ASX RELEASE 19 December 2022

ASX Code: GIB



Lithium Projects Update

1.0 Lithium Projects Update

GIB 100%

Gibb River Diamonds Limited's ('GIB' or the 'Company') Lithium Generative Project aims to add significant shareholder value through generating and/or acquiring lithium/REE projects within Australia and to explore and develop these projects. The project areas are selected as prospective based upon ongoing reviews of data from government databases, remote sensing and from other data sources.

2.0 Recent Field Mapping of the Mica Well; Mukinbudin, Bald Hill and Forrestania Projects

In the last six weeks, field trips have been conducted to a further three of the Company's Lithium Generative Project areas, these being Mica Well, Mukinbudin and Forrestania. Targets within these areas were mapped and sampled, where access allowed, and the Company is currently awaiting assays from these rock chip sampling programs.

Assay laboratory wait times are currently lengthy and these latest assay results will be reported as soon as they become available and have been assessed.

The Bald Hill Project area was field mapped and sampled and assay results have been returned. No lithium prospective geology or lithium bearing rocks were found and this tenement has now been relinquished.

3.0 Recent Results from Codrus Minerals (ASX: CDR) within the Mukinbudin Pegmatite Field

The Company notes with interest recent high grade REE assays reported on 9 December 2022 from the Codrus Minerals (ASX: CDR) Project in the Mukinbudin area of WA¹. The site of the Karloning quarry from which these high grade samples were taken is six kilometres to the south of one of the GIB Mukinbudin tenements. These CDR samples are especially significant as they confirm the presence of the high-value permanent magnet rare earths of dysprosium, neodymium, terbium and praseodymium within the Mukinbudin Pegmatite Field². These REE bearing pegmatites are GIB's exploration target at Mukinbudin.

4.0 Current Tenement Status

The nature of the Lithium Generative Project is speculative and as such tenements are being dropped and acquired on a regular basis as new information becomes available. The current tenement status is shown in Figure 1 and Table 1 and consists of eleven exploration licenses and two Prospecting licenses totaling 1,860km², all in Western Australia.

1/16 Ord Street

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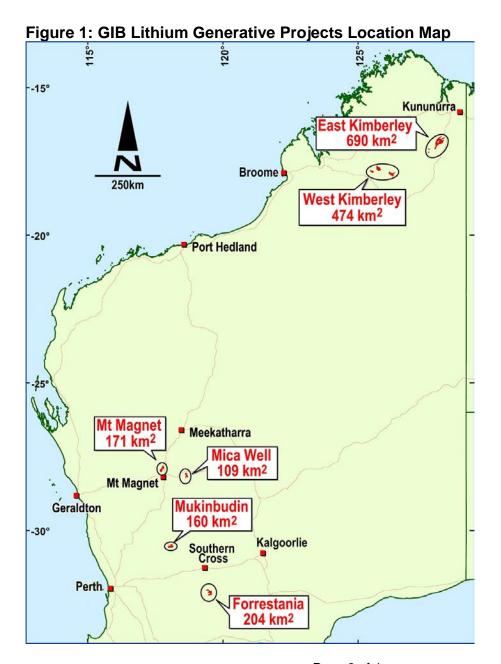


The Mount Magnet East Project tenements have been field checked (ASX Release dated 26 October 2022) and despite containing a number of non-lithium bearing pegmatites, are deemed to be below GIB's threshold for prospectivity. These tenements have now been relinquished.

5.0 Upcoming Work Programs

The assays from the recent sampling programs at the Mica Well; Mukinbudin and Forrestania Project areas are currently pending and these results will determine what future work will be conducted over these areas.

Starting in early 2023, field trips are planned to the Mount Magnet West and the Kimberley Projects. Further lithium prospective targets are being looked at on an ongoing basis and the Company remains open to an acquisition in the lithium/REE space.



