



Quarterly Report

Period ended 31st December 2020

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

Alok Kumar Mehta, 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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28 January 2021

The Company Announcements Office
ASX Limited

Via E Lodgement

REPORT FOR THE QUARTER ENDED 31st December 2020

Please find attached the Company's Quarterly Activities Report for the quarter ended 31st December 2020.

Yours faithfully

LEGACY IRON ORE LIMITED

Rakesh Gupta
Chief Executive Officer

HIGHLIGHTS

EXPLORATION AND DEVELOPMENT

South Laverton:

Mt Celia:

- HQ core size (63.5mm) Diamond drilling was completed at Mt Celia, for Geotech studies. In this quarter 540m drilled in 6 holes.
- The Basic Fauna survey was carried out, field work completed October 2020.
- The successful drilling results from the previous September quarter at Mt Celia were published to the market November 2020. The results indicate potential for additional resource definition (see ASX announcement 17th November 2020).

Yilgangi:

- A total of 854m of RC drilling was completed for 13 RC inclined holes during the month of December 2020. These holes were drilled to test targets generated from a comprehensive soil sampling campaign completed 2018 at the Golden Rainbow project. Results will be released in early February 2021.

Patricia North:

- The assay results from the September rock chip sampling were returned in November and produced another high yield result (2.46g/t) which the Company plans to drill test later this year.

Koongie Park:

- Interpretation for existing soil geochemical data defined 6 potential targets for Ground Electromagnetic survey. A Fixed Loop Electromagnetic (FLEM) survey was completed at one of the anomalies, Anomaly 6, during October 2020. There is a plan to complete the additional survey work for the other 5 targets as well.

EXPLORATION

Project Overview

Legacy Iron Ore Limited (Legacy Iron or the Company) is an active exploration company with a diverse portfolio of assets spanning iron ore, gold, base metals and tungsten and rare earth elements (REE) Figure 1. The Company has a significant landholding in the Eastern Goldfields (Yillgran) and East Kimberley districts of WA.

During the last three months, the major focus of the Company's activities has continued to be on the Mt Celia Gold project in the Eastern Goldfields. In the next three (3) months the Company plans to finalise it's 2021 exploration planning for all projects.

Since the first quarter of 2020 the State Government imposed inter-regional travel restrictions within Western Australia to combat the spread of COVID-19 which limited the amount of travel to site and continued to impact the exploration efforts of the Company for the remainder of 2020.

As a result, the Company delayed drilling programs at the Yilgangi, Mt Bevan and Sunrise Bore projects. The planned exploration work at the East Kimberley tenements were also impacted by the travel restrictions.

The activities planned for Mt Celia, being of highest priority, commenced as soon as the travel restrictions were eased, and included completed RC drilling programs for Blue Peter and Kangaroo Bore totalling 3324m (see ASX release 17th November 2020).

The delayed exploration drilling program planned for Yilgangi was completed in December totalling 854m RC for which the assay results received and are under review. Final results will be published by early February 2021.

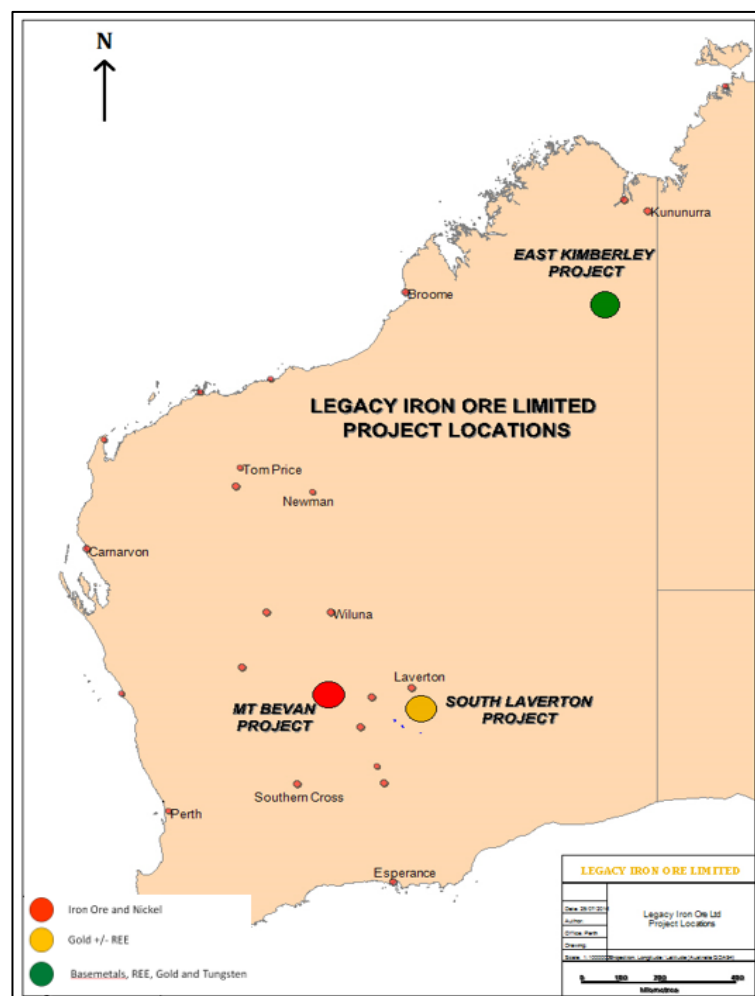


Figure 1 Legacy Iron – Project Locations

The major focus of the Company's activity at present is delivering a resource upgrade and carrying out project feasibility evaluation studies with an aim to develop the Mt Celia gold project.

DIRECTORS' REPORT (continued)

GOLD

South Laverton Gold Project

The South Laverton Project includes the Mt Celia, Yerilla, Yilgangi, Sunrise Bore and Patricia North tenements (Figure 2). The Mt Celia, Yerilla and Yilgangi tenements contain several gold occurrences with known gold resource estimates established from years prior to the change in JORC code reporting in 2012.

The Company is in the process of upgrading the resource estimates for Mt Celia (Kangaroo Bore and Blue Peter orebodies), with upgrades at the remaining tenements to follow.

