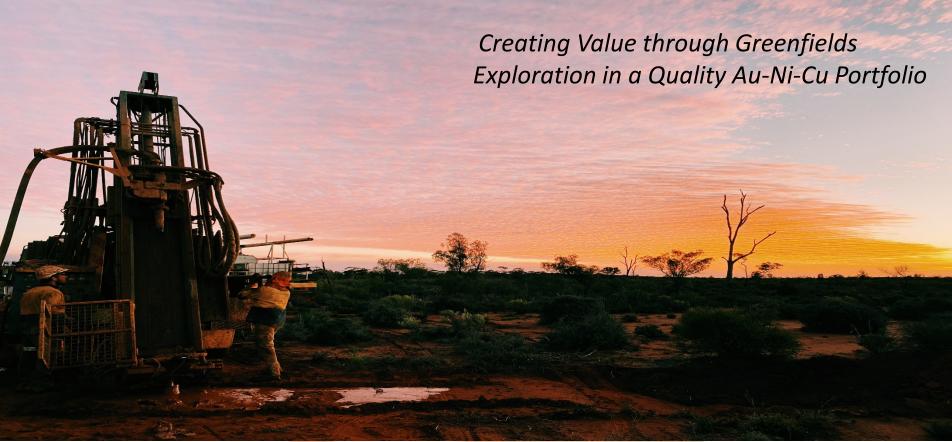
Lefroy Exploration Limited

FY2020 AGM Presentation





Wade Johnson Managing Director

9 December 2020

Disclaimer



This presentation contains summary information about Lefroy Exploration Limited (LEX) and is current as at 8 December 2020. The information contained in this presentation is of a general nature and does not purport to be complete.

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2020 Company Summary



- Lefroy Exploration Limited (LEX or Lefroy) controls a major tenement portfolio in two project areas in the Yilgarn of Western Australia, with more than 621km² in the flagship Lefroy Gold Project (LGP) near Kalgoorlie alone
- Lefroy is targeting high-value gold and copper-gold deposits at the LGP capable of being rapidly developed through systematic generative exploration
- The Lefroy exploration effort is underpinned by the \$25 million Farm-in and JV with Gold Fields over the western part of the LGP adjoining the Gold Fields St Ives mining operations
- At Eastern Lefroy, exploration has discovered the wholly owned 79,600oz Lucky Strike BIF hosted gold deposit within a 3000m long gold mineralised corridor defined by aircore drilling
- During 2020 Lefroy generated multiple early stage drill ready targets within three exploration hubs that straddle the regional scale Mt Monger Fault over a 40km strike length on the Non JV Eastern Lefroy
- At Western Lefroy, JV partner Gold Fields is evaluating multiple large geochemical targets through foundation diamond and aircore drilling on Lake Lefroy
- Initial exploration at Lake Johnston has identified multiple targets considered prospective for mafic intrusion hosted Ni mineralisation

Corporate Snapshot



Board

- Gordon Galt Non Executive Chairman
- Wade Johnson Managing Director
- Michael Davies Non Executive Director
- Geoff Pigott Non Executive Director

Major Shareholders*	Shares* (M)	%
St Ives Gold Mining Company Pty Ltd	21.6	18.1
Michael Davies ¹	13.4	11.3
J P Morgan Nominees Australia Pty Ltd	12.0	10.0
Other Directors ¹	7.8	6.5

¹ Does not include share plan share allocations

Corporate Details

Issued Capital: 119.3 million shares

Options on Issue: 1.0 million unlisted

Cash: \$0.55M (30 September 2020)²

Debt: Nil

Investments: Nil

Market Capitalisation @ \$0.20ps: \$23.9M#

12 Month Share Price Range \$0.125-\$0.340

Top 20 Shareholders: ~71%

Board Ownership: ~18%

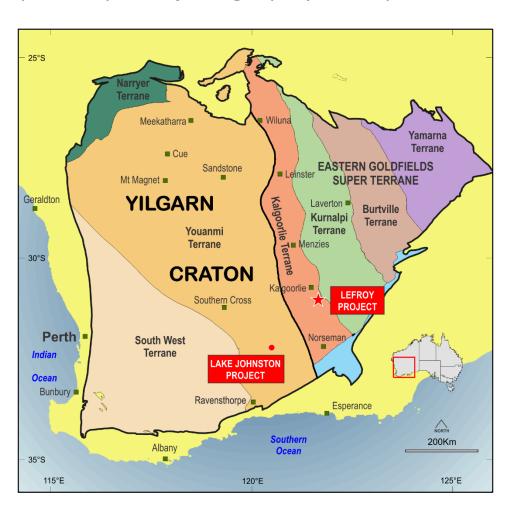
² On 22 October 2020 the Company announced it had raised \$4.5million(before costs) in a share placement





