

## About Legacy Iron Ore

Legacy Iron Ore Limited ("Legacy Iron" or the "Company") is a Western Australian based Company, focused on iron ore, base metals, tungsten and gold development and mineral discovery.

Legacy Iron's mission is to increase shareholder wealth through capital growth, created via the discovery, development and operation of profitable mining assets.

The Company was listed on the Australian Securities Exchange on 8 July 2008. Since then, Legacy Iron has had a number of iron ore, manganese and gold discoveries which are now undergoing drilling and resource definition.

## Board

**Sumit Deb**, Non-Executive Chairman

**Amitava Mukherjee**, Non-Executive Director

**Somnath Nandi**, Non-Executive Director

**Devanathan Ramachandran**, Non-Executive Director

**Rakesh Gupta**, Director and Chief Executive Officer

**Ben Donovan**, Company Secretary

## Key Projects

Mt Bevan Iron Ore Project

South Laverton Gold Project

East Kimberley Gold, Base Metals and REE Project

## Enquiries

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29<sup>th</sup> April 2022

The Company Announcements Office  
ASX Limited

Via E Lodgement

## REPORT FOR THE QUARTER ENDED 31<sup>st</sup> March 2022

Please find attached the Company's Quarterly Activities Report for the quarter ended 31<sup>st</sup> March 2022.

Yours faithfully  
**LEGACY IRON ORE LIMITED**

Rakesh Gupta  
Chief Executive Officer

## HIGHLIGHTS

### EXPLORATION AND DEVELOPMENT

#### *Mt Celia:*

- Resource estimation works for the Mt. Celia project was undertaken during the quarter. The revision in the geological and resource model has been completed by Mr. Andrew Hawker, Principal Geologist, HGS Australia (HGS). Mt Celia has an Indicated and Inferred resource endowment of 6.97 MT @ 1.39 g/ tonne for 312,600oz \*. The revised total Mt Celia gold resource endowment with almost 54% i.e., 168,300 Oz as indicated Mineral Resources, provides further confidence to the economic potential of the Mt Celia project.
- The waste rock characterisation studies were completed under the supervision of MBS Environmental. The final report has been received and as per the recommendations, overall, waste rock from the proposed open pits for the Mt Celia project is environmentally benign and does not require specific management other than applying good practice for landform construction and surface water management.
- JT Metallurgical Services were carrying out the work on toll treatment option analysis.
- Good faith negotiations for a heritage and mining agreement are underway with Native Title group and the agreement finalisation has reached to an advanced stage.
- The pit optimization and mining studies for the Mt. Celia project were being carried out by AMC Consulting, Perth, using the revised resource model. The mining studies are nearing completion and the final report is expected soon.

#### *Mt Bevan:*

- Geological mapping and surface sampling is planned for Lithium and Nickel exploration. The work is expected to be done in the June Quarter.
- The joint venture agreement between Legacy, Hawthorn and Hancock has been finalised and the final agreement due to be executed in the first week of April 2022.

#### *Yilgangi:*

- The resource estimation works for the Yilgangi Project has commenced. Work is being carried out by BMGS. The work is expected to finish during the June Quarter which will provide the Yilgangi Project a maiden JORC resource.

#### *Sunrise Bore:*

- Follow up RC drilling planning has been completed for the Sunrise Bore project to prove strike continuity of the gold intersections received in the maiden RC campaign conducted during June 2021 (ASX dated 06.10.2021).
- The drilling is expected to be done during the June Quarter.

#### *Kongie Park:*

- RC drilling planning has been completed for the Koongie Park project following up targets presented by the MLEM Survey conducted during the last year.
- The talks with Kimberley Land Council (KLC) for the work program clearance for the proposed RC drilling has been started.

*\*Refer to ASX release dated 3<sup>rd</sup> March 2022*

## DIRECTORS' REPORT (continued)

### *Kimberley Tungsten tenements:*

- RC drill planning has been completed for the Sophie Downs project following up targets presented by the MLEM Survey conducted during last year.
- Talks with KLC for work program clearance for the proposed RC drilling has commenced and the HIA notice has been provided to KLC.
- A drone magnetics survey is being planned in the Sophie Downs and Ruby Plains tenements to assist generation of new targets.
- The company signed a binding Heads of Agreement (HOA) with Eastern Lithium Pty Ltd, a wholly owned subsidiary of the Eastern Resources Ltd (ASX: EFE) with exclusivity for rights of lithium group of minerals (lithium, beryllium, caesium, niobium, rubidium, tantalum and tin) at the Taylor Lookout project.

