

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 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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29th October 2021

The Company Announcements Office ASX Limited

Via E Lodgement

REPORT FOR THE QUARTER ENDED 30th Sep 2021

Please find attached the Company's Quarterly Activities Report for the quarter ended 30th Sep 2021.

Yours faithfully LEGACY IRON ORE LIMITED

Rakesh Gupta
Chief Executive Officer

HIGHLIGHTS

EXPLORATION AND DEVELOPMENT

South Laverton:

Mt Celia:

- In July 2021, resource revision was completed after incorporating additional drilling (March 2021, 1080m RC drilling) and mineralisation at depth. After this revision, the total mineral resources of the project reached 309,200 ounces of gold (Refer ASX announcement dated 28.07.2021).
- The mining study of the project was completed by AMC Consulting and the results of the mining studies were announced on the market. (Refer ASX announcement dated 06.09.2021 and 10.09.2021). The study indicated positive outcomes for Kangaroo Bore and Blue Peter deposit by toll treatment arrangements.
- The waste rock characterisation studies were initiated, and the work is being completed under the supervision of MBS Environmental. The work on toll treatment option analysis was awarded to JT Metallurgical Services.
- Talks for a heritage and mining agreement are underway with Native Title group representatives.

Sunrise Bore

The assay results of June 2021 RC drilling were received during the quarter. The assay results are encouraging for gold mineralisation in the area, the results have already been announced to the market (Refer ASX announcement dated 06.10.2021).

Patricia North

The tenement was visited during the quarter for ground verification of drilling targets and confirming targets through rock chip sample collections. Talks are underway with the Native Title groups for the work programme clearances for upcoming drilling.

Mt Bevan:

In one of the holes drilled for Nickel mineralization in the northern part of the tenement, downhole electromagnetic survey was carried out. The survey didn't reveal any anomalous response.

East Kimberley tenements (Koongie Park, Ruby Plains, Taylor Lookout and Sophie downs)

- In this quarter the data of the MLEM survey (June 2021) was processed by the geophysical consultant Newexco and the report was finalised. The geophysical survey reveals encouraging anomalies.
- At the Koongie Park project, Ground Moving Loop Electromagnetic Survey (MLEM) was completed during the quarter, over six of the targets' areas identified by review of soil geochemistry in the tenement and a few other geological targets. The data of the MLEM survey was processed by consultant Newexco and the report was finalised. The survey is defining anomalies for further follow-up.

EXPLORATION

Project Overview

Legacy Iron Ore 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 21 tenements in the Western Australian known mineralised belts. The Company is advancing the projects into higher stages of exploration and development through systematic exploration activities.

During the last three months the Company has formulated an annual exploration plan for all projects. Based on the exploration maturity and feasibility it has devised an exploration schedule with a continued agenda of development of the Mt Celia gold project and advance other projects through continued exploration.

GOLD

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).

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.

