



# HARMONY™

## Wafi-Golpu

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Chief Executive Officer

Media Briefing

20 April 2011

Journey to growth



[www.harmony.co.za](http://www.harmony.co.za)





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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 harbor created by such sections. 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; (vii) estimates of reserves, and statements regarding future exploration results and the replacement of reserves; and (viii) statements regarding modifications to the Company's hedge position. 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, as well as political 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, see the Company's latest Annual Report on Form 20-F for the year ended June 30, 2010, 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.

**1**

## Understanding Cu-Au porphyries

- Background on arc related gold and copper-gold deposits similar to Wafi-Golpu

**2**

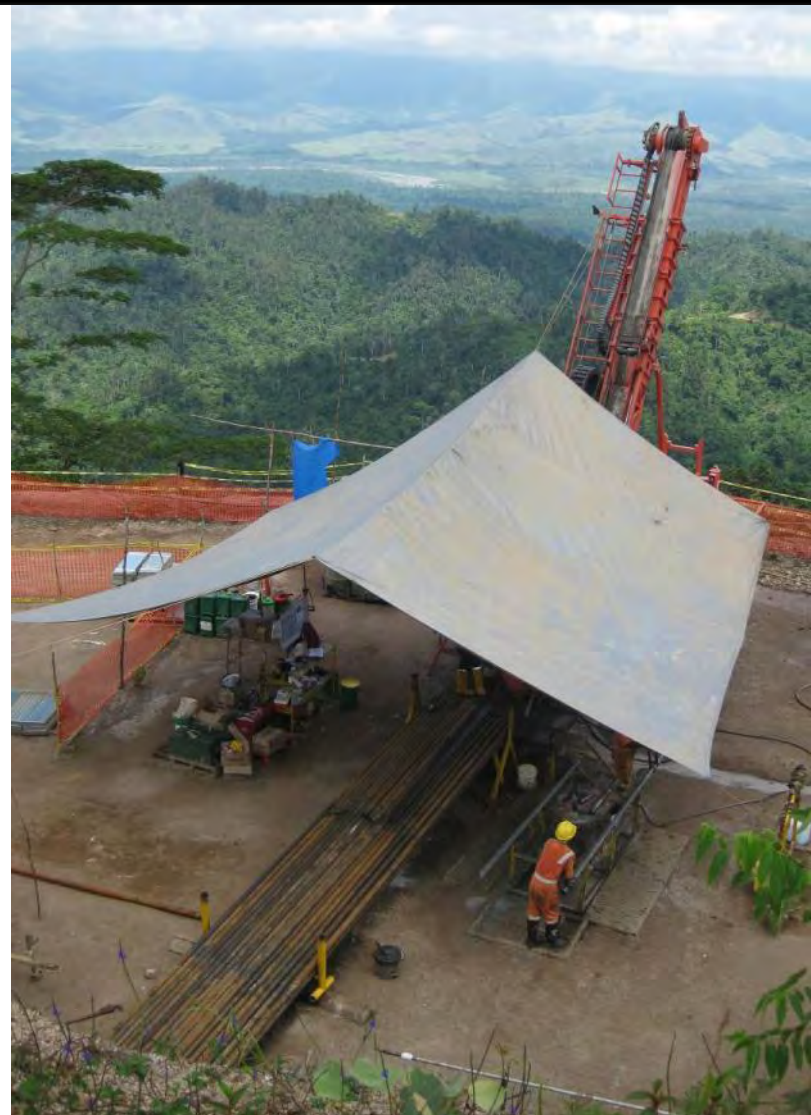
## Understanding Wafi-Golpu

- Creating the future

**3**

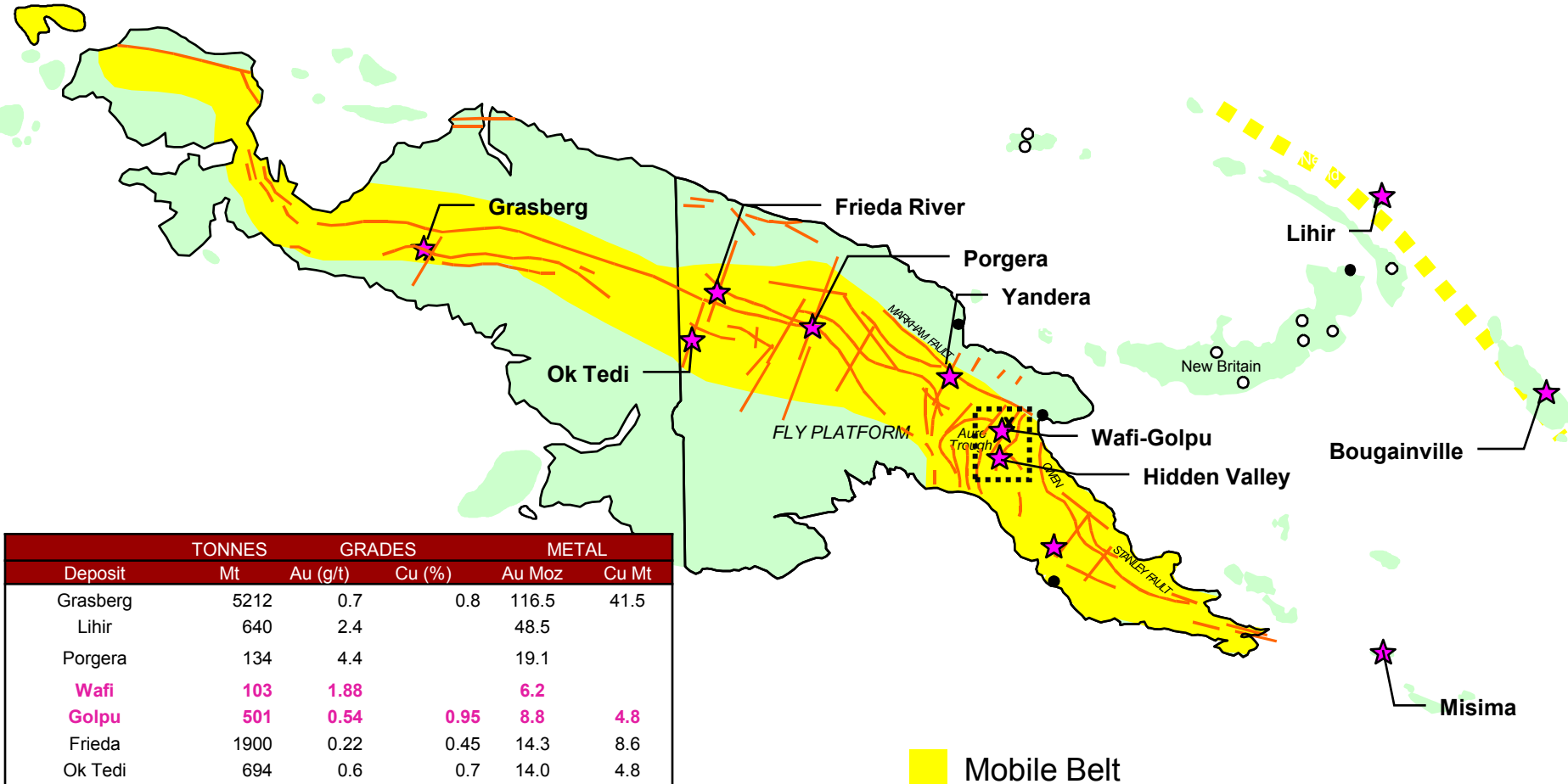
## More PNG excitement to come

- Exploration outside of the JV





# The New Guinea Mobile Belt

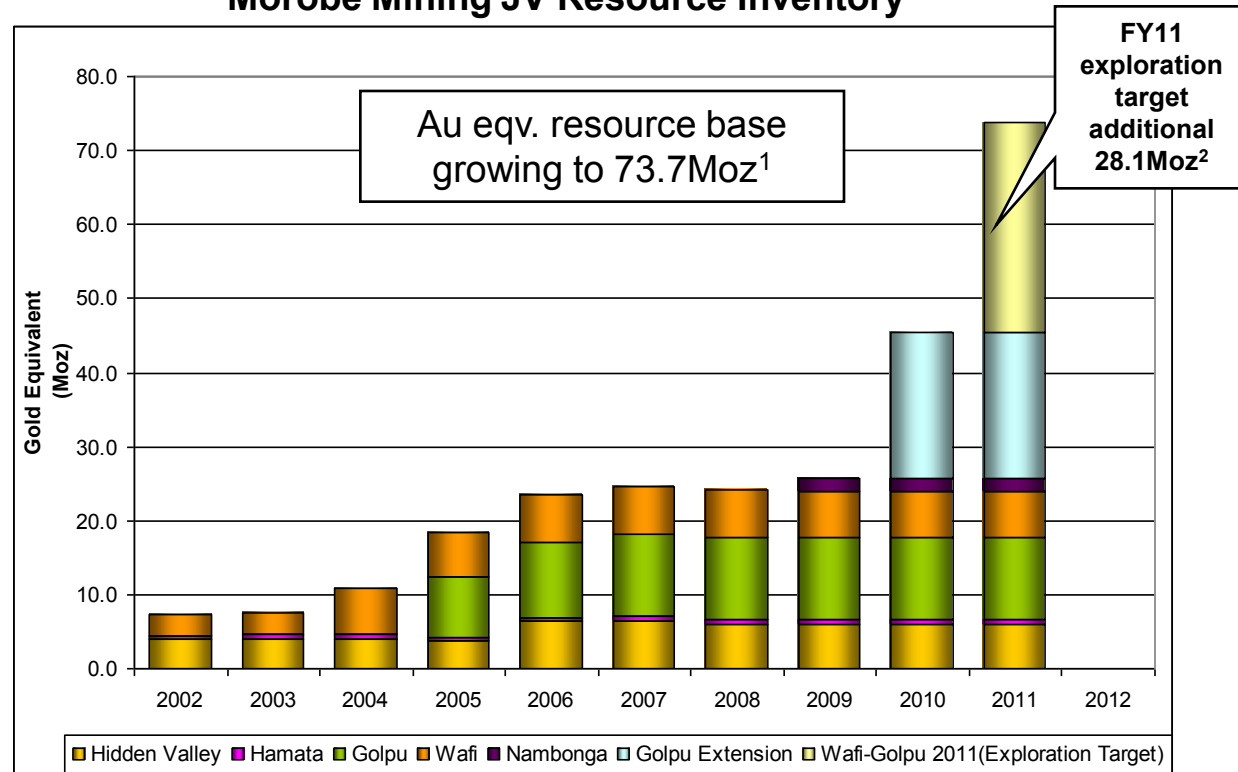


Deposit	TONNES		GRADES		METAL	
	Mt	Au (g/t)	Cu (%)	Au Moz	Cu Mt	
Grasberg	5212	0.7	0.8	116.5	41.5	
Lihir	640	2.4		48.5		
Porgera	134	4.4		19.1		
<b>Wafi</b>	<b>103</b>	<b>1.88</b>		<b>6.2</b>		
<b>Golpu</b>	<b>501</b>	<b>0.54</b>	<b>0.95</b>	<b>8.8</b>	<b>4.8</b>	
Frieda	1900	0.22	0.45	14.3	8.6	
Ok Tedi	694	0.6	0.7	14.0	4.8	
Bougainville	1064	0.4	0.3	12.7	3.5	
<b>Hidden Valley</b>	<b>103</b>	<b>1.69</b>		<b>5.6</b>		
Yandera	776	0.1	0.37	2.2	2.8	
Misima	85	1.4		3.7		