## EXPLORATION

### Project Overview

Legacy Iron Ore (**Legacy Iron** or the **Company**) has a committed focus on the company's objective of development of gold, iron ore, and base metal deposits in the Western Australia through exploration. The Company has 10 promising projects encompassing 22 tenements in the Western Australian known mineralised belts (Fig.1). The Company is advancing the projects into higher stages of exploration and development through systematic exploration activities.

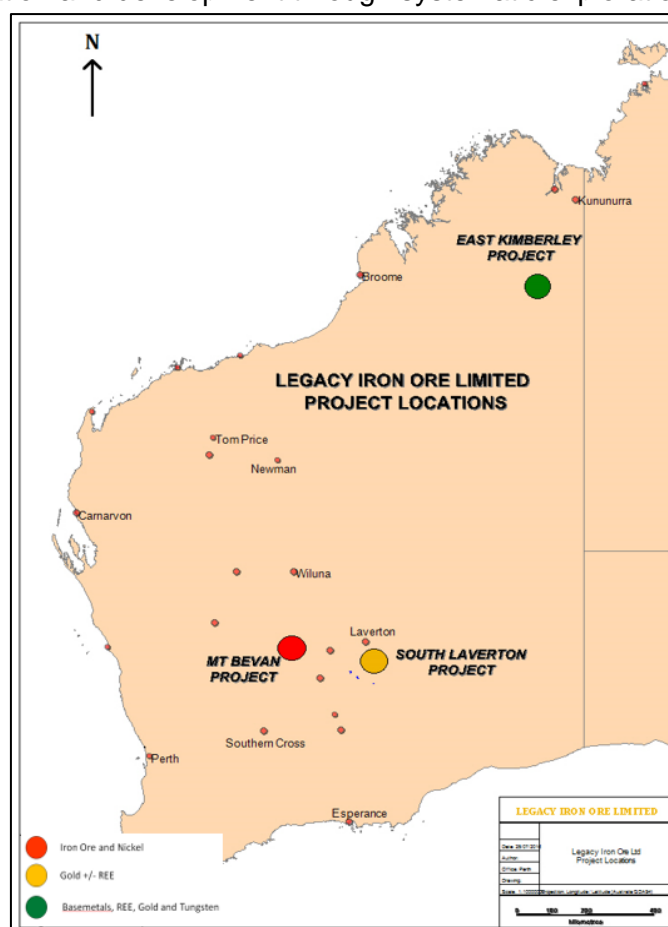


Figure 1 Legacy Iron – Project Location

## South Laverton Gold Hub

Legacy Iron Ore's South Laverton Gold hub includes the projects; Mt Celia, Yerilla, Yilgangi, Sunrise Bore and Patricia North shown in (

Figure 2).

