

14 February 2023

MANNA LITHIUM PROJECT PROGRESSES AFTER ROBUST SCOPING STUDY RESULTS

Global Lithium Resources Limited (ASX: GL1) (“GL1” or the “Company”) is pleased to announce the results of the Scoping Study (“Study”) on the Manna Lithium Project (“Manna” or the “Project”) located 100km east of Kalgoorlie, a major mining hub in Western Australia. The key financial metrics are compelling and the GL1 Board has recommended the Project to proceed directly to a Definitive Feasibility 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 Manna Lithium Project by developing a mine and constructing a beneficiation and processing facility onsite. The Scoping Study referred to in this announcement 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 certainty that the conclusions of the Scoping Study will be realised.

Approximately 68% of the Life-of-Mine production is in the Indicated Mineral Resource category and 32% is in the Inferred Mineral Resource Category. The Company has concluded it has reasonable grounds for disclosing a Production Target, given that the Scoping Study assumes that in the first 3 years of operation, 89% of the production is from the Indicated Resource category. The inferred mineral resource is not the determining factor in determining the viability of the Manna Lithium Project. Furthermore, Indicated material processed over the initial 7 years of production accounts for 85% of lithium concentrate produced.

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\$435 (US\$304) 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.

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Key Highlights

Scoping Study confirms the potential for a globally competitive lithium project

- GL1 owns 100% of the Manna Lithium Project located in Western Australia
- Total Mineral Resource Estimate (MRE) of **32.7Mt at 1.00% Li₂O**, with 58% in the Indicated category
- Life-of-Mine (LOM) of 10 years with an estimated total production of 2.2Mt of spodumene concentrate
- Concentrator nameplate capacity is 2Mtpa of run-of-mine (ROM) ore

Excellent project economics and financial returns

- Cash operating cost for LOM is US\$688/t for a 5.5% Li₂O spodumene concentrate (SC5.5, FOB)
- Robust pre-tax NPV_{8%} of approximately A\$2.8 billion and 103% IRR
- Rapid payback of 15 months after first production using a long-term spodumene concentrate price of US\$2,500/t SC5.5 (CIF, China) as forecast by Fastmarkets, an internationally recognised price reporting agency.

Low risk open pit mining in a proven mining jurisdiction

- Large scale open pit contract mining
- Process plant based on robust flowsheet using learnings from other lithium producers
- A number of opportunities have been identified to improve mining costs and plant capacity
- Exploration program is being finalised with a focus on extending mine life
- Environmental baseline studies underway with the Company well positioned to submit Works Approvals early in CY24

Global Lithium Managing Director, Ron Mitchell commented,

“The results of the Scoping Study show the true quality and real potential of the Manna Lithium Project.

The exploration team worked extremely hard throughout 2022 to provide a solid foundation for the Manna Lithium Project delivering an upgraded resource of 32.7Mt at 1.0% Li₂O. The Company also acquired 100% ownership of the Project late last year, which enables our shareholders to fully benefit from this outstanding asset.

The GL1 Board is delighted with the robustness of the Project and its resilience to multiple factors that the resource industry is experiencing here in Western Australia with increasing cost escalation and market conditions.

The development team will now diligently progress all the necessary technical components and engineering work streams to ensure the Project is sufficiently de-risked allowing the Company to progress to a final investment decision next year.

The Board has unanimously resolved for the Project to proceed directly to formal Feasibility, due to the compelling economics and the continuing strong lithium market fundamentals.”

Executive Summary

Key metrics below for the Manna Scoping Study assumes a weighted average lithium concentrate price of US\$2,500/t CIF China, based on Fastmarkets average forecast price from 2026-2032 and adjusted for a 5.5% Li₂O spodumene concentrate (SC 5.5) product. Lithium price forecast is discussed in more detailed in Appendix 1. A flat AUD:USD exchange rate of 0.70 has been assumed for the Scoping Study.

Key Metrics	Unit	Value
Life of Mine (LOM)	Years	10
Plant Nameplate Capacity Run-of-Mine (ROM)	Mtpa	2.0
LOM Average ROM Grade	% Li ₂ O	0.92
Process Plant Recovery	%	70.0
LOM Average Production (SC5.5)	ktpa	221
Total LOM Production (SC5.5)	Mt	2.22
Plant & Infrastructure Capital	A\$M	419
Mine Pre-Strip Capital (additional to Plant & Infrastructure capital)	A\$M	17.4
Exchange Rate	AUD:USD	0.70
Operating Cash Cost US\$/t, LOM Average (FOB, Esperance) ¹	US\$/t SC5.5	688
AISC US\$/t LOM Average (CIF, China) ²	US\$/t SC5.5	885
WA Royalty	%	5.0
Long Term Lithium Price Assumption (SC5.5, CIF China)	US\$/t SC5.5	2,500
Project NPV_{8%} (inclusive of Royalties, pre-tax)	A\$ Billion	2.8
Project IRR (%) (inclusive of Royalties, pre-tax)	%	103
Payback from start of production	Months	15

1. Cash operating costs include all mining, processing, transport, freight to port, port costs and site administration. Excludes sustaining capital and WA Royalties.

2. All-in Sustain Costs (AISC) includes all mining, processing, site administration, transport, freight to port, port costs, shipping to Zhenjiang (China), customs and import duties, sustaining capital and WA Royalty on sale receipts.

The Scoping Study has been completed with the assistance of highly experienced and reputable independent consultants based in Western Australia, including:

- Mineral resource modelling and estimation – Snowden Optiro
- Resource optimisation, mine planning and mining costs – Resolve Mining Solutions
- Flowsheet development, engineering and cost estimation – Minsol Engineering Consultants

The Scoping Study was completed to an overall estimating accuracy of +/-30% (Class 5 estimate) and has a basis date for Q1 CY23. The Project is based on a 2Mtpa mining and processing operation with the Study demonstrating very strong financial metrics. The preliminary economic evaluation indicates the Manna Project will generate significant net cash flows over an initial 10 year life-of-mine (LOM) with a capital payback of 15 months following first production.

Sensitivity analysis was completed to determine the impact of various factors on the project economics (see Figure 1). Lithium price and foreign exchange rate (AUD:USD) have the largest influence on the Project financials. For every US\$1,000/t (SC5.5) increase in the lithium concentrate price, the project NPV_{8%} increased by A\$1.8B. An increase in the AUD:USD exchange rate from 0.70 to 0.75 resulted in a A\$0.3B reduction in the project NPV_{8%}.

The Project demonstrates it is resilient to capital escalation with a 20% increase in the total project capital cost to \$522M, only reducing the NPV_{8%} from A\$2.8B to A\$2.7B and the payback period increasing slightly to 18 months after first production.

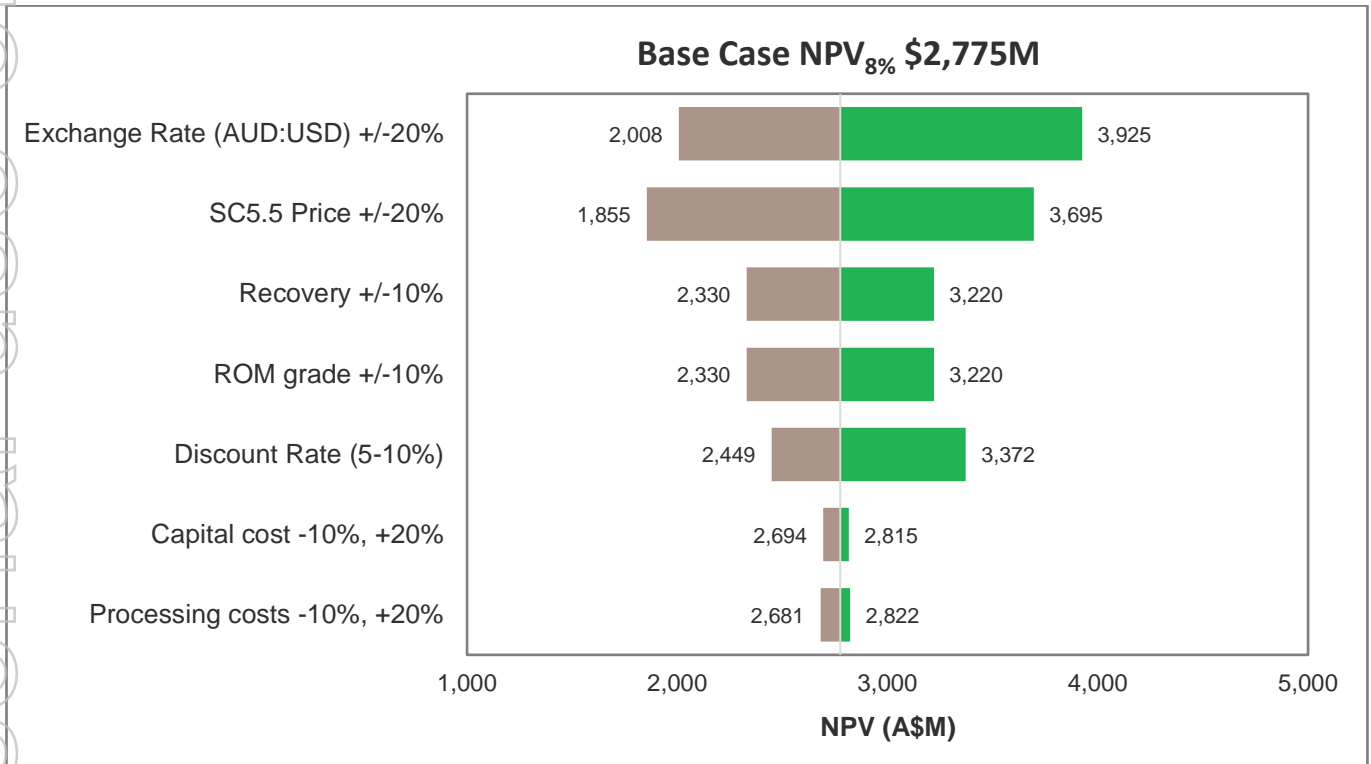


Figure 1: Tornado plot showing the impact of various sensitivities to the Project economics.

Next Steps

The Company will proceed directly to a Definitive Feasibility Study (DFS) on the Manna Lithium Project with the aim of reaching a final investment decision (FID) in CY2024.

A further Mineral Resource update incorporating an additional ~30,000m of drilling at Manna is expected to be announced in CY23. This Mineral Resource update will form the basis of the DFS, with further drilling planned throughout this year to inform detailed mine planning and extension of mine life for Front-End Engineering and Design (FEED).

Bulk metallurgical diamond drilling was completed last year and testwork is underway, as announced earlier this month (refer to ASX announcement 25 January 2023). This will allow flowsheet optimisation and vendor testing of preferred equipment for the process plant. Ore variability testwork will also be



conducted this year to confirm impact of the mine schedule on process recovery and product quality over the life of the Project.

The Scoping Study results have identified several areas that have the potential to further improve the Project's economics through cost reductions and efficiencies. Various work programs will be undertaken to assess these opportunities, and include:

- Ore sorting trials to reduce internal mine dilution and iron content
- Assess larger haul trucks and excavators for waste rock removal
- Site water balance and hydrogeological studies
- Water treatment process options
- Dry stack tailings to simplify environmental approvals and avoid construction of tailings facility
- Power generation and fuel studies to reduce carbon emissions
- Utilise the Scoping Study mining outputs to obtain preliminary pricing from contract miners
- Further evaluate optimum product transportation route and secure agreements.

Environmental assessment work activities have been scheduled and underway, including:

- Completion of baseline studies
- Undertake environmental risk assessments
- Stakeholder engagement activities, including heritage surveys
- Preparation of Mining Proposal, Mine Closure Plan and Project Management Plan
- Submission of Works Approvals for prescribe facilities
- Submission of Native Vegetation Clearing Permits
- Ground water abstraction licences.

Approved for release by the Board of Global Lithium Resources Limited.

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APPENDIX 1 – MANNA LITHIUM SCOPING STUDY

Introduction

Global Lithium Resources owns 100% of the Manna Lithium Project located approximately 100km east of the major mining centre Kalgoorlie, Western Australia. The Project is situated on two granted Exploration Licences (E28/2551 and E28/2552) in the City of Kalgoorlie-Boulder. Global Lithium holds title to approximately 250km² of exploration ground across the Manna Project (see Figure 2).

The Manna Lithium Project has a mineral resource estimate of 32.7Mt at 1.0% Li₂O using a 0.6% Li₂O cut-off grade as announced to the ASX on 15 December 2022.

The Scoping Study has assumed a processing plant capable of treating 2Mtpa of run-of-mine (ROM) ore. Minsol Engineering Pty Ltd (**Minsol**) were engaged to complete sufficient engineering to generate a capital and operating estimate with an accuracy of +/-30% (Class 5). Resolve Mining Solutions (**Resolve**) completed the relevant mining components of the Scoping Study, which are discussed further within this announcement. All costs and financials are presented in Australian dollars unless stated otherwise.

