

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

Mr Rakesh Gupta, Chief Executive Officer and board member

Mr Vishwanath Suresh, Non-Executive Director

A K Padhy, Non-Executive Director Mr Devanathan Ramachandran, Non-Executive Director

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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31 October 2023

The Company Announcements Office ASX Limited

Via E Lodgement

REPORT FOR THE QUARTER ENDED 30 September 2023

The Company's Quarterly Activities Report is attached.

Yours faithfully LEGACY IRON ORE LIMITED

Rakesh Gupta Chief Executive Officer

This announcement has been authorised for release by the Board of Directors.

HIGHLIGHTS

EXPLORATION AND DEVELOPMENT

South Laverton Project

Mount Celia

Substantial progress in transitioning the Mount Celia Gold Operation to production.

- Granted all remaining regulatory approvals to commence mining in CY Q4 2023.
- Executed toll milling arrangement with Paddington Gold Mine Pty Ltd through an Ore Purchase Agreement to use their mill.
- Finalised discussions with potential contractors and mine operators for key mining activities and infrastructure sharing.
- Progressed Mine Safety Management and Environmental and Heritage Management Systems development.
- Commenced optimisation and update of the mining schedule.

Yilgangi

- Finalised drill plan to increase geology confidence in the current Mineral Resource.
- RC drill plan approved and will be completed in the next quarter.

Patricia North

- Finalised plan to drill test targets.
- RC drilling to be completed in the next quarter.

Sunrise Bore

- Encouraging results received from samples recently drilled.
- Drilling intersected gold mineralisation greater than 0.50 ppm Au in five of the 15 holes drilled.
- Further RC drilling is planned to define the continuity and extension of the mineralised zone.

Mount Bevan Project

Iron Ore - Magnetite

Significant progress of Pre-Feasibility Studies (PFS) by the JV Partner Atlas Iron Ltd.

- Progressed mineral resources estimates & testwork
 - Commenced peer review of the mineral resource model.
 - Completed preliminary bore field designs.
 - Completed most metallurgical test work. Master composite test work ongoing.
- Progressed engineering
 - Progressed plant design to the peer review stage
 - Finalised tailings report.
 - Commenced mine modelling.
 - Completed non-processing infrastructure list.
 - Completed site layout design.
 - Completed port and rail design review.
 - Progressed power study.
- Progressed EHA
 - Completed all environmental and heritage surveys.

Lithium and Other Minerals

Considerable progress with planning and commencing Phase 1 exploration activities.

- Completed program scheduling and design work.
- Commenced initial ground testing fieldwork. Geological mapping, heritage surveys and soil sampling are to be completed next quarter.

East Kimberley Project

Koongie Park

- Finalised plan for 1,500 metres of RC drilling.
- Applied to Koongie-Elvire Native Title Group for heritage clearance.

Taylor Lookout, Sophie Downs and Ruby Plains

- Finalised 1,500 metres of RC drilling for Koongie Park.
- Interpreted targets are to be ground-truthed for first-phase drill testing.
- Exploration activities on the Taylor Lookout tenement by Eastern Lithium Pty Ltd, a whollyowned subsidiary of Eastern Resources Limited (ASX:EFE), will progress in accordance with the Head of Agreement (HOA) or rights of lithium group of minerals (lithium, beryllium, caesium, niobium, rubidium, tantalum, and tin). ASX announcement: Executes farm-in on Taylor Lookout, 28 February 2022.

EXPLORATION

Projects Overview

Legacy Iron Ore (**Legacy Iron** or the **Company**) is committed to exploring and developing gold, iron ore, base metals, and critical mineral deposits in Western Australia. The Company has ten promising projects encompassing 25 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.