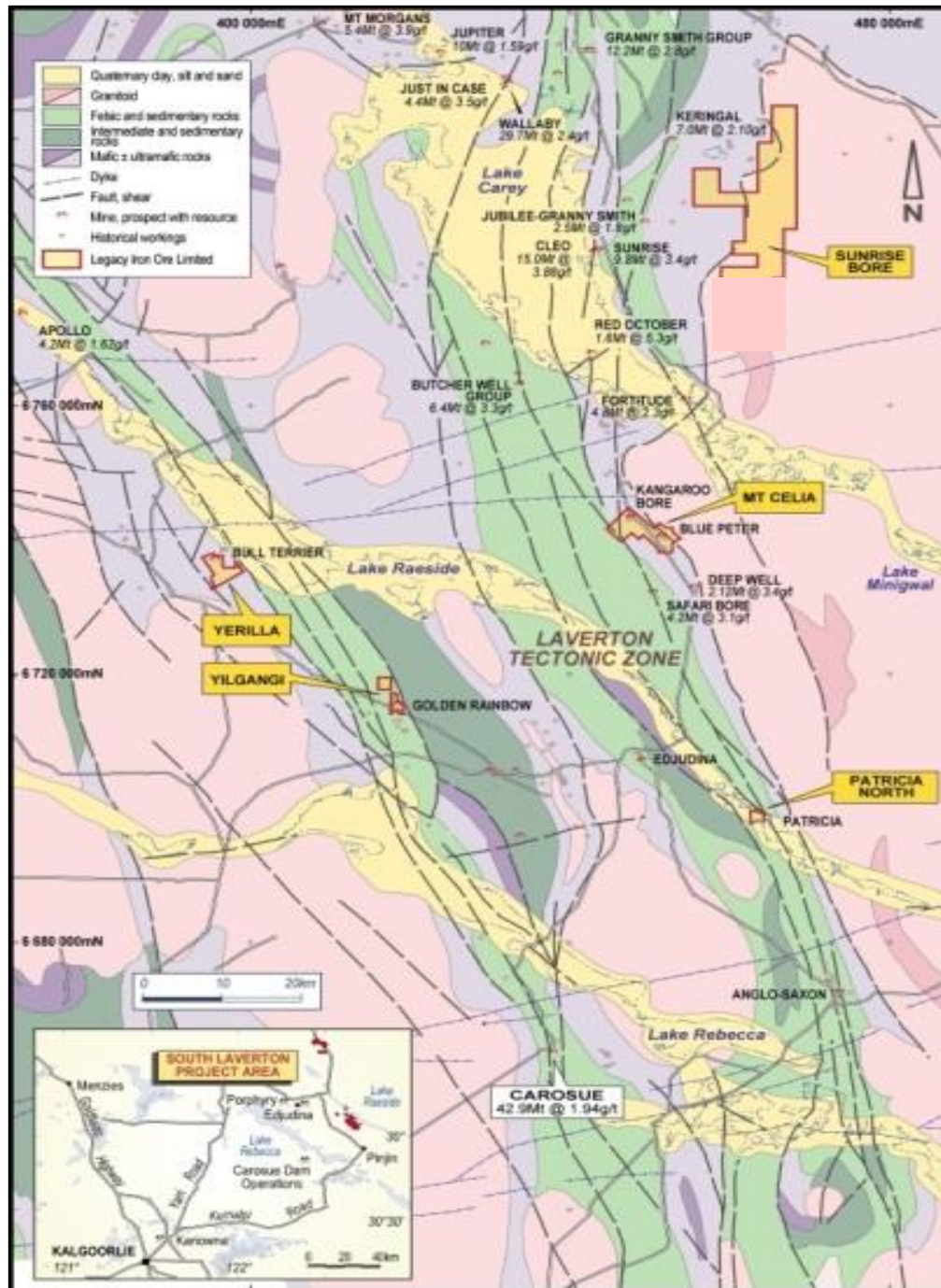


Figure 2 Legacy Iron's South Laverton Gold Projects on regional geology

The Company is working towards the completion of pre-feasibility study and development of the Mt Celia projects including the Kangaroo Bore and Blue Peter deposits.

The Yerilla and Yilgangi tenements contain several known gold occurrences with estimated gold resources established from years prior to the change in JORC code reporting in 2012. These are planned to be upgraded in due course.

#### **Mt Celia revised Resource Estimation:**

During the quarter, the revision in the geological and resource model has been completed by Mr. Andrew Hawker, Principal Geologist, HGS Australia (HGS). Mt Celia has an Indicated and Inferred resource endowment of 6.97 MT @ 1.39 g/ tonne for 312,600oz. The revised total Mt Celia gold resource endowment with almost 54% i.e., 168,300 Oz (ASX dated 3<sup>rd</sup> March 2022) as indicated\* Mineral Resources, provides further confidence to the economic potential of the Mt Celia project. These estimates continue to support the Company's aim of developing the Mt Celia gold project into a mine. Further, the Company believes there is significant potential to extend existing mineralization and to discover new mineralization within the project.

#### **Mineral Resource Statement**

The previous Mineral Resource estimates for Kangaroo Bore and Blue Peter were prepared by SRK in November 2017, January 2018, December 2020, and by HGS in July 2021 respectively. Since then, Legacy Iron has completed additional drilling programs aimed at increasing the geological confidence and increasing the quantity of the resource.

The current Mineral Resource estimates were prepared using the results from drilling programs conducted up to 2021. No additional drilling has been carried out since this period.

The current Mineral Resource Statements for Kangaroo Bore, Blue Peter and Margot are presented in Table 1, 2, 3 and 4, respectively. The estimates for all deposits are based on various cut-off grades applied to oxidation horizons of 0.5g/t oxide, 0.6g/t transitional, and 0.7g/t fresh. The lower cut-off grades reflect modest operating costs with marginal increases based on weathering profiles. The majority of the indicated resource is within the upper 150m and therefore considered acceptable to open pit mining.