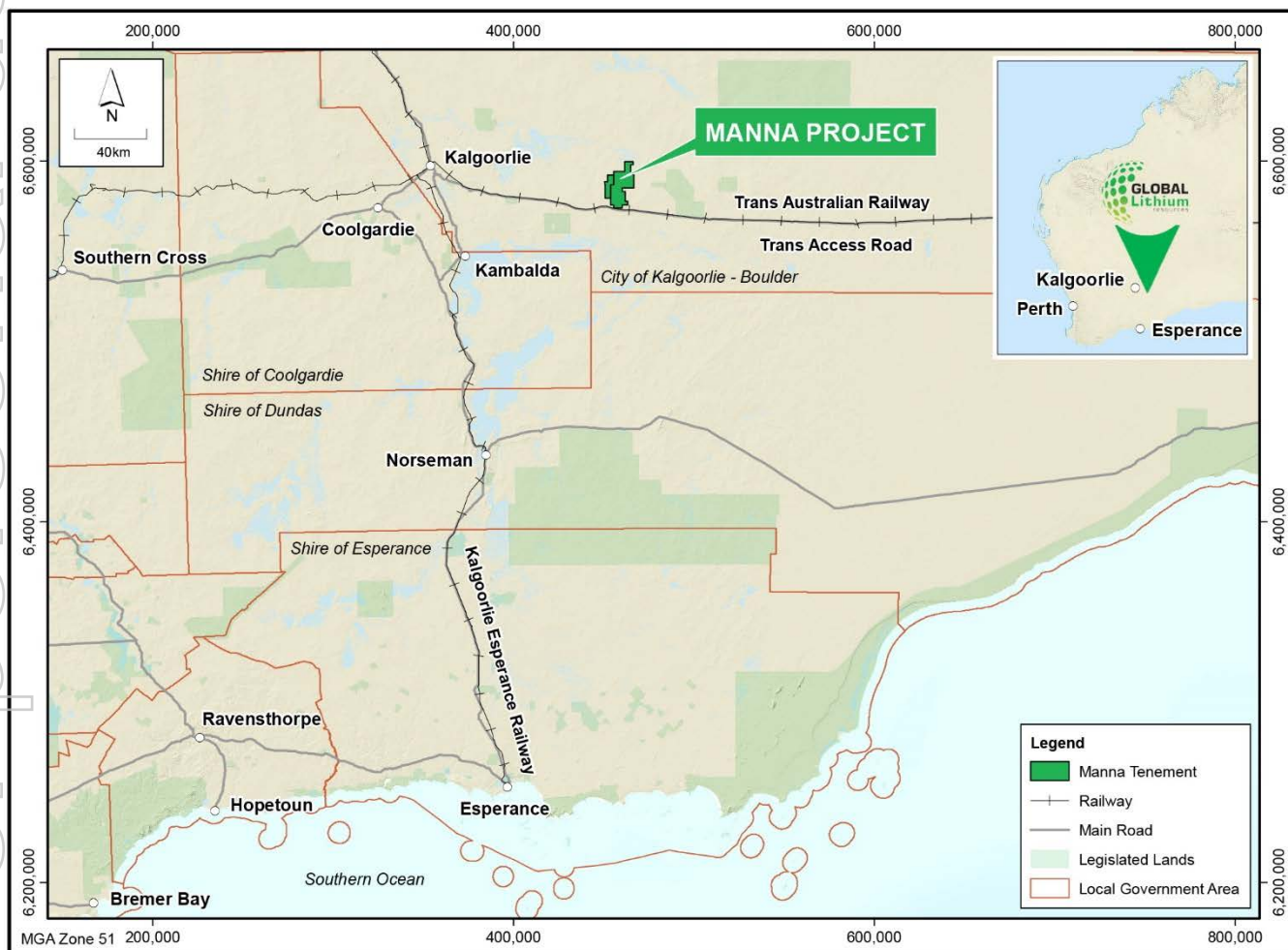


Figure 2: Manna Lithium Project Location

Mineral Resource

Geology

The mineralisation at Manna is characterised as lithium-caesium-tantalum type (LCT) pegmatite swarms. The greenstone sequences within the vicinity of the Manna lithium deposit are dominated by mafic and felsic-intermediate igneous rocks, with minor sedimentary rocks, of the Kurnalpi Terrane of the Archean Yilgarn Craton. It is thought that the LCT pegmatite swarms, which includes the Manna lithium deposit, is likely to be associated with the Cardunia granitoid body.

Mineralisation at Manna remains open along strike in both directions and at depth. Forty-six sets of anastomosing pegmatite veins were interpreted and 16 of these, which contain significant lithium mineralisation, were used with the mineral resource model.

The pegmatites have been defined from geological logging and surface mapping. The lithium-mineralised zones were defined using a nominal cut-off grade of 0.2% Li_2O . The pegmatite veins strike northeast-southwest and dip at -60° to -70° to the southeast. The main set of 12 mineralised pegmatites has been drilled over an area of 1,600m by 300m and to a depth of 480m. There are two mineralised pegmatites to the north and two to the west of this area. The individual mineralised pegmatites are typically 1m to 14m thick and have an average thickness of 3.6m.

Mineral Resource

The Mineral Resource Estimate (MRE) for the Manna deposit is based on 179 reverse circulation (RC) drillholes for a total of 37,039m, with a total of 13,252 assays, 12 RC holes with diamond tails (RCD) for a total of 6,139m and 2,301 assays, and four diamond drillholes (DD) for a total of 282m, with a total of 59 assays.

Figure 3 shows a collar map for the Manna Project with drilling generally spaced at 80m x 40m.

Snowden Optiro was engaged by Global Lithium to provide a Mineral Resource update for the Manna lithium deposit to support the Scoping Study and ongoing project development activities.

The Manna Mineral Resource Estimate has been classified as Indicated and Inferred on the basis of confidence in geological and grade continuity and by taking into account the quality of the sampling and assay data, and confidence in estimation of Li_2O and Ta_2O_5 content. Infill drilling, more density data and detailed topographical data are required to improve confidence. Only a portion of the main zone has been classified as Indicated where there is infill drilling at 80m along strike and 40m in-section and where the geological and grade continuity are robust.

The resource model for the Manna deposit was constructed using a parent block size of 5m(E) x 10m(N) on 2m benches and the parent blocks were allowed to sub-cell down to 2.5m(E) x 2.5m(N) x 0.5m(RL) to more accurately represent the geometries and volumes of the mineralised pegmatites.

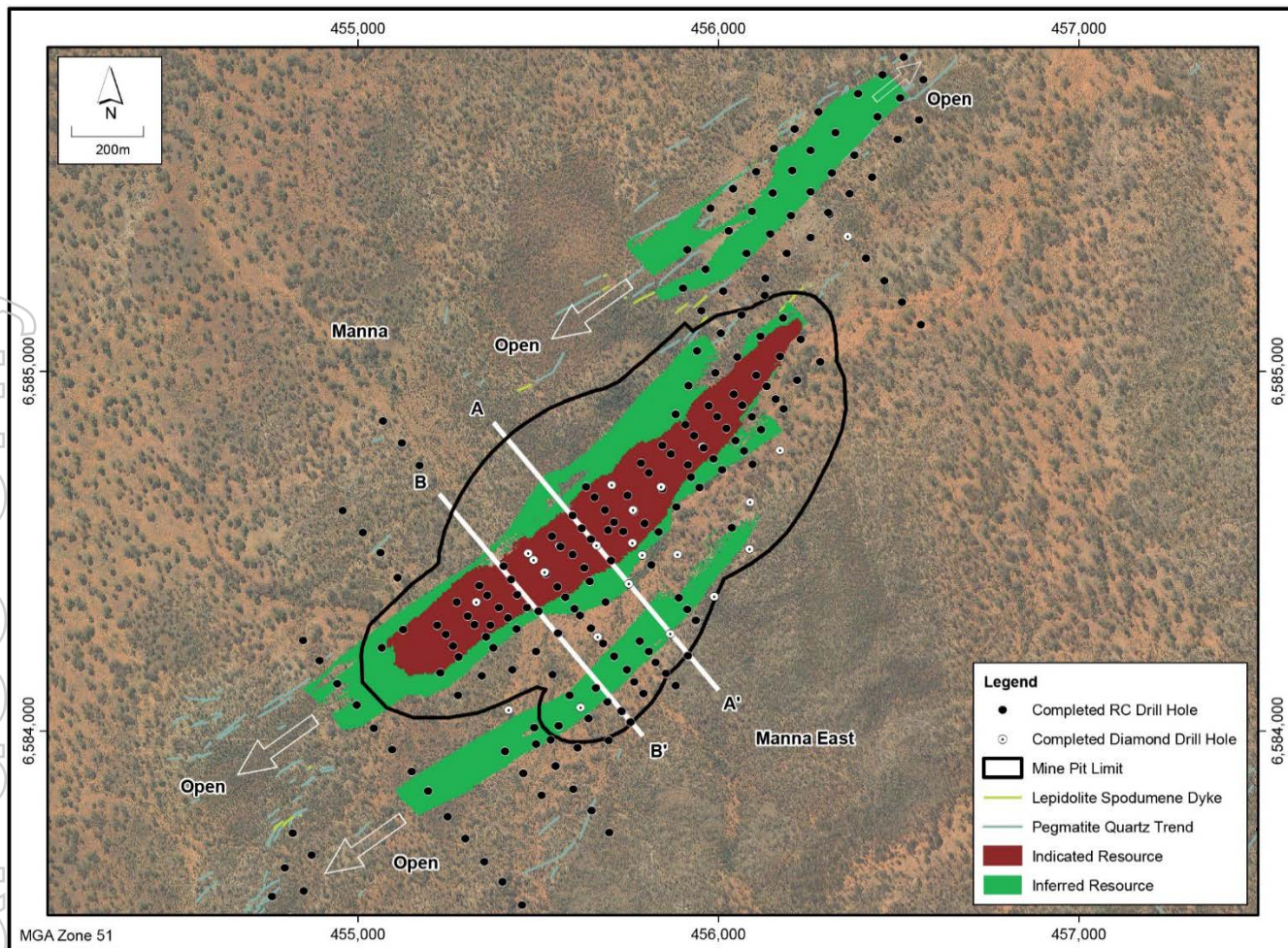


Figure 3: Manna Lithium Project collar map

Lithium oxide (Li_2O) % and tantalum pentoxide (Ta_2O_5) ppm block grades were estimated using ordinary kriging techniques. Bulk density values of 2.68 t/m^3 have been applied to the pegmatite, and 2.90 t/m^3 to the mafic material for tonnage estimation. The lithium mineralised pegmatite veins at Manna exhibit good grade and geological continuity and the Mineral Resource estimate for the Manna deposit has been reported above a cut-off grade of 0.6% Li_2O (refer to Table 1).

Table 1: Manna Mineral Resource Estimate at a cut-off of 0.6% Li_2O (December, 2022)

Resource Category	Tonnes (Mt^1)	Lithium Grade (% Li_2O)	Tantalum Grade (Ta_2O_5 ppm)
Indicated	18.5	1.03	45
Inferred	14.2	0.97	43
Total	32.7	1.00	44

1. t = Metric dry tonnes, Appropriate rounding has been applied, and rounding errors may occur.

The information in Table 1 above is extracted from ASX announcement entitled "GL1 Delivers Transformative 50.7Mt Lithium Resource Base" released on 15 December 2022 and available to download from www.asx.com.au ASX:GL1. The Company is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of estimates of Mineral Resources or Ore Reserves that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement 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 announcement.

Figure 4 and Figure 5 show typical cross sections of the main deposit at Manna. The Manna Lithium deposit remains open along strike in both directions and at depth with current resource extension drilling to continue throughout 2023, with an additional 35,000m utilising both RC and DD drilling techniques planned.

