

Annual General
Meeting Presentation
December 2021

2 December 2021W JohnsonManaging Director



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2021 Company Summary

- Lefroy Exploration Limited (LEX or Lefroy) controls a major tenement portfolio in three project areas in Western Australia, with more than 637km² 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 operation.
- In early 2021 drilling by Lefroy at Burns intersected an outstanding gold copper interval of 38m at 7.63g/t Au and 0.56% Cu from 134m down-hole, including: 27m at 10.1g/t Au and 0.74% Cu from 141m in the Eastern Porphyry. The Burns system is open, with further drilling underway to expand the footprint of the intrusion related system.
- At Eastern Lefroy, early stage aircore drilling at Coogee South prospect outlined the Catalina and Bronte gold anomalies that are open, and with further drilling planned to extend both.
- At Western Lefroy, JV partner Gold Fields elected to progress to Stage 2 of the Farm In and have commenced massive land based Full Field Air Core drill program.
- LEX has a small tightly capital structure means that is leveraged to exploration success.

2021 Project Portfolio

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 and emerging areas of Western Australia
- Lefroy Project: flagship gold project in excess of 638km² of contiguous wholly owned tenements, within 50km of Kalgoorlie
- Lake Johnston Project: 198km² of granted tenure prospective for nickel and gold located immediately north of the Emily Anne nickel mine held by Poseidon Nickel Limited (ASX: POS
- Glenayle Project: commanding 2738km² first mover recent land acquisition in the Proterozoic Salvation Basin considered prospective for Ni sulphide mineralisation

Systematic, generative exploration targeting high-value gold and copper-gold deposits and delivering discoveries

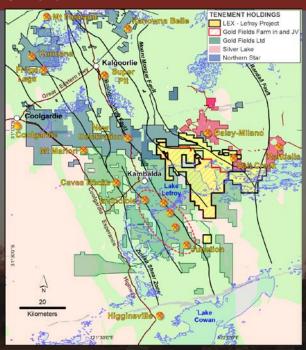
The flagship Lefroy Gold Project, 50km south-east of Kalgoorlie, comprises two primary packages:

- Eastern Lefroy (266km²): Burns, Red Dale and greenfield discoveries at Lucky Strike, Hang Glider Hill and Havelock
 - Recent exploration success at Burns following the Au-Cu discovery
 - Discovery and definition of the 80koz Lucky Strike gold deposit*
- Western Lefroy (372km²): underpinned by \$25 million Farm-in and JV with Gold Fields
 - Adjacent to Gold Fields' +10 million ounce St Ives gold operation
 - Multiple greenfield targets generated through foundation aircore drilling in 2019 on Lake Lefroy
 - Gold Fields recently elected to Stage 2 commitment of \$15million to earn additional 19%

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

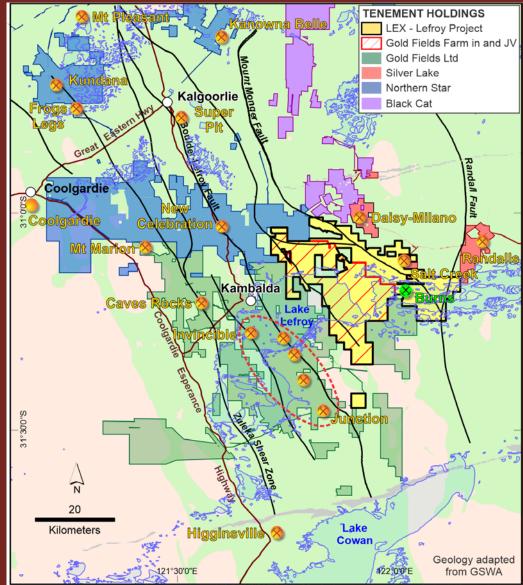
MAJOR SHAREHOLDERS	SHARES	%
Gold Fields	21.6m	15.7
Michael Davies	14.8m	10.8
Other Directors	10.7m	7.8

