

Follow up Aircore Drilling Underway in Lake Lefroy

- A multi-target aircore drilling program is underway in Lake Lefroy by JV partner Gold Fields
- The program is designed to improve gold anomaly definition ahead of scheduled follow up RC drilling
- This drilling complements the extensive 2019 foundation aircore program that obtained geological and geochemical information beneath the surfaces of Lake Lefroy and the adjacent Lake Randall.
- The majority of the gold anomalies for this phase of drilling are located in Lake Lefroy, with the largest being a linear 5km trend known as Eastern Shoreline
- An additional anomaly in Lake Randall is located 1000m south-west of the Neon gold prospect, also located in Lake Randall, and is immediately east of the Burns Au-Cu prospect recently acquired by LEX
- The drilling is expected to be completed in April with results in May

Lefroy Exploration Limited (ASX: LEX) (“Lefroy” or “the Company”) is pleased to advise that Gold Fields Limited (NYSE: GFI) (“Gold Fields”) has commenced a supplementary aircore (AC) drilling program on the Company’s tenements over Lake Lefroy and the adjacent Lake Randall (Figure 1). The program is a follow up to the extensive foundation AC drilling that commenced in late January 2019 and part of the \$25million Farm-In and Joint Venture (JV) agreement between Lefroy and Gold Fields that commenced in June 2018.

The tenements form part of the Western Lefroy tenement JV package that cover 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. The Company is actively exploring the non-JV Eastern Lefroy, that includes priority prospects at Lucky Strike, Red Dale and HangGlider Hill.

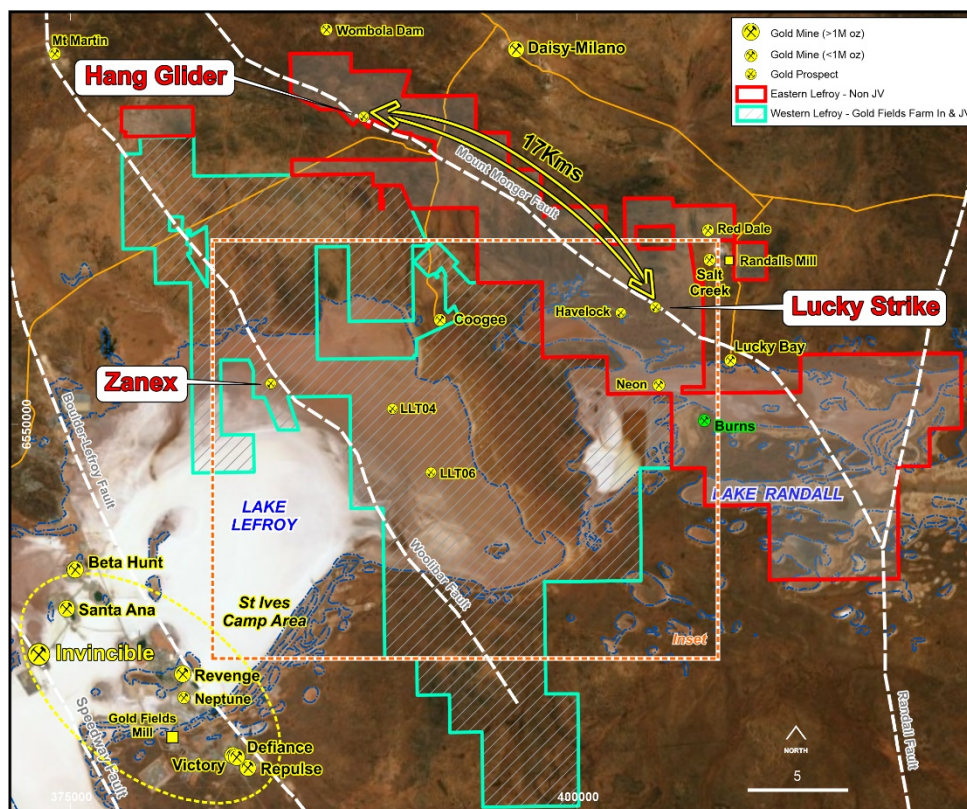


Figure 1 Lefroy Gold Project tenement package highlighting the Gold Fields Farm in & JV Western Lefroy package, proximity to Gold Fields St Ives and the non-JV Eastern Lefroy Project. Refer to inset for drill program detail.

Program Background

Gold Fields commenced the major full field aircore (AC) drilling program in late January 2019 (refer: LEX ASX release 31 January 2019). That initial program involved completing approximately 350 vertical holes spaced 200m apart on traverses 1km apart to cover most of the JV tenure in Lake Lefroy using a specialised lake drilling rig.

In August 2019 Gold Fields completed the full field aircore (AC) drilling program on tenements within Lakes Lefroy and Randall with 776 vertical air core holes totaling 40,421m being completed. The program yielded foundation geological and geochemical information that has been interrogated in conjunction with the geophysical data to deliver specific drill targets for deeper drill testing and hence termed foundation drilling.

