

## QUARTERLY ACTIVITIES REPORT

- Updated Exploration Target and maiden Inferred Mineral Resource confirm McDermitt as one of the largest lithium deposits in the US
- Jindalee lodges Exploration Licence abutting 5.8Moz Gruyere deposit
- At 31 December 2019 Jindalee held cash and marketable securities of \$2.2M and no debt

During the quarter, Jindalee (or 'Company') continued its focus on its 100% owned McDermitt US Lithium project with excellent results from the 2019 drill program leading to a significant increase in the Exploration Target Range (ETR) at McDermitt and the estimation of a maiden Inferred Mineral Resource.

The Company also lodged an Exploration Licence application at Gruyere North, immediately along strike from the 5.78Moz Gruyere gold deposit being mined by Goldfields and Gold Road Resources.



**Figure 1 – Outcropping mineralised sediments towards the centre of the world-class McDermitt lithium deposit. View looking north from hole MDD-002.**

## US LITHIUM

### McDermitt (Jindalee 100%)

The McDermitt Lithium project is located in SE Oregon and was generated by the Company after an extensive search across the western US. An initial four hole drilling program completed in September 2018 intersected broad widths of sediment hosted lithium mineralisation over significant distances, resulting in the estimation of an ETR of 160-780Mt @ 1,300-1,600ppm Li at 1,000ppm Li cut-off<sup>1</sup>.

Jindalee completed nine diamond drill holes during the September 2019 quarter with all holes intersecting substantial thicknesses of lithium mineralisation over a much larger area, leading to both a significant increase in the ETR at McDermitt and estimation of a maiden Inferred Mineral Resource in November 2019.

On 13 November Jindalee announced that the ETR\* at McDermitt had increased to **2.2-4Bt @ 1,200-1,600ppm Li** (at 1,000ppm Li cut-off)<sup>2</sup>, more than six times larger than the 2018 ETR at the same cut-off. A summary of the updated ETR\* at several cut-off grades is shown in Table 1, below:

Cut Off (ppm Li)	Lower Limit (Mt)	Upper Limit (Mt)	Grade Range (ppm Li)	Mid-Point Contained LCE (Mt)
1,000	2,200	4,000	1,200-1,600	23.1
1,500	700	1,100	1,600-2,000	8.6
2,000	140	180	2,000-2,040	1.9

**Table 1 – Summary of Exploration Target Ranges at various cut-off grades, with the contained lithium carbonate equivalent (LCE) for each range calculated using the mid-point of each range**

On 19 November Jindalee announced a maiden Inferred Mineral Resource of **150Mt @ 2,000ppm Li** (0.43% Li<sub>2</sub>O) at 1,750ppm Li cut-off<sup>3</sup> had been estimated at McDermitt (refer Table 2, below):

Cut Off (ppm Li)	Mass (Mt)	Grade (ppm Li)	Contained LCE (Mt)
1,750	150	2,000	1.6

**Table 2 – Summary of the maiden Inferred Mineral Resource**

The Mineral Resource was estimated using a cut-off grade of 1,750ppm Li, which is considered appropriate in the context of similar projects and based on an assessment of the likelihood of future economic extraction as required by the JORC (2012) Code.

Importantly, the entire Inferred Mineral Resource sits within 100m of surface and is flat lying, both positive factors for future project economics. Furthermore, analysis of the grade tonnage distribution of the McDermitt resource model highlights the potential for additional material available at lower grades.

The Company confirms that it is not aware of any new information or data that materially affects the information included in this market announcement and that all material assumptions and technical parameters underpinning the estimates of mineral resources referenced in this market announcement continue to apply and have not materially changed.

