

## 22 July 2010

# Quarterly Report for the three months ending 30 June 2010

## Phu Kham Copper-Gold Operations, Laos

- Third consecutive quarter of plus-16,000t copper production on record mill throughput.
- June quarter production was 63,430dmt of concentrate containing 16,012t of copper at an average C1<sup>1</sup> cash cost of US\$0.97/lb of copper after precious metal credits from 12,239oz of gold and 110,916oz of silver.
- Ore Reserve tonnes increased by 17%; potential for further increases from ongoing resource extension drilling.

## **Growth Projects**

#### Ban Houayxai Gold-Silver Project, Laos

- Early implementation earthworks and construction of a new access road were largely completed during the quarter.
- Environmental and Social Impact Assessment submitted to the Water Resources and Environment Administration.

#### **Exploration**

#### Phonsavan, Laos:

- Drilling has confirmed the continuity of the KTL copper-gold deposit over a strike length of 2km.
- High-grade gold discovery at Tharkhek.

## **Corporate**

 At 30 June 2010, the Company had cash of U\$\$72.2 million and project debt of U\$\$32.5 million. Further debt repayments on the project debt facility totalling U\$\$23.3 million have been made during July 2010.

<sup>&</sup>lt;sup>1</sup> Brook Hunt convention for reporting direct cash costs comprising: mine site, concentrate transportation and freight, treatment and refining charges and marketing costs. Based on payable copper in concentrate produced.

#### Phu Kham Operations, Laos

#### Introduction

Strong production performances continued in the June quarter 2010 with, for the third successive quarter, the Phu Kham Operation producing over 16,000t of copper in concentrate.

**Table 1**: Production and cost summary

| Phu Kham Operations                                    |            | 3 months    | 6 months    |
|--|------------|-------------|-------------|
| Production summary                                     | Units      | to          | to          |
| Production summary                                     |            | 30 Jun 2010 | 30 Jun 2010 |
| Copper in concentrate                                  | t          | 16,012      | 32,016      |
| Gold in concentrate                                    | OZ         | 12,211      | 25,915      |
| Silver in concentrate                                  | OZ         | 110,916     | 229,034     |
| Gold in doré (Heap Leach)                              | OZ         | 28          | 2,423       |
| C1 cash cost after precious metal credits <sup>2</sup> | US\$/lb Cu | 0.97        | 0.88        |

Further details of the production and cost performances are contained in Table 2 and Table 3 of this report

#### **Production Performance**

The processing rate for the quarter was a record 3.6Mt at an average copper grade of 0.64%. This rate equates to 14.3Mtpa and is 19% above the design capacity, reflecting the processing of softer ores and no major shutdowns during the period. Routine SAG mill maintenance including relining the mill is planned for the September quarter.

The mining operation posted the second consecutive quarterly production record with a total of over 7.4Mt of material mined.

Pay-metal in concentrate sales during the June quarter totalled 14,754t of copper and 12,232oz of gold. The average copper and gold prices realised (after hedging) were US\$2.99/lb and US\$1,168/oz³ respectively.

#### Production and cost guidance

With approximately 32,000t of copper produced in the first half, Phu Kham is on track to achieve 2010 year production and operating cost guidance of 60,000t to 63,000t of copper in concentrate at an average C1 cash cost of between US\$0.95/lb and US\$1.05/lb copper after precious metal credits<sup>4</sup> from 43,000oz gold and 300,000oz silver.

The relative quarter on quarter increase in C1 cash costs for the June quarter reflects: scheduled lower gold credits following depletion of the heap leach operation; scheduled lower grade ore mined during the June quarter; higher transport and shipping costs; and, an increase in waste stripping costs expensed.

C1 cash costs for the second half of 2010 are anticipated to be within the guidance range of between US\$0.95/lb and US\$1.05/lb copper for the balance of 2010.

<sup>&</sup>lt;sup>2</sup> Based on invoiced pricing for gold and silver

<sup>&</sup>lt;sup>3</sup> Includes sales of gold in heap leach doré

Assumes gold and silver prices of US\$1,000/oz and US\$16/oz respectively and US\$0.78/litre diesel fuel cost

#### **Increased Ore Reserve**

On 30 June, PanAust announced a 17% increase in the total estimated Phu Kham Ore Reserve to 168Mt at 0.62% copper, 0.24g/t gold and 1.9g/t silver (Table 4).

The new estimate incorporates data from the successful 2009 south pit area infill and resource extension drill program and supports a mine life of 14 years at current 12Mtpa design ore processing rates. Further increases to the Mineral Resource (Table 5) and the Ore Reserve are anticipated from the current resource extension drill program to the north of Phu Kham.

#### Plant upgrades and planned expansion of processing capacity

Additional flotation capacity is scheduled to be commissioned during the December quarter 2010 as part of an ongoing recovery optimisation program. The additional flotation capacity will also reduce current constraints on ore processing capacity during periods when higher grade ores are being processed.

The Company is currently conducting a design review for a planned expansion of design processing capacity. Implementation of the expansion will be timed to coincide with a scheduled decline in ore grades as mine production moves from near-surface transition ore to a higher proportion of lower grade primary ore. The objective of the expansion will be to maintain and potentially increase copper production.

The expansion review is scheduled to be completed during the September quarter 2010, for announcement in the December quarter 2010. Commissioning an expansion to a nominal 16Mtpa during 2012 would see the 2010 Ore Reserve support a mine life of 12 years.

