

## 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

**Amitava Mukherjee**, Non-Executive Chairman

**Vishwanath Suresh**, 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

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28 April 2023

The Company Announcements Office  
ASX Limited

Via E Lodgement

## REPORT FOR THE QUARTER ENDED 31 March 2023

Please find attached the Company's Quarterly Activities Report for the quarter that ended 31 March 2023.

Yours faithfully  
**LEGACY IRON ORE LIMITED**

Rakesh Gupta  
Chief Executive Officer

## DIRECTORS' REPORT

### HIGHLIGHTS

#### **EXPLORATION AND DEVELOPMENT**

##### ***Mt Celia:***

- Progressed talks with the prospective mills to finalise an Ore Processing Agreement (OPA) or Toll Processing Agreement (TPA).
- Delivered the proposed Mining Agreement to the Native Title Claimants Group (NTCG) for signing.
- Completed a heritage survey by NTCG for proposed exploration and mining activities.
- Completed the draft Mining Proposal by Integrate Sustainability consultants, which is being reviewed in-house for final submission to the Department of Mining and Petroleum (DMP).
- Received the surface hydrology report and subterranean fauna report from Hydrologia and Bennelongia Environmental consultants.
- Commenced the native vegetation clearing permit application and supporting documents by Integrate Sustainability consultants.
- Progressed discussions with various mining and ore haulage contractors for proposed mining activities.
- Planned grade control drilling for the initial Blue Peter and Kangaroo Bore pits. Drilling is to commence in the second quarter of 2023.

##### ***Mt Bevan:***

- Progressed pre-feasibility studies (PFS) by the JV Partner Atlas Iron.
- Completed Reverse Circulation (RC) (7,224 m) and core drilling (1,570 m) to inform metallurgical test work and mineral resource modelling.
- Commenced metallurgical test work.
- Progressed heritage studies with the engagement of NTCG.
- Completed stage one environmental studies, including flora and vegetation, fauna, subterranean and soil. Further environmental surveys are planned for the next quarter.
- Progressed product logistics options study and port destination studies that examine multiple routes and various modes of transport.
- Commenced mine geotechnical work.

##### ***Patricia North:***

- Received the heritage survey report undertaken last quarter for the proposed RC drilling activities.

## DIRECTORS' REPORT

### ***Sunrise Bore:***

- Planned follow-up RC drilling targeting anomalous gold intersections reported from previous RC campaigns.
- Lodged Programme of Work for the RC drilling program. Approval received from the DMP.
- Provided Heritage Impact Assessment (HIA) to NTCG on proposed RC activities at the project.

### ***East Kimberley tenements:***

- Commenced interpretation of the drone magnetics survey data for Sophie Downs, Taylor Lookout and Ruby Plains by Newexco consultants.
- Completed initial field works by JV partner (Eastern Resources Ltd) at the Taylor Lookout Project. Rock chip sampling works were conducted at the identified lithologies of interest. The samples were analysed at the Nagrom laboratory.

## EXPLORATION

### Projects Overview

Legacy Iron Ore (**Legacy Iron** or the **Company**) is committed to exploring and developing gold, iron ore, base metal and critical mineral deposits in Western Australia. The Company has ten promising projects encompassing 24 tenements in the Western Australian known mineralised belts, Figure 1. The Company is advancing the projects into higher stages of exploration and development through systematic exploration activities.

