



September 2022 Quarterly Activities Report

LEFROY EXPLORATION LIMITED

Western Australian Focused
Gold Explorer

ASX Code: LEX

Shares on Issue:
146M

Current Share Price:
30c

Market Capitalisation:
\$43.8m

Board of Directors

Chairman
Gordon Galt

Managing Director
Wade Johnson

Non-Executive Director
Michael Davies

Non-Executive Director
Tara French

Flagship Exploration Project

Lefroy Gold Project

- Eastern Lefroy
- Western Lefroy JV

Growth Exploration Projects

Lake Johnston Nickel Project
Glenayle Nickel Project

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HIGHLIGHTS

Exploration during the September 2022 Quarter was focused at the Burns Gold-Copper Project, which involved a deep diamond program totaling 2784m. This was complemented by further FFAC drilling at Western Lefroy by JV partner, Gold Fields Ltd.

Burns Central

- Two deep diamond drillholes, LEFD006-007a, totalling 1952m were completed with the following key outcomes:
 - EIS co-funded hole, LEFD006, was completed to 1245.8m downhole, which is the deepest drillhole at Burns to date
 - LEFD006 established four key geological domains (including the Central Porphyry) which when combined indicate a width of 600m to the intrusive system and vertical depth of 1000m
 - A new zone of mineralisation has been confirmed from the limited assay results from LEFD006 returned to date, which intersected: **19.6m at 0.33g/t Au, 0.75% Cu from 428m** and includes **3.5m at 0.86g/t Au, 0.72% Cu, 0.09% Co from 430m**

Lovejoy

- Two diamond holes, LEFD008-009, totalling 832m were completed located 1.5km north of Burns Central
- Hole, LEFD008 completed to 364m downhole intersected significant visual native copper mineralisation, including:
 - A 145m long interval of native copper mineralisation between 130m-275m, which included;
 - A 42m interval of hydrothermal breccia with native copper and copper sulphides from 233m – 275m
- The results from the four holes add support to Burns Central and the surrounding prospects, including Lovejoy, are part of a large polymetallic intrusion-related hydrothermal system that has at least a 2.5km. lateral extent
- Final assays results are pending for holes LEFD006-009.
- A major 15,000m reverse circulation drill program commenced at Burns Central, which aims to deliver a maiden gold-copper resource estimate in CY23.

Corporate

The Company had \$2.85m in cash and equivalents and zero debt as of 30 September 2022.

The Company confirmed in October it is progressing its demerger/IPO strategy for its wholly owned nickel focused subsidiary, Johnston Lakes Nickel Ltd (JLN). The Company is targeting a listing of JLN in the first half of CY23, subject to shareholder and ASX approvals.

INTRODUCTION

The Board of Lefroy Exploration Limited (ASX: LEX) (“**Lefroy**” or the “**Company**”) is pleased to provide its report on exploration activities during the September 2022 Quarter. Lefroy is a gold focussed exploration company employing a methodical generative targeting approach to exploration at the wholly owned Eastern Lefroy subproject within the greater flagship Lefroy Gold Project (“**LGP**”). The Company’s aim continues to be focused on the discovery of high-value gold and more recently gold-copper deposits. This exploration and strategy is complemented by the work undertaken at Western Lefroy funded by a Joint Venture (JV) with Gold Fields Limited (NYSE: GFI) (“**Gold Fields**”).

Lefroy Gold Project (LGP)

The Lefroy Gold Project is located approximately 50km to the southeast of Kalgoorlie in the Eastern Goldfields Province of Western Australia (Figure 1). This semi-contiguous land package covers 539km² immediately east of and adjoining the world class St Ives gold camp (in excess of 10 million oz produced), operated by Gold Fields, and is immediately south of the high-grade Mt Monger gold centre operated by Silver Lake Resources Limited (ASX:SLR) (“**Silver Lake**”). Four gold processing operations are strategically located within 50km of the project and provide commercial options for processing any gold resources discovered.

LGP is referenced in two packages, i.e.

- **Eastern Lefroy** covering 302km² of wholly owned tenements (Figure 1) that include the Lucky Strike, Coogee South, Hang Glider Hill, Havelock, Burns and other sub-projects along or near the regional scale Mt Monger fault, and;
- **Western Lefroy Joint Venture** (“**WLJV**”) tenements (Figure 1) covering 237km² adjoining the Gold Fields tenements that make up the St Ives mining operation. Gold Fields can earn up to a 70% interest in the LEX tenements by spending up to a total of \$25 million on exploration activities within 6 years of the commencement date of 7 June 2018.

At Eastern Lefroy, the Company continued to focus exploration at the priority Burns Gold-Copper Project (“**Burns Au-Cu Project**”) (Figure 1). This involved the completion of a four-hole deep diamond drill program totaling 2783m of drilling. The program included a 1246m EIS co-funded hole, LEFD006, which evaluated the vertical and lateral extents of the main Burns system (**Burns Central**) stepping out 250m to the west of the known mineralisation.

These holes successfully expanded the continuity of Burns Central to an approximate width of 600m and a depth of 1000m vertical from surface, which remains open at depth and along strike. Two additional holes were completed at the Lovejoy prospect, located approximately 1.5km north of Burns Central, totaling 831.7m of drilling. Assay results for these four holes are pending and are anticipated to be returned in November.

At Western Lefroy Gold Fields continued the extensive land-based Full Field Aircore (FFAC) drilling program, with 114 aircore (AC) drillholes completed for 2904m of drilling.

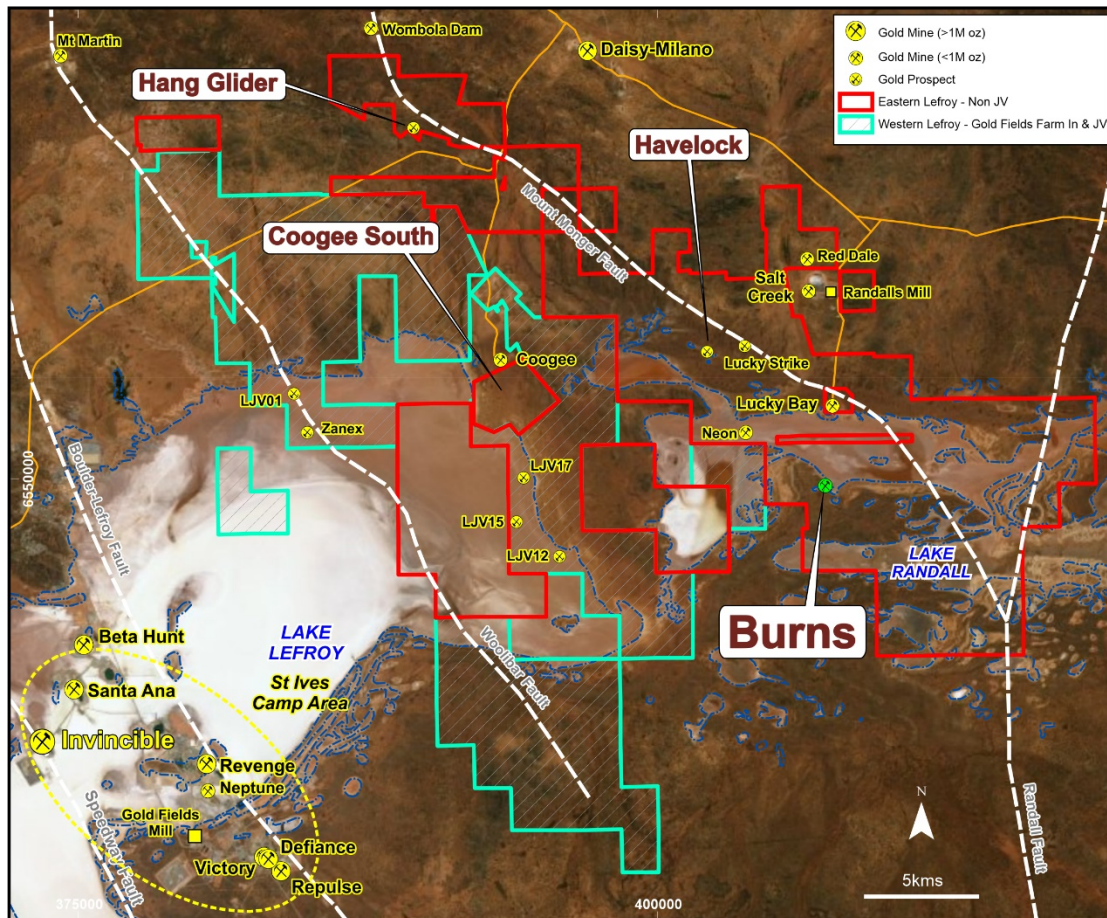


Figure 1 Lefroy Gold Project showing extent of the Eastern and Western sub projects, proximity to the St Ives and Daisy Milano gold mines and the position of the Burns project

EXPLORATION ACTIVITIES

Eastern Lefroy Gold Project (LEX 100%)

The Eastern Lefroy project is a semi contiguous package of wholly owned tenements that cover approximately 37km of strike along and straddling the regional scale Mt Monger Fault (Figure 1). The Mt Monger Fault is considered to be structurally analogous to other regional faults in the Kalgoorlie terrain (e.g., Boulder-Lefroy, Zuleika, Randall) that are likely a primary control to gold mineralization. The Company considers the Mt Monger Fault to be similarly prospective to host large gold deposits adjacent to its interpreted position although, the area lacks a significant degree of exploration.