Data Source: Metals Economic Group & Company Reports. Resources only

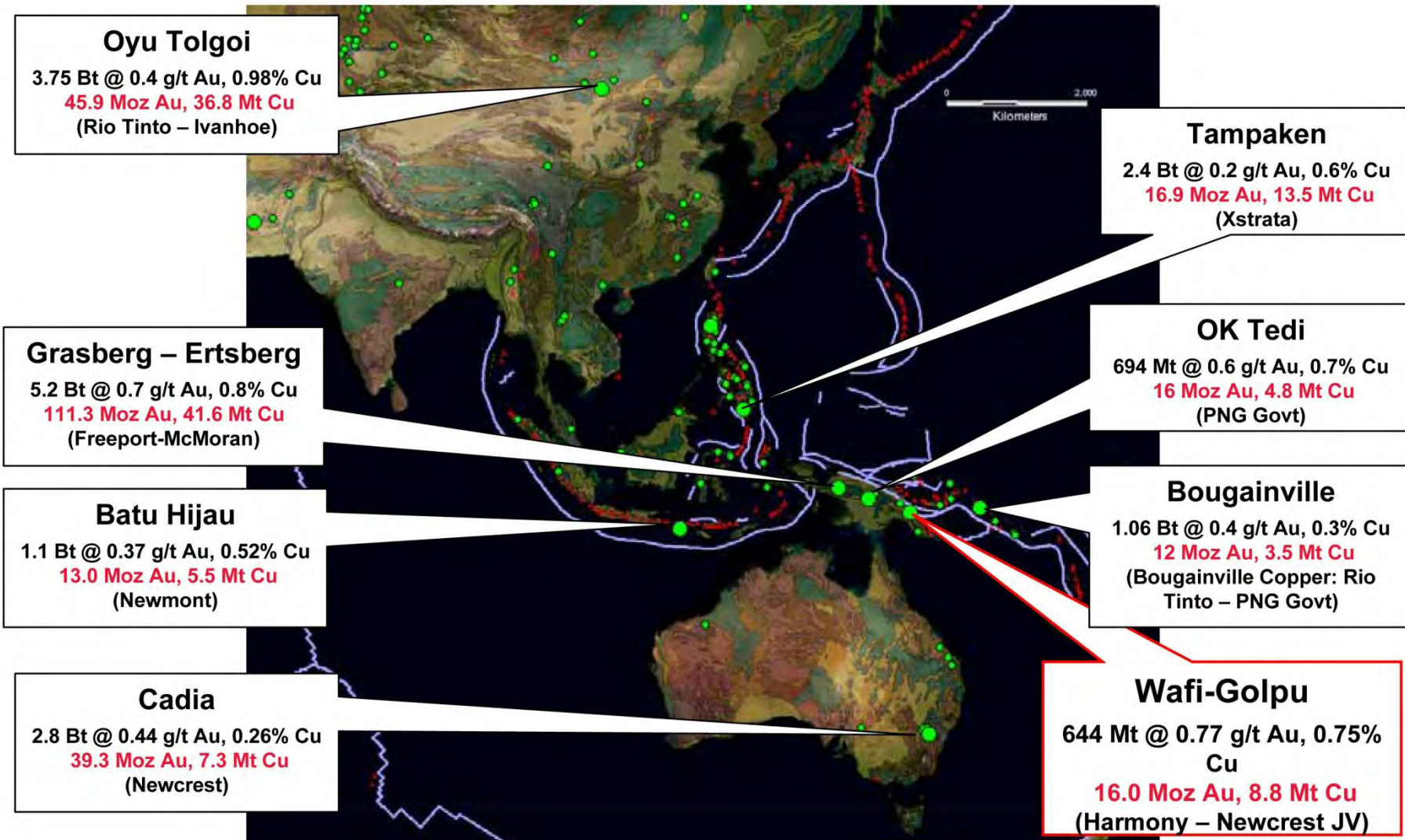
- Emerging as **world-class** mineral province – bring your elephant gun.
- Under-explored
- Exploration investment translating into resource growth
- Low cost per ounce for discovery
- Exploration target for Wafi-Golpu System<sup>2</sup>:
  - 900 to 1 400Mt
  - 30Moz gold
  - 8Mt Copper

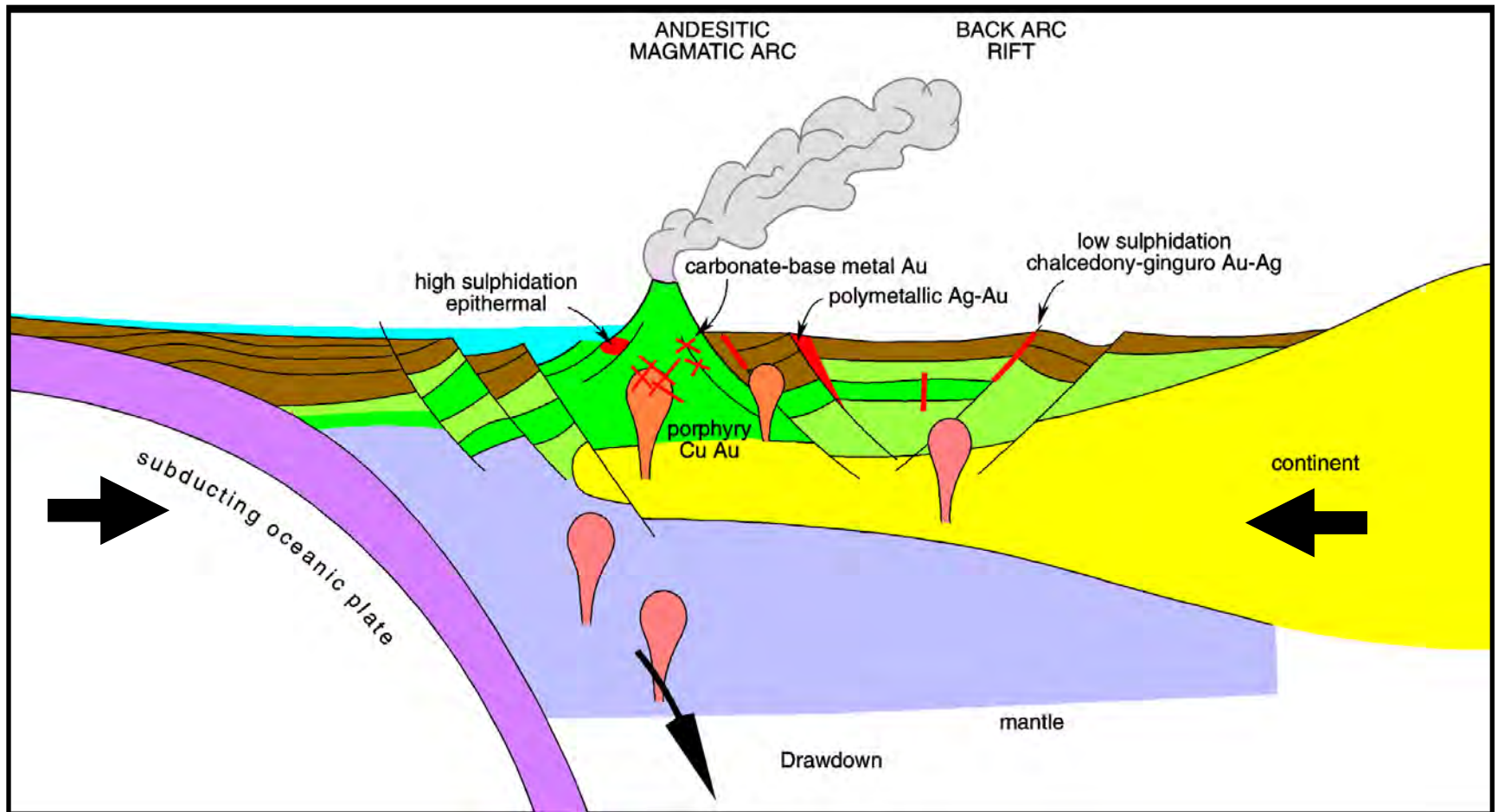
### Morobe Mining JV Resource Inventory<sup>2</sup>



<sup>1</sup>Resource figures quoted as 100% with gold equivalent based on US\$ 950 oz Au, US\$ 4,412 /t Cu at 100% recovery for both metals. Molybdenum not included in metal equivalents.

<sup>2</sup> Refer [www.harmony.co.za](http://www.harmony.co.za) for full July 2010 resource statement and target guidance.