The results of that foundation program yielded multiple new gold anomalies in Lake Lefroy and expanded the footprint of the anomalies identified by the Company during its 2017 lake drilling campaign. These include the Zanex, LLT04 and LLT06 prospects (Figure 2).

New areas of regolith hosted gold mineralisation were outlined in Lake Lefroy but also from wide spaced initial drilling in the adjacent Lake Randall. The key new anomaly in Lake Lefroy is known as Eastern shoreline (Figure 2) where a linear gold trend has been defined over a 5000m strike. Better results from this trend include 7m at 0.70g/t Au from 74m in SAL1467 and 6m at 1.53g/t Au from 88m in SAL1533.

Initial wide spaced early stage aircore drilling completed in Lake Randall in 2019 also generated new gold anomalies. Lake Randall is located approximately 5km to the east of Lake Lefroy (Figure 1), and is a similar ephemeral salt lake that forms a chain of lakes that extend eastward over approximately 40km.

Significantly, the gold anomaly is located approximately 1000m to the south west of the Neon gold prospect also located in Lake Randall (Figure 2). Neon is a 2,300m X 400m gold-in-bedrock anomaly (> 0.1 g/t Au) that was defined by shallow aircore (AC) drilling by Western Mining Corporation (WMC) in the 1990's. Bedrock lithologies comprise strongly altered (haematite-epidote-silica) mafic volcanics and epiclastic sediments on the northern margin of the Burns granitoid intrusive. The intrusive hosts the Burns Gold-Copper prospect located 2.5km to the east. Both Neon and Burns are located within the Non-JV Eastern Lefroy package.

The current air core program is designed to improve and extend the Eastern Shoreline, Lake Randall and other anomalies (Figure 2) with both infill and extensional drilling. The results of this drilling will identify those targets for follow up reverse circulation drilling. Approximately 4000m of drilling in 57 vertical air core holes is planned.

The drilling is expected to be completed in April, with final results available in May 2020.

