

18 January 2024

## MANNA LITHIUM PROJECT OPERATIONAL UPDATE

*GL1 on track to achieve major milestones in CY24 including  
Manna Definitive Feasibility Study*

### Key Highlights

- GL1 continues to make significant progress towards completion of the Manna Lithium Project Definitive Feasibility Study (DFS) in H1 CY24
- The Manna DFS remains on schedule and will incorporate an updated MRE, detailed mine schedule, metallurgical and process flowsheet test work results and detailed operating and capital costs, amongst other key work streams
- A significant number of assays remain pending from the 60,000m drilling program completed at Manna in CY23 with remaining assay results expected in Q1 CY24
- An updated Mineral Resource Estimate (**MRE**) for Manna is progressing and will, incorporate the results from the CY23 drill program
- Planning for the CY24 exploration program is nearing finalisation with significant upside remaining with new lithium targets identified which will be tested in CY24
- Additional advanced metallurgical test work is nearing completion, with this work focused on delivering a further increase in lithium recoveries
- Key approvals including Environmental and Native Title negotiations are well advanced, with the mining lease expected to be granted once the Native Title Mining Agreement is finalised
- Offtake agreement discussions with global tier one counterparties continue as part of the financing strategy for development of Manna Lithium Project

Established multi-asset West Australian lithium company Global Lithium Resources Limited (**ASX: GL1**, “**Global Lithium**” or “the **Company**”) is pleased to advise of significant progress being made towards the completion of the Manna DFS in H1 CY24, at its **100% owned Manna Lithium Project**, 100km east of Kalgoorlie in Western Australia.

Global Lithium is well funded and committed to delivering these milestones in CY24, including releasing the results of the Manna Definitive Feasibility Study (**DFS**).

## **Global Lithium Managing Director, Ron Mitchell commented,**

*“GL1 is in a strong position and is on track to reach several major project milestones in 2024. This quarter, we will announce the remainder of the drilling results from the ~60,000m CY23 drilling program at the Manna Lithium Project, paving the way for an update to the Mineral Resource Estimate and mine schedule. Coupled with our ongoing metallurgical studies, these updates will form integral parts of the DFS which we plan to announce the results of during H1 CY24. From an approvals viewpoint the Company has put a tremendous effort in advancing key approvals on multiple fronts, and we anticipate execution and receipt of these key approvals and agreements in H1 CY24.*

*“We have recently seen several new and existing individual and institutional shareholders take advantage of an opportunity to establish and or increase their holdings within the company. The Company welcomes the strong and ongoing support shown by these shareholders and the opportunity that GL1 represents as the Company works towards achieving its major milestone of completing the Manna DFS.*

*GL1 is well funded and has a clear strategy in place in relation to the continued development of the Manna Lithium Project which we anticipate can withstand the current lithium market conditions and related near term headwinds. The Board of GL1 expects the positive advances we have made at Manna will allow the Company to benefit from improved market conditions going forward. We are excited by the opportunities ahead for the Company in 2024 and look forward to keeping shareholders well informed of our progress.”*

## **Definitive Feasibility Study**

### Resource Update

GL1 is set to release the results of the DFS for the Manna Lithium Project in H1 CY24. The DFS will incorporate an updated Mineral Resource that is planned for release in Q2 CY24. The pending MRE will include all the results from the recently completed CY23 drill program. The updated MRE will support further detailed mine scheduling to be undertaken as part of the Manna DFS and provide confidence in the underlying Resource.

### Process Design

DFS metallurgy and process design work continues to be based on a flotation flowsheet that incorporates ore sorting (as previously announced by Global Lithium, refer ASX release 21 September 2023). Ore sorting is anticipated to increase the lithia (Li<sub>2</sub>O) head grade to the process plant by rejecting waste material entering the process plant and thereby reduce processing costs. This increase in plant head grade is also expected to increase the concentrate production capacity of the main Manna Processing Plant.

