

6 September 2018

## Bald Hill Operations and Optimisation Study Update

Joint venture partners Tawana Resources NL (TAW:ASX) (**Tawana**) and Alliance Mineral Assets Limited (SGX:40F) (**AMAL**) (together the **JV parties**) are pleased to provide an update for the Bald Hill Lithium and Tantalum Mine (**Bald Hill Mine**) located in the eastern goldfields of Western Australia.

### Highlights:

- Total of 21,975 wmt (wet metric tonnes) of spodumene (lithium) concentrate produced in July and August
- 18,855 dmt (dry metric tonnes) of lithium concentrate shipped during July and August
- Lithium concentrate stockpiles of approximately 12,300 wmt as of 31 August
- 13.2 wmt tantalum pentoxide in concentrate produced
- Total of 243,182 tonnes of ore processed during July and August at an average throughput of 211 tph (tonnes per hour)
- Fines optimisation study well-advanced, targeting increased combined throughput to 300tph

The JV parties are targeting production of 60,000 to 75,000 tonnes of lithium concentrate during the 6 months between July and December 2018.

Tawana Managing Director Mark Calderwood said *“the Bald Hill JV is continuing to make excellent progress at the Bald Hill Mine and we are on track for our targeted production of concentrate by calendar year end. We remain fully focused on getting the project operating to its optimum level as soon as possible, and with the optimization studies currently underway we anticipate making further significant gains in throughput increases.”*

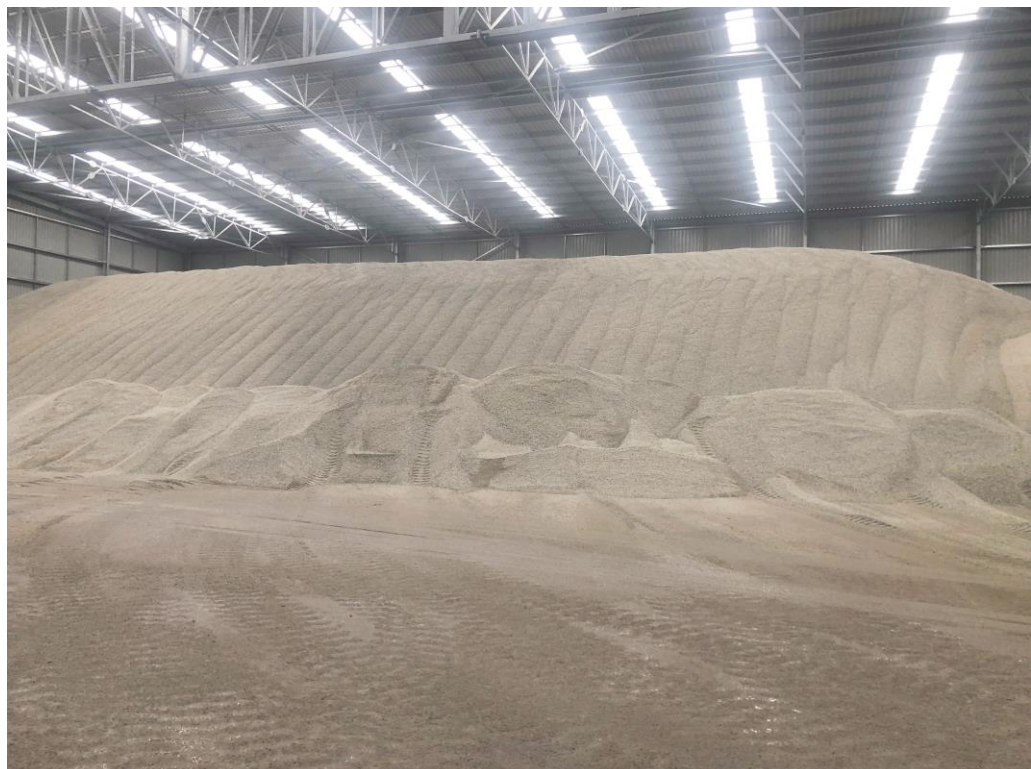


Figure 1 | +11,000t stockpile at Qube facility in Esperance

## **Mining**

Mining for the months of July and August is estimated at 1.53Mm<sup>3</sup> (million cubic metres) including 250,000 tonnes of lithium ore and 90,000 tonnes of tantalum ore at a strip ratio of approximately 10.9:1. Final numbers will be available upon completion of the August monthly survey.

Waste mining is currently below budget; however, ore movements are above budget.

## **Processing**

July and August processing reached 243,182 tonnes at 0.83% Li<sub>2</sub>O head grade and 280 ppm Ta<sub>2</sub>O<sub>5</sub> at an average throughput rate of 211tph with a plant net utilisation rate of 77%. Total lithium concentrate production was 21,975 wmt and a total of 18,855 dmt was shipped during the 2-month period. Estimated lithium recovery for July and August was 63% due to higher than expected quantity of fines.

A total of 13.2 wmt of tantalum pentoxide extracted from lithium fines was recovered to concentrates.

## **Lithium and Tantalum Product Quality**

The Bald Hill Mine is establishing a reputation for high quality lithium concentrates with low levels of deleterious elements and minerals such as Fe, Na, K, F and mica. The grade of lithia in concentrates is generally managed in a range of between 5.5% and 6.5% Li<sub>2</sub>O, with production to date averaging 6.0%.