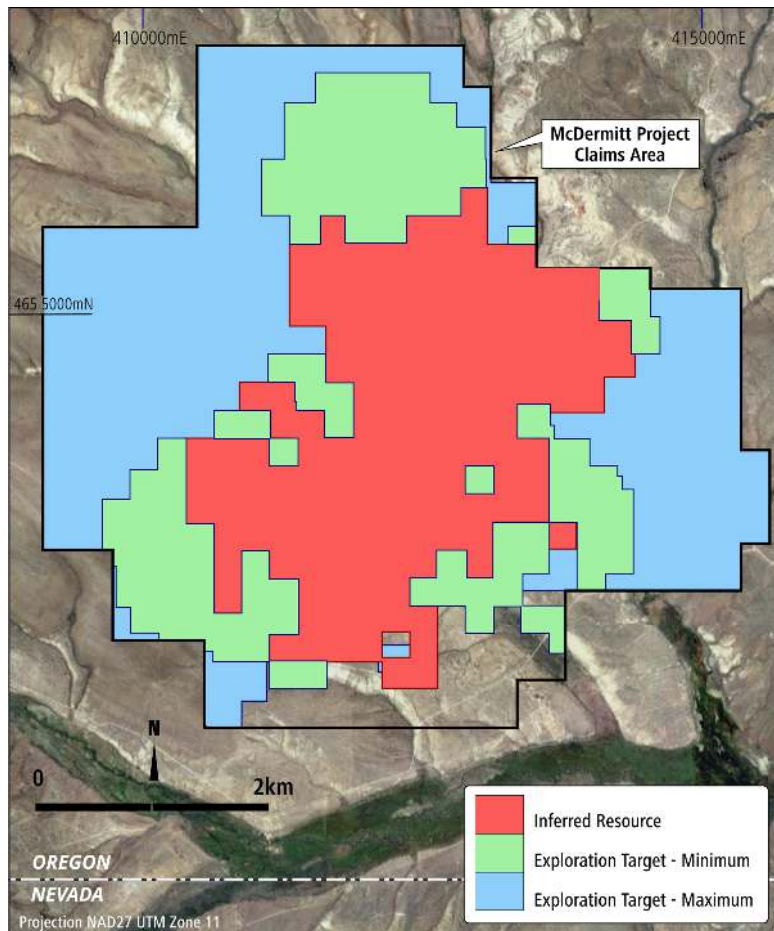
Using the same cut-off grade as the Mineral Resource, an ETR\* of **180-330Mt @ 1,800-2,200ppm Li** (exclusive of the Inferred Resource) was also estimated (refer Table 3, below), with the previous ETR\* updated by excluding the material now classified as Mineral Resources.

Cut Off (ppm Li)	Mineral Resource		ETR Lower Limit (Mt)	ETR Upper Limit (Mt)	ETR Grade Range (ppm Li)
	(Mt)	(ppm Li)			
1,000	996	1,420	1,200	3,000	1,200-1,600
1,500	328	1,800	370	800	1,600-2,000
<b>1,750</b>	<b>155</b>	<b>2,000</b>	<b>180</b>	<b>330</b>	<b>1,800-2,200</b>
2,000	64	2,200	75	120	2,000-2,400
2,500	5	2,590	2	3	2,400-2,800

**Table 3 – Summary of the maiden Inferred Mineral Resource and revised ETR at various cut-off grades, with the preferred cut-off grade figures in bold. (NB: figures may not sum precisely due to rounding, and an increased number of significant figures does not imply increased precision).**

\*Note that the potential quantity and grade of the ETR is conceptual in nature, there has been insufficient exploration to estimate a Mineral Resource over the Exploration Target and it is uncertain if further exploration will result in the estimation of additional Mineral Resources.

The location of the Inferred Mineral Resource and the ETR at the 1,750ppm Li cut-off is shown below:



**Figure 2 – Schematic plan view of the McDermitt Project showing the Inferred Mineral Resource and ETR footprints at a 1,750ppm Li cut-off.**

The estimation of a maiden Inferred Mineral Resource and substantial ETR surrounding the Mineral Resource have confirmed McDermitt is one of the largest lithium deposits in the US. Despite recent softening of lithium prices, industry fundamentals remain strong with accelerating demand continuing to be driven by regulatory actions and consumer demand. The US currently imports most of its lithium for Li-ion battery construction and Jindalee believes that McDermitt has the potential to provide a significant, long life supply of lithium for both domestic consumption and export.

