

Drilling of Shallow High-Grade Oxide Zone Underway at Lucky Strike

- A new RC drilling program has commenced at Lucky Strike to infill between recent multiple high-grade gold intersections hosted by a deeply oxidized, gold-mineralised Banded Iron Formation (BIF).
- The results from recent multiple phases of RC drilling in 2019 evaluating a 480m strike length of the trend returned impressive oxide gold intersections that included:
 - *18m @ 6.57g/t Au from 68m in LEFR140 incl. 4m @ 21.9g/t Au from 77m*
 - *19m @ 4.52 g/t Au from 45m in LEFR167*
 - *11.1m at 2.47g/t Au from 56.9m in LSRD013*
 - *12m @ 2.97g/t Au from 147m in LEFR146*
 - *22m @ 2.49g/t Au from 63m in LEFR152*
- The shallow high-grade results are from multiple, wide spaced drill sections that extended the strike of the BIF hosted mineralisation by 480m to a total strike length of 740m. The mineralisation remains open along strike to the south east.
- The intersections in LEFR167 and LSRD013 support LEFR140 and reinforce the existence of a new, south-east plunging lode within the BIF hosted mineralisation, which is open
- The current infill drilling program of approximately 4000m will focus on the shallow oxide gold mineralisation over a 480m strike length to support the delivery of a maiden resource estimate.



RC Drilling at Lucky Strike-16 January 2020

ASX Announcement

17 January 2020

Lefroy Exploration Limited (ASX: LEX) (“Lefroy” or “the Company”) is pleased to advise that a new reverse circulation (RC) drilling program has commenced at the Lucky Strike Prospect near Kalgoorlie. The infill drill program totalling approximately 4000m will focus on evaluating 480m of strike of shallow oxide gold mineralisation hosted by a Banded Iron Formation (BIF) which was identified from multiple phases of step out (80m) drilling during 2019.

The results of that step out drilling confirmed the continuity of the BIF under transported cover to the south east and highlighted a deeply weathered (oxidised) metasedimentary sequence of rocks, including BIF, wedged between a hanging wall andesite and a footwall basalt (Figure 1). The BIF in this location is preferentially oxidised to approximately 200m from surface (Figure 2).