	CORPORATE STRUCTURE							
	Issued capital	137.3m shares						
E. C.	Options on issue	0						
	Cash (Post November placement)	~\$6.5m (no debt)						
	Market capitalisation	36c/share: ~\$49.4M						
	Top 20	~69%						
	Board ownership	~18.6%						



Lefroy Gold Project-District Context

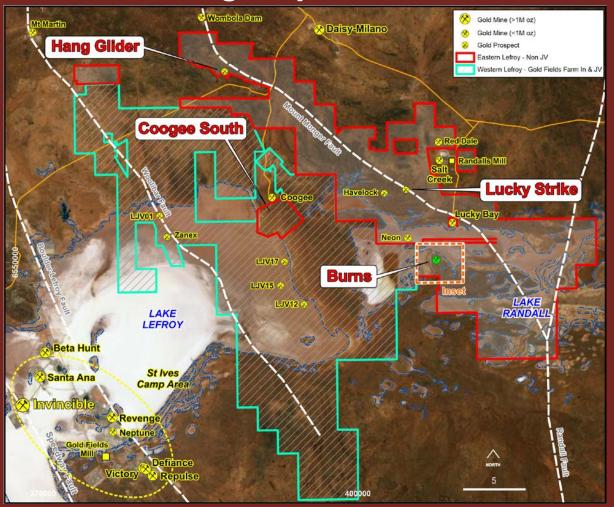
Flagship project in a highly gold endowed gold district of the Eastern Goldfields



- Discovering new gold systems in a commanding wholly owned large land package within world-class gold producing district
- Project area bounded by major regional structures that control gold mineralisation in the district
- Adjoins Gold Fields St Ives Gold 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 Resources Limited Mt Monger Operations
- Strategically located near five operating gold mills that have a combined milling capacity of 8.4mtpa provides commercial options

The Burns Cu-Au Discovery

Focussed on a new style of high grade gold-copper mineralisation within a tier one gold province



LAND & EXPLORATION FOCUS

- Commanding wholly owned large prospective land package within world-class gold producing district- 638km²
- Generative exploration approach underpinned and complemented by Farm In & JV with Gold Fields at Western Lefroy
- Eastern Lefroy-Portfolio of targets over a 32km strike length straddling the regional scale Mt Monger Fault
- Aggressive ground monitoring secured the Burns tenement in late 2019 that was granted in Q3 2020

Burns & Lake Randall



Discovery RC hole February 2021

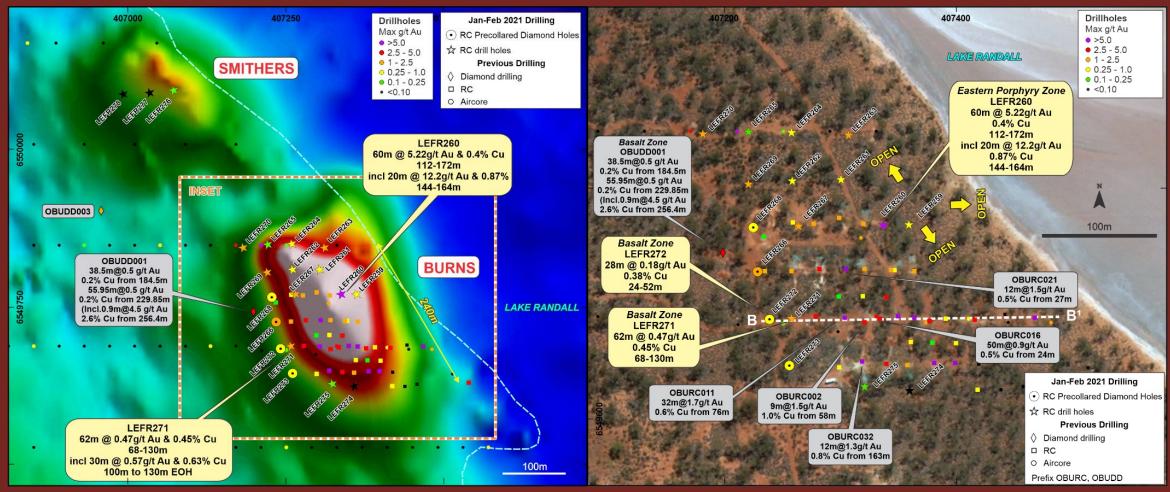
Primary exploration focus throughout 2021

