

Tawana Resources NL (ASX: TAW, **Tawana** or the **Company**) is pleased to report to shareholders its activities for the quarter ended 30 September 2018.

**ASX RELEASE:**  
**31 October 2018**

**ASX: TAW**

**CORPORATE DIRECTORY**

**Non-Executive Chairman**  
Robert Benussi

**Managing Director**  
Mark Calderwood

**Non-Executive Directors**  
Robert Vassie  
Mark Turner  
Wei (Vicki) Xie

**Chief Financial Officer**  
Craig Hasson

**Joint Company Secretaries**  
Alexei Fedotov  
Joanna Kiernan

***Increased production of high quality lithium and tantalum concentrates at Bald Hill as the mine continues to ramp up.***

**Highlights**

**Bald Hill Mine, Western Australia, Operations**

***Production***

- Commercial lithium production declared in July
- Significant plant performance improvements during the quarter
- Production of **28,419** wmt of spodumene concentrate, **up 63%** from the June quarter
- Recovery of **36,100lbs** of saleable Ta<sub>2</sub>O<sub>5</sub>, **up 36%** from June quarter
- Shipments of 18,670 dmt lithium concentrate and a further 10,336 dmt on 7 October
- Sales of parcels containing approximately 41,000 Lbs Ta<sub>2</sub>O<sub>5</sub> negotiated during the quarter
- Bald Hill produces high quality lithium (**+6% Li<sub>2</sub>O**, **<0.5% Fe**, **<0.5% mica**) and tantalum (**+30% Ta<sub>2</sub>O<sub>5</sub>**) concentrates
- Production Cash Costs<sup>2</sup> for the Quarter were approximately **A\$900 (US\$660)** per tonne of spodumene concentrate produced
- Revised production target of 55,000 to 60,000 tonnes of lithium concentrate for the 6 months between July and December 2018 (previously 60,000 – 75,000 tonnes)

***Optimisation Study Update***

- Fines optimisation study completed; detailed design commenced
- Targeting increased combined throughput to 300tph and recovery of 72-80%
- Offtake discussions commenced on increased lithium concentrate production

**Corporate**

***Proposed merger with Alliance Mineral Assets Limited (“Alliance”)***

- Scheme Booklet registered with ASIC and despatched to shareholders
- Independent Expert BDO concluded that the Scheme is fair and in the best interests of Tawana Shareholders (in the absence of a superior proposal)
- Supplementary Scheme Booklet progressed, subject to ASIC and Court approval

***Demerger of non-core assets to form Cowan Lithium Limited***

- Shareholders approved disposal of projects, capital reduction and amendment to constitution at a General Meeting on 6 July 2018
- Cowan Lithium shares were distributed to eligible shareholders on 18 July 2018

***Funding***

- Institutional share placement completed in July 2018 to raise approximately \$4.9m
- \$40m funding package secured to strengthen balance sheet and expedite the ASX listing of Alliance

Tawana Managing Director Mark Calderwood said *“The Bald Hill Mine continued to make excellent progress throughout the quarter, notably significant increases in lithium and tantalum concentrate production. The completion of the fines study and commencement of commissioning of an additional tantalum circuit were also achieved. Improvements to plant performance continued throughout the quarter with an average throughput rate of 202tph; 25% above nameplate capacity. In addition, we agreed terms for our first tantalum sales and have continued to build our reputation as a supplier of premium lithium and tantalum concentrates.”*

**CONTACT DETAILS**

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<sup>1</sup> wmt = wet metric tonnes. dmt = dry metric tonnes

## Bald Hill Mine (Tawana 50%, Alliance 50%)

The Bald Hill Lithium and Tantalum Mine (**Bald Hill Mine**) is located 50km south east of Kambalda in the Eastern Goldfields region of Western Australia. It is located approximately 75km south east of the Mt Marion Lithium project. The Project comprises mining tenure totalling 774km<sup>2</sup>.

### Safety Performance

The 12-month moving average Total Recordable Injury Frequency Rate (**TRIFR**) for the mine is 0.63 (up 0.27 due to a recordable Medically Treated Injury that occurred in September).