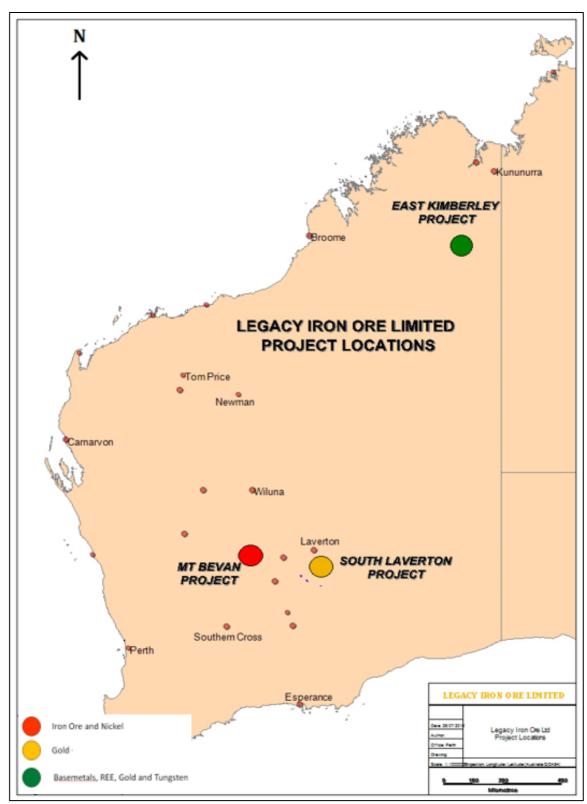


Figure 1 Legacy Iron – Project Location

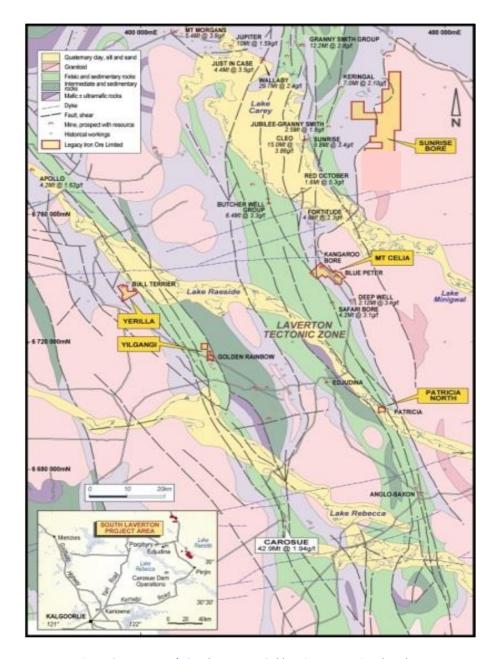


Figure 2 Legacy Iron's South Laverton Gold Projects on regional geology

Mt Celia Mining Studies

The Mt Celia Mining Study carried out by AMC Consultants Pty Ltd (AMC) confirms that the Mt Celia project has potential to be a technically and economically viable project through a toll treating option. The Company has a current 2012 JORC Mineral Resource estimate, at the Mt Celia Project (Kangaroo Bore and Blue Peter deposits) as shown in Table 1:

Table1: Current Mineral Resource at Mt Celia as of July 2021

Classification	Tonnage (Mt)	Grade (g/t Au)	Metal (oz)
Indicated	3.344	1.44	155,300
Inferred	3.616	1.32	153,900
Total	6.960	1.38	309,200

(See ASX announcement dated 28th July 2021 for existing resource details). 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. In June 2021 additional RC drilling has been done on these deposits, revision of the above estimates will be undertaken after assay results are received.

Using the current Mineral Resources, AMC carried out geotechnical and hydrogeological analysis, dilution modelling, pit optimization, mine design, mine scheduling and economic evaluation to investigate the mining potential at the Mt Celia Project and the potential for economic cashflow.

Pit Optimisation

The Mining Study undertaken by AMC used Whittle Four-X software and was completed using the Total Mineral Resource (see Table 1) and a base case gold price of A\$2300/oz (Refer ASX announcement dated 06.09.2021 and 10.09.2021).

AMC prepared models by adding cost, recovery, royalty and revenue drivers to individual blocks within the models using Datamine macros. The resource model was regularized to account for dilution and ore loss expected during mining operations. Royalties, administration charges, ore processing costs and other ore related costs were all aggregated to create a total ore related cost which was assigned to ore blocks. Mining costs common to all material types were assigned to all model blocks.

AMC applied mining cost parameters based on similar sized operations in the region from AMC's database.

All parameters used were in the normally acceptable range of costs of similar mining operations. Whittle Four-X pit optimization software was used to determine economic limits for open pit mining from the resource model, geotechnical model, operating costs, metal price and metal recovery.

A family of pit shells is generated using different metal prices, as a revenue factor (RF) of input metal price, to determine the ore and waste tonnes to achieve the maximum undiscounted operating cost surplus for that metal price.

Study Results

The results from the Mt Celia Mining Study are encouraging, for both the Kangaroo Bore and Blue Peter deposits and the Company aims moving forwards under a toll treatment option of project development.

Nested pit shells were generated at varying metal prices and evaluated at the base case metal price. Pit shells that provided a reasonable balance between value and mine life were selected as the basis

for pit design for both the Blue Peter and the Kangaroo Bore deposits. Legacy Iron notes that there is potential for a smaller pit shell to provide a stronger positive outcome.

Several open pit design options were undertaken, assuming either toll treatment or a new mill arrangement, as a basis for mine schedule optimization and evaluation. The study confirms that the Mt Celia project has potential to be a technically and economically viable project through a toll treating option. Additional work will be undertaken to confirm the findings of the Mt Celia Mining Study, such as detailed CAPEX, OPEX estimates and firming up toll treating arrangements. The Company is currently in discussions with processing plant operators in the area. A plan view of the designed pits for the toll treatment option is shown in figures 3 and 4 below.

