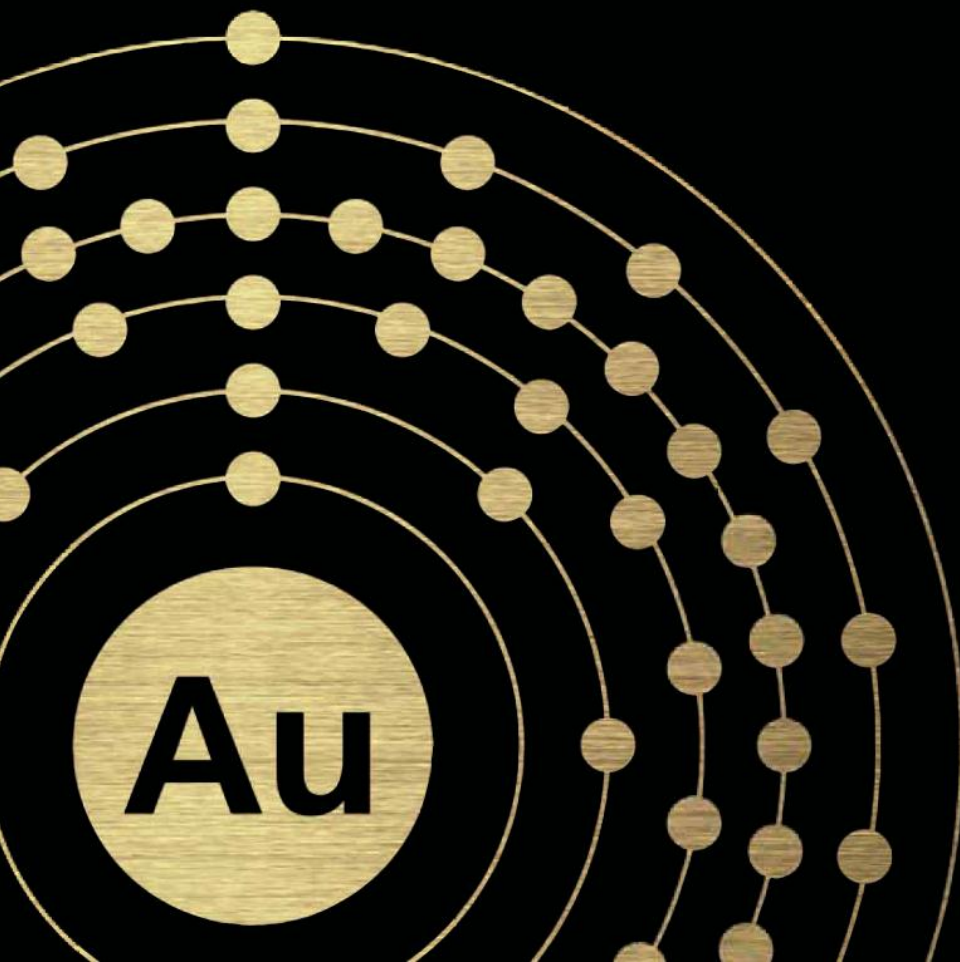


# WAFI-GOLPU PROJECT

Max Esparon and Mike Humphries



*Analyst site visit*

26 September 2012



# Private Securities Litigation Reform Act Safe Harbour Statement and Competent Person Statement

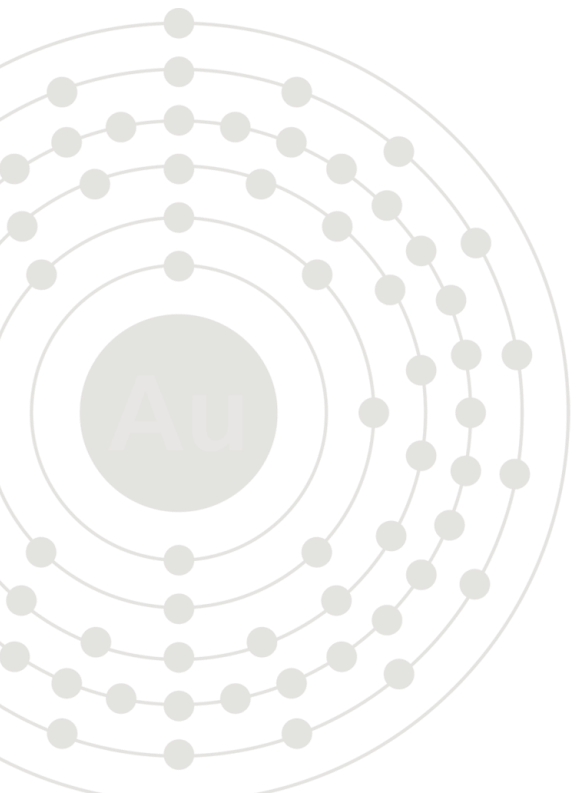



This presentation contains "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, and 21E of the Securities Exchange Act of 1934, as amended, that are intended to be covered by the safe harbour created by such sections. These statements may be identified by words such as "expects", "looks forward to", "anticipates", "intends", "believes", "seeks", "estimates", "will", "project" or words of similar meaning. All statements other than those of historical facts included in this presentation are forward-looking statements, including, without limitation, (i) estimates of future earnings, and the sensitivity of earnings to the gold and other metals prices; (ii) estimates of future gold and other metals production and sales, (iii) estimates of future cash costs; (iv) estimates of future cash flows, and the sensitivity of cash flows to the gold and other metals prices; (v) statements regarding future debt repayments; (vi) estimates of future capital expenditures; and (vii) estimates of reserves, and statements regarding future exploration results and the replacement of reserves. Where the Company expresses or implies an expectation or belief as to future events or results, such expectation or belief is expressed in good faith and believed to have a reasonable basis. However, forward-looking statements are subject to risks, uncertainties and other factors, which could cause actual results to differ materially from future results expressed, projected or implied by such forward-looking statements. Such risks include, but are not limited to, gold and other metals price volatility, currency fluctuations, increased production costs and variances in ore grade or recovery rates from those assumed in mining plans, project cost overruns, as well as political, economic and operational risks in the countries in which we operate and governmental regulation and judicial outcomes. For a more detailed discussion of such risks and other factors (such as availability of credit or other sources of financing), see the Company's latest Annual Report on Form 20-F for the year ended June 30, 2011 which is on file with the Securities and Exchange Commission, as well as the Company's other SEC filings. The Company does not undertake any obligation to release publicly any revisions to any "forward-looking statement" to reflect events or circumstances after the date of this presentation, or to reflect the occurrence of unanticipated events, except as may be required under applicable securities laws.

## Competent Person Statement

The information in the presentation that relates to Exploration Results was compiled by Mike Humphries, Exploration Executive, Harmony Southeast Asia Region who is a member of the Australian Institute of Geologists, and a full time employee of Harmony Gold Mining Company Limited. Mr Humphries has sufficient experience which is relevant to the styles of mineralisation and types of deposits under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the "JORC Code". Mr Humphries consents to the inclusion in this presentation of the matters based on this information in the form and context in which they appear.



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- 1 Golpu movie
  - 2 Governance and overview
  - 3 Wafi-Golpu geology system
  - 4 Golpu pre-feasibility

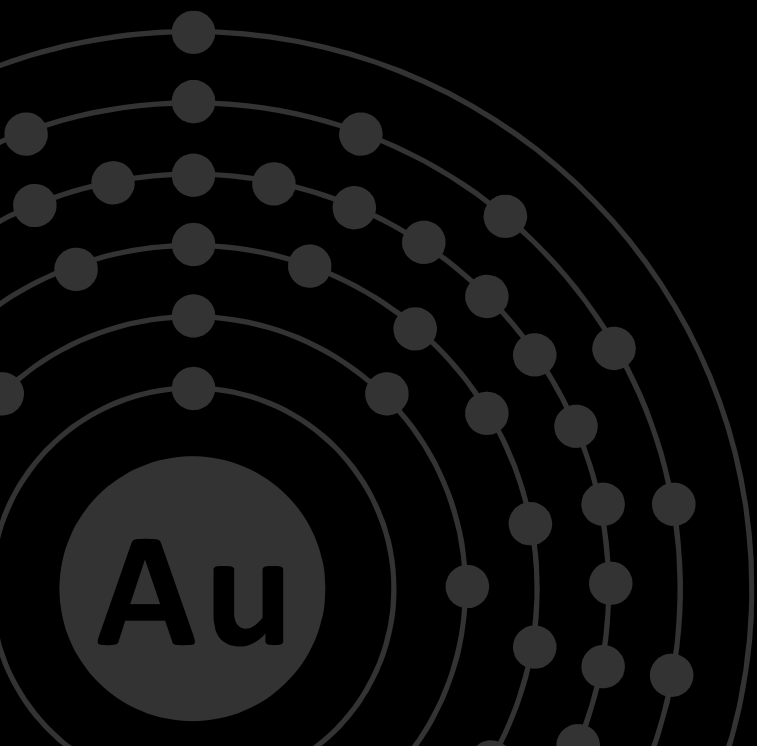


# Golpu movie

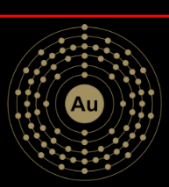


This movie is also available on the website at [www.harmony.co.za](http://www.harmony.co.za)