Initial baseline exploration at Burns more recently progressed to expand the footprint of the intrusion related system

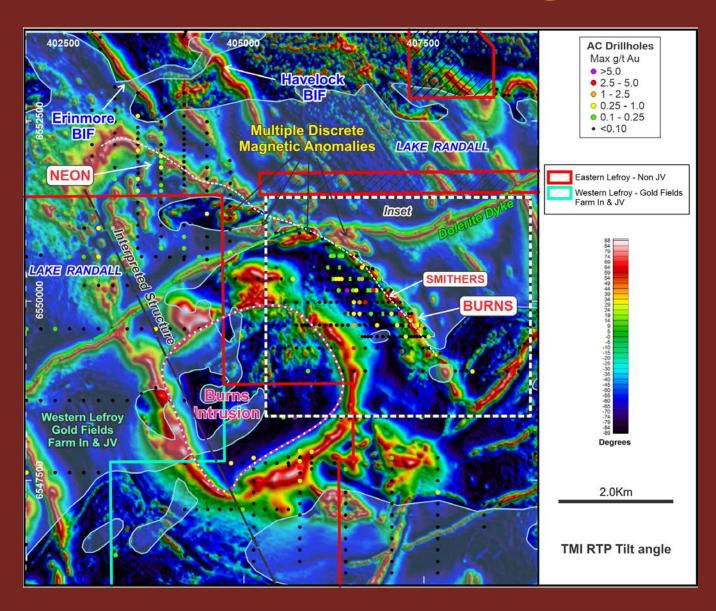
Aircore drilling currently underway testing multiple targets including Kennys Dream within Lake Randall

Burns - Phase 1 - Discovery Program

A 22-hole combined RC and diamond drill program was completed in Jan-Feb 2021 principally targeting the northern and down dip extensions to the Burns system outlined by the previous explorer. Two holes (LEFR259 & 260) evaluated the eastern side of the magnetic anomaly *



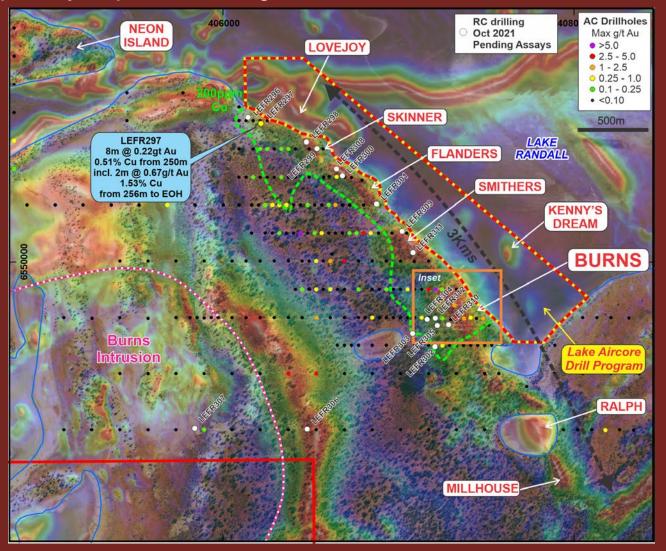
Burns Tenement & Magnetics



- Detailed 25m line spaced aeromagnetic survey completed in August 2021*
- The Burns Au-Cu-Ag prospect has a distinctive, positive, aerial magnetic signature due to strong magnetite alteration of the porphyry and basalt rocks that host the mineralisation
- Results from the survey refined and improved knowledge of the magnetic signature of the rock sequence beneath Lake Randall and its adjacent shoreline
- Six new magnetic anomalies with signatures similar to Burns were detected by the survey. The anomalies define a corridor of dioritic intrusions, each of which is considered prospective for mineralisation.

