



ASX ANNOUNCEMENT

ASX : LTR

29th January 2019

Kathleen Valley Scoping Study confirms potential for a new WA lithium mine development

HIGHLIGHTS

- A Scoping Study for Liontown's **100%-owned Kathleen Valley Lithium-Tantalum Project**, located 680km north-east of Perth in Western Australia's Northeastern Goldfields, demonstrates the potential for a **viable standalone lithium mining and processing operation**.
- The Scoping Study is based on:
 - A robust Mineral Resource Estimate of 21.2Mt @ 1.4% Li₂O and 170ppm Ta₂O₅ which is **75% Measured and Indicated**;
 - Highly encouraging, preliminary metallurgical test work which confirmed the **potential to produce a saleable spodumene concentrate with low iron content**; and
 - A **favourable location in a tier-1 mining jurisdiction, close to high quality transport and energy infrastructure**.
- The engagement of highly credentialed, proven, Western Australian-based consultants using an extensive database of local capital and operating cost estimates provides a high degree of confidence in the study outcomes.
- The positive Scoping Study outcomes are expected to pave the way for the **commencement of a Feasibility Study targeted for completion in early 2020**.
- Based on the degree of confidence from the initial test work, **additional metallurgical drilling has been completed and further test work is underway** to optimise the grade/recovery performance and produce a spodumene concentrate to a minimum 6% Li₂O. The additional drilling will also provide sufficient product for market analysis and customer engagement.
- Additional drilling is scheduled to commence in early February 2019 targeting further **Mineral Resource growth** aimed at increasing the mine life – with the updated Mineral Resource to be used as the basis of upcoming Feasibility Studies.
- Discussions with potential strategic **off-take partners** and consideration of financing alternatives have commenced.

Liontown Resources Limited (ASX: LTR; “Liontown” or “Company”) is pleased to announce the results of an independent Scoping Study (“Study”) for its 100%-owned **Kathleen Valley Lithium-Tantalum Project** (“Project”), located in Western Australia’s North-eastern Goldfields, with key outcomes demonstrating the potential of the project to support a viable standalone lithium mining and processing operation.

As a result, the Liontown Board has approved the commencement of further studies and metallurgical test work to support a Feasibility Study, as well as a new drilling programme aimed at significantly expanding the current Mineral Resource estimate.

Commenting on the Scoping Study outcomes, Liontown's Managing Director David Richards said:

“We are very pleased with the results of the Scoping Study, which has confirmed the potential to establish a significant new standalone lithium mining and processing operation at Kathleen Valley capable of producing a spodumene concentrate for global and local markets.”

“The Scoping Study outlines a base case 2Mtpa development with the potential to produce approximately 360,000tpa of spodumene concentrate over an initial 8 to 9-year mine life – a similar scale of operation to those which have recently been successfully commissioned in the Pilbara region of WA by Pilbara Minerals and Altura Mining.”

“Importantly, using conservative forecast product pricing assumptions, the Scoping Study estimates competitive life-of-mine cash operating costs of around US\$376 per tonne FOB of spodumene concentrate and potentially US\$308 per tonne net of tantalum credits.”

“This highlights the potential for the development of a robust standalone mining and processing operation capable of generating strong margins and excellent financial returns, based on a forecast capital outlay of A\$232 million, which is similar to the scope of other recently established lithium mines in WA.”

“Given these impressive results and the Project's location in a well-established mining district, close to high-quality infrastructure, as well as the strong potential to continue growing the Resource base, the Board of Liontown has approved the commencement of further studies and a new drilling program designed to expand the existing Mineral Resource.”

“We have a clear commitment to move the Project forward as quickly as we can, with a view to delivering a full Definitive Feasibility Study by early 2020 and then moving into a financing and construction phase. That will position Kathleen Valley to take advantage of what is widely anticipated to be a rapid expansion of the global lithium-ion supply chain next decade as the electrification of the world’s transport fleet really begins to gather momentum.”

Scoping Study – Cautionary Statements

The Scoping Study referred to in this announcement is a preliminary technical and economic study of the potential viability of developing the Kathleen Valley Lithium-Tantalum Deposit by constructing a mine and concentrator to produce a spodumene and tantalum concentrate. The Scoping Study referred to in this report is based on lower-level technical and preliminary economic assessments and is insufficient to support estimation of Ore Reserves or to provide assurance of an economic development case at this stage, or to provide certainty that the conclusions of the Scoping Study will be realised.

Approximately 80% of the Life-of-Mine (LOM) Production Target is in the Measured and Indicated Mineral Resource categories and 20% is in the Inferred Mineral Resource category. The Company has concluded it has reasonable grounds for disclosing a Production Target which includes 20% Inferred Mineral Resources, given that in the first three years of production 88% of the mill feed is scheduled from Measured and Indicated Resource categories.

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 further Measured or Indicated Mineral Resources or that the Production Target or preliminary economic assessment will be realised.

The Scoping Study is based on the material assumptions outlined elsewhere in this announcement. These include assumptions about the availability of funding. 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 Scoping Study will be achieved.

To achieve the potential mine development outcomes indicated in the Scoping Study, funding in the order of A\$232 million will likely be required. Investors should note that there is no certainty that the Company will be able to raise funding when needed, however the Company has concluded it has a reasonable basis for providing the forward-looking statements included in this announcement and believes that it has a "reasonable basis" to expect it will be able to fund the development of the Project.

It is also possible that such funding may only be available on terms that may be dilutive to, or otherwise affect the value of the Company's existing shares. It is also possible that the Company could pursue other strategies to provide alternative funding options.

Given the uncertainties involved, investors should not make any investment decisions based solely on the results of the Scoping Study.

Scoping Study Financial Outcomes

Based on a proposed 2Mtpa standalone mining and processing operation, the Scoping Study has demonstrated the potential for strong financial metrics for the Kathleen Valley Project.

The Scoping Study is based on the maiden Mineral Resource Estimate for the Kathleen Valley Lithium-Tantalum Project reported on 4 September 2018, comprising Measured, Indicated and Inferred Resources totalling 21.2Mt @ 1.4% Li₂O and 170ppm Ta₂O₅.

Table H1: Kathleen Valley Project – Base Case Key Metrics

Study Outcomes	
Post-tax NPV _{8%} (real, post-tax)	A range of between A\$316M to A\$526M with a Base Case of A\$421M (range based on +/- 25% of Base Case NPV)
Internal Rate of Return (IRR)	Base case IRR of 38%
Payback period	<3 years
Life of mine (LOM)	~9 Years (including ramp-up)
Pre-production capital cost	~A\$232M including A\$40M in contingency
Average LOM cash operating costs ¹	~US\$376/tonne (A\$522/tonne) of spodumene concentrate. ~US\$308/tonne (A\$428/tonne) of spodumene concentrate net of tantalum by-product credits
Annual production	~360,000 tonnes of spodumene concentrate at nameplate capacity

¹ Cash operating costs include all mining, processing, transport, state and private royalties, freight to port, port costs and site administration and overhead costs

Approximately 80% of the LOM Production Target is in the Measured and Indicated Mineral Resource categories and 20% is in the Inferred Mineral Resource category. 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 further Measured or Indicated Mineral Resources or that the Production Target will be realised.

Figure H1 provides an indication of the sensitivities on the project economics.