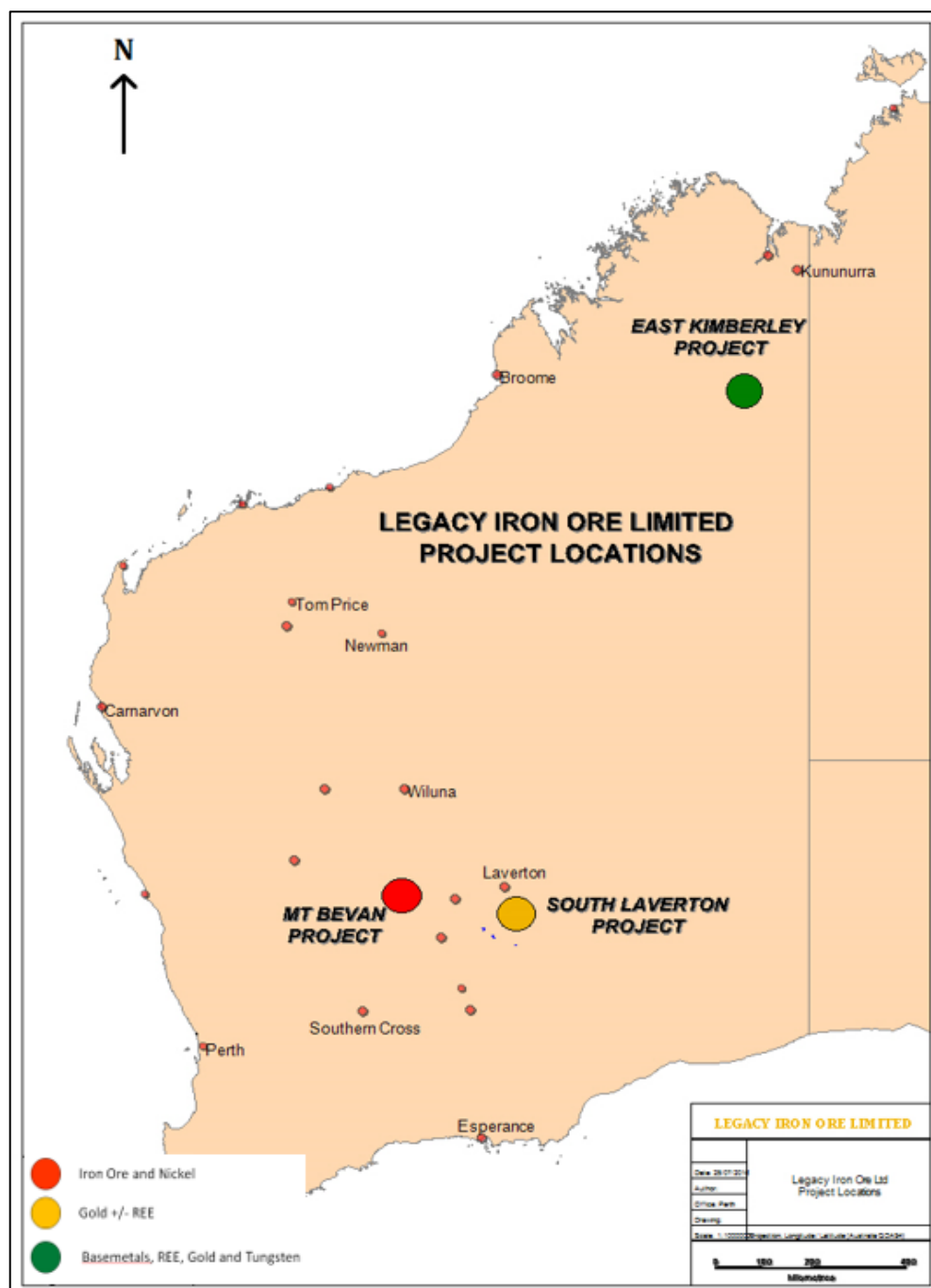


Figure 1 Legacy Iron – Project Location

### South Laverton Gold Hub

Legacy Iron's South Laverton Gold Hub includes the projects; Mt Celia, Yerilla, Yilgangi, Sunrise Bore and Patricia North, Figure 2.