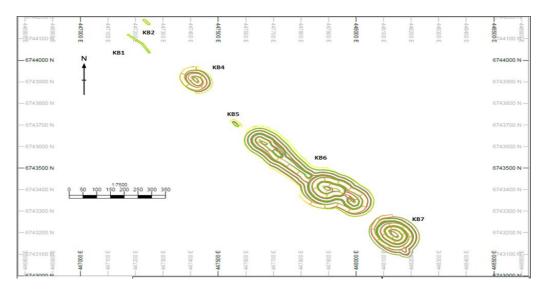


Figure 3. Mt Celia Gold Project – Plan View of the Kangaroo Bore toll treatment pit

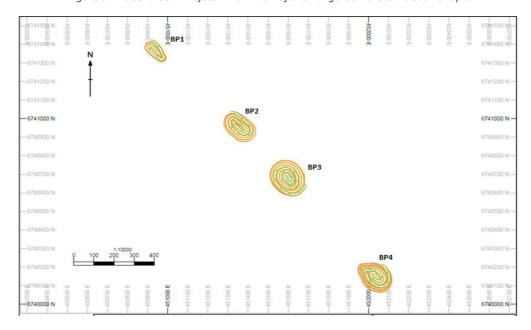


Figure 4. Mt Celia Gold Project – Plan View of the Blue Peter toll treatment pit

Next steps

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

- Complete waste rock characterisation studies for the project
- Enter into stakeholder's agreement to expedite the grant of Mining Lease
- Interpretation of the received assay results of June 2021 RC drilling
- Revise the resources after incorporating June 2021 RC results
- Update the pit optimisation study on the new resource model

Sunrise Bore Project

The Sunrise Bore project lies some 12 km east of the world class Sunrise Dam gold mine operated by Anglo Gold Ashanti (Figure 2). A number of prospective shear structures have been identified within the project area associated either with gold anomalism noted in earlier field work and/or nugget gold found by recent prospecting.

Work done to date has identified numerous anomalies (Figure 5) for follow-up.

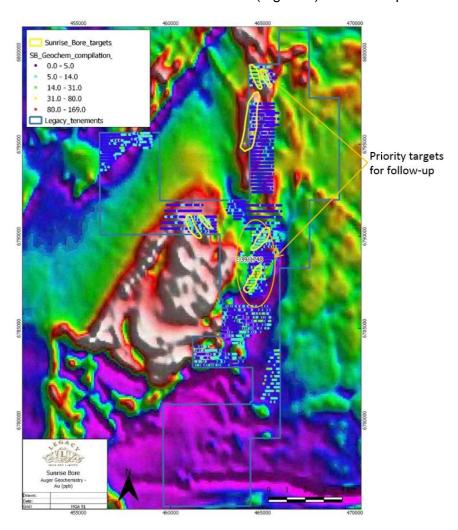


Figure 5: Sunrise Bore Project- Delineated au anomaly after auger geochemical analysis

RC Drilling:

In the past, significant geochemical auger soil sampling covered the major portion of the tenement. The geochemical assays resulted in the identification of high priority gold anomalies, the best of which was the anomalism at Kingsley 1 and 2. An RC exploration drilling programme has been completed over Kingsley 1 and 2 anomalies in June 2021 comprising 1133m of RC drilling for 17 holes. The drill collars are shown in figure 6.

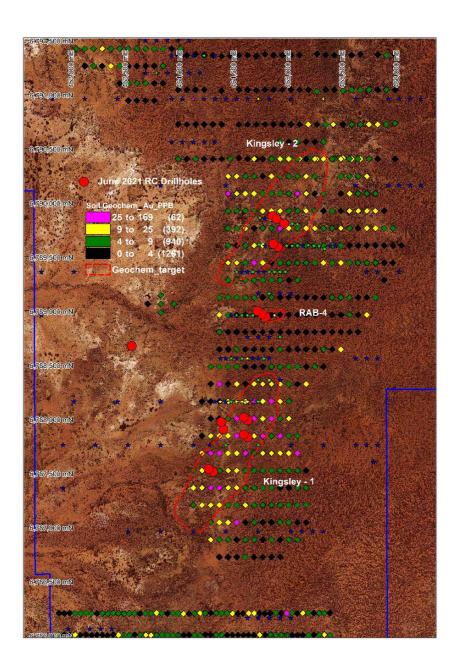


Figure 6. Sunrise Bore Project- RC drillhole locations June 2021

Drilling Results:

The assays of the Company's maiden RC campaign in the tenement were received and the drilling intercepted following major mineralisation for gold (please see ASX announcement dated 6th October 2021):

- o 3 m at 2.06 g/t Au from 47 m in SBC03 including 1 m at 4.02 ppm from 47 m
- o 2 m at 0.95 g/t Au from 53 m in SBC05 including 1 m at 1.26 ppm from 53.
- 1 m at 0.75 g/t Au from 36 m in SBC06.

A total of 3 holes, out of 17, returned mineralisation, maximum value received was 4.02 ppm in SBC 03 at 47m drilled depth. The result provides confidence in the mineralisation. The results are providing additional scope for further investigation to define strike and depth continuity of the mineralization.

Patricia North Project

The Patricia North tenement is part of our South Laverton gold project. The project lies in and adjacent to a major deformation zone that hosts gold mineralisation. The project area flanks a small internal granitoid stock along strike of the now- abandoned Patricia open cut gold mine.

Legacy Iron has previously undertaken two phases of RAB drilling to test surficial geochemical anomalies. This drilling produced encouraging gold intersections. Drilling has defined three to four zones of mineralisation over some 700m.

The mineralisation has been followed up in recent years by rock chip sampling/ geological traversing and it was confirmed that the thin quartz veins which have intruded into the shear zones are mineralised. Past rock chip samples yielded some very high assay values.

During the period, geological traversing and rock chip sampling was undertaken to fully evaluate surface signatures of gold mineralisation. The assay results are awaited in this period.

The Company plans to drill test the tenement in the near future.

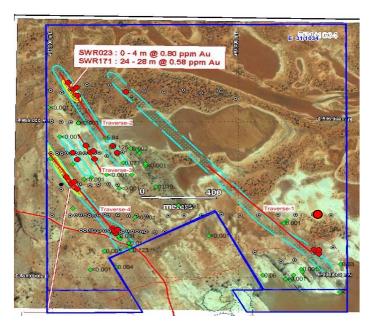


Figure 7. Patricia North planned drillholes over mineralised zones

Mt Bevan Project (E29/510-I)

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 potentially world class magnetite project and is also exploring for Hematite (DSO) and nickel-copper mineralisation at an early-stages.

Table 2 Mt Bevan BIF Resource Estimate

Mt Bevan Fresh BIF Resource											
Class	Material	Tonnes	Fe	SiO ₂	Al ₂ O ₃	CaO	Р	S	LOI	MgO	Mn
		x 10 ⁶	%	%	%	%	%	%	%	%	%
	<i>In situ</i> Total	322	34.7	46.2	0.57	1.35	0.054	0.131	-1.05	1.91	0.31
Indicated	In situ 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
	<i>In situ</i> Total	847	35.0	45.6	0.77	2.00	0.063	0.39	-1.15	1.77	0.04
Inferred	In situ 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
	<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
Total	In situ 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 17th December 2013)

The Company continues to assess the prospectively for Hematite (DSO) discovery in the southern and central portion of tenement holding, along strike from the Mt Mason deposit.

In June a RC drilling programme was completed at the Mt Bevan project, and a total of 1378 m in 13 holes were drilled. The programme aimed to explore DSO mineralisation and to drill test remaining Nickel sulphide targets in the Northern most part of the tenement. In this programme RC drilling for Nickel Sulphides was undertaken in 3 holes for 363m. RC Drilling for Hematite Mineralisation was undertaken for 10 holes for 1015 m.

Downhole Electromagnetic Survey:

MBH011 was drilled to 123m as a stratigraphic hole. No significant sulphides were intersected in the hole. However, Hole MBH011 intersected a thin zone of ultramafic unit (peridotite) from 41m to 43m based on the logging. It was then recommended for DHEM survey to detect any nickel sulphides in proximity to drillhole MBH011.

The DHEM survey was completed from 5m to 113m on 30 July 2021 by Vortex Geophysics. No anomalous response consistent with a confined bedrock conductive source was identified in proximity to Hole MBH011.

