Exploration Update-Aircore Drilling to Recommence at Lucky Strike

Key Points:

- Early stage aircore drill program commenced at the Lucky Strike Prospect, at the Company’s flagship Lefroy Gold Project, south east of Kalgoorlie
- Reconnaissance drilling to evaluate a 1500m strike length of prospective stratigraphy proximal to the Mt Monger Fault, to the north west of the Lucky Bay open pit
- Initial wide spaced program comprising 3000m of drilling to follow up strike continuity of results generated from inaugural 2016 air core program

The Board of Lefroy Exploration Limited (ASX: LEX) (“Lefroy” or “the Company”) is pleased to announce the commencement of an early stage aircore drilling program at the Lucky Strike Prospect at its flagship Lefroy Gold Project (“LGP or Project”), located approximately 50km to the south east of Kalgoorlie.

LGP is a commanding contiguous land package covering in excess of 540km² in the heart of the world class gold production area between Kalgoorlie and Norseman. The Project adjoins the Gold Fields owned St Ives gold camp and mining centre, which contains the Invincible gold deposit, now in production and located in the western part of Lake Lefroy. The LGP is also immediately south of the Mount Monger Gold Operation and adjoins the site of the Randalls Processing Facility, both operated by Silver Lake Resources (ASX: SLR).

The Lucky Strike Prospect is located 2km to the northwest of the Lucky Bay open pit mined by Silver Lake Resources (ASX:SLR) during 2015. The Company has interpreted from geophysical and geological data that the Lucky Strike Prospect 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.

An initial air core drilling program was completed at Lucky Strike 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 core northwest trending zone of bedrock gold mineralisation over a 220m strike length, centered on SCA 794, but also generated 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).
This drilling intersected a sequence of deeply weathered (up to 110m downhole) altered siltstone, shales and carbonaceous sediments beneath approximately 14m of recent transported cover. The metasedimentary sequence is juxtaposed with shallow (14-30m downhole) weathered mafic rocks to the north, the contact interpreted to represent the position of the Mt Monger Fault.

Approximately 1500m of strike of this stratigraphic package remains untested to the northwest, where it extends to the Sideshow Prospect within the Company’s E26/183. Previous aircore drilling by Octagonal Resources Limited and Western Mining Corporation (WMC) at Sideshow intersected anomalous gold intercepts within a structurally disrupted sequence of quartz veining, iron formation, argillite and dolerite (refer Figure 1).

This aircore program aims to evaluate the 1500m of strike of this corridor between Lucky Strike and Sideshow with approximately 32 angled air core holes totaling an estimated 3000m. The initial phase will be a first pass reconnaissance evaluation with drill traverses at 320m spacing and holes at 80m centres and is expected to take 7 days to complete. A Programme of Works (POW) has been approved for a follow up phase of drilling to a 160m traverse spacing (Figure 1) and these holes can be drilled immediately depending on zone’s geological interest intersected or as a follow up to positive assay results returned from this initial phase. It is anticipated that first assay results will be received in late April.

Figure 1. Location of the Lucky Strike Prospect, proposed drilling at 160m line spacing and proximity to the Lucky Bay Pit.
About Lefroy Exploration and the Lefroy 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.

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

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.