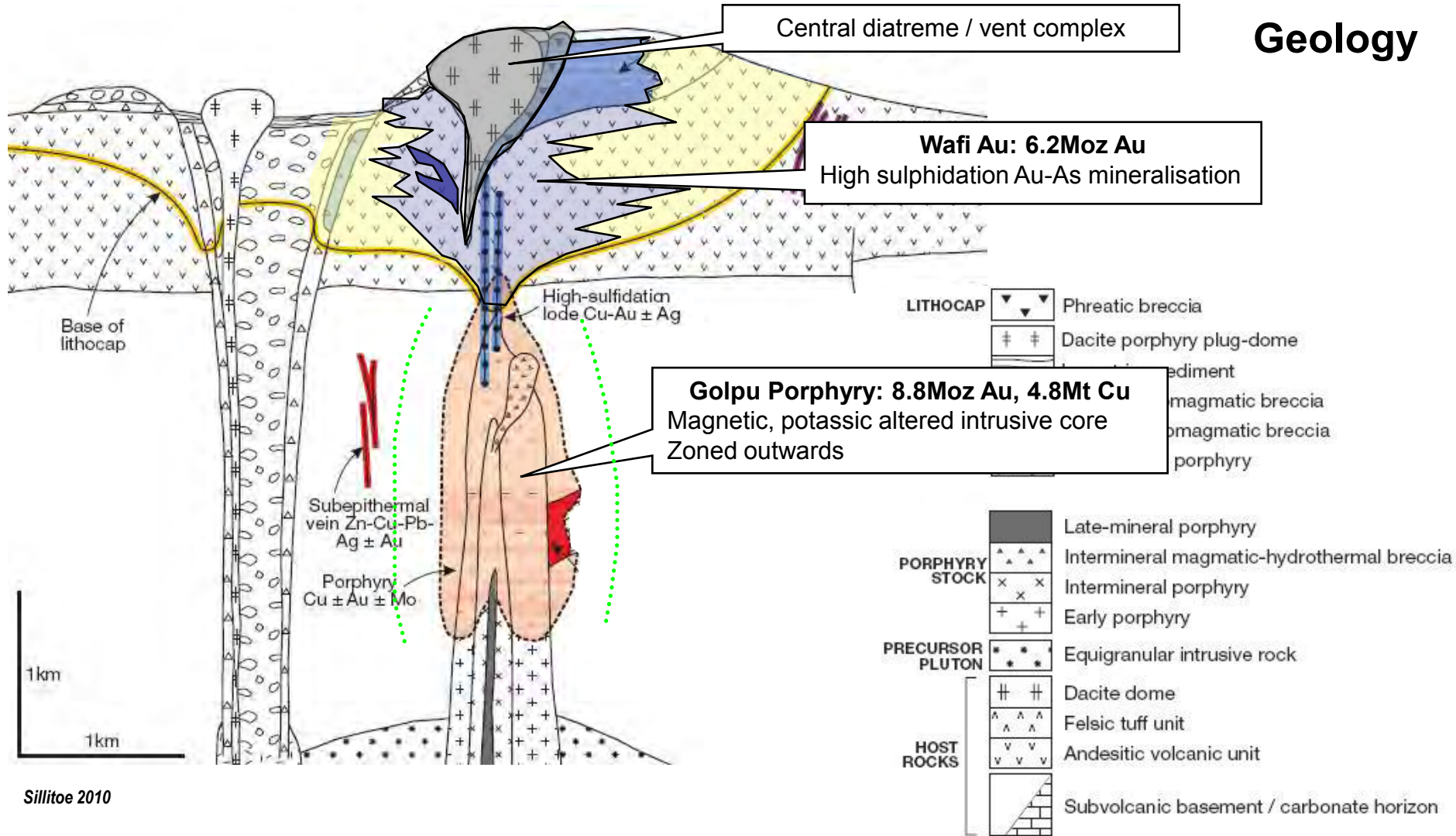


Porphyry Copper and Gold systems: developed in subduction zones at plate boundaries



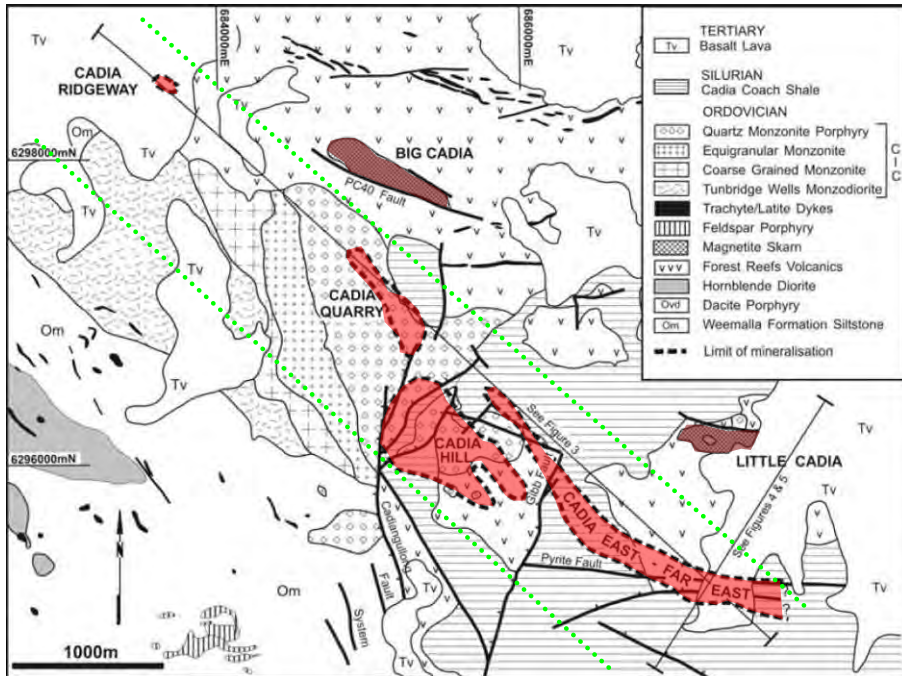
# Deposit scale characteristics using Wafi-Golpu as context

## Geology



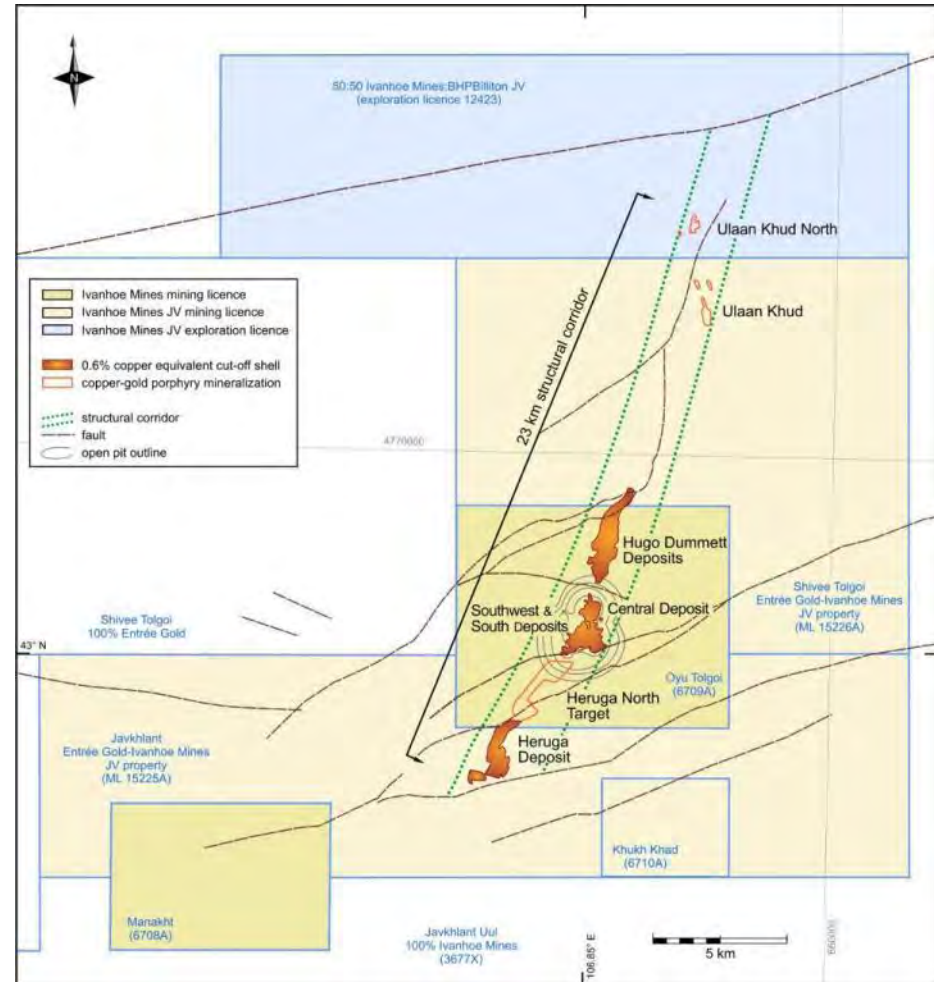
Sillitoe 2010

## Deposit Cluster Concept



### Cadia Valley Operations: 44Moz Au, 8Mt Cu

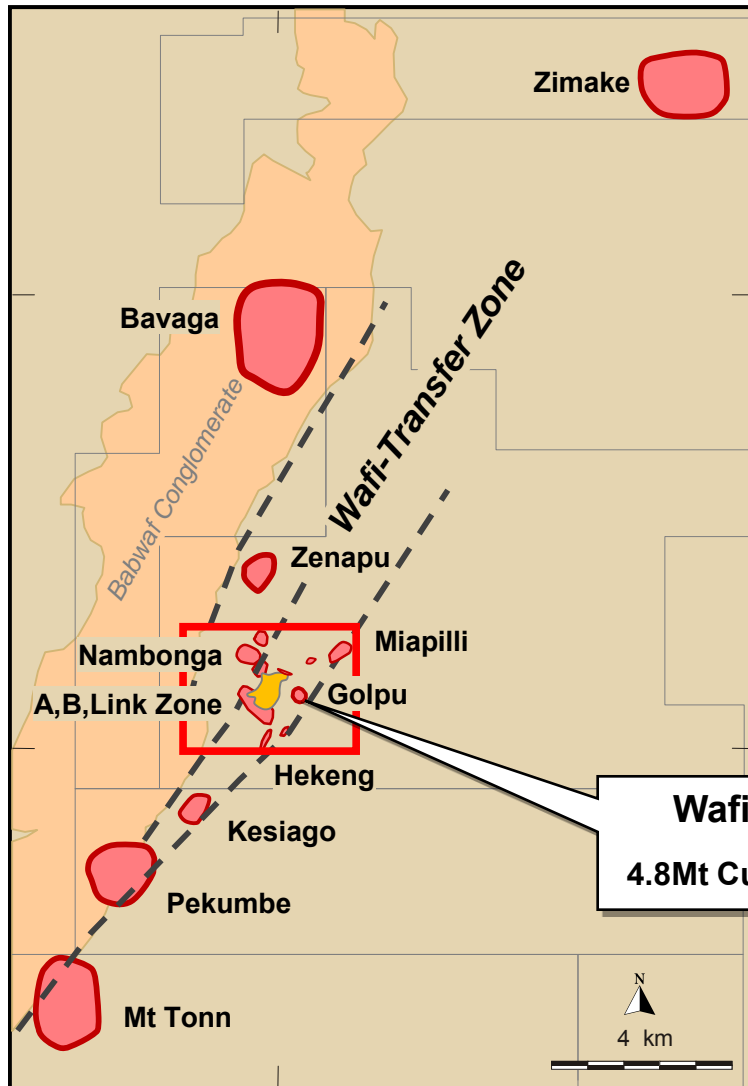
- Alignment of 4 deposits over 7 km of strike in NW trending structural corridor
- Note skarn development



