

# Gold and Copper in Australia and Papua New Guinea

# **Disclaimer**

#### **Important Information**

This presentation has been prepared by Papua Mining plc ("PML" or the "Company"). It should not be considered as an offer or invitation to subscribe for, or purchase any, securities in the Company or as an inducement to make an offer or invitation with respect to those securities. This presentation contains forecasts, projections and forward looking information. Such forecasts, projections and information are not a guarantee of future performance and involve unknown risks and uncertainties, many of which are out of PML's control. Actual results and developments will almost certainly differ materially from those expressed or implied. PML has not audited or investigated the accuracy or completeness of the information, statements and opinions contained in this presentation. To the maximum extent permitted by applicable laws, PML makes no representation and can give no assurance, guarantee or warranty, express or implied, as to, and takes no responsibility and assumes no liability for (1) the authenticity, validity, accuracy, suitability or completeness of, or any errors in or omission from, any information, statement or opinion contained in this presentation and (2) without prejudice to the generality of the foregoing, the achievement or accuracy of any forecasts, projections or other forward looking information contained or referred to in this presentation. This overview of the Company does not purport to be all inclusive or to contain all information which its recipients may require in order to make an informed assessment of PML's targeted prospects. You should conduct your own investigation and perform your own analysis in order to satisfy yourself as to the accuracy and completeness of the information, statements and opinions contained in this presentation before making any investment decision.



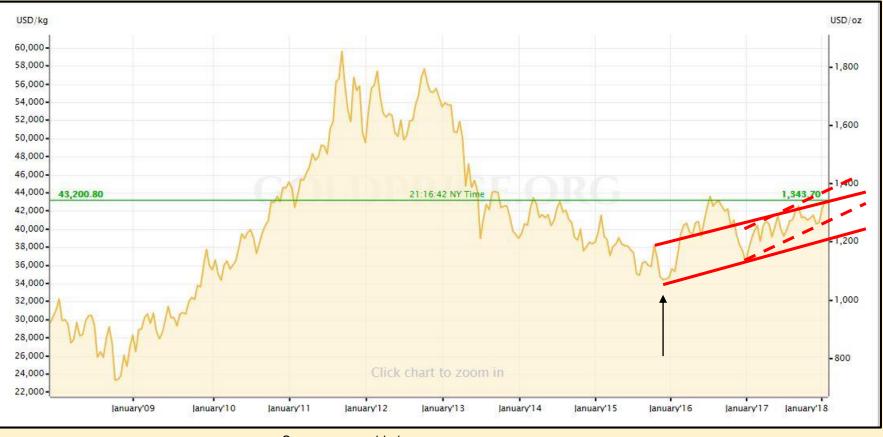
# Papua Mining plc (LON: PML) – exploring amongst giants

- Pursuing gold and large-scale copper/gold deposits
- Motivated towards high investment returns with exploration in two world-class mining destinations
- Acquisition of BGM Investments Pty Ltd with breccia-hosted, IRGS, epithermal and porphyry copper/gold projects in Queensland, Australia
- First drilling campaign in Queensland identified wide intervals of gold and silver mineralisation, close to surface
- Collectively, the projects present opportunity for Papua to identify multimillion ounce deposits of gold and copper \* \*



<sup>\* \*</sup> The potential quantity and grade of our exploration targets are conceptual in nature. There has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.

# Papua Mining plc (LON: PML) – 10-year gold price chart (US\$)





Source: www.goldprice.org

# Papua Mining plc (LON: PML) – 10-year copper price chart



Source: www.lme.com/Metals/Non-ferrous/Copper

Papua

# Papua Mining plc – company profile

AIM Code: PML	
Ordinary Shares (million)	343.34
Market Cap (£0.0125)	£4.29M
Cash at 1 Feb 2018	£1.0M
Debt at 1 Feb 2018	£0

Shareholder	Shares (M)	%
Michael Somerset-Leeke	51.15	14.90
Value Generation/P.& M. Johnson	20.87	6.08
Nicholas Walley	20.82	6.06
Salida Capital (Europe) Limited	14.89	4.34
Blue Lake Resources Pty Ltd	14.00	4.08
David W Price	13.60	3.96
A&H Advisory	13.00	3.79
		43.21

<b>Directors &amp; Management</b>		
Michael Somerset-Leeke	Non Executive Chairman	
David Price	Managing Director & CEO	
John Haggman	Technical Director	
Hugh McCullough	Non Executive Director	
Kieran Harrington	Non Executive Director	
Directors & Management hold 22.9% of PML		



# Papua Mining plc – board of directors

- Michael Somerset-Leeke (Non-Executive Chairman) Winchmore plc, Coni & Covington Stockbrokers.
- Hugh Martin McCullough
   Non-Executive Director

Geologist, (+40 years experience) Ireland, Ghana, Mali, PNG Glencar Mining plc (acquired by Gold Fields Limited)

Kieran Harrington
 Non-Executive Director (P.Geo)
 Geologist, (30 years experience)
 West Africa, PNG, Europe
 Tara Prospecting Ltd,
 Burmin Exploration and Development Ltd.,
 Glencar Mining plc