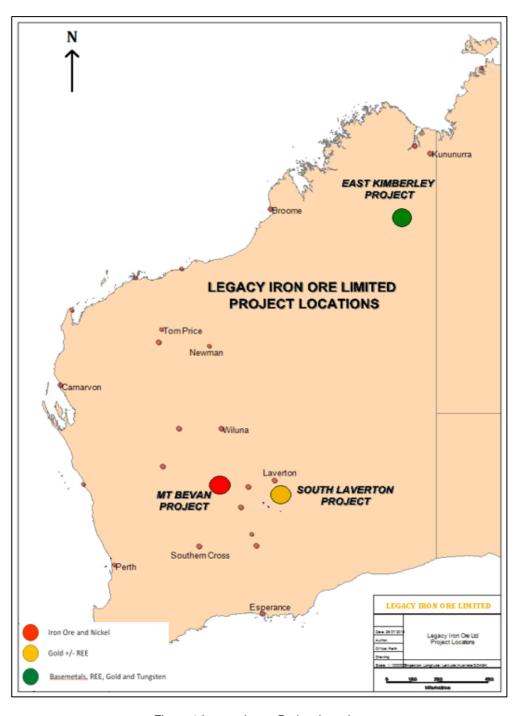


Figure 1 Legacy Iron – Project Location.

South Laverton Project

Legacy Iron's South Laverton Gold Project includes the Mt Celia deposits, Yerilla, Yilgangi, Sunrise Bore and Patricia North prospects, Figure 2.

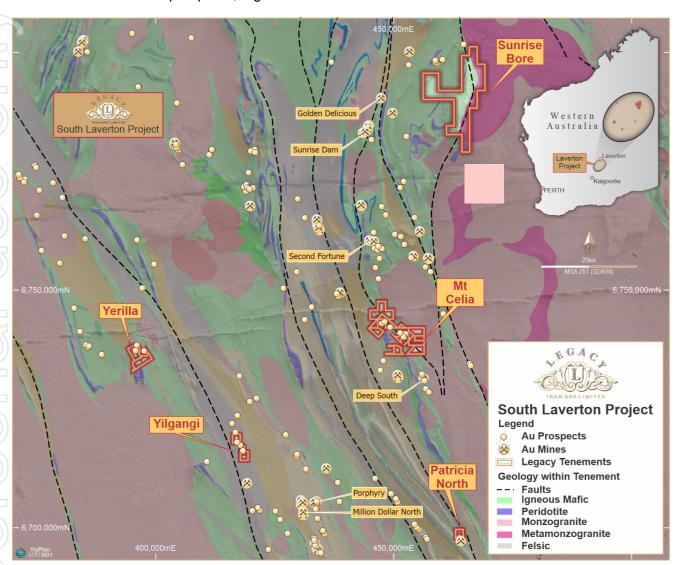


Figure 2 Legacy Iron's South Laverton Gold Projects on regional geology.

Mount Celia

The Mount Celia gold deposits lie within the Laverton Tectonic Zone, 40 kilometres south of the Sunrise Dam Gold Mine. The deposits contain known gold occurrences, particularly Kangaroo Bore and Blue Peter, which cover Mining Leases M39/1145, M39/1127 and M39/1128. The combined deposits have a Mineral Resource of 6.97 million tonnes at 1.39 g/t for 312,600 ounces, ASX announcement: Revised Resource Estimates of the Mt Celia Gold Project, 3 March 2022.

Considerable progress has been achieved in transitioning the Mount Celia Gold Project to production. As of the time of writing, all regulatory approvals have been received, and the Project is in a "mineready" state. Finalising commercial agreements and contracts are in the advanced phase to allow mining to commence in CYQ4 2023.

Quarter Activities

The following activities were either commenced or completed:

- Granted approval for Native Vegetation Clearance Permit, Mining Proposal and Closure Plan by the Department of Mining Industry Regulation and Safety (DMIRS).
- Granted License "To Take Water" by the Department of Water and Environmental Regulation for mine dewatering and dust suppression activities.
- Executed toll milling agreement with Paddington Gold Mine Pty Ltd to purchase up to 400 Kt of tonnes of ore throughout the project.
- Progressed discussions with potential contractors for mining and ore haulage activities.
- Advanced discussions with Linden Gold Alliance Limited for a Strategic Infrastructure Sharing Agreement to accommodate mine workers. Post the end of the quarter, the Company executed this agreement, ASX announcement: Infrastructure Sharing Agreement Signed with Linden Gold Alliance, 4 October 2023.
- Progressed the Mine Safety Management System with SHEQ Management Consultants.
- Commenced the development of an Environmental and Heritage Management Plan with Integrate Sustainability Consultants.