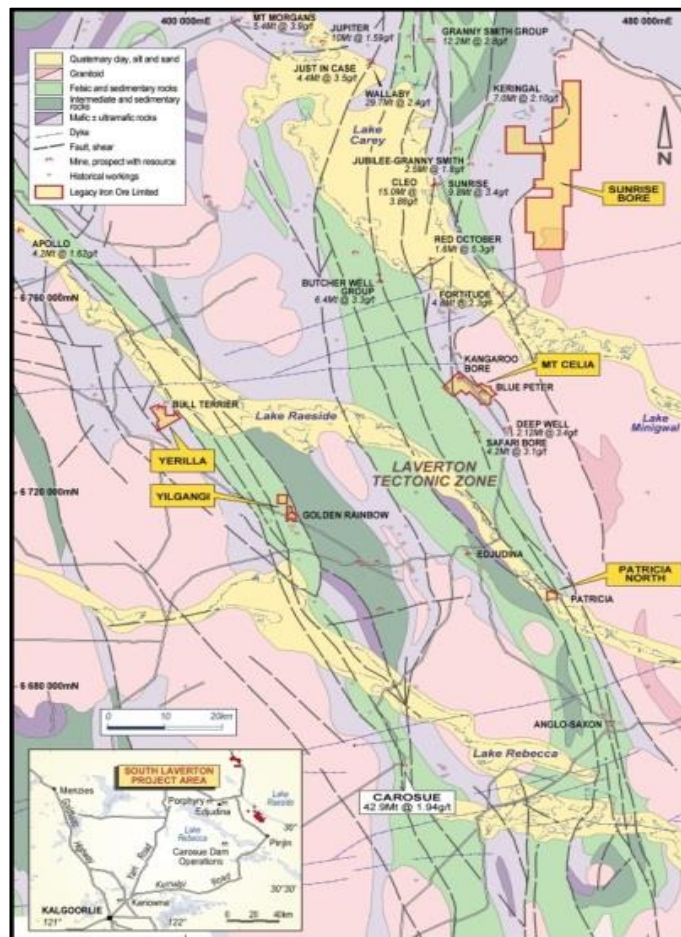


Figure 2 Legacy Iron's South Laverton Gold Projects on regional geology

Mt Celia Project

The Mt Celia Project lies within the Laverton Tectonic Zone, some 40km south of the Sunrise Dam gold mine (an 8Moz gold resource), as shown in Figure 2. The Mt Celia Project currently contains several known gold occurrences including *Kangaroo Bore* and *Blue Peter* prospects

The successful drilling results from the previous September quarter at Mt Celia were published to the market November 2020. The results were additional resource definition for the updated MRE, to be finalised February 2021.

The first phase of Fauna survey to assist in environmental studies was carried out in the quarter, field work was completed in October 2020 and the interim report was received early January 2021.

In the December quarter diamond drilling was completed at Mt Celia, HQ core size (63.5mm) for samples used in Geotech studies. In total, 540m of diamond core was drilled for 6 diamond drill holes. Geotech studies were undertaken with SRK. The geotechnical parameters were used for detailed pit designs and stability study for Blue Peter and Kangaroo Bore pits and was completed and presented to the Company early January 2021.

Metallurgical studies were conducted at the ALS labs in Perth and completed in December 2020. Simon Walsh from Simulus Engineering assisted the Company in completing the metallurgical studies. A final report of the results due by mid-December 2020 had been delayed until early February 2021 due to a significant backlog at labs, as a result of increased exploration activity across the sector.

The map below (Figure 3) shows the locations of diamond Geotech holes drilled during the December quarter.

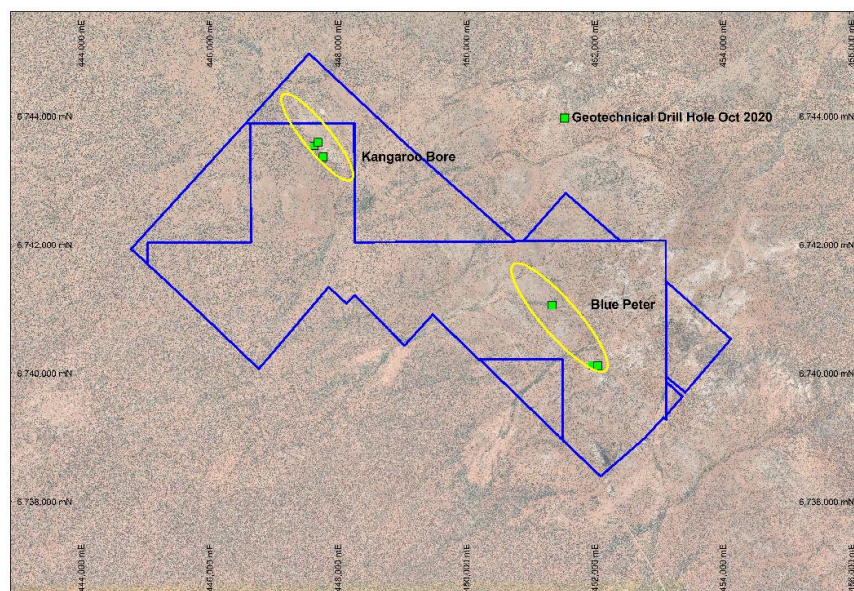


Figure 3 Locations of Diamond drilling holes used in Geotech studies

The Company plans to achieve the following key outcomes for Mt Celia in the coming quarter -

-
- Release results of resource update for the Mt Celia project.
 - Complete final geo-metallurgical and hydrogeological studies.
 - Complete pit optimisation and mining study tender process and engage successful company contractually.
 - Define any environmental or Heritage issues associated with the project development.
 - Obtain the regulatory approvals for the open pit mining at the Blue Peter deposit including clearing permit.

Next steps:

- Approx. 1000m RC drilling at Mt Celia, follow up delineated targets based on assay results of the last program.
- Complete all resource modelling and pit optimization work.
- Completing geotechnical, geo-metallurgical and hydrogeological studies of the deposits.

Yilgangi Project

The Yilgangi project forms part of Legacy Iron's South Laverton Gold Project which includes Mt Celia, Yilgangi, Yerilla, Patricia North and Sunrise Bore tenements (Figure 2).

During the December quarter, a total of 854m of RC drilling was completed for 13 RC inclined holes during the month of December 2020 shown in table 1. These holes were drilled to test targets generated from a comprehensive soil sampling campaign completed in 2018 at the Golden Rainbow prospect. The soil sampling results (by MMI analysis) delineated several northwest-striking potential targets shown in figure 4.