Jindalee will continue to advance and de-risk McDermitt through 2020 with activities planned including additional metallurgical testwork, commencement of preliminary permitting activities and further drilling to build on the Mineral Resource and ETR.

## AUSTRALIA

### North Gruyere (Jindalee 100%)

Late December 2019 Jindalee advised that it had applied for an Exploration Licence (E38/3461) located immediately NW along strike of the Gruyere gold deposit, situated 160km NE of Laverton (WA).

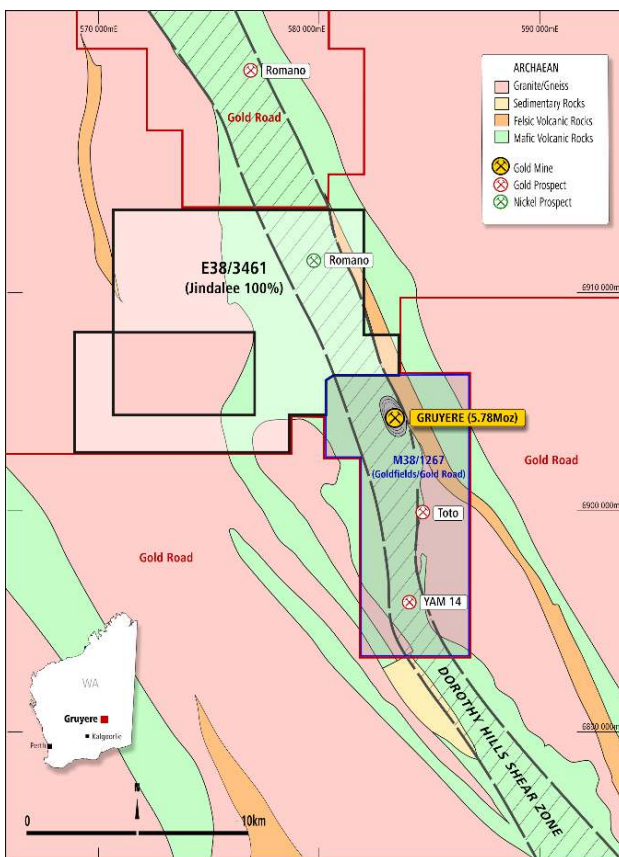


Figure 3 – North Gruyere project over interpreted geology.

E38/3461 is uncontested and abuts Mining Lease 38/1267 containing the Gruyere deposit (total resource of 139.6Mt @ 1.29g/t for 5.78Moz<sup>1</sup>), which is jointly owned by Goldfields (JSE/NYSE: GFI) and Gold Road Resources (ASX: GOR). The Gruyere mine is expected to produce 300,000oz of gold per annum for the next 12 years<sup>4</sup>.

