ASX Announcement
29 January 2021

Lefroy Exploration

December 2020 Quarterly Activities Report

LEFROY EXPLORATION LIMITED
Western Australian Focused Gold Explorer

ASX Code: LEX

Shares on Issue:
120M

Current Share Price:
19.0c

Market Capitalisation:
$22.8M

Board of Directors
Chairman
Gordon Galt

Non-Executive Directors
Michael Davies
Geoffrey Pigott

Managing Director
Wade Johnson

Flagship Exploration Project
Lefroy Gold Project
- Eastern Lefroy
- Western Lefroy JV

Growth Exploration Project
Lake Johnston Project

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Highlights

Exploration during the quarter included drilling programs evaluating multiple target areas at Eastern Lefroy and JV partner, Gold Fields, undertook diamond drilling in Lake Lefroy. A maiden drilling program was also completed at Lake Johnston.

At Eastern Lefroy, a 127-aircore drill hole program evaluated multiple targets along the Lucky Strike and Havelock Banded Iron Formation (BIF) trends. Assay results are pending. Outcomes include:

- **At Havelock, which is 1500m south west of the Lucky Strike resource, hole LEFR 898 ended in near fresh, sulphide altered BIF, which is a known host to higher-grade gold mineralisation at Lucky Strike**
- **The sulphidic BIF further enhances the potential for discoveries along both the Havelock trend and the untested, parallel Erinmore BIF trend, which is a further 900m to the south of Havelock**

At the Western Lefroy JV with Gold Fields, results from a multi target aircore, RC and diamond drill hole program continued to reinforce and advance the understanding of the geological prospectivity beneath Lake Lefroy. Highlights included:

- **5m @ 1.73g/t Au from 95m in KD81795 at target LJV01, which is to the north end of the Zanex trend**
- **Wide spaced aircore drilling on the Eastern shore of Lake Lefroy has identified a new gold anomaly named LJV017**

At Lake Johnston, a maiden 22-hole aircore drill program was completed at the Bullseye nickel target. Drilling intersected ultramafic intrusive rocks supporting the geological model. Results are pending.

The Company raising $4.5million from an oversubscribed share placement in October 2020.

INTRODUCTION

The Board of Lefroy Exploration Limited (ASX: LEX) ("Lefroy" or "the Company") is pleased to provide its report on exploration activities and progress made during the December 2020 Quarter. Lefroy is an exploration company taking a systematic generative exploration approach at its flagship Lefroy Gold Project (Lefroy Project or LGP) to discover high-value gold and or gold-copper deposits.

The Lefroy Gold Project is wholly owned by the Company and located approximately 50km to the south east of Kalgoorlie in the Eastern Goldfields Province of Western Australia (Figure 1). The commanding, semi-contiguous, granted land package covers 621km^2 immediately east of and adjoining the world class +10Moz St Ives Gold camp, operated by Gold Fields Limited (NYSE: GFI) ("Gold Fields"), and is immediately south of the high-grade Mt Monger gold centre operated by Silver Lake Resources Limited (ASX:SLR). Four gold processing operations are strategically located within 50km of the project and provide commercial options for processing any gold resources discovered.

The LGP is referenced in two packages i.e.

- Eastern Lefroy covering 249km^2 of wholly owned tenements (Figure 1) including Lucky Strike, Red Dale, Hang Glider Hill, Havelock, Burns and other sub-projects along or near the regional scale Mt Monger fault, and

- Western Lefroy JV (WLJV) tenements (Figure 1) covering 372km^2 adjoining the Gold Fields tenements that make up the St Ives mining operation. These tenements are included in the Joint Venture agreement with Gold Fields. Gold Fields can earn up to a 70% interest in the LEX tenements by spending up to a total of $25million on exploration activities within 6 years of the commencement date, 7June 2018.

The key focus of exploration by the Company in Eastern Lefroy during the quarter was at the Lucky Strike exploration hub located within the Non-JV Eastern Lefroy sub project (Figure 1).

This involved a 127-hole aircore (AC) drill program for a total of 7495m completed by the Company in November/December 2020. The program evaluated multiple early stage and conceptual targets at the Lucky Strike exploration hub. This was a follow up aircore drill program to that completed earlier in the 2020 year (LEX ASX release 3 August 2020). These generative early-stage geochemical exploration programs are designed to highlight gold anomalies for follow up RC drill testing and fill the discovery pipeline.

In July 2020, Gold Fields commenced a 9000m reverse circulation (RC) and diamond drill program to evaluate five key targets generated in Lake Lefroy on the Western Lefroy JV (refer LEX ASX release 27 July 2020). That program was ongoing in the December 2020 quarter with 802m of RC and 3,002m of diamond drilling completed. A further 4,077m of aircore drilling was also undertaken to complete the foundation aircore drill coverage in Lake Lefroy.

