

SEPTEMBER 2020 QUARTERLY ACTIVITIES REPORT

Updated Kathleen Valley PFS delivers substantial increase in NPV to A$1.1B and mine life to ~40 years as landmark $12.5m capital raise de-risks Liontown's development pathway

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HIGHLIGHTS

KATHLEEN VALLEY LITHIUM PROJECT (Western Australia:100%)

- Updated Pre-Feasibility Study (PFS) confirms the technical and financial viability of a standalone 2Mtpa mining and processing operation based on an updated Ore Reserve of **71Mt @ 1.4% Li_2O and 130ppm Ta_2O_5.**
- Ore Reserve underpins a 40-year mine life with average production of ~350ktpa 6% Li_2O spodumene concentrate (SC6.0) and 430tpa of 30% Ta_5O_5 concentrate.
- Key financial outcomes of the PFS include:
  - LOM free cash flow after-tax of A$4.8B;
  - Project payback of ~3 years post-production;
  - Post-tax $NPV_{8\%(real)}$ of A$1.12B and IRR of 37%;
  - Pre-production capital expenditure of A$325M; and
  - Cash costs of US$283/dmt Li_2O concentrate (excluding royalties) in Years 1-10.
- A Downstream Scoping Study (DSS) leveraging off the PFS demonstrates the significant financial upside of an integrated mining, processing and refining operation based on the production of lithium hydroxide (LHM) or lithium sulphate (LSM) using SC6.0 from Kathleen Valley as feedstock.
- Liontown Resources ("Liontown" or the "Company") has commenced a Definitive Feasibility Study (DFS) focused on SC6.0 production that will review a number of opportunities to improve the Project's financial metrics, including additional test work to further develop the DSS, given the compelling economic upside.

MOORA GOLD-PGE*-NICKEL-COPPER PROJECT (Western Australia: 100%)

- Data from an Airborne Electromagnetic (AEM) survey has defined a number of large, conductive zones coincident with the previously delineated, 15km long, Mt Yule – Felton Gold-PGE corridor.
- The AEM conductors may indicate primary bedrock-hosted, sulphide zones beneath and down dip of the surface geochemical anomalies.

* PGE – palladium-platinum

CORPORATE

- $12.5m capital raising announced subsequent to end of Quarter.
- Funds will ensure the continued development of Liontown's flagship Kathleen Valley Project, including the completion of a DFS, and initial drill testing of the Moora Project.



Drill rig at Kathleen Valley

INVESTMENT HIGHLIGHTS

- World class lithium-tantalum deposit defined at 100%-owned Kathleen Valley Project.
- Studies demonstrate the potential of Kathleen Valley to be a significant contributor to the battery metals market.
- Development momentum at Kathleen Valley being maintained with a DFS scheduled for completion in Q4 2021.
- Strategic land position at Moora, which is located in an emerging mineral province, with initial results confirming high order Au-PGE-Ni-Cu anomalism.



Auger drilling at Moora

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PROJECTS

1. Kathleen Valley Lithium Project, WA (Liontown: 100%)

*The Kathleen Valley Project is located in Western Australia, ~680km north-east of Perth and ~350km north-northwest of Kalgoorlie, within the Eastern Goldfields of the Archaean Yilgarn Craton (**Figure 1**). Liontown commenced work at Kathleen Valley in 2017 and has since defined a world-class Mineral Resource Estimate of **156Mt @ 1.4% Li_2O and 130ppm Ta_2O_5**.*

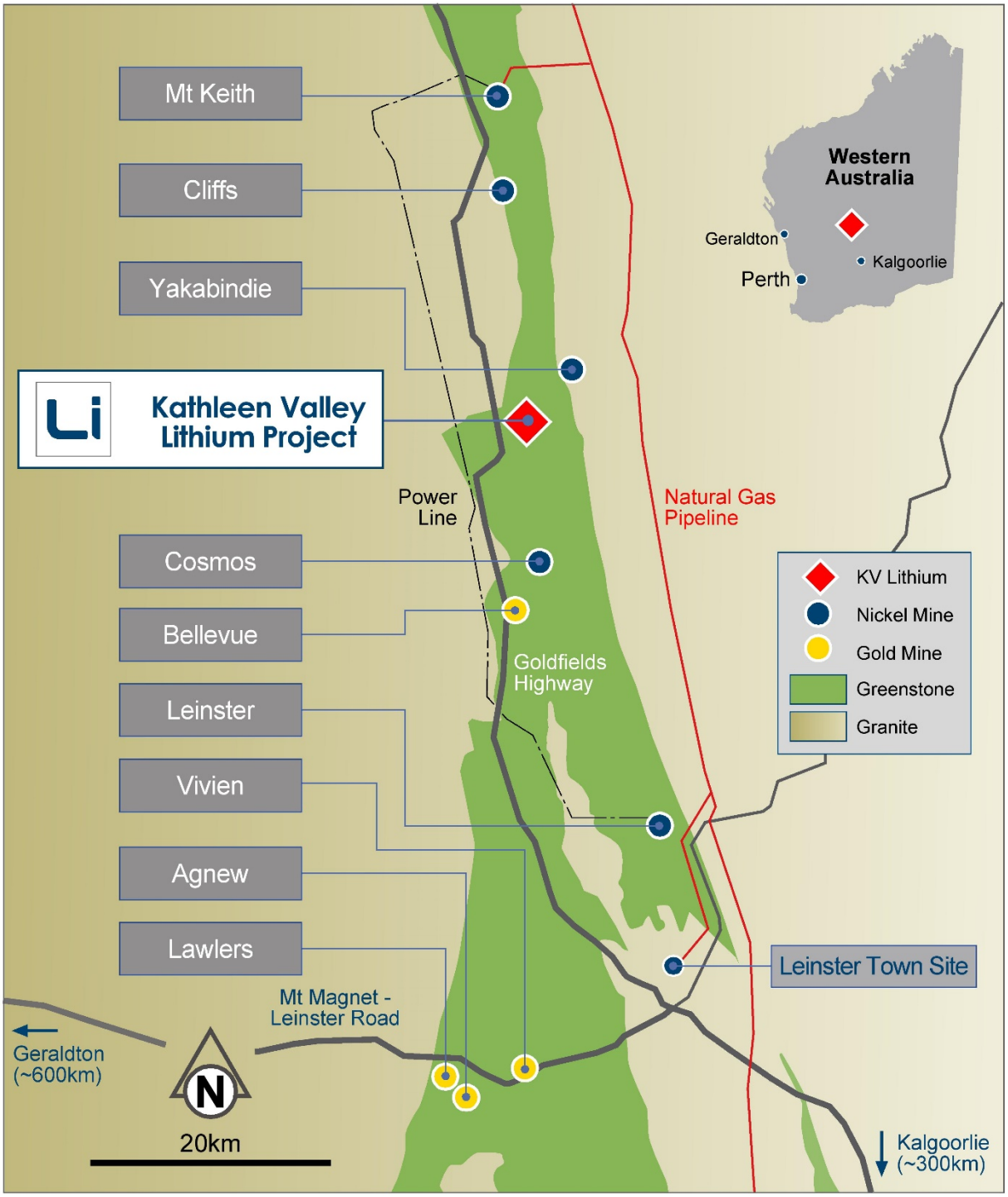


Figure 1: Kathleen Valley Lithium Project – Location and Geology Plan.

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Following the updated Mineral Resource Estimate (MRE) reported in May 2020, Liontown has continued to advance the Kathleen Valley Project with completion of:

A. An updated Pre-Feasibility Study (PFS) investigating the establishment of a mining and processing operation to produce spodumene and tantalum concentrates; and

B. A Scoping Study into the viability of refining the spodumene concentrate onsite to produce either lithium hydroxide or lithium sulphate.

UPDATED PRE-FEASIBILITY STUDY

The PFS, which builds on the previous study completed in December 2019, delivered an updated Ore Reserve of **71Mt @ 1.4% Li_2O and 130ppm Ta_2O_5** which will underpin a 2Mtpa mining and processing operation over a 40-year mine life. The Ore Reserve was based on the May 2020 MRE of 156Mt @ 1.4% Li_2O and 130ppm Ta_2O_5.

The PFS evaluated a mining and processing operation delivering an average of 350ktpa of SC6.0 and 430tpa of a 30% Ta_2O_5 tantalum concentrate. Following conventional underground and open pit mining and delivery to the Run-of-Mine pad, ore will be processed by Whole of Ore Flotation (WOF) to produce spodumene and tantalum concentrates which will then be transported in bulk for delivery to downstream customers. ***Figure 2*** shows the proposed site layout including mining areas, processing facilities and non-process infrastructure.