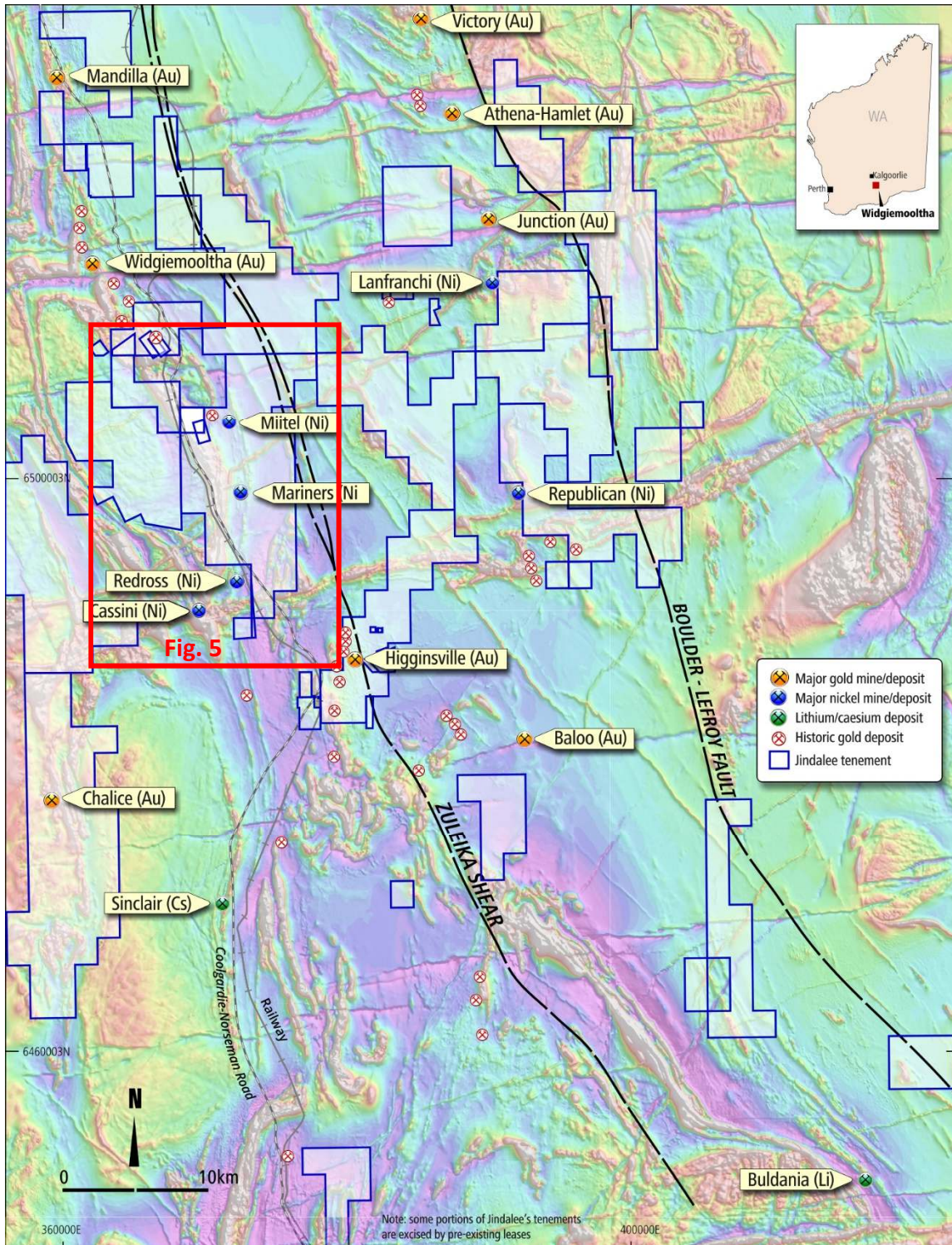
The Dorothy Hills Shear Zone, the structure controlling the mineralisation at Gruyere, is interpreted to trend through the eastern part of E38/3461. Despite this highly prospective geological setting previous exploration appears to have been minimal, possibly due to widespread transported cover and access issues.

Jindalee plans to collate historic exploration results and initiate negotiations with the Traditional Owners and looks forward to commencing exploration as soon as E38/3461 is granted.



**Widgiemooltha (Jindalee 100%)**

Jindalee’s largest Australian project is situated in the Western Australian goldfields south of Kalgoorlie. A significant ground position has been built over the last three years in this premier mining district. During the quarter the Company continued to build on its holding, adding several new tenement applications, and consolidating others (Figures 4 & 5). Holding costs remain minimal with most tenements still in application (Jindalee is the sole applicant in almost all cases).