## Governance and overview



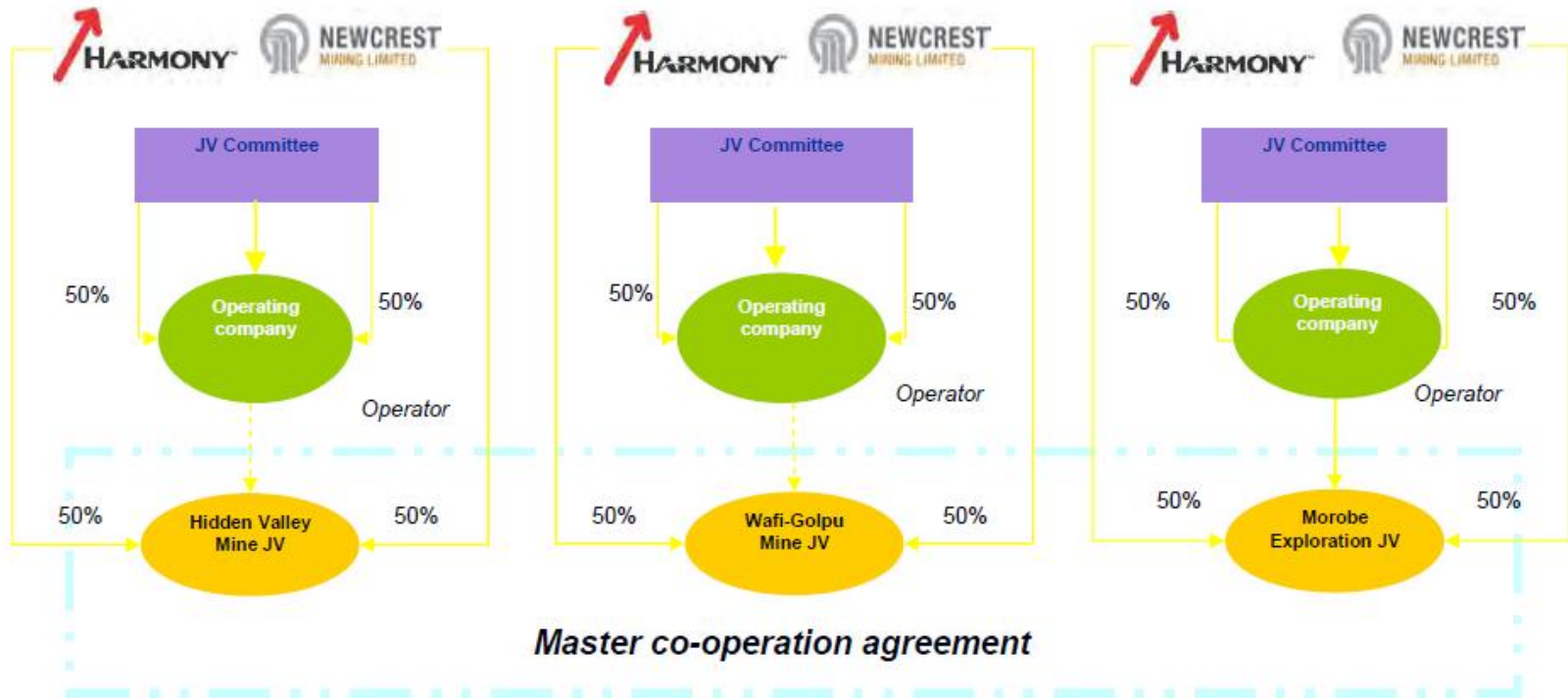
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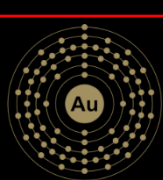


# Organisation structure for the MMJV companies

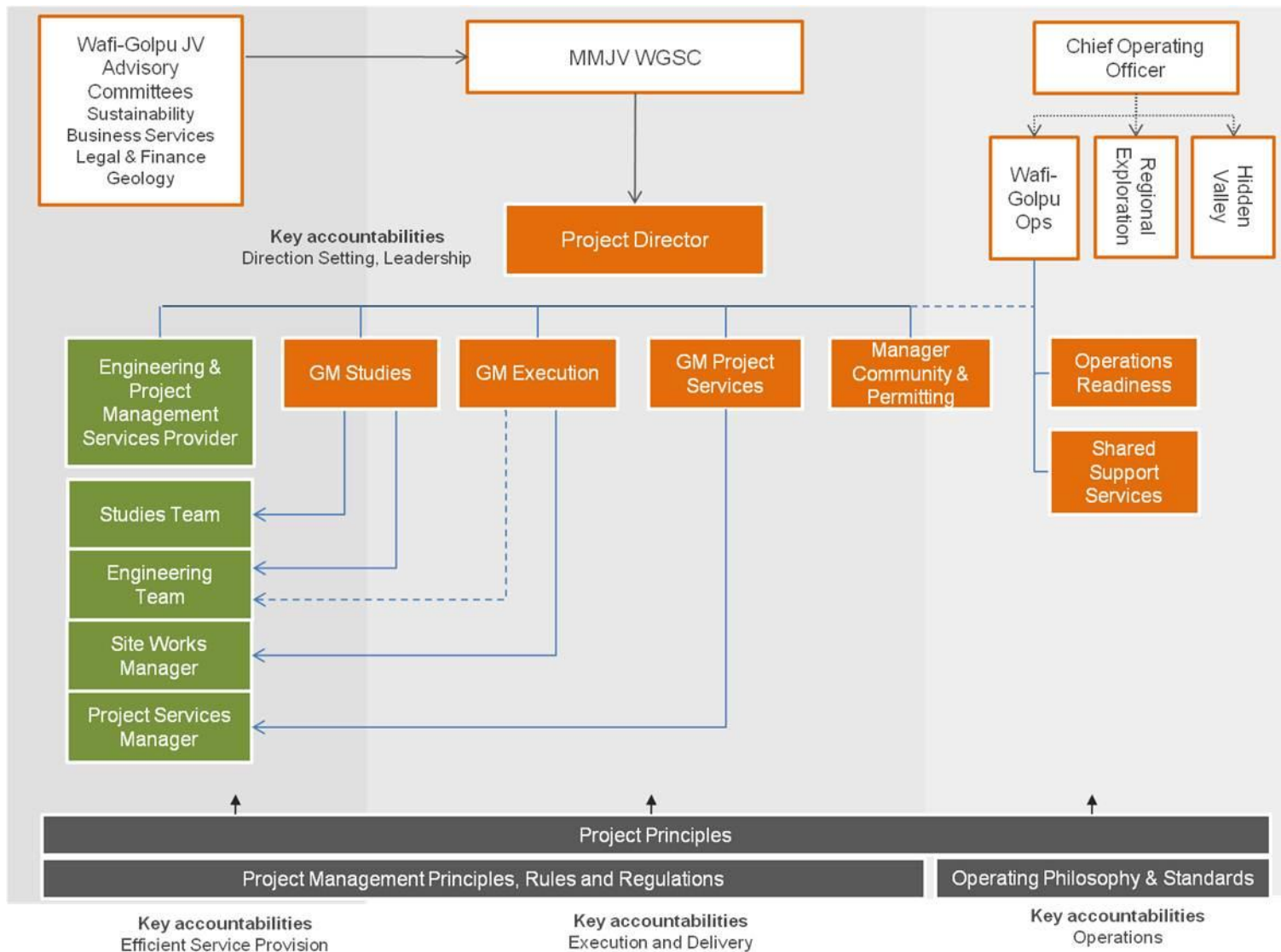


## 50:50 Joint venture between Harmony and Newcrest



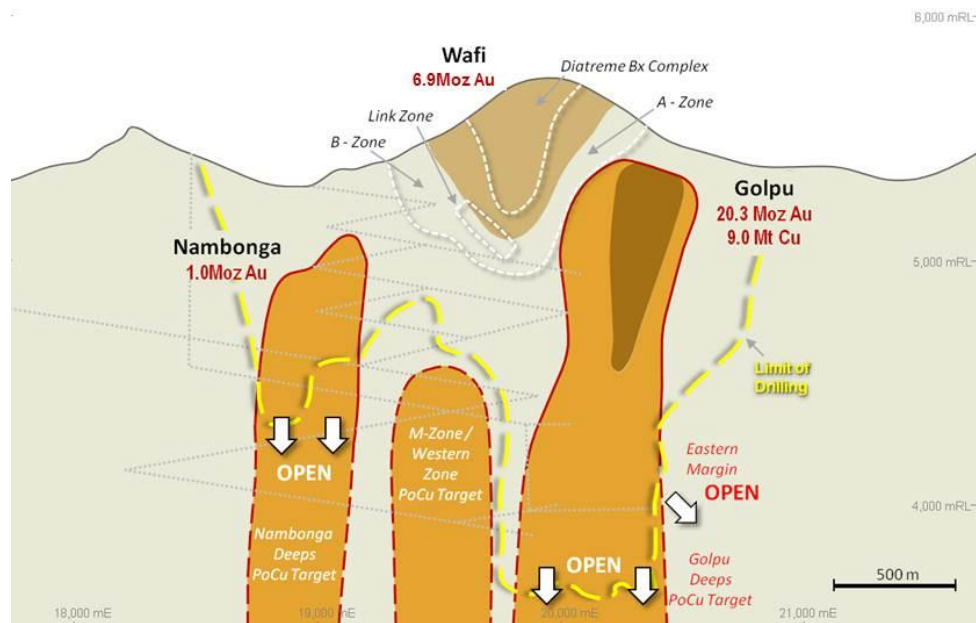


# Management



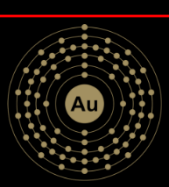


# Wafi-Golpu project – overview



- Located ~80km from regional, industrial and commercial hub, Lae
- 50:50 JV project with Harmony Gold Mining Co Ltd and Newcrest Mining Limited
- Three major deposits
  - Wafi – epithermal gold deposit
  - Golpu – copper gold porphyry deposit
  - Nambonga – copper-gold porphyry deposit
- Total Resource
- 28.5 Moz Au, 9.1 Mt Cu
  - Excellent potential for expansion at deposit, local and regional scale