David Price

Managing Director and CEO (FAusIMM) Geologist, (30 years experience) Australia, PNG, Fiji, China, Greece, Austria

Convergent Minerals, Golden Tiger Mining, Millennium Mining (Fiji), Danae Resources, Hargraves Resources

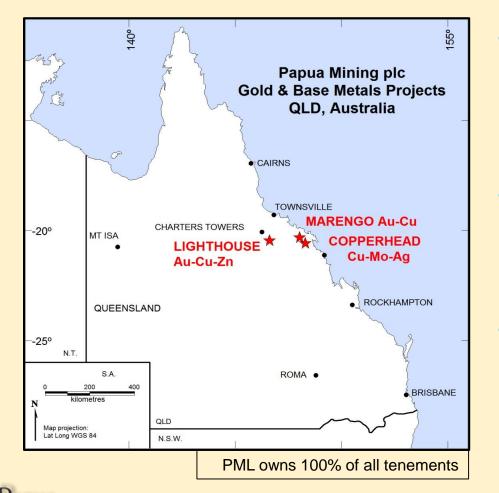
# John Haggman Technical Director

*Geologist, (30 years experience)* Australia, PNG, Philippines, South America Convergent Minerals, MIL Resources, Climax Mining Limited, Cyprus Gold Australia.



# Australian projects

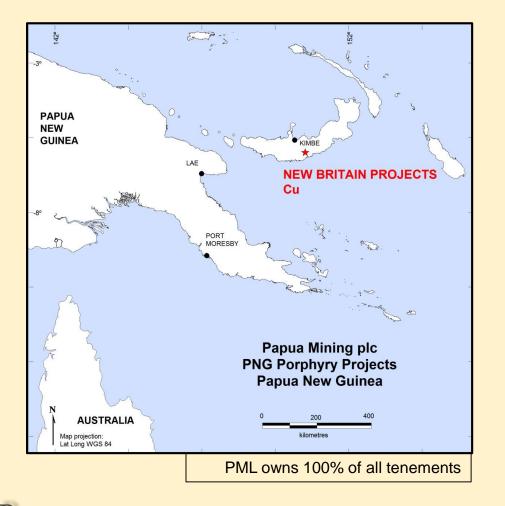
apua



- 'Lighthouse' EPM 25617 Gold/Silver/Copper Sits amongst giants - Charters Towers, Pajingo, Mt Leyshon, Ravenswood, Mt Wright within a region which has produced +20 million ounces of gold.
- 'Marengo' EPM 25715 Gold IRGS
  Historical goldfield (1871) within 50km of Mt Carlton
  (1.4 million ounces of gold)
- **Copperhead**' EPM 25531 Copper porphyry Included in the USGS 'Global Mineral Resource Assessment'

Visible Cu logged in drilling from surface to 300m deep

### Papua New Guinea projects



Papua

'Tripela' EL 1462
Rocks up to 29% Cu
Large, mineralised copper/gold
target.

'Mount Visi' EL's 2051 and 2322
 Virgin discovery with outcrops up to 35.5 g/t Au and 4% Cu.

# Australia & Papua New Guinea

#### AUSTRALIA

- World-class gold and copper deposits
- Strong history of mining
- Modern and proven Mining Act
- Realistic environmental regulation
- First-world, low sovereign risk





Mt Isa Copper Mine, Queensland, Australia

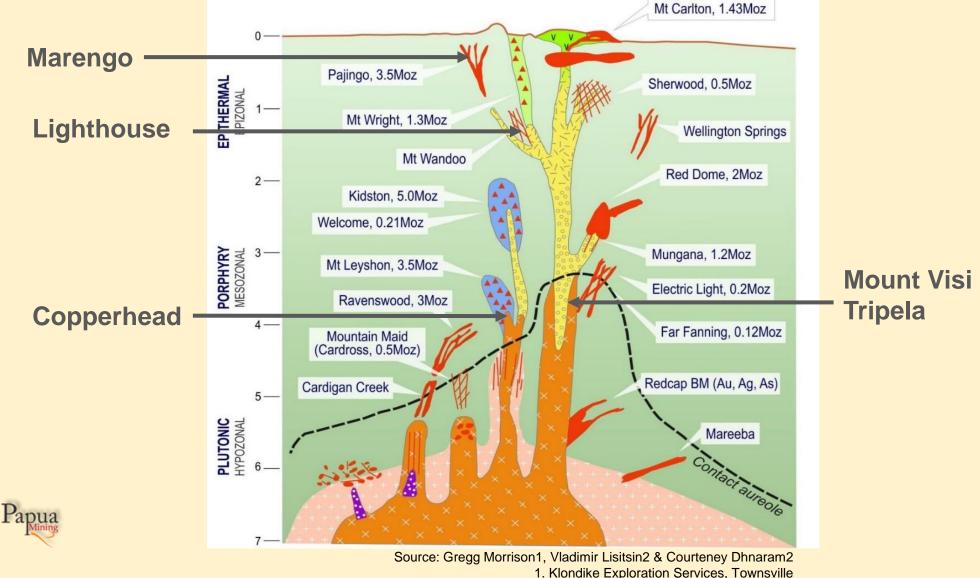
#### PAPUA NEW GUINEA

- World-class gold & copper deposits
- "Giant deposit" exploration potential
- Modern and proven Mining Act
- Strong history of mining
- Experienced mining industry workforce



