

## Bald Hill Lithium-Tantalum Project to Deliver Outstanding Cash-Flows and Returns

11 July 2017

### CORPORATE DIRECTORY

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Robert Benussi

**Managing Director**  
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Tawana Resources NL (“Tawana” or the “Company”) is pleased to announce that the Bald Hill Mine in Western Australia (Project) is on track to become a low-cost producer of quality spodumene (lithium) concentrate in early 2018 following outstanding results from a Pre-Feasibility Study (PFS).

**Bald Hill PFS Highlights** (Tawana earning a 50% interest in Project, owns 50% of Lithium Rights)<sup>1</sup> and A

- Confirms technical and financial viability of a 1.2Mtpa lithium Dense Media Separation circuit (DMS) adjacent to the existing tantalum processing facility (TPF).
- Forecast annual production of approximately 155,000tpa of spodumene concentrate from the DMS and 260,000lbs pa of tantalum pentoxide from the TPF.
- Maiden Lithium Ore Reserve of 4.3Mt at 1.18% Li<sub>2</sub>O and 208 ppm Ta<sub>2</sub>O<sub>5</sub> representing approximately 90% conversion of existing Indicated Resources. Additional tantalum Ore Reserve of 1.4Mt at 317ppm Ta<sub>2</sub>O<sub>5</sub>.
- Declared Ore Reserve underpins an initial “starter pit” life of 3.6 years with further growth for the Project expected from infill and extensional drilling. Inferred Resources outside the scope of the PFS are an additional 8.2Mt at 1.14% Li<sub>2</sub>O, most of which is contained within scoping level pit optimisation shells, indicating potential for a 10-year mine life prior to resource growth.
- Long lead items have been ordered, and construction mobilisation has commenced under an early works contract. Production is scheduled for the March quarter 2018.

### Economics

- Exceptional Project economics with an IRR of 185% and payback in approximately 12 months.
- Lowest capital-cost lithium project in Australia at A\$42M (excluding pre-production operating costs). A\$37.5M already committed to the Project with Tawana earn in (\$12.5m) and off-take contractual pre-payments (\$25m).
- Average EBITDA for “starter pit” life-of-pit of approximately A\$83M per annum.
- Operating cash flow for the “starter pit” of approximately \$223M.
- The NPV<sub>10%</sub> of the “starter pit” is A\$150M, potential to increase significantly with upgrade of Inferred Resources and inclusion of a low-cost Lithium Fines Circuit.
- Estimated life-of-pit operating cash costs<sup>B</sup> of only A\$508/tonne (US\$381/tonne) of spodumene concentrate FOB (including tantalum pentoxide by-product credits) resulting in a 100% pre-tax margin.

### Opportunities for Growth

- Significant opportunity to increase annual production by treatment of stockpiled screened fines and middling concentrates containing about 25% of mined lithium, through the Lithium Fines Circuit currently under consideration. Approximately A\$117/tonne of operating cash costs carried by the DMS concentrate operating costs.
- Infill drilling on the current additional Inferred Resources of 8.2Mt at 1.14%<sup>C</sup> Li<sub>2</sub>O is expected to add significantly to the life of the Project. Extensional drilling also is continuing to grow the total mineralised pegmatite footprint which has expanded laterally by about 40% since the Resource Estimate.

### CONTACT DETAILS

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<sup>1</sup> All figures throughout this announcement regarding the Project and the PFS are, unless expressly stated otherwise, presented on a 100% of Project basis. Tawana, through its 100% owned subsidiary Lithco No. 2 Pty Ltd, has earned a right to 50% of all lithium minerals from the tenements comprising the Project - refer to announcements of 28 June 2017. Tawana is required to spend \$12.5 million in capital expenditure for upgrading and converting the existing plant on the Bald Hill tenements for processing ore derived from the Project, infrastructure costs, pre-stripping activities and other expenditures including operating costs by 31 December 2019. Upon completion of such capital expenditure commitment, Tawana (through Lithco No.2 Pty Ltd) will be entitled to a 50% interest in the Project comprising the Bald Hill tenements, the processing plant and infrastructure at Bald Hill, and all minerals from the Bald Hill tenements under the terms of the Bald Hill Joint Venture Agreement (which will only take effect upon satisfaction of the capital expenditure obligation). Refer to announcements of 24 February 2017.

**Bald Hill Project** (TAW 50% of Lithium Rights, earning 50% of the Project)<sup>A</sup>

**Tawana Resources NL** (“Tawana” or the “Company”) is pleased to advise the results of the Pre-Feasibility Study (“PFS”) on the Bald Hill Lithium-Tantalite Project (**Project**), located south east of Kambalda, Western Australia. The Project is set to become a low-cost producer of high-quality spodumene (Lithium) concentrates in Q1 2018.

The PFS was completed by Tawana with the assistance of a group of highly experienced consultants and contractors. In particular, the DMS plant capital and operating costs (including maintenance) were compiled by Primero Group (Primero). Subsequent to the PFS level estimate, Primero has provided Tawana and its Joint Venture Partner, Alliance Mineral Assets Limited (together the Joint Venture Parties) with a fixed price lump sum commitment (which is now included in the PFS) to build the DMS plant which has given the Joint Venture Parties certainty on the capital estimate. Primero have recently commissioned a DMS lithium plant in Western Australia and are currently involved in several significant lithium projects globally.

All figures throughout this announcement regarding the Project and the PFS are, unless expressly stated to the contrary, are presented on a 100% of Project basis. All production targets and financial information based on production targets, are supported exclusively by the ore reserves discussed below under the heading “Mining / Reserves”.

Tawana, through its 100% owned subsidiary Lithco No. 2 Pty Ltd, has earned a right to 50% of all lithium minerals from the tenements comprising the Project, with a right to farm in to 50% of the Project (including tenements, plant and all minerals) through a further A\$12.5M of capital expenditure<sup>A</sup>. Tawana has sufficient funds to meet this earn in requirement.

The PFS for the Project, being the initial “starter pit”, contemplates a net cash flow before tax of \$223 million before tax and a net present value (@ 10% discount rate) of \$150 million with an internal rate of return of 185%. The payback period is rapid at approximately 12 months. The NPV is expected to increase significantly as additional ore Reserves are defined.

Average concentrate cash costs (net of tantalum pentoxide by-product credits) are A\$508/t (US\$381/t).

Net cash costs are expected to reduce to under A\$400/t if an allowance is made for mining and crushing of stockpiled screened fines and middling concentrates containing about 25% of mined lithium were to be processed. The fines and middlings are likely to be treated via a floatation circuit (**LFC**), however test work is incomplete and the LFC was excluded to reduce initial construction time and cost.

The capital cost estimate to construct a new 1.2Mtpa DMS plant, upgrades to the existing tantalum plant and infrastructure at the Bald Hill site, including all direct costs is approximately A\$42 million (+/- 5% to 15%). This estimate includes a contingency of 10% and excludes pre-production operating costs. The financial model has assumed pre-production costs as highlighted in the capital section of the announcement.

Tawana Managing Director Mark Calderwood stated:

*“The results show an impressive IRR and payback period. Given we have a modest sized ‘brown-fields’ construction project, we believe we are on track to become one of Australia’s next lithium producers with our first shipment planned for the first quarter of 2018.*

*“We are keeping to our strategy of fast tracking lithium production to take advantage of the strong near-term demand whilst minimising dilution to our shareholders. Given our spodumene recovers so well through the DMS, and produces a high-grade concentrate, the two-phase production approach of getting the DMS commissioned in 2018 and then look to construct a LFC out of cash flow has assisted in the Bald Hill Project being one of Australia’s lowest upfront capital cost, stand-alone lithium projects.*

*“It is exciting to be involved with the Project and the economics have highlighted attractive returns. Drilling is also continuing on infilling the current 8Mt Inferred Resource area with a view to converting the bulk of this into Reserves and to increase the mine life to 10 years.*

*“There is significant exploration upside potential at Bald Hill. The Company has only drilled 20% of the known pegmatite footprint and there are significant other portions of our tenements that are unexplored so we are very confident of being at Bald Hill for many years to come.”*

## PROJECT BACKGROUND



Figure 1: Project Location

The Bald Hill Mine is located in the southeast of the Goldfields-Esperance Region of Western Australia, approximately 105 km south southeast of Kalgoorlie, and about 56km east of Widgiemooltha. The main hub in the region providing access to the Project is Kalgoorlie, which can be accessed by air, rail and road from Perth.

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 65 km of unsealed shire road. The Project is located approximately 350km by road from the port of Esperance.

The Project will consist of open pit mines, a Dense Media Separation Process Plant, tailings dam, waste rock dumps, water harvest and storage dams, stores, camp including administrative and living quarters and associated infrastructure.

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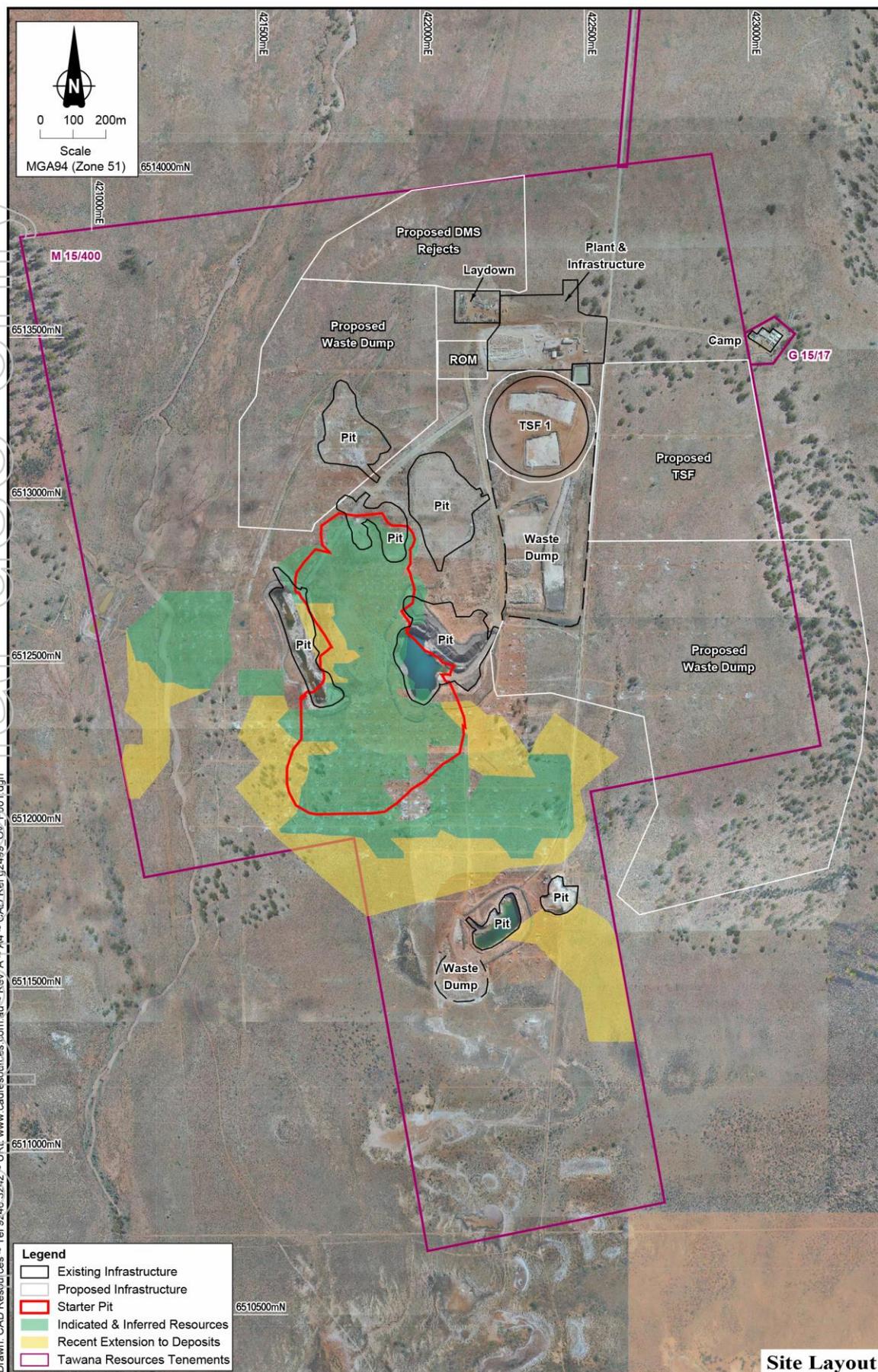


Figure 2: The Bald Hill Project Layout Plan

Lithium concentrate will be hauled via Binneringie Road to the Port of Esperance. Tantalite concentrate will be packed into 205L drums, sealed and exported via Fremantle in standard shipping containers.

Tawana has signed an offtake agreement with a fixed price for two years 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 Tawana's ASX announcement of 26 April 2017.

## Financial Evaluation

The key commercial results of the PFS are presented below (on a 100% of Project basis).