### Oyu Tolgoi: 46Moz Au, 37Mt Cu

- Alignment of 4 deposits over 12 km of strike in structural corridor
- Potential for 23km of strike identified to date

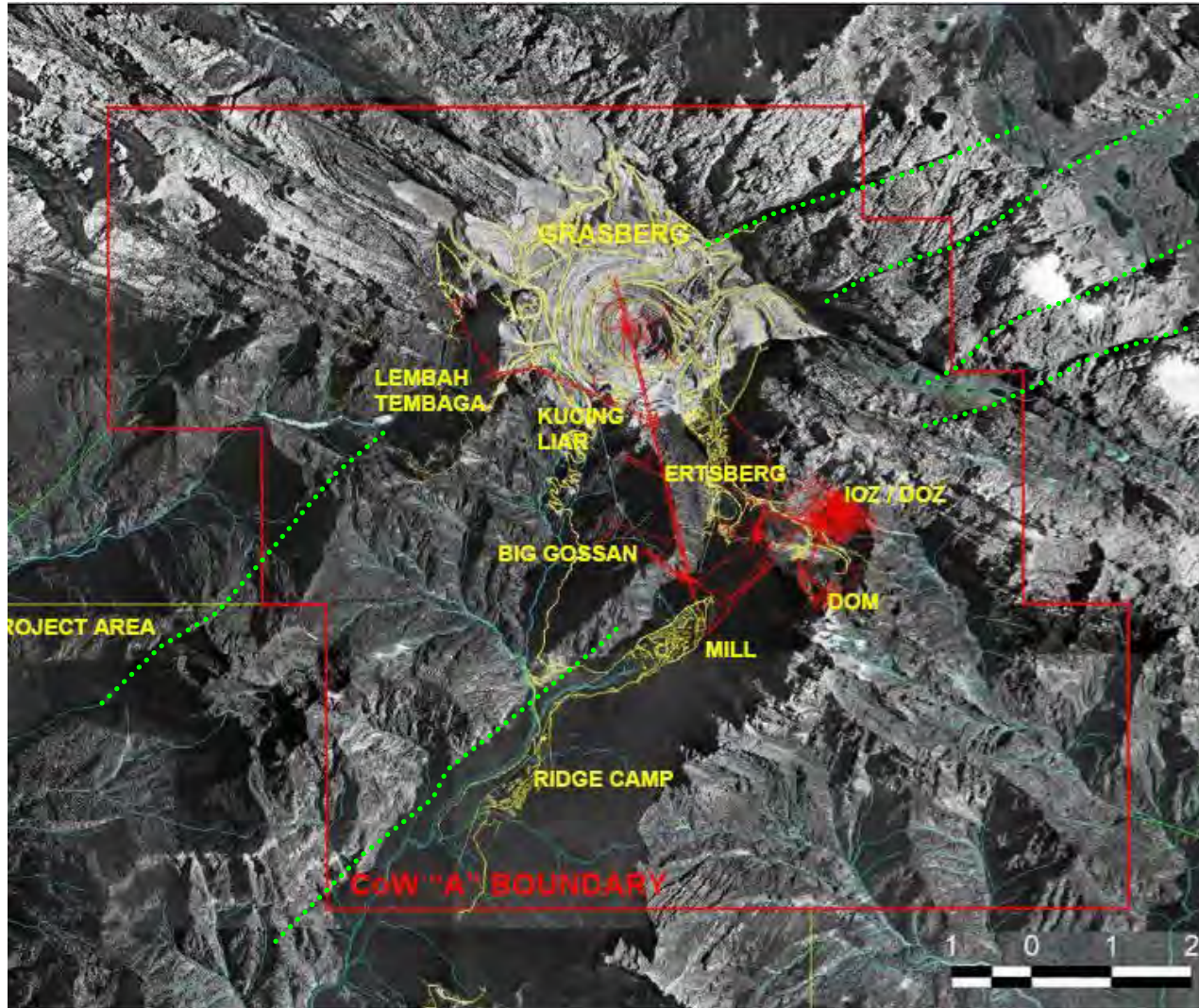
# Wafi Transfer Zone: An emerging mineral district



**Wafi-Golpu Project\***  
4.8Mt Cu, 16Moz Au, 55Kt Mo

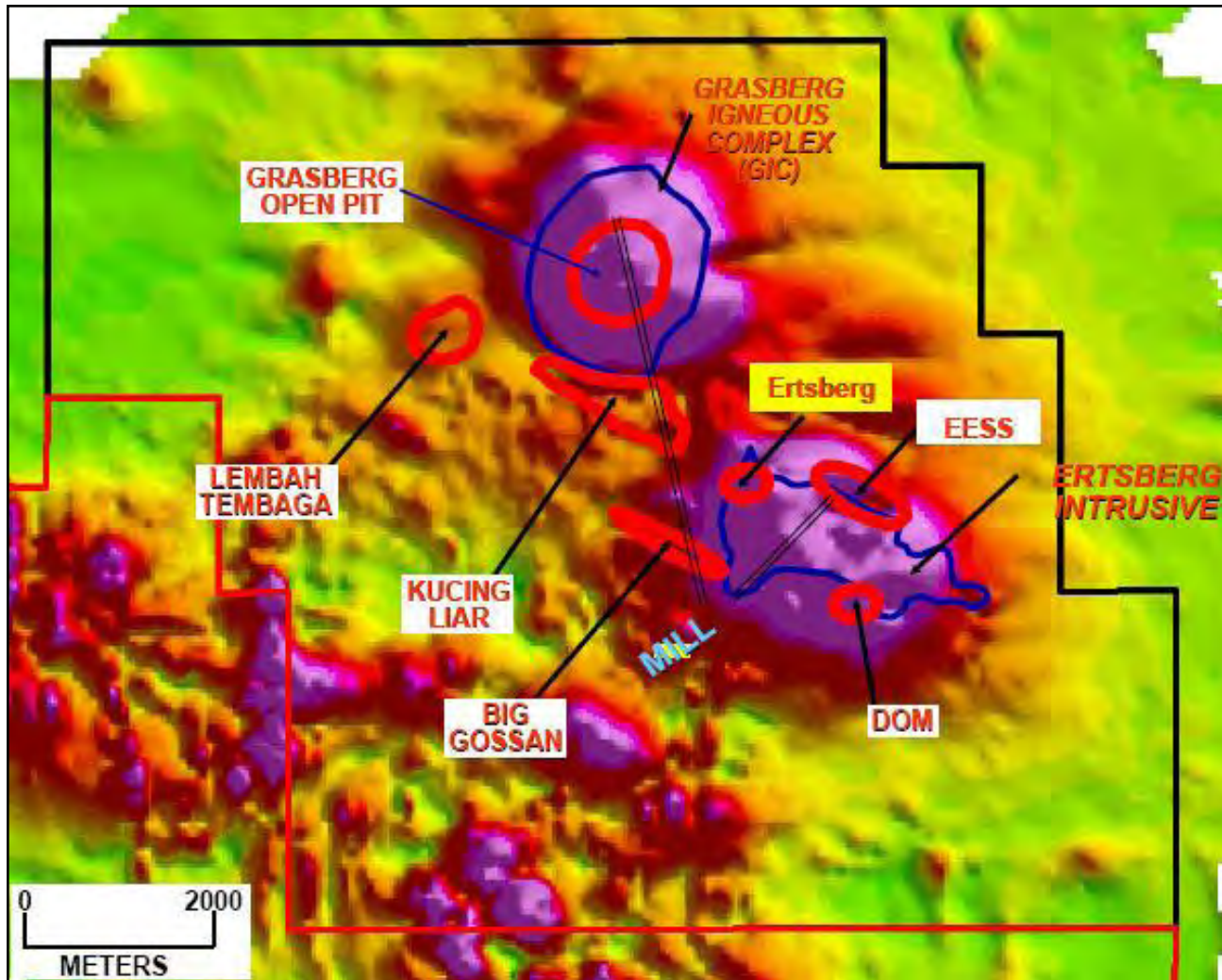
- Potential for deposit cluster/alignment of porphyry copper-gold and related high sulphidation gold deposits is excellent
- First class anomalies (tenor and grade) at Bavaga, Zenapu, Zimake and Mt Tonn
- 17km trend
- Little to no previous exploration

\*For July 2010 resource statement refer to [www.harmony.co.za](http://www.harmony.co.za)



