golpu, Frieda River, Ok Tedi, Grasberg/Erztberg). Most of these deposits are relatively young i.e. of Tertiary or Cretaceous age.

A third potential deposit type put forward by Barrick was the occurrence of sediment hosted gold in the carbonate containing Omapora Formation, the outcrop of which corresponded to an area of significantly anomalous gold in stream sediment samples. This theory remains untested.

## 9 Exploration

Exploration work to date has essentially been completed in four phases. An early pre-1980s collection of major companies completing broad based regional geochemical and desktop studies with very limited reporting of results. A second phase (1989-1994) comprised RGC and HGL undertaking surface mapping and geochemical sampling and an airborne magnetic survey. Barrick completed a third phase consisting of mainly data compilation, desk top studies and a Helimag survey across the tenement (2008-2012). Phase two was halted by an unfortunate accident that resulted in the death of two field crew members, whilst phase three was held up by landowner disagreements. The final phase is current with GPAC completing a Helimag survey, surface mapping and geochemical sampling with follow up preliminary diamond drilling.

The relevant data sets include a detailed airborne (Helimag) geophysical survey, regional and local geochemical sampling (mainly 'trunk' stream sediment sampling data, ridge and spur soil sampling and localised bedrock sampling, including trenching programmes) along with localised areas of surface mapping. The surface work in general has covered most of the prospective stratigraphy on the property. In addition drilling has tested a range of targets across two of the main prospects with encouraging results.

Recent work completed by GPAC on EL 2711 (Kesar) includes:

- Diamond drilling of PQ, HQ and NQ core with 5 holes for 2,084.9m at the Anteruno Prospect and 7 holes for 1469.9m at Hampore. 1 drillhole was started at Fufunambi but had to be stopped at 227.6m.
- 205 rock chips samples collected throughout the southern part of the tenement.
- 967 soil samples collected throughout the southern part of the tenement.
- 6km of detailed geological mapping and traversing within the Anteruno Prospect.
- Technical report compilations including a review of Helimag data.
- Numerous meetings with Kesar landowner groups.
- Compensation payments for damages.

The following activities are currently ongoing:

- Desktop review of geophysical targets
- Engaging with community & awaiting positive response before designing field programs with a view to undertaking:
  - Field checking of anomalies and targets from the geophysics work
  - Rock chip sampling of other selected areas.
  - Geological mapping and traversing at Hampore & Fufunambi.

### 9.1 Geophysical Surveys

#### 9.1.1 Introduction

RGC completed an airborne magnetic survey over the property, but no details or images are available.

Barrick completed a Helimag survey in 2008 for 511 line kms with a flight height of 50m and a line spacing of 100m in the southern section of the licence (NW-SE lines), and 200m line spacing in the central section of the current tenement (N-S lines). In 2012 advanced geophysical modelling was undertaken on data covering the Kesar Creek prospect in order to evaluate the influence of steep topography on magnetic data in areas with magnetic host rocks and its implications for exploration in the region. It was found that the steep topography did influence the magnetic response and consequently a workflow was developed to improve the effectiveness of magnetic data interpretation in areas of steep terrain.

In 2024 GPAC commissioned Expert Geophysics Surveys Inc to undertake a Helimag Mobile MT geophysical survey, with 100 and 200m line spacing and 300m flight height. The purpose of the survey was to map bedrock structure and lithology, including possible alteration and mineralization zones. The survey contained measured apparent ground conductivity corresponding to different frequencies, inversion of the EM data to obtain the distribution of resistivity with depth and used VLF and magnetic data to study properties of the bedrock units. A total of 15 production flights were flown to complete 931 line-kilometres of the survey over a 143 sq.km area.

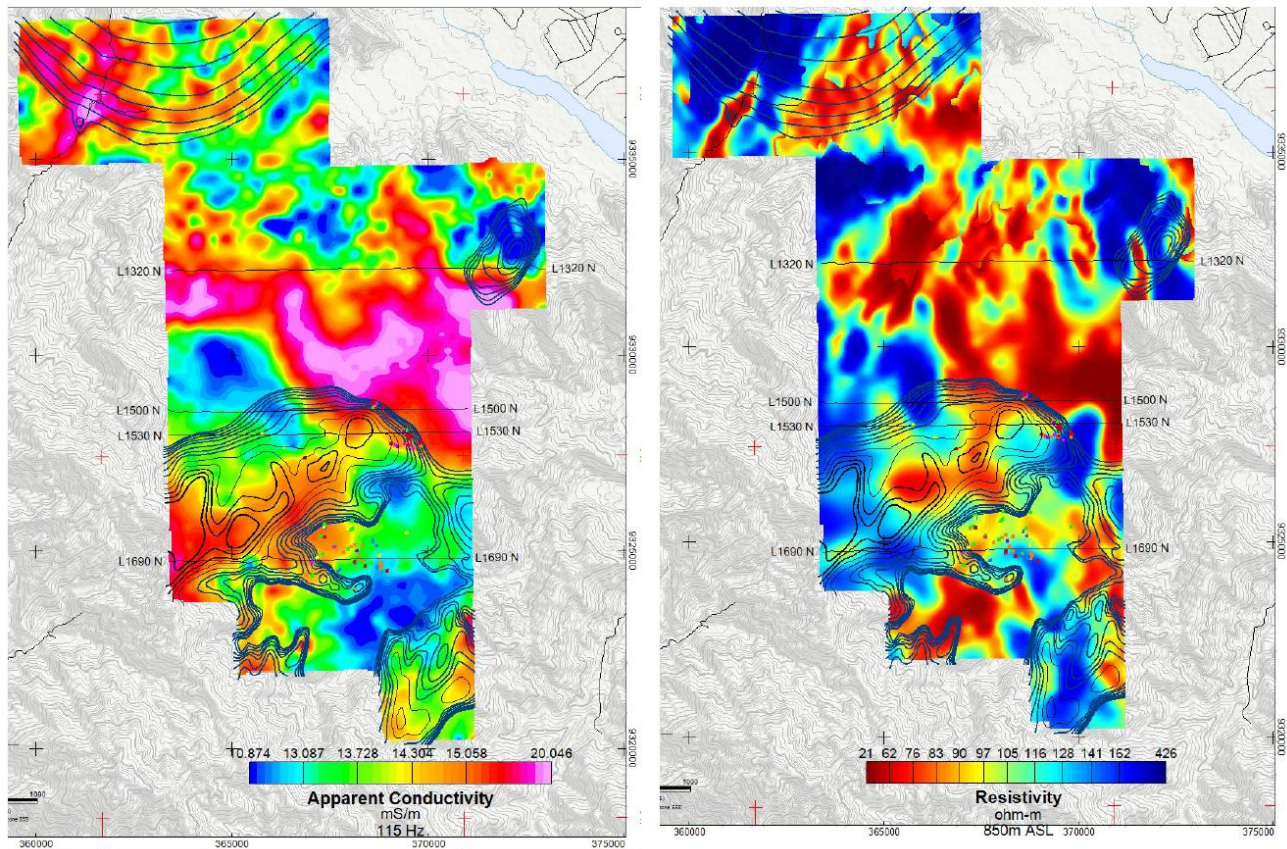
Apart from the interpretive work completed by Expert Geophysics, the MT data including the magnetics was also processed by two independent consulting companies, Global Geologic (Stephen Olsen) and Aimex Geophysics (Peter Swiridiuk).

### 9.1.2 Expert Geophysics MT Survey

The geophysical survey results were presented in the form of digital databases, maps, grids, sections, elevation slices and 3D voxels. The report describes the data acquisition, processing and inversion procedures, equipment and digital data specifications, and basic data analysis.

Figure 10 show the flight lines and the TMI-RTP image for the Kesar tenement. Clearly, the image shows different geological domains across the tenement, specifically distinct is the northern half related to the Goroka Formation and a southern half related to the granodiorites/tonalites of the Akuna Intrusive Complex. There is considerable variability in the magnetic responses of the southern half, implying possible multiphase intrusions with or without alteration, veining and mineralization. There appears to be some modest discrepancies with the magnetically defined lithological boundaries with respect to the surface mapping which can easily be fixed with subsequent re-interpretation of the data. There appears to be a distinct structural NE-SW trend in part of the intrusive complex which may have implications for potential mineralised vein directions re K92's Arakompa deposit ~10km to the east.

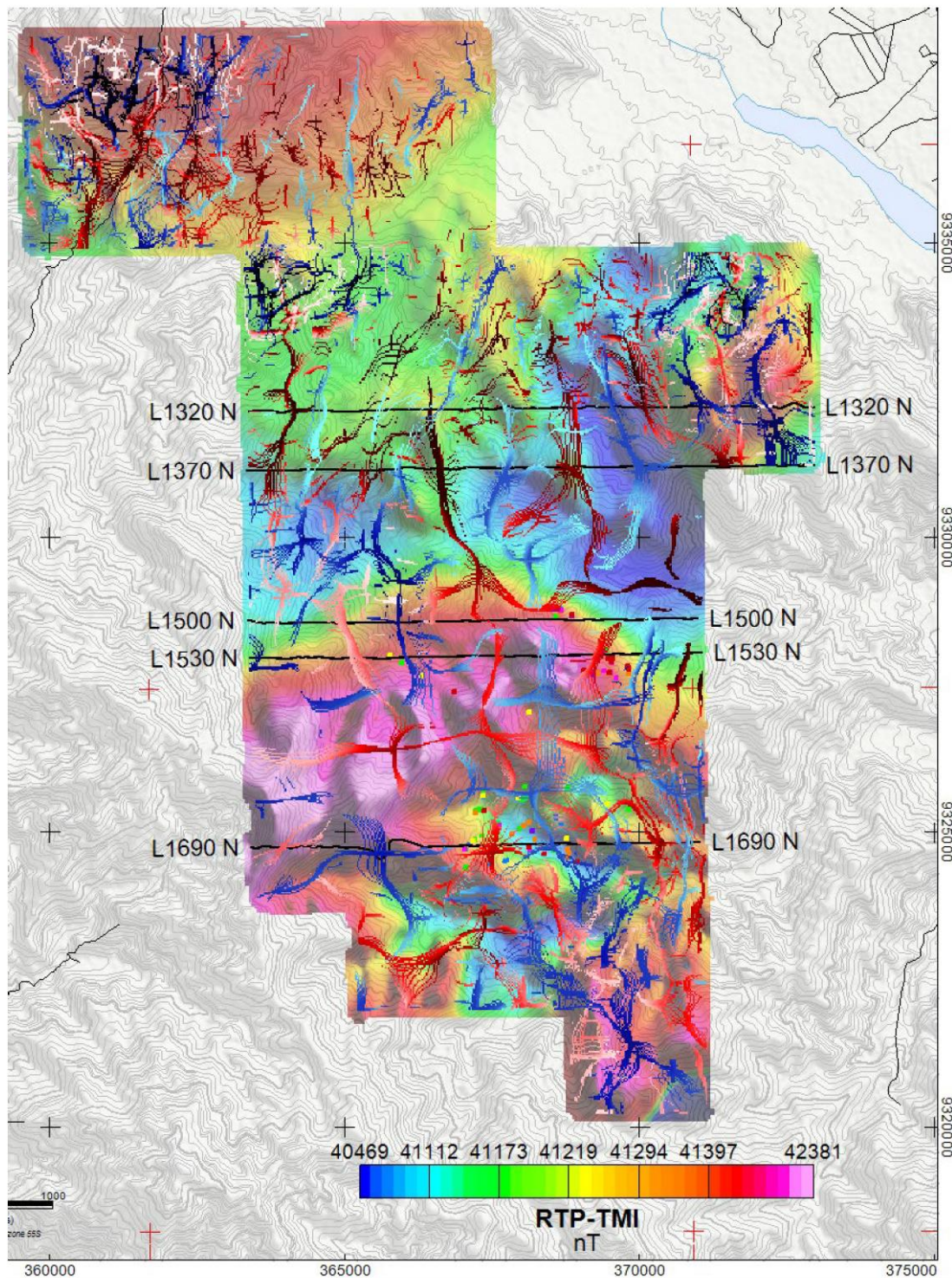




**Figure 11 Conductivity and Resistivity Images for the Kesar Property**  
(supplied by GPAC; from Expert Geophysics report)

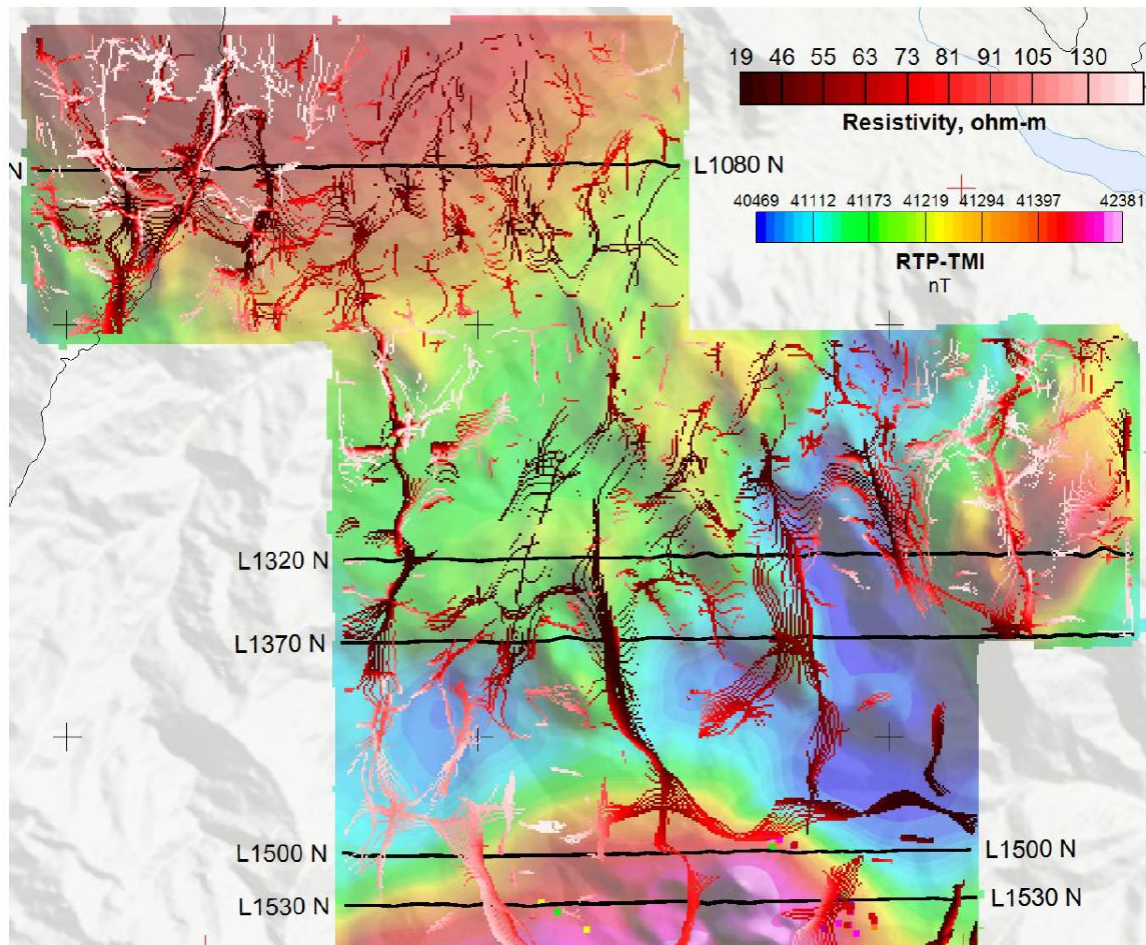
Structural analysis completed by Expert Geophysics using its proprietary Lineament Analysis software, generates conductive and resistive axes trends extracted from a series of resistivity values corresponding to different depths (from inverted data) over the total magnetic intensity colour grid. Conductive and resistive axis trends were extracted from inverted resistivity-depth data between -200m to 1800 m ASL with the results shown in plan view for axes trends from 850-500 m a.s.l. depth range (Figure 12).

Lineament Analysis interpretation involves reviewing 40 layers of resistivity and conductivity lineament at RL levels every 50m, down to 2km depth. This technique is relatively new (past six months) and so the correlation of MT lineaments with epithermal or high sulfide content (mesothermal?) veins is yet to be tested by drilling. Nevertheless, with the success of airborne MT in defining the Kora and Judd gold/copper veins, the lineament analysis results more accurately confirm locations of conductivity anomalies due potential veining.



**Figure 12** Conductive (red) and Resistive (blue) axes from 850-500m ASL over TMI-RTP Image  
(supplied by GPAC; from Expert Geophysics report)

Part of the Expert Geophysics report focussed on the central northern part of the tenement where the host geology is the Goroko Formation and likened the structural interpretation to the K92 Kora-Blue Lake-Arakompa area (Figure 13). The diagram shows areas of marked conductivity-related structural trends that warrant further follow up.



**Figure 13** Conductive Axes from 950-500m ASL over TMI-RTP Image Northern Area  
(supplied by GPAC; from Expert Geophysics report)

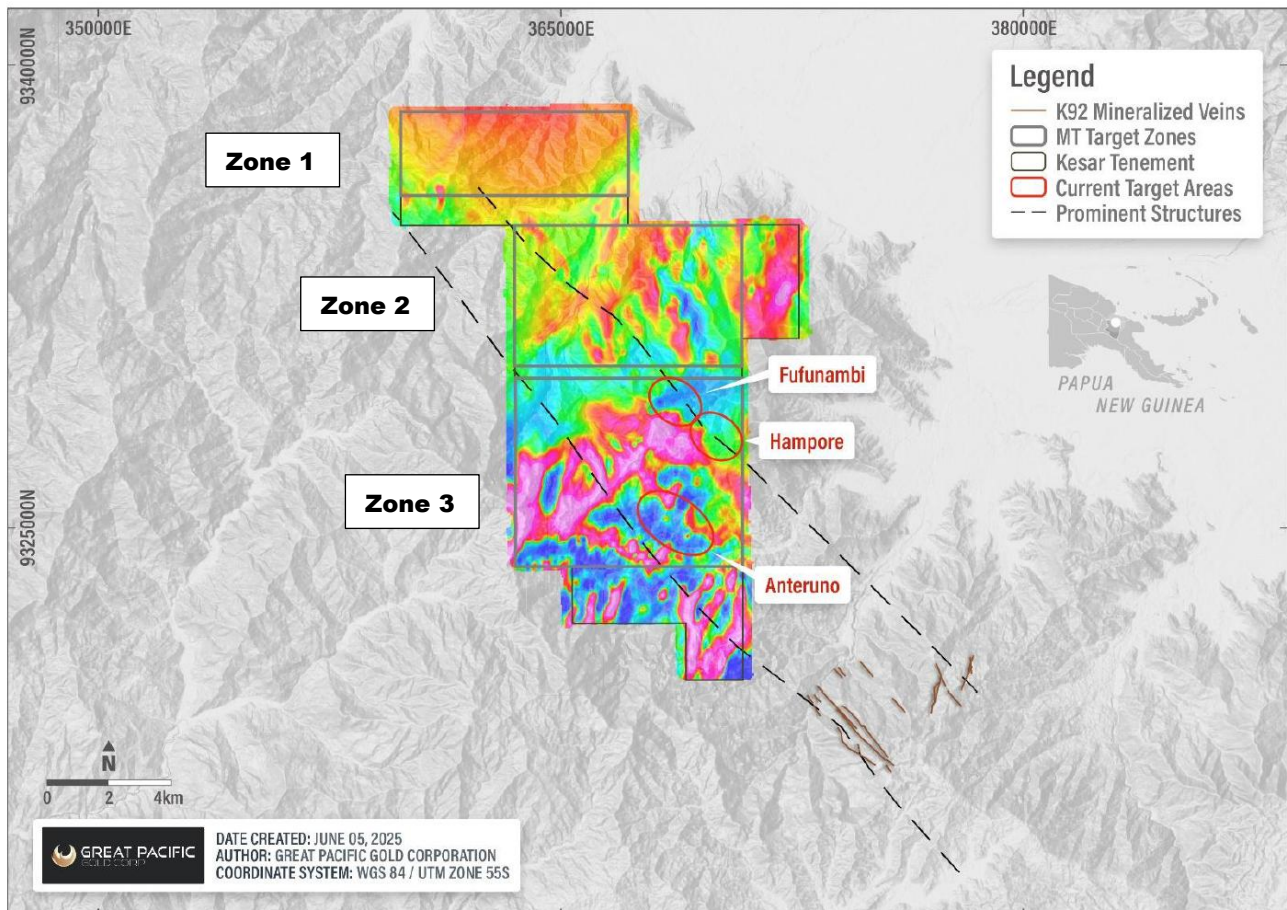
The calculated vertical gradient (“CVG”) RTP image (Figure 14) indicates some additional structural information. In particular on a sub-regional scale is the suggestion of a major NW-SE structure/structural zone boundary appearing to link up with the NW-SE oriented structurally controlled mineralization at Irumafimpa and Kora/Judd. Also of note is the tendency for many of the low value zones (the blue colours) to coincide with the river drainage and the high value zones (red colours) corresponding to topographic highs. This may be a limitation of the data processing, the effect of overburden coverage, or it indicates the roof of the original magma chamber is relatively flat and shallow. This could suggest that there is plenty of scope for significant economic mineralization to form towards the margin of the intrusive i.e. porphyry style, as peripheral intermediate epithermal veins either in earlier intrusives or in hornfels surrounding the tonalite or possibly even skarn-style mineralization.

### 9.1.3 Global Geologica

Global Geologica completed an initial interpretation of new airborne MT data with the conclusion that the MT survey was very effective at defining major porphyry copper target locations. In addition

it also was successful in defining the presence of major faults and conductive features along these faults which represent possible targets for drill testing.

The interpretation of the MT data, which was completed in the Leapfrog software, has identified three broad zones for the property which have unique geological signatures and targets (Figure 14).



**Figure 14 1VD of TMI-RTP Image with Regional Structure & K92 Mineral Lodes**

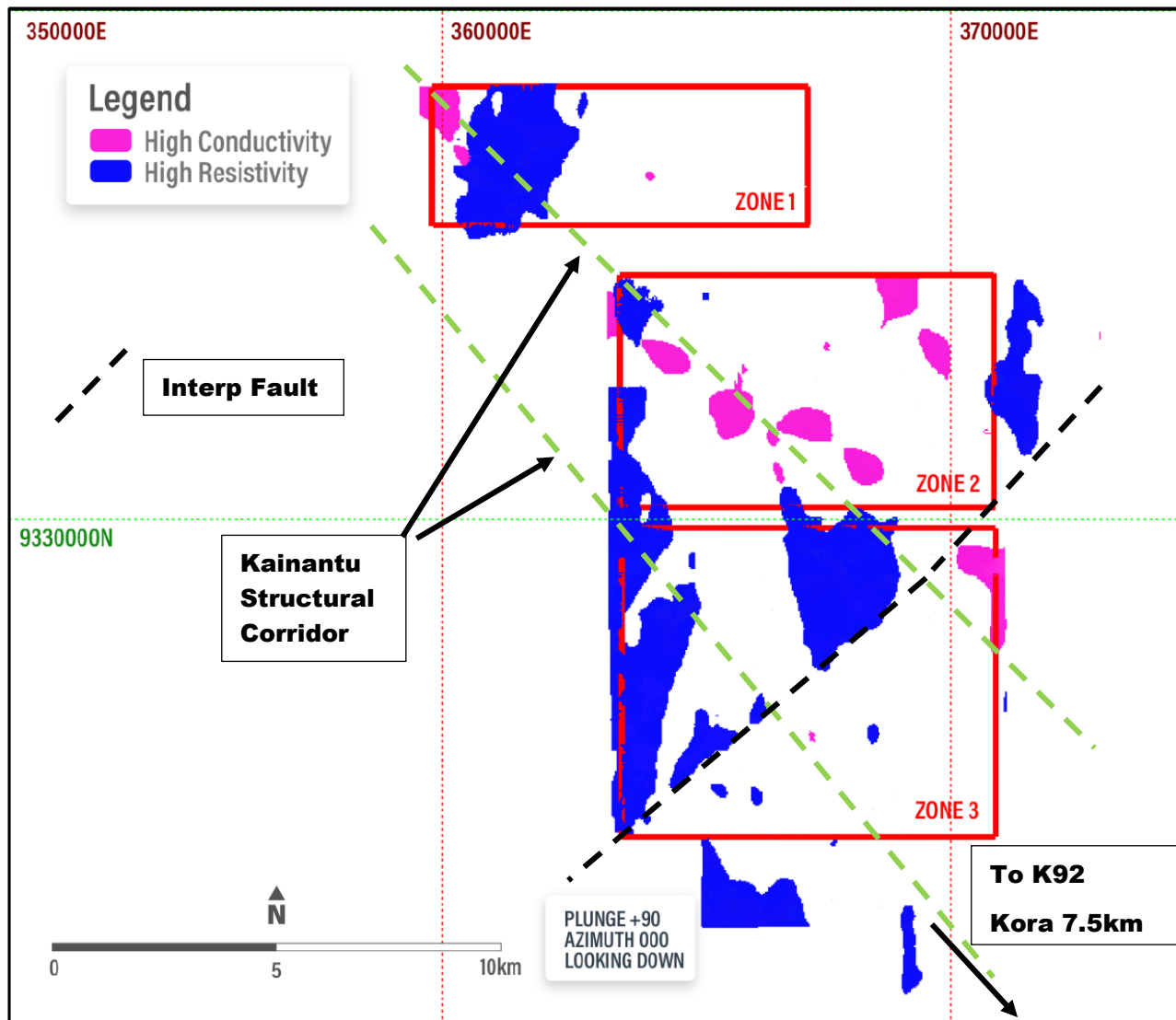
*(supplied by GPAC)*

**Zone 1** – This area in the northernmost position of the MT survey, appears host to an interpreted porphyry copper target on its western side, with some smaller conductive features of interest towards the east of this target position (Figure 15).

**Zone 2** – Appears to be an area of structural complexity that may represent a similar geologic environment to the K92 mineralized veins present to the SE of the tenement. The focus of this area is structures and structural intersections along which areas of high conductivity are concentrated, representing potential areas of mineralization (Figure 15).

**Zone 3** – This area hosts both porphyry copper targets and structurally hosted gold targets, which lie immediately to the north of a major NE fault. To the south of this NE fault, there is a “quiet” zone extending to the southern end of the MT survey where there are no strong features or obvious target positions that are apparent in the MT data (Figure 15).

From its interpretation Global Geologica recommended that field investigations be completed at the major target positions by completing six proposed traverses. The results from the field work should be used to further refine and prioritise each target location leading to planned drill testing.

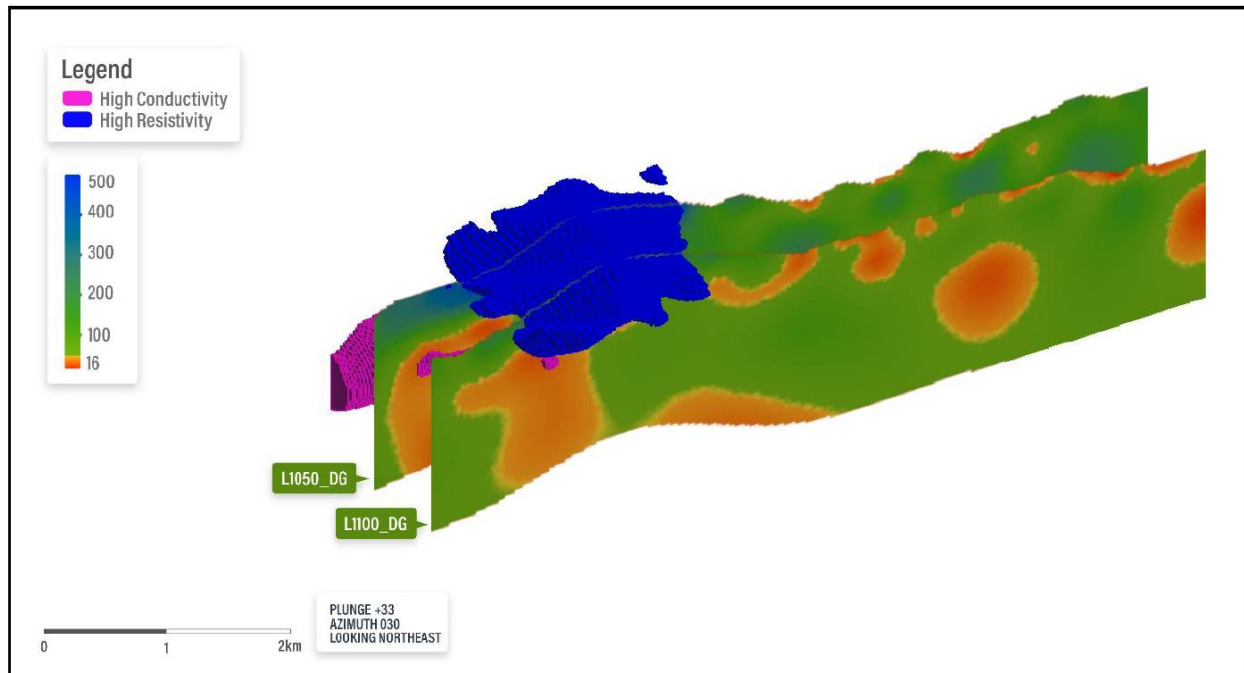


**Figure 15 Target Zones with High Conductivity (pink) & Resistivity (blue) Filtered Zones**

*(supplied by GPAC; source Global Geologica Report)*

Examples of Global Geologica's sectional interpretation work are included.