Table 1: Key Parameters from the PFS Financial Model

Summary of Key Parameters from PFS "Starter Pit" Financial Model		
Life of Mine (LOM)	Years	3.6
LOM Ore Mined (lithium)	Mt	4.3
LOM Ore Mined (tantalum)	Mt	1.4
LOM Waste Mined	Mt	51.5
LOM Strip Ratio	(waste:ore)	9:1
Plant Feed Rate (lithium)	tpa	1,200,000
Plant Feed Rate (tantalum)	tpa	320,000
Average Lithium Ore Head Grade	% Li <sub>2</sub> O	1.18%
Average Lithium Recovery	%	65.8%
Average Spodumene Concentrate Production	tpa	155,000 (@6% Li <sub>2</sub> O)
Average Tantalite Pentoxide Production	lbs Ta <sub>2</sub> O <sub>5</sub> pa	260,000
Average Tantalum Pentoxide Recovered Grade	Ta <sub>2</sub> O <sub>5</sub>	25%
Tantalite Forecast Price	US\$/lb FOB	60
Forecast FX rate	AUD/USD	0.75
Initial capital cost (including 10% contingency)	A\$M	42.2 <sup>1</sup>
Offtake Prepayment <sup>3</sup>	A\$M	\$25m, received in three instalments being 15 April 2017 (\$A7.5m), 15 July 2017 (\$8.75m) and 15 September 2017 (A\$8.75m).
Repayment of Offtake Prepayment	A\$M	\$25m, 20% of sales until full amount repaid.
Sustaining Capital	A\$M	\$6.1 <sup>2</sup>
Average LOM Operating Costs (Real\$)	A\$/t product	641
Average Operating costs (after tantalite credits)	A\$/t product	508
Average Annual EBITDA	A\$M	83.1
NPV (10% Discount Rate, Before Tax)	A\$M	150.2
IRR	%	185.03
Payback	Months	12

1. Pre-production capital costs exclude pre-production operating costs. They are expected to be between A\$10M and A\$22M depending on the financing terms with key contractors (mining and crushing). The financial model has included the upper limit of this range and includes a 10% contingency.
2. Includes a new tailings dam after production has commenced and \$1.0m per year for general sustaining capital. Plant sustaining costs including in process operating costs.
3. Binding Prepayment and Offtake Agreement. Refer to ASX announcement on 26 April 2017.

## Capital Cost Estimates

The capital cost estimate to construct a new 1.2Mtpa Dense Media Separation plant, refurbish the existing tantalum plant and infrastructure at the Bald Hill site, including all direct costs, is approximately A\$42.2 million. This estimate includes a contingency of 10%.

The capital costs are shown in Table 2 and were estimated as follows:

Table 2- Capital Costs Estimates

Capital Item	Value - A\$M	Source/Comments
DMS Process Plant	\$27.0	Primero feasibility study and fixed lump sum.
Non-DMS Infrastructure	\$9.2	Includes refurbishment of tantalum plant, earthworks, roadworks, communications, electrical supply, site buildings, first fills, light vehicles, camp running costs.
Owners Costs	\$2.0	Project and development team salaries.
Contingency	\$4.0	10% on DMS process plant, non-DMS infrastructure capital costs and owners costs. <sup>1</sup>
<b>TOTAL</b>	<b>\$42.2</b>	

1. Any of the \$3M contingency saved under the Primero contract is to the benefit of Primero, excess expenditure under the contract scope is to be borne by Primero.

## Operating Cost Estimates

The estimated LOM cash operating costs ranges between A\$172-\$624/t year on year (FOB, after tantalite credits) of concentrate produced. The LOM average cost of production after tantalum credits is approximately A\$508/t concentrate FOB.

In addition, the Company will carry A\$117/t of operating costs as fines and middlings. It is anticipated that a flotation circuit will be built in the future to process these and/or direct shipped to a market in China.

The Project operating costs utilised in the study base case are shown in Table 3 below. The principal sources for the operating cost estimates are:

Table 3- Operating Costs Estimate Details

Cost Item	Amount	Source/Comments
Mining Ore and Waste	\$3.65/t	Mining contractor rates plus drill and blast, grade control and other costs. Includes mining overheads of \$0.24 per tonne mined for the mining team including flights/camp/support costs, light vehicles and grade control.
Crusher feeding costs	\$9.00/plant feed	Crushing contractor rates plus on-costs.
Processing (lithium)	\$14.15/t feed	From Primero feasibility study. Assumed a flat rate of feed irrespective of the feed quality from the mine and the process flow required. Also includes contract power station.
Processing (tantalum)	\$5.58/t feed	Calculated by Tawana and from previous historical production records and new first principles.
Product transport and storage (lithium)	\$51/t transported	Haulage contractor rates - For transport to Esperance, storage and ship loading.
Product transport and storage (tantalum)	\$380/t transported	Based on historical numbers shipped from Fremantle.
Corporate and Admin	4.66/t processed of lithium ore or \$5.6m pa.	From Primero feasibility study and added additional staff costs/flights/camp/support costs, light vehicles and Lanfranchi camp rental cost.

State royalties are calculated separately from the operating costs and is 5% for both lithium and tantalum concentrates.

## Geology / Resources<sup>C</sup>

CSA Global Pty Ltd (“CSA Global”) was commissioned by Tawana to compile the maiden lithium Mineral Resource estimate for the Bald Hill Project and update the tantalum Resource.

The Bald Hill Pegmatite Mineral Resource comprises one large, main, sub horizontal pegmatite body, striking north-south, with a strike length of 1,070 metres, and a width at its widest point of 775 metres. This main body is surrounded by several smaller discrete pegmatite bodies, sub-parallel to the main, which result in a total strike length for the whole resource of 1,245 metres, and a total width of 990 metres. The Mineral Resource has a total vertical depth of 195 metres, beginning 20 metres below the natural surface and plunging gently to the south along its entire strike length.

The Mineral Resource was classified as Indicated and Inferred in accordance with the JORC Code (2012 Edition) on a qualitative basis; taking into consideration numerous factors including drillholes spacing, estimation quality statistics (kriging slope of regression), number of informing samples, average distance to informing samples in comparison to the semivariogram model ranges, and overall coherence and continuity of the modelled mineralisation wireframes.

Table 4 | Bald Hill Project, Resources above 0.5% Li<sub>2</sub>O cut-off

Resource Category	Tonnes (Mt)	Grade Li <sub>2</sub> O %	Contained Li <sub>2</sub> O Tonnes	Grade Ta <sub>2</sub> O <sub>5</sub> ppm	Contained Ta <sub>2</sub> O <sub>5</sub> (,000) Lbs
Indicated	4.6	1.25	57,100	207	2,200
Inferred	8.2	1.14	94,300	130	2,500
<b>Total</b>	<b>12.8</b>	<b>1.18</b>	<b>151,400</b>	<b>158</b>	<b>4,700</b>

Table 5 | Bald Hill Project, Resources above 0.5% Li<sub>2</sub>O and 200ppm Ta<sub>2</sub>O<sub>5</sub> cut-offs

Resource Category	Tonnes (Mt)	Grade Li <sub>2</sub> O %	Contained Li <sub>2</sub> O Tonnes	Grade Ta <sub>2</sub> O <sub>5</sub> ppm	Contained Ta <sub>2</sub> O <sub>5</sub> (,000) Lbs
Indicated	1.9	1.26	23,700	312	1,300
Inferred	1.4	1.10	15,000	291	900
<b>Total</b>	<b>3.2</b>	<b>1.19</b>	<b>38,700</b>	<b>303</b>	<b>2,100</b>

Note

- 1) The tantalum resources form part of the lithium/tantalum resources reported in Table 4.

Table 6 | Bald Hill Project, Resources below 0.5% Li<sub>2</sub>O and above 200ppm Ta<sub>2</sub>O<sub>5</sub> cut-offs

Resource Category	Tonnes (Mt)	Grade Ta <sub>2</sub> O <sub>5</sub> ppm	Contained Ta <sub>2</sub> O <sub>5</sub> (,000) Lbs
Indicated	2.8	325	2,000
Inferred	2.9	297	1,900
<b>Total</b>	<b>5.7</b>	<b>311</b>	<b>3,900</b>

Note

- 1) The tantalum resources reported in Table 6 are additional to those reported in Table 4 and 5.

## Mining / Reserves

The lithium and tantalite mineralisation at Bald Hill is amenable to low cost open pit mining for the proposed 1.2Mtpa of ore to the ROM (Run-of-Mine) pad. It is envisaged that mining of staged open pits will be performed using a conventional truck/shovel and truck/excavator mining method. The mining method would include grubbing of vegetation, stockpiling of topsoil, pre-stripping of the overburden, followed by mining of the mineralisation, and on the completion of mining landform rehabilitation.

Tawana, with the assistance of consultants completed a mining study on the drill-defined mineralisation covering the Bald Hill Mine prospects. The defined mineralisation comprised a block model of the lithium and tantalite Mineral Resource<sup>B</sup> in the area surrounding the 5 existing open pits, located about 1-2km south-south-west of the existing processing facilities. The mineralisation is near surface.

To minimise ore loss and dilution, ore was calculated in blocks of shallow bench height of 2.5m, and oriented down the bedding planes. Waste mining would utilise 5.0-10.0m benches.

The mining sequence will consist of: advance dewatering, grade control drilling and modelling, followed by survey control, drill and blast, survey control and load and haul operations.

To establish mineable quantities and grades a number of optimisations were completed on the Resource model completed by CSA Global in June 2017. These results were then analysed with a set of current price and cost assumptions to determine their respective value and an optimal shell was selected for the study based on both value and risk.

Using conceptual mine plans a number of mining contractors were requested to provide budgetary pricing for open pit mining, and these costs were used to build up mining costs included in cost assumptions for the mining study.

Pit shells were used as stage designs and from these a mine production schedule was completed for the life of the mine.

Pit optimisations were undertaken by CSA Global using Whittle Four-X pit optimisation software (Whittle). The block model of the lithium and tantalite ores including the overburden and waste rocks was imported into Whittle.

A number of optimisations were run and the case selected to be the base Whittle pit optimisation utilised the indicated lithium and tantalum Mineral Resource. An ultimate pit was designed using only JORC Mineral Resource Indicated material only to create staged mine Reserves for the mine schedule.

The mine schedule was completed using Maptek Evolution scheduling software after importing the updated resource model from Vulcan. Using a cutoff grade of 0.39% Li<sub>2</sub>O for Indicated material only and iterations of the mining schedule were run to maximise early grade while minimising waste movement.

**Table 7: Bald Hill Project, Reserves above 0.39% Li<sub>2</sub>O**

Reserve Category	Tonnes (Mt)	Grade Li <sub>2</sub> O %	Contained Li <sub>2</sub> O Tonnes	Grade Ta <sub>2</sub> O <sub>5</sub> ppm	Contained Ta <sub>2</sub> O <sub>5</sub> (,000) Lbs
Proven	-	-	-	-	-
Probable	4.3	1.18	50,800	208	2,000
Total	4.3	1.18	50,800	208	2,000

Notes

- 1) Allows for mining ore loss of 5% and dilution of 5%

**Table 8: Bald Hill Project, Reserves below 0.39% Li<sub>2</sub>O and above 200ppm Ta<sub>2</sub>O<sub>5</sub> cut-offs**

Reserve Category	Tonnes (Mt)	Grade Li <sub>2</sub> O %	Contained Li <sub>2</sub> O Tonnes	Grade Ta <sub>2</sub> O <sub>5</sub> ppm	Contained Ta <sub>2</sub> O <sub>5</sub> (,000) Lbs
Proven	-	-	-	-	-
Probable	1.4	0.21	3,000	317	1,000
Total	1.4	0.21	3,000	317	1,000

Notes

- 1) Allows for mining ore loss of 5% and dilution of 5%
- 2) Reserves contained in Table 7 are additional to those reported in Table 8.

The production targets and forecast financial information outlined in this announcement are based solely on the Reserves in Tables 7 and 8 above.

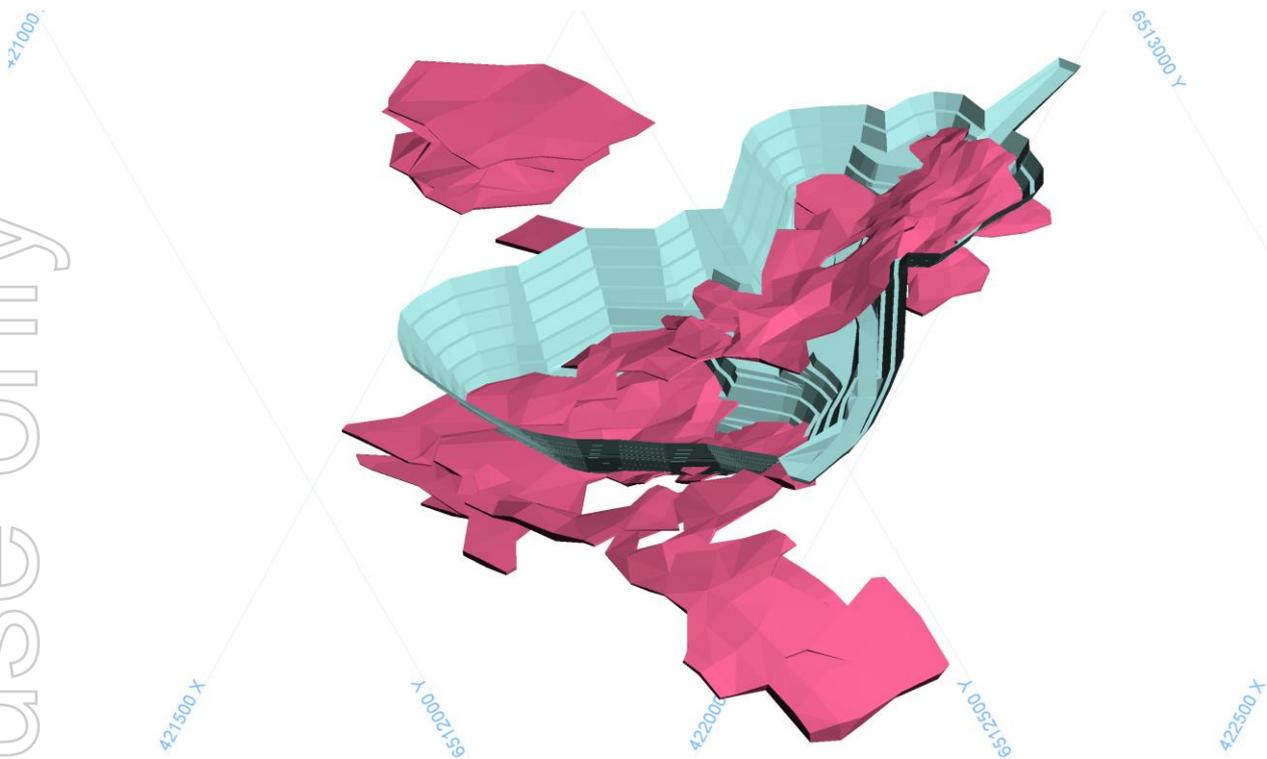


Figure 3: Starter Pit (turquoise) over western third of Main Pegmatite resource (pink).

