



www.toluminerals.com

Tolu Minerals Limited
PNG CR Company Camp,
Baruni Road,
National Capital District,
Papua New Guinea
Company Registration No.: 1-125888

Unit 3, 180 Main Street,
Kangaroo Point, QLD 4169,
Australia
ARBN: 657 300 359

ASX: TOK, OTCQX: TOLUF

ASX, OTCQX Announcement

15 May 2025

EL2780 Award – New Targets from Airborne MT

HIGHLIGHTS:

- Ipi River tenement EL2780 granted by the Mineral Resource Authority
 - Preliminary interpretation of Airborne MT imagery indicates five previously unknown copper-gold targets that require further exploration and drill testing
 - The newly advanced Airborne MT survey provides electrical resistivity imaging of the top 1km to define geological targets and structures related to copper-gold mineralisation, as well as magnetic data to assist in the exploration process
 - Ipi River Porphyry System represents a historically under-explored Cu-Au-Mo system where previous rock sampling results returned up to 10.10% copper and 167g/t gold
 - Douglas Kirwin, renowned porphyry and epithermal specialist, is appointed to the Advisory Board
-

Iain Macpherson, MD & CEO of Tolu Minerals Ltd. said:

"I'm pleased to report the progression of our exploration strategy with the award of Exploration License EL 2780 consisting of highly prospective ground within the Ipi River tenement. This award, coupled with our recent and historical exploration programmes at Ipi River, reinforces Tolu's position as an emerging, important explorer and operator in what is rapidly becoming one of the great gold/copper provinces of the world.

Recently flown Airborne MT preliminary imagery reinforces historical exploration data and indicates a number of porphyry or intrusive related copper-gold targets. The tenement also includes historical copper-gold-molybdenum, late-stage epithermal gold, and peripheral unexplored Au targets. This latest addition to our tenement portfolio allows us to proceed with our next stage of exploration on a more detailed evaluation of the Airborne MT results and target areas.

The award of the Ipi River exploration license is a significant addition to Tolu's highly prospective exploration and development portfolio that provides a number of compelling targets and potential for further major discoveries.

In line with the Company's vision to reveal the porphyry and epithermal deposit potential at Tolukuma, Mt Penck and now Ipi River, the appointment of Doug Kirwin to Tolu's Advisory Board is a testament to the Company's broader commitment to defining a substantial resource within Tolu's exploration targets, further to the re-start of the Tolukuma Gold-Silver Mine."

Chris Muller, Tolu's Executive Group Geologist commented that *"the continuous progress towards growing Tolu's exploration portfolio with high potential tenements has reinforced my view that Tolu is among the most exciting growth companies in one of the great underdeveloped and underexplored gold mining provinces on the planet."*

Tolu Minerals Limited ("Tolu") is pleased to announce the granting of its Ipi River tenement EL 2780 (Figure 1) covering 395.56 km² of highly prospective copper-gold mineralisation. The historically discovered Ipi River porphyry deposit within EL 2780, located 55 km northwest of the Tolukuma gold mine is one of several under-explored porphyry style Cu-Au-Mo systems with epithermal Au overprint within Tolu's exploration portfolio.

The advanced Airborne Magneto Telluric ("**Airborne MT**" or "**MT**") survey was flown over the Eastern 209km² of the EL to help in identifying a new generation of geophysical targets related to gold and copper-lead-zinc mineralisation for ground follow-up and drilling.

Airborne MT is an advanced geophysical technology providing high-resolution, deep resistivity/conductivity 3D mapping to over 1km depth. Final data from the recently completed airborne MT survey flown over the known Ipi River porphyry and Mt. Yule "Bulls-eye" magnetic porphyry gold-copper systems have diagnostic sub-surface conductivity, resistivity and magnetic signatures that are calibrations for identifying similar integrated anomalies.

An additional five, previously unexplored discrete geophysical target areas, have already been identified, proving the technique to be a cost-effective compliment to historical exploration results. A more detailed desktop review of historical exploration and airborne geophysics will now be completed ahead of fieldwork on ground.

Target mineralisation within the tenement includes an extremely intense and large 6km x 6km dipolar "**Bulls-eye**" magnetic anomaly (Figure 2) at Mt. Yule (IPI06), located at a major structural intersection of the NE-trending Yule Transfer Structure and orthogonal structure related to a deep-set high electrical resistivity trend (Figure 3).

The IPI06 occurs as an exceptionally high magnetic signature (>1,730nT dipolar variation) and geologically related to a diorite/monzonite intrusive. The magnetic characteristics are

like that of the Indonesia Grasberg monzodiorite and Ertsberg diorite Cu-Au-Ag mineral deposits, located on the Western half of New Guinea island¹.

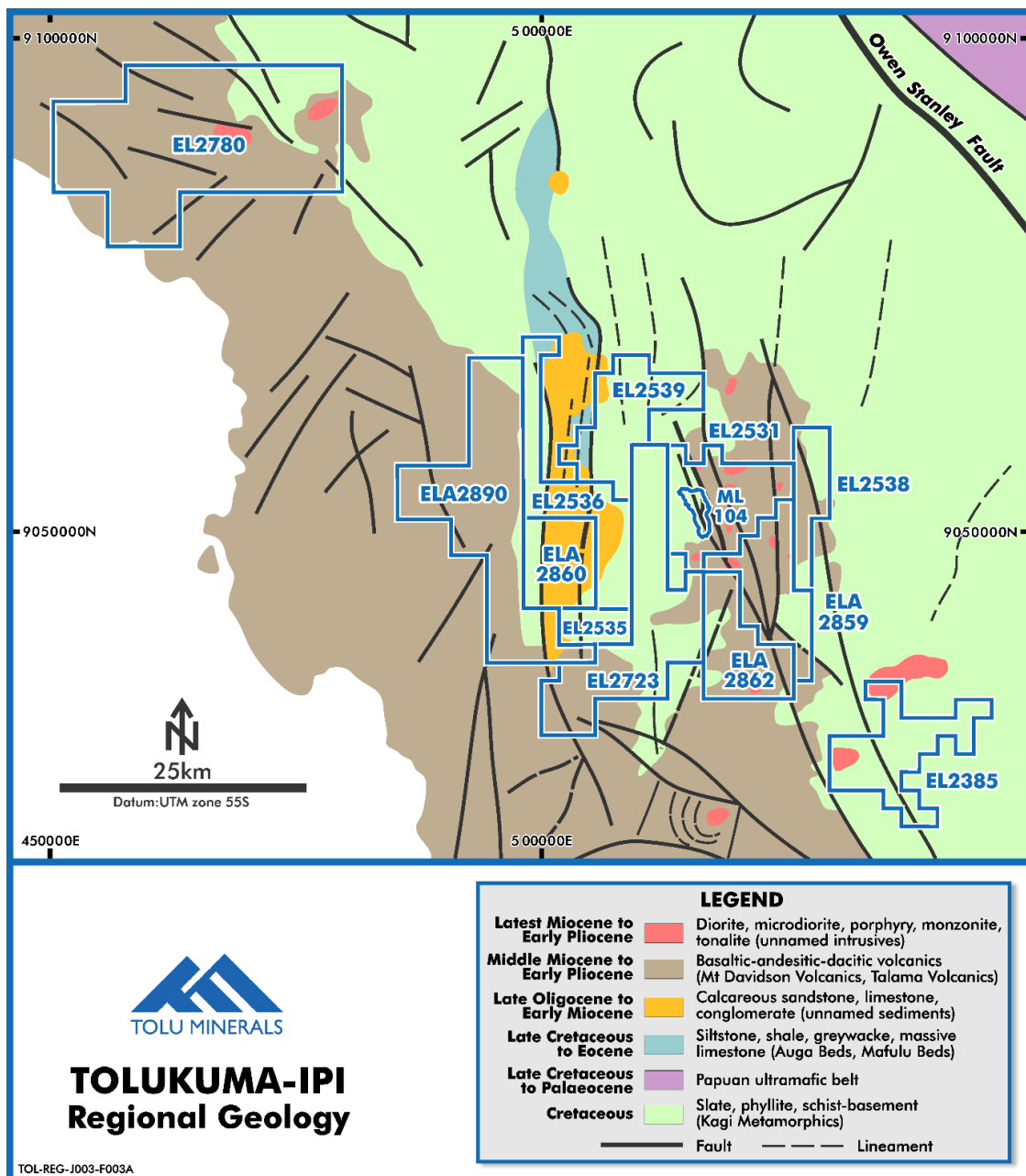


Figure 1: Location and Regional Geology of Ipi River EL2780 and Tolukuma Tenements

¹ The Grasberg/Ertsberg is a 51.9 Moz gold and 42.8 Mlb gold-copper mine located in the eastern province of Papua, Indonesia, on the Western half of the island of New Guinea. Freeport-McMoRan, Technical Report Summary of Mineral Reserves and Mineral Resources for Grasberg minerals district. Papua, Indonesia. December 31, 2021.

