Exploration Update-RC Drilling Recommencing at Lucky Strike

- A step out RC drilling program is scheduled to recommence to further evaluate the strike of and plunge extensions to a deeply oxidized, gold-mineralised Banded Iron Formation (BIF) at Lucky Strike

- The results from a recent phase of RC drilling returned significant oxide gold intersections that included 21m @ 2.93g/t in LEFR 137 and extended the strike of the BIF hosted mineralisation that is open along strike

- The deeply oxidised BIF unit correlates with a linear gravity low, interpreted as defining a major structural trend that can be traced over a 3000m strike length to the south east

- The design of the step out drilling program is both to extend the mineralisation in LEFR137, but also broader scoping deep drilling guided along the linear gravity trend

Lefroy Exploration Limited (ASX: LEX) (“Lefroy” or “the Company”) is pleased to advise the market that a broad scoping reverse circulation (RC) drilling program is about to recommence at the Lucky Strike Prospect. The drill program is primarily aimed to further evaluate the strike and plunge potential of the strong gold mineralisation hosted by Banded Iron Formation (BIF) intersected in hole LEFR 137 in June 2019 (LEX:ASX release 3 July 2019)

The proposed drilling of 21 holes for approximately 4000m will involve multiple 80m step out drill sections to test an additional 280m of strike to the south east at Lucky Strike, and initial deep RC drill evaluation of the air core anomalies at Lucky Strike Extended (Figure 2). An RC drill rig has been secured and will mobilise to site on or about 12 August 2019.

Lucky Strike is located within a granted Mining Lease that falls within the Eastern Lefroy tenement package, that is part of the wholly owned greater Lefroy Gold Project (LGP) located 50km south east of Kalgoorlie (Figure 1).

The LGP is referenced in two packages i.e.

- Eastern Lefroy covering 226km² of wholly owned tenements including Lucky Strike, Red Dale, Havelock, Hang Glider and other sub-projects along or adjacent to the regional Mt Monger fault; and

- Western Lefroy JV tenements covering 372km² adjoining the St Ives gold camp that are subject to a Farmin and Joint Venture agreement with Gold Fields Limited (“Gold Fields”). A large aircore drilling program is currently underway by Gold Fields on tenements covering Lake Lefroy.
Background--Lucky Strike

Lucky Strike is located approximately 35km north east of Gold Fields St Ives processing plant and 5km south west of the Randalls Processing Plant operated by Silver Lake Resources (ASX: SLR). Gold mineralisation at Lucky Strike is hosted within multiple north west trending Banded Iron Formation (BIF) units.

The mineralised BIF package is a recent green fields gold discovery by the Company in 2018. Lucky Strike is approximately 5km along strike to the northwest of the high-grade Lucky Bay open pit, mined by Silver Lake Resources (ASX: SLR) during 2015. The gold mineralisation at Lucky Bay is also hosted within BIF.

A six-hole step out RC drilling program was completed at Lucky Strike in June (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 Banded Iron Formation (BIF) intersected in hole LEFR 132 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 core of Lucky Strike where the depth to top of fresh rock is approximately 60m.

The results from that step out drilling further confirm the mineralised nature of the deeply oxidised BIF unit that the Company now interprets as a major structure that is open along strike. The main BIF intersected in the two 80m step out sections has a consistent width, geometry and geology, but variable tenor of gold mineralisation. The BIF package at Lucky Strike has now been confirmed over 460m of strike.

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 (Figure 2). 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 effective RC drilling along its strike length.

Figure 2 Gravity image and drilling along the Lucky Strike Trend. Warm colours depict dense or heavy rocks, cool colours depict less dense or light rocks. The linear gravity low (light blue) is interpreted to map deeper oxidation (hence soft/light rocks) along a major structural corridor. Proposed holes are shown as blue stars.
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 598km² 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 $25 million on exploration activities within 6 years of the commencement date.

For Further Information please contact:

Wade Johnson
Managing Director
Telephone: +61 8 93210984

Email: wjohnson@lefroyex.com
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.

- Exploration Update: Diamond Drilling Commences at the Lucky Strike Trend: 31 August 2017
- High Grade Gold Mineralisation Intersected at Lucky Strike: 21 September 2017
- September 2017 Quarterly Activities Report: 25 October 2017
- RC Drilling Commenced at Lucky Strike: 23 November 2017
- RC Drill Results Enhance Lucky Strike Gold Discovery: 12 December 2017
- Exploration Update: RC Drilling Underway at Lucky Strike: 25 January 2018
- Drill Results Extend Gold Mineralisation at Lucky Strike: 14 February 2018
- March 2018 Quarterly Activities Report: 27 April 2018
- High Grade Gold Intersected at Lucky Strike: 16 May 2018
- Lucky Strike Update Successful EIS grant: 2 June 2018
- High Grade Gold Mineralisation at Lucky Strike: 15 June 2018
- Lucky Strike Drilling Update: 3 October 2018
- Exploration Update: RC drilling commenced at Lucky Strike: 19 November 2018
- 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

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.