

04 February 2019

## PanAust Quarterly Report for the three months to 31 December 2018

### Highlights

- **Outstanding annual safety performance reflects PanAust’s commitment to Zero Harm**
  - The PanAust Group achieved an annual total recordable injury frequency rate (TRIFR) of 0.60 per million hours worked; a 28 per cent improvement on the Company’s 2017 performance.
  - A lost time injury frequency rate (LTIFR) of 0.07 was achieved; 12.5 per cent better than the rate PanAust achieved in 2017.
  
- **Solid fourth quarter 2018 production and cost performance outcomes achieved**
  - The Phu Kham Copper-Gold Operation produced 22,055 tonnes (t) of copper in concentrate at a C1<sup>i</sup> cost of US\$1.20/lb after precious metal credits from 21,173 ounces (oz) of gold and 140,685oz silver. An all-in sustaining cost<sup>ii</sup> (AISC) of US\$1.59/lb copper was realised.
  - The Ban Houayxai Gold-Silver Operation recorded production of 31,880oz of gold and 188,067oz of silver at a C1 cost of US\$594/oz after silver credits. An AISC of US\$789/oz gold was achieved.
  - Both the Phu Kham and Ban Houayxai Operations retained the externally audited Caterpillar 5 Star Contamination Control accreditations for the fifth and sixth consecutive years. The achievement underpins safety, high availability and low cost outcomes for the owner-operator mining fleets.
  
- **Growth**
  - A feasibility study and Environmental Impact Statement for the Frieda River Copper-Gold Project was completed following independent peer review and joint venture approval. An amended Proposal for Development and new environmental permit applications were submitted to relevant Papua New Guinea (PNG) regulatory agencies in December.
  - A scout drilling program at the Company’s Exploration Licences in Myanmar commenced in late December.
  - Near mine Mineral Resource development drill programs commenced at both Phu Kham and Ban Houayxai during the quarter.

**2018 WINNER**  
ASEAN OSHNET  
EXCELLENCE AWARD  
OHS MANAGEMENT



**2017**  
LAO PDR LABOUR ORDER MEDAL  
2011  
LAO PDR LABOUR ORDER  
MEDAL CLASS 1  
POVERTY REDUCTION



**2015 WINNER**  
AUSTRALIAN CLIMATE  
LEADERSHIP AWARDS  
MOST PROFITABLE CARBON  
REDUCTION ACTIVITY



**2013 WINNER**  
PROJECT  
DEVELOPMENT  
OF THE YEAR



**2013 WINNER**  
SUSTAINABILITY LEADERSHIP  
**2010/11 WINNERS**  
BEST COMMUNITY  
DEVELOPMENT



- **Sustainability**

- On 12 November, the Company was honoured to receive the ‘Friend of ASEAN’ award at the ‘2018 ASEAN Business Awards’ gala event, held at the Ritz Carlton in Singapore.
- Construction was completed on a Company-funded upper secondary school and teacher’s dormitory at the village of Nam Mo, Xaisomboun province in October.
- On 7 December 2018, 51 apprentices – 34 from Phu Bia Mining and 17 from Chifeng LXML Sepon – celebrated graduating from the Company’s Trades Training Program at a ceremony held in their honour at the Crowne Plaza in Vientiane.

### Executive Chairman’s overview

At the end of 2018, PanAust underwent a strategic review aimed at streamlining and positioning the Company for the next phase of its development.