### Mining

Mining during the September quarter occurred in Stages 1 and 2 of the pit with ore supply coming from Stage 1. Mining continued at a rate of approximately 773kbcm per month for a total of 2.3mbcm of material including 292,428t of lithium ore at 0.90 % Li<sub>2</sub>O and 265 ppm Ta<sub>2</sub>O<sub>5</sub>. An additional 98,510 wmt of low-grade tantalum ore grading 284 ppm Ta<sub>2</sub>O<sub>5</sub> was also mined.

The strip ratio for the September quarter was 14.7, and will continue to remain high as the Stage 3 pre-strip begins in the schedule, allowing for continuity of ore supply in the medium to long term.

Mining vertical advance rates were less than targeted and has resulted in lower than expected ore and waste volumes. Improvements to the mining and dewatering procedures have been adopted and a fourth excavator has arrived on site to reduce effects of equipment downtime.

Source	Units	June 2018 Quarter	September 2018 Quarter	Movement
Ore BCM's	<i>bcm</i>	112,557	147,524	+31%
Waste BCM's	<i>bcm</i>	2,244,198	2,171,246	-3%
Total Mined BCM's	<i>bcm</i>	2,356,755	2,318,770	-2%
Strip Ratio	<i>W:O</i>	19.9	14.7	-26%
Ore Tonnes (Lithium)	<i>wmt</i>	211,978	292,428	+38%
Ore Tonnes (Tantalum)	<i>wmt</i>	86,298	98,510	+14%
Mined Lithium Grade	<i>%Li<sub>2</sub>O</i>	1.01%	0.90%	-11%
Ore Grade (Tantalum)	<i>ppm</i>	285	284	-

### Processing

Processing during the September quarter resulted in a total of 337,287 tonnes of lithium and tantalum ore at 0.82 % Li<sub>2</sub>O and 284ppm Ta<sub>2</sub>O<sub>5</sub> being fed to the plant. From the plant feed, 93,164 tonnes of -1mm fines were stockpiled after removal of 374wmt of tantalum concentrate containing about 36,100lbs of saleable Ta<sub>2</sub>O<sub>5</sub>. The remaining 244,123 tonnes grading 0.94 % Li<sub>2</sub>O were processed through the DMS circuit for recovery of 28,419 wmt of spodumene concentrate. Lithium recovery was approximately 74% (net 62%, taking into account unprocessed fines and middlings).

The Bald Hill JV previously announced a lithium concentrate production target of 60,000 to 75,000 tonnes for the six-month period July to December 2018. This target has been revised to 55,000 to 60,000 tonnes due to mining delays and throughput limitations during construction of the tailings dam during the December quarter.

Plant performance was consistently good with throughputs of up to 249tph. The average throughput rate for the quarter was 202tph, up 17% from June quarter and 25% above nameplate.

	Units	June 2018 Quarter	September 2018 Quarter	Movement
Processed Tonnes (Gross)	wmt	240,504	337,287	+40%
Lithium Grade	%Li <sub>2</sub> O	0.79	0.82	+4%
Processed Tonnes (Net of unprocessed stockpiled fines and middlings)	wmt	179,875	239,253	+33%
Lithium Feed Grade	%Li <sub>2</sub> O	0.89	0.94	+6%
Spodumene Produced	wmt	17,403	28,419	+63%
Recovery (gross) (including stockpiled fines)	%	59%	62%	+3%
Recovery (net) (excluding stockpiled fines)	%	72%	74%	+2%
Tantalite Produced	Lbs	26,480	36,100	+36%
Throughput (Gross)	tph	172	202	+17%

Operational performance of the plant continues to improve with plant availability increasing to 78% as it approaches the steady state target 85%. Crushed plant feed size increased from 10mm to 18mm. This change has reduced the quantity of -1mm fines bypassing the DMS circuit from 27% to 20% and improved overall mass yield, while maintaining overall concentrate grades of 6% or better.

The Bald Hill Mine currently produces a high quality spodumene concentrate containing **+6% Li<sub>2</sub>O**, **<0.5% Fe**, **<0.5% mica**, **<3% H<sub>2</sub>O**, **<1% K<sub>2</sub>O** and +90% of concentrate greater than 1mm.