Next Quarter Activities

- Award mining and ore haulage contracts.
- Complete Mine Safety Management System.
- Develop an Environmental and Heritage Management Plan.
- Finalise optimisations and scheduling of the Kangaroo Bore and Blue Peter pits.
- Commence gold mining in the scheduled pits.

Patricia North

Patricia North is part of the South Laverton Gold Project and comprises Exploration Licence E 31/1034. The tenement is considered highly prospective for gold mineralisation and is one kilometre north of the now-closed Patricia Open Cut Mine. The tenement is situated on the eastern margin of the Norseman-Wiluna Archaean Greenstone Belt within the Kurnalpi Terrane of the Yilgarn Craton. The tenement overlies part of the north-northwest trending stratigraphy comprising mafic and felsic volcanics and metasediments of the Mulgabbie formation. Several northwest and northeast trending mafic dykes cross-cut the regional stratigraphy. In addition, the NNW trending Mt. Celia Tectonic Lineament passes through the project area.

Quarter Activities

The Company plans to drill test targets selected from a review of earlier work, including surface traverses and mapping, surface sampling, Rotary Air Blast (RAB) and Air Core (AC) drilling. This evaluation work enabled the completion of the following goals.

 Finalised the RC drill plan (1,000 metres) to test gold mineralisation's interpreted dip and strike.

Next Quarter Activities

• Execute RC drilling, sampling and analytical work.

Sunrise Bore

The Sunrise Bore prospect is approximately 12 kilometres east of the world-class Sunrise Dam Gold Mine operated by AngloGold Ashanti. Several prospective shear structures have been identified within the project area spatially associated with gold anomalism noted in earlier fieldwork and/or nugget gold found by recent prospecting.

Quarter Activities

 Validation and evaluation of recently completed drilling data from 15 RC drill holes totalling 1,710 metres.

The drilling was undertaken to test the continuity of intersected mineralisation in the previous RC drill campaign. Drilling intersected gold mineralisation greater than 0.50 ppm Au in five of the 15 holes drilled, Table 1, ASX announcement: Encouraging Gold Mineralisation Intercepted at Sunrise Bore Prospect, 6 September 2023.

The most significant mineralised intersections are:

- 2 m @ 3.36 ppm Au from 45 m in SBRC037
- 5 m @ 1.35 ppm Au from 9 m in SBRC039

Borehole **Drill Hole Collar Coordinates** Downhole Survey & Depth Drill Hole Interval Mineralised Intersection Easting (mE) Northing (mN) RL (m) Azimuth Dip Total Depth (n From (m) To (m) Au (ppm) SBRC035 1 m @ 0.53 g/t Au 464700.0 6788930.0 497.0 125.0 -60.0 68 0.53 69 SBRC036 464694.0 6788964.0 497.0 125.0 -60.0 160 83 84 0.53 1 m @ 0.53 g/t Au 45 46 0.61 SBRC037 464720.0 6788976.0 498.0 125.0 -60.0 2 m @ 3.36 g/t Au 46 47 6.11 1 m @ 1.10 g/t Au 1.10 9 10 1.42 10 1.92 11 0.72 1.37 11 12 5 m @ 1.35 g/t Au SBRC039 464743.0 6789035.0 500.0 125.0 -60.0 120 12 13 1.33 13 45 46 0.80 2 m @ 0.71 g/t Au 46 47 0.62 1 m @ 0.55 g/t Au 50 51 0.55 SBRC048 464869.0 6789853.0 516.0 122.0 -60.0 90 31 0.58 1 m @ 0.58 g/t Au

Table 1 Intersected mineralisation ≥0.5 ppm Au per drill metre

Next Quarter Activities

• Interpret the geological and analytical data collected from the June 2023 RC drilling program and determine further exploration of potential targets.