The review identified a leaner organisational structure that best supports the Company’s strategy moving forward. The organisational structure changes stemming from the review came into effect 15 January 2019. At an executive-level, these changes included:

- Dr Fred Hess, Managing Director, retired after thirteen years of service. Dr Qun Yang assumed Managing Director’s responsibilities as Executive Chairman. Dr Yang was previously a senior executive with Shenzhen Zhongjin Lingnan Nonfemet Co. Ltd (Nonfemet), a publicly listed mining company based in Shenzhen, China.
- Andrew Price, Chief Financial Officer (CFO) left the Company after more than three years’ service. Daniel Zheng, also previously with Nonfemet, assumed the role of CFO.
- Adrian Bell, Executive General Manager Support Services, left PanAust after more than twelve years’ service. Mr Bell’s duties have been shared among the new executive team.
- Dr Peter Trout, Executive General Manager, Technical Support and Studies left the Company after more than five years’ service. Dr Trout’s responsibilities will be taken up by Scott Cowie, General Manager, Technical Services (in relation to technical services and studies), and Simon Milroy, General Manager Corporate Development and Exploration (Frieda River Project site operations).
- Glen Connell, General Manager External Affairs, left the Company after more than eight years’ service. Simon Milroy assumed responsibility for external affairs in PNG. Shaun Massey, General Manager Support Services will be responsible for external affairs in Laos and Myanmar.

Dr Yang acknowledged departing executives and employees, and noted how proud he was to be given the opportunity to lead PanAust in his new position as Executive Chairman.

“It is with great honour that I take my position as leader of this Company. I would like to take this opportunity to thank those who have left the Company for their immeasurable contribution towards making PanAust one of the most respected mid-tier copper and gold mining companies in the world.

“In particular I would like to acknowledge Dr Fred Hess for his four-year tenure as Managing Director and his previous nine years as an executive in the business. There is no greater indication of Fred’s dedication to PanAust than the outstanding operational and sustainability outcomes, and record production results achieved during his time with the Company,” Dr Yang said.

Reflecting on 2018, Dr Yang spoke of PanAust's outstanding performance during the year, and of the Company's focus and strategy moving forward.

"In 2018, PanAust again set the bar high for safety performance and operational excellence.

"The year was bookended by two prestigious awards that highlight our success, the ASEAN OSHNET 'Excellence Award', and the 'Friend of ASEAN' Award. I would like to recognise the invaluable involvement of those who have left and remain with the Company alike towards achieving these milestones. Importantly, they were achieved safely, sustainably, and in collaboration with our host communities and governments.

"2019 will be a year of change for PanAust as we look to adopt a strategy that will position our Company for the new horizons and challenges ahead.

"Our first priority will be to maintain and extend production at our Lao Operations. We will look to achieve this by safely and sustainably maximising metal production at the Phu Kham and Ban Houayxai Operations.

"We will also continue to work with the Government of Laos towards securing new exploration tenements both within and outside our existing Mineral Exploration and Production Agreement.

"In PNG, our focus will be to advance the project permitting, identify a suitable strategic partner and maintain our site operations. The continued engagement with our local communities, the Government of PNG and other stakeholders will be of paramount importance as we move through the Sepik Development Project permitting phase.

"Exploration of our highly prospective tenements in Myanmar will continue to be an important growth strategy for the Company in 2019. The Exploration Licences in Myanmar fit well with our continued strategy to maximise returns from our existing assets while advancing projects that offer the potential to grow and sustain our business in the long term.

"Our way of doing business, the PanAust Way, is a modern approach to mining that measures success not merely by production volumes but equally by the sustainability of its interactions with its people, its host communities and governments, the environment, and its shareholder.

"I look towards 2019 with much anticipation of what our employees will achieve together, working to the highest standards and absolute integrity that has become synonymous with this Company," Dr Yang concluded.

## Operations overview

### Phu Kham Copper-Gold Operation, Laos (PanAust 90 per cent)

Production of copper in concentrate at the Phu Kham Copper-Gold Operation totalled 22,055t during the December quarter. A C1 cost of US\$1.20/lb copper was realised.