## Processing

### Lithium

Primero Group Pty Limited (**Primero**) completed a feasibility study on the lithium processing capital and operating costs for the Project. The Study was required to establish the capital cost of the Project (now fixed lump sum price) and an expected process and maintenance operating cost to an accuracy of +/-25%.

It was agreed that the project should be advanced in two separate phases. The first phase of development is intended to fastrack the Project to achieve lithium production by the first quarter of 2018. Phase 1 works involve the design and construction of a 1.2Mtpa front end spodumene concentrator utilising dense medium separation to produce a coarse (+1mm) spodumene concentrate of 6.0% Li<sub>2</sub>O.

The -1mm fines material from this new concentrator will be stockpiled for future processing. All (+1mm) Secondary DMS floats (Middlings) material will be stockpiled for future consideration during the Phase 2 development.

Phase 2 of the development is the inclusion of a milling and processing circuit. This phase 2 will be finalised following the completion of test work, but the layout of Phase 1 has allowed for the Phase 2 circuits. Note that the PFS is based on Phase 1 only.

A contract crushing operation will produce P100 = 10mm crushed ore to be fed to the processing plant. The existing tantalum concentrate spirals and tables plant will be fed with separate high tantalite bearing ore. The spodumene concentrate DMS circuit is fed at 161tph to a wet screen that removes - 1mm material which is sent to storage after removal of portion of the tantalum minerals through rougher spirals. The -10+1mm material continues to the DMS Feed Prep Screen coarse side which separates the feed to a -10+5mm (coarse fraction) and -5+1mm (fines fraction). The coarse fraction is mixed with Ferrosilicon (FeSi) medium and pumped to the Primary Coarse DMS Cyclone.

The fines fraction is pumped to a reflux classifier where mica is removed, dewatered and sent to rejects. The fines fraction is pumped back to the Feed Prep Screen (fine side). The fines material is mixed with FeSi and pumped to the Primary Fine DMS Cyclone. The Primary DMS cyclone underflow (coarse and fines) are sent to the Sinks Drain & Rinse Screen (split) where FeSi is recovered. The Primary DMS cyclone overflow (coarse and fines) are combined on the Floats Drain & Rinse Screen, FeSi is recovered and floats sent to

rejects loadout. The coarse and fine ore are mixed with a higher SG FeSi and pumped to respective Secondary Coarse and Fine DMS Cyclones.

The Secondary DMS cyclone underflow (coarse and fines combined) is sent to the combined Drain & Rinse Screen (Sinks & Floats split) where the sinks from the main spodumene concentrate product after FeSi removal, is recovered. The Secondary fines DMS cyclone overflow is sent to a separate Drain & Rinse Screen (middlings) for future processing. The Secondary coarse cyclone-overflow is sent to a small rolls mill for grinding to 3.35mm and fed back to the primary 1mm wet screen with the primary feed.

Due to the low concentration of iron and mica in the concentrates, no allowance has been made for the removal of deleterious elements.

Table 9: Key Process Design Criteria

Parameter	Units	Value	Ref
Wet Plant Nominal Feed	tpa	1,200,000	Lithco/Tawana
	tph	161.2	Calculated
Wet Plant Operating Hours per year	hr	7,446	Calculated
Wet Plant Utilisation	%	85.0	Calculated
Spodumene Ore Head Grade	%Li <sub>2</sub> O	1.41	Test work
Tantalum Ore Head Grade	%Ta <sub>2</sub> O <sub>5</sub>	0.023	Test work
Spodumene Product Grade	%Li <sub>2</sub> O	6.0	Test work
Wet Plant Feed F100	mm	10.0	Lithco/Tawana
Wet Plant Feed F80	mm	8.3	Test work
Spodumene Product	tpa	153,417	Calculated
Spodumene Mass Yield (as % of plant feed)	%w/w	12.75	Calculated

The Lithium Circuit is designed to be feed at 1.2mtpa however only about 940,000t of the feed passes through the DMS cyclone units, about 190,000t of -1mm is screened out and stockpiled for likely future processing and 70,000 of slimes and mica is sent to tailings.



Figure 4: DMS Plant Layout with the existing Tantalum Plant (Provided by Primero)

## Tantalum

After crushing to P100 passing 10mm, tantalum only ore will feed the existing 320,000tpa Tantalum Processing Facility (TPF). The TPF ore will feed to a 1.4mm primary screen with screen oversize recirculated through a VSI crusher. Screen undersize is feed to a three-stage spiral circuit, gravity concentrates are then feed to a dedicated cleaner spiral circuit followed by Wilfley tables. Spiral tails are pumped to the TSF. The Wilfley tables and if required electromagnets will be used to produce 25% Ta<sub>2</sub>O<sub>5</sub> concentrates to be drummed for export. Table tails will be added to Lithium Fines Circuit stockpiles subject to lithium grades.

The -1mm fines from the lithium circuit after de-slimes will be passed over rougher spirals to remove a medium grade tantalum concentrate. The rougher spiral tails will be pumped and dewatered to stockpile for future treatment through the LFC. The rougher concentrate will be fed to the TPF.

## Metallurgical Testwork

### Lithium

The metallurgical programs were supervised by Noel O'Brien of Trinol Pty Ltd, and the test work was conducted at the Nagrom mineral processing laboratories located in Perth, Western Australia.

Following on from the excellent results obtained from the variability test work (refer ASX announcement on 13 February and SGX announcement on 12 February 2017), larger scale tests were done on a 160kg composite of core used in the variability tests.<sup>D</sup>

The sample was crushed to 10mm and screened at 1mm. The -1mm fines have been retained for later testing. The +1mm fraction was further screened at 5.6 mm to assist the DMS gravity processing. The -5.6+1mm fraction was processed in a reflux classifier to remove mica, and then both -10+5.6mm and -5.6+1mm fractions were processed in a 100mm DMS cyclone.

The results of this phase of the test work were:

Table 10: Feed Composition

Feed	Mass Yield %	Cont. Li
-1mm screened out after 10mm crushing	17	14.7%
Mica/gangue minerals removed in reflux classifier	5	1.5%
Composite treated through DMS	78	83.8%
Head grade of composite 1.41% Li <sub>2</sub> O		

These results demonstrated that the amount of fines produced was limited to 17% by coarse crushing at 10mm and that over 80% of the contained lithium was available for processing via the cheaper gravity DMS route.

The results obtained from DMS processing were:

Table 11: Coarse fraction (-10+5.6mm) at SG 2.8 (55% of DMS feed)

Fraction	% Mass Yield	% Li <sub>2</sub> O	% Cont. Li	% Fe <sub>2</sub> O <sub>3</sub>
SG 2.8 Sinks	17	6.30	78.9	0.76
SG 2.8 Floats	12	2.56	13.3	0.56
SG 2.7 Floats	71	0.16	7.8	0.29

Table 12: Finer fraction (-5.6+1mm) at SG 2.9(mica removed) (45% of DMS feed)

Fraction	% Mass Yield	% Li <sub>2</sub> O	% Cont. Li	% Fe <sub>2</sub> O <sub>3</sub>
SG 2.9 Sinks	16	6.55	73.4	0.90
SG 2.9 Floats	21	1.53	21.8	0.57
SG 2.7 Floats	63	0.11	4.9	0.33

These results highlighted two key characteristics of the Bald Hill mineralisation:

- The ability to produce grades well in excess of 6% Li<sub>2</sub>O at good mass yields with acceptably low iron content.
- The ability to reject 60-70% of the feed mass after a first pass DMS, thus reducing processing costs appreciably.

Initially a product grade of over 7% Li<sub>2</sub>O was obtained in the coarser fraction using a density of 2.9 and, whereas this was an excellent result, it was generally significantly above market requirements. Hence a lower cut density of 2.8 was adopted to increase the mass yield. This resulted in a mass yield of 17% at a grade of 6.3% Li<sub>2</sub>O at SG 2.8.

The middlings fraction, from the coarse DMS, or 2.8 floats, still had a grade of 2.56% Li<sub>2</sub>O and a further test was done by re-crushing this to 3.35 mm to determine additional DMS recovery. This test resulted in a further mass yield of 4% at a grade of 6.14% Li<sub>2</sub>O to the sinks.

Based on these results the PFS used the following key metallurgical factors:

#### DMS circuit

- Total feed - 1,200,000tpa
- Feed to DMS cyclones - 937,000tpa
- -1mm Fines from wet screening after desliming - 17.8% mass 16.4% of contained lithium
- Primary concentrates - 65.8% of contained lithium in total feed or 84.3% of lithium in feed to DMS cyclones
- Middlings - 10.3% of contained lithium in total feed of 13.2% of lithium in feed to DMS cyclones
- Tantalum recovery to concentrates from -1mm Fines 16.2% of contained tantalum in total feed

#### Tantalum

There has been significant prior test work undertaken for the tantalum ore, however it was considered appropriate to use actual Haddington throughput and recoveries based on the current TPF arrangement. The plant originally had a ball mill to re-grind a portion of the feed prior to scavenger spirals, however in practice it was found that there was little commercial benefit to run the ball mill and it was subsequently removed from the circuit. The existing VSI crusher at circa 500% recycle can produce 330,000 tpa of -1.4mm feed to the spiral circuit. Recoveries over the last two years through the spiral circuit were about 68% at an ore feed of 80,000t/qtr to 85,000t/qtr, which produced a concentrate grade of about 14% Ta<sub>2</sub>O<sub>5</sub> prior to tabling. Given that tantalum feed grades are expected to be lower than during the Haddington era, a reduced 65% recovery was used.

Table 13: Haddington 2004-2005 Production on a Quarterly Basis

Quarter	Ore treated t	Head ppm	tantalum pentoxide pounds rec.	Recovered grade ppm Ta <sub>2</sub> O <sub>5</sub>	Calc. Rec. %	Stated Rec. %	concentrate t	con grade % Ta <sub>2</sub> O <sub>5</sub>
Mar-04	84,639	421	56,379	297	71	71.5	262	14.4
Jun-04	87,071	431	54,844	281	65	66.6	308	12.6
Sep-04	80,580	437	53,732	298	68	69.1	298	12.1
Dec-04	80,117	405	51,110	285	70	73	252	14.2
Mar-05	76,200	424	49,570	290	68	70	239	14.2
Jun-05	81,456	443	50,475	277	62	67	220	16.5
Sep-05	93,614	470	66,453	317	67	68	265	15.8
Dec-05	71,718	408	44,854	279	68	69	77	41.6

It has been proposed that the -1mm fines from the lithium circuit be treated in a separate spiral plant to recover tantalum prior to stockpiling for future grinding and flotation (or another method) to recover spodumene.

-1mm fines from the 150kg bulk sample were tabled after desliming. This work simulates rougher spiral performance and these results show that 14.6% of the total contained tantalum could be recovered from the -1mm lithium fines. A further 4.6% could be recovered from the fines generated after re-crushing the coarse DMS middlings, bringing the total recovery of tantalum on rougher spirals to a possible 19.1%.

This rougher concentrate would require further upgrade by tabling and magnetic separation. This work has not been done yet, but it is expected that a further 15% losses would be incurred in these clean-up operations.