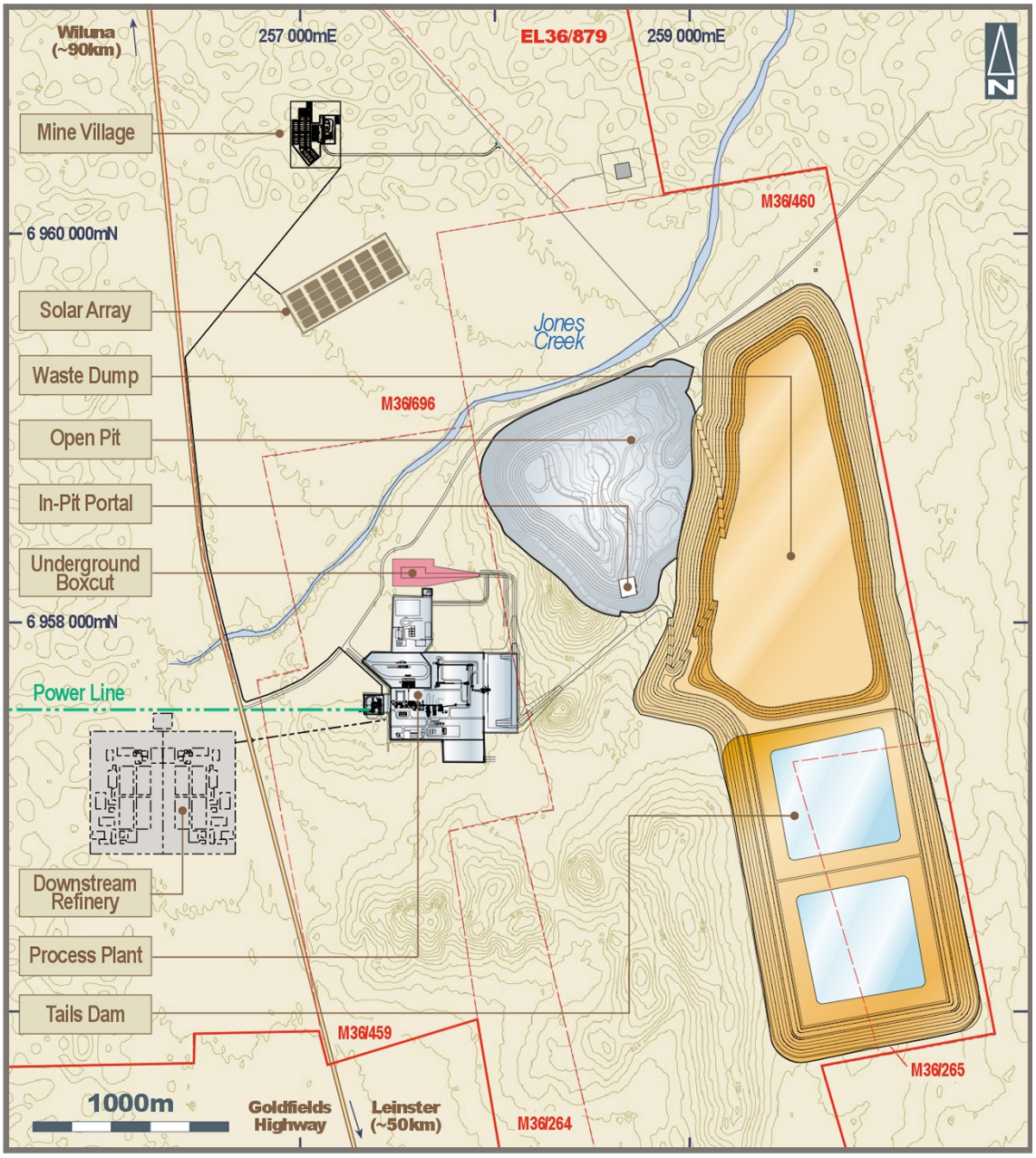


Figure 2: Kathleen Valley Project – Proposed mine site and refinery layout.

Updated Ore Reserve

Orelogy Consulting Pty Ltd (Orelogy) were responsible for the mining component of the PFS. As such, Orelogy has prepared an Ore Reserve Estimate for the Kathleen Valley underground and open pit as at 9th October 2020, in accordance with the guidelines of the JORC Code 2012.

The Ore Reserve Estimate is based on the MRE update released on the 11th May 2020 of 156Mt at 1.4% Li_2O and 130ppm Ta_2O_5. The Measured, Indicated and Inferred MRE was prepared by independent specialist resource and mining consulting group Optiro Pty Ltd (Optiro) and is summarised in ***Table 1***.

Table 1: Kathleen Valley Project – Mineral Resource Estimate (May 2020)

Cut-off grade Li_2O %	Resource Category	Million tonnes	Li_2O % (Equiv)	Li_2O %	Ta_2O_5 ppm
0.55	Measured	20	1.4	1.3	140
	Indicated	105	1.5	1.4	130
	Inferred	32	1.4	1.3	110
Total		**156**	**1.5**	**1.4**	**130**

Notes:
- *Reported above a Li_2O cut-off grade of 0.55%*
- *Tonnages and grades have been rounded to reflect the relative uncertainty of the estimate.*
- *Li equivalency based on overall recoveries of 50% & 76% respectively for Ta_2O_5 and Li_2O and pricing of US$69.9/lb for 30% Ta_2O_5 / $739/t for 6% Li_2O.*

The MRE is reported and classified in accordance with the guidelines of the 2012 Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code; 2012). The Mineral Resource is inclusive of the Ore Reserve.

The summary of the Ore Reserve prepared by Orelogy is shown in ***Table 2***.

Table 2: Kathleen Valley Project – Ore Reserve Estimate (October 2020)

Category	Tonnage (Mt)	Li_2O (%)	Li_2O (t)	Ta_2O_5 (ppm)	Ta_2O_5 (t)
Underground					
Proved	3.9	1.4	56,000	130	**500**
Probable	37.6	1.5	572,000	120	**4700**
Sub-Total	**41.5**	**1.5**	**628,000**	**120**	**5100**
Open Pit					
Proved	11.7	1.2	142,000	140	**1,700**
Probable	17.6	1.2	205,000	130	**2,300**
Sub-Total	**29.3**	**1.2**	**346,000**	**130**	**3,900**
TOTAL	**70.8**	**1.4**	**974,000**	**130**	**9,100**

Notes:
- *Tonnages and grades are diluted and reported at Li_2O cut-off grade of 0.7-0.75% (open pit) and 1.2 -1.5% (Underground). Tonnages and grades have been rounded.*

Mineral Resources were converted to Ore Reserves in line with the material classifications which reflect the level of confidence within the resource estimate. The Ore Reserve reflects that portion of the Mineral Resource which can be economically extracted by open pit and underground mining methods.

The Ore Reserve considers modifying factors and other parameters including, but not limited to the mining, metallurgical, social, environmental, statutory and financial aspects of the Project. ***Figure 3*** shows the proposed open pit and underground development. The open pit has been designed in two phases, the first being to supply ore for the plant in the first 3 – 4 years until the underground operation is up to full capacity. The second phase occurs after 25 years when the underground mining operation is nearing completion.