Airborne MT Survey Results

From a review of the recently flown airborne MT conductivity and magnetics images (Figures 2 to 4), geophysical anomalies have been identified as being related to the Ipi River (Figure 5) and Mt. Yule (Figure 6) porphyry copper-gold prospects.

These geophysical responses help provide a diagnostic “footprint” to assist in identifying additional targets for follow-up ground exploration and drilling (Table 1).

Table 1: Ipi River Airborne MT and Magnetism Targets

Target	Identifier	Description
IPI01	Ipi River Porphyry	Airborne MT conductivity anomaly at depth (300mRL) interpreted to be related to a copper enrichment blanket beneath an upper leached zone related to the porphyry system (see summary below).
IPI02	Magnetic Porphyry target	Discrete magnetic low and airborne MT resistivity anomaly associated with an upper leached zone above a MT conductivity interpreted enrichment zone. Recommended for follow-up sampling/drilling.
IPI03	Magnetic Intrusive	Discrete magnetic intrusive anomaly (Figure 2) for follow-up drill testing.
IPI04	Magnetic Intrusive	Discrete magnetic anomaly (Figure 2) along the Yule Transfer Structure. Near surface airborne MT resistivity anomaly interpreted to be due to an upper leached blanket of a porphyry target. Recommended for follow-up sampling.
IPI05	Magnetic Intrusive	Discrete magnetic intrusive (Figure 2). Recommended for follow-up sampling.
IPI06	Mt. Yule “Bulls eye” Magnetic Anomaly	Large (2.3km x 1.8km) intrusive related to a strong magnetic anomaly (Figure 2) and topographic feature (Figure 7). Near surface airborne MT resistivity anomaly interpreted as an upper zone of leaching with lower horizontal lying base metal enrichment zone (Figure 6). Occurs at the intersection of the Yule Transfer structure and perpendicular deep-set structure. In 2007, historical explorer Emperor Mines recommended further exploration work for epithermal related base metals.
IPI07	Korai Porphyry Target	Discrete airborne deep-set MT conductivity anomaly (300mRL) which occurs within a structural intersection (Figure 3). Recommended for follow-up sampling.
IPI08	MT Porphyry Target	Discrete airborne deep-set MT conductivity anomaly (300mRL) below a resistivity high (Figure 3) possibly related to a leached or silica cap. Recommended for follow-up sampling.