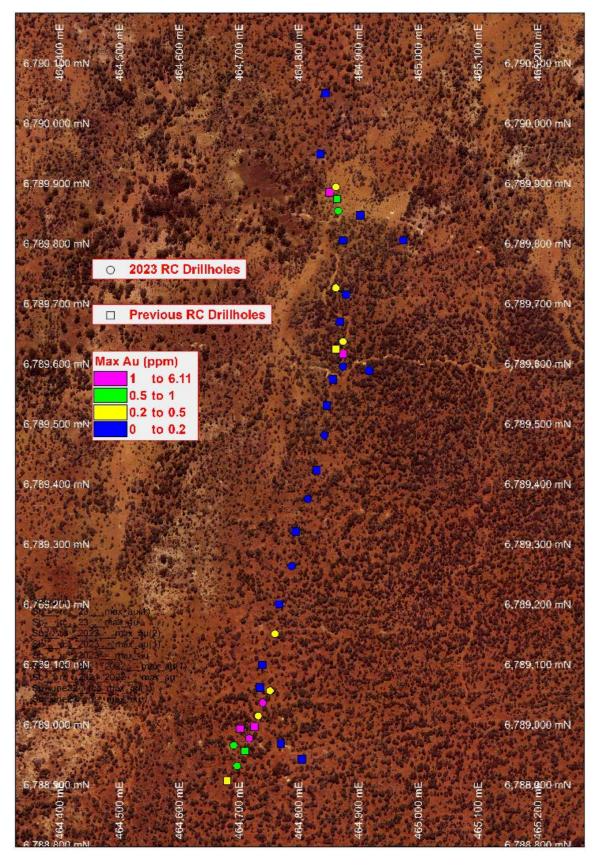


Figure 3 Thematic map showing completed drill hole locations at Sunrise Bore.

Mount Bevan Project

The Mount Bevan project is 250km north of Kalgoorlie in Western Australia. The Project is on an extensive exploration tenement (E29/510), which hosts 1,170 Mt of magnetite resource @ 34.9% Fe, ASX announcement: Significant Resource Upgrade at Mt Bevan Iron Ore Project, 17 December 2013.

The Company aims to progress the world-class magnetite project through a JV partnership with Hancock Magnetite Holdings Pty Ltd (Hancock) & Hawthorn Resources Ltd (Hawthorn), simultaneously exploring lithium and nickel-copper mineralisation in the tenement.

Iron Ore - Magnetite

Quarter Activities

Progressed Pre-Feasibility Studies (PFS) by the JV Partner Atlas Iron Ltd, including.

- Commenced peer review of mineral resource model with technical write-up progressing well.
- Completion of metallurgical test work to verify flowsheet and process design. Master composite test work ongoing.
- Reviewed hydrogeology results and completed preliminary bore field design.
- Completed review of Process Plant design based on variability composite testwork.
- Completed list of non-process Infrastructure and progressed site layout design
- Finalised tailings design and report.
- Commenced mine planning process with Cube Consultants.
- Completed rail modelling, which indicates that the initial scope may be conservative.
- Progressed rail upgrade engineering and capital estimates.
- Commenced third-party rail haulage pricing with Aurizon and Pacific National.
- Completed design review with Southern Ports through upgraded Port.
- Reviewed port site layout drawings and upgraded engineering and capital estimates.
- Commenced power study.

in Iruosibol **Next Quarter Activities**

- Finalise the Mineral Resource model.
- Progress mine plan optimisation work.
- Complete master composite test work (additional dry magnetic separation).
- Complete engineering and estimates.
- Confirm port and rail third-party pricing.
- Complete all EHA reports.
- Commence financial modelling.
- Complete trade-off studies and optimisation.

Lithium and Other Minerals

Legacy Iron recognises the considerable potential of the Mount Bevan project in the exploration of lithium and other minerals. The Mount Ida fault is spatially related to what is acknowledged as an emerging lithium, caesium, tantalum (LCT) pegmatite corridor following recent discoveries along the fault by neighbouring companies, Figure 4.

Given Mount Bevans' exploration and strategic importance, Legacy executed a new earn-in and JV for lithium and other minerals agreement with Hancock and Hawthorn, announced on 15 June 2023.

Quarter Activities

- Completed scheduling and design work for phase 1 exploration activities to confirm a lithium Exploration Target (as defined by JORC 2012), including
 - Field Reconnaissance.
 - Ground-based geophysics campaign.
 - Airborne geophysics campaign.
 - 10,000m RC drilling.
- Commenced ground and aerial geophysics.
- Commenced rock shipping.
- Commenced heritage surveys.