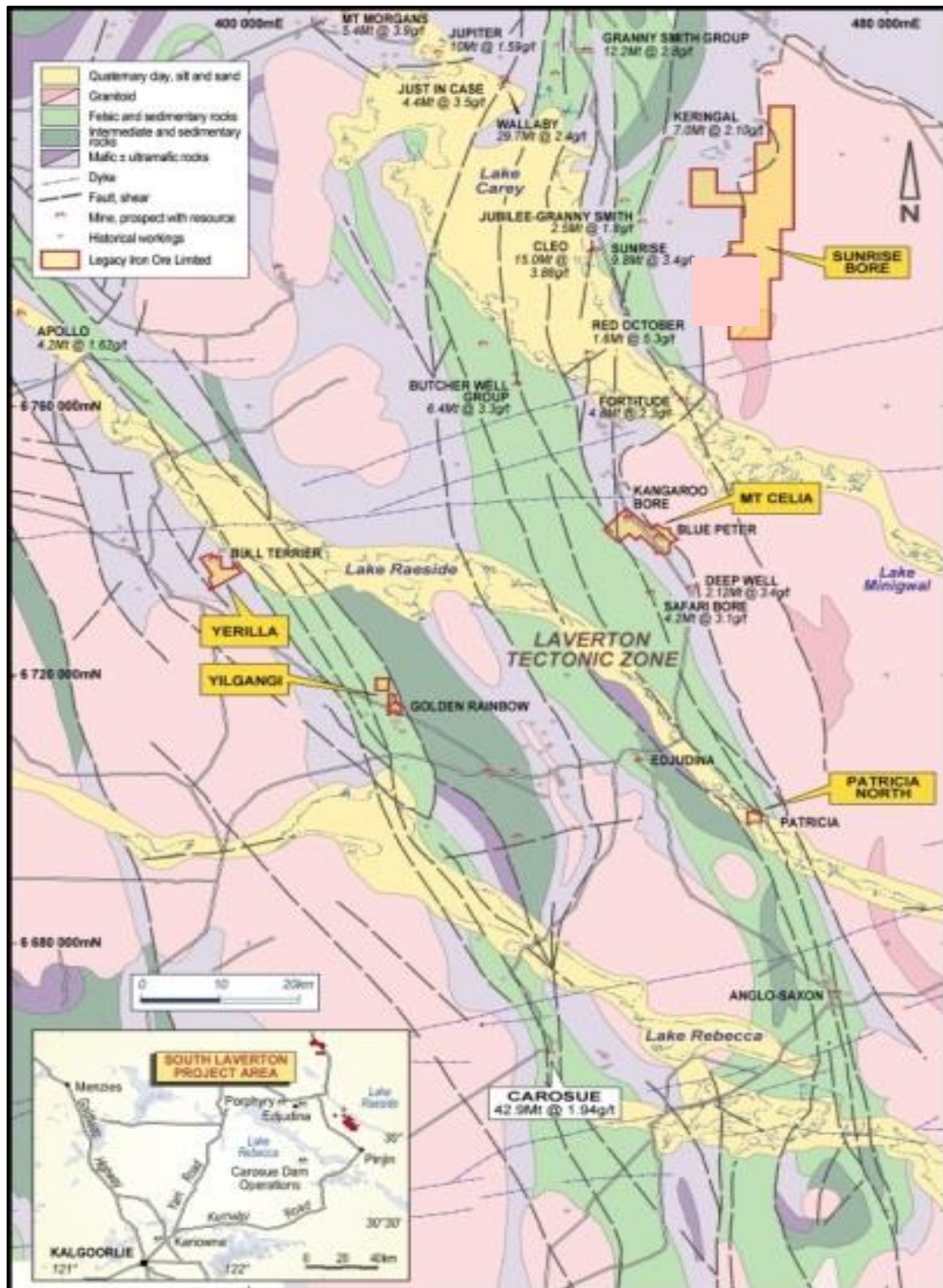


Figure 2 Legacy Iron's South Laverton Gold Projects on regional geology

## DIRECTORS' REPORT (continued)

### **Mt Celia:**

The Company is working towards completing the pre-feasibility study and developing the Mt Celia project, including the Kangaroo Bore and Blue Peter deposits. The following activities were either commenced or completed during the quarter:

- JT Metallurgical Services and Legacy continue analysis work on toll treatment options. Advanced talks are being held with the prospective mills to finalise an Ore Processing Agreement (OPA) or Toll Processing Agreement (TPA).
- Delivered the proposed mining agreement to Native Title Claimants Group (NTCG) for signing.
- Completed a heritage survey by NTCG for proposed exploration and mining activities.
- Completed the draft mining proposal by Integrate Sustainability consultants, which is being reviewed in-house for final submission to the Department of Mining and Petroleum (DMP).
- Received the surface hydrology report and subterranean fauna report from Hydrologia and Bennelongia Environmental consultants.
- Commenced the native vegetation clearing permit application and supporting documents by Integrate Sustainability consultants.
- Progressed discussions with various mining and ore haulage contractors for proposed mining activities.
- Planned grade control drilling for the initial Blue Peter and Kangaroo Bore pits. Drilling is to commence in the second quarter of 2023.