### Mine Planning

The Company continues to develop and optimise open pit mine designs and schedules, in addition recent work is assessing several underground mining scenarios.

The underground mining study is reviewing several design and cost options against the DFS open pit designs and the current Mineral Resource model. Several high-level scenarios are being assessed, including but not limited to;

- Standalone underground operation after completion of the open pit
- Underground mining in parallel to open pit mining
- Smaller open pit mining followed by an earlier transition to underground

The underground mine study is being completed in parallel to the Manna DFS and will be incorporated into the broader DFS study.

## Exploration

During CY23 the company completed a 60,000m RC and diamond drilling program, encouragingly positive assay results continue to be received. This is the second year of successful exploration at the Manna project. The Company has now drilled 420 holes at Manna and is developing an advanced understanding of the composition of the ore body.

Highlights from released results from the drilling programs at Manna include:

- **26m @ 1.53% Li<sub>2</sub>O from 249m in MRC0290<sup>1</sup>**
- **24m @ 1.03% Li<sub>2</sub>O from 161m in MRC0048<sup>2</sup>**
- **22m @ 1.03% Li<sub>2</sub>O from 461m in MRC0252<sup>1</sup>**
- **19m @ 1.20% Li<sub>2</sub>O from 263m in MRC0192<sup>3</sup>**
- **18m @ 1.09% Li<sub>2</sub>O from 152m in MRC0063<sup>4</sup>**
- **17m @ 1.80% Li<sub>2</sub>O from 36m in BMRC0009<sup>5</sup>**
- **17m @ 1.76% Li<sub>2</sub>O from 341m in MRC0232<sup>3</sup>**
- **17m @ 1.60% Li<sub>2</sub>O from 114m in MRC0126<sup>6</sup>**
- **17m @ 1.54% Li<sub>2</sub>O from 38m in BMRC0022<sup>5</sup>**
- **16m @ 1.58% Li<sub>2</sub>O from 176m in MRC0379<sup>7</sup>**

The remaining assay results from the 60,000m CY23 drill program are expected during Q1 2024 and will be incorporated into the pending updated MRE for Manna. The updated MRE is planned for completion in Q2 CY24 and will then be incorporated into the Manna DFS.

The 2023 exploration program drilled 221 holes for ~60,000m with ~25,000 samples being sent for analysis. Currently, 47 holes comprising ~6,500 sample assay results are still outstanding.

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<sup>1</sup> ASX announcement 19<sup>th</sup> December 2023. HIGH-GRADE DRILLING RESULTS CONTINUE AT MANNA

<sup>2</sup> ASX announcement 10<sup>th</sup> August 2022. EXCEPTIONAL MANNA DRILLING RESULTS

<sup>3</sup> ASX announcement 10<sup>th</sup> March 2023. MANNA DELIVERS INCREASED EXPLORATION UPSIDE

<sup>4</sup> ASX announcement 15<sup>th</sup> November 2022. MANNA LITHIUM PROJECT UPDATE

