



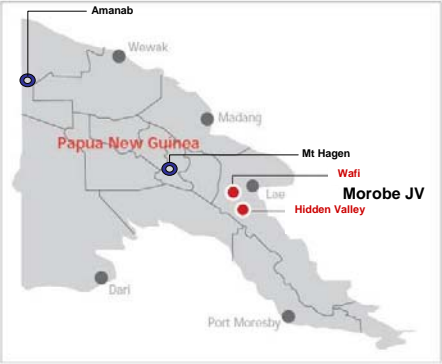


PNG EXPLORATION



PNG Exploration





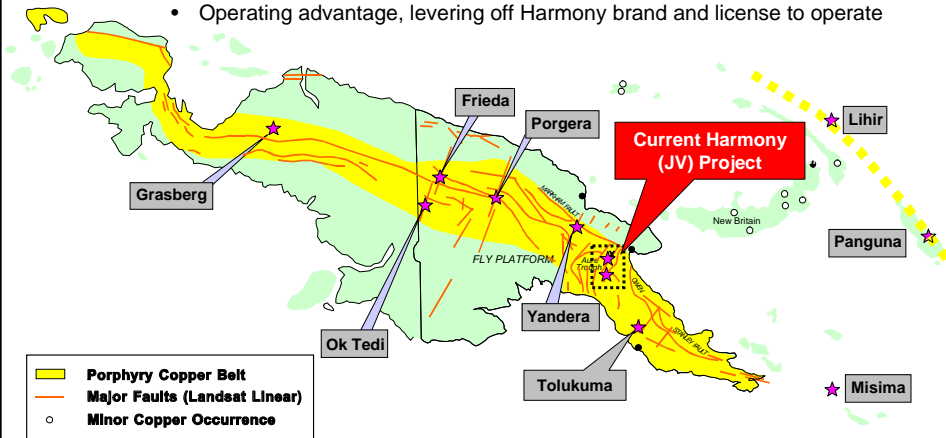
- New Exploration Project FY10 (100%)
- Morobe JV Exploration Projects (50%)

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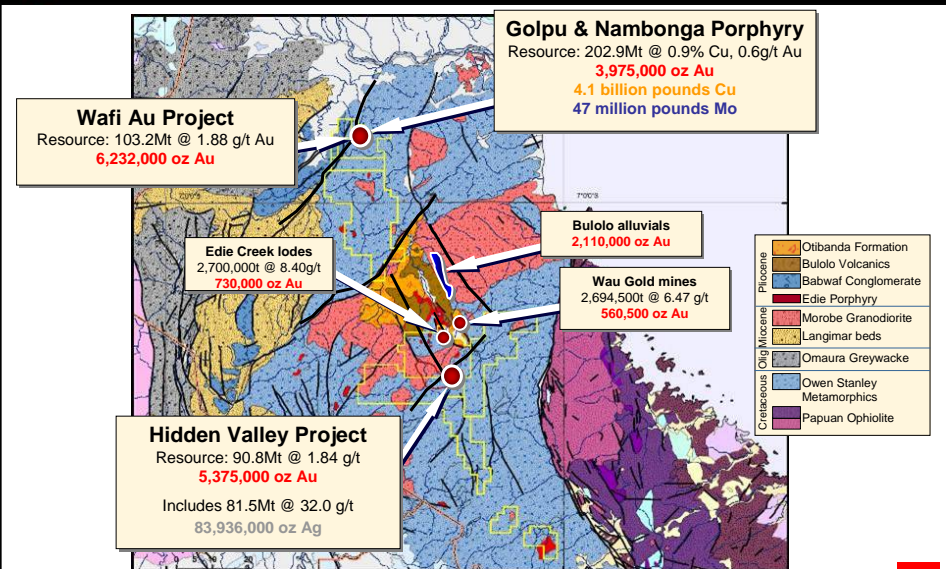
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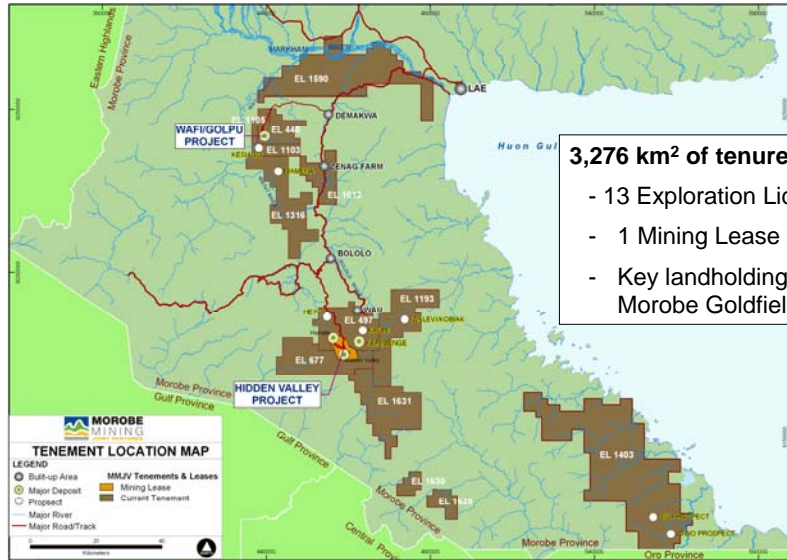
Why PNG Exploration?