Targeting high-value gold and nickel deposits capable of being rapidly developed

- Focus: undertake early stage Greenfields exploration for gold and nickel deposits in premier areas of the Yilgarn Craton of Western Australia
- Lefroy Project: flagship gold project in excess of 621km² of contiguous wholly owned tenements, within 50km of Kalgoorlie
- Lake Johnston Project: 291km² of granted tenure prospective for nickel and gold located immediately north of the Emily Anne nickel mine held by Poseidon Nickel Limited (ASX: POS)

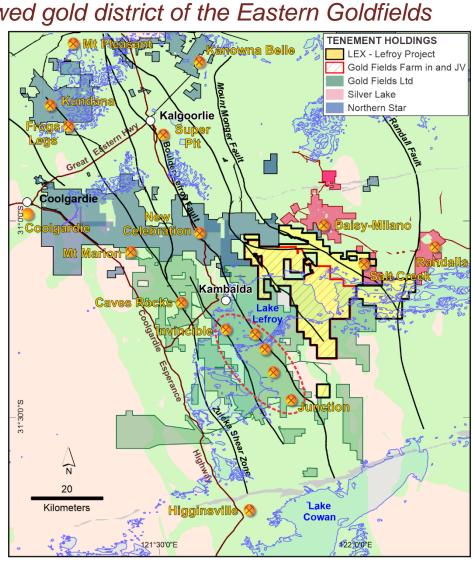


Lefroy Gold Project-District Context



Flagship project in a highly gold endowed gold district of the Eastern Goldfields

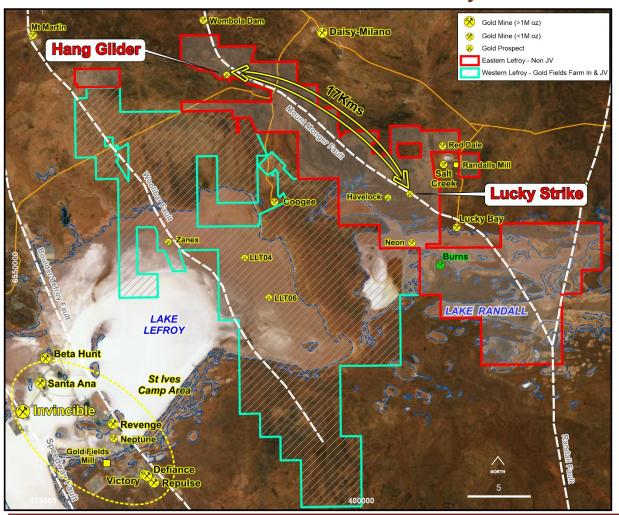
- Commanding wholly owned large package within world-class gold producing district
- Project area bounded by major regional that gold structures control mineralisation in the district
- Adjoins Gold Fields St Ives Operation the area of consistent focused high exploration budget expenditure
- Bracketed by the 350,000oz pa St Ives and the 130,000oz pa Silver Lake Limited Mt Resources Monger **Operations**
- Strategically located near five operating gold mills that have a combined milling capacity of 8.4mtpa provides commercial options



Lefroy Gold Project-Accelerating Exploration



Underpinned by a \$25million Farm-in and Joint Venture with Gold Fields at Western Lefroy

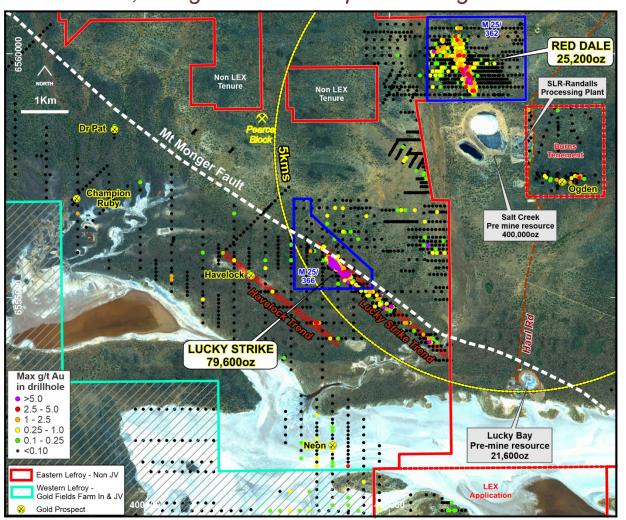


- Large contiguous 100% owned land package covering 621km²
- Eastern Lefroy–LEX managed-249km²
- Western Lefroy-Gold Fields Farm-In & JV managed-372km²
- Farm-in area covers prospective rock sequence adjacent to the Woolibar Fault corridor, in Lake Lefroy
- LEX exploration focus on the Non JV Eastern Lefroy package which includes the Lucky Strike, Hang Glider and Lake Randall Hubs