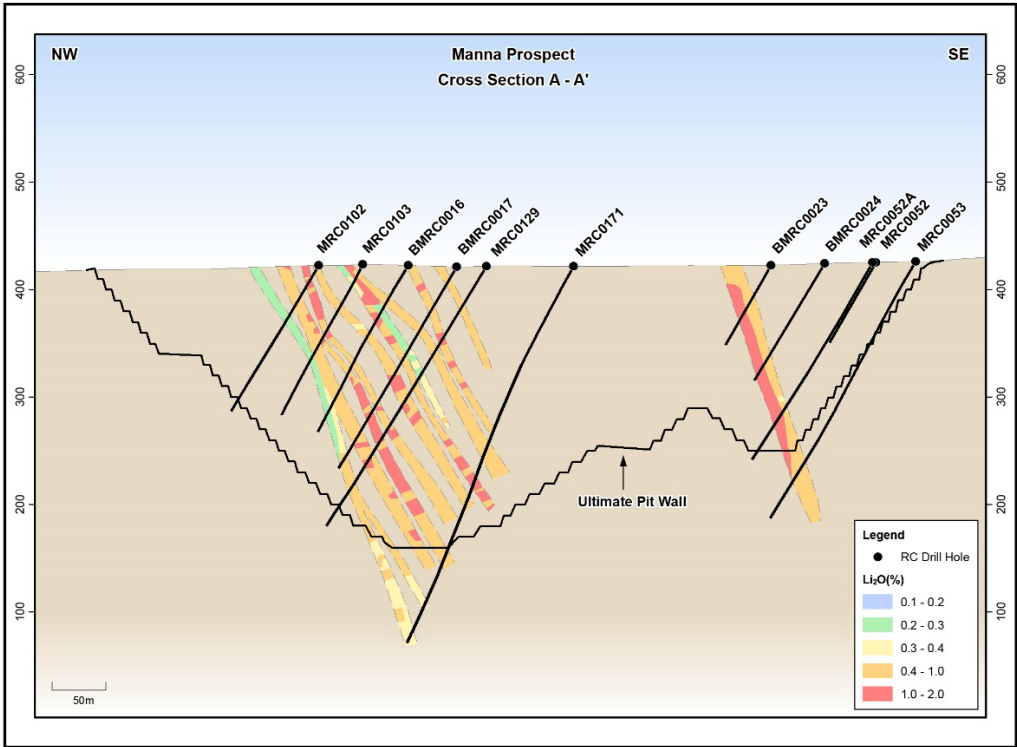


Figure 4: Manna cross section A - A' showing estimated Li₂O grades

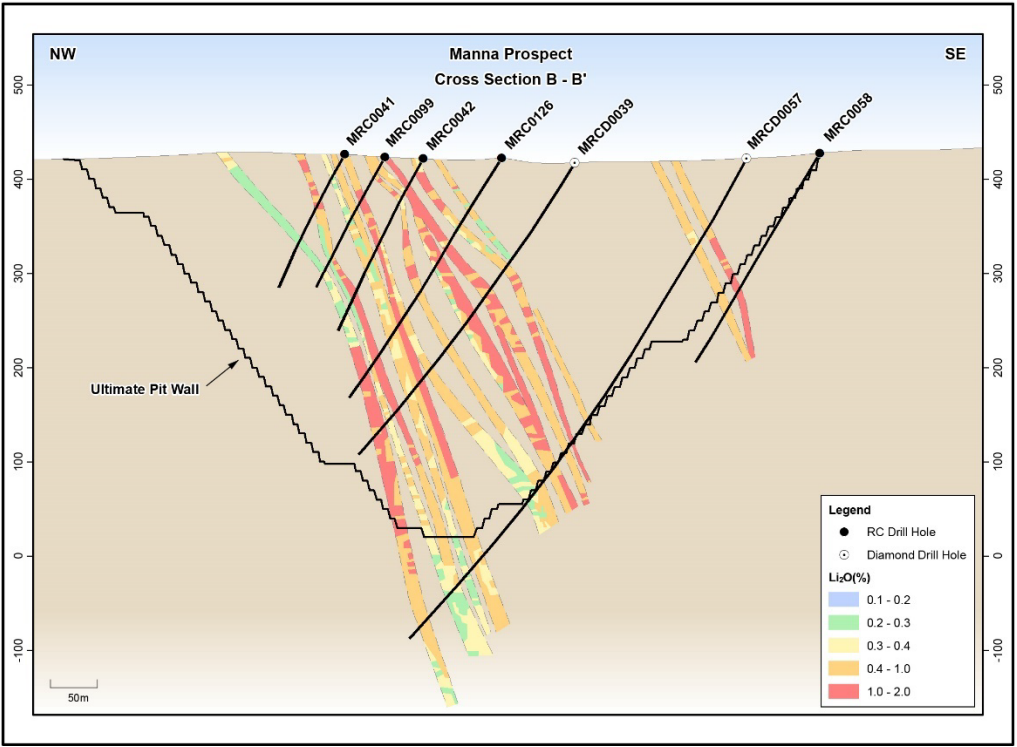


Figure 5: Manna cross section B - B' showing estimated Li₂O grades

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Mining

Pit Optimisation

Resolve was engaged by Global Lithium to undertake the mining components of the Scoping Study. The Mineral Resource (December 2022) block model was provided to Resolve by Snowden Optiro. The resource model was regularised to create a standard mining unit (SMU) mining block model that include dilution and ore losses.

A range of SMU sizes were modelled to ascertain the most practical size to use for mining the deposit. A 5m x 5m x 4m SMU was selected for pit optimisations and pit designs. The larger block dimensions were deemed to lose too much potential ore tonnage and the smaller block sizes were too small for the mining equipment likely to be utilised within the mine.

Indicated and Inferred mineral resources were included in all optimisations as potential mineral inventory, and while the Indicated were primarily targeted to show where additional resource drilling should be targeted, the inclusion of Inferred, and the nature of a Scoping Study has removed the possibility of the declaration of an Ore Reserve.

The pit optimisations were completed using preliminary mining, processing costs and metal recoveries as provided in this Scoping Study. A range of lithium (SC5.5) concentrate price assumptions were selected \$1,000/t SC 5.5 (US\$700/t), \$2,000/t (US\$1,400/t), \$3,500/t (US\$2,450/t) and \$6,500/t (US\$4,550 /t) for the optimisations and varying revenue factors (RF) used, with RF 1.0 having the maximum revenue for a given lithium price. A life of mine spodumene concentrate (SC5.5) price of \$US2,500 was used for the financial model. This price point represents the long term average forecast price from 2026 to 2032, as reported by Fastmarkets, a leading global independent price reporting agency.

The highest concentrate price was used to located permanent infrastructure outside the blast radius of this pit shell. The lower price was used to confirm the location of a high-grade starter pit on the assumption the Project feeds the process plant with the highest grade for the first 12 months during ramp-up to maximise cashflow. A two-year ramp-up was included in the optimisation with the process plant achieving 75% throughput in Year 1, 90% in Year 2 and full 2Mtpa nameplate capacity from Year 3 onwards.

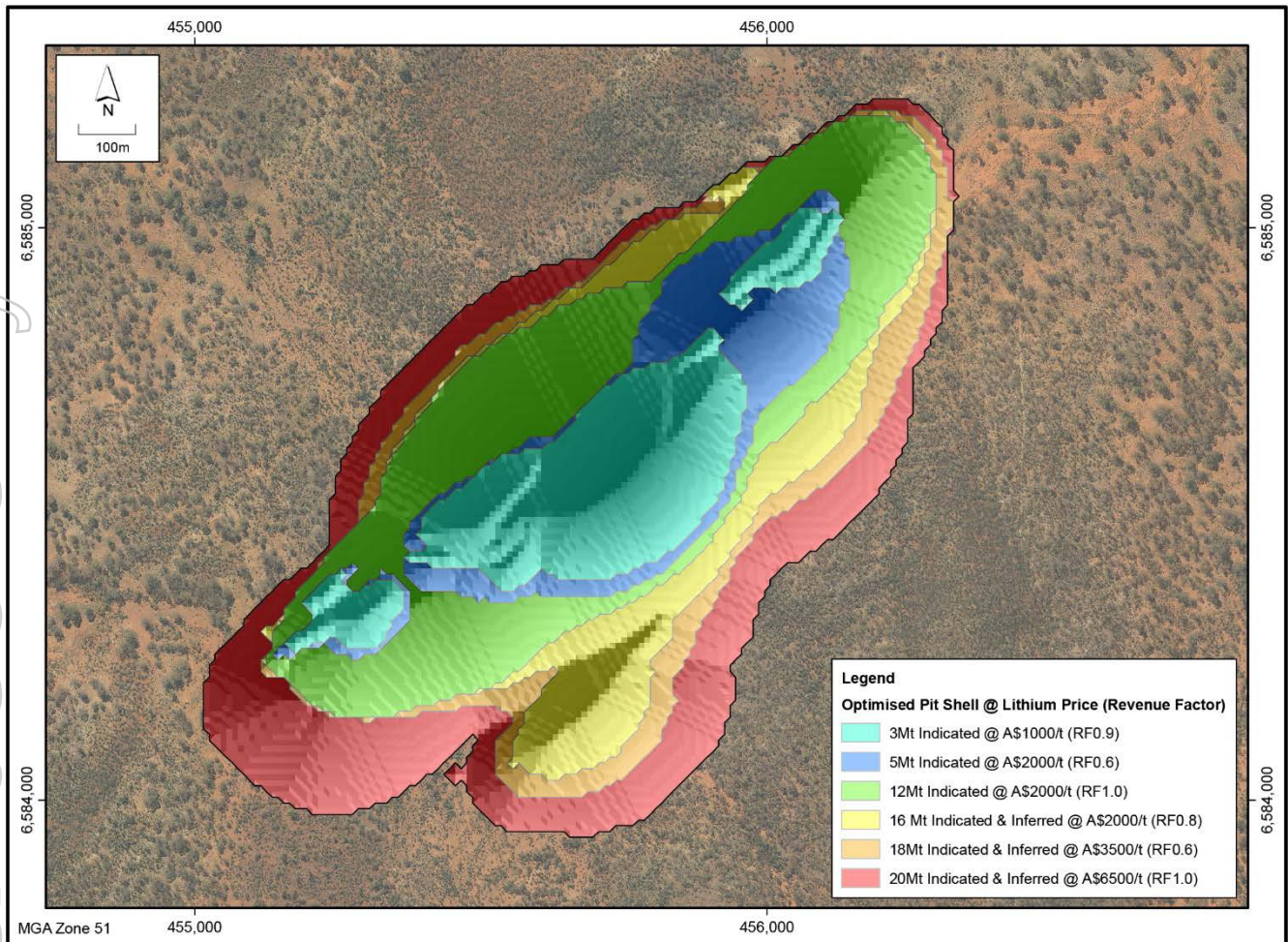


Figure 6: Optimised pit shells at different lithium prices

Mine Design

The mine design parameters utilised for the Scoping Study are:

- Overall wall angle of 55°
- 10m benches with 4.5m berms and 75° batters in the pits
- 10m benches with 10m berms and 35° batters on the dumps
- 40m dual lane ramps and road
- Ramp gradients maintained at less than 10%
- Minimum mining widths, 60m for cutbacks and 40 m at pit base

The staged pit designs are shown in Figure 7, which includes six stages and forms the basis of the mine schedule.

The early pit stages focus on the Indicated mineralisation, while the larger designs see an increasing amount of Inferred mineral inventory, ensuring the initial production schedule is mainly informed by Indicated material. The designs have been completed including access ramps to all benches allowing the schedule to be practical and achievable.

As the level of accuracy is still a Scoping Study, no temporary ramps are included in the design process, however some are expected to access the later stages and the final pit.

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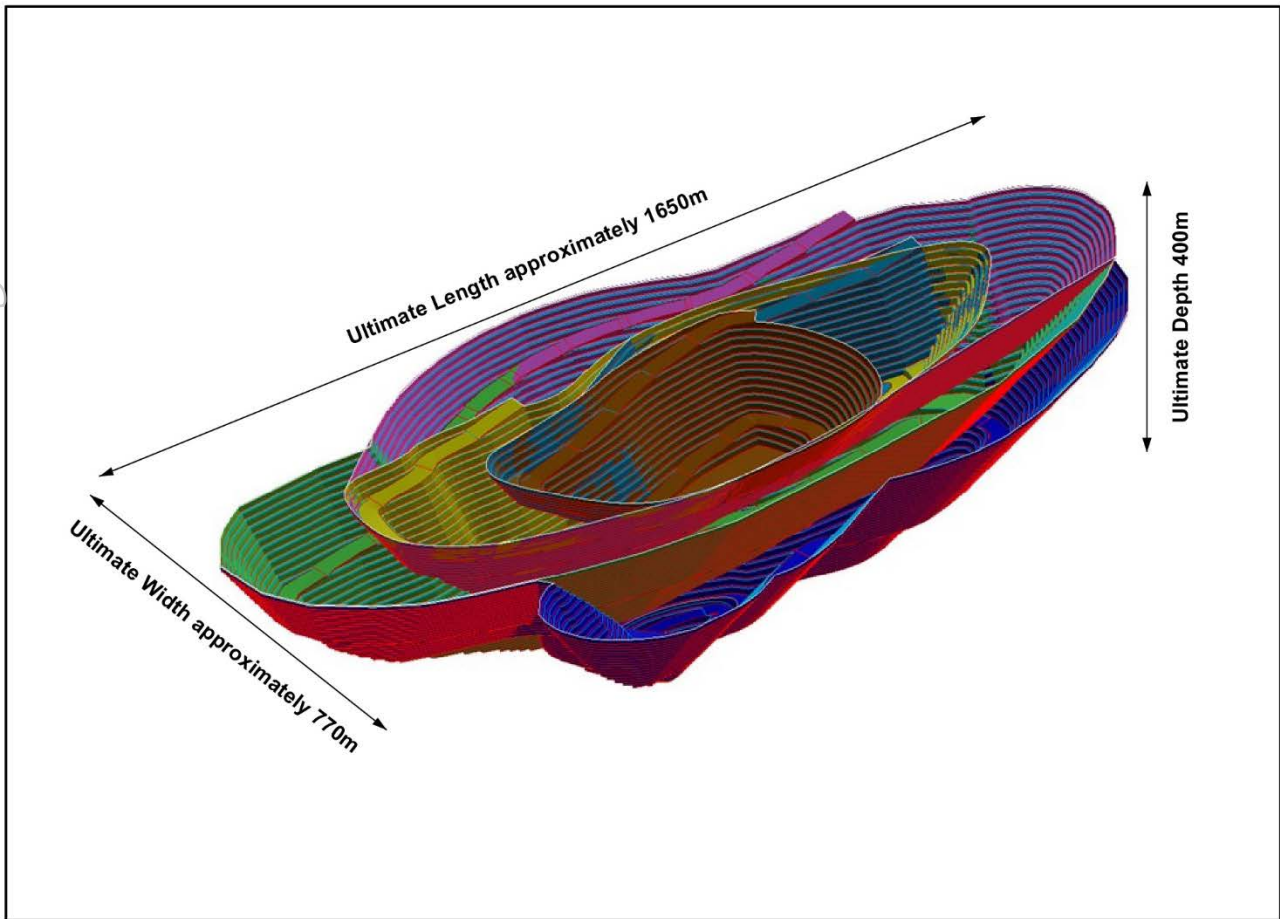


Figure 7: Isometric view of the six pit stages

Table 2 summarises the mining resource within each stage pit design including a breakdown of the mineral classification of the mill feed.