- World class mineral belt that remains underexplored
- In-country operating environment and mining laws are favorable
- Operating advantage, leveraging off Harmony brand and license to operate



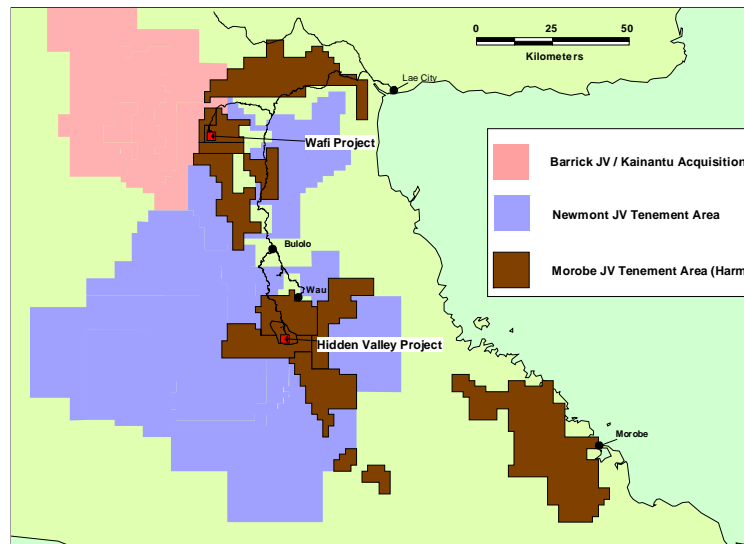
Morobe – a gold mineral province





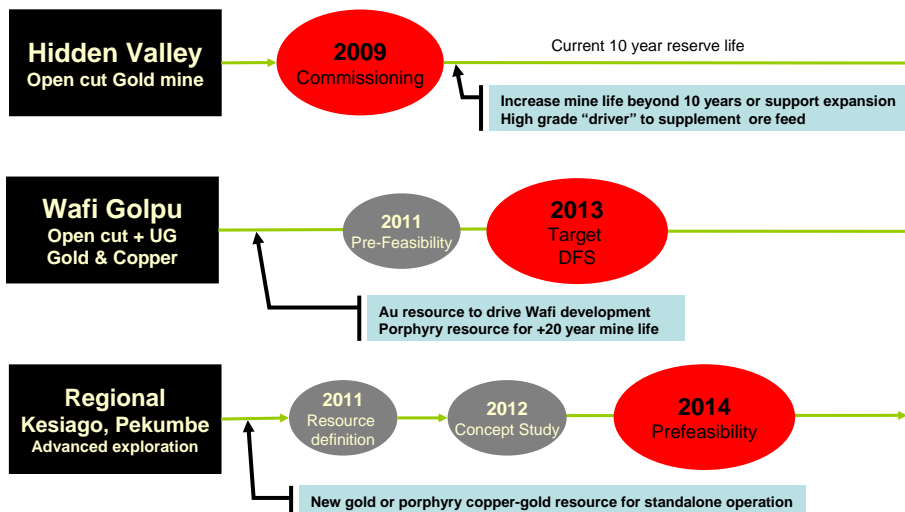
3,276 km² of tenure:

- 13 Exploration Licences
- 1 Mining Lease
- Key landholding in the Morobe Goldfields District