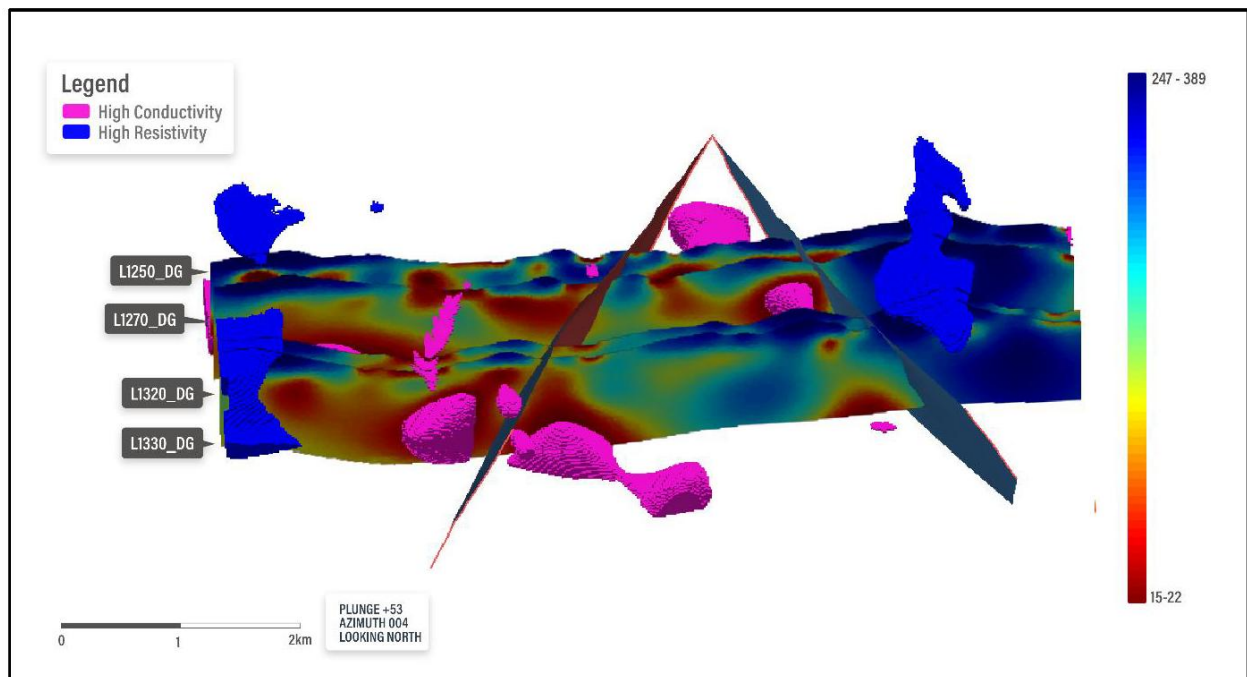
Figure 16 shows an interpretation for Zone 1 where the filtered voxel model is overlain on the sections, showing a shallow, high resistivity lithocap creating the topographic high (blue), obscuring a high conductivity target at depth (pink) with deep roots indicating a potential porphyry-style signature.



**Figure 16 Zone 1: Cross Sections for Conductivity Showing Potential Porphyry Target**

*(supplied by GPAC; source Global Geologica Report)*

Within Zone 2 the focus of this area is structures and structural intersections along which areas of high conductivity are concentrated, representing potential areas of mineralization (Figure 17). Contrasts in the high conductivity can be mapped as faults that run parallel to the regional faulting (NW-SE) as well as perpendicular (NE-SW).

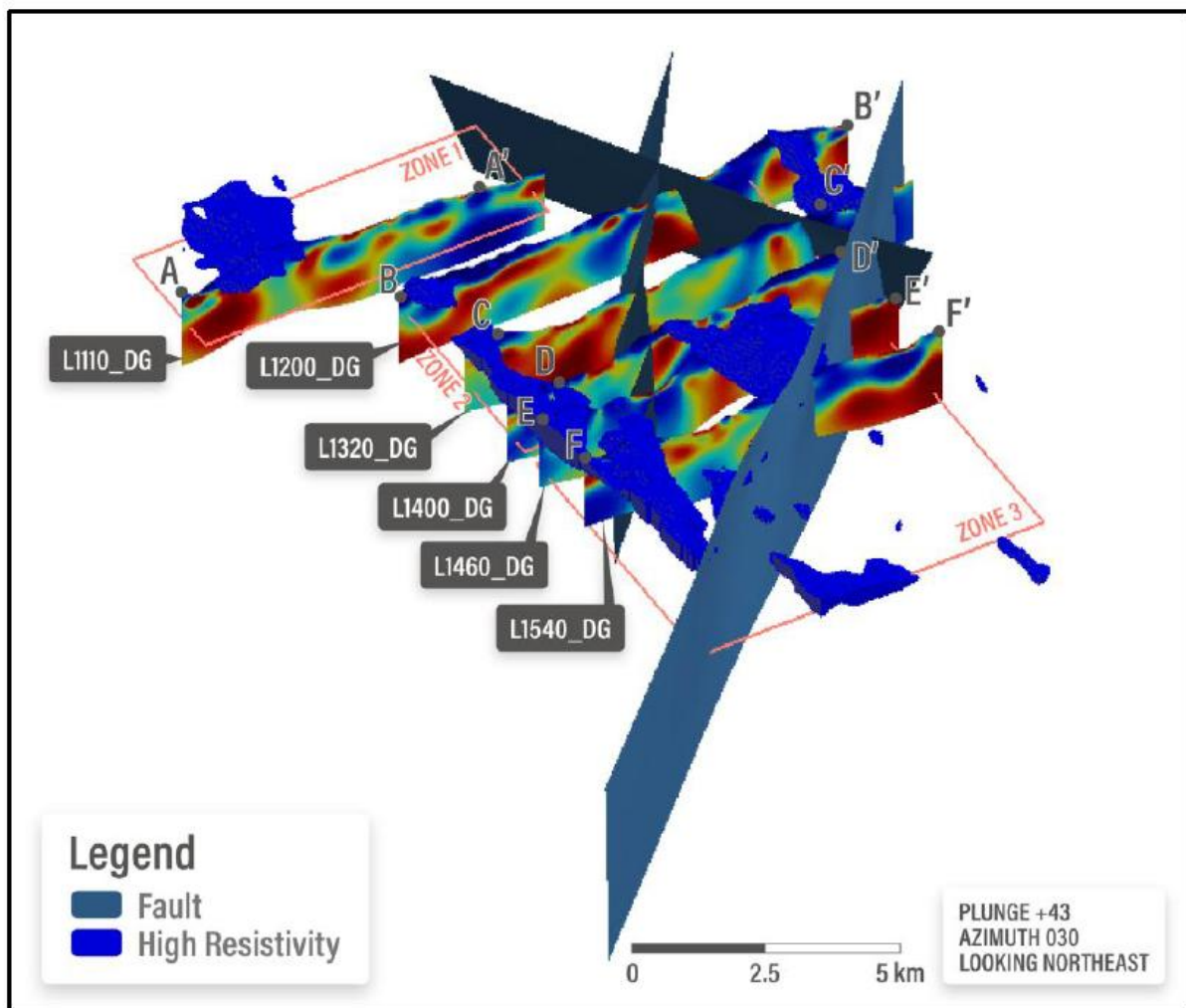


**Figure 17 Zone 2: Cross Sections for Conductivity Showing Structural Targets**

*(supplied by GPAC; source Global Geologica Report)*

Zone 3 represents a complex area of potential mineralization at depth that may be obscured by a large, shallow highly resistive lithocap present in the centre of the project area. A regional fault trending NE-SW separates this zone into two major domains with differing MT signatures (Figure 18). The main area of interest appears to be located on the northern side of the NE fault, with both porphyry copper targets and structurally hosted gold targets present. This area contains evidence of a lithocap at its centre in addition to further evidence of a larger lithocap developing along the western margin of the tenement boundary and extending further to the west. Underneath both lithocap positions, there is some evidence of an intrusive batholith (with high resistivity) surrounded by conductive rocks which is typical of a porphyry copper deposit signature.

Overview images of the resistivity and conductivity interpretations as observed in cross section across the tenement have been produced by Global Geologica. Figure 18 shows resistivity with filtered out high resistivity zones shown as blue masses with the sections colour coded for resistivity. The high resistivity zones are interpreted a lithocaps to potential porphyry systems.

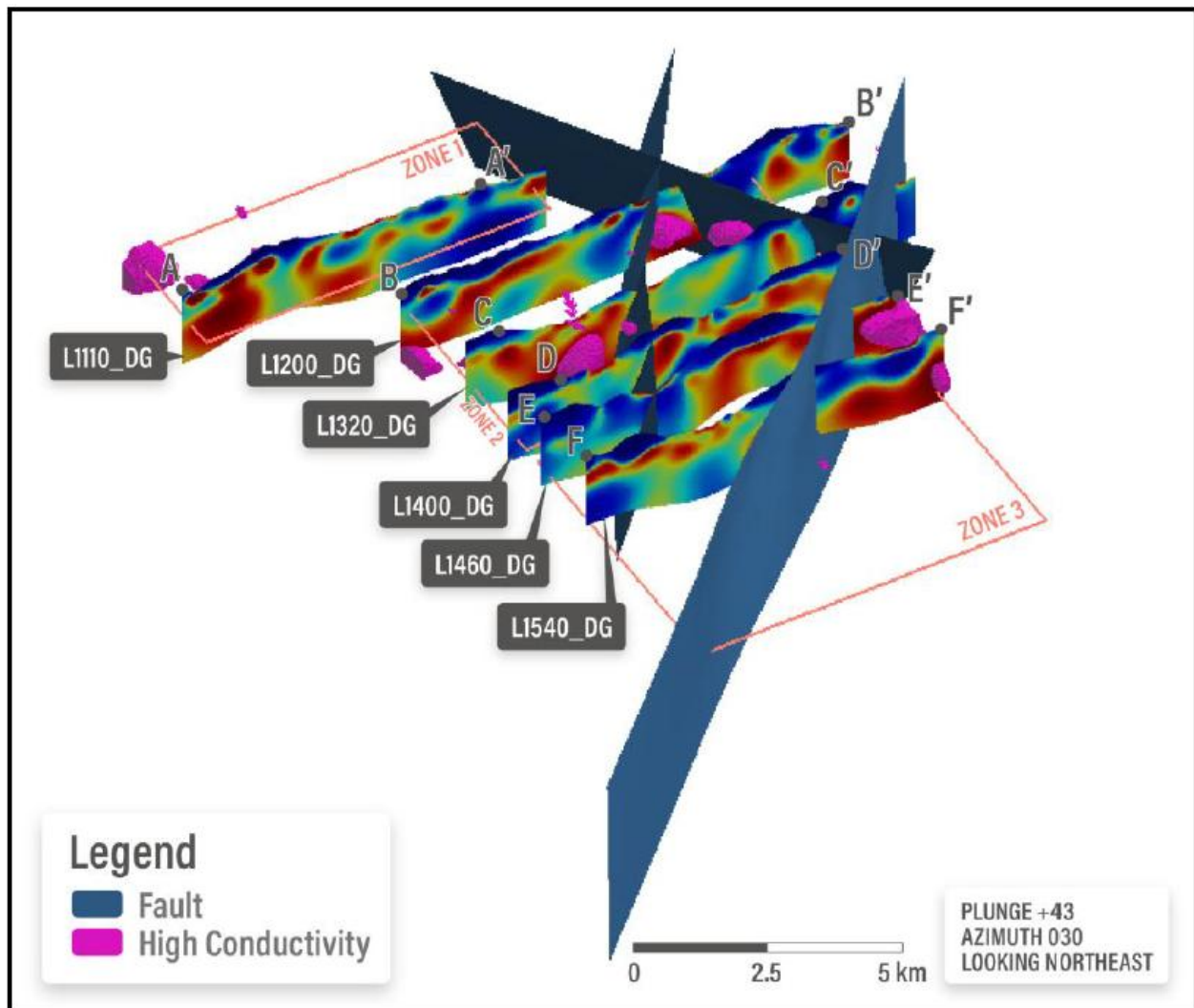


**Figure 18 High Resistivity Overview**

*(supplied by GPAC; source Global Geologica Report)*

Figure 19 shows conductivity with filtered out highly conductive zones shown as pink masses with the sections colour coded for conductivity. Proximity of high conductive zones to interpreted faults

would represent potential targets for structurally controlled mineralization of a similar style to Kora and Arakompa.



**Figure 19 High Conductivity Overview**

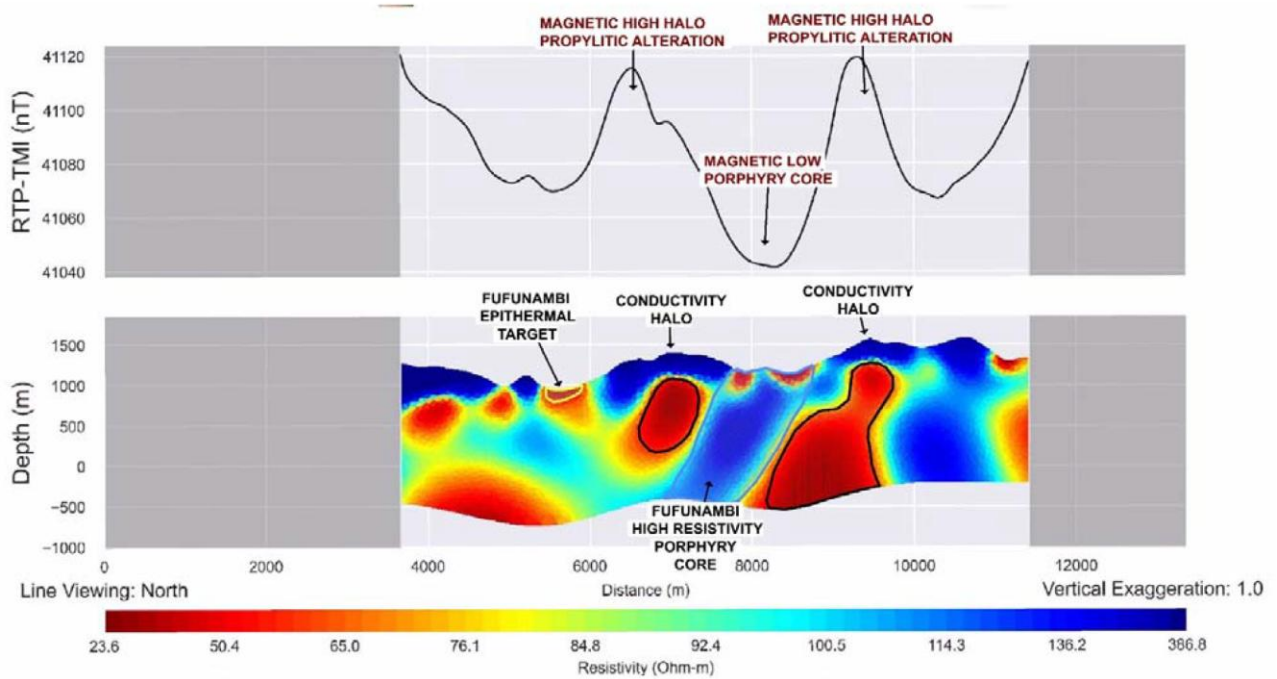
*(supplied by GPAC; source Global Geologica Report)*

#### 9.1.4 Aimex Geophysics

Aimex Geophysics completed a preliminary interpretation of the Airborne MT and magnetic data acquired by Expert Geophysics in February 2025 over EL2711. Aimex undertook magnetic filtering including derivative TILT and AGC (Automatic Gain Control) that was used to help identify porphyry related targets. The derived mineralised porphyry targets and epithermal/high sulfide content vein targets were marked out for follow-up field sampling, mapping and drill testing.

Aimex's interpretation utilised the 3D voxel conductivities produced from the MT survey, Expert Geophysics proprietary Lineament Analysis, conductivity and resistivity 3D voxels, VLF conductivity images, cross-sections of MT conductivities along each flight line, and airborne magnetic data collected during the Airborne MT survey. Examples of cross sectional interpretation of resistivity in comparison with RTP-TMI are included.

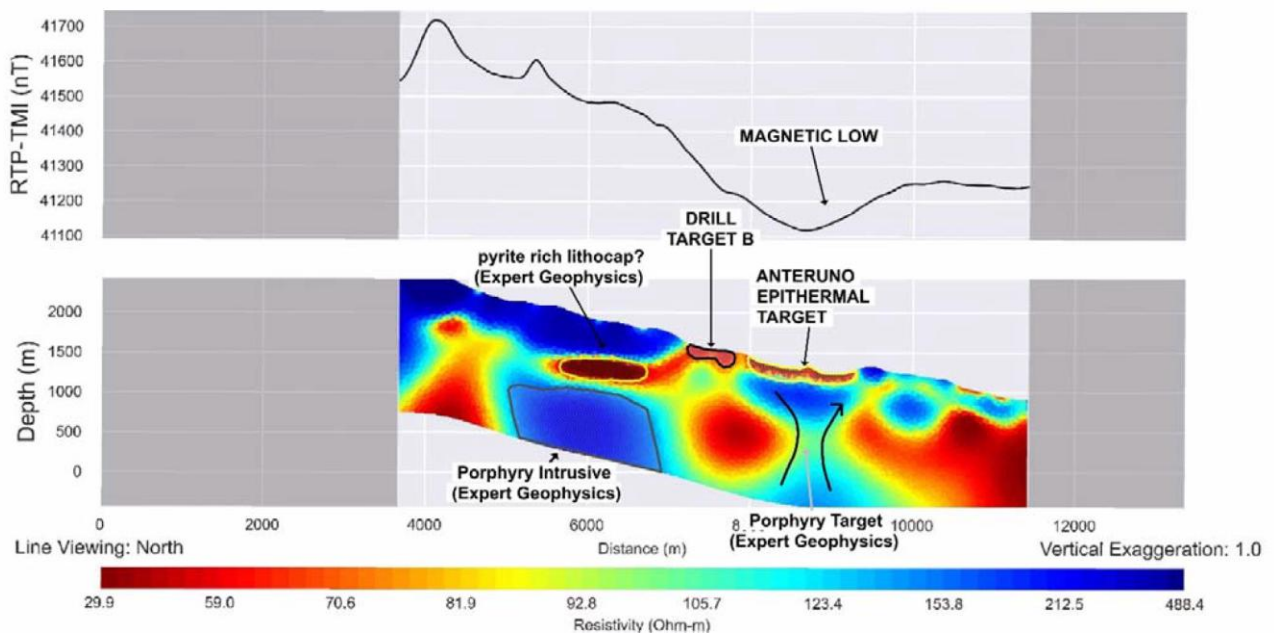
Figure 20 is E-W section line 1390 across the Fufunambi porphyry target showing a geological interpretation of the data and identifying possible target areas.



**Figure 20 Cross Section 1390 Fufunambi Porphyry Target**

*(supplied by GPAC; source Aimex Report)*

Figure 21 is E-W section line 1690 across the Anteruno porphyry/lithocap/structural target showing a geological interpretation of the data and identifying possible target areas.



**Figure 21 Cross Section 1690 Anteruno Lithocap and Structural Target**

*(supplied by GPAC; source Aimex Report)*

Aimex commented that Expert Geophysics' proprietary Lineament Analysis generated significant amounts of data that helps to define intrusive boundaries and lineaments/veins that may represent the channels for mineralising fluids. Two east-west trending deep structures >500m depth are evident from the Lineament Analysis results within the survey area that are likely important controls for emplacement of interpreted porphyry target systems.

Aimex identified eight intrusive and porphyry copper-gold style targets, and eight epithermal/high sulfide content gold-base metals style targets (Figure 22). In addition, analysis of near surface (<150m) conductivity lineaments generated 29 areas for immediate follow-up with ground mapping and sampling to determine their coincidence of epithermal and mesothermal (high sulfide content) gold-copper veins. Most of these vein targets are associated with the interpreted porphyry and epithermal target areas mentioned above; but are more specific in their location and potential as drill targets. Most of these lineament targets have been labelled, however due to their higher density of occurrence at the Anteruno and Hampore prospects, they have been drawn but not categorised.

Aimex's overall impression of EL2711 is that there are significant mineralising events not previously recognised. Some targets, including Lineament Analysis targets, have been partly tested by surface sampling or drilling. Following additional ground exploration, a further review of the Lineament Analysis data can be completed to assist in defining specific drill targets, as well as 3D modelling of magnetics over particular areas of interest.

An extensive amount of work has been completed in analysing the MT data. The work has produced a lot of broad architectural interpretation to structure and intrusion activity and a slightly bewildering number of exploration targets. A significant number of targets for both porphyry-style and intermediate sulfidation epithermal style have been delineated by all three geophysical companies. It is now necessary to bring all that work together and review all the targets, perhaps constructing a 3D geological model for the tenement and working the drilling and surface geochemical information into this 3D visualisation. All targets need to be reviewed as a desktop study initially before deciding on which areas to put forward as a priority for ground truthing follow up. Depending on the results from the follow up discrete drill targets may be identifiable.

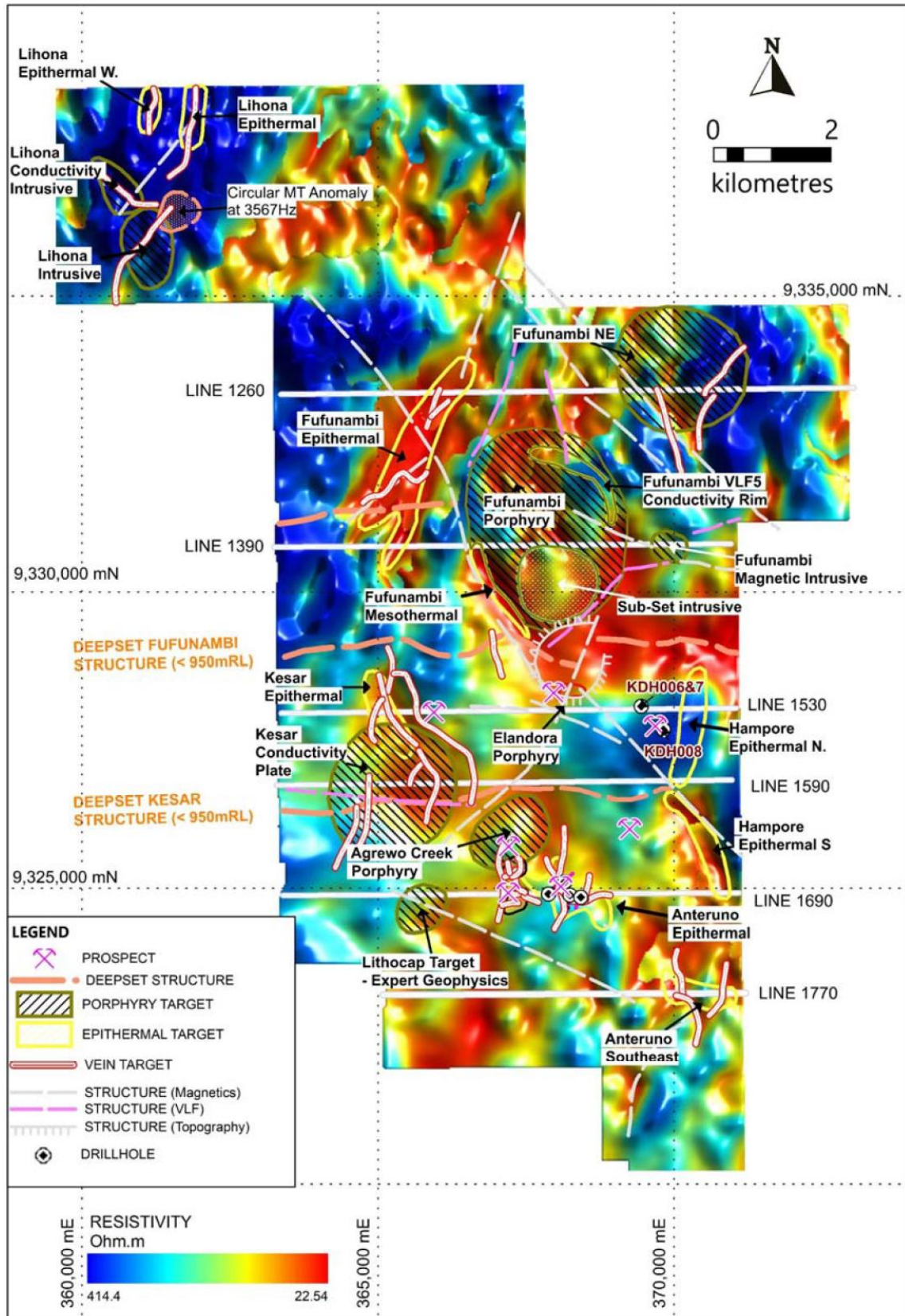


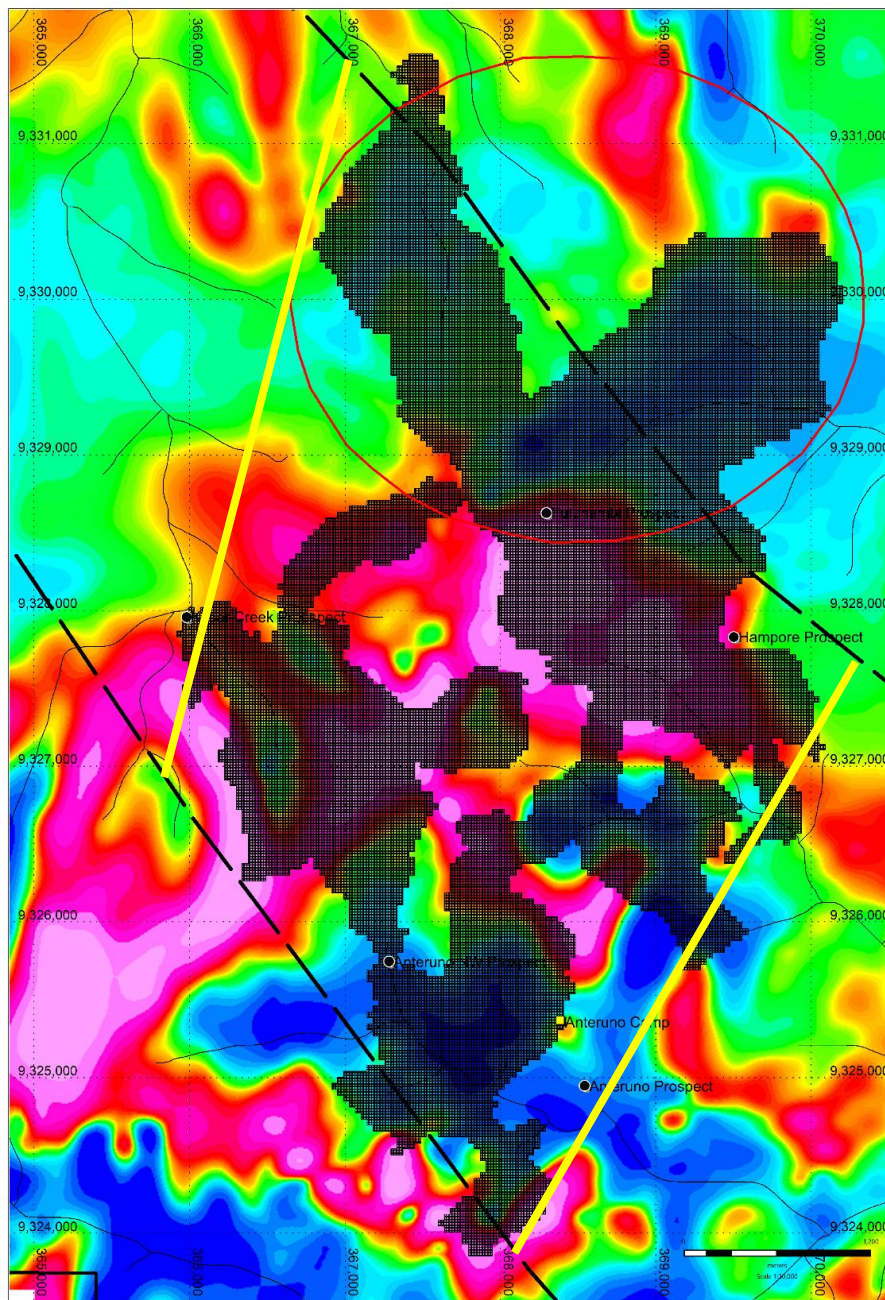
Figure 22 MT Resistivity Image Showing Targets

(supplied by GPAC; source Aimex)

## 9.2 Geochemical Surveys

### 9.2.1 Stream Sediment Sampling

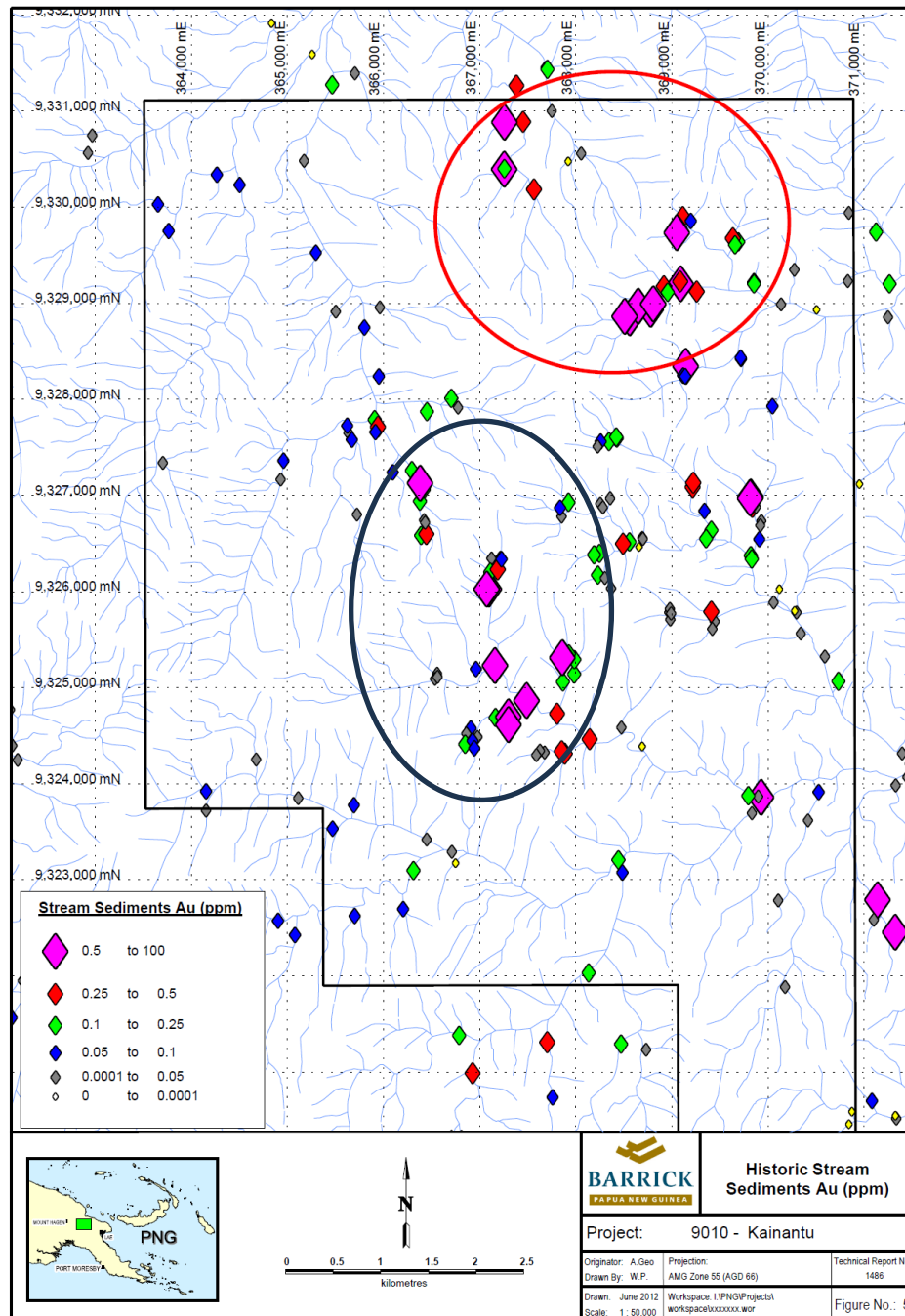
Most of the southern half of the tenement has been covered by historic reconnaissance ('trunk') stream sediment sampling with localised areas of rock chip sampling. Figure 23 shows the anomalous stream catchment areas (cross shading) from the historic sampling against the CVG\_RTP magnetic image backdrop. The majority of the anomalism is captured within the main interpreted NW striking structural corridor but with a potentially more localised NNE-SSW overall trend (yellow lines). The anomalous catchments help to define the main area of interest for the property.