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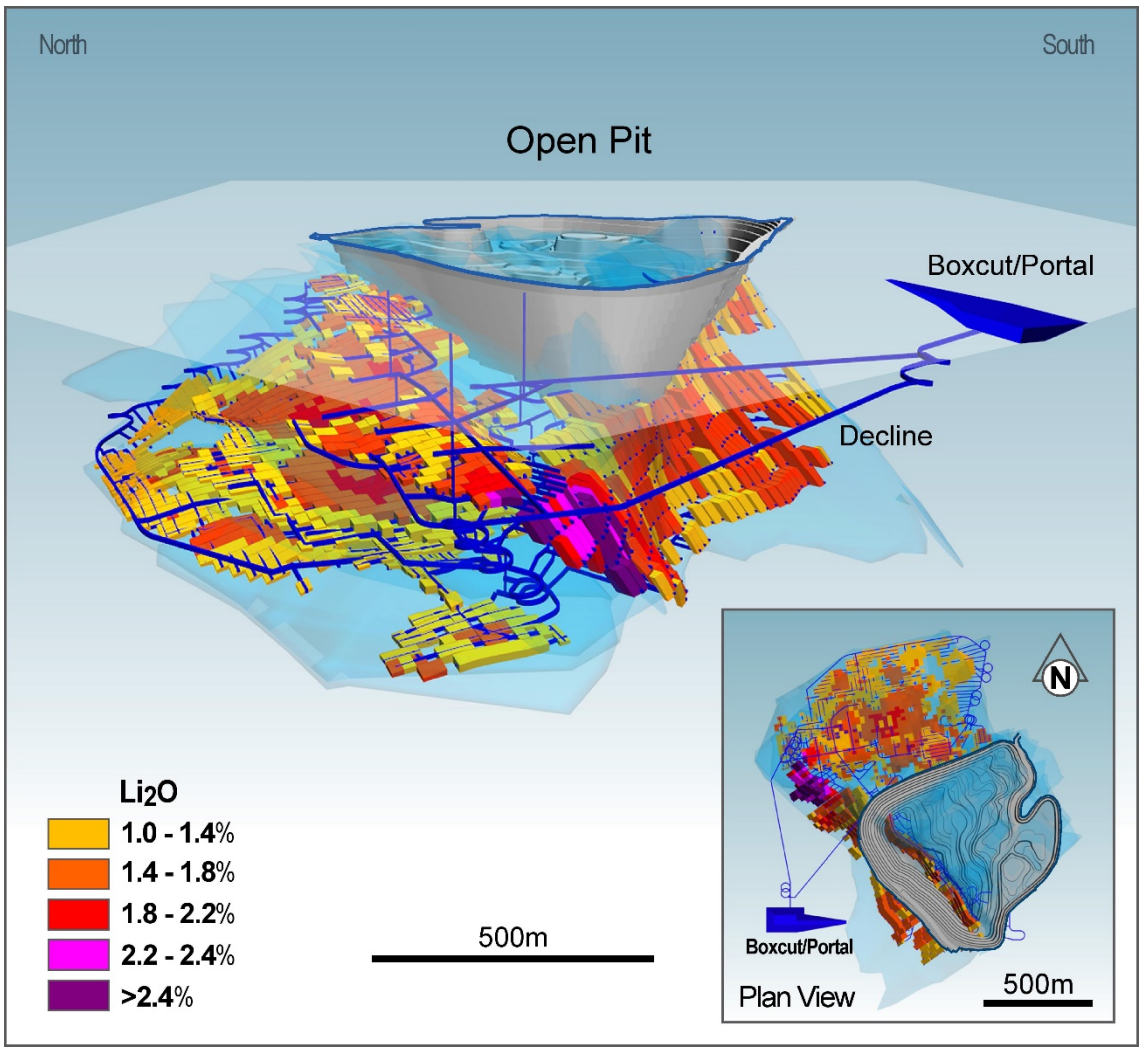


Figure 3: Kathleen Valley Project – Proposed mine development showing underground ore stopes by grade

PFS Financial Outcomes

Based on a proposed 2Mtpa standalone mining and processing operation, the PFS has demonstrated strong financial metrics for the Project (***Table 3 / Figure 4***).

Table 3: Kathleen Valley Project – PFS Base Case Key Metrics

Study Outcomes	PFS
Post-tax NPV$_{8\%\ (real,\ post\text{-}tax)}$	A$1.12B
Internal Rate of Return (IRR)	37%
Payback	3 years post-production
Life of mine (LOM)	~ 40 years
Pre-production capital cost	A$325M (inc. A$67M preproduction & A$27M contingency)
Cash operating costs (1st 5years) (1) (2)	~US$261/dmt of SC6.0 (including tantalum credits)
Cash operating costs (1st 10years)(1)(2)	~US$283/dmt of SC6.0 (including tantalum credits)
Cash operating costs (LOM) (1) (2)	~US$310/dmt of SC6.0 (including tantalum credits)
Cash operating costs (LOM) (1) (3)	~US$377/dmt of SC6.0 (including tantalum credits & Royalties)
Average steady state production	350 ktpa of SC6.0, 430 tpa of 30% Ta_2O_5 concentrate

[1] Cash operating costs include all mining, processing, transport, freight to port, port costs and site administration & overhead costs. Excludes sustaining capital.

[2]Royalties are predominantly sales price dependent hence not included, for a PFS Li_2O price of US$739/t royalties equate to US$62/t for the 1st 10 years and US$67/t for LOM.

[3] Includes royalties of US$67/t for LOM.

The production targets and forecast financial information referred to in the PFS comprise Proven Ore Reserves (19.7%), Probable Ore Reserves (69.8%) and Inferred Mineral Resources (10.5%). The Inferred material included in the inventory is 8.28Mt @ 1.36% Li_2O & 121ppm Ta_2O_5.The Inferred material has been scheduled such that less than 1Mt is mined in the first ten years with 6.44Mt at the end of the underground mine life and a further 0.84Mt after Year 25 for the Open Pit

The Inferred material does not have a material effect on the technical and economic viability of the project. The Reserve Estimate has been prepared by a Competent Person in accordance with the requirements of the 2012 JORC Code. All material assumptions on which the production targets and forecast financial information are based are disclosed in this announcement and in Liontown's ASX release dated 9th October 2020.

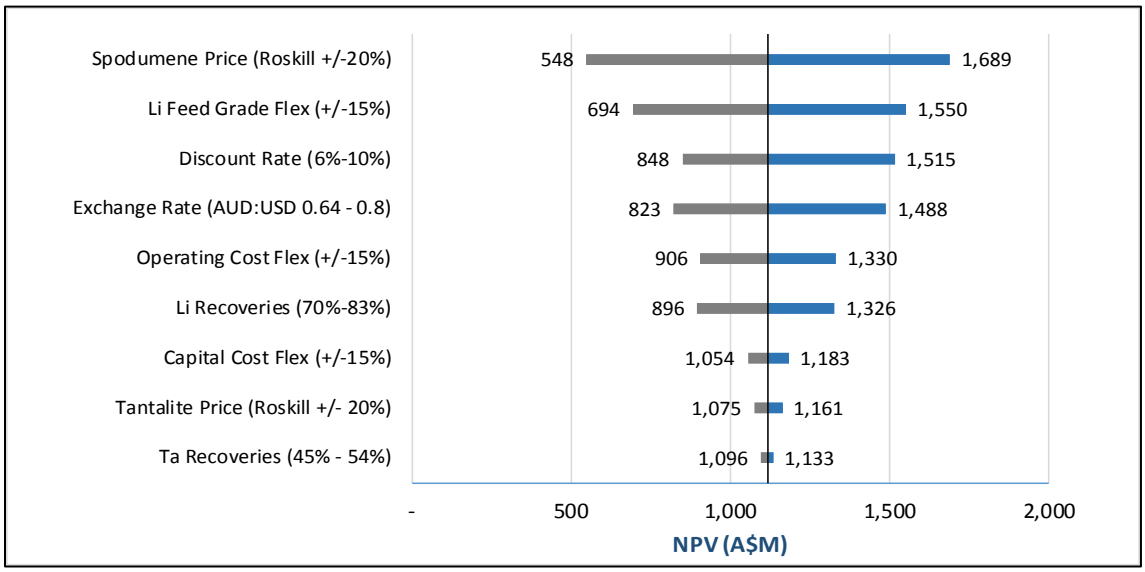


Figure 4: Kathleen Valley Project – NPV Sensitivity Analysis. Base case NPV A$1,120M

The PFS was completed to an overall +/- 25% accuracy using the key parameters and assumptions set out in ***Table 4***.