Eastern Lefroy- Lucky Strike Hub



Successful exploration has delivered the maiden Lucky Strike resource, increased the Red resource, and generated multiple new targets to enhance the district potential

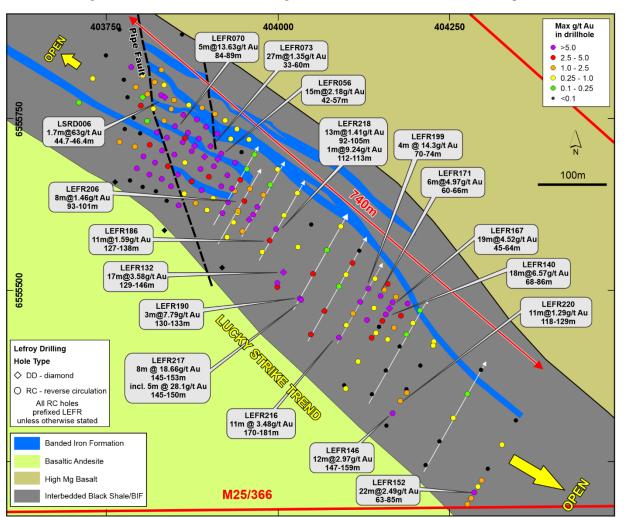


- Prospects and targets proximal the regional scale Mt Monger Fault
- Maiden Resource
 Estimate delivered in
 2020 for Lucky Strike
 within a granted Mining
 Lease
- Emerging new parallel gold trend at Havelock
- Lucky Strike and Havelock hosted by BIF's that have a magnetic signature
- Generative prospects at Neon and Erinmore continue to fill the target pipeline

Eastern Lefroy- Lucky Strike



The high grade gold discovery adjacent to the regional Mt Monger Fault is open down plunge and provides the concept for additional BIF style mineralisation in the immediate area



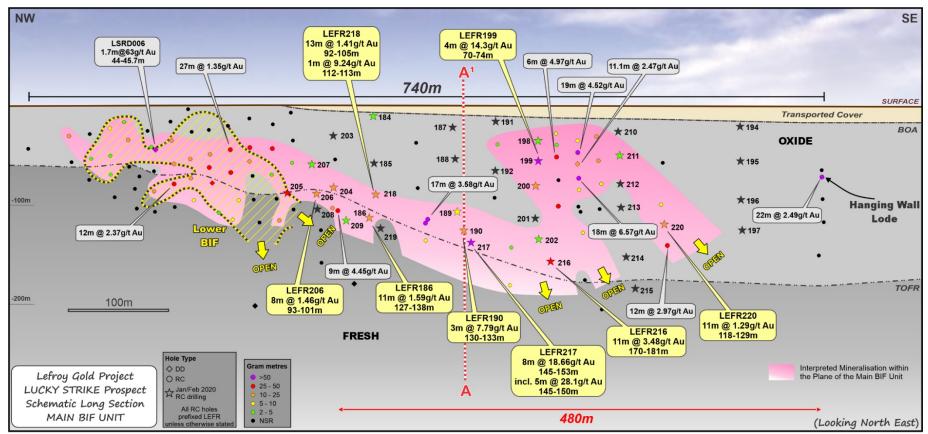
- Drilling has defined mineralisation over a 740m strike length
- Gold mineralisation hosted by multiple banded iron formation units (BIF)
- Results from RC and diamond drilling reinforce south-east plunging lodes that are open
- Significant oxide results include 8m @18.6g/t Au from 145m* and 18m @ 6.57g/t Au from 68m

^{*}Reference LEX - ASX release 26 February 2020.

Eastern Lefroy- Lucky Strike



Gold mineralisation hosted within multiple BIF units and open at depth and down plunge



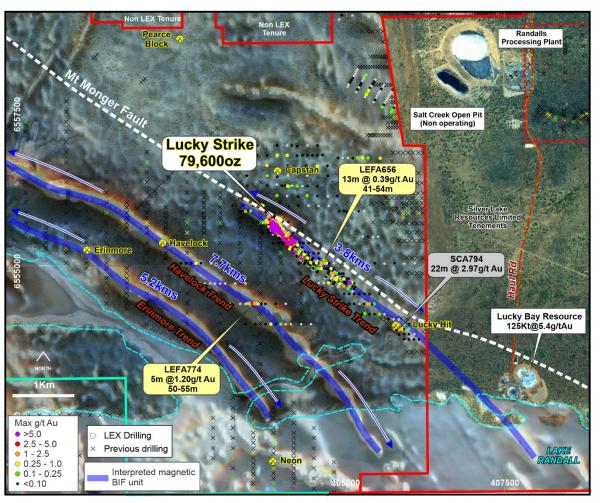
Step out RC drilling confirmed extension of the BIF host unit that now has a 740m strike length and that is oxidised to +200m from surface. Maiden Mineral Resource Estimate* of 1.27Mt @1.95g/t Au containing 79,600oz of gold. Down plunge extensions provide immediate drill targets

^{*} Reference LEX - ASX release 20 May 2020.