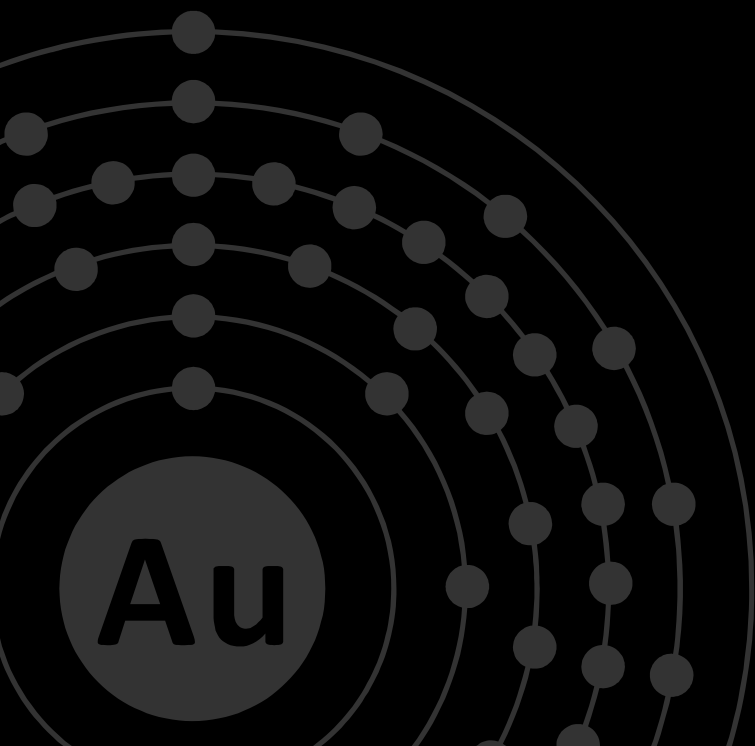


# Wafi-Golpu project – current status

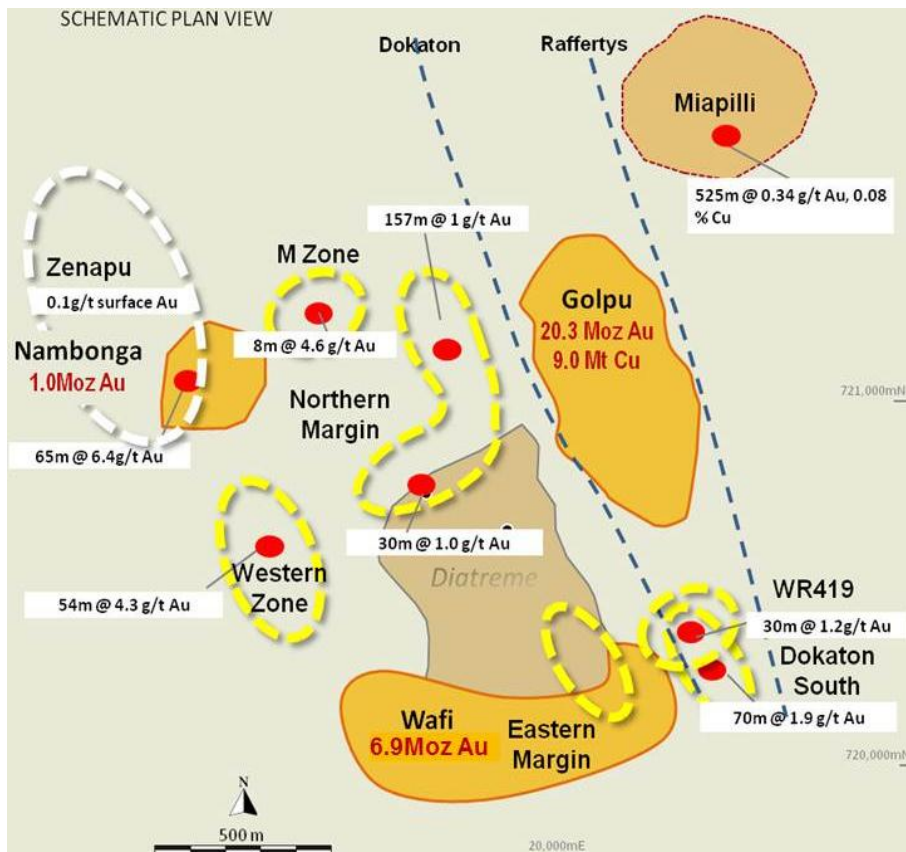


- Existing road network from Lae to Wafi-Golpu
- 300 person camp
- Exploration drilling program
- Initial construction works including road development
- Community and environmental studies and programs
- Studies – Golpu pre-feasibility study and Wafi concept study

## Wafi-Golpu geology system



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## Golpu

- 1 000Mt @ 0.63g/t Au, 0.90% Cu (20.3Moz Au, 9.0Mt Cu)

## Wafi

- 132Mt @ 1.69g/t Au (6.9Moz Au)

## Nambonga

- 40Mt @ 0.79g/t Au, 0.21% Cu (1.0 Moz Au, 0.1Mt Cu)

## Total Resource

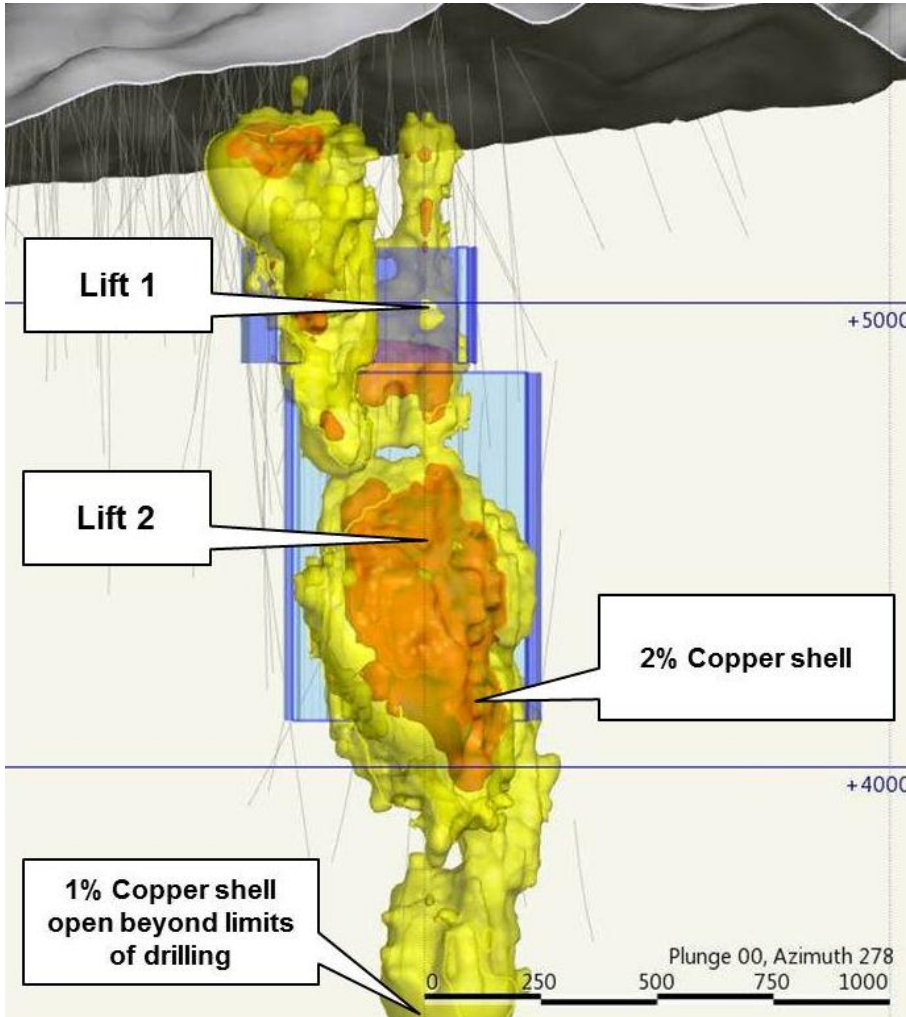
- 1 172Mt 28.3Moz Au, 9.08Mt Cu

## Northern Gold Zone

- New gold zone (+200m strike) confirmed west of Golpu
- WR426 157m @ 1.0g/t Au



# Wafi-Golpu is highly prospective – deposit scale upside

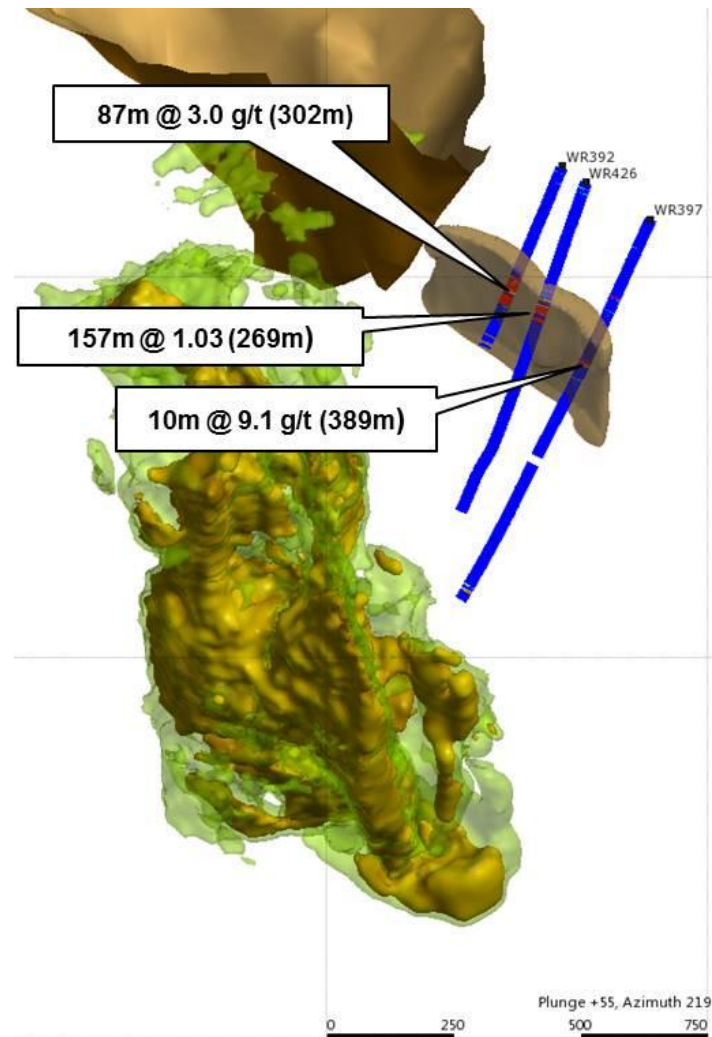
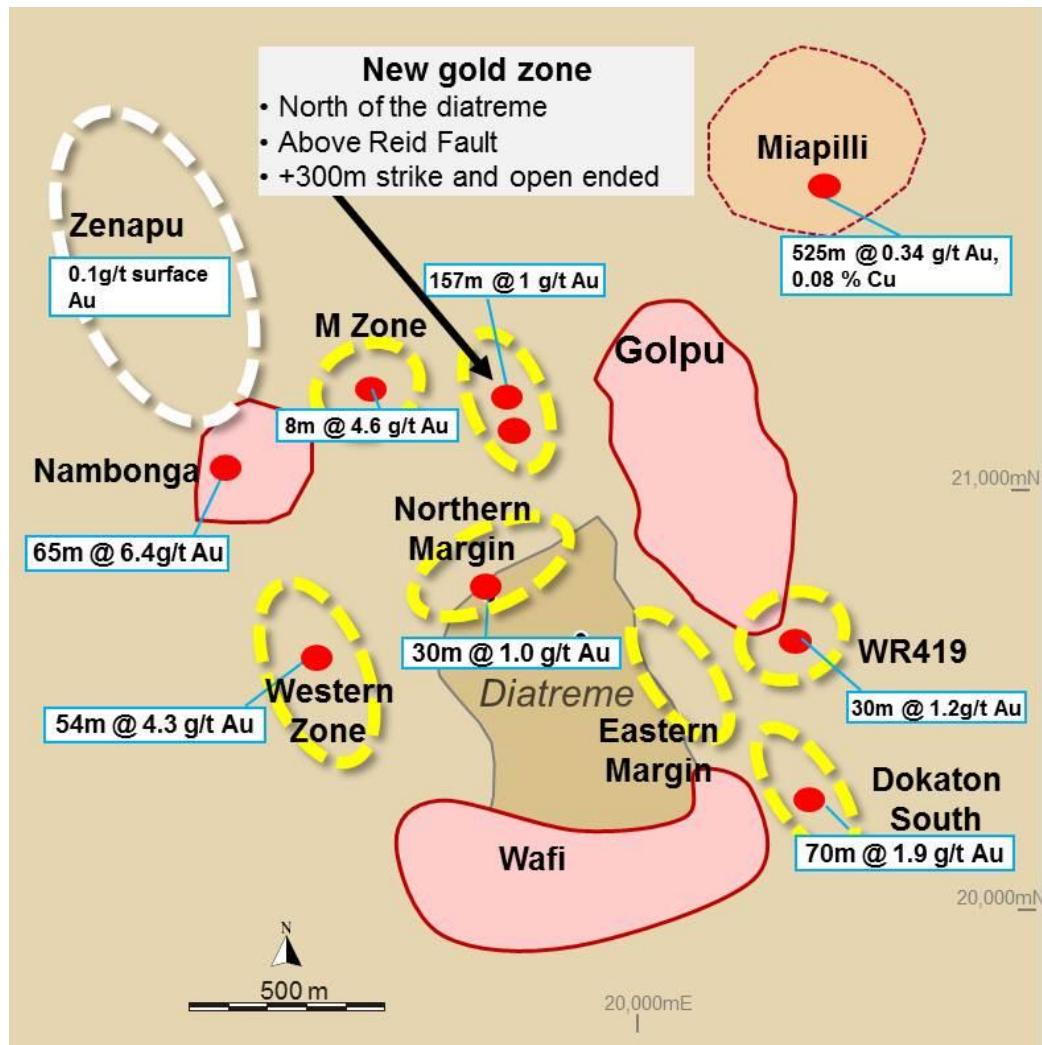