The Company has identified three priority centres, or hubs, along the Mt Monger Fault trend where greenfields exploration for gold is being focused. These hubs are ranked according to the level of prior exploration activity, gold anomalies identified as noted below (Figure 1), and the structural setting.

- P1-** Lake Randall Exploration Hub: Generative Exploration (e.g., Burns)
- P2-** Lucky Strike Exploration Hub: Advanced Exploration (e.g., Havelock, Lucky Strike)
- P3-** Hang Glider Hill Exploration Hub: Early-Stage Exploration (e.g., Hang Glider, Coogee South)

During the September 2022 Quarter the Company continued to focus field activities within the Lake Randall Exploration Hub, which included a four-hole deep diamond drill program at the Burns Au-Cu Project.

Burns Au-Cu Project

The Burns Au-Cu Project lies within the Lake Randall Exploration (LRE) Hub, which is immediately southeast of the linear trending Lucky Strike-Havelock-Erinmore banded iron formation (BIF) trends (Figure 1 and refer LEX ASX Release 7 July 2022) and west of the highly prospective, regional Mt Monger Fault. Burns is a new and unique style of intrusion-related, gold (Au)-copper (Cu)-molybdenum (Mo)-silver (Ag) mineral system, hosted by Archean age rocks in the Eastern Goldfields Province (EGP) of Western Australia.

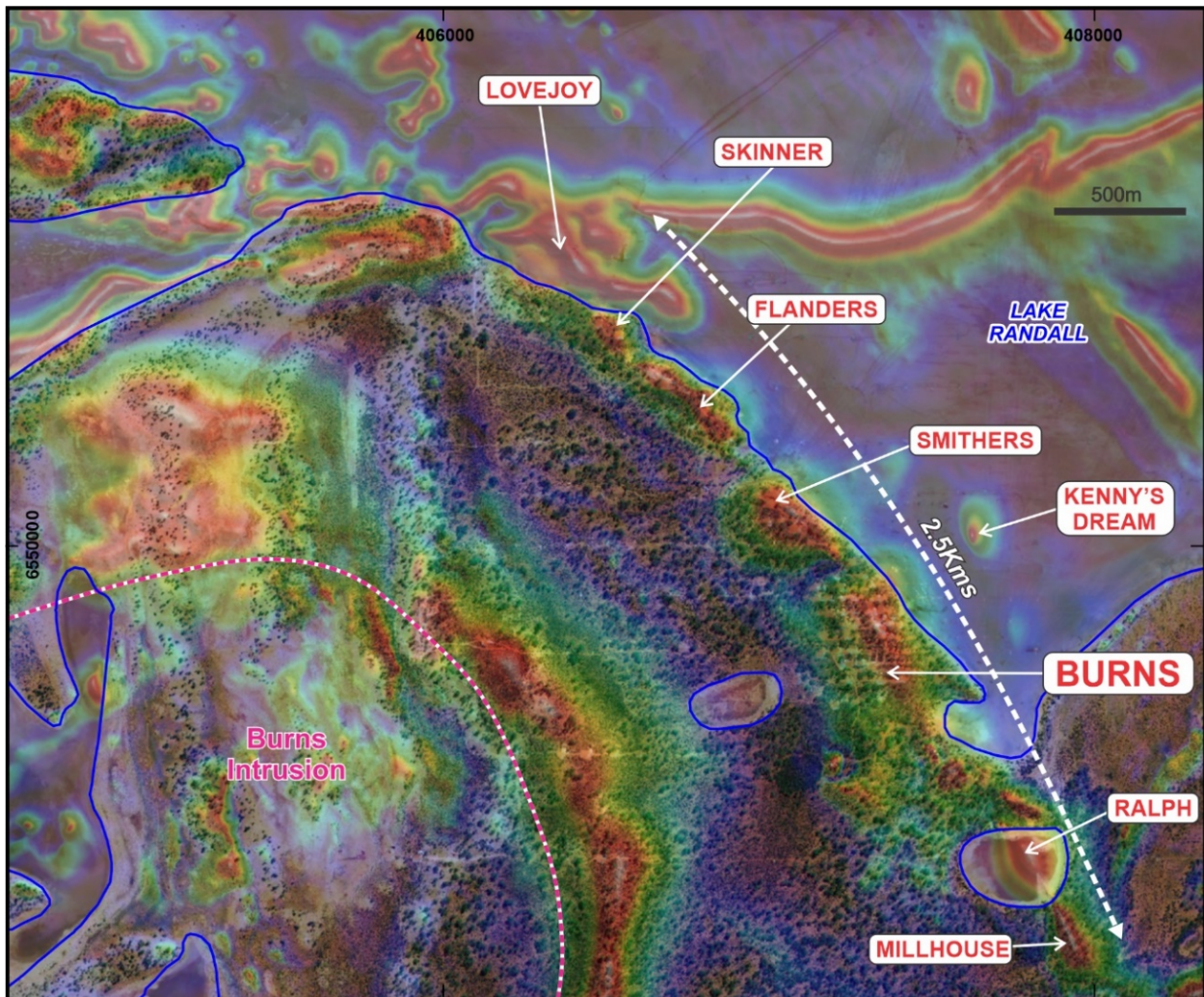


Figure 2 Combined satellite image with transparent TMI RP aeromagnetic image highlighting the discrete magnetic anomalies along strike of the Burns Corridor over a length of 2.5km (warm colours represent rocks beneath the surface with higher magnetite content). Note-drill holes have been removed from the figure to highlight the magnetic anomalies.

A maiden 22-hole RC drill program completed in Jan-Feb 2021 intersected a spectacular gold and copper interval in discovery hole, LEFR260 containing 38m @ 7.63g/t gold & 0.56% copper from 134m. The results from that RC program provided geological and geochemical data that highlighted the unique geological characteristics of Burns and the base for continued exploration activity.

The gold, copper, silver (and lesser molybdenum) mineralisation, which is hosted by multiple diorite-porphyry intrusives and high-magnesium basalt, is considered by the Company to be a new and unique style of gold-copper mineralisation in the Eastern Goldfields of Western Australia.

Exploration activities by the Company since January 202, including drilling and aeromagnetics at the Burns Project, has defined multiple Au-Cu prospects over a 2.5km corridor (Burns Corridor) (Figure 2).

Activity during the September 2022 Quarter involved a deep diamond drill program that was aimed to advance the understanding of the scale and genesis of system at Burns Central and the Lovejoy prospect.

Burns Central Diamond Drilling

Two diamond drill holes were completed, LEFD006-007a, to evaluate the continuity of the Burns Central system to 1000m vertically from surface on the baseline (0N) section and along strike 240m to the south of baseline discovery hole section (LEX ASX release 22 February 2021).

LEFD006 (EIS Co-funded)

The first hole of the two-hole diamond drill program LEFD006 (Figure 3), commenced on 12 July (refer LEX ASX release 12 July 2022) and completed to a downhole depth of 1245.8m. Co-funding for this hole is being provided under the Exploration Incentive Scheme (EIS) managed by the WA Department of Mines, Industry Regulation and Safety (DMIRS) (refer LEX ASX release 29 October 2021).

LEFD006 was designed to evaluate the Burns Au-Cu mineralised diorite porphyry host rock, to a target (vertical) depth of 1000m from surface with key aims to:

- Expand the continuity of the mineralisation discovered to date on a vertical scale
- Test the lateral extent of the system by 250m west of the main known mineralisation
- Provide geological and geochemical information to support ongoing research
- Demonstrate further that Burns is a new, large Au-Cu intrusion related mineral system

This hole provided a cross-section through the entire system of Burns Central, and successfully evaluated the down-dip continuity of the diorite porphyry intrusive rocks and the extent of the Western Basalt. The suite of diorite porphyry rocks together are known as the Eastern Porphyry which is the main host of gold-copper mineralisation.

The initial 570m of LEFD006 (Figure 3) intersected a wide downhole interval of largely high-magnesium basalt (LEX ASX release 1 August 2022). By all indications, the alteration assemblage intersected supports extensive hydrothermal alteration zonation that is consistent with an intrusion related mineralized system, which included: basalt altered to epidote-biotite-magnetite with localized hydrothermal breccia intervals, gypsum veins and narrow cross-cutting porphyries.

Mineralisation within the basalt interval includes fracture-fill native copper, with vein and/or fracture-fill chalcopyrite, pyrite, chalcocite and molybdenite (LEX ASX release 1 August 2022). This interval of altered basalt has successfully increased the lateral extent of the copper mineralised Western Basalt zone by approximately 250m to the west. Within this basalt unit, a new 40m interval (400m-440m) containing multiple cross-cutting diorite intrusives was intersected (Figure 3). The interval contains predominantly potassic-altered hematite and biotite, with associated pyrite-chalcopyrite and trace molybdenite mineralisation (Refer LEX ASX 1 September 2022).