The resource estimation results are summarized in tables 1, 2, 3 and 4

Classification	Tonnes	Au (g/t)	Ounces
Indicated	3,663,000	1.43	168,300
Inferred	3,312,000	1.36	144,300
Total	6,975,000	1.39	312,600

Table 1 Mt Celia - Mineral Resource estimate as at Feb 2022 \*

Classification	Tonnes	Au (g/t)	Ounces
Indicated	3,024,000	1.27	123,100
Inferred	2,631,000	1.28	108,700
Total	5,655,000	1.27	231,800

Table 2 Kangaroo Bore - Mineral Resource estimate as at Feb 2022 \*

Classification	Tonnes	Au (g/t)	Ounces
Indicated	639,000	- 2.20	45,200
Inferred	328,000	1.83	19,300
Total	967,000	2.07	64,500

**Table 3 Blue Peter - Mineral Resource estimate as of Feb 2022\***

Classification	Tonnes	Au (g/t)	Ounces
Indicated	0	0.00	0
Inferred	353,000	1.44	16,300
Total	353,000	1.44	16,300

**Table 4 Margot Find - Mineral Resource estimate as of Feb 2022\***

(The Company confirms that it is not aware of any new information or data that materially affects the information included in these announcements and that all material assumptions and technical parameters underpinning the resource estimate in the prior announcements continue to apply and have not materially changed. - See Announcements 3rd March 2022)

### **Revised Resource at Mt Celia Gold Project – Feb 2022**

The Mineral Resource estimates are classified in accordance with the 2012 edition of The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code 2012).



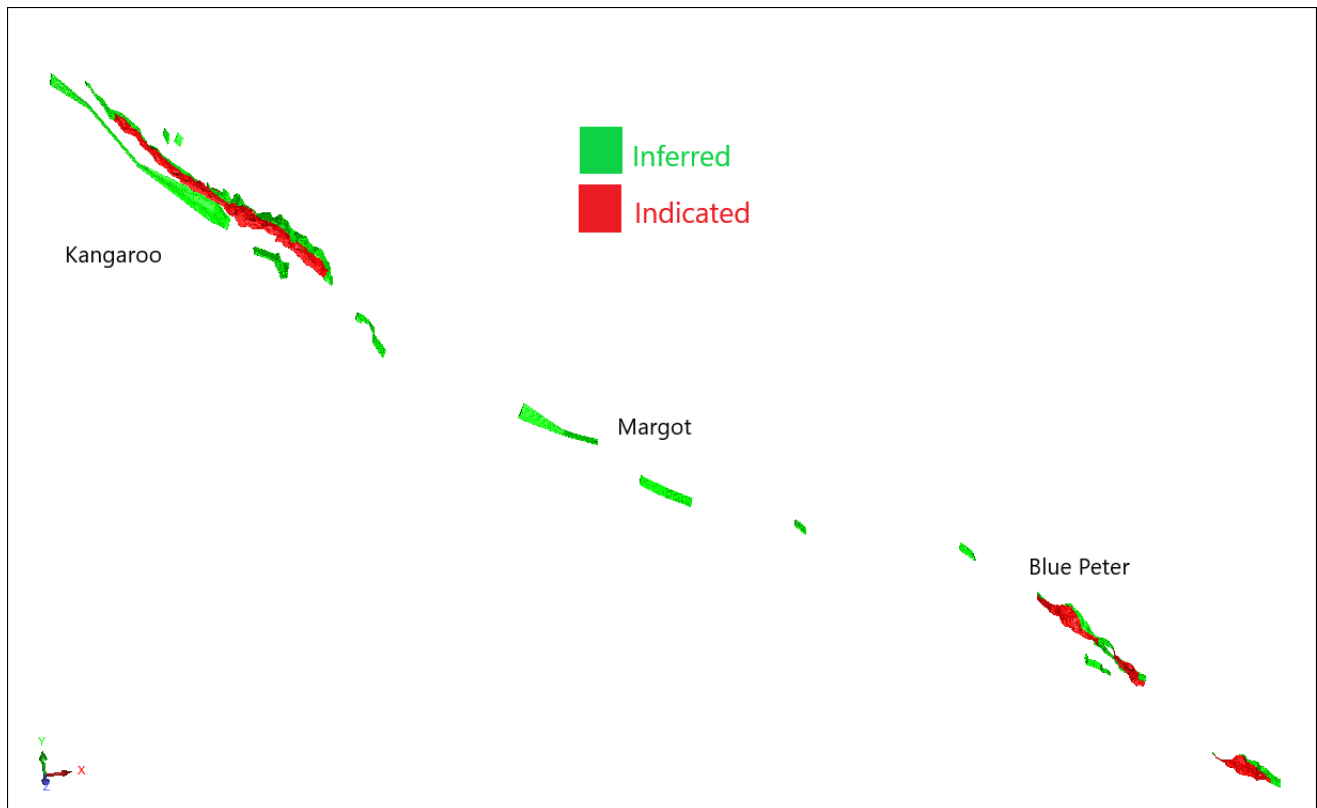


Figure 3 Classification of individual lodes with each prospect area.