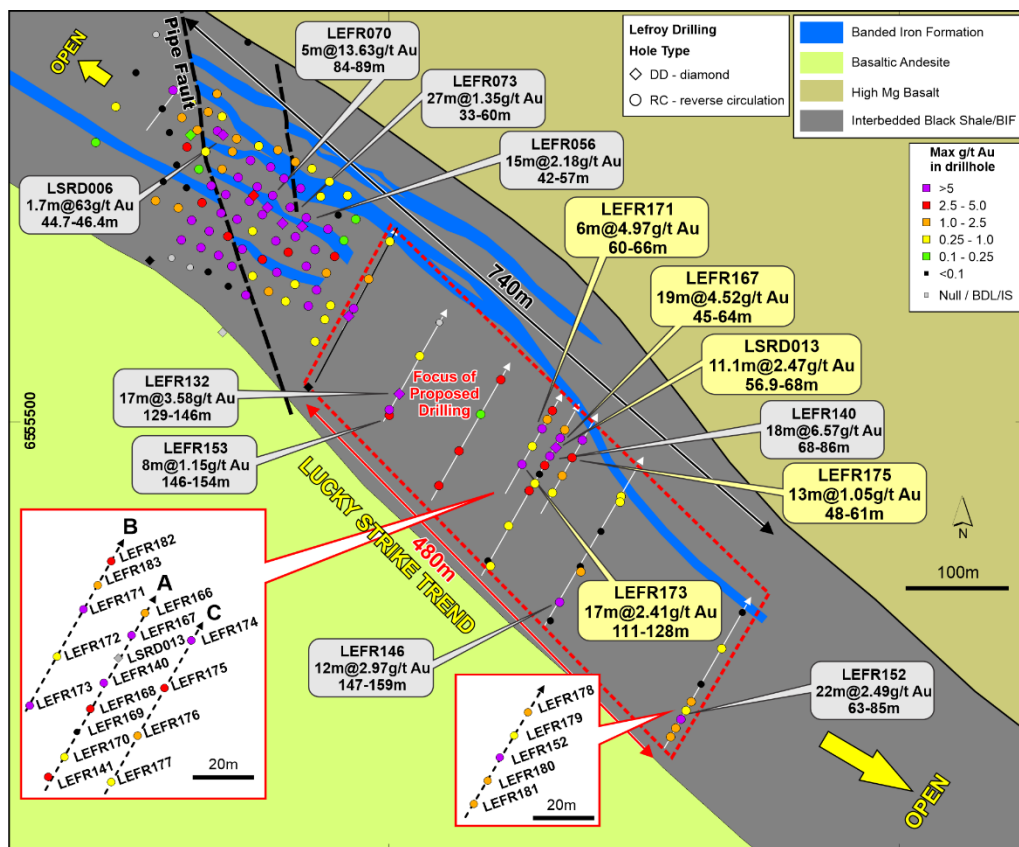


Figure 1 Geology and Drill hole plan along the Lucky Strike Trend. Target for focussed RC drilling shown as red dashed boxes. Refer to Figure 3 for long section projection.

The confined weathering of the BIF is interpreted to represent an oxidation channel down a structure or alteration zone that is open along strike. The BIF is strongly oxidised, maintains a consistent down hole width of approximately 12m and has sharp contact relationships with the hanging and footwall shale units. The main BIF unit at Lucky Strike has a strike length of 740m and is open. Early interpretation by the Company, and recent Company research, suggests these are Algoma type BIF units.

The most recent phases of RC drilling (LEX:ASX release 20 November 2019) intersected impressive shallow oxide gold intersections within the BIF that confirm and reinforce the interpretation of a new BIF hosted plunging lode centered on the impressive intersection in hole

LEFR140 (18m @6.57g/t Au from 68m) that is open down plunge. This lode and the plunge geometry are further supported by the intersection in LEFR146, also in oxide BIF, and which is open. The plunge orientation of this new lode is consistent with that observed from drilling in the main drilled area of Lucky Strike (Figure 2)

The closer spaced drill test around LEFR140 delivered additional high-grade intersections but also demonstrated the geometry and extent of the BIF hosted mineralisation (Figure 1&2). The wide (80m or 160m) spaced drill sections with holes at 40m centres can broadly scope out the extent of the system but, it can overlook the short strike length of individual lodges.

This provides support to the Company’s interpretation that there is potential for additional near surface high grade ore shoots along a 400m strike length of the BIF that has only been evaluated by wide spaced RC drilling. The current drilling program is designed to test for additional high-grade mineralisation positions.

