

## QUARTERLY ACTIVITIES REPORT

- Jindalee commences a Pre-Feasibility Study (PFS) on the globally significant McDermitt Lithium Project
- Leading global EPCM company Fluor Corporation appointed as lead engineer for PFS
- Selection of samples for metallurgical testwork to support PFS completed
- Positive industry developments and government support continue to bolster the outlook for the lithium sector
- Jindalee held \$8.3M in cash and securities at 30 June 2023

### US LITHIUM

#### McDermitt Lithium Project (Jindalee 100%)

In late February 2023, Jindalee Resources Limited (**Jindalee** or the **Company**) announced an updated Mineral Resource Estimate (**MRE**) at the McDermitt Lithium Project (US) following a 21 hole drilling program completed in October 2022 (Figure 1)<sup>1</sup>.

The 2023 MRE for McDermitt contains a combined Indicated and Inferred Mineral Resource Inventory of 3.0 Billion tonnes at 1,340ppm Li for a total of 21.5 Million tonnes LCE at 1,000 ppm cut-off grade. At 21.5 Mt LCE, McDermitt is the largest lithium deposit in the US by contained lithium in Mineral Resource, and a globally significant resource (Table 1).

Cut-off Grade (ppm Li)	Indicated Resource			Inferred Resource			Indicated and Inferred Resource		
	Tonnage (Mt)	Li Grade (ppm)	LCE (Mt)	Tonnage (Mt)	Li Grade (ppm)	LCE (Mt)	Tonnage (Mt)	Li Grade (ppm)	LCE (Mt)
1000	1,470	1,420	11.1	1,540	1,270	10.4	3,000	1340	21.5

Table 1 – Summary of 2023 McDermitt Mineral Resource Estimate<sup>1</sup> at the reporting cut-off of 1000ppm.