Lihir Gold Mine, Lihir Island, Papua New Guinea

# Papua Mining plc – mineralisation models



 Klondike Exploration Services, Townsville
 Geological Survey of Queensland, Brisbane Digging Deeper, December 03, 2014



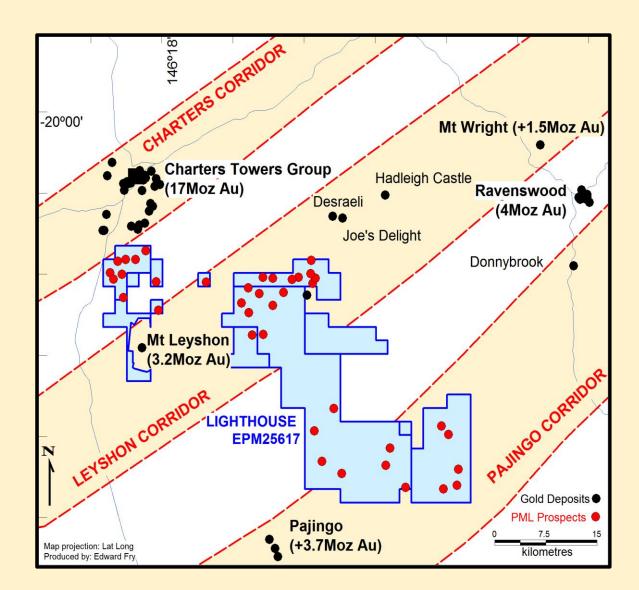
Multiple breccia, epithermal and vein-hosted mineralising systems

Upside potential = discovery of a Mt Wright-style or Mt Leyshon-style gold deposit



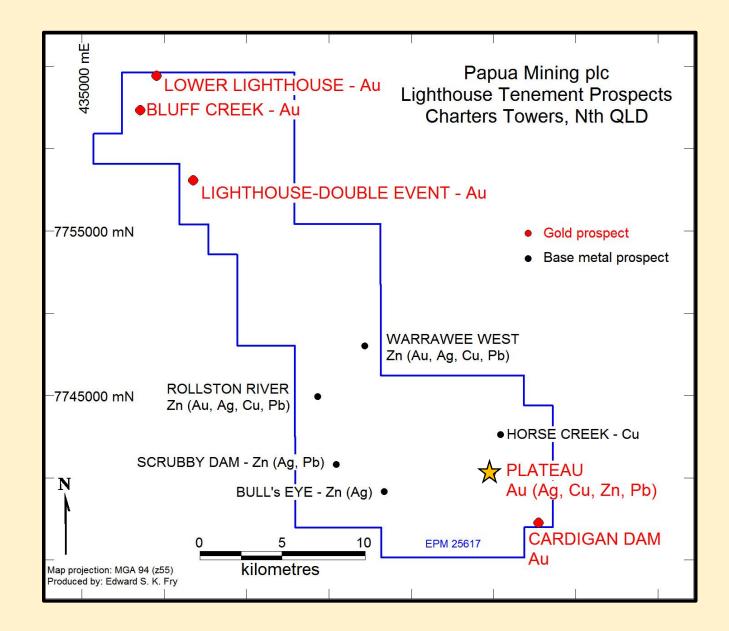
#### Lighthouse strong potential

- Regional production +20moz Au
- Previous Pennaroya, ESSO, City Resources, CRA, Aberfoyle, Newcrest, Ramelius, Liontown.
- 20km from Pajingo Gold Mine (operating)
- Surround Mt Leyshon Gold Mine lease (C&M)
- Numerous prospect targets





#### Lighthouse multiple prospects





Assay results from Nov/Dec 2017 drilling include:

- 22m @ 1.9 g/t Au + 22.3 g/t Ag (**39m downhole**)
- 18m @ 1.0 g/t Au + 10.5 g/t Ag (**119m downhole**)
- 20m @ 0.5 g/t Au + 2.5 g/t Ag (**16m downhole**)
- 10m @ 1.9 g/t Au + 9.0 g/t Ag (**18m downhole**)

Assay results from Nov/Dec 2017 drilling also included:

- 22m @ 0.4 % Zn (**0m downhole**)
- 24m @ 0.5 % Zn (**25m downhole**)
- 16m @ 1.1 % Zn (**129m downhole**)
- 43m @ 2.0 g/t Ag (**0m downhole**)
- 40m @ 3.0 g/t Ag (**55m downhole**)
- 20m @ 0.2 % Cu (**0m downhole**)

Historical drilling results include:

- 44m @ 2.4 g/t Au
- 10m @ 5.0 g/t Au
- 8m @ 3.0 g/t Au
- 14m @ 2.4 g/t Au
- 3m @ 4.9 g/t Au





Geology and geochemistry have some similarities to the Mt Wright Gold Mine (+1.5Moz gold)