Lucky Strike Exploration Hub (LSEH)



Three parallel magnetic BIF units provide the opportunity for discovery of additional Lucky Strike style gold systems along BIF units that have a combined 17km of strike*

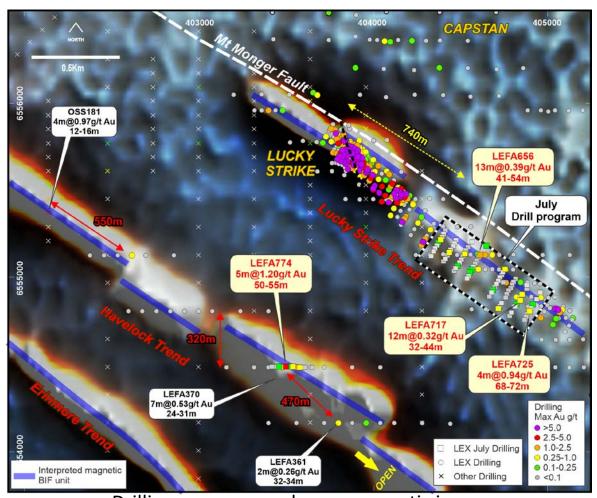


- Lucky Strike BIF trend is the most advanced, with wide spaced aircore drilling since 2017 defining a 3800m anomalous gold trend trend
- The Havelock BIF trend has strike length in excess of 7.7km and only tested by four wide spaced LEX aircore drill traverses
- Erinmore BIF trend only evaluated by previous wide spaced AC drilling
- Major campaign of AC drilling to test multiple targets along each trend commenced in November and in progress

LSEH-Havelock



Located 1.2km south of Lucky Strike –Parallel BIF unit. AC Drilling Underway

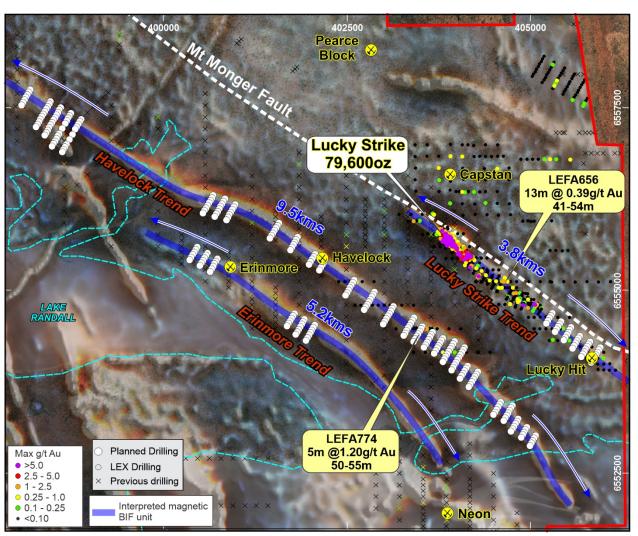


Drilling over grey scale aeromagnetic image

- The Havelock BIF trend has strike length in excess of 7.7km and only tested by four wide spaced LEX aircore drill traverses
- Prior wide spaced drill traverses by LEX
- Tenor of the AC gold anomalies are similar to early results from Lucky Strike
- Opportunity to discover another Lucky Strike BIF gold system
- Build upon 80,000oz resource at Lucky Strike

LSEH-Multiple BIF Trends





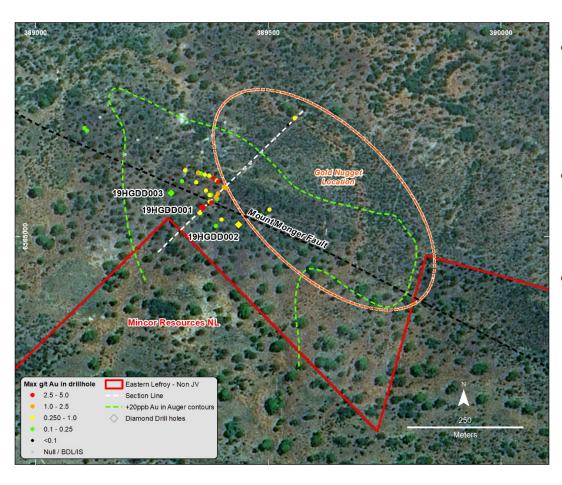
Drilling over grey scale aeromagnetic image

- Three BIFS eight targets
- Optimise target evaluation based on Lucky Strike discovery
- Havelock is most advanced with prior gold intersections: 5m @1.20g/t Au
- 286 hole AC program for estimated 15,000m of drillingnow underway
- Deliver–RC & diamond drill targets for evaluation in CY2021