Bald Hill Mine produces a premium +30% tantalum pentoxide concentrate that has notably low levels of U, Th, As and Sb.

## **Operating Costs**

Mining cash costs<sup>1</sup> for July 2018 were AUD\$10/m<sup>3</sup> or AUD\$3.80/t for all material types including grade control costs. Mining cash costs equated to AUD\$57/t of ore processed while crushing and processing cash costs<sup>1</sup> came in at AUD\$27/t of ore processed.

Total mining and processing cash costs<sup>1</sup> per tonne of spodumene concentrate produced in July were approximately US\$575/t or AUD\$785/t.

Site administration, haulage and other cash costs<sup>1</sup> were approximately AUD\$1.1M or AUD\$8.8/t of ore processed, which equates to the approximate value of the tantalum pentoxide produced during the month of July 2018.

## **Optimisation Studies**

A metallurgical and engineering review to add a fines circuit and significantly increase throughput from the existing Dense Media Separation (**DMS**) plant, is nearing completion. At this time, the preferred option is to modify the existing DMS circuit from a 2-stream circuit processing a 1-10mm feed range to a 3-stream circuit processing a 0.5mm to 12mm feed range through the addition of cyclones, screens and pumps. A 3-stream DMS circuit provides maximum operational flexibility for Bald Hill's feed. It is proposed that +2mm feed would be processed through the existing DMS plant streams and the 'Fines' stream would treat an additional 20% of feed in the 2mm and 0.5mm size range. The plant throughput rate with the addition of the fines stream is expected to increase from the current nominal 200tph to 300tph with increased total DMS recovery rates, providing a significant concentrate production increase. The capital cost estimate for the fines circuit addition is still pending, however, it is expected to be significantly less than a second full DMS plant.

## **Notes:**

<sup>1</sup> Cash costs are a non-IFRS measure of the direct costs incurred and are included to assist investors to better understand performance of the business.

### **Commencement of the Commissioning of the Burwill & Jiangte JV Lithium Converter**

In its June Quarterly Activities Report released on 31 July 2018, Tawana reported that, in June 2018, management of Tawana had visited the Jiangte Special Electric Motor Co (**Jiangte**) lithium conversion facility under construction in Yichun, in China's Jiangxi Province. The spodumene conversion facility has two production lines, one of which is a joint venture between Burwill Holdings Limited (**Burwill**) – the holding company of the Bald Hill Mine lithium offtake partner and Jiangte.

The JV parties are pleased to note the announcement released by Burwill on The Stock Exchange of Hong Kong on 28 August 2018, which advised the kiln in the production line under the joint venture between Jiangte and Burwill had been ignited and that commissioning of the equipment is expected to be completed within a few months to reach design production capacity of 15,000tpa of lithium carbonate. The kiln is expected to be fed by spodumene concentrate from the Bald Hill Mine.

### **About the Bald Hill Mine**

The Bald Hill Mine is in the southeast of the Goldfields-Esperance Region of Western Australia, approximately 105km south-southeast of Kalgoorlie. Kalgoorlie is the main hub in the region providing access to the Mine which can be accessed from Perth by air, rail and road.

The principal road access to the Mine is via the (sealed) Coolgardie-Esperance Highway (National Highway 94), and then the Binneringie Road from Widgiemooltha, a distance of 65km of unsealed shire road. The Mine is approximately 350km by road from the Port of Esperance.

The Bald Hill Mine currently consists of an open pit, a Dense Media Separation and Spiral Circuits, waste rock dumps, stores, a camp (including administrative and living quarters) and associated infrastructure. Lithium concentrate is hauled via Binneringie Road to the Port of Esperance.

Tawana and AMAL executed separate offtake agreements in April 2017 (and subsequent variations thereto) for the supply of lithium concentrate from Bald Hill Mine over a five-year term with pricing for 2018 and 2019 of US\$880/t (A\$1,173) (FOB Esperance) for 6% Li<sub>2</sub>O concentrates. The offtake agreement provides for an attractive fixed price in US dollars per dry metric tonne for the first 2 years of production, and shipping costs are borne by the offtake party. Refer to ASX announcement of 26 April 2017 and SGX announcement of 4 May 2017.

### **Forward Looking Statements**

All statements other than statements of historical facts included in this announcement are or may be forward-looking statements. Forward-looking statements include but are not limited to those using words such as "aim", "seek", "expect", "anticipate", "estimate", "believe", "intend", "project", "plan", "strategy", "forecast" and similar expressions or future or conditional verbs such as "will", "would", "should", "could", "may" and "might". These statements reflect the AMAL and Tawana's current expectations, beliefs, hopes, intentions or strategies regarding the future and assumptions in light of currently available information. Such forward-looking statements are not guarantees of future performance or events and involve known and unknown risks and uncertainties. Accordingly, actual results may differ materially from those described in such forward-looking statements. Shareholders should not place undue reliance on such forward-looking statements, and neither AMAL nor Tawana guarantees any future performance or event or assumes any obligation to update publicly or revise any forward-looking statement.

Neither Tawana nor AMAL provide any financial or investment 'advice' as that term is defined in the South African Financial Advisory and Intermediary Services Act, 37 of 2002.

Investors should exercise caution when dealing in the securities of Tawana and AMAL. In the case of any doubt, they should seek their own professional advice and consult with their own bank manager, stockbroker, solicitor, accountant, tax adviser or other professional adviser.