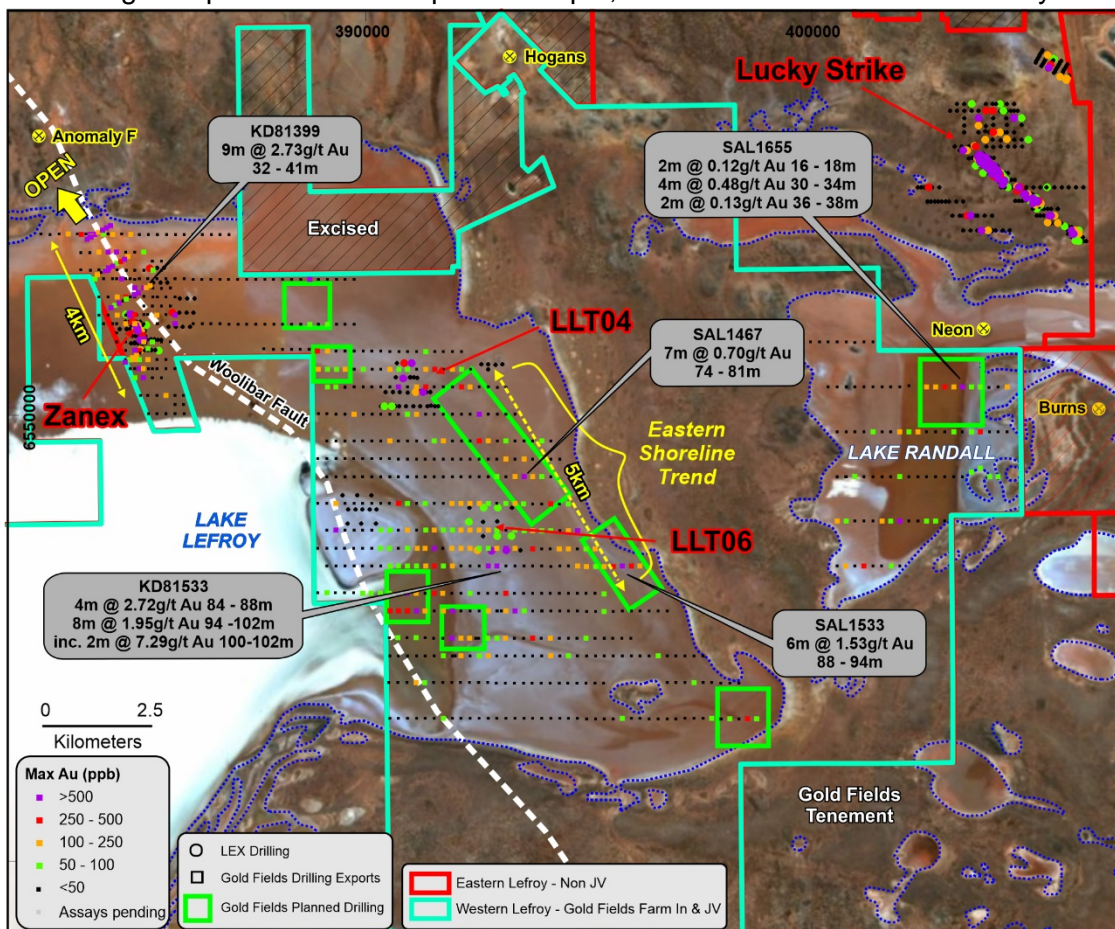


Figure 2 Map of drill holes completed in Lake Lefroy and Lake Randall coloured by maximum gold value and the location of the key Zanex, LLT06 and LLT04 gold anomalies. Areas of planned AC drilling highlighted.

Background to the Western Lefroy JV

The Western Lefroy tenement package is a Joint Venture with Gold Fields which 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 \$25million 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 is a South African based gold producer with eight operating mines and two projects in Australia, Chile, Ghana, Peru and South Africa with a total attributable annual gold-equivalent production of 2.2million ounces. Mining assets in Australia include a 100% interest in the St Ives, Agnew and Granny Smith mines in the Eastern Goldfields of Western Australia with a combined annual production of 935koz. Gold Fields also has a 50% interest in the Gruyere gold mine with Gold Road Resources (ASX: GOR) also in the Eastern Goldfields, which entered into production in June 2019.

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. This extensive detailed magnetic survey program is complete. These surveys built upon the data collected by the Company in 2017 and delivered a foundation detailed geophysical dataset to be used for target identification and focused RC and diamond drilling.

To complement this foundation geophysical data, Gold fields commenced a large full field aircore drill program on Lake Lefroy and the adjacent Lake Randal within the Western Lefroy JV tenements in late January 2019 and completed in September.

This announcement has been authorised for release by the Board



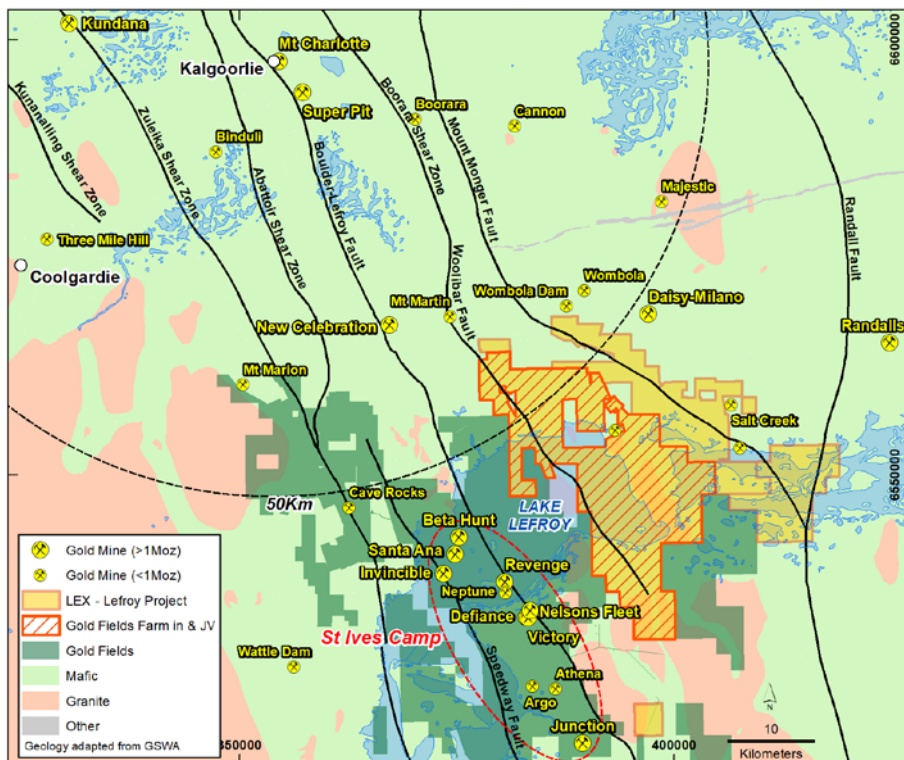
Wade Johnson

Managing Director

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 searching 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 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 \$25million on exploration activities within 6 years of the commencement date.



Location of the Lefroy Gold Project relative to Kalgoorlie and the Western Lefroy tenement package subject to the Gold Fields joint venture.

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 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.

- Initial Drilling at Lake Lefroy completed: 9 March 2017
- New Anomalies on Lake Lefroy: 3 April 2017
- Drilling Extends gold anomalies along the Woolibar trend: 20 June 2017
- 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
- Drilling Intersects Gold Mineralisation in Lake Randall: 29 August 2019
- RC Drilling Underway at Zanex on Western Lefroy JV: 6 September 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.