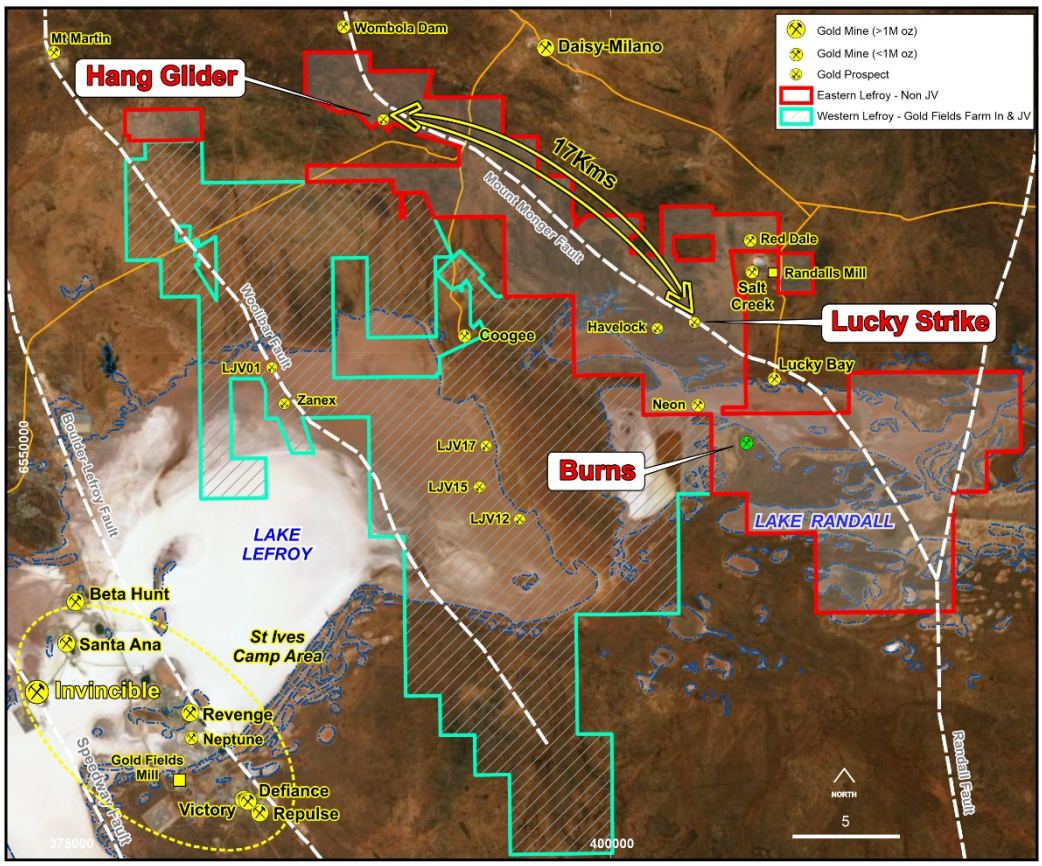


Figure 1 Lefroy Gold Project showing Eastern and Western Lefroy and the location of Lucky Strike, Hang Glider Hill and the Burns gold copper prospect where drilling is underway.

EXPLORATION ACTIVITIES

Eastern Lefroy Gold Project (LEX 100%)

The Eastern Lefroy project is a semi contiguous package of wholly owned tenements that cover approximately 30km of strike along and straddling the regional scale Mt Monger Fault (Figure 1). The Mt Monger Fault is considered to be structurally analogous to other major regional faults in the Kalgoorlie terrain (e.g. Boulder Lefroy, Zuleika, Randall) that are a likely a primary control to gold mineralisation. The Company considers the Mt Monger Fault to be similarly prospective for large gold deposits, but the area lacks the same degree of exploration.

The Company has identified three priority centres or hubs along the Mt Monger Fault trend where greenfields exploration for gold is being focused (Figure 1). These hubs are ranked according to the level of prior exploration activity, gold anomalies identified and the structural setting.

P1- Lucky Strike Exploration Hub: - Advanced Exploration

P2-Hang Glider Hill Exploration Hub: -Reconnaissance Exploration

P3-Lake Randall Exploration Hub: -Generative Exploration

During the December 2020 Quarter the Company maintained its activities to focus on evaluating multiple early-stage generative targets at the priority Lucky Strike hub with AC drilling along the BIF trends near to the Lucky Strike resource.

Lucky Strike Exploration Hub

The Lucky Strike Exploration Hub is centered on the Lucky Strike deposit (refer LEX ASX release 20 May 2020) and envelopes the nearby gold prospects identified by the Company at Red Dale, Havelock, Neon and the Lucky Strike trend (Figure 2). Gold mineralisation at Lucky Strike is hosted within multiple north west trending Banded Iron Formation (BIF) units interbedded with shale. Lucky Strike is hosted within a gold mineralised trend over a 3800m strike length, defined from AC drilling (Figure 2). Higher grade mineralized zones at Lucky Strike are associated with sulphide (pyrite, pyrrhotite) altered BIF.

A 127-hole AC program for a total of 7495m was completed by the Company in November/December 2020 along the Havelock and Lucky Strike BIF trends (Figure 3). The program aimed to evaluate multiple generative targets (refer LEX ASX release 23 November 2020) at the Havelock-Lucky Strike-Erinmore BIF trends to the south and along strike of the Lucky Strike gold deposit (Figure 2).

The conceptual targets were generated from interpretation of aeromagnetic data that highlights the iron rich magnetic BIF units (Figure 2). Zones of dislocation, flexures and demagnetisation along each of the trends, combined with results from previous wide spaced drilling were selected for initial air core drilling. The partially completed drill program evaluated two of 5 targets along the 9.5km Havelock BIF trend, and a 1000m corridor along the Lucky Strike BIF centred on the Lucky Hit prospect.

A nominal 160m line spacing with angled holes spaced at 40m centres along each line was completed at each of the target areas.

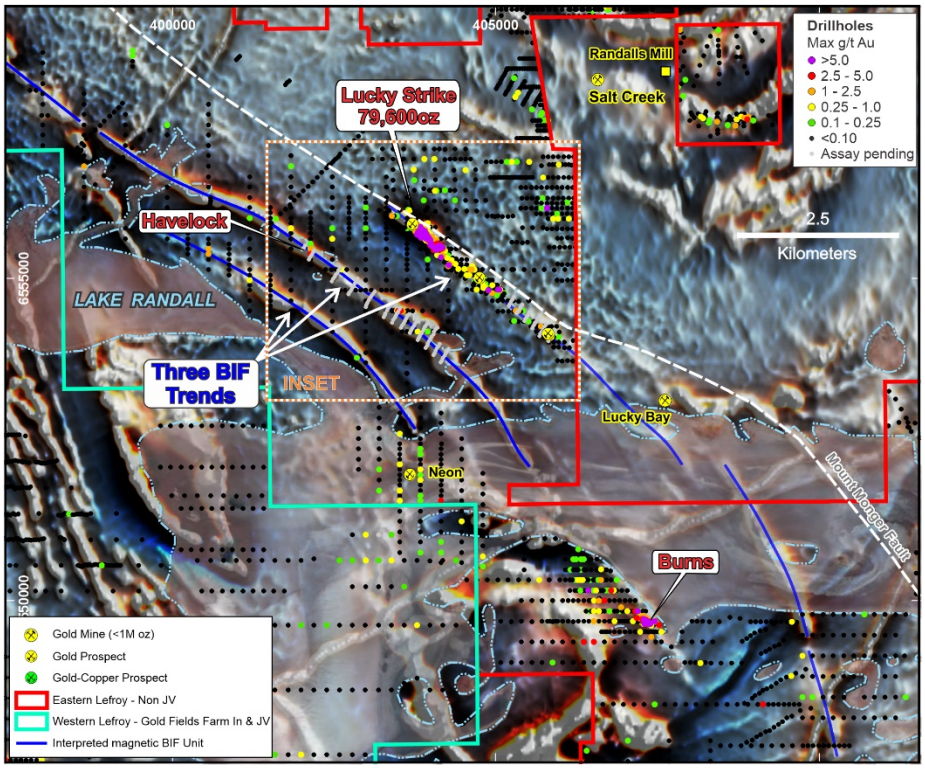


Figure 2 Lucky Strike exploration hub showing the multiple interpreted BIF trends (blue shade) and prospects on greyscale regional aeromagnetic imagery and max Au ppm in drill holes**.** Holes drilled in the Nov-Dec AC program are shown as assay pending

Havelock

The Havelock prospect is located approximately 1.2km south west of Lucky Strike (Figure 2&3). The target was generated in 2018 from the Company's assessment of regional aeromagnetic imagery which highlights a linear magnetic unit which was confirmed by AC drilling as BIF (Figure 2).