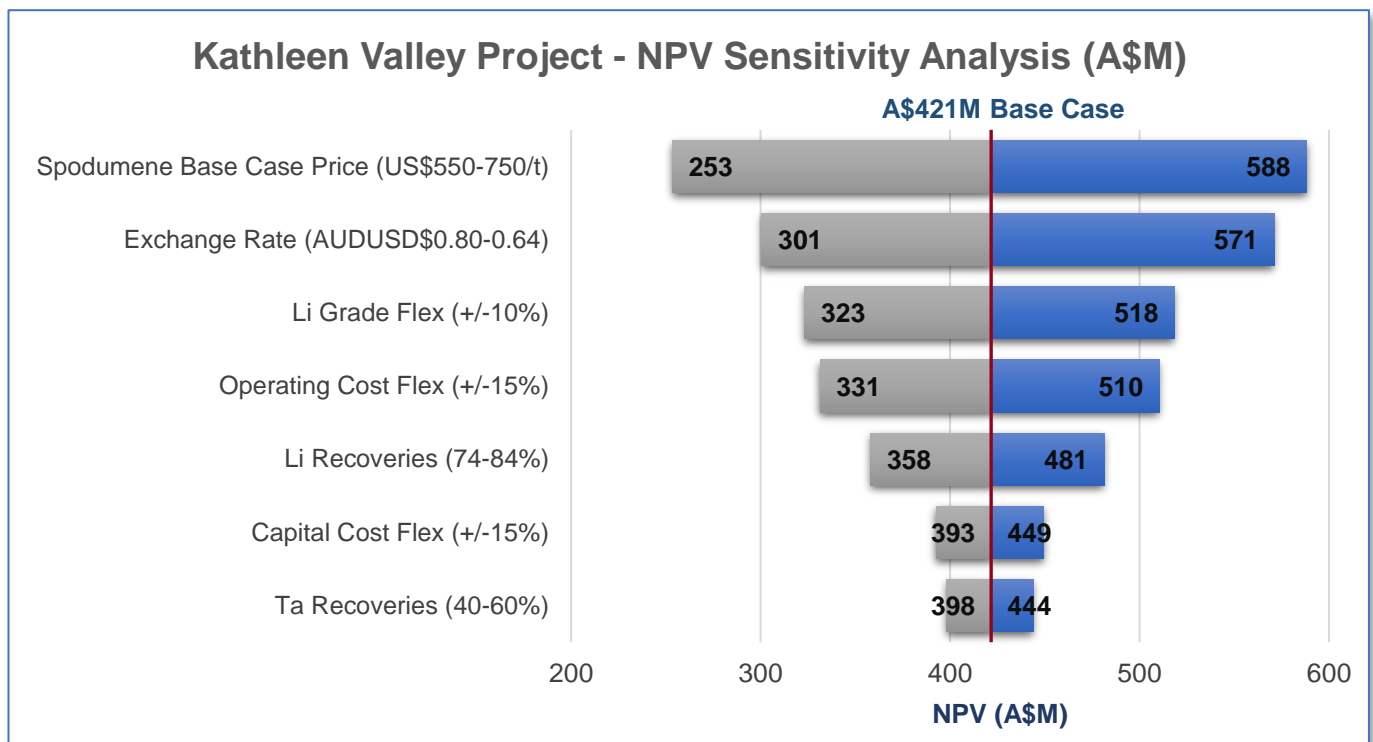


Figure H1: NPV Sensitivity Analysis

A “Lithium Only” case was also evaluated excluding tantalum revenue streams and associated capital expenditures resulting in a positive NPV_{8%} of A\$323M and IRR of 34%. Limited testwork completed on tantalum recovery and initial assays indicate that the tantalum may be recoverable using industry standard processes and benchmarking which have assumed recoveries of 50% into a 30% tantalite concentrate. The Kathleen Valley deposit is geologically very similar to operating hard rock lithium-tantalum mines in Western Australia which are producing lithium and tantalum concentrates. The Base Case therefore assumes a lithium and tantalum operation.

Scoping Study Parameters and Assumptions

The Scoping Study was completed to an overall +/- 35% accuracy using the key parameters and assumptions set out in Table H2 and as further outlined in the attached Annexure. The Scoping Study has been completed with the assistance of a highly experienced and reputable group of independent consultants, including:

- Optiro Pty Ltd – Geology and Resources
- Orelogy Consulting Pty Ltd – Optimization and Mining
- Nagrom – Process Testwork
- Lycopodium Minerals Pty Ltd – Process and Infrastructure Design, CAPEX and OPEX
- Knight Piesold – Tailings Management Facilities
- AQ2 – Hydrology and hydrogeology
- MBS and Botanica – Environmental

The recovery and grade assumptions for spodumene are based on a preliminary testwork programme detailed in the ASX announcement dated 12th November 2018. The recovery and grade assumptions for tantalum are based on industry norms and will be evaluated in the next phase of metallurgical testing.

Revenue and costs are based on FOB (Geraldton) using an estimated sale price for spodumene concentrate of US\$650 per tonne and a AUD/USD exchange rate of 0.72.

Table H2: Key Parameters and Assumptions

Parameter	
General and Economic	
Discount rate (real, post tax)	8%
Spodumene concentrate price	US\$650 per tonne FOB
Tantalum concentrate price (contained Ta ₂ O ₅)	US\$71 per pound FOB
Exchange rate – AUD/USD	0.72
Mining and Production	
Average Life-of-Mine strip ratio	8.24:1
Processing rate	2Mtpa
Life-of-Mine Production Target	15.7Mt ore
Average Li ₂ O grade (diluted)	1.26%
Average Ta ₂ O ₅ grade (diluted)	154ppm
Li ₂ O recoveries	79%
Ta ₂ O ₅ recoveries	50%
Spodumene concentrate grade	5.6%
Tantalite concentrate grade	30%
Moisture content of concentrate	13%
Cost Assumptions	
LOM average open pit mining costs (\$/t ore mined)	A\$37.72
LOM average processing cost (\$/t ore milled)	A\$19.32
Logistics and transport (\$/t concentrate)	A\$75.65
General and admin (\$/t ore milled)	A\$6.01
Western Australia State royalty	5%
Other royalties	3% gross sales and \$0.5/t ore mined
Corporate tax rate	30%
Estimated opening tax losses available	A\$25M

Site Layout

The preliminary layout of the mine, process plant and waste dumps are illustrated in Figure H2.

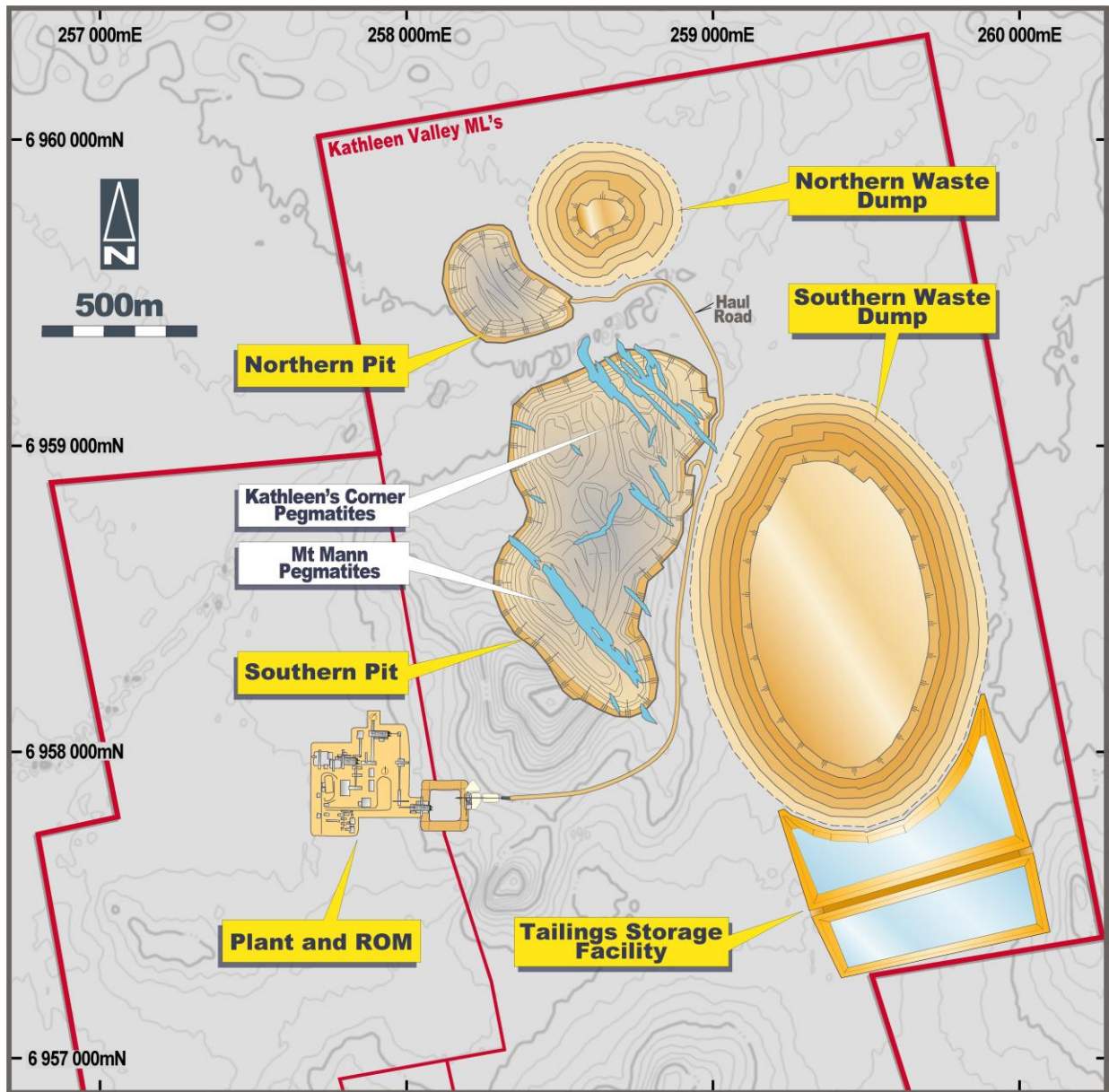


Figure H2: Preliminary Site Layout

Next Steps

Further feasibility studies, including a Pre-Feasibility Study and/or a Definitive Feasibility Study may now commence in conjunction with advancing several opportunities to enhance financial metrics and to de-risk key elements of the Project.

Growth Potential – Mineral Resource

The current Mineral Resource remains open both along strike and down-dip, and optimisation work indicates that the conceptual open pits are largely constrained by the limit of drill data.

A comprehensive review is in progress to determine the potential resource upside and the amount of drilling required to confirm this opportunity.