Next Quarter Activities

- Complete geological mapping of ground and air activities per the JV terms and conditions.
- Complete heritage surveys.
- Complete soil sampling program.

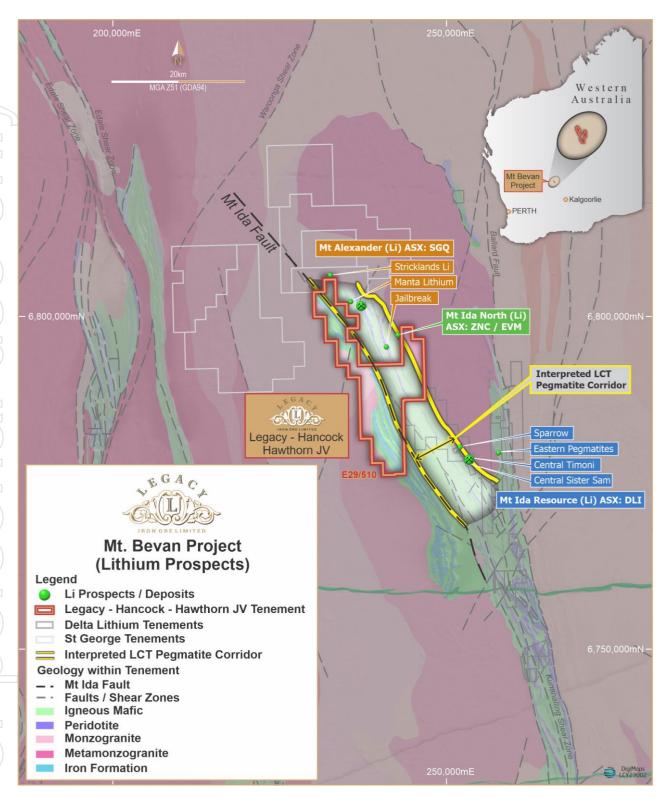


Figure 4 Mount Bevan Project, LCT pegmatite corridor.

East Kimberley Projects

The East Kimberley Project is in the Halls Creek area, 350 km south of Kununurra and is readily accessible via the Great Northern Highway. The Project comprises Koongie Park (E80/4221) and the Sophie Downs (E80/5067), Ruby Plains (E80/5068) and Taylor Lookout (E80/5066) tenements.

This Project's tenements remain relatively underexplored, allowing Legacy to reveal the inherent potential of known polymetallic, base metals, gold, and rare earth mineralisation occurrences.

Koongie Park

Legacy Iron Koongie Park tenement (E80/4221) is contiguous with highly prospective ground explored by Auking Mining Limited (ASX:AKN) and Astral Resources LN (ASX:AAR) at their Koongie Park base metals deposits, Figure 5. AKN has defined substantial base metal, gold, and silver mineralisation. AKN has had recent success in intersecting copper-zinc mineralisation.

These recent discoveries have been described as a potential VMS-style which is known worldwide to occur in clusters, and often the early discoveries in such mineralisation systems are not the largest. Work completed by Legacy Iron at Koongie Park revealed several base metals, gold and rare earth elements (REE) anomalies.

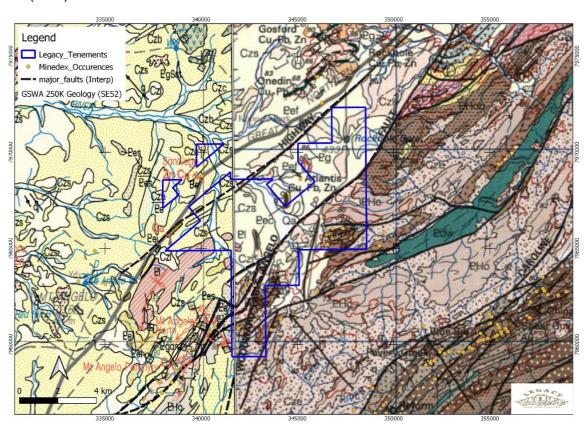


Figure 5 Geological Survey of Western Australia (GSWA) 250000 geology, Minedex occurrences and Koongie Park prospects.