Table 4: PFS Key Parameters and Assumptions

Parameter	
General and Economic	**PFS**
Discount rate (real, post-tax)	8%
Average SC6.0 (US$ per tonne FOB Geraldton 2025-2040)	US$739/ t
Average Tantalum 30% conc. (US$ per pound FOB Fremantle 2025-2040)	US$69.9/lb
Exchange rate – AUD/USD	0.72
Mining and Production	
Average LOM strip ratio (Open pit)	8.4:1
Processing rate	2Mtpa
Ore Reserve	71Mt
Life-of-Mine Production Target (49Mt UG & 30Mt OP)	79Mt ore
Li_2O & Ta_2O_5 grades (diluted) years 1-10 processed	1.5%/ 125 ppm
LOM average Li_2O & Ta_2O_5 grades (diluted) processed	1.4%/ 130 ppm
Average Li_2O recovery (%) *	76%
Overall Ta_2O_5 recovery (% including offsite upgrade losses of ~6%)	50%
SC6.0 (grade %)	6%
Ta_2O_5 Concentrate final grade (%)	30%
Moisture content of SC6.0	9%

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Average annual Tonnes of SC6.0	350ktpa
Average annual Tonnes of 30% Ta_2O_5 concentrate	430tpa
Cost Assumptions	
LOM average open pit mining costs ** ($/ dmt ore processed)	A$43
LOM average underground mining costs ($/ dmt ore processed)	A$55
LOM average processing cost ($/ dmt ore processed)	A$20
Logistics and transport ($/ wmt conc. Inc Port Charges)	A$65/wmt
General and admin ($/dmt ore processed including mining)	A$6
Western Australia State royalty	5%
Private royalties (does not apply to MLA M36/696)	3% gross sales & $0.5/t ore mined
Native Title Agreement	Under Negotiation
NPV Date	Start of Construction
Corporate tax rate	30%
Estimated opening tax losses	A$35M

* *Based on testwork derived grade-recovery relationship for PFS mine plan grades of Li_2O (inclusive Ta_2O_5 extraction Li_2O losses)*

** *Includes ROM rehandle for all Mill processing*

Metallurgy

Samples were collected from across the deposit as part of the metallurgical testwork. These samples include a range of grades and depths.

The metallurgical process proposed consists of 3-stage comminution including high-pressure grinding roll (HPGR), a sequential magnetic-gravity circuit for iron and tantalum extraction followed by WOF.

The process has been tested at a PFS level in the laboratory with a grade-recovery relationship established which results in an average metallurgical recovery of 76% Li_2O into SC6.0 (inc. losses for Ta_2O_5 extraction) based on the PFS mine schedule. A separable site Ta_2O_5 recovery of 56% will enable the production of a Ta_2O_5 concentrate grading 15% Ta_2O_5 (upgraded to 30% offsite resulting in an overall Ta_2O_5 recovery of 50%).

DOWNSTREAM SCOPING STUDY (DSS)

Building on the PFS, Liontown engaged Lycopodium Minerals Pty Ltd (Lycopodium) to evaluate the impact of integrating a downstream refinery with the mine and process plant ("**Integrated Project**") at Kathleen Valley to produce either battery-grade Lithium Hydroxide monohydrate ($LiOH.H_2O$ "**LHM**") or Lithium Sulphate monohydrate ($Li_2SO_4.H_2O$ "**LSM**").

Lycopodium determined scoping-level operating and capital cost estimates (+/-30% accuracy) for a downstream facility capable of processing feed of ~380ktpa (noting WOF circuit average LOM production rate of 350k tpa) SC6.0 to produce 58ktpa of battery-grade LHM or 88ktpa LSM on-site**.**

As the financial analysis demonstrates, an Integrated Project is a better commercial proposition, given the location of the Project relative to key infrastructure including power and gas, the supply of key consumables such as acid from the nearby mining and logistics centre of Kalgoorlie and, importantly, having a suitable area for storage of tailings. Reduced transport volumes of final product would also significantly reduce operating costs.

DSS Metallurgy and Process Flowsheets

The scope of the DSS relates solely to the process design, capital and operating costs associated with an LHM or LSM refinery; however, the analysis also uses information published as part of the PFS.

The DSS assumes that the LHM and LSM processing plant options will be located at Kathleen Valley, adjacent to the proposed WOF plant detailed in the PFS (***Figure 2***).

A 2 Mtpa WOF concentrator feed rate was considered in-line with the PFS. Further options to generate LSM, followed by third party treatment to produce LHM, were also evaluated to gain an understanding of additional upgrade costs expected to be borne by third parties.

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The options considered are as follows:

- An LHM refinery sized to process a design feed rate of 380ktpa of SC6.0 comprising two parallel processing trains to produce a nominal total of 57,600tpa of battery grade LHM.
- An LSM refinery sized to process a design feed rate of 380ktpa of SC6.0 comprising two parallel processing trains to produce a nominal total of 87,900tpa LSM.
- Separable costs to upgrade the LSM produced to LHM (by others) using the flowsheet and cost and recovery assumptions in the calculation of LHM above were also compiled to assist with pricing assumptions underlying the LSM modelling.

DSS Financial Outcomes

Based on a proposed 2Mtpa standalone mining, processing and refining operation, the DSS demonstrated strong financial metrics for the Integrated Project as outlined below (***Table 5 and Figures 5 - 7***):

Table 5: Kathleen Valley Integrated Project – Key Metrics

	LHM	LSM
Post-tax $NPV_{8\%}$ (real, post-tax)	**A$4.8 B**	**A$3.2 B**
Internal Rate of Return (IRR) %	**41%**	**35%**
LOM Free Cashflow (post tax)	**A$19.5 B**	**A$13.2 B**
Payback period (years)	**3**	**3**
Average LHM/ LSM pricing Real Spot (2025-2041, US$/t) [7]	**US$14,079**	**US$6,991**
Average LOM cash operating costs (US$/t) [1] [5]	**US$4,744**	**US$2,649**
Design production rate (ktpa)	**58 ktpa LHM**	**88 ktpa LSM**
Integrated Capex (SC6.0 Plant + Refinery A$) [2] [3] [4] [6]	**A$1.1B**	**A$0.9B**
Life of mine (LOM years)	**~40 years**	**~40 years**

[1] Cash operating costs include all mining, processing, downstream refining, transport, state & private royalties, freight to port, port costs and site administration and overhead costs. Excludes sustaining capital.
[2] Integrated Capex for LHM production includes $325M for the mine/ SC6.0 processing plant (PFS) and $785M for the downstream refinery
[3] Integrated Capex for LSM production includes $325M for the mine/ SC6.0 processing plant (PFS) and $625M for the downstream refinery
[4] SC6.0 plant capital to PFS level +/-25% accuracy, DSS to +/-30% accuracy
[5] PFS include no contingency on SC6.0 operating costs, DSS included no contingency on operating costs
[6] PFS include 15% ($27M) capital contingency, DSS included 20% ($135M LHM & $109M LSM) contingency on capital costs
[7] LHM Pricing per Roskill September 2020 price estimates for years 2025-2040, LSM pricing scaled based on Roskill LHM price estimate.