Subsequent to the Quarter's end, assay results were returned for the 40m zone noted above with a best result of **19.6m @ 0.75% copper and 0.33 g/t gold from 400m** including **3.50m @ 0.72% copper, 0.86 g/t gold, 0.09% cobalt from 430m** (LEX ASX release 5 October 2022). This intersection of diorite porphyry is separate to the main porphyry (that is deeper) and has created an additional target for follow up drilling (Figure 3).

From 510m to 710m downhole, four texturally different and variably altered diorite porphyry units were intersected (LEX ASX 1 September 2022). Importantly this contains the Burns Alkalic Porphyry (BAP) unit, which is interpreted by the Company to be a control on gold and copper mineralisation. The porphyry units are now grouped to form the Central Porphyry (Figure 3).

Below the Central Porphyry, from 710m to 905m, a broad zone of biotite-altered, calcite-veined, sheared basalt was intersected. This 195m downhole interval contains multiple, massive porphyry units that are variably pyrite altered which is termed the Deformation Zone (Figure 3). This deformation zone is interpreted to be the main structural conduit to the porphyry intrusions and gold-copper mineralisation.

The completion of LEFD006 also established four broad geological domains, each with contrasting alteration and geology, which now demonstrate that the Burns system has a width of at least 600m, with the western limit yet to be defined. The hole also successfully provided continuity to the multiple porphyry units, approximately 300m below the existing drilling, and to 1000m vertically below surface on the baseline section (0N) where discovery RC hole, LEFR260 intersected a best result of **38m @ 7.63g/t gold & 0.56% copper from 134m**. The system remains open at depth and along strike (Figure 3).

The gold and multi-element (e.g. copper, silver, molybdenum, etc.) assays results are pending from the remaining 1184.8m of the hole. Due to a delay at the laboratory in Perth, these subsequent results are expected in November.

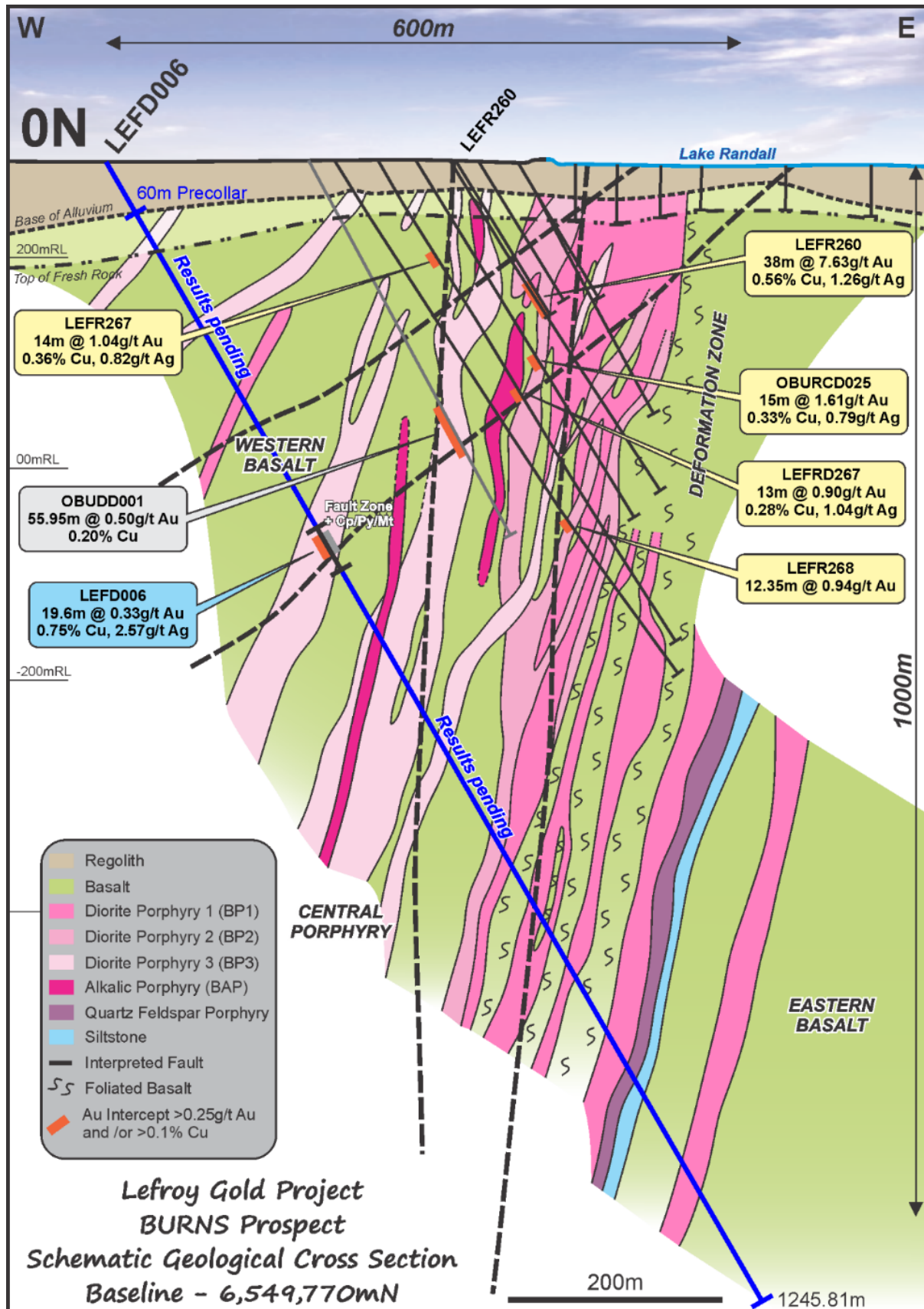


Figure 3 Burns baseline drill section (ON) showing completed drill holes, extent of the multiphase porphyries that make up the eastern porphyry and the position of diamond hole LEFD006

LEFD007a

The second diamond hole, LEFD007a, was completed to a depth of 706m. The collar position of this hole was planned 240m south of the baseline (0N) section (Figures 4 & 5) to target the down-plunge extent of a modelled high-grade north-trending gold-copper component defined by holes, LEFR260 & 320 (refer to long section Figure 5). This higher-grade component exists within a larger northwest trending, gentle south-plunging mineralized gold, copper, silver, and molybdenum shell that was identified by interrogating Company drill hole data.

The hole intersected two 30m intervals of (149.2 – 184.0m and 205.6-230.8m) containing copper nuggets hosted within epidote-chlorite altered basalt. This new, wide downhole interval of altered basalt has increased the lateral extent of the copper-mineralised Western Basalt zone 240m to the south of the baseline section and is open along strike and down dip. The alteration assemblage also continues to support and expand an interpreted large, zoned, hydrothermal-alteration system around the diorite intrusions. All gold, copper and multi-element assays are expected to be returned in November, subject to the laboratory turn-around.

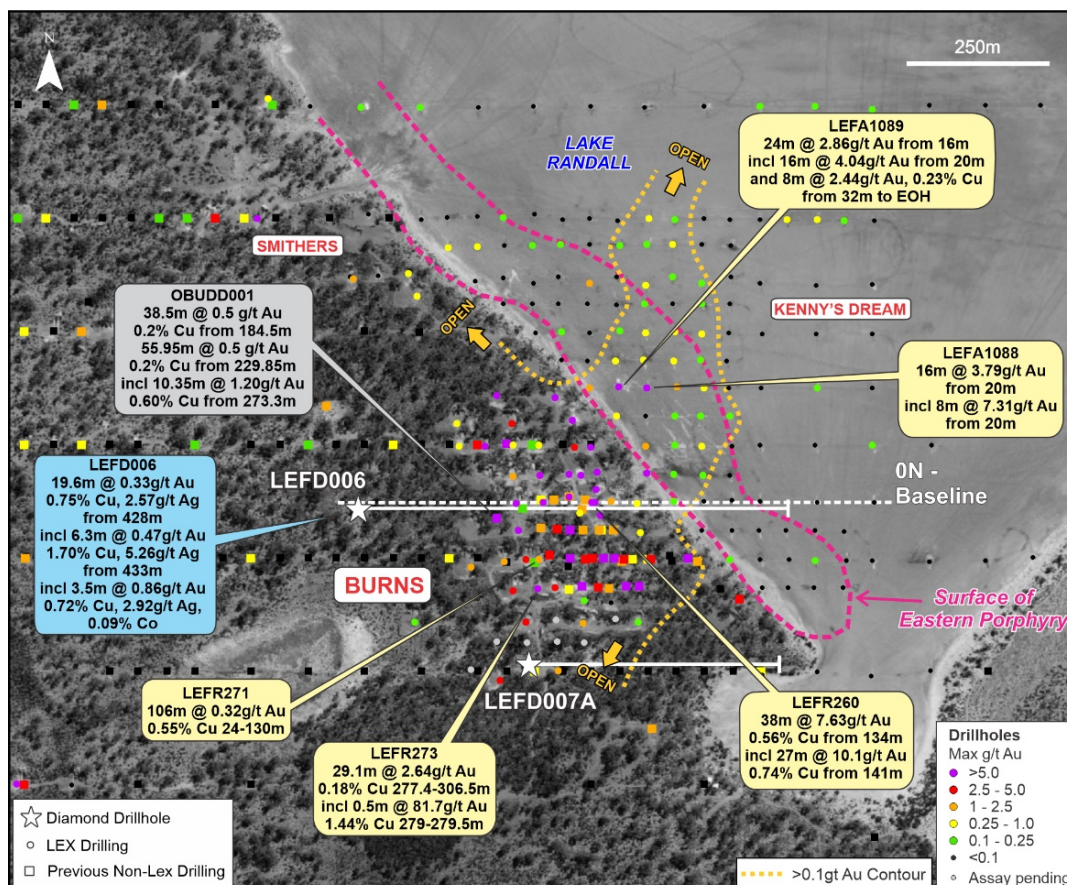


Figure 4 Plan view of Burns highlighting the position of holes, LEFD006 and LEFD007a, the interpreted extent of the Eastern Porphyry and gold >0.10g/t Au anomaly associated with previous AC drilling.