**Figure 23** Anomalous Au Catchment with CVG-RTP Data from GPAC Helimag Survey

*(Supplied by H&SC)*

Figure 24 shows the gold results for the stream sediment sampling for the main area of interest as plotted by Barrick. The black ellipse marks the Anteruno area, and the red circle represents an area of gold anomalism at the Hampore/Fufunambi prospects. The latter was identified by Barrick but had no follow up work completed until the recent GPAC work.

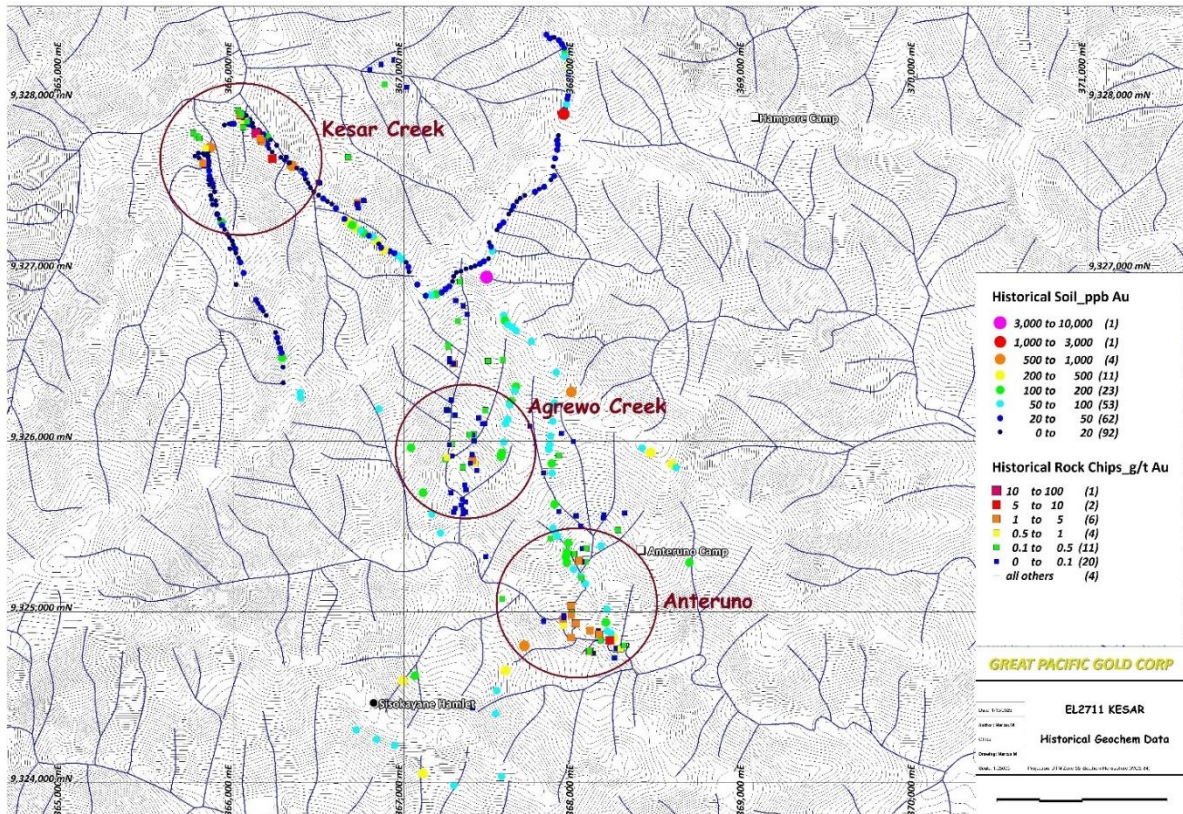


**Figure 24 Historic Stream Sediment Sampling - Gold Results**

(from Halfpenny, 2012)

There has also been some panned concentrate and BLEG sampling which were common field techniques in the 1980s/1990s, but the former is generally considered a qualitative technique whilst the latter only ever achieved mixed results and has fallen out of favour.

In addition historic soil geochemistry comprised ridge and spur sampling. Outcomes of the historic soil sampling and rock chip sampling are included as Figure 25.



**Figure 25 Historical Surface Geochemical Sampling**

*(supplied by GPAC)*

## 9.2.2 Rock Chip Sampling

GPACs rock chip sampling is detailed in Figure 26 and highlights the prospective areas of Anteruno and Hampore/Fufunambi. Mineralization is variously described as structurally controlled with phyllic alteration and sulfide mineralization typical of intermediate epithermal vein deposits. The recent rock sampling (post-April 2025) has included channel sampling of trenches around Fufunambi/Hampore including the Link Zone (Figure 26). Results from 4 trenches (a fifth trench returned low values only) are shown in Table 4 along with selective grab samples for approximately the same area.

**Table 4: Recent Channel Sampling & Grab Sampling Results**

Location	Trench	Interval (m)	Au g/t
Link Zone	KCC_01	5	3.03
	inc	1	12.9
Link Zone	KCC_02	2	0.75
	inc	1	1.37
Fufunambi SE	KCC_03	1	1.14
Fufunambi SE	KCC_05	7	1.67
	inc	3	3.39

Location	Sample No	Samp Type	Au g/t	East	North	Elev
Fufunambi W	KCRX25181	Grab	22.1	368116	9328593	1936
Fufunambi W	KCRX25173	Grab	21.8	368182	9328467	1948
Link Zone	KCRX25158	Grab	21.4	369221	9328320	1409
NW Fufunambi	KCRX25188	Grab	10.2	368328	9328898	1979
Link Zone	KCRX25161	Grab	5.44	369220	9328294	1424
NW Link Zone	KCRX25163	Grab	2.76	369029	9328386	1491
Fufunambi W	KCRX25178	Grab	2.6	368409	9328496	1874

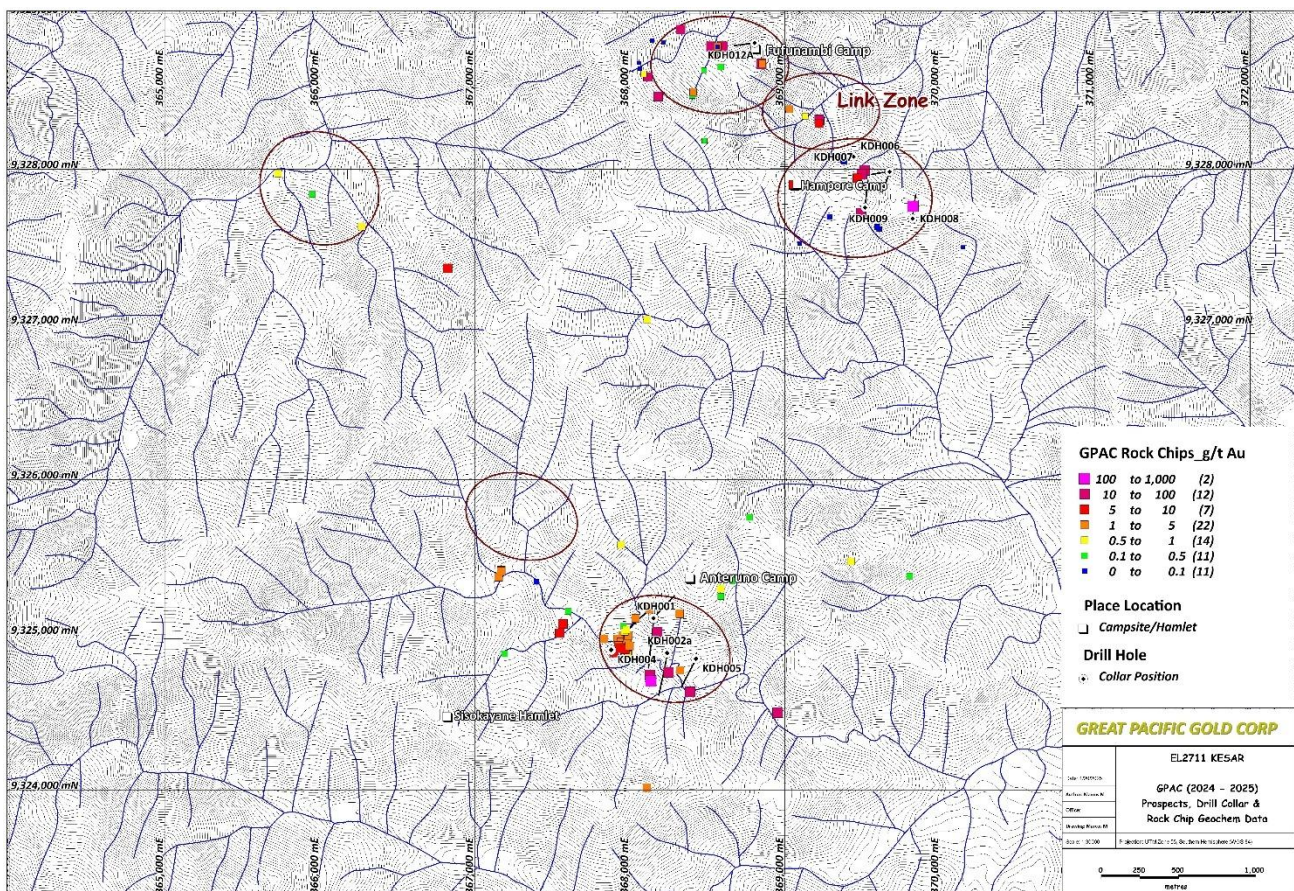


Figure 26 2024/5 GPAC Rock Chip Sampling

(supplied by GPAC)

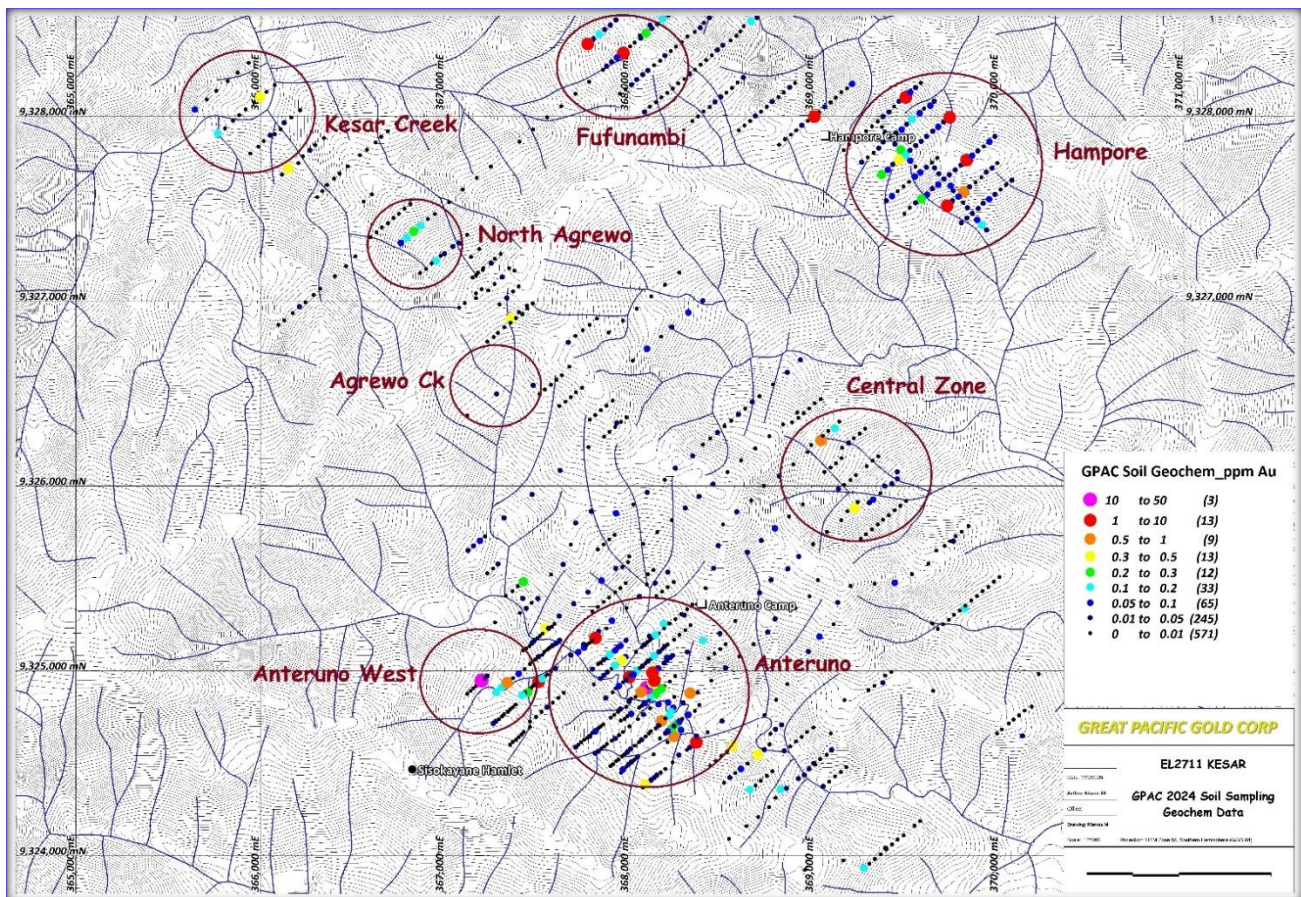
### 9.2.3 Soil Sampling

GPAC's soil sampling has consisted of a series of grids over several areas of anomalous stream or rock chip geochemistry (Figure 27). Sample spacing was variable depending on previous results with the spacing initially 100m decreasing to 50m in the main target areas and further decreasing to 20m in Anteruno. Line spacing was between 100, 150m and 200m. Sampling comprised collecting a bulk 2kg sample from the B-horizon which was then sent to the laboratory for sample preparation and analysis. The soil samples are considered representative in most cases so long as the B horizon is

reasonably in situ. The main highlights are the Anteruno prospect and the Hampore/Fufunambi prospects. Table 5 provides a summary of the size and intensity of the main soil anomalies for a 30ppb gold cut off and a 50ppm arsenic cut off.

**Table 5: Soil Anomaly Details**

Prospect	Length (m)	Width (m)	Orientation	Peak Au ppb	Comment
Anteruno	2,340	40 to 260	NW-SE Open	20,900	Minor peripheral anomalous zone
Hampore	850	80 to 280	NNW-SSE Open	3,940	Complex anomaly
Fufunambi	560	100	WNW-ESE Open	35,700	Multiple parallel narrow zones



**Figure 27 2024 GPAC Soil Sampling**

*(supplied by GPAC)*

### 9.3 Geological Mapping

*(Text in italics from Adrian Corvino mapping report, 2024, Model Earth Global Geological Services)*

The Anteruno prospect was mapped by Adrian Corvino of Model Earth Global Geological Services, over a two-week period in October 2024. Core from the drillhole KDH001 was also examined.

### 9.3.1 Anteruno Field Observations

Anteruno area is dominated by granodiorite/tonalite. The granodiorite contains plagioclase, quartz, biotite, hornblende and magnetite of around 1 to 5 mm grainsize. It is texturally massive, unfoliated and generally unaltered except adjacent to fractures. Biotite and magnetite are ubiquitous, and they are considered primary minerals. They are not indicative of hydrothermal potassic alteration. Chlorite alteration has occurred overprinting the biotite and hornblende. Enclaves of hornblende-feldspar porphyry are observed throughout the granodiorite. They range from a few centimetres to about a metre across.

Felsic aplite dykes around 3 to 30 cm thick cut the granodiorite at random intervals. They are composed mainly of fine-grained quartz and feldspar and less than 5% biotite.

Systematic faults and fractures cut across the granodiorite, porphyritic enclaves and felsic dykes. The fault-fracture system has an orthorhombic geometry, including two criss-crossing pairs of conjugate faults which form distinctive X-shaped intersections in both plan and cross-section views.

Bisecting the conjugate faults are arrays of sheeted veins and fractures that trend E-W to WNW-ESE. In outcrop these resemble joints. However, close inspection shows that are not pure extension fractures. Many are slickensided indicating shearing. Opening space textures, while present, are not strongly developed. Thus, the veins are best categorised as hybrid extensional-shear fractures, with slight variations in the degree of shearing and opening between them.

It is worth noting that the fractures have very systematic directions indicating that they were structurally controlled and not caused by irregular shattering from fluid overpressures.

For this [mapping] work, the veins have been roughly classified into three relative-size classes (1) Major > 15 cm, (2) Intermediate > 5 to 15 cm, and (3) Minor < 5 cm.

Hydrothermal mineralization exploited the fault-fracture mesh at Anteruno. An important feature of the area is that most fractures appear to be mineralised, despite their size or direction. An exception are NNE fracture zones, which do not appear to be as well mineralised or strongly altered as those in the other directions. They may relate to a separate deformation or were formed in a direction unfavourable for fluid infiltration.

Arsenopyrite, chalcopyrite, galena, molybdenite and sphalerite are found scattered in veins across the map area without clear trends in their presence or abundance. Metal zonation patterns defining the gold system should be resolvable but may require a larger area to map the directional geochemical changes.

Almost all of the fractures show narrow phyllic-type alteration halos. Generally, the alteration halos are about an order of magnitude wider than the veins. For example, a 1 mm vein has a 1 cm halo, whereas a 1 cm vein has a 10 cm halo, and so on.

The alteration is characterised by the introduction of silica and Au, As and base metal sulfides, and retrogression of feldspar, hornblende and biotite to sericite, illite and chlorite assemblages. Sericite is generally stronger than silica, and some halos appear more chloritic than others. Some faults are noted as containing a very soft white clay sludge that could represent argillic-illite alteration. Insights on the alteration assemblages will be gained from petrologic inspection of core.

Mineralization is concentrated strongly along the veins, and to a lesser degree is scattered or disseminated in their alteration halos. The transition between altered and unaltered host granodiorite is fairly sharp (rather than diffuse). The amount of mineralization is expected to drop quickly to virtually nothing across the alteration front and the intervening granodiorite is barren.

Previous suggestions of porphyry-related potassic alteration seem questionable. There is no evidence of any strong or pervasive K-feldspar alteration. As mentioned, biotite is common, but it appears primary and not an alteration product.

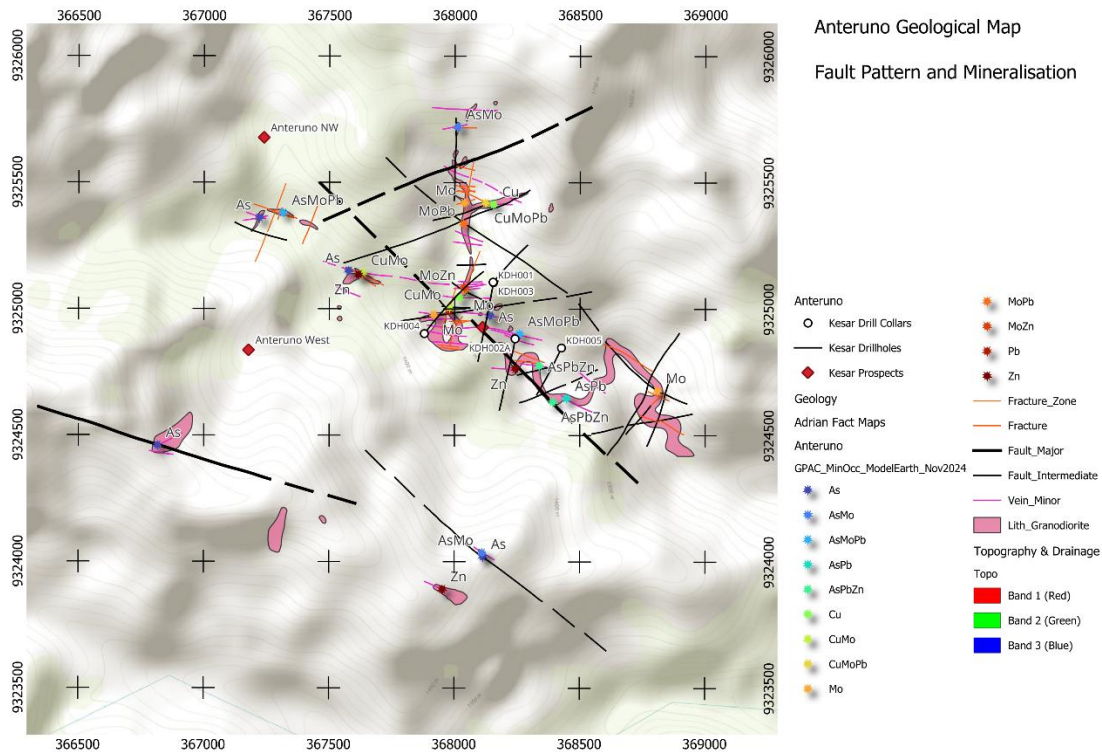
Reconnaissance mapping along the Anteruno Creek revealed abundant E-W trending mineralized veins. These were interpreted as a complex of sheeted and stockwork veins representing dilatancy along a NW-striking fault zone.

Gold, arsenic and base metal sulfides occur exclusively in narrow polymetallic veins and their alteration halos within host granodiorite/tonalite. Individual veins and vein arrays are characterized by a subparallel sheeted morphology. They have steep-to-subvertical dips and are long and thin with large aspect ratios (length/width) above 1000. The veins are part of a low-displacement fault-fracture network that is extensively developed across the mapped area. The fault-fracture network has an orthorhombic geometry that includes four conjugate fault planes. One set that trends WNW and dips either NNE or SSW, and another that trends ENE and dips either NNW or SSE. Veins occur along the orthorhombic faults and along sheeted arrays of minor extensional-shear veins interlinking them. The majority of sheeted veins trend E-W to WNW-ESE. These are common in outcrops along Anteruno Creek.

### 9.3.2 Interpretation

The fault-fracture mesh formed in a strike-slip regime during a single event involving E-W sub-horizontal shortening and N-S sub-horizontal extension. It relates to movement of a deeper and longer-lived NW-trending crustal fault that links this area to the Kainantu gold mine to the southeast.

Figure 28 represents the geological interpretation for the Anteruno prospect.



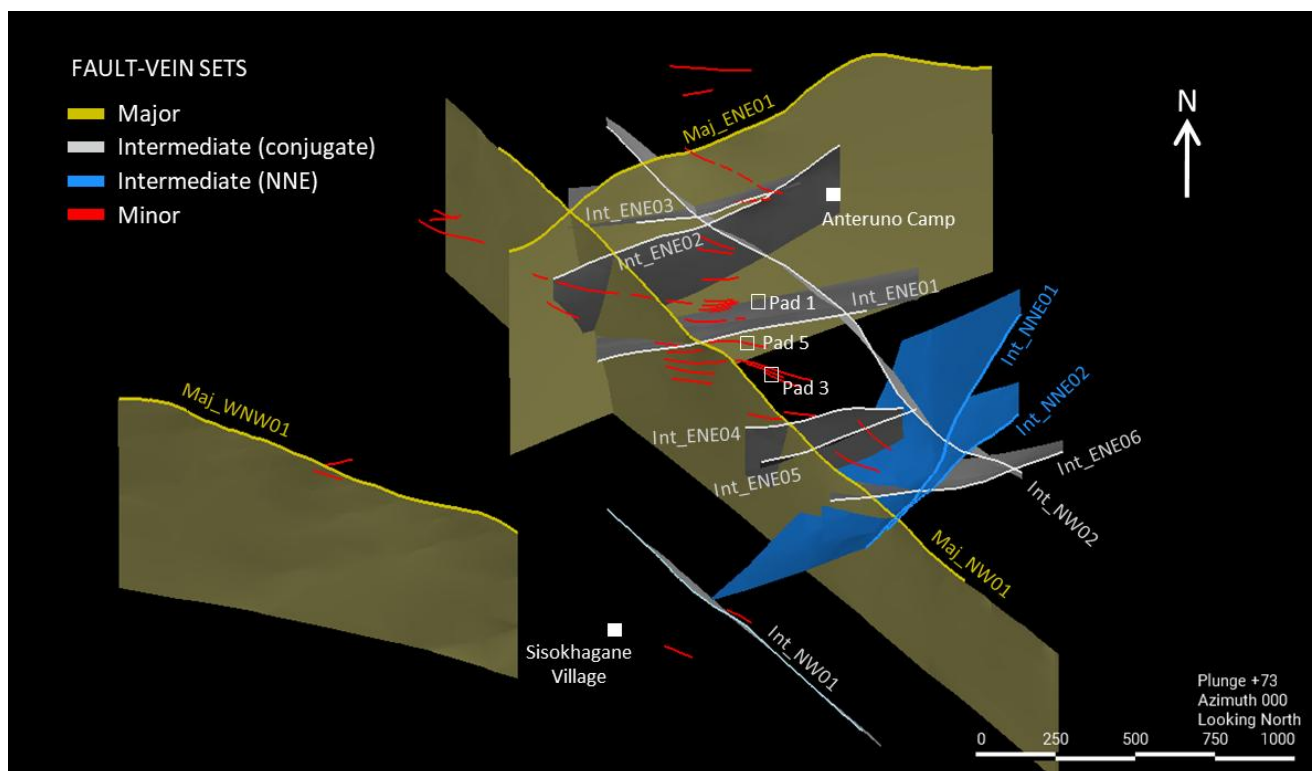
**Figure 28 Anteruno Prospect Interpreted Geology Map**

(supplied by GPAC; after Corvino)

The fault-fracture mesh acted as a permeable network during hydrothermal mineralization related to late-syn to post faulting. There is no evidence to suggest multiple stages of fault reactivation or mineralization. On the whole, fractures appear to have been well interconnected, and they are similarly mineralized.