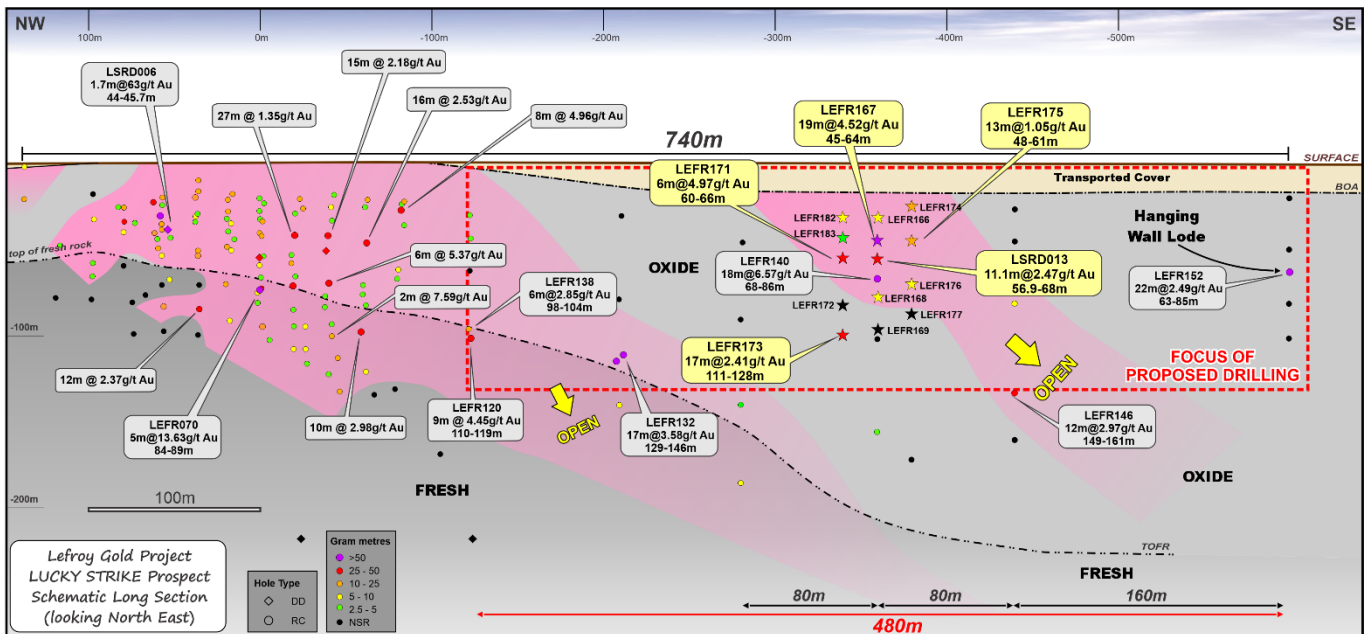


Figure 2 Lucky Strike Schematic Long Section highlighting pierce points of drill holes, key gold intersections and interpreted plunge of gold system with depth to top of fresh rock (TOFR) increasing to the south east. The red dashed box highlights the area of the infill drill program.

The proposed drilling will infill the existing wide spaced drilling to a nominal 40m by 20m grid spacing and evaluate the BIF host system to a vertical depth of approximately 150m. As noted in the LEX ASX release dated 20 November 2019, this new drilling will be incorporated with existing drilling to support the delivery of a maiden resource for Lucky Strike prior to June 2020.

The drilling program is expected to be completed by mid-February, with final results anticipated later that month.

Background--Lucky Strike

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 4).

The LGP is referenced in two packages i.e.

- Eastern Lefroy covering 249km² 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”).

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) (Figure 3). Gold mineralisation at Lucky Strike is hosted within multiple north west trending Banded Iron Formation (BIF) units.