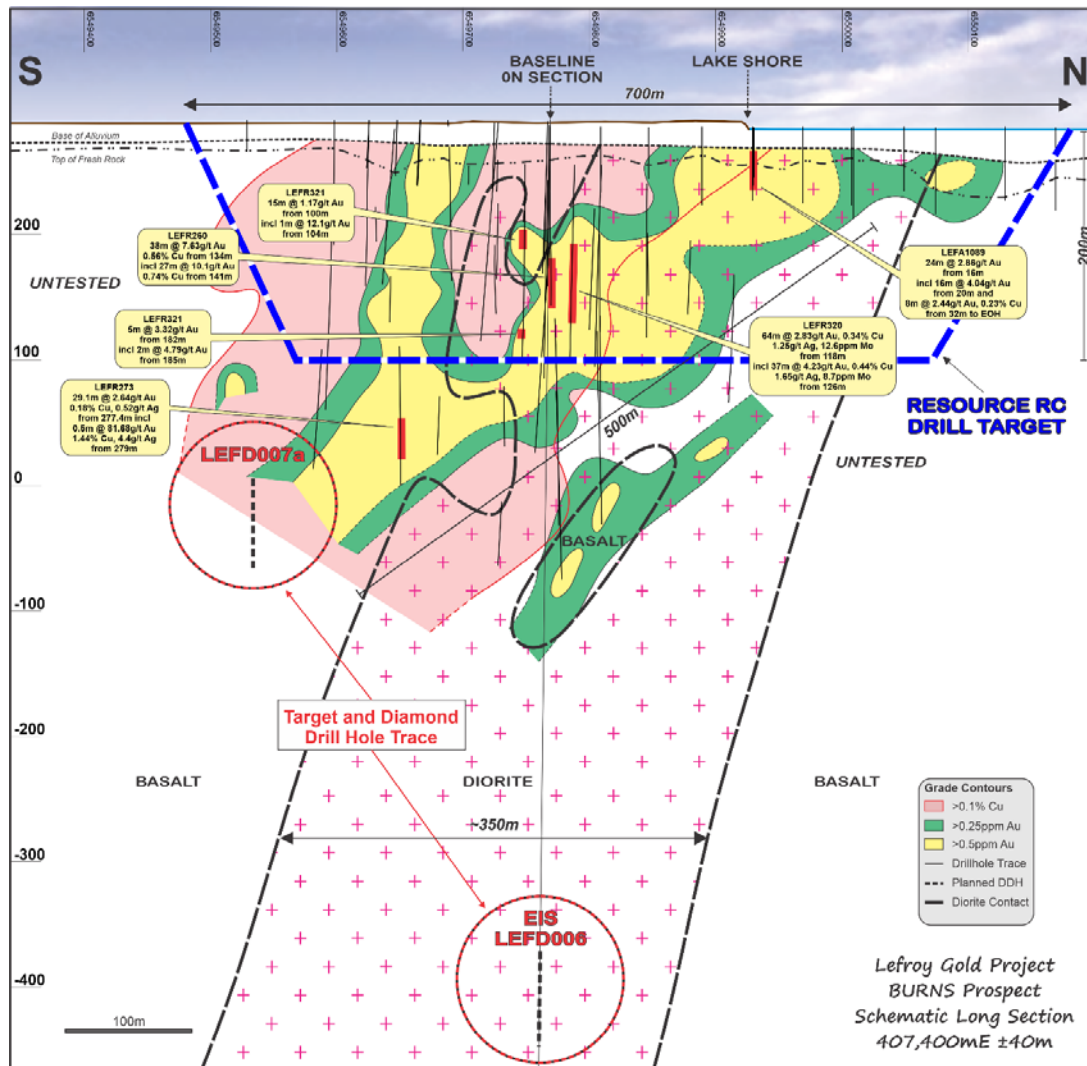


Figure 5 Schematic Longitudinal Section 407400N looking west showing drill hole traces, modelled grade contours and selected previous and recent drill hole intercepts to demonstrate the system. Drill traces of the diamond drill holes that tested the two target positions are shown.

Lovejoy Diamond Drilling

Proceeding the Burns Central drill holes, two additional holes totaling 831.7m were drilled at the Lovejoy prospect, located 1.5km north of Burns (Figure 2).

The Lovejoy prospect is the northernmost magnetic anomaly of a linear trend of discrete magnetic features, extending 2000m northwest from Burns (Figure 2). Each of the magnetic anomalies was evaluated by RC drill holes in 2021 which intersected altered diorite and basalt in each hole (similar to those observed at Burns) and copper-gold-silver mineralisation. The best results were returned in hole, LEFR297, and associated with altered hematite-silica breccia, including:

- 10m @ 0.21g/t Au & 0.60% Cu & 2.5g/t Ag from 218m, including 2m @ 0.41g/t Au & 1.56% Cu & 5.5g/t Ag from 225m, and
- 8m @ 0.22g/t Au & 0.51% Cu & 1.75g/t Ag from 250m to EOH, including 2m @ 0.67g/t Au & 1.53% Cu & 5.0g/t Ag from 256m to EOH

Due to high flows of ground water, hole LEFR297 was abandoned at 258m with the last 2m containing strong copper mineralisation hosted by altered diorite porphyry and basalt with associated gold and silver credits (refer LEX ASX release 3 November 2021).

LEFD008

LEFD008 was completed 5m west of LEFR297 to an end-of-hole depth of 364.3m in aim of extending at depth the strong bottom-of-hole copper mineralisation intersected in LEFR297. In addition, the company also aimed to gain a detailed understanding of the style and geometry of the breccia-hosted mineralisation.

The hole successfully extended the mineral system a further 70m downhole beyond the depth that LEFR297 was abandoned, which contained a spectacular 42m interval of visual native copper and copper-sulphide mineralisation in hydrothermal breccia from 233m – 275m. This native copper occurred as partial to complete replacement of basalt clasts and disseminations throughout the breccia matrix (LEX ASX release 20 September 2022). The hole also intersected basalt intruded by a suite of diorite porphyries consistent with that observed in RC hole LEFR297, and similar to those observed at Burns Central.

The intensity of the copper mineralisation was demonstrated by the residual copper coating on the outside of the drill rods when drilling (refer LEX ASX release 20 September 2022). This was only evident once the rods had been extracted from the ground. The Company interprets this significant copper mineralisation to be a primary component of the breccia. This suggests the breccia may be an earlier phase of mineralisation of the larger Burns mineral system.

LEFD009

A second hole, LEFD009, was completed to 467.4m to follow up the down dip extent of the copper-rich breccia zone intersected in LEFD008. The hole collar was positioned 10m to the west of LEFD008 (Figure 6). This hole successfully intersected the same breccia observed up-dip in LEFD008 which provides an interpreted shallow-dipping geometry to the breccia structure (Figure 6). The hole was extended beyond the planned depth of 450m to intersect the depth extension of the two porphyry intrusions observed in LEFD008.

The discovery of the copper rich breccia at Lovejoy, 1.5km north of Burns, highlights the extensive scale of the Burns magmatic system, which is open. This provides further confidence to test the other similar magnetic anomalies, such as Skinner and Smithers, along the Burns Corridor (Figure 2).

Multiple sample batches for LEFD008-009 have been submitted to the laboratory for gold, copper, and multi-element analysis. Assay results for these holes are pending and are anticipated to be returned in November.