#### Lighthouse possible analogy



Plateau polymict breccia



#### Mt Wright polymict breccia



Plateau hydrothermal rhyolite breccia

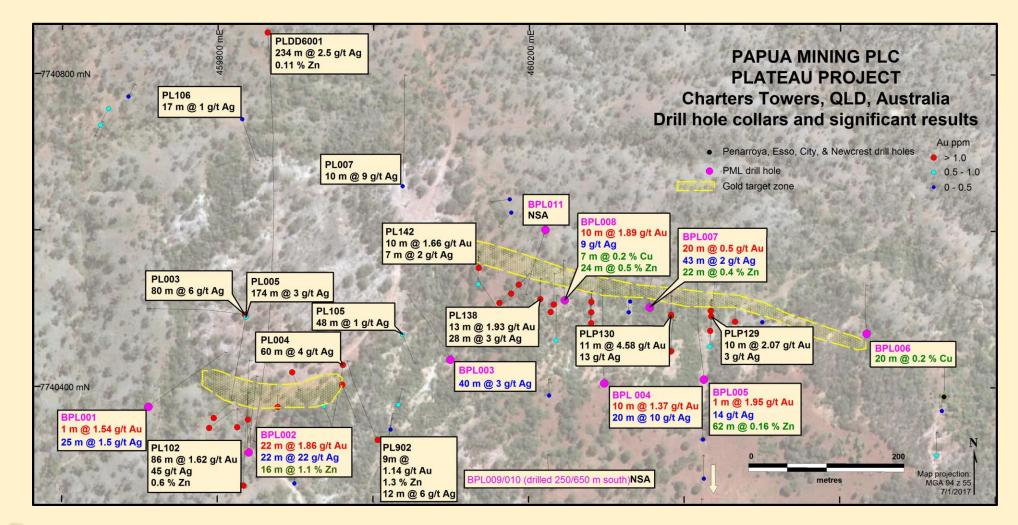


Mt Wright hydrothermal rhyolite breccia



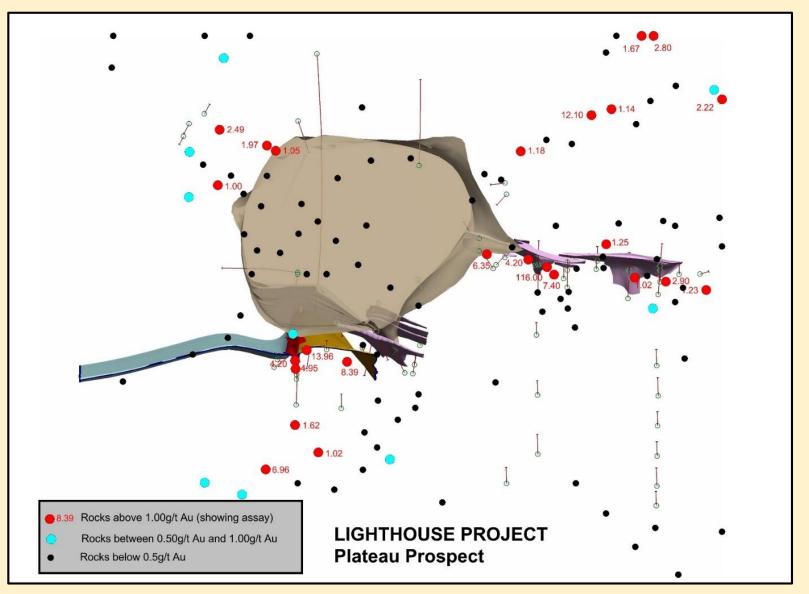
Source of Mt Wright photos: Nick Lisowiec<sup>1</sup>, Gregg Morrison<sup>2</sup>

- <sup>1</sup> Carpentaria Gold / Resolute Mining Ltd, Ravenswood, QLD
- <sup>2</sup> Klondike Exploration Services, Townsville, QLD