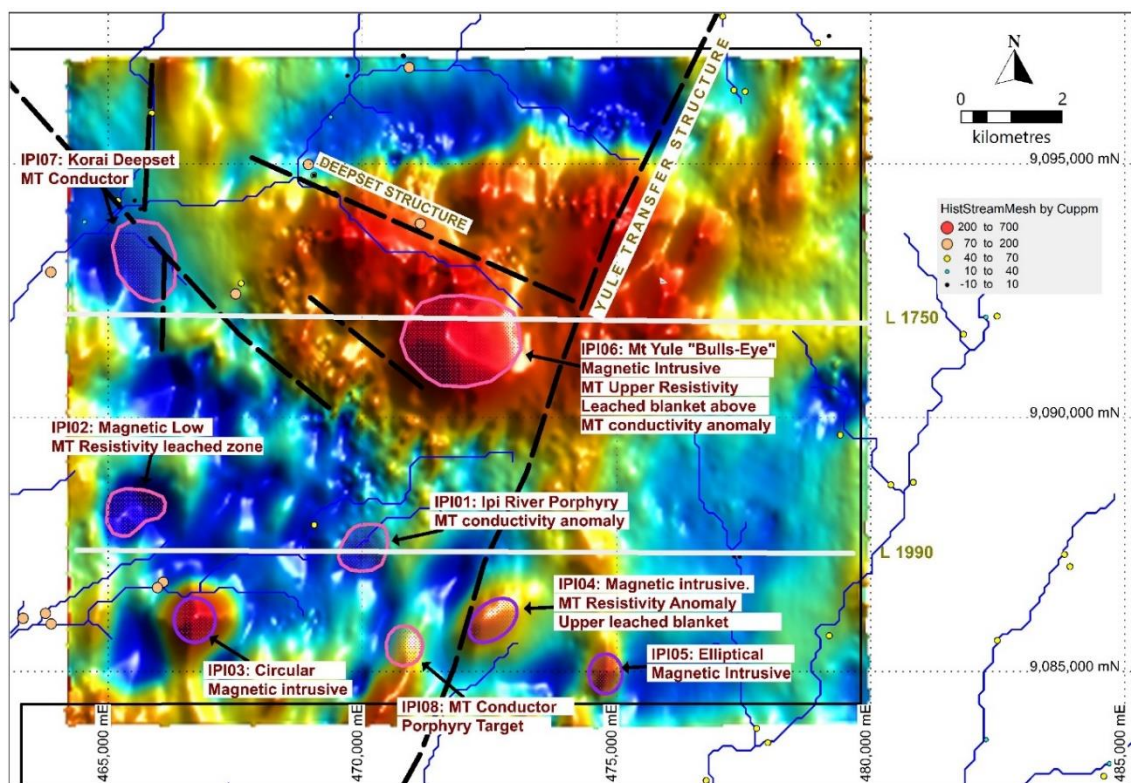


Figure 2: Airborne Magnetics Image (RTP-VD1) and Targets

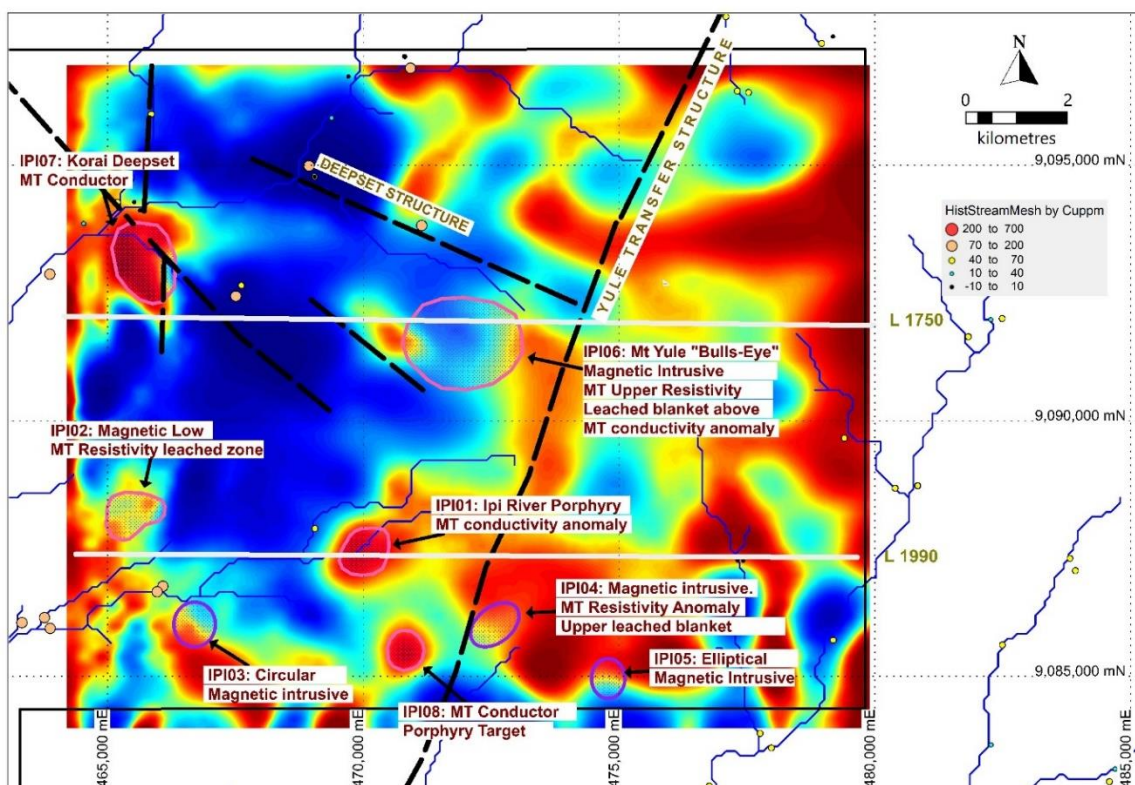


Figure 3: Airborne MT Conductivity Image (300mRL) and Targets

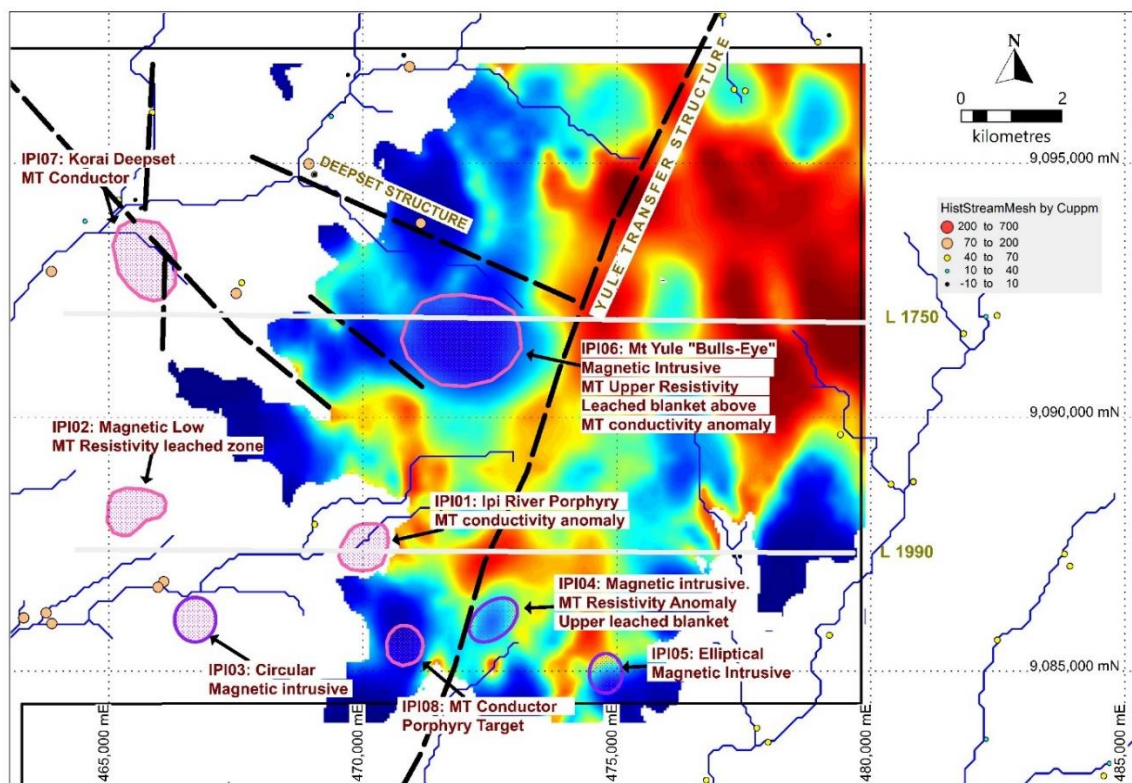


Figure 4: Airborne MT Conductivity Image (1200mRL) and Targets

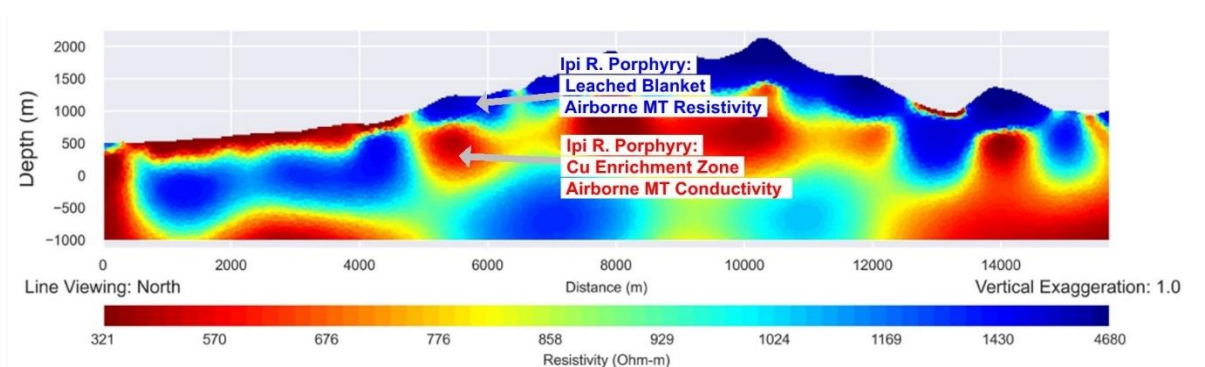


Figure 5: Airborne MT Cross-Section across Ipi River Porphyry (L1990)

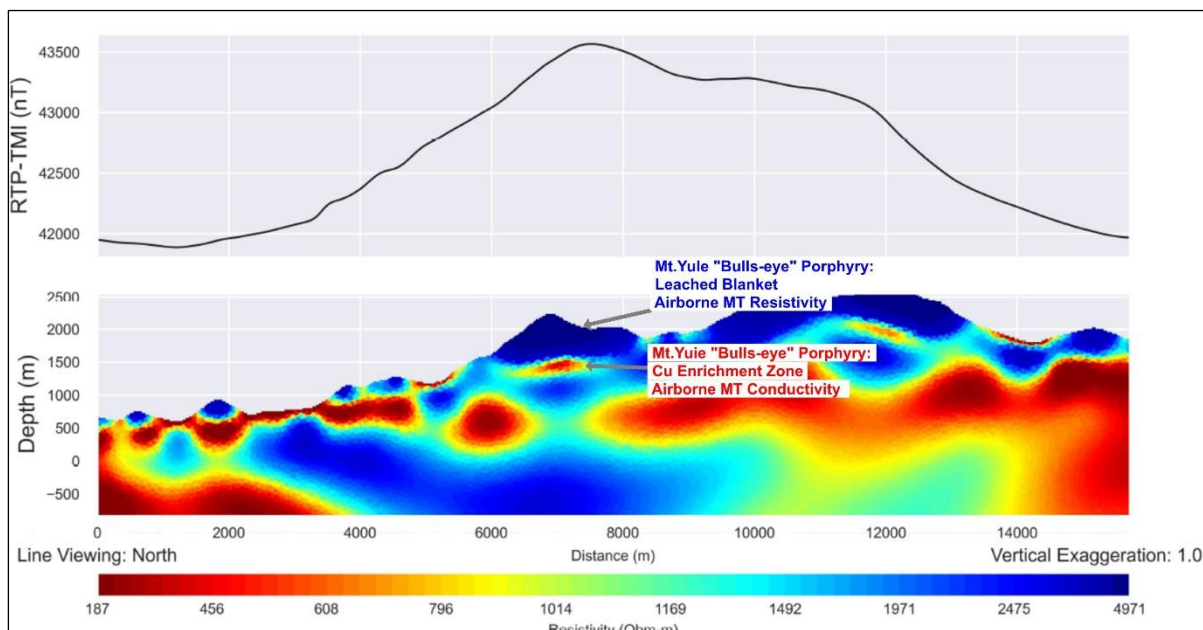


Figure 6: Airborne MT Cross-Section across Mt. Yule "Bulls-eye" Porphyry Target (L1750)

