

Extensional Drilling Program Underway at Lucky Strike

- An aircore drilling program is underway immediately south east and along strike of the existing 79,600oz Lucky Strike gold resource. The program will investigate 700m of strike extent (to potentially double the current 740m strike extent of the Lucky Strike gold system) and deliver targets for follow up RC drilling.
- The zone being drilled is interpreted from geophysical data to be the continuation of the deeply oxidized sequence of the metasedimentary rocks, including Banded Iron Formation (BIF), that host gold mineralisation at Lucky Strike. Close spaced drill holes along multiple 80m spaced drill traverses will target the metasedimentary package to search for BIF units hidden beneath transported cover.
- The initial drill traverse is 80m south-east and along strike from the resource outline that includes an oxide RC drill intersection of 22m @ 2.49g/t Au from 63m in LEFR152.



Lefroy Exploration Managing Director Wade Johnson said "we are excited to be back aircore drilling at Lucky Strike to evaluate a 700m corridor that has the opportunity to deliver new zones of BIF hosted gold mineralisation hidden beneath cover. Aircore drilling was the technique that led us to the discovery of the Lucky Strike system in 2017 and our aim is to replicate that discovery along the corridor"

ASX Code: LEX Shares on Issue: 100.5M Market Capitalisation: \$22m Australian Registered Office Level 2, 11 Ventnor Avenue West Perth, 6005 E: info@lefroyex.com T: +61 8 9321 0984 ARBN: 052 123 930

www.lefroyex.com



Lefroy Exploration Limited (ASX: LEX) ("Lefroy" or "the Company") is pleased to advise that an aircore (AC) drilling program has commenced at the Lucky Strike Prospect near Kalgoorlie. The drill program totalling approximately 4000m will focus on evaluating 700m corridor immediately along strike to the south east of the 79,600oz Lucky Strike gold resource hosted within banded iron formation (BIF).

The close spaced drilling will evaluate a deeply weathered (oxidised) metasedimentary sequence of rocks, including BIF, between a hanging wall andesite and a footwall basalt hidden beneath approximately 12m of transported cover. The BIF at Lucky Strike is preferentially weathered down to as deep as approximately 200m from surface. When combined with the other metasedimentary rocks it highlights a unique linear gravity signature that can be traced along strike and provide a corridor to focus drilling.



Figure 1 Geology and Drill hole plan along the Lucky Strike Trend. Target for focussed AC drilling shown as the red dashed box.

The confined weathering of the BIF is interpreted to represent an oxidation channel down a structure or alteration zone that is open along strike. The BIF is strongly oxidised, maintains a consistent down hole width of approximately 12m and has sharp contact relationships with the hanging and footwall shale units. The main BIF unit at Lucky Strike has a strike length of 740m based on RC drilling and is open. The south eastern limit of RC drilling at Lucky Strike intersected 22m @2.49g/t Au from 63m in LEFR152 hosted within an interpreted new upper BIF unit that is open along strike and is the immediate focus for this phase of AC drilling.



This provides support to the Company's interpretation that there is potential for additional near surface high grade ore shoots along a 700m strike length of the BIF that has only been evaluated by wide spaced aircore drilling by the Company in 2017. The current drilling program is designed to test for additional high-grade oxide mineralisation positions that can be followed up by reverse circulation (RC) drilling.

The current drilling program consists of multiple 80m spaced drill sections (or traverses) evaluating approximately 700m of strike. Drill holes are spaced at 20m centres along each section to ensure the metasedimentary package is fully tested, exploring for one or multiple narrow BIF units.

The interpretation of the results from this program will guide further follow up corridor aircore drilling to investigate established intersections from prior wide spaced aircore drilling further south east for at least another 1500m of strike.

The drilling program is expected to be completed by mid-July, with final interpreted results anticipated in early August.

Background--Lucky Strike

Lucky Strike is located within a granted Mining Lease (M25/366) that falls within the Eastern Lefroy tenement package which is part of the wholly owned greater Lefroy Gold Project (LGP) located 50km south east of Kalgoorlie.