A strong anomalous response was observed on the top section (0m to 20m) in all three components. This coincides with a strong magnetic response. Newexco interpreted that this strong response is interpreted to be caused by the transmitter loop and/or magnetic materials at the surface.

Several weak and high frequency responses were observed at a downhole depth of 42m, 80-85m and between 102.5m to 110m. These responses coincide with changes in the magnetic response measured by the DHEM probe in the hole. Newexco interpreted that these weak and high frequency responses are interpreted to be caused by geological features such as sharp contact.

Forward models were erected to see whether this DHEM survey could have detected a similar conductor to the Cathedrals style conductor (~10mx10m, 10000 Siemens with a flat lying target). The forward model response (red profiles) shows that this DHEM survey could have detected a similar target in close proximity to the drillhole (50-60m radius from drillhole).

It was concluded that no bedrock conductive source was identified in proximity to Hole MBH011 based on this survey. A weak response observed at early to mid-times corresponded with the ultramafic unit intersected in the hole. Newexco believes this weak response is interpreted to be changes in the geology rather than from a confined conductor.

Next Quarter agenda

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

- Interpretation of assay results.
- Follow up exploration planning for the project.

Koongie Park Project (E80/4221)

Legacy Iron holds exploration licence E80/4221 that is contiguous with ground under exploration by Auking- Anglo Australian Resources Limited (AAR) at its Koongie Park VMS base metals deposit (Figure 8). AAR has defined substantial base metal/gold/silver mineralisation in the deposits to date and AuKing has some recent success in getting mineralisation.

The possible VMS style of deposit is known worldwide to occur in clusters and often the early discoveries in these camps are not the largest. Work completed by Legacy Iron at Koongie Park revealed a number of base metals, gold and rare earth elements (REE) anomalies (Figure 8).

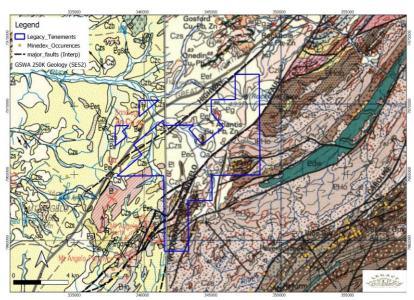


Figure 8: GSWA 250k geology and Minedex occurrences and prospects at Koongie Park

In 2013 Legacy Iron flew an airborne EM survey across the project. Interpretation of the data revealed a number of anomalies that were targeted in 2015 RC drilling. No anomalous base metals values were intersected but nor were the sources of the EM anomalies identified.

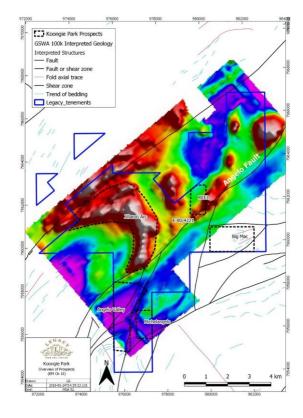


Figure 9. Prospects at Koongie Park project and EM Ch15 with GSWA interpreted structures

MLEM Survey:

During this quarterly period, ground geophysical, Moving Loop Electromagnetic (MLEM) survey was completed for the identified targets.

A total of six target areas were identified based on the geochemical anomaly analysis and ground Electromagnetic Survey was carried over them (Fig 10).

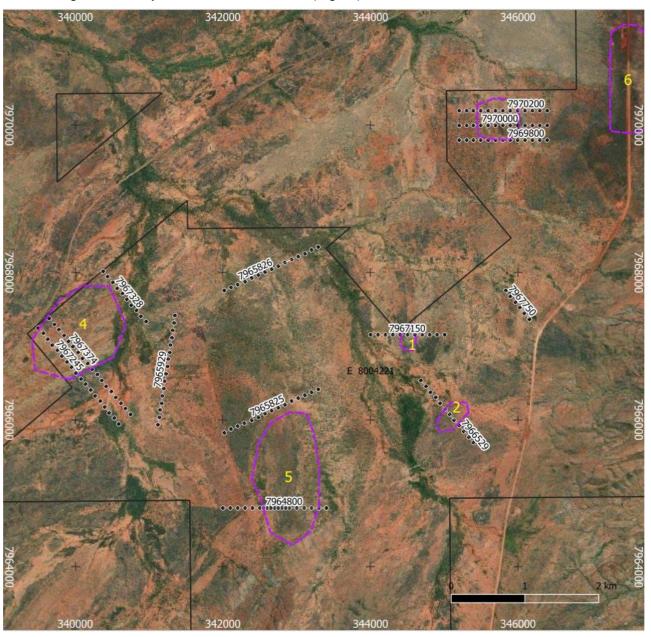


Figure 10: MLEM-Slingram survey stations and Geochem Anomaly locations over the google photo