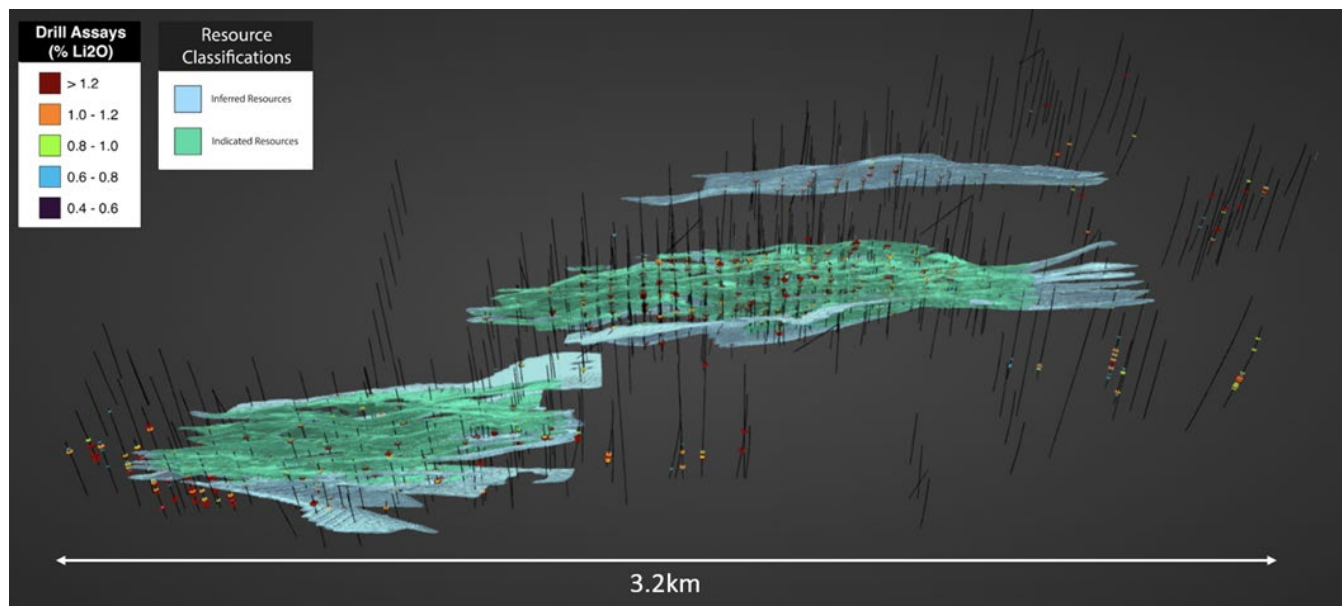
<sup>5</sup> ASX announcement 23<sup>rd</sup> December 2021. GLOBAL LITHIUM ACQUIRES 80% INTEREST IN MANNA LITHIUM PROJECT

<sup>6</sup> ASX announcement 31<sup>st</sup> January 2023. POSITIVE DRILLING RESULTS AT MANNA

<sup>7</sup> ASX announcement 26<sup>th</sup> October 2023. MANNA DRILLING DELIVERS FURTHER HIGH-GRADE RESULTS

The Manna Lithium Project is a spodumene dominant ore body and currently hosts a Mineral Resource of **36.0Mt @ 1.13% Li<sub>2</sub>O<sup>8</sup>**.

Planning for GL1's CY24 exploration program at the Manna Lithium Project is nearing completion. The CY24 exploration program will include a major drilling program which will focus on testing mineralisation along strike of the existing resources and several new standalone lithium targets already identified at the Project.



**Figure 1.** View of the sheeted Manna pegmatite system, looking down dip to the southeast, with pegmatite wireframes from the July 2023 MRE update, drill traces and received Li<sub>2</sub>O assay results. Results for 47 drillholes are still outstanding.

## Metallurgical Test work

Manna metallurgical test work is now focused on optimising the DFS process flowsheet with particular emphasis on ore sorting and whole-of-ore flotation (WOF). GL1 expects this program will provide further boost to lithium recoveries, building on the successful test work program completed in CY23.

Metallurgical test work is being performed at the Nagrom Laboratory located in Perth, Western Australia. Nagrom is recognised as a leading lithium industry metallurgical laboratory in mineral beneficiation. The metallurgical program is being completed on composite samples generated from approximately 12 metric tonnes of diamond core obtained from multiple drilling programs completed at Manna between early-2022 and early-2023.