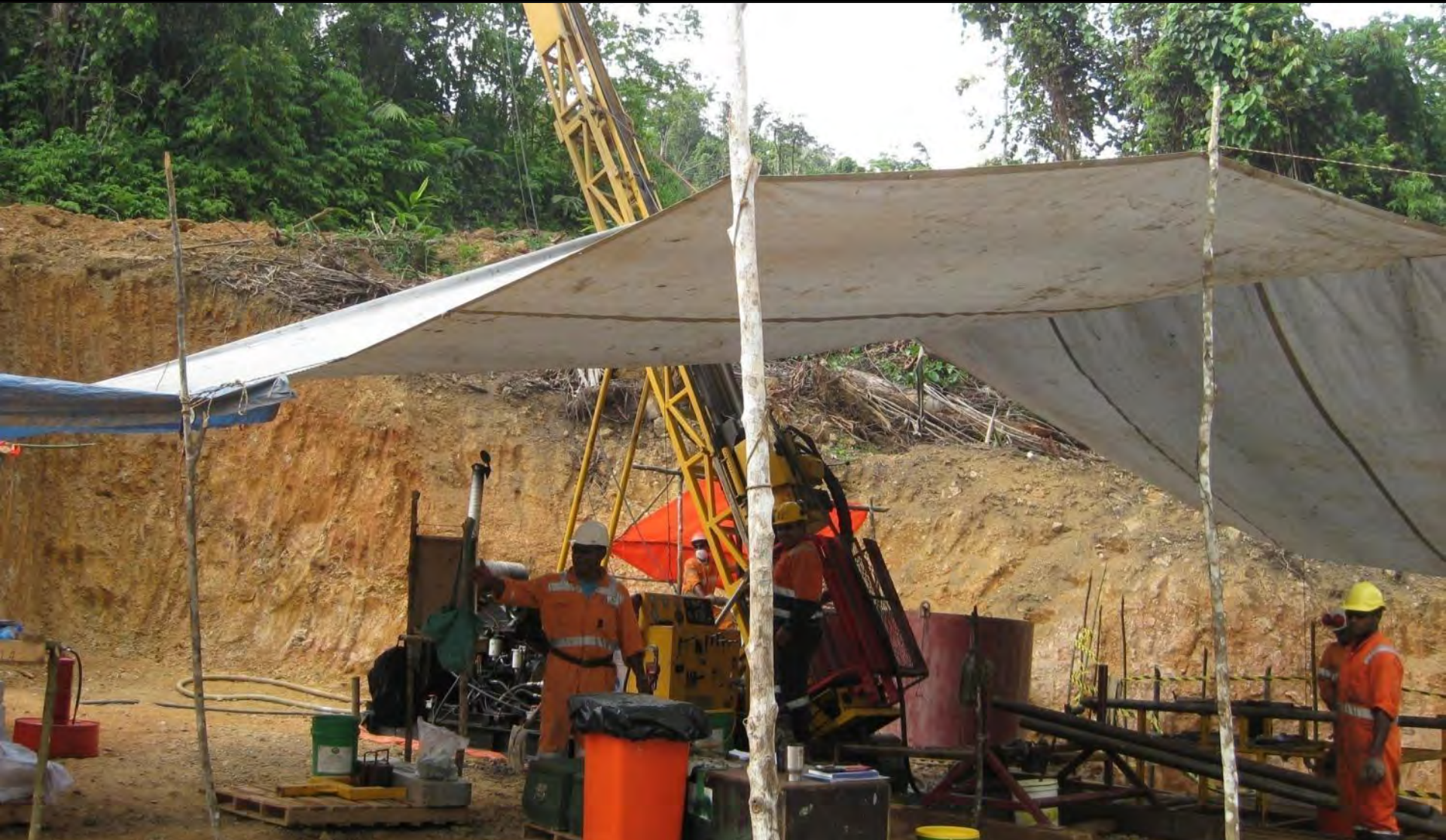
## Grasberg-Ertsberg

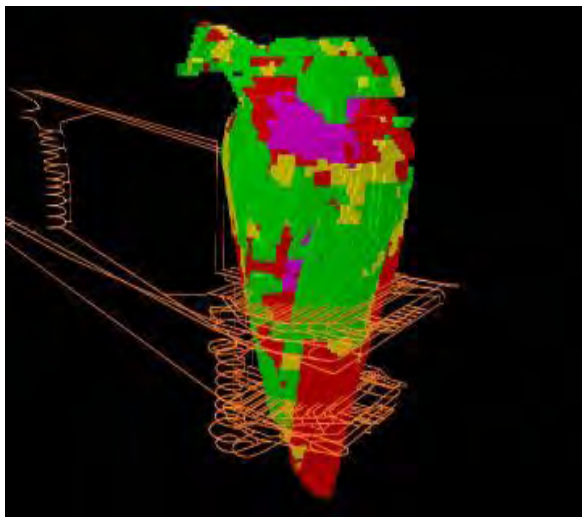
- Cluster of Cu-Au porphyry and Cu-Au skarn deposits
- Grasberg discovered in 1988
- Resources
  - 116.3Moz Au
  - 45.5Mt Cu
- Approximately 60% Skarn and 40% porphyry
- Annual production
  - 2-3Moz Au
  - 500 000 – 700 000t Cu
- Skarn metallurgy complex
- Transfer structural control



## Cow A magnetics

- Analytic signal
- Anomalies sourced from magnetite in potassic altered core of monzodiorite intrusives
- Not all deposits have “bull’s eye” magnetic targets owing to alteration overprints and other factors

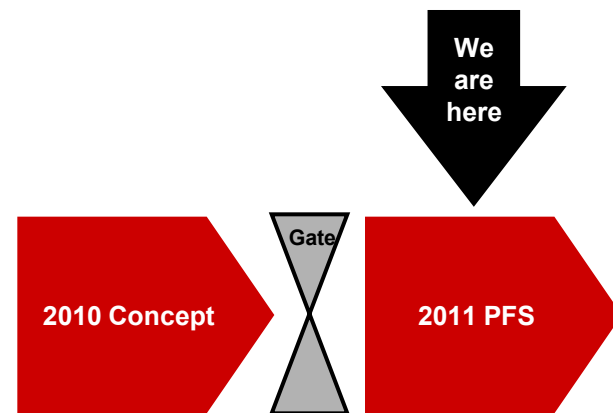
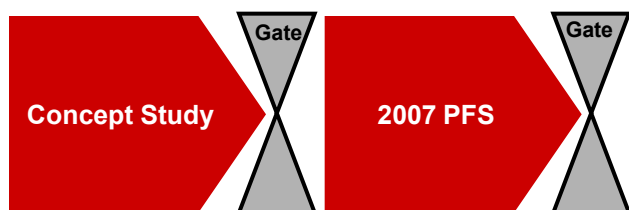




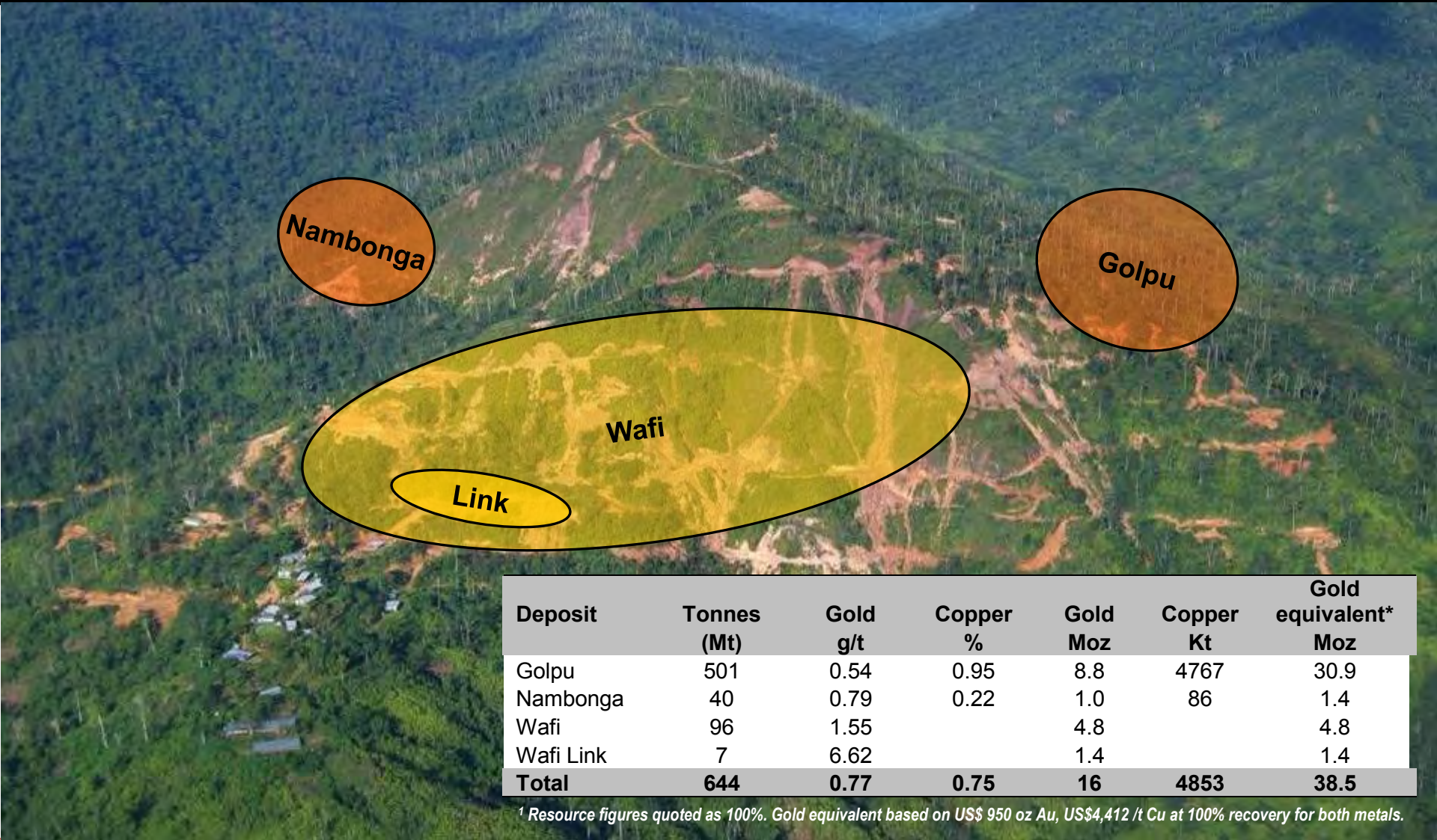
- 2007 pre-feasibility study:
  - technically and financially viable mining operation
  - 100Mt block cave on Golpu
  - ~US\$0.64/lb cash cost
  - US\$1.5bn capital
  - 13-year mine life
  - positive NPV but needed improving

