

Resource RC Drilling Program Underway at Burns

- A major +15,000m reverse circulation (RC) drill program has commenced at the Burns gold copper prospect, located 70km to the southeast of Kalgoorlie.
- The drill program is expected to be completed in January 2023 with data used to deliver a maiden shallow gold copper resource estimate for Burns in the March Quarter 2023.
- Drilling on a 40m by 40m grid pattern will test to a depth of approximately 200m from surface and cover a 700m by 500m mineralised footprint at Burns extending north and east into Lake Randall.
- The land based (onshore) component is underway and consists of 50 angled RC holes. RC drilling on Lake Randall (offshore) is expected to commence in late October.
- Samples from the RC program will be prioritised for gold analysis with first assay results expected in November with copper, silver, and cobalt thereafter.



Lefroy Exploration Managing Director, Wade Johnson, said "This is another exciting period of exploration at Burns and immediately following on from the completion of the four diamond drill holes both at Burns and Lovejoy. The RC drilling is focussed on the shallow portion of the larger Burns system and designed to deliver a maiden gold copper resource. This close spaced drill data will also provide detailed geological information to guide further deeper exploration at Burns and also at multiple targets along the Burns corridor"

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Lefroy Exploration Limited (ASX: LEX) ("Lefroy" or "the Company") is pleased to announce the commencement of major reverse circulation (RC) drill program at the Burns Au-Cu intrusion-related mineral system, located in the Company's wholly owned Eastern Lefroy Gold Project, 70km southeast of Kalgoorlie.

Burns is a new and unique style of intrusion-related, gold (Au)-copper (Cu)-molybdenum (Mo)-silver (Ag) mineral system, hosted by Archean age diorite-porphyry intrusives and high-magnesium basalt in the Eastern Goldfields Province (EGP) of Western Australia.

A maiden 22-hole RC drill program completed in Jan-Feb 2021 intersected a spectacular gold and copper interval in hole LEFR260 containing **38m @ 7.63g/t Au & 0.56% Cu from 134m**. The results from that RC program provided the geological and geochemical data that highlighted the unique geological characteristics of Burns and was a key parameter to subsequent and ongoing exploration activity.

Targeted aircore, RC and diamond drilling at Burns since January 2021 has established the broad footprint of the system but with the limit of mineralisation yet to be fully defined.

Interrogation of 3D metal models including gold (Au), copper (Cu) and molybdenum (Mo) sourced from an extensive multi-element drill database collected over the Burns project since January 2021, has provided an enhanced interpretation of the geometry of the Burns mineral system.

That work highlighted a large, northwest trending, southerly plunging mineralised (Au, Cu, Ag, \pm Mo) shell. Included within this shell is a higher-grade, northerly trending Au-Cu component (Figure 1 and 3) which was recently tested with diamond holes (LEFD006 and 007a).

This northerly trending, high-grade zone is further supported by the recent (LEX ASX 21 February 2021) multiple aircore (AC) gold intersections in Lake Randall, 240m north of discovery hole LEFR260 (refer Figure 2). This included an intersection of **24m at 2.86g/t Au from 16m in LEFA1089** (LEX ASX release 23 February 2021), hosted within diorite porphyry and obscured by transported overburden (Figure 1).

Reverse Circulation (RC) Resource Drill Program

Following on from the recent diamond drilling, which focussed on the deep vertical extent of the system, an RC drill program to evaluate the economics of the system to 200m from surface and over a 700m strike length (Figure 3) has commenced and underway.

The planned resource drilling (Figure 1 and 2) will be both land-based (onshore) and on Lake Randall (offshore). 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.

A specialised lake RC drill rig has been secured and scheduled to commence in late October 2022.

Subject to assay result turnaround, the Company aims to deliver a maiden resource estimate for the shallow part of the Burns system in the March 2023 Quarter.