A total of 374 wmt of tantalum pre-concentrate containing 36,100 lbs of Ta<sub>2</sub>O<sub>5</sub> was recovered from the fines circuit. Commissioning of two tables to upgrade spiral concentrates resulted in the production of concentrates containing 15-40% Ta<sub>2</sub>O<sub>5</sub> on site. Work continued to be undertaken at Nagrom Mineral Laboratory in Perth to upgrade pre-concentrates. Based on the treatment of spiral samples, results indicate that a +30% concentrate is available with extremely low deleterious elements.

A pilot jig plant was also installed to recover liberated tantalite contained in the final lithium product. This plant is currently being commissioned and is expected to provide recovery of additional liberated tantalum minerals.

## Fines Circuit Upgrade

A metallurgical and engineering options study to increase throughput and recovery has been completed. The preferred option is to modify the existing DMS circuit from a 2-stream circuit currently processing a 1-18mm feed range to a 3-stream circuit processing a 0.5mm to 18mm feed range through the addition of cyclones, screens and pumps. A 3-stream DMS circuit provides maximum operational flexibility for the Bald Hill Mine'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 220tph to 300tph and increase total lithium recovery rates to a range of 72-80% depending on feed grade. The combined increase in throughput and recovery will significantly increase the total concentrate production and reduce the processing cost per tonne produced. In addition, tantalum recovery rates would increase.

The preliminary capital cost estimate for the fines circuit addition, completed by Primero Group is estimated at A\$10M (+/- 20%) excluding contingency and contractor margin. Primero has extensive knowledge for DMS circuits including the existing DMS circuit at the Bald Hill Mine.

Work is continuing on the Front End Engineering Design (FEED) works and it is expected that mechanical equipment orders will commence being placed during the December 2018 quarter.

## Sales and Marketing

During the quarter, Tawana and Alliance sold a total of 18,670 dmt of spodumene concentrate to offtake partner Burwill Lithium Company Limited (**Burwill**) and a further 10,336 dmt was shipped on 7 October.

Tawana and Alliance agreed to sell approximately 400 wmt (50% each) of low-grade tantalum concentrate (3-4% contained Ta<sub>2</sub>O<sub>5</sub>) produced by the Bald Hill Mine between April and July 2018 under a one-off sales contract to Global Advanced Metals Greenbushes Pty Ltd, with the sale completed subsequent to the end of the quarter.

Subsequent to quarter end, Tawana and Alliance also agreed to sell approximately 23 dmt (50% each) of high-grade tantalum concentrate (approximately 30% contained Ta<sub>2</sub>O<sub>5</sub>) to H.C. Starck Tantalum and Niobium GmbH (**H.C. Starck**). Tawana and Alliance remain engaged with H.C. Starck for the long-term offtake of the high-grade tantalum concentrate production from the Bald Hill Mine.

## Costs

Production Cash Costs<sup>2</sup> for the Quarter, net of tantalum by-product credits were approximately A\$900 (US\$660) per tonne of spodumene concentrate produced.

## Exploration

Limited exploration work was undertaken during the quarter. The grade control rigs were used periodically to complete selected in-pit resource definition drilling in areas that were not previously available to exploration during the 2017 program due to access restrictions. A total of 21 holes were completed for 2042m.

In addition to the limited drilling, field reconnaissance, mapping and rock chip sampling has been undertaken on regional targets across the broader Bald Hill Mine area.

### Notes:

<sup>2</sup> Cash Costs per wmt of spodumene concentrate produced is a non-IFRS measure of the direct costs incurred net of tantalum by-product credit value produced, net of waste deferral costs and excluding royalties.

## Corporate

### Proposed Merger of Tawana and Alliance

On 5 April 2018, Tawana announced a merger with Alliance by way of a members' scheme of arrangement (**Scheme**) pursuant to which, Alliance will acquire all Tawana shares and Tawana shareholders will receive 1.1 new Alliance shares for every 1 Tawana share held at the Scheme record date (**Merger**). Tawana and Alliance entered into a Scheme Implementation Agreement (**SIA**) (as amended on 9 July 2018) which documented the terms of the Merger.