- Barrick JV / Kainantu Acquisition Tenement Area
- Newmont JV Tenement Area
- Morobe JV Tenement Area (Harmony / Newcrest)

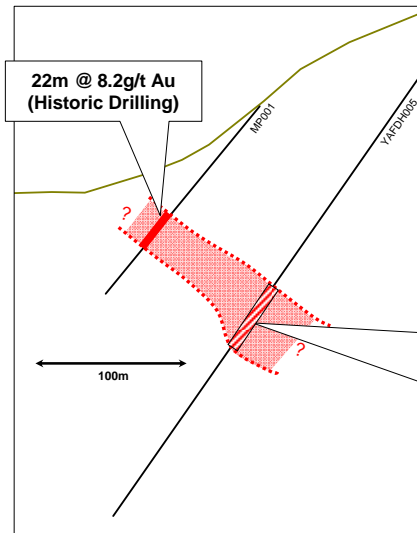
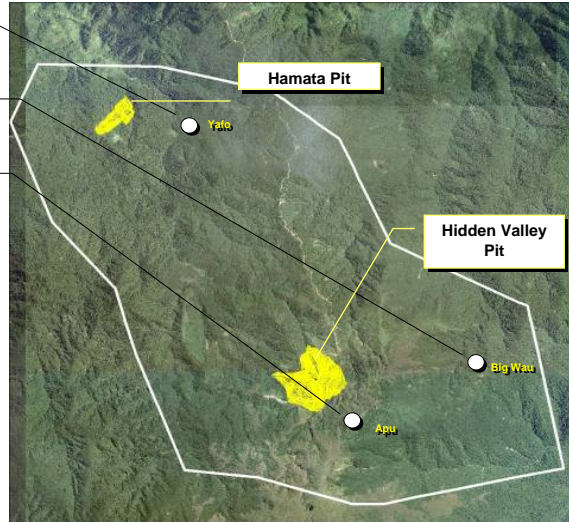
- Resource Addition:
 - Nambonga North 1.0 Moz Au, 86 kt Cu
 - (1.5 Moz Au equivalent using US\$ 750 per oz and US\$ 1.90 per pound copper)
 - FY09 Discovery Cost per ounce US\$ 14
- Significant Results:
 - HVML prospects including Hidden Valley South, Yafo, and Apu Creek
 - Significant porphyry potential developing at Miapilli and Northern Diatrema area, northeast of Golpu
 - Major porphyry and epithermal potential identified along the Wafi Transfer
 - Grassroots anomalies progressed at Morobe Coast, Garaina
- Drill Production:
 - Actual production of 39,385m for FY09 vs 11,269m for FY08
 - Increased prospect turnover
- Safety:
 - 1 LTI
 - Improved reporting and systems awareness



"Develop large scale, long life assets with excellent growth"

1. Yafo prospect
2. Big Wau prospect
3. Apu Creek prospect
4. Structural geological compilation underway

- Integration of available geology, geophysics, geochemistry, structural data and resource models
- Development of 5 year exploration (drill) strategy integrated with mine based Resource Development activities

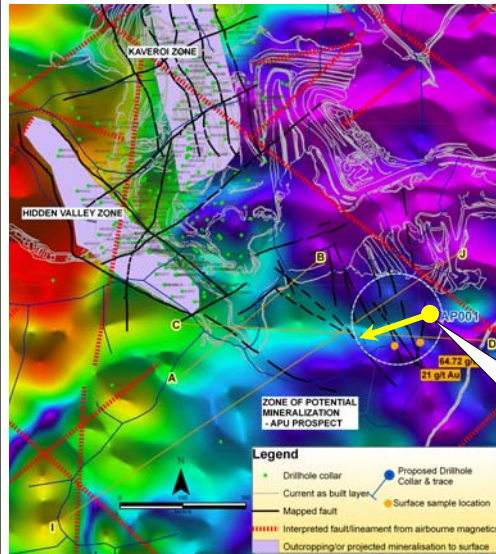


- Located east of Hamata Pit
- Hosted entirely in Morobe Granodiorite
- Potential for high-grade ore to supplement HV plant feedstock
- Historical and MMJV drilling at the prospect includes significant intercepts:

YAFDH01: 5m @ 11.9 g/t from 96m
MP001: 22m @ 8.2 g/t Au from 36 m

YAFDH05 completed in July 09

- Borehole was designed to test below historical high-grade intercept
- Borehole encountered a 30m interval of intense "Hamata" style mineralisation / alteration
- Results Pending



APDH001 : 466m @ 2.36g/t Ag from 17m; 59m @ 2.04g/t Ag, 0.16% Pb, 0.3% Zn from 521m. Veined and altered granodiorite containing base metal mineralisation (galena and sphalerite)

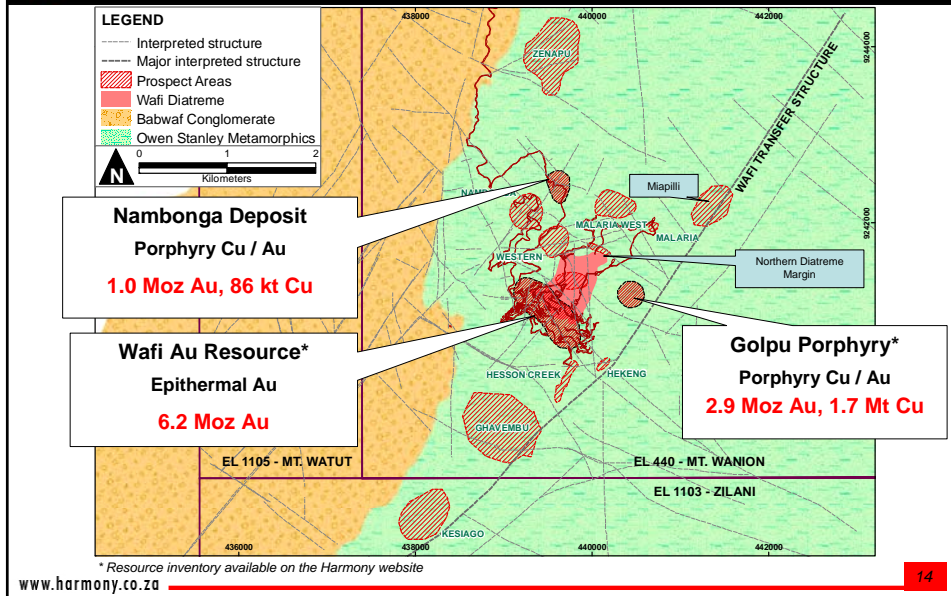
- Highly anomalous Ag-Base metal intercept with associated alteration suggests potential for major system
- Work currently focused on alteration assemblages and metal zonation around HV / Kaveroi to put Apu mineralisation in context
- Potential for significant resource addition outside of known deposit areas