Despite their narrowness, the veins have (or are suspected to have) high local gold grades. This has been shown by recent GPAC rock-chip assays, and by high gold recovery from artisanal workings near Sisokhagane Village to the south.

Figure 29 shows the 3D fault model for the Anteruno prospect. An orthorhombic geometry is recognized with the faults forming a rhombic mesh-like pattern characterized by X-shaped intersections between conjugate pairs in both plan and section views. This pattern occurs at different scales.



**Figure 29 3D Structural Model for Anteruno**

(supplied by GPAC; after Corvino)

The major faults are the largest through-going mineralized structures. A single strain pattern explains the fault-fracture network at Anteruno. An implication of which is that there are several intersection lines controlling the fault system permeability, rather than just one if the faulting were truly conjugate.

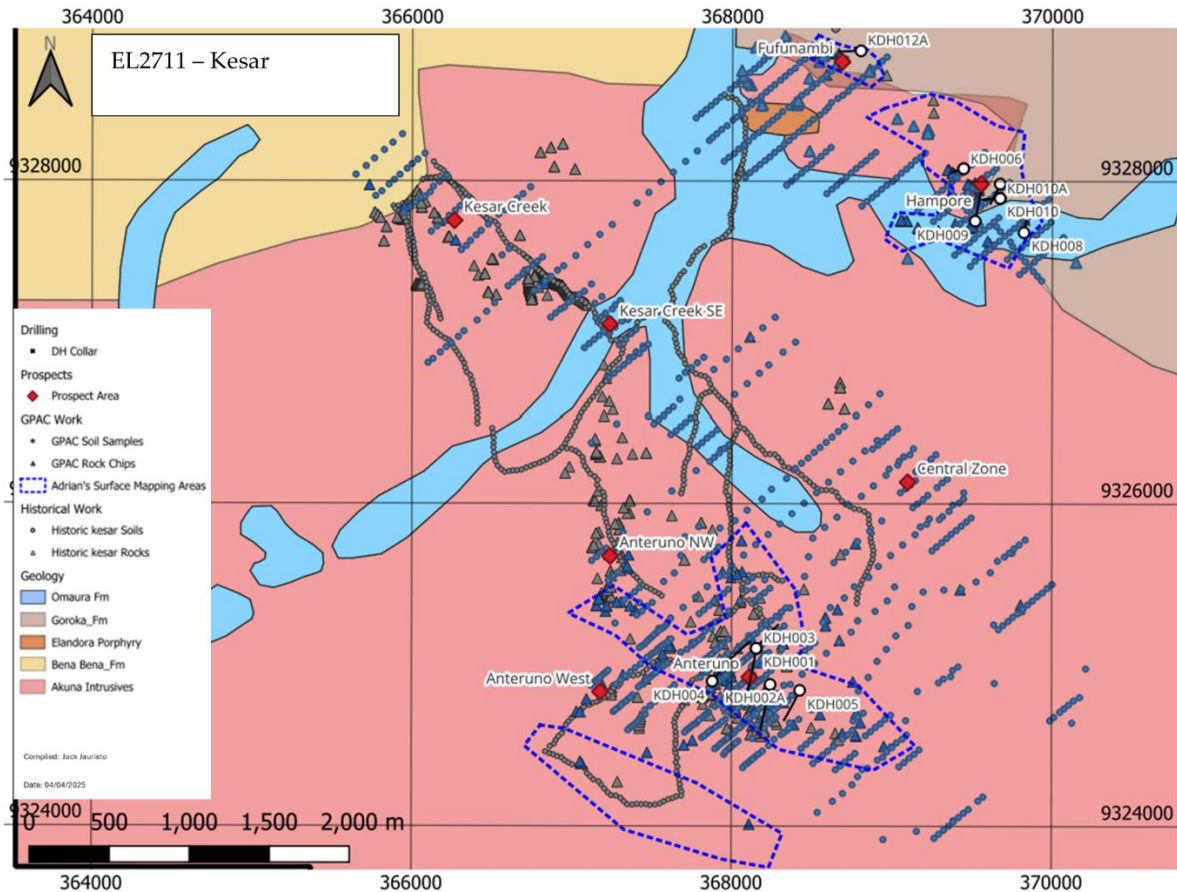
The fault-fracture network gives a kinematically consistent pattern without any major signs of fault reactivation or multiphase mineralization processes. It is inferred that this fracturing took place during a time when N-S shortening was relaxed, and during which E-W shortening was transiently dominant.

There is no clear evidence for a discrete vein array or trapezoidal zone at Anteruno. The true extents of the vein systems have not been mapped, and current interpretations are heavily restricted to observations along Anteruno Creek and its tributaries.

## 9.4 Exploration Summary

### 9.4.1 Work Done

Figure 30 details work completed by GPAC and includes locations for drillholes KDH001 to KDH0012A.



**Figure 30 Recent Work Compilation Map**

*(supplied by GPAC; zoom for better resolution)*

### 9.4.2 Anomalism

Figure 31 shows the interpreted surface anomalism on a backdrop of the tenement geology. The blue dash areas represent the anomalous stream catchments. The NW-SE striking black dashed lines represent GPAC's interpretation of the NW striking structural corridor with the SW line continuing onto the K92 Kora tenements and lining up with the Kora/Irumafimpa deposits (which also strike NW-SE). The NE structural boundary appears to coincide with the northern margin of the Akuna Intrusive Complex, where a strong focus for mineralization might be reasonably interpreted. The red circle represents the anomalous gold in stream sediments collected by Barrick. The black stars represent the old gold workings at Hampore and Fufunambi. The black ESE lines with yellow alteration haloes represent recently discovered veins and vein systems.

Figure 31 also shows the locations of Anteruno/Hampore/Fufunambi drillholes up to KDH0012A.

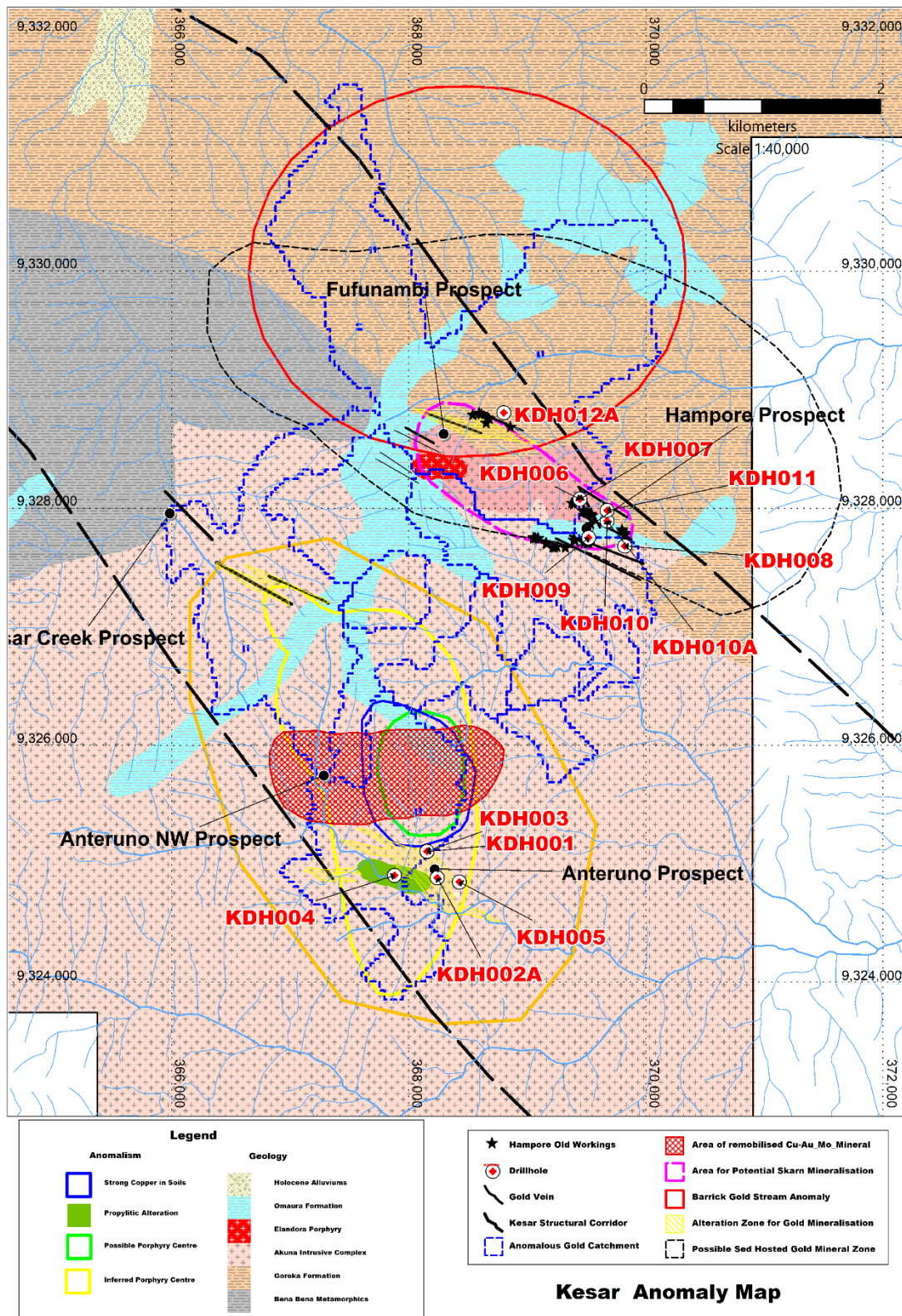


Figure 31 Kesar Anomalism on Geology Backdrop with Latest Drillhole Collars

(supplied by H&SC)

The red cross hatch represents an area of anomalous copper, gold and molybdenum recognised by HGL. Previous workers have also identified a possible porphyry system with strong copper values in the ridge and spur soil sampling (coincident blue and green solid line polygons), an Inferred Porphyry (yellow polygon), an area of propylitic alteration (green solid polygon) within the general porphyry areas, an area of possible skarn mineralization in the NE sector of the map (magenta dash polygon) and an area of potential sediment hosted gold mineralization (black fine dash polygon). The orange polygon represents a general porphyry target area.

## 10 Drilling

The property was undrilled up to the current exploration work by GPAC. Drilling has been via a helicopter supported CS1000 diamond rig operated by Quest Exploration Drilling Pty Ltd (“QED”), based in Lae, PNG. The rig is rated to 1000m NQ with the coring comprising initially PQ size reducing down to HQ and then NQ size at appropriate downhole intervals.

Figure 32 is an example of a Kesar drill pad (hole KDH006).



**Figure 32 Drill Pad for Hole KDH006**

*(supplied by H&SC)*

Location of the drillholes is included as Figure 33. Two main prospects have been subject to exploratory diamond drilling, namely Anteruno (5 holes for 2,084.9m) and Hampore (7 holes for 1,401.8m). One hole was drilled at Fufunambi but ended up being abandoned at 227.6m.

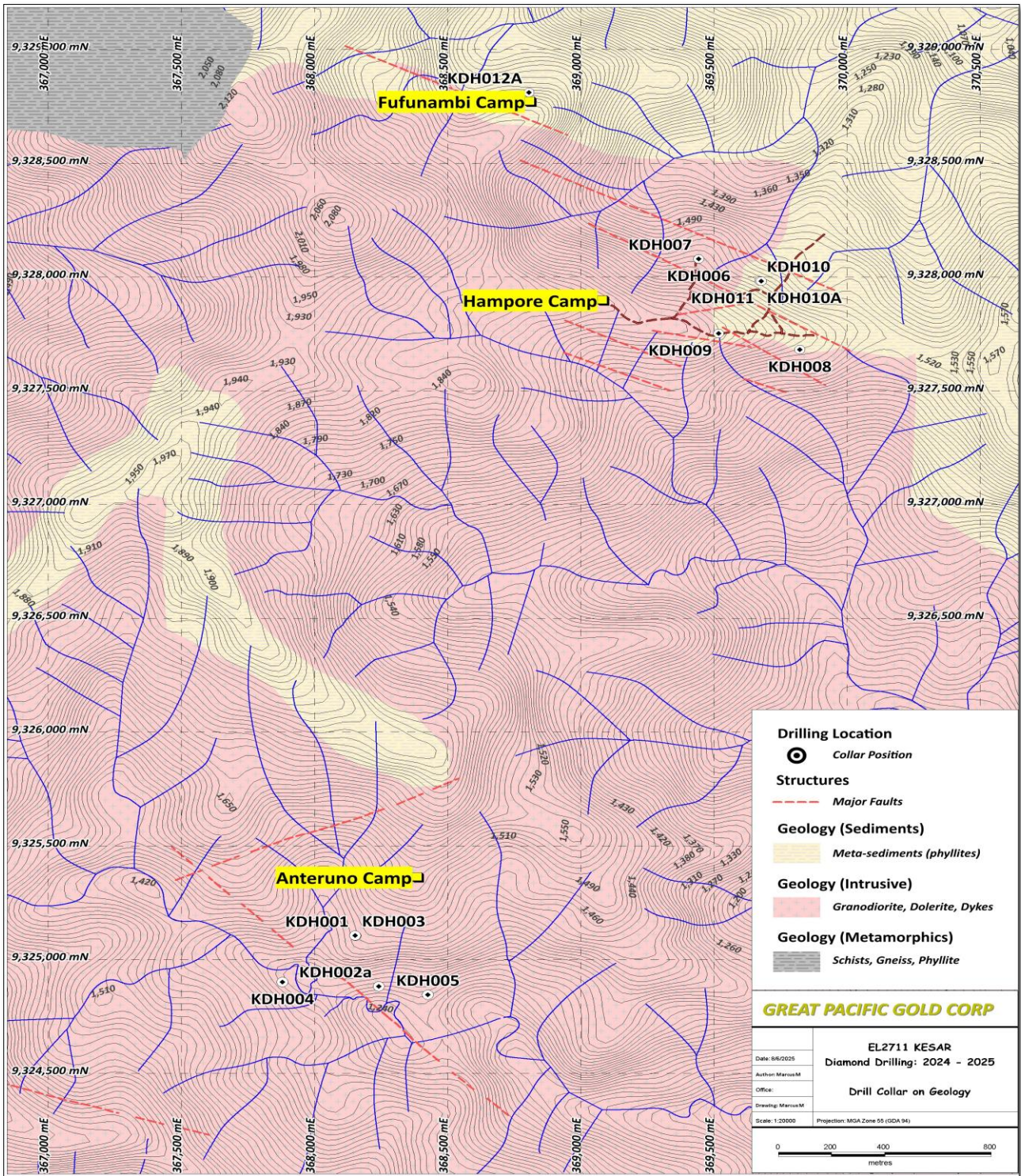
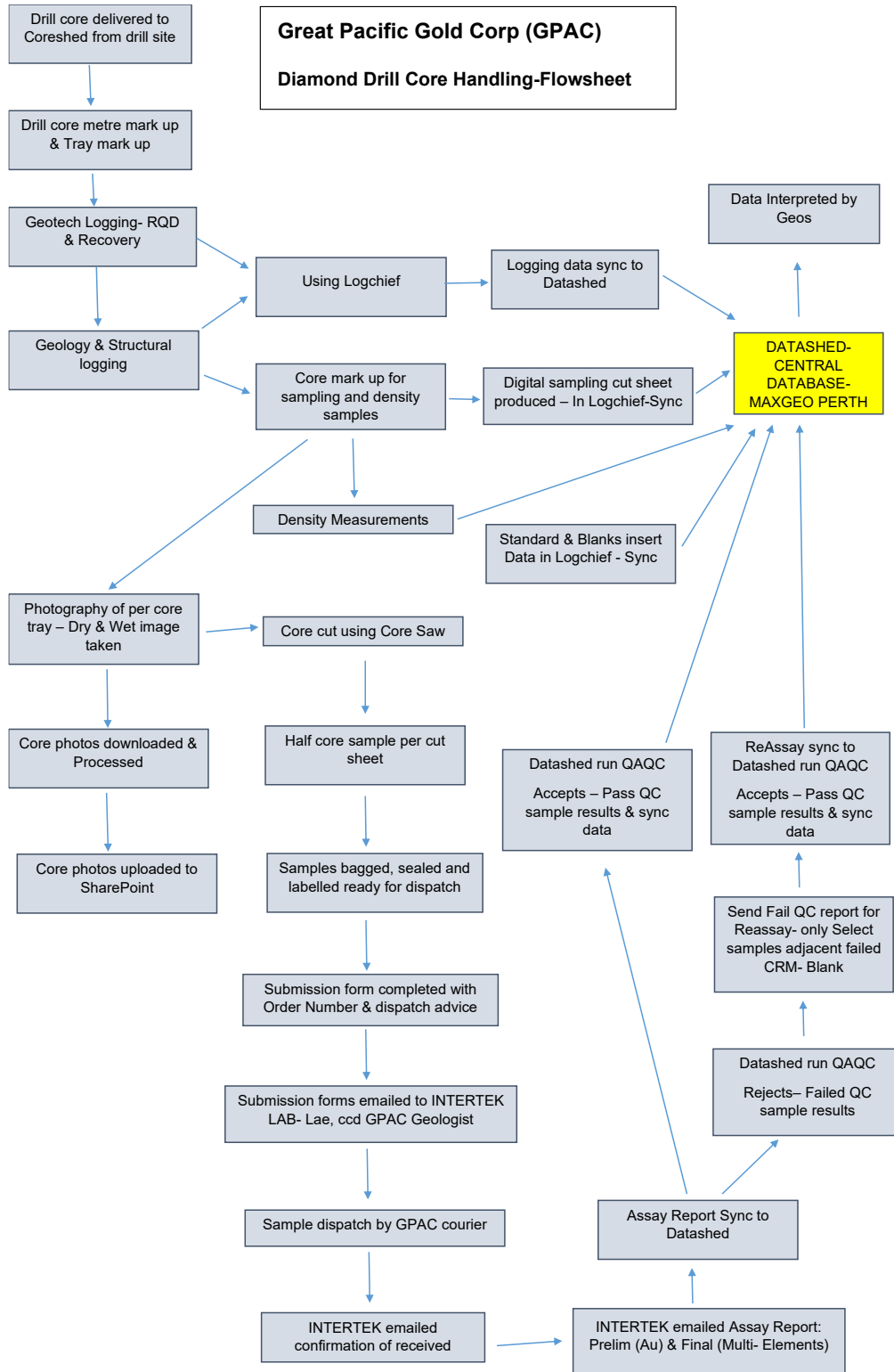


Figure 33 Drillhole Location Map on Geology

(supplied by GPAC)

### 10.1 Sampling Protocol

Diamond drill core was logged and sampled following a detailed protocol (Figure 34). The procedures are appropriate and to industry standard.



**Figure 34 Drill Core Handling Flow Sheet**

*(supplied by GPAC/H&SC)*

The following is a summary version of the protocol:

1. Cores were logged on site to record geotechnical properties- fracture spacing, fracture angle, roughness,
2. Each box of core was photographed along with a board that showed the hole name, start and end depth of the core tray, tray number and date. The core was photographed both wet and dry.
3. Once photographed the core was geologically logged and marked with sample intervals. Sampling was essentially under geological control with sample intervals ranging from 0.04m to 2.65m with an average sample length of 0.66m and a median of 0.58m. The geological logs record recovery, weathering, lithology, alteration (type and intensity), mineralization, veining, structure and estimates of type and amount of sulfide/oxide mineralization.
4. Core was split in half using a diamond saw. One half was sent for assay and the other half returned to the core tray for reference.
5. The half core was bagged labelled with a unique sample number and dispatched to the Intertek laboratory in Lae for sample preparation and assay.
6. At this stage no density data has been collected.

## 10.2 Collar Surveys

Drill hole collars are located initially by hand-held GPS. Expected accuracy is +/- 5 m for northing and easting coordinates and +/- 15 m for elevation. GPAC plan to survey the holes using a DGPS with a sub-metre accuracy.

Grid system used is WGS84, Zone 54.

Topographic control is from publicly available 10m contour data.

## 10.3 Downhole Survey

Downhole surveys are initially single shot digital values at 50m intervals as the hole progresses. Once the hole is completed a complete multi-shot digital survey by the driller is completed with readings every 3m.

## 10.4 Core Recovery

Core recovery was measured before the core was disturbed. Recovered lengths were measured by run and the percent recovery estimated for each sample. Final core recovery data was not available during the site visit, but the data verification process indicates almost full core recovery with no core loss issues associated with the mineralization.

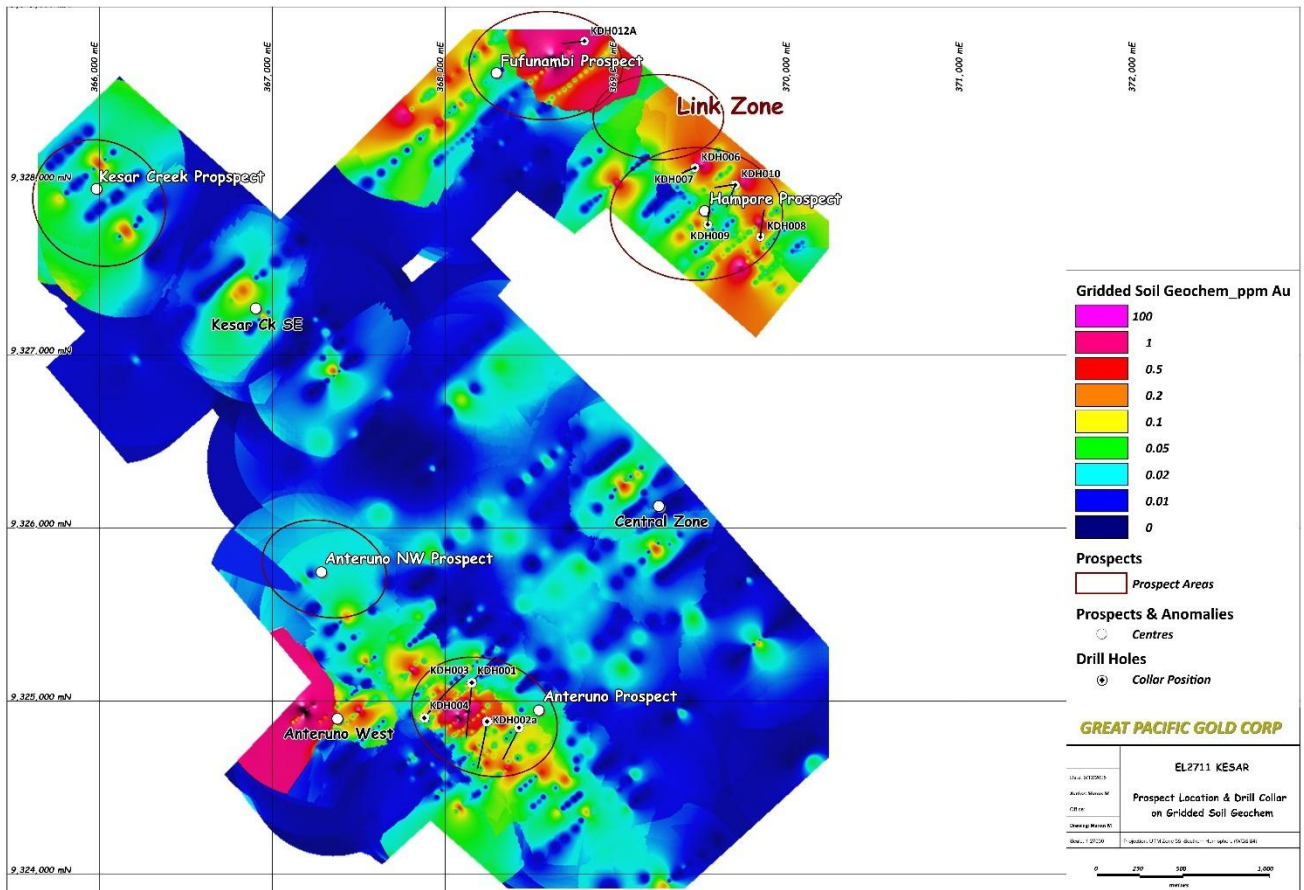
## 10.5 Sampling

The core was cut in half using a water lubricated diamond saw blade. Core samples were bagged in calico bags to avoid contamination or loss of fine material during transport. Sequential sample numbers were assigned and recorded on the paper drill log sheet. All the holes' survey, logging and sampling data were captured and stored in a secure database system on a laptop in the field and

backed up by transfer to a central MSAccess database system. All data was subject to routine validation during capture and storage.

### 10.6 Prospect Drilling

Drillhole targeting is primarily based on testing down dip mineralised structures exposed at surface within the GPAC anomalous soil sampling areas. (Figure 35).



**Figure 35 Drillhole Plan on Backdrop of Gridded Gold Soil Sample Results**

*(supplied by GPAC; zoom for better resolution)*

#### 10.6.1 Anteruno

A total of 5 holes totaling 2,084.9m of core were drilled at the Anteruno prospect with collar details in Table 6. Not included in the drilling statistics was KDH002 which was abandoned at around 27m depth due to significant core loss.

Table 6: Anteruno Diamond Drillhole Collar Details

Hole No	WGS84 East	WGS84 North	RL	EOH	Survey	Dip	Azimuth (True)
KDH001	368154	9325104	1408	500.0	GPS	-55	190
KDH002A	368241	9324882	1293	400.0	GPS	-50	190
KDH003	368153	9325106	1408	320.7	GPS	-55	50
KDH004	367879	9324902	1314	504.6	GPS	-50	40
KDH005	368426	9324846	1256	359.6	GPS	-55	205

Figure 36 shows a plan view of the drilling at Anteruno against a backdrop of gridded soil sampling data for gold. KDH003 lies within the red ellipse and was targeting mineralised structures exposed at surface. The reason why there is no anomaly on top of the KDH003 intersection is possibly due to the steep topography causing extensive soil creep or even landslides (a common occurrence in PNG) and thus the original B horizon soil may have moved downhill and been dispersed.

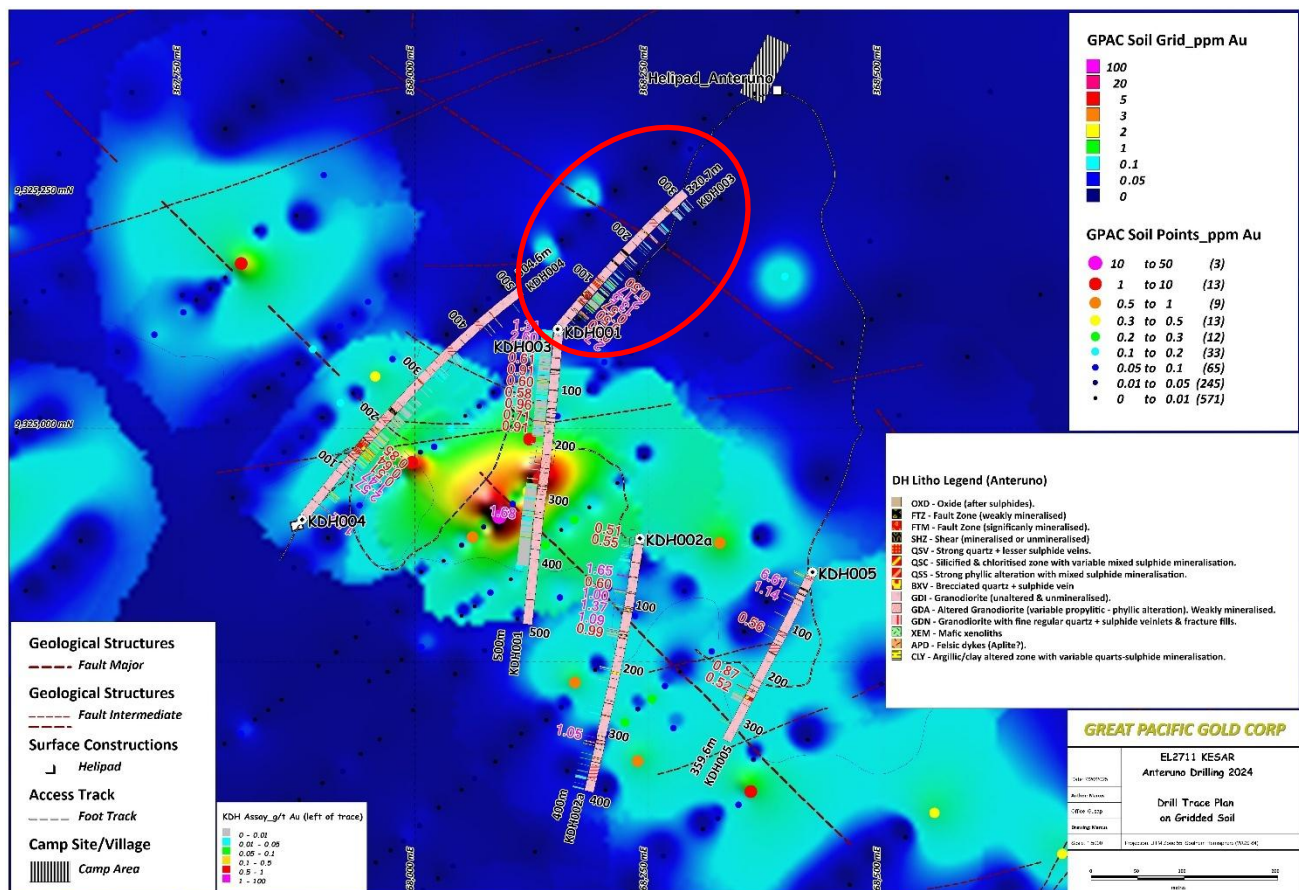


Figure 36 Plan View of Anteruno Hole Traces on Gridded Soil Data – Gold

(supplied by GPAC; zoom for better resolution)

The drilling at Anteruno intersected multiple narrow veins structures within NW-SE and E-W trending structures hosted in granodiorite. Mineralization is dominated by quartz-carbonate-polymetallic veins associated with base metals (sphalerite, galena, molybdenite, chalcopyrite) and arsenopyrite. The best result from this program was in KDH003 of 0.71m @ 13.5 g/t Au (downhole

width) within an 11m wide fault zone. The soil (and rock chip) anomalies within the main Anteruno prospect area were reasonably tested by the five drill holes.