In 2013 Legacy Iron flew an airborne electromagnetics (EM) survey across the Project. Interpretation of the data revealed several anomalies that were targeted in 2015 for RC drill testing. The 2015 RC

drilling did not intersect anomalous base metals mineralisation, nor were the source of the EM anomalies identified.

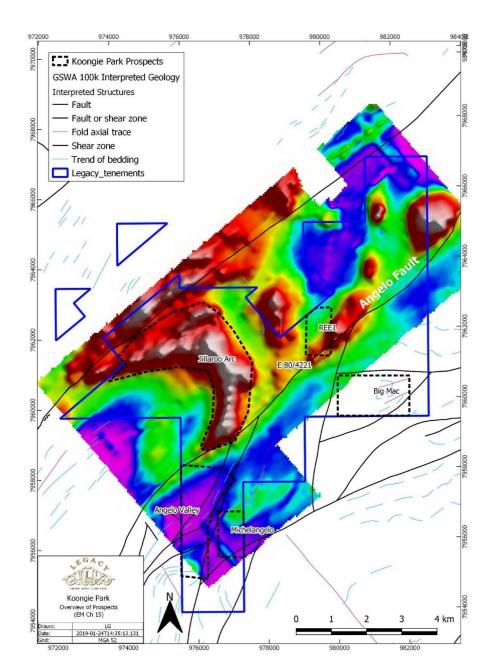


Figure 6 Prospects at Koongie Park superimposed with electromagnetic survey (Ch15) and geological structures interpreted by the GSWA.

During 2021, ground geophysical, Moving Loop Electromagnetic (MLEM) survey was completed for the six identified targets resulting from geochemical and ground electromagnetic surveys, Figure 7.

Between July and August 2021, a MLEM-Slingram survey was completed over nine targets identified by from geochemistry, geology and AEM survey data. This MLEM survey aimed to determine the presence of any bedrock conductors that may represent massive sulphide targets.

The field data for the EM survey were interpreted by geophysical consultants Newexco. Out of the identified targets, Geochem anomalies 2, 4 and 5 were identified by Newexco as potential target categories and recommended for further follow-up work, Figure 7.

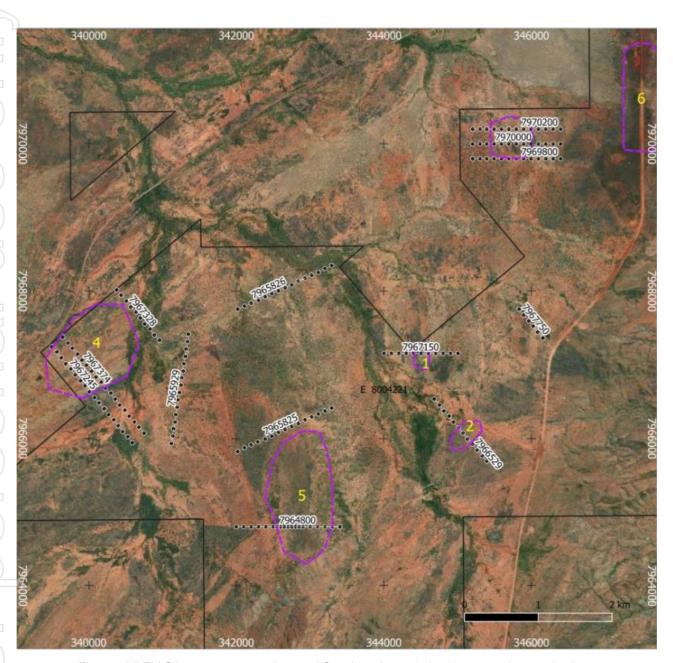


Figure 7 MLEM-Slingram survey stations and Geochem Anomaly locations over the google photo.

Based on the results of the MLEM survey conducted in 2020/2021 a follow RC drill program is planned to test targets proposed by the geophysical survey interpretation.

The ground works for the planned RC drilling at the Koongie Park project is waiting heritage clearances. The heritage survey has been completed but report is pending.

Quarter Activities

- Finalised 1,500 metre RC drill plan.
- Applied to Koongie-Elvire Native Title Group for heritage clearance.

Next Quarter Activities

- Attain heritage clearance from Koongie-Elvire Native Title Group.
- Complete 1,500 metres of RC drilling.