Hang Glider Hill Hub



An early stage three-hole diamond drilling program completed at the Hang Glider Hill gold prospect in 2019 intersected visible gold in the first hole 19HGDD001*



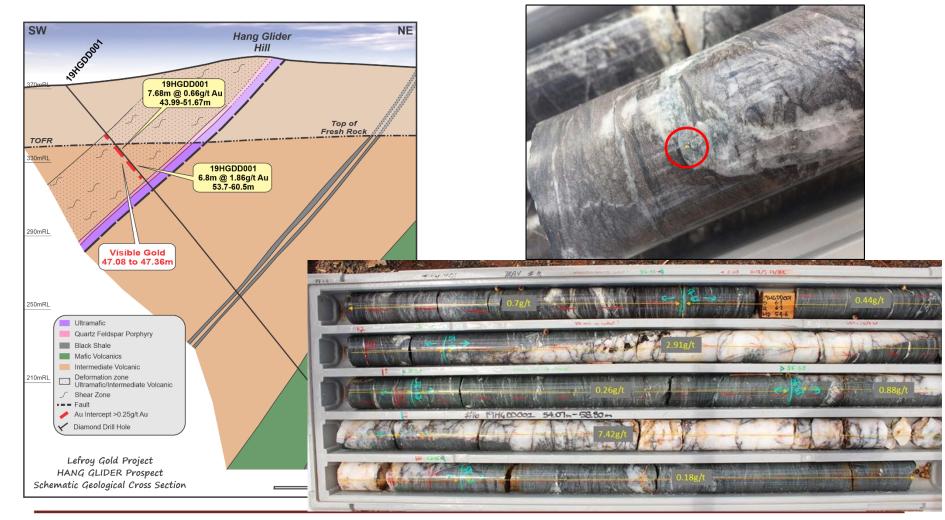
- New Gold trend proximal to the interpreted Mt Monger Fault 17km north west from Lucky Strike
- Trend defined in 2018 & 2019 from auger sampling and discovery of gold nuggets*
- Foundation aircore drilling completed in June 2020 enhanced a further 3.5km of the litho-structural trend



Hang Glider Hill



Gold mineralisation is hosted by quartz-carbonate veins that cross cut a highly deformed, flat dipping, north-westerly trending package of highly altered rocks *

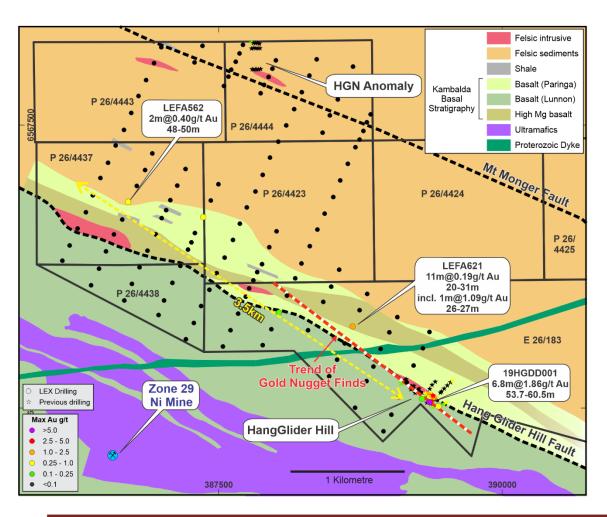


^{*} Reference LEX - ASX release 29 November 2019

Hang Glider Hill



Enhanced gold prospectivity of the target area that has highlighted a 3.5km corridor adjacent to the Hang Glider Hill fault to focus additional exploration *



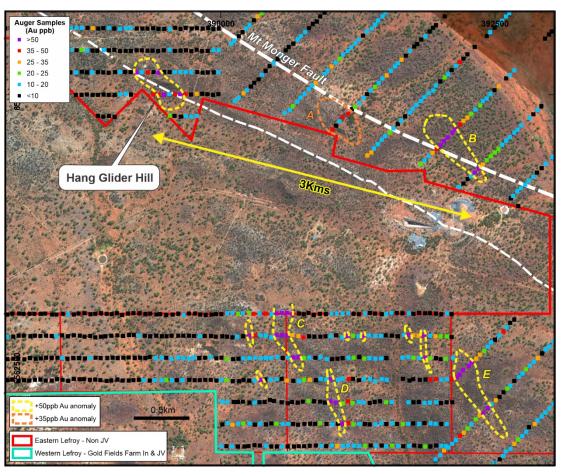
- Subtle gold and elevated levels of typical orogenic gold system pathfinder elements occur along the interpreted position of the Hang Glider Hill Fault
- Best intersection from wide spaced AC drilling in 2020 of 11m @ 0.19g/t Au from 20m including 1m @ 1.09g/t Au from 26m in LEFA621
- CY2021 program to include infill AC drill across the fault as well as focused diamond drilling.