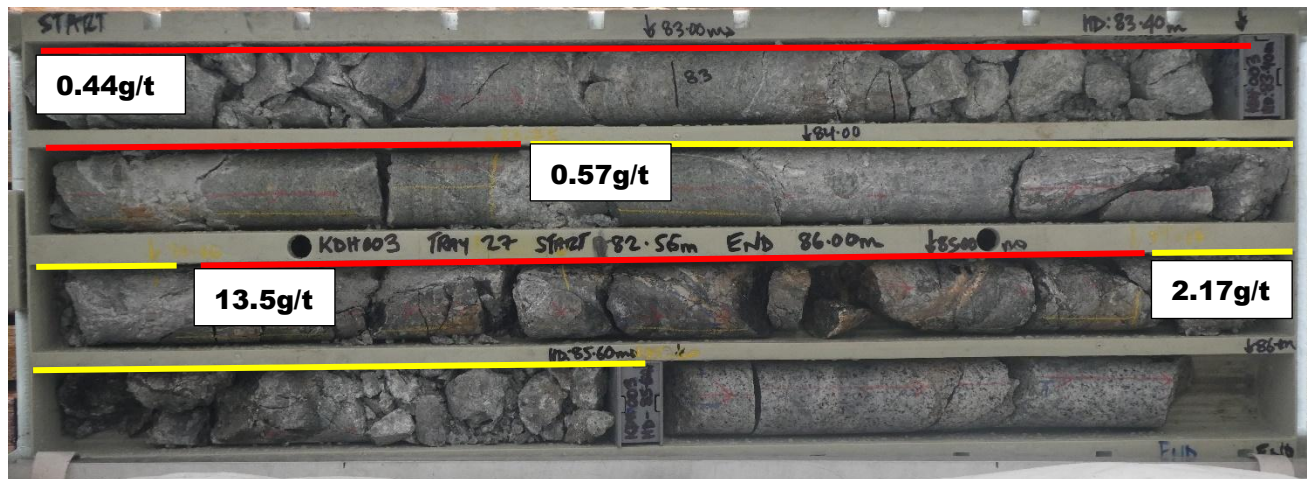
Table 7 contains significant downhole mineral intercepts based on the final drill results for the five holes completed by GPAC at Anteruno. Most of the drilling intersected mineralised structures at moderately high angles and therefore the downhole intercepts do not represent true thicknesses.

**Table 7: Anteruno Diamond Drilling Significant Intercepts**

Hole Id	From (m)	To (m)	Interval (m)	Au g/t	Ag ppm	Cu ppm	
KDH001	18.85	19.50	0.65	1.31	4.6	108	
KDH001	334.77	335.24	0.47	1.68	4.4	187	
KDH002a	65.20	66.83	1.63	1.10	43.3	867	inc 1.03m @ 1.65g/t Au
KDH002a	90.65	91.32	0.67	1.30	19.4	150	
KDH002a	156.56	157.30	0.74	1.09	24.8	861	
KDH003	51.78	53.70	1.92	1.5	13.7	129	inc. 0.87m @ 2.76g/t Au
KDH003	82.47	85.60	3.13	3.67	10.8	137	inc. 0.71m @ 13.5g/t Au
KDH004	37.29	38.30	1.01	2.33	69.8	572	
KDH004	122.00	122.30	0.30	2.57	103.0	2,399	
KDH005	62.52	62.75	0.23	6.61	6.1	65	
KDH005	69.16	69.58	0.42	1.14	12.1	293	

(nominal 0.4g/t Au cut off)

An example of mineralized core from drillhole KDH003 is included as Figure 37.



**Figure 37 Main Mineral Intercept from KDH003 (82.47 to 85.6m)**

A review of the multielement assay data indicates that gold mineralization (>0.1g/t) at Anteruno is characterised by elevated potassium values. Also related to the gold mineralization is elevated iron and sulfur which is interpreted to represent the presence of pyrite. A combination of these two observations would support a phyllic style of alteration associated with the gold mineralization. Also present in various anomalous amounts are arsenic (non-weighted average value of 0.14%), lead (non-weighted average value of 0.2%), zinc (non-weighted average value of 0.43%), and molybdenum

(non-weighted average value of 64ppm). The values for the first three elements would correspond to the observed presence of arsenopyrite, galena and sphalerite respectively.

A cross section showing the downhole trace, geology and assay results for KDH003 is included as Figure 38.

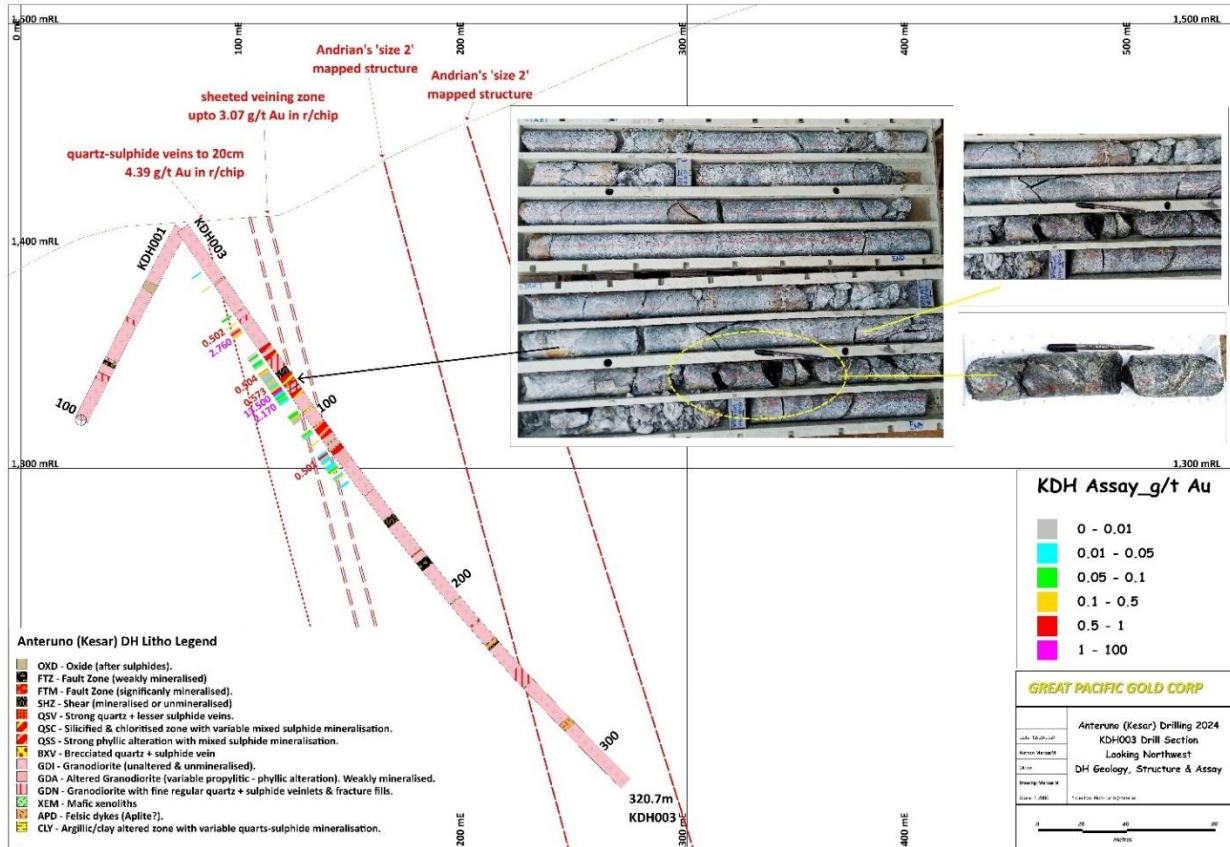


Figure 38 Simplified Anteruno Cross Section for Drillhole KDH003

(supplied by GPAC)

### 10.6.2 Hampore

Mapping at Hampore has identified NW/WNW trending mineralized veins and active artisanal mining. Drilling targeted high grade rock chip and soil samples collected within the prospect, with the main targets focusing on the larger of the old adit workings with the highest gold grades.

Seven holes were completed on the Hampore prospect for a total of 1,401.8m (Table 8). Hole KDH009 was in progress during the QP site visit. KDH010 was redrilled as KDH010A due to extensive core loss in the original hole. Hole KDH010A is a wedge from KDH010 at 108.5m with an additional coring of 68.1m.

Table 8: Hampore Diamond Drillhole Collar Details

Hole No	WGS84 East	WGS84 North	RL	EOH	Survey	Dip	Azimuth (True)
KDH006	369444	9328077	1612.0	128.1	GPS	-55	250
KDH007	369444	9328077	1612.0	242.8	GPS	-75	250
KDH008	369822	9327681	1593.1	258.3	GPS	-55	9.5
KDH009	369517	9327752	1706.5	314.7	GPS	-55	9.5
KDH010	369517	9327752	1706.5	179.1	GPS	-50	264.5
KDH010A	369673	9327983	1525.0	176.6	GPS	-50	264.5
KDH011	369677	9327982	1525.0	210.7	GPS	-50	207.8

Figure 39 shows the collar locations and hole traces in relation to the geological interpretation for the Hampore area.

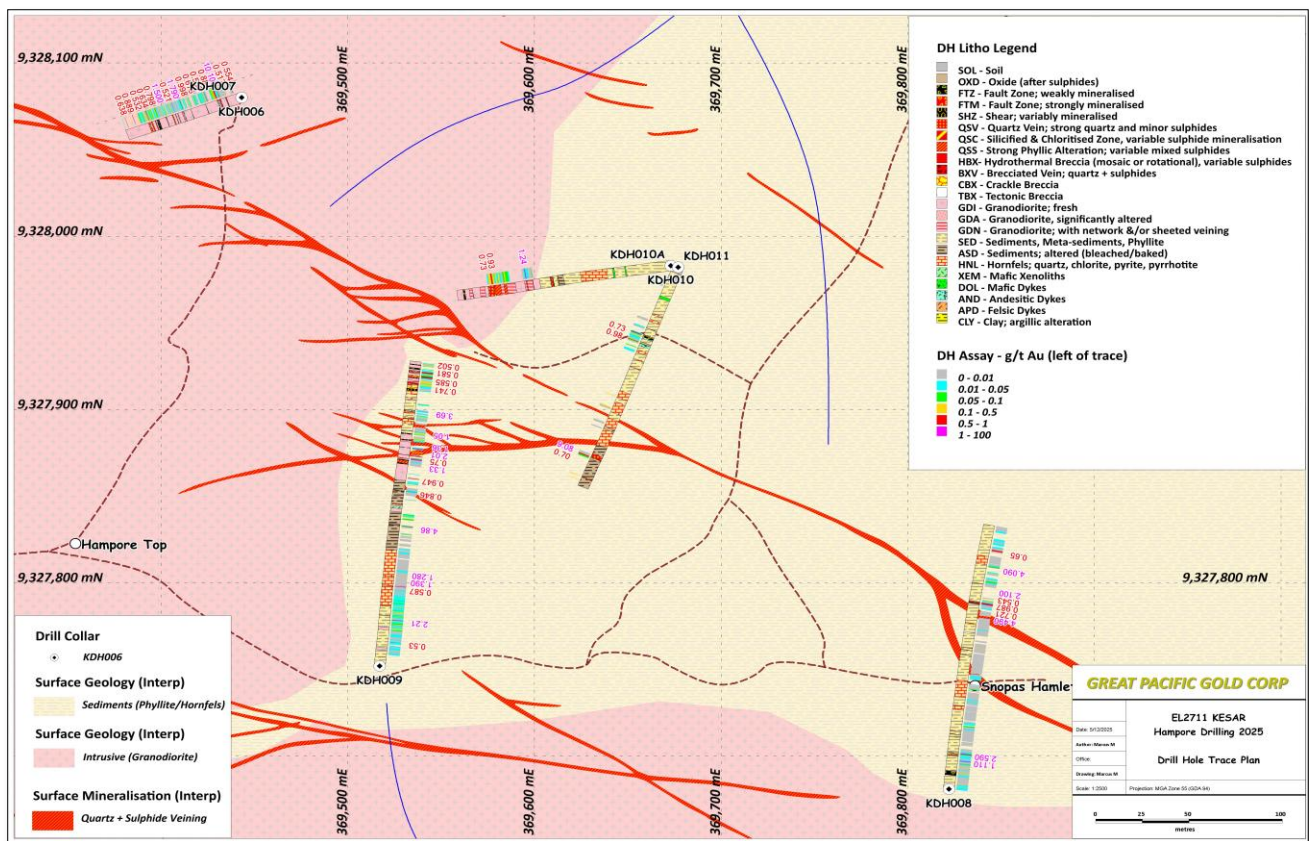


Figure 39 Plan Map with Geology Backdrop for Hampore Drillhole Outcomes

(supplied by GPAC)

Mineralization encountered in the Hampore drilling primarily occurs as narrow quartz-pyrite veins with arsenopyrite, sphalerite, and chalcopyrite, often associated with phyllic alteration (silica-sericite-pyrite). Both holes KDH006 and KDH007 successfully intersected multiple narrow, mineralized structures hosted within granodiorite. Drill hole KDH008 targeted bedded meta-sediments (phyllites) and intersected significant structural and alteration zones. Drillcore observations indicate strong pervasive secondary biotite alteration and sericite associated with vein halos, brecciation and multiple structural intersections.

Table 9 contains significant downhole mineral intercepts based on the final drill results for the six holes completed by GPAC at Hampore. Most of the drilling intersected mineralised structures at moderately high angles and therefore the downhole intercepts do not represent true thicknesses.

**Table 9: Hampore Diamond Drilling Significant Intercepts**

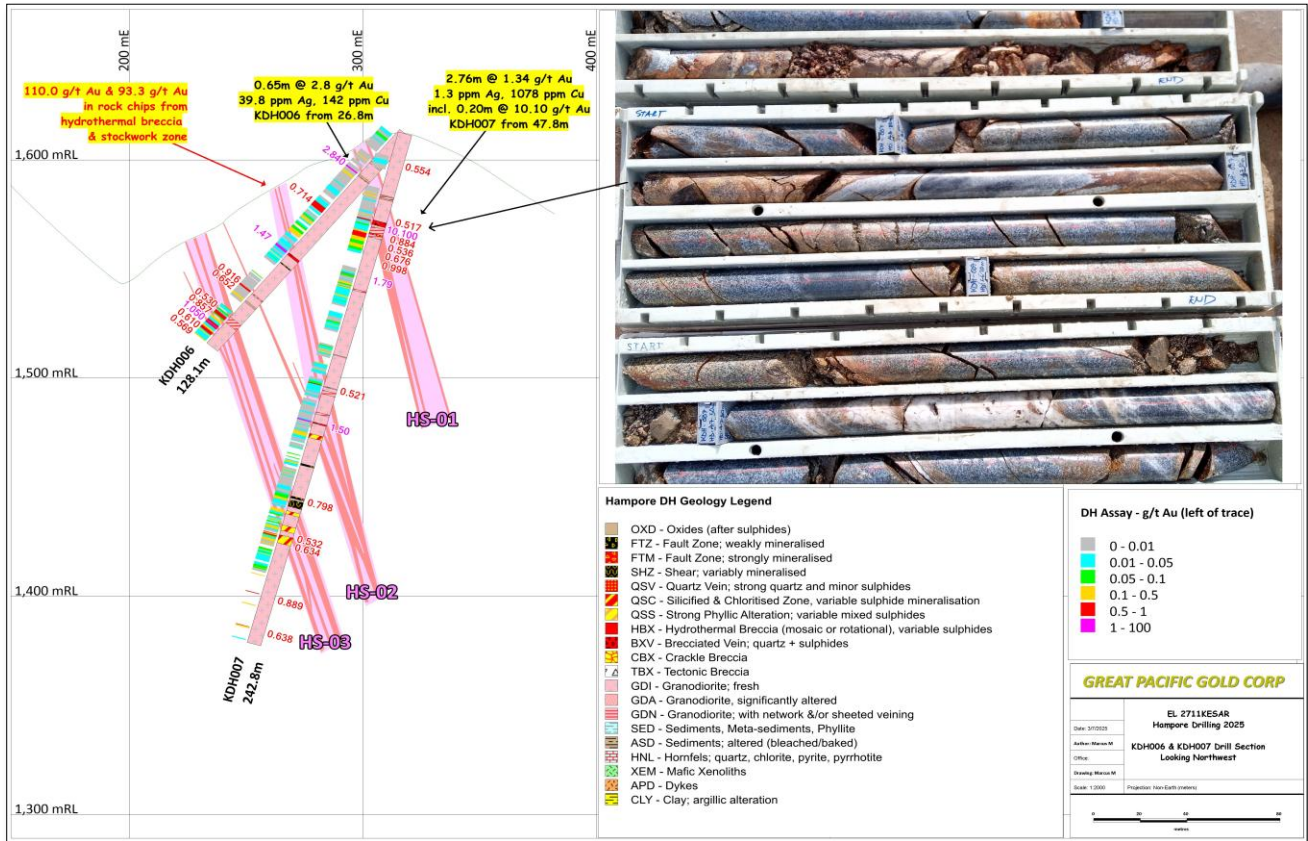
Hole Id	From (m)	To (m)	Interval (m)	Au g/t	Ag ppm	Cu ppm	
KDH006	26.80	27.45	0.65	3.85	39.8	142	
KDH006	73.72	74.80	1.08	1.47	118.0	1,766	
KDH006	119.00	121.00	2.00	0.71	2.2	75	
KDH007	47.80	50.56	2.76	1.34	1.3	1,078	inc. 0.2m @ 10.1g/t Au
KDH008	35.40	36.40	1.00	2.59	4.9	51	
KDH008	183.10	186.1	3.00	1.16	8.3	32	inc. 0.38m @ 5.25g/t Au
KDH009	47.50	48.00	0.50	2.21	95.9	1,251	
KDH009	82.60	83.70	1.10	0.97	41.4	324	
KDH009	213.20	214.16	0.96	1.33	1.3	35	
KDH009	216.86	217.50	0.64	1.01	12.6	20	
KDH009	298.38	300.14	1.76	0.66	9.6	94	
KDH010A	119.20	119.80	0.60	1.24	42.4	277	
KDH010A	146.84	147.82	0.98	0.84	6.8	64	
KDH011	183.64	184.58	0.94	3.17	66.8	309	inc. 0.29m @ 9.08g/t Au

*(nominal 0.4g/t Au cut off)*

A review of the multielement assay data indicates that gold mineralization (>0.1g/t) at Hampore is characterised by a rather more complex pattern of elevated potassium values (no multi-element data for Fufunambi). This is probably related to the drilling of a more varied set of lithologies for Hampore relative to Anteruno. Other elements associated with the mineralised intersections include elevated calcium and manganese. A marked difference to Anteruno was a much higher level of arsenic (non-weighted average value of 0.37%), and relatively low levels of lead (non-weighted average value of 0.09%), zinc (non-weighted average value of 0.09%) and molybdenum (non-weighted average value of 1ppm).

In a counter to observed chemical variations between Anteruno and Hampore it is worth noting that the non-weighted average gold value for gold mineralization >0.1g/t at Anteruno is 0.58g/t whilst for Hampore it is 0.66g/t.

A cross section showing the downhole trace, geology and assay results for KDH006 and KDH007 is included as Figure 40.



**Figure 40 Simplified Hampore Cross Section for Drillholes KDH006 and KDH007**  
(supplied by GPAC)

**10.6.3 Fufunambi**

The original drill plan (one plus five more holes) was not possible due to pad instability associated with steep slopes. A compromise was found for the first hole but involved drilling a deeper than planned hole at a sub-optimal angle to the targeted structures. The initial plan was to target the geological contact between metasediments and granodiorite intrusion, which is an ideal location for enhanced fracturing and hydrothermal mineral fluid flow.

Drilling commenced at Fufunambi on the 10<sup>th</sup> of May 2025. KDH012A (details in Table 10) was drilled to 227.6m before GPAC terminated the drilling program. None of the other planned holes were completed.

**Table 10: Fufunambi Diamond Drillhole Collar Details**

Hole No	WGS84 East	WGS84 North	RL	EOH	Survey	Dip	Azimuth (True)
KDH012A	368805	9328811	1764	227.6	GPS	-55	270

Figure 41 shows the location of the hole KDH012A drilled at Fufunambi in relation to the geology.

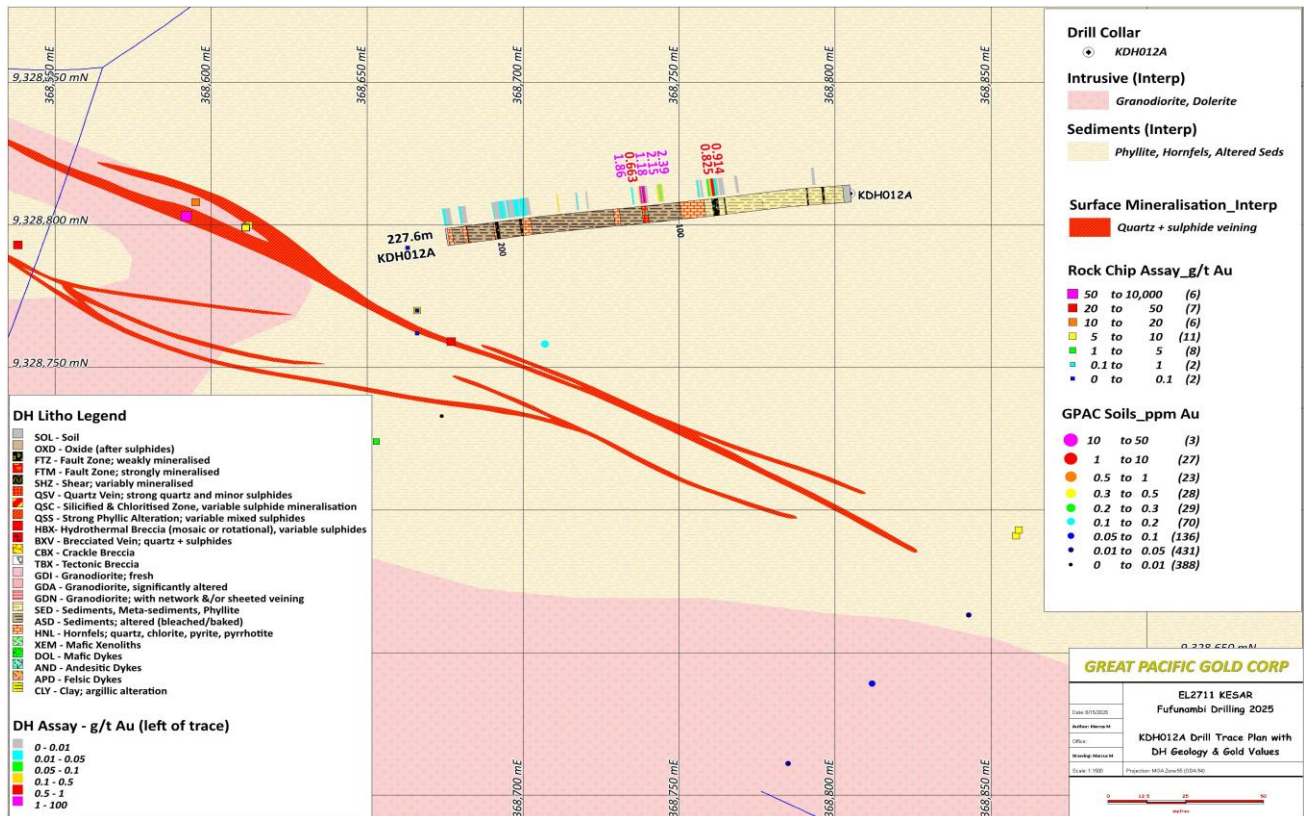


Figure 41 Plan Map with Geology Backdrop for Fufunambi Drillhole KDH012A

(supplied by GPAC)

Table 11 contains the significant downhole mineral intercepts for the hole completed by GPAC at Fufunambi. The drilling intersected narrow mineralised structures, veins 7 to 10mm thick, at relatively shallow angles (dip:70° & dip direction: 195°) and therefore the downhole intercepts do not represent true thicknesses. The vein orientations are consistent with mapped veins at surface although the drillhole failed to reach the main targeted surface vein.

Table 11: Fufunambi Diamond Drilling Significant Intercepts

Hole Id	From (m)	To (m)	Interval (m)	Au g/t	Ag ppm	Cu ppm	
KDH012A	76.30	78.10	1.80	0.88	n/a	n/a	
KDH012A	115.46	117.20	1.74	1.29	n/a	n/a	inc. 0.54m @ 2.29 g/t Au

(nominal 0.4g/t Au cut off)

No multi-element assays were available for drillhole KDH012A.

Figure 42 is cross sectional representation of the drillhole KDH012A.

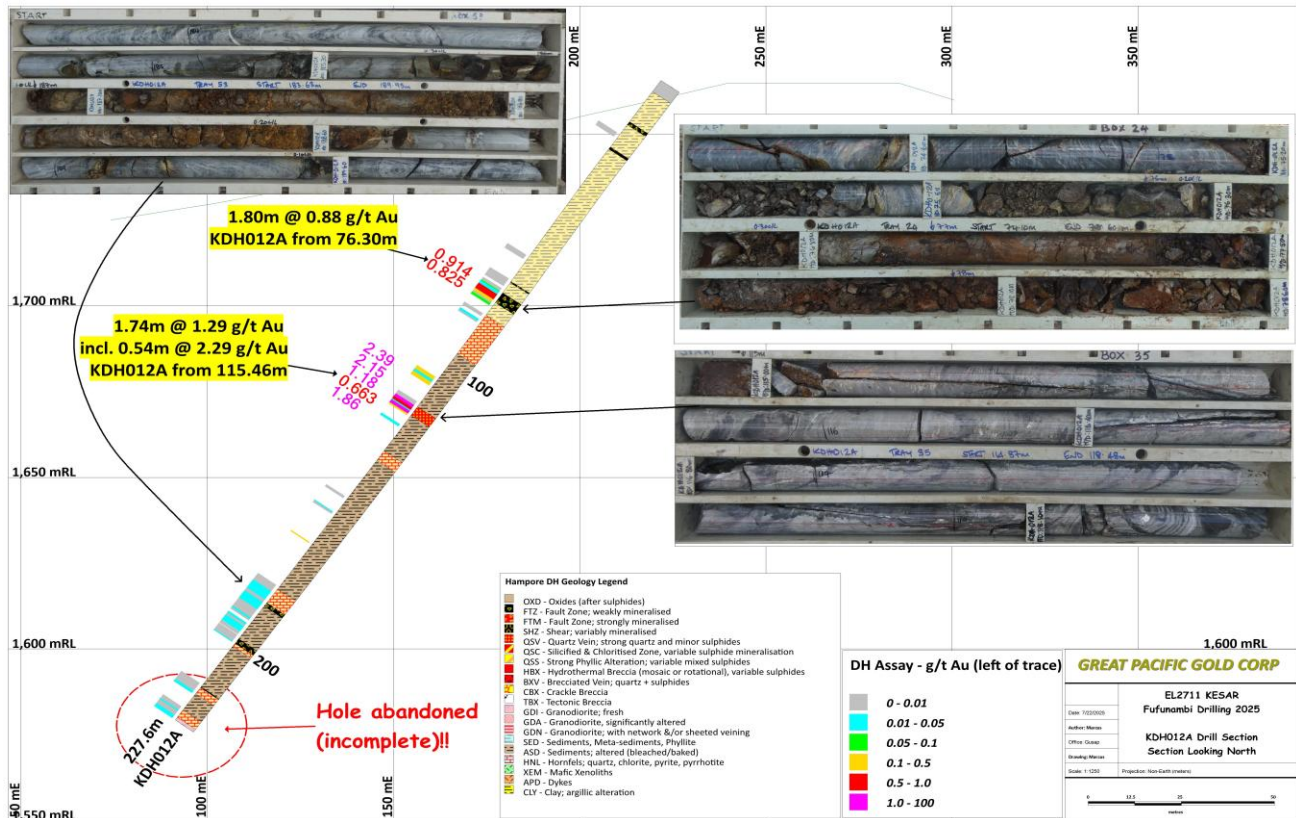


Figure 42 Simplified Fufunambi Cross Section for Drillhole KDH012A

(supplied by GPAC)

Further inspection of the drillhole results noted that there were in some holes low grade gold zones that were an order of magnitude wider than the more isolated higher grade narrow veins. Details of these zones are included in Table 12. It is worth noting that the zones roughly have the same downhole length at roughly the same gold grade; the reason why is uncertain. It is also uncertain as to the significance of these intercepts but they maybe distal indicatives of a more substantial structural zone. KDH006 and KDH007 are a pair of holes on the same cross section with the mineral zones lining up to imply a steep dip 75° to the east.

