Lefroy Exploration Limited (ASX: LEX) (“Lefroy” or “the Company”) is pleased to advise that Gold Fields Limited (NYSE: GFI) (“Gold Fields”) has commenced a large reverse circulation (RC) drilling program at the Zanex prospect, within the Company’s tenements over Lake Lefroy (Figures 1 & 2). The program is part of the $25million Farm-In and Joint Venture (JV) agreement between Lefroy and Gold Fields at Western Lefroy.

Gold Fields is a South African based gold producer with seven operating mines in Australia, Ghana, Peru and South Africa and a total attributable annual gold-equivalent production of 2.2million ounces. Mining assets in Australia include a 100% interest in St Ives, Agnew and Granny Smith in the Eastern Goldfields of Western Australia with a combined annual production of 935koz. Gold Fields has a 50% interest in the Gruyere Project with Gold Road Resources (ASX: GOR)-also in the Eastern Goldfields.

The tenements form part of the Western Lefroy JV package that covers 372km² adjoining the St Ives gold camp (Figure 1). Western Lefroy is part of the wholly owned greater Lefroy Gold Project (LGP) located 50km south east of Kalgoorlie.

Figure 1 Lefroy Gold Project tenement package highlighting the Gold Fields Farm in & JV Western Lefroy package, proximity to Gold Fields St Ives and the non-JV Eastern Lefroy Project. Refer to inset for drill program detail.
The Zanex prospect was the most advanced of a number of gold prospects identified by the Company (refer LEX ASX release 20 June 2017) from aircore drilling during 2017 in Lake Lefroy (Figure 2). Further extensive foundation aircore drilling by Gold Fields earlier this year has significantly enhanced and extended the strike of the Zanex trend to 4000m under the sediments of Lake Lefroy (refer LEX ASX release 11 June 2019). Multiple strong shallow gold intersections by Gold Fields along the strike (Figure 3) of the Zanex prospect include:

- 9m @ 2.73g/t Au from 32m to end of hole in KD81399
- Including 2m @ 8.78g/t Au from 36m
- 8m @ 1.56g/t Au from 36m in KD81377
- 34m @ 0.44g/t Au from 32m in KD81294

![Map highlighting drill holes completed in Lake Lefroy and Lake Randall coloured by maximum gold value and the location of the key Zanex and LLT06 gold anomalies. Holes with pending results in Lake Randall are shown as grey diamonds. Refer to Figure 3 for Zanex inset map.](image)

The program will involve approximately 6800m of RC drilling in wide spaced drill traverses to cover the full extent of the Zanex trend. The program is designed to test beneath and along strike of the gold anomalous trend defined from early stage wide spaced air core drilling. The drilling will penetrate into fresh rock to gain an understanding of the style and extent of any primary mineralisation.

The RC drilling program is expected to take two months to complete. Results material to the Company will be reported to the market as the program progresses.
Figure 3 Inset map highlighting aircore drill holes completed by LEX and Gold Fields along the Zanex trend. Key gold intersections from Gold Fields air core drilling shown in the white boxes.

Zanex Background

The Zanex Prospect is the most advanced of a number of gold prospects identified by the Company from aircore drilling during 2017 in Lake Lefroy (Figure 2&3). The prospects were initially identified by a geophysical based targeting exercise completed in December 2016. This also identified, a north westerly trending structure termed the Woolibar Fault which has been reinforced by interpretation of gravity data.

The Woolibar fault is to the east of and parallel to the Boulder Lefroy and Speedway Faults, which have a primary influence on gold deposits at the St Ives gold camp. The Invincible gold mine at St Ives is situated along the Speedway Fault. The Woolibar Fault extends for approximately 15km in a south easterly direction within Lake Lefroy and the Company believes this may be a structure analogous to the Boulder Lefroy and Speedway Faults.

The Zanex gold anomaly, defined by air core drilling during 2017, has established a north westerly trending sequence of strongly altered and deformed, high Mg basalt, that is intruded by porphyry and open along strike. The best intersection for this air core drilling was 17m at 2.14 g/t Au from 40m to the end of hole in LEFA047 (Figure 3).

In January 2018 the Company completed three (3) pre-collared, angled diamond holes totaling 573m to test for a primary mineralised zone beneath the oxidised rock (saprolite), transported cover and more recent lake sediments over a 380m strike.
Background to the Western Lefroy JV

The Western Lefroy tenement package is a Joint Venture with Gold Fields that commenced on 7 June 2018 (ASX: LEX 7 June 2018). Gold Fields can earn up to a 70% interest in the Western Lefroy tenements by spending up to a total of $25 million on exploration activities within 6 years of the commencement date. This includes a minimum expenditure requirement of $4 million within 2 years before Gold Fields can elect to withdraw.

Gold Fields commenced exploration on Western Lefroy in July 2018 involving multi-disciplinary ground and airborne geophysical surveys (gravity and magnetics) primarily located on or near Lake Lefroy. To complement this foundation geophysical data, Gold fields commenced a large full field aircore drill program on Lake Lefroy within the Western Lefroy JV tenements in January 2019 (Figure 2). Since commencement of drilling, 776 vertical air core holes totaling 40,421m have been completed on both Lake Lefroy and the adjacent Lake Randall. Results are pending for 33 holes at Lake Randall.

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 exploration by the Company on the Zanex, LLT04 and LLT06 Prospects in Lake Lefroy and the Neon gold prospect in Lake Randall at the Lefroy Gold Project.

- Lefroy Exploration Limited-Prospectus: 8 September 2016
- Managing Directors AGM Presentation: 5 December 2016
- Initial Drilling at Lake Lefroy completed: 9 March 2017
- New Anomalies on Lake Lefroy: 3 April 2017
- March 2017 Quarterly Activities Report: 28 April 2017
- June 2017 Quarterly Activities Report: 27 July 2017
- Drilling Extends gold anomalies along the Woolibar trend: 20 June 2017
- September 2017 Quarterly Activities Report: 25 October 2017
- December 2017 Quarterly Activities Report: 25 January 2018
- Gold Fields Commences Drilling on Western Lefroy JV: 31 January 2019
- Drilling Extends Two Gold Trends Under Lake Lefroy: 15 April 2019
- Drilling Continues to Deliver Gold Mineralisation Under Lake Lefroy: 29 May 2019
- Drilling Extends the Zanex Gold Trend in Lake Lefroy: 11 June 2019
- Drilling by Gold Fields Enhances New Gold Prospect in Lake Lefroy: 8 July 2019
- Further Results Reinforce LLT06 Gold Prospect in Lake Lefroy: 6 August 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.
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).

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