The mineralised BIF package is a recent green fields gold discovery within a 3000m long trend made by the Company in 2018. Lucky Strike is approximately 5km along strike to the northwest of the high-grade Lucky Bay open pit (Figure 2), also BIF hosted which was mined by SLR during 2015.

A six-hole step out RC drilling program was completed at Lucky Strike in Jun 2019 (LEX:ASX release 3 July 2019). The step out program was specifically aimed to evaluate the along strike and down plunge extent of the strong gold mineralisation hosted by the Banded Iron Formation (BIF) intersected in hole LEFR132 in May 2019. A standout gold mineralised zone was intersected in hole LEFR132, i.e.

17m at 3.58g/t Au from 129m including 2m at 11.8g/t Au from 132m

This interval is hosted within highly oxidised and quartz veined BIF and is one of the strongest gold intercepts at Lucky Strike (+60 gram-metres). The association with the deep oxidation to approximately 150m vertical is unusual when compared to the north western end of Lucky Strike (20m x 20m drilling), where the depth to top of fresh rock is approximately 60m.

Integration and assessment of the recent drilling with the Company's detailed gravity data revealed a strong correlation between the deep oxidation and a linear gravity low. The deep oxidation along a linear trend is interpreted to represent weathering along a major fault or structure that has a 3000m strike length.

The Company interprets Lucky Strike to be part of a larger gold mineralised structure, highlighted by the gravity feature, that has limited deeper RC drilling along its strike length.



A further step out 27-hole RC drilling program designed to test the gravity trend was completed in September 2019 (refer LEX ASX release 27 September 2019) and is considered the breakthrough program. The program returned multiple high-grade gold intersections, including 18m at 6.57g/t Au from 68m in LEFR140, and extended the deeply oxidised, BIF hosted gold mineralisation a further 320m along strike to the south east (Figure 3).

The high-grade oxide mineralisation intersected in holes LEFR140, 146 and 199 is masked beneath approximately 12m of transported cover which remained unrecognised in previous (2017) wide spaced (80m by 160m) aircore drilling by the Company. The discovery of this new mineralisation was guided by the coincidence of the deepening level of oxidation to the south east of Lucky Strike and the linear gravity anomaly.

On 20 May 2020 the Company announced a Maiden Mineral Resource Estimate of 1.27Mt @1.95g/t Au containing 79,600oz of gold with 54% of the total resource ounces classified in the Indicated resource category (refer LEX ASX release 20 May 2020)

The Lucky Strike resource is open along strike and at depth with the opportunity to discover additional BIF hosted oxide gold mineralisation. This is highlighted by hole LEFR152 located within the southernmost drill section that intersected 22m @ 2.49g/t Au from 63m remains open along strike to the south east



Figure 2 Lucky Strike resource location plan relative to the Randalls Processing Plant highlighting maximum gold value in drill holes and the extent of the LEX landholding. Refer to Figure 1 for inset plan of the drilling detail.



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 621km² 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 over the Western 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@lefroyex.com

ASX Announcement



*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.

- Drilling at Lucky Strike enhances Oxide Gold Zone: 3 December 2018
- High Grade Results Continue to Enhance Lucky Strike: 7 January 2019
- High Grade Results Expand Lucky Strike Footprint: 6 March 2019
- Strong Gold Intersection Extends Lucky Strike: 13 May 2019
- Drilling Supports large Mineralised Trend at Lucky Strike: 3 July 2019
- Step Out Drilling Delivers Impressive Results at Lucky Strike: 27 September 2019
- Further Strong Drill Results Confirm New Lode at Lucky Strike: 20 November 2019
- Outstanding Results Reinforce Lucky Strike Potential: 26 February 2020
- Maiden Gold Resource at Lucky Strike: 20 May 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.

This announcement has been authorised for release by the Board

Wade Johnson.

Wade Johnson Managing Director