**Figure 4: Widgiemooltha Project tenure as at 31 December 2019 and nearby deposits/mines over magnetics (TMI RTP). Portions of Jindalee tenure are excised by pre-existing leases (refer Figure 5 for details).**



The Widgiemooltha project is prospective for gold, nickel and lithium and Jindalee is encouraged by recent exploration success in the district.

Jindalee holds ground north along strike of Mincor Resources' (ASX: MCR) exciting Cassini nickel deposit (1.254Mt @ 4.0% Ni<sup>5</sup>) (refer Figure 5) and south of Anglo Australian's (ASX: AAR) Mandilla gold discovery, where wide intercepts up to 93m @ 3.11g/t Au have recently been reported<sup>6</sup>.

The Company looks forward to commencing exploration at Widgiemooltha.

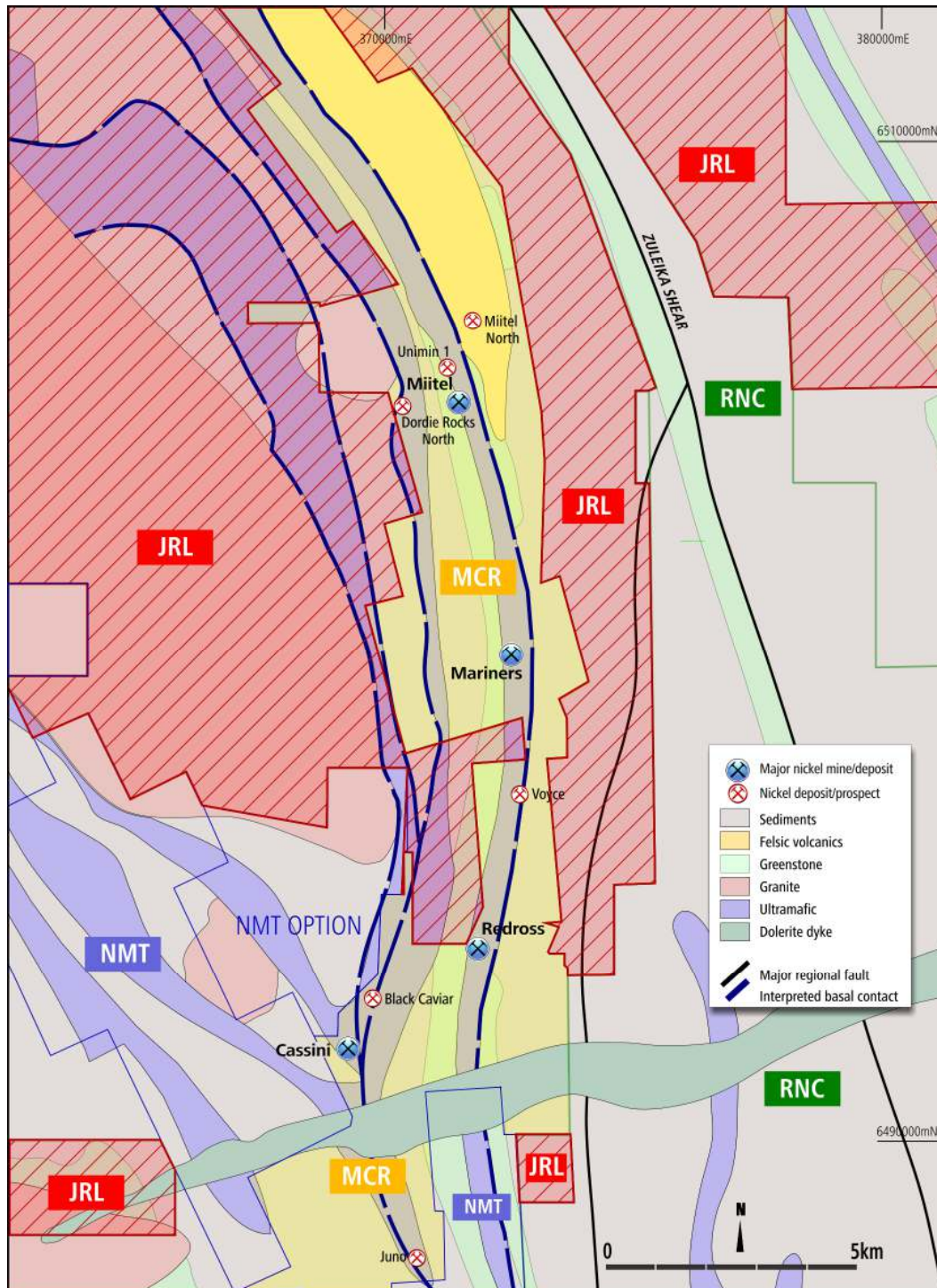


Figure 5: Cassini – Tenements over simplified interpreted geology.

## JOINT VENTURES and NON-MANAGED PROJECTS

### Camel Bore and North Sinclair (Aldoro 80% of non-gold rights)

During the quarter Aldoro Resources (ASX: ARN) announced the results from 4 RC holes drilled to test EM conductors at the Firefly prospect, North Sinclair<sup>4</sup>. The holes encountered sulphide rich (mainly pyrite) intervals within mafic rocks with only trace sulphides associated with ultramafics. Nickel concentrations were elevated within the ultramafic units (best intercept 67m @ 0.11% Ni from hole AFFRC04) with anomalous nickel values also returned from the base of the ultramafic pile (eg: 3m @ 0.14% Ni from hole AFFRC02). Aldoro is currently reviewing the results of the program.

### Joyners (GWR Group 80%, Jindalee 20% free carried)

The Joyners joint venture with GWR Group (ASX: GWR) forms a part of GWR's much larger Wiluna West project. GWR has earned an 80% interest in M53/1078, with Jindalee maintaining a 20% interest, free-carried through to completion of a Bankable Feasibility Study. During the period GWR announced a