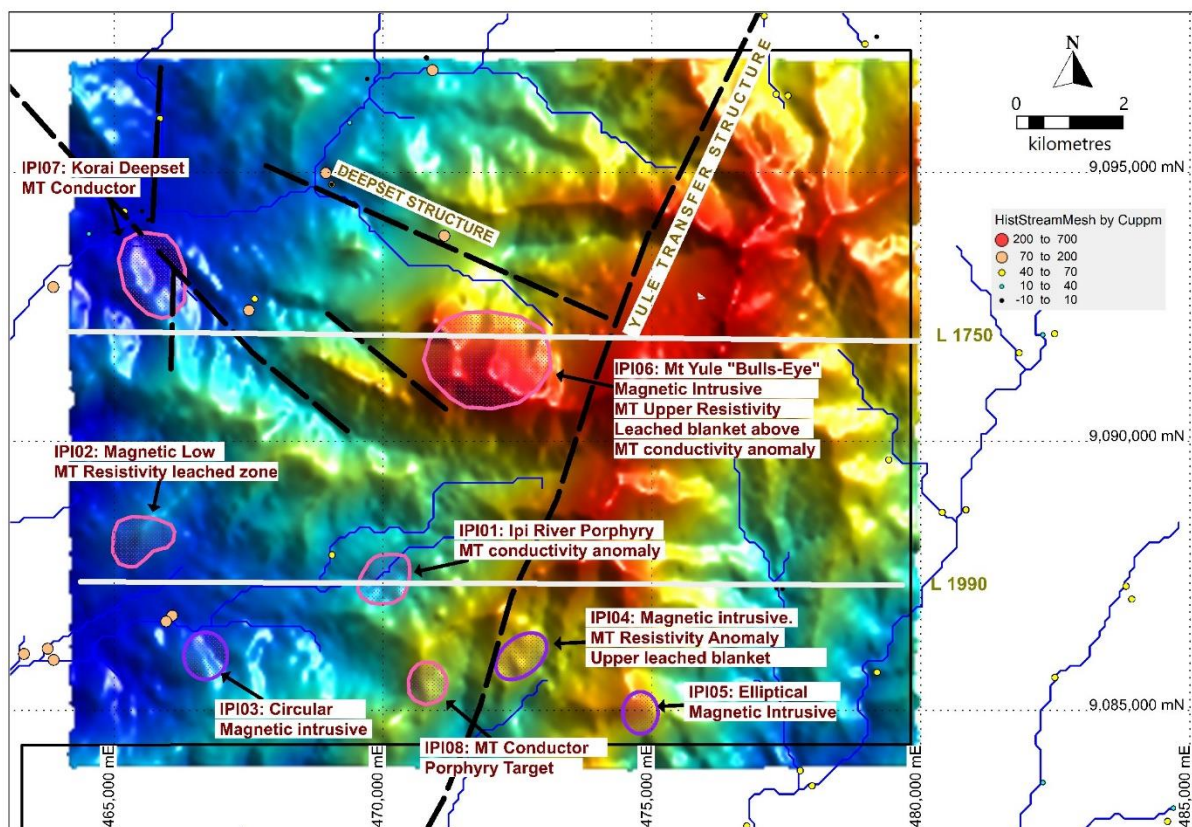


Figure 7: Digital Topography Image and Targets

Ipi River Porphyry

The Ipi River porphyry stock is a multi-phase intrusive complex of late Miocene age intruding Late Cretaceous siltstone-mudstone and Mid to Late Miocene volcanics. The associated deep-set Airborne MT conductivity anomaly is partly related to biotite alteration (Figure 8) and an upper zone of copper and base metal leaching. The airborne MT cross-section shows a lower horizontal conductivity anomaly (Figure 6), interpreted to represent a lower enrichment blanket of copper and base metals. The airborne geophysics provides diagnostic signatures which help identify additional potential porphyry targets within the survey area.

Ipi River was discovered and initially explored by CRA in 1970. Between 1974 and 2016, additional exploration programs were carried out by Dampier/BHP, Indaba, Newmont, Emperor/TGM, Petromin and Eda/Kumul Minerals (Table 2). Historical drilling is limited to 6 scout diamond holes totalling 1,818.70m. No work has been carried out since 2016.

A peripheral zone of hornfels and local calc-silicate/marble up to 800m wide is developed at the intrusive-sediment contact. Seven intrusive phases have been mapped: early gabbro, granodiorite and diorite, syn-mineral feldspar-biotite porphyry and post-mineral felsic, pebble and mafic dykes. The central part of the stock is covered by a Quaternary boulder terrace up to 100m thick (Figure 9).

The mineralisation is centred on a propylitic-phyllitic-potassic altered multiphase diorite-monzonite stock with surface dimensions of about 1.8km x 1.5km. There are associated calc-silicate skarns and late overprinting epithermal quartz/base metal-carbonate veins. Anomalous values of **10.1% Cu, 167 g/t Au, 274 g/t Ag** in rock chip samples associated with highly anomalous Pb and Zn have been reported (Table 4). Peripheral outlying gold targets, defined by historical geochemistry, remain unexplored.

Exploration History

Historical exploration included geological mapping, rock chip sampling, stream sediment sampling, ridge-spur and grid soil sampling, and 3D-IP geophysical programs. Two rounds of scout diamond drilling were undertaken, 3 x 200m holes by BHP in 1974-75 and 3 holes totalling 1.219.3m by Petromin in 2012-13 (Figure 5). Petromin also completed whole rock geochemical analyses and isotopic age dating that showed the intrusive complex to be of Late Miocene age.

Table 2: Ipi River Exploration History

Year	Company	Activity
1970-72	CRA	Discovered in 1970 during regional stream sediment survey targeting porphyry Cu deposits; follow up mapping and rock chip sampling.
1973-77	Dampier/BHP	Creek mapping, rock chip sampling; scout DD drill testing (3 x 200m vertical holes).
1988-89	Indaba and Newmont	Reconnaissance & follow up stream sediment and rock chip sampling.
2000-03	TGM	Review of all historical regional geochemical & geophysical data. No fieldwork at Ipi River.
2006	Emperor/TGM	Mapping, rock chip & ridge/spur soil sampling; focus was late epithermal Au mineralisation & mapping extent of alteration zones.
2009-14	Petromin	Mapping, BLEG & pan con stream sediment sampling; rock chip sampling; terrace sampling; 3D-IP survey; whole rock geochemical studies; age dating; grid soil sampling; hand trenching (costeans); DD drilling (3 holes, 1,281.7m).
2016	Eda/Kumul	Data review; re-logging drill core; limited stream sediment, soil & rock chip sampling.