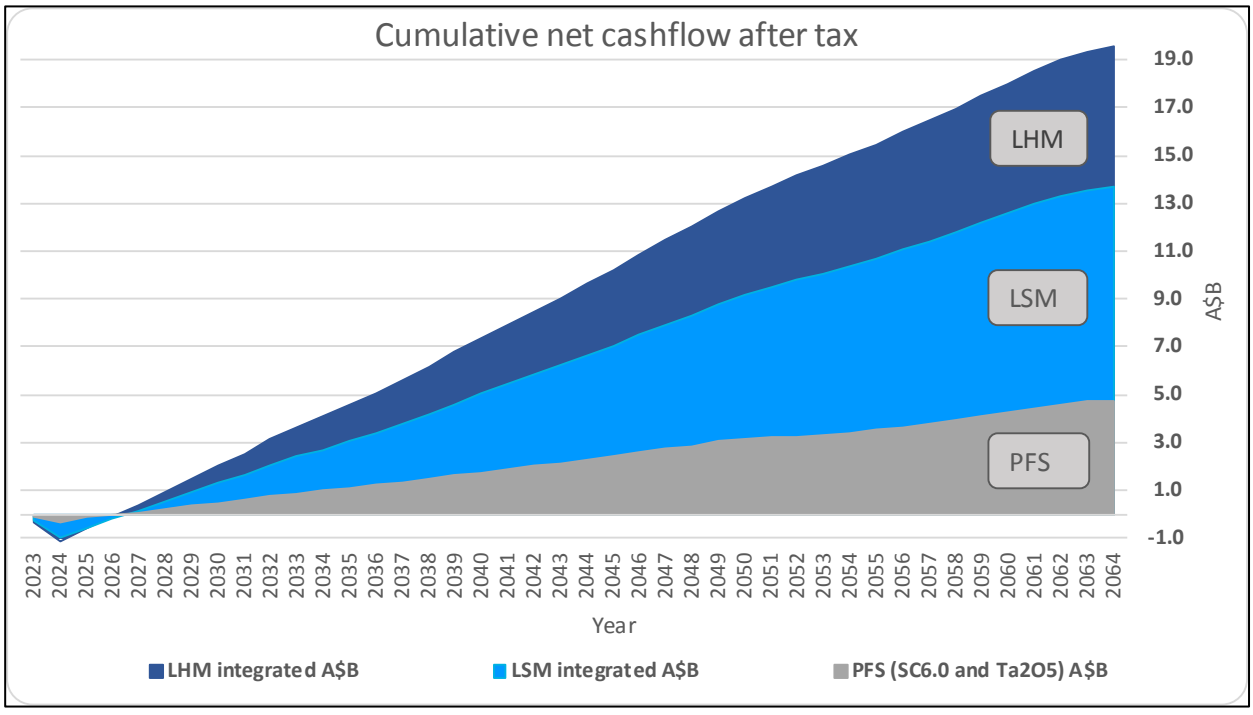


Figure 5: Integrated Project Cumulative Free Cash Flow and Payback Period

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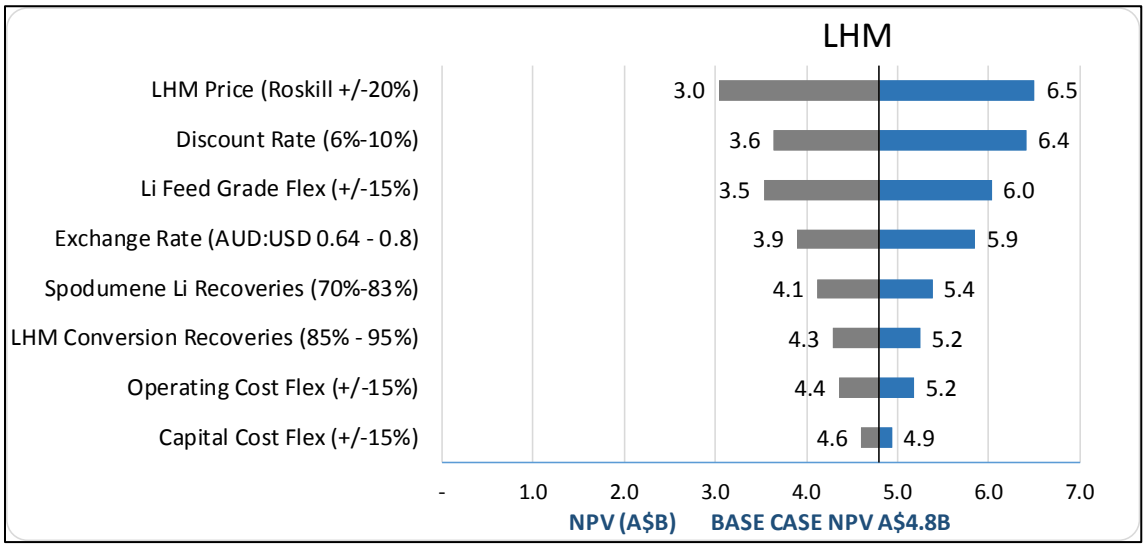


Figure 6: Kathleen Valley LHM Integrated Project – NPV Sensitivity Analysis

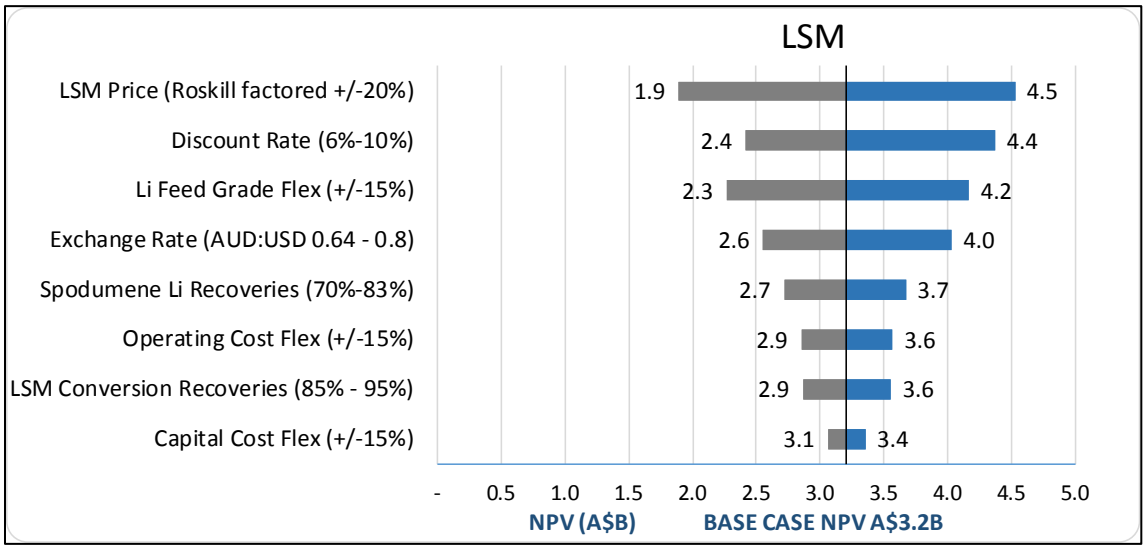


Figure 7: Kathleen Valley LSM Integrated Project – NPV Sensitivity Analysis

The DSS is based on the material assumptions outlined in ***Tables 4 and 6***. While the Company considers all the material assumptions to be based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated by the DSS will be achieved. Given the uncertainties involved, investors should not make any investment decisions based solely on the results of the DSS.

In accordance with ASX Listing Rules 5.16 and 5.17, the Company confirms the following in respect of the production targets and forecast financial information resulting from the DSS:

- The production targets and forecast financial information referred to in the DSS comprise Proven Ore Reserves (19.7%), Probable Ore Reserves (69.8%) and Inferred Mineral Resources (10.5%). The Inferred material included in the inventory is 8.28Mt @ 1.36% Li_2O & 120 ppm Ta_2O_5. The Inferred material has been scheduled such that less than 1Mt is mined in the first ten years, with 6.44Mt at the end of the underground mine life and 0.84Mt after Year 25 for the open pit.
- The Inferred material does not have a material effect on the technical and economic viability of the project.

There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production target itself will be realised.

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Table 6: Integrated Project Key Parameters[1]

Parameter	LHM	LSM
General and Economic		
Discount rate (real, post-tax)	8%	8%
Average Price (US$ per tonne FOB Fremantle 2025-2040)	US$14,079/t	US$6,991/t
Tantalum concentrate price (US$ per pound FOB Fremantle 2025-2040)	US$69.9/lb	US$69.9/lb
Exchange rate – AUD/USD	0.72	0.72
Downstream Integrated Refinery		
Number of processing Trains (#)	2	2
Recovery Li (%)	90%	90%
Calcination Temperature (°C)	1,100	1,100
Sulphuric Acid Addition (mol/mol)	1.25(H_2SO_4:Li_2O)	1.25(H_2SO_4:Li_2O)
Acid Roast Temperature (°C)	250	250
Acid Leaching Residence Time (minutes)	120	120
Lithium Sulphate Crystalliser Stages (per train)	2	2
Production (average ktpa at 380ktpa SC6.0 feed rate)	58 ktpa	88 ktpa
Cost Assumptions		
LOM average processing cost (US$/dmt SC6.0 Concentrate)*	US$310	US$310
LOM average processing cost incl. SC6.0 costs (US$/t)	US$4,744	US$2,649
LOM average processing upgrade cost LSM to LHM (US$/t LHM)	N/A	US$1,509/t LHM
Transport cost (A$/t LHM to Fremantle incl. Port Charges)	A$86	A$86
WA State royalty (based on spodumene feedstock market value)	5%	5%
Other royalties (does not apply to MLA 36/696) (based on spodumene feedstock market value for gross sales)	3% gross sales & A$0.5/t ore mined	3% gross sales & A$0.5/t ore mined
Corporate tax rate	30%	30%
NPV Date	Start of Construction	Start of Construction
Estimated opening tax losses	A$35M	A$35M

1 Refer to Table 4 for Mining and Production of SC6

**Excludes Royalties and sustaining capital*

Opportunities to Increase Project Returns

Following the positive results from the PFS, Liontown has elected to commence a DFS focussed on SC6.0 production which is due for completion in Q4 2021. A number of opportunities to improve the financial metrics for the Project are discussed below.

Throughput Options

Throughputs of 2Mtpa and 4Mtpa from a mining and a processing perspective were evaluated as part of the PFS. A staged approach to the plant development was considered prudent, however key considerations in both the mine and the processing plant have been included upfront to enable a throughput expansion with negligible impact on the 2Mtpa mining and processing presented in the PFS. Further throughput related optimisation will be undertaken as part of the DFS.