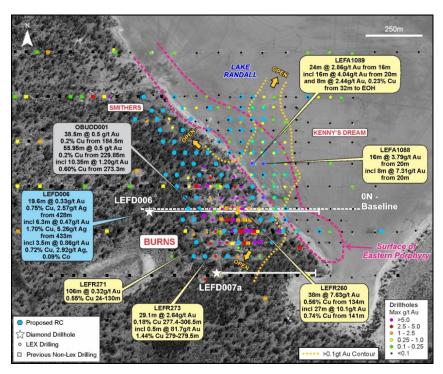


Figure 1. Burns Drill hole location highlighting position of planned RC drill holes

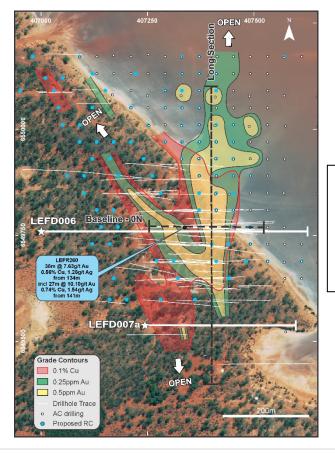


Figure 2 Burns drill hole plan showing RC & Diamond drill hole traces, extent of copper and gold grade contours, the position of the long section (slice) depicted in Figure 3 and planned RC drill holes (blue dots)



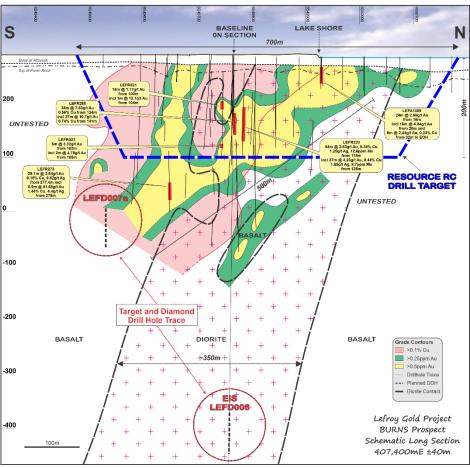


Figure 3 Schematic Longitudinal Section 407400N looking west showing area of planned RC drilling (blue outline).

The Company will continue to provide further updates as assay results are received.

This announcement has been authorised for release by the Board

Wade Johnson.

Wade Johnson Managing Director

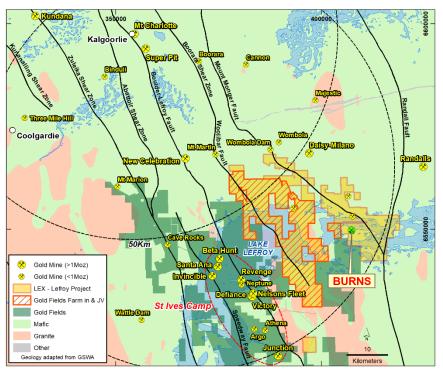
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About Lefroy Exploration Limited and the Lefroy Gold Project

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 534km² 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

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ASX Announcement

6 October 2022



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 but specific to exploration reporting by the Company of previous exploration at Burns at the Lefroy Gold Project.

- Outstanding High-Grade Gold and Copper Mineralisation Intersected at Burns: 23 February 2020
- Exploration Update-Drilling Extends Porphyry at Burns: 26 March 2021
- Drill Results Extend Copper Gold Zones at Burns: 29 April 2021
- Multiple Intervals of Altered Porphyry Intersected at Burns: 3 May 2021
- Burns Drilling Update-first hole on 40N section confirms significant mineralisation extends to the north: 18 June 2021
- Exploration Update-RC drilling commences at the Burns Cu Au prospect: 20 July 2021
- Burns Update-Cu-Au mineralisation confirmed on 0N section, step out drilling extends system: 2 August 2021
- June 2021 Quarterly Activities Report: 28 July 2021
- Exploration Update-Advancing the Burns and Coogee South Prospects: 18 August 2021
- Results from 40N section Further Enhance Burns Cu-Au System: 21 September 2021
- Multiple magnetic anomalies highlight 3000m trend at Burns: 28 September 2021
- Drill testing of multiple magnetic targets underway at Burns: 5 October 2021
- Massive drilling planned for the Western Lefroy JV:13 October 2021
- Burns Update-Drill Results continue to support larger Cu-Au-Ag system: 3 November 2021
- Burns Update Drilling underway at Lovejoy anomaly: 22 November 2021
- Major Drilling Programs Recommenced at Lefroy: 19 January 2022
- RC Drill Results Outline New Gold Zone at Burns: 25 January 2022
- High-Grade results expand the Burns Cu Au System: 21 February 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
- 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

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