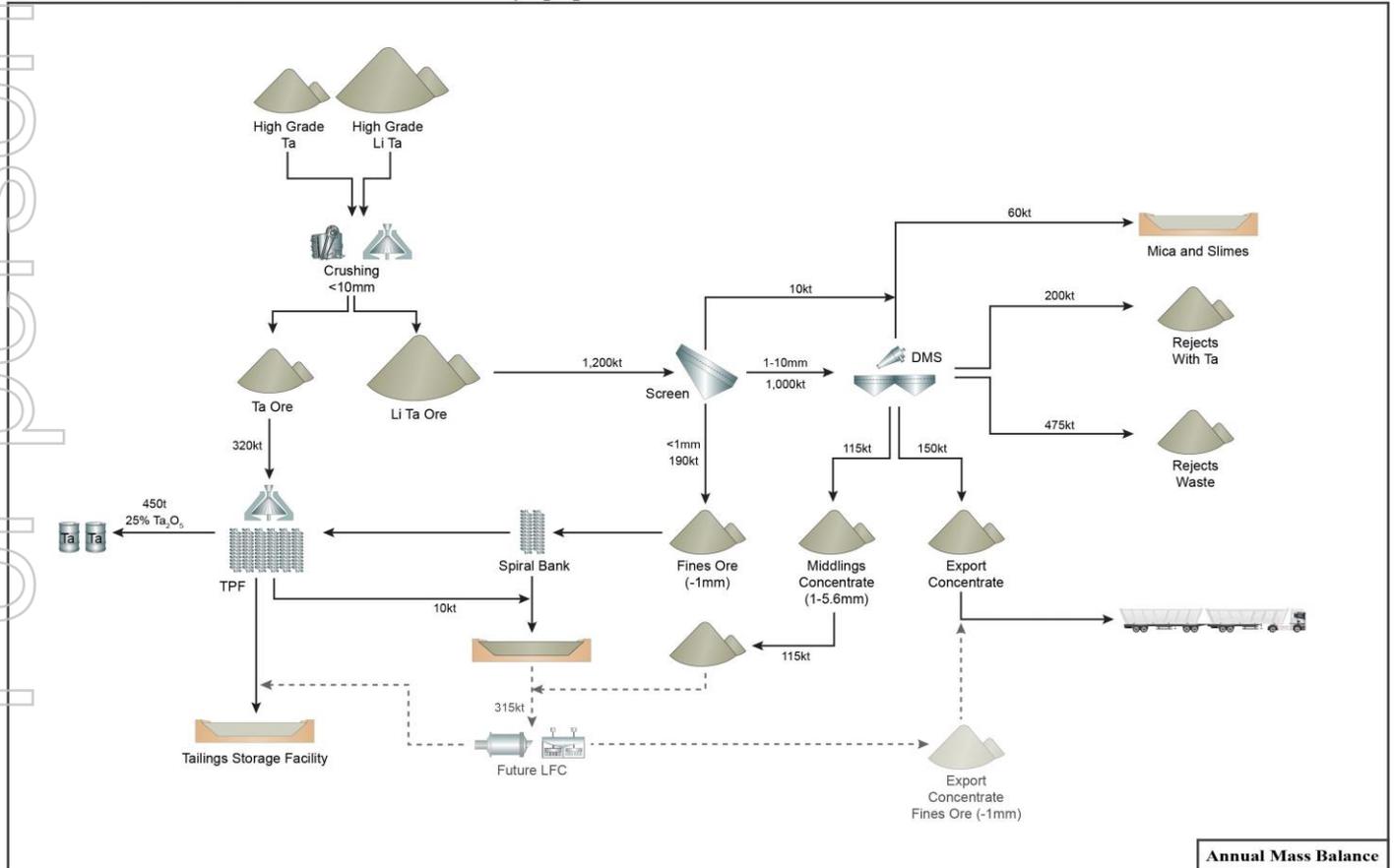


Figure 5: Simplified Process Flow and Mass Balance Diagram

## Infrastructure

The Mine is located in the Goldfields region of Western Australia where good infrastructure is available for mining projects.

A sealed highway and unsealed public road with RAV-7 approval provides access from the port of Esperance to within 1.8km of the plant site where existing private access road will require minimal upgrading for the increased traffic load.

Process water requirements for processing can be serviced from water resources within the mine area, as per the existing water Permits. Potable water will be transported to site until the new Mine camp is constructed.

Power will be produced on site using diesel generators on a rental basis.

The site will operate on a fly-in fly-out basis to Kalgoorlie or Kambalda with a village constructed to house operations personnel whilst on site. During construction and operations a combination of the existing village and a leased neighbouring village will be used.

Additional offices and storage shed will be constructed and an upgrade to the existing laboratory completed.

A new fuel storage facility will be constructed.

## Logistics and Port

The lithium concentrate will be hauled via Binneringie Road to the Port of Esperance.

3 Trucks will depart from an Esperance depot and storage facility and will be able to complete 1 cycle per 12-hour shift or 2 cycles per day.

Tantalite concentrate will be packed into 205 L drums, sealed and exported via Fremantle in standard shipping containers.

The Port of Esperance (the Port) is under the management of Southern Ports Authority and is the ocean-borne export and import hub for the south-eastern corner of Western Australia. Besides mineral exports, such as lithium, nickel and iron ore products and concentrates, it handles woodchip, agricultural, hydrocarbon and industrial produce and materials.

It is anticipated that bulk haulage will be from the Bald Hill mine to a storage shed at Esperance, not at the port, or full containers would be stored at the Esperance port after being loaded on site. During ship loading Rotabox/Rotainer containers will be ferried back and forth to the ship loading crane from an off port bulk storage site or from the full container stack at the port.



Figure 6: Rotainer Ship Loading

## Sales/Marketing/ Pricing

### Lithium

The Company has a binding offtake agreement for the supply of lithium concentrate from the Bald Hill Project in Western Australia over an approximate initial five-year term.

The key terms of the offtake agreement are as follows (refer further to the Company's ASX announcement of 26 April 2017):

- A fixed price for all production for 2018 and 2019 of US\$880/t (FOB Esperance) for 6% Li<sub>2</sub>O with price adjustment increment/decrement of US\$15/t based on grade variation of 0.1%.
- From 2020 to 2023, the sales price and volumes are to be negotiated and agreed based upon prevailing market conditions at the time.

For the purpose of this feasibility study the following prices have been used from 2020.

Table 14: Lithium and currency pricing (Source: Canaccord Genuity Estimates)

	2017e	2018e	2019e	2020e	2021e	2022e	2023e	2024e	2025e
SC 6% Li <sub>2</sub> O FOB (US\$/t)	904	745	653	733	800	753	771	754	727
AUDUSD	0.76	0.76	0.75	0.75	0.75	0.75	0.75	0.75	0.75
SC 6% Li <sub>2</sub> O FOB (A\$/t)	1192	986	866	977	1072	1009	1033	1010	974
Tantalum (US\$/lb)	60	60	60	60	60	60	60	60	60

### Tantalum

The commodity pricing for tantalum is based on a price of US\$60/lb (FOB Fremantle) for +25% Ta<sub>2</sub>O<sub>5</sub>. The assumed spot price is \$55/lb and a premium (based on historical sales from Bald Hill) of US\$5/lb has been assumed due to the low radiation and past sales history from the Bald Hill Mine.

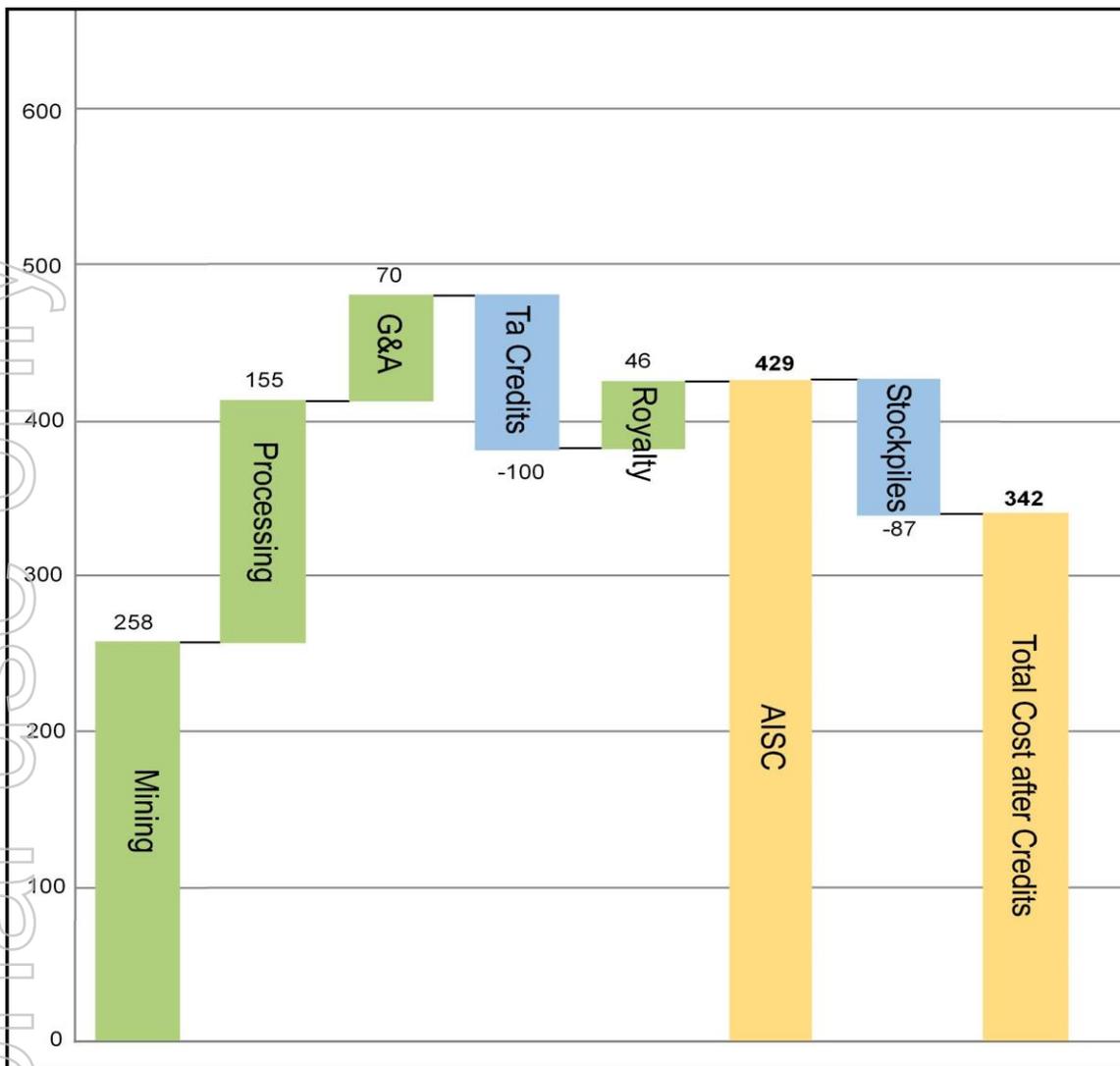


Figure 7: Summary of Operating Costs (USD) for Phase 1

### Tenure

All mining and processing activities will be contained on granted Mining Lease M15/400 and eight associated Miscellaneous Licences L15/264 to L15/270 and L15/348 all held 100% by Alliance Mineral Assets Limited and part of a larger tenement package. M15/400 was granted in 1988 and its 2<sup>nd</sup> extension of term will expire 7 September 2030, it pre-dates Native Title and has been the subject of prior mining and production. Apart from state government royalties, M15/400 is not subject to royalties.

In the later years a Miscellaneous Licence will be required for the extension of waste dumps onto the current E15/1212 also held 100% by Alliance Minerals Assets Limited.

### Environmental Review, Project Approvals and Heritage

To reinstate mining operations at the Bald Hill Mine, a series of permits are required. The most important of these include:

#### Department of Environmental Regulation (DER) - Licence Amendment

Since Bald Hill already has an Environmental operating Licence (for tantalum mining and processing) there is not a requirement to go through a lengthy approval process. And, since the nature of the proposed lithium mining and processing also fits with the current licence scope, there is also not a requirement for a works approval. Thus an application has been submitted for an amendment to the existing operating licence.

Due to the increased throughput, a new Tails Storage Facility (TSF) will be required once the approved TSF is full, this will require a separate approval at a later date.

#### *Department of Mines and Petroleum (DMP) - Environmental Branch Mining Proposal*

The Bald Hill site already has an approved mining proposal for tantalum mining and processing, issued by the Environmental branch of the DMP. An updated application was submitted which has now been approved. The updated mining proposal includes the new DMS plant and all the new infrastructure required to operate the Lithium project, excluding then final Pit design.

The final pit design is not required to commence lithium mining and processing on site.

When the final pit design is determined another submission will be made to include the new pits etc. in the mining proposal, and the final mine closure plan will also be submitted.

#### *Department of Mines and Petroleum (DMP) Environmental Branch -Clearing of native vegetation*

Bald Hill already has a clearing permit for its tantalum mining and processing. A new application will be made for any works to be undertaken outside the current approved clearing area.

#### *Department of Mines and Petroleum (DMP) Safety Branch - Project Management Plan (PMP)*

The current approved PMP (for tantalum mining and processing) has been updated and resubmitted and has been approved. The updated PMP now includes all Construction activities planned for site. A further update of the PMP to cover the recommencement of mining operations will be submitted once the Mining and Crushing contractors are identified.