**Grade Control RC Drilling plan:** Grade control drilling has been planned at a nominal collar spacing of 10m x 10m. The total drill metres planned is approximately 6,000 metres over the scheduled pits of Blue Peter and Kangaroo Bore deposits. Figures 3 & 4 below show the planned grade control drilling at Blue Peter and Kangaroo Bore deposits.

## DIRECTORS' REPORT (continued)

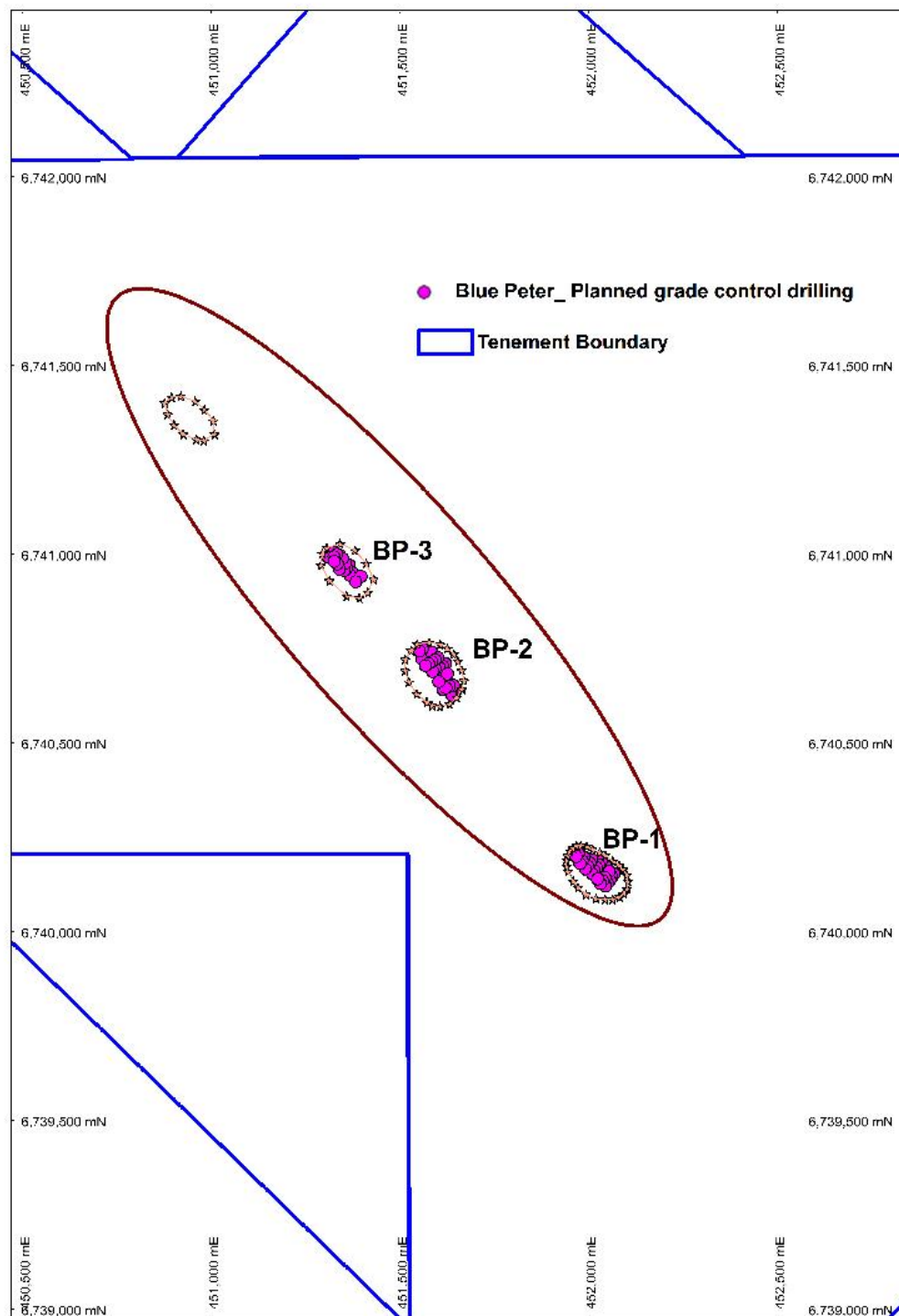


Figure 3 Planed grade control pits of Blue Peter deposit



## DIRECTORS' REPORT (continued)

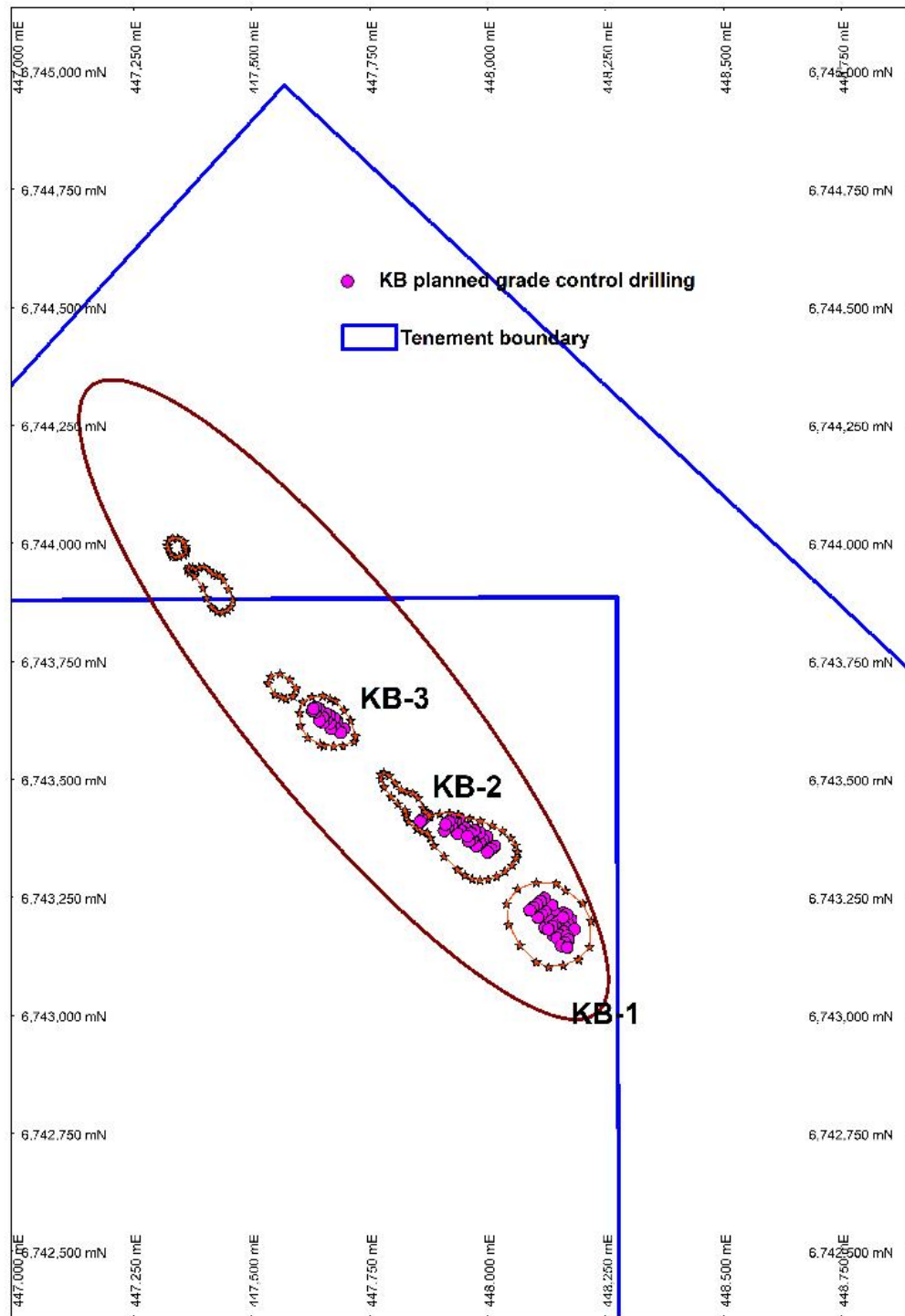


Figure 4 Planned grade control pits of Kangaroo Bore deposit



## **DIRECTORS' REPORT (continued)**

### **Next quarter agenda**

- Conduct grade control RC drilling in the proposed pits at Mt. Celia.
- Finalise mining, ore haulage and toll treatment contracts for the proposed mining activities.
- Finalise the mining proposal and submit it to the Department of Mines and Petroleum for approval.
- Progress through the required regulatory approvals.
- Assess infrastructure and contract requirements.

### **Patricia North:**

- The report was received for the heritage survey undertaken last quarter for the proposed RC drilling activities. No significant heritage issues were identified, and drilling will progress as planned.

### **Next Quarter Agenda**

- Finalise the RC drill plan to test the interpreted dip and strike of gold mineralisation.