#### **Resource extension**

Resource extension drilling continued during the quarter to test the northern and northeastern limit of the Phu Kham copper-gold deposit where mineralisation remains open both along strike and at depth. Intersections are detailed in Table 6 and include:

- GDD1072: 64 metres at 0.60% copper, 0.79g/t gold and 7g/t silver from 50 metres 86.3 metres at 0.80% copper, 0.74g/t gold and 3g/t silver from 158 metres including: 16.3 metres at 1.38% copper and 2.46g/t gold from 228 metres
- GDD1073: 96 metres at 0.61% copper, 0.22g/t gold and 2g/t silver from 144 metres
- GDD313: 86 metres at 0.50% copper, 0.16g/t gold and 2g/t silver from 142 metres
- GDD318: 24 metres at 1.37% copper, 0.46g/t gold and 1g/t silver from 320 metres
- GDD315: 46 metres at 0.68% copper, 0.14g/t gold and 2g/t silver from 288 metres
- GDD321: 70 metres at 0.44% copper, 0.20g/t gold and 1g/t silver from 314 metres

#### Growth

PanAust has a corporate strategy focused on growth by discovery, acquisition and development.

Key components of this strategy are: a commitment to progressing capital efficient organic growth opportunities; the acquisition of producing or pre-development copper assets that could support annual production of 50,000t of copper or copper equivalent; and, pursuit of an active exploration and resource development program in Laos.

#### Ban Houayxai Gold-Silver Project, Laos

The Ban Houayxai gold-silver deposit is located approximately 25km west of the Phu Kham Copper-Gold Operation. In November 2009, PanAust commenced pre-development work for an operation comprising an open pit mine feeding ore to a conventional 4Mtpa Carbon In Leach (CIL) process plant to produce over 100,000oz of gold and 700,000oz of silver per annum.

Earlier this year, the Government of Laos issued the Company a permit authorising the Company to commence bulk earthworks and construct a new access road and low-impact facilities including camp accommodation and offices. By the end of the June quarter 2010, the bulk earthworks and construction of the northern access road were largely complete. Disturbed areas not required for future work were rehabilitated to promote regrowth and limit erosion. All personnel have been relocated to new temporary office buildings and an accommodation camp close to the plant site. Final plant site earthworks and foundation works for the permanent offices were continuing at the end of the quarter.

Commencement of on-site process plant construction work and operations is subject to Government of Laos acceptance of the Environmental and Social Impact Assessment Study (ESIA) which was lodged during the quarter with the Water Resources and Environment Administration. Fabrication of the SAG mill was committed to in the June quarter and represents the major long lead item on the Project delivery critical path. Fabrication of the ball mill is well advanced. Off-site fabrication of other major process plant equipment is scheduled to be committed progressively during the September and December 2010 quarters.

The Project is scheduled for commissioning in late 2011 with steady state production reached during the March quarter 2012.

The Ban Houayxai deposit remains open at depth and to the west and further resource development drilling is aimed at delineating additional near surface oxide mineralisation, and upgrading the resource categorisation of deeper primary mineralisation with the target of extending the mine life beyond ten years. Significant intersections from the current resource extension and infill drill program are presented in Table 7 and include:

- HDD160 26 metres at 1.49g/t gold and 12.81g/t silver from 34 metres and
   28 metres at 1.01g/t gold and 7.74g/t silver from 67 metres
- HDD162 30 metres at 0.99g/t gold and 1.62g/t silver from surface
- HDD170 30 metres at 2.43g/t gold and 11.56g/t silver from 101 metres and
   29.4 metres at 1.65g/t gold and 6.28g/t silver from 138.6 metres

## Inca de Oro Copper-Gold Project, Chile

In the March quarter 2010, PanAust made a binding offer to Corporación Nacional del Cobre de Chile ("Codelco") for PanAust to acquire a majority interest in the Chilean registered company Inca de Oro S.A., which, following a re-structure of Codelco subsidiaries, will own the Inca de Oro Copper-Gold Project.

Under Chilean law, the offer is subject to approval by Presidential Decree and it is anticipated that the President of the Republic of Chile will consider the proposal during the current September quarter.

The Inca de Oro pre-feasibility study, which was recently completed by Codelco, has confirmed the potential for a conventional open-pit mining and flotation operation to support annual production of approximately 50,000t of copper and 40,000oz of gold in concentrate at a competitive cash cost and over a plus ten-year mine life. The pre-feasibility study report will be reviewed by PanAust during the September quarter.

PanAust's interest in Inca de Oro S.A. will be held through a 90% interest in PanAust Minera, the remaining 10% being held by an independent Australian private company, The Minera Group. PanAust Minera will hold a 66% interest in Inca de Oro S.A. (giving PanAust a 59.4% beneficial interest) and Codelco will retain a 34% interest.

The acquisition will fit well with PanAust's corporate strategy for growth and represents an excellent opportunity to establish a business in one of the world's most attractive copper mining regions.

## **Phonsavan Copper-Gold Project**

The Phonsavan Copper-Gold Project comprises two copper deposits: KTL and Tharkhek located 5km apart and close to existing road and power infrastructure. A resource drilling program is in the first year of a two-year plan to define sufficient resources to justify the development of a copper-gold operation.

Resource drilling at **KTL** has confirmed the continuity of the copper-gold deposit over a strike length of 2km (Figure 1). The deposit, which dips moderately to the south at between 30deg and 40deg (Figure 2), remains open along strike to the east and down dip. Significant drill assay results from the current program are presented in Table 8. Drilling is continuing.

At **Tharkhek**, copper-gold mineralisation occurs in two distinct zones: a gossan area which has a strike length of over 1.5km, and a skarn zone.