**Table 1**

Phu Kham Copper-Gold Operation <i>Production summary (100% equity basis)</i>	Units	3 months to 31 Dec 2018	12 months to 31 Dec 2018
Copper in concentrate	t	22,055	83,680
Gold in concentrate	oz	21,173	70,787
Silver in concentrate	oz	140,685	537,888
C1 cost after precious metal credits	US\$/lb Cu	1.20	1.32
AISC	US\$/lb Cu	1.59	1.74

Further details of the production and cost performances are contained in Tables 3 and 4 of this report

### Phu Kham production performance

A total of 13.3 million tonnes (Mt) of ex-pit material was mined during the quarter which included 5.7Mt of copper-gold ore.

Copper, gold and silver head grades averaged 0.56 per cent, 0.26 grams/t (g/t) and 2.07g/t respectively. An overall copper recovery rate of more than 82 per cent was realised.

Quarterly pay-metal in concentrate sales totalled 24,614t of copper, 21,140oz of gold and 162,351oz of silver.

The reliability and high performance of the Phu Kham process plant in 2018 resulted in a new record mill operating time of 95.6 per cent, breaking the previous record of 94.5 per cent set back in 2015.

### Ban Houayxai Gold-Silver Operation, Laos (PanAust 90 per cent)

The Ban Houayxai Gold-Silver Operation poured 31,880oz of gold and 188,067oz of silver in doré during the December quarter. A C1 cost of US\$594/oz gold was realised.

**Table 2**

Ban Houayxai Gold-Silver Operation <i>Production summary (100% equity basis)</i>	Units	3 months to 31 Dec 2018	12 months to 31 Dec 2018
Gold poured	oz	31,880	108,570
Silver poured	oz	188,067	666,628
C1 cost after precious metal credits	US\$/oz	594	726
AISC	US\$/oz	789	931

Further details of the production and cost performances are contained in Tables 3 and 5 of this report

## **Ban Houayxai production performance**

A total of 4.4Mt of total material mined was achieved at Ban Houayxai during the quarter. Mined material included 1.3Mt of gold-silver ore. Over 1.3Mt of ore was processed.

Gold and silver head grades averaged 0.88g/t and 8.15g/t respectively. A gold recovery percentage of close to 87 was achieved.

Payable gold and silver in doré sold during the quarter totalled 34,854oz and 208,867oz respectively.

The Ban Houayxai process plant set multiple new production records during 2018, amongst them mill throughput (5.3Mt vs. 5.0Mt 2017) and operating time (96.3 per cent vs. 95.8 per cent in 2017).

## **Pre-development and exploration projects overview**

### **Frieda River Copper-Gold Project, Papua New Guinea (PanAust 80 per cent)**

In Papua New Guinea (PNG), PanAust holds an 80 per cent interest in the Frieda River Copper-Gold Project.

In August 2018, PanAust announced it had completed a revision to the scope of the Project that identified a new development path which integrated with the Government of PNG's development plans as outlined in Vision 2050 and the Papua New Guinea Development Strategic Plan 2010-2030.

The new pathway focuses on the development of shared-use infrastructure that will support, and in turn be supported by, the mining operation. Under this inclusive development model, the Frieda River Copper-Gold Project will be a core component to a transformative nation-building opportunity for PNG – the Sepik Development Project.

The Sepik Development Project contemplates four interdependent projects that together will create a new economic corridor across the Sandaun and East Sepik Provinces: the Sepik Infrastructure Project, the Frieda River Copper-Gold Project, The Frieda River Hydroelectric Project, and the Sepik Power Grid Project.

During the December quarter, PanAust completed work on, and submitted for independent external and joint venture review, a feasibility study and completed an Environmental Impact Statement. An amended Proposal for Development and new environmental permit applications were submitted to the relevant regulatory agencies in PNG to advance the permitting of the Sepik Development Project.

### **Exploration Licences, Myanmar (PanAust 80 per cent)**

In Myanmar, PanAust holds an 80 per cent interest in Wuntho Resources Company Limited (WRCL) and has established a joint venture with Myanmar Energy Resources Group International Company Limited (MERG), a Myanmar-based company which holds the remaining 20 per cent of WRCL.