The Yilgangi Project includes two exploration tenements (E31/1019 and E31/1020) and two mining leases (M31/426 and M31/427). It contains numerous gold occurrence/anomalies including the Golden Rainbow prospect where several drill holes have been completed and the gold mineralisation only tested to a shallow depth.

Future development of the Yilgangi project includes analysing the first phase exploration RC drilling results with the delineated mineralization for second generation targeting. A second phase drill program is to be planned during next quarter 2021 and include testing the improved known mineralization at depth.

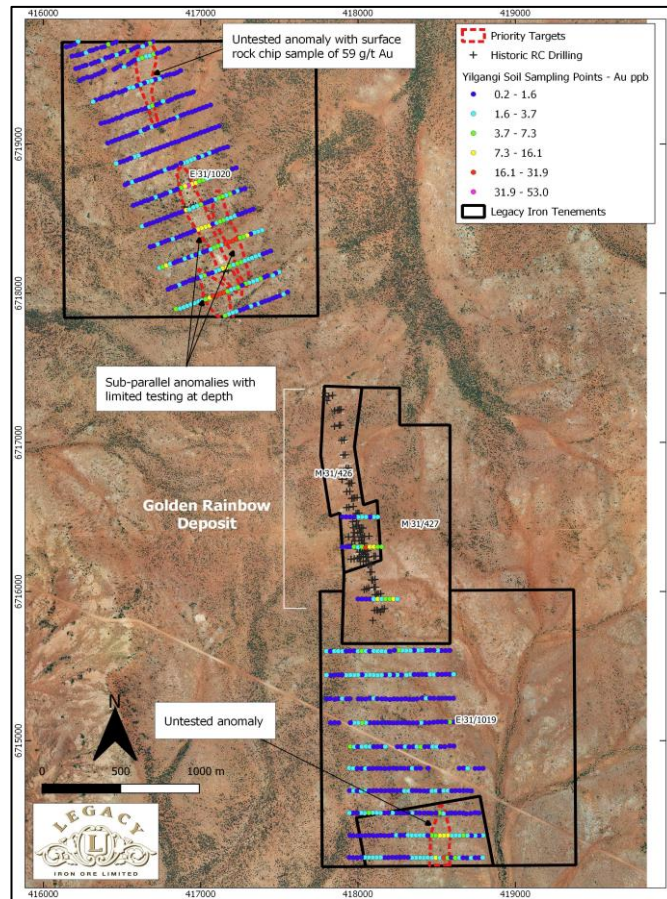


Figure 4 Soil sampling results used in drill hole planning

<u>Hole ID</u>	<u>Tenement ID</u>	<u>Drilling Type</u>	<u>Easting</u>	<u>Northing</u>	<u>Depth</u>
YGRC001	E31/1019	RC	418005	6715585	60
YGRC002	E31/1019	RC	418225	6715609	49
YGRC003	E31/1019	RC	417982	6715425	55
YGRC004	M31/0427	RC	418112	6715955	67
YGRC005	M31/0426	RC	418049	6716228	60
YGRC006	M31/0426	RC	417946	6716620	55
YGRC007	E31/1020	RC	417112	6718208	90
YGRC008	E31/1020	RC	416996	6718432	91
YGRC009	E31/1020	RC	416904	6718640	67
YGRC010	E31/1020	RC	416886	6718705	67
YGRC011	E31/1020	RC	416659	6719522	73
YGRC012	E31/1020	RC	416658	6719642	60
YGRC013	E31/1020	RC	417075	6717960	60

Table 1 Yilgarn drill holes completed Dec. 2020

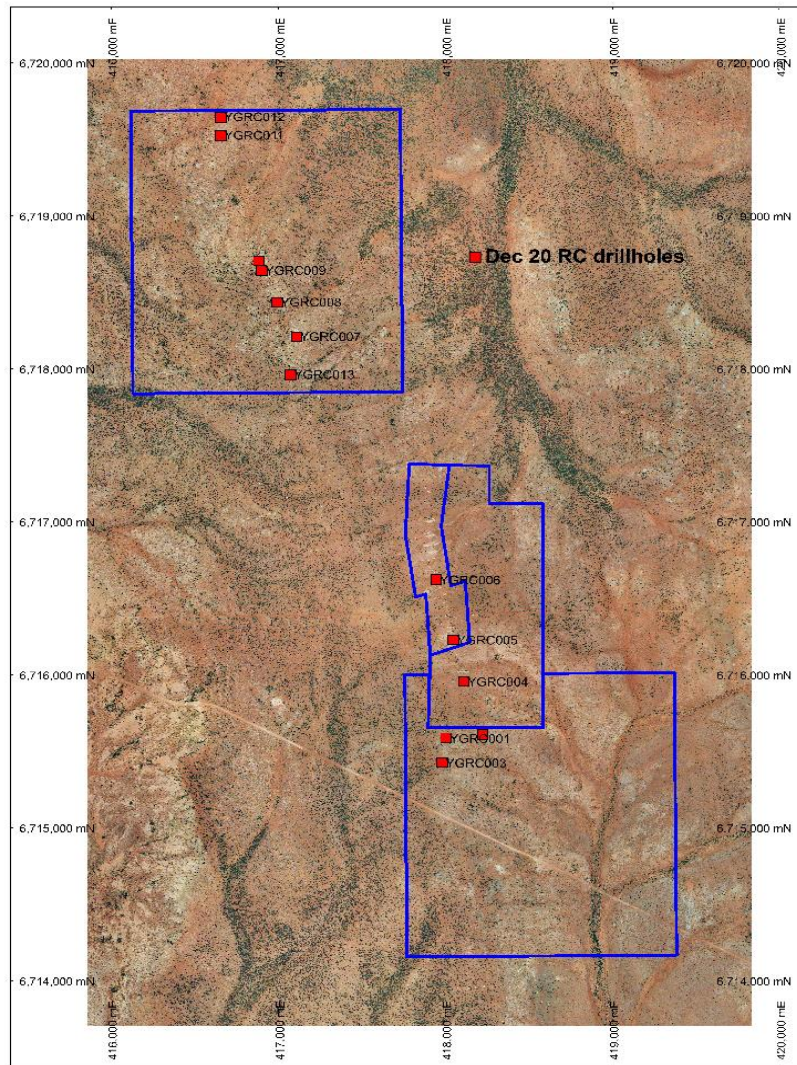


Figure 5 Location of completed Yilgarn Exploration RC drilling

In this drilling campaign sampling was done at one metre intervals with sufficient QAQC samples inserted for quality control purpose.