Burns Tenement

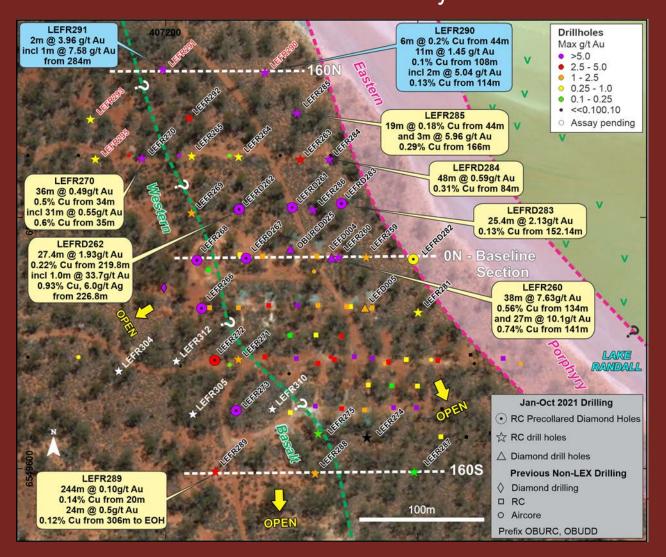
The intrusion has only been partially explored by shallow aircore drilling and is considered a priority exploration target in FY 2022 for an intrusion related copper gold system*

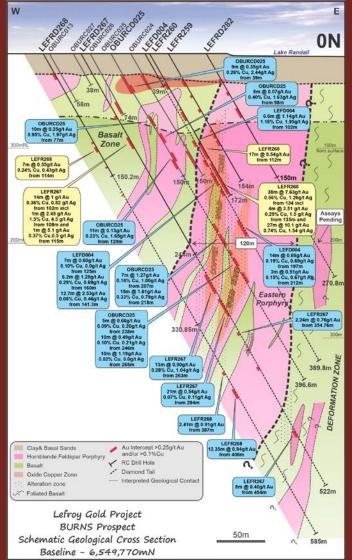


- The detailed aeromagnetic survey has enhanced the quality of the imagery
- Multiple magnetic anomalies now recognised along a 3000m corridor coincident with a +200ppm Cu anomaly
- A Stage 1 17 RC hole drill program was recently completed as a proof-ofconcept evaluation of each anomaly-Onshore-results pending
- Results to date-One hole on the edge of the Lovejoy anomaly, intersected altered diorite host rocks and ended in 1.5% copper mineralisation*
- Stage 2 aircore drilling program is underway in Lake Randall-offshore

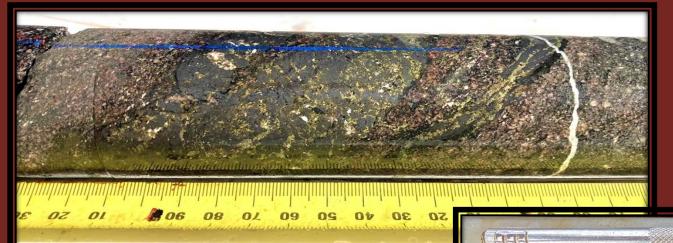
Burns – Phase 2 -Baseline Program

A 5 -hole diamond drill program evaluated the Eastern Porphyry on the Baseline drill section to follow up and characterise the intersection in LEFR260. Four additional diamond holes drilled on the adjacent 40N and 40S sections.