Significant base metal and gold mineralisation intercepts at Tharkhek are presented in Table 8 and include:

• TKD024 20 metres at 1.35% copper, 0.11g/t gold and 2.2g/t silver from 42 metres

During the quarter exploration drilling at Tharkek confirmed a **high-grade gold discovery** (Figure 3). The zone of gold mineralisation occurs within a magnetite and pyrrhotite skarn which is in close proximity to the copper skarn mineralisation (Figure 4). A ground geophysical survey suggests the presence of a number of skarns with a broad east-west orientation that extend over 1.5 kilometres.

Intersections include 22 metres at 12.75g/t gold from 141 metres and 17 metres at 10.96g/t gold from 135 metres (details in Table 9). The mineralisation has been intersected over an area of approximately 100 x 100 metres and has an estimated true thickness of between 15 metres and 20 metres and remains open to the east and west. Drilling at the Tharkhek gold prospect will be suspended for the duration of the current wet season while results are collated and interpretive work is completed.

Tharkhek is emerging as an exciting discovery with the prospect of a discrete high-grade gold deposit being defined in close proximity to the copper-gold deposit. This increases the prospects for separate gold and copper-gold streams to be developed in the Phonsavan region.

The relationship between the discrete gold and copper-gold occurrences at Tharkhek is not fully understood but is thought to be analogous to the Fortitude gold and Copper Canyon deposits in Nevada. Drilling is planned to recommence in November this year.

## Puthep Copper Project, Thailand<sup>5</sup>

An Independent Expert review of the feasibility study concurs with the conclusion that whole of ore vat leaching is the preferred processing option for near-surface chalcocite mineralisation. The review also recommended further copper leach test work and more definition of capital costs. The Puthep Company is targeting a project with an annual production rate of 25,000t to 30,000t of cathode copper over an eight-year mine life.

Through the second half of 2010 and 2011, Puthep will submit a mine plan to apply for mining leases and complete community consultation and an Environmental and Social Impact Assessment study. PanAust will also table a proposal to the Independent Expert and the Puthep management committee for further technical work.

#### **Regional Exploration, Laos**

The Company's 2,636km<sup>2</sup> Contract Area in Laos is under-explored and is highly prospective for copper and gold, offering excellent potential for the discovery of significant new resources as the basis for organic growth.

The **Ban Phonxai Copper-Gold Prospect** which is situated approximately 25km northwest of Phu Kham is defined by the largest (6km x 3km) soil anomaly discovered to date in the Contract Area. A program of scout drilling focused in the northern area of the copper in soil anomaly to provide baseline geological interpretation data was concluded during the quarter and has confirmed the present of low-grade copper mineralisation. The data will be used to determine a strategy for further exploration activities.

#### Sustainability

PanAust's Sustainability Report for the year ending 31 December 2009 was released during the quarter and is available in electronic form on the Company's website (www.panaust.com.au). Note that policies enunciated in that report are subject to review to reflect the rapidly changing nature and needs of the business.

#### Safety

There were five Lost Time Injuries (LTI) recorded (includes a 1 July incident). Two of the LTIs were due to two incidents involving contractors. Both incidents have been investigated and appropriate corrective action taken:

- A contractor electrician sustained an electrical "flash over" injury at Phu Kham and ended the LTI free period for Phu Kham Operations which stood at 271 days. The contractor employee has made a full recovery.
- 2. A contractor was injured while working on the new Ban Houayxai access road while installing a gabion.

<sup>&</sup>lt;sup>5</sup> PanAust will earn a 51% interest in the Puthep Company upon completing a feasibility study on the PUT1 deposit and has further options to acquire a total 60% to 70% interest

The LTI frequency rate (LTI's per million man-hours) on a 12-month rolling average basis at 30 June 2010 was 0.37. The Company's safety record remains excellent by international comparison. The Company's own employees at the Phu Kham Operation have achieved two years without an LTI. Improving contractor safety remains a focus.

Three of the LTIs were due to two separate, but probably related, security incidents that occurred on 30 June and 1 July. In the first incident, two exploration personnel, an employee and a contractor, were injured during an attack on the 30 June by a number of armed assailants in a remote location. On 1 July, a contractor received a superficial wound during the second incident which occurred on the outer perimeter of the heap leach operation. All of the injuries were non-life threatening and the injured are expected to make a full recovery. The security incidents did not disrupt the Phu Kham Copper-Gold Operation.

#### **Environment**

There were no reportable environmental incidents during the quarter.

The Company organised world Environment Day celebrations that included engaging the Company the National University of Laos and its faculty of Forestry's Mobile Conservation Unit (MCU) staff, to educate local children and villagers on biodiversity.

#### **Local Community Projects, Laos**

In the vicinity of Phu Kham, PanAust continues to advance a number of community development projects mainly in the neighbouring villages of Nam Mo and Nam Gnone. Education, health, infrastructure and business development are the main focus, with projects progressed in full consultation with local community and government.

Activities for the quarter included:

- Bitumen sealing of the access roads through villages along the concentrate haulage route and through the two villages adjacent to the Phu Kham Operation;
- Progress of local village livelihood programs including vegetable growing, fish and frog farming;
- Sanitation improvements including regular collection of waste and use of a new landfill facility;
- Disease prevention vaccination programs for both the villagers and their livestock as well as HIV and Aids awareness training;
- Significant improvements in water supply piping and access points;
- Employed a Community Health Officer (Doctor) to provide support and coordination of community health initiatives and;
- Road Safety awareness training.