The table indicates approximately 68% of the LOM production is in the Indicated Mineral Resource category and 32% is in the Inferred Mineral Resource category. The Company has concluded it has reasonable grounds for disclosing a Production Target, given that the Scoping Study assumes that in the first 3 years of operation, approximately 89% of the production is from the Indicated Mineral Resource category. Additionally, Indicated Mineral Resources account for 85% of the first 7 years of production of lithium concentrate.

Table 2: Mining resource for each pit cutback

Pit Stage	Mill Feed (Mt)	Mill Feed (%Li ₂ O)	Indicated (%)	Waste (Mt)	Total (Mt)
Stage 1	2.76	1.03	95%	34.7	37.4
Stage 2	2.06	0.88	84%	25.9	27.9
Stage 3	2.00	0.85	89%	29.1	31.1
Stage 4	3.51	0.90	82%	100.4	103.9
Stage 5	5.25	0.91	69%	117.9	123.1
Stage 6	3.33	0.94	5%	111.2	114.6
Total	18.91	0.92	68%	419.1	438.0

Waste Dump Design

The final mine layout is shown in Figure 8, which includes two waste dumps. These dumps have been located away from any potential strike extensions and have left the southern area for the processing plant and site access requirements. The dumps have also been designed with wide berms to be closer to a final landform slopes.

The two dumps shown are sufficient for the majority of the waste contained within the pit designs, but a more accurate material balance should be undertaken during the DFS stage.

No rehabilitation or closure plans have been undertaken for this Study.

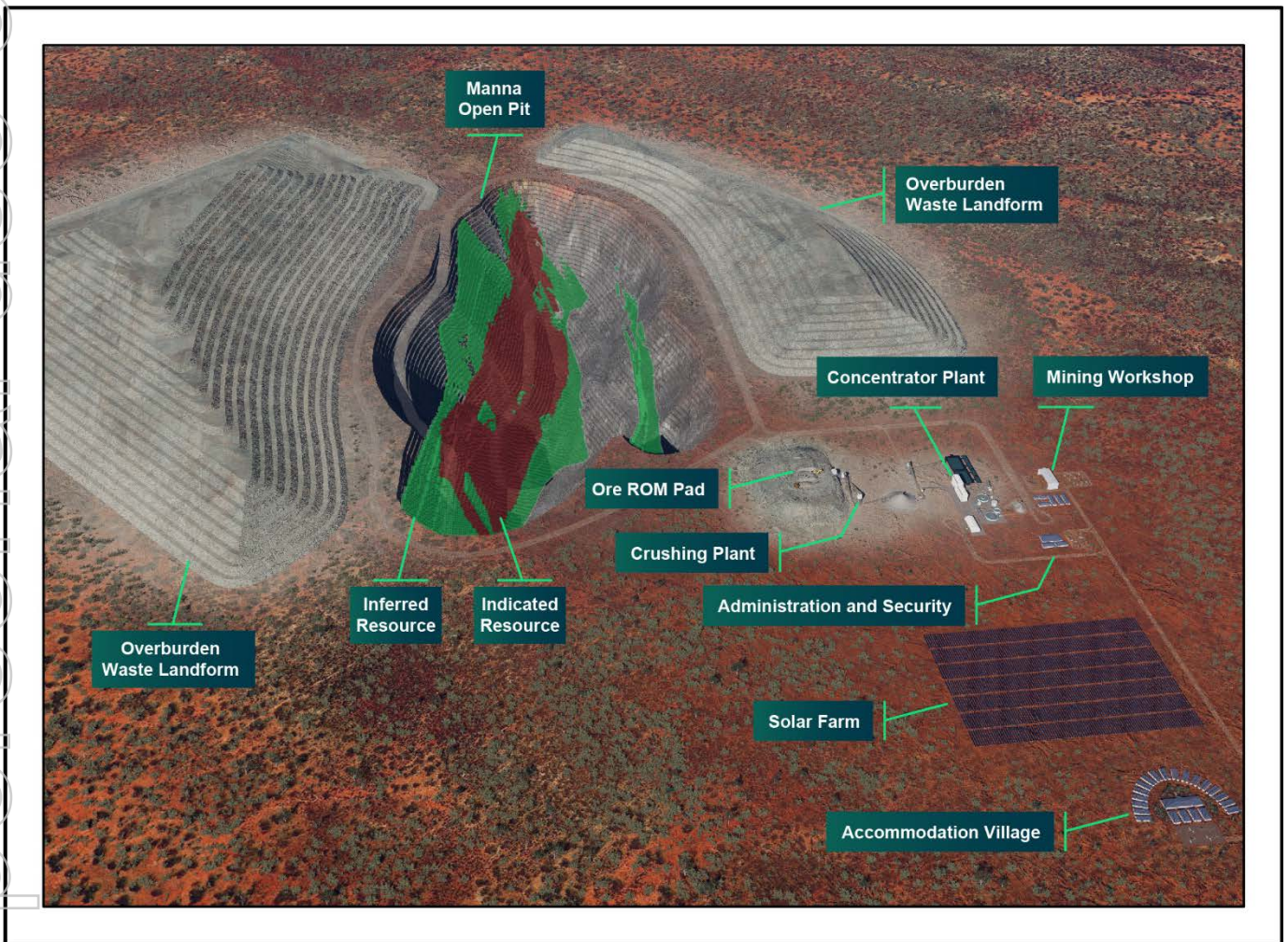


Figure 8: Final mine design with overburden waste landforms

Mine Schedule

The overarching production target was to deliver 2.0Mt of ROM ore to the mill each year other than during the ramp-up phase during the first two years of production. The mining rate required to ensure continuous mill feed, and the production targets, is determined by the production schedule, however the rate needs to be cognisant of mining fleet size, equipment productivities and shift arrangements. The equipment classes selected were 250t excavators matched with 150t trucks.

The production schedule shows that 2.0Mtpa of ROM ore can be achieved once commissioning and ramp-up is achieved, as shown in Figure 9. This production rate can be maintained in full for the current LOM of 10 years.

To achieve this annual production the mining rates are required to increase steadily over the full mine life. The required mining and processing rates are shown in Figure 10, which illustrates the mining rate increasing to 60Mtpa while mining Stage 4 and Stage 5. There is an initial pre-strip to provide sufficient ore on the ROM pad for commissioning and start-up. The cost of the pre-strip has been included in the financial model as initial capital.

The mining rate required to meet the production targets is moderately aggressive and when combined with the high strip ratios does result in high annual tonnages. Further work will be undertaken during the DFS stage to optimise the annualised tonnages to reduce the peak mining fleet requirements and potentially investigate a larger waste mining fleet and if possible de-couple ore and waste mining fleets.

As this Study is still at scoping level, the accuracy of the schedule is still at a relatively low level which would be expected from a DFS, and as such vertical rates of advance, fleet productivities and development practicalities still need to be developed further.

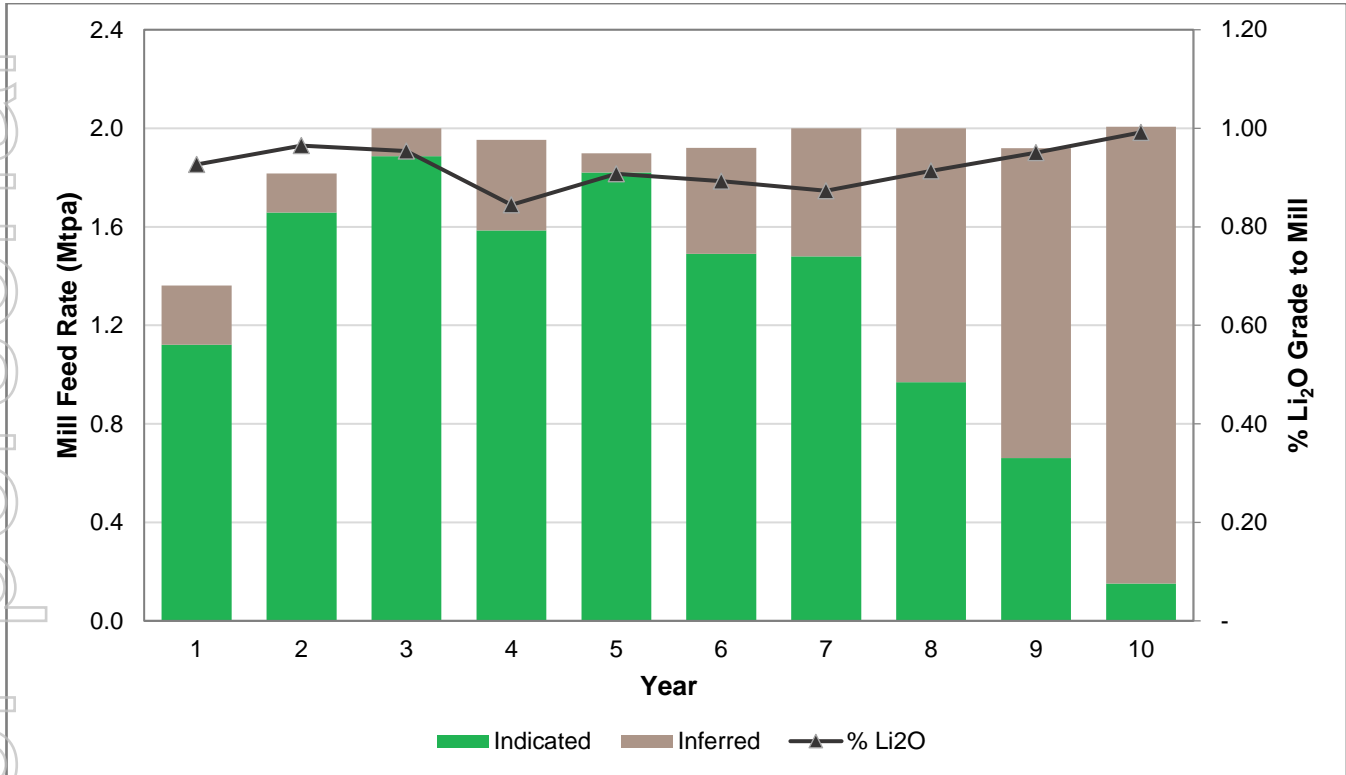


Figure 9: Yearly mine schedule to plant mill



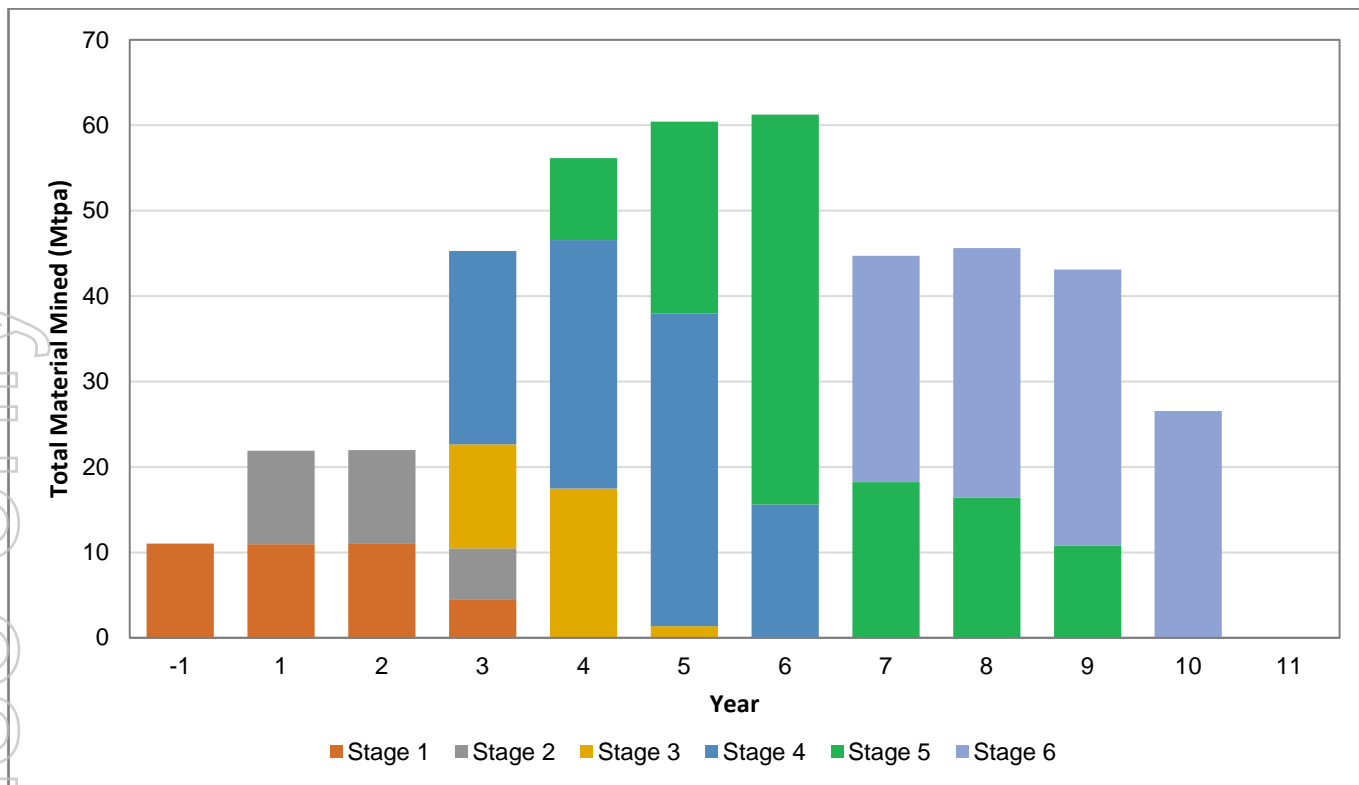


Figure 10: Yearly mine schedule to plant mill

Mining Costs

Unit mining rates have been estimated using wet hire rates sourced in January 2023 from within Resolve for a similar sized mining operation.