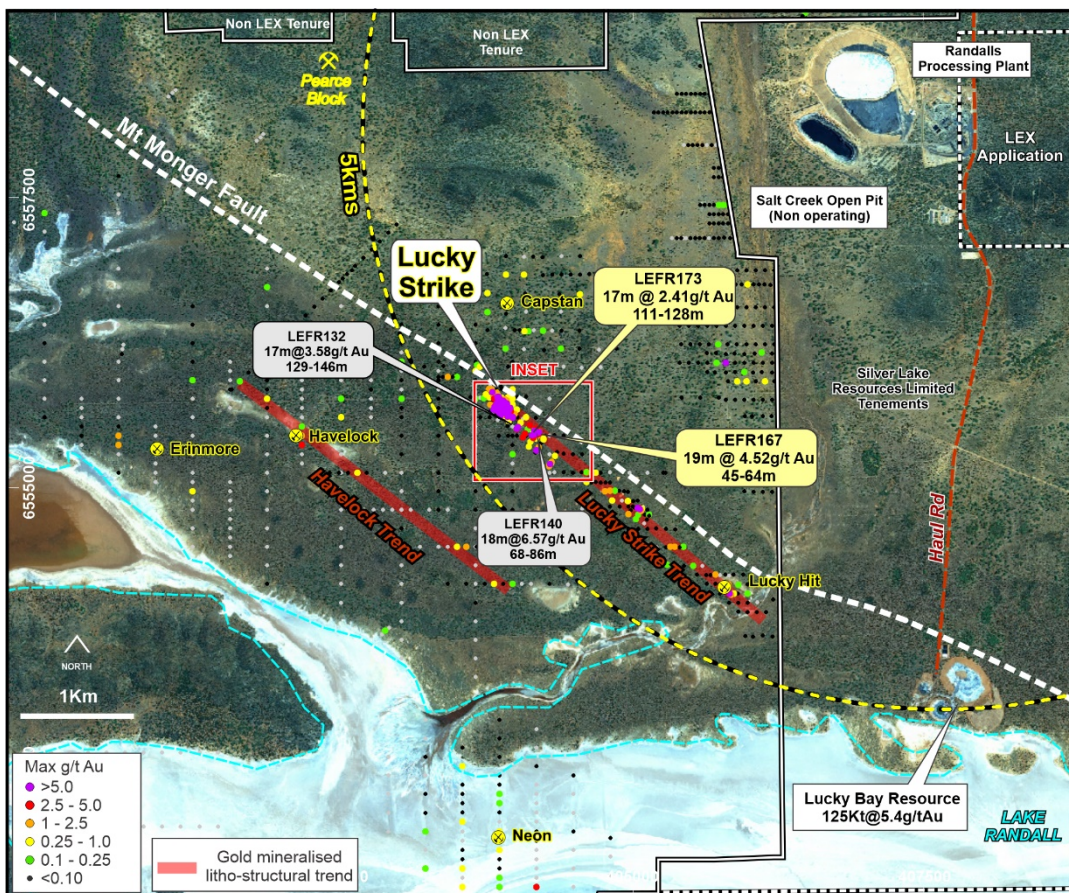


Figure 3 Lucky Strike prospect location plan relative to the Randalls Processing Plant highlighting maximum gold value in drill holes other LEX gold prospects. Inset-Refer to Figure 1 for detailed Lucky Strike drill hole plan and geology.

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 (Figure 3), 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 (+60gram 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.

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. 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.

A further step out 27-hole RC drilling program designed to test the gravity trend was completed in September 2019 (refer LEX ASX release 27 September 2019). That returned multiple high-grade gold intersections, including 18m at 6.57g/t Au from 68m in LEFR140, and extended the deeply oxidised, BIF hosted gold mineralisation a further 320m along strike to the south east (Figure 1).

Gold mineralisation in the BIF-metasediment package at Lucky Strike now has a strike length of 780m and remains open to the south east.

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 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 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.

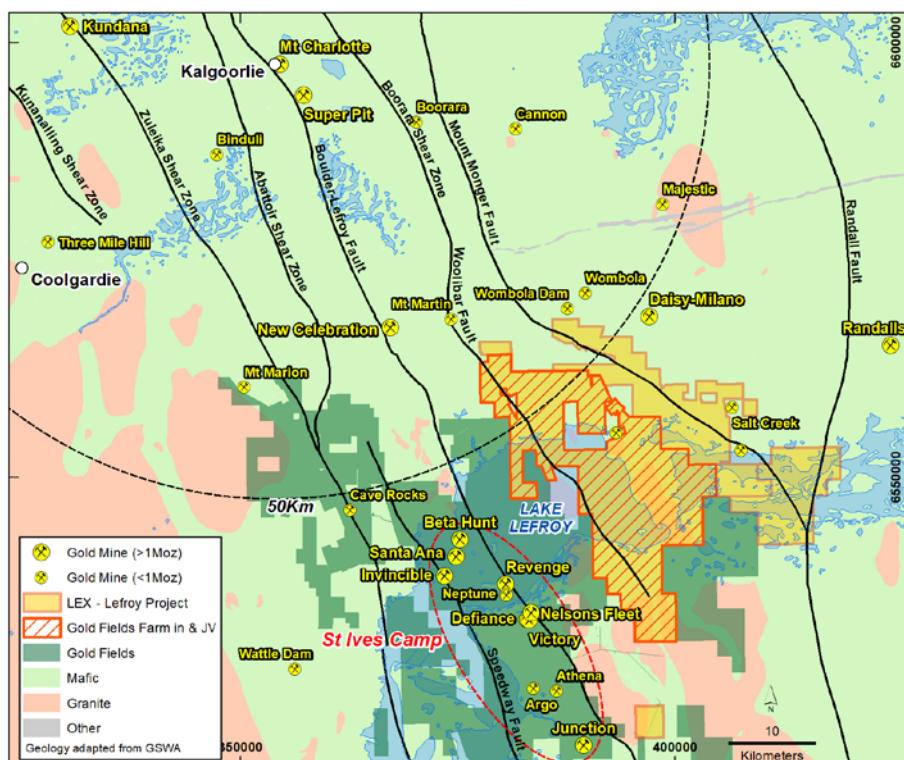


Figure 4 Location of the Lefroy Gold Project relative to Kalgoorlie and the Western Lefroy tenement package subject to the Gold Fields joint venture.

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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 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
- Step Out Drilling Delivers Impressive Results at Lucky Strike: 27 September 2019
- Further Strong Drill Results Confirm New Lode at Lucky Strike: 20 November 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.