## Corporate

At 30 June 2010, the Company had cash of US\$72.2 million, project debt of US\$32.5 million and a mobile equipment lease facility of US\$35 million. Debt repayments on the Phu Kham Project debt facility totalling US\$23.3 million have been made during July 2010.

PanAust is progressing discussions with a group of banks to replace the Project debt facility with circa US\$100 million of debt facilities at the Lao subsidiary level. These facilities will include a revolver facility that will provide the Company with further funding flexibility.

#### Copper price exposure

PanAust's current hedging policy seeks to maximise the Company's exposure to the prevailing copper price but protect the Company against near-term sharp falls in the copper price and revenue loss over the quotation period on provisionally priced shipments.

The Company manages the copper provisional price risk on sales contracts (over the quotational period) with bank hedging facilities and near-term production (up to 12 months) with a mixture of fixed price agreements with copper trading companies and put options.

At the date of this report, PanAust has copper swaps covering 7,150t of copper at an average price of US\$6,904/t (US\$3.13/lb) due for settlement in the current quarter, as well as 6,075t of copper under fixed price agreements, of which, 4,075t at an average price of US\$7,069/t (US\$3.21/lb) is due for settlement in the current quarter, with the remaining 2,000t at US\$6,487 (US\$2.94) due to be executed in October.

PanAust has also implemented strategic hedging in the form of put options (as protection against potential downside copper price risk on future production) over 2,500t of copper executable each month to April 2011 at an average strike of US\$5,510/t (US\$2.50/lb). It is anticipated that the banks that are likely to participate in the proposed new debt facilities will require the extension of the strategic hedging to cover 20% of forecast copper production over the period from May 2011 to mid 2012.

## Gold price hedging

PanAust has a limited amount of gold hedging in place. Gold price hedging was a requirement under the terms of the Phu Kham project debt facility. The following gold hedging positions remained at 30 June 2010:

- Gold forward sales totalling 44,148oz between 2010 and 2013 at escalating prices between US\$776/oz and US\$858/oz
- Gold put options purchased on a deferred premium basis covering 60,006oz of gold at a strike price of US\$700/oz and executable between 2010 and 2013.

Committed gold hedges represent less than 25% of the anticipated Phu Kham gold production over that period. The Company may consider hedging part of the Ban Houayxai gold and silver production to cover the capital pay-back period of 2-3 years (at current prices).

### **Issued Capital**

The issued capital of the Company at 30 June 2010 comprised:

2,933,053,479 Ordinary fully paid shares

36,580,000 Unlisted options 19,414,305 Unlisted share rights

## **Proposed 2010 reporting calendar:**

26 Aug 2010 June half 2010 financial results

27 Oct 2010 September quarter 2010 report

Dates are provisional and remain subject to confirmation.

#### **Directors**

Garry Hounsell Non-executive Chairman
Gary Stafford Managing Director
Geoff Billard Non-executive Director
Andrew Daley Non-executive Director
Geoff Handley Non-executive Director
Nerolie Withnall Non-executive Director
Zezhong Li Non-executive Director

# For further information contact:

Allan Ryan Investor Relations Manager
Natalie Whale Communications Manager

PanAust Limited PO Box 3468

South Brisbane Qld 4101

Telephone: (07) 3117 2000 Facsimile: (07) 3846 4899

Email: info@panaust.com.au Website: www.panaust.com.au

#### Registered and principal office

PO Box 3468, South Brisbane Qld 4101

Telephone: (07) 3117 2000 Facsimile: (07) 3846 4899

### Shareholder enquiries to:

Computershare Registry Services PO Box 523, Brisbane Qld 4001 Telephone: 1300 552 270 Facsimile: (07) 3229 9860

Website: www.computershare.com.au

#### Securities Exchange Listing

Australian Securities Exchange Code: PNA PanAust is a constituent of the S&P/ASX 200 Index.

#### **Competent Person Statements**

The data in this report that relates to exploration results and Phu Kham Mineral Resources are based on information reviewed by Mr Daniel Brost who is a Member of the Australasian Institute of Mining and Metallurgy.

Mr Brost is a full time employee of PanAust Limited. Mr Brost has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.

Mr Brost consents to the inclusion in the report of the exploration results and Phu Kham Mineral Resources in the form and context in which they appear.

The data in this report that relates to Phu Kham Ore Reserves are based on information reviewed by Mr Rob Usher who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Usher is a full time employee of PanAust Limited.

Mr Usher has sufficient experience relevant to the styles of mineralisation and type 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 Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.

Mr Usher consents to the inclusion in the report of the Phu Kham Ore Reserves in the form and context in which they appear.

#### Forward-Looking Statement

This announcement includes certain "Forward-Looking Statements". All statements, other than statements of historical fact, included herein, including without limitation, statements regarding production and cost performances, potential mineralisation, mineral resources, exploration results and future expansion plans and development objectives of PanAust Limited are forward-looking statements that involve various risks and uncertainties. There can be no assurance that such statements will prove to be accurate and actual results and future events could differ materially from those anticipated in such statements.