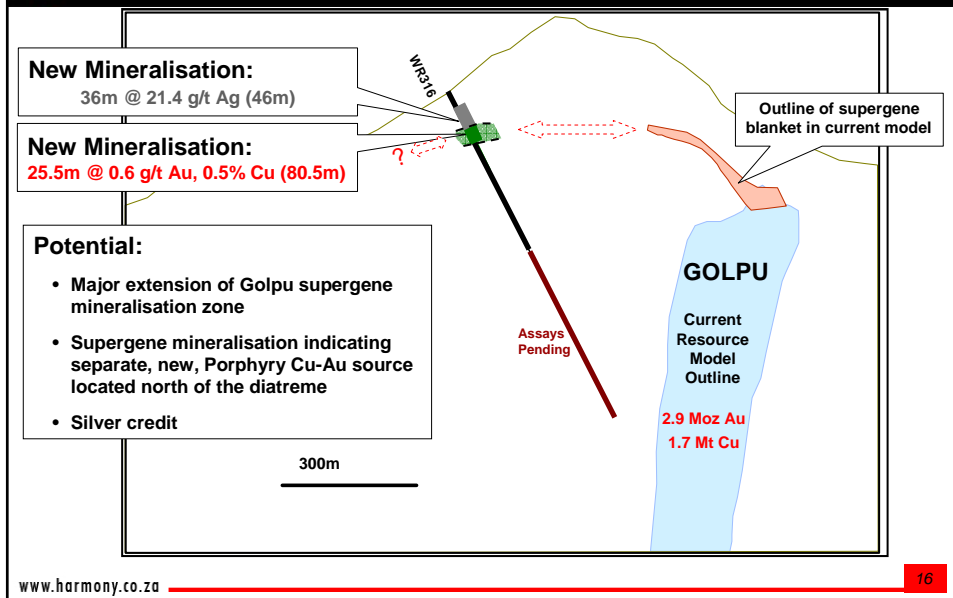
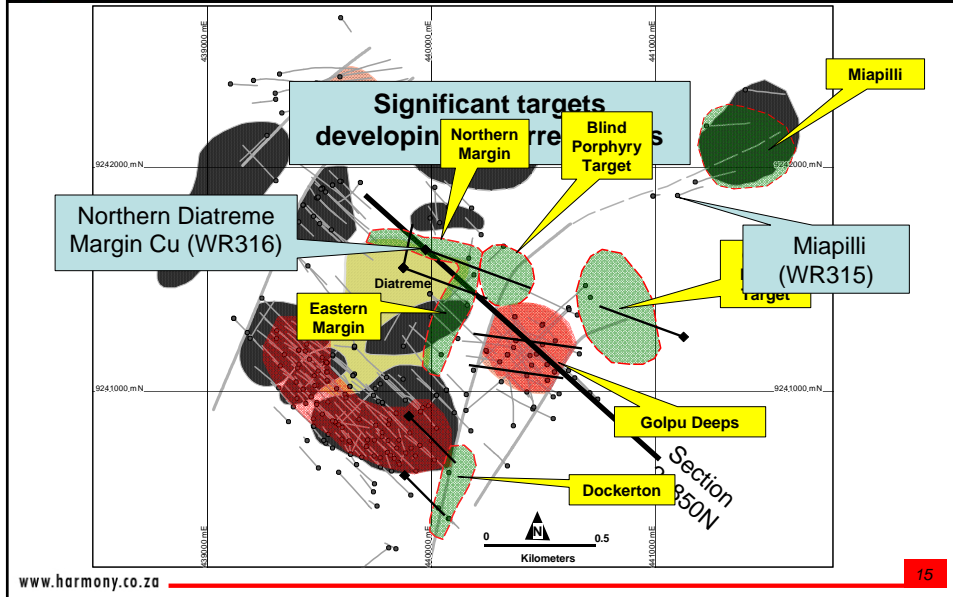