The equipment operating hours were estimated within the production schedule using equipment productivities based on benchmark data. Truck fleet size was estimated within the production schedule utilising haul profiles for each pit stage and dump, as shown in Figure 11, and rimpull and retard speeds for each haul segment. Mining fleet requirements to deliver quarterly schedule over LOM was estimated along with supporting ancillary fleet.

Drilling and blasting costs have been estimated using average drill pattern parameters and unit costs from within Resolve.

Mining operating costs are inclusive of contractor margin, labour, loading, haulage, fuel, equipment maintenance, drill and blast, grade control, dewatering, stockpiling, ancillary fleet, clearing and grubbing and development of temporary mine infrastructure. Owner's Technical Services Team has been built-up from first principals to provide geotechnical ground control, geological mapping, grade control, surveying and detailed mine planning.

An average all-in unit mining rate of \$67.47/t ROM delivered to the process plant, inclusive of contractor margins, has been estimate over the 10-year mine life.

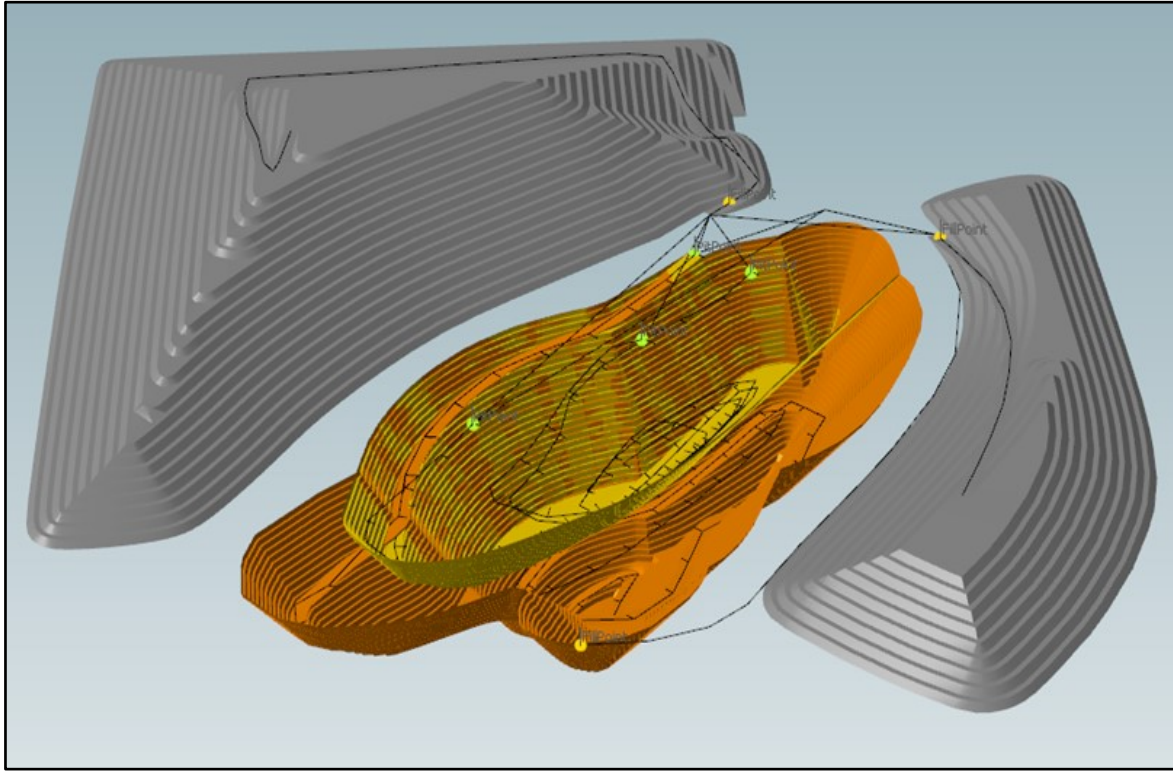


Figure 11: Haulage analysis shown for final pit stage

Processing

The Manna deposit has two broad ore types that will be presented to the process plant:

- Central zone – coarse grained high-grade spodumene
- Southern and northern zones – fine grained spodumene

The process flowsheet is based on a typical Western Australian hard-rock spodumene resource, which is amenable to both Dense Media Separation (DMS) and froth flotation to achieve a target concentrate grade of 5.5% Li₂O, and incorporates the current understanding of resources size, grade, mineralogy and crystal grain size, as well as information from Heavy Liquid Separation (HLS) test work undertaken to date.

Figure 12 shows a schematic of the Manna process flowsheet, which uses conventional processing technologies, however it is a 4th generation spodumene concentrator adopting learnings and optimisations from existing Western Australian spodumene operations to ensure high efficiency through every process unit operation. These optimisations include:

- Maximise mineral liberation for effective coarse and fine spodumene recovery
- Minimise slimes losses
- Effective rejection of gangue minerals including mica and iron silicates
- Efficient milling, desliming and float conditioning to maximise fines recovery
- Maximise plant availability by employing high wear resistant materials of construction and duty/standby equipment where necessary

Crushing and Comminution

Ore is delivered to the ROM pad where it will be blended in the plant via a front-end loader. The crusher circuit comprises of a two-stage circuit to produce a -32mm fine ore product which will be stored on the Fine Ore Stockpile (FOS). The FOS has a nominal capacity of 18 hours of ore, reclaimable via the reclaim tunnel at the design feed rate of 250t/h. This stockpile will provide surge capacity between the crusher and the concentrator to ensure consistent feed to the downstream circuits.

The reclaimed material is then further comminuted through a High-Pressure Grinding Roll (HPGR) operating in closed circuit with a wet screen to produce a -3.35mm feed to the concentrator plant. The HPGR has been employed throughout the lithium industry, due to its superior reliability and improved product liberation, which is essential for high process recoveries downstream.

Concentrator

The HPGR product will undergo multiple stages of screening to produce discrete size fractions, which is essential for efficient downstream processing.

The coarse fraction, nominally +850 μ m, will be fed to a reflux classifier (RC) to elutriate (float) and remove liberated mica prior to entering the Dense Media Separation (DMS) circuit. In the DMS circuit, ore will be mixed with a medium comprising water and Ferro Silicon (FeSi) and will be pumped through a hydrocyclone to produce a heavy “sinks” product fraction and a light “floats” tails fraction. The sinks will then undergo a subsequent stage of magnetic separation to remove magnetic gangue minerals before reporting to the product filtration circuit. This stream typically consists of high-grade coarse spodumene and allows for product blending to obtain a final spodumene concentrate grade of 5.5% Li₂O.

The fines fraction, -850 μ m, will report to an up-current classifier to produce a -180 μ m primary feed to the fines float circuit, while the intermediate size fraction, being -850 μ m +180 μ m, and the DMS floats will report to the regrind ball mill for further particle size reduction. The mill will operate in closed circuit with vibrating screens to produce a -180 μ m product, which will be reconstituted with the primary fines.

The combined fine stream will then be treated through multiple stages of desliming hydrocyclones to remove ultrafines, which inhibit efficiency of the downstream flotation process, prior to undergoing magnetic separation. The final deslimed non-magnetics fraction is then conditioned in agitated tanks with select flotation reagents and then floated in a three-stage froth flotation circuit. The output of the flotation circuit will be a spodumene concentrate product fraction and tailings fraction, both of which will be pumped to their respective dewatering circuits.

Concentrate Handling

The final flotation concentrate is blended with the DMS sinks concentrate and dewatered using a vacuum filter belt. The filter cake is then conveyed to a concentrate storage bunker prior to reclaiming with a front-end loader for dispatch from site in triple road trains to the rail siding at Karonie. Concentrate filtrate will undergo water treatment, so it can be recycled to the process plant.

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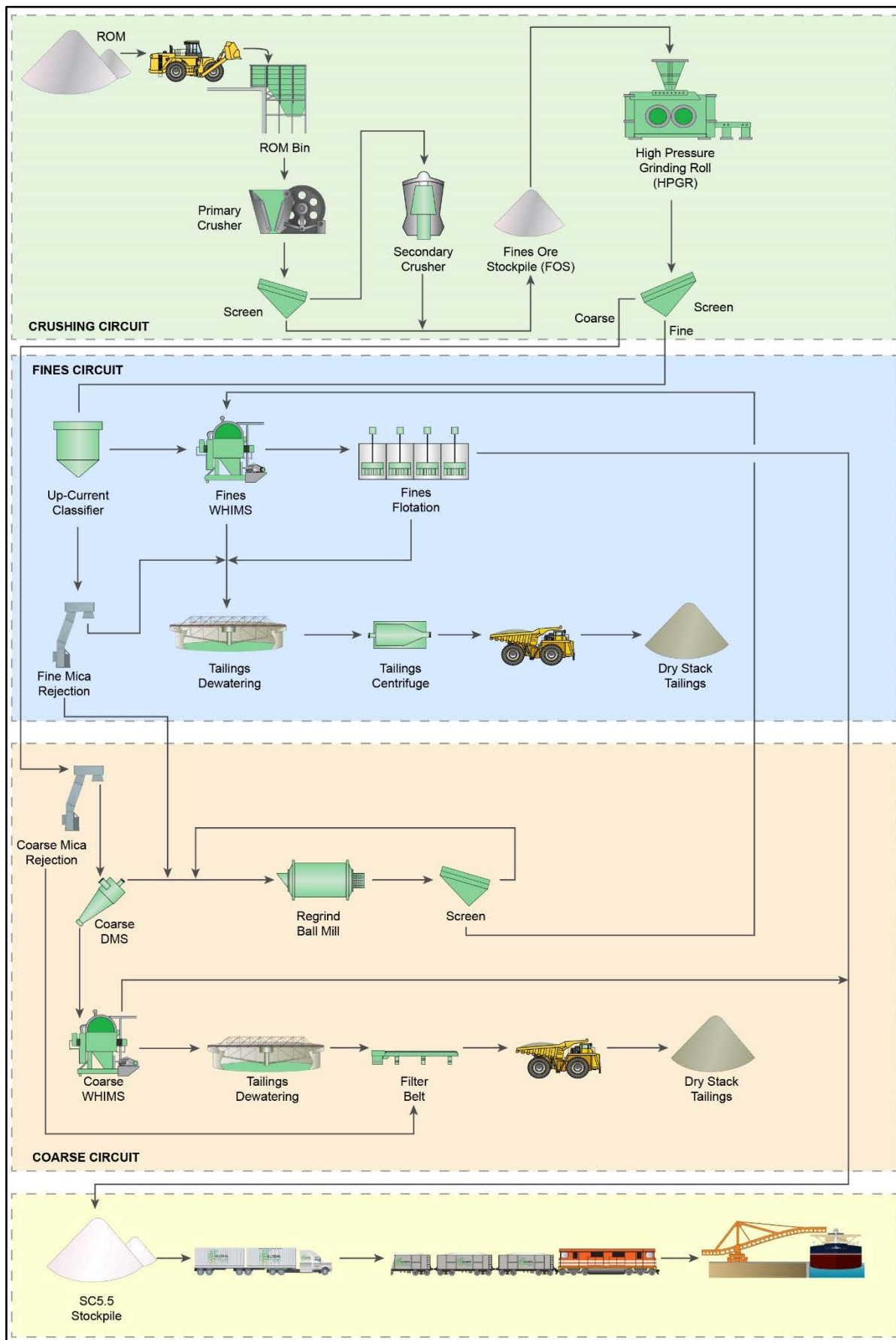


Figure 12: Manna spodumene concentrate process flowsheet

Tailings

Plant tailings will be dewatered utilising a continuous decanter centrifuge before being back hauled in mine trucks to the waste stockpile. This approach will dramatically reduce the reliance on ground water extraction to sustain the operation, as well as reduce the environmental footprint of the site.

Infrastructure

All associated infrastructure required to support the Manna operation is included in the Scoping Study. Capital provisions were included for the following items: HV power supply and distribution, access roads, accommodation and mess facilities, bore field for water supply, water treatment plant, sewage treatment plant, administration buildings, telecommunications, security, maintenance workshops, wash-down areas, bulk fuel farm, laboratory and emergency response facilities.

Power will be provided to the site via an Independent Power Provide (IPP) through a Build-Own-Operate (BOO) hybrid power station. The Project has a total installed power of 12.6MW and the expected continuous power demand is approximately 8MW. Global Lithium will seek a hybrid power solution with 30-40% of power provided by a tracking solar PV system. Further studies will be undertaken to determine a pathway to increase the percent of renewable power generation with the preferred IPP.