Note: totals may vary due to rounding

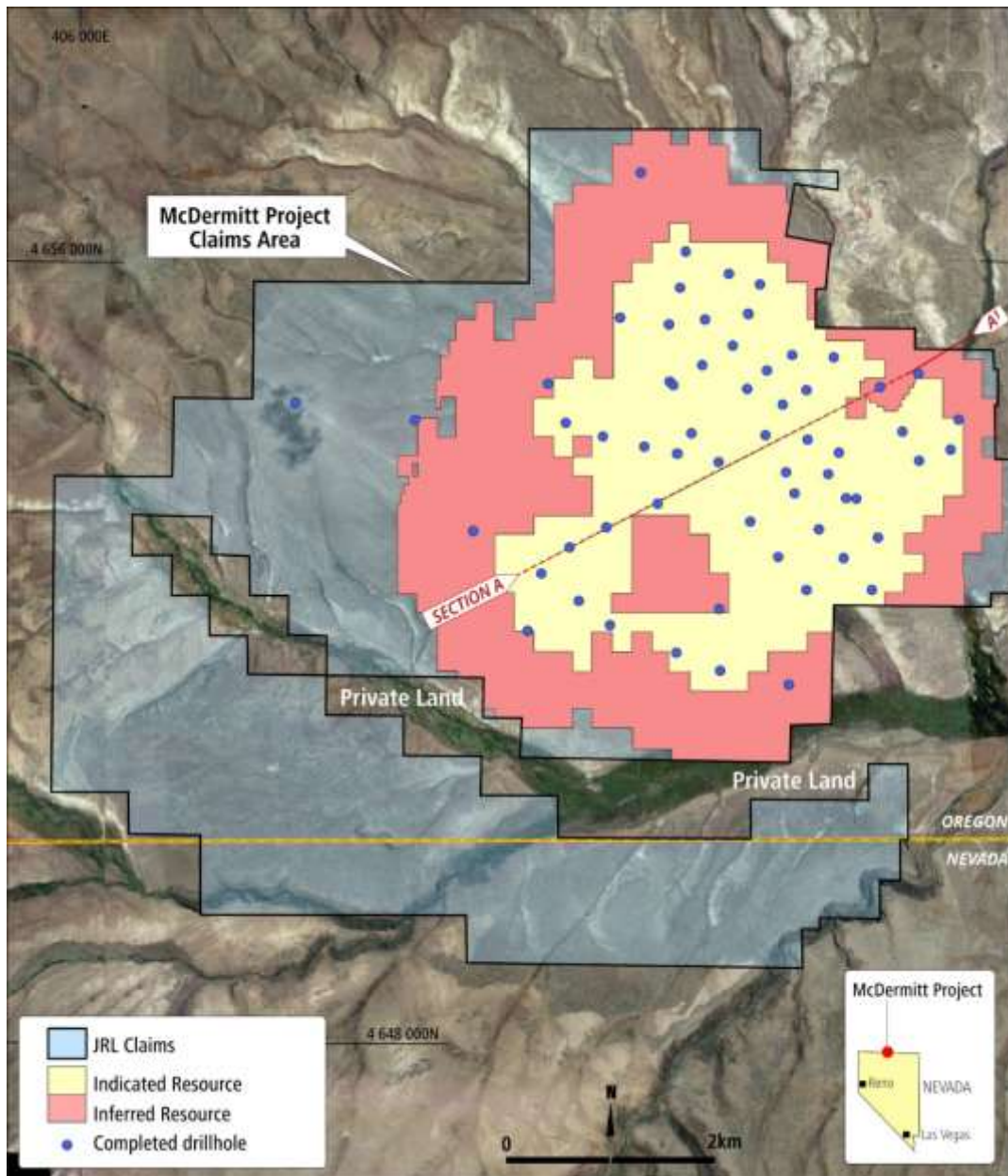


Figure 1 - Plan view of the McDermitt Lithium Project with drill collars and 2023 Mineral Resource<sup>1</sup> (at 1523mRL).

### Metallurgical Testwork - Jindalee

There are two potential pathways for the extraction of lithium from sedimentary deposits such as McDermitt: sulphuric acid leaching of both whole or beneficiated ore, and alkali salt (sulphation) roasting. Initial work completed by Jindalee focussed on beneficiation and sulphuric acid leaching, similar to the flowsheet proposed by the nearby Thacker Pass Project<sup>2</sup>, with alkali salt roasting also investigated as a potential alternative processing route through 2022.

Encouraging results were returned from both acid leaching and alkali salt roasting and in late 2022 Jindalee engaged global engineering, procurement, construction and maintenance (EPCM) company Fluor Corporation (NYSE: FLR) (**Fluor**) to undertake a review of the metallurgical testwork undertaken by Jindalee at McDermitt.

In March 2023 Jindalee announced that Fluor had determined that acid leaching with ore beneficiation (to upgrade the leach head grade) delivered the lowest operating costs and best financial outcome among the alternatives considered<sup>3</sup>. Fluor noted that the very large Mineral Resource at McDermitt (21.5 Mt LCE, Table 1)<sup>1</sup> allows flexibility in development, providing the opportunity to optimise mining and feed higher grade ore early in the mine life. Fluor also recommended that a comprehensive metallurgical testwork program be undertaken to provide information upon which the preferred flowsheet for the processing of McDermitt ore can be defined.

In June 2023 leading mine engineering group Cube Consulting generated conceptual pit shells using the McDermitt MRE geological model to assist with selection of samples for the metallurgical testwork program defined by Fluor. Sampling of drill holes from the Indicated portion within Pit Shell 5 (nominal 20 years) has been completed, with approximately 500kg of drill core despatched to the metallurgical facility late July 2023.

### **McDermitt Lithium Project Pre-Feasibility Study (PFS)**

On 7 June 2023 Jindalee announced that it had commenced a PFS on the McDermitt Lithium Project and had appointed Fluor as lead engineer<sup>4</sup>. Fluor has extensive experience with US sediment hosted lithium deposits and has assembled a team of highly credentialled metallurgists and engineers to work on the study. The Company is also pleased to advise that Michael Elias has been engaged as Jindalee's Study Manager for the PFS. Michael is an engineer with extensive experience managing studies for major projects, both in Australia and overseas.