#### **Project Delivery Schedule**

The key milestone dates are as follows:

**Table 15: Project Delivery Timeline**

Construction mobilisation	June 2017
Construction commencement	July 2017
Mining mobilisation	October 2017
Mining commencement	November 2017
Crushing mobilisation	December 2017
Crushing commencement	January 2018
Ore commissioning	February 2018

#### **Study Team**

The PFS was completed by Tawana with the assistance of a group of highly experienced consultants and contractors. The main areas of focus and responsible contributors are detailed below:

- Primero Group Lithium Process Plant Design, Capital and Operating Cost
- Lithium Metallurgical Work Nagrom and Trinol Pty Ltd
- Mining Study Marcus Jacobs and Mark Gell
- Logistics GDC Services Pty Ltd
- Geotechnical Dempers & Seymour Pty Ltd
- Tailings Storage Facility Klohn Crippen Berger Ltd
- Environmental Studies Ecotech (WA) Pty Ltd
- Resource Estimation CSA Global Pty Ltd

## Opportunities For Growth

Several opportunities for increasing production rates and the mine life;

- Flotation test work to date shows potential for significant lithium recoveries from the -1mm Fines and DMS middlings stockpiles which will contain about 25% of mined lithium. Additional optimisation test work is being undertaken prior to further engineering. If constructed the LFC will have a very low unit cost due to the fact that mining and crushing costs have been carried by the DMS concentrate operating costs and the fact that its incremental production requiring limited additional manning and overheads. The lithium fines circuit throughput would be in the order of 350,000tpa to 600,000tpa subject to allowances for potential increases to DMS throughput.
- The test work done on the composite sample and the 5 tonne bulk sample showed a significant tantalum content within the -5.6mm DMS concentrate. A jig test was done on the larger sample showed a significant portion of the contained tantalum could be recovered to concentrate. Further work is required to optimise the extraction of the tantalum without impacting lithium recoveries to primary concentrates.
- Infill drilling on the current additional Inferred Resources of 8.2Mt at 1.14% Li<sub>2</sub>O is expected to add significantly to the mine life based on scoping optimisations on both Indicated and Inferred Resources.
- Mining currently accounts for more than 50% of cash costs. It is likely that larger mining equipment will be selected for bulk waste mining and when final pit limits are determined in pit waste rock disposal into earlier pit stages will be adopted to reduce haul distances. Larger equipment and in pit waste disposal is expected to reduce unit mining unit costs.
- Extensional drilling is continuing to expand the known mineralised pegmatite footprint and the exploration potential is significant.

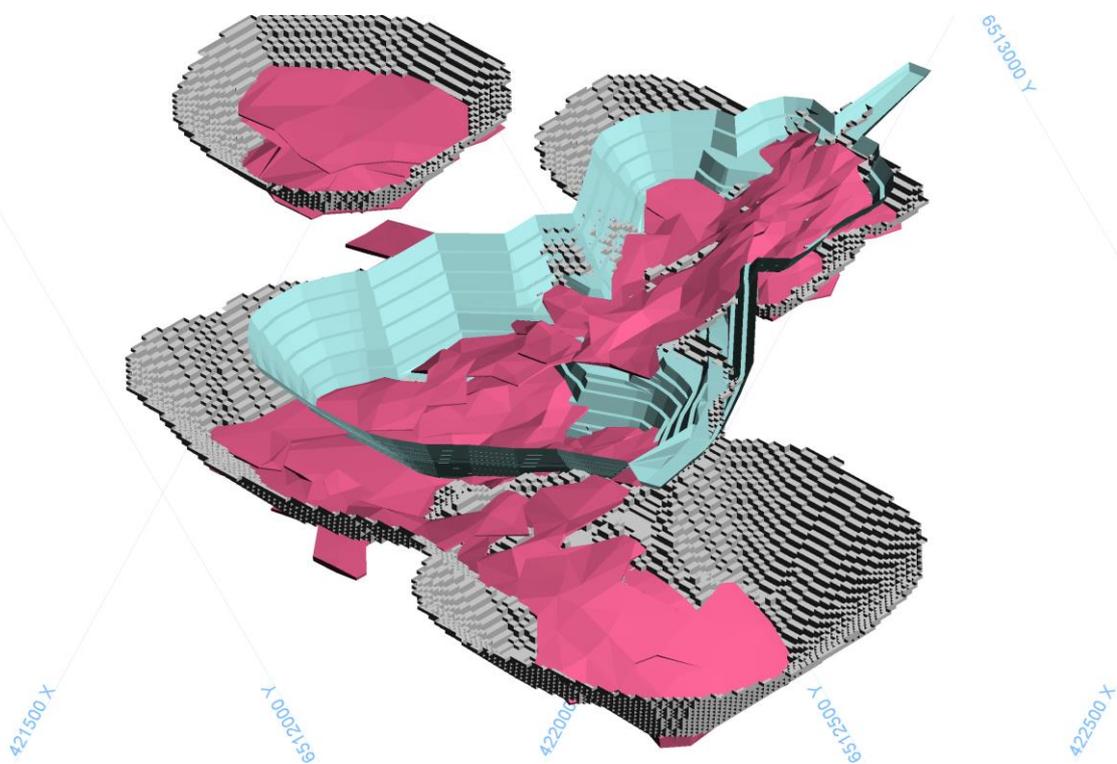


Figure 8: Whittle shell (grey) for both Indicated and Inferred Resources (pink), showing Starter Pit (turquoise) for Indicated Resources.

## Financing

Tawana has sufficient funds available to meet the requirements of the first A\$12.5m of capital. In addition:

- Tawana and its joint venture partner AMAL have secured a A\$25m prepayment (refer ASX announcement on 26 April 2017), of which \$7.5m has been received to date.
- The remaining capital is modest and is shared 50% each amongst Tawana and AMAL. Tawana's board believes funding requirements for the Project are modest in relation to the Company's current market capitalisation.
- The funding requirements for the Project are low and the payback is rapid.
- Tawana is already in early stage discussions with many potential financiers, the details of which will be disclosed when financing has been agreed and as required by applicable exchange and securities laws. No binding agreements for funding have been signed to date.
- Tawana's board has relevant experience in financing projects and further is finalising the services of an advisor to assist the Company to arrange project finance. The advisor worked for more than 15 years with Macquarie Bank and is experienced in initiating and leading equity, quasi-equity, project finance for a broad range of resource projects.
- The production and economic outcomes delivered in the PFS are sufficiently robust to provide confidence in the Company's ability to fund development of the Project through debt and/or equity financing.

The Tawana Board believes that there are reasonable grounds that future funding will be available for the ongoing development of the Project, as envisaged in this announcement

The Tawana Board cannot make any warranties or representations relating to any impediments in relation to the Joint Venture<sup>A</sup>, its formation and AMAL's funding capability.

### Competent Persons Statement

#### *Exploration*

The information in this announcement that relates to Exploration Results is based on and fairly represents information and supporting documentation compiled by Mr Mark Calderwood, who is an employee of Tawana Resources NL ("Tawana"). Mr Calderwood is a member of The Australasian Institute of Mining and Metallurgy. Mr Calderwood has sufficient experience relevant to the style of mineralisation under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Calderwood consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

Mr Calderwood is a significant shareholder in Tawana. Mr Calderwood and Tawana do not consider these to constitute a potential conflict of interest to his role as Competent Person. Mr Calderwood is not aware of any other relationship with Tawana which could constitute a potential for a conflict of interest.

#### *Reserves*

The information in this announcement that relates to Ore Reserves is based on and fairly represents information and supporting documentation compiled by Mr Mark Gell, a Competent Person who is a member of The Australasian Institute of Mining and Metallurgy. Mr Gell is a full-time employee of Tawana Resources NL ("Tawana").

Mr Gell has sufficient experience that is relevant to the type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Gell consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

Mr Gell is an employee of Tawana. Mr Gell is not aware of any other relationship with Tawana which could constitute a potential for a conflict of interest.

#### *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 not an employee of the company, but is employed as a contract consultant. 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 "Australasian 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 Statement

This report may contain certain forward looking statements and projections regarding estimated, resources and reserves; planned production and operating costs profiles; planned capital requirements; and planned 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 and/or Alliance Mineral Assets Limited. 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 and/or Alliance Mineral Assets Limited. The forward looking statements/projections are inherently uncertain and may therefore differ materially from results ultimately achieved.

Tawana Resources NL and/or Alliance Mineral Assets Limited does not make any representations and provides no warranties concerning the accuracy of the projections, and disclaims any obligation to update or revise any forward looking statements/projects based on new information, future events or otherwise except to the extent required by applicable laws. While the information contained in this report has been prepared in good faith, neither Tawana Resources NL and/or Alliance Mineral Assets Limited or any of their directors, officers, agents, employees or advisors give any representation or warranty, express or implied, as to the fairness, accuracy, completeness or correctness of the information, opinions and conclusions contained in this presentation. Accordingly, to the maximum extent permitted by law, none of Tawana Resources NL and/or Alliance Mineral Assets Limited, their directors, employees or agents, advisers, nor any other person accepts any liability whether direct or indirect, express or limited, contractual, tortious, statutory or otherwise, in respect of, the accuracy or completeness of the information or for any of the opinions contained in this announcement or for any errors, omissions or misstatements or for any loss, howsoever arising, from the use of this announcement.

## ENDNOTES

- A. Through Tawana's 100% owned subsidiary Lithco No. 2 Pty Ltd (**Lithco**), Tawana entered into a Farm-In Agreement on 23 February 2017 with AMAL with respect to the Bald Hill Project for the purpose of joint exploration and exploitation of lithium and other minerals. In May 2017, Tawana earned its 50% rights to all lithium minerals from the tenements comprising the Project, and Tawana and AMAL are now governed by the Lithium Rights Joint Venture Agreement which was entered into on 10 April 2017.

Tawana is required to spend \$12.5 million in capital expenditure for upgrading and converting the existing plant on the Bald Hill tenements for processing ore derived from the Project, infrastructure costs, pre-stripping activities and other expenditures including operating costs (**Capital Expenditure**) by 31 December 2019.

Upon completion of the Capital Expenditure, Tawana (through Lithco) will be entitled to a 50% interest in the Project (being all minerals from the tenements and the processing plant and infrastructure at Bald Hill). The portfolio of mineral tenements, comprising mining leases, exploration licences, prospecting licences, miscellaneous licences, a general-purpose lease, and a retention lease are in good standing.

AMAL and Lithco entered into the Bald Hill Joint Venture Agreement ("Bald Hill JVA") on 18 April 2017. The Bald Hill JVA has not come into effect as at the date of this announcement, but will take effect upon completion of the Capital Expenditure.

Tawana raised \$15 million before costs, in May 2017, in order to fund its \$12.5 million Capital Expenditure commitment to earn its 50% interest in the Project.

- B. C1 cash costs as set by Wood Mackenzie Co which includes all production costs, administration and transport to Esperance port.
- C. For more information on the Resource estimate, refer to ASX announcement dated 14 June 2017. Tawana is not aware of any new information or data that materially affects the information included in the said announcement.
- D. Refer metallurgical test work ASX Announcement on 7 April 2017.

# APPENDIX

## JORC Table 1

### Mineral Resources JORC Reporting:

#### Section 1 Sampling Techniques and Data

Criteria	JORC Code Explanation	Commentary
Sampling techniques	Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.	<p>Drilling consists of ~98% reverse circulation (RC), RC with diamond core tails (RCD) and diamond drilling (DD) for a total 728 holes for 63,539.2m of drilling in the Bald Hill project database. The Bald Hill Mineral Resource is based on assay data from 460 RC holes, 9 RCD holes and 3 DD holes.</p> <p>RC cuttings were continuously sampled at 1m intervals through all pegmatite intercepts including 2m of waste above and below each intercept.</p> <p>DD core is typically continuously sampled at 2m intervals through pegmatite intercepts. Where required by changes in lithology, mineralization, or alteration, core samples may be shorter or longer than the typical 2m.</p>
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	<p>The majority of drill hole collars are accurately surveyed using RTK DGPS equipment.</p> <p>Drill samples are logged for lithology, weathering, structure (diamond core), mineralogy, mineralisation, colour and other features.</p> <p>Half diamond core was collected and placed in marked plastic sacks, and shipped to the assay laboratory.</p> <p>RC samples were collected and placed in marked plastic bags which were placed in sacks and then shipped to the assay laboratory.</p>
	Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.	<p>Drill samples were jaw crushed and riffle split to 2-2.5kg for pulverizing to 80% passing 75 microns. Prepared samples are fused with sodium peroxide and digested in dilute hydrochloric acid. The resultant solution is analysed by ICP, by Nagrom Laboratory in Perth.</p> <p>The assay technique is considered to be robust as the method used offers total dissolution of the sample and is useful for mineral matrices that may resist acid digestions.</p>
Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).	<p>RC was drilled using 4.5-inch (114 mm) rods with a nominal 5.9-inch (150 mm) diameter hole. Diamond core used either PQ, NQ2 or HQ3 diameter core. Core was oriented where possible.</p> <p>All DD holes and ~98% of RC drill holes are angled; the remainder were drilled vertically.</p>
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	Chip recovery or weights for RC drilling were not recorded. Core recovery is very good through the mineralised zones and estimated to be greater than 90%.

Criteria	JORC Code Explanation	Commentary
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	RC drilling generally utilised an external booster to keep samples dry and maximising recoveries. The majority of RC holes are shallow (<150m) with very few wet samples encountered.
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	No relationship between grade and recovery has been identified.
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	Geological logs exist for all drill holes with lithological codes via an established reference legend.  Drill samples were logged for lithology, weathering, structure (diamond core), mineralogy, mineralisation, colour and other features. Logging and sampling has been carried out to "industry norms" to a level sufficient to support the Mineral Resource estimate.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	Drill holes have been geologically logged in their entirety. Where logging was detailed, the subjective indications of spodumene content were estimated and recorded.
	The total length and percentage of the relevant intersections logged.	All drill holes are logged in full, from start to finish of the hole.
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	Where sampled, core is cut in half onsite using an industry standard core saw, to produce two identical halves.
	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	Dry RC samples were collected at 1m intervals and riffle or cone split on-site to produce a subsample less than 5kg.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Sample preparation is according to industry standard, including oven drying, coarse crush, and pulverisation to 80% passing 75 microns.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Subsampling is performed during the preparation stage according to the assay laboratories' internal protocol.
	Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.	Field duplicates, laboratory standards and laboratory repeats are used to monitor analyses.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Sample sizes are considered to be appropriate and correctly represent the style and type of mineralisation.
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	The assay technique is considered to be robust as the method used offers total dissolution of the sample and is useful for mineral matrices that may resist acid digestions.
	For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	None were used.