Table 12: Details of Low Grade Auriferous Zones

Area	Hole	Interval	From	Au g/t	Comment
Anteruno	KDH004	18.80	144.0	0.20	Completely sampled section
Hampore	KDH006	14.27	113.8	0.26	Minor zones of non-sampled intervals
Hampore	KDH007	16.90	180.1	0.14	Minor zones of non-sampled intervals
Hampore	KDH009	18.30	223.9	0.21	Minor zones of non-sampled intervals

Diamond drilling is considered the most appropriate sampling method for testing the sub-vertical expression of surface mineralization. Sample recovery is almost 100% and with the use of CRMs to check the accuracy of the laboratory analysis provides reassurance on the accuracy of the results. Hole collar accuracy at this stage is modest i.e. handheld GPS with GPACs intention to complete detailed pickup of the collars using a Differential Global Positioning System (“DGPS”). Downhole surveys are measured using a multishot digital instrument which provides an acceptable level of

accuracy. The sub-sampling procedures of sawn half core completed by GPAC are appropriate and reasonably accurate, noting the style and nature of the gold mineralization. It should also be noted that exploration is at an early stage where the required level of accuracy is not as high as for resource definition.

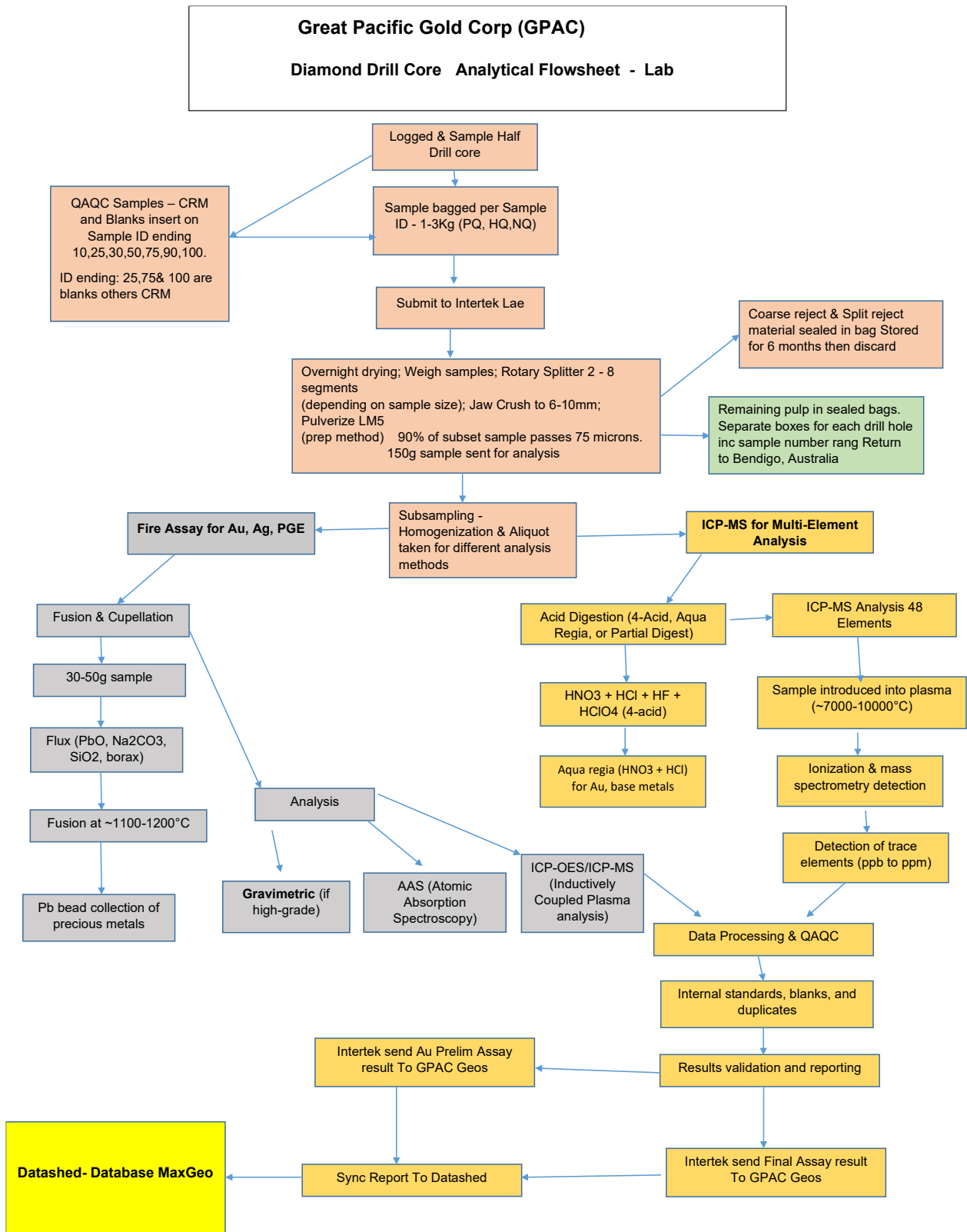
## 11 Sample Preparation, Analyses and Security

Due to the early exploratory nature of the drillholes, sampling was prudently selective based on geological evidence for the presence of gold mineralization eg phyllic alteration, quartz veins and sulfide mineralization including arsenopyrite and pyrite.

Sample preparation is undertaken at the independent Intertek Laboratories in Lae. Sample preparation consisted of the entire sample being dried, crushed and check screened to ensure that at least 80% of the crushed material passes through a 2mm screen. The crushed sample is riffle split to approximately 3kg and this is pulverized in a LM2 or LM5 as a single charge with testing of the pulp to ensure that a minimum 80% is <75 microns. All the sizing tests are recorded to ensure compliance. Samples that do not pass the sizing tests are re-crushed or re-milled until an acceptable pass is obtained. The laboratory then splits a 150g-250g pulp sample directly from the pulverised material which is then bagged in a kraft paper envelope. The remaining crushed and pulped sample is retained and stored at the lab so that umpire samples may be taken if required. The minus 75 micron pulps of 150-200g are sub-sampled for the base metal acid digest assay and the gold fire assay.

Gold was determined by fire assay using a PbO, Na<sub>2</sub>CO<sub>3</sub>, SiO<sub>2</sub>, borate fusion at 1100-1200°C with an AAS finish. For multi-element analysis samples were assayed using both 3 acid (for base metals) and 4 acid digests with an ICP-MS finish. Samples were sent to Intertek in Townsville, a commercial laboratory, for the ICP analysis.

A sample preparation and analysis flowsheet is included as Figure 43. The sub-sampling and assaying procedures are appropriate for the style and nature of the gold mineralization and are to industry standard.



**Figure 43 Sample Preparation and Analytical Flow Sheet**

*(supplied by GPAC with modifications by H&SC)*

## 11.1 QAQC

The following QAQC programme is used for the diamond drilling:

1. Certified Reference Materials (“CRM” or standard) are used to monitor analytical accuracy, inserted at the core-shed on a 1 in 20 basis. 5 CRMs are used, two low grade, two at a nominal head grade and one high grade sample.
2. A field blank sample to monitor carry-over contamination at the crusher, is inserted at the core-shed on a 1 in 20 basis.

The CRMs were sourced from *Ore Research and Exploration* (OREAS) in Australia. OREAS are a well-known supplier of CRMs for the mining industry. Certificates detailing the source and accepted assay values and standard deviation of the material supplied are available online from the OREAS website ([www.Ore.com.au](http://www.Ore.com.au)).

A similar sample preparation process was used for the rock chip sampling but for the soil sampling the minus the 2mm jaw crushing stage was omitted.

### 11.1.1 Definitions

A list of QAQC definitions is included below.

Item	Description
Standard	<p>Also known as a Certified Reference Material (“CRM”). Ideally have three standards comprising:</p> <ol style="list-style-type: none"> <li>1. Low grade: approximately at any likely resource cut off grade eg 0.3g/t Au</li> <li>2. ‘Head’ or medium grade: approximately at any likely resource average grade eg 0.8 to 1g/t</li> <li>3. High grade: in this instance between 3-10g/t Au is appropriate</li> </ol> <p>Standards measure accuracy of the laboratory analysis</p>
Blank Gravel	<p>Coarse blank sample, usually some sort of locally sourced material but can be bags of stones acquired from the local hardware store. Sample weight should be reasonably similar to mineral sample weights.</p> <p>Blank gravels are used to assess any issue with sample contamination at the sample preparation stage; optimal insertion point is immediately after a high grade sample and not at the beginning of a batch.</p>
Blank Standard	<p>This is a pulp sample usually 10 or 25g usually sourced from CRM suppliers.</p> <p>The blank sample is used to check for contamination/machine error in the acid digest and analytical procedure.</p>
Field Duplicate	<p>A second sample collected in the field. There are usually two types:</p> <ol style="list-style-type: none"> <li>1. RC second split: This can either be a second split from the rig mounted cyclone (if set up to produce) or involves the whole sample being passed through a riffle splitter to give an equivalent</li> </ol>

	<p>size to the original cyclone mounted sample. Spear sampling is not recommended.</p> <p>2. Diamond core: usually consists of quarter core sampled material matching the length of the original sample. Ideally done on HQ core, but can be done with NQ core (maintaining consistent sample size is important)</p> <p>Ideally duplicate samples are nominated by the geologist after viewing the core/chip material so as to avoid unnecessary barren rock assaying.</p>
Laboratory Duplicate	<p>After jaw crushing and sample pulverisation a second pulp of 200-330g is split from the original sample.</p> <p>This sample is used to provide a check on sample homogeneity from the sample preparation stage.</p> <p>Ideally duplicate samples are nominated by the geologist after viewing the core/chip material to avoid excessive sampling of barren material.</p>
Laboratory Replicate	<p>The original pulp sample has a second sample extracted that is used for a second acid digest and analysis test.</p> <p>This provides a check on the acid digest process and the calibration of the analytical machine. It is not the same as a laboratory duplicate</p>
2 <sup>nd</sup> Laboratory Checks	<p>A set of pulp samples is sent to a second laboratory for acid digest and analysis. This is usually done on a campaign basis but needs to be done regularly. Ideally the laboratory duplicate samples are used.</p> <p>This provides a check on the accuracy of the results for the primary laboratory; most important to include a range of grades with some emphasis on the higher grades.</p>
Coarse Reject	<p>Material that has not passed the original jaw crushing stage ie too coarse. A sub-sample of this material is pulverised and then analysed.</p> <p>Mainly used for gold to recognise possible sampling issues with nuggety material.</p>
Screen Fire assays	<p>Crush &amp; pulverise sample and then screen out material (nominally 75um) and then analyse the oversize and undersize material.</p> <p>Generally used for gold but could be used for native copper and/or silver. Considered important for nuggety gold deposits.</p>
Twin Hole	<p>A repeat hole located in very close proximity to the original hole ie &lt;5m collar difference.</p> <p>Mainly consists of a diamond hole checking the quality of samples from an RC hole and is used to validate the RC drilling and that the sampling is representative. Always wise to have drilled the RC hole first rather than the other way round.</p>

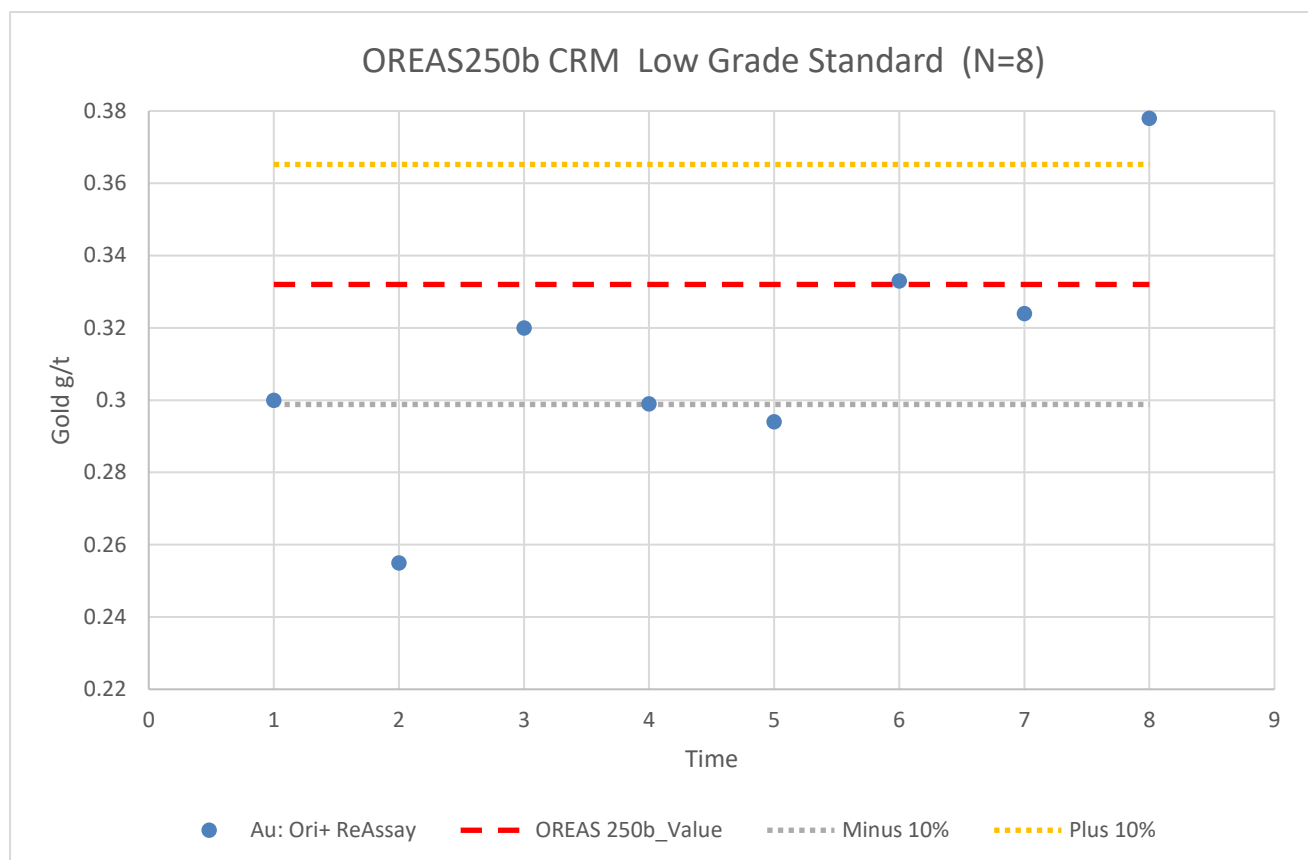
### 11.1.2 Standards

Five different CRMS have been employed by GPAC for its diamond drilling. Table 13 provides a listing of the standards used and their expected gold values.

**Table 13: CRM Details**

CRM	CRM Au g/t Value
OREAS230	0.337
OREAS250b	0.332
OREAS232	0.902
OREAS235	1.59
OREAS239	3.55

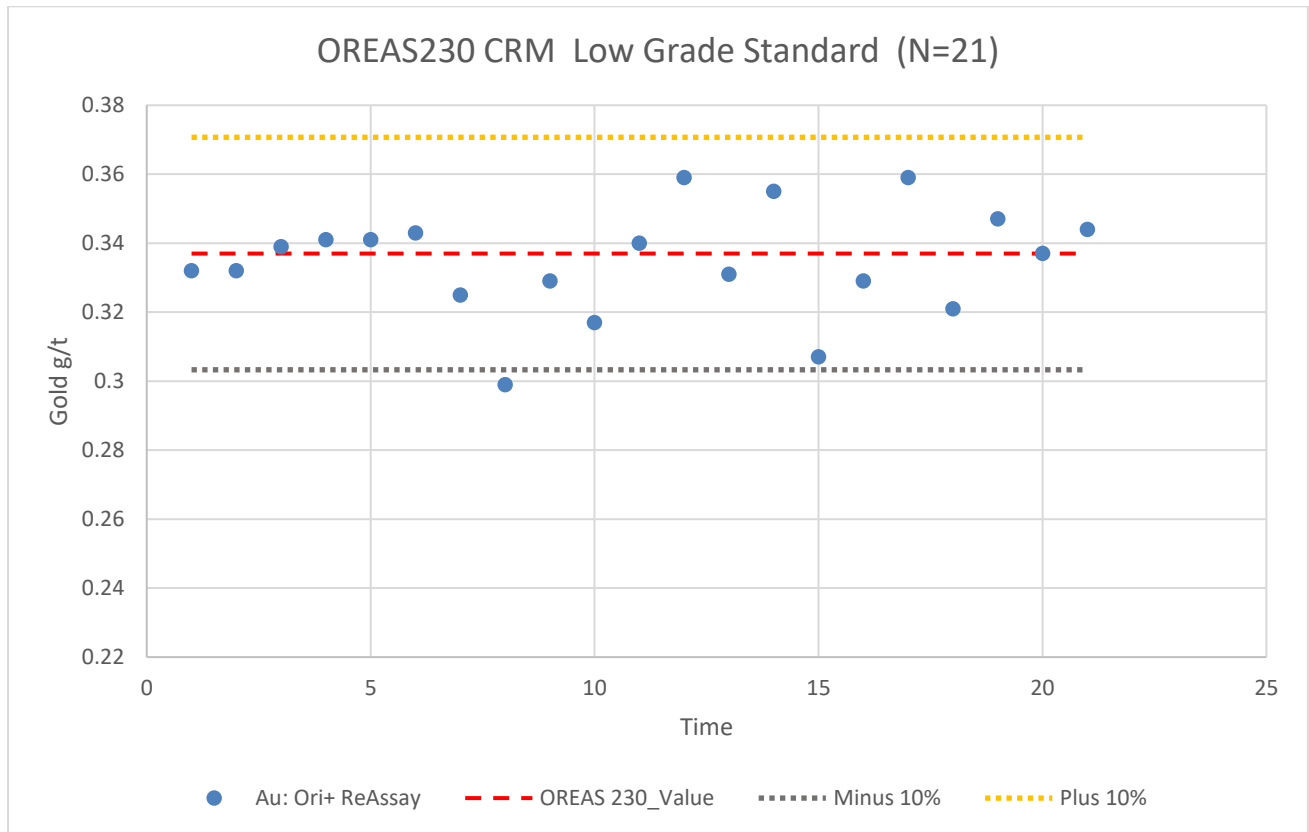
The following five diagrams represent control graphs for gold for each CRM. The graphs have the gold assay grade plotted against time (a function of sample number/batch number) with lines representing the CRM accepted value and +/-10% of the CRM value, the latter of which is designed to give an indication of laboratory performance/accuracy. Figure 44 shows the assay results for one of the low grade standards and suggest a possible 5-10% under-reporting, i.e. bias, of the gold results, which whilst within the laboratory's acceptable range requires continued monitoring.



**Figure 44 CRM OREAS250b Gold Assay Results**

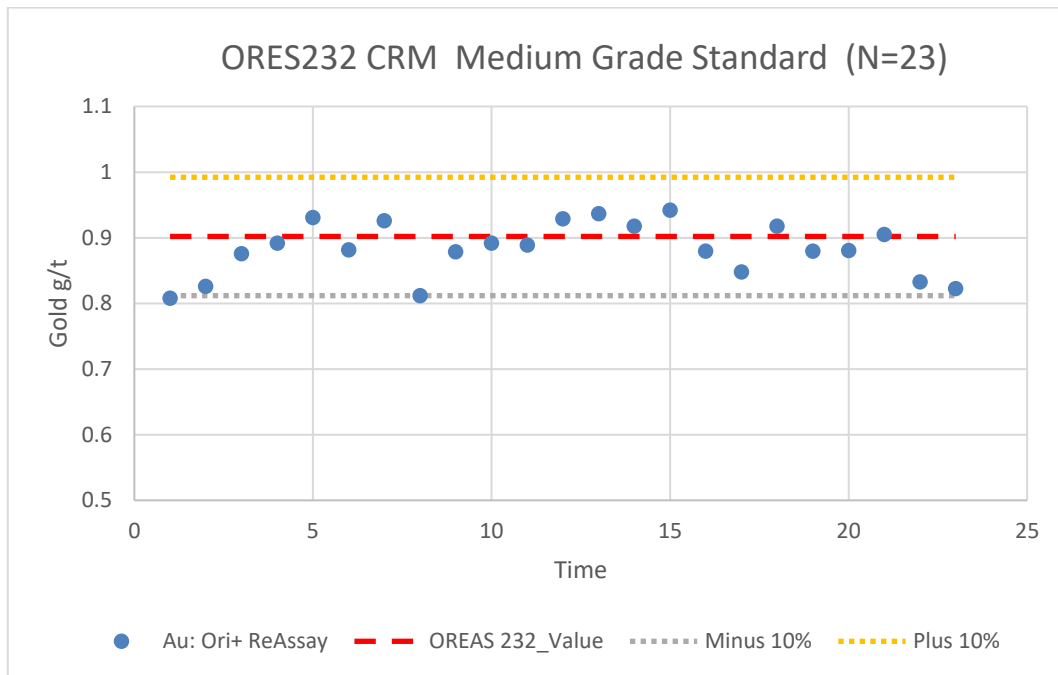
Whilst it is industry tradition to report +/-2 or 3 standard deviations for the CRM accepted value, H&SC considers this method measures the performance of the standard and not necessarily the accuracy of the laboratory, hence the inclusion of the +/-10% of the CRM value lines in the plotted graphs.

Figure 45 represents results from the other low grade CRM with initially accurate results with good precision. However, whilst the accuracy has been maintained, the precision has significantly deteriorated which needs to be reviewed with the laboratory.



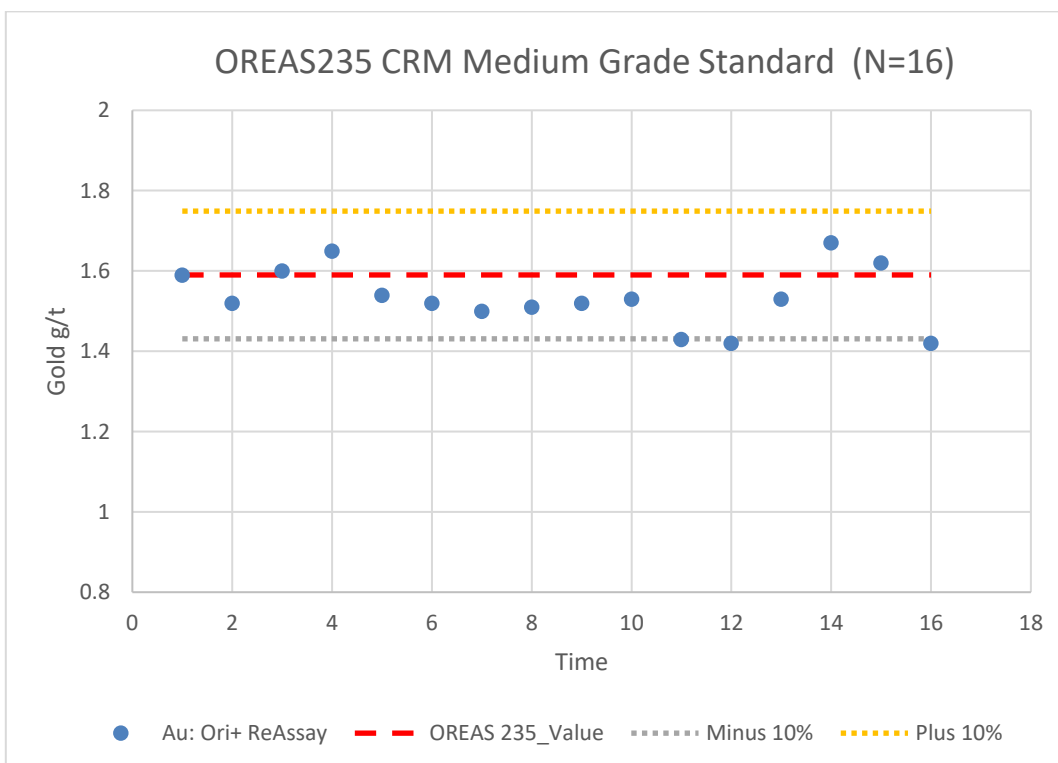
**Figure 45 CRM OREAS230 Gold Assay Results**

Figure 46 shows the CRM results for one of the ‘head’ grade standards. The outcomes are a minor 2-3% under-reporting, i.e. bias, and that there is some cyclicity with the gold assay which may need to be brought to the attention of the laboratory. Precision is moderate.



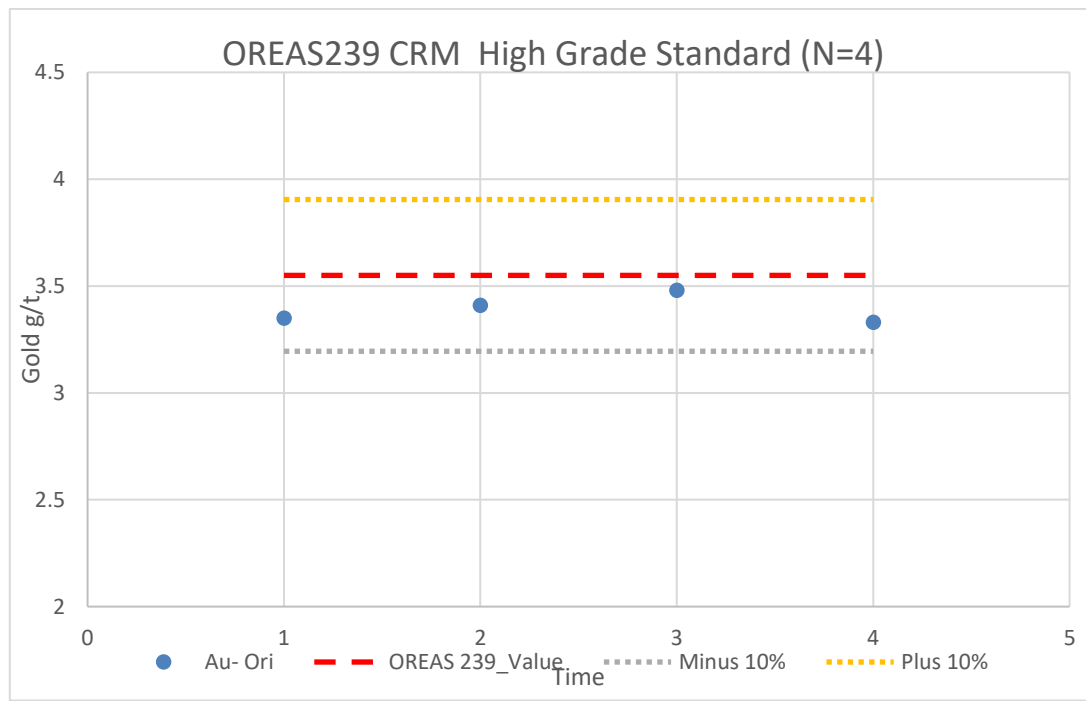
**Figure 46 CRM OREAS232 Gold Assay Results**

Figure 47 shows the CRM results for the other ‘head’ grade standard. The outcomes are a minor 2-3% average under-reporting, i.e. bias, and that there is some weak cyclicity with the gold assays which may need to be brought to the attention of the laboratory. Precision was good with the earlier samples but has somewhat deteriorated with more recent analyses.



**Figure 47 CRM OREAS235 Gold Assay Results**

Figure 48 shows the CRM results for the high grade standard. The limited number of data points suggest a minor 2-3% under-reporting of the gold assays.



**Figure 48 CRM OREAS239 Gold Assay Results**

### 11.1.3 Duplicates

No field or lab duplicates have been collected. Collection of such samples will become more appropriate with increased exploration success.