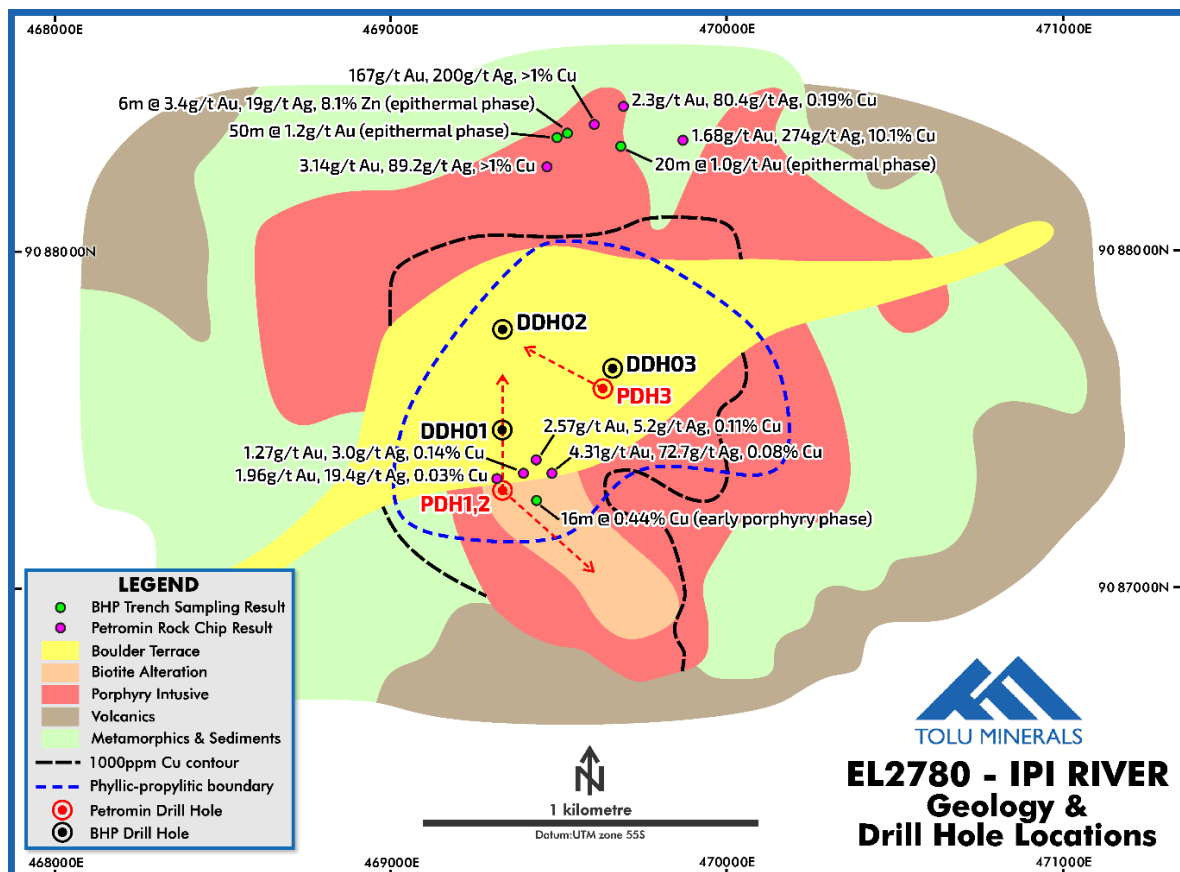


Figure 8: Ipi River Prospect Geology and Historical Drill Hole Locations

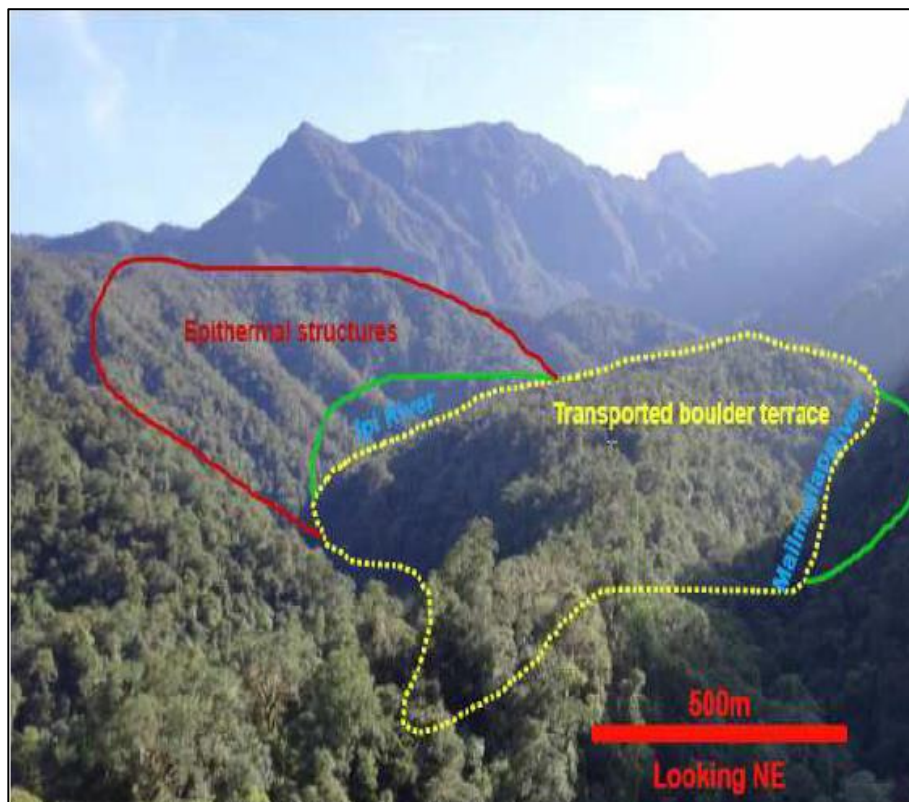


Figure 9: Ipi River Transported Boulder Terrace and Epithermal Quartz Structures

Historical Surface Sampling – Ipi River Porphyry

Dampier/BHP recognised an early porphyry Cu-Au-Mo phase associated with emplacement of the stock and a later epithermal Au phase from surface trench sampling (Table 3).

Table 3: BHP's Trench Sampling Highlights

Easting/Northing	Grades
469435/9087261	16m at 0.44% Cu (early porphyry phase)
469527/9088354	6m at 3.4g/t Au + 19 g/t Ag + 8.1% Zn (epithermal phase)
469686/9088315	20m at 1.0g/t Au (epithermal phase)
469496/9088341	50m at 1.2g/t Au (epithermal phase)

Petromin mapped five alteration phases – propylitic, phyllic, potassic, argillic and supergene, and reported typical porphyry-style veining including A-type biotite-quartz-magnetite-chalcopyrite-pyrite, B-type quartz-molybdenite-chalcopyrite-pyrite and D-type quartz-sericite-chlorite-pyrite-chalcopyrite veins. Petromin's rock chip sampling highlights include 167 g/t Au and >1% Cu (Table 4).

Table 4: Petromin Rock Chip Assay Highlights

Easting	Northing	Au (g/t)	Ag (g/t)	Cu (%)
469607	9088380	167	200	>1
469466	9088254	3.14	89.2	>1
469694	9088434	2.3	80.4	0.19
469434	9087382	2.57	5.2	0.11
469317	9087326	1.96	19.4	0.03
469481	9087342	4.31	72.7	0.08
469396	9087342	1.27	3	0.14
469871	9088333	1.68	274	10.10

Historical Drilling – Ipi River Porphyry

BHP drilled 3 x 200m (DDH-01, 02 & 03) vertical scout diamond holes testing the upper 100m of the stock beneath the boulder terrace (Figure 8 and 9).

Petromin drilled 3 angled diamond holes (PHI001, 002 & 003) totalling 1,219.3m targeting mainly IP chargeability anomalies. The holes were inclined at -60° or -70° and drilled to depths between 330m to 462.3m downhole (Table 5).