Metallurgy Optimisation

Preliminary metallurgical test work results based on a 300kg sample (see ASX release dated 12th November 2018) were highly encouraging and indicate that a saleable spodumene concentrate similar to those from existing lithium mining operations in Western Australia can be produced at Kathleen Valley.

A comprehensive test work programme is proposed both to optimise the preliminary metallurgical results and to provide adequate sample volumes to obtain meaningful tantalum recoveries. A 33-hole/2,896m PQ diamond core drilling programme was completed in late 2018 and will provide ~4 tonnes of material for the metallurgical test work, which is scheduled to be completed in the first half of 2019.

The proposed test work programme consists of an optimisation programme for each unit process with an associated cascading bulk sample programme to produce sufficient spodumene concentrate samples for potential off-take partners, as well as confirming the potential for tantalum concentrate recovery.

Non-process Infrastructure

The Project is located in close proximity to a sealed highway and grid power in the well-regulated and established mining jurisdiction of the Northeastern Goldfields of Western Australia. The Scoping Study identified a number of potential water supply options within 10km of the proposed mine, including the development of a borefield. It is proposed that a water exploration and test bore drilling programme be initiated during the first half of 2019 to gauge aquifer supply potential.

Environmental Assessment and Community

Based on the desktop analysis and field work to date, a programme of environmental baseline studies will be initiated in early 2019.

The mining operations will overlap with existing land users including the Yakabindie Pastoral Lease and the Native Title holders. The Company has engaged with both parties to facilitate future operations.

Risk Assessment and Mitigation

Liontown has identified a number of risks that will be addressed as part of future studies. These include:

- Refining the inputs used in the scoping studies;
- Determining the tantalum concentrate grade and recovery;
- Achieving a 6% Li₂O concentrate grade;
- Confirming competent ground conditions;
- Receiving statutory clearances to comply with Heritage conditions;
- Potential cost escalations associated with capital and operating cost estimates; and
- Possible falling prices related to increased market supply.

Given the grade and geology of the Kathleen Valley Lithium Deposit and its location in a well-regulated and established mining jurisdiction, the Company is confident it can satisfactorily address the potential risks.



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29 January 2019

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Competent person statements

The information in this report that relates to Mineral Resources for the Kathleen Valley Project is extracted from the ASX announcement "Maiden 21 million tonne Lithium-Tantalum Mineral Resource sets strong growth foundation for Liontown at Kathleen Valley" released on the 4th September 2018 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 previous market announcement and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed.

The information in this report that relates to metallurgical test work for the Kathleen Valley Project has been reviewed by Mr Aidan Ryan who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Ryan is an employee of Lycopodium Minerals Pty Ltd and has sufficient experience relevant to 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 Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Ryan consents to the inclusion in the report of a summary based upon his information in the form and context in which it appears.

Forward-looking statements

This report contains forward-looking statements which are identified by words such as 'may', 'could', 'believes', 'estimates', 'targets', 'expects', or 'intends' and other similar words that involve risks and uncertainties. These statements are based on an assessment of present economic and operating conditions, and on a number of assumptions regarding future events and actions that, as at the date of this report, are considered reasonable. Such forward-looking statements are not a guarantee of future performance and involve known and unknown risks, uncertainties, assumptions and other important factors, many of which are beyond the control of the Company, the Directors and the management. The Directors cannot and do not give any assurance that the results, performance or achievements expressed or implied by the forward-looking statements contained in this report will actually occur and investors are cautioned not to place undue reliance on these forward-looking statements. The Directors have no intention to update or revise forward-looking statements, or to publish prospective financial information in the future, regardless of whether new information, future events or any other factors affect the information contained in this report, except where required by law or the ASX listing rules.

KATHLEEN VALLEY LITHIUM AND TANTALUM PROJECT



Scoping Study Material Assumptions and Additional Information

1. Project Location and Tenure

The 100%-owned Kathleen Valley Lithium-Tantalum Project is located on four granted Mining Licences and one Exploration Licence on the western edge of the Norseman-Wiluna Belt within the Archaean Yilgarn Craton, approximately 400km north of Kalgoorlie (Figure 1), in Western Australia.

The Project lies in close proximity to a sealed highway, grid power and gas pipeline and is located in a well-regulated and established mining jurisdiction.

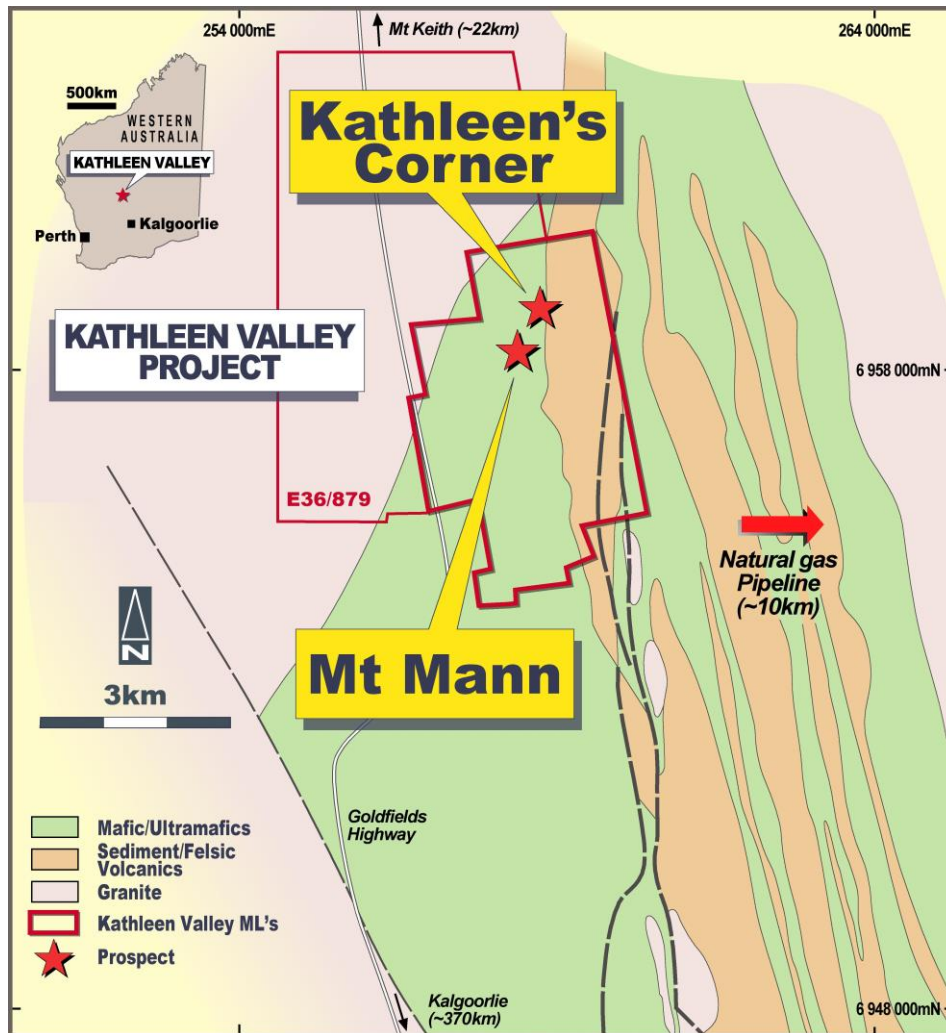


Figure 1: Kathleen Valley Project Location and Tenure

2. Mineral Resource and Geology

The Mineral Resource was prepared by independent specialist resource and mining consulting group Optiro Pty Ltd ("Optiro"). It encompasses the adjacent Kathleen's Corner and Mt Mann deposits and combined comprises 21.2Mt @ 1.4% Li₂O and 170ppm Ta₂O₅.

75% of the Mineral Resource is classified as Measured or Indicated and 25% as Inferred.

Details of the Mineral Resource estimate are provided in Tables 1 and 2 below.

Table 1: Kathleen's Corner and Mt Mann Mineral Resource as at September 2018

Resource category	Million tonnes	Li ₂ O %	Ta ₂ O ₅ ppm
Measured	3.0	1.3	190
Indicated	12.7	1.4	160
Inferred	5.3	1.3	150
Total	21.2	1.4	170

- Notes:
- Reported above a Li₂O cut-off grade of 0.5%
 - Tonnages and grades have been rounded to reflect the relative uncertainty of the estimate

Table 2: Kathleen Valley Mineral Resource reported by Li₂O% cut off grades

Cut-off Li ₂ O %	Million tonnes	Li ₂ O %	Ta ₂ O ₅ ppm
0.3	21.2	1.37	166
0.4	21.2	1.37	166
0.5	21.2	1.37	166
0.6	21.2	1.37	166
0.7	21.0	1.37	166
0.8	20.7	1.38	166
0.9	20.1	1.40	167
1.0	18.9	1.43	167
1.1	17.3	1.46	167
1.2	15.1	1.51	168
1.3	12.3	1.56	170
1.4	9.3	1.63	174
1.5	6.6	1.71	177

The Mineral Resource estimate has been prepared by a Competent Person and 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 Project is not sensitive to cut-off grade (see Table 2) due to the style of mineralisation which is hosted by visually discrete pegmatites. A cut-off grade of 0.5% Li₂O has been applied based on similar operations in Western Australia.

