ASX RELEASE
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ASX Code: GIB

Lithium Projects Update

1.0 Lithium Generative Project — GIB 100%

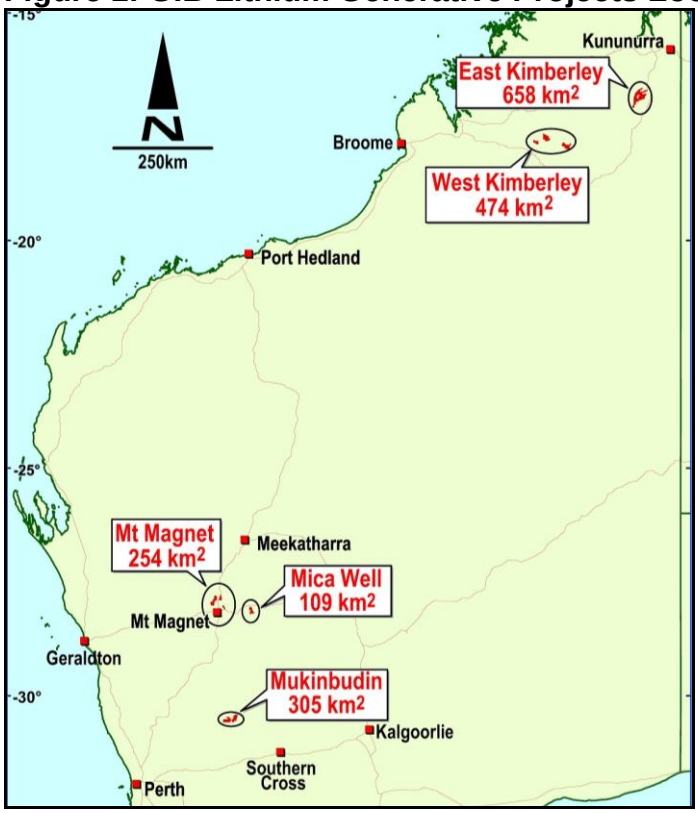
Gibb River Diamonds Limited's ('GIB' or the 'Company') Lithium Generative Project aims to add significant shareholder value through generating and/or acquiring lithium/REE projects within Australia and to explore and develop these projects.

The tenements which have been pegged so far comprise of ten exploration licenses and four Prospecting licenses totaling 1,800km^2, all in Western Australia (Table 1). These areas were selected as prospective based upon a review of data from government databases, remote sensing data and from other data sources.

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[1].

As a part of the Lithium Generative Project, GIB has identified a new Rare Earth Element (REE) project targeting 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 technologies.

Figure 1: GIB Lithium Generative Projects Location Map



1.0 Mount Magnet Lithium Project GIB 100%

The Mount Magnet Lithium Project consists of four exploration licenses and four prospecting licenses totalling 254km^2. The area was identified as prospective based upon a review of data from government databases, remote sensing data and from other data sources.

In early October, a mapping field trip was conducted over the Mount Magnet East tenements (Figure 2) to investigate various anomalies generated using geochemical data, remote sensing and satellite imagery. As a result of this work, five pegmatites of varying dimensions were successfully identified and sampled, with one of the new pegmatites measuring approximately 150m long and ~18m at its greatest width.

These pegmatites showed very coarse grained, feldspar and quartz with graphic textures and varying amounts of muscovite and /or biotite. No obvious lithium mineralisation was observed. The assay results for this sampling have recently been received and no lithium or rare earth mineralisation was reported.

Nevertheless, the discovery of these new pegmatites is encouraging and validates the Company's exploration methodology for finding new pegmatite districts. GIB expects that the discovery of mineralised LCT or NYF pegmatites will take a degree of persistence, and the Company will continue to persevere in its exploration for new pegmatites with the desired mineralogy.

