

## Major Gold Exploration Campaign Underway at Eastern Lefroy

---

- The Company has commenced a major high impact exploration campaign to evaluate and progress multiple gold targets at Eastern Lefroy near Kalgoorlie.
- A 15,000m aircore programme has commenced testing along strike from the 79,600 oz Lucky Strike gold resource and to evaluate seven prioritised targets along the parallel Havelock and Erinmore BIF trends.
- The target areas were developed from interpretation of aeromagnetic data that highlight discontinuities, flexures and or breaks in the Banded Iron Formation (BIF), which may host a style of gold mineralisation similar to Lucky Strike.
- An ultra-detailed gravity survey has also commenced along the Lucky Strike trend to support and further develop the evolving geological model. The trend has a distinctive gravity signature and recent re-interpretation of the data has highlighted a potential new structural model to focus exploration.
- At the Burns gold-copper prospect a heritage survey is underway with the Ngadju Native Title Aboriginal Corporation, ahead of a gravity survey scheduled to commence in late November. Subsequent 3D modelling of the gravity and aeromagnetic data will provide a foundation to plan new diamond drilling to evaluate both the Burns Intrusion and Au-Cu prospect.
- A diamond core and an RC drill rig are booked to commence drilling at Burns in early January 2021.
- In addition, an aircore drill rig is scheduled to commence in mid-January to complete the BIF program and commence evaluation of auger gold anomalies at Hang Glider Hill.

*Lefroy Exploration Managing Director Wade Johnson said “subsequent to our recent capital raising and SPP we are now well funded to undertake exploration on a portfolio of early stage targets that we have generated at Eastern Lefroy over the past 12 months. We are now in a strong position to evaluate these drill ready targets, with aircore drilling underway testing the Lucky Strike & Havelock BIF trends and three drill rigs secured to commence in early January 2021, two of which will head to our priority Burns gold copper target. This is an exciting period of exploration activity and growth for Lefroy, and complements the exploration by Gold Fields on the Western Lefroy JV out in Lake Lefroy”*

Lefroy Exploration Limited (ASX: LEX) (“Lefroy” or “the Company”) is pleased to advise that a multi-faceted exploration program has commenced at two priority targets areas at the non-JV Eastern Lefroy project south east of Kalgoorlie.

The Eastern Lefroy project is a semi contiguous package of wholly owned tenements that cover approximately 40km 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 major regional faults in the Kalgoorlie terrain (e.g. Boulder Lefroy, Zuleika, Randall) that are a likely a primary control to gold mineralisation. The Company considers the area near to the Mt Monger Fault to be similarly prospective for large gold deposits, but the area lacks the same degree of exploration.

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

P1- Lucky Strike Exploration Hub: - Advanced Exploration

P2-Hang Glider Hill Exploration Hub: -Reconnaissance Exploration

P3-Lake Randall Exploration Hub: -Generative Exploration

This initial program is part of a major exploration drive by the Company to evaluate multiple generative targets at each of the Lucky Strike, Lake Randall and Hang Glider Hill exploration hubs over the coming six months.