Lithium mineralisation is hosted within spodumene-bearing pegmatites, which are part of a series of LCT-type rare metal pegmatites that intrude mafic and sedimentary rocks in the region. Eighteen mineralised pegmatites have been identified at the Kathleen Valley Project hosted by two pegmatite swarms – Kathleen's Corner and Mt Mann.

3. Mining and Production

Orelogy Consulting Pty Ltd (Orelogy) carried out an open pit optimisation and mining schedule study on the Mineral Resource to determine the appropriate scale of the operation. It has been assumed that Kathleen Valley will be a contract mining operation.

The optimisation concluded that the pit shells are similar for both a 1.5Mtpa and 2Mtpa option, and therefore a 2Mtpa plant has been selected for the Scoping Study as it returns the highest value.

The Scoping Study assumes that head grades will be diluted approximately 10% (to 1.26% Li₂O and 154ppm Ta₂O₅) due to waste or sub-grade material being excavated along with ore during mining. A conceptual pit design for the 2Mtpa option is detailed in Figure 2.

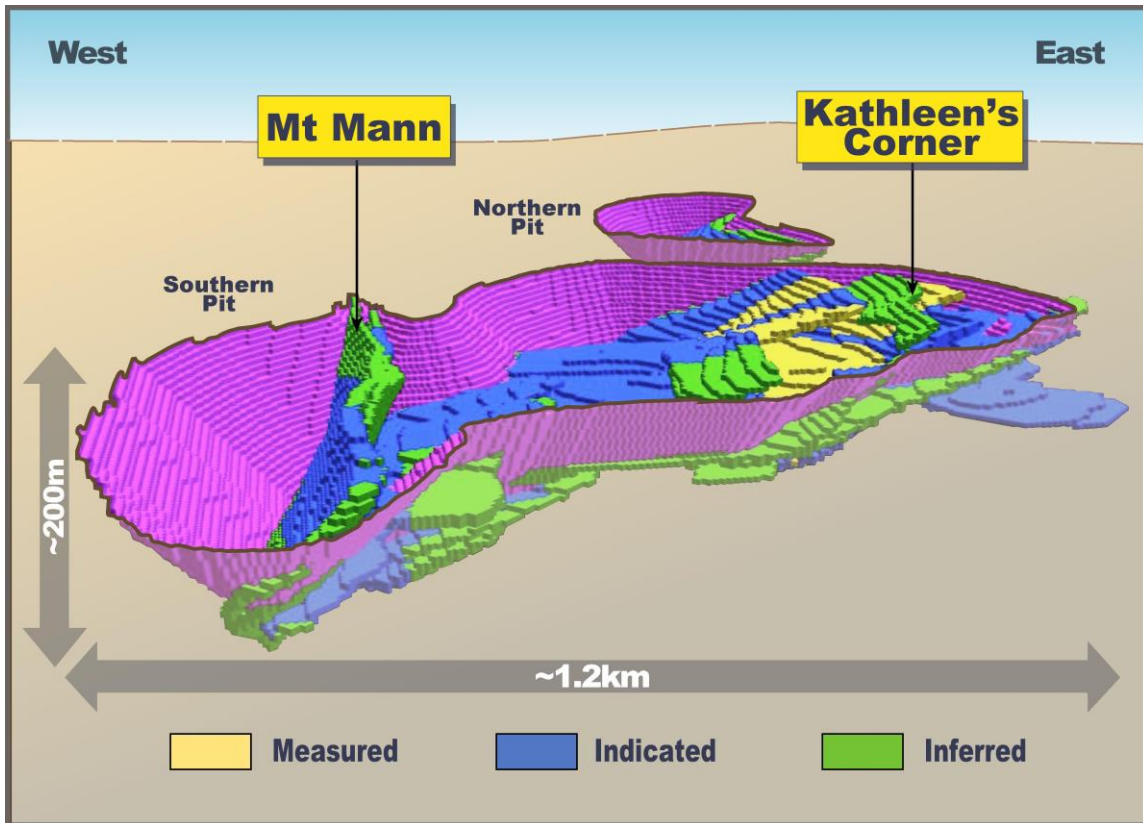


Figure 2: Kathleen Valley Conceptual 2Mtpa Pit

As shown in Figure 3, 88% of the mill feed is scheduled from Measured and Indicated Resource categories during the first three years of production when initial capital is being paid back. Current scheduling has less than 20% of annual production being derived from Inferred material during the first five years of operation.

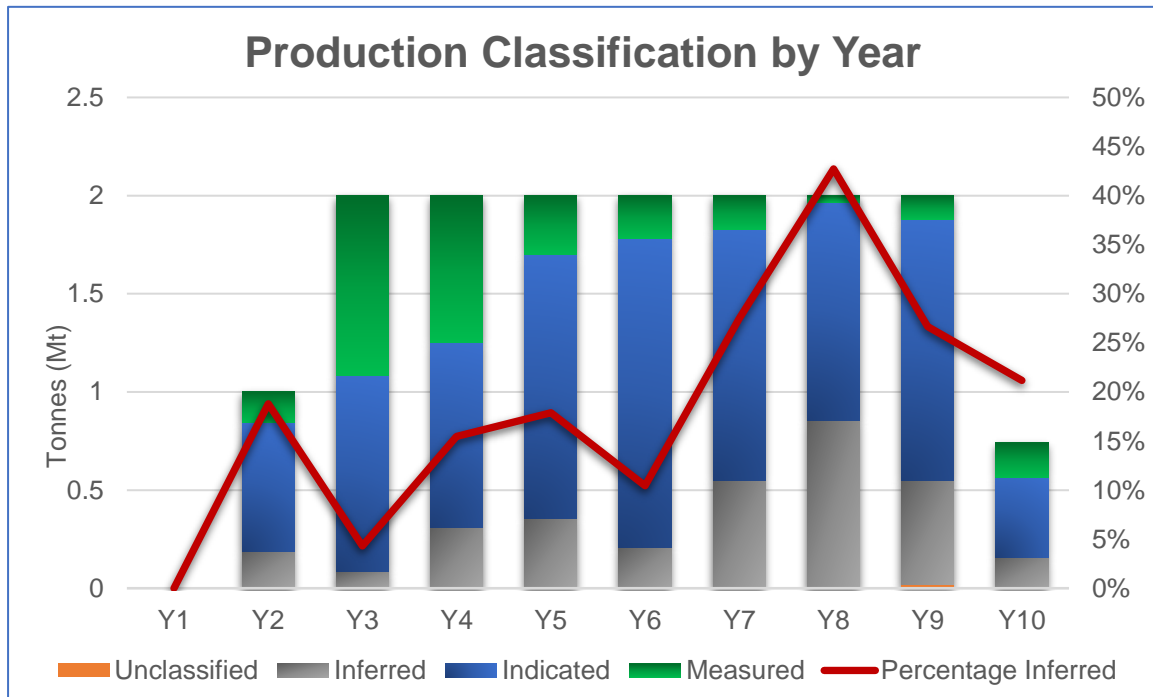


Figure 3: Production Classification by Year

Slope Design Criteria

Overall slope design parameters were based on a preliminary review of geological structure and rock mass by Orelogy and pit design parameters are in keeping with established mining practice. These will be refined in future feasibility studies.

Open Pit Mine Design

The proposed pit outline and overall site layout for the Kathleen Valley Project is illustrated in Figure 4. The mining schedule has been developed in seven stages to maximise the back-filling of the two pits, wherever possible. It is proposed that the northern pit will be back-filled completely and the northern section of the southern pit as detailed in Figure 5.