^{*} Reference LEX - ASX release 1 September 2020

Hang Glider Hill Hub



A large auger program completed in 2020 has identified five new strong surface gold anomalies near to the Hang Glider Hill prospect *



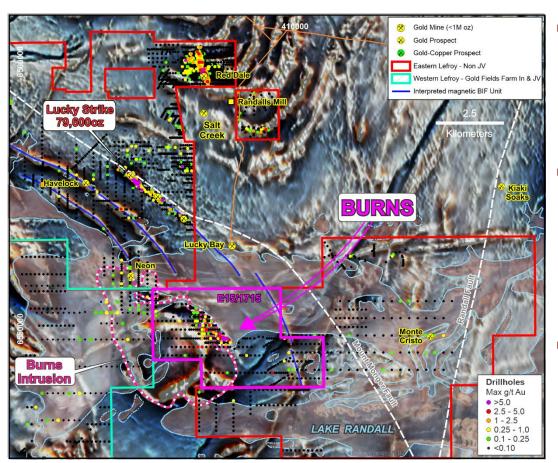
- Three key gold anomalies with a north-south trend with results >50ppb Au are located 2.5km to the south of Hang Glider Hill
- These highlight the potential for a new mineralised structural setting and are high priority targets for initial aircore drill testing
- Two gold anomalies are located south east along strike of Hang Glider Hill and support the developing trend adjacent to the Hang Glider Hill Fault

The anomalies add five new priority drill ready targets to the portfolio-testing Q3 FY2021

Lake Randall Hub



Recently granted Burns tenement covers 20km² to secure a prime land position that now outlines a major contiguous Company landholding covering 40km's of the Mt Monger fault, stretching from Lake Randall to Hang Glider hill *



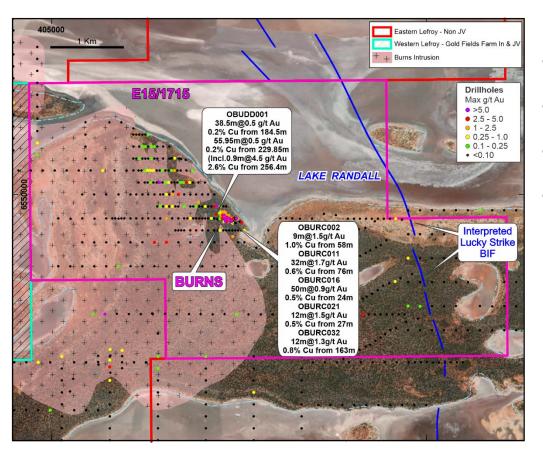
- The tenement covers the Burns copper-gold prospect and the extension of the BIF that hosts the Lucky Strike gold trend
- Burns was discovered in 2011, with drilling intersecting broad zones of gold and copper mineralisation in magnetite biotite altered basalt and felsic intrusive rocks
- Burns lies on the eastern margin of a large interpreted multiphase felsic intrusion, the majority of which is held by the Company

plan of granted tenement E15/1715, the Burns prospect, extent of the Burns Intrusion on a grey scale aeromagnetic image

Lake Randall Hub-Burns Cu-Au



The intrusion has only been partially explored by shallow aircore drilling and is considered a priority exploration target in CY 2021 for an intrusion related copper gold system*



plan of granted tenement E15/1715, the Burns prospect, prior drilling and the extent of the Burns Intrusion relative to Lake Randall

- Significant results from prior RC and diamond drilling at Burns include:
- 50m @ 0.9g/t Au & 0.5% Cu from 24m in OBURC16
- 32m @1.7g/ Au & 0.6% Cu from 76m in OBURC011
- 12m @1.5g/t Au & 0.5% Cu from 27m in OBURC021
- 38.5m @ 0.5g/t Au & 0.2% Cu from 184.5m and 55m @ 0.5g/t Au & 0.2% Cu from 229.85m in OBUDD001 Including 0.9m @4.5g/t Au & 2.6% Cu from 256.4m
- Heritage survey completed in November 2020
- RC and Diamond drilling scheduled for Q3 2021 to evaluate the intrusion and the Burns Prospect

Lefroy Exploration

Western Lefroy-Gold Fields JV

Key Terms –Farm-in and Joint Venture with Gold Fields*

 Gold Fields can earn up to a 70% interest in the western tenement package, by spending up to \$25 million on exploration within 6 years from commencement of the Agreement

Stage 1 farm-in requirements:

- Gold Fields sole funds \$10 million within 3 years to earn a 51% joint venture interest
- This includes a minimum commitment of \$4 million within 2 years before Gold Fields can elect to withdraw from the Agreement which has been met

