

Massive drilling program planned for the Western Lefroy JV

- A 46,000m aircore drilling program is planned for the Western Lefroy tenement package by JV partner Gold Fields.
- The Full Field Aircore (FFAC) program is designed to cover most of the land area of the tenement package with approximately 1318 vertical holes on regular 400m by 400m spaced grid pattern planned.
- This program will yield foundation geological and geochemical information that:
 - a) may represent the broad footprint of a large gold system and,
 - b) will be interrogated in conjunction with geophysical data to deliver specific targets for follow up AC, RC and diamond drilling
- The program is expected to take at least 6 months to complete, with first assay results in January 2021.

Lefroy Exploration Limited (ASX: LEX) ("Lefroy" or "the Company") is pleased to advise that Gold Fields Limited (NYSE: GFI) ("Gold Fields") is due to commence a major aircore (AC) drilling program (Figure 1) on the Company's tenements at Western Lefroy. The program is part of the \$25million Farm-In and Joint Venture (FIJV) agreement between Lefroy and Gold Fields.

Gold Fields is a South African based gold producer with seven operating mines in Australia, 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 St Ives, Agnew and Granny Smith 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.

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 program will involve completing approximately 1318 vertical holes spaced 400m apart on traverses 400m apart to cover most of the land area of the Western Lefroy tenement package. This program will yield foundation geological and geochemical information that will be interrogated in conjunction with the geophysical data to deliver specific targets for AC, RC and diamond drilling.

The air core program is expected to take 6 months to complete, but dependent on land access. Results material to the Company will be reported to the market as the program progresses.

ASX Code: LEX Shares on Issue: 120M Market Capitalisation: \$46.8m Australian Registered Office Level 2, 11 Ventnor Avenue West Perth, 6005 E: info@lefroyex.com T: +61 8 9321 0984 ARBN: 052 123 930



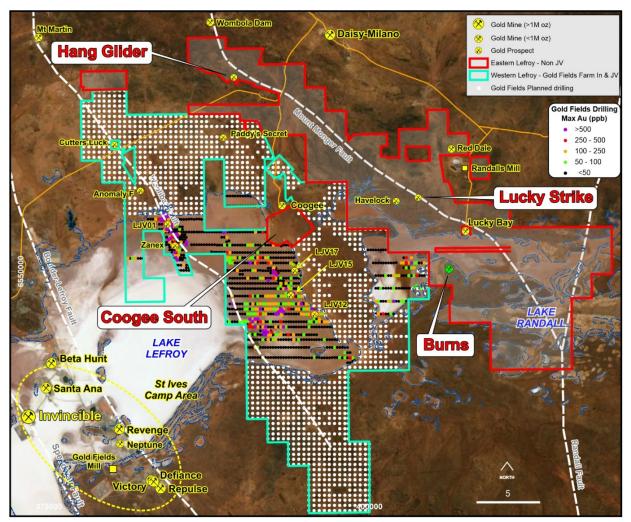


Figure 1 Lefroy Gold Project tenement package highlighting the Gold Fields Farm in & JV package, proximity to Gold Fields St Ives and location of the Full Field Aircore (FFAC) drilling program adjacent to Lake Lefroy. Schematic locations of the new FFAC program is represented by the white dots. Drilling by Gold Fields in Lake Lefroy during 2019-2021 is also shown for reference.

While waiting on final land access clearance to commence the FFAC program, a phase of close spaced AC drilling is underway at Paddy's Secret, to the north of Lake Lefroy (Figure 1). Paddy's Secret is the site of an alluvial gold find in 2013-2014, where several large (plus 10oz) gold nuggets were discovered in a 400m by 200m area (LEX:ASX release 12 October 2017).

The AC drilling is a reconnaissance technique, searching for both geochemical anomalies and geology from the bedrock or top of fresh rock (TOFR) beneath the surface and oxidised rock that comprise the regolith. The depth of the regolith and TOFR is highly variable, ranging from 5m to 100m vertical and averaging 35m.

The variability in the depth to TOFR is also controlled by the distribution and thickness of palaeochannels (ancient river channels) that mask the underlying older bedrock. The interface between the palaeochannel material and bedrock can have a variable thickness of pebble gravels and or sand that can be mineralized. The gold bearing gravels and sands can be used as a vector to locate the primary source in the bedrock.

ASX Announcement

12 October 2021



Background Western Lefroy Gold Project (Farm-In and JV: Gold Fields right to earn 70%)

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 AUD\$25million on exploration activities within 6 years of the commencement date in two stages.

On 30 July 2021 St Ives provided Hogans with the Stage 1 Satisfaction Notice to confirm;

- 1. St Ives had satisfied the Stage 1 Farm In requirement by.
 - a. Payment of one half of the shortfall amount (plus GST), being \$1,518,797.50 paid by funds transfer to Hogans on 24 June 2021, and
 - b. Excising the Excluded Area from the Principal Agreement from the effective date of the Side Deed, being 18 June 2021.
- 2. St Ives provided Hogans with an itemised breakdown of Direct Expenditure incurred by St Ives during the Stage 1 Farm in Period
- 3. St Ives elects to earn the Stage 2 Participating Interest.

The Stage 2 earn-in allows St Ives to sole fund a further \$15 million of expenditure over 3 years to earn an additional 19% interest to bring its total interest to 70%.

Gold Fields is globally diversified gold producer with nine operating mines in Australia, Peru, South Africa and West Africa (including the Asanko JV), as well as one project in Chile. It has a total attributable annual gold-equivalent production of 2.2million ounces, attributable gold-equivalent Mineral Reserves of 51.3Moz and Mineral Resources of 115.7Moz. 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 approximately 935koz. Gold Fields also has a 50% interest in the Gruyere mine with Gold Road Resources (ASX: GOR) also in the Eastern Goldfields.

Gold Fields commenced exploration on Western Lefroy in July 2018 involving multidisciplinary ground and airborne geophysical surveys (gravity and magnetics) primarily located on or near Lake Lefroy. Those surveys built upon the data collected by the Company in 2017 to deliver a foundation detailed geophysical dataset used for target identification.

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 between January and August 2019. That 45,000m program outlined multiple geochemical targets that were evaluated with a combined +11,000m reverse circulation and diamond drill program during 2020 and early 2021.

This announcement has been authorised for release by the Board

Wade Johnson

Wade Johnson.

Managing Director

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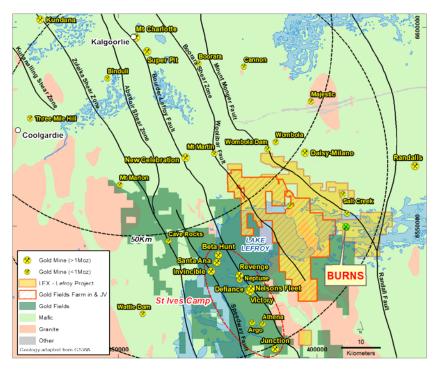
12 October 2021



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 southeast 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. The Western Lefroy tenement package subject to the Gold Fields joint venture, and Gold Fields tenure are also highlighted

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