Criteria	JORC Code Explanation	Commentary
	Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	Standards and duplicates were submitted in varying frequency throughout the exploration campaign and internal laboratory standards, duplicates and replicates are used for verification.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Significant intersections have been verified by alternative TAW personnel and by a CSA Global Competent Person (Ralph Porter).  The Ta and Li assays show a marked correlation with the pegmatite intersections via elevated downhole grades.
	The use of twinned holes.	Twinning of holes undertaken to date show reasonable continuity and representivity of the mineralised intervals.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Drill logs exist for all holes as electronic files and/or hardcopy (all 2017 logging has been input directly to field logging computers).  Digital log sheets have been created with inbuilt validations to reduce potential for data entry errors.  All drilling data has been loaded to a database and validated prior to use.
	Discuss any adjustment to assay data.	For the Mineral Resource estimate, adjustments were made to a number of down hole surveys. These adjustments were made where angled holes were blocked well before the end of hole, or where down hole surveys had not yet been undertaken but surveys had been completed for nearby holes.  Where the drill hole was blocked, the last survey was copied to the end of hole depth. Where no down hole survey was completed or the hole was blocked at surface, the down hole surveys from a nearby hole, drilled by the same rig (and preferably same driller), was copied and applied to the hole. Some of these holes may need to be re-entered, cleaned and surveyed in the future. All changes were marked as 'nominal' in the database.  In all cases, corrections to down hole surveys were reviewed against surrounding drill holes and pegmatite intervals to ensure error was minimised.
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	Prior to drilling, collar coordinates are situated using hand held GPS (considered accurate to within 4m). Following drilling, accurate surveying using RTK DGPS is undertaken by trained site personnel.  Hole collars are preserved until completion of down hole surveying. A significant portion of holes are surveyed down hole digital instruments dominated by gyro tools.
	Specification of the grid system used.	Grid used is MGA 94 Zone 51.
	Quality and adequacy of topographic control.	Topographical survey is generated from detailed airborne survey with points generated on a 1m by 1m grid. Areas mined have been defined by final mine surveys.

Criteria	JORC Code Explanation	Commentary
Data spacing and distribution	Data spacing for reporting of Exploration Results.	Drilling has been conducted on a 40m by 40m grid extending to 80m by 80m on the peripheries of the deposit, with a 140m by 80m area in the northern portion of the deposit drilled out at 20m by 20m.
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	The spacing of holes is considered of sufficient density to provide an 'Indicated' or 'Inferred' Mineral Resource estimation and classification under JORC (2012).
	Whether sample compositing has been applied.	There has been no sample compositing.
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	Drilling has been angled to achieve the most representative intersections through mineralisation.  The majority of drilling is angled. Some vertical holes have been drilled in areas where access is limited or the pegmatites are interpreted to be flat lying.
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	The lithium tantalite-bearing pegmatites are generally flat to shallowly dipping in nature. The true width of pegmatites is generally considered 80-95% of the intercept width, with minimal opportunity for sample bias.
Sample security	The measures taken to ensure sample security.	The drill samples are taken from the rig by experienced personnel, stored securely and transported to the laboratory by a registered courier and handed over by signature.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audits have been undertaken to date.

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## Section 2 Reporting of Exploration Results

Criteria	Explanation	Commentary
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	<p>The Bald Hill Resource is situated on Mining lease M15/400 comprising 501Ha. M 15/400 is 100% owned by Australian incorporated, Singapore Exchange listed Alliance Mineral Assets Limited (AMAL).</p> <p>The Mining lease are subject to an earn-in agreement between AMAL and Tawana Resources Limited.</p> <p>There are no other third-party interests or royalties. Government royalties are 5% for Lithium or Tantalum mineral concentrates.</p>
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	The portfolio of mineral tenements, comprising mining leases, exploration licences, prospecting licences, miscellaneous licences, a general-purpose lease, and a retention lease are in good standing.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<p>Alluvial tantalite has been mined periodically from the early 1970s.</p> <p>Gwalia Consolidated Limited undertook exploration for tantalite-bearing pegmatites from 1983-1998. Work included mapping, costeaning, and several phases of drilling using RAB, RC, and diamond methods. The work identified mineral resources that were considered uneconomic at the time.</p> <p>Haddington Resources Limited (Haddington) entered agreement to develop the resource and mining</p> <ul style="list-style-type: none"> <li>• commenced in 2001 and continued until 2005.</li> <li>• Haddington continued with exploration until 2009.</li> </ul> <p>Living Waters acquired the project in 2009 and continued with limited exploration to the north of the main pit area.</p>
Geology	Deposit type, geological setting and style of mineralisation.	<p>The Bald Hill area is underlain by generally north-striking, steeply dipping Archaean metasediments (schists and greywackes) and granitoids.</p> <p>Felsic porphyries and pegmatite sheets and veins have intruded the Archaean rocks. Generally, the pegmatites cross cut the regional foliation, occurring as gently dipping sheets and as steeply dipping veins.</p> <p>The pegmatites vary in width and are generally comprised quartz-albite- muscovite-spodumene in varying amounts. Late-stage albitisation in the central part of the main outcrop area has resulted in fine-grained, banded, sugary pegmatites with visible fine-grained, disseminated tantalite. A thin hornfels characterised by needle hornblende crystals is often observed in adjacent country rocks to the pegmatite intrusives. Tantalite generally occurs as fine disseminated crystals commonly associated with fine-grained albite zones, or as coarse crystals associated with cleavelandite.</p> <p>Weathering of the pegmatites yields secondary mineralised accumulations in alluvial/elluvial deposits.</p>

Criteria	Explanation	Commentary
Drill hole Information	<p>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</p> <ul style="list-style-type: none"> <li>• easting and northing of the drill hole collar</li> <li>• elevation or RL (Reduced Level - elevation above sea level in metres) of the drill hole collar</li> <li>• dip and azimuth of the hole</li> <li>• down hole length and interception depth</li> <li>• hole length.</li> </ul>	Not Applicable - Not reporting exploration results.
	<p>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</p>	Not Applicable - Not reporting exploration results.
Data aggregation methods	<p>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</p>	Not Applicable - Not reporting exploration results.
	<p>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</p>	Not Applicable - Not reporting exploration results.
	<p>The assumptions used for any reporting of metal equivalent values should be clearly stated.</p>	Not Applicable - Not reporting exploration results.
Relationship between mineralisation widths and intercept lengths	<p>These relationships are particularly important in the reporting of Exploration Results.</p>	Not Applicable - Not reporting exploration results.
	<p>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</p>	<p>The majority of drilling is angled. Some vertical holes have been drilled in areas where access is limited or the pegmatites are interpreted to be flat lying.</p> <p>The lithium tantalite-bearing pegmatites are generally flat to shallowly dipping in nature. The true width of pegmatites are generally considered 85-95% of the intercept width, with minimal opportunity for sample bias.</p>
	<p>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</p>	Not Applicable - Not reporting exploration results.
Diagrams	<p>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</p>	Not Applicable - Not reporting exploration results

Criteria	Explanation	Commentary
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	Not Applicable - Not reporting exploration results
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples - size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	The metallurgical test work for spodumene referred to in the release was undertaken by Nagrom. Nagrom has extensive experience with tantalum and lithium extraction testwork and has ISO9001:2008 accreditation. Results have been reported without interpretation.
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).	Further RC and diamond drilling is warranted at the deposit to explore for additional resources and improve the understanding of the current resources prior to mining.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Diagrams have been included in the body of this report.

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**Section 3 Estimation and Reporting of Mineral Resources**  
(Criteria listed in the preceding section also apply to this section)

Criteria	Explanation	Commentary
Database integrity	Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.	<p>Logging is completed onto templates using standard logging codes into Toughbook laptops. Analytical results are imported directly into the database by a database specialist.</p> <p>The central database, from which the extract used for Mineral Resource estimation was taken, is managed by Tawana. Upon receipt of the extract, CSA Global validated the database for internal integrity as part of the import process for modelling in Surpac.</p>
	Data validation procedures used.	Data were validated for internal database integrity as part of the import process for use in Surpac. This includes logical integrity checks for data beyond the hole depth maximum, and overlapping from-to errors within interval data. Visual validation checks were also made for obviously spurious collar or downhole survey values, collars which were not assigned a proper RL value, and collars which may lack substantial downhole survey data.
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	<p>CSA Global Principal Consultant; Ralph Porter has visited site and reviewed the drilling, sample collection, and logging data collection procedures, along with conducting a review of the site geology.</p> <p>The outcome of the site visits (broadly) were that data has been collected in a manner that supports reporting a Mineral Resource estimate in accordance with the JORC Code, and controls to the mineralisation are well-understood.</p>
	If no site visits have been undertaken indicate why this is the case.	Not Applicable.
Geological interpretation	Confidence in (or conversely, the uncertainty of ) the geological interpretation of the mineral deposit.	The geological model developed is based on lithological logging of pegmatites within a metasedimentary host, with occasional hypabyssal intrusions of dioritic composition. The deposit geology is very well understood based on previous mining history and open pit exposures, and this is reflected in the generally high confidence in both the mineralisation and geological interpretations.
	Nature of the data used and of any assumptions made.	The input data used for geological modelling has been derived from the qualitative and quantitative logging of lithology, alteration, geochemical composition of samples returned from RC and DD drilling.
	The effect, if any, of alternative interpretations on Mineral Resource estimation.	The geological model developed has a solid lithological basis, and is controlled by the presence of visually distinct pegmatite within drillholes. Pegmatite structures have been modelled as predominantly low angle / sub-horizontal structures on the basis of a high density of input drillhole data and confirmation of the interpretation on the basis of mapping. The data do not readily lend themselves to alternative interpretations, and it is unlikely that such alternatives would yield a more geologically reasonable result.

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Criteria	Explanation	Commentary
	The use of geology in guiding and controlling Mineral Resource estimation.	The model developed for mineralisation is geologically driven; controlled by the presence or absence of pegmatite.
	The factors affecting continuity both of grade and geology.	Geological continuity is controlled by the preference for fractionated pegmatitic fluids to follow preferential structural pathways through the host rocks (an intercalated pile of metasediments and metavolcanics). Grade within this pegmatite is controlled by numerous factors such as fluid residence time, degree of fluid fractionation and pegmatite thickness.
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	The Bald Hill Mineral Resource comprises one large, main, sub horizontal pegmatite body, striking north-south, with a strike length of 1,070m, and a width at its widest point of 775m. This main body is surrounded by several smaller discrete pegmatite bodies, sub-parallel to the main, which result in a total strike length for the whole resource of 1,245m, and a total width of 990m. The Mineral Resource has a total vertical depth of 195m, beginning 20m below the natural surface and plunging gently to the south along its entire strike length.
Estimation and modelling techniques	The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.	<p>The Bald Hill Mineral Resource has been estimated using ordinary Kriging in a Surpac block model. The variables Li<sub>2</sub>O ppm and Ta<sub>2</sub>O<sub>5</sub>ppm were estimated independently in a univariate sense. The pegmatites on which this Mineral Resource was defined was domained internally on the basis of a 7,500ppm Li<sub>2</sub>O cut-off, which itself was determined from exploratory data analysis as a point of inflection within the Li<sub>2</sub>O grade distribution. This resulted in a high-grade core of Li<sub>2</sub>O mineralisation surrounded by lower grade pegmatite, and is an interpretation supported by the petrogenetic model for the formation of Li<sub>2</sub>O bearing pegmatites.</p> <p>Samples were composited to 1m intervals based on assessment of the raw drill hole sample intervals. Various high grade cuts were used for both Li<sub>2</sub>O (ranging from 10,000ppm to 40,000ppm) and Ta<sub>2</sub>O<sub>5</sub> (ranging from 300ppm to 4,000ppm) based on statistical review of each object. Composites for some objects remained uncut depending on the statistical review.</p> <p>High and low grade domains were estimated independently with hard boundaries assumed between domains. Parameters for estimation and search ellipsoids were determined from quantitative kriging analysis performed within the Supervisor™ software package, which was also used to define semivariogram models for each variable. The parameters defined for the largest, most populated domains (main mineralised body and its high-grade core) were used to inform all smaller subsidiary domains during estimation.</p> <p>A two search pass strategy was employed, with successive searches using more relaxed parameters for selection of input composite data, and a greater search radius. Blocks not informed for any given variable after two passes were assigned the Sichel Mean of the input data from that particular domain.</p>