- Current drilling suggests upside for Lift 1
  - High grade mineralised porphyries more extensive than previously thought (implying more contained metal)
  - Strike opened to north with latest drill intercepts
    - WR433 – 190m@ 1.15g/t Au, 2.57%Cu
    - WR434 – 702m@ 0.82g/tAu, 1.69% Cu
- Lift 2 upside
  - Open to the east (data constrained)
  - Additional porphyries
- Potential Lift 3
  - Significant resource remains for conversion to reserves
  - Requires underground drilling



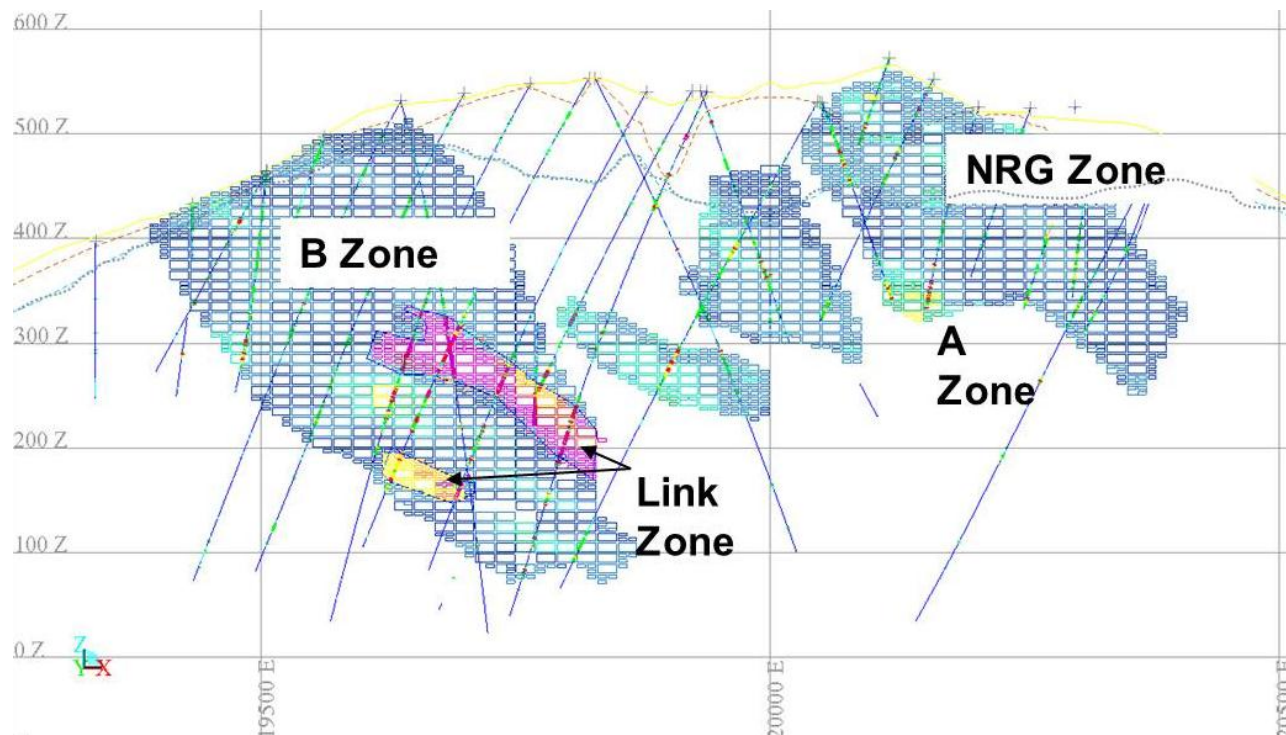


# Wafi-Golpu is highly prospective – system scale upside





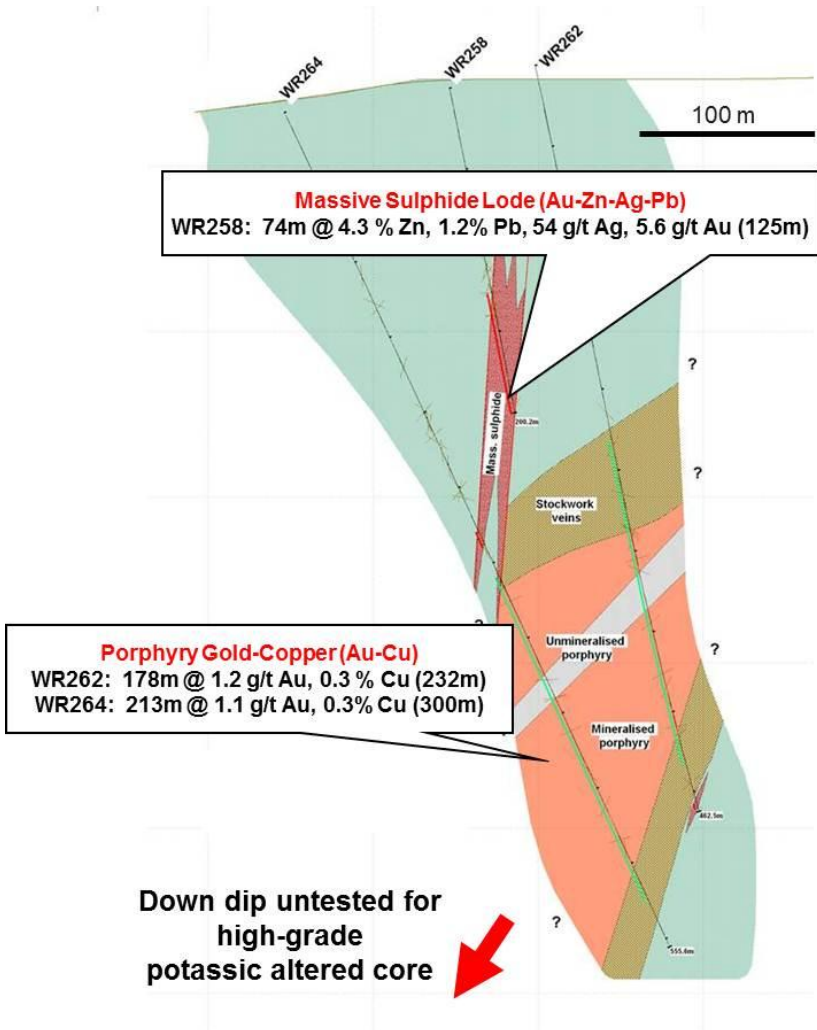
# Wafi is also highly prospective



- Concept Study underway to evaluate the potential for Wafi
- Includes open pit mining at NRG Zone (Non-refractory gold) and underground mining at Link Zone
- Exploration for more Wafi style mineralisation