### **Sunrise Bore:**

- Planned follow-up RC drilling targeting anomalous gold intersections reported from previous RC campaigns.
- Lodged Programme of Work for the RC drilling program. Approval received from the DMP.
- Provided Heritage Impact Assessment (HIA) to NTCG on proposed RC activities at the project.

### **Next Quarter Agenda**

- Finalise and execute the RC drilling plan to test the dip and strike continuity of gold mineralisation. Work is subject to heritage clearance from NTCG.

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

The project 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. (Refer to ASX announcement dated 17 December 2013).

The Company aims to progress the world-class magnetite project through a joint venture partnership with Hancock & Hawthorn Resources, simultaneously exploring lithium and nickel-copper mineralisation in the tenement.

The JV manager Atlas Iron undertook the pre-feasibility studies related to planned works as per the JV agreement executed in April 2022 and include:

- Progressed pre-feasibility studies (PFS) by the JV Partner Atlas Iron.
- Completed Reverse Circulation (RC) (7,224 m) and core drilling (1,570 m) to inform metallurgical test work and mineral resource modelling.

## **DIRECTORS' REPORT (continued)**

- Commenced metallurgical test work.
- Progressed heritage studies with the engagement of NTCG.
- Completed stage one environmental studies, including flora and vegetation, fauna, subterranean and soil. Further environmental surveys are planned for the next quarter.
- Progressed product logistics options study and port destination studies that examine multiple routes and various modes of transport.
- Commenced mine geotechnical work.

### **Next quarter agenda**

- Atlas Iron will continue to progress the project to PFS.

### **East Kimberley Projects**

- Commenced interpretation of the drone magnetics survey data for Sophie Downs, Taylor Lookout and Ruby Plains by Newexco consultants.
- Completed initial field works by JV partner (Eastern Resources Ltd) at the Taylor Lookout Project. Rock chip sampling works were conducted at the identified lithologies of interest. The samples were analysed at the Nagrom laboratory.

Numerous base metal and tin workings are known from the 1:250K scale map sheet. The deposits are primarily reported as skarns, implying a likely stratigraphic control in the Biscay Formation. Traverses in the current period failed to identify many of the mapped occurrences. However, traces of secondary copper minerals were noted in historic drill spoils.

Several quartz-cored pegmatites were identified and sampled as part of the work conducted on this trip. In addition, 69 rock chip samples were delivered to Nagrom for assays in January 2023. Assay results were received in early March 2023. No significant lithium in rock chips was collected in November 2022.

Fig 5 below shows the location map of the rock chip samples collected during the above-mentioned field trip.