A single traverse of AC drill holes completed in July 2020 at 20m spacing intercepted strong quartz veining and highly oxidised BIF similar to the host rocks at Lucky Strike. **The best result was 5m @ 1.2g/t Au from 50m in hole LEFA774** (Figure 2 & 3).

The recent drilling evaluated two target areas along a 2.7km corridor centered over the interpreted Havelock BIF (Figure 3). A total of 92 angled holes for 4735m were completed with holes spaced at 40m centres along drill traverses nominally 160m apart with several broader 320m spaced traverses. The average hole depth was 51m.

Assay results are pending though the drill geology provides confirmation of an oxidised BIF unit along the trend. Importantly Hole LEFA 898 terminated in mineralised, near fresh, sulphide (pyrite) altered BIF that is open down dip. At the nearby Lucky Strike deposit, the sulphide altered BIF is host to the high-grade gold mineralisation and supports the Company's view that the new Havelock discovery to be a similar style gold system

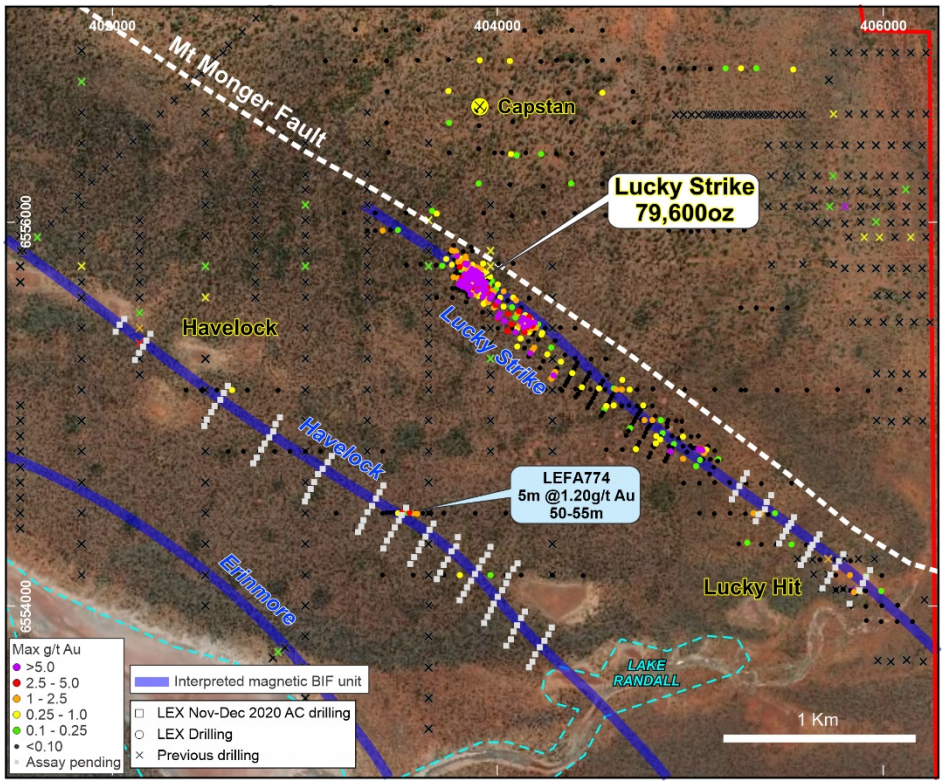


Figure 3 Lucky Strike -Havelock showing the multiple interpreted BIF trends (blue shade) and prospects with max Au ppm in drill holes. Nov Dec 2020 drill program along the Lucky Strike and Havelock BIF trends shown as grey squares

Lucky Strike

The November/December 2020 AC program evaluated a 900m corridor at the south eastern end of the Lucky Strike trend (Figure 2 & 3) which totaled 35 holes for 2760m. The drilling was completed on a regular 160m line spacing with angled holes at 40m centers. The average hole depth was 81m reflecting the deeper cover and depth of oxidation than observed at Havelock. The close spaced drill program aimed to target the deeply oxidised meta-sedimentary package in search of the BIF which is the primary host for gold mineralisation at the Lucky Strike deposit.

The AC drilling discovered multiple highly oxidised (weathered) BIF's within the meta-sedimentary package establishing continuity of the host geology a further 700m along strike, under ~10-15m of transported cover. This provides confidence the deeply weathered BIF package continues a further 400m to the South-East toward the tenement boundary. The total length of the Lucky Strike BIF trend is 3.8km within the Company's tenure. The Company interprets the Lucky Strike BIF and host structure extends to the south east and under Lake Randall to the Burns tenure (Figure 2)

Assay results are pending though the geology provides confirmation that the host rock geology and the mineralized structural trend are present and helps support the Company's interpretation that more systems analogous to the Lucky Strike resource can be discovered along the Lucky Strike BIF trend.

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

The Western Lefroy tenement package being farmed into by Gold Fields covers Lake Lefroy and the surrounding area. The package comprises 372km^2 of the total 621km^2 of the Lefroy Gold Project and is adjacent to Gold Fields' +10 million-ounce St Ives Gold operation (Figure 1).

Gold Fields commenced a 9000m reverse circulation (RC) drill program in July 2020 to evaluate five key targets generated in Lake Lefroy (refer LEX ASX release 27 July 2020). Each target area (Figure 4) was initially planned to be evaluated by one or more traverses of angled deep reverse circulation (RC) or diamond holes (+200m) to gain a greater appreciation of the primary (fresh) bedrock.

During the December 2020 Quarter, 127 combined AC, RC and diamond drill holes were completed totaling 7891m on the Western Lefroy JV(WLJV) (Table 1). Four target key areas were evaluated with wide spaced traverses of RC and or diamond drilling. Aircore drilling was completed near to and along strike of the eastern shoreline (Figure 4) to complete the foundation drilling.

Table 1 Western Lefroy JV Drill Physicals December Quarter 2020

	Completed RC		Completed DD		Completed AC	
SIGM Target	Holes	m	Holes	m	Holes	m
LJV01	4	802	0	0	0	0
LJV06	0	0	3	910.7	0	0
LJV09	0	0	4	1,254.4	0	0
LJV10	0	0	0	0	0	0
LJV12	0	0	2	837.1	0	0
LEX JV FFAC	0	0	0	0	114	4,077
Total	**4**	**802**	**9**	**3,002.2**	**114**	**4,077**

A validated drill database export holes was provided to the Company by Gold Fields on 15 January 2021. The export and results are as of 1 January 2021. Final drill results for several aircore drilled during the quarter are pending.