Results from the metallurgical testwork referred to above will be integrated with recent detailed geological modelling, XRD sampling (400 samples) and lithological domaining of the deposit to provide an updated MRE for McDermitt, targeted for late 2023, ahead of more detailed studies informing the PFS.

The PFS represents the next logical step towards development of McDermitt and is expected to facilitate meaningful discussions with potential financiers (both public and private sector), off-takers and strategic partners.

### **Permitting**

Jindalee continues to de-risk the McDermitt Lithium Project on multiple fronts. In addition to ongoing geological, metallurgical and engineering studies the Company is building on environmental baseline and cultural surveys completed during 2022.

On 16 May 2023 Jindalee announced that it has been notified by the US Bureau of Land Management (**BLM**) that the Exploration Plan of Operations (**EPO**) for McDermitt, originally submitted August 2022 (with additional information provided early 2023), had been deemed complete<sup>5</sup>. Once approved, the EPO will allow Jindalee to significantly increase on-site activity, including infill drilling and bulk sampling.

Jindalee also announced that both the BLM and the Oregon Department of Geology and Mineral Industries (**DOGAMI**) have agreed to accept surety bonds to replace cash reclamation bonds currently lodged against the McDermitt Project<sup>5</sup>. Importantly, the use of surety bonds is expected to reduce the cash outlay for additional bonding which will be required once the EPO receives final approval.

The BLM has advised that the public comment period on the EPO will commence 31 July 2023, either separate from or as a part of the environmental review process required by the National Environmental Policy Act (**NEPA**), with the final decision of the NEPA assessment to be incorporated into the EPO. This process is expected to take up to 12 months.

## Industry Developments

Recent industry developments in the US lithium sector include the commencement of construction at Lithium Americas' (TSX:LAC) nearby Thacker Pass Project<sup>6</sup>, which is supported by a US\$650M equity investment and exclusive offtake by US car manufacturer General Motors Company (**GM**)<sup>7</sup>. Jindalee also notes the US Department of Energy (**DOE**) announcement of a conditional loan of up to US\$700M to support development of Loneer Limited's (ASX: INR) Rhyolite Ridge Lithium-Boron Project in Esmeralda County, Nevada<sup>8</sup>.

These developments have emboldened Jindalee's confidence that the development of McDermitt will play a key role in feeding the United States' rapidly growing demand for domestically produced lithium.

The Rhyolite Ridge project (1.3Mt LCE<sup>9</sup>) and the Thacker Pass project (19.0Mt LCE<sup>2</sup>), located 35km south of McDermitt, are the two most advanced sediment hosted lithium deposits in the US and are currently in the last stages of permitting.

These developments underline the US Government's commitment to securing domestic sources of critical materials for US battery supply chains and have positive implications for the potential funding and development of the McDermitt deposit (21.5Mt LCE)<sup>1</sup>.

This demand has been highlighted by the passage of the *US Inflation Reduction Act 2022 (IRA)*, which has allocated US\$369B in funding to reduce carbon emissions by 40% by 2030. Under the IRA at least 40% of an EV's battery materials must be sourced from the US (or a Free Trade Agreement partner) to qualify for an EV tax credit, rising to 80% by 2027. Furthermore, miners producing critical materials will be eligible for tax credits equivalent to 10% of production costs and US\$40B has been made available under the DOE's Innovative Technology Loan Guarantee to support projects that bolster a domestic supply of critical minerals.

Jindalee also notes the recent conclusion of the Australia-United States Climate, Critical Minerals and Clean Energy Transformation Compact<sup>10</sup>, which aims to establish climate and clean energy as a central pillar of the Australia-United States Alliance. Among the objectives of the Compact is the promotion of a responsible, sustainable and stable supply of critical minerals essential to the global energy transformation. While implementation of the Compact is at an early stage, its signing is considered by the Board to be positive for companies whose operations and interests span the two countries, such as Jindalee.