#### **Mt Celia waste characterisation studies:**

The work of waste rock characterisation was carried out by MBS Environmental. The objective of the study was to assess each identified waste rock type in terms of their potential to generate acidic and/or metalliferous drainage (AMD) and to assess the suitability of benign waste rock from each deposit for construction and rehabilitation requirements.

The scope of work for this assessment included:

The preparation of a static waste rock characterisation report that included:

- The development a laboratory testing programme with an appropriate NATA (National Association of Testing Authorities) accredited laboratory, which included the preparation of all relevant Chain of Custody forms.
- Classification of all samples in terms of potential for formation of acid and metalliferous drainage (AMD) based on acid base accounting (ABA) methodology.
- An overhead figure showing spatial distribution of drill hole collars in relation to the proposed pit shell expansion.
- Assessment of geochemical enrichment and the potential of mine wastes to produce saline or neutral mine drainage using static laboratory leach procedures.
- Assessment of geochemical enrichment and the potential of mine wastes to produce saline or neutral mine drainage using static laboratory leach procedures.
- Screening of the materials for naturally occurring radioactive materials (NORM) based on total element composition.
- Screening of the materials for asbestiform minerals.

- Recommendations for Legacy Iron relating to the management of waste rock based on outcomes of the above assessment to satisfy the requirements for conceptual landform planning and permitting requirements.

## Conclusions & Recommendations:

Key findings of the geochemical assessment were:

### *Blue Peter Deposit*

- All samples regardless of the degree of weathering were classified as non-acid forming (NAF), indicating that they will not require specific handling or storage to control for AMD.
- No metals/metalloids were enriched relative to global averages in any sample tested. None of the samples contained sufficient uranium or thorium to be considered radioactive and trigger further radiological assessment.
- Water leachate results indicate that seepage or runoff produced by waste rock would be neutral to alkaline, and fresh to brackish containing low level of alkalinity, and are unlikely to contain any metals and metalloids with significantly environmental concerns.
- No asbestos fibres were identified in the samples tested.
- Oxide wastes (four of five selected samples considered generally representative) were found to be highly sodic and will be prone to dispersion/erosion if placed on sloping surfaces.

### *Kangaroo Bore Deposit*

- All samples regardless of the degree of weathering were classified as non-acid forming (NAF), indicating that they will not require specific handling or storage to control for AMD.
- Although enrichment of silver, bismuth, antimony, selenium, and tungsten were observed in several samples, they are likely to be present in insoluble forms based on results of water leachates and are thus unlikely to be environmentally significant. None of the samples contained sufficient uranium or thorium to be considered radioactive and trigger further radiological assessment.
- Leachates produced from waste rock is likely to be neutral to alkaline and non-saline in perpetuity. Leachates are also likely to have low alkalinities and are unlikely to contain environmentally significant levels of metals and metalloids. Arsenic concentrations in a 1:5 soil water extract were elevated compared to the freshwater aquatic guideline, however no such receptors are present in the vicinity and results were below Non-potable groundwater use and ANZECC Livestock drinking water guidelines. Under acidic conditions, concentrations were significantly lower than those observed for water extracts of the same samples - this together with lack of enrichment in total arsenic indicates a low potential for plant uptake of arsenic. Given depth to groundwater (60 m) and distance to pastoral bores, the risk for groundwater impacts is considered very low.
- No asbestos fibres were identified in the samples tested.
- Clay rich oxide wastes are highly sodic and will be prone to dispersion/erosion if placed on sloping surfaces.

Overall, waste rock from the proposed open pits for the Mt Celia project is environmentally



benign and does not require specific management other than applying good practice for landform construction and surface water management. Oxide waste is likely to be highly sodic and dispersive and thus should not be placed on sloping surfaces due to its potential to disperse and therefore erode. Ideally, this material should be placed back into previously mined pit voids or in constructed waste rock landforms which are suitably rock armoured with the available fresh rock on outer edges to prevent erosion and/or be restricted for use on flat surfaces only. Although erosive on slopes unless co-mingled with rock armour, there is no particular impediment for use of oxides as growth media or subsoil store and release moisture layer for rehabilitation given low salinity and neutral to alkaline pH. Harvested hardpan (ferricrete/calcrete) where available should also be considered as final cover material with available topsoil where there is a shortage of topsoil for rehabilitation and normally in preference to deeper weathered clay rich oxide regolith. Harvested hardpan is more resistant to erosion than underlying clay/fines rich oxides.