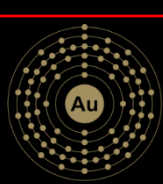


# Nambonga porphyry

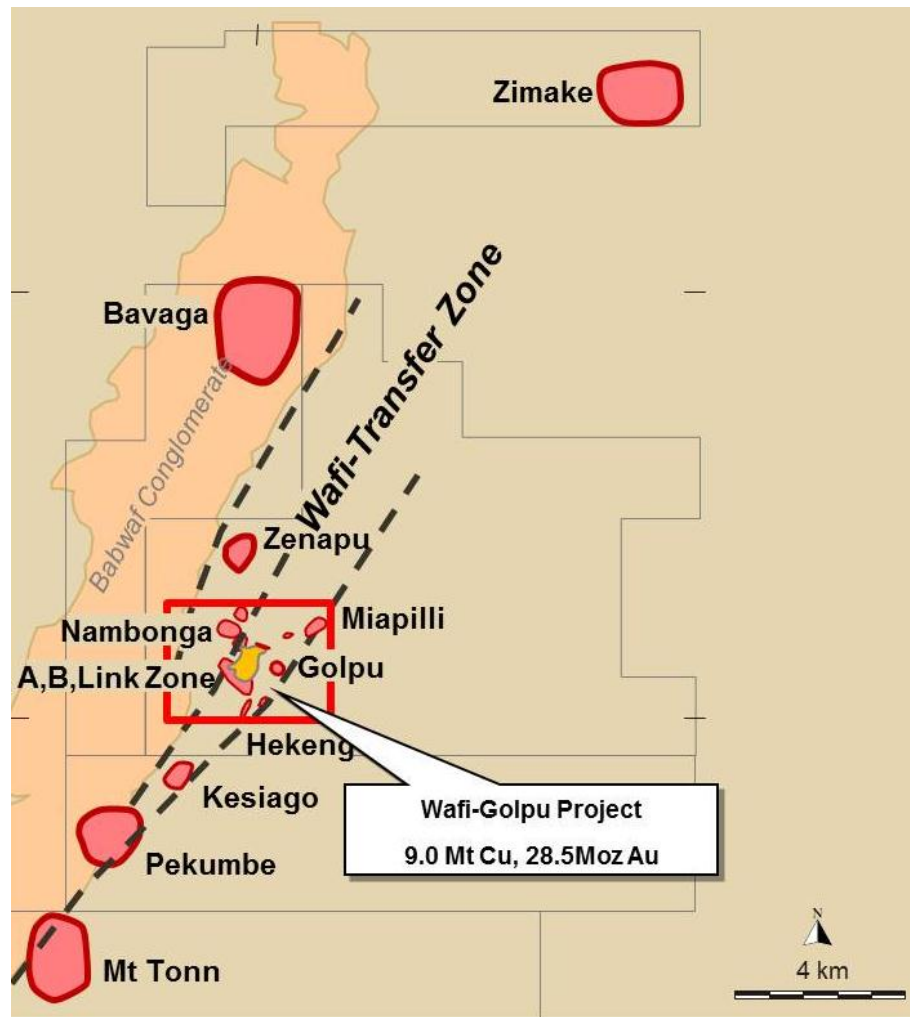


- Nambonga North resource
  - 1.0 Moz gold
  - 80 Kt copper
- Mineralisation defined over 200m of strike to date
- Open to north and at depth
- Vein stockwork with sericite alteration





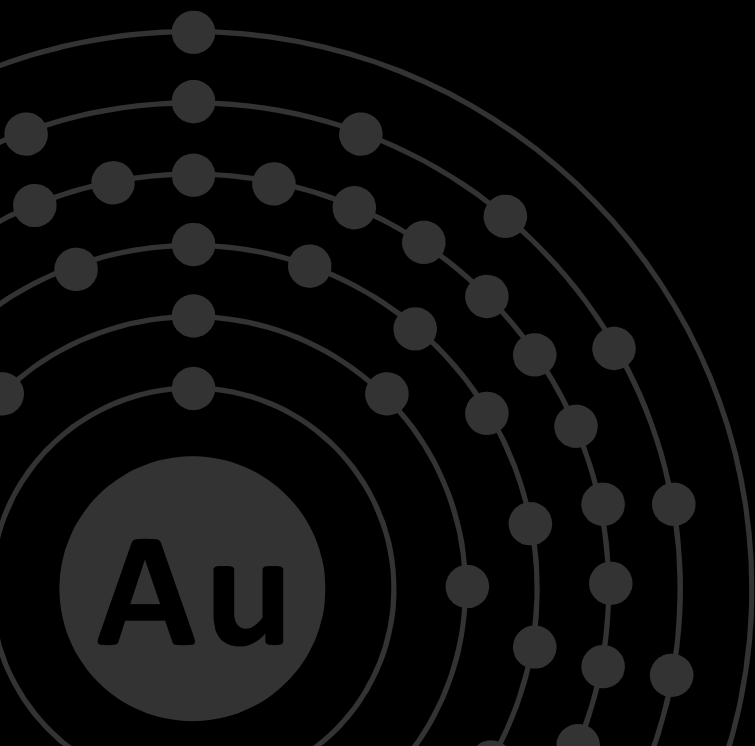
# Wafi- transfer zone is highly prospective



- Characteristically, major porphyry copper-gold deposits occur in groups as clusters or as an alignment of several deposits along structural trend
- Wafi transfer is a major northeast trending crustal structure
- Numerous high tenor, cohesive gold surface geochemical anomalies with underlying magnetic intrusives
- + 25km trend
- Under-explored with drilling having been focused at Wafi-Golpu



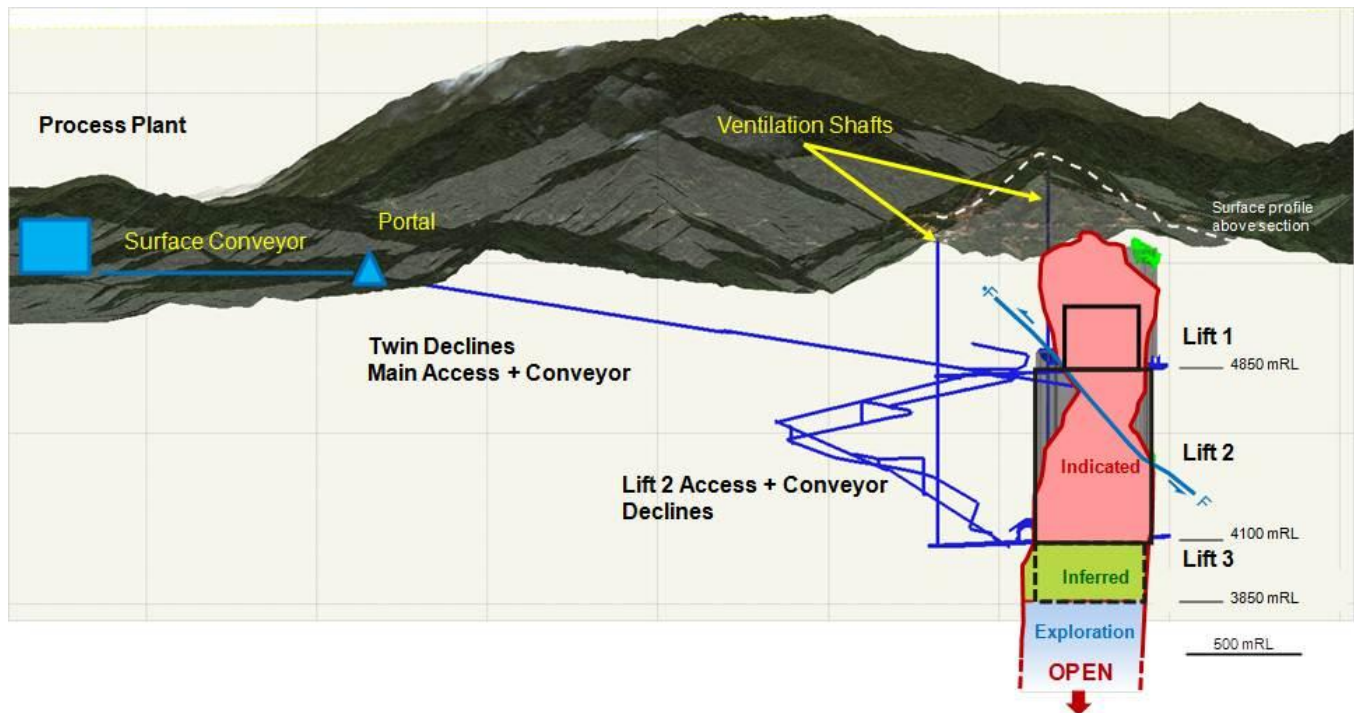
## Golpu pre-feasibility



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# Golpu mining approach

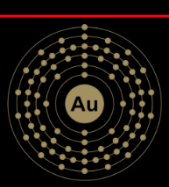


- Two block cave lifts: sequential mining of lifts
- Rock mass preconditioning by hydraulic fracturing and conditioning techniques
- Mine development plan further optimised in Feasibility Study
- Remains open at depth; good potential for Lift 3