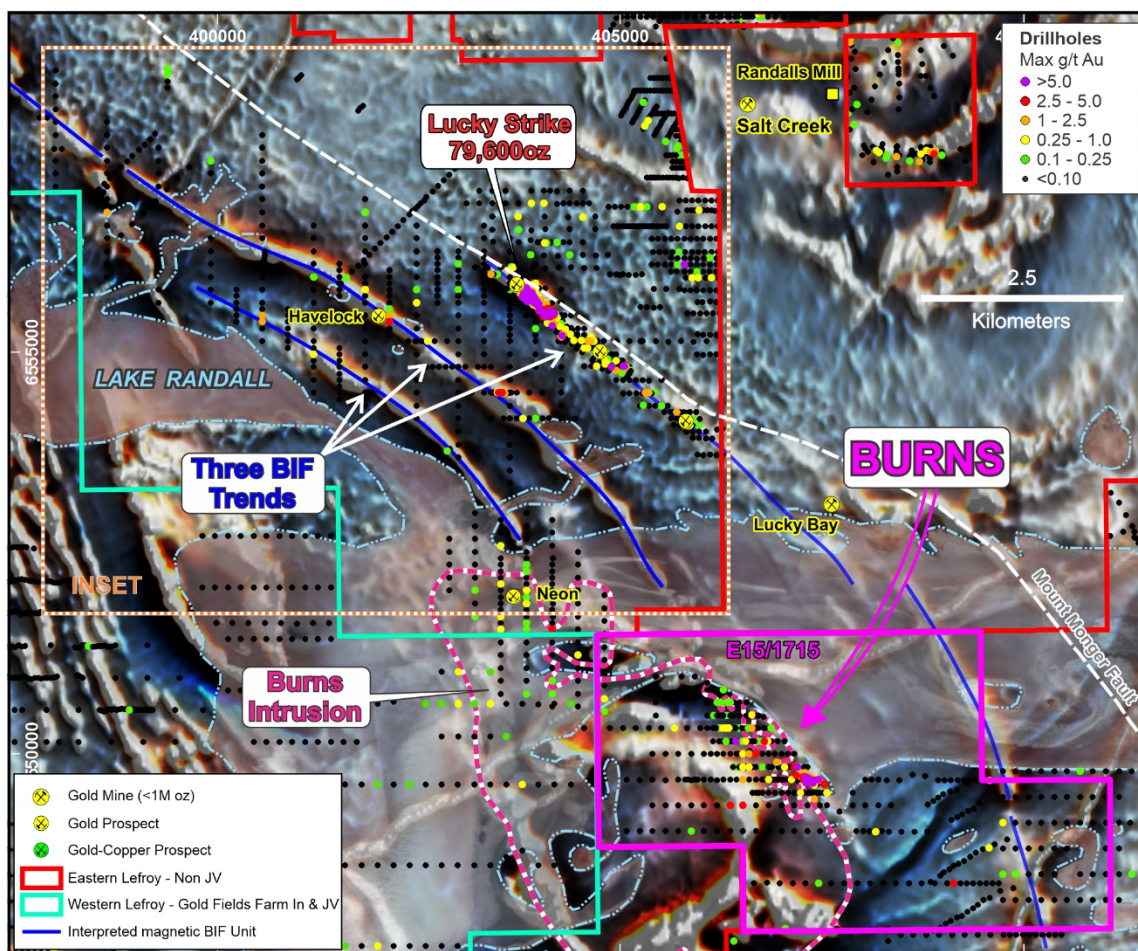
**Figure 1** Lefroy Gold Project showing Eastern and Western Lefroy and the location of Lucky Strike, Hang Glider Hill and the recently acquired Burns gold copper prospect.

**Lucky Strike Exploration Hub**

The Lucky Strike Exploration Hub is centered on the Lucky Strike deposit (refer LEX ASX release 20 May 2020) and envelopes the nearby gold prospects identified by the Company at Red Dale, Havelock, Neon and the Lucky Strike trend (Figure 2). Gold mineralisation at Lucky Strike is hosted within multiple north west trending Banded Iron Formation (BIF) units interbedded with shale. Lucky Strike is hosted within a gold mineralised trend over a 3800m strike length, defined from AC drilling (Figure 2)

The Havelock prospect is located approximately 1.2km south west of Lucky Strike (Figure 2). The target was generated in 2018 from the Company’s assessment of regional aeromagnetic imagery which highlights a linear magnetic unit which was confirmed by AC drilling as BIF (Figure 2).

A single traverse of AC drill holes completed in July 2020 at 20m spacing intercepted strong quartz veining and highly oxidised BIF similar to the host rocks at Lucky Strike. The best result was 5m @ 1.2g/t Au from 50m in hole LEFA774 (Figure 2).