On 20 August 2018, Tawana announced that ASIC had registered the Scheme Booklet in relation to the Merger following Federal Court of Australia approval. The Scheme Booklet included an Independent Expert's Report prepared by BDO Corporate Finance (WA) Pty Ltd which concluded that the Scheme is fair and reasonable and therefore in the best interests of Tawana shareholders, in the absence of a superior proposal.

As outlined in the Scheme Booklet, the Merger is subject to a number of conditions precedent. On 19 September 2018, Tawana announced that Tawana and Alliance agreed to waive the condition relating to the admission of Alliance to the Official List of ASX Limited (**ASX**) and Official Quotation of Alliance Shares on ASX (**ASX Listing Condition**) as Alliance was unable to satisfy certain ASX listing conditions at the time relating to its accounts not containing an emphasis of matter (as further explained in the announcement on 19 September 2018).

On 27 September 2018, Tawana announced that it had secured a debt funding package (see details below) which was expected to facilitate the satisfaction of the ASX listing requirements. Accordingly, Tawana and Alliance confirmed that Alliance will seek ASX listing following the Merger.

The Scheme Meeting scheduled to be held on 26 September 2018 was adjourned until a later date so that additional disclosure can be provided to shareholders in respect of the impact of the new debt facilities and waiver of ASX listing condition. The new date for the Scheme Meeting and an updated indicative timeline will be advised in due course, subject to the required orders being obtained from the Federal Court of Australia. Shareholders will also be provided with a Supplementary Scheme Booklet.

### General Meeting of Alliance Shareholders

The General Meeting of Alliance shareholders was held on 21 September 2018, where all the resolutions in respect of the Merger were approved. This satisfied a key condition to the Merger, and also facilitates the listing of Alliance on ASX through the adoption of ASX-compliant changes to Alliance's constitution.

### Demerger of Assets

In the March quarter, Tawana announced a proposed demerger of its non-core assets to allow it to focus on the development of the Bald Hill Mine (**Demerger**). The Demerger involved transferring the Cowan, Yallari and Mofe Creek assets and shares in Rakana Consolidated Mines (Proprietary) Ltd to a new wholly-owned public company, Cowan Lithium Limited (**Cowan Lithium**) before undertaking a capital reduction and an in-specie distribution of 85% of all of the Cowan Lithium shares to the Company's shareholders.

The Demerger was approved at a General Meeting held on 6 July 2018, and shares in Cowan Lithium were distributed on 18 July 2018. Tawana no longer has a direct interest in these projects, however retains exposure through its 15% shareholding in Cowan Lithium.

## Placement

In July 2018 Tawana completed a placement of 12,195,122 fully paid ordinary shares to an institutional investor at a price of 40 cents per share to raise gross proceeds of approximately \$4.9 million.

## Debt Funding Package

In September, Tawana secured a \$40m funding package from a consortium of lenders led by Tribeca Investment Partners to strengthen balance sheet liquidity and to facilitate an expeditious ASX listing of Alliance following the Merger. The funding package comprised the following:

- \$20 million secured debt facility for Tawana (**Tawana Facility**)
- Additional secured \$20 million line of credit for Merged Group, conditional upon Merger completion and Alliance receiving conditional ASX listing approval (**Conditional MergeCo Facility**)

\$15 million of the \$20 million Tawana Facility will be used to advance the proposed fines lithium and tantalum circuit additions to the existing DMS plant and for additional working capital. The remaining \$5 million of the \$20 million of the Tawana Facility will be used to repay the Red Coast loan (Refer to ASX Announcement dated 5 February 2018).

The Tawana Facility was conditional upon (amongst other things), receipt of a waiver of listing rule 10.1 from ASX in respect of the grant of security in favour of Tribeca. This waiver was granted by ASX on 4 October 2018.

## Cash Position and Movements

As at 30 September 2018, Tawana Resources held \$11.4m in cash (June 2018: \$11.6m).

For further movements in cash during the Quarter, refer to the Appendix 5B.

## About Tawana

Tawana Resources NL is a resources focused ASX and JSE-listed company located in Perth, Western Australia.

Tawana has a 50% interest in 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 Project which can be accessed from Perth by air, rail and road.

The principal road access to the Project 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 Project is approximately 350km by road from the Port of Esperance.