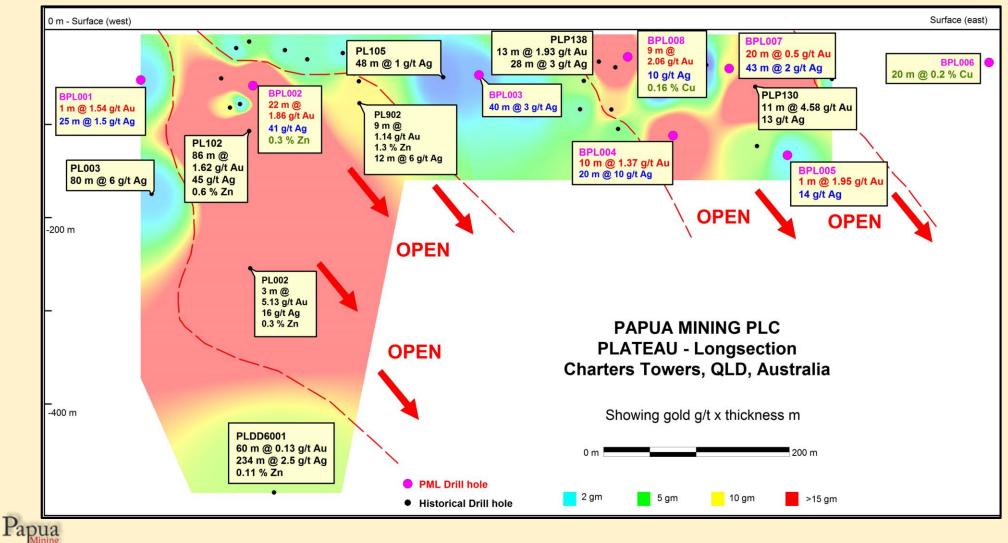




Papua

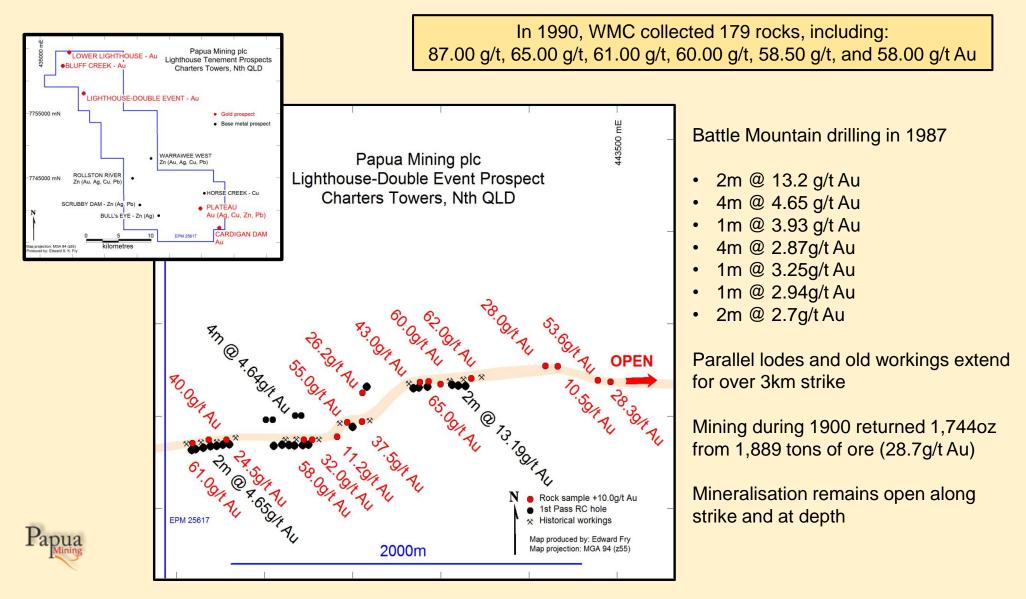


Plan view of Plateau showing the rhyolite dome (in grey/brown) and mineralised lodes at the margins of the dome.

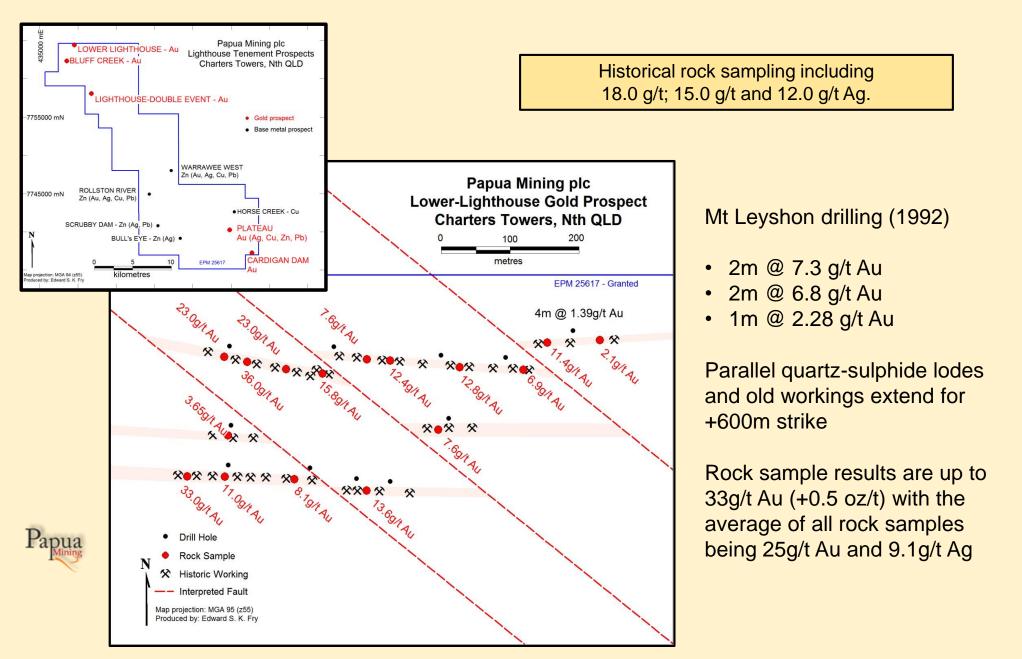


Long Section showing depth potential.