## **Attachment**

**Table 2: Production statistics** 

| Phu Kham Operations       | Units | 3 months<br>to<br>30 Jun 2010 | 6 months<br>to<br>30 Jun 2010 |
|---------------------------|-------|-------------------------------|-------------------------------|
| Total material mined      | t     | 7,417,108                     | 14,081,313                    |
| Copper-gold ore mined     | t     | 3,527,404                     | 6,034,118                     |
| Ore milled                | t     | 3,574,891                     | 6,560,239                     |
| Copper head grade         | %     | 0.64                          | 0.71                          |
| Gold head grade           | g/t   | 0.26                          | 0.30                          |
| Silver head grade         | g/t   | 2.87                          | 3.38                          |
| Concentrate produced      | dmt   | 63,430                        | 128,361                       |
| Copper in concentrate     | t     | 16,012                        | 32,016                        |
| Gold in concentrate       | OZ    | 12,211                        | 25,915                        |
| Silver in concentrate     | OZ    | 110,916                       | 229,034                       |
| Gold in doré (Heap Leach) | OZ    | 28                            | 2,423                         |
| Copper recovery           | %     | 70.2                          | 69.2                          |

Year to date data may incorporate minor post reporting period adjustments

Table 3: Production costs (US\$/lb copper)

| Phu Kham Copper-Gold Operation   | 3 months<br>to<br>30 Jun 2010 | 6 months<br>to<br>30 Jun 2010 |
|--|-------------------------------|-------------------------------|
| Mining cost  | 0.44                          | 0.40                          |
| Processing cost  | 0.45                          | 0.46                          |
| General & Administration   | 0.21                          | 0.21                          |
| Total on-site operating costs  | 1.10                          | 1.07                          |
| Transport handling and marketing   | 0.31                          | 0.28                          |
| Concentrate treatment and refining   | 0.10                          | 0.10                          |
| Total off-site operating costs   | 0.41                          | 0.38                          |
| Deduct precious metal credits  | 0.54                          | 0.57                          |
| Total direct operating costs (C1 cash cost)  | 0.97                          | 0.88                          |
| Royalty  | 0.20                          | 0.19                          |
| Depreciation and amortisation  | 0.40                          | 0.39                          |
| Total costs  | 1.57                          | 1.47                          |
| Average copper price realised (copper revenue recognised / sales) after realised hedging | 2.99                          | 3.14                          |

Notes:

Costs are based on payable copper in concentrate produced May include minor computational discrepancies due to rounding

Western Mineralised
Zone

Position of section for Figure 2

Its 500 mit

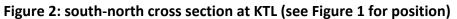
Western Mineralised
Zone

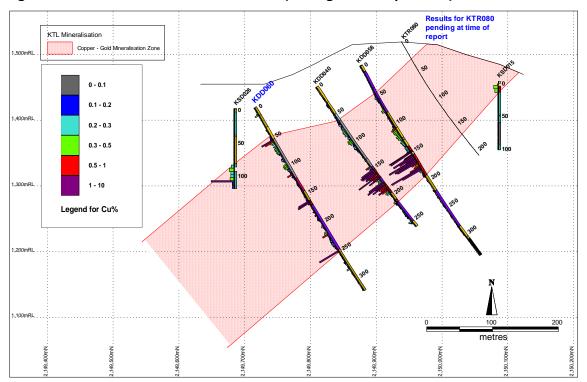
Drilling has confirmed the continuity of copper-gold mineralisation over a strike length of 2km

Topography Legend
Cortoc Line (fish)
XTL Geophysics Legend
High P Chargeality
KTL Mineralisation Legend
Society of Copper enterestation referenced by disting confirmed the continuity of copper-gold mineralisation over a strike length of 2km

No. Society Legend
High P Chargeality
KTL Mineralisation Legend
High P Chargeality
KTL Mineralisation telerated by disting copied developed to lested the strike of the lested the stri

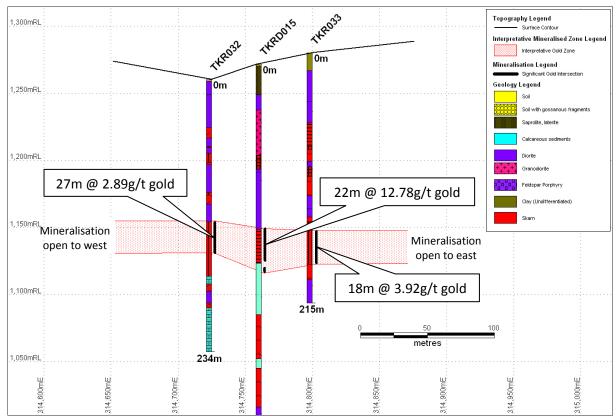
Figure 1: KTL deposit: 2km continuous zone of copper-gold mineralisation





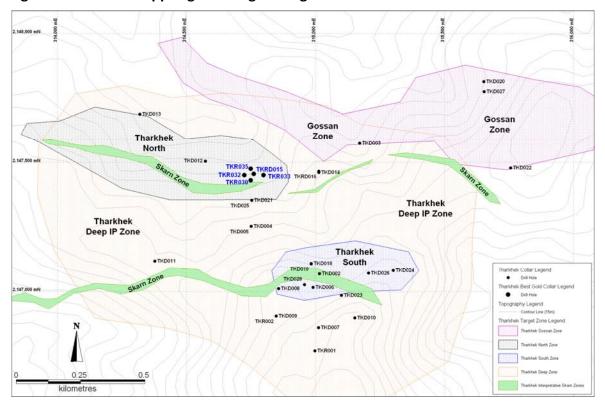
Details of the main intersections shown in Figure 2 are presented in Table 8

Figure 3: Tharkhek high-grade gold discovery - west-east section showing drill hole intersections