review had highlighted the C4 Deposit (21.6Mt @ 60.7% Fe) as an attractive opportunity to commence mining at Wiluna<sup>5</sup>. The C4 deposit is situated approximately 12km north of the joint venture ground, with positive implications for the Jindalee Joyners deposit (7.2Mt @ 63% Fe) should mining at C4 be successful.

### Kelly Well and New Bore (Dacian Gold 90%, Jindalee 10% free carried)

Jindalee's 10% interest in the Kelly Well and New Bore projects is free carried to completion of a feasibility study at which point Jindalee can elect to contribute pro-rata or dilute, with Jindalee reverting to a 1% net smelter royalty if its interest falls below 5%. No work was reported on the joint venture ground during the quarter.

### Alchemy Resources Limited (Jindalee 3.2% of issued capital)

Jindalee's investment in Alchemy Resources (ASX: ALY) provides shareholders with exposure to Alchemy's Bryah Basin gold and base metals project (WA), the Karonie gold project (WA), and a farm in and joint venture over gold and base metal prospective properties in central NSW (the Cobar Basin/Lachlan Fold Belt Projects). During the period Alchemy announced significant gold intercepts from drilling at the Karonie project including 26m @ 1.6g/t from the Parmelia prospect, 26m @ 1.3g/t from KZ5 and 10m @ 1.8g/t from Taupo<sup>6</sup>. Follow up drilling is proposed.

### Energy Metals Limited (Jindalee 6.7% of issued capital)

Jindalee holds approximately 14 million 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. During the quarter Energy Metals reported that further work on the vanadium halo surrounding the uranium mineralisation at Bigrlyi had recognised a vanadium mineralised volume more than three times larger than the previously estimated mineralisation volume, leading to estimation of a significant vanadium ETR of 40.5 – 47.6kt of contained V<sub>2</sub>O<sub>5</sub><sup>7</sup>.