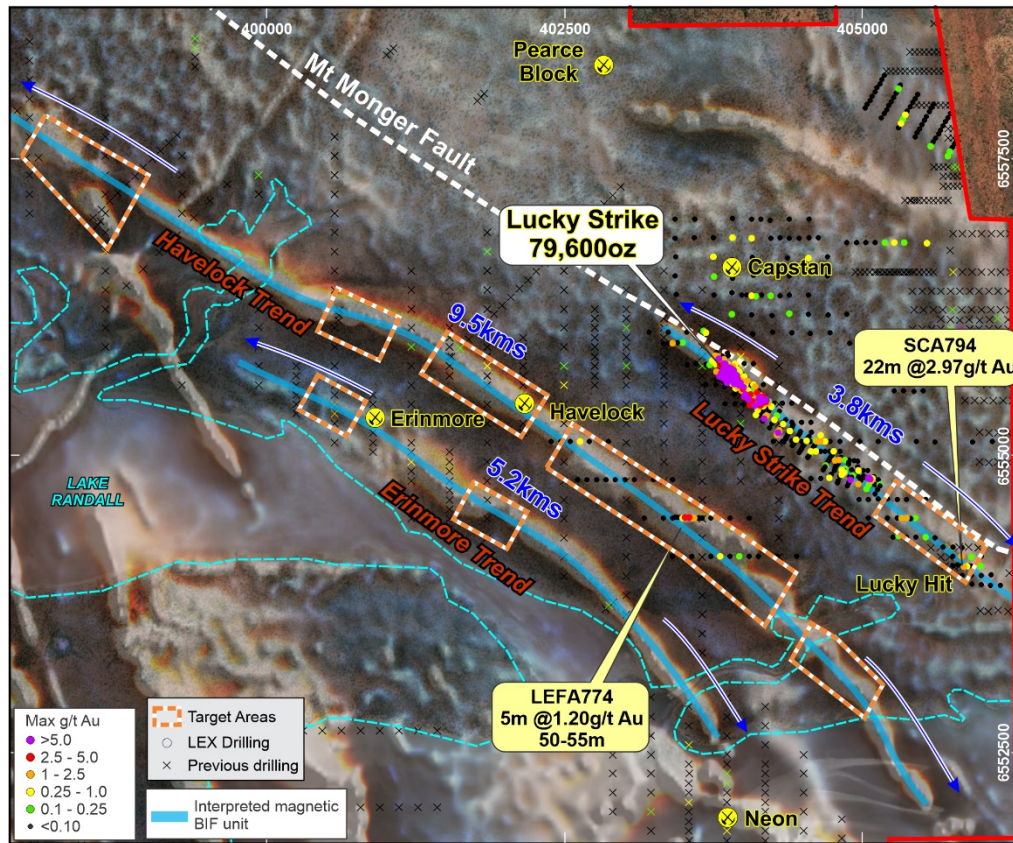
**Figure 2** Inset plan highlighting tenement E15/1715, the Burns prospect, extent of the Burns Intrusion and proximity to Lucky Strike on a grey scale aeromagnetic image. The extent of Lake Randall is also shown with the underlying aero magnetic image. The BIF trends are highlighted as blue lines. Refer to Figure 3 for detailed tenement map.

The discovery of higher tenor gold mineralisation at Havelock is a significant break though that presents a new opportunity for discovery along a 7.7km BIF trend which is twice as long as the Lucky Strike BIF trend. Adjacent to the Havelock trend and 750m to the South-West lies another parallel magnetic horizon interpreted to be another sedimentary package containing BIF. This trend is called Erinmore and has not been drill tested by the Company. Erinmore represents a further 5.2km of BIF strike length (Figure 2).

An aircore (AC) drilling program is underway to evaluate multiple (8) generative targets at the Havelock-Lucky Strike-Erinmore BIF trends to the south and along strike of the Lucky Strike gold deposit (Figure 3). The drill program totalling approximately 15,000m will focus on evaluating 5 targets along the 9.5km Havelock BIF, two targets along the Erinmore BIF and a 1000m corridor along the Lucky Strike BIF centred on the Lucky Hit prospect.