Burns – Unique mineral assemblage



OBURCD025- 222.35m-222.8m diorite porphyry with a magnetite vein & chalcopyrite. (1.5g/t Au & 0.55% Cu)

OBURCD025 -231.37m-231.6m diorite
porphyry- blebby
chalcopyrite (4.61g/t Au
& 1.1% Cu)



LEFRD267 interval 301 – 301.3m showing chalcopyrite in association with a gypsum magnesite vein in basalt. (9.92g/t Au and 2.3% Cu). Gypsum vein contains visible gold.

Burns- A unique mineral system



- Varying mineralisation styles and porphyry host point to a large, multistage, intrusion related mineral system at Burns defined over an area of 200m eastwest and 300m north-south and growing
- Detailed aeromagnetic survey to recently completed has refined and generated new targets and out onto Lake Randall
- Interrogation of baseline geochemical data has provided key pathfinder element associations to assist drill data from wider step out drilling.
- Collaborative geological research effort underway with University of WA and GSWA
- Baseline data to demonstrate the scale of the Burns system and enhance the prospectivity of the regional land package
- Geophysical data support interpretation that Burns is part of a much larger mineral system (5km corridor?)

Burns Next Steps

Expand the footprint of the Burns system to deliver multiple new Au-Cu RC drill targets

- Await ~3000 samples from 16 RC holes that evaluated onshore targets over a 2km strike
- Interrogate gold and whole rock geochemical data from baseline section-vectors
- Continue to Interpret results from detailed aeromagnetic and gravity surveys to refine and rank targets



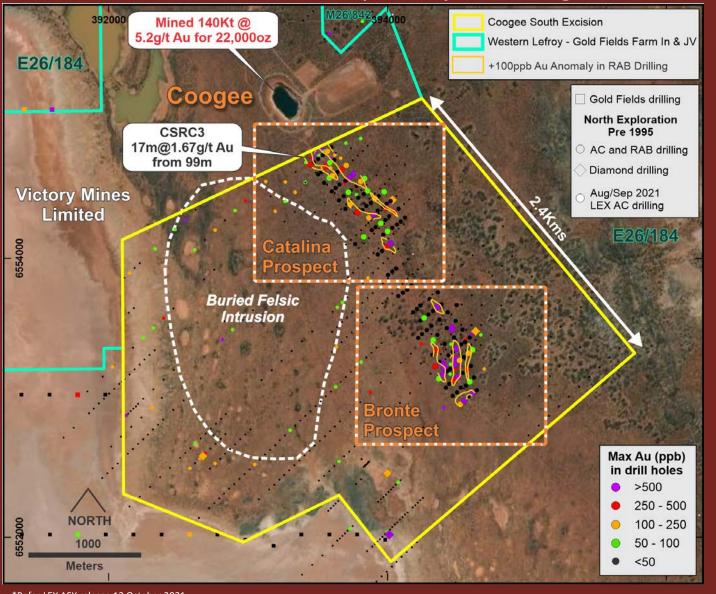
- Multiple targets to be evaluated
- Lovejoy is the priority
- Further refinement of geophysical targets
 Onshore and Offshore





Complemented by Coogee South

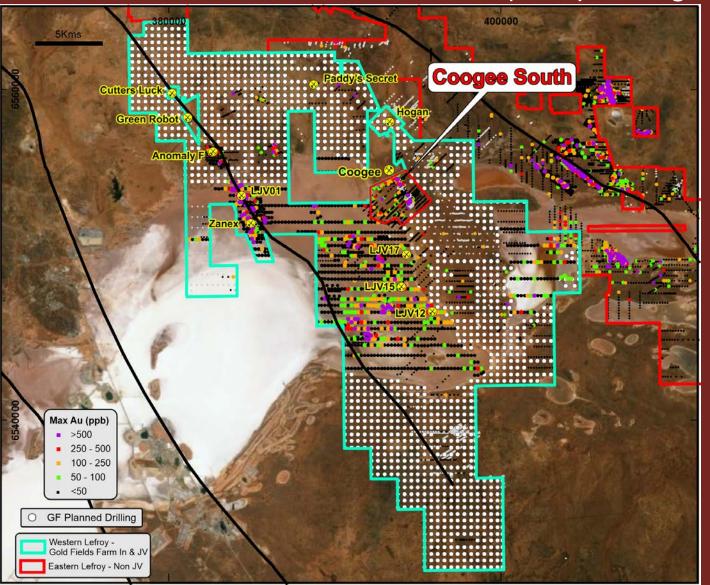
Nominated the priority drill target in the LEX 2016 Prospectus