Taylor Lookout, Sophie Downs and Ruby Plains

In July 2022, a drone magnetics survey was completed by Atlas Geophysics at Sophie Downs, Taylor Lookout and Ruby Plains to assist with investigating interpreted structures as potential hosts for mineralisation. A specialised unmanned aerial vehicle (UAV) rotary wing geophysical survey aircraft was equipped with a Pegasus autonomous flight control and terrain following system. An aircraft was used to tow the Pegasus, which also housed the geophysical sensors and data acquisition system. The processed data showing the total magnetic intensity is shown in Figure 8, Figure 9, Figure 10.

Exploration activities on the Taylor Lookout tenement by Eastern Lithium Pty Ltd, a wholly-owned subsidiary of Eastern Resources Limited (ASX:EFE), will progress in accordance with the Heads of Agreement (HOA) or rights of lithium group of minerals (lithium, beryllium, caesium, niobium, rubidium, tantalum, and tin). ASX announcement: Executes farm-in on Taylor Lookout, 28 February 2022.

Quarter Activities

Planning to test geophysical anomalies.

Next Quarter Activities

- Ground-truth and confirm targets as identified by Newexco consultants.
- Design RC program (2,000 metres) to drill-test confirmed targets.

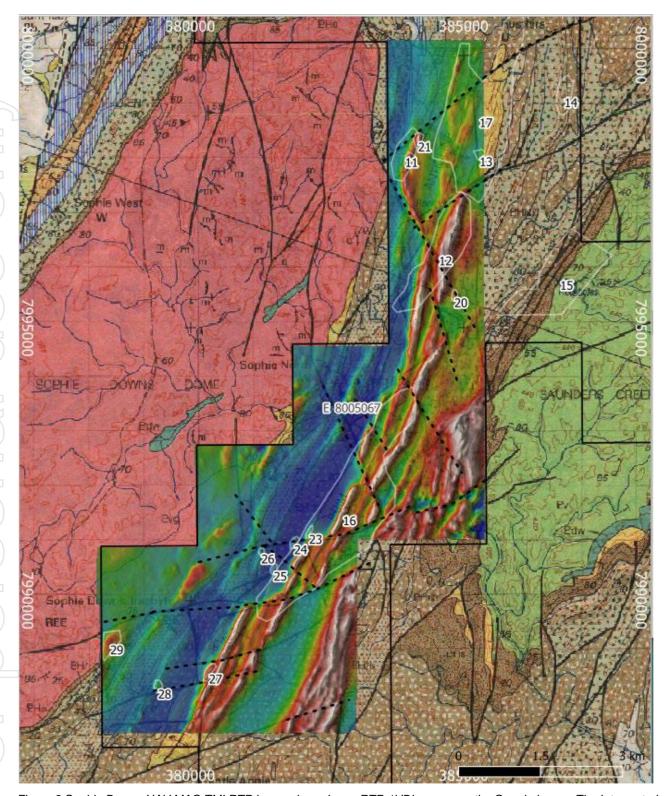


Figure 8 Sophie Downs UAV MAG TMI RTP image draped over RTP-1VDimage over the Google image. The Interpreted targets are circled. Note older targets identified in 2019 are also included.