The Study assumed operational personnel will work on a fly-in fly-out roster via Kalgoorlie and transported to the Manna site by bus. A budget proposal for charter flights from Perth to Kalgoorlie was obtained for the study. Site accommodation and mess facilities have been included for an anticipated peak construction workforce of 350 personnel. During operational phase, personnel onsite will peak during Years 4-8 with up to 190-200 personnel onsite at any point in time. The operational workforce will work a 12-hour shift on an 8 days on / 6 days off roster for the process plant and a 2 weeks on / 1 week off for mining operations.

A high-speed data connection to site will be supplied via a 13km fibre link to the existing Nextgen Network operated by the Vocus Group, located adjacent to the Trans Australia Railway.

Product Logistics

Minsol engaged Palaris Australia Pty Ltd to (Palaris) to undertake a product logistics study for transporting lithium concentrate from Manna to the nearest available port located at either Kwinana (750km) or Esperance (490km).

Palaris reviewed various options using road, rail or a combination thereof. Bulk transport and containerised (rotainer) options were considered. Preliminary discussions were held with rail and port operators to confirm available capacity. For the purposes of the study, shipping was assumed to be in a dedicated 30kt Handysize vessel on an approximately monthly basis.

Each transport option was priced based on mix of direct quotes, previous quotes, factoring from similar operations and first principles build-up. Braemar ACM Shipbroking provided current and 2024 forecast rates for dedicated Handysize vessels from Kwinana and Esperance to China.

The Study concluded the preferred initial option is container rail from the rail siding located at Karonie, 13km south of Manna, through to Esperance. Containers will be unloaded at a multiuser shed within the port precinct, which is connected to a bulk out-loading facility. Further work will commence early within

the next phase of the Project to confirm the optimum transport option and reserve sufficient rail and port capacity for the Manna Project.

Operating Cost Estimate

Minsol has developed the operating cost estimate for the Manna Project to an accuracy of +/-30% with a basis date of Q1 CY23. Cost of reagents, fuel, labour, flights, accommodation and messing has been based on budget quotations for the Scoping Study or recent quotations from their in-house database.

Minsol has determined the average operating cash cost over LOM for the Manna Lithium Project is US\$688/t SC5.5 (FOB, Esperance). Note the actual processing operating costs will vary from year-to-year based on annual mineral inventory and lithium grade being delivered to the plant over the LOM.

An annual sustaining capital allowance of 1.5% of the direct installed capital cost for the Project was included in the operating cost. Western Australia has a 5% royalty on total revenue for spodumene concentrates. When incorporating these costs, an AISC of US\$853/t SC5.5 (FOB, Esperance) was calculated for the Manna Lithium Project. This increases to US\$885/t SC5.5 (CIF, China) for delivery to mainland China, inclusive of sea freight, customs and import duties.

Table 3 provides a breakdown of the operating cost for the Manna Lithium Project.

Table 3: LOM average operating cost for the Manna Lithium Project

Operating Item	LOM Average		
	A\$ 000's pa	A\$/t SC5.5	US\$/t SC5.5
Mining	127,355	575.3	402.7
Processing			0
- Labour	24,885	112.4	78.7
- Power	14,479	65.4	45.8
- Diesel	472	2.1	1.5
- Reagent	9,565	43.2	30.2
- Maintenance & Consumables	13,128	59.3	41.5
- Tailings	3,731	16.8	11.8
Product Logistics	16,122	72.8	51.0
General & Administration	8,018	36.2	25.3
Cash Cost (FOB, Esperance)	217,755	983.6	688.5
Sustaining Capital	3,751	16.9	11.9
WA Royalties	48,324	218.3	152.8
AISC (FOB, Esperance)	269,829	1,218.8	853.2
AISC (CIF, China)	279,791	1,263.8	884.7

Capital Estimate

Minsol has completed sufficient engineering to develop a capital cost estimate for the Manna Lithium Project with an accuracy of +/-30% (Class 5) and a basis date of Q1 CY23. No provision has been included for capital escalation between the release of this Scoping Study announcement and an anticipated final investment decision in second half of 2024. The estimated capital cost for the Manna Project is \$419.4M, including a contingency amount of A\$69.3M (or approximately 20% of total project costs). An additional \$17.4M of capitalised pre-production mining costs is included in the project financial model.

Capital estimate has been developed using preliminary MTOs and unit pricing obtained from either contractor or vendor supplied quotations. Approximately 70% of total equipment supply value (\$50M) for the Manna Lithium Project was based on budget quotes for the Project. Structural steel rates were based on direct quotes and quantities estimated on recent projects for other lithium concentrators. Concrete and earthworks are in-line with rates received from a recently completed project in Kalgoorlie. Factored amounts have been calculated from the direct installed capital cost for construction indirects and engineering, procurement and construction management (EPCM) components.

Owner's costs have been included in the capital estimate for the following:

- Owner's project management team
- Pre-mobilisation construction
- Insurances
- Approvals
- Computing systems (business services systems)
- Recruitment costs for operational team
- Salaries for operational team during commissioning and handover period, and
- Home office costs

Contingency allowance of A\$69.3M has been estimated to cover costs associated with unexpected items during construction that are not covered by the EPCM contract. These may include such items as scope changes, changes to equipment or material specification changes, construction delays, price escalation etc. Minsol determined the contingency amount based on level of engineering complete, estimating accuracy and installation risk for each line within the capital estimate.

Table 4: Capital cost estimate for the Manna Lithium Project

Capital Item	Capital Cost (A\$M)
Crushing Plant	37.9
Processing Plant	200.2
Non-Process Infrastructure	61.3
Direct Capital Cost	299.4
Indirects (EPCM & Construction Facilities)	36.0
Owner's Costs	14.7
Contingency	69.3
Total Capital Cost	419.4

Lithium Market

Global Lithium has utilised the services of Fastmarkets, a leading independent lithium industry consultancy expert to provide a basis for the long-term price forecast for the Manna Scoping Study. Fastmarkets is a cross-commodity price reporting agency (PRA) in the metals and mining, new generation energy, agriculture and forest products markets.

The spodumene concentrate specification as proposed to be produced at Manna Project has been derived following considered consultation with a range of international spodumene concentrate end users who specifically use the material in BEV batteries. GL1 has entered into a 10-year strategic offtake with Suzhou TA&A for 30% of annual concentrate product with market price. Discussions with potential customers regarding uncontracted offtake agreements are ongoing. Strong interest from key players throughout the EV value chain is ongoing.

Demand

Total global demand for lithium increased by a CAGR of 20% between 2016 and 2021, to 485,000t LCE from 196,000t LCE respectively. This growth has been mostly driven by the high demand of lithium-ion batteries used in electric vehicles (EVs), which increased at a CAGR of 51% in the same period. EV demand increased to 280,000t from 35,000t between 2016 and 2021 respectively, superseding traditional industrial applications (glass, ceramics and pharmaceuticals) as the largest demand segment in 2020.

Battery electric vehicles (BEV) sales are forecast to increase at a CAGR of 24%, to 50 million units in 2032 up from 4.6 million units in 2021. This will result in a 10-fold increase (CAGR 24%) in lithium demand to 2.1Mt of LCE from 197,000t LCE in 2021 (refer to Figure 13). While the world is positioning towards decarbonisation, the energy storage systems (ESS) demand will grow together with the rollout of various renewable energy applications.

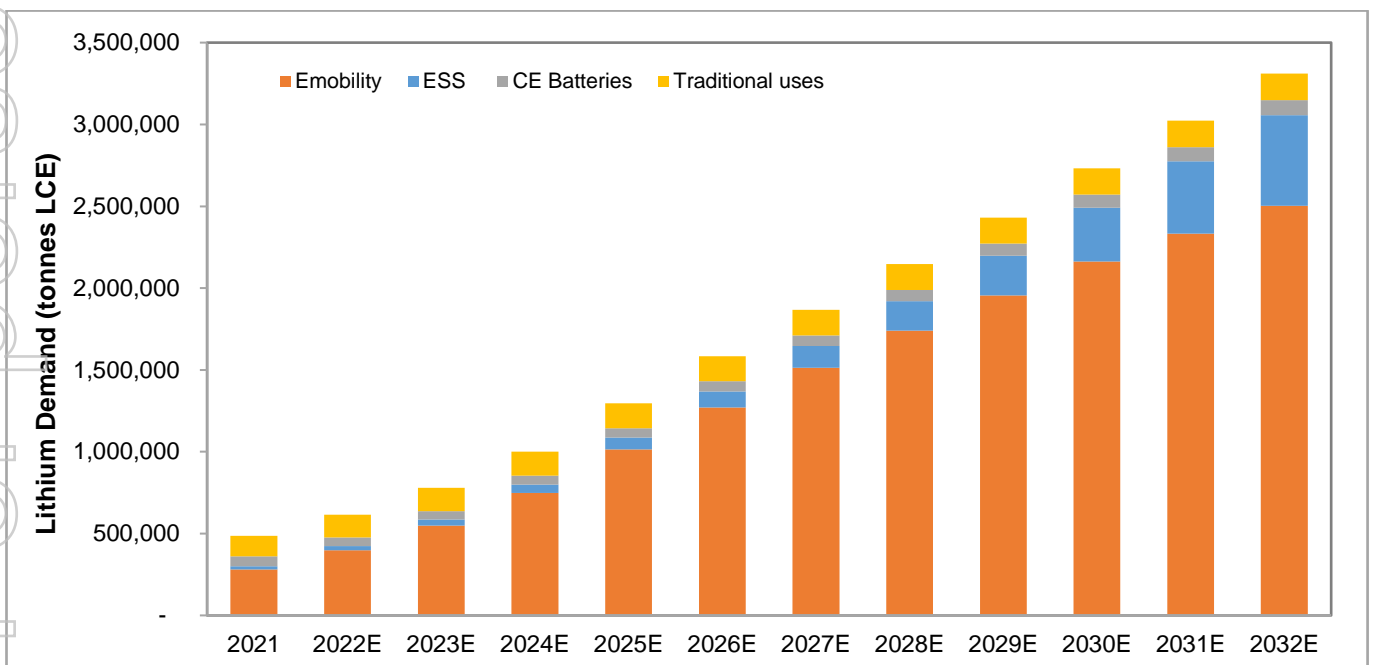


Figure 13: Global lithium demand (non-adjusted)

Total global lithium demand is forecast to double every three to four years during the current decade to reach 1,475kt LCE in 2025 and 3,035kt LCE in 2030. Figure 14 shows a comparison in end use for lithium in 2022 and 2032. The graph shows e-mobility market sector will continue to grow strongly over the coming decade.

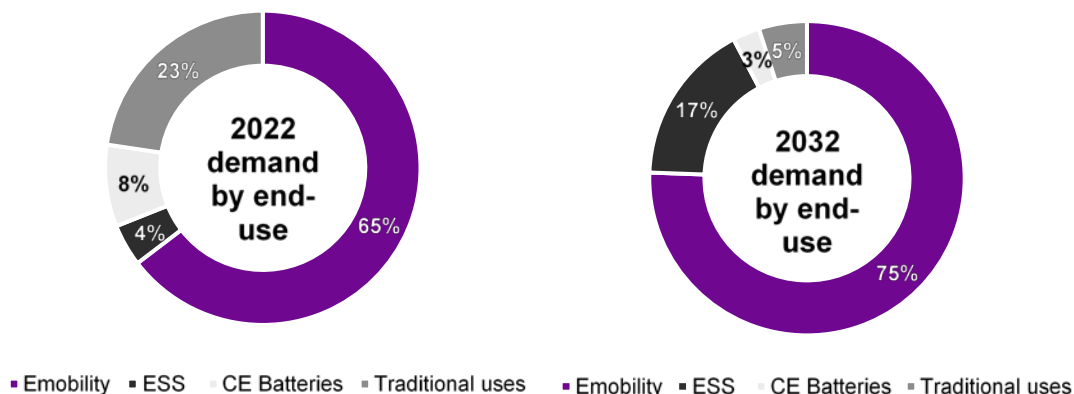


Figure 14: Demand by end use for lithium in 2022 versus 2032

Supply

Lithium is sourced predominantly from brine and hard-rock mineral deposits. Mineral concentrates are the largest source of lithium and spodumene is the most important commercially mined lithium mineral given its higher inherent lithia content. In 2022, spodumene mineral concentrates accounted for 48% of total global lithium production. Supply of lithium will become increasingly diverse but spodumene concentrates will continue to dominate the mineral concentrate output accounting for 84% to 90% during the forecast period. Production from Australia accounted for 43% of total global lithium extraction in 2022.

Total global lithium supply is expected to reach 1,444kt LCE and 3,084kt LCE by 2025 and 2030 respectively. However, with regulatory frameworks and increasingly stringent ESG requirements, new lithium project timelines are likely to be extended and this is anticipated to bring long-term pressure on supply.