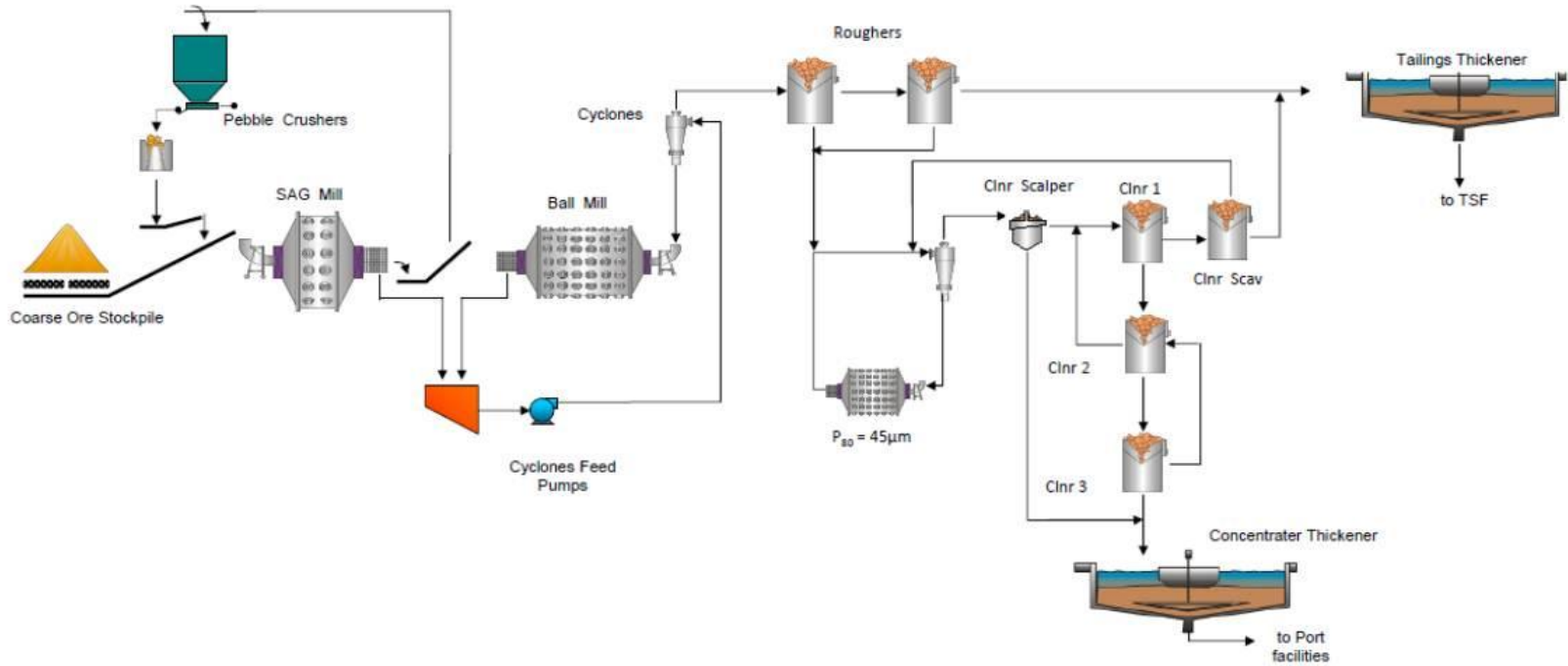


- Plant will be designed in modular stages to match mining ramp-up profile
- Initial capacity of 15Mtpa, upgrade to 22Mtpa and scope for expansion to +25Mtpa throughput
- Flow sheet comprises primary crushing underground then a SAG and ball mill grinding circuit to achieve target tonnage and grind size
- Life of mine recoveries: gold 61% and copper 93%
- Opportunity to enhance gold recovery – focus of feasibility study





# Processing flow sheet



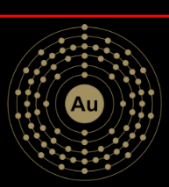
Golpu Concentrator Basic Flow Sheet



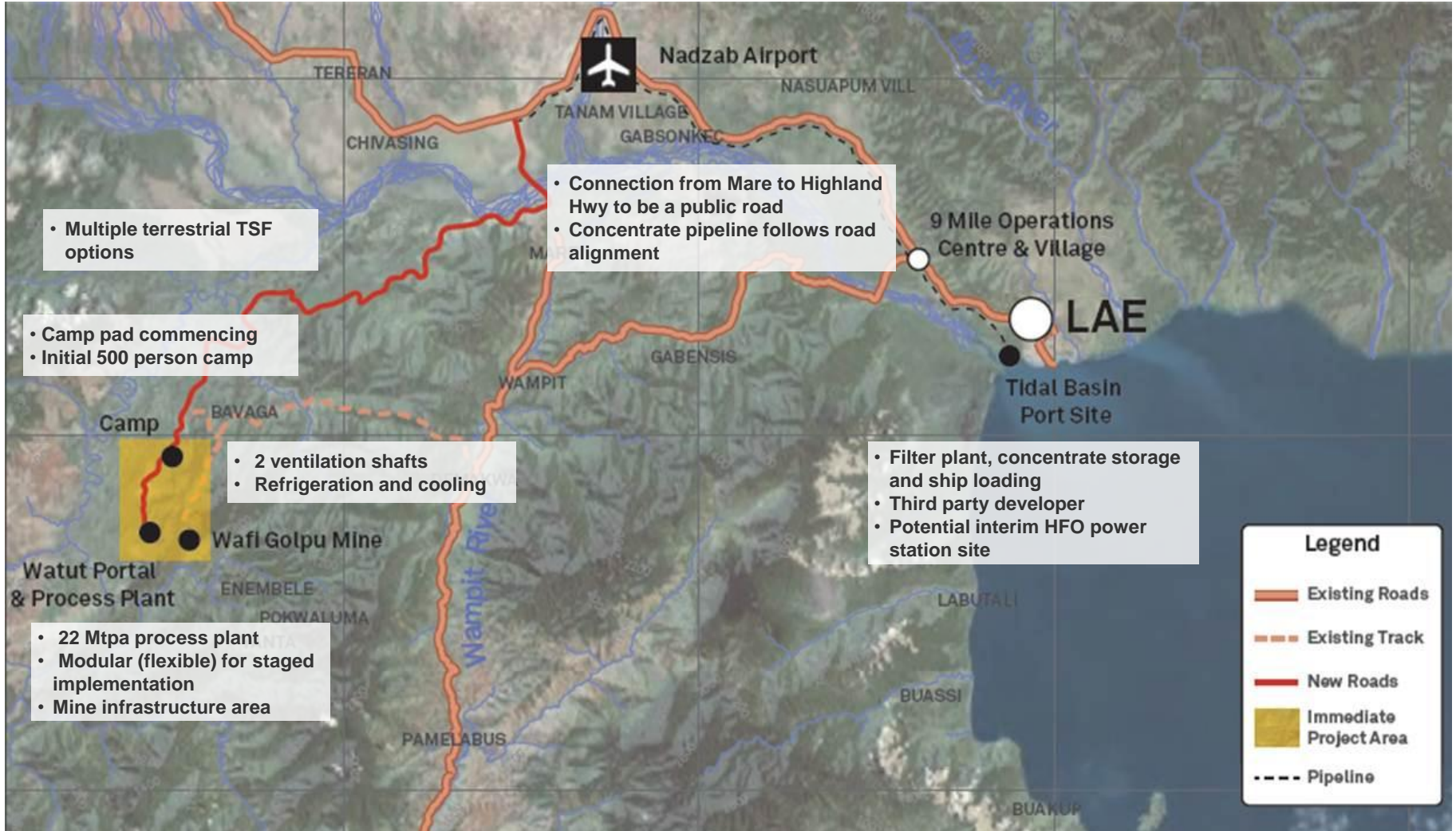
# Gold recovery



- Gold is very fine (mostly below 10 microns)
- Most commonly occurs on sulphide and/or gangue mineral boundaries
- Gold reports to floatation – currently float optimised for copper recovery
- Potential to increase gold recovery through float optimisation
- Additionally, new Lift 1 material is not affected by the advanced argillic alteration which has a detrimental impact on gold recoveries



# Golpu proposed infrastructure





# Golpu updated Ore Reserve estimate



	Potential production rate (Mtpa)	Mt	Grade		Contained metal		
			Au g/t	Cu%	Au Moz	Cu Mt	
<b>2007 Pre-feasibility study</b>							
2 lifts	9	70	0.61	1.10	1.3	0.8	
<b>2012 Pre-feasibility study</b>							
Lift 1	15	82	0.65	1.19	1.7	0.9	
Lift 2	22	368	0.90	1.21	10.7	4.5	
<b>Total</b>		<b>450</b>	<b>0.86</b>	<b>1.21</b>	<b>12.4</b>	<b>5.4</b>	

Figures quoted on 100% basis



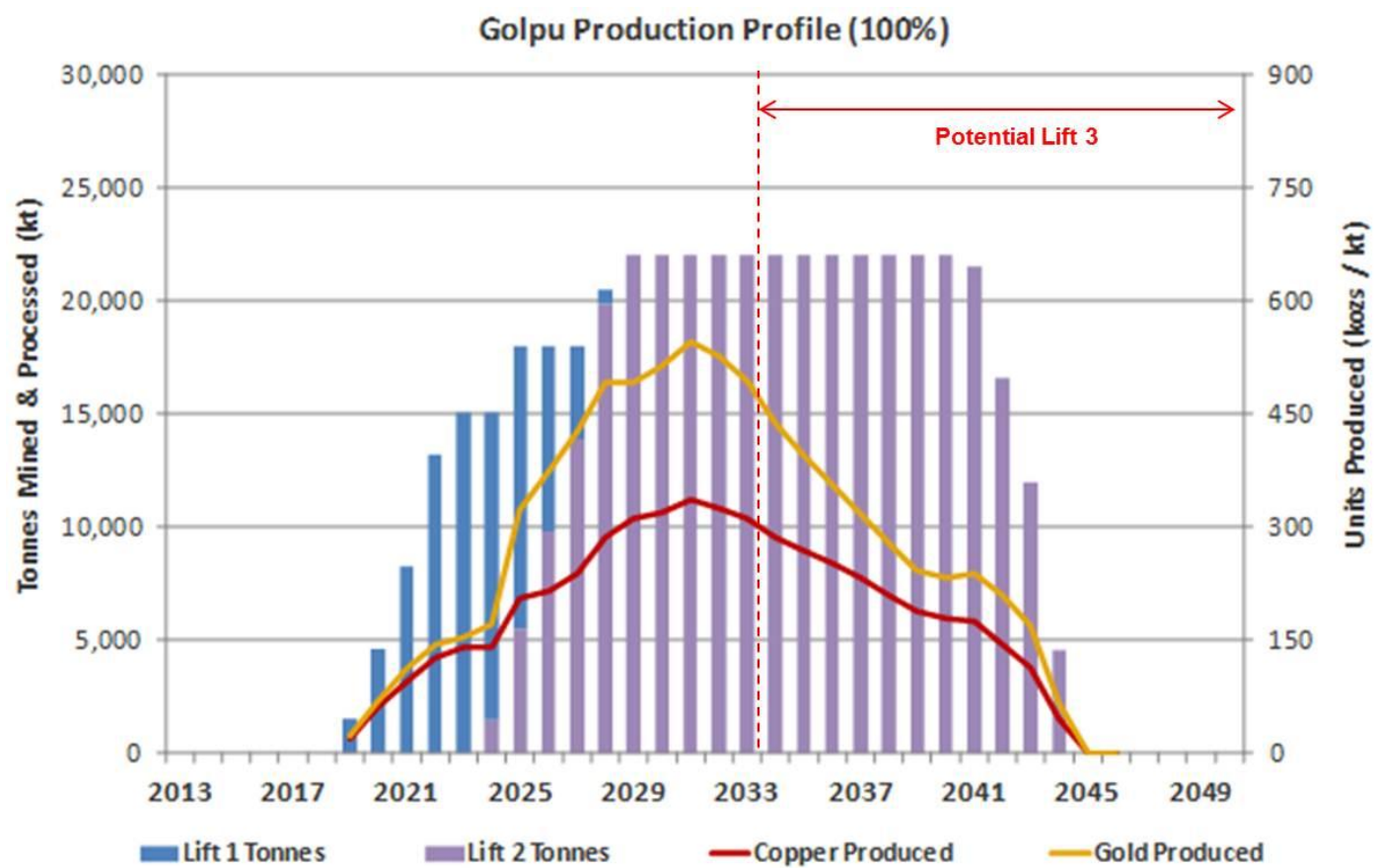


<b>Pre-feasibility 22Mtpa capacity</b>	<b>Units</b>	<b>Result</b>
Production life	Years	26
Peak Au production	koz pa	560
Peak Cu production	kt pa	335
Annual Au production	koz pa	490
Annual Cu production	kt pa	290
Gold cash cost	US\$/oz	Negative 2 600
Copper cash cost	US\$/lb	0.54
Total initial capital	US\$ m	4 845
Total capital	US\$ m	9 747