Production of Multiple Spodumene Concentrate Grades

The PFS was evaluated on the basis of the production and sale of SC6.0. Based on testwork, the WOF flowsheet provides considerable flexibility for the production of much higher-grade concentrates (>6.5% Li_2O) for periods of the mine life when mining higher grade ore. The ability to produce higher concentrate grades may have sales and operating cost benefits. Further grade-related optimisation will be undertaken as part of the DFS.

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Reserve/Resource Expansion

The PFS underground mine planning has identified accessible Inferred material that potentially could be added to the Reserve if further drilling was undertaken. A 2 hole/700m, geotechnical drilling program is planned in Q4 2020 and the data will also be used to convert this Inferred material to the Indicated Resource category. The Company cautions that there is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of additional Indicated Mineral Resources.

As noted in previous ASX announcements the Kathleen Valley MRE remains open at depth and along strike and the resource base could be grown with additional drilling.

Downstream Processing/Refinery

Ongoing metallurgical and process engineering work is envisaged in Q2, 2021 to further develop the DSS, given the compelling economic upside.

2. Moora Gold-Nickel-Copper-PGE Project, WA (Liontown: 100%)

*The Moora Project, which is located in south-west Western Australia approximately 150km north-east of Perth (**Figure 8**), comprises wholly-owned tenure applied for in 2018 and 2019 as part of Liontown's generative studies to acquire areas considered prospective for precious and battery-related metals. Geochemical exploration has defined strong Au-PGE-Ni-Cu anomalism coincident with geophysical features interpreted to be indicative of mafic-ultramafic intrusions similar to the unit that hosts the recent Julimar discovery ~95km to the south.*

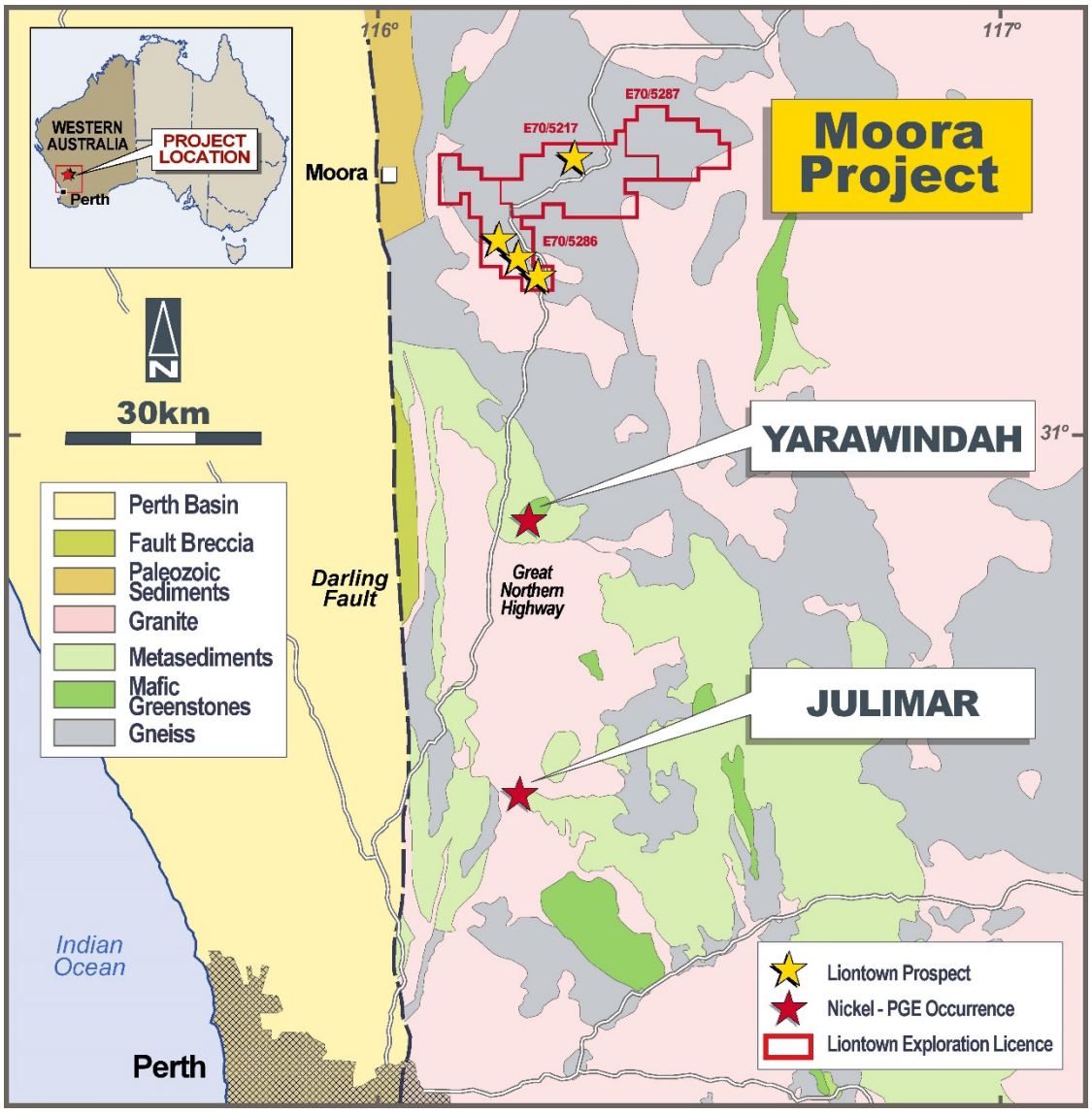


Figure 8: Moora Project – Location and Regional Geology Plan.

An Airborne Electromagnetic ("**AEM**") survey was flown during the Quarter over the entire 467km^2 Project area on lines 200m apart with an average terrain clearance of 35m.

Preliminary data has defined a cluster of late time (Channel 17) EM responses in the southwest part of the Project area indicating possible bedrock conductors. The conductive zones are broadly coincident with the Mt Yule-Felton Corridor, where shallow (<1m) auger sampling earlier this year defined strong gold and PGE anomalism (***Figure 9***) associated with elevated nickel and copper values.