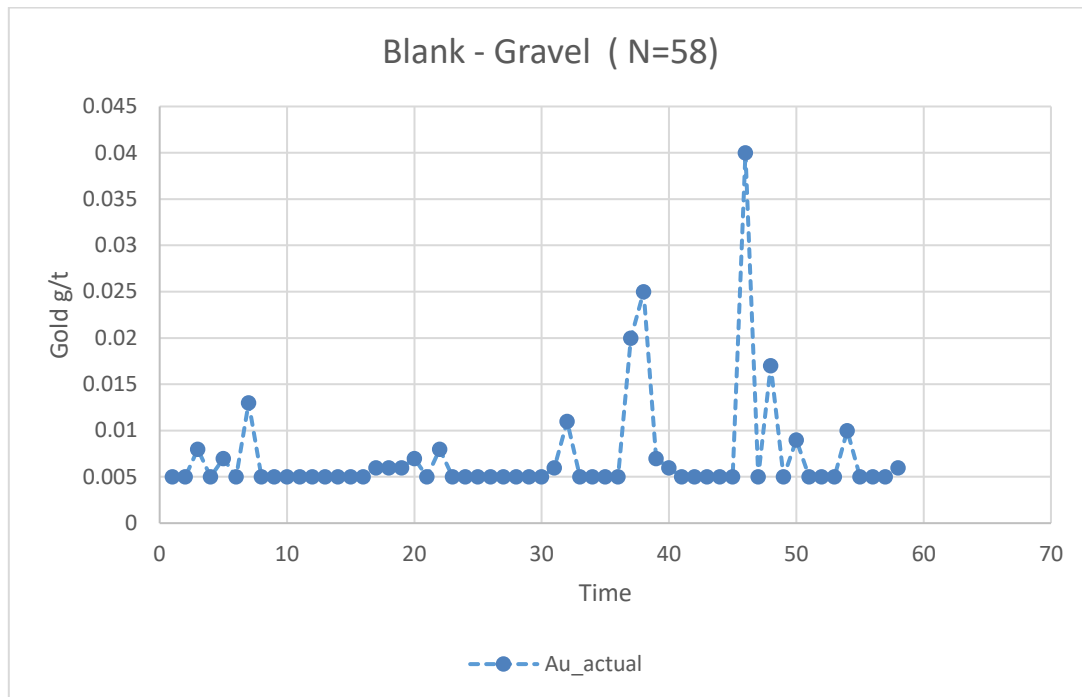
### 11.1.4 Blanks

Blank material comprises two sources

1. Gravel from a nearby quarry and consists of road metal material i.e. intrusive and metasediments. for drillholes KDH001,2,5 to 12A
2. Broken glass bottles (for holes KDH003 and 4).

None of the material was certified or tested prior to their being used as a blank sample but analytical results have indicated that they are 'barren' samples.

It is noted in Figure 49 that there has been a slight but persistent uptick in the number of samples with detectable gold. Whilst the contamination levels are low this needs to be monitored. The assay results for the glass bottle show a similar low level of contamination as for the blank gravel.



**Figure 49 Blank Gravel Gold Assay Results**

*(supplied by GPAC)*

## 11.2 Sample Security

Chain of custody was managed by GPAC. Samples are collected and stored by the project geologists. After cutting samples were sealed into calico bags and then bulked into polyweave bags sealed with tape. The polyweave bags were shipped by air cargo directly to Intertek in Lae using a freight courier. The core yard is located inside the fenced camp which is surrounded by 2m fencing. The gate to the camp was manned 24/7 by a watchman. Tracking sheets were used to track the progress of sample batches.

## 11.3 Summary

The sampling procedures and sample sizes are appropriate for the style of mineralization and the commodity being explored for.

The analytical process is appropriate for the style of mineralization and the commodity being explored for.

The current programme of CRM values and insertion rates is considered to industry standard and appropriate for the early stage of exploration. It is recommended that a higher grade standard is purchased in the 10-20g/t range. This will provide a check on the accuracy of any high grade sample analysis.

There needs to be a careful scrutiny of the CRM results. The current outcomes are suggesting a modest under-reporting, i.e. bias, of the gold assays but mostly within the laboratory acceptability range. The latest results for OREAS230 are a bit of a concern and should be followed up once the final results have been released. It may be worthwhile sending a set of pulps to a second laboratory for check fire assay analysis.

The coarse blank sample analysis indicates no significant contamination.

The relatively limited QAQC programme indicates a few modest tissues with the recent GPAC drilling that should be followed up with laboratory.

Future considerations, assuming further exploration success, would be to implement a more comprehensive QAQC programme including duplicate core samples and laboratory duplicates, 2<sup>nd</sup> laboratory checks along with some coarse reject analyses and possibly screen fire assays check.

## 12 Data Verification

Simon Tear (QP) completed a site visit to the property during the course of the 2025 drill program. The visit ran from 18<sup>th</sup> to 20<sup>th</sup> March 2025 and comprised being based at the GPAC field camp. Inspection of two drill sites (Holes KDDH001 and KDDH009) via helicopter support was completed along with summary logging and assay review of two diamond core drillholes (KDDH003 and KDDH006).

The data supplied by GPAC is suitable for geological interpretation with implications for its suitability for any subsequent resource estimation.

Verification of the GPAC drillhole database was conducted by Simon Tear to ensure that the database is internally consistent. The data was supplied as exported CSV files from an original GPAC MSAccess database and included collar coordinates, downhole surveys, lithological, alteration and vein logging along with structural measurements from oriented core. These were loaded into an H&SC MSAccess database ([kesar\\_2025.mdb](#)) with indexed fields for data validation with the conclusion that the database is consistent and suitable for any future resource estimation.

A random selection of two drillholes for data verification from the drillhole database was made by Simon Tear. The downhole surveys, assays and geology data for these holes were compared to original individual downhole survey files, original laboratory assay certificates and original logging digital files. A review of the assays with the hard copy assay certificates indicated no issues, and the standards and blank insertion rates and results confirm the appropriateness of sampling and accuracy of the analysis.

A review of core handling and core sampling procedures was undertaken with no issues noted.

A site visit to the Intertek Laboratory in Lae was also completed with all procedures being to standard industry practice.

Other data validation consisted of checking the drill collar coordinates in relation to supplied topography, alignment of downhole surveys, the presence of duplicate sample intervals, overlapping samples, that no assays or geological logs occur beyond the end of hole and that all drilled intervals have been geologically logged. The minimum and maximum values of assays and density measurements were checked to ensure values were within expected ranges. A review of the assays supplied by GPAC as a csv file indicated some minor issues with missing multi-element assay data.

A lithochemical study using the drillhole assays allowed for the delineation of the various lithotypes associated with the mineralization. The study appeared to confirm the presence of phyllic alteration with the Anteruno mineralization. The picture for Hampore is more complex on account of a greater variety of lithologies. Comparing the assays with the logged geology indicated no issues. Simon Tear as QP has assumed that all supplied drilling data is a fair and accurate record of work completed on the deposit.

## **13 Mineral Processing and Metallurgical Testing**

No metallurgical testwork has been undertaken.

## **14 Mineral Resource Estimates**

No Mineral Resources have been generated

## **15 Mineral Reserve Estimates**

No Mineral Reserves have been generated.

## **16 Mining Methods**

This item is not relevant to the project at this stage.

## **17 Recovery Methods**

This item is not relevant to the project at this stage.

## **18 Project Infrastructure**

No mining reserves have been delineated on any of the prospects and thus no project-specific infrastructure exists.

The tenement is situated in a remote and rugged part of Papua New Guinea. There are no roads into the tenement area or within it. Access is limited to helicopter, short take-off and landing fixed-wing aircraft like a Twin Otter into the nearby airstrip at Gusap.

The area of the tenement is lightly populated with the majority being subsistence farmers. The local people mostly live in small (<50 people) villages scattered along the valleys at the base of the steep mountains.

## 19 Market Studies and Contracts

This item is not relevant to the project at this stage

## 20 Environmental Studies, Permitting and Social or Community Impact

This item is not relevant to the project at this stage.

## 21 Capital and Operating Costs

This item is not relevant to the project at this stage.

## 22 Economic Analysis

This item is not relevant to the project at this stage.

## 23 Adjacent Properties

Details of the surrounding tenements to EL2711 are listed in Table 14 and shown in Figure 50.

**Table 14: Surrounding Tenement Details**

Tenement ID	Holder Name	Area (sub-blocks)	Commodity
EL 470	K92 Mining Limited	28 (incl ML 150)	Cu, Au, Ag
EL 693	K92 Mining Limited	28 (incl ML 150)	Cu, Au
EL 2620	K92 Mining Limited	59	Au
EL 2684	Chryso Resources Ltd.	141	Au

The most significant adjacent tenement is EL470 held by K92 Mining Limited which includes ML150 on which the Kainantu gold mine is located. The mine lies approximately 6km to the ESE of the SE corner of EL2711. The main gold mineralization at the mine, the Kora and Judd lodes, is hosted within a broad structurally controlled zone of brittle and ductile shearing with a NW-SE strike within the Bena Bena metasediments. Also on EL470 is K92's Blue Lake Porphyry Cu/Au deposit, which lies approximately 6km south of the SE corner of EL 2771.

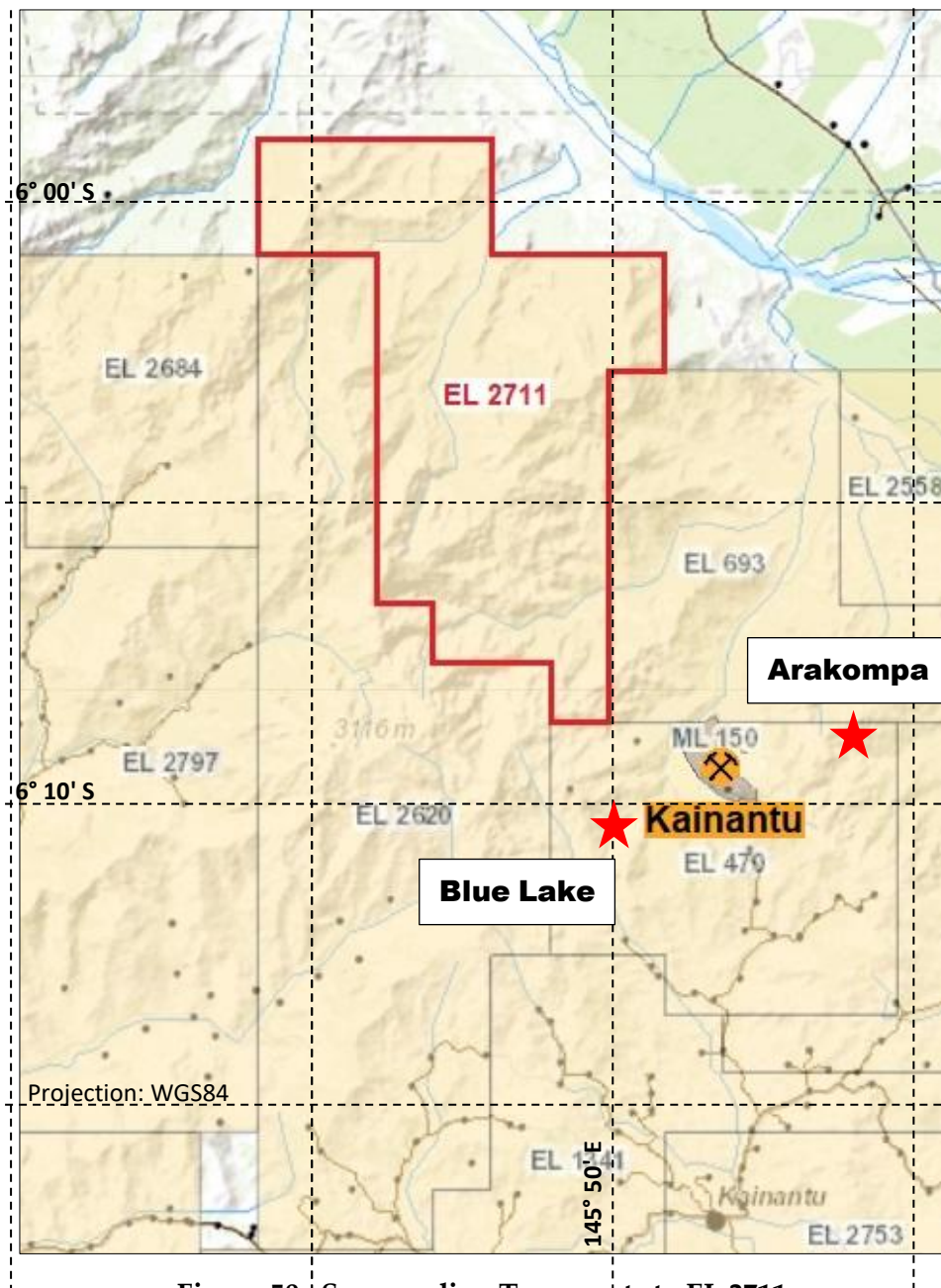


Figure 50 Surrounding Tenements to EL 2711

(supplied by H&SC)

Mineral Resources for the Kora/Judd lodes (2023) and the Blue Lake Porphyry deposit (2022) are detailed in Table 15.

**Table 15: Mineral Resources for EL470**

Kora & Judd	Gold			Silver		Copper		Au Eq	
	Mt	g/t	Mozs	g/t	Mozs	%	Kt	g/t	Mozs
Measured	4.1	8.77	1.2	20.4	2.7	1.17	48.2	10.92	1.5
Indicated	4.0	6.86	0.9	20.6	2.6	1.19	47.4	9.05	1.2
<b>Total M&amp;I</b>	<b>8.1</b>	<b>7.83</b>	<b>2.0</b>	<b>20.5</b>	<b>5.3</b>	<b>1.18</b>	<b>95.6</b>	<b>10.00</b>	<b>2.6</b>
Inferred	16.5	5.69	3.0	27.0	14.3	1.50	248.3	8.48	4.5

Blue Lake	Gold			Copper		Silver		Au Eq	
	Mt	g/t	Mozs	%	Mt	Ag g/t	Mozs	g/t	Mozs
Inferred	549	0.21	3.7	0.23	1.3	2.4	43	0.61	10.8

*(as of the effective date of this report)*

K92 Mining Ltd recently announced results from its maiden surface diamond drill program at Arakompa, located on EL470 and EL693, approximately 4.5km to the ENE from the Kainantu Gold Mine Process Plant. The Arakompa project is interpreted to be an intrusive-related gold-copper-silver epithermal vein system with similarities to the producing Kora and Judd vein systems. A significant difference at Arakompa is that it is hosted in tonalite, whereas Kora and Judd are hosted predominantly in the Bena Bena metasediments (phyllite). A selection of reported drill intersections include:

#### **AR1 Vein**

KARDD0029: 20.60 m at 9.87 g/t AuEq (8.90 g/t Au, 29 g/t Ag, 0.38% Cu)

KARDD0033: 11.10 m at 5.93 g/t AuEq (5.37 g/t Au, 8 g/t Ag, 0.29% Cu),

including 3.30 m at 11.15 g/t AuEq (10.92 g/t Au, 3 g/t Ag, 0.12% Cu)

#### **AR2 Vein**

KARDD0004: 11.20 m at 5.89 g/t AuEq (5.64 g/t Au, 6 g/t Ag, 0.11% Cu)

KARDD0038: 14.50 m at 17.33 g/t AuEq (17.17 g/t Au, 4 g/t Ag, 0.07% Cu),

including 6.90 m at 34.99 g/t AuEq (34.73 g/t Au, 7 g/t Ag, 0.11% Cu)

There are no reports of significant mineralization on the other surrounding exploration licences.

Mineralization on the adjacent properties is not necessarily indicative of mineralization on EL2711.

## **24 Other Relevant Data and Information**

No other information is considered relevant at this stage.

## 25 Interpretation and Conclusions

The property comprises steep and rugged jungle terrain necessitating helicopter support for all field activities. Within a 10km radius of the centre of the tenement is the Kainantu Gold district which includes K92's Kora/Judd mine, the Arakompa lodes, the Irumafimpa epithermal and Blue Lake porphyry deposits.

The southern half of the tenement is more geologically active with a complex area of interest comprising multiphase intrusives and a number of structures and structural trends.

A combination of historic and recent exploration has led to the discovery of significant bedrock gold mineralization as quartz-sulfide veins hosted by phyllic-altered shear zones within and around the granodiorite/tonalite of the Akuna Intrusive Complex.

The new discoveries indicate the prospectivity of the tenement for significant economic gold mineralization of a style akin to intermediate sulfidation epithermal vein systems. There is some modest evidence for the existence of 'pencil-like' gold porphyry systems.

A combination of surface mapping and geochemical sampling has allowed for the delineation of coherent anomalous areas, some of which have been subjected to detailed prospecting and subsequent diamond drilling. The main target areas are Anteruno, Hampore and Fufunambi.

A total of 13 helicopter-supported diamond drillholes for 3,714.3m has been completed at the Anteruno (5 holes for 2,084.9m), Hampore (7 holes for 1,401.8m) and Fufunambi (1 hole for 227.6m) prospects. The drilling primarily intersected a significant number of isolated, narrow, auriferous quartz-sulfide vein structures (0.05 to 0.5m downhole lengths) related to shearing and faulting. The intersection angles of the drilling to the veining were modest with the veins possessing modest phyllic alteration haloes (<3.5m generally). A best downhole result for Anteruno (KDH003) was 3.13m @ 3.67g/t including 0.71m @ 13.5g/t Au and for Hampore a best downhole result of 0.94m @ 3.17g/t including 0.29m @ 9.08g/t Au (KDH011). At Fufunambi the one drillhole, KDH012A, was abandoned at approximately 220m.

GPAC completed an airborne mobile magneto-telluric survey over the whole tenement. 15 production flights were flown to complete 931 line-kilometres of the survey over a 143 sq.km area. Assembled datasets include magnetic and electro-magnetic data including measurements for conductivity and resistivity and incorporated 3D inversion modelling. Lineament Analysis, a third party proprietary technique, was used to identify structural architecture and potential mineral sites. In addition two sets of external consultants were asked to interpret the data which resulted in a 3D geological interpretation for the property and the generation of multiple targets for both porphyry style mineralization and intermediate sulfidation epithermal deposits.

The review of the airborne MT data by Peter Swiridiuck of Aimex geophysics has resulted in the interpretation of a series geologic features and exploration targets for the tenement (Figure 51). These targets will require various levels of geological prospecting via mapping, trenching/channel sampling and geochemical soil and rock chip sampling with the aim being to identify follow up drill targets.

Figure 52 provides a more detailed picture of the exploration targets in the Hampore/Fufunambi area.

Table 16 contains a list of targets from the work completed by GPAC to date that are suitable for ground follow up.

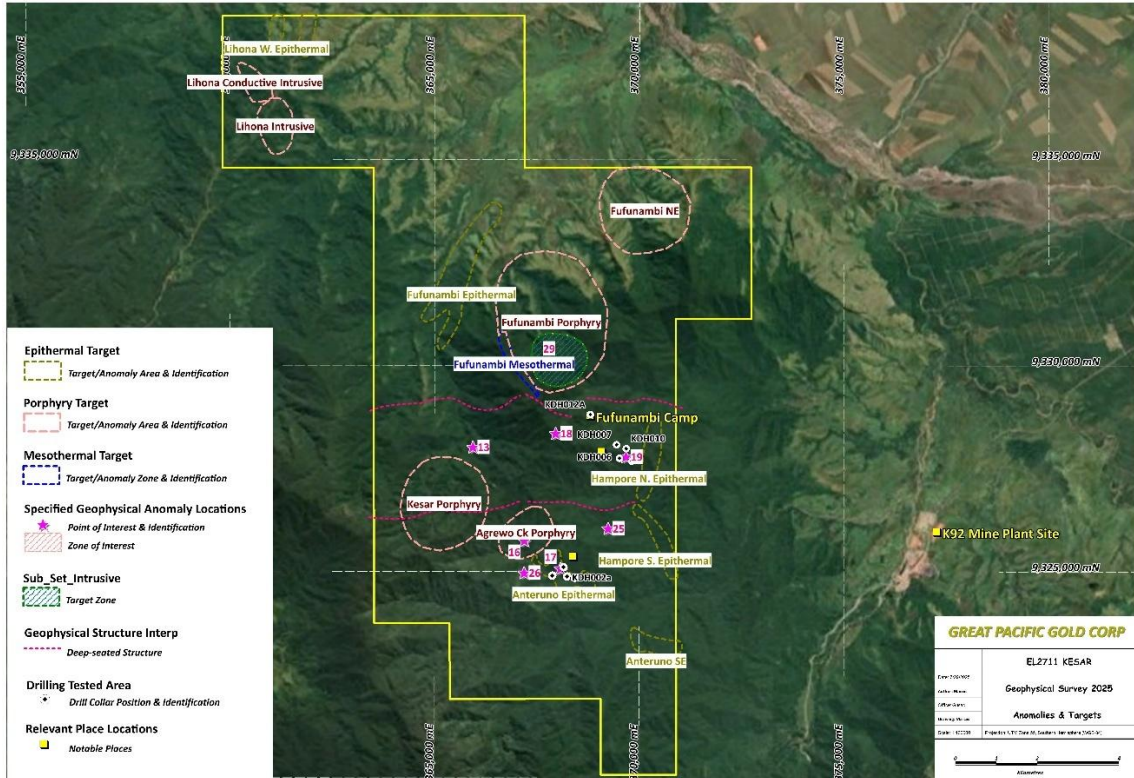


Figure 51 Kesar Project Tenement Target Areas (Aimex)

(supplied by GPAC)

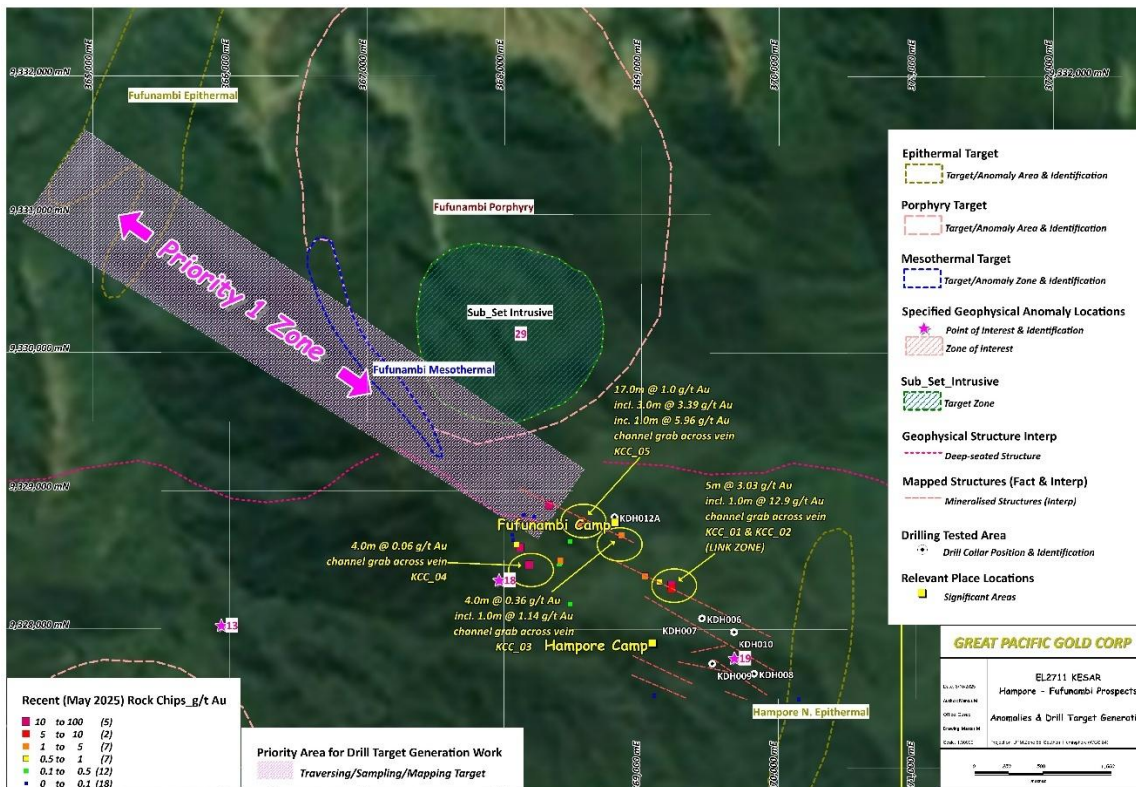


Figure 52 Hampore & Fufunambi Prospects with Geophysical Targets & Recent Rock Sampling

(supplied by GPAC)

Table 16: List of Exploration Targets

Name	Deposit Style	Ranking	Comments	Results	East	North
<b>Anteruno Prospect</b>	Epithermal	1	The Anteruno Target area exist within a near surface MT anomaly. The recent drilling KDH001 -005 occurred within this zone. Additional drill targets areas occur where MT conductivity lineament analysis trends were focused.	Historic Au anomalism from stream sediment by Barrick. Elevated Au results from surface soil and rock chip sampling by GPAC 2024. GPAC 2024 drilling testing down deep extension of mineralization.		
<b>Anteruno Target A</b>	Epithermal	1	Concentration of conductivity lineaments	Historic Au anomalism from stream sediment by Barrick. Elevated Au results from surface soil and rock chip sampling by GPAC 2024. GPAC 2024 drilling testing down deep extension of mineralization.	367320	9325190
<b>Anteruno Target B</b>	Epithermal	1	Conductivity lineaments 400m west of KDH004	Historic Au anomalism from stream sediment by Barrick. Elevated Au results from surface soil and rock chip sampling by GPAC 2024. GPAC 2024 drilling testing down deep extension of mineralization.	367420	9324920
<b>Anteruno Target C</b>	Epithermal	1	130m SSW of drill hole KDH003 and 210m east of KDH004 with northly MT conductivity lineaments.	Historic Au anomalism from stream sediment by Barrick. Elevated Au results from surface soil and rock chip sampling by GPAC 2024. GPAC 2024 drilling testing down deep extension of mineralization.	368080	9324980
<b>Anteruno SE Epithermal Target</b>	Epithermal	1	Deeper WNW trending MT conductivity lineaments dipping NNE beneath the surface of MT conductivity anomaly. Anomalous gold in Barrick gold stream sediment samples occur downstream from the target area.	Historic Au anomalism from stream sediment by Barrick. Elevated Au results from surface soil and rock chip sampling by GPAC 2024. GPAC 2024 drilling testing down deep extension of mineralization.	370300	9323300
<b>Kesar Porphyry Target</b>	Porphyry	1	The airborne magnetic filtered (AGC-RTP) imagery indicates a very clear 2km diameter halo with a central magnetic core (porphyry intrusive?) clearly defined in the magnetic image and MT conductivity. The target occurs within the Akuna Intrusive Complex along the deep-set east-west Kesar structure defined from the MT Lineament analysis.	Anomalous gold in Barrick stream sediments occur along its northeastern magnetic rim.	365300	9326400
<b>Agrewo Creek Porphyry Target</b>	Porphyry	1	A 1.1km diameter magnetically quiet area within the Akuna Intrusive Complex. It has a MT resistivity centre interpreted to be related to clay alteration and sulfide veining. The target area has an outer halo of high MT conductivity with a potential pyrite rich lithocap.	Not much surface geochemical sampling done. Few GPAC soil samples with <0.2ppm Au.	367090	9325770

Name	Deposit Style	Ranking	Comments	Results	East	North
<b>Fufunambi Porphyry Target</b>	Porphyry	1	The airborne magnetic filtered (AGC-RTP) imagery shows a very clear 3.0km diameter magnetic halo with a 1.4km diameter subset inner intrusive event in its southern extent. Modelled conductivity cross-section shows a high resistivity core, flanked by high MT conductivity zones (propylitic alteration?) and high magnetics. It is a high priority target area occurring on the northern boundary of: 1) deep-set east-west lineament evident in the Airborne MT Lineament Analysis, 2) NW trending prominent structure defined by the magnetics 3) NE trending structure evident in the magnetics and MT resistivity imagery. The Fufunambi Prospect occurs in a volcanic peak between Kesar and Hampore, beneath which a high conductivity anomaly may indicate a 1km deep volcanic intrusive system.	Historic Au anomalism from stream sediment by Barrick. Elevated Au results from surface soil by GPAC 2024.	367500	9330900
<b>Fufunambi Epithermal Target</b>	Epithermal	1	A surficial airborne MT conductivity anomaly occurring at the intersection of NW and NE trending structure within mapped Holocene alluviums. The MT conductivities could be related to alluvium clays. These clays could be related to weathered epithermal alteration, similar to Tolukuma.	Not much surface geochemistry.	365600	9332300
<b>Fufunambi Mesothermal</b>	Mesothermal	1	A structurally controlled airborne MT conductivity anomaly along a NW trending structure with depth extent, similar to Kora and Judd MT anomalies at Kainantu.	Anomalous Barrick stream sediment samples drain from this area	366890	9330210
<b>Fufunambi NE Target</b>	Porphyry? Epithermal? Mesothermal?	1	High MT conductivity target along a NW trending structure within the Goroka Formation. Requires additional interpretation.	Not much surface geochemistry.	369700	9333500

The drilling indicated that the two tested prospects are littered with narrow to very narrow auriferous quartz sulfide veins with phyllic alteration haloes. The subsequent challenge is to locate where, if at all, the structural influences contrive to generate a much thicker zone of alteration/mineral fluid flow and hence greater amounts of auriferous mineralization.