A total of 691 samples were selected for chemical analysis.

The samples have been sent to SGS Perth, for chemical analysis for gold assays via Fire assay. The complete results of the assays received and are under review. Final results will be published by early February 2021.

Patricia North Project

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

Legacy Iron had historically undertaken two phases of RAB drilling to test some surficial geochemical anomalies. The drilling produced encouraging gold intersections and had defined three to four zones of mineralisation over a 700m strike length.

The mineralisation was followed up in recent years with rock chip sampling and geological mapping which confirmed the thin quartz veins intruded the shear zones are indeed mineralized with past rock chip sampling yielded significant assay values.

No further field work was undertaken during the December quarter. Past geological traversing and rock chip sampling undertaken in the month of September to continue to help evaluate surface signatures was the last field work completed. The assay results from the sampling were returned in November and produced another high yield result (2.46 g/t figure 6, table 2), the Company plans to drill test the tenement this year, drill plan shown in figure 7.

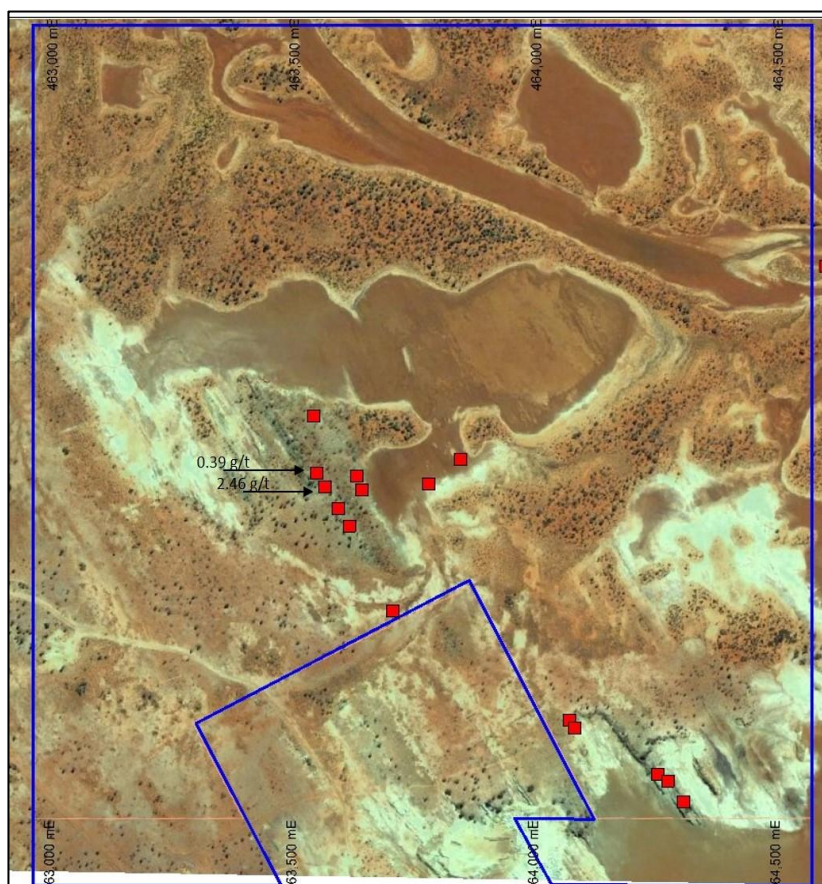


Figure 6 Patricia North rock chip samples locations

<u>Sample ID</u>	<u>Easting</u>	<u>Northing</u>	<u>Description</u>	<u>Au ppm</u>
PNR3003	463573	6698631	Qtz vein in a small trench of 5m length and 0.5 m thickness in an elevated topography	2.46
PNR3004	463555	6698662	Qtz vein in a small trench of 5m length and 0.5 m thickness in an elevated topography	0.39

Table 2 Patricia North traverse sample assay

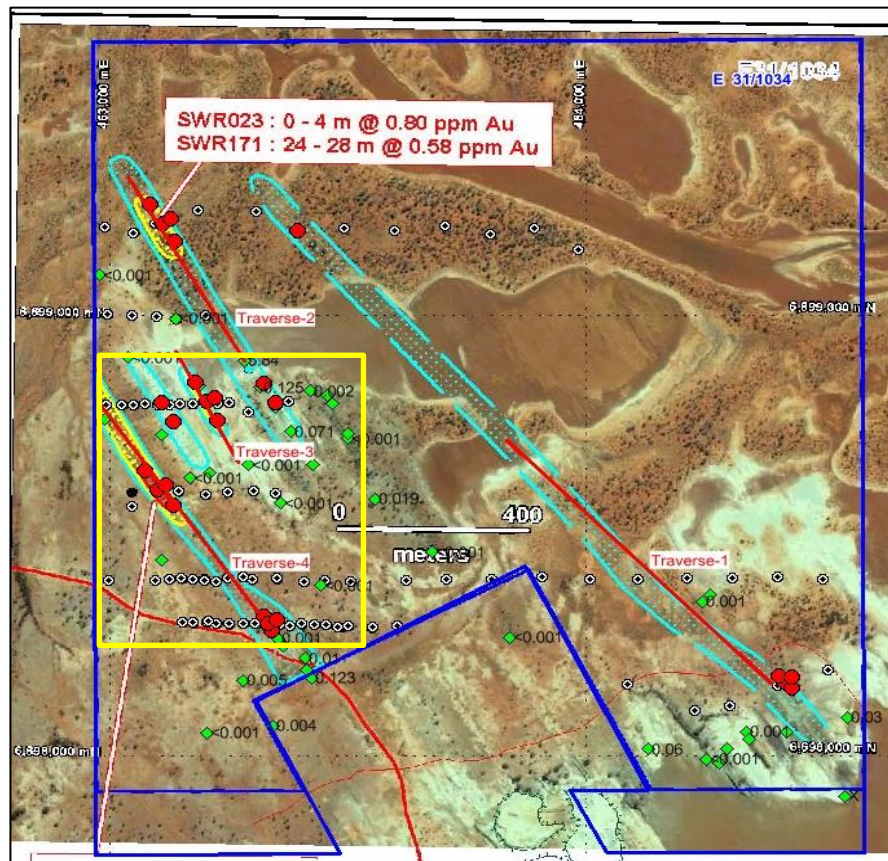


Figure 7 Patricia North planned drilling over mineralised zones

Sunrise Bore Project

The Sunrise Bore tenement has been actively explored by Legacy Iron for gold and the exploration has resulted in the definition of a gold anomalous zone ready for drill testing. Drilling these targets was delayed in 2020 due to Covid-19 and a tenement expenditure exemption was granted.