## 2007 recommendations

- Seek capital reduction
- Improve metallurgy
- Prove up additional resources



**Exploration success has transformed Wafi-Golpu into a world-class project**

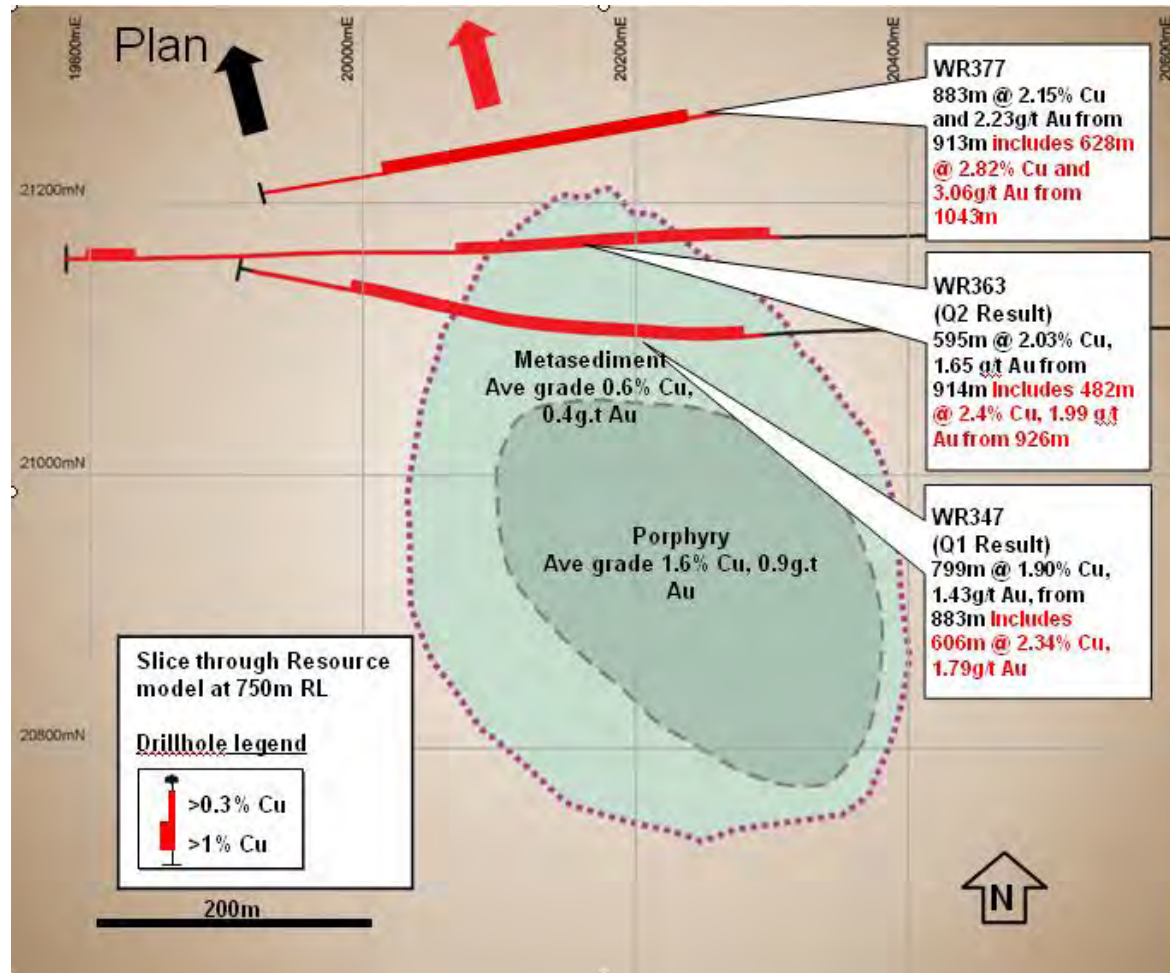


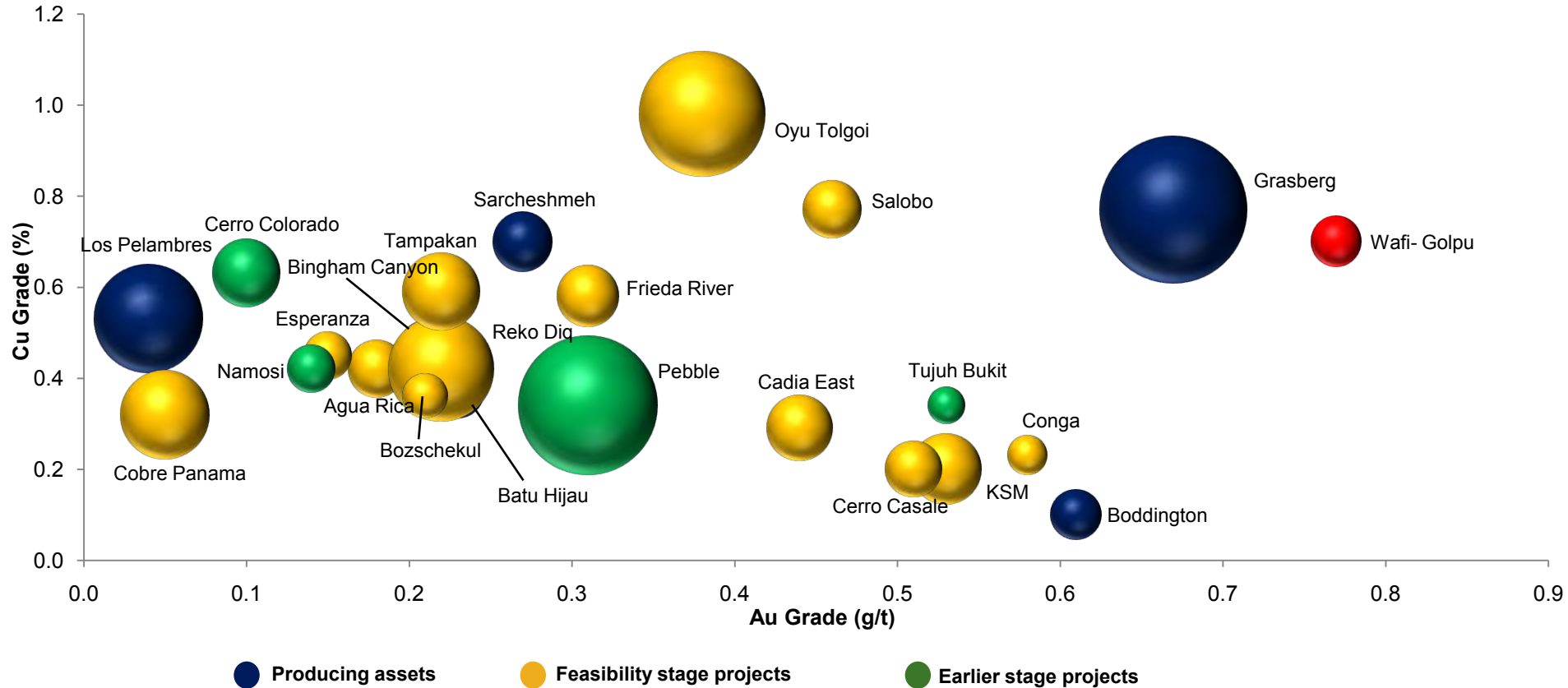
Deposit	Tonnes (Mt)	Gold g/t	Copper %	Gold Moz	Copper Kt	Gold equivalent* Moz
Golpu	501	0.54	0.95	8.8	4767	30.9
Nambonga	40	0.79	0.22	1.0	86	1.4
Wafi	96	1.55		4.8		4.8
Wafi Link	7	6.62		1.4		1.4
<b>Total</b>	<b>644</b>	<b>0.77</b>	<b>0.75</b>	<b>16</b>	<b>4853</b>	<b>38.5</b>

<sup>1</sup> Resource figures quoted as 100%. Gold equivalent based on US\$ 950 oz Au, US\$4,412 /t Cu at 100% recovery for both metals.