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Criteria	Explanation	Commentary
		All geological modelling and grade estimation was completed using Surpac software.
	The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	No check estimates are available for the current Mineral Resource. Historic estimates for the Bald Hill deposit focussed on Ta <sub>2</sub> O <sub>5</sub> only, and as such are not directly comparable to the current estimate for which Li <sub>2</sub> O is the primary target variable.
	The assumptions made regarding recovery of by-products.	The only significant by-product to be considered is Ta <sub>2</sub> O <sub>5</sub> which has been estimated within the domains defined by Li <sub>2</sub> O.
	Estimation of deleterious elements or other non-grade variables of economic significance (eg. sulphur for acid mine drainage characterisation).	No deleterious elements have been identified or estimated.
	In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	Block model dimensions used for the Bald Hill Mineral Resource estimate were 10 by 10 by 5m (XYZ) sub-celled to 2.5 by 2.5 by 1.25m for resolution of volumes at lithological boundaries. This compares to an average drillhole spacing of 20m within the more densely informed areas of the deposit. This 20m spacing increases to up to 80m between drillholes in less well informed portions of the deposit.  Kriging Neighbourhood Analysis (KNA) was conducted within the Supervisor™ software package to test a variety of block sizes in both well and poorly informed areas of the deposit. The chosen block size represents the smallest block size that yields a robust set of estimation statistics, which are comparable to the results also yielded from larger blocks sizes.
	Any assumptions behind modelling of selective mining units.	No assumptions were made regarding selective mining units.
	Any assumptions about correlation between variables.	The two variables under consideration; Li <sub>2</sub> O and Ta <sub>2</sub> O <sub>5</sub> are uncorrelated within both the pegmatite as a whole, and within the high-grade domain (correlation coefficient of -0.04). Consequently, no correlation between variables was considered. Both variables were treated in a univariate sense.
	Description of how the geological interpretation was used to control the resource estimates.	The nature of the mineralised body is such that the definition of the pegmatite host also defines the mineralisation. Within that, and based on a combination of petrogenetic process and statistical appraisal, an internal high-grade Li <sub>2</sub> O domain was defined.
	Discussion of basis for using or not using grade cutting or capping.	Domained data for both variables were assessed using histogram and log probability plots to define potential top cuts to data. Where the Competent Person observed likely breaks in the continuity of the grade distributions,

Criteria	Explanation	Commentary
		a top cut was chosen and applied. This was conducted on a per-domain basis.
	The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	The results of estimation into the block model for the Bald Hill Mineral resource were validated visually and statistically. Estimated block grades were compared visually in section against the corresponding input data values. Additionally, trend plots of input data and block estimates were compared for swaths generated in each of the three principal geometric orientations (northing, easting and elevation).
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	Tonnages are reported on a dry basis.
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	Modelling of mineralisation for the resource was based on a combination of pegmatite lithological logging. Within this mineralisation shape, a higher grade core was defined on the basis of a 7,500 ppm Li <sub>2</sub> O cut-off.  The Mineral Resource is reported using a 0.5% Li <sub>2</sub> O cut-off which approximates a conservative cut-off grade used for potential open pit mining as determined from preliminary pit optimisations.
Mining factors or assumptions	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	The methods used to design and populate the Bald Hill Mineral Resource block model were defined under the assumption that the deposit is likely to be mined via open pit methods.
Metallurgical factors or assumptions	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	The material targeted for extraction predominantly comprises the mineral spodumene, for which metallurgical processing methods are well established. No specific detail regarding metallurgical assumptions have been applied in the estimation the current Mineral Resource, however at the current level of detail available, the Competent Person believes with sufficient confidence that metallurgical concerns will not pose any significant impediment to eventual economic extraction.
Environmental factors or assumptions	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be	No assumptions have been made regarding waste products, however the Mineral Resource has previously been mined by open pit methods with a processing facility, stacked waste dumps and tailings storage facilities on site. It is reasonable to assume that in the presence of this infrastructure, the creation and storage of waste products on site will not be of concern for future mining activities.

Criteria	Explanation	Commentary
	reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	
Bulk density	Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.	In situ bulk densities for the Bald Hill Mineral Resource have been assigned on a lithological basis for both mineralisation and waste, based on historical values derived from mining and values taken from those used in similar deposits and lithologies.  The Competent Person considers the values chosen to be suitably representative.
	The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.	Densities have been assigned on a lithological basis based on a total of 44 metasediment and 25 pegmatite core samples measured at the Nagrom laboratory and values derived from surrounding deposits and rock types.
	Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	Bulk densities have been applied on a lithological unit basis. Values assigned were as follows: <ul style="list-style-type: none"> <li>• Fresh pegmatite mineralisation 2.65 t/m<sup>3</sup></li> <li>• Transitional pegmatite 2.5t/m<sup>3</sup></li> <li>• Fresh diorite 2.8t/m<sup>3</sup></li> <li>• Transitional diorite 2.6t/m<sup>3</sup></li> <li>• Fresh metasediments 2.74t/m<sup>3</sup></li> <li>• Transitional metasediments 2.6t/m<sup>3</sup></li> <li>• Oxide metasediments 2.2t/m<sup>3</sup></li> <li>• Waste fill 1.8t/m<sup>3</sup></li> </ul> additional bulk density testwork utilising drill core across the mineralised zones and less common waste units is recommended for future estimates.
Classification	The basis for the classification of the Mineral Resources into varying confidence categories.	The Mineral Resource has been classified as Indicated and Inferred on a qualitative basis; taking into consideration numerous factors such as drillhole spacing, estimation quality statistics (kriging slope of regression), number of informing samples used in the estimate, average distance to informing samples in comparison to the semivariogram model ranges, and overall coherence and continuity of the modelled mineralisation wireframes.
	Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).	The classification reflects areas of lower and higher geological confidence in mineralised lithological domain continuity based on the intersecting drill sample data numbers, spacing and orientation. Overall mineralisation trends are reasonably consistent within the various lithology types over numerous drill sections.
	Whether the result appropriately reflects the Competent Person's view of the deposit.	The Mineral Resource estimate appropriately reflects the Competent Person's views of the deposit.
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	Internal audits were completed by CSA Global which verified the technical inputs, methodology, parameters and results of the estimate.  The current model has not been audited by an independent third party

Criteria	Explanation	Commentary
Discussion of relative accuracy/ confidence	Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.	The Mineral Resource accuracy is communicated through the classification assigned to the deposit. The Mineral Resource estimate has been classified in accordance with the JORC Code, 2012 Edition using a qualitative approach. All factors that have been considered have been adequately communicated in Section 1 and Section 3 of this Table.
	The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	The Mineral Resource statement relates to a global estimate of in-situ tonnes and grade.
	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	The deposit has been historically mined for tantalum (Ta <sub>2</sub> O <sub>5</sub> ), however no accounting for Li <sub>2</sub> O had been undertaken, and therefore no production records are available for comparison to the current estimate.

#### Section 4 Estimation and Reporting of Ore Reserves (Criteria listed in the preceding section also apply to this section)

Criteria	Explanation	Commentary
<b>Mineral Resource estimate for conversion to Ore Reserves</b>	<i>Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.</i>	The Mineral Resource estimate was completed by Dr Matthew Cobb and Mr Ralph Porter of CSA Global Pty Ltd (CSA).  The Lithium Resources included:  Indicated Resources of 4.6Mt at 1.25% Li <sub>2</sub> O and 207ppm Ta <sub>2</sub> O <sub>5</sub> ; and  Inferred Resources of 8.2Mt at 1.14% Li <sub>2</sub> O and 130ppm Ta <sub>2</sub> O <sub>5</sub>  Additional Tantalum Resources included:  Indicated Resources of 2.8Mt at 325ppm Ta <sub>2</sub> O <sub>5</sub> ; and  Inferred Resources of 2.9Mt at 297ppm Ta <sub>2</sub> O <sub>5</sub> .
	<i>Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves</i>	The Mineral Resources are reported Inclusive of Ore Reserves.
Site visits	<i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i>	The Competent person, Mr Mark Gell, in his capacity as Registered Manager and Senior Mining Engineer has spent significant time on the Bald Hill mine site over a period of 2 years. He has been involved with tantalum processing from existing tantalum plant and is familiar with most aspects of the site, logistics, infrastructure and mining issues.
	<i>If no site visits have been undertaken indicate why this is the case.</i>	Not applicable
Study status	<i>The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.</i>	The study undertaken was a Pre-Feasibility Study (PFS). The PFS was undertaken as the basis for conversion of Indicated Resources to Probable Reserves. The study was

Criteria	Explanation	Commentary
		<p>compiled by the Company with input from a number of independent consultants as follows:</p> <ul style="list-style-type: none"> <li>○ Geology - CSA</li> <li>○ Mining - CSA for Whittles, Design Marcus Jacobs, Mark Gell</li> <li>○ Metallurgical testing - Nagrom</li> <li>○ Metallurgy &amp; Processing - Trinol Pty Ltd and Primero Group (Primero)</li> <li>○ Infrastructure - Klohn Crippen Berger Ltd (KCB) and GDC Services Pty Ltd (GDC)</li> <li>○ Environmental - Ecotech (WA) Pty Ltd (Ecotech)</li> <li>○ Geotechnical - Dempers &amp; Seymour Pty Ltd (Dempers &amp; Seymour)</li> </ul>
	<p><i>The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.</i></p>	<p>Mine planning included pit optimisations, pit designs, mining and processing scheduling, cost estimations and economic analysis to ensure the project is technically achievable and economically viable.</p> <p>Capital expenditure estimates are considered to be within -5%/+10%, and</p> <p>Operational expenditure estimates are considered to be within -10%/+15%.</p>
<p><i>Cut-off parameters</i></p>	<p><i>The basis of the cut-off grade(s) or quality parameters applied.</i></p>	<p>The economic parameters used in pit optimisation were used to define a breakeven cut-off grade of 0.39% Li<sub>2</sub>O or 200ppm Ta<sub>2</sub>O<sub>5</sub>.</p>
<p><i>Mining factors or assumptions</i></p>	<p><i>The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).</i></p>	<p>Pit optimisations, and sensitivity analysis, was completed. Slope design criteria, mining dilution, ore loss and processing recoveries were applied in the pit optimisation process together with mining, processing, transport and sales cost estimates, and revenue projections to form the basis for pit designs and subsequent mining and processing schedules.</p>
	<p><i>The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.</i></p>	<p>A conventional open pit mine method was chosen as the basis of the PFS. Ore occurs close to surface requiring minimal pre-stripping and pre- production mining activities.</p>
	<p><i>The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.</i></p>	<p>Dempers &amp; Seymour carried out geotechnical logging of 5 specifically located core drill holes in the deeper portions of the proposed pit and initial evaluation of the data resulted in recommended inter-ramp slope angles ranging from 48-55°.</p> <p>A running ramp widths for designs vary from 10m for single to 19.5m for double lane ramps for gross widths of 15m-25m.</p>
	<p><i>The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).</i></p>	<p>The Ore Reserve estimate for the PFS was based on the Mineral Resource, dated 14 June 2017, prepared by CSA.</p> <p>Major assumptions for pit optimisation include: for lithium 0.20% Li<sub>2</sub>O fixed tail and 100% recovery (also 70%</p>

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Criteria	Explanation	Commentary
		recovery with no fixed tail used). For tantalum recovery of 62%; ore production rate of 1.2Mtpa; DMS and 0.35Mt through the tantalum plant; Gross price of US\$750/t 6% Li <sub>2</sub> O Conc (inclusive of transport). FOB and US\$60/lb of contained tantalum within tantalum concentrates; Selling cost of 5% (State Government royalty); overall processing cost of A\$29.06/t of lithium and tantalum ore inclusive of administration costs, ore rehandle, mine management, contract crushing, sustaining capital and grade control; and contract waste mining cost at surface of A\$3.04/t mined. Site rehabilitation allowance of A\$0.12/t of waste mined. A discount rate of 8% was applied.
	<i>The mining dilution factors used.</i>	Mining dilution of 5% was nominally applied to Indicated Resources based on the highly visual nature of the ore and a subjective assessment of prior mining performance. A grade of 0.0% Li <sub>2</sub> O and 0ppm Ta <sub>2</sub> O <sub>5</sub> was assumed for dilution material.
	<i>The mining recovery factors used.</i>	A mining recovery of 95% was applied based on highly visual nature of ore and a subjective assessment of prior mining performance
	<i>Any minimum mining widths used.</i>	Minimum mining width for optimisation and design was 30m
	<i>The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion</i>	Inferred Resources was included in several pit optimisation runs to ensure infrastructure or waste was not located on potential economic resource. The optimisation shells for the combined Indicated and Inferred resources contained about 3 times the volume and mineralisation of those for Indicated alone.
	<i>The infrastructure requirements of the selected mining methods.</i>	Mining Infrastructure was limited to ROM pad, haul roads, workshops and other buildings for a contract mining operation.
<i>Metallurgical factors or assumptions</i>	<i>The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.</i>	<p>For lithium ore the PFS economics has only considered Phase one processing comprising dense media gravity separation (DMS) of the 1mm to 10mm fraction after P100 crushing to 10mm. This process is considered lowest risk methodology for the ore type comprising zoned, very coarse grained, spodumene-<math>\alpha</math> pegmatite. To further reduce processing risk the DMS circuit will treat 1-5.6mm and 5.6-10mm separately, with partial mica removed from the 1-5.6mm fraction using a reflux classifier (RFC).</p> <p>-1mm material (lithium fines) along with low grade DMS concentrates (middlings) will be treated at a later date through a lithium fines circuit (LFC)</p> <p>For tantalum ore the PFS has only considered tantalum recovery from direct ore feed to the existing tantalum spiral plant and from additional spirals to remove portion of the tantalum from the lithium fines prior to stockpiling for future treatment through the LFC. Test work has shown additional tantalum concentrate recovery can be obtained from treatment of DMS concentrate through jigs however this has not been considered by the PFS.</p>
	<i>Whether the metallurgical process is well-tested technology or novel in nature.</i>	All technologies proposed are proven and well tested with easily sourced components