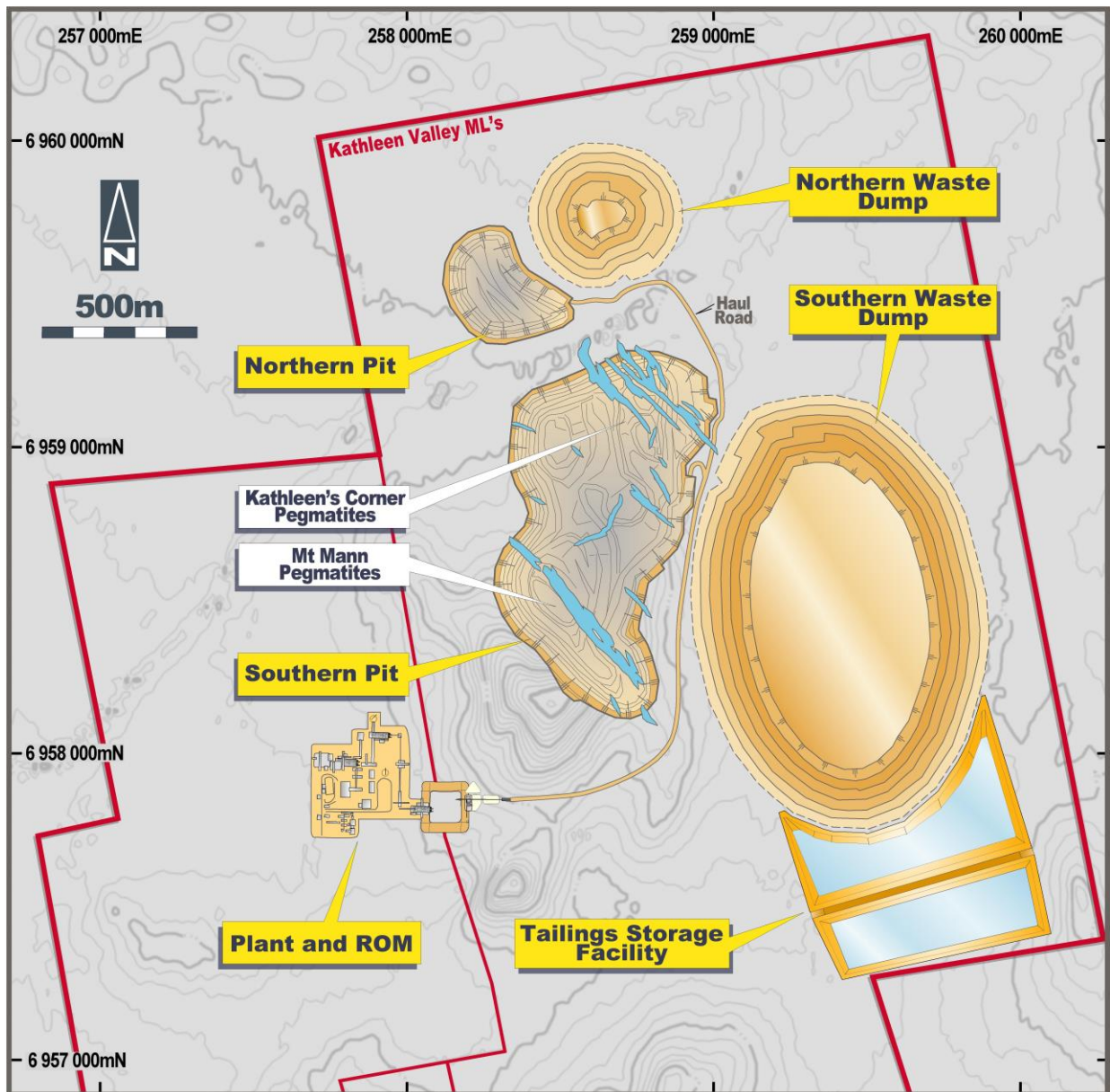


Figure 4: Kathleen Valley Site Layout

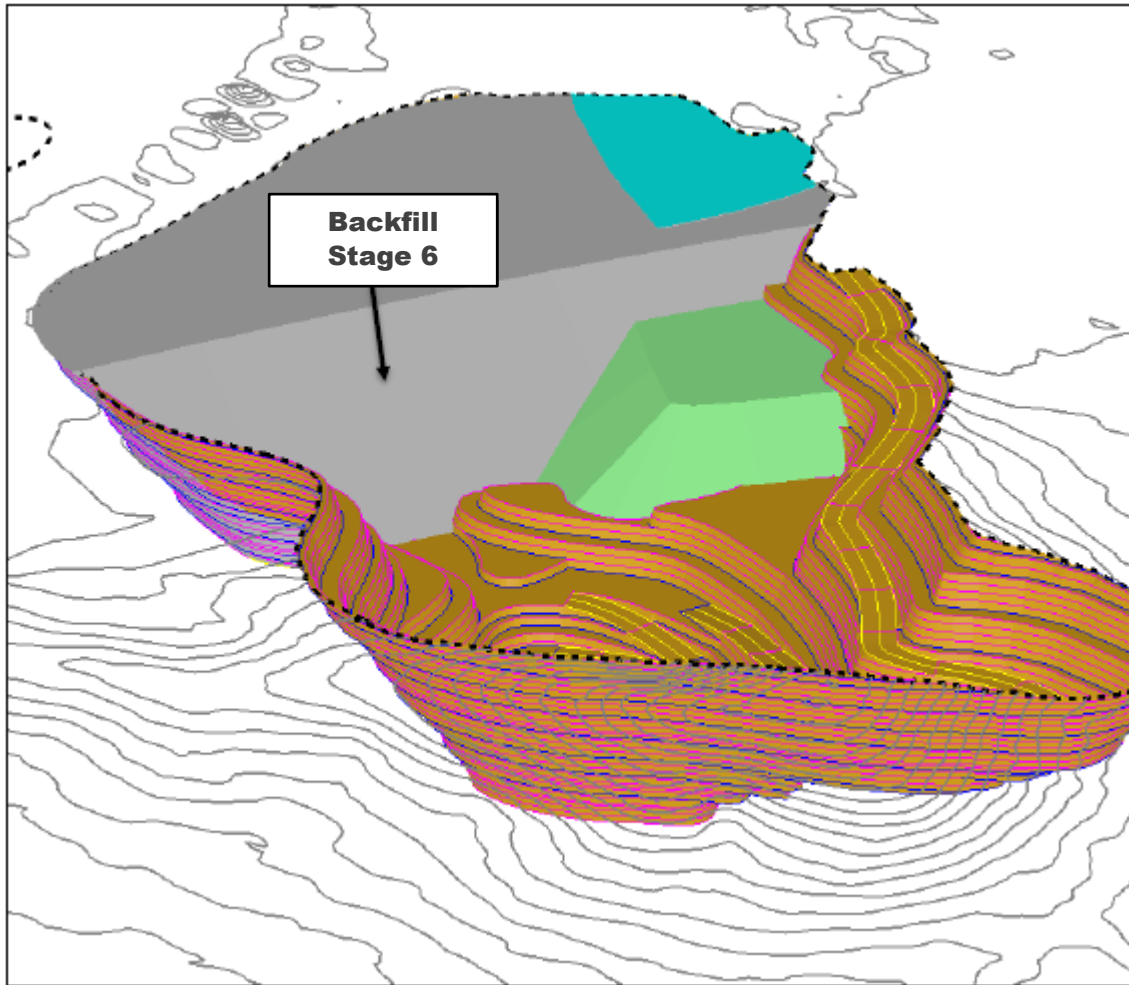


Figure 5: Extent of backfilling of the Southern Pit

Open Pit Mine Design Physicals

The open pit designs contain a total of 15.7Mt of ore, at a diluted grade of 1.26% Li_2O and 154ppm Ta_2O_5 . The pits contain 129.7Mt of waste material for an average strip ratio of 8.24:1.

The Northern pit contains 0.7Mt of contained ore and 8.3Mt of waste for an average strip ratio of 12.53:1.

The Southern pit contains 15.0Mt of contained ore and 121.4Mt of waste for an average strip ratio of 8.09:1.

Mine Production Schedule

The proposed mine schedule for the Kathleen Valley Project is shown below in Figure 6. For the first two years the mining capacity is maintained at around 22Mtpa. During period 4 in year 3 and the entire year 4 mining capacity increases to 34Mtpa to complete Stage 6 and ensure sufficient waste is available in stage 7 for the back-fill to occur.

Based on a standard 3 panel 9-on, 5-off fly-in, fly-out roster, a single fleet with approximately 119 mining, maintenance and supervision personnel will be required for the majority of the project. During the material movement spike in years 3 and 4, additional personnel and equipment will be required.

