



LEFROY EXPLORATION LIMITED

Western Australian Focused Gold Explorer

ASX Code: LEX

Shares on Issue: 64.5m

Current Share Price: 14c

Market Capitalisation: \$9.0m

Board of Directors Chairman Gordon Galt

Managing Director Wade Johnson

Non-Executive Directors Michael Davies James Beecher Geoffrey Pigott

Flagship Project Lefroy Gold Project

Growth Exploration Projects Lake Johnston Project Murchison Project

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Exploration Update: Aircore Drilling Recommences Along Lucky Strike Trend

Key Points

- Aircore drilling program has recommenced to follow up significant earlier drill intersections along the Lucky Strike Trend, at the Company's flagship Lefroy Gold Project
- Drilling program designed to evaluate strike and down dip continuity of key intersections reported in April 2017 of, 10m at 4.60g/t Au from 24m in LEFA 171, and 11m at 3.53g/t from 60m in LEFA 136, both holes ending in mineralisation
- Emerging gold mineralised trend defined over a 3000m strike length host within an altered package of sedimentary rocks, proximal to the regional Mt Monger Fault
- The infill drilling program to comprise 2500m of drilling in 40 holes, with results expected in late June

The Board of Lefroy Exploration Limited (ASX: LEX) ("Lefroy" or "the Company") is pleased to announce the commencement of a follow up aircore drilling program along the Lucky Strike Trend at its flagship Lefroy Gold Project ("LGP or Project"), located approximately 50km to the south east of Kalgoorlie.

The Lucky Strike Trend is located 2km to the northwest of the Lucky Bay open pit mined by Silver Lake Resources (ASX:SLR) during 2015 and 4km to the south west of the Randalls Processing Plant operated by SLR (Figure 1). The Company has interpreted from geophysical and geological data that the Lucky Strike Trend shares a similar geological and structural setting to Lucky Bay, being adjacent to the regional Mt Monger Fault that separates mafic units of the Bulong Antiform to the north and metasedimentary rocks to the south.

ASX Announcement





BACKGROUND. The Company initially recognised the Lucky Strike Trend after detailed assessment of previous drilling programs in the area by prior explorers and placing these in a regional geological framework aided by detailed ground gravity data. An initial air core drilling program was completed in November 2016 which focused on evaluating 1100m of strike around a previous highly anomalous intersection of 22m at 2.97g/t Au in air core hole SCA 794, drilled by Integra Mining Limited in 2010. This program successfully defined a northwest trending zone of bedrock gold mineralisation over a 220m strike length, centered on SCA 794, but also indicated a new zone of gold mineralisation 300m along strike to the north west in hole LEFA 027, which intersected 5m at 0.76g/t Au to end of hole (refer ASX Announcement 23 December 2016).

A further 48 holes totaling 2593m evaluated a 1500m strike length of this stratigraphic package to the northwest and along strike of LEFA 027 was completed in April 2017. This drill program was a reconnaissance first pass evaluation, with lines spaced at 320m and holes at 80m centres and specifically targeted after recognition of the confluence of anomalies and structural trends generated from the interpretation of regional aeromagnetics and the Company's detailed ground gravity dataset. This program returned two key intersections of **11m at 3.53g/t Au from 60m** to End of Hole (EoH) in LEFA136 (Figure 2), and **10m at 4.60g/t from 24m** to EoH in LEFA171 (Figure 2&3), located some 960m apart on relatively wide spaced drill traverses. Importantly, contouring maximum gold values in each hole resulted in the definition of three key anomalies (+100ppb Au) over the 3000m of strike length evaluated by the Company along the Lucky Strike Trend.

The results from the two phases of relatively wide spaced early stage air core drilling are considered by the Company to be significant when placed in a regional geological context. The two new strong gold intersections support the previous intersection in SCA794 drilled in 2010, by highlighting the broad high grade nature of gold mineralisation in what have been interpreted to be sedimentary rocks. This new potential gold trend lies on or adjacent to the Mt Monger Fault which is interpreted by the Company as possibly extending south east to encompass the Lucky Bay open pit, and 10km to the north west within tenements wholly owned by the Company and that have had very little systematic reconnaissance drilling. This interpretation is revealed and further supported by the Companys detailed ground gravity dataset.

PROGRAM. The recently commenced angled aircore drill program aims to further enhance the Lucky Strike Trend with infill drilling focused around the key intersections in LEFA 136 and LEFA 171. This program will involve closing the drill traverse spacing down to a regular 160m with hole centres to 40m (Figure 2). Closer spaced drilling to a 80m line and 40m hole centre will be focused in the immediate strike extent of the two key intersections. In addition one step out line will evaluate the strike extension 160m to the north west of LEFA 171. The program of 40 holes for an estimated 2500m is anticipated to take a week to complete with composite assay results expected in late June.

ASX Announcement 2 June, 2017





Figure 1. Location of the Lucky Strike Trend relative to the Red Dale Prospect and the Randalls Processing Plant operated by Silver lake Resources (refer Figure 2 for inset map)



Figure 2. Inset Map-Lucky Strike Trend showing previous drill holes, planned drilling (blue triangles) and key gold intersections.



About Lefroy Exploration Limited and the Lefroy Gold Project

Lefroy Exploration Limited is a new WA based and focused explorer taking a disciplined methodical approach in the search for high value gold and nickel deposits. 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 covering 547km², located 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 newly discovered Invincible gold mine located in Lake Lefroy, and is also immediately south of Silver Lake Resources (ASX: SLR) Daisy Milano gold mining operation.



Location of the Lefroy Gold Project relative to Kalgoorlie, Gold Fields St Ives Gold Camp near Lake Lefroy, and major gold deposits.

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 but specific to exploration reporting on the Lucky Strike Trend at the Lefroy Gold Project. The Company confirms that it is not aware of any new information or data that materially affects the information on the Lucky Strike Trend in the following announcements.

- Lefroy Exploration Limited-Prospectus: 8 September 2016
- Lefroy Commences Exploration: 24 October 2016
- Lefroy Commences Drilling at Lucky Strike: 17 November 2016
- Managing Directors AGM Presentation: 5 December 2016
- Drilling at Lucky Strike Supports and Extends Gold Trend: 23 December 2016
- Exploration Update: Aircore Drilling to Recommence at Lucky Strike: 29 March 2016
- Significant Intersections at Lucky Strike Prospect: 18 April 2017

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.