In the past, substantial auger drilling campaigns were completed across multiple geophysics targets giving the project significant geochemical coverage. A total of 2,806 samples have been collected and assayed thus far. The auger drilling resulted in the identification of some major anomalies and further exploration is now planned for the areas. The assay result of auger samples for gold are shown in figure 8.

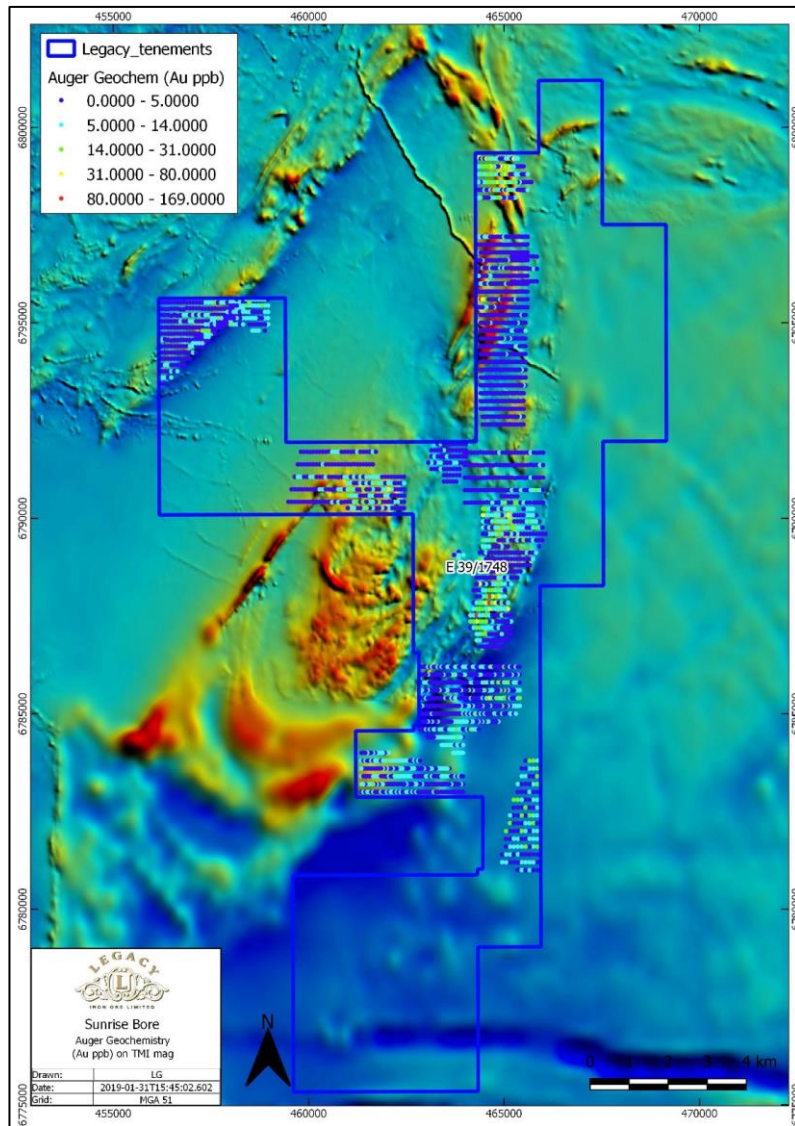


Figure 8 Au geochem anomalies in the Sunrise Bore tenement suite

To pursue further exploration across the tenement the Company completed RC drillhole planning for 20RC holes.

The map below showing the proposed RC drilling locations (figure 9).

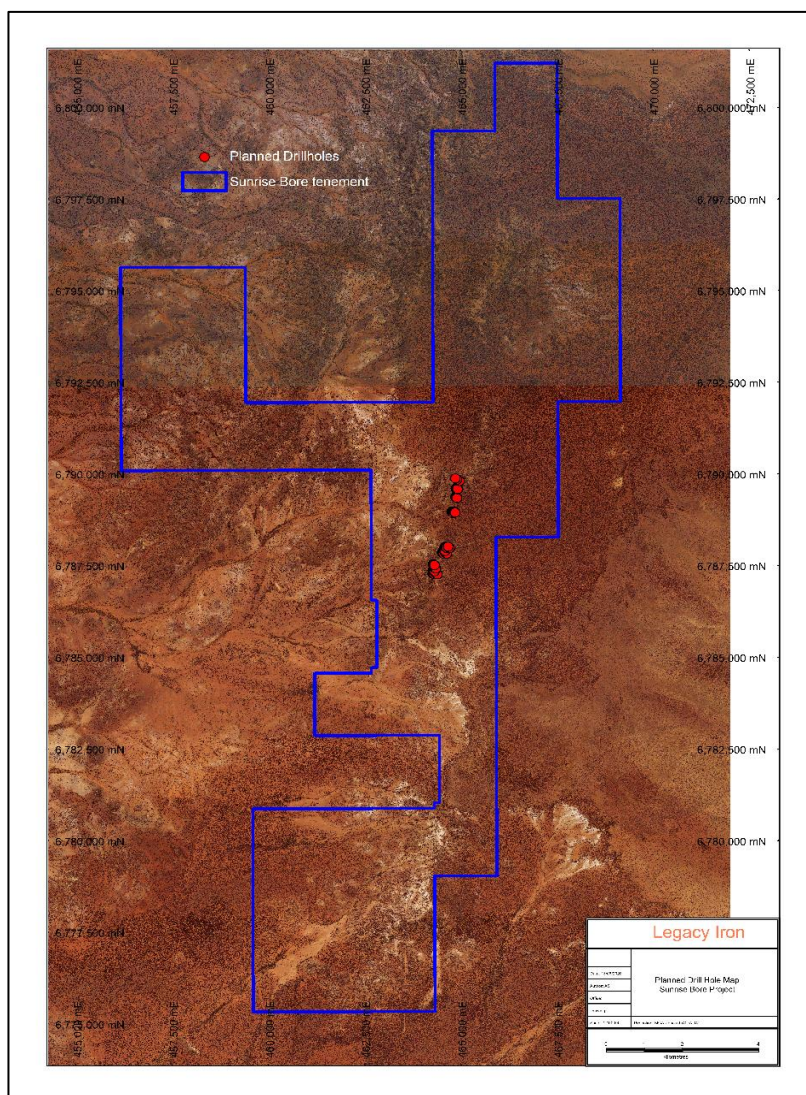


Figure 9 Proposed RC drilling for the Sunrise Bore project

During the next six-month Legacy iron has planned to drill the RC exploration holes in the project.