The Qualified Person is not aware of a range of environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors that could materially affect the continued exploration of the Kesar property or the development of any Mineral Resource estimate if future exploration results were to be successful.

Exploration for Mineral Resources is inherently high risk and is primarily dependent on the actual existence of economic mineralization in the first place. The exploration methods employed by GPAC are industry standard techniques for the mineral style and commodity with results to date considered encouraging.

## 26 Recommendations

The following recommendations are made and are split into two phases.

### Phase 1

- The existing database (GIS, geochemistry, drilling, geophysics) should be audited and reviewed. Some additional compilation may be required to bring all geoscientific datasets into a manageable database and in a single appropriate coordinate system.
- Drillhole locations should be measured in using DGPS.
- Check all surface geochemical anomalies have been properly reviewed and tested.
- Use the geophysical section interpretations to create a 3D geological model for the tenement and incorporate all the drilling, geophysical targets and surface geochemical anomalism into the 3D space. Review the results with the aim of identifying areas for follow up prospecting, mapping and geochemical sampling (rock/trenches and soil sampling). Look to include interpretation from air photos and satellite data.
- Mapping and rock chip sampling further NW along strike of the known veins at Fufunambi to understand both strike extent of mineralization and to determine whether better developed structures exist and the extent of any associated grades.
- Trenching along known vein areas outcrop/workings to better determine grade distribution along the structure.
- Follow up identified targets from the 3D study with field exploration to establish diamond drilling targets.

### Phase 2

- Continue further ground truthing and drill target definition.
- Complete a substantial drilling program based on targets identified from the above recommendations.

Additional recommendations include:

- Continue to monitor the laboratory assay results via the standards
- Start collecting density data

A supporting budget for the above work is included as Table 17.

**Table 17: Estimated Summary of Proposed Programme Costs**

<b>Phase 1 (remainder of 2025)</b>	
<b>ITEM</b>	<b>COST (C\$)</b>
Audit and review of existing data (GIS, geochemistry, drilling, geophysics) aiming for target ranking for follow up drill testing	60,000
Eight (8) week field program to map (geology and structure) and sample (ridge-and-spur, scout trenches and channels) targets generated from recommended item 1	250,000
Geological studies: Consultants including geophysics interpretation, structural interpretation and petrography	40,000
Landowner engagement	5,000
Camp staging on high priority targets	45,000
<b>Total</b>	<b>C\$400,000</b>

<b>Phase 2 (2026)</b>	
<b>ITEM</b>	<b>COST (C\$)</b>
Refining and confirming target ranking via desktop studies	80,000
A 3,000 metre drill program of top-ranked targets identified from the Phase 1 program.	2,750,000
Surface exploration work: ground truthing confirmed MobileMT targets, target/drill-scale mapping, sampling and trenching	655,000
Landowner engagement	15,000
<b>Total</b>	<b>C\$3,500,000</b>

## 27 References & Glossary

### 27.1 References

Corbett, G.J., and Leach, T.M., 1998, Southwest Pacific gold-copper systems: Structure, alteration and mineralization: Special Publication 6, Society of Economic Geologists, 238 p.

Corbett, G.J., 2005, Geology and Mineral Potential of Papua New Guinea: Ed. A Williamson & G Hancock, Papua New Guinea Department of Mining, 152p.

Corvino, A., 2024, Geological Mapping and Structural Observations at Anteruno Gold prospect, Papua New Guinea. ([ModelEarth\\_GPAC\\_MappingReport\\_Anteruno\\_Nov2024.pdf](#))

Davies, H L, 1990, Structure Evolution of the Border Region of New Guinea in Carman, G.J. and Carman, Z. (Eds.). Petroleum Exploration in Papua New Guinea pp.245-269.

EL916 Henganof, Annual Report for the Twelve Month Period to 31<sup>st</sup> January 1993, Highlands Gold Limited

EL916 Henganof, Annual Report for the Twelve Month Period to 30<sup>th</sup> January 1994, Highlands Gold Limited

Expert Geophysics, 2025, Data Acquisition and Processing Report, Helicopter-borne **MobileMT**, Electromagnetic & Magnetic survey, ([24155\\_GPAC\\_MobileMT\\_Report.pdf](#))

Great Pacific Gold Corp; Condensed Consolidated Interim Financial Statements for the six month period ended June 30, 2024

Halfpenny, R., 2012 EL1277 – Kesar Creek Annual Report 30/05/2011 to 29/05/2012, Barrick (PNG Exploration) Ltd ([TR1486\\_EL1277\\_AR\\_2011-2012.pdf](#))

Jones, R A, 1973, Geochemical prospecting in Papua New Guinea - case history, in Proceedings Aus/MM Annual Conference, pp 41-51 (The Australasian Institute of Mining and Metallurgy: Melbourne).

Mason, R A, 1994, Structural evolution of the western Papuan fold belt, Papua New Guinea, Ph.D. Thesis, University of London, 331 p.

Olsen, S., 2025, Global Geologica, Magneto-telluric EM Survey Report for Kesar Project in Kainantu, Papua New Guinea; [20250605\\_GPG Kesar MTm Survey Report\\_Final.pdf](#)

Rogerson, R., and Williamson, A., 1986, Age, petrology and mineralization associated with two Neogene intrusive types in the eastern highlands of Papua New Guinea, in The, G.H., and Paramanthan, S., eds., Fifth regional congress on geology, mineral and energy resources of Southeast Asia, 9-13 April 1984, proceedings: Bulletin of the Geological Society of Malaysia, v. 20, p. 487-502.

Rogerson, R J, Hilyard, D B, Finlayson, E J, Holland, D J, Nion, S T S, Sumaiang, R M, Duguman, J and Loxton, C D C, 1987, The geology and mineral resources of the Sepik Headwaters region, Papua New Guinea, Geological Survey of Papua New Guinea, Memoir 12, 130 p.

Seedorff, E, Dilles, J H, Proffett, J M, Jr., Einaudi, M T, Zurcher, L, Stavast, W J A, Johnson, D A, and Barton, M D, 2005, Porphyry deposits: Characteristics and origin of hypogene features: Economic

Geology One Hundredth Anniversary Volume: 1905-2005, Society of Economic Geologists, p. 251–298.

Sillitoe, R, 2010, Porphyry Copper Systems, Economic Geology One Hundredth Anniversary Volume: 1905-2005, Society of Economic Geologists, p. 3-41.

Swiridiuk, P., Interpretation of Airborne MT and Magnetics Data, Kesar Gold Project, Eastern Highlands Province, PNG.EL2711; [AimexFinalReportEL2711.pdf](#)

Tear, S.J., 2025, Kesar Gold Project, Eastern Highlands Province, Papua New Guinea; NI43-101 Report May 2025

Tingey R.J. and Grainger D.J., 1976, Markham, Papua New Guinea, 1:250,000 Geological Series, Bureau of Mineral Resources of Australia, Explanatory Notes Sb/55-14

Williamson, A., and Hancock, G., (editors), 2005. The geology and mineral potential of Papua New Guinea: Papua New Guinea Department of Mining, 152p.

Woodward, A.J, Tear S., 2022, Independent Technical Report, Mineral Resource Estimate for the Blue Lake Porphyry deposit, Kainantu, Papua New Guinea,

Woodward, A.J, Tear S., Kohler, A, 2023, Independent Technical Report, Mineral Resource Estimate Update for the For the Kora and Judd Gold deposits, Kainantu, Papua New Guinea,

## 27.2 Measurement Units

Symbol	Description	Symbol	Description
AUD or A\$	Australian dollars	m <sup>3</sup>	cubic metre
'	seconds (geographic)	m <sup>3</sup> /hr	cubic metres per hour
"	minutes (geographic)	Mm	million metres
#	number	mm	millimetre/millimetres
%	percent	M	million
wt%	weight percent	t	metric tonne
/	per	Mt	Million tonnes
>	greater than	Kt	Kilotonnes
<	less than	t/m <sup>3</sup>	Tonnes per cubic metre
g	gramme	t/d	tonnes per day
ppb	parts per billion	t/h	tonnes per hour
ppm	parts per million	Mt/a	million tonnes per annum
°C	degrees Celsius	t/a	tonnes per annum (tonnes per year)
ha	hectares	Ma	million years ago
km	kilometre	Ga	billion years ago
km <sup>2</sup>	square kilometres	asl	above sea level
g/cm <sup>3</sup>	Grams per cubic centimetre	c.	circa
kg/m <sup>3</sup>	kilograms per cubic metre	kW	kilowatt
m	metre	pH	measure of the acidity or alkalinity of a solution
g/t	grammes per tonne		

## 27.3 Glossary

Some of the terms given in the below are specifically defined by NI 43-101 (2011) and CIM Definition Standards (2010); where this is the case this is indicated by the source given in the right hand column. Other terms are based on definitions obtained from public domain sources and industry standard usage.

Term	Definition	Source
AAS	Atomic absorption spectrometry	Other
acceptable foreign code	The JORC Code, the PERC Code, the SAMREC Code, SEC Industry Guide 7, the Certification Code, or any other code, generally accepted in a foreign jurisdiction, that defines mineral resources and mineral reserves in a manner that is consistent with mineral resource and mineral reserve definitions and categories as defined under NI 43-101	NI 43-101
adjacent property	A property in which the issuer does not have an interest; that has a boundary reasonably proximate to the property being reported on; and that has geological characteristics similar to those of the property being reported on (NI 43-101)	NI 43-101
advanced property	A property that has mineral reserves or mineral resources for which the potential economic viability is supported by a preliminary economic assessment, a pre-feasibility study or a feasibility study	NI 43-101
AeroMag	Abbreviated term for an aeromagnetic geophysical survey. Measures variations in total magnetic field. Transport method can be fixed wing aircraft or helicopter.	Other
alluvial	Of, relating to, or found in alluvium	Other
alluvium	Unconsolidated terrestrial sediment composed of sorted or unsorted sand, gravel, and clay that has been deposited by water	Other
AMT Survey	Audio-MagnetoTellurics (AMT). An electromagnetic geophysical method for inferring the earth's subsurface electrical conductivity from measurements of natural geomagnetic and geoelectric field variation at the Earth's surface	Other
annual report	A statutory report required by national government detailing exploration work completed on a licence or licence block for a specific year.	Other
aquifer	A geologic formation capable of transmitting significant quantities of groundwater under normal hydraulic gradients	Other
auger drill	A type of drill which uses a corkscrew type of bit to recover samples from unconsolidated materials	Other

argillic	A form of alteration of rocks and minerals, typically generating clay minerals; often a characteristic zone associated with porphyry style mineralization	Other
azimuth	The direction of one object from another, usually expressed as an angle in degrees relative to true north. Azimuths are usually measured in the clockwise direction; thus an azimuth of 90 degrees indicates that the second object is due east of the first	Other
batholith	A large intrusive mass of igneous rock	Other
beneficiation	Physical treatment of crude ore to improve its quality for some specific purpose. Also called mineral processing	Other
BLEG	Bulk Leach Extractable Gold: a reconnaissance surface geochemical sampling technique for streams commonly used in the 1980s and 1990s.	Other
block model	Refers to the process of creating a 3D spatial array of estimations. The parameter that is being estimated may be the thickness of the ore, the grade of the ore, or some other property that is useful for the evaluation of the resource. These estimations are based on a weighted average of the values associated with the surrounding control points. A variety of interpolation methods or “algorithms” are available for performing these estimations. A popular technique is ordinary Kriging.	Other
bulk density	is the mass per unit volume of a solid, including the voids in a bulk sample of the material	Other
calc-alkaline	Igneous rock with dominant calcium-rich feldspar	Other
Certified Reference Material (CRM)	Homogenised finely ground sample material which has been analysed at a group of different laboratories in order to provide agreed ('true') values for the grades of the certified values. Such materials can be purchased commercially and are used to provide control samples for monitoring the accuracy of analyses during evaluation sampling	Other
chalcocite	Copper iron sulfide mineral approx 80% Cu	Other
chalcopyrite	Copper iron sulfide mineral approx 33% Cu	Other
coefficient of variation	A statistical term defined as the ratio of the standard deviation to the mean; also referred to as relative standard deviation. This provides a measure of the degree of skewness of a distribution of sample values.	Other
core recovery	Amount of rock recovered when diamond core drilling usually expressed as a percentage	Other
covellite	Copper iron sulfide mineral generally an oxidation product	Other
Cretaceous	Geological epoch from 64 to 136 million years ago	Other

cut-off grade	A grade level below which the material is not of economic interest and considered to be uneconomical to mine and process. The minimum grade of mineralization used to establish reserves	Other
data verification	The process of confirming that data has been generated with proper procedures, has been accurately transcribed from the original source and is suitable to be used	NI 43-101
density	The mass per unit volume of a substance, commonly expressed in grams/cubic centimetre	Other
development	Often refers to the construction of a new mine or is the underground work carried out for the purpose of reaching and opening up a mineral deposit includes shaft sinking, cross-cutting, drifting and raising	Other
DGPS	Differential Global Positioning System: the positional data available from <a href="#">global navigation satellite systems</a> (GNSSs). A DGPS can increase accuracy of positional data by about a thousandfold, from approximately 15 metres (49 ft) to 1–3 centimetres ( $\frac{1}{2}$ – $1\frac{1}{4}$ in). <sup>1</sup>	
diamond drillhole	A drillhole which is drilled used a diamond impregnated bit so that a cylindrical sample of solid rock (drill core) can be recovered.	Other
dilution	Waste of low-grade rock which is unavoidably removed along with the ore in the mining process	Other
diorite	An intrusive igneous rock composed principally of the silicate minerals plagioclase feldspar (typically andesine), biotite, hornblende, and/or pyroxene.	Other
disclosure	any oral statement or written disclosure made by or on behalf of an issuer and intended to be, or reasonably likely to be, made available to the public in a jurisdiction of Canada, whether or not filed under securities legislation, but does not include written disclosure that is made available to the public only by reason of having been filed with a government or agency of government pursuant to a requirement of law other than securities legislation;	NI 43-101
drill core	The cylinder of material, normally solid rock, recovered from a diamond drillhole	Other
early stage exploration property	Under NI 43-101 this means a property for which the technical report being filed has no current mineral resources or mineral reserves defined; and no drilling or trenching proposed	NI 43-101
effective date	With reference to a technical report, this means the date of the most recent scientific or technical information included in the technical report. The effective date can precede the date of signing the technical report but if there is too long a period between these dates, the issuer is exposed to the risk that new	NI 43-101 & Companion Policy

	material information could become available, and the technical report would then not be current	
encumbrance	This is a legal term covering anything that affects or limits the title of a property, such as mortgages, leases, easements, liens, or restrictions. An encumbrance may diminish the value of ownership but does not prevent the transfer of ownership. Mortgages, taxes and judgements are encumbrances known as liens. Restrictions, easements, and reservations are also encumbrances, although not liens	Other
epithermal deposit	A mineral deposit deposited from warm waters at rather shallow depth under conditions in the lower ranges of temperature and pressure. Typically associated with surface and sub-surface volcanic activity	Other
erosion	Removal of surface material from the Earth's crust, primarily soil and rock debris, and the transportation of the eroded materials by natural agencies from the point of removal.	Other
Exploration information	Geological, geophysical, geochemical, sampling, drilling, trenching, analytical testing, assaying, mineralogical, metallurgical and other similar information concerning a particular property that is derived from activities undertaken to locate, investigate, define or delineate a mineral prospect or mineral deposit.	CIM (2010)
footwall	The wall or rock on the underside of a vein or other mineralised structure	Other
Global Positioning System GPS	A space-based global navigation satellite system that provides location and time information in all weather, anywhere on or near the Earth, where there is an unobstructed line of sight to four or more GPS satellites	Other
granodiorite	A granular-textured intrusive igneous rock similar to granite but containing more plagioclase feldspar than orthoclase feldspar. Typically has less free quartz than diorite	Other
ground IP	A ground-based geophysical survey method, Induced Polarization, which measures the conductivity properties of sub-surface rock masses	Other
hanging wall	The wall or rock on the upper or top side of a vein or other mineralised structure.	Other
Helimag	Airborne magnetic survey undertaken by using a helicopter	Other
historical estimate	An estimate of the quantity, grade, or metal or mineral content of a deposit that an issuer has not verified as a current mineral resource or mineral reserve, and which was prepared before the issuer acquiring, or entering into an agreement to acquire, an interest in the property that contains the deposit;	NI 43-101

hornfels	A fine-grained metamorphic rock composed of quartz, feldspar, mica, and other minerals, formed by the action of intrusive rock upon sedimentary rock, especially shale.	Other
hydrothermal	of or relating to hot water – used especially of the formation of minerals by hot solutions rising from a cooling magma	Other
Indicated Mineral Resource	That part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics, can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed	CIM (2010)
Inferred Mineral Resource	That part of a Mineral Resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes	CIM (2010)
initial public offering (IPO)	A corporation's first offering of stock to the public, usually by subscription from a group of investment dealers	Other
JORC Code & Guidelines	Means the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves prepared by the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia, as amended; the 2012 Code has superseded the 2004 code	NI 43-101
Jurassic	Geological epoch from 137 to 195 million years ago	Other
liberation	Freeing, by comminution, of particles of specific mineral from their interlock with other constituents of the ore	Other
lithology	The lithology of a rock unit is a description of its physical characteristics visible at outcrop, in hand or core samples or with low magnification microscopy, such as colour, texture, grain size, or composition.	Other
magnetite	A hard mineral containing oxides of iron.	Other
Measured Mineral Resource	That part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters, to support production planning and evaluation of	CIM (2010)

	the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough to confirm both geological and grade continuity.	
mill	Includes any ore mill, sampling works, concentration, and any crushing, grinding, or screening plant used at, and in connection with, an excavation or mine	Other
mineral project	Any exploration, development or production activity, including a royalty or similar interest in these activities, in respect of diamonds, natural solid inorganic material, or natural solid fossilized organic material including base and precious metals, coal, and industrial minerals	NI 43-101
Mineral Reserve	The economically mineable part of a Measured or Indicated Mineral Resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified. A Mineral Reserve includes diluting materials and allowances for losses that may occur when the material is mined	CIM (2010)
Mineral Resource	A concentration or occurrence of diamonds, natural solid inorganic material, or natural solid fossilized organic material including base and precious metals, coal, and industrial minerals in or on the Earth's crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge	CIM (2010)
Miocene	Geological epoch from 5.3 to 26 million years ago	Other
Mobile MT	Mobile Magneto-Telluric geophysical survey considered as the latest innovation in airborne electromagnetic technology and the most advanced generation of airborne AFMAG technologies. MobileMT combines the latest achievements in electronics, advances of modern airborne system design, and sophisticated signal processing techniques.	Other
monzonite	A granular igneous rock containing approximately equal amounts of orthoclase and plagioclase; with less than 5% quartz by weight	Other
National Instrument 43-101	Canadian National Instrument 43-101 "Standards of Disclosure for Mineral Projects".	NI 43-101
open pit	A mine that is entirely on the surface. Also referred to as open-cut or opencast mine	Other

Ordinary Kriging	A geostatistical approach to geological modelling. Instead of weighting nearby data points by some power of their inverted distance, ordinary kriging relies on the spatial correlation structure of the data to determine the weighting values of each sample.	Other
ore mineral	A mineral of value containing economic elements of interest. Mineral processing is aimed at separating the ore and gangue minerals contained in mineralization	Other
overburden	Material of any nature, consolidated or unconsolidated, that overlies a deposit of ore that is to be mined	Other
oxidation	A chemical reaction in which substances combine with oxygen to form an oxide. For example, the combination of iron with oxygen to form an iron oxide (rust) or copper and oxygen produce copper oxide, the green coating on old pennies. The opposite of oxidation is reduction.	Other
PC	Panned concentrate	Other
Pliocene	Geological epoch from 2.6 to 5.3 million years ago	Other
Porphyry copper	Porphyry copper (Cu) deposits bodies of diffuse copper mineralization that are formed from hydrothermal fluids that originate from a voluminous magma chamber several kilometres below the deposit itself. Predating or associated with those fluids are vertical intrusions of porphyritic intrusive rocks.	Other
porphyritic	A textural term to describe igneous intrusive rocks where there are distinct crystals within a matrix of finer compact crystals	Other
phyllitic alteration	a hydrothermal alteration zone in a permeable rock that has been affected by circulation of hydrothermal fluids. It is commonly seen in copper porphyry ore deposits in calc-alkaline rocks; commonly expressed as a quartz-sericite-pyrite assemblage that replaces original feldspars and mafic silicates; by the removal of sodium, calcium, and magnesium usually destroying the original rock texture	Other
potassic alteration	a hydrothermal alteration zone that is commonly seen in porphyry copper deposits in calc-alkaline rocks; commonly seen as micaceous, potassic minerals such as biotite in iron-rich rocks, muscovite mica or sericite in felsic rocks, and orthoclase (adularia) alteration, often quite pervasive and producing distinct salmon-pink alteration veins.	Other
preliminary economic assessment	A study, other than a pre-feasibility or feasibility study, that includes an economic analysis of the potential viability of mineral resources. A preliminary economic assessment might be based on measured, indicated, or inferred mineral resources, or a combination of any of these. We consider these types of economic analyses to include disclosure of forecast mine production rates that might contain capital costs to develop and	NI 43-101 & Companion Policy

	sustain the mining operation, operating costs, and projected cash flows	
preliminary feasibility study, pre-feasibility study (PFS)	A comprehensive study of a range of options for the technical and economic viability of a mineral project that has advanced to a stage where a preferred mining method, in the case of underground mining, or the pit configuration, in the case of an open pit, is established and an effective method of mineral processing is determined. It includes a financial analysis based on reasonable assumptions on mining, processing, metallurgical, economic, marketing, legal, environmental, social and governmental considerations and the evaluation of any other relevant factors which are sufficient for a Qualified Person, acting reasonably, to determine if all or part of the Mineral Resource may be classified as a Mineral Reserve	CIM (2010)
Probable Mineral Reserve	The economically mineable part of an Indicated and, in some circumstances, a Measured Mineral Resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified	CIM (2010)
producing issuer	An issuer with annual audited financial statements that disclose (a) gross revenue, derived from mining operations, of at least \$30 million Canadian for the issuer's most recently completed financial year; and (b) gross revenue, derived from mining operations, of at least \$90 million Canadian in the aggregate for the issuer's three most recently completed financial years;	NI 43-101
Professional Association	A self-regulatory organization of engineers, geoscientists or both engineers and geoscientists that fulfils certain criteria as defined in NI 43-101. The NI43-101 Companion Policy provides a list of currently recognised professional associations	NI 43-101 & Companion Policy
property	This is considered to include multiple mineral claims or other documents of title that are contiguous or in such close proximity that any underlying mineral deposits would likely be developed using common infrastructure. NI 43-101 defines two different types of properties (early stage exploration, advanced) and requires a technical report to summarize material information about the subject property.	NI 43-101 Companion Policy
propylitic alteration	a hydrothermal alteration zone that is the result of low-pressure- low-medium temperature alteration around many hydrothermal orebodies. The chemical alteration of a rock, caused by iron and magnesium bearing hydrothermal fluids removing potassium, altering biotite or amphibole within the rock groundmass. The propylitic assemblage usually consists of epidote, chlorite, Mg-Fe-Ca carbonates, quartz, pyrite and albite, altering feldspars, biotite and amphibole within the rock	Other

	groundmass. It typically includes veining and breccia/fracture filling.	
Proven Mineral Reserve	The economically mineable part of a Measured Mineral Resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction is justified.	CIM (2010)
pyrrhotite	Iron sulfide mineral with the formula $Fe(1-x)S$ ( $x = 0$ to $0.2$ ). Similar in colour to pyrite but weakly magnetic.	Other
pXRF	Portable X-ray fluorescence (pXRF) analysis (often as a handheld machine) is a rapid, non-destructive technique used for in-situ elemental analysis of samples, offering advantages like portability, speed, and low cost compared to traditional laboratory methods	Other
QAQC	Quality assurance and Quality control of the geological sample database.	Other
Qualified Person (QP)	Refers to a qualified person as defined under NI 43-101. In summary this means an individual who is an engineer or geoscientist with at least five years of experience in mineral exploration, mine development or operation or mineral project assessment, or any combination of these; has experience relevant to the subject matter of the mineral project and the technical report; and is a member or licensee in good standing of a recognised professional association. A qualified person must also meet the specific requirements laid down in the more extensive definition which forms part of NI 43-101	CIM (2010) & NI 43-101
quantity	Either tonnage or volume, depending on which term is the standard in the mining industry for the type of mineral;	NI 43-101
Reconciliation (mine)	The process of making the block model from the resource estimate consistent or compatible with mine/mill production.	Other
resource estimation	The process of using exploration data to generate models (usually three-dimensional) of a mineral resource for use in mine planning and in quantifying the tonnage and grades of mineral resources present	Other
Reverse Circulation RC drilling	A percussion drilling technique that produces chip samples that are removed from the drillhole by compressed air pushing the sample up the inside of the drill rods. Considered superior to aircore drilling, generating better quality samples	Other
royalty	An amount of money paid at regular intervals by the lessee or operator of an exploration or mining property to the owner of the ground. Generally based on a specific amount per tonne or a percentage of the total production or profits. Also, the fee paid for the right to use a patented process	Other

run-of-mine (ROM)	A term used to describe ore of average grade for the deposit	Other
skarn	An old Swedish mining term now used to describe rocks formed around the edges of a magma body that intrudes a nearby rock mass. Rocks are formed/altered by a process of metasomatism whereby the interaction of magma, country rock and hydrothermal fluids produces hard, coarse-grained metamorphic rocks. Skarns tend to be rich in calcium-magnesium-iron-manganese-aluminium silicate minerals	Other
specific gravity	The weight of a substance compared with the weight of an equal volume of pure water at 4°C	Other
strike length	The horizontal distance along the long axis of a structural surface, rock unit, mineral deposit or geochemical anomaly.	Other
tailings	Material rejected from a mill after the recoverable valuable minerals have been extracted	Other
technical report	A report prepared and filed in accordance with NI 43-101 and Form 43-101F1 Technical Report that includes, in summary form, all material scientific and technical information in respect of the subject property as of the effective date of the technical report. A report may constitute a “technical report” as defined in the Instrument, even if prepared considerably before the date the technical report is required to be filed, provided the information in the technical report remains accurate and complete as at the required filing date. The qualified person is responsible for preparing the technical report. The qualified person, not the issuer, has the responsibility of determining the materiality of the scientific or technical information to be included in the technical report	Other
Tertiary	A Geological Age within the Cainozoic Era 2.6 to 65 million years ago	Other
Tonalite	A felsic, plutonic (intrusive) igneous rock characterized by its intermediate composition between granite and diorite, containing essential quartz and plagioclase feldspar, and typically found in the Adamello massif in Italy	Other
Universal Transverse Mercator (UTM)	The Universal Transverse Mercator projection is a map projection used to define horizontal positions world-wide by dividing the surface of the Earth into 6 degree zones, each mapped by the Transverse Mercator projection with a central meridian in the centre of the zone. UTM zone numbers designate 6 degree longitudinal strips extending from 80 degrees South latitude to 84 degrees North latitude. UTM zone characters designate 8 degree zones extending north and south from the equator	Other
variogram	A function of the distance and direction separating two locations that is used to quantify dependence. The variogram is defined as the variance of the difference between two variables	Other

	at two locations. The variogram generally increases with distance and is described by nugget, sill, and range parameters. If the data is stationary, then the variogram and the covariance are theoretically related to each other.	
variogram model	A model that is the sum of two or more component models, such as nugget, spherical, etc. Adding a nugget component to one of the other models is the most common nested model, but more complex combinations are occasionally used.	Other
voxel	A voxel is a value on a regular 3D grid, representing a small cube of volume and analogous to a 2D pixel. Voxels are used to visualize and analyze three-dimensional data, such as in medical scans (CT, MRI), and scientific research like geophysical surveys	
wacker	A semi-mechanised deep overburden soil sampling method commonly used in PNG	Other
WGS 84	an Earth-centred, Earth-fixed terrestrial reference system and geodetic datum. Used as a universal system for geographical coordinates	Other
weathering	Disintegration or alteration of rock in its natural or original position at or near the Earth's surface through physical, chemical, and biological processes induced or modified by wind, water, and climate.	Other
wedge hole	A drillhole that is collared down a pre-existing drillhole using a drill wedging technique to deviate the drilling rods into a new, preferred direction, sometimes known as a daughter hole.	Other
written disclosure	Includes any writing, picture, map, or other printed representation whether produced, stored or disseminated on paper or electronically, including websites.	NI 43-101