Flowsheet optimisation test work presently underway has a primary focus on lithia recovery. Lithium recovery enhancement concepts currently being investigated include:

8

ASX announcement 26<sup>th</sup> July 2023. Manna Lithium Project Resource Grows

- Coarse ore magnetic separation (cobbing) of -10mm crushed ore to remove magnetic susceptible waste that is not processed through the ore sorting plant
- Grind size optimisation to reduce lithia losses through slimes removal ahead of WOF
- Grind size optimisation and magnetic separation trade-off to ensure final spodumene concentrate product meets iron specification while maximising lithia recovery
- Flotation reagent optimisation, including reagent screening for cost effective WOF recovery

The metallurgical test work program is intended to conclude with an ore variability programme adopting ore sorting and WOF flowsheet. New samples with varying lithological, spatial and grade properties are currently being prepared; each sample is proposed to be tested at the optimised conditions.

All vendor and engineering test work to support the DFS for equipment selection and sizing is now complete.

## Approvals and Permitting

Environmental approvals and Native Title negotiations continue to be progressed and are nearing completion. In CY23, all fauna and flora surveys were completed across the Project area, including supporting infrastructure corridors. Preliminary results indicated no significant impacts to any priority flora and fauna species will result from the project. Final reports are expected to be received in Q1 CY24 and once received, the Company will submit approval applications under the Environmental Protection Act (1986) and the Mining Act 1978.

All heritage surveys were also completed across the mining lease application (M28/414) in CY23, with no heritage sites identified that impact the Project.

Global Lithium anticipates the Native Title Mining Agreement (**NTMA**) with the Kakarra Part B Native Title Group will be agreed to by both parties in Q1 CY24. Once a NTMA has been reached with Kakarra Part B, this will clear the pathway for the Mining Lease to be granted.

## Offtake Agreements and Financing

Discussions with potential offtake partners are progressing as part of the financing strategy for the Manna Lithium Project. The Company continues to have constructive engagement with a number of potential offtake counterparties who are seeking to secure supply of spodumene from the Manna Lithium Project and particular the tier one mining jurisdiction of Western Australia. The Company is engaged in discussions with potential partners to secure offtake agreements that include key elements of financial support that align with the proposed funding structure.

The recent determination of Foreign Entity of Concern “FEOC” under the US Inflation Reduction Act renews the focus on Western Australia spodumene as a key supplier of energy transition materials. This

has seen key industry players regularly visiting Perth and the Company seeking to secure offtake agreements that feed the emerging value chain for energy transition materials.

Approved by the board of Global Lithium Resources Limited.

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### About Global Lithium

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

Global Lithium has now defined a total Indicated and Inferred Mineral Resource of 54Mt @ 1.09% Li<sub>2</sub>O at its Manna and MBLP Lithium projects, confirming Global Lithium as a significant global lithium player.

### Directors

Geoff Jones	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 – Resource Statement

Project Name	Category	Million Tonnes (Mt)	Li <sub>2</sub> O%	Ta <sub>2</sub> O <sub>5</sub> ppm
<b>Marble Bar</b>	<i>Indicated</i>	3.8	0.97	53
	<i>Inferred</i>	14.2	1.01	50
	<b>Subtotal</b>	<b>18.0</b>	<b>1.00</b>	<b>51</b>
<b>Manna</b>	<i>Indicated</i>	20.2	1.12	56
	<i>Inferred</i>	15.8	1.14	52
	<b>Subtotal</b>	<b>36.0</b>	<b>1.13</b>	<b>54</b>
<b>Combined Total</b>		<b>54.0</b>	<b>1.09</b>	<b>53</b>

### Competent Persons Statement:

#### Mineral Resources

Information on historical exploration results and Mineral Resources for the Manna Lithium Project presented in this announcement, together with JORC Table 1 information, is contained in an ASX announcement released on 26 July 2023.

Information on historical exploration results and Mineral Resources for the Marble Bar Lithium Project presented in this announcement is contained in an ASX announcement released 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 relevant market announcements, and that the form and context in which the Competent Persons findings are presented have not been materially modified from the original announcements.

Where the Company refers to Mineral Resources for the Manna Lithium Project (MLP) and the Marble Bar Lithium Project 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.