Mt Bevan Project

The Company's Joint Venture with Hawthorn Resources Limited 40% interest (ASX: HAW) on the Mt Bevan Project is north of Kalgoorlie in Western Australia, where the Company aims to progress a potentially world class magnetite project and is also exploring for nickel-copper mineralisation at an early stage. The project is on a large tenement E29/510 which hosts 1,170 Mt of magnetite resource @ 34.9% Fe (see table 3) as well as potential for discovery of nickel-copper mineralisation in the northern most part of the tenement (figure 10).

Mt Bevan Fresh BIF Resource											
Class	Material	Tonnes x 10 ⁶	Fe %	SiO ₂ %	Al ₂ O ₃ %	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

Table 3 Mt Bevan BIF Resource Estimate

*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) Also, no additional work has been done on these deposits which warrants revision of the above estimates at this stage. - See Announcements from 2014 and 2015

Although no major field activities were carried out on the project during the December quarter development for Mt Bevan included continued collaboration with Hawthorn regarding the scope, timing, and funding of next phases in the project.

A JV meeting was hosted by Legacy Iron on the 19th of November 2020 with Hawthorn Resources and addressed items including future planning of exploration drilling on the Nickel sulphide targets.

Target evaluation for nickel sulphide mineralization has continued and the Company believes that the geology of the northern part of the tenement is favourable in host of Ni sulphide mineralization shown in figure 10.

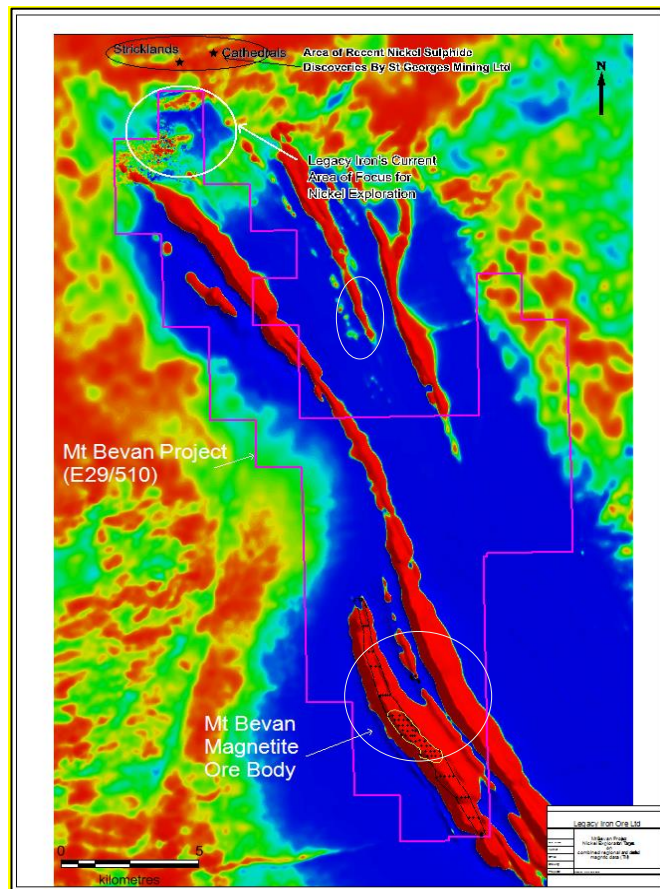


Figure 10: Mt Bevan Project – airborne magnetics data (TMI) showing area of interest for nickel sulphide mineralisation

This is supported by the results of the petrography study which suggested the presence of younger dikes in the area that are known to host nickel sulphide mineralisation. There is a planned 1000m of RC drilling to test the updated nickel targets.

Location of the drill holes drilled in 2019 are shown in figures 11 and 12 below –

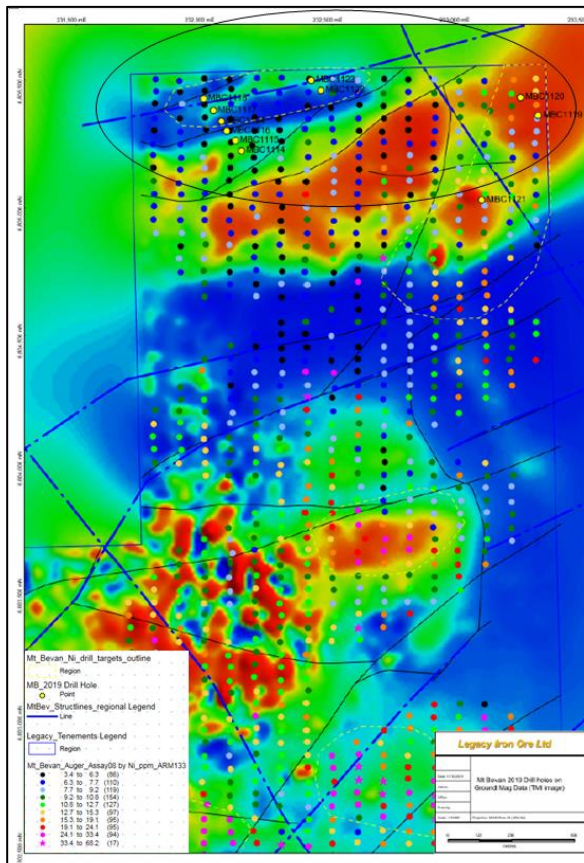


Figure 11: 2019 drill hole locations on Merged ground and regional TMI magnetics with structural interpretations and auger