### **Next Quarter Agenda**

The next quarterly plan for the Mt Celia project includes the following main objectives:

- Execution of Heritage and Mining Agreement for the Mt. Celia tenements with the native title claimants.
- Completion of mining studies of the project and work towards the financial model of the project.
- Work on finalization of a mining contractor for the proposed mining activities at the Mt. Celia project.
- The Company continues to work through the required regulatory approvals, including heritage studies, and enter into agreements.

### ***Yilgani:***

During this quarter, assays from all the drilling programs of Legacy iron were compiled and the legacy database along with the historical drilling database was prepared.

All the data for the project is being currently used for generating a resource model and updating the resource at the project into a JORC compliant category. The work is being currently carried out by BMGS. The work is expected to be finished soon providing a resource model for the project and a maiden JORC compliant resource base.

*Next Quarter agenda-* The ore body modelling and resource estimation will be finished for the project. Further activities would be planned based on the generated resource model.

### **Mt Bevan Project (E29/510-I) Iron and Nickel**

The Company's Mt Bevan project is a joint venture with Hawthorn Resources Limited (40% interest) and is situated 250km north of Kalgoorlie in Western Australia. The project is on a large tenement E29/510 which hosts 1,170 Mt of magnetite resource @ 34.9% Fe (Table2).

The Company aims to progress the world class magnetite project through joint venture partnership with Hancock Magnetite Holdings Pty Ltd. Simultaneously exploring for lithium and nickel-copper mineralisation in the tenement.

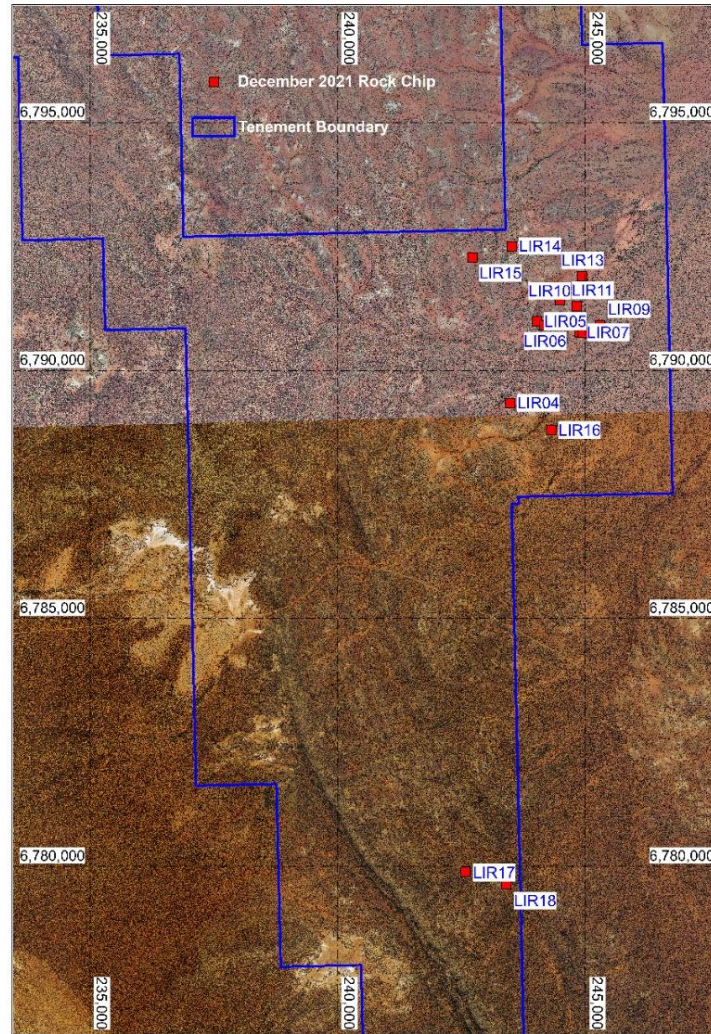
**Table 1 Mt Bevan BIF Resource Estimate**