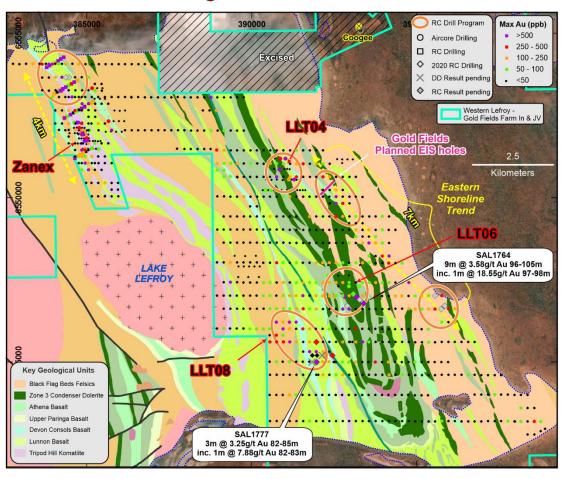
Stage 2 farm-in requirements:

- If Gold Fields satisfies the Stage 1 Farm-in requirements, it has the option to elect to sole fund a further \$15 million of expenditure within a total of 6 years from commencement of the Agreement to earn an additional 19% interest (taking its total interest in the JV to 70%)
- Gold Fields will manage all exploration activities during the farm-in period
- If Gold Fields elects to process its share of gold ore through its St Ives Mill, LEX has 'tag
 along' rights to also receive processing services at St Ives on commercial terms

Western Lefroy- Gold Fields Farm-in & JV



Foundation drilling and geophysical surveys completed in 2019 have reinforced and enhanced multiple gold trends at Zanex, LLT04, LLT06 and generated new large regolith gold anomalies at Eastern Shoreline and LLT08*

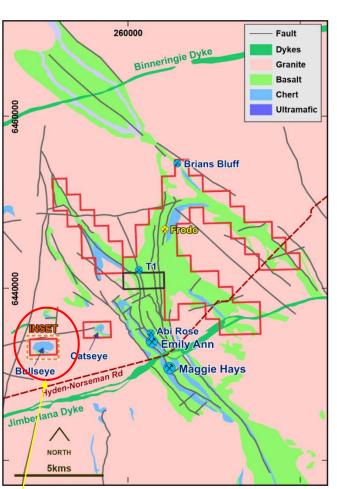


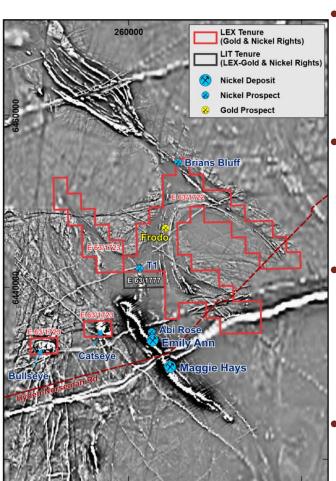
- Multi-target 9000m RC and diamond drill program commenced in July 2020
- Interpretation of foundation datasets stablished a package of rocks similar to that at the +10Moz St Ives gold mine, 15km to the west
- Significant initial RC drill results include*:
 9m @3.58g/t Au in SAL1764
 3m @3.25g/t Au in SAL1777
- Current drill program is ongoing and part of a AUD6million exploration effort to meet JV expenditure commitment

Lake Johnston Ni Project



A large tenement holding located approximately 5km north of the Emily Anne/Maggie Hayes nickel mine owned by Poseidon Nickel Limited (ASX:POS)





Bullseye—18m @0.46% Ni in regolith-Magnetic Anomaly-possible Mafic Intrusion

- The Abi Rose Ni discovery is located immediately north of the Emily Anne Mine
- Abi Rose interpreted by POS as a magmatic Ni-Cu type emplacement model (mafic intrusion related)*
- Lefroy has interpreted a gravity anomaly at Mt Day interpreted to represent a large buried mafic intrusion *
- Bullseye prospect is interpreted to represent a mafic intrusion to be drill tested in December 2020

FY2021 – Exploration Work Plan



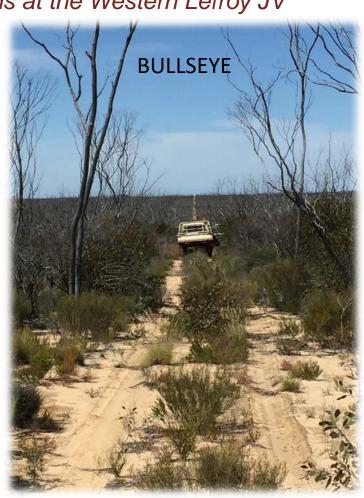
Exploration by Lefroy in FY2021 is committed to aircore drilling of multiple early stage gold prospects to deliver RC and diamond drill targets, complemented by continued focused diamond drilling by Gold Fields at the Western Lefroy JV