The key outcome of the quarterly drill program was the identification of a primary gold intersection at target LJV01 1800m north of Zanex (Figure 4 & 5). The intersection in RC hole KD81795 is along the contacts of a hematite and pyrite altered felsic intrusion along a dolerite-basalt contact which is open. RC drill holes to the west on the same drill traverse intersected transported Au in basal gravels and sandy clays in a tributary to the main Lefroy palaeochannel located further south. Significant gold intersections (Table2) from the RC/Diamond drilling include:

- **5m @ 1.73g/t Au from 95m in KD81795**
- **8m @ 0.67g/t Au from 41m in KD81798**
- **5m @1.94g/t Au from 39m in KD81800**

The gold mineralisation in KD81798 and KD81800 is within transported sand and gravels at or near the palaeochannel-in situ (Bedrock) interface.

An aircore drilling program commenced in October 2020 to evaluate untested areas near to or along strike of the Eastern Shoreline trend. The results of that 114-hole program identified a new target LJV017 (Figure 4) to the north of target LJV12 in a package of multiple NNW striking dolerite and basalt sills in a sequence of felsic volcanics and volcaniclastic rocks. Significant results (Table 2) from that program include:

- **2m @ 0.33g/t Au from 30m in SAL1843**
- **2m @ 0.27g/t Au from 20m in SAL1797**
- **4m @ 0.53g/t Au from 30m in SAL1870**
- **2m @ 0.44g/t Au from 44m in SAL1870**

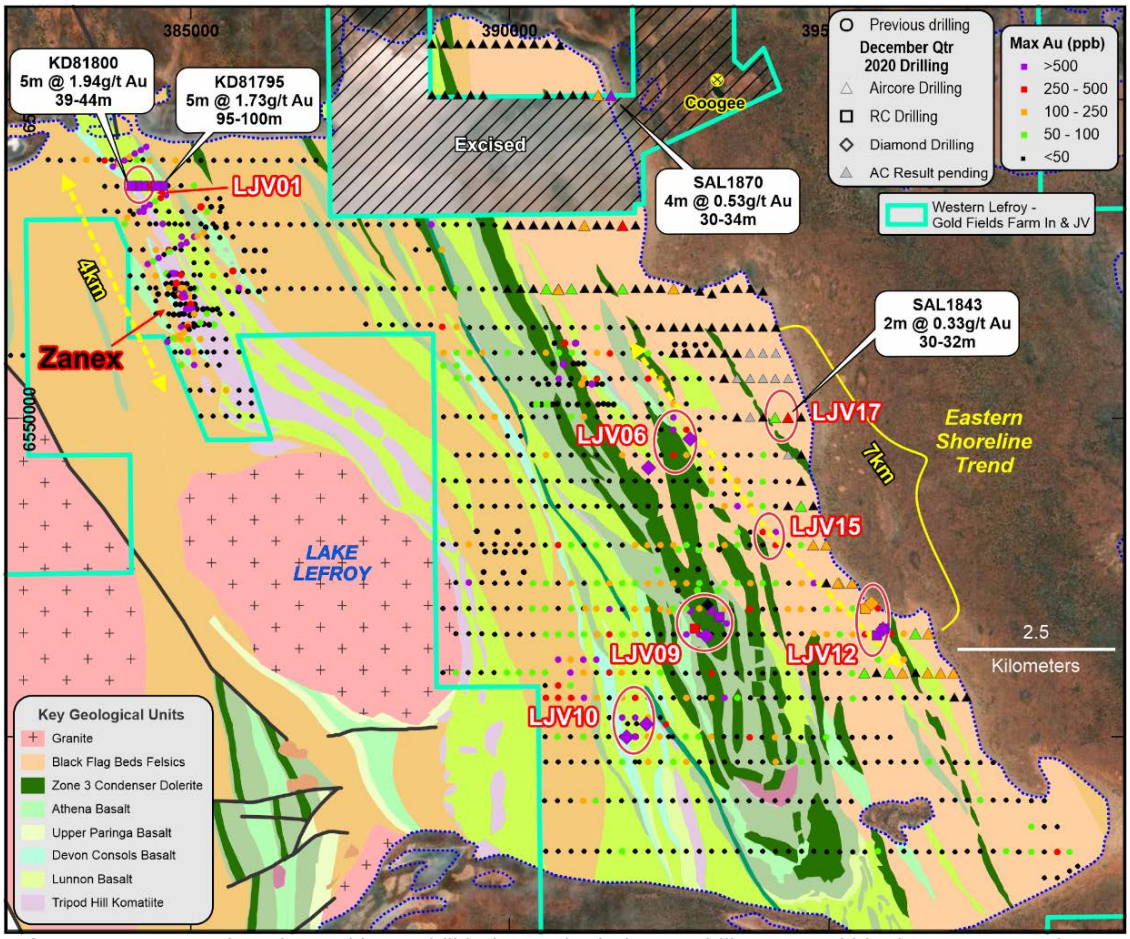


Figure 4 Interpreted geology with AC drill holes and priority RC drill targets within the Western Lefroy JV in Lake Lefroy. The validated holes from the December 2020 quarter campaign are highlighted with significant results.

Subsequent to the end of the December 2020 Quarter, Gold Fields reported that $1,096,091 was spent in the December 2020 Quarter and the total JV exploration expenditure of $6.2million had been incurred since JV commencement to 30 December 2020. Gold Fields are required to fund an additional $3.8million for AFY2021 to meet the Stage 1 earn in commitment to sole fund $10million to earn a 51% interest in the joint venture by 7 June 2021.