## CORPORATE

Jindalee held its AGM on 29 November 2019 with all resolutions passed unanimously on a show of hands. The Company thanks Shareholders for their attendance and ongoing support.

On 21 November 2019 Pip Darvall, Jindalee's Managing Director, announced his intention to resign effective 31 December 2019. The Board acknowledges Pip's contribution and wishes him every success in his further endeavours. The search for a new CEO to advance the Company's assets has commenced.

At 31 December 2019 Jindalee held cash and marketable securities worth approximately \$2.2M. These assets, combined with our tight capital structure (38.5M shares on issue), provide a strong base for leverage into new opportunities.

For and on behalf of Jindalee Resources Limited. For further information please contact:

LINDSAY DUDFIELD

**Executive Director**

T: + 61 8 9321 7550

E: enquiry@jindalee.net

## **ADDITIONAL INFORMATION**

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

### References

1. Jindalee Resources ASX announcement 20/11/2019: "Lithium Exploration Target at McDermitt".
2. Jindalee Resources ASX announcement 13/11/2019: "Material Increase to Exploration Target Confirms McDermitt as one of the Largest Lithium Deposits in the USA".
3. Jindalee Resources ASX announcement 19/11/2019: "Maiden Lithium Resource at McDermitt".
4. Mincor Resources ASX Announcement 6/11/2019: "Cassini Mineral Resource hits 50,400 nickel tonnes".
5. Anglo Australian ASX Announcement 12/12/2019: "Mineralised Footprint at Mandilla Gold Project Increases".
6. Aldoro Resources ASX Announcement 19/12/2019: "Firefly Drilling Results".
7. GWR Group ASX Announcement 12/11/2019: "Wiluna West Iron Project Strategic Review & C4 Update".
8. Alchemy Resources ASX Announcement 9/12/2019: "Significant Intercepts returned from Karonie Gold Project".
9. Energy Metals ASX Announcement 4/12/2019: "BJV Vanadium Model Mineralisation & Extraction Update".

### 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. Mr Dudfield is consultant to the Company and a Member of the Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists. Mr Dudfield has sufficient experience relevant to the styles of mineralisation and types of deposits 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, Minerals Resources and Ore Reserves.' Mr Dudfield consents 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). Mr. van der Heyden consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.

### Forward-Looking Statements

This document may contain certain forward-looking statements. Forward-looking statements include but are not limited to statements concerning Jindalee Resources Limited's (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.