Priority exploration now underway AC Drilling along the BIF trends near Lucky Strike evaluating multiple targets to deliver regolith gold anomalies for RC and diamond drill to build upon the Lucky Strike resource

Drill Ready exploration

- Advance the Hang Glider Hill exploration Hub to deliver a new RC targets through evaluation of the 5 strong surface auger anomalies
- RC and Diamond drilling at the Burns Cu-Au Prospect and evaluation of the felsic intrusion

Enhancing the discovery pipeline.... fill the prospect pipeline by generative early stage drilling at targets that include, Lake Randall, Erinmore, Neon and nickel targets at Carnilya South and Lake Johnston (Bullseye)



Company Summary



- ✓ The Company has a large, highly prospective gold tenement package near Kalgoorlie, which complements its other nickel tenement package at Lake Johnston in Western Australia
- ✓ Focused on and committed to the discovery of a new high value gold deposits at the Lefroy Gold Project
- ✓ The Farm-in and JV Agreement with Gold Fields underpins and funds the exploration of the Western Lefroy tenement package
- ✓ Strong commitment to generative exploration and discovery, demonstrated by early stage drill success at Lucky Strike to deliver a resource and additional exploration opportunities.
- ✓ Strong target generation ability that continues to enhance the portfolio and fill the target pipeline with Au, Cu and Ni targets
- ✓ The proximity of the Eastern Lefroy area to four nearby gold processing facilities potentially allows for optionality the commercialisation of smaller gold discoveries
- ✓ Tight capital structure means that the share price is leveraged to exploration success.



THANK YOU

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Competent Person Statement



Notes Specific-ASX Announcements Investor Presentation

The following announcements were lodged with the ASX (including supporting JORC Reporting Tables) and details for each of the sections noted in this Presentation and can be found in the announcements. Note that these announcements are not the only announcements released to the ASX since the last presentation dated 2 December 2019 but specific to exploration reporting. The Company confirms that it is not aware of any new information or data that materially affects the information previously reported.

- Outstanding Results Reinforce Lucky Strike Potential: 26 February 2020
- Auger Drilling Extends the Hang Glider Hill Trend: 16 April 2020
- Maiden Lucky Strike Resource Estimate: 20 May 2020
- Large Gold Anomalies Confirmed At the Western Lefroy JV: 29 June 2020
- Multiple Gold Trends Confirmed From Eastern Lefroy: 1 September 2020
- Tenement Granted over Burns Au-Cu Prospect: 16 September 2020
- 2020 Annual Report: 30 September 2020
- Multiple New Surface Gold Anomalies at Mt Monger: 5 October 2020
- Exploration Update-Significant Gold Intersected in Lake Lefroy: 12 October 2020
- Exploration Update-Major Exploration Campaign Underway: 23 November 2020

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 Johnson 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.

LEX JORC Resource Statement



Table 1 Lefroy Exploration Limited -Summary of Gold Mineral Resources (at a 0.5g/t Au cutoff grade)

Mineral Resource Estimate by class - 0.5g/t Au reporting cut-off										
Deposit	sit Indicated			Inferred		Total Resource				
	Mt	Au (g/t)	Oz	Mt	Au (g/t)	Oz	Mt	Au (g/t)	Oz	
Red Dale	0.64	1.21	24,660	0.03	0.60	570	0.67	1.18	25,230	
Lucky Strike	0.70	1.93	43,400	0.57	1.97	36,200	1.27	1.95	79,600	
TOTAL	1.34	1.58	68,060	0.6	1.90	36,770	1.94	1.71	104,830	

Table 1 taken from LEX 2020 Annual Report dated 29 September 2020

Confirmation

The Red Dale deposit is situated within the Company's Lefroy Gold Project located approximately 60km to the south east of Kalgoorlie, Western Australia. The resource is situated wholly within the Company's granted Mining lease M25/362. The Company engaged Resource Evaluation Services in 2020 to compile the Resource. The Company announced the Resource to the ASX on 3 June 2020 and reported in accordance with JORC 2012. The Company confirms there has been no exploration activity, including resource compilation at the Red Dale Deposit since 3 June 2020 that would alter the Resource Statement.

The Lucky Strike deposit is situated within the Company's Lefroy Gold Project located approximately 50km to the south east of Kalgoorlie, Western Australia. The resource is situated wholly within the Company's granted Mining lease M25/366. The Company engaged Resource Evaluation Services in 2020 to complete the Mineral Resource estimate. The Company announced the Resource to the ASX on 20 May 2020 and reported in accordance with JORC 2012. The Company confirms there has been no exploration activity, including resource compilation at the Lucky Strike Deposit since 3 June 2020 that would alter the Resource Statement