Next Steps

A diamond drill program is scheduled to commence in late January to evaluate the LJV01 and LJV15 target. At LJV01 a single 400m diamond hole is planned to follow up the intersection in KD81795

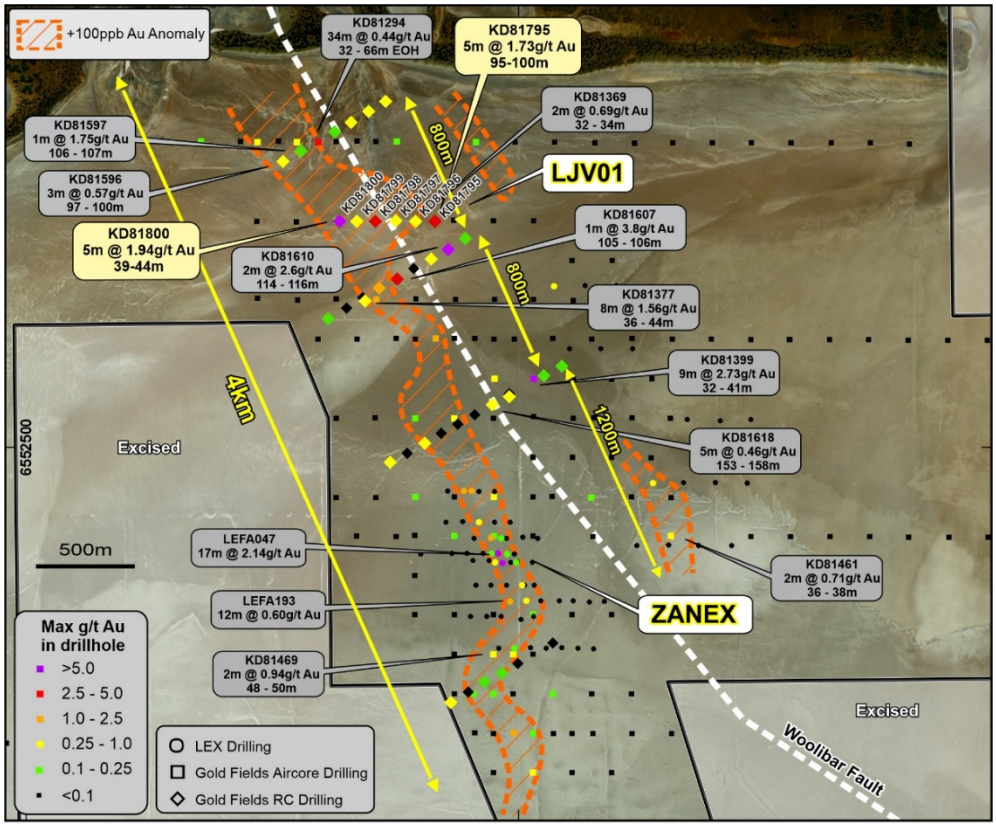


Figure 5 Zanex trend and LJV01 target drill hole plan. The validated holes from the December 2020 quarter campaign are highlighted with significant results

Lake Johnston Project (Gold and Nickel), Lefroy 100% of Gold and Nickel Rights

The Lake Johnston Project is located 120km west of Norseman in Western Australia and comprises two granted exploration licenses (E63/1722 & 1723) held under title by Lefroy and one granted exploration license (E63/1777) held by Lithium Australia NL (ASX:LIT). These holdings form a cohesive package in excess of 300km^2 over the Lake Johnston Greenstone Belt.

During the Quarter, the Company completed a 22 hole/695m aircore drill program as an initial evaluation of the Bullseye nickel target (refer LEX ASX release 15 December 2020). Bullseye is characterised by a distinctive 2.5km wide ovoid shaped high amplitude aeromagnetic feature interpreted by the Company to represent a mafic or ultramafic intrusion.

A single traverse of wide spaced rotary air blast (RAB) drilling in 1997 on the southern margin of Bullseye reported promising shallow nickel intersections that includes 18m at 0.46% Ni from 20m in hole RTRB16 including 4m at 0.58% Ni from 24m.

The December 2020 aircore drill program was completed on two preexisting drill lines to determine the underlying basement geology. The drilling intersected localised serpentinised cumulate textured ultramafic rocks that supports the Company's interpretation that the Bullseye magnetic anomaly is an ultramafic intrusive body and advances the prospectivity for Ni mineralisation.

Assay results are pending but based on the rocks observed in the drilling the Company lodged an exploration license (E63/2073) to cover the ground immediate to the east and south.

EXPLORATION OUTLOOK

Eastern Lefroy (100% LEX, Non-JV)

The Company will continue to actively progress field-based exploration in the March 2021 Quarter on the Non-JV Eastern Lefroy package. Subsequent to the end of the Quarter the Company commenced a major 5000m RC and diamond drill program at the Burns gold copper prospect which is ongoing and expected to be completed in February.

Follow up drilling at Havelock and Lucky Strike will be considered after receipt and assessment of the pending AC drill results, and prioritised with outcomes from the Burns drill program.

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

Gold Fields will recommence diamond drilling at multiple targets in Lake Lefroy as noted in this announcement.

Lake Johnston (Lefroy 100% of Gold and Nickel Rights)

The Company will consider the next phase of exploration at Bullseye after receipt and interpretation of the pending drill results.

CORPORATE

During the December 2020 Quarter the Company's total outgoings on its operating activities was $0.86 million, of which $0.62 million was attributed to direct exploration expenditure as noted in this report.

As at 30 December 2020 the Company had cash reserves of $4.1 million.

During the December 2020 Quarter payments totalling $115,000 were paid to related parties of the Company and their associates for Director fees and consulting services (refer to section 6 of the December 2020 Quarterly cash flow report for further detail). The consulting services relate to assistance provided relating to optimising commercial value from Lake Johnston and Lucky Strike as noted in this report.

On 22 October 2020, the Company advised that it had completed a A$4.5 million (before issue costs) significantly oversubscribed placement to institutional and sophisticated investors (LEX ASX release 22 October 2020).

The Company held its 2020 Annual General Meeting on 9 December 2020 (refer LEX ASX releases 9 December 2020).

This announcement has been authorised for release by the Board of Lefroy Exploration Limited.

Wade Johnson
Managing Director

Lefroy Exploration

Table 2 December Quarter 2020 Drill Results -Lefroy Gold Project-Western Lefroy

Drill hole intersections tabulated below are calculated with a 0.25g/t Au lower cut with a maximum of 2m internal dilution for the entire drill program. Samples are routinely collected as 1m intervals. **Significant (>1g/t Au intervals) intersections are shown in bold.**