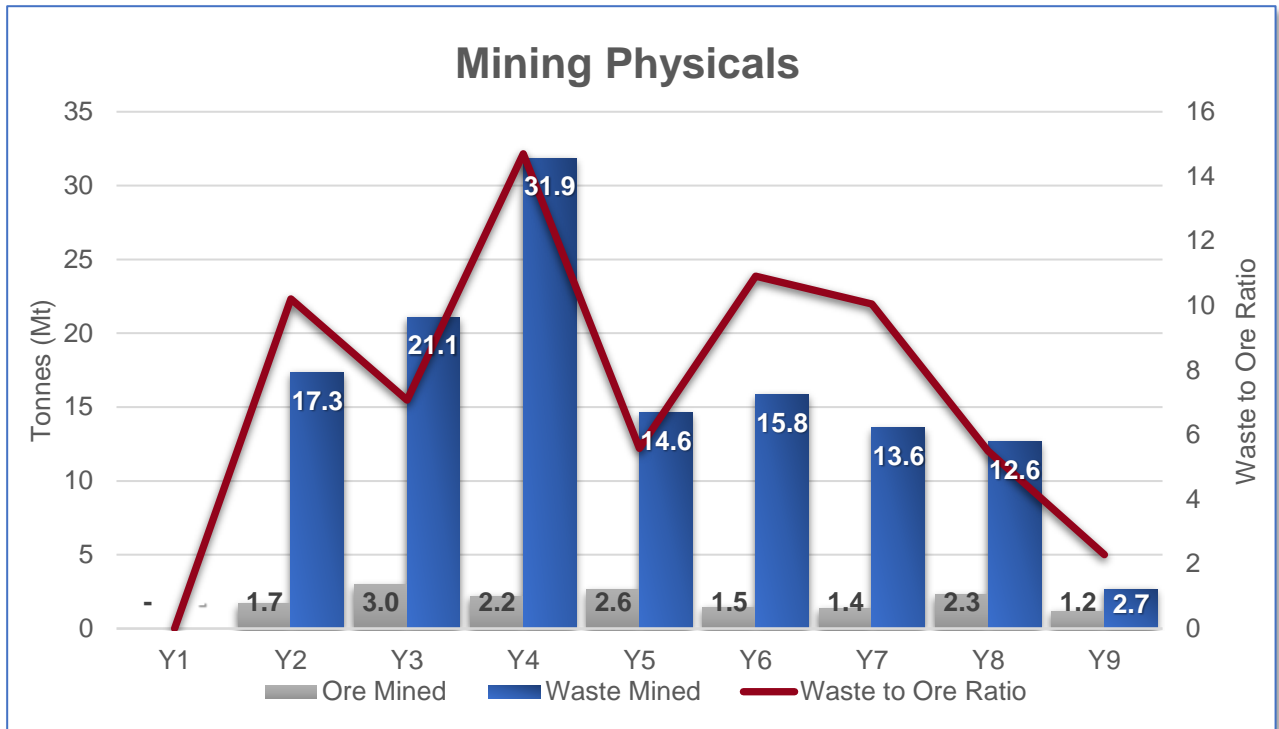


Figure 6: Mining schedule and strip ratio by year

Figure 7 details the annualised processing physicals and shows the anticipated ramp-up in production in Year 2 before full capacity is maintained from Year 3-9. The schedule generated utilised blending stockpiles to smooth the grade profile for lithium presented to the processing plant (as shown in Figure 8) and associated tantalum grades.

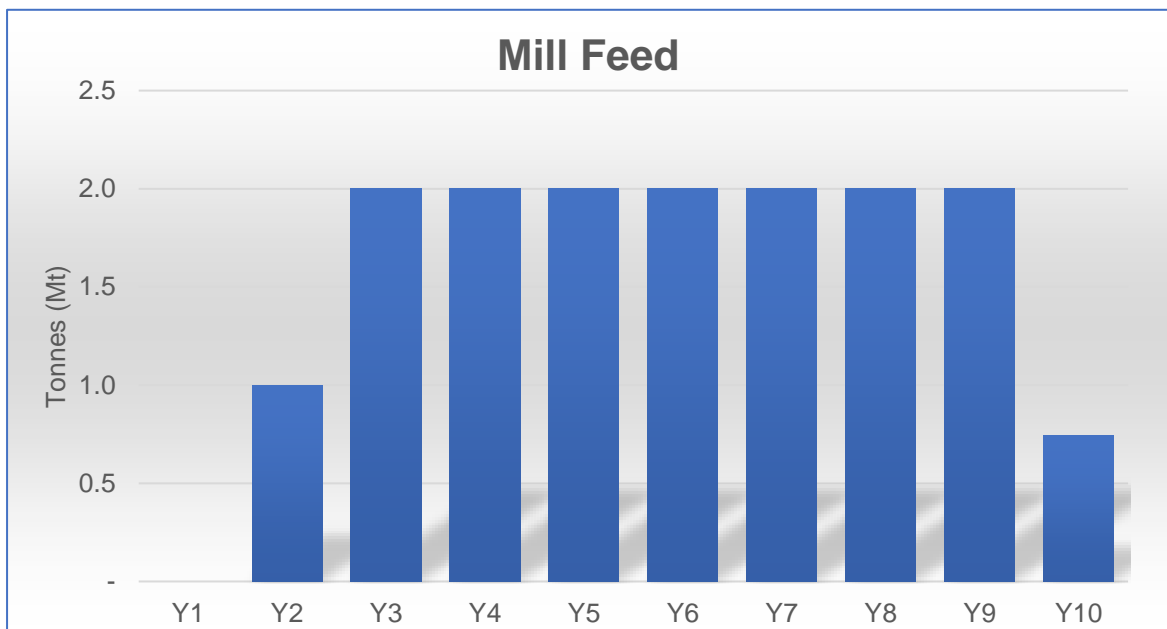


Figure 7: Mill production by year

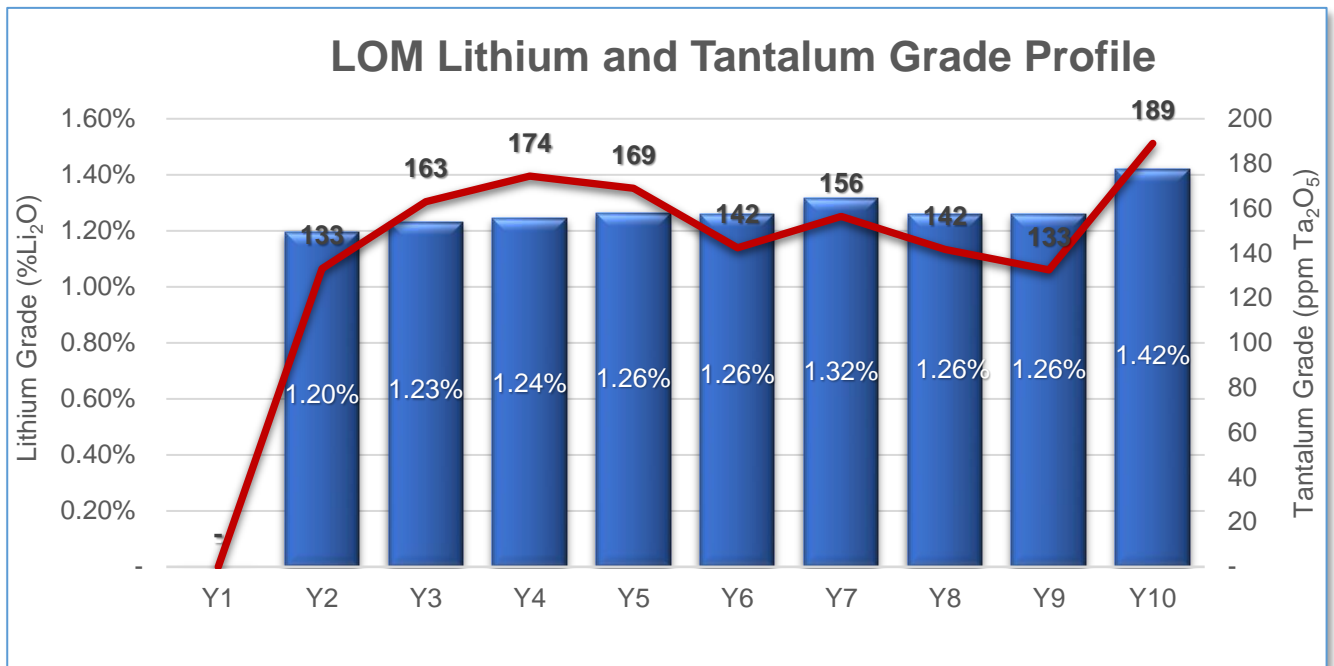


Figure 8: Mill Feed Grade by Year

4. Metallurgy and Flowsheet Development

Metallurgy

Samples were taken from diamond core holes drilled into the Kathleen's Corner and Mt Mann deposits. A preliminary programme of sighter testwork was commenced focusing on lithium recovery. Key aspects of this work included:

- Head assay
- Size by assay
- Heavy Liquid Separation
- Bond ball work Index
- Rougher and Cleaner Flotation

Following initial encouraging results, a full flowsheet was tested to establish likely concentrate recovery and grade for the spodumene concentrate.

The results are summarised in the Figure 9.