- Area excised from Western Lefroy
 Farm-In and JV in June 2021*
- Located immediately south of the high grade Coogee open pit mined in 2014
- Maiden 136-hole AC drilling program completed in September evaluating a 1500m corridor
- The results successfully generated two new broad gold anomalies known as Catalina and Bronte which are both open.
- Follow up AC planned to extend the limits of the system due to commence shortly

And then Gold Fields activity at Western Lefroy

Massive Full Field Air Core (FFAC) Drilling Program Underway



- 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*
- Estimated 46,000m program
- The 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
- First results expected in January

CY 2022-Exploration Work Plan

Exploration by Lefroy in CY2022 is committed to discovery at the Burns prospect through additional RC and diamond drilling, supported by aircore drilling of early stage gold prospects to deliver new RC targets into the pipeline, complemented by the FFAC drilling by Gold Fields at the Western Lefroy JV

Priority exploration now underway

AC drilling evaluating multiple targets in Lake Randall to expand the limits of the Burns system & accelerate RC and Diamond exploration onshore at Burns

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
- AC, RC and diamond drilling at Coogee South to expand and enhance the Bronte and Catalina anomalies

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



THANK YOU

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Small dedicated passionate team

Strong commitment to generative exploration and discovery, demonstrated by early-stage drill success at Lucky Strike and more recently at Burns.



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 9 December 2020 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.

- Drilling Underway at Burns Au-Cu Prospect: 12 January 2021
- Drilling Update-Native copper Intersected at Burns Prospect: 2 February 2021
- Outstanding High-Grade Gold and Copper Mineralisation Intersected at Burns: 23 February 2020
- New Basalt Hosted Gold-Copper Zone Supports Large Burns Mineral System: 9 March 2021
- Exploration Update-Drilling Extends Porphyry at Burns: 26 March 2021
- Diamond Drilling Underway at the Burns Cu-Au Prospect: 21 April 2021
- Resampling of RC holes at Burns confirms and better defines recent Copper Gold intersections: 27 April 2021
- Drill Results Extend Copper Gold Zones at Burns: 29 April 2021
- Multiple Intervals of Altered Porphyry Intersected at Burns: 3 May 2021
- Burns Success Continues-55m vertical depth extension and more strong mineralisation established: 13 May 2021
- Burns Continues to Grow-deeper-wider and a new zone: 25 May 2021
- Burns Drilling Update-first hole on 40N section confirms significant mineralisation extends to the north: 18 June 2021
- Exploration Update-RC drilling commences at the Burns Cu Au prospect: 20 July 2021
- Burns Update-Cu-Au mineralisation confirmed on ON section, step out drilling extends system: 2 August 2021
- Exploration Update-Advancing the Burns and Coogee South Prospects: 18 August 2021
- Coogee South -Aircore Drilling Underway: 30 August 2021
- Results from 40N section Further Enhance Burns Cu-Au System: 21 September 2021
- Multiple Magnetic Anomalies Highlight 3000m Trend at Burns: 28 September 2021
- Drill Testing of Multiple Magnetic Targets Underway at Burns: 5 October 2021
- Burns Update-Drill Results continue to support larger Cu-Au-Ag system: 3 November 2021
- Coogee South Update-Aircore Drilling Outlines Two Geochemical Gold Anomalies: 4 November 2021

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

LEX JORC Resource Statement

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

Mineral Resource Estimate by class - 0.5g/t Au reporting cut-off											
Deposit	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