Details of the drill hole intersections are presented in Table 9

Figure 4: Tharkhek copper-gold and gold targets



## Ore Reserve and Mineral Resource estimates as at 1 January 2010:

**Table 4: Phu Kham Ore Reserve** (US\$2.25/lb copper price, US\$900/oz gold and US\$13/oz silver)

| Category | Tonnes<br>(Mt) | Copper<br>Grade<br>(%) | Gold<br>Grade<br>(g/t) | Silver<br>Grade<br>(g/t) | Contained<br>Copper<br>(000 t) | Contained<br>Gold<br>(000 oz) | Contained<br>Silver<br>(000 oz) |
|----------|----------------|------------------------|------------------------|--------------------------|--------------------------------|-------------------------------|---------------------------------|
| Proved   | 124            | 0.63                   | 0.25                   | 2.0                      | 776                            | 1,005                         | 7,905                           |
| Probable | 44             | 0.60                   | 0.22                   | 1.7                      | 267                            | 313                           | 2,409                           |
| Total    | 168            | 0.62                   | 0.24                   | 1.9                      | 1,043                          | 1,318                         | 10,314                          |

Table 5: Phu Kham Mineral Resources (0.25% copper cut-off)

| Category  | Tonnes<br>(Mt) | Copper<br>Grade<br>(%) | Gold<br>Grade<br>(g/t) | Silver<br>Grade<br>(g/t) | Copper<br>In-Situ<br>(000 t) | Gold<br>In-Situ<br>(000 oz) | Silver<br>In-situ<br>(000 oz) |
|-----------|----------------|------------------------|------------------------|--------------------------|------------------------------|-----------------------------|-------------------------------|
| Measured  | 140            | 0.61                   | 0.24                   | 2.0                      | 854                          | 1,076                       | 8,837                         |
| Indicated | 69             | 0.57                   | 0.19                   | 1.7                      | 394                          | 432                         | 3,813                         |
| Inferred  | 18             | 0.53                   | 0.15                   | 1.6                      | 96                           | 89                          | 923                           |
| Total     | 227            | 0.59                   | 0.22                   | 1.9                      | 1,344                        | 1,598                       | 13,582                        |

Table 6: Summary of Phu Kham resource extension drill intersections

| Hole No.      |       |          | Copper | Gold  | Silver |
|---------------|-------|----------|--------|-------|--------|
| Depth of hole | From  | Interval | Grade  | Grade | Grade  |
| Orientation   | (m)   | (m)      | (%)    | (g/t) | (g/t)  |
| GDD313        | 67.4  | 8.8      | 0.59   | 0.26  | 8      |
| 361.1m        | 142.0 | 86.0     | 0.50   | 0.16  | 2      |
| -60 to 270    | 234.0 | 3.7      | 0.40   | 0.12  | 2      |
| GDD314        | 15.3  | 5.2      | 0.68   | 0.04  | 3      |
| 438.2m        | 108.0 | 6.0      | 0.64   | 0.54  | 4      |
| -60 to 270    | 144.0 | 32.0     | 0.43   | 0.14  | 1      |
|               | 205.5 | 44.5     | 0.58   | 0.19  | 1      |
|               | 256.0 | 36.0     | 0.79   | 0.14  | 1      |
| GDD315        | 9.2   | 4.8      | 0.36   | 0.05  | 1      |
| 556.6m        | 208.0 | 22.0     | 0.53   | 0.32  | 1      |
| -60 to 270    | 238.0 | 14.0     | 0.40   | 0.16  | 1      |
|               | 276.0 | 6.0      | 0.44   | 0.19  | 1      |
|               | 288.0 | 46.0     | 0.68   | 0.14  | 2      |
| GDD318        | 144.0 | 8.0      | 0.60   | 0.59  | 5      |
| 438.4m        | 162.0 | 8.0      | 1.08   | 1.49  | 4      |
| -60 to 270    | 182.0 | 12.0     | 0.36   | 0.17  | 2      |
|               | 202.0 | 54.0     | 0.39   | 0.14  | 1      |
|               | 268.0 | 38.0     | 0.47   | 0.22  | 1      |
|               | 320.0 | 24.0     | 1.37   | 0.46  | 1      |

| Hole No.      |            |          | Copper | Gold  | Silver |
|---------------|------------|----------|--------|-------|--------|
| Depth of hole | From       | Interval | Grade  | Grade | Grade  |
| Orientation   | (m)        | (m)      | (%)    | (g/t) | (g/t)  |
| GDD321        | 4.0        | 24.0     | 0.33   | 0.21  | 3      |
| 451.9m        | 72.0       | 46.0     | 0.40   | 0.17  | 2      |
| -60 to 090    | 130.0      | 40.0     | 0.43   | 0.04  | 1      |
|               | 226.0      | 40.0     | 0.43   | 0.14  | 2      |
|               | 314.0      | 70.0     | 0.44   | 0.20  | 1      |
| GDD1071       | 80.0       | 12.0     | 0.62   | 1.04  | 4      |
| 521.5m        | 182.0      | 24.0     | 0.44   | 0.14  | 4      |
| -60 to 270    | 218.0      | 12.0     | 0.57   | 0.17  | 3      |
|               | 242.0      | 48.0     | 0.50   | 0.16  | 3      |
|               | 298.0      | 38.0     | 0.46   | 0.12  | 2      |
| GDD1072       | 0.0        | 10.0     | 1.31   | 0.16  | 4      |
| 348.0m        | 50.0       | 64.0     | 0.60   | 0.79  | 7      |
| -72 to 090    | 138.0      | 8.0      | 0.52   | 0.53  | 7      |
|               | 158.0      | 86.3     | 0.80   | 0.74  | 3      |
|               | Including: |          |        |       |        |
|               | 228.0      | 16.3     | 1.38   | 2.46  | 4      |
| GDD1073       | 90.0       | 30.0     | 0.38   | 0.28  | 5      |
| 309.0m        | 144.0      | 96.0     | 0.61   | 0.22  | 2      |
| -70 to 090    | 246.0      | 7.0      | 0.68   | 0.46  | 1      |
| GDD1076       | 162.0      | 9.0      | 1.66   | 0.39  | 3      |
| 344.0m        | 279.0      | 40.0     | 0.53   | 0.05  | 1      |
| -60 to 270    |            |          |        |       |        |
| GDD1078       | 8.0        | 10.0     | 2.78   | 0.03  | 3      |
| 326.5m        |            |          |        |       |        |
| -60 to 090    |            |          |        |       |        |
| GDD1079       | 76.0       | 8.0      | 0.49   | 0.46  | 4      |
| 261.5m        | 94.0       | 17.0     | 0.39   | 0.14  | 3      |
| -60 to 090    |            |          |        |       |        |