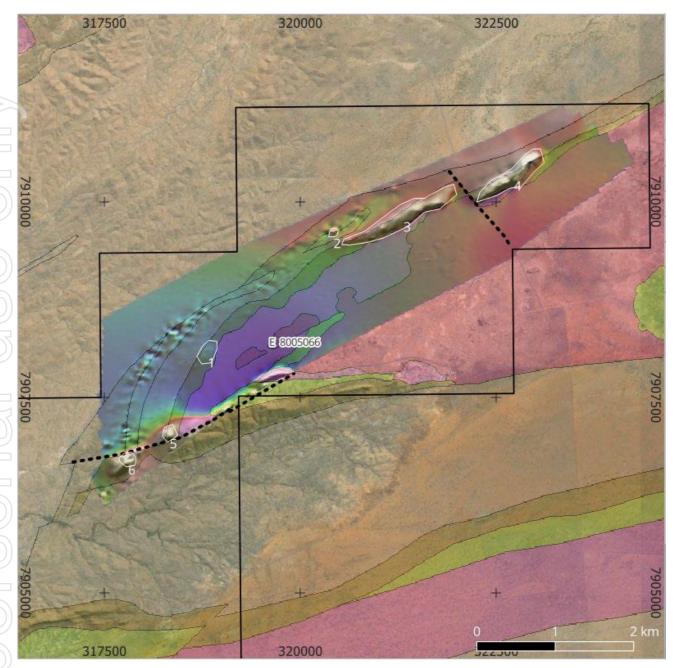


Figure 9 Taylors Lookout UAVMAG TMI RTP image draped over RTP-2VD image over the Google image. The Interpreted targets are circled.

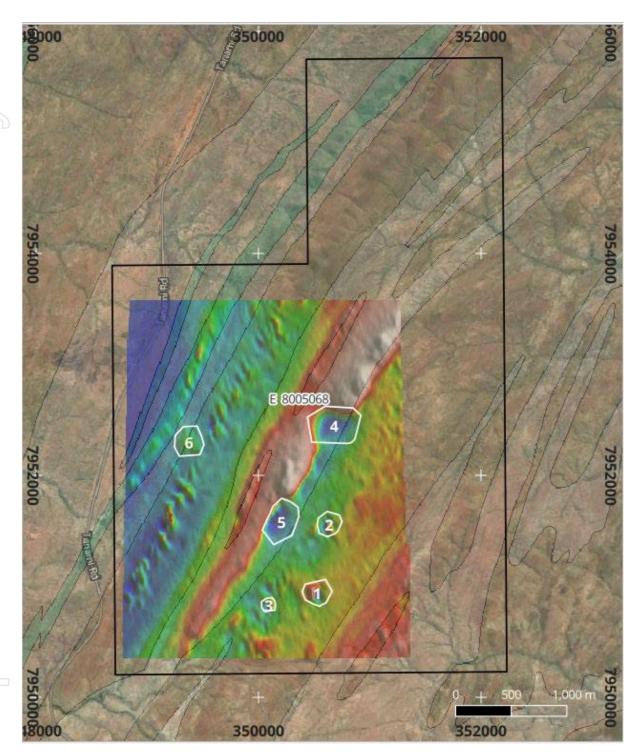


Figure 10 Ruby Plains GSWA 100k geology and geology interpretation over the UAV MAG TMI RTP image draped over RTP-1VDimage. The interpreted targets are circled.

Corporate

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

Competent Person's Statement:

Information in this report that relates to Exploration is based on information reviewed or compiled by Peter Preston, BSc (Hons), who is a member of the Australasian Institute of Mining and Metallurgy. Peter Preston is the Geology Manager of Legacy Iron Ore Ltd. He 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 and Mineral Resources'. Peter Preston consents to the inclusion of this information in the form and context in which it appears in this report.

The information in this report references ASX announcements previously released by the Company, which contain all geological data and the required competent person sign-off. These announcements are:

- Significant Resource Upgrade at Mt Bevan Iron Ore Project, 17 December 2013
- Hancock Executes Lithium Earn-in and Joint Venture at Mt Bevan, 15 June 2023
- Revised Resource Estimates of the Mt Celia Gold Project, 3 March 2022

The Company confirms that no new information or data 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 2 Tenements held at the end of the September 2023 Quarter

Location	Tenement	Project	Date of Grant	Equity (%) Held at start of Period	Equity (%) Held at end of Period
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	M39/1145	Mt. Celia	23/05/2023	100%	100%
WA	M39/1125	Mt Celia	07/06/2018	100%	100%
WA	M39/1126	Mt Celia	07/06/2018	100%	100%
WA	M39/1127	Mt Celia	07/06/2018	100%	100%
WA	M39/1123	Mt Celia	07/11/2018	100%	100%
WA	M39/1124	Mt Celia	07/11/2018	100%	100%
WA	M39/1128	Mt Celia	07/11/2018	100%	100%
WA	E39/2262	Mt. Celia	15/11/2022	100%	100%
WA	E39/2348	Mt. Celia	06/02/2023	100%	100%
WA	E39/1748	Sunrise Bore	01/07/2014	100%	100%
WA	E29/0510	Mt. Bevan	07/07/2005	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%