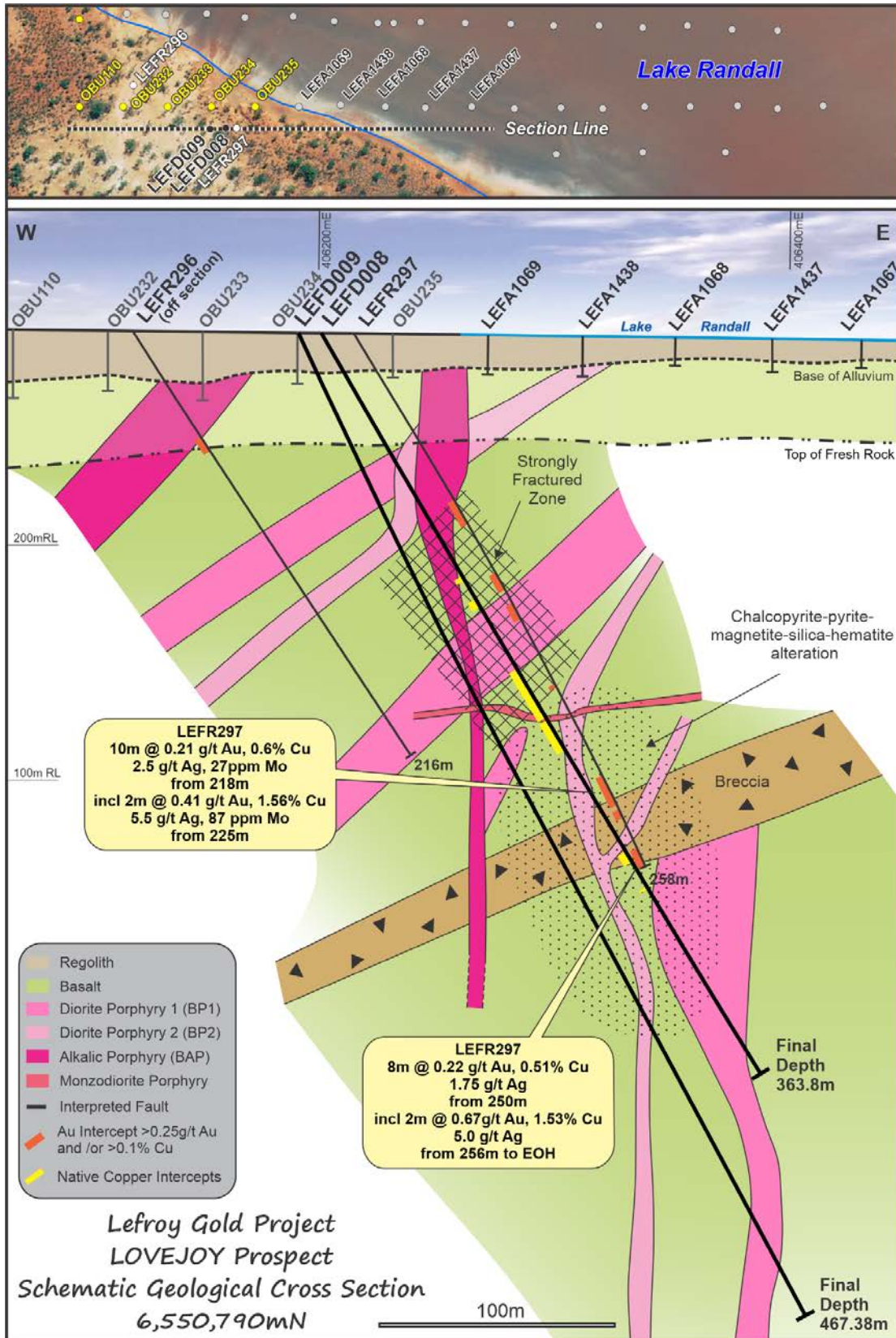


Figure 6 Lovejoy schematic drill section +/- 40m and plan view snapshot (above). NB holes drilled by the Company are prefixed 'LEF' and historical holes are prefixed 'OBU'.

Next Steps-Burns Central RC Resource Drilling

Subsequent to Quarters end the Company commenced a major 15,000m resource RC drill program at Burns Central (LEX ASX Release 6 October 2022) to evaluate the system to 200m vertically from surface and over a 700m of strike length (Figures 7 & 8). The program will be both land-based (onshore) and on Lake Randall (offshore).

The onshore component is well advanced, and a specialised lake RC drill rig is scheduled to commence offshore in early November 2022. The drilling will be on a 40m-by-40m spaced grid pattern with angled holes planned at nominal 250m final depth. The new drill data, when combined with existing drill data, will form the basis for a maiden gold-copper resource estimate.

Samples from the RC program will be prioritized for gold analysis with first assay results expected in November. Subject to assay result turnaround, the Company aims to deliver a maiden gold copper resource estimate for the shallow part of the Burns system in the March 2023 Quarter.

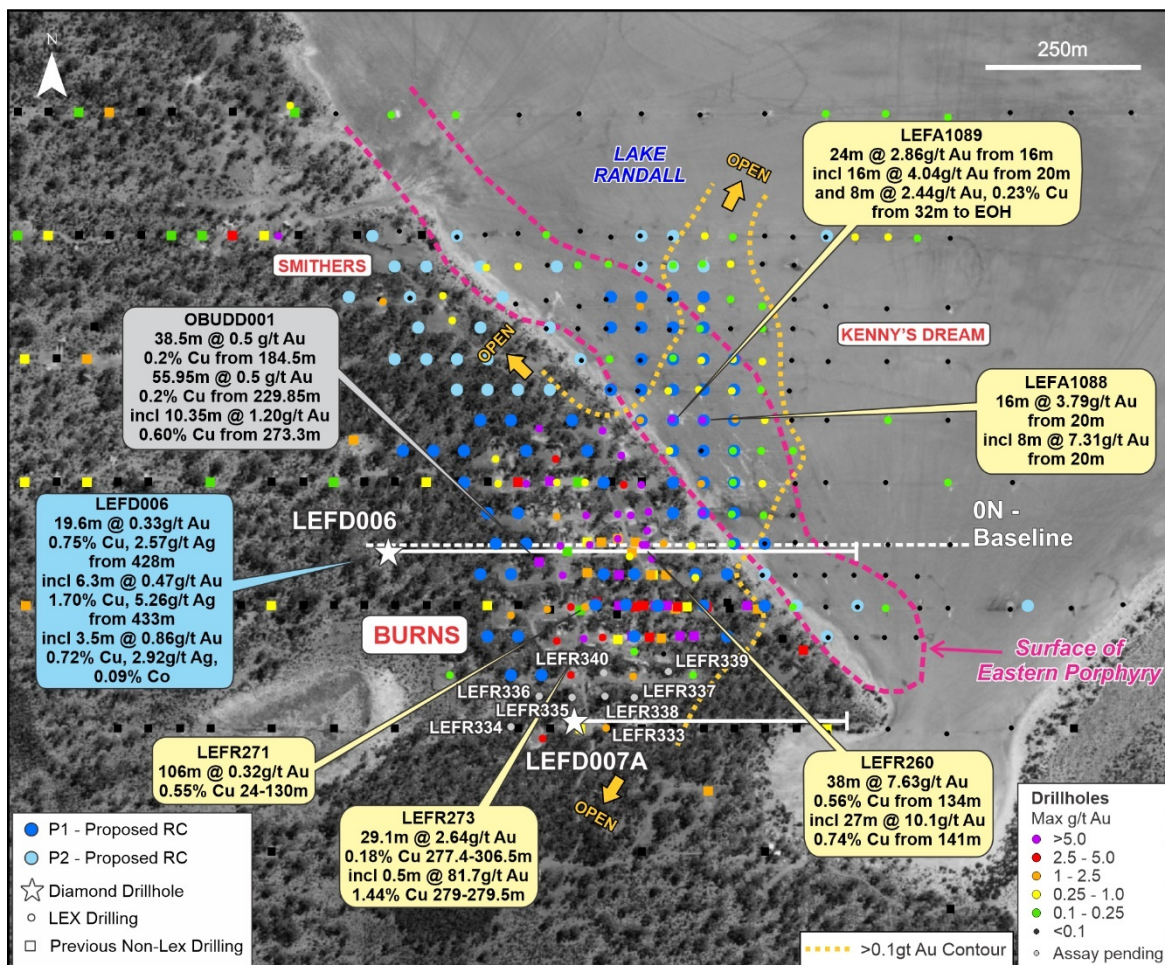


Figure 7 Burns Drill hole location highlighting position of planned RC drill holes P1 and P2.