Criteria	Explanation	Commentary
	<i>The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.</i>	<p>Samples used for metallurgical test work were sourced from existing open pits and 10 diamond core holes distributed across the Indicated Resource area. Variability test work and mineralogy was undertaken and a composite drill core sample was used for design purposes. A bulk sample collected from open pit material was processed to obtain approximately 1.5 tonnes of spodumene concentrates averaging 6.23% Li<sub>2</sub>O for down-stream test work by lithium convertors.</p> <p>The variability, composite and bulk samples all show the same metallurgical characteristics with no apparent variation or domaining across the deposit.</p> <p>About 99% of Resources are fresh rock and the remaining 1% is transitional to fresh rock.</p>
	<i>Any assumptions or allowances made for deleterious elements.</i>	<p>For Lithium concentrates potential deleterious elements have been observed at low concentrations in concentrates or are non-existent, key deleterious minerals and elements are</p> <p>lepidolite - not present in test work</p> <p>petalite - not present in test work</p> <p>Iron - Concentrates to date contain less than the 0.8% total Fe and 8% moisture content the key contractual requirements.</p> <p>mica - concentrates to date contain less than 3% mica. The Port of Esperance allows a limit of 5% mica.</p> <p>Detailed mineral product quality and safety chemical and micro mineral analysis undertaken on concentrates for the Port of Esperance returned favourable results.</p>
	<i>The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.</i>	<p>A bulk sample was processed through a DMS250 at Nagrom. A total of 3,887kg of material was treated through the DMS after removal of fines and partial mica for recovery of 1,490kg of combined concentrates averaging 6.23% Li<sub>2</sub>O at a recovery of 95.9% of contained lithium in the DMS feed or net recovery of 84.9% after taking into account lithium contained in fines and RFC rejects. The iron content of the combined concentrate was 0.21%.</p> <p>This is a significantly better result than the Composite test work used for engineering mass balance and PFS recoveries. The exceptionally high recoveries were due in part to the higher than expected head grade of the bulk sample feed resulting in middlings being able to be blended with primary concentrates and grades in excess of 6% being maintained.</p>
	<i>For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?</i>	<p>The Ore Reserve has been based on being able to produce concentrates of at between 5.5% and 7.0% Li<sub>2</sub>O</p>
Environmental	<i>The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.</i>	<p>The Site is a 'Brown Fields' site with existing mine workings and infrastructure. The mine has existing Environmental approvals, conditions and monitoring requirements for pre-existing proposed pits, dumps and tails storage which satisfy a limited portion of the proposed enlarged Mine site. The project has formal Department of Mines and Petroleum (DMP) approval for the addition of spodumene production and the Department of Environment Regulation (DER) review of the revised construction activities is complete. Additional approvals are still required for larger pits, dumps and the</p>

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		<p>long-term tailings facility Studies have shown that there are no significant additional environmental impacts for construction of the lithium circuit or extensions to the existing permitted open pits.</p>
<p><i>Infrastructure</i></p>	<p><i>The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.</i></p>	<p>The Mine is located in the Goldfields region of Western Australia where good infrastructure is available for mining projects.</p> <p>A sealed highway and unsealed public road with RAV-7 approval provides access from the port of Esperance to within 1.8km of the plant site where existing private access road will require minimal upgrading for the increased traffic load.</p> <p>Process water requirements for processing can be serviced from water resources within the mine area, as per the existing water Permits. Potable water will be transported to site until the new Mine camp is constructed.</p> <p>Power will be produced on site using diesel generators.</p> <p>Product will be shipped via the port of Esperance located approximately 360km by road to the south.</p> <p>The site will operate on a fly-in fly-out basis to Kalgoorlie or Kambalda with a village constructed to house operations personnel whilst on site. During construction and operations a combination of the existing village and a leased neighbouring village will be used.</p>
<p><i>Costs</i></p>	<p><i>The derivation of, or assumptions made, regarding projected capital costs in the study.</i></p>	<p>Project Capital was derived on the following basis:</p> <p>The DMS circuit capital estimate was estimated by Primero based on budget pricing and Primero's database of recent project costs. Subsequent to the initial DMS capital estimate a fixed sum EPC price has been agreed based on a detailed scope of works and an early works contract has been signed allowing long lead items to be ordered, detailed design to advanced and mobilization to site. The updated agreed EPC price has been used for the PFS.</p> <p>A number of items outside the Primero scope were costed under by the Company (Owner's) Costs. These included Road improvements, Additional mining infrastructure, Tailings Storage Facility (TSF) based on initial input from KCB, water reticulation and environmental costs.</p> <p>The Company provided costs for Owner's team and other related indirect expenses. The Owner's Costs have been reviewed and compiled by GDC and Mark Gell.</p> <p>Contingency has been applied to account for the accuracy of the estimate.</p> <p>Mining working capital costs include site establishment costs and mobilisation of the contract mining fleet and pre-production costs. The contract mining operation has no mining fleet capital expenditure as these costs are incorporated in the contract mining costs. Pre-production includes clearing and stockpiling of topsoil.</p>
	<p><i>The methodology used to estimate operating costs.</i></p>	<p>DMS reagent consumption was factored from similar operations.</p> <p>Contract crushing unit rates were derived from initial pricing and exclusions received from contractors.</p> <p>Contract mining unit rates were derived from initial</p>

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		pricing received from contractors. The Owner's team for Mine Management and Technical services were based on personnel levels required to manage the operation and the Mercer salary Data.
	<i>Allowances made for the content of deleterious elements.</i>	Due to the low concentration of Fe and mica in the Concentrates, no allowance was made for deleterious elements.
	<i>The source of exchange rates used in the study.</i>	Exchange rates were applied based on external sources and at current levels.
	<i>Derivation of transportation charges.</i>	Transport and port charges were derived from quotations by reputable contractors and includes storage and re-handling costs.
	<i>The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.</i>	Based on the off-take agreement concentrates must contain 5.5% Li <sub>2</sub> O. positive or negative variations in grade from 6% attract a straight line price adjustment increment/decrement of US\$/15t based on grade variation of 0.1%.
	<i>The allowances made for royalties payable, both Government and private.</i>	Allowances were made for State Government royalties, no other royalties are payable for production from M15/400.
Revenue factors	<i>The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.</i>	Spodumene revenue factors were: Variable head grade averaging 1.12% Li <sub>2</sub> O over 3.5 years of the mine life after dilution and ore loss Processing recoveries applied at 65.8%. Spodumene price of US\$880/t for 2018, 2019 US\$733/t for 2020 and US\$800/t for 2021 based on 6% Li <sub>2</sub> O content Exchange rate of 0.75 AUD:USD Transportation and Port loading charges have been allowed for however remain confidential Tantalum revenue factors were: Direct tantalum feed averaging 342ppm Li <sub>2</sub> O over 3.5 years of the mine life with a recovery rate of 65% to saleable concentrates. Secondary production of 191,000kg of tantalum pentoxide from the lithium circuit fines. Tantalum pentoxide price of US\$60/Lb for a 25% Ta <sub>2</sub> O <sub>5</sub> content Exchange rate of 0.75 AUD:USD Transportation and Port loading charges have been allowed for however remain confidential.
	<i>The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.</i>	The commodity pricing for spodumene concentrates is based on a price of US\$880/t (FOB Esperance) for 6% Li <sub>2</sub> O. The Company has a binding offtake agreement for the supply of lithium concentrate from the Bald Hill Project in Western Australia over an approximate initial five-year term. The key terms of the offtake agreement are as follows:

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		<ul style="list-style-type: none"> <li>A fixed price for all production for 2018 and 2019 of US\$880/t (FOB Esperance) for 6% Li<sub>2</sub>O with price adjustment increment/decrement of US\$/15t based on grade variation of 0.1%.</li> <li>From 2020 to 2023, the sales price and volumes are to be negotiated and will be by agreed based upon prevailing market conditions at the time.</li> </ul> <p>For the purpose of the PFS reference prices of US\$733/t for 2020, US\$800/t for 2021 and US\$753/t for 2022, for 6% Li<sub>2</sub>O concentrates based on Canaccord Genuity forward estimates.</p> <p>The commodity pricing for tantalum is based on a price of US\$60/lb (FOB Esperance) for +25% Ta<sub>2</sub>O<sub>5</sub>. The assumed spot price is \$55/lb and a premium (based on historical sales from Bald Hill) of US\$5/lb has been assumed due to the low radiation and past sales history from the Bald Hill Mine. In 'real terms' the current pricing is close to an 'all-time' low however there are no indications a strong correction to pricing.</p>
Market assessment	<i>The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.</i>	<p>Medium and long-term supply and demand modeling for spodumene concentrates is difficult to predict due to the rapid growth in demand and promise of supply.</p> <p>The Company has signed a Binding Offtake Agreement (BOA) for 100% of production for the first two years which includes substantial prepayments.</p>
	<i>A customer and competitor analysis along with the identification of likely market windows for the product.</i>	Lithium demand growth will likely be driven by demand for electric cars and energy storage systems. There are several large Lithium projects that are expected come into production in late 2018 and 2019 these may result in a period of oversupply from 2020, however based on history supply has significantly lagged analysts' predictions.
	<i>Price and volume forecasts and the basis for these forecasts.</i>	<p>The commodity pricing for spodumene concentrates is based on a price of US\$880/t (FOB Esperance) for 6% Li<sub>2</sub>O. The Company has a binding offtake agreement for the supply of lithium concentrate from the Bald Hill Project in Western Australia over an approximate initial five-year term.</p> <p>For the purpose of the PFS reference prices of US\$733/t for 2020, US\$800/t for 2021 and US\$753/t for 2022, for 6% Li<sub>2</sub>O concentrates based on Canaccord Genuity forward estimates.</p>
	<i>For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.</i>	Concentrates produced during bulk metallurgical test work are well within contractually acceptable limits of grade and impurities.
Economic	<i>The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.</i>	<p>The economic analysis is based on cash flows driven by the production schedule. The cash flow projections include:</p> <p>Initial and sustaining capital estimates.</p> <p>Mining, processing and concentrate logistics costs to the customer based on FOB pricing.</p> <p>Revenue estimates based on concentrate pricing adjusted for fees, charges and royalties.</p> <p>A 10% discount factor.</p>

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	<i>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</i>	Sensitivity analyses were generated by varying the salient economic variables. The project is most sensitive to grade, recovery of lithium and AUD/USD. The project is robust against a 20% negative change to recovery, grade, metal pricing, foreign exchange rates, capital or operating costs.
Social	<i>The status of agreements with key stakeholders and matters leading to social licence to operate.</i>	The site is a Brown Fields operation however over time the larger project footprint will have marginal impact on pastoral lease feed and improvements. The Company is working with the lessee to mitigate impacts. The License pre-dates Native Title however the Company has been in dialog with the Ngadju Native Title Group on neighboring tenements
Other	<i>To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:</i>	
	<i>Any identified material naturally occurring risks.</i>	No material naturally occurring risks have been identified.
	<i>The status of material legal agreements and marketing arrangements.</i>	The Company has a binding offtake agreement for the supply of lithium concentrate from the Bald Hill Project over an approximate initial five-year term. Apart from Bald Hill JV agreements that govern the Project there are no other relevant material legal agreements.
	<i>The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.</i>	The Company has granted mining lease M15/400 covering sufficient area for the open pit, plant and other infrastructure. Being an operating tantalum mine the site has existing DER operating license and DMP mining proposal. An amendment DMP mining proposal has also been approved and a DER license amendment has been submitted. There are no apparent impediments to obtaining all government approvals required for the project.  The License pre-dates Native Title.
Classification	<i>The basis for the classification of the Ore Reserves into varying confidence categories.</i>	Probable Ore Reserves were determined from Indicated resource material as per the guidelines. As there is no Measured resource material, there are no Proven Ore Reserves.
	<i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i>	The results reflect the views of the Competent Person.
	<i>The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).</i>	There are currently no Measured Mineral Resources for the project
Audits or reviews	<i>The results of any audits or reviews of Ore Reserve estimates.</i>	Ore Reserve estimates have been reviewed internally and mine design and scheduling has been reviewed. No material flaws have been identified and the Ore reserve is considered appropriate for a PFS level of study.  The Primero capital cost and operating estimate and scope of work was externally reviewed.  The financial model was reviewed externally.
Discussion of relative accuracy/ confidence	<i>Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative</i>	The Ore Reserve is the outcome of the PFS that has taken into account geological, metallurgical, geotechnical, process engineering and mining engineering considerations. It has a nominal accuracy of + 15% / -10%.

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	<i>accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.</i>	The Project has a IRR and NPV which makes it robust in terms of cost variations. The project is sensitive to price variations for spodumene concentrates and mining costs and less sensitive to capital costs.
	<i>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</i>	All estimates are based on local costs in Australian dollars.  Standard Industry practices have been used in the estimation process.
	<i>Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage</i>	The degree of accuracy of study knowledge surrounding: <ul style="list-style-type: none"> <li>• Geology</li> <li>• Engineering</li> <li>• Permitting requirements</li> <li>• Project delivery</li> <li>• Capital and Operational expenditure estimates, and</li> <li>• Financial modelling</li> </ul> are considered to be at a minimum of Class 3 in regard to the Association for the Advancement of Cost Engineering (AACE). Refer to the AACE International Recommended Practice No. 18R-97.  Importantly: <ul style="list-style-type: none"> <li>• Capital expenditure estimates are considered to be within -5%/+10%, and</li> <li>• Operational expenditure estimates are considered to be within -10%/+15%.</li> </ul> There are no known undisclosed areas of uncertainty.
	<i>It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i>	There has been no lithium production via DMS to date, so no comparison or reconciliation of data can be made.  There is significant tantalum recovery records and these have been used as a basis for estimating future recovery.

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