Figure 2: Mount Magnet Lithium Project – Sample Sites

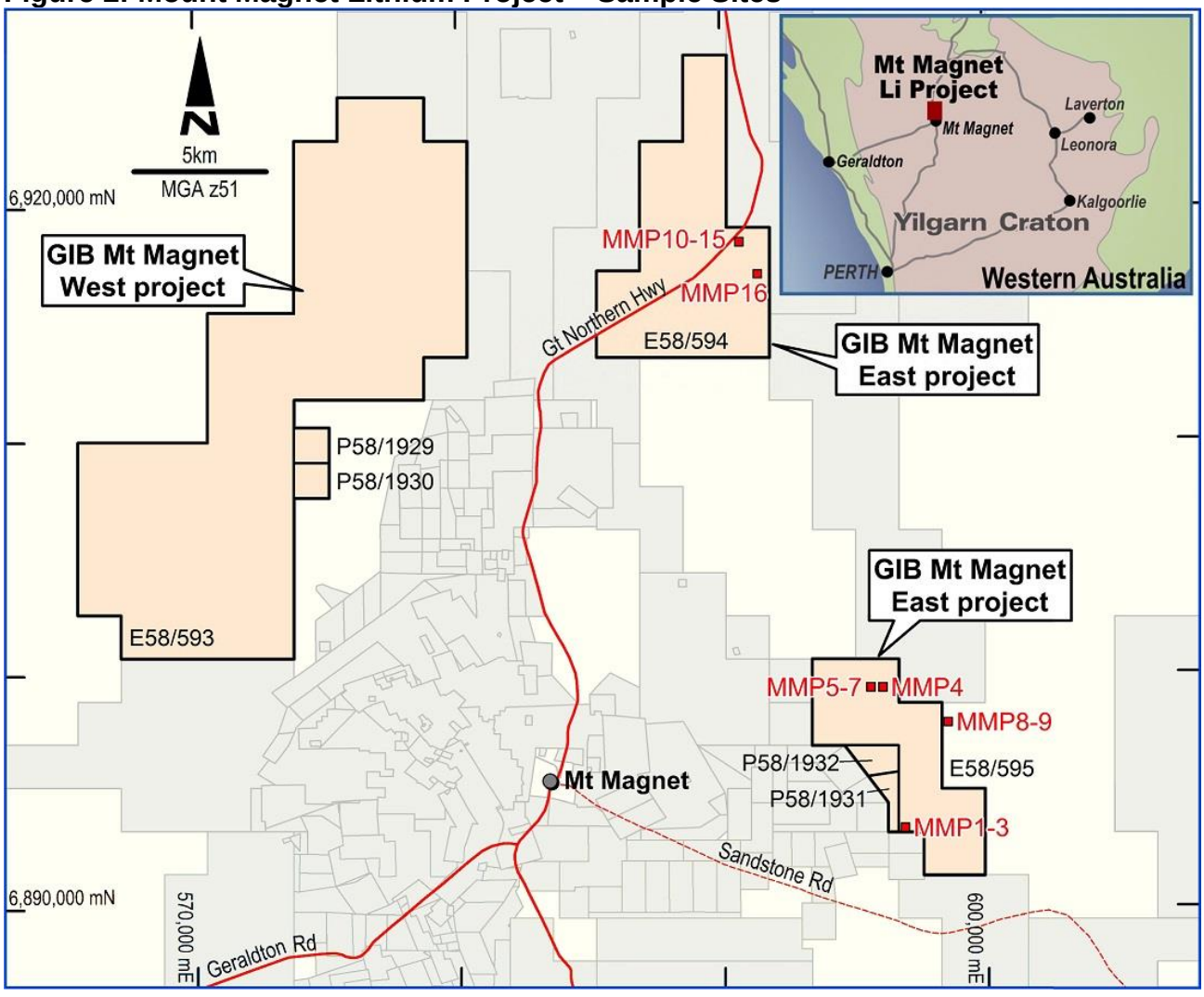


Figure 3: Mount Magnet East Lithium Project - Pegmatites
Coarse grained quartz and feldspar with muscovite +/- biotite

Pegmatite MMP4

Pegmatite MMP5

Pegmatite MMP10: Stacked pegmatite veins in host granite

Pegmatite MMP16: Stacked pegmatite veins in host granite

There are further follow-up targets at the Mount Magnet West and East Lithium Projects and these will be mapped and sampled during future field trips.

3.0 Other Lithium Projects GIB 100%

The Company has also generated lithium projects in the West Kimberley, East Kimberley and at Mica Well, east of Mount Magnet (Figure 1). These Projects are all deemed to have varying degrees of prospectivity based upon the Company's review of available geochemical, remote sensing and other data. Planning is currently underway to undertake mapping and sampling trips to further assess these areas.