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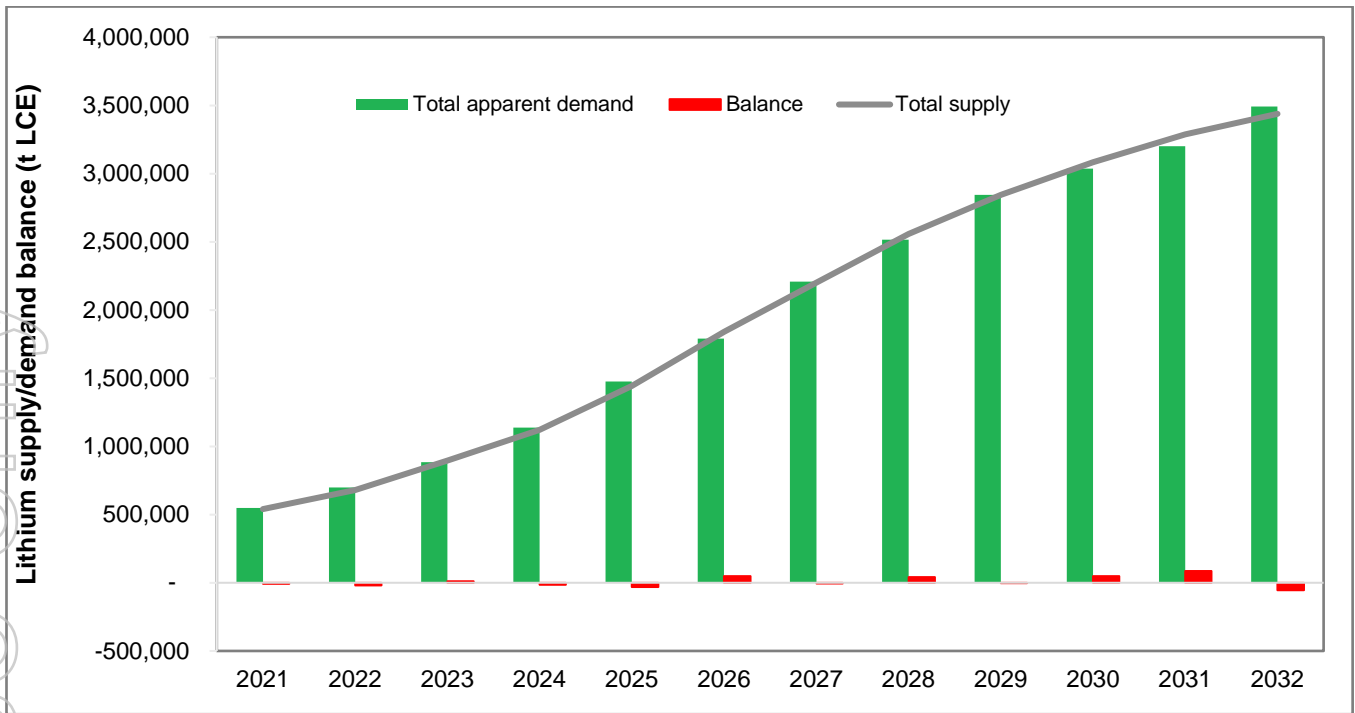


Figure 15: Global lithium supply and demand balance from 2021 to 2032

Lithium Price

Fastmarkets has provided annual forecast pricing through to 2032 for 6% spodumene concentrate (SC6.0) as shown in Figure 16. The Manna Scoping Study is based on a long-term weighted average forecast price assumption from 2026-2032 for SC5.5 (CIF, China) of US\$2500/t. The period has been selected to align with anticipated first production in 2026. Assumptions include a pro-rata grade adjustment for 5.5% Li₂O grade.

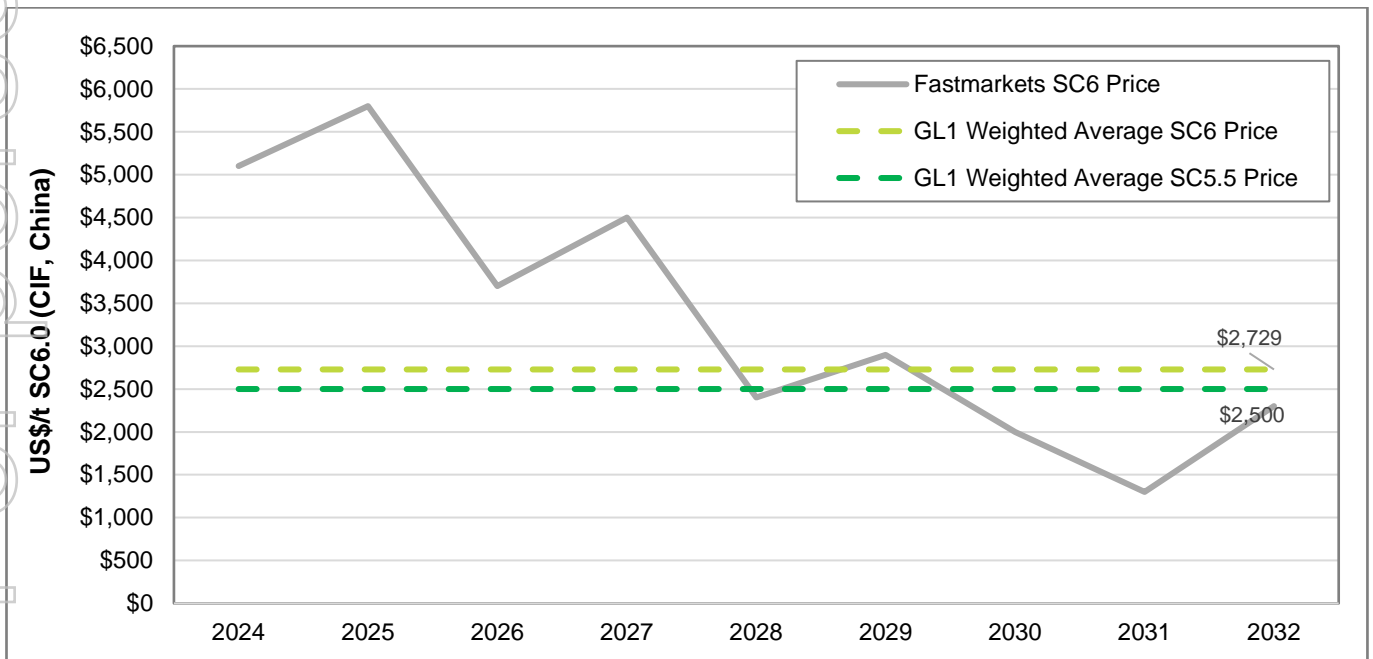


Figure 16: Fastmarkets long-term spodumene concentrate (SC6.0) price forecast to 2032

Financial Analysis

All results are inclusive of a 5% Western Australian Mining Royalty. Results are on a pre-tax basis in A\$, unless stated otherwise. Financial modelling is inclusive of all capital items including mining pre-strip, process plant, project infrastructure and LOM sustaining capital.

Global Lithium provided a project financial model, which was independently verified by Minsol to ensure the functionality and accuracy of the model was correct.

Table 5 shows the variance in NPV, IRR and project payback based on the forecast long-term average lithium concentrate (SC5.5 equivalent) price from 2026 to 2032. The Project NPV_{8%} is A\$2.8B at an assumed long-term contract price of US\$2,500/t SC5.5 lithium concentrate, with an IRR of 103% and project payback period of 15 months following commencement of production.

The all-in capital breakeven lithium concentrate (SC5.5) price for the Project is US\$992/t using a discount rate of 8%. The Project generates on average A\$520M free cash flow per annum (EBITDA) after royalties.

The Scoping Study has assumed no by-product revenue from the tantalum within the Mineral Resource.

Table 5: Financial evaluation of the Manna Lithium Project

Financial Metrics	Unit	Value
Life of Mine (LOM)	Years	10
Mine Pre-Strip Development Capital	A\$M	17.4
Plant & Infrastructure Capital	A\$M	419
Total Capital	A\$M	435
Exchange Rate	AUD:USD	0.70
Operating Cash Cost US\$/t, LOM Average (FOB, Esperance) ¹	US\$/t SC5.5	688
AISC US\$/t LOM Average (CIF, China) ²	US\$/t SC5.5	885
WA Mining Royalty (as of February 2023)	%	5.0
Long Term Lithium Price Assumption (SC5.5, CIF China)	US\$/t SC5.5	2,500
Project NPV_{8%} (inclusive of Royalties, pre-tax)	A\$ Billion	2.8
Project IRR (%) (inclusive of Royalties, pre-tax)	%	103
Payback from start of production	months	15

3. Cash operating costs include all mining, processing, transport, freight to port, port costs and site administration. Excludes sustaining capital and WA Royalties.

4. All-in Sustain Costs (AISC) includes all mining, processing, site administration, transport, freight to port, port costs, shipping to Zhenjiang (China), customs and import duties, sustaining capital and WA Royalty on sale receipts.

Figure 17 shows the impact of capital and process costs, production, foreign exchange rate and lithium price on the project economics. Lithium concentrate price and AUD:USD foreign exchange rate has the greatest impact on the project economics with every US\$1,000/t (SC5.5) in lithium concentrate increase the NPV_{8%} increasing by A\$1.8B, and AUD:USD exchange rate increasing from 0.70 to 0.75 resulted in a A\$0.3B reduction in NPV_{8%}. A 20% increase in the total project capital to \$522M, only reduces the project NPV_{8%} from A\$2.8B to A\$2.7B and payback period increases slightly to 18 months from first production.

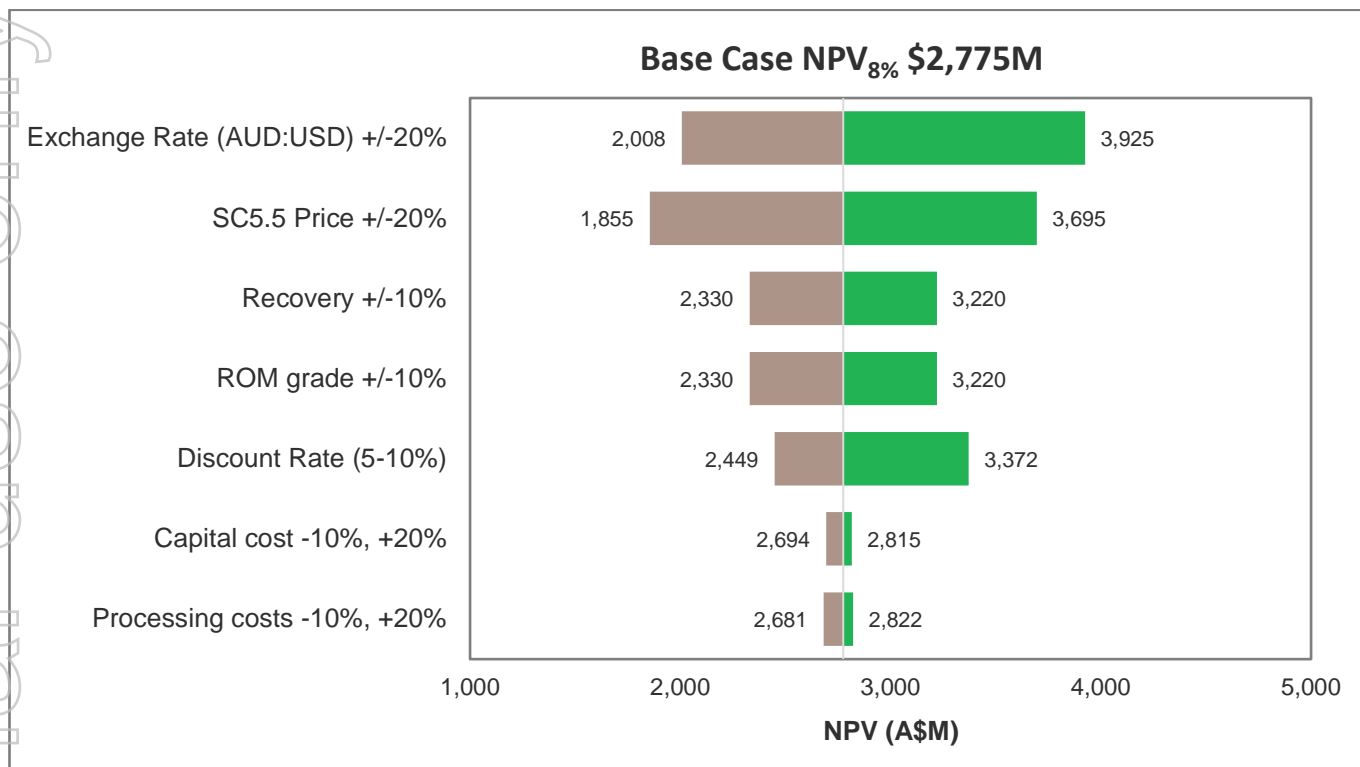


Figure 17: Tornado plot showing sensitivity of the Project to a range of variables

Project Funding

Financing for the Manna Lithium Project has not yet been secured, however based on the positive NPV and on receipt of all requisite approvals, there is reasonable basis to assume that the necessary funding for the Project is achievable.

Global Lithium will consider a range of funding sources including a combination of debt, equity and prepaid offtake, with the objective of securing the most cost competitive and value maximising option for the Company and our Shareholders.

Given the scale of the operation, the Project is expected to generate substantial free cash flow per year to service debt, which will enhance the debt capacity of the Project. As a result, a greater percentage of debt funding may be achievable when compared to other commodities for a similar sized project.

Global Lithium may consider a range of debt options, including Export Credit Agency (ECA) covered debt finance and senior-secured project debt finance.

Global Lithium has commenced early discussions with several international companies with respect to potentially securing offtake for the Project. The Company will preferentially engage with offtake counterparties and financial institutions that have capacity to contribute funding to the Project which may include: conventional equity at the corporate and/or project level; convertible notes or bond; debt financing in the form of either conventional project debt financing, prepayment for product or royalties; or a combination of the above.

Global Lithium's current market capitalisation is approximately \$537M (as at 13 February 2023). The Company remains confident that its market capitalisation will increase as it continues to de-risk, secure offtake, debt financing and execute the development of the Manna Lithium Project.