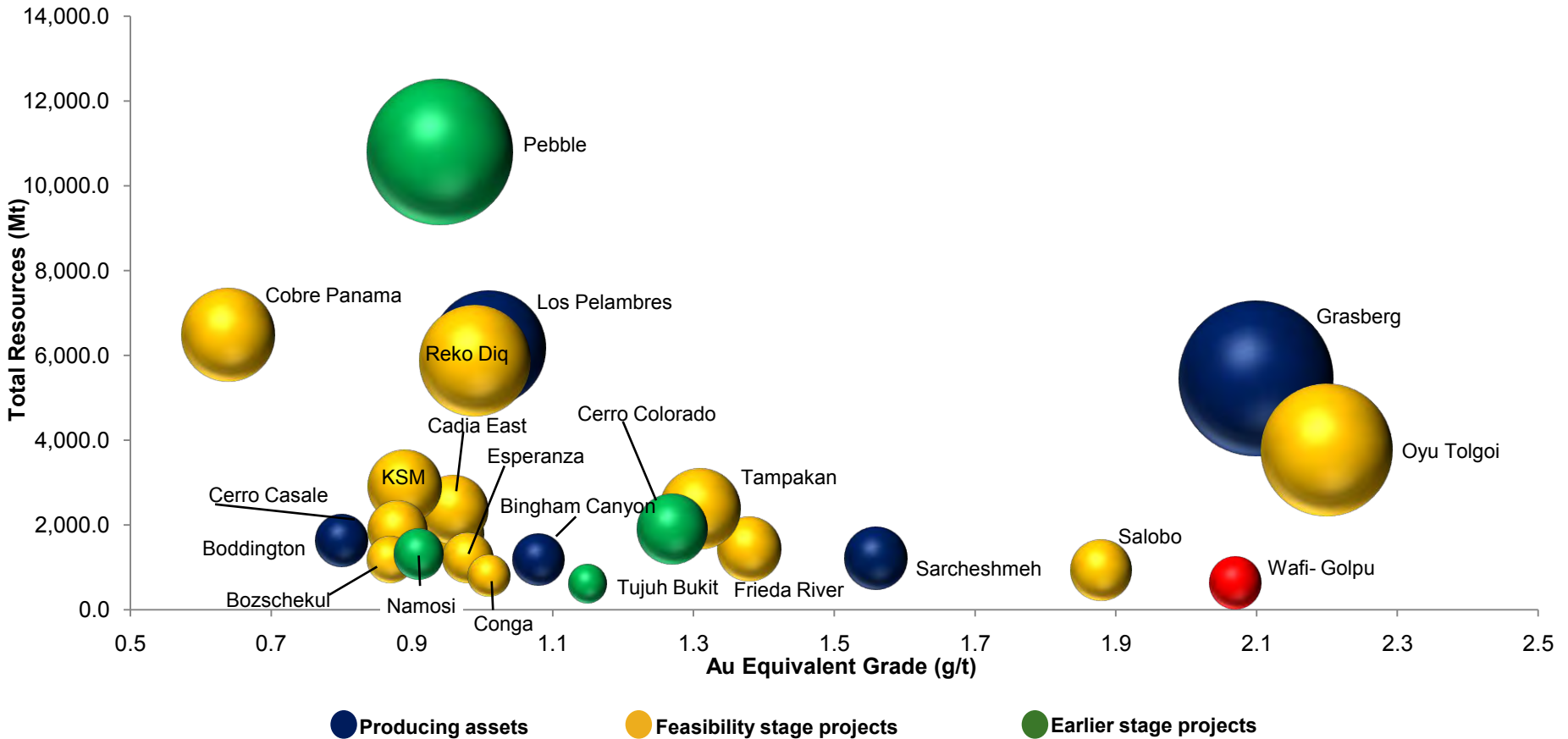


# Open along strike – recent success



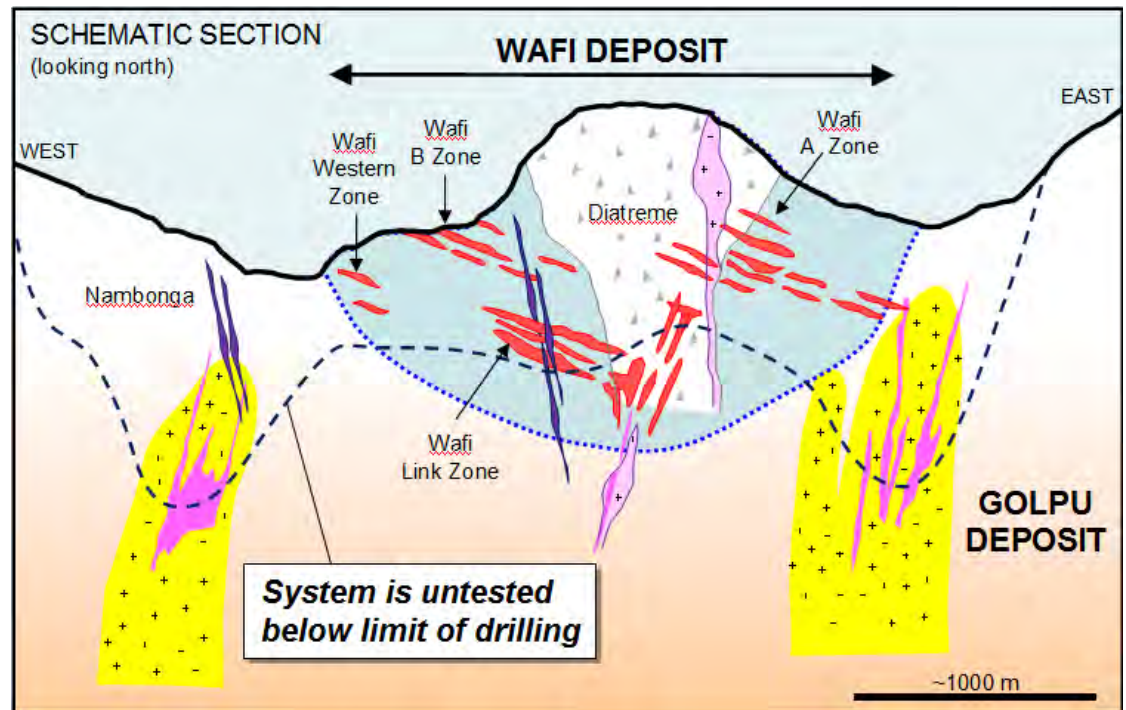


Note: Bubble size represents total reserves and resources equivalent gold

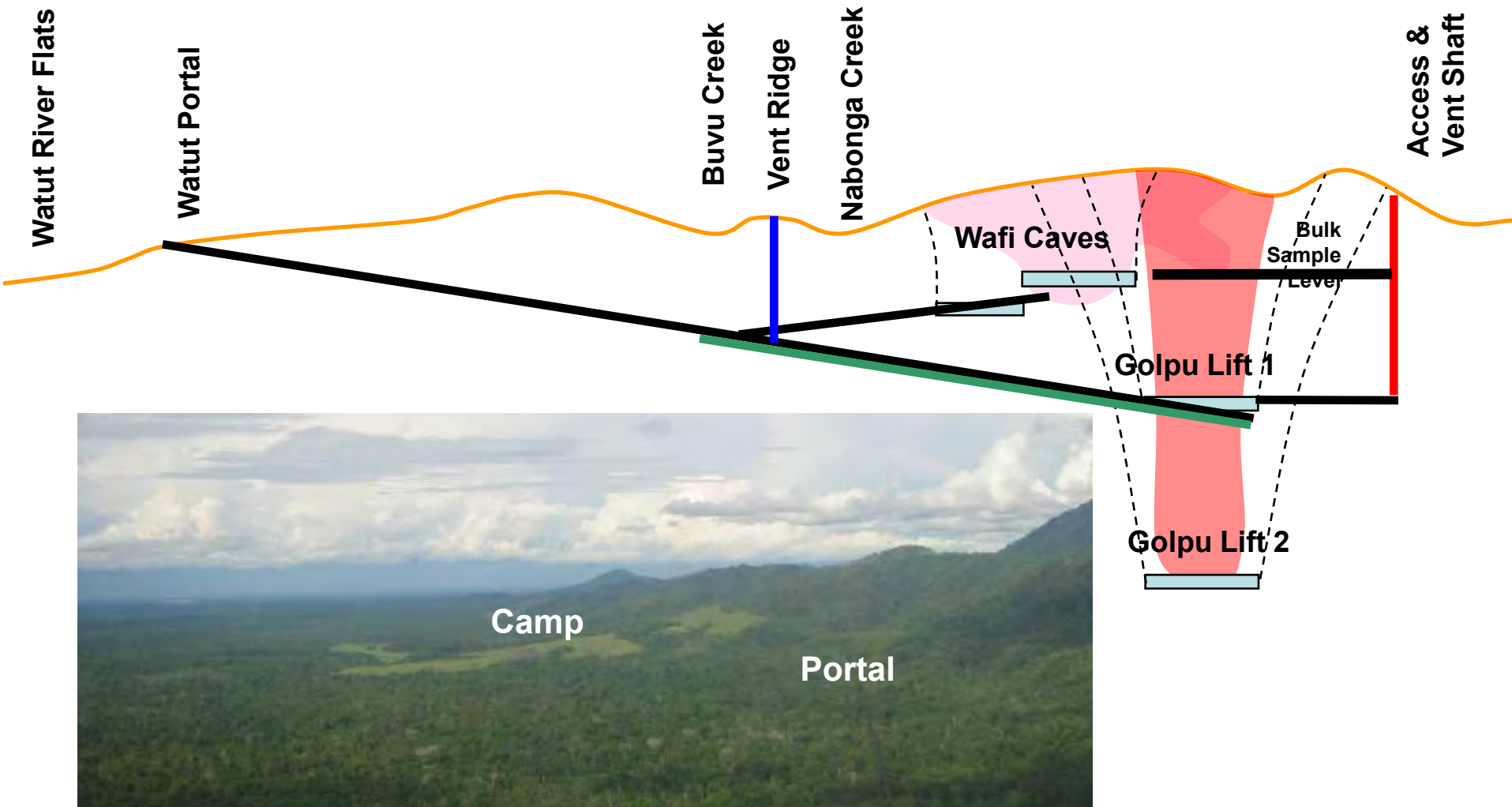


Note: Bubble size represents total reserves and resources equivalent gold

- **Golpu**
  - large copper-gold porphyry – high grade
  - cylindrical shape amenable to block caving
  - „standard’ metallurgy
- **Wafi**
  - structurally controlled epithermal gold deposit.
  - high sulphidation system (+oxide)
  - requires more complicated metallurgical recovery
  - amenable to open pit and/or block cave



*\*Gold equivalent is calculated using a gold price of US\$950/oz Au and \$4 412/t Cu at 100% recovery for both metals*



- PFS will determine scale of operation
- Current resource indicates:
  - 600Mt – 800Mt mining inventory
  - 20 – 30Mtpa throughput
  - 300 000 – 700 000oz gold/year
  - 200 000 – 320 000t copper/year
  - lowest quartile cash cost
  - multiple mining and infrastructure options
- Potential to increase size of operation with further resource upgrades
- Next Golpu resource upgrade expected in July 2011

- Environmental considerations fundamental in development decisions
- Currently developing an Environmental Management Plan
- Gathering environmental baseline data
- Water quality monitoring
- Flora and fauna surveys
- Establishing nurseries for rehabilitation



- Support based on stakeholder consultation and feedback on priorities with sustainable outcomes:
  - health
    - clinical services
    - construction of new aid post at Babuaf
  - education
    - school fee assistance
    - maintenance of schools
  - water supplies
    - constructing water supplies in partnership with local-level governments(LLGs) and non-governmental organisations(NGOs)





- Social impact assessment
- Cultural sensitivity training for JV employees
- Project awareness and engagement
- Consultation and information
- Capacity building for landowner groups
- Training, preparation for employment and business opportunities