Intersection grades are down-hole length weighted calculations using a cut-off grade of 0.3% copper and a maximum sub-grade interval of 4m.

**Table 7:** Ban Houayxai Gold-Silver Project; drill intersections from resource extension and infill program

| Hole No.      |      |          | Gold  | Silver |
|---------------|------|----------|-------|--------|
| Depth of hole | From | Interval | Grade | Grade  |
| Orientation   | (m)  | (m)      | (g/t) | (g/t)  |
| HDD151        | 46.0 | 32.0     | 0.72  | 1.95   |
| 162.3m        |      |          |       |        |
| -60 to 180    |      |          |       |        |
| HDD154        | 23.0 | 32.0     | 0.35  | 2.73   |
| 186.3m        |      |          |       |        |
| -60 to 180    |      |          |       |        |

| Hole No.      |              |          | Gold  | Silver   |
|---------------|--------------|----------|-------|----------|
| Depth of hole | From         | Interval | Grade | Grade    |
| Orientation   | (m)          | (m)      | (g/t) | (g/t)    |
| HDD160        | 34.0         | 26.0     | 1.49  | 12.81    |
| 294.3m        | 67.0         | 28.0     | 1.01  | 7.74     |
| -60 to 180    | 150.0        | 4.0      | 0.78  | 3.00     |
|               | 183.0        | 4.0      | 0.39  | 6.83     |
|               | 215.0        | 35.0     | 0.51  | 2.32     |
| HDD162        | 0.0          | 30.0     | 0.99  | 1.62     |
| 302.8m        | 147.0        | 4.0      | 2.41  | 4.85     |
| -60 to 180    | 218.0        | 4.0      | 0.47  | 6.83     |
| 00 to 100     |              |          |       |          |
|               | 229.0        | 7.0      | 0.51  | 9.96     |
| UDD464        | 259.0        | 7.0      | 0.81  | 15.17    |
| HDD164        | 6.0          | 6.0      | 0.51  | 2.00     |
| 282.2m        | 30.0         | 5.0      | 0.96  | 6.62     |
| -60 to 180    | 92.0         | 25.0     | 0.64  | 2.71     |
|               | 142.0        | 14.0     | 0.65  | 9.91     |
|               | 169.0        | 8.0      | 0.39  | 19.46    |
|               | 195.0        | 4.9      | 0.64  | 3.49     |
| HDD165        | 146.0        | 8.0      | 1.32  | 3.65     |
| 185.5m        |              |          |       |          |
| -60 to 180    |              |          | 2.2=  | 1.00     |
| HDD166        | 0.0          | 3.0      | 0.97  | 1.23     |
| 291.2m        | 15.0         | 5.0      | 2.67  | 3.11     |
| -60 to 180    | 44.0         | 15.0     | 0.42  | 7.34     |
|               | 65.0         | 33.0     | 0.63  | 28.49    |
|               | 138.0        | 12.0     | 0.85  | 4.30     |
|               | 187.0        | 12.0     | 0.38  | 2.63     |
|               | 209.0        | 4.0      | 1.10  | 4.48     |
|               | 271.0        | 3.0      | 0.39  | 1.90     |
| HDD170        | 17.0         | 14.0     | 0.78  | 6.28     |
| 198.6m        | 37.0         | 27.0     | 0.61  | 18.74    |
| -60 to 180    | 69.0         | 6.0      | 0.34  | 7.97     |
|               | 101.0        | 30.0     | 2.43  | 11.56    |
|               | 138.6        | 29.4     | 1.65  | 6.28     |
| HDD172        | 0.0          | 29.0     | 0.60  | 5.65     |
| 201.2m        |              |          |       |          |
| -60 to 180    |              |          |       |          |
| HDD178        | 5.0          | 25.0     | 0.42  | 1.49     |
| 200.1m        |              |          |       |          |
| -60 to 180    |              |          |       | _        |
| HDD180        | 29.0         | 15.0     | 1.52  | 2.67     |
| 200.2m        | 83.0         | 20.0     | 0.85  | 1.88     |
| -60 to 180    | <b>5</b> 4.0 | 40.0     | 0.55  | 2.2.1    |
| HDD182        | 51.0         | 10.0     | 0.66  | 3.94     |
| 108.2m        |              |          |       |          |
| -60 to 180    | L            |          |       | <u> </u> |

Intersection grades are down-hole length weighted calculations using a 0.3g/t gold cut-off and a maximum sub-grade interval of 4m.