Between 3rd July 2021 and 6th August 2021, a MLEM-Slingram survey was completed over nine targets identified by interpretation of geochemistry, geology and an AEM survey. The objective of this MLEM survey was 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 consultant Newexco. Out of the identified targets, Geochem anomaly 2, 4 and 5 were placed by the Newexco in possible targets category and recommended for further follow-up work.

Next Steps

The quarterly plan for the Koongie Park project includes the following main objectives:

- RC drilling planning over the received geophysical targets
- Commence Heritage survey if required for the proposed work programme

Sophie Downs (E80/5067)

During this quarterly period,_Ground Electromagnetic survey data was processed. Two broad, moderate anomalous responses were observed at early to mid-times over the middle part of the survey area, The time constant of this anomalous response is interpreted to be approximately 10ms. The negative to positive crossovers observed on the Bx component suggests that this is probably caused by a flat lying source. This coincides with the Malachite exposure outlined by the geologist. It is believed that the strong anomalous response observed at early to mid-delay times is probably caused by the formational conductive source such as metasediments/shale unit.

A strong and broad anomalous response was observed over the western end of all three lines. However, this anomaly is not well defined as these lines were approaching a strong conductive source. The times constant of this strong anomalous response is estimated to be around 150ms consistent with a highly conductive bedrock source. It is recommended to extend these lines further to the west if this is geologically encouraging.

A strong discrete anomalous response was observed at late times at 390200E on Line 8006200N. This anomalous response was observed only on the northern most line and is probably still open to the north. The time constant is estimated to be approximately 170ms consistent with a highly conductive bedrock source such as massive sulphides, possibly pyrrhotite dominated.

The map showing the EM survey lines is given below.

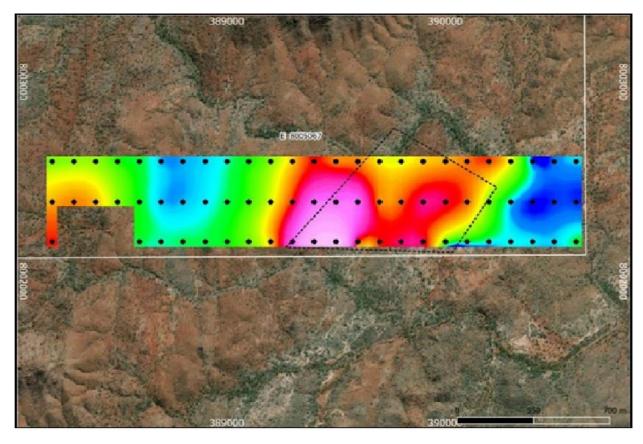


Figure 11: Sophie Downs project- MLEM Survey lines modelled anomalies.

PLANNED ACTIVITIES – December 2021 quarterly period.

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

Mt Celia project

- Waste rock characterisation study to be completed.
- The Company continues to work through the required regulatory approvals including heritage studies and enter into agreement.
- Resource revision and updating pit optimisation studies.
- Enter into agreement with the stake holders and obtaining statutory approvals to commence the mining.

Yilgangi

Geological modelling and resource estimation.

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Drill hole planning and heritage survey related works if required.

Sunrise Bore:

Follow up drilling planning.

Mt Bevan Project:

- Interpretation of assay results and follow up planning.
- Potentially lodging ML application for the southern part of the tenement where iron ore Resources exists.

Project Generation:

Continue to review new potential opportunities

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.

Tenement Schedule in accordance with ASX Listing Rule 5.3.3

Tenements held at the end of the September 2021 Quarter

Location	Tonomont	Project	Date of Grant	Equity (%) Held at start	Equity (%) Held at end of Quarter
WA	Tenement E80/4221	Project Koongie Park	14/12/2009	of Quarter	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%