The targets were generated from interpretation of aeromagnetic data that highlights the iron rich magnetic BIF units. Zones of dislocation, flexures and demagnetisation along each of the trends, combined with results from previous wide spaced drilling were selected for initial air core drilling. A nominal 160m line spacing with holes spaced at 40m centres along each line is planned for each of the targets.

The bulk of the drilling program is expected completed in Dec 2020, with any carry over to be completed in January 2021. Final results are expected in January 2021.



**Figure 3** Inset plan highlighting AC drill target areas along the Lucky Strike-Havelock and Erinmore BIF trends on a grey scale aeromagnetic image.

### ***Lake Randall Exploration Hub***

The Lake Randall exploration hub adjoins and is immediately south east of the Lucky Strike-Havelock-Erinmore BIF trends (Figure 2). The hub contains tenement E15/1715 that covers an area of approximately 20km<sup>2</sup> containing the Burns gold-copper prospect that was discovered by Octagonal Resources Limited (“Octagonal”) in 2011.

The Burns prospect is situated on the eastern margin of a large interpreted felsic intrusion, termed the Burns Intrusion. The intrusion does not outcrop and has is represented by a distinctive annular aeromagnetic and gravity geophysical signature (Figure 2) (refer LEX ASX release 16 September 2020).

Exploration by Octagonal in 2011 discovered significant gold and copper anomalism in the regolith (weathered rock) from aircore (AC) drilling, now known as the Burns Prospect. This defined a one square kilometre area of gold anomalism and a two-kilometre-long copper anomaly on the north margin of the Burns Intrusion.

Initial litho-geochemical investigations by Octagonal report that the Au-Cu mineralisation at the Burns prospect and adjacent intrusion may have an affinity with a porphyry copper model (refer page 31 Final Report Government Co-Funded Drilling Grant DAG2015/0055929-October 2016). The intrusion has not had any systematic RC and or diamond drilling into the central position (core) to better define the geological model.

Burns represents a high priority target for the Company and complements the drilling activity underway at the nearby Lucky Strike and Havelock BIF targets. Field reconnaissance involving re-logging of old drill holes, sample collection for Bottom of Hole (BoH) litho-geochemistry and petrology to characterise the intrusion is in progress. A heritage survey is underway at Burns with the Ngadju Native Title Group to facilitate land access and clearance for work programs.

A detailed gravity survey over the Burns Intrusion is scheduled to commence in early December. Integration with and inversion modelling (3D) of the gravity and aeromagnetic data over the Burns intrusion will provide a foundation dataset for planning RC and diamond drilling.

Planning of the drilling is in its early stages and will involve validation RC and diamond drilling at the Burns Prospect to facilitate a resource estimate and the drilling of deep diamond core holes to assess the mineralised potential of the Burns intrusion. A diamond and RC rig has been booked and scheduled to commence in early January 2021.

---

## ASX Announcement

23 November 2020



### Hang Glider Exploration Hub

Hang Glider Hill (HGH) is located in the north west region of the Company's Lefroy Gold Project ("LGP" or "Project") (Figure 1). HGH is located close to the interpreted position of the regional scale Mt Monger Fault, along which (some 17km along strike to the south east) the Company identified the Lucky Strike deposit.

A 3120-sample point auger drilling program completed in July 2020 along the Mt Monger trend identified five new strong surface gold anomalies near to the Hang Glider Hill Prospect. The Company considers these new surface gold anomalies to be highly encouraging and represent new high priority targets for drill testing in its Eastern Lefroy Project portfolio.

Field reconnaissance of the anomalies has been completed and the next stage of exploration will involve an early stage reconnaissance wide spaced air core drilling program to prioritise targets for RC drill testing scheduled to commence in Q3 FY2021.



AC Drill rig at LEFA778 along the Lucky Strike trend, the first aircore hole of the current program.

This announcement has been authorised for release by the Board

A handwritten signature in black ink that reads "Wade Johnson".