APUDH01: Strong pervasive epidote alteration at 494m

Wafi Golpu Exploration

Wafi Region Prospects



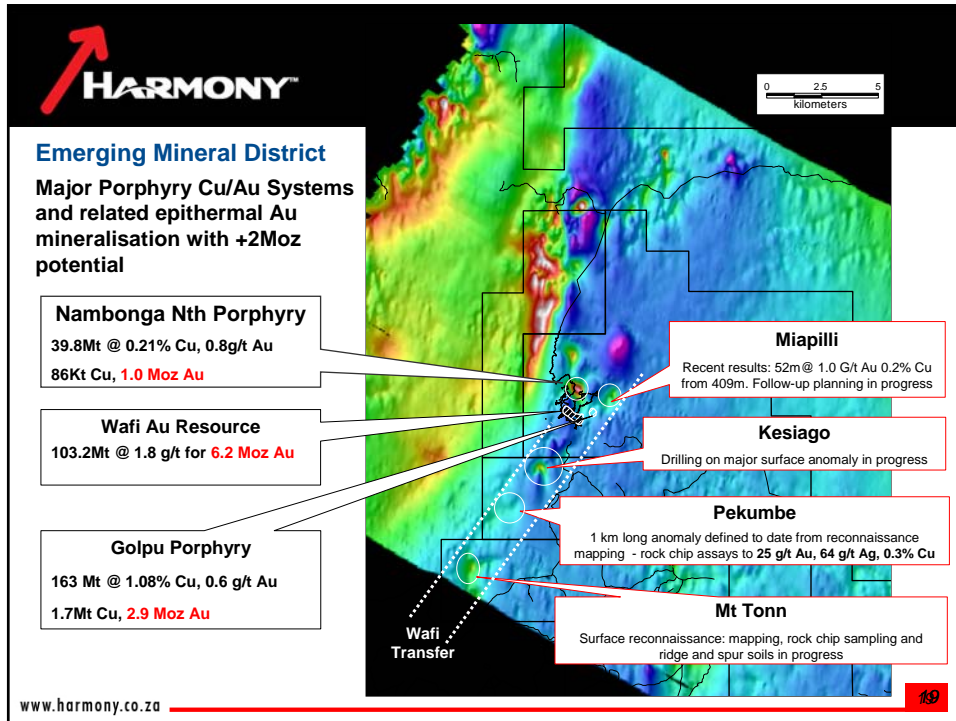




- 1.5 km northeast from Golpu
- Along strike on the Wafi Transfer structure
- Potential for new porphyry Cu-Au mineralisation
- Host rocks: Owen Stanley Metamorphics intruded by andesite porphyry
- Results:
 - **WR315: 52m @ 1 g/t Au, 0.2% Cu (409m)**
- Stockwork Au-Cu vein mineralisation developed in metasediments, adjacent porphyry intrusive
- Follow-up drilling planned

WR315 @ 433.4m: Veined and mineralised metasediments
Assays 1.9 g.t Au, 0.44% Cu

Regional Exploration



HARMONY™

– **New Harmony PNG Exploration Projects FY10:**

- **Mt Hagen**
- **Amanab**

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- Development of a pipeline of quality projects to deliver new economic resources beyond 2013
- Expansion of exploration activities outside of MMJV
 - Lever off PNG operating advantage

Organic Growth Opportunities in PNG

1 Mt Hagen Project

- Harmony management control, ownership and option to purchase
- Greenfields exploration project with significant potential
- Excellent prospectivity with outcropping gossan

2 Amanab Project

- Low cost greenfields area
- 100% Harmony owned.
- Underexplored highly prospective belt

EL1611 & EL 1596 (Mt Hagen)

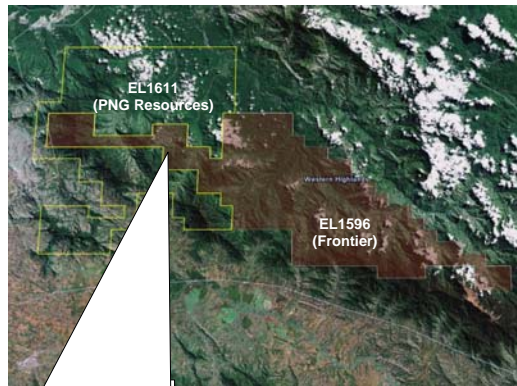
Area: 1100 km²

Ownership: Project comprises 2 tenements:
EL1611 – Regional Resources
EL1596 – Frontier Resources

Location: Western Highlands Province

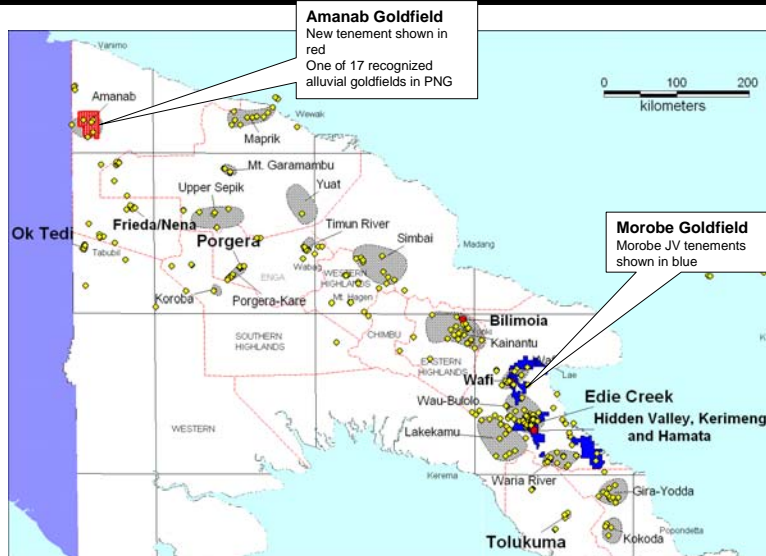
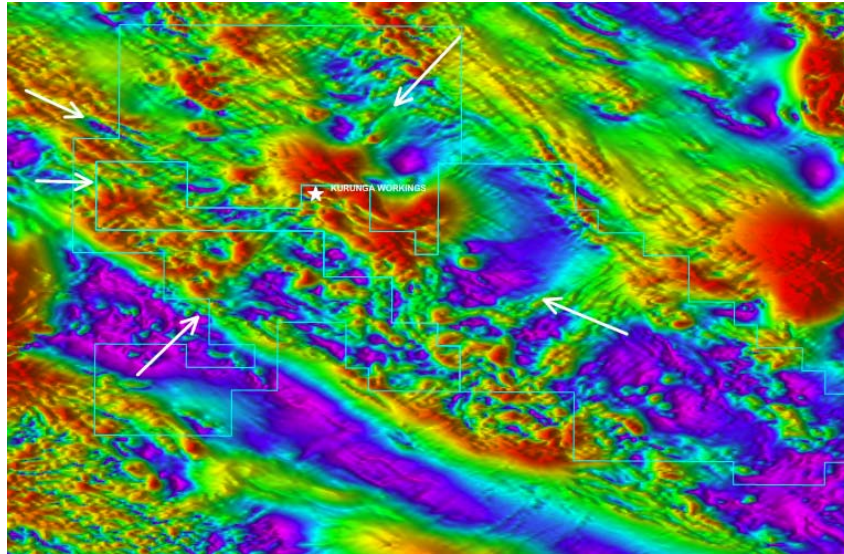
Target: Porphyry Cu-Au
Cu-Au Skarn
Epithermal Au mineralisation