## INVESTMENTS

### Dynamic Metals

(Jindalee 25.5% of issued capital)

Dynamic Metals (ASX: DYM) was spun out of Jindalee mid-January 2023 to allow Jindalee to focus on its US lithium assets. Jindalee holds 12.5M Dynamic shares and is Dynamic's largest shareholder, providing Jindalee shareholders with an indirect interest in Dynamic's Australian projects.

Dynamic's portfolio includes an extensive landholding in the Widgiemooltha district and the Lake Percy Project, both of which are highly prospective for lithium, nickel and gold, as well as the Deep Well Ni-Cu-PGE Project in which Dynamic holds an 80% interest. For further information on these and other projects owned by Dynamic please refer to Dynamic's website ([www.dynamicmetals.com.au](http://www.dynamicmetals.com.au)).

**Energy Metals Limited**

**(Jindalee 5.7% of issued capital)**

Jindalee holds approximately 11.9M Energy Metals (ASX: EME) shares, giving shareholders continued exposure to the development of the Bigrlyi uranium-vanadium deposit and the potential of Energy Metals' other uranium projects (refer [www.energymetals.net](http://www.energymetals.net)).

**CORPORATE**

Jindalee currently has 57.4M shares on issue with cash and listed securities at 30 June 2023 of approximately \$8.3M<sup>11</sup>.

**FINANCIAL COMMENTARY**

The Quarterly Cashflow Report (Appendix 5B) for the period ending 30 June 2023 provides an overview of the Company's financial activities.

Exploration expenditure for the reporting period was \$203k and was dominated by expenditure on McDermitt. Net corporate expenditure inflow was \$3k, after reimbursement of Dynamic exploration and spin-out costs of approximately \$127k. The total amount paid to directors of the entity and their associates in the period (item 6.1 of the Appendix 5B) was \$121k and includes directors' fees, consulting fees and superannuation.

Authorised for release by the Jindalee Board of Directors.

For further information please contact:

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## ADDITIONAL INFORMATION

Additional details including JORC 2012 reporting tables, where applicable, can be found in the ASX announcements referenced in this report and announcements lodged with the ASX during the quarter:

### References

1. Jindalee Resources ASX announcement 27/02/2023: "Resource at McDermitt increases to 21.5 Mt LCE"
2. Refer: [https://www.lithiumamericas.com/staging/lithiumamericas.com/resources/thacker-pass/Thacker-Pass-Feasibility-Study-43\\_101\\_1-31-23](https://www.lithiumamericas.com/staging/lithiumamericas.com/resources/thacker-pass/Thacker-Pass-Feasibility-Study-43_101_1-31-23)
3. Jindalee Resources ASX announcement 24/03/2023: "Preferred Lithium Extraction Process for McDermitt Project"
4. Jindalee Resources ASX announcement 07/06/2023: "Fluor Appointed Lead Engineer for McDermitt Project"
5. Jindalee Resources ASX Announcement 16/05/2023: "McDermitt Progress Update"
6. Lithium Americas TSX announcement 02/03/2023 "Lithium Americas Commences Construction at Thacker Pass"
7. Lithium Americas TSX announcement 02/3/2023 "Lithium Americas to Develop US Sourced Lithium Production through \$650 Million Equity Investment and Supply Agreement"
8. Ioneer Limited ASX announcement 16/1/2023 "US Department of Energy Offers Conditional Commitment for a Loan of Up to US\$700 Million for the Rhyolite Ridge Project"
9. Refer: <https://www.ioneer.com/projects/about-rhyolite-ridge/reserves-resources/>
10. Refer: <https://www.pm.gov.au/media/australia-united-states-climate-critical-minerals-and-clean-energy-transformation-compact>
11. Jindalee Resources ASX announcement 31/07/2023: "Quarterly Cashflow Report"

### Competent Persons Statement

The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr. Lindsay Dudfield and Mr. Brett Marsh. Mr. Dudfield is a director, shareholder and consultant to the Company and a Member of the Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists. Mr. Marsh is an employee of the Company and an American Institute of Professional Geologists (AIPG) Certified Professional Geologist and a Registered Member of the Society for Mining, Metallurgy & Exploration (SME). Both Mr. Dudfield and Mr. Marsh have sufficient experience relevant to the styles of mineralisation and types of deposits under consideration, and to the activity being undertaken, to qualify as Competent Persons as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves' (JORC Code). Mr. Dudfield and Mr. Marsh consent to the inclusion in this report of the matters based on this information in the form and context in which it appears.