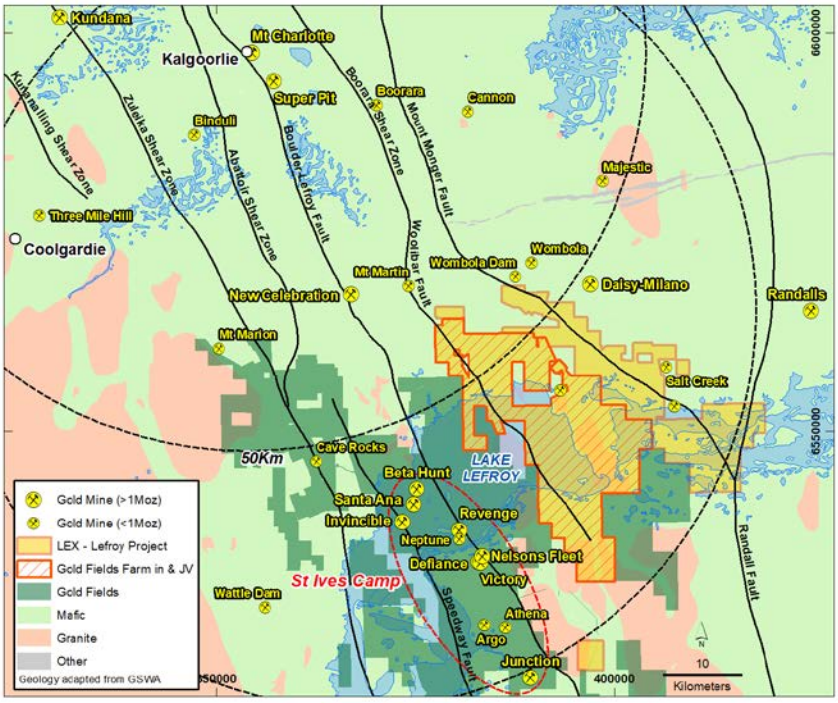
Hole ID	Collar N (MGA)	Collar E (MGA)	Collar RL	Hole Depth (m)	Dip	Azimuth	Depth From (m)	Depth To (m)	Downhole Intersection (m)	Au Value (g/t)	Hole Type
KD81795	6553650	384577.4	288.6	216	-60	272	**95**	**100**	**5**	**1.73**	RC
including							**97**	**98**	**1**	**4.15**	RC
KD81796	6553652	384479.1	289.03	222	-60	263	35	36	1	0.56	RC
also							165	166	1	0.47	RC
KD81797	6553652	384377.6	288.91	204	-60	273	68	69	1	0.31	RC
KD81798	6553652	384273.6	288.9	206	-56	271	33	36	3	0.27	RC
also							41	49	8	0.67	RC
including							45	46	1	3.57	RC
KD81799	6553650	384179.3	288.85	200	-61	267	41	46	5	0.23	RC
KD81800	6553650	384092	288.93	204	-61	270	**39**	**44**	**5**	**1.94**	RC
including							**39**	**40**	**1**	**7.75**	RC
also							195	196	1	0.64	RC
SAL1764B	6546912	393284.7	288.78	200	-80	319	86	87	1	0.61	RC
SAL1769	6546730	392905.4	288.58	174	-80	317	84	86	2	0.42	RC
SAL1781A	6546733	395867	290.53	180	-80	230	90	94	4	0.50	RC
SAL1783	6546627	395753.7	290.12	180	-60	270	28	29	1	0.51	RC
SAL1786	6549692	392825.7	289.26	429	-59	240	55.7	56.7	1	0.52	DD
SAL1788	6549250	392177.7	288.75	452.7	-59	236	340	341	1	0.45	DD
also							**355**	**356**	**1**	**1.17**	DD
SAL1789	6545031	391840	288.18	525.8	-59	90	**197**	**198**	**1**	**2.28**	DD
SAL1790	6545234	392147.5	288.41	395.6	-59	270	351	352	1	1.32	DD
SAL1791	6546608	393082.5	288.62	239.8	-59	315	129.7	130.9	1.2	0.63	DD
also							**134**	**135**	**1**	**6.38**	DD
SAL1797	6553037	391780	290	22	-90	0	**20**	**22**	**2**	**0.27**	AC
SAL1843	6550029	394374	290	43	-90	0	30	32	2	0.33	AC
SAL1870	6555075	391600	290	46	-90	0	30	34	4	0.53	AC
also							44	46	2	0.44	AC
SAL1873	6546717	395844.9	290.82	420	-59	225	211.8	212.8	1	0.63	DD

Drill Type
AC-aircore
RC—reverse circulation
DD-diamond drilling

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 621km^2 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, Gold Fields St Ives Gold Camp near Lake Lefroy, and major gold deposits.

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 by the Company but specific to exploration completed during the December Quarter 2020 and reported in this announcement.

- Lefroy Exploration Limited Prospectus: 8 September 2016
- Multiple Gold Trends Confirmed from Eastern Lefroy: 1 September 2020
- Tenement Granted over Burns Au-Cu Prospect: 16 September 2020
- Multiple New Surface Gold Anomalies at Mt Monger: 5 October 2020
- Exploration Update-Significant Gold Intersected in Lake Lefroy: 12 October 2020
- September 2020 Quarterly Activities Report: 29 October 2020
- Exploration Update-Major Exploration Campaign Underway: 23 November 2020
- Drilling Underway at Bullseye Nickel Target: 15 December 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 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.

Lefroy Exploration

LEFROY EXPLORATION LTD TENEMENT SCHEDULE 31 December 2020				
Project	**Tenement ID**	**Ten status**	**Holder**	**Interest %**
Lefroy	E26/0183	Live	MONGER EXPLORATION PTY LTD	100[1]
Lefroy	E26/0184	Live	HOGANS RESOURCES PTY LTD	100[1]
Lefroy	E 26/0131	Live	HOGANS RESOURCES PTY LTD	100[1]
Lefroy	E 26/0134	Live	HOGANS RESOURCES PTY LTD	100[1]
Lefroy	E 26/0150	Live	HOGANS RESOURCES PTY LTD	100[1]
Lefroy	P 26/3764	Live	HOGANS RESOURCES PTY LTD	100[1]
Lefroy	P 26/3765	Live	HOGANS RESOURCES PTY LTD	100[1]
Lefroy	P26/3889	Live	HOGANS RESOURCES PTY LTD	100[1]
Lefroy	P26/3890	Live	HOGANS RESOURCES PTY LTD	100[1]
Lefroy	P26/3891	Live	HOGANS RESOURCES PTY LTD	100[1]
Lefroy	E 25/0517	Live	MONGER EXPLORATION PTY LTD	100[1]
Lefroy	E26/0182	Live	MONGER EXPLORATION PTY LTD	100
Lefroy	E15/1447	Live	HOGANS RESOURCES PTY LTD	100[1]
Lefroy	P25/2316	Live	MONGER EXPLORATION PTY LTD	100[1]
Lefroy	P25/2317	Live	MONGER EXPLORATION PTY LTD	100[1]
Lefroy	E25/0518	Live	MONGER EXPLORATION PTY LTD	100[1]
Lefroy	E15/1497	Live	MONGER EXPLORATION PTY LTD	100[1]
Lefroy	E15/1498	Live	MONGER EXPLORATION PTY LTD	100[1]
Lefroy	E26/0193	Live	HOGANS RESOURCES PTY LTD	100[1]
Lefroy	P25/2421	Live	MONGER EXPLORATION PTY LTD	100[1]
Lefroy	P25/2451	Live	MONGER EXPLORATION PTY LTD	100[1]
Lefroy	P25/2488	Live	MONGER EXPLORATION PTY LTD	100[1]
Lefroy	P26/4287	Live	MONGER EXPLORATION PTY LTD	100[1]
Lefroy	M25/362	Live	MONGER EXPLORATION PTY LTD	100[1]
Lefroy	M25/363	Live	MONGER EXPLORATION PTY LTD	100
Lefroy	M26/842	Live	HOGANS RESOURCES PTY LTD	100[1]
Lefroy	E15/1615	Live	HOGANS RESOURCES PTY LTD	100[1]
Lefroy	P26/4391	Live	MONGER EXPLORATION PTY LTD	100[1]
Lefroy	P26/4392	Live	MONGER EXPLORATION PTY LTD	100[1]
Lefroy	P26/4393	Live	MONGER EXPLORATION PTY LTD	100[1]
Lefroy	P26/4394	Live	MONGER EXPLORATION PTY LTD	100[1]
Lefroy	P26/4423	Live	MONGER EXPLORATION PTY LTD	100[1]
Lefroy	P26/4424	Live	MONGER EXPLORATION PTY LTD	100[1]
Lefroy	P26/4425	Live	MONGER EXPLORATION PTY LTD	100[1]
Lefroy	P26/4437	Live	MONGER EXPLORATION PTY LTD	100[1]
Lefroy	P26/4438	Live	MONGER EXPLORATION PTY LTD	100[1]
Lefroy	P26/4443	Live	MONGER EXPLORATION PTY LTD	100[1]
Lefroy	P26/4444	Live	MONGER EXPLORATION PTY LTD	100[1]