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Table 1: GIB Lithium and REE Project Tenements

Lease	Project	Status	Area km2
E58/593	Mt Magnet	Granted	166.9
P58/1929		Granted	2.0
P58/1930		Granted	2.0
E58/602	Mica Well	Application	109.0
E70/6316	Mukinbudin	Application	159.7
E70/6374		Application	53.2
E77/3020	Forrestania	Application	203.7
E04/2843	West Kimberley	Application	78.5
E04/2844		Application	202.8
E80/5831		Application	192.8
E80/5836	East Kimberley	Application	657.5
E80/5848		Application	19.7
E80/5849		Application	13.1
Total			1860.9

6.0 Exploration Target Methodology

GIB's lithium exploration targets are Lithium-Caesium-Tantalum ('LCT') pegmatites. LCT pegmatites are enriched in Li, Cs, Ta, Be, B, F, P, Mn, Ga, Rb, Nb, Sn and Hf. Examples of major LCT pegmatite deposits include the Tin Mountain pegmatite in the US; Tanco pegmatite in Canada; Altai pegmatite in China; and the Greenbushes, Wodgina and Pilgangoora pegmatites in Western Australia.

As a part of the Lithium Generative Project, GIB is also targeting pegmatites containing Rare Earth Elements (REE) specifically Niobium–Yttrium–Fluorine (NYF) pegmatites. These NYF pegmatites are enriched in Be, Sn, B, Nb > Ta, Ti, Y, REE's, Zr, Th, U, Sc and F, but are depleted in Li, Cs and Rb. Both LCT and NYF pegmatites contain elements that are critical for green technologies³.

Other styles of lithium/REE mineralisation of interest to GIB are:

- carbonatites eg Mount Weld in WA
- Monazite Veins eg Steenkampskraal in South Africa
- Hydrothermal alteration of sediments eg Browns Range in WA
- Hydrothermal alteration of dolomites and sediments eg Bayan Obo in Inner Mongolia, China (responsible for 45% of global REE production⁵).
- Hydrothermal alteration of sediments eg Browns Range in WA

7.0 Summary and Lookahead

GIB expects that the discovery of commercially mineralised LCT or NYF pegmatites will take a degree of persistence, and the Company will continue to persevere in 2023 in its exploration for and/or acquisition of lithium/REE projects with the desired mineralogy.



Concurrent with this activity, the due date for the Ellendale Diamond Project Option is fast approaching, with a decision by the Option holder, Burgundy Diamond Mines (ASX: BDM), due on 23 March 2023.

Should the Option be exercised, BDM will pay to GIB A\$4 million in cash and issue a further 7 million fully paid ordinary shares in BDM (in addition to the 9 million already received and held by GIB). This Option is at BDM's election and would result in BDM becoming the 100% holder of the Ellendale Diamond Project, with GIB retaining a 1% gross revenue royalty.

Should the Option not be exercised, GIB will retain the Ellendale Diamond Project 100%. This Option arrangement does provide GIB with some certainty as to its Projects position post 23 March 2023. The Company considers that whether or not the Ellendale Option is exercised, it is a win-win situation for GIB.

Jim Richards **Executive Chairman**

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References:

¹Codrus Confirms High Grades at ... Karloning REE Project in WA; CDR ASX Release dated 9 December 2022

²Pegmatites of Western Australia: M Jacobsen, M Calderwood, B Grguric; Hesperian Press 2007

³Rare-Element Pegmatites: A Mineral Systems Analysis; P Duuring, Geol Survey WA, Record 2020/7 dated 2020

⁴Lithium Projects Update: P Duuring, GIB ASX Release dated 26 October 2022

⁵The Bayan Obo rare earth niobium deposits, Inner Mongolia, China; L. J. Drew, Meng Qingrun and Sun Weijun; Lithos, 26, 1990, 43-65.

Competent Persons Statement

The information in this report that relates to previously reported exploration results and new exploration results is based on information compiled by Mr. Jim Richards who is a Member of The Australasian Institute of Mining and Metallurgy and a Member of the Australian Institute of Geoscientists. Mr. Richards is a Director of Gibb River Diamonds Limited. Mr. Richards has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr. Richards consents to the inclusion in the report of the matters based on the information in the form and context in which it appears.