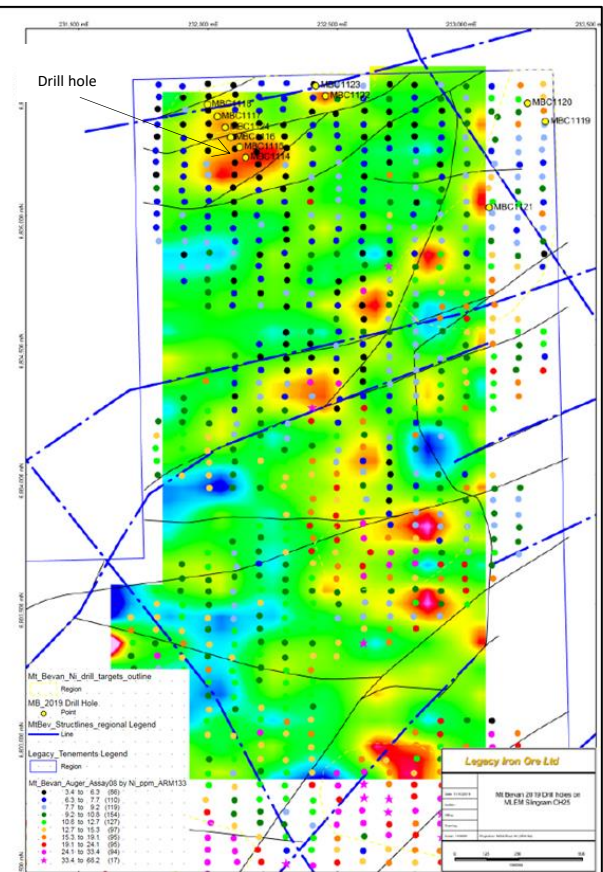


Figure 12: 2019 Drill hole locations on MLEM Slingram CH25 with structural interpretation lines and auger geochemistry (Ni ppm)

This area is almost completely concealed by Quaternary alluvium and colluvium cover. Further exploration by drill testing the priority Nickel targets will be done to assess the Nickel potential of the area. There is also a plan to take up further DSO and Hematite exploration on the tenement.

Koongie Park Project

Legacy Iron holds an exploration licence on E80/4221 that is contiguous with ground under exploration by Anglo Australian Resources Limited (AAR) at its Koongie Park VHMS base metals deposit (Figure 13). AAR has defined substantial base metal/gold/silver mineralisation in two deposits to date, with a total JORC resource (Indicated and Inferred) of 8Mt at 3.3% zinc, 1.2% copper, 0.3g/t gold and 23g/t silver. AAR has also outlined a shallow supergene high grade copper resource.

Limited field work was possible in the December quarter, it included 1 of 6 identified areas of interest for Geophysical survey Fixed Loop Electromagnetic completed in Oct. 2020. Past work completed by Legacy at Koongie Park revealed a number of base metals and rare earth element

(REE) anomalies predominantly to the west of the Angelo Fault and potential gold targets (early stage targets) to the East of the Angelo Fault (Figure 13).

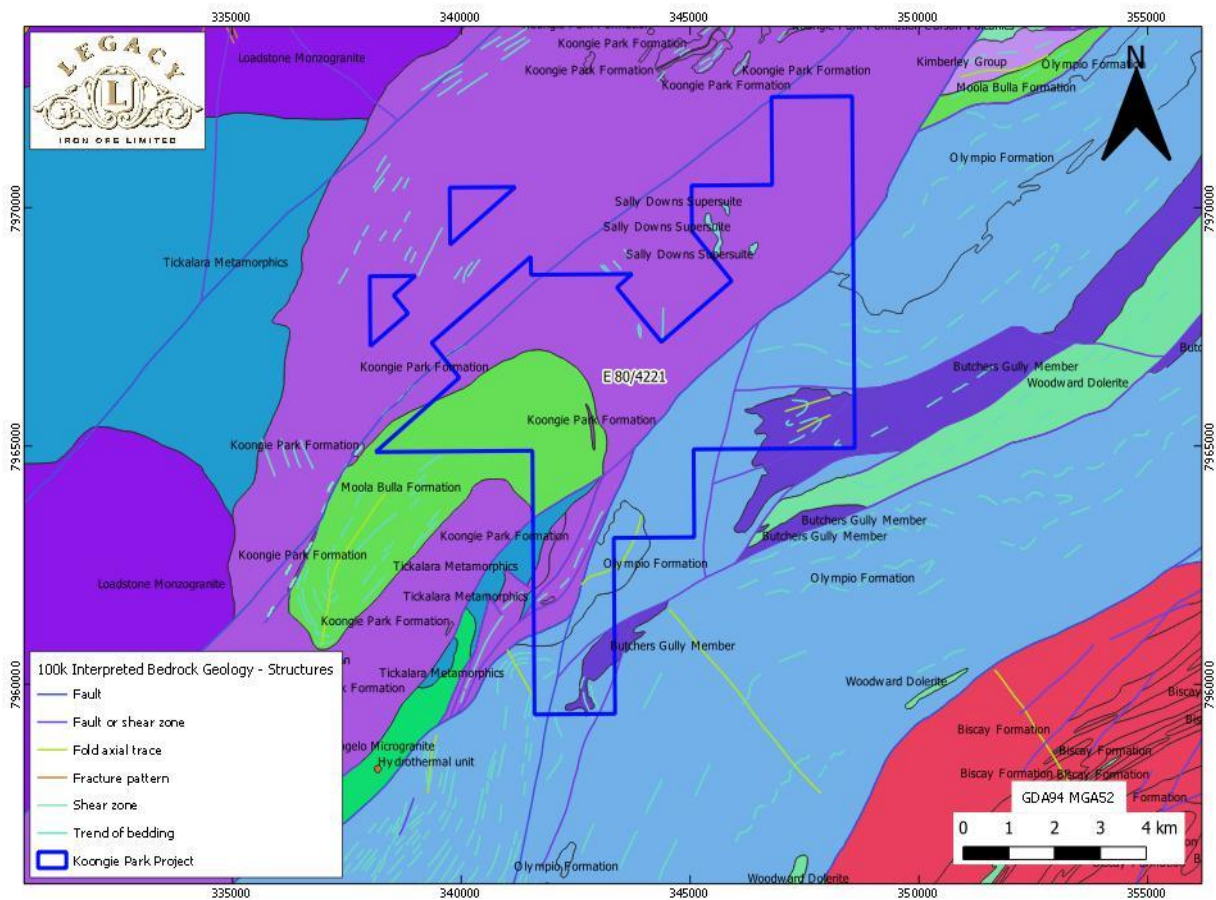


Figure 13: GSWA 100k geology and prospects at Koongie Park

For base metal targeting in the tenement, the Company engaged Newexco for geophysical and geochemical interpretation based on this interpretation, geophysical ground EM 6 targets were defined to identify VHMS mineralisation targets for drill testing.