WRCL holds tenements covering roughly 775 square-kilometres in the Sagaing region of Myanmar and has applied for additional Exploration Licences in the same Region.

Phase one of a scout drilling program of the WRCL tenements commenced in late December.

### **Inca de Oro Copper-Gold Project, Chile (PanAust 66 per cent)**

PanAust completed a feasibility study on the Inca de Oro Copper-Gold Project in 2014. No material site activities are currently being undertaken or are planned.

## Sustainability

PanAust is committed to ensuring its presence positively impacts the host communities and countries in which it operates. The Company achieves this by meeting the demand for resources in a socially responsible way, by ensuring traditional rights and values are supported, and respecting cultural heritage.

### Commitment to localisation in Laos

Highlighting PanAust's continued vision to reduce its reliance on expatriate employees through increased localisation and thereby leaving a lasting positive legacy in Laos, the Company's second intake of 51 apprentices graduated from its Trades Training Apprenticeship Program on 7 December 2018.

The apprentices, nine of whom were women, received an Australian Certificate III trade qualification in one of the following fields: automotive electrical; heavy equipment plant mechanical; metal fabrication and welding; fitting and machining; and electrical.

The group included 34 direct Phu Bia Mining employees and 17 apprentices from Chifeng LXML Sepon-owned Sepon copper-gold mine in southern Laos who were invited to join the program in 2015 following their observation of its success. Graduates from the Company's Phu Bia Mining Operations began transitioning into full-time roles within the Company's fixed plant maintenance and mobile maintenance teams during December.



*Left: Trades Training apprentices celebrate their success at a ceremony for their graduation held at the Crown Plaza in Vientiane, 7 December 2018*

### New school buildings open in time for the 2019 school year

On 28 October, a Company-funded newly constructed upper secondary school and a teacher's dormitory were officially opened at the village of Nam Mo.

The new facilities increases access to education in the village, removing the need for students from Mor 5 to Mor 7 (grades 10 to 12 in the international education system) to travel long distance to attend school.

PanAust's support of infrastructure projects that secure quality learning outcomes for those living close to its Operations highlight the Company's support for the Government of Laos' commitment to strengthen education outcomes for people living in remote areas.



*Left: PanAust General Manager Site Support, Shaun Massey and the Vice Governor of Xaisomboun province, H.E. Mr Phoykham Houngbounyuang at the opening of the upper secondary school and teacher's dormitory at Nam Mo, 28 October 2018*

### **PanAust recognised as a leading business within ASEAN**

On 12 November 2018, PanAust received the 'Friend of ASEAN' award at the 2018 ASEAN Business Awards gala event, held at the Ritz Carlton in Singapore.

The award was presented to then PanAust Executive General Manager Support Services by the President of Singapore, Her Excellency Halimah binto Yacob. Also in attendance was the Prime Minister of Malaysia, Dr Mahathir bin Mohamad.

The ASEAN Business Awards acknowledge and recognise businesses that significantly contribute to the economic growth of the ASEAN region. The 'Friend of ASEAN' award was bestowed upon PanAust in recognition of its demonstrated commitment to growing its presence in Laos and thereby positively impacting its economy.



*Left: Former PanAust Executive General Manager Support Services, Adrian Bell receives the 'Friend of ASEAN' Award from the President of Singapore, Her Excellency Halimah binto Yacob at the ASEAN Business Awards, 12 November 2018*