# Production profile: PFS base case, 22 Mtpa





## Project-enabling capital

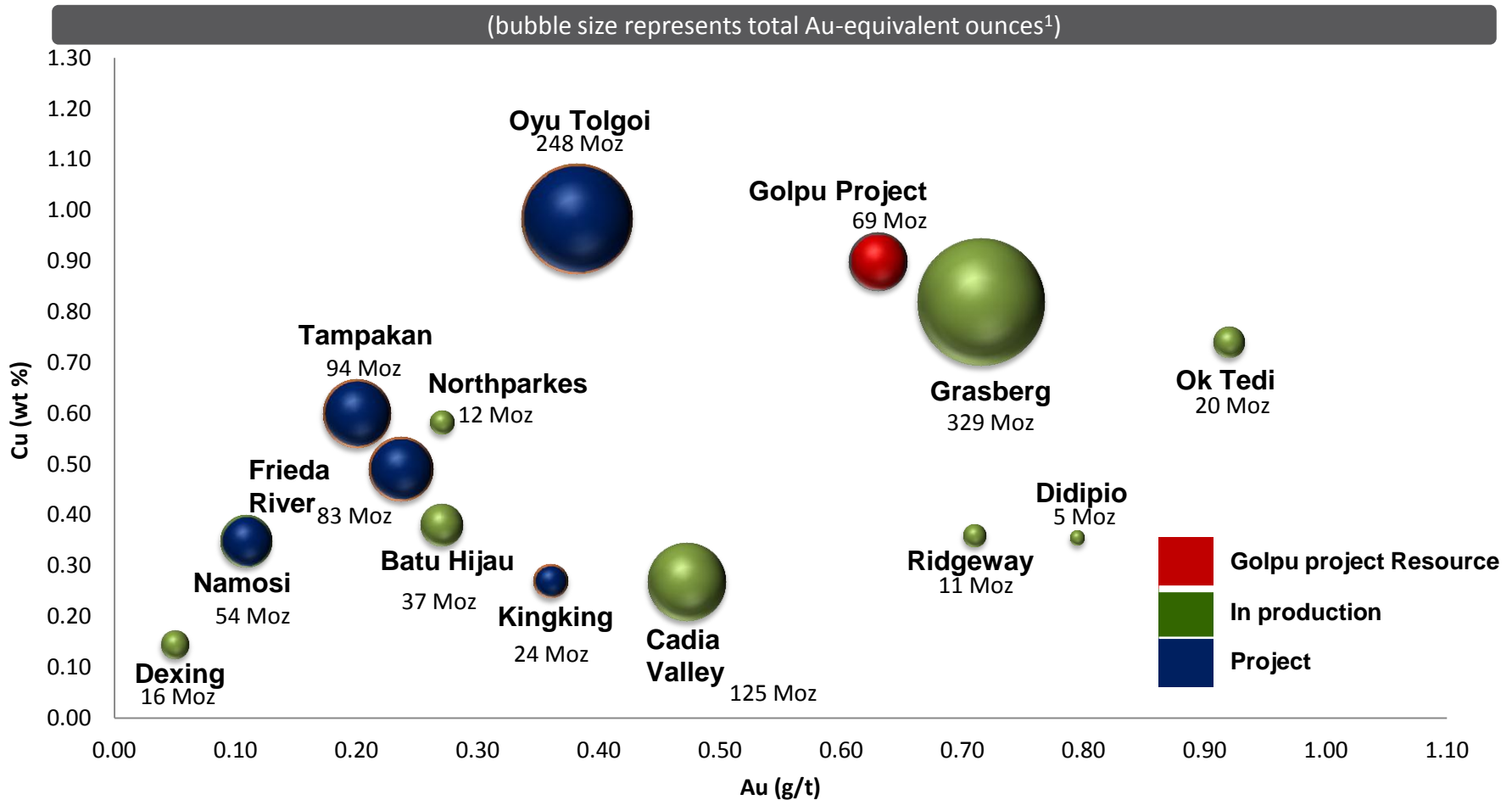
- Mining environment (scale, water and heat conditions)
- Regional infrastructure
  - Roads and bridges
  - Power and transmission
  - Port facilities
- Support facilities
  - IT infrastructure
  - Camp facilities for 7 year early works and construction effort
  - Permanent camp and office facilities
- Feasibility study and drilling costs (US\$0.4bn)
- Based on current market conditions

## Capex opportunities

- Golpu has flexible timeline to optimise capital spend
- Sourcing and execution strategy will be reviewed
- Shift in global conditions
  - Falling commodity prices
  - Improved resource availability
    - completion of current major projects
    - growth of new project slows
- Capital spent now will be utilised for any further growth



## Porphyry Copper - Gold Deposits - SE Asia



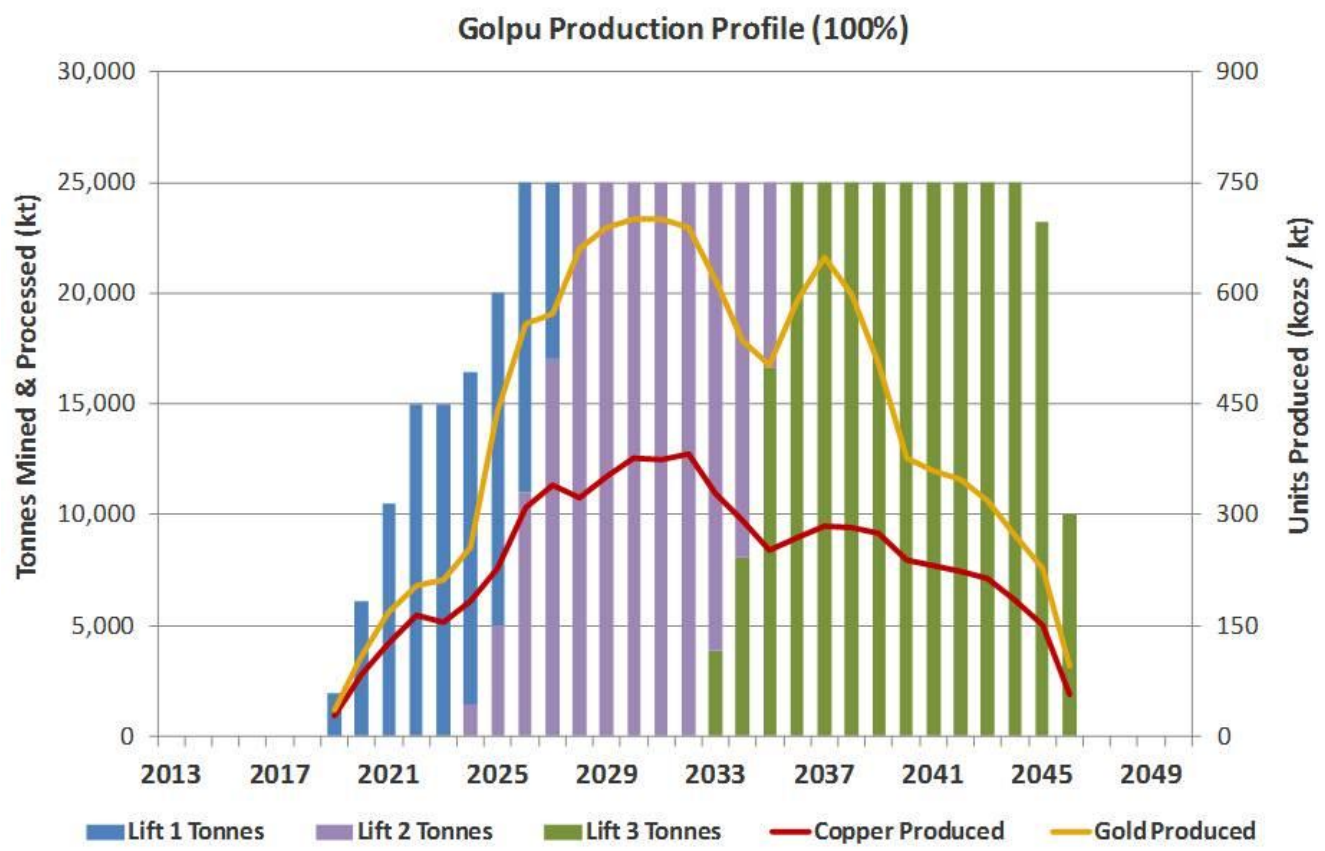
Sourced from Company Reports and Wood Mackenzie Database (accessed 28/06/2012)  
1. Gold equivalent based on US\$ 1250/oz Au, USD 3.10/lb Cu on an in-situ basis