LEFROY EXPLORATION LTD TENEMENT SCHEDULE 31 December 2020 cont.				
Project	**Tenement ID**	**Ten status**	**Holder**	**Interest %**
Lake Johnston	E63/1722	Live	LEFROY EXPLORATION LTD	100[2]
Lake Johnston	E63/1723	Live	LEFROY EXPLORATION LTD	100[2]
Lefroy	M25/366	Live	HOGANS RESOURCES PTY LTD	100[1]
Lefroy	E26/176	Live	MONGER EXPLORATION PTY LTD	100[1]
Lefroy	E26/195	Live	MONGER EXPLORATION PTY LTD	100[1]
Lefroy	M26/850	Pending	HOGANS RESOURCES PTY LTD	100[1]
Lefroy	M26/851	Pending	HOGANS RESOURCES PTY LTD	100[1]
Lefroy	E15/1715	Live	MONGER EXPLORATION PTY LTD	100[1]
Lefroy	E25/587	Pending	MONGER EXPLORATION PTY LTD	100[1]
Lefroy	L25/61	Pending	MONGER EXPLORATION PTY LTD	100[1]
Lefroy	L25/63	Pending	MONGER EXPLORATION PTY LTD	100[1]
Lake Johnston	E63/2073	Pending	LEFROY EXPLORATION LTD	100

Notes to accompany tenement listing

1-Hogans Resources Pty Ltd and Monger Exploration Pty Ltd are wholly owned subsidiaries of Lefroy Exploration Limited

2-E63/1722 and E63/1723- Held under title by LEX. Lithium Australia NL (ASX:LIT) have the rights to Lithium

JORC CODE, 2012 Edition-Table 1 Report –Lefroy Project – Gold Fields Western Lefroy JV – 31 December 2020

SECTION 1: SAMPLING TECHNIQUES AND DATA

Criteria	JORC Code Explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• The sampling noted in this release has been carried out by Joint Venture partner Gold Fields Limited utilising Reverse Circulation (RC) diamond and aircore (AC) drilling on Lake Lefroy, targeting potential structural corridors prospective for gold mineralisation. The RC and diamond hole spacing was nominally 200m apart on selected traverses targeting gold anomalism generated by previous aircore drill results. The aircore hole spacing was nominally 200m apart on traverses located 400m apart that has been infilled in places to 200m between lines. • Sampling and QAQC protocols as per industry best practice with further details below. • RC samples were collected from the cyclone and processed through a separate riffle splitter at 1m intervals. 1m samples were then sent to the ALS Laboratory in Kalgoorlie for analysis. Samples were dried and pulverised to produce a 50g sample for analysis by fire assay with Au determination by Atomic Absorption Spectrometry. • AC samples were collected from the cyclone at 1m intervals. Library samples were collected in calico sample bags for future detailed sampling if required. Composite 2m samples were then collected by scoop/spear to produce a bulk 2-3kg sample which was sent to the ALS Laboratory in Kalgoorlie for analysis. Samples were dried and pulverised to produce a 50g sample for analysis by fire assay with Au determination by Atomic Absorption Spectrometry.
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• The Reverse Circulation (RC), diamond and AC drilling was completed by contractor Ausdrill. High air face sampling RC hammer drilling proved satisfactory to penetrate the regolith fresh rock. Orientated NQ sized ore was used for Diamond drilling
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• The majority of the samples collected from the RC drill program were dry to moist. Drilling took place on Lake Lefroy some of the transported material (i.e. lake sediments, palaeochannel sand/gravel) contained wet sample, which can result in poor recovery. Samples below the transported material were mostly dry and good recovery, however the RC drill technique did struggle to penetrate some of the palaeochannel gravels and resulted in drill rods becoming bogged in "running sand" produced from the palaeochannel sands/gravels. Where this has occurred, recoveries were recorded and if necessary, holes were re-drilled or re-entered. • RC precollars were completed for the NQ diamond drilling