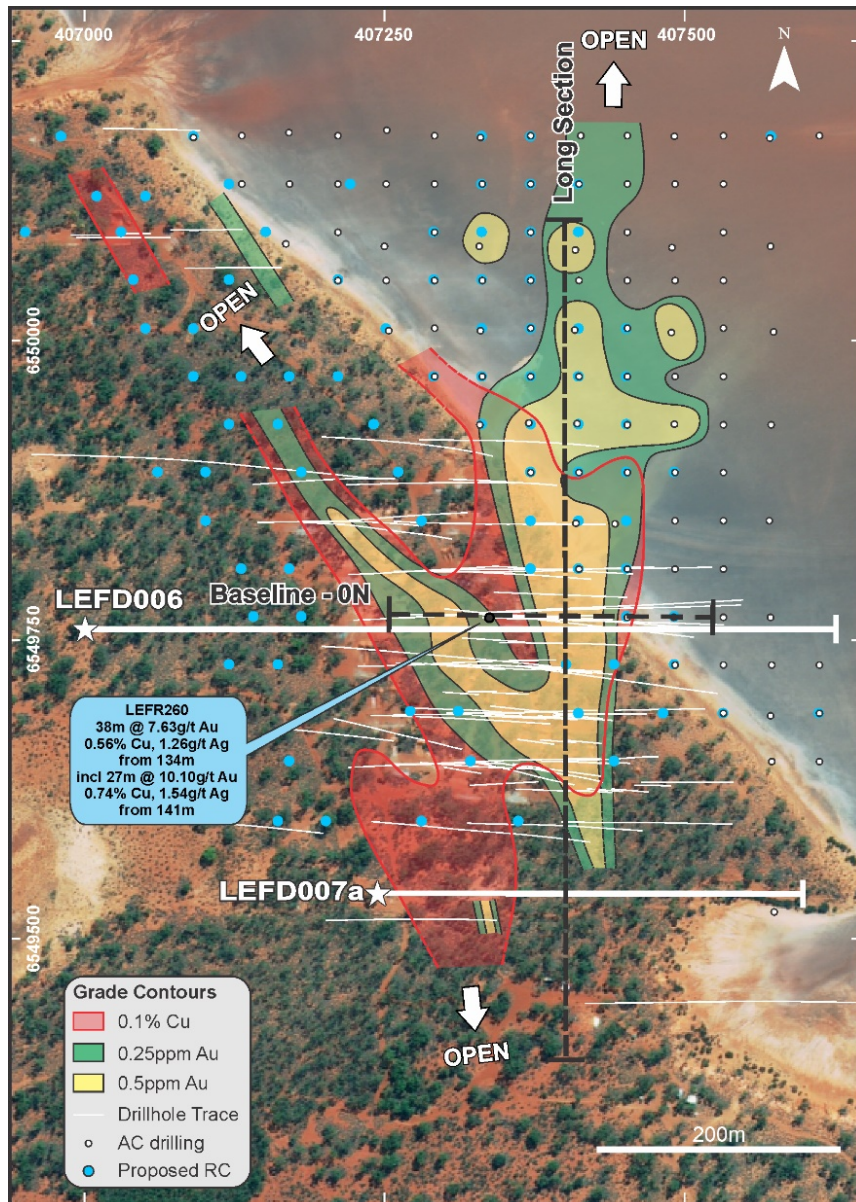


Figure 8 Burns drill hole plan showing RC & Diamond drill hole traces, extent of copper and gold grade contours, the position of the long section (slice) depicted in Figure 5 and proposed RC holes.

Western Lefroy Farm-In (WIFI) & Joint Venture (Gold Fields Earn-in)

The Western Lefroy tenement package being farmed into by Gold Fields covers Lake Lefroy and the surrounding area. The package comprises 237km² of the total 539km² of the LGP and is adjacent to Gold Fields' +10 million-ounce St Ives Gold operation (Figure 1).

Gold Fields is currently in the first year of the Stage 2 earn-in of the Western Lefroy Project Farm-In and Joint Venture Agreement, dated 7 June 2018 (refer to ASX release 6 June 2018), whereby Gold Fields has elected in July 2021 to sole fund a further \$15 million of expenditure over 3 years (by June 2024) to earn an additional 19% interest in the Joint Venture to bring its total interest to 70%.

Gold Fields' exploration activities completed in the September 2022 Quarter was the continuation of the extensive Full Field Aircore (FFAC) drill program which commenced in December 2021 (LEX ASX release 12 October 2021).

Gold Fields continued with the extensive 46,000 metre land based Full Field Aircore (FFAC) drilling program (Figure 9). A total of 114 vertical drillholes were completed on a nominal 400m by 400 metre grid spacing for a total of 2,904 metres. The FFAC program will yield foundational geological and geochemical information that will be interrogated in conjunction with the geophysical data to deliver specific targets for AC, RC, and diamond drilling. However, no significant assay results were returned from drill samples submitted prior to and during the current Quarter. Multiple heritage surveys were completed over the priority areas during the Quarter. These surveyed areas will provide the clearance required for planned drilling in the December CY22 Quarter.

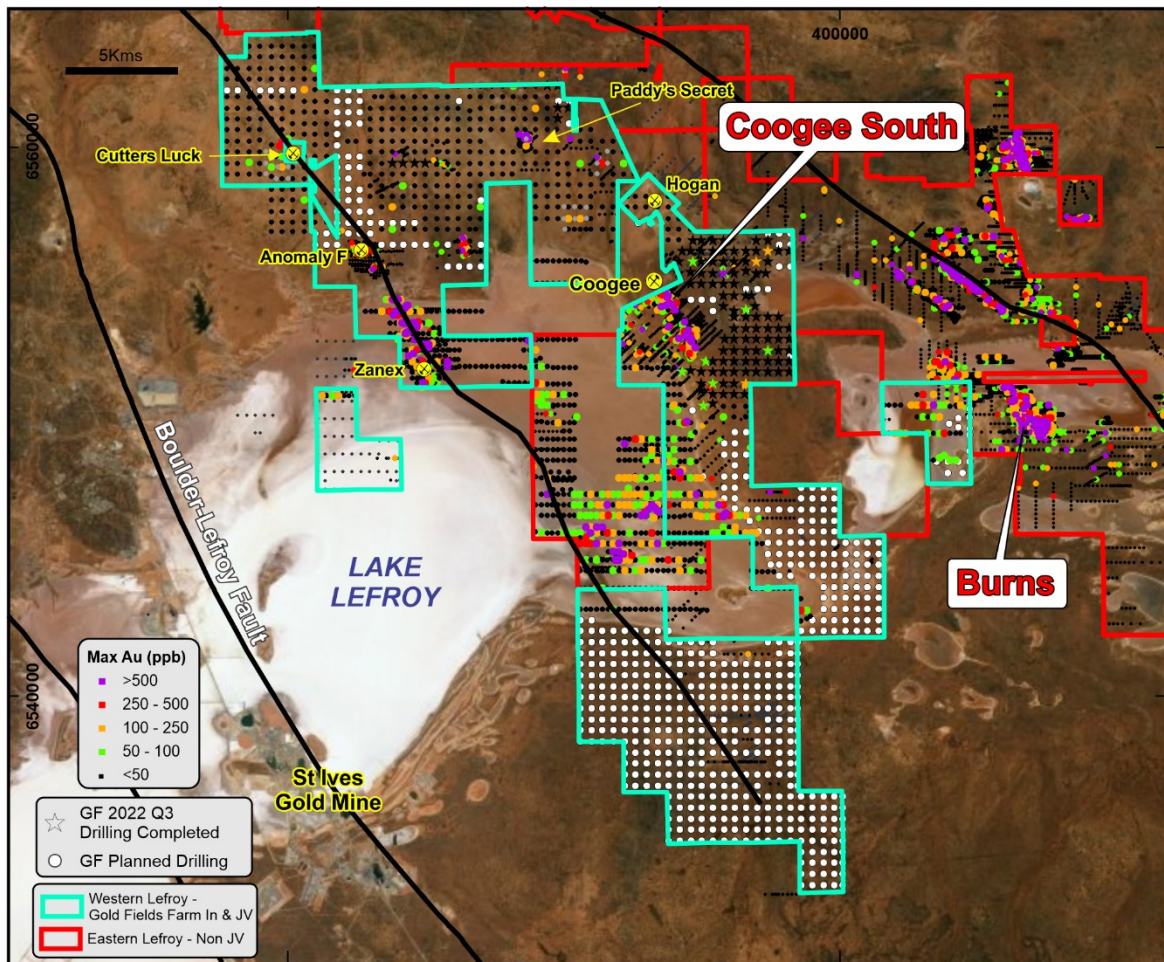


Figure 9 Lefroy Gold Project highlighting the Gold Fields Farm in & JV package, proximity to St Ives and location of the Full Field Aircore (FFAC) drilling program adjacent to Lake Lefroy. White dots refer to planned AC holes.

WLFI Next Steps

A quarterly exploration committee meeting was held on 22 September 2022 with Gold Fields to discuss the ongoing exploration program and plans for December CY22.

Depending on rig availability, planned work for the following Quarter is the ongoing FFAC aircore drilling program, with 516 holes for an estimated 21,190m yet to be completed in the first pass program (Figure 9). Additional heritage surveys are scheduled to be completed in advance of the FFAC drilling.

Lake Johnston Project (Gold and Nickel), Lefroy 100% of Gold and Nickel Rights

The Lake Johnston Project is located 120km west of Norseman in Western Australia and comprises four granted exploration licenses (refer attached tenement schedule) held under title by Johnston Lakes Nickel Pty Ltd. These holdings form a cohesive package of 180km² over the Lake Johnston Greenstone Belt. The lithium rights for three of the tenements are held by Charger Metals NL (ASX CHR) and Lithium Australia NL (ASX LIT).

The Company continues to progress the opportunity to accelerate nickel exploration on the project and is actively pursuing tasks to assist this strategy (LEX ASX release 13 October 2022). The Company is conscious of the exploration prospectivity for nickel and gold mineralisation on the cohesive land package, but with the full focus being at Eastern Lefroy, there is limited opportunity to run parallel exploration programs. Positive investor sentiment within the nickel sector prompted LEX to assess strategies to generate value recognition for its nickel assets.

Subsequent to the Quarter's end, the Company announced that it is progressing its demerger/IPO strategy for its wholly owned subsidiary Johnston Lakes Nickel Ltd (JLN) (LEX ASX release 13 October 2022).

LEX is well advanced with progressing its JLN strategy, with the demerger of JLN from LEX and listing by way of Initial Public Offering ("IPO") planned to be completed in the first half of CY2023 subject to receipt of Shareholder and ASX approvals. This will allow LEX to focus on the Lefroy Gold Project near Kalgoorlie.