The 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. Tantalum concentrates are planned to be packed into 205L drums and/or bulka-bags and exported via Fremantle in standard shipping containers.

## Tawana Resources NL Mining Tenements (as at 30 September 2018)

Tenement	Location	Registered Owner	Structure and Ownership
<b>Bald Hill Mine<sup>1</sup></b>			
M15/400	Western Australia	Alliance Mineral Assets Limited	50%
M15/1470	Western Australia	Alliance Mineral Assets Limited	50%
M15/1305	Western Australia	Alliance Mineral Assets Limited	50%
M15/1308	Western Australia	Alliance Mineral Assets Limited	50%
M15/1840 (application)	Western Australia	Alliance Mineral Assets Limited	50%
M15/1851 (application)	Western Australia	Alliance Mineral Assets Limited	50%
G15/28	Western Australia	Alliance Mineral Assets Limited	50%
P15/5862	Western Australia	Alliance Mineral Assets Limited	50%
P15/5863	Western Australia	Alliance Mineral Assets Limited	50%
P15/5864	Western Australia	Alliance Mineral Assets Limited	50%
P15/5865	Western Australia	Alliance Mineral Assets Limited	50%
R15/1	Western Australia	Alliance Mineral Assets Limited	50%
E15/1058	Western Australia	Alliance Mineral Assets Limited	50%
E15/1212	Western Australia	Alliance Mineral Assets Limited	50%
E15/1161	Western Australia	Alliance Mineral Assets Limited	50%
E15/1162	Western Australia	Alliance Mineral Assets Limited	50%
E15/1166	Western Australia	Alliance Mineral Assets Limited	50%
E15/1353	Western Australia	Alliance Mineral Assets Limited	50%
E15/1066	Western Australia	Alliance Mineral Assets Limited	50%
E15/1067	Western Australia	Alliance Mineral Assets Limited	50%
E15/1492	Western Australia	Alliance Mineral Assets Limited	50%
E15/1493	Western Australia	Alliance Mineral Assets Limited	50%
E15/1555	Western Australia	Alliance Mineral Assets Limited	50%
E15/1556	Western Australia	Alliance Mineral Assets Limited	50%

<sup>1</sup> Lithco No. 2 Pty Ltd has a 50% beneficial interest in these tenements pursuant to the Farm-In Agreement described on page 12 of the Company's 2017 Annual Report. Registrations in the name of Lithco No.2 Pty Ltd are pending.

Mining Tenements acquired: Alliance Mineral Assets Limited applied for M15/1851 (Lithco No.2 Pty Ltd – 50% beneficial interest).

Mining Tenements disposed: P15/5465, 5466 and 5467 were relinquished.

Beneficial percentage interests held in farm in or farm-out agreements: Refer above.

Beneficial percentage interests in farm-in or farm-out agreements acquired or disposed: Nil.

## **Competent Persons Statement**

### *Metallurgical*

The information in this release that relates to metallurgy and metallurgical test work has been reviewed by Mr Noel O'Brien, FAusIMM, MBA, B. Met Eng. Mr O'Brien is a part time employee of the company. Mr O'Brien is a Fellow of the Australasian Institute of Mining and Metallurgy, and he has sufficient experience with the style of processing response and type of deposit under consideration, and to the activities undertaken, to qualify as a competent person as defined in the 2012 edition of the "Australian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr O'Brien consents to the inclusion in this report of the contained technical information in the form and context as it appears.

## **Forward Looking Statements**

This announcement may contain certain forward looking statements and projections, including regarding estimated resources and reserves, production and operating costs profiles, capital requirements and strategies and corporate objectives. Such forward looking statements/projections are estimates for discussion purposes only and should not be relied upon as representation or warranty, express or implied, of Tawana Resources NL. They are not guarantees of future performance and involve known and unknown risks, uncertainties and other factors many of which are beyond the control of Tawana Resources NL. The forward looking statements/projections are inherently uncertain and may therefore differ materially from results ultimately achieved.

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## **End Note**

All figures throughout this report regarding the Blad Hill Mine are, unless expressly stated otherwise, presented on a 100% basis. Tawana, through its 100% owned subsidiary Lithco No. 2. Pty Ltd has a 50% interest in the project.