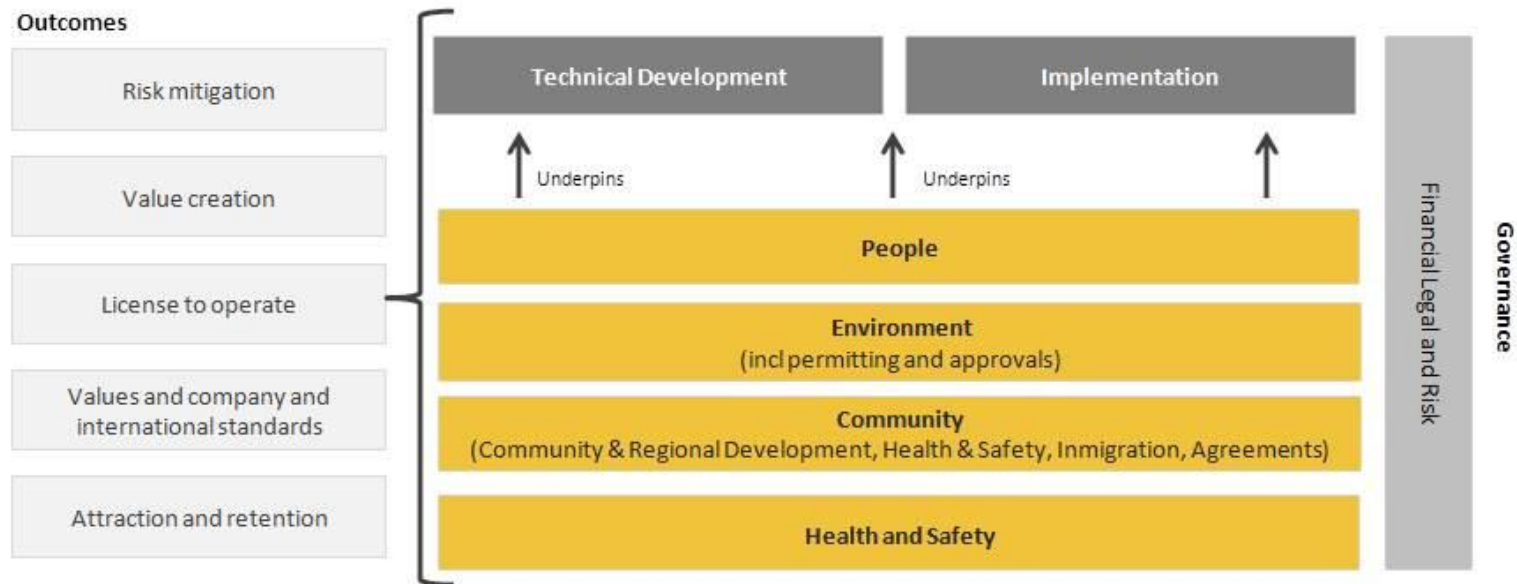


- Higher grade and recovery in Lift 1
  - recently 3 holes in upper section of Golpu deposit returned high grade intercepts
- Optimise metallurgical recovery for gold
  - during the feasibility study the metallurgical studies will test an increase in gold recovery
- Ramp up and production rate
  - feasibility study will test impact of accelerating ramp up in production and sustaining a 25Mt per annum mining and processing rate
- Mining Lift 3
  - holes drilled at depth beneath Lift 2 have returned high grade drill intercepts – a study will assess a third mining lift



# Production profile – enhanced production case





- Mostly PNG workforce
- Opportunities for local businesses
- Environmental approach meets international standards
- Investment in community health and education
- Focus on health, safety and welfare of employees and communities
- Implement water management strategy
- Investment in training programs and facilities

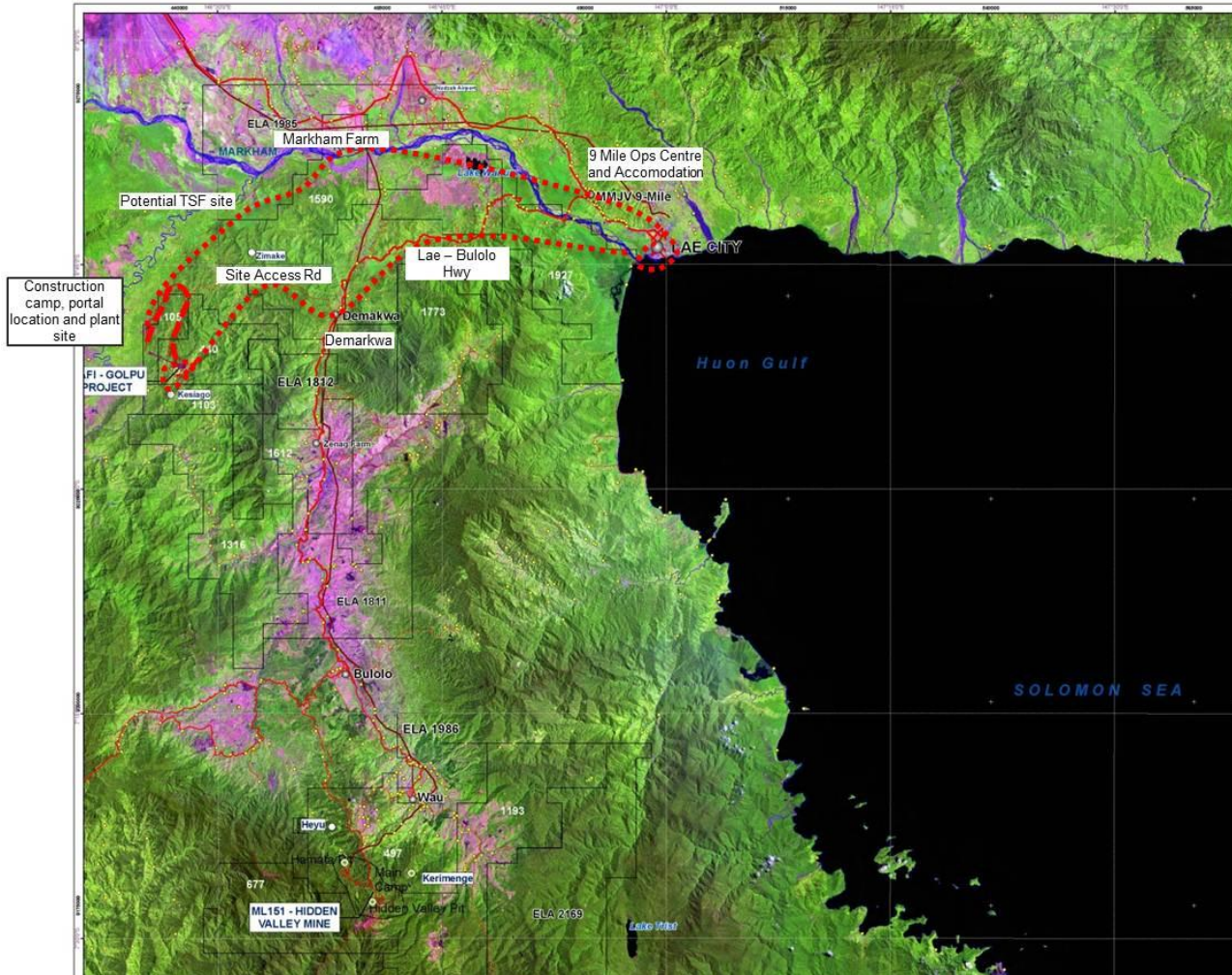


## Next steps



- Engagement with Government, landowner communities and other stakeholders
- Exploration and drilling at Wafi-Golpu to continue
- Continue community and environmental programs
- Start Feasibility first half 2013, pending consultation outcomes and approval by JV Boards





### Chopper to Wafi, via

- Lae Bulolo Hwy
- Demarkwa
- Access Rd

### Site tour

- Orientation
- Drillcore
- Drill site
- Access rd
- Watut flat
- Camp location

### Lunch

### Chopper to Lae, via

- Camp
- Process plant site
- Portal and decline route
- Potential TSF site
- Markham farm
- 9 Mile ops centre and accommodation
- Lae Port facilities



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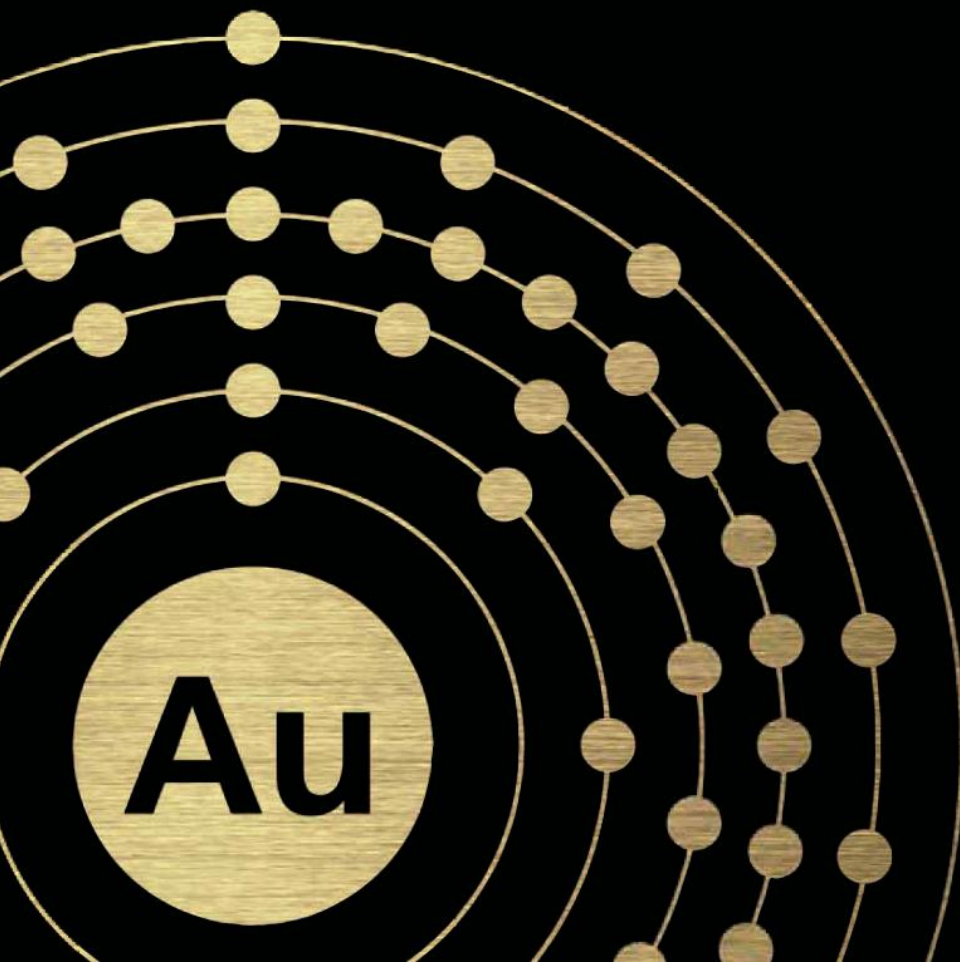
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