Drilling highlights included:

DDH-01: 60m at 0.1% Cu from 100m depth below boulder terrace

DDH-02: 24m at 0.1% Cu from 100m depth below boulder terrace

PDH001: 367m at 0.17% Cu + 0.1g/t Au + 120 ppm Mo from 60m depth

28m at 0.25% Cu from 222m depth

18m at 249ppm Mo from 409m depth

PDH002: 4m at 229ppm Mo from 101m depth

3m at 0.64g/t Au from 150m depth

PDH003: 4.60m at 0.30g/t Au from 143m depth

0.60m at 0.41 g/t Au from 106m depth

Petromin concluded after drilling that intersections were typical of outer propylitic and phyllic pyritic shell of economic porphyry deposits. Drilling did not test the potassic core.

Table 5: Ipi River Drill Hole Locations

Hole ID	Easting	Northing	RL (m)	Depth (m)	Azimuth (Deg)	Dip (Deg)
DDH-01	469450	9087770	1005	200	0	-90
DDH-02	469450	9088060	1000	200	0	-90
DDH-03	469780	9087950	1259	200	0	-90
PDH001	469450	9087590	1001	427	0007	-60
PDH002	469450	9087590	1094	462.3	130	-60
PDH003	469750	9087890	1260	330	313	-70

Exploration Potential

The historical data have delineated three styles of mineralisation, including:

- 1) early-stage porphyry and skarn Cu-Au-Mo;
- 2) late-stage epithermal Au; and
- 3) peripheral Au mineralisation.

The remainder of the tenement requires additional exploration for these styles of mineralisation, including follow-up of outlying historical Au and Cu geochemical anomalies (Figure 10).

These styles have been determined from surface geochemistry and surface geological information plus six drillholes from 200m to 462.3m in length (Table 5). Airborne MT and magnetics have the capability of determining aspects of geology from near surface to over 1km depth, over the areas of interest. A continuing analysis of the airborne data and historical surface exploration provides a significant advance to Tolu in rapidly identifying new target areas related to these three styles of mineralisation.

Porphyry and Skarn Mineralisation: The Ipi River prospect has been drill tested by only 6 scout holes to a depth of about 350m beneath the alluvial terrace cover. Wide zones of low-grade Cu-Au-Mo mineralisation (**PDH-001: 367m at 0.17% Cu + 0.1 g/t Au + 120 ppm Mo**) with narrower intervals of higher grade (**PDH-001: 28m at 0.25% Cu; and PDH-002: 3m at 0.64g/t Au**) were intersected from drillholes by Petromin. Further deep drilling to over 500m depth is required to further test the Ipi porphyry target and untested historical proximal IP chargeability anomalies.

Epithermal Mineralisation: The historical results with gold values ranging up to **167g/t Au** and **19g/t Ag** (Table 4), including **6m at 3.4g/t Au** and **50m at 1.2g/t Au** (Table 3), indicate considerable potential for epithermal Au mineralisation in broadly North trending veins and structures. This target is underexplored and untested by drilling.

Peripheral Gold Mineralisation: These targets at Ipi River East and Ipi River North are defined by regional stream sediment gold anomalies that have had limited, or no, follow up. Black banded quartz and visible gold have been reported nearby.

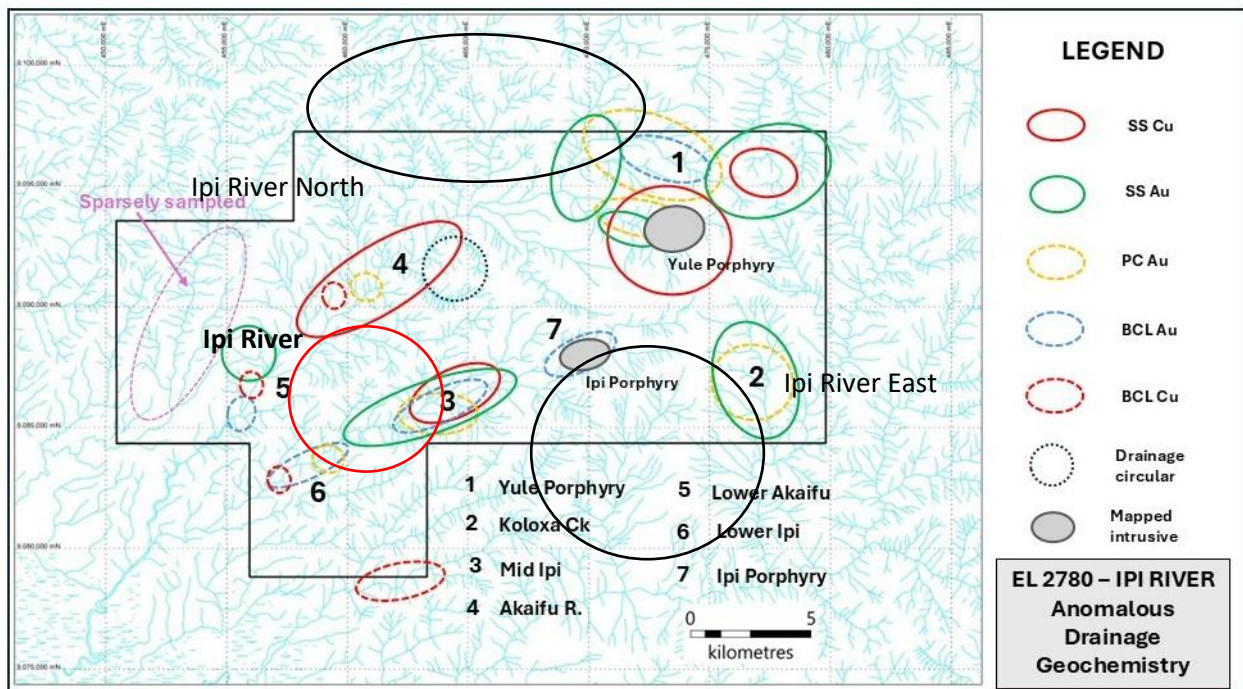


Figure 10: Interpreted Drainage Geochemical Anomaly Map from Historical Stream Samples

Historical exploration work recommended by Petromin included:

- Detailed high resolution airborne geophysics, currently completed by Tolu.
- Further exploratory drilling to test depth and extent of porphyry mineralisation and alteration within the potassic core and the NE trending mineralised structures, mostly of quartz/carbonate base metal and sulphide veins.
- Detailed 1:1000 prospect scale mapping to be extended further upstream and downstream of the Ipi drainages.
- Trenching and channel sampling anomalous outcrops with high gold and copper values.

Chris Muller, Tolu's recently appointed Executive Group Geologist further noted "With tenement EL2780 granted, we are delighted to be able to further investigate the multiple novel copper-gold targets identified from the Mobile MT airborne geophysical survey. Several stages of mineralisation and historic rock chip results with exceptional gold and copper grades are a reflection of the tenor of the Ipi River project, which, has to date only been tested with a limited number of relatively shallow drill holes, none of which tested an inferred potassic core. As well as a more detailed desktop review, these targets will be followed up in due course with

detailed mapping and sampling, before initiating a deeper, more specifically targeted drill program.

Ipi River adds to an already exceptional exploration portfolio and I look forward to participating in the further development of that portfolio's potential."

Appointment of Doug Kirwin

Tolu Minerals is delighted to announce the appointment of Doug Kirwin to the Advisory Board.

Doug is widely regarded as an experienced and successful mineral explorer globally, and particularly in the Indo-Pacific region." Doug contributed to the unsurpassed discovery record of Ivanhoe Mines (formerly Indochina Goldfields), which so far accounts for an in-ground metal value of in excess of one trillion US dollars.

Doug has an impressive 50 year career and his exploration teams have been responsible for a number of major mineral discoveries that are now mines. One of the most significant is the enormous Hugo Dummett gold-copper deposit in Mongolia, now operated by Rio Tinto. Doug was a co-recipient of the prestigious PDAC Thayer Lindsley Award, for this most prominent global discovery, in 2004. Others include a number of epithermal gold-silver mines in South Korea, Seryung gold mine in Indonesia, Moditaung gold mine in Myanmar and the Swan and Merlin deposits in Australia.