Mt Bevan Fresh BIF Resource											
Class	Material	Tonnes x 10 <sup>6</sup>	Fe %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	CaO %	P %	S %	LOI %	MgO %	Mn %
Indicated	<i>In situ</i> Total	322	34.7	46.2	0.57	1.35	0.054	0.131	-1.05	1.91	0.31
	<i>In situ</i> Magnetic*	44.18%	30.0	2.4	0.01	0.08	0.005	0.053	-1.38	0.05	0.01
	Concentrate	142	68.0	5.5	0.02	0.18	0.012	0.130	-3.12	0.12	0.03
Inferred	<i>In situ</i> Total	847	35.0	45.6	0.77	2.00	0.063	0.39	-1.15	1.77	0.04
	<i>In situ</i> Magnetic*	45.70%	30.8	2.8	0.01	0.06	0.004	0.042	-1.37	0.03	0.01
	Concentrate	387	67.5	5.9	0.03	0.14	0.009	0.096	-3.00	0.06	0.02
Total	<i>In situ</i> Total	1,170	34.9	45.8	0.71	1.82	0.060	0.137	-1.12	1.81	0.11
	<i>In situ</i> Magnetic*	45.28%	30.6	2.7	0.01	0.07	0.004	0.045	-1.37	0.03	0.01
	Concentrate	530	67.7	5.80	0.03	0.15	0.010	0.105	-3.03	0.07	0.02

\*In situ Magnetic is the material that is expected to report to the magnetic fraction. The in situ Magnetic quantities in the Tonnes column are expressed as the percentage of the in situ Total tonnes (as estimated from Davis Tube Mass recovery) The Company confirms that it is not aware of any new information or data that materially affects the information included in these announcements and that all material assumptions and technical parameters underpinning the resource estimate in the prior announcements continue to apply and have not materially changed. - See Announcements 17<sup>th</sup> December 2013)

### ***Mt Bevan exploration for nickel/copper and lithium and associated metals:***

Initial geological reconnaissance and rock chip sampling was conducted in the eastern region of the Mt Bevan exploration lease. Pegmatite development in the area appears weak. Detailed geological mapping and surface sampling will now be undertaken in the northern and eastern areas. The northern area is proximal to the St George Cathedrals Ni-Cu sulphide discovery and the eastern area is along strike of the broad NNW trending corridor from the recently reported Red Dirt Minerals Li/Ta discovery at Mt Ida. Extensive pegmatite development is associated with the Mt Alexander granite which intrudes into the mafic dyke rocks that host the SGQ Ni-Cu deposits. Potentially there are chances to discover these pegmatites in the areas as similar a geological setting is evident.



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*Figure 4. Rock chip samples collected December 2021*

#### *Joint Venture with Hancock Magnetite Holdings Pty Ltd.:*

The final agreement is due to be signed in the first week of April 2022.

The details of the term sheet were originally outlined in the ASX announcement of 15 November 2021 and the final agreement comprises:

- Hancock Magnetite Holdings Pty Ltd. having exclusive right to earn-in to the Mt Bevan iron ore project and form a new joint venture agreement
- Hancock Magnetite Holdings Pty Ltd. funding the Pre-feasibility Study (PFS)
- Hancock Magnetite Holdings Pty Ltd. appointing Atlas Iron Pty Ltd (Atlas) as the manager of the new Joint Venture
- Legacy Iron and Hawthorn retaining all non-iron ore mineral rights.

Under the executed agreement, Hancock Magnetite Holdings Pty Ltd. will make an initial investment of \$9m for a 30% interest in the Project (Initial Investment) with \$8m cash being paid to Legacy Iron (\$4.8m) and Hawthorn (\$3.2m) and the

remaining \$1m to be available as working capital for the new Joint Venture.

Upon completion of the Initial Investment, Hancock Magnetite Holdings Pty Ltd. will hold a 30% interest in the Project with Legacy Iron and Hawthorn holding 42% and 28% respectively.

Earn-in occurs with Hancock Magnetite Holdings Pty Ltd. increasing its interest in the Project by a further 21% through the funding of a completed PFS. After the earn-in, Hancock Magnetite Holdings Pty Ltd. will hold 51%, Legacy will hold 29.4% and Hawthorn will hold 19.6% of the Project.

Thereafter, and subject to favourable outcomes, work programs will be undertaken with the intention of further advancing the Project to a Bankable Feasibility Study.

#### *Next Quarter agenda*

The next quarterly exploration plan for the Mt Bevan project includes following main objectives:

- Geological mapping and surface sampling in the tenement for Li/Ni exploration.