### Tenement Information in accordance with Listing Rule 5.3.3

Project	Tenement ID	Location	Status	Interest at beginning of Qtr	Interest at end of Qtr
Mt Barnett	E04/2512	Western Australia	Application	100%	100%
Planets	E15/1549	Western Australia	Granted	100%	100%
Widgie	E15/1552	Western Australia	Granted	100%	100%
Highway	E15/1563	Western Australia	Granted	100%	100%
Railway	E15/1564	Western Australia	Granted	100%	100%
Lawry	E15/1624	Western Australia	Application	100%	100%
Lawry	E15/1626	Western Australia	Granted	100%	100%
Widgie	E15/1645	Western Australia	Application	100%	100%
Widgie	E15/1680	Western Australia	Application	100%	100%
Higginsville	E15/1691	Western Australia	Application	100%	100%
Widgie	E15/1697	Western Australia	Application	100%	100%
St Ives	E15/1699	Western Australia	Application	100%	100%
Widgie	E15/1700	Western Australia	Application	100%	100%
Chalice	E15/1705	Western Australia	Application	100%	100%
Widgie	E15/1712-3	Western Australia	Application	100%	100%
St Ives	E15/1718	Western Australia	Application	100%	100%
St Ives	E15/1720	Western Australia	Application	100%	100%
Chalice	E15/1721	Western Australia	Application	100%	100%
St Ives	E15/1722	Western Australia	Application	100%	100%
St Ives	E15/1730-1	Western Australia	Application	100%	100%
St Ives	E15/1736	Western Australia	Application	100%	100%
St Ives	E15/1747	Western Australia	Application	0%	100%
St Ives	E15/1752-4	Western Australia	Application	0%	100%
Higginsville	P15/6112	Western Australia	Granted	100%	100%
Railway	P15/6245-6	Western Australia	Application	100%	100%
Highway	P15/6267	Western Australia	Granted	100%	100%
Highway	P15/6268	Western Australia	Application	100%	100%
Widgie	P15/6342-3	Western Australia	Application	100%	100%
Widgie	P15/6367	Western Australia	Application	100%	100%
Widgie	P15/6388	Western Australia	Application	100%	100%
Salt Creek	E25/562	Western Australia	Granted	100%	100%
Salt Creek	E25/572	Western Australia	Application	100%	100%
Salt Creek	P25/2568	Western Australia	Granted	100%	100%
Silver Swan	E27/627	Western Australia	Application	0%	100%
North Sinclair	E36/895	Western Australia	Granted	100%	100%
Camel Bore	E36/910	Western Australia	Granted	100%	100%
Camel Bore	E36/953	Western Australia	Granted	100%	100%
Lawlers	E36/994	Western Australia	Application	0%	100%
Lockyer Well	E37/1370	Western Australia	Granted	100%	100%
New Bore	E38/3211	Western Australia	Granted	100%	10%
Kelly Well	E38/3272	Western Australia	Granted	100%	10%
Kelly Well	M39/1135	Western Australia	Application	100%	10%
North Gruyere	E38/3461	Western Australia	Application	0%	100%

**Tenement Information (continued)**

Project	Tenement ID	Location	Status	Interest at beginning of Qtr	Interest at end of Qtr
Kenya	E39/1998	Western Australia	Granted	100%	100%
Kenya	E39/2005	Western Australia	Granted	100%	100%
Mulga Tank	E39/2134	Western Australia	Application	0%	100%
Meentheena	E45/5381	Western Australia	Application	100%	100%
Mt Samson	E47/3975	Western Australia	Application	100%	100%
Bundie Bore	E51/1909	Western Australia	Application	100%	100%
Bundie Bore	E51/1946	Western Australia	Application	0%	100%
Bundie Bore	P51/3145-7	Western Australia	Application	100%	100%
Millrose	E53/1962	Western Australia	Granted	100%	100%
Taipan	E63/1823	Western Australia	Granted	100%	100%
Jeffreys Find	E63/1832	Western Australia	Granted	100%	100%
Killaloe	E63/1874-5	Western Australia	Granted	100%	100%
Lake Percy	E63/1981	Western Australia	Application	0%	100%
Mission	E63/2005	Western Australia	Application	0%	100%
Forrestania	E77/2575-6	Western Australia	Application	100%	100%
Aries	E80/5027	Western Australia	Granted	100%	100%
Cummins Range	E80/5091*	Western Australia	Application	100%	100%
Aries	E80/5117****	Western Australia	Application	0%	0%
Halls Creek Tungsten	E80/5410	Western Australia	Application	0%	100%
Joyners	M53/1078-I	Western Australia	Granted	20%	20%
Prospect Ridge	EL5/2016**	Tasmania	Granted	100%	100%
McDermitt	HTM 1-50,56-342, 348-349***	Oregon, USA	Granted	100%	100%
Clayton North	HTC 1-6,12-18, 25-28***	Nevada, USA	Granted	100%	100%

\* Tenement held or applied for through JRL's wholly-owned subsidiary, Eastmin Pty Ltd.

\*\* Tenement held or applied for through Jindalee's wholly-owned subsidiary, HiTec Minerals Pty Ltd.

\*\*\* Tenements held by Jindalee's wholly-owned US subsidiary, HiTech Minerals Inc.

\*\*\*\* Diamond rights only on Celsius Resources Ltd tenement.