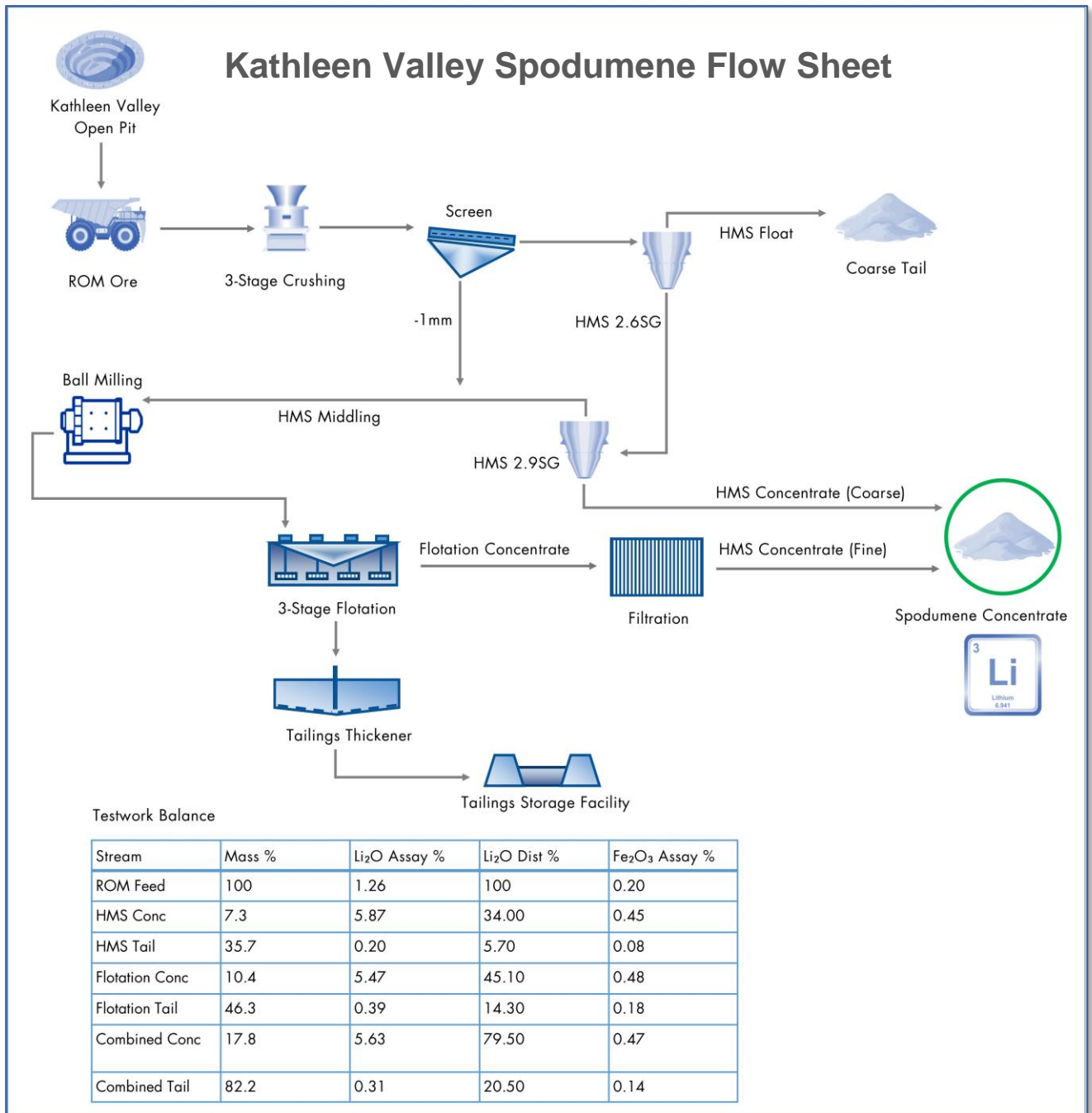


Figure 9: Kathleen Valley Flow Sheet - summary of test work results

Limited testwork on tantalum recovery and initial assays indicate that the tantalum may be recoverable using industry standard processes. On that basis, and given geological similarities to other mining operations in Western Australia, the Scoping Study assumes the capital and operating costs associated with a standard spiral and tabling flowsheet, followed by magnetic separation to remove deleterious elements. Recovery has been assumed at 50% into a 30% Ta₂O₅ concentrate based on industry benchmarking.

Flowsheet

The Kathleen Valley Project process plant consists of a mineral processing concentrator with associated services and ancillaries. The plant has been designed using robust equipment and processes. The process facilities include:

- Three-stage crushing;
- Two-stage dense media separation to produce a primary concentrate, a coarse tail and a middling product for further treatment;
- Ball milling of the middling product;
- Low and high intensity magnetic separation to remove ferrous impurities;
- Three-stage flotation to produce a fine concentrate and fine tails;
- Rod milling and gravity/magnetic separation to produce a tantalum concentrate;
- Thickening and filtration of the concentrate;
- Coarse and fine tails disposal; and
- Reagents and Services.

5. Site Infrastructure

Site Development and Access Roads

The sealed Goldfields Highway is 2km west of the proposed mine site and will form the main access to the Project.

A new access road will connect the plant site to the highway.

Power Supply

A 132kV Transalta overhead power line runs adjacent to the main highway. A tee-off sub-station has been included together with a transformer to drop the voltage from 132kV to 33kV with an overhead powerline to an HV switch room.

Water Supply

A borefield will supply the raw water demand for the process plant. The plant will use tails thickeners and a decant return system to maximise water recycle.

Accommodation

A 200-person camp complete with single rooms with ensuite, wet mess, dry mess and recreational facilities has been included. The camp will include sewage treatment and potable and fire water systems. It will be powered from the overhead power line.

Plant Buildings

Several plant buildings have been allowed including administration office, clinic/First Aid, plant office, ablutions, cribroom, maintenance workshop, warehouse, reagent storage, laboratory and control room.

Sewage Treatment

A packaged sewage treatment plant will process wastewater on the plant site.

Mine Services

An allowance for mine services and other facilities is included on the basis of use by the selected mining contractor. A magazine with earthworks bunding has been included.

6. Tailings and Water Management

Tailings Storage

The coarse tail from the DMS plant will be loaded onto trucks and placed in the waste stockpile area. The fine tail from the flotation plant will be thickened and then pumped to a separate storage facility.

Water Management

- *Flood management*

Jones Creek runs over the deposit, with separation of the north and south open pits being dependent on the setback and berms required to ensure the pits are not impacted by flood events.

- *Site surface water management*

Storm water runoff around the mine area and associated infrastructure will be managed to limit the environmental impacts in the area. Flooding from adjacent streams will be controlled away from mine infrastructure (waste rock dumps, open pits, process plants, roads and mine camp infrastructure, for example). Also, runoff generated from mine infrastructure – potential “dirty water” – will be managed to make certain that any water discharged off the mine areas, has no impacts on the downstream environment.

- *Dewatering*

A simple analytical groundwater model, based on data from two nearby projects suggests that pit inflows will be manageable by conventional dewatering.

- *Water supply*

There are a number of potential water supply options (to augment pit dewatering) within 10km of the proposed mine, that will require further assessment.

7. Geotechnical

No geotechnical work has been completed to date; however, the ground is expected to be competent and no allowance has been made to cover the risk of poor ground conditions.

8. Environmental Assessment and Community

Environmental

MBS completed a desktop environmental review of the existing environment for the project and its surrounds. At this stage the primary environmental issues would be surface water and the groundwater dependent ecosystems.

Aboriginal Heritage

The proposed mining operations may overlap with registered Aboriginal Heritage sites and Liontown will commission an independent archaeological survey to identify possible sites and mitigate potential damage. Once this work is done, the Company will apply for formal Section 18 (Aboriginal Heritage Act) clearance over the proposed mining area to comply with relevant government legislation.

9. Financial Information

A financial evaluation was completed using the Base Case Production Target of 15.7 million tonnes of potential mill feed at an average mill feed grade of 1.26% Li₂O and 154ppm Ta₂O₅ and a life of mine strip ratio of 8.24:1.

Life of Mine Financials

Table 3: Life of Mine Project Cash flows

	A\$M
Revenues	2,802
Operating costs	(1,236)
Capital expenditure - pre-production	(232)
- sustaining	(25)
Royalties	(232)
Corporate tax	(315)
Life of Mine Project Free Cash flow	762

Capital Expenditure

The Project capital cost estimate was compiled by Lycopodium and reflects the assumptions and parameters outlined in the Scoping Study.

Table 4: Capital Cost Estimate Summary (A\$, 4Q2018, ±35% accuracy)

Main Area	Capital (A\$M)
Treatment Plant	82.8
Reagents & Plant Services	9.5
Infrastructure – general	39.9
Mining	6.1
Contractor and Construction Indirects	18.6
Subtotal	156.9
Management Costs	20.6
Owners Costs	14.4
Subtotal	35.0
Contingency	40.3
Project Total	232.2

Sustaining capital is estimated at A\$2.8M per annum.

Operating Cost Estimate

The Project has an estimated C1 cash cost, FOB Geraldton (exclusive of royalties) of A\$439/t (total cash operating costs of A\$522/t) of spodumene concentrate, as detailed in Table 5 below. This does not include credits for potential Tantalum concentrate produced.

Table 5: Cash Operating Cost Estimate - (+/-35% accuracy, 4Q2018)

Operating Cost	A\$ per Tonne of Ore Milled	A\$ per Concentrate Tonne
Mining	37.72	211
Processing	19.32	108
Transport and logistics (Dry metric tonnes)	15.29	86
General and Administration	6.01	33
Other	0.18	1
Royalties	14.74	83
Total Cash Operating Cost	93.26	522

The operating cost estimates are detailed below:

- *Mining Estimate*

The total ore excavated for the project is 15.7 million tonnes with a mining operating cost of \$593.7M over the life of the mine. This equates to an average cost per tonne of ore of \$37.72/t ore from the pit to the ROM. Costs have been estimated assuming contractor mining.

- *Processing and G&A Estimate*

Process plant operating cost estimates for the Project have been developed by Lycopodium based on a design treatment rate of 2Mtpa with the plant operating 24 hours per day, 365 days per year and a 91.3% plant utilisation (nominal 8,000 hours per year). The plant operating cost estimate is summarised in Table 6.