Tenure: EL1611 option to purchase (100%)
EL1596 outright purchase (100%)



Exploration Plan FY10:

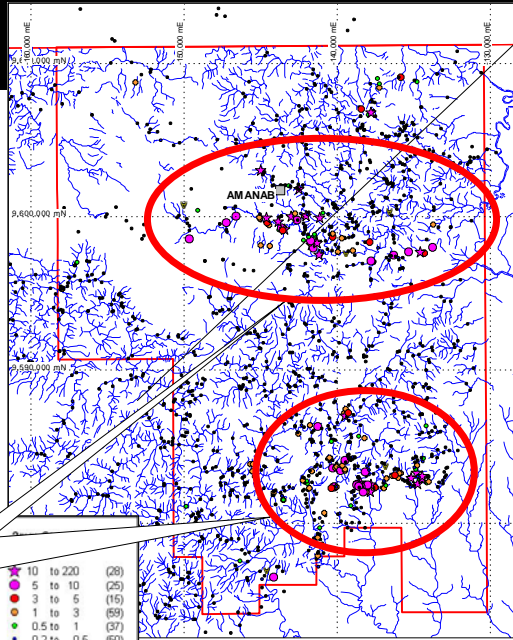
- Grassroots level prospecting (1800 surface samples)
- Geophysical data processing
- Drill test outcropping skarn mineralisation and coincident magnetic target Kurunga Hill (1600m drilling)





EL 1708 – Amanab (New Project)

Area: 863 km²
Ownership: Harmony 100% (granted July 09)
Location: West Sepik Province, approx 160 km north of OK Tedi
Target: Epithermal Au and porphyry Cu-Au
History: One of 17 recognized alluvial goldfields in PNG. Porgera, Bougainville, & the Morobe Deposits had similar alluvial goldfields prior to discovery.
 Historical work focused stream on sediment sampling.



Exploration Plan FY10:
 Grassroots level prospecting. 2000 Surface samples (Ridge and Spur soils and rock chip sampling) to identify targets for hardrock source.



Consolidated Exploration Budget FY10

Project		Budget (AUD)	Budget (ZAR)	Drilling Physicals (metres)
PNG - Morobe JV	<i>Morobe Exploration</i>	\$9,677,263	62,902,210	7200
	<i>Wafi Exploration</i>	\$7,299,765	47,448,473	7200
	<i>Hidden Valley Exploration</i>	\$5,831,333	37,903,665	10800
	<i>Hidden Valley Res Dev</i>	\$6,874,545	44,684,543	21600
	<i>Subtotal</i>	\$29,682,906	192,938,889	
	<i>Harmony Contribution (50%)</i>	\$14,841,453	96,469,445	
PNG - Other Areas	<i>Other Project</i>	\$1,659,680	10,787,920	1600
	<i>Amanab</i>	\$1,060,530	6,893,445	
	<i>Subtotal</i>	\$2,720,210	17,681,365	
Mt Magnet Gold	<i>Minimum Holding Costs</i>	\$2,215,000	14,397,500	
	<i>Subtotal</i>	\$2,215,000	14,397,500	
Exploration Total		\$19,776,663	128,548,310	