## DIRECTORS' REPORT (continued)

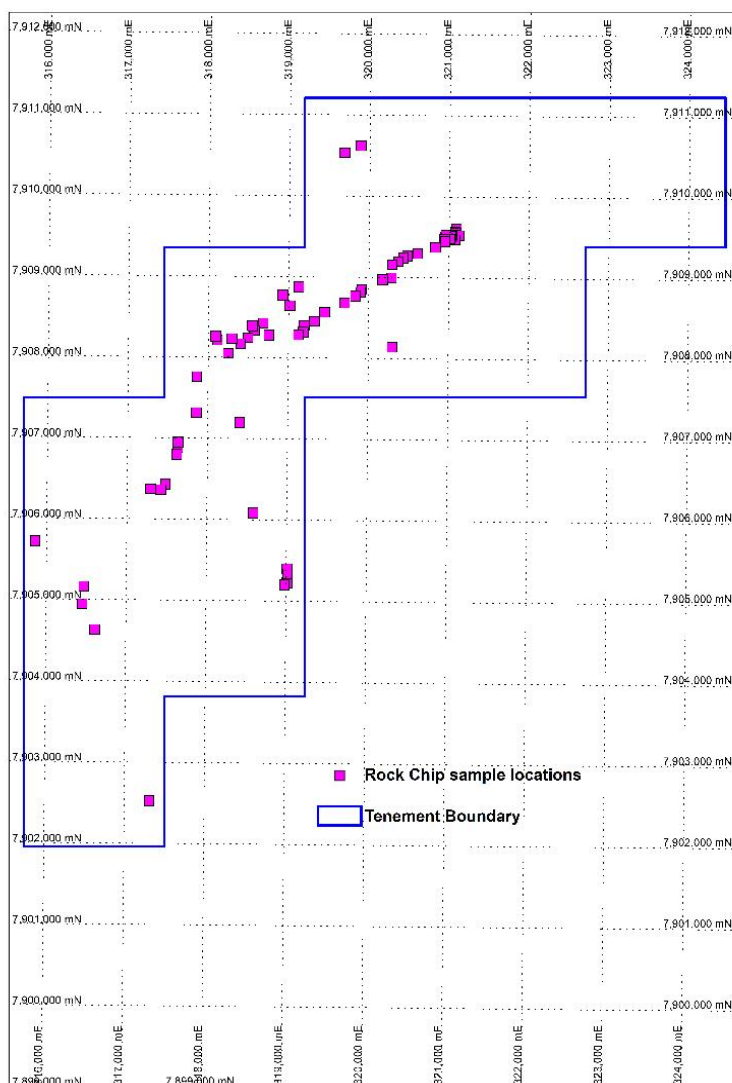


Figure 5 Rock chip sample location map

Planned mapping and sampling works in November 2022 could not be completed because of extreme weather and flooding in Halls Creek in November and December 2022. Further mapping and sampling will be planned in 2023 to complete unfinished work.

### Next quarter agenda

- Complete the geophysical interpretation of the three tenements and generate new targets for further exploration.
- Continue work for the lithium and associated minerals exploration by Eastern Resources as per the joint venture terms and conditions.

## DIRECTORS' REPORT (continued)

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 refers to ASX announcements previously released by the Company, which contain all geological information and the required competent person sign-off. These announcements are:

- SIGNIFICANT RESOURCE UPGRADE AT MT BEVAN IRON ORE PROJECT Dated 17 December 2013
- Mt Bevan Joint Venture Update 3 May 2022

The Company confirms that there is no new information or data that materially affects the mineral resource estimate announced on 17 December 2013, and that all assumptions underpinning the estimate continue to apply and have not materially changed.

### Tenement Schedule in accordance with ASX Listing Rule 5.3.3

Table 1 Tenements held at the end of the March 2023 Quarter

Location	Tenement	Project	Date of Grant	Equity (%) Held at the start of the quarter	Equity (%) Held at the end of the quarter
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	E39/2262	Mt. Celia	15/11/2022	100%	100%
WA	E39/2348	Mt. Celia	06/02/2023	NA	100%
WA	E39/1748	Sunrise Bore	1/07/2014	100%	100%
WA	E29/0510	Mt. Bevan	7/07/2005	42%	42%
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%