Doug was Executive Vice President for Ivanhoe Mines from 1996 to 2012 and also a founding director of Ivanhoe Mines Australia. He was directly associated with the acquisition of the Kainantu Gold Mine and tenements, for K92 Mining, from Barrick Gold Corp.

Doug is a past President of the Society of Economic Geologists and in 2006 was named the International Exchange Lecturer for the Society of Economic Geologists.

He was also an Industry Advisor for the Society for Geology Applied to Mineral Deposits, awarded an Honorary Professorship at the Mongolian University of Geology, was an Industry Advisor for China Mining, an Industry Ambassador for the Queensland Mines Department, and has held several other roles on boards, committees and advisory panels.

Doug, via Indochina Goldfields as the sponsor, was the industry supervisor for Chris Muller's Honours degree project in Thailand, through the University of Tasmania. Doug will be working closely with Chris and other Tolu staff, to unlock the mineral potential at Tolukuma and other PNG projects.

This announcement has been authorised for release by the Directors of the Company. For additional information please visit our website at www.toluminerals.com

Contacts:

Iain Macpherson	Vern Wills
MD & CEO	Strategic Corporate Advisor
iain.macpherson@toluminerals.com	vern.wills@enhance.net.au
+61 428 912 245, +675 7202 7320	+61 418 912 664

TOLU MINERALS LIMITED

Competent Person Statement:

The information in this report that relates to Exploration Results and Mineral Resources is based upon and fairly represents information compiled by or compiled under the supervision of Peter Swiridiuk - Member of the Aust. Inst. of Geoscientists. Peter Swiridiuk is a Technical Consultant and member of the Tolu Minerals Ltd. Advisory Board. Peter Swiridiuk has sufficient experience which is relevant to the type of mineralisation and type of deposit under consideration to qualify as Competent Person as defined in the 2012 Edition of the Australasian Code of Reporting Exploration Results, Mineral Resources and Ore Resources. Peter Swiridiuk consents to the inclusion in the report of the matters based on the information in the form and context in which it appears. Additionally, Mr Swiridiuk confirms that the entity is not aware of any new information or data that materially affects the information contained in the ASX releases referred to in this report.

Tolu License Information held at 9 May 2025

License Number	Type of License	Tolu Ownership	Sub-blocks	Area * (km ²)	Grant Date	Expiry Date
ML104 Tolukuma	Mining Lease	100%	N/A	7.71	01-Sep-21	28-Aug-32
EL2531 Frontier	Exploration License	100%	32.73	111.63	25-Feb-19	24-Feb-25 [#]
EL2385 Udava River	Exploration License	100%	58	197.78	26-May-16	25-May24 [#]
EL2535 Avole	Exploration License	100%	8	27.28	26-Jan-22	25-Jan24 [#]
EL2536 Fane	Exploration License	100%	30	102.30	26-Jan-22	25-Jan-24 [#]
EL2538 Woitape	Exploration License	100%	14	47.74	26-Jan22	25-Jan24 [#]
EL2539 Belavista	Exploration License	100%	29	98.89	26-Jan22	25-Jan-24 [#]
EL2723 Etasi	Exploration License	100%	54	183.30	08-Nov22	07-Nov-24 [#]
EL2662 Mt. Penck	Exploration License	100%	30	102.60	26-Oct-21	25-Oct-23 [#]
EL2780 Ipi River	Exploration License	100%	116	395.56	03-Dec-24	02-Dec-26
ELA2859 Mt. Tafa	EL Application	100%	27	92.07	Pending	N/A
ELA2862 Mt. Tafa W	EL Application	100%	29	98.46	Pending	N/A
ELA2860 Karau	EL Application	100%	20	67.91	Pending	N/A
ELA 2890 Mt Kebea	EL Application	100%	67	228.47	Pending	N/A
ELA2866 Namo	EL Application	100%	59	201.80	Pending	N/A
Total			573.73	1963.50		

*1 sub-block approximately 3.41 sq.km

Pending MRA Renewal for a further two-year term

Notes:

The PNG Mining Act-1992 stipulates that Exploration Licenses (ELs) are granted for a renewable 2-year term (subject to satisfying work and expenditure commitments) and the PNG Government maintains the right to purchase up to 30% project equity at "Sunk Cost" if/when a Mining Lease (ML) is granted.

EL2531, EL2385, EL2535, EL2536, EL2538, EL2539, EL2723 and EL2662 are currently subject to an extension renewal process. The tenements remain in force until determinations of renewal are made by the Mining Advisory Council.

ELA 2859, ELA 2860, ELA 2862, ELA2866 and ELA 2890 are in process for Warden's Hearings.

JORC Code Table 1, 2012 Edition – Report of Exploration Results

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	- Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. - Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. - Aspects of the determination of mineralisation that are Material to the Public Report. - In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.	- BHP sampling was marked out according to the extent of exposures and not exceeding 50m. Each sample was taken across each lithology at approximate hammer length intervals to ensure sample representivity. - Petromin PNG Holdings Limited (Petromin) checked samples before dispatch, packed in cardboard boxes for delivery to Tolukuma Gold Mines yard for laboratory analysis in Lae. - BHP channel samples were sent to Central Mineralogical Services Pty Ltd laboratories for petrology. - Material aspects of mineralisation are noted in the text of the document. - Historic exploration drilling results are quoted from historical Annual and internal MRA reports. Petromin completed three diamond core holes. Samples were sent to Intertek in Lae for analysis. - Historic sampling methodology included stream sediment sampling, rock chip sampling of outcrop and chip channel of creek outcrops. - No data are available on measures taken to verify historic sample representivity. - Historical data are considered reliable and of sufficient quality based on a review of available historical reports and literature.
Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	- No drilling has been undertaken by Tolu Minerals (Tolu). - Petromin and BHP drilled a total of six diamond drill holes. - Historic diamond core sampling was half core: 1.0m or 2.0m PQ and HQ. - No historic drill logs or data are available for the BHP drilling. Historic logs are available from the Petromin drilling.
Drill sample recovery	- Method of recording and assessing core and chip sample recoveries and results assessed. - Measures taken to maximise sample recovery and ensure representative nature of the samples. - Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	- Historical drill core was sampled selectively: Petromin took one to two metre samples depending on lithology and vein type. - Historic diamond drill logs in most cases do not record core loss and no details are available of methods for assessing core recovery or measures taken to ensure representative sampling. - No data are available regarding possible sample bias.
Logging	- Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. - Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. - The total length and percentage of the relevant intersections logged.	- No drilling has been undertaken by Tolu. - No Mineral Resource estimation, mining studies or metallurgical studies have been completed. - Historic logs show that in most cases qualitative logging was completed for the total length of each hole. - No historic drill logs or data are available for the BHP drilling. Drill logs are available from the Petromin drilling.
Sub-sampling techniques and sample preparation	- If core, whether cut or sawn and whether quarter, half or all core taken. - If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. - For all sample types, the nature, quality and appropriateness of the sample preparation technique. - Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. - Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling. - Whether sample sizes are appropriate to the grain size of the material being sampled.	- No drilling has been undertaken by Tolu. - BHP and Petromin diamond drilling used half core for sampling. - Historic samples were assayed at independent and reputable laboratories indicating preparation techniques would have followed standard industry best practice. - No data are available on QAQC procedures or measures taken to ensure representivity of historic sampling. - Historic drill sample sizes are considered appropriate.