The information in this report that relates to the Exploration Target and the Mineral Resource Estimate for the McDermitt deposit is based on information compiled by Mr. Arnold van der Heyden, who is a Member and Chartered Professional (Geology) of the Australasian Institute of Mining and Metallurgy and a Director of H&S Consultants Pty Ltd. Mr. van der Heyden has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity being 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' (JORC Code).

The Company confirms that it is not aware of any further new information or data that materially affects the information included in the original market announcement by JRL entitled "Resource at McDermitt increases to 21.5 Mt LCE" released on 27 February 2023 and in the case of estimates of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. To the extent disclosed above, 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.

### Forward-Looking Statements

This document may contain certain forward-looking statements. Forward-looking statements include but are not limited to statements concerning Jindalee's current expectations, estimates and projections about the industry in which Jindalee operates, and beliefs and assumptions regarding Jindalee's future performance. When used in this document, the words such as "anticipate", "could", "plan", "estimate", "expects", "seeks", "intends", "may", "potential", "should", and similar expressions are forward-looking statements. Although Jindalee believes that its expectations reflected in these forward-looking statements are reasonable, such statements are subject to known and unknown risks, uncertainties and other factors, some of which are beyond

the control of Jindalee and no assurance can be given that actual results will be consistent with these forward-looking statements.

Such factors may include, among others, risks related to regulatory approvals of or in connection with the proposed transaction, actual results of current or planned exploration activities, change in market conditions which affect the completion of the transaction, obtaining appropriate approvals to undertake exploration activities in the portfolio of projects, changes in exploration programs and budgets based upon the results of exploration, future prices of minerals resources; grade or recovery rates; accidents, labour disputes and other risks of the mining industry; delays in obtaining government approvals or financing or in the completion of development or construction activities; movements in the share price of investments and the timing and proceeds realised on future disposals of investments, the impact of the COVID 19 pandemic as well as those factors detailed from time to time in the Company's interim and annual financial statements and reports, all over which are available for review on ASX at [asx.com.au](http://asx.com.au) and OTC Markets at [otcm Markets.com](http://otcm Markets.com).

Although the Company has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking statements.

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**Tenement Information in accordance with Listing Rule 5.3.3**

As at 30 June 2023

Project	Tenement ID	Location	Status	Interest at beginning of Qtr	Interest at end of Qtr
McDermitt*	HTM 16-20, 24-35, 39-55, 59-77, 81-101, 105-125, 130-149, 152-172, 176-195, 199-213, 217-225, 231-235, 238-242, 258-260, 340-342, 348, 349, 355, 356, 362, 363, 369, 376-380, 387-391, 398, 399, 420-445, 448-456, 460-469, 480-493, 496, 497, 500-517, 532-585, 685-687. HTX 1-113, 116-442.	Oregon, USA	Granted	100%	100%
	HTM 586-682.	Nevada, USA			
Clayton North*	HTC 1-6, 12-18, 25-28.	Nevada, USA	Granted	100%	100%
Sherlock	E47/4345	Western Australia	Granted	20%	20%

NOTE: Jindalee's interests in all Australian tenements except Sherlock were transferred to Dynamic Metals Limited (ASX: DYM) effective 11 January 2023. Refer [www.dynamicmetals.com.au](http://www.dynamicmetals.com.au) for further details.  
 \* Tenements held by Jindalee's wholly owned US subsidiary, HiTech Minerals Inc.