4.0 Mukinbudin Rare Earth Elements (REE) Project GIB 100%

The Mukinbudin REE Project consists of two exploration licenses totalling 304.7km^2. The area was selected as prospective based upon historic accounts of Niobium–Yttrium–Fluorine (NYF) pegmatites in the area as documented in government databases and other sources.

The area is predominantly freehold arable farmland, which means access to these areas needs to be secured from the landowner. The Company is currently working on land access with a view to mapping and sampling these areas.

Table 1: GIB Lithium and REE Project Tenements

Lease	Project	Status	Area km^2
E58/593	Mt Magnet	Granted	166.90
E58/594		Granted	51.60
E58/595		Granted	28.50
P58/1929		Application	2.00
P58/1930		Application	2.00
P58/1931		Application	1.47
P58/1932		Application	1.99
E58/602	Mica Well	Application	109.00
E70/6316	Mukinbudin	Application	159.70
E70/6317		Application	145.00
E04/2843	West Kimberley	Application	78.50
E04/2844		Application	202.80
E80/5831		Application	192.80
E80/5836	East Kimberley	Application	657.50
Total			**1799.8**

5.0 Summary and Lookahead

GIB believes that the green energy metals space is a very commercially attractive place to operate. The Company is committed to generating projects within this space which have the potential to add significant shareholder value.

The Company has a very strong geological team and believes GIB has the expertise to add significant shareholder value through generating and/or acquiring lithium/REE projects within Australia and exploring and developing these projects. Generating/acquiring further Li-REE Projects and mapping and sampling of current Li-REE Projects are planned for the remainder of 2022. Ongoing resource and metallurgical studies of the Edjudina Gold Project is progressing concurrently with this work.

Jim Richards
Executive Chairman

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References:

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

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.

Appendix A

JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• Rock chip samples were collected at sites shown in Figure 2 at GIB's Mt Magnet Li project. These are greenfields exploration samples and were taken to assess the lithium and REE endowment of rocks in the project area.
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• Not applicable.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• Not applicable.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*	• Rock samples were geologically described in the field. Further studies are not applicable to this greenfields exploration program.

Criteria	JORC Code explanation	Commentary
	• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• Not applicable for a first-pass greenfields sampling program.

Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*
	• *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.*
	• *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*
		• The samples were submitted to Intertek Perth for analysis by:
		  ○ Four acid digestion 48 element analysis, with REE 12-element add-on (lab codes 4A/OM48 and 4A/OM48R)
		  ○ 25g Au ICPMS fire assay (lab code FA25/MS)
		These techniques are considered total.

Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Not applicable for a first-pass greenfields sampling program.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Sample locations were recorded by hand-held GPS. Datum is MGA94 zone 50.

Criteria	JORC Code explanation	Commentary
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• Not applicable for a first-pass greenfields sampling program.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• Not applicable for greenfields rock chip sampling.
Sample security	• *The measures taken to ensure sample security.*	• Samples were collected in calico bags and delivered to Intertek Perth by GIB personnel.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• Not applicable for a first-pass greenfields sampling program.

Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• GIB's Mt Magnet tenements (E58-593-595, P58/1929-1932) are held 100% by Gibb River Diamonds. There are no private royalties or other third party commercial interests in the tenement. • Native title has been extinguished over the project area.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• GIB is not aware of lithium exploration having been undertaken by other companies in the Project area.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• E58/583 and P58/1929-1930 (Mt Magnet West) are pegged over granites of the Big Bell Suite, a series of Archaean K-feldspar porphyritic monzogranites. • E58/594-595 and P58/1931-1932 (Mt Magnet East) are pegged over the Archaean Cundimurra monzogranite, which is locally syenogranitic and has common magmatic foliation. • This field trip explored for and assayed pegmatites intruded into the above granitic bodies.

Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*
	  ○ *easting and northing of the drill hole collar*
	  ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  ○ *dip and azimuth of the hole*
	  ○ *down hole length and interception depth*
	  ○ *hole length.*
	• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*
		• n/a

Criteria	JORC Code explanation	Commentary
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• n/a
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• n/a
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• See Maps, Tables and Figures within the body of this announcement.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• n/a – see body of this Announcement for comprehensive reporting of all exploration results.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• n/a
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• The Company is in the process of planning additional exploration work at Mt Magnet

END