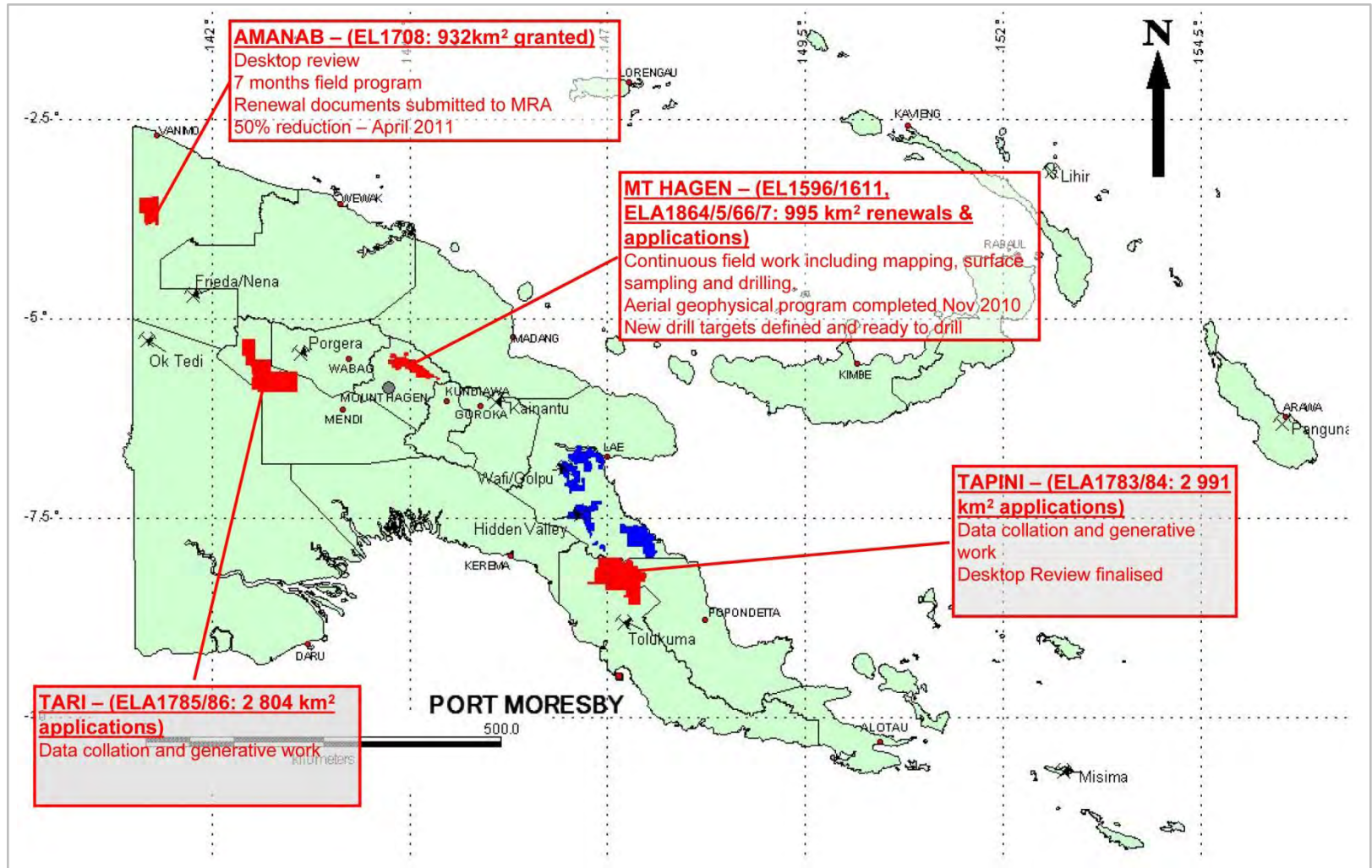


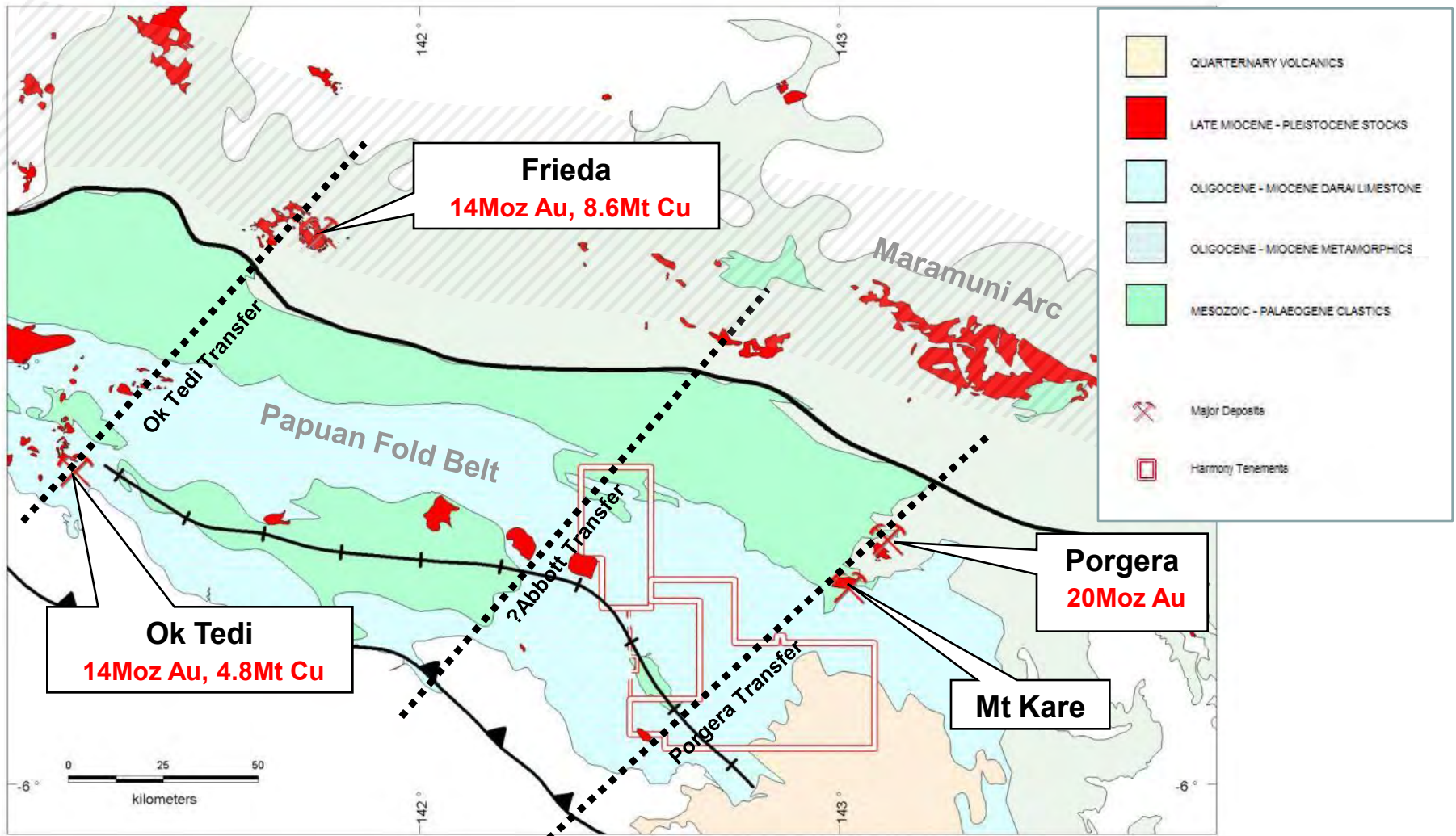
- Government very supportive of project
- Land Titles Commission progressing
- Open door to Mineral Resources Authority (MRA) and the Department of Environment and Conservation (DEC)
- Government may potentially buy-in up to 30% - subject to negotiation



- Quality resource – tonnes, grade, morphology, metallurgy (Golpu)
- Targeting lowest quartile cash costs
- Close proximity to good infrastructure
- Established in PNG with an experienced team
  - mine already built at Hidden Valley
- Stable regulatory environment and supportive government
- Good relationship with landowners
- Significant upside potential with Wafi, Nambonga and Transfer structure exploration
- Will significantly add to Harmony's offshore resource base and production profile

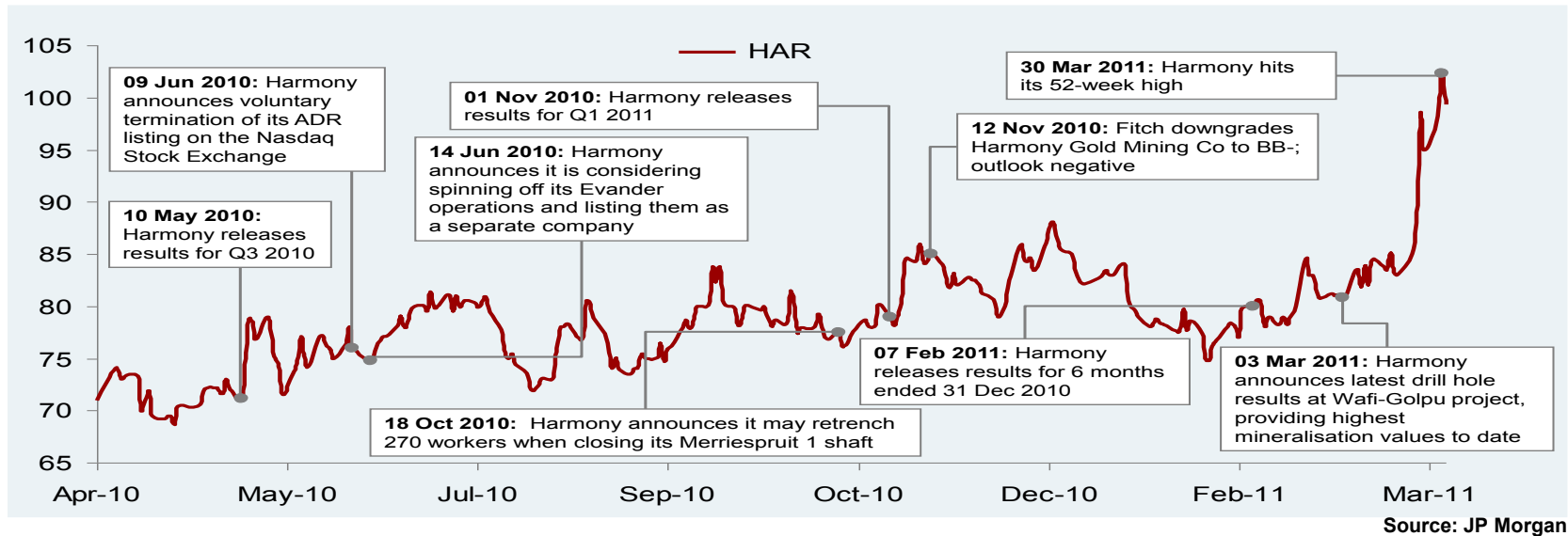






## Organic growth


- Grass roots exploration success drives exponential growth in shareholder value
- Exemplified by recent Harmony value uplift on back of Golpu extension discovery



**Release on 3 March 2011:** WR377 with 883m @ 2.15% Cu and 2.23g/t Au (5.33g/t Au equivalents\*) from 913m including 628m @ 2.82% Cu and 3.06g/t Au (7.13g/t Au equivalents\*) from 1043m

\*Refer to Harmony website

- Opportunity for Harmony to repeat the Golpu success story
  - outside of the JV on Harmony 100% ground
  - more systems in the Golpu transfer structure



# HARMONY™ – an exciting investment proposition



- ✓ One of the best explorers worldwide
- ✓ Wafi-Golpu 'find of the century'
- ✓ Unhedged, low debt
- ✓ Building low-cost, high-grade mines
- ✓ Experienced, focused management team
- ✓ Exciting long-term possibilities
- ✓ Dividends

JSE (HAR) NYSE (HMY) LSE (HRM)

[www.harmony.co.za](http://www.harmony.co.za)

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