A highly experienced Board and Management team has been secured to accelerate the listing of JLN and advancing exploration on the prospective nickel portfolio. The JLN board will be led by Dave Kelly as Non-Executive Chair. JLN's Managing Director, Graeme Gribbin, commenced with JLN on 31 October 2022.

Next Steps

LEX is aiming to list JLN in the first half of CY2023. Relevant LEX shareholder and ASX approvals will be sought prior to the listing. Progress towards the listing is well advanced (LEX ASX release 13 October 2022). The Board and Management team have been selected and will all be in place at the start of November. Due diligence, prospectus preparation for the demerger and the submission to the ATO for demerger relief are also nearing completion.

Over the coming months LEX will confirm other relevant details, including the date of a LEX General Meeting to approve the demerger by way of in-specie distribution of JLN shares to LEX shareholders, the record date for LEX shareholder entitlement to the in-specie distribution, the entitlement ratio and the priority entitlement of LEX shareholders in the IPO. Further announcements regarding these matters will be made later in 2022.

Marloo Farm-In (SensOre Ltd Earn-In)

The single Marloo tenement (E15/1498) adjoins SensOre's Maynards Dam project, located east of the Gold Fields-owned St Ives Gold Mining operation. Under the Agreement, Sensore can earn up to a 70% joint venture interest in the Marloo Tenement by spending up to \$0.8 million on exploration activities within 4 years from the commencement of the agreement (LEX ASX release 9 February 2022).

During the September quarter SensOre reported results for 16 aircore holes (over 405m) that were drilled late in the prior Quarter. The objective of this maiden program was to understand the geology, weathering depth and to identify anomalism (including ensuring that undrilled anomalies are effectively tested and that the previously drilled anomalies were sufficiently tested).

Assay results have been received with no significant anomalies returned. A drill program review is ongoing, JV project next steps will be planned in the December Quarter.

EXPLORATION OUTLOOK SEPTEMBER 2022 QUARTER

Eastern Lefroy (100% LEX, Non-JV)

The Company will continue RC resource drilling at the Burns Gold-Copper Project in the December 2022 Quarter on the Non-JV Eastern Lefroy package. This program is designed to support a maiden mineral resource estimate at Burns Central, which is expected to be delivered in the March 2023 Quarter (subject to assay result turnaround). Drilling will be ongoing FY2023 with an interim break in the 2022 Christmas/New Year period.

Final assays from the four-hole diamond program at Burns and Lovejoy are expected to be returned in November. The results from this program will be interrogated during the December Quarter to provide further targets for follow up drilling.

Western Lefroy (Farm-In and JV Gold Fields right to earn 70%)

The FFAC program will be ongoing subject to land access clearances in advance of the drilling.

CORPORATE

During the September 2022 Quarter the Company's total outgoings on its operating activities was \$1.4 million, of which \$1.13 million was attributed to direct exploration expenditure, as noted in this report.

As of 30 September 2022, the Company had cash reserves of \$2.85 million and no debt.

During the September 2022 Quarter payments totalling \$164,000 were paid to related parties of the Company and their associates for Director fees and consulting services (refer to section 6 of the September 2022 Quarterly cash flow report for further detail)

On 1 July 2022 the Company announced that Ms Tara French has been appointed to the Lefroy Board as an independent Non-Executive Director. (Refer LEX ASX release 1 July 2022).

On 30 September 2022 the Company released its 2022 Annual Report.

As noted above (refer section, Lake Johnston Project) the Company confirmed it is progressing its demerger/IPO strategy for its wholly owned subsidiary, Johnston Lakes Nickel Ltd (JLN). The Company is targeting a listing of JLN in the first half of CY23, subject to shareholder and ASX approvals.

On 20 October 2022, the Company released an updated investor presentation, which was delivered by Managing Director, Wade Johnson, at the South-West Connect Showcase, in Busselton, WA.

This announcement has been authorised for release by the Board of Lefroy Exploration Limited.



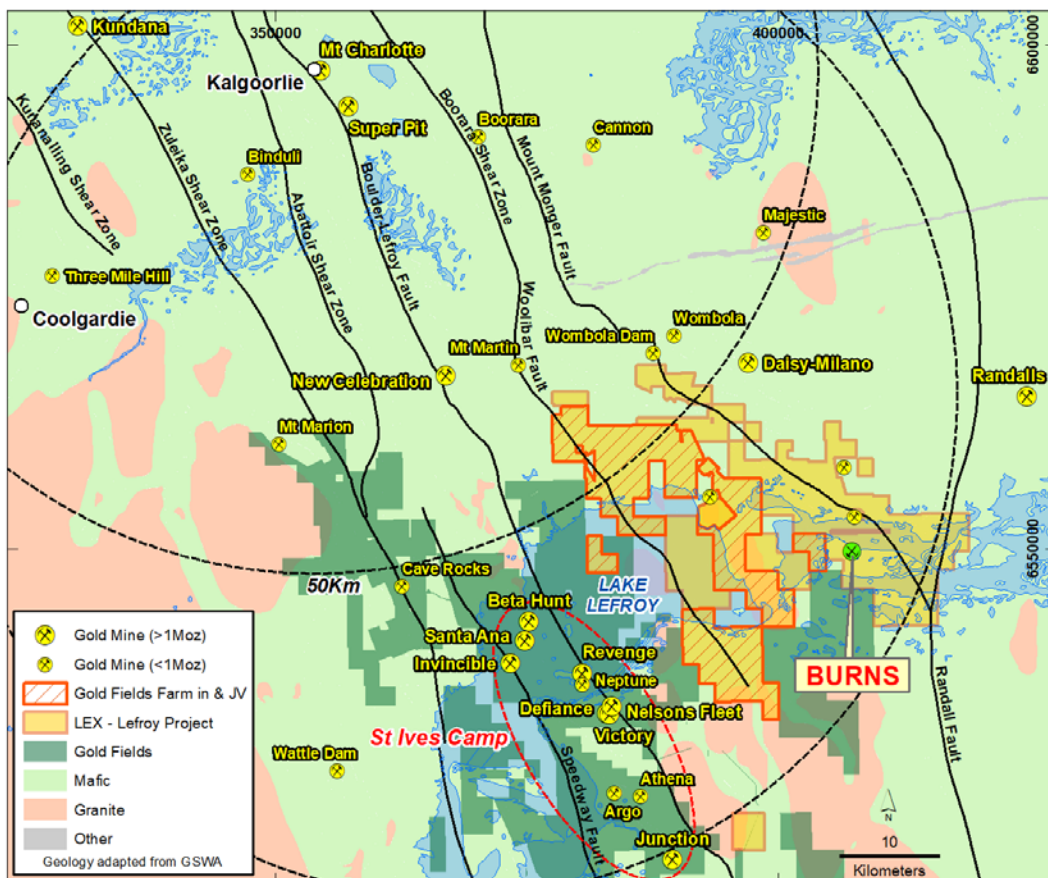
Wade Johnson

Managing Director

About Lefroy Exploration Limited and the Lefroy Gold Project

Lefroy Exploration Limited is a WA based and focused explorer taking a disciplined methodical and conceptual approach in the search for high value gold deposits in the Yilgarn Block of Western Australia. Key projects include the Lefroy Gold Project to the southeast of Kalgoorlie and the Lake Johnston Project 120km to the west of Norseman.

The 100% owned Lefroy Gold Project contains mainly granted tenure and covers 539km² in the heart of the world class gold production area between Kalgoorlie and Norseman. The Project is in close proximity to Gold Fields' St Ives gold camp, which contains the Invincible gold mine located in Lake Lefroy and is also immediately south of Silver Lake Resources' (ASX:SLR) Daisy Milano gold mining operation. The Project is divided into the Western Lefroy package, subject to a Farm-In Agreement with Gold Fields and the Eastern Lefroy package (100% Lefroy owned). The Farm-In Agreement with Gold Fields over the Western Lefroy tenement package commenced on 7 June 2018. Gold Fields can earn up to a 70% interest in the package by spending up to a total of \$25million on exploration activities within 6 years of the commencement date.



Location of the Lefroy Gold Project relative to Kalgoorlie. The Western Lefroy tenement package subject to the Gold Fields joint venture, and Gold Fields tenure is also highlighted

For Further Information please contact:

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Notes Specific- ASX Announcements

The following announcements were lodged with the ASX and further details (including supporting JORC Reporting Tables) for each of the sections noted in this Announcement can be found in the following releases. Note that these announcements are not the only announcements released to the ASX by the Company but specific to exploration completed during the December 2021, March 2022, June 2022 and September 2022 Quarters and reported in this announcement.