Wade Johnson

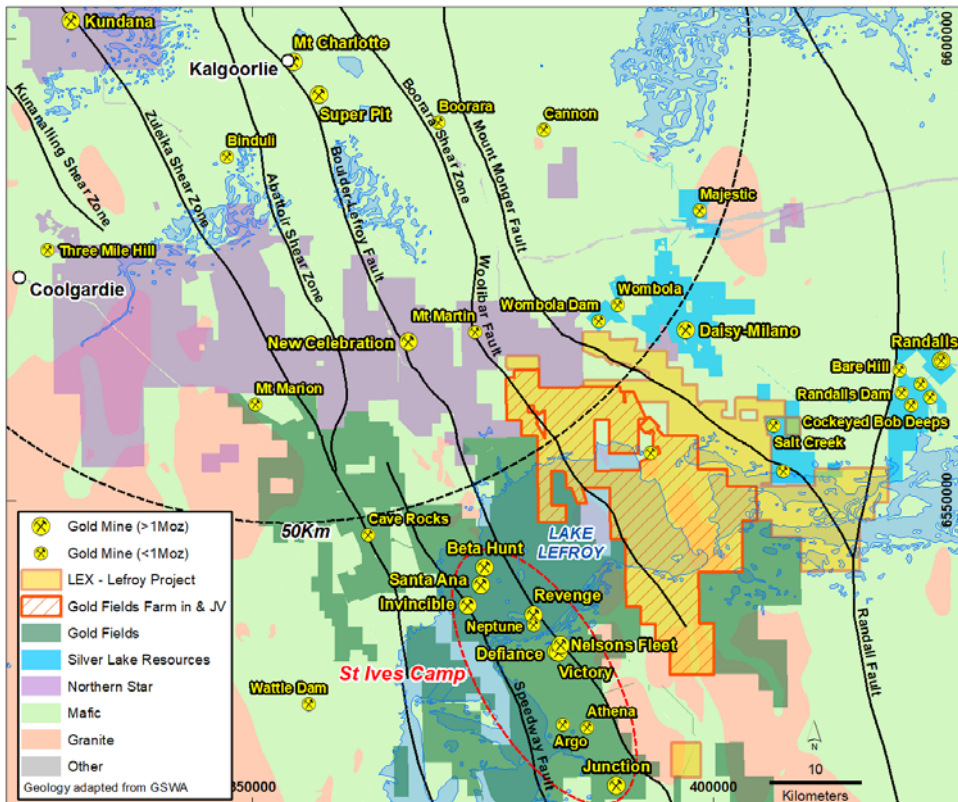
Managing Director

---

**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 south east 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 621km<sup>2</sup> 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, major gold deposits in the district and land holdings of Gold Fields, Northern Star Resources Ltd and Silver Lake Resources Limited.**

For Further Information please contact:

Wade Johnson  
 Managing Director  
 Telephone: +61 8 93210984

Email: [wjohnson@lestroyex.com](mailto:wjohnson@lestroyex.com)

## \*Notes Specific-ASX Announcements

The following announcements were lodged with the ASX and further details (including supporting JORC Reporting Tables) for the drill results 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 on RC and diamond drilling results at Lucky Strike at the Lefroy Gold Project.

- Extensional Drilling Program Underway at Lucky Strike: 1 July 2020
- Major Multi-Target RC Drilling Program Underway in Lake Lefroy: 27 July 2020
- Major Auger Drilling Program Underway at Eastern Lefroy: 3 August 2020
- Multiple Gold Trends Confirmed from Eastern Lefroy: 1 September 2020
- Tenement Granted over Burns Au-Cu Prospect: 16 September 2020
- Multiple New Surface Gold Anomalies at Mt Monger: 5 October 2020
- September 2020 Quarterly Activities Report: 29 October 2020

*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.*

*The Company confirms that it is not aware of any new information or data that materially affects the original market announcement for the Lucky Strike Mineral Resource estimate dated 20 May 2020. All material assumptions and technical parameters underpinning the estimate in that announcement continue to apply and have not changed.*

---