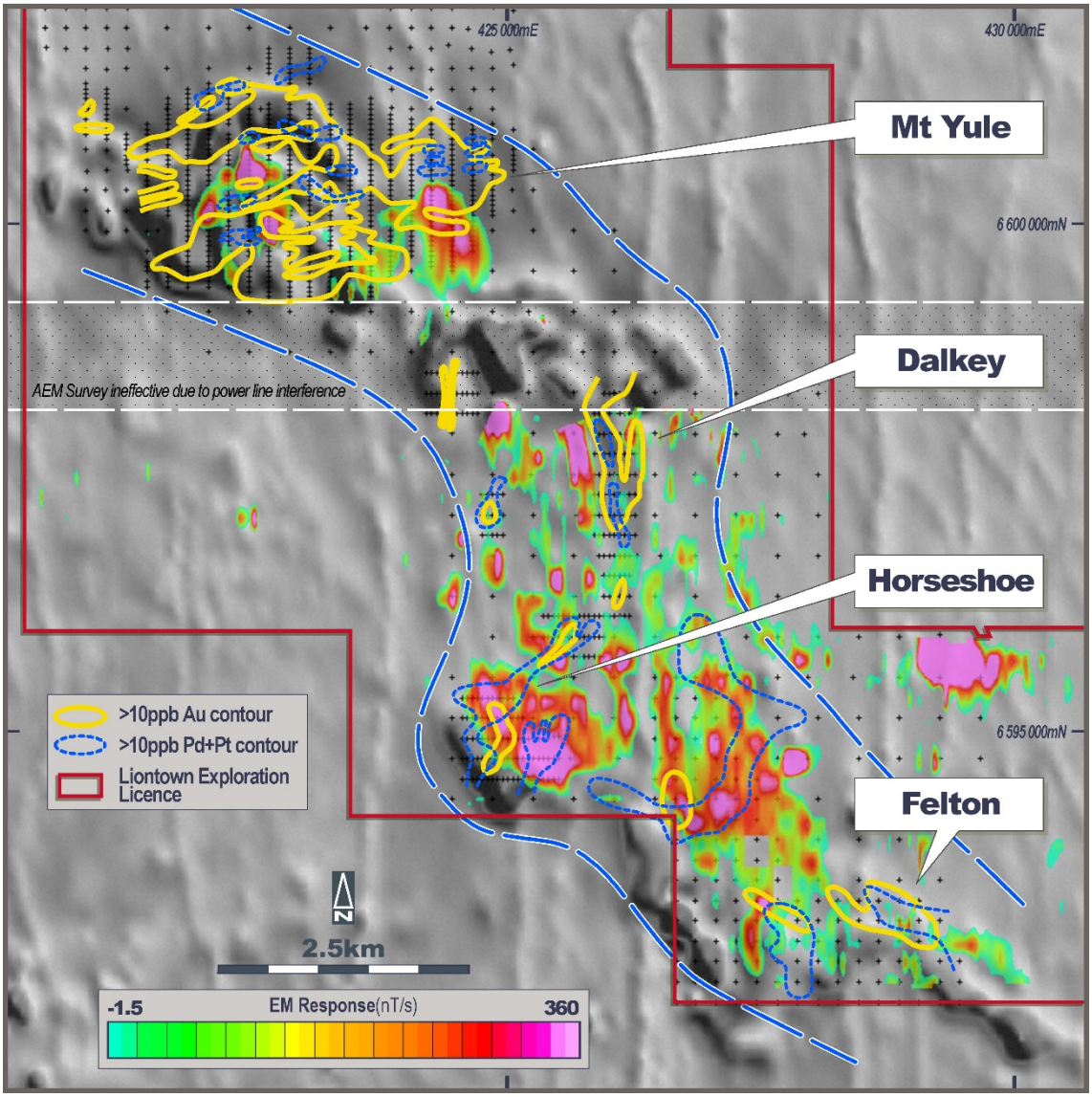


Figure 9: Moora Project/Mt Yule – Felton Corridor: Grey scale magnetic image showing gold and PGE anomalies and late time (Channel 17) conductors defined by AEM survey.

Liontown's exploration results indicate that the setting and prospectivity at Moora are analogous to Chalice Gold Mines' Julimar PGE-nickel-copper-gold discovery, located in the same geological terrain 95km to the south. Electromagnetic techniques have proven to be very effective in defining sulphide zones that host the mineralisation at Julimar.

While EM conductors may also be caused by graphitic sediments and saline groundwater, Liontown considers their coincidence with strong geochemical and magnetic anomalism to be very encouraging for the discovery of significant mineralisation at Moora.

Next Steps

The airborne EM data will be used to plan ground-based moving loop EM (MLEM) surveys which will more accurately delineate potential bedrock conductors. The MLEM data will also be modelled to determine the best orientation to target follow-up Reverse Circulation drilling of the conductive zones.

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3. Buldania Lithium Project, WA (Liontown: 100%)

The Buldania Project is located in the Eastern Goldfields, approximately 600km east of Perth and 200km north of the regional port of Esperance. Historical mapping and exploration delineated a large spodumene-bearing pegmatite swarm that had not been previously assessed for lithium or associated rare metals. Drilling by Liontown has defined a maiden Mineral Resource Estimate of ~15Mt @ 1% Li_2O at the Anna pegmatite.

A Mining Lease application has been pegged over the Anna lithium deposit with relevant paperwork lodged with the Mines Department.

4. Toolebuc Vanadium Project, Qld (Liontown: 100%)

*The Toolebuc Vanadium Project is located in NW Queensland, approximately 440km west of Townsville (**Figure 10**), in a region which hosts a number of large vanadium resources defined as part of previous exploration for hydrocarbons in oil shale. Liontown has five tenements which adjoin existing resources and the Project represents a low-cost entry into vanadium, a commodity that is part of the battery metal suite, critical to the future of energy storage.*

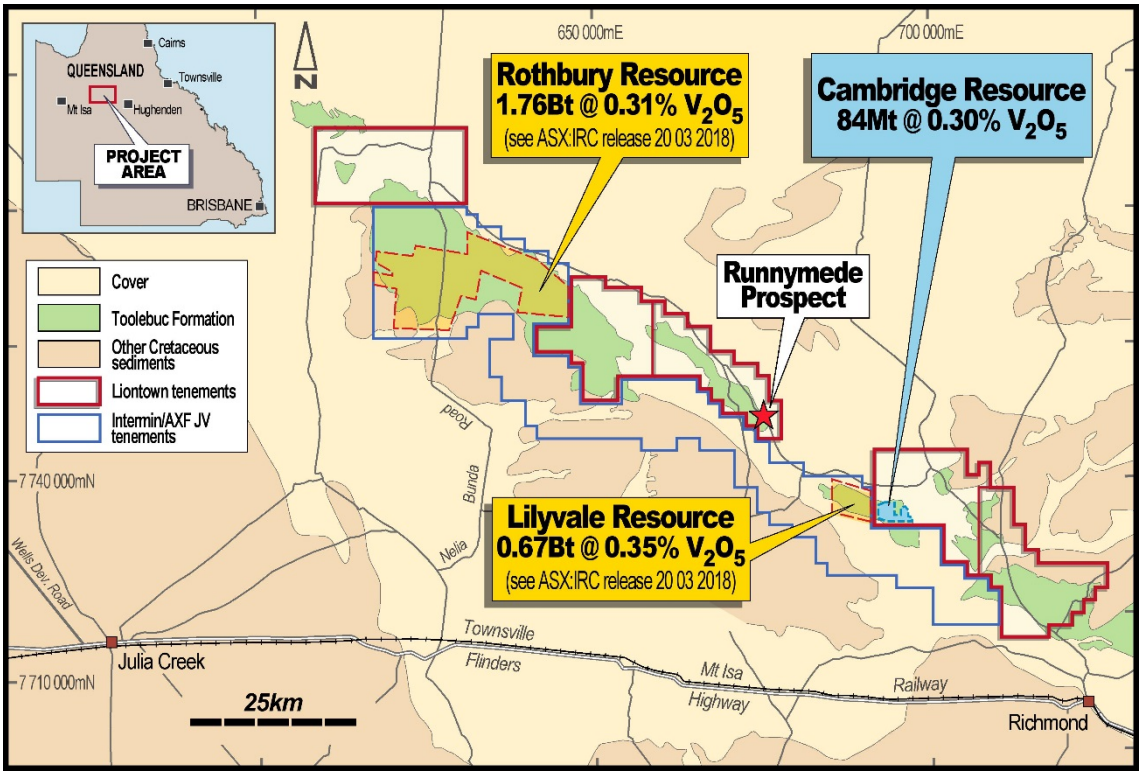


Figure 10: Toolebuc Vanadium Project – Location, regional geology and tenure showing mineral resources held by Intermin (in yellow) and Liontown's Cambridge deposit (in blue).

No work was undertaken during the Quarter.

The Toolebuc Project represents a quality development and growth opportunity in the battery metals space. However, following a strategic review of its corporate priorities, Liontown has decided that the Project is no longer core to its operations. Consequently, the Company is seeking to divest the Project via a joint venture or outright sale.

5. Tenement schedules and expenditures

In accordance with ASX Listing Rule 5.3, please refer to Appendix 1 for a listing of tenements. During the Quarter the Company spent $1,534,000 on exploration and evaluation activities (YTD: $1,534,000) and $352,000 on administration costs (YTD: $352,000).

Payments reported in Appendix 5B, Section 6.1, relate to Directors fees, consulting fees, salaries paid to Managing Director related parties and service charges paid to Chalice Gold Mines Ltd (a director-related entity) for the provision of corporate services at cost including office rent and facilities, administration personnel and KMP services.

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6. Corporate

Capital Raising

Subsequent to the end of the Quarter, Liontown announced a $12.5 million capital raising which will be used to fund further feasibility and other studies at Kathleen Valley as well as initial drill testing of the Moora Project.

Importantly, the Company's flagship Kathleen Valley Lithium-Tantalum Project in Western Australia will now be fully funded through to completion of a DFS in 2021.

The Capital Raising was conducted at $0.23 per share and comprised:

- A $10.33 million placement via the issue of 44,923,913 New Shares to institutional and sophisticated investors within the Company's 15% placement capacity in accordance with ASX Listing Rule 7.1; and
- A $2.17 million placement via the issue of 9,423,913 New Shares to the Company's Directors (and their associates), which is subject to shareholder approval.

Exercise of Options and Service Rights

Subsequent to the end of the Quarter, a total of 11,000,000 Liontown share options were exercised by directors, staff and associates of the Company raising $604,500.

Also subsequent to the end Quarter, directors and staff of Liontown exercised 1,253,619 service rights received in lieu of fees and salaries.

Cash Position

At the end of the Quarter, Liontown's cash balance was $5.3 million excluding funds raised from the capital raising and exercise of share options.