## PanAust Group production and sales statistics for the December quarter 2018

**Table 3**

Phu Kham Copper-Gold Operation	Units	3 months to 31 Dec 2018	12 months to 31 Dec 2018
Total material mined	t	13,334,947	51,951,464
Copper-gold ore mined	t	5,710,711	21,076,052
Process plant available time	%	96.2	96.0
Process plant operating time	%	96.1	95.6
Ore milled	t	4,796,720	18,918,804
Copper head grade	%	0.56	0.54
Gold head grade	g/t	0.26	0.23
Silver head grade	g/t	2.07	2.15
Concentrate produced	dmt	93,526	357,709
Copper in concentrate	t	22,055	83,680
Gold in concentrate	oz	21,173	70,787
Silver in concentrate	oz	140,685	537,888
Copper recovery	%	82.1	81.4
Concentrate sales	dmt	105,247	367,375
Payable copper in concentrate sold	t	24,614	85,328
Payable gold in concentrate sold	oz	21,140	72,093
Payable silver in concentrate sold	oz	162,351	589,468
Ban Houayxai Gold-Silver Operation	Units	3 months to 31 Dec 2018	12 months to 31 Dec 2018
Total material mined	t	4,424,830	15,820,718
Gold-silver ore mined	t	1,329,001	4,957,835
Process plant available time	%	96.8	97.1
Process plant operating time	%	95.9	96.3
Ore milled	t	1,341,228	5,262,499
Gold head grade	g/t	0.88	0.79
Silver head grade	g/t	8.15	7.65
Gold in doré	oz	31,880	108,570
Silver in doré	oz	188,067	666,628
Gold recovery	%	87.0	81.8
Payable gold in doré sold	oz	34,854	114,122
Payable silver in doré sold	oz	208,867	688,216

Cumulative data may incorporate post reporting period adjustments to prior periods

**Table 4**

Phu Kham Copper-gold Operation production costs US\$/lb copper	3 months to 31 Dec 2018	12 months to 31 Dec 2018
Mining cost	0.60	0.68
Deferred mining and inventory adjustments capitalised	-0.04	-0.03
Processing cost	0.59	0.60
General and administration (site support)	0.16	0.16
<b>Total on-site operating costs</b>	<b>1.30</b>	<b>1.41</b>
Transport handling and marketing	0.19	0.20
Concentrate treatment and refining	0.22	0.23
<b>Total off-site operating costs</b>	<b>1.71</b>	<b>1.84</b>
Deduct precious metal credits	-0.51	-0.52
<b>Total direct operating costs (C1 cost)</b>	<b>1.20</b>	<b>1.32</b>
Royalty	0.17	0.18
Sustaining capital (includes TSF)	0.08	0.11
Rehabilitation and closure	0.00	0.00
Corporate support and shared services costs	0.10	0.09
Lease principal and interest charges	0.00	0.00
Deferred mining and inventory adjustment capitalised	0.04	0.03
<b>All-in sustaining costs</b>	<b>1.59</b>	<b>1.74</b>

Notes: costs are based on payable copper in concentrate produced; may include minor computational discrepancies due to rounding

**Table 5**

Ban Houayxai Gold-Silver Operation production costs US\$/oz gold	3 months to 31 Dec 2018	12 months to 31 Dec 2018
Mining cost	264	345
Deferred mining and inventory adjustments capitalised	-25	-13
Processing cost	347	377
General and administration (site support)	89	104
<b>Total on-site operating costs</b>	<b>676</b>	<b>814</b>
Total off-site operating costs (freight, refining)	6	6
Deduct silver credit	-88	-94
<b>Total direct operating costs (C1 cost)</b>	<b>594</b>	<b>726</b>
Royalty	80	83
Sustaining capital (includes TSF)	47	65
Rehabilitation and closure	7	3
Corporate support and shared services costs	36	42
Lease principal and interest charges	0	0
Deferred mining and inventory adjustment capitalised	25	13
<b>All-in sustaining costs</b>	<b>789</b>	<b>931</b>

Notes: costs are based on payable copper in concentrate produced; may include minor computational discrepancies due to rounding

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<sup>i</sup> Brook Hunt convention for the reporting of direct costs comprising: mine site, product transportation and freight, treatment and refining charges and marketing costs; based on payable metal content after by-product credits

<sup>ii</sup> AISC reported are the C1 cost plus royalties, allocated corporate support charges, shared services costs, sustaining capital; lease principal and interest charges; and deferred mining and inventory adjustments capitalised