Table 6: Process and G&A Operating Cost Summary – (+/-35% accuracy, 4Q2018)

Cost Centre	A\$ tonne of ore milled	Proportion %
ROM Loading	0.60	2.4
Coarse Tails Disposal	0.21	0.8
Mobile Equipment	0.32	1.2
Labour – Processing	3.87	15.3
Operating Consumables	4.11	16.2
Power	7.40	29.2
Maintenance and Repairs	2.10	8.3
Laboratory	0.70	2.8
Subtotal Processing	19.32	76.3
Labour – Administration	1.77	7.0
General and Administration Cost	4.24	16.7
Subtotal General and Administration	6.01	23.7
Total	25.32	100.0

- *Transport and logistics*

The Scoping Study assumes road transport from site to Geraldton on sealed roads and highways. The indicative quotes received from transport providers covers loading and transportation from the mine site to the ship loader and includes storage and rehandling outside of the port. Port costs are based on the published port fees (Geraldton).

Life of Mine Cash Flows

Figures 10 and 11 illustrates net cash flows after tax per annum and the revenue streams and operating costs associated with the project and includes royalties and taxes. This demonstrates a potential payback period of less than 3 years of production.

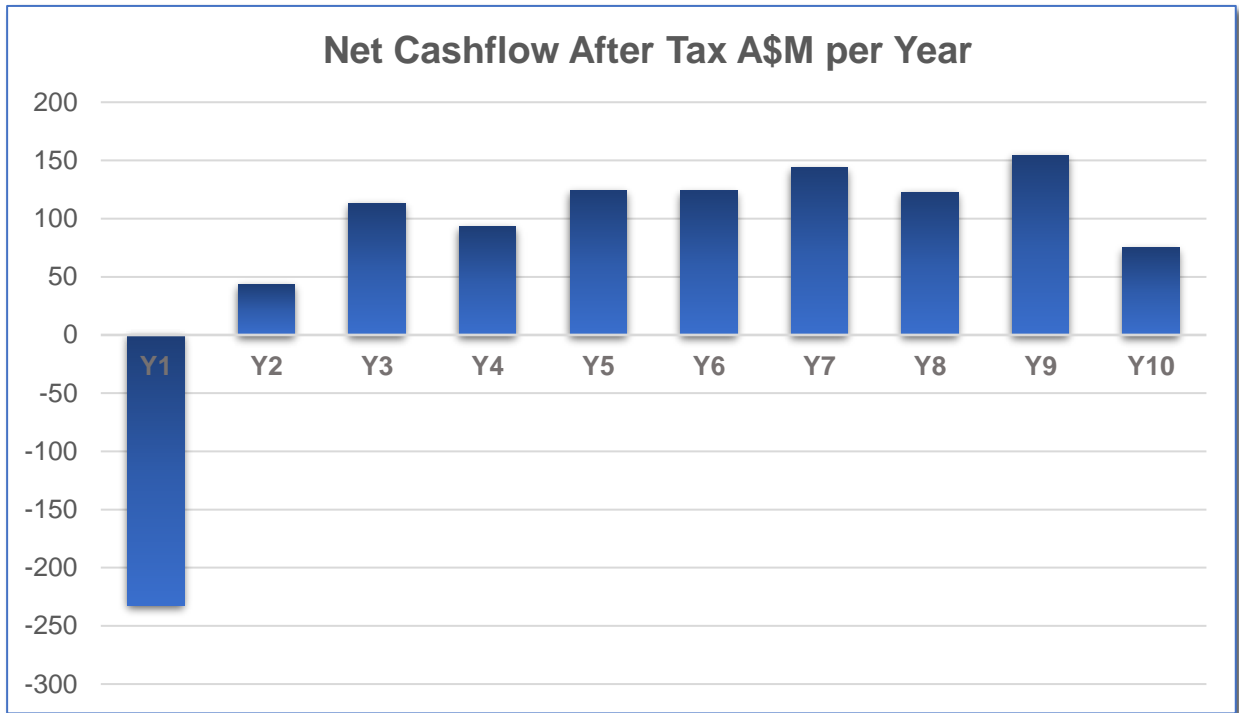


Figure 10: Net Cashflow After Tax

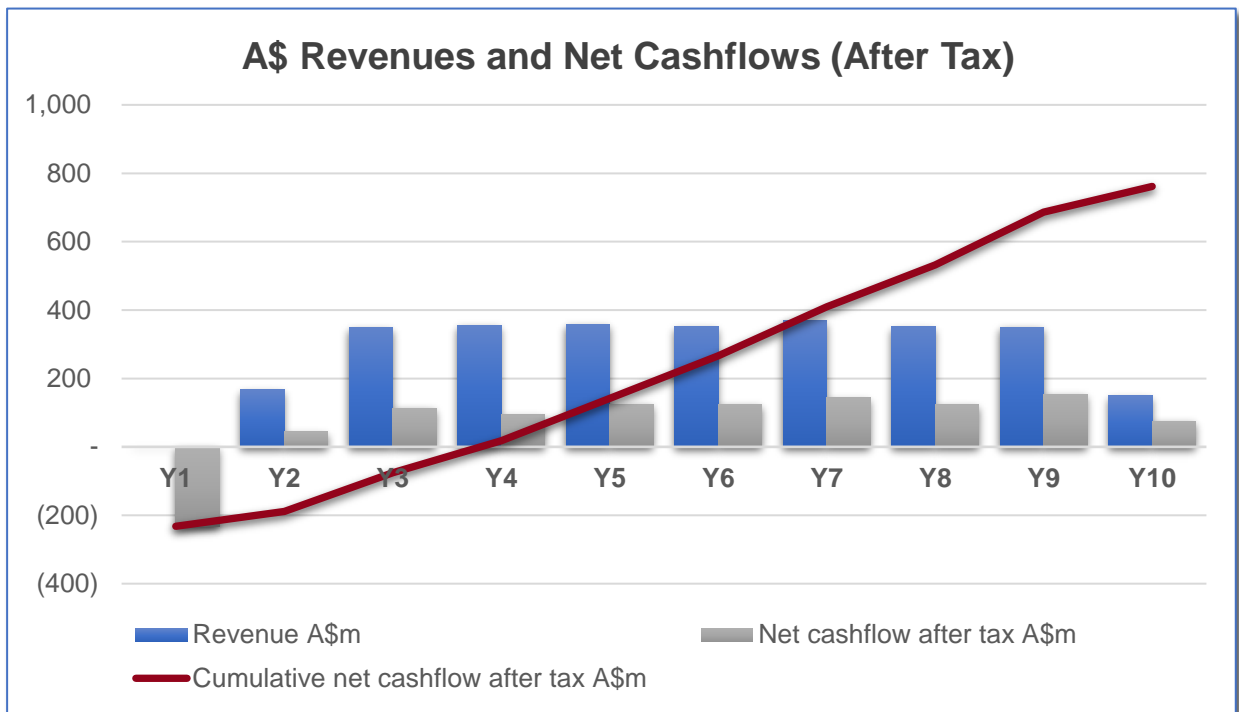


Figure 11: Revenue, Operating Costs and Cumulative Free Cash Flow

Foreign Exchange

All capital and operating prices are provided in Australian dollars. A long-term FX value of A\$1 = US\$0.72 was used in converting USD to AUD.

Commodity Pricing

Independent spodumene and tantalum concentrate pricing forecasts have not been obtained for this scoping level study. A forecast price of US\$650 per tonne (FOB Geraldton) of 5.6% Li₂O spodumene concentrate has been assumed for the life of the mine in the Scoping Study. Pricing has been obtained from various recent public domain analyst reports and company announcements of other lithium developers and producers. Liontown has not established any contracts or committed any of its production pursuant to off-take agreements at this time.

10. Project Funding

Based on the Scoping Study results, there are reasonable grounds to believe that the Kathleen Valley Project can be financed in future. It is most likely that any financing would be undertaken via a combination of debt and equity, similar to a number of comparable projects in Western Australia which have been funded in the past 24 months.

Under current conditions, debt may be secured from several sources including Australian banks, international banks, the high yield bond market and resource credit funds. It is difficult to finance metals that cannot be easily hedged with banks and for this reason, along with the size and volatility of the lithium market, debt funding is more likely to be sourced from resource credit funds. On this basis, it is likely that the Kathleen Valley Project will require the support of a resource credit fund or alternatively it may be possible in the bond market.

There are several factors that will influence the ability of Liontown to secure funding including (but not limited to) a requirement to have “bankable” lithium offtake agreements and favourable prevailing market conditions (being both the lithium market and the wider equity and debt market). It may also be necessary and/or desirable to have an offtake partner invest in the Company or the Project.

It is possible that funding may be dilutive to, or otherwise affect the value of the Company’s existing shares.

It is also possible that the Company could pursue other strategies to provide alternative funding options including undertaking a corporate transaction, seeking a joint venture partner or asset sales.

11. Implementation and Schedule

Further feasibility studies will now commence and are expected to be completed in early 2020. It is currently estimated that construction could commence in 2021 with first production in 2022.