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	- The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. - For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. - Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	- Rock and trench/channel samples taken by Petromin have been dispatched to Intertek Laboratories in Lae, PNG for preparation and to Indonesia for base metal analyses. All samples are sorted, dried to 180°C, crushed to <2mm and pulverised (95%<75µm) up to 2kg. They were fire assayed at the Lae laboratory for total gold with a 30g charge (FA30). - All rock and drill core samples have undergone Aqua Regia Digest IC01 and GA50 for a suite of 12 elements (Ag, As, Co, Mg, Mo, Ni, Pb, S, Sb, Te, Zn, S). - Acceptable levels of accuracy are obtained in the Intertek assaying results of Au 0.01 ppm, Ag 0.1 ppm, As 2 ppm, Co 1 ppm, Cu 1 ppm, Mg 0.01, Mo 1 ppm, Ni 1 ppm, Pb 2 ppm, S 0.005, Sb 1 ppm, Te 5 ppm - Duplicates, Standards and Blanks have not been noted in historical reports. - No Geophysical tools were used downhole.
Verification of sampling and assaying	- The verification of significant intersections by either independent or alternative company personnel. - The use of twinned holes. - Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. - Discuss any adjustment to assay data.	- Verified by geologist onsite at the time. The nature and style of sampling and mineralisation at this stage of historical exploration for this project is considered adequate. - No historical drillholes have been twinned. - All assay data is stored in reports submitted to the MRA library in digital PDF formats.
Location of data points	- Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. - Specification of the grid system used. - Quality and adequacy of topographic control.	- Samples have been located by hand held GPS and air photos. - Historical stream samples were digitised from maps with located drainages. - Historical drillholes were located using airborne photos and GPS. - Map Datum and drillholes are in AGD66. Drillhole Figures are supplied in WGS84, Zone 55. - Topographic control is low with 40m contours from 1:100,000 plans and 10m contours from airborne DTM.
Data spacing and distribution	- Data spacing for reporting of Exploration Results. - Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. - Whether sample compositing has been applied.	- Refer to any attached plans and tables for rock and trench/costean sample spacing. - Historical BHP trench locations and hence data spacing, and distribution is NOT sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedures. Data spacing and improved topographic control need to be reviewed in detail from additional drillhole and trench/costean databases prior to undertaking a resource estimate. - Sample compositing was not applied. - Airborne MT (Mobile Magneto Tellurics) geophysical surveying was undertaken by Expert Geophysics with a 200m line spacing orientated east-west. Conductivities were modelled using proprietary 2.5D modelling software and results supplied as 3D voxels, 100m depth slices and cross-sections along each survey line. Sample spacing with the helicopter borne (Bell 407 helicopter) MT survey is approximately every 2m and bird height of 60-70m. Airborne magnetics is also collected with a Geometrics G822A Cesium Magnetometer, with sampling every 0.1 seconds (2.5m) and average magnetometer height of 110m. - Expert Geophysics executed lineament analysis of the inverted data in 3D, and using VLF EM and magnetic data to study properties of the bedrock units. - As a result of the adaptive energy filtering, axes of conductive and resistive anomalies are represented in 2D depth plan and 3D view formats. The lineament analysis results show conductive and resistive axes extracted from a series of apparent conductivity values in a specified data frequency range. - Adaptive energy filtering along with autocorrelation function calculation was applied to inverted resistivity grids for a set of depths, every 100 m, and the results were

Criteria	JORC Code explanation	Commentary
		combined into anomalies trends grids/maps corresponding to different elevations and into 3D voxels for the entire survey block. The procedure helps to find positions of geophysical data extremums, minimal and maximal and correlate them as anomaly axes over the survey area.
Orientation of data in relation to geological structure	- Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. - If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	- Historical sampling appears to achieve unbiased sampling of possible structures from historical reporting by BHP and Petromin in a nominally perpendicular orientation as much as is practicable. - Sample intervals are selected based upon observed geological features and the strike of the narrow quartz veins. Mineralisation is narrow 1 to 25m thickness. - The Author is not aware of any sampling bias.
Sample security	The measures taken to ensure sample security.	Access to the tenement is controlled and historical drill samples were stored on-site in a remote location. Site employees transport samples to the Intertek analytical lab. The laboratory compound in Lae is independent and secure.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	- Sampling and assay methods are recorded in historical reports from 1974 to 2017. - There are no audits or reviews of sampling techniques.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	- Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. - The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	- There are no joint ventures or partnerships in place. - EL 2780 was granted on 03 December 2024 for a term of 2 years. - Tolu Minerals Limited have a 100% ownership of Exploration Licence EL2780 totalling 395.56 km². - There are no known impediments to operating in EL2780.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	- Systematic exploration of the property commenced in 1970 where CRA completed (-#80) stream sediment and stream panned concentrate sampling, and follow-up geological mapping and rock chip sampling. - In 1973, Dampier/BHP completed stream sediment and panned concentrate stream sampling, creek geological mapping, rock chip sampling and 3 scout 200m deep diamond drillholes. - In 1988, Indaba and Newmont completed reconnaissance (-#20) stream sediment and rock chip sampling. - In 2005, Emperor/Tolukuma Gold Mines completed rock chip and ridge/spur soil sampling focussing on epithermal style mineralisation and mapping zones of alteration. - In 2009 to 2012, Petromin completed geological mapping, BLEG and Pan Con stream sampling; terrace sampling; 3D-IP ground geophysics, geochemical studies; Diamond drilling of 3 holes for a total of 1,281.7m; grid soil sampling and trench sampling.
Geology	Deposit type, geological setting and style of mineralisation.	- Ipi River is an under-explored porphyry style Cu-Au-Mo system with epithermal Au overprint located 55 km northwest of the Tolukuma gold mine. The Mt Yule target is associated with a "bulls-eye" magnetic anomaly near a major structural intersection where the NE-trending Yule Transfer Structure transects the regional NW Owen Stanley Fault system. - Ipi Porphyry mineralisation is centred on a propylitic-phyllitic-potassic altered multiphase diorite-monzonite stock with surface dimensions of about 1.8 km x 1.5 km.

Criteria	JORC Code explanation	Commentary
		There are associated calc-silicate skarns and late overprinting epithermal quartz/base metal-carbonate veins. Several generations of fractures and faults are present which partly control veining and mineralisation. The dominant trends are NW to NE with steep to sub-vertical easterly dips. Examples include quartz-molybdenite-pyrite veins exposed in the Mailmailap River and quartz-chalcopyrite-pyrite veins in the Ipi River.
Drill hole Information	- A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: - easting and northing of the drill hole collar - elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar - dip and azimuth of the hole - down hole length and interception depth - hole length. - If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	- A summary of all historical drillhole and ground geophysical anomaly information is noted within Tables in the text of this report or and Figures. - Tolu has acquired historical reports with drillhole and trench information that have been reviewed and interpreted.
Data aggregation methods	- In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. - Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. - The assumptions used for any reporting of metal equivalent values should be clearly stated.	- Exploration results are reported typically within epithermal veins. Trench grades are compiled using length-weighted average grades. - Cut-off grades are NOT stated. - There are no aggregations - No metal equivalent values are used.
Relationship between mineralisation widths and intercept lengths	- These relationships are particularly important in the reporting of Exploration Results. - If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. - If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	- The relationship between historical mineralisation widths & intercept lengths from trench/costeans is understood. - Historical drillholes are generally targeted perpendicular to known veins and porphyry targets at depth based on surface sampling and ground geophysics. Downhole width projections are reported in Tables where relevant within the text of this report.
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Appropriate maps, sections, and tabulations of drillhole, intercepts are included where relevant.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	Comprehensive reporting of all trench and rock sample results are summarised and representative reporting is used.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	- In addition to the reported trench and rock samples and historical drill results, the historical database used by Tolu includes stream sediment samples, soil and rock geochemical data, airborne magnetic/radiometric data and ground 3DIP/Resistivity geophysical images. - All meaningful exploration data undertaken to date by Tolu has been included in their ASX announcements. - No metallurgical testing data are reported.
Further work	- The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). - Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	- Current Tolu exploration is aimed at interpreting final Lineament Analysis modelled airborne Magneto-Telluric results to assist defining targets for follow-up exploration. Follow-up trenching and drilling is aimed at defining additional gold mineralisation at surface and copper mineralisation at depth. - Appropriate plans are included where possible. - The nature of planned further work is provided in the body of text.