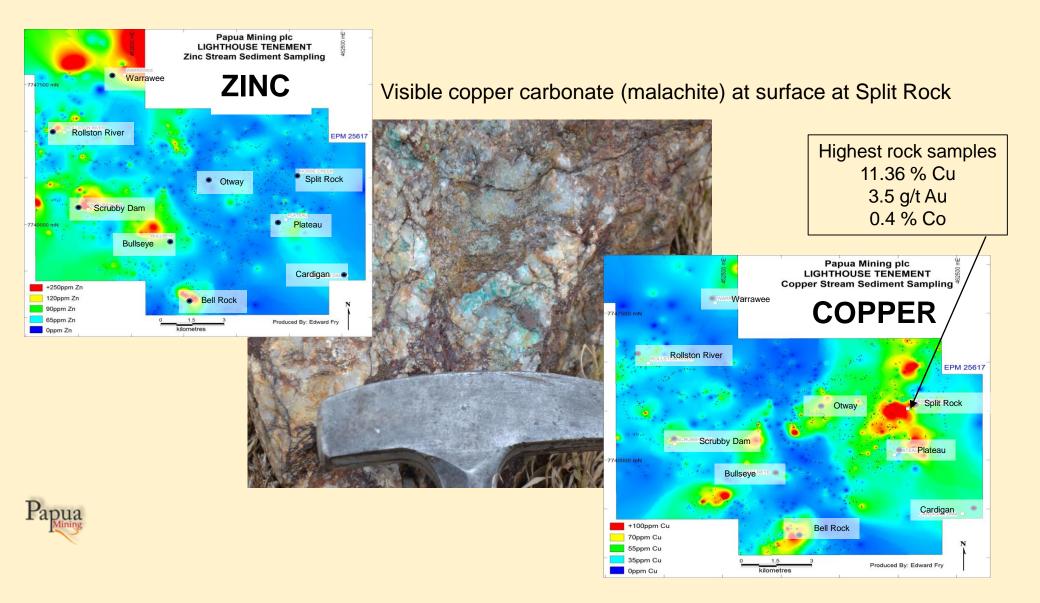
#### Lighthouse double event prospect



#### Lighthouse lower lighthouse prospect

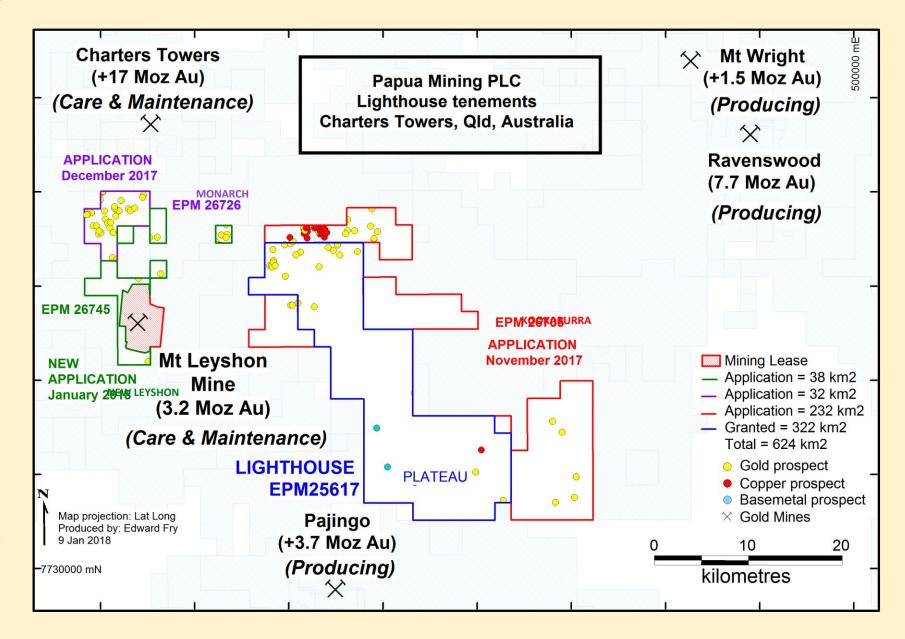


#### Lighthouse regional targets



#### Lighthouse new acquisitions

Papua



# Marengo Queensland, Australia EPM 25715

Epithermal and Intrusionrelated gold system (IRGS)