- Exploration Update - Geophysical Surveys Commenced: 11 October 2017
- LEX secures \$25M Farm In and JV Agreement with Gold Fields: 6 June 2018
- Tenement Granted over Burns Au-Cu Prospect: 16 September 2020
- Outstanding High-Grade Gold and Copper: 22 February 2021
- Drill Testing of Multiple Magnetic Targets Underway at Burns: 4 October 2021
- Massive drilling program planned for the Western Lefroy JV: 12 October 2021
- LEX Expands Nickel Portfolio Securing a Major Land Package: 25 October 2021
- Major Drilling Programs Resumed at Lefroy: 17 January 2022
- RC Drill Results Outline New Gold Zone at Burns: 25 January 2022
- LEX Secures \$0.8million Farm-In & JV with Sensore at Marloo: 9 February 2022
- High-Grade Results Extend the Burns Au Cu System Beneath Lake Randall: 21 February 2022
- Exploration Update - Drilling Program Underway at Burns: 25 February 2022
- Exploration Update - RC Drilling Underway at Burns: 17 March 2022
- Impressive Au-Cu Intersection in New RC hole at Burns: 19 April 2022
- AC Drill Results Continue to Expand the Burns Gold-Copper System Beneath Lake Randall: 4 July 2022
- High-Grade Gold Result Confirms New Discovery at Havelock: 7 July 2022
- Exploration Update-1200m Deep Diamond Hole Underway at Burns: 12 July 2022
- Burns 1200m Diamond Drill hole Update: 1 August 2022
- Drilling Continues to Define Larger Scale to Burns Au Cu System: 1 September 2022
- Burns Update: Significant Copper Mineralisation Intersected at Lovejoy: 20 September 2022
- Resource RC Drilling Program Underway at Burns: 6 October 2022
- Lefroy Confirms Demerger/IPO for Nickel Assets: 13 October 2022

The information in this announcement that relates to exploration targets and exploration results is based on information compiled by Wade Johnson a competent person who is a member of the Australian Institute of Geoscientists (AIG). Wade Johnson is employed by Lefroy Exploration Limited. Wade has sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 edition of the JORC Code. Wade Johnson consents to the inclusion in this announcement of the matters based on his work in the form and context in which it appears.

LEFROY EXPLORATION LTD TENEMENT SCHEDULE 30 September 2022				
Project	Tenement ID	Ten Status	Holder	Interest %
P26/3765	Goldfields JV	Live	HOGANS RESOURCES PTY LTD	100 ⁽¹⁾
P26/3889	Goldfields JV	Live	HOGANS RESOURCES PTY LTD	100 ⁽¹⁾
P26/3890	Goldfields JV	Live	HOGANS RESOURCES PTY LTD	100 ⁽¹⁾
P26/3891	Goldfields JV	Live	HOGANS RESOURCES PTY LTD	100 ⁽¹⁾
E26/0134	Goldfields JV	Live	HOGANS RESOURCES PTY LTD	100 ⁽¹⁾
E26/0193	Goldfields JV	Live	HOGANS RESOURCES PTY LTD	100 ⁽¹⁾
E26/0150	Goldfields JV	Live	HOGANS RESOURCES PTY LTD	100 ⁽¹⁾
E15/1615	Goldfields JV	Live	HOGANS RESOURCES PTY LTD	100 ⁽¹⁾
E26/0131	Goldfields JV	Live	HOGANS RESOURCES PTY LTD	100 ⁽¹⁾
E26/0184	Goldfields JV	Live	HOGANS RESOURCES PTY LTD	100 ⁽¹⁾
E15/1447	Goldfields JV	Live	HOGANS RESOURCES PTY LTD	100 ⁽¹⁾
M26/0842	Goldfields JV	Live	HOGANS RESOURCES PTY LTD	100 ⁽¹⁾
M26/0850	Goldfields JV	Pending	HOGANS RESOURCES PTY LTD	100 ⁽¹⁾
M26/0851	Goldfields JV	Pending	HOGANS RESOURCES PTY LTD	100 ⁽¹⁾
E15/1498	Lefroy	Live	MONGER EXPLORATION PTY LTD	100
E26/0195	Lefroy	Live	MONGER EXPLORATION PTY LTD	100 ⁽²⁾
E15/1497	Lefroy	Live	MONGER EXPLORATION PTY LTD	100 ⁽¹⁾
P25/2488	Lefroy	Live	MONGER EXPLORATION PTY LTD	100 ⁽¹⁾
P26/4443	Lefroy	Live	MONGER EXPLORATION PTY LTD	100 ⁽¹⁾
P26/4444	Lefroy	Live	MONGER EXPLORATION PTY LTD	100 ⁽¹⁾
P26/4423	Lefroy	Live	MONGER EXPLORATION PTY LTD	100 ⁽¹⁾
P26/4424	Lefroy	Live	MONGER EXPLORATION PTY LTD	100 ⁽¹⁾
P26/4425	Lefroy	Live	MONGER EXPLORATION PTY LTD	100 ⁽¹⁾
P26/4437	Lefroy	Live	MONGER EXPLORATION PTY LTD	100 ⁽¹⁾
P26/4438	Lefroy	Live	MONGER EXPLORATION PTY LTD	100 ⁽¹⁾
P25/2317	Lefroy	Live	MONGER EXPLORATION PTY LTD	100 ⁽¹⁾
P25/2316	Lefroy	Live	MONGER EXPLORATION PTY LTD	100 ⁽¹⁾
E25/0517	Lefroy	Live	MONGER EXPLORATION PTY LTD	100 ⁽¹⁾
E25/0518	Lefroy	Live	MONGER EXPLORATION PTY LTD	100 ⁽¹⁾
P25/2421	Lefroy	Live	MONGER EXPLORATION PTY LTD	100 ⁽¹⁾
E15/1715	Lefroy	Live	MONGER EXPLORATION PTY LTD	100 ⁽¹⁾
E26/0182	Lefroy	Live	MONGER EXPLORATION PTY LTD	100 ⁽¹⁾
E25/0587	Lefroy	Live	MONGER EXPLORATION PTY LTD	100 ⁽¹⁾
E26/0183	Lefroy	Live	MONGER EXPLORATION PTY LTD	100 ⁽¹⁾
E25/524	Lefroy	Live	MONGER EXPLORATION PTY LTD	100 ⁽¹⁾
M25/0362	Lefroy	Live	MONGER EXPLORATION PTY LTD	100 ⁽¹⁾
M25/0363	Lefroy	Live	MONGER EXPLORATION PTY LTD	100 ⁽¹⁾
M25/0366	Lefroy	Live	MONGER EXPLORATION PTY LTD	100 ⁽¹⁾
E25/0606	Lefroy	Pending	MONGER EXPLORATION PTY LTD	100 ⁽¹⁾
P26/4392	Lefroy - JLN (Ni rights)	Live	MONGER EXPLORATION PTY LTD	100 ⁽¹⁾
P26/4393	Lefroy - JLN (Ni rights)	Live	MONGER EXPLORATION PTY LTD	100 ⁽¹⁾
P26/4394	Lefroy - JLN (Ni rights)	Live	MONGER EXPLORATION PTY LTD	100 ⁽¹⁾

LEFROY EXPLORATION LTD TENEMENT SCHEDULE 28 September 2022 - Continued				
P26/4391	Lefroy - JLN (Ni rights)	Live	MONGER EXPLORATION PTY LTD	100 ⁽¹⁾
E26/0176	Lefroy - JLN (Ni rights)	Live	MONGER EXPLORATION PTY LTD	100 ⁽¹⁾
L25/0061	Lucky Haul Road	Pending	MONGER EXPLORATION PTY LTD	100 ⁽¹⁾
L25/0063	Mulga Haul Road	Pending	MONGER EXPLORATION PTY LTD	100 ⁽¹⁾
E63/2073	Lake Johnson	Live	Johnston Lakes Nickel Pty Ltd	100 ⁽¹⁾
E63/1723	Lake Johnston – CHR & LIT (Li rights)	Live	Johnston Lakes Nickel Pty Ltd	100(2)
E63/1722	Lake Johnston – CHR & LIT (Li rights)	Live	Johnston Lakes Nickel Pty Ltd	100(2)
E63/1777	Lake Johnston – CHR & LIT (Li rights)	Live	Johnston Lakes Nickel Pty Ltd	100(2)
E69/3945	Glenayle	Pending	Johnston Lakes Nickel Pty Ltd	100 ⁽¹⁾
E69/3946	Glenayle	Pending	Johnston Lakes Nickel Pty Ltd	100 ⁽¹⁾
E69/3947	Glenayle	Pending	Johnston Lakes Nickel Pty Ltd	100 ⁽¹⁾
E69/3948	Glenayle	Pending	Johnston Lakes Nickel Pty Ltd	100 ⁽¹⁾
E69/3949	Glenayle	Pending	Johnston Lakes Nickel Pty Ltd	100 ⁽¹⁾
E69/4045	Glenayle	Pending	Johnston Lakes Nickel Pty Ltd	100 ⁽¹⁾
E26/240	Lefroy	Pending	MONGER EXPLORATION PTY LTD	100 ⁽¹⁾
E26/241	Lefroy	Pending	MONGER EXPLORATION PTY LTD	100 ⁽¹⁾

Notes to accompany tenement listing

- (1) Hogans Resources Pty Ltd, Monger Exploration Pty Ltd and Johnston Lakes Nickel Pty Ltd (JLN Pty Ltd) are wholly owned subsidiaries of Lefroy Exploration Limited
- (2) E63/1722, E63/1723 and E63/1777 - Held under title by JLN. Charger Metals NL (ASX CHR) and Lithium Australia NL (ASX:LIT) have the rights to Lithium.

DMIRS-- Department of Mines Industry Regulation and Safety