 Table 8: Phonsavan Copper Project; significant copper-gold drill intersections

|                   |             | , , <u>, , , , , , , , , , , , , , , , , </u> | •      |       |        |
|-------------------|-------------|---|--------|-------|--------|
| Hole No.          |             |   | Copper | Gold  | Silver |
| Depth of hole     | From        | Interval                                      | Grade  | Grade | Grade  |
| Orientation       | (m)         | (m)   | (%)    | (g/t) | (g/t)  |
| KTL deposit:      |             |   |        |       |        |
| KDD040            | 80.0        | 8.0   | 0.30   | 0.27  | 1.9    |
| 261.7m            | 96.0        | 6.0   | 0.43   | 0.39  | 3.4    |
| -55 to 360        | 146.0       | 50.0  | 0.95   | 0.38  | 2.8    |
| KDD045            | 32.0        | 14.0  | 0.33   | 0.04  | 2.5    |
| 210.7m            | 52.0        | 18.0  | 0.33   | 0.04  | 1.1    |
| -55 to 360        | 32.0        | 16.0  | 0.40   | 0.44  | 1.1    |
| KDD046            | 104.0       | 12.0  | 0.92   | 0.28  | 2.3    |
| 306.4m            | 124.0       | 14.0  | 0.87   | 0.17  | 2.3    |
| -60 to 360        | 158.0       | 22.0  | 0.35   | 0.55  | 1.4    |
| KDD047            |             |   |        |       |        |
| 283.5m            | 95.0        | 13.0  | 0.74   | 0.16  | 1.9    |
| -60 to 360        |             |   |        |       |        |
| KDD048            | 16.0        | 4.0   | 0.67   | 0.03  | 0.8    |
| 311.2m            | 44.0        | 4.0   | 0.43   | 0.41  | 4.3    |
| -60 to 360        | 146.0       | 10.0  | 0.30   | 0.20  | 2.3    |
|                   | 194.0       | 6.0   | 0.77   | 0.49  | 3.3    |
|                   | 278.0       | 6.0   | 0.39   | 0.02  | 2.1    |
| KDD049            | 44.0        | 24.0  | 0.33   | 0.15  | 2.7    |
| 285.2m            | 74.0        | 10.0  | 0.44   | 0.32  | 7.0    |
| -60 to 360        | 132.0       | 26.0  | 0.56   | 0.04  | 1.6    |
|                   | 168.0       | 6.0   | 0.36   | 0.01  | 1.9    |
|                   | 212.0       | 8.0   | 0.30   | 0.01  | 1.6    |
| KDD058            | 76.0        | 4.0   | 0.31   | 0.32  | 2.2    |
| 342.4m            | 108.0       | 26.0  | 0.34   | 0.20  | 2.4    |
| -60 to 360        | 150.0       | 34.0  | 1.71   | 0.42  | 3.5    |
| KDD059            | 84.0        | 34.0  | 0.50   | 0.37  | 3.6    |
| 339.8m            | 136.0       | 6.0   | 0.80   | 0.46  | 5.4    |
| -60 to 360        | 158.0       | 6.0   | 0.52   | 1.05  | 4.2    |
|                   | 184.0       | 8.0   | 0.36   | 0.20  | 1.5    |
|                   | 218.0       | 22.0  | 0.69   | 0.22  | 2.4    |
| KDD060            | 56.0        | 6.0   | 0.92   | 0.16  | 5.0    |
| 324.8m            | 70.0        | 8.0   | 0.30   | 0.10  | 1.9    |
| -60 to 360        | 98.0        | 8.0   | 0.38   | 0.15  | 3.1    |
|                   | 164.0       | 4.0   | 1.27   | 0.22  | 3.1    |
|                   | 220.0       | 4.0   | 0.50   | 0.01  | 1.5    |
|                   | 252.0       | 2.0   | 2.35   | 0.07  | 7.7    |
| KDR064            |             |   |        | -     |        |
| 126.0m            | 38.0        | 24.0  | 0.53   | 0.09  | 2.5    |
| -70 to 360        |             |   |        |       |        |
| Tharkhek deposit: | 1           | 1   | I      |       | l      |
| TKD024            |             |   |        |       |        |
| 203.0m            | 12.0        | 4.0   | 0.38   | 0.01  | 0.2    |
| -60 to 360        | 42.0        | 20.0  | 1.35   | 0.11  | 2.2    |
| TKD026            |             |   |        |       |        |
| 204.0m            | 62.0        | 32.0  | 0.36   | 0.03  | 0.9    |
| -60 to 360        | 124.0       | 4.0   | 0.65   | 0.10  | 1.4    |
| 30 10 300         | <del></del> |   |        | 0.00/ |        |

Intersection grades are down-hole length weighted calculations using a 0.3% copper cut-off and a maximum sub-grade interval of 4m.

 Table 9: Tharkhek high-grade gold discovery; significant drill intersections

| Hole No.      |       |          | Gold  |
|---------------|-------|----------|-------|
| Depth of hole | From  | Interval | Grade |
| Orientation   | (m)   | (m)      | (g/t) |
| TKRD015       | 141.0 | 22.0     | 12.78 |
| 680.3m        | 167.0 | 2.0      | 0.5   |
| -60 to 180    | 175.0 | 3.5      | 1.5   |
| TKR032        |       |          |       |
| 234.0m        | 122.0 | 27.0     | 2.89  |
| -60 to 180    |       |          |       |
| TKR033        | 153.0 | 18.0     | 3.92  |
| 215.0m        | 176.0 | 5.0      | 2.88  |
| -60 to 180    | 176.0 | 5.0      | 2.00  |
| TKR035        |       |          |       |
| 193.0m        | 135.0 | 17.0     | 10.96 |
| -60 to 180    |       |          |       |

Intersection grades are down-hole length weighted calculations using a 0.3g/t gold cut-off and a maximum sub-grade interval of 4m.