Given the above, the Company has concluded that it has a reasonable basis to expect that the upfront project capital cost could be funded following the completion of a positive Bankable Feasibility Study and obtaining the necessary project approvals.

Project Development

The Scoping Study has demonstrated that the Manna Lithium Project has no critical technical flaws, and the DFS is anticipated to commence in March 2023 on awarding the lead engineering tender. Predicated on a potentially positive DFS outcome, an investment decision to develop the Manna Lithium Project is expected to occur in CY2024.

A further Mineral Resource update incorporating an additional ~35,000m of drilling at Manna is expected to be announced in CY23. This Mineral Resource update will form the basis of the DFS. Final infill drilling and mine life extension drilling will be completed by the end of 2023. Results from this campaign will be incorporated during detailed mine planning during Front-End Engineering and Design (FEED). Groundwater exploration will be conducted in parallel to exploration drilling in 2023, for a low saline borefield to provide sufficient quality and quantity of water for the entire mine life.

Overburden removal is a key cost driver and future ore sorting trials will be a key area of focus for the DFS. There are two main waste rock types, a coarse grain dark grey magnetic mafic and a fine grain dark grey/green basalt (see Figure 18). It is expected that ore sorting will have a high probability of success to reduce waste to the plant and reduce overall iron contamination.

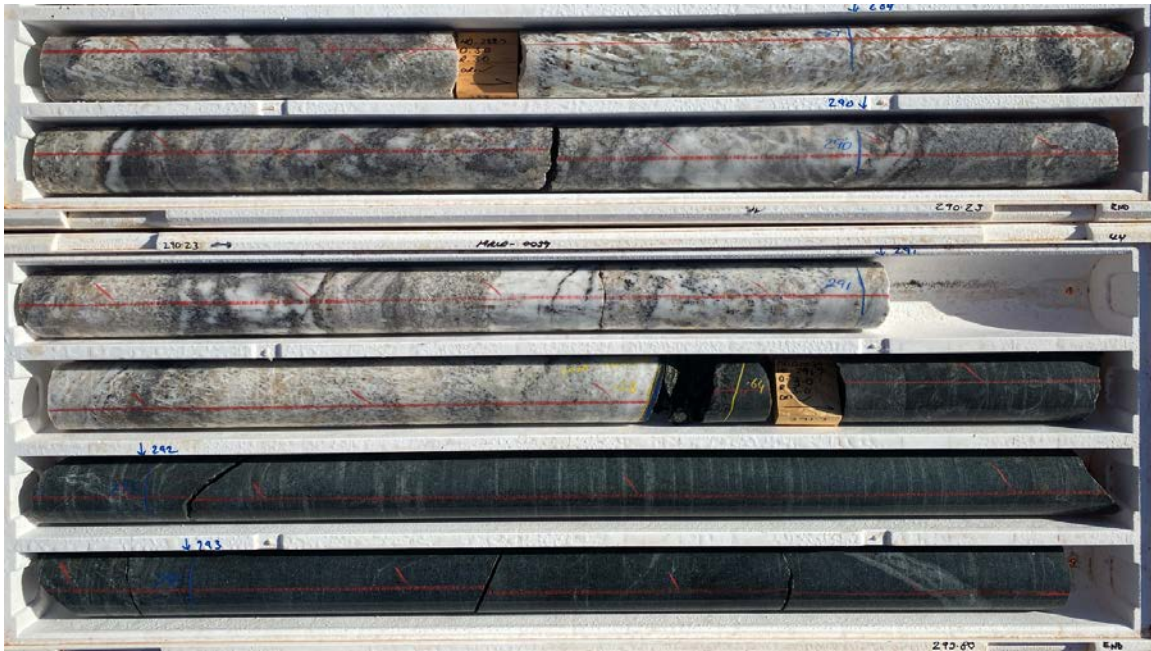


Figure 18: Typical example of contact between waste rock (black) and mineralised spodumene (white)

Bulk metallurgical diamond drilling was completed in CY22 and testwork is underway, as announced earlier this year (refer to ASX announcement 25 January 2023). This workstream will allow flowsheet optimisation and vendor testing of preferred equipment for the process plant. Ore variability testwork will also be conducted this year to confirm impact of the mine schedule on process recovery and product quality over the life of the Project.

Environmental approvals and securing the Mining Lease for the Project are on critical path. The Company anticipates it will be able to lodge relevant Works Approvals for the project in the first half of CY2024.

A high-level project schedule is provided in Figure 19.

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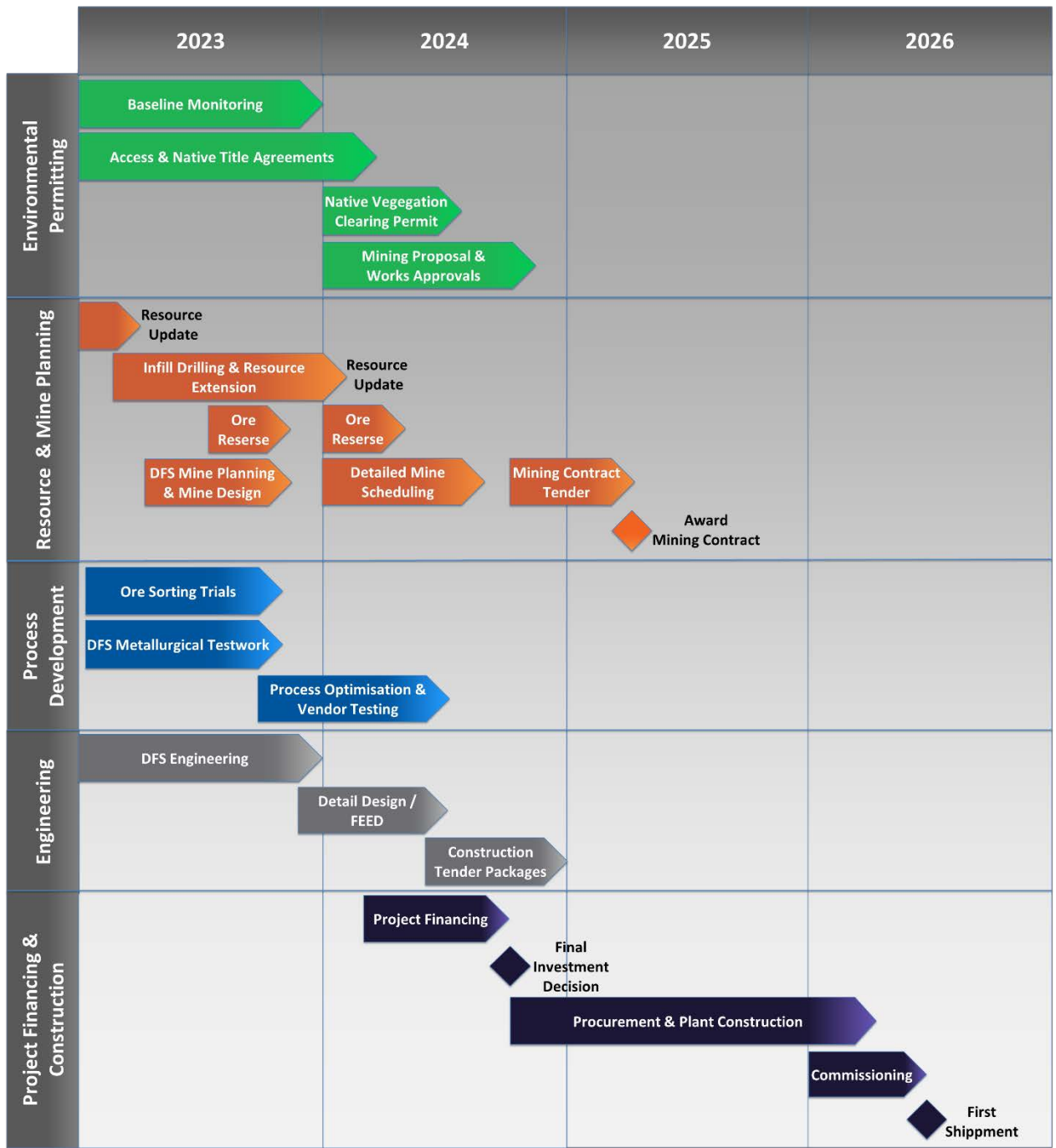


Figure 19: Project Development Schedule

Compliance Statements:

The Manna Lithium mineral resource estimate referred to in this announcement was first released to ASX on 15 December 2022. The Company confirms that it is not aware of any new information or data that materially affects the information in the original market announcements, and that the form and context in which the Competent Persons findings are presented have not been materially modified from the original market announcement.

Competent Persons Statement:

The information in this report which relates to the mineral resources underpinning the production target for the Manna deposit was prepared by Resolve Mining Solutions and reviewed by Mr Andrew Hutson, a full-time employee of Resolve Mining Solutions. Mr Hutson is a Fellow of the Australasian Institute of Mining and Metallurgy and has sufficient experience relevant to the style of mineralisation, the 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 Hutson consents to the inclusion of the information in the release in the form and context in which they appear.

The information in this release that relates to metallurgy and plant design has been reviewed by Mr Robert Simmons, MAusIMM, B. Eng. (Chemical Engineering). Mr Simmons is not an employee of the company, he is employed as a contract consultant. Mr Simmons is a Member of the Australasian Institute of Mining and Metallurgy, he has sufficient experience with the style of processing response and type of deposit under consideration, and to the activities undertaken, to qualify as a competent person as defined in the 2012 edition of the "Australian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves" (The JORC Code). Mr Simmons consents to the inclusion in this report of the contained technical information in the form and context as it appears.

Forward Looking and Cautionary Statements:

Some statements in this report regarding estimates or future events are forward-looking statements. They include indications of and guidance on, future earnings, cash flow, costs and financial performance. Forward-looking statements include, but are not limited to, statements preceded by words such as "planned", "expected", "projected", "estimated", "may", "scheduled", "intends", "anticipates", "believes", "potential", "could", "nominal", "conceptual" and similar expressions. Forward-looking statements, opinions and estimates included in this announcement are based on assumptions and contingencies which are subject to change without notice, as are statements about market and industry trends, which are based on interpretations of current market conditions. Forward-looking statements are provided as a general guide only and should not be relied on as a guarantee of future performance. Forward-looking statements may be affected by a range of variables that could cause actual results to differ from estimated results, and may cause the Company's actual performance and financial results in future periods to materially differ from any projections of future performance or results expressed or implied by such forward-looking statements. These risks and uncertainties include but are not limited to liabilities inherent in mine development and production, geological, mining and processing technical problems, the inability to obtain mine licences, permits and other regulatory approvals required in connection with mining and processing operations, competition for among other things, capital, acquisitions of reserves, undeveloped lands and skilled personnel; incorrect assessments of the value of acquisitions, changes in commodity prices and exchange rates; currency and interest rate fluctuations; various events which could disrupt operations and/or the transportation of mineral products, including labour stoppages and severe weather conditions; the demand for and availability of transportation services; the ability to secure adequate financing and management's ability to anticipate and manage the foregoing factors and risks. There can be no assurance that forward-looking statements will prove to be correct.

Statements regarding plans with respect to the Company's mineral properties may contain forward-looking statements. Statements in relation to future matters can only be made where the Company has a reasonable basis for making those statements

About Global Lithium

Global Lithium Resources Limited (ASX:GL1, Global Lithium) is a diversified lithium company with multiple assets in key lithium branded jurisdictions with a primary focus on the 100%-owned Marble Bar Lithium Project (MBLP) in the Pilbara region and the Manna Lithium Project in the Goldfields, Western Australia.

Global Lithium has now defined a total Inferred and Indicated Mineral Resource of 50.7Mt @ 1.0% Li₂O at its MBLP and Manna Lithium projects, confirming Global Lithium as a significant global lithium player aiming to fast track into development.

Global Lithium's major shareholders include Suzhou TA&A Ultra Clean Technology Co. Limited (Suzhou TA&A), a controlling shareholder of Yibin Tianyi Lithium, a joint venture between Suzhou TA&A (SZSE: 300390) (75%) and CATL (SZSE: 300750) (25%), the world's largest EV battery producer, and ASX listed Mineral Resources Limited (ASX: MIN).

Directors

Warrick Hazeldine	Non-Executive Chair
Ron Mitchell	Managing Director
Dr Dianmin Chen	Non-Executive Director
Greg Lilleyman	Non-Executive Director
Hayley Lawrance	Non-Executive Director

Global Lithium – Mineral Resources

Project Name	Category	Million Tonnes (Mt)	Li ₂ O%	Ta ₂ O ₅ ppm
Marble Bar	Indicated	3.8	0.97	53
	Inferred	14.2	1.01	50
	Subtotal	18.0	1.00	51
Manna	Indicated	18.5	1.03	45
	Inferred	14.2	0.97	43
	Subtotal	32.7	1.00	44
Combined Total		50.7	1.00	46

Competent Persons Statement:

Mineral Resources

Information on historical exploration results and Mineral Resources for the Manna Lithium Project and the Marble Bar Lithium Project presented in this announcement, together with JORC Table 1 information, is contained in an ASX announcement released on 15 December 2022.

Where the Company refers to Mineral Resources in this announcement (referencing previous releases made to the ASX), it confirms that it is not aware of any new information or data that materially affects the information included in that announcement and all material assumptions and technical parameters underpinning the Mineral Resource estimate in that announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Persons findings are presented have not materially changed from the original announcement.

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