The objective of this Ground Electromagnetic FLEM survey is to determine the presence of any conductors, which may represent massive sulphides (VHMS target). No anomalous response consistent with a massive (VHMS type) sulphide source was observed at low-ranking Anomaly 6 (figure 14).

Although it was concluded that no bedrock anomalous response was observed consistent with a VHMS target based on this FLEM data at the one site. It is recommended to complete this survey at the more prospective sites when access is available after the wet season.

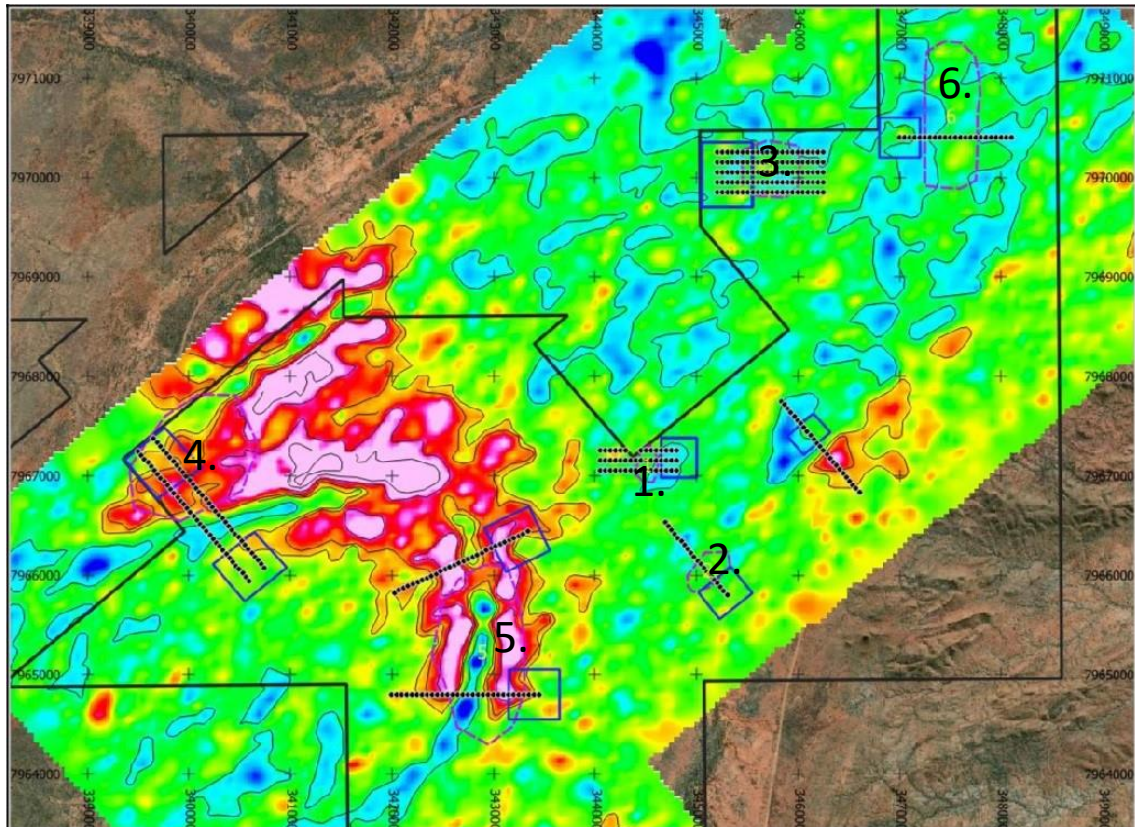


Figure 14 Planned 1-6 FLEM loops and interpreted Geochem anomalies

PLANNED ACTIVITIES – March 2021 quarterly period.

Main activities planned for the next three months is likely to comprise:

South Laverton:

Mt Celia project –

- The Company is focusing on increasing the overall resource for the Mt Celia project and to convert the current JORC inferred resource into an indicated category.
- Resource modelling and pit optimization work will continue during the next quarter. The Company aims to complete resource estimation work by early February 2021.
- In addition, the Company intends to complete the metallurgical work by conclusion of 1st quarter 2021 to support the pre-feasibility study of the project.
- Complete the extended hydrogeological studies with construction of 4 monitoring bore, 1 observation bore, and 1 production bore.

Yilgangi

- The Company continues to work through the required regulatory approvals undertaking the necessary environmental and heritage studies. Sign-off on the completed 1st phase flora and fauna surveys.
- For the mining lease agreement signed with stake holders the Company continues to work on progressing site infrastructure.
- Planning of ore body extension drilling, approx. 1000m testing new targets based on results from the last round of drilling.

- Follow up from Dec. 2020 RC drilling results with new drill planning

Koongie park

- Plan for geophysical ground EM and downhole EM survey in the Koongi Park project to further define VHMS mineralisation targets

Mt Bevan Project

- Assess nickel mineralisation potential in the central and eastern part of the tenement and further DSO target drilling.
- Further evaluation of the weak anomalous responses seen in the downhole EM results and follow up any younger dike intersections identified in the 2019 drilling.

Sunrise Bore

- Follow up identified on-ground structures prospective for controlling gold mineralisation and undertake ground geophysics survey if warranted to assist with drill targeting process.
- Confirm planned RC drilling for Q2 2021 over the delineated gold targets.

Project Generation

- Continue to review new potential opportunities including Kangaroo Bore North and Yilgangi.

Competent Person's Statement:

The information in this report that relates to Exploration Results is based on information compiled by David Mills who is a member of AIG and employee of Legacy Iron Ore Limited. Mr. Mills 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. Mills consents to the inclusion in this report of the matters based on his information in the form and the context in which it appears.