**Upside potential = discovery of a Mt Carlton-style gold deposit** 

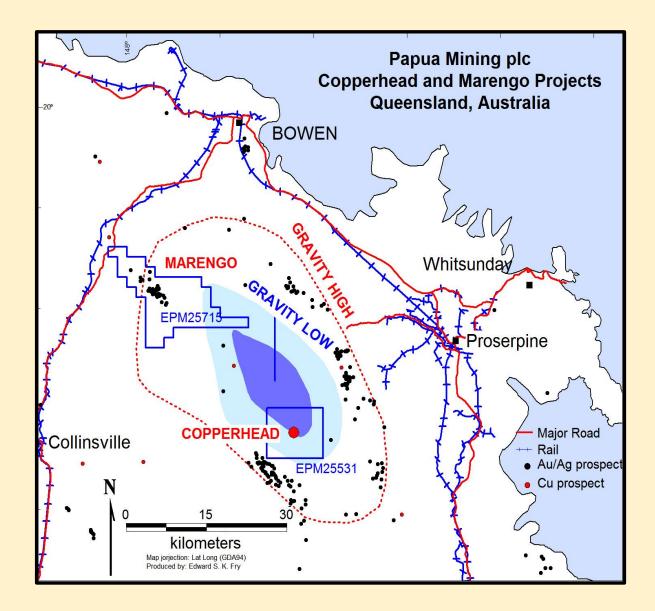


#### Marengo a large, under-explored goldfield

- Historical Marengo Goldfield
- 37 gold workings

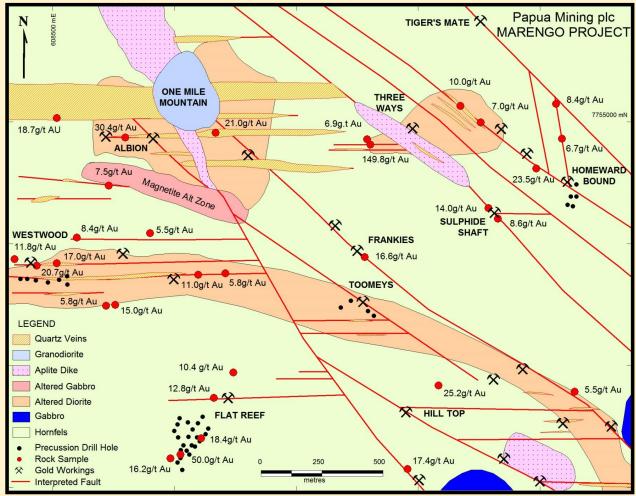
Papua

- 55km from Mt Carlton Gold Mine
- Multiple intrusions and structural events - critical for mineralised systems



#### Marengo multiple intrusive events

- Discovered in 1871
- Very high-grade rocks
- Au, Cu, Ag potential
- NW faults important for mineralisation
- 38 shallow holes drilled at 4 sites
- Costean at Flat Reef 12m @ 6.1 g/t Au
- One Mile Mountain hydrothermal breccia is undrilled





#### Marengo visible copper, bonanza-grade gold





# Copperhead Queensland, Australia EPM 25531

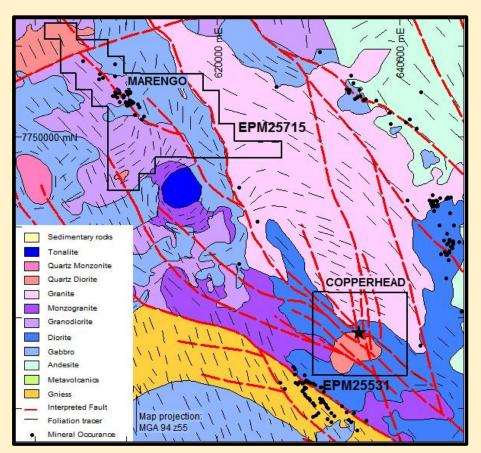
# Porphyry Copper

Upside potential = discovery of a large porphyry copper deposit



#### Copperhead large porphyry system

- Listed in the USGS 'Global Mineral Resource Assessment'
- 1970 Cu vein discovered at Julivon in 1970
- 5 drill holes at Julivon have visible chalcopyrite throughout (to max 300m depth)
- Auger drilling outlined a coherent +100ppm copper-in-soil anomaly in excess of 3km x 2km
- Six +450ppm copper-in-soil anomalies remain untested and provide high-potential targets

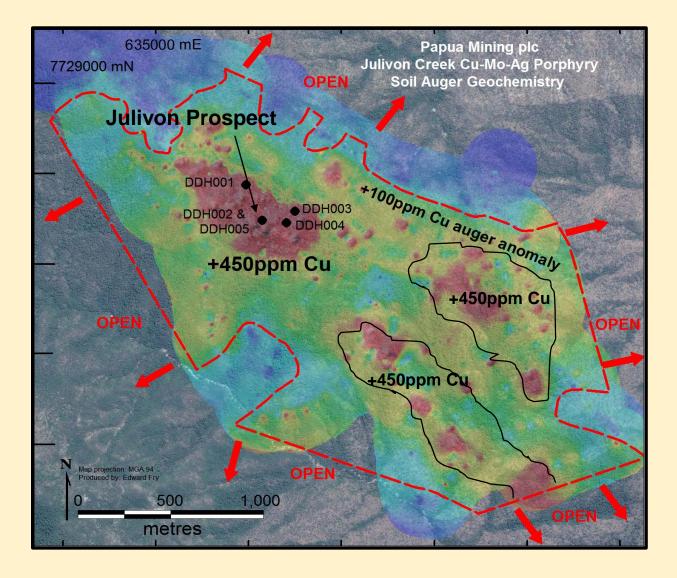




#### **Copperhead open in all directions**

- 5 holes by Carpentaria Exploration in 1972
- Sample collected each 30m downhole to 300m
- Weighted average
   0.25% Cu + 2.1g/t Ag
- Includes
   2.81% Cu + 12g/t Ag
   potential for high-grade