#### *Taylor Lookout Project*

The company signed a binding Heads of Agreement (HOA) with Eastern Lithium Pty Ltd, a wholly owned subsidiary of the Eastern Resources Ltd (ASX: EFE) with exclusivity for rights of lithium group of minerals (lithium, beryllium, caesium, niobium, rubidium, tantalum and tin) at the Taylor Lookout project.

The key points of the HOA are:

- Eastern Resources can earn up to 85% of the lithium group of minerals rights in the Taylor Lookout Project in the three stages.
  - Eastern Resources has the right to earn-in to the project by spending not less than A\$400,000 in the first 24 months to earn a 51% interest in lithium group of minerals (Stage 1).
  - Eastern Resources can earn a further 19% by committing a further A\$400,000 within a further 24 months (Stage 2); and
  - Eastern Resources can earn a further 15% by completing a Pre-Feasibility Study within 24 months of Stage 2 being completed.
- The parties will form an unincorporated joint venture ("Joint Venture") after stage 1 Earn-in.
- Legacy Iron will participate in the lithium project development after completion of a PFS by contribute funding to the Joint Venture on a pro-rata basis of lithium rights (15% rights).
- Where a party is unable to meet its required proportionate expenditure for the Joint Venture, industry standard dilution clauses will apply.
- LCY will remain the registered holder of the tenement and retain all rights pertaining to Other Minerals.

#### **PLANNED ACTIVITIES – June 2022 quarterly period.**

Main exploration activities planned in the next three months is likely to comprise of:

**Mt Celia project**

- Completion of pit optimisation studies.
- Work on financial model of the project.
- The Company continues to work through the required regulatory approvals.
- Option analysis for the ore processing
- Assessing Infrastructure and contract requirements

**Yilgangi**

- Geological modelling and resource estimation and future exploration planning.

**Koongie park:**

- For the upcoming RC drilling work heritage survey related works if required.

**Sunrise Bore:**

- Follow up RC drilling for approx. 1500 m.

**Mt Bevan Project:**

- Detailed Geological mapping and surface sampling in the tenement for Li/Ni exploration.

**Sophie Downs:**

- Work program clearance from KLC and heritage survey related works if required.
- Finalisation of drone magnetics survey in parts of the tenement to generate new exploration targets.

**Ruby Plains:**

- Finalisation of drone magnetics survey in parts of the tenement to generate new exploration targets.

For the purpose of Section 6 of the Appendix 5B, all payments made to related parties have been paid in relation to director fees.

**Competent Person's Statement:**

*The information in this report that relates to Exploration Results is based on information compiled by Vivek Sharma who is a member of AusIMM and employee of Legacy Iron Ore Limited. Mr Sharma 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 a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Sharma consents to the inclusion in this report of the matters based on his information in the form and the context in which it appears.*

This announcement has been authorised by the Board.

**Tenement Schedule in accordance with ASX Listing Rule 5.3.3****Tenements held at the end of the March 2022 Quarter**

<b>Location</b>	<b>Tenement</b>	<b>Project</b>	<b>Date of Grant</b>	<b>Equity (%) Held at start of Quarter</b>	<b>Equity (%) Held at end of Quarter</b>
WA	E80/4221	Koongie Park	14/12/2009	100%	100%
WA	E31/1034	Patricia North	19/09/2013	100%	100%
WA	M31/0426	Yilgangi	12/01/2009	100%	100%
WA	M31/0427	Yilgangi	12/01/2009	90%	90%
WA	E31/1019	Yilgangi	10/04/2013	90%	90%
WA	E31/1020	Yilgangi	10/04/2013	90%	90%
WA	E39/1443	Mt. Celia	10/11/2009	100%	100%
WA	M39/1125	Mt Celia	7/06/2018	100%	100%
WA	M39/1126	Mt Celia	7/06/2018	100%	100%
WA	M39/1127	Mt Celia	7/06/2018	100%	100%
WA	M39/1123	Mt Celia	7/11/2018	100%	100%
WA	M39/1124	Mt Celia	7/11/2018	100%	100%
WA	M39/1128	Mt Celia	7/11/2018	100%	100%
WA	E39/1748	Sunrise Bore	1/07/2014	100%	100%
WA	E29/0510	Mt. Bevan	7/07/2005	60%	60%
WA	E80/5066	Taylor Lookout	18/07/2018	100%	100%
WA	E80/5067	Sophie Downs	18/07/2018	100%	100%
WA	E80/5068	Ruby Plains	18/07/2018	100%	100%
WA	E39/2040	Kangaroo Bore North	18/09/2018	100%	100%