Criteria	JORC Code Explanation	Commentary
		• The majority of the samples collected from the AC drill program were dry to moist. Drilling took place on Lake Lefroy and the initial transported material (i.e. lake sediments) were wet with some muddy samples, which can result in poor recovery. Samples below the transported material were moist/dry with minor AC samples being wet at the base of the holes. Sample recovery below the base of alluvium (BOA) was considered appropriate with some samples dry with good sample recovery. • Sample recovery size and sample condition (dry, wet, moist) recorded. Recovery of samples estimated to be 20-100%, with limited recovery particularly drilling through the surficial lake clays and puggy moist transported clays. • Drilling with care (eg. clearing hole at start of rod, regular cyclone cleaning) if water encountered to reduce incidence of wet – sticky sample and cross contamination. • Insufficient sample population to determine whether relationship exists between sample recovery and grade. The quality of the sample (wet, dry, low recovery) was recorded during logging.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• Detailed logging of drill chips to record, regolith, lithology, structure, mineralisation and recoveries in each hole by an experienced geologist. • Logging carried out by sieving 1m composite sample cuttings, washing in water and the entire hole collected in plastic chip trays for future reference. • Every hole was logged for the entire length. • NQ drill core was processed and logged at the St Ives Gold Mine core processing facilty
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• Half core sampled for the NQ core drilling completed • 1m RC and diamond samples were collected in pre-numbered calico bags. Sample weight 2 - 4 kg. Samples placed in polyweave bulka-bags for despatch to assay laboratory. • The sample preparation of the RC and diamond drilling RC follows industry best practice, involving oven drying, pulverising, to produce a homogenous sub sample for analysis. • Standards and blanks were randomly inserted (approximately every 25 samples) and were included in the laboratory analysis. Standards were certified reference material. • 23% holes duplicate sampled (excluding redrilled A holes)
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory*	• RC and diamond Samples routinely analysed for gold using the 50gram Fire Assay digest method with an AAS finish at ALS (Kalgoorlie) Laboratory. • Multi-element analysis by 4 acid digest with ICP-MS/OES finish and ASD was completed on a minimum rate of 5% with placement at geologists' discretion based on lithology/alteration

Criteria	JORC Code Explanation	Commentary
	checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	• AC Samples routinely analysed for gold using the 50gram Fire Assay digest method with an AAS finish at ALS (Kalgoorlie) Laboratory. A Bottom of Hole (BOH) sample was also collected and sent to ALS (Perth) Laboratory for multi-element analysis by 4 acid digest with ICP-MS/OES finish. • No geophysical tools, spectrometers or hand held XRF instruments used. • Quality control process and internal laboratory checks demonstrate acceptable levels of accuracy. At the laboratory, regular assay repeats, lab standards, checks and blanks are analysed.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• The results have been reviewed and checked by Gold Fields and Lefroy Exploration personnel. • Capture of field logging is electronic using Toughbook hardware and Logchief software. Logged data is then exported to Gold Fields DATASHED database and validation checks completed to ensure data accuracy. Assay files are received electronically from the laboratory by the database administrators and filed to the Gold Fields server. • There has been no adjustment to the assay data. The primary Au field reported by the laboratory is the value used for plotting, interrogating and reporting.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Initial Drill hole positions were surveyed using a hand-held Garmin GPS with a horizontal (Easting Northing) accuracy of +-5m. No downhole surveys completed. • Grid System – MGA94 Zone 51. • Topographic elevation captured by DGPS. • Final RC and Diamond collar pick ups was completed by DGPS with an accuracy of +-2cm
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• Hole spacing at nominal 200m centres on east west and north-west south-east orientated drill lines, under selected gold anomalies generated by AC drilling. • No compositing has been applied to RC or diamond samples • AC samples composite nominally 2m
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• The east west and north-west south-east orientated drill traverses considered effective to evaluate the north to north-west trending geology. Drill holes are reconnaissance and are orientated appropriately to ensure unbiased sampling of the geological trends • The RC drilling is reconnaissance in nature, forming an early assessment of gold anomalism and the relationship to geological features observed in fresh rock. There has been no observed bias in the orientation of the drill holes in relationship to gold mineralisation.

Criteria	JORC Code Explanation	Commentary
		• The East West orientated AC drill traverses considered effective to evaluate the northerly-north westerly trending geology Drill holes are reconnaissance and are orientated appropriately to ensure unbiased sampling of the geological trends • The AC drilling is reconnaissance in nature, being wide spaced and the orientation of the deformed rocks intersected is yet to be confirmed.
Sample security	• *The measures taken to ensure sample security.*	• Individual composite samples were bagged in polyweave bulka-bags, collected and delivered to the ALS Laboratory in Kalgoorlie. Samples were sorted and checked for inconsistencies against submission sheet by ALS staff at the Kalgoorlie laboratory. • ALS check the samples received against the sample submission form to notify of any missing or extra samples. Following analysis, the sample pulps and residues are retained by the laboratory in a secure storage yard.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• All results of this drill program were reviewed and validated by Gold Fields Personal. No specific site audits or reviews have been conducted. A validated data export was provided to the Company on 15th January 2021. The data was reviewed by the Company Managing Director and Senior Geologist.

Section 2: REPORTING OF EXPLORATION RESULTS – LEFROY PROJECT- Gold Fields Western Lefroy JV as at 31st December 2020

Criteria	JORC Code Explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• The Lefroy Project Goldfields Western Lefroy JV is located approximately 50 km in south east from Kalgoorlie, Western Australia and consists of a contiguous package of wholly owned tenements held under title by LEX or its wholly owned subsidiary's Hogans Resources Pty Ltd. The work described in this report was undertaken on Prospecting leases P26/3889, P26/3890 and Exploration Licences 15/1447 & E26/184 held 100% by Hogans Resources Pty Ltd a 100% owned subsidiary of Lefroy Exploration Limited but operated by Goldfields St Ives Pty Ltd as part of an earn-in joint venture agreement. • The tenements are current and in good standing with the Department of Mines and Petroleum (DMP) of Western Australia.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Within Lake Lefroy and along the interpreted Woolibar Trend the key exploration in the area now known as Zanex was completed by Cyprus Gold Australia Corporation in 1997 and this drill program is well documented in a report to the Department of Mines and Petroleum WAMEX report A52840.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The Lefroy Project is located in the southern part of the Norseman Wiluna Greenstone Belt and straddles the triple junction of three crustal units, the Parker, Boorara and Bulong Domain. The Lefroy project tenements are mostly covered by alluvial, colluvial and lacustrine material with very little outcrop. The project is underlain by a folded and fault bounded sequence of Archaean rocks, and in the Woolibar trend within Lake Lefroy area being predominantly metasediments, High Mg basalt and basalt. The key structural element is the interpreted North West trending Woolibar Fault.

Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*
	  • *easting and northing of the drill hole collar*
	  • *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  • *dip and azimuth of the hole*
	  • *down hole length and interception depth*
	  • *hole length.*
	• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*
		• Table containing drill hole collar, survey, and intersection data for material (gold intersections >0.25g/t Au with 2m Max internal dilution) drill holes are included in the Table 2 in the body of the announcement.
		• No Information has been excluded.

Criteria	JORC Code Explanation	Commentary
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• There is no weighting or averaging of the reported grades. High grades have not been cut. A lower cut off of 0.25g/t Au has been used to identify significant results in Table 2. These are considered significant given the first pass reconnaissance nature of the drilling. • Where present, higher grade values are included in the intercepts table and assay