Papua



# Papua New Guinea

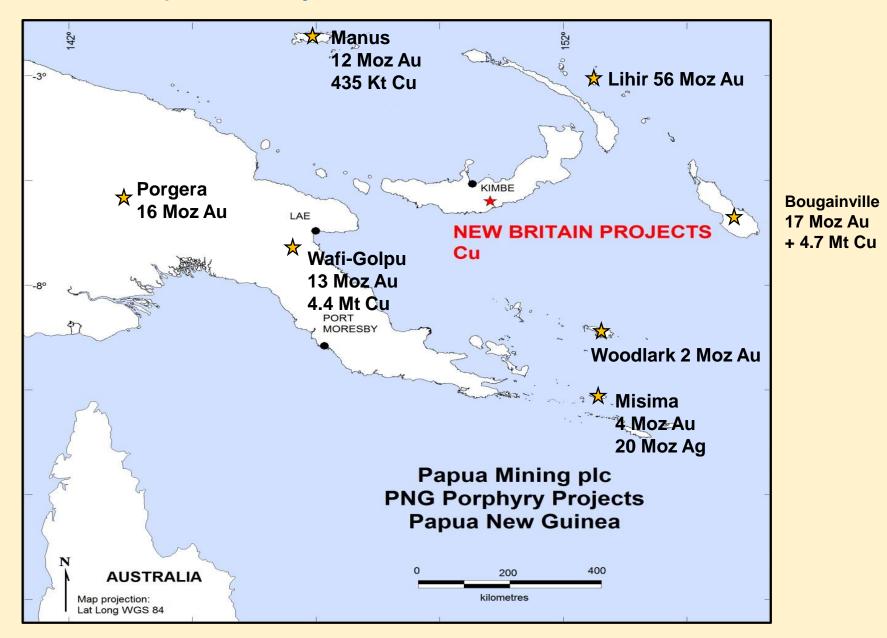
New Britain (352 sq. km)

# Porphyry copper/gold

Upside potential = discovery of Golpu-style copper/gold deposit

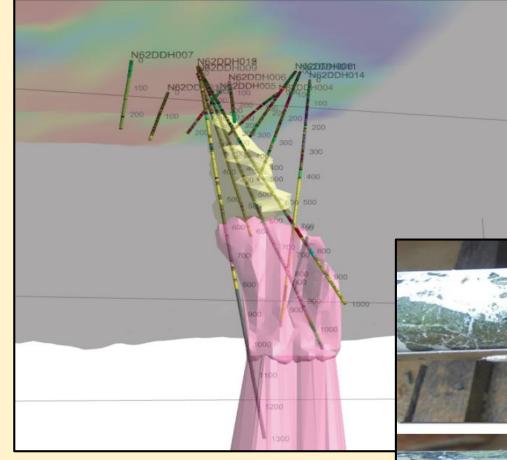


#### Papua New Guinea 'elephant' territory





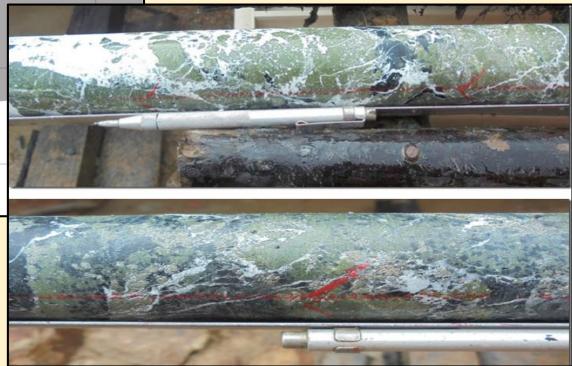
#### Tripela large mineralised system



3-dimensional modelling of Tripela

Papua

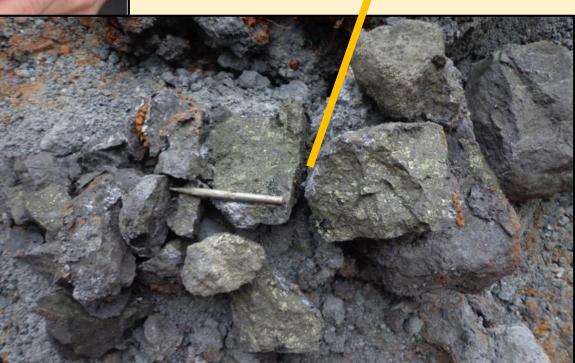
- 6,500m drilling
- Diorite porphyry (host to most porphyry copper deposits in the region)
- Intense hydrothermal alteration



#### **Tripela intensely altered and mineralised**



# Up to 29% Cu in outcrop





#### Mt Visi new, near-surface discovery

- Mineralized copper porphyry with shearing and brecciation
- Outcrop samples to **35.5 g/t Au + 4.0% Cu**
- 776m of diamond drilling in 5 holes (deepest hole only 211m)
- Propylitic transitional to potassic alteration styles
  - ✓ dominant in areas of < 0.3 % Cu</p>
  - ✓ chlorite is > biotite
  - ✓ pyrite is > chalcopyrite
  - bornite/chalcopyrite occur concurrently







# Papua Mining plc (LON: PML) – what to expect

#### Lighthouse

- Geophysics at Plateau
- RC drilling
- Regional assessment

#### Marengo

- Geophysics at One Mile Mountain
- Rock sampling and XRF survey at One Mile Mountain

#### Copperhead

• Geophysics at Julivon Creek

#### Papua New Guinea

Review and targeting at Tripela and Mt Visi





# Website: www.papuamining.com

E-mail: david@papuamining.com