This announcement has been authorised for release by the Board.



DAVID RICHARDS
Managing Director

30th October 2020

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The Information in this Report that relates to Mineral Resources for the Kathleen Valley Project is extracted from the ASX announcement "Kathleen Valley confirmed as a world-class lithium deposit as Mineral Resource increases to 156Mt @ 1.4% Li2O" released on the 11th May 2020 which is available on www.ltresources.com.au.

The Information in this Report that relates to Ore Reserves, Production Target and Pre-Feasibility Study (PFS) for the Kathleen Valley Project is extracted from the ASX announcement "Updated Kathleen Valley Pre-Feasibility Study delivers substantial increase in NPV to A$1.1 billion and mine life to ~40 years" released on 9th October 2020 which is available on www.ltresources.com.au

The information in this Report that relates to the Downstream Scoping Study (DSS) is extracted from the ASX announcement "Downstream Scoping Study: Kathleen Valley Lithium-Tantalum Project" released on 22 October 2020 which is available on www.ltresources.com.au

The information in Report that relates to Exploration Results for the Moora Project is extracted from the ASX announcements "Initial phase of exploration completed at 100%-owned Moora Nickel Project, located north-east of Perth in Western Australia", "Strong gold, PGE, nickel and copper anomalism returned from initial fieldwork completed at 100%-owned Moora Project, WA", "Further outstanding gold, PGE and nickel results from 100%-owned Moora Project, WA" and "Large, strong EM conductors identified at the Moora Project, WA" released on 16th April 2020, 13th May 2020, 13th July 2020 and 24th September 2020 which are available on www.ltresources.com.au

The Information in this Report that relates to Mineral Resources for the Buldania Project is extracted from the ASX announcement "Liontown announces maiden Mineral Resource Estimate for its 100%-owned Buldania Lithium Project, WA" released on the 8th November 2019 which is available on www.ltresources.com.au

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and that all material assumptions and technical parameters underpinning the estimates or production targets or forecast financial information derived from a production target (as applicable) in the relevant market announcements continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.

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APPENDIX 1

The following information is provided in accordance with ASX Listing Rule 5.3 for the quarter.

1. Listing of tenements held in Australia (directly or beneficially):

Country	Project	Tenement No.	Registered Holder	Nature of interests
Australia	Kathleen Valley	M36/264	LRL (Aust) Pty Ltd (wholly owned subsidiary of Liontown Resources Limited).	100% - nickel claw back rights retained by other party
		M36/265		
		M36/459		
		M36/460		
		M36/696	Liontown Resources Limited	0% - pending application
		E36/879	Liontown Resources Limited	100% - all metal rights
		L36/236	LRL (Aust) Pty Ltd (wholly owned subsidiary of Liontown Resources Limited).	100%
		L36/237		
	Buldania	E63/856	Avoca Resources Pty Ltd	100% of rights to lithium and related metals secured by Lithium Rights Agreement
		P63/1977		
		M63/647		
		M63/676		0% - pending application
	Killaloe	E63/1018	80% LRL (Aust) Pty Ltd/ 20% Cullen Resources Limited	80% - Application for exemption from expenditure conditions pending
		E63/1660	LRL (Aust) Pty Ltd (wholly owned subsidiary of Liontown Resources Limited).	100%
		E63/1713		
		M63/0177	LRL (Aust) Pty Ltd (wholly owned subsidiary of Liontown Resources Limited).	100% - Application for exemption from expenditure conditions pending
	Toolebuc	EPM26490	Liontown Resources Limited	100%
		EPM26491		
		EPM26492		
		EPM26494		
		EPM26495		
	Moora	E70/5217	ERL (Aust) Pty Ltd (wholly owned subsidiary of Liontown Resources Limited).	100%
		E70/5286		
		E70/5287		

2. Listing of tenements acquired (directly or beneficially) during the quarter:

Country	Project	Tenement No.	Registered Holder	Nature of interests
Australia	Buldania	M63/676	Avoca Resources Pty Ltd	Lithium and related metal rights. 0% - pending application

3. Tenements relinquished, reduced or lapsed (directly or beneficially) during the quarter:

No tenements were relinquished, reduced or lapsed during the Quarter

4. Listing of tenements applied for (directly or beneficially) during the quarter:

No tenements were applied for during the Quarter

Appendix 5B

Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Name of entity

Liontown Resources Ltd

ABN	Quarter ended ("current quarter")
39 118 153 825	30 September 2020

Consolidated statement of cash flows		Current quarter $A'000	Year to date (3 months) $A'000
1.	**Cash flows from operating activities**		
1.1	Receipts from customers	-	-
1.2	Payments for		
	(a) exploration & evaluation	(1,534)	(1,534)
	(b) development	-	-
	(c) production	-	-
	(d) staff costs	(205)	(205)
	(e) administration and corporate costs	(147)	(147)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	6	6
1.5	Interest and other costs of finance paid	(2)	(2)
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	150	150
1.8	Other (provide details if material)	-	-
1.9	**Net cash from / (used in) operating activities**	**(1,732)**	**(1,732)**

2.	**Cash flows from investing activities**		
2.1	Payments to acquire or for:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	(6)	(6)
	(d) exploration & evaluation	-	-
	(e) investments	-	-
	(f) other non-current assets	-	-

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Consolidated statement of cash flows		Current quarter $A'000	Year to date (3 months) $A'000
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements	1,500	1,500
	(c) property, plant and equipment	-	-
	(d) investments	-	-
	(e) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	-	-
2.6	**Net cash from / (used in) investing activities**	**1,494**	**1,494**

3.	**Cash flows from financing activities**		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	-
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	343	343
3.4	Transaction costs related to issues of equity securities or convertible debt securities	(8)	(8)
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	(10)	(10)
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
3.10	**Net cash from / (used in) financing activities**	**325**	**325**

4.	**Net increase / (decrease) in cash and cash equivalents for the period**		
4.1	Cash and cash equivalents at beginning of period	5,258	5,258
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(1,732)	(1,732)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	1,494	1,494
4.4	Net cash from / (used in) financing activities (item 3.10 above)	325	325

Consolidated statement of cash flows		Current quarter $A'000	Year to date (3 months) $A'000
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	**Cash and cash equivalents at end of period**	**5,345**	**5,345**

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter $A'000	Previous quarter $A'000
5.1	Bank balances	5,345	5,258
5.2	Call deposits	-	-
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	**Cash and cash equivalents at end of quarter (should equal item 4.6 above)**	**5,345**	**5,258**

6.	Payments to related parties of the entity and their associates	Current quarter $A'000
6.1	Aggregate amount of payments to related parties and their associates included in item 1	88
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-

Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments.

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7.	**Financing facilities** *Note: the term "facility' includes all forms of financing arrangements available to the entity.* *Add notes as necessary for an understanding of the sources of finance available to the entity.*	**Total facility amount at quarter end $A'000**	**Amount drawn at quarter end $A'000**
7.1	Loan facilities	-	-
7.2	Credit standby arrangements	-	-
7.3	Other (please specify)	-	-
7.4	**Total financing facilities**	-	-

7.5	**Unused financing facilities available at quarter end**	-

7.6 Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.

8.	**Estimated cash available for future operating activities**	**$A'000**
8.1	Net cash from / (used in) operating activities (item 1.9)	(1,732)
8.2	(Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	-
8.3	Total relevant outgoings (item 8.1 + item 8.2)	(1,732)
8.4	Cash and cash equivalents at quarter end (item 4.6)	5,345
8.5	Unused finance facilities available at quarter end (item 7.5)	-
8.6	Total available funding (item 8.4 + item 8.5)	5,345
8.7	**Estimated quarters of funding available (item 8.6 divided by item 8.3)**	3.1

Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3, answer item 8.7 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.7.

8.8 If item 8.7 is less than 2 quarters, please provide answers to the following questions:

8.8.1 Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?

Answer: Not Applicable

8.8.2 Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?

Answer: Not Applicable

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8.8.3	Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?
Answer: Not Applicable	
Note: where item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 above must be answered.	

Compliance statement

1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.

2 This statement gives a true and fair view of the matters disclosed.

Date: .....30 October 2020.....

Authorised by: .....By the board.....
(Name of body or officer authorising release – see note 4)

Notes

1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.

2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, *AASB 6: Exploration for and Evaluation of Mineral Resources* and *AASB 107: Statement of Cash Flows* apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.

3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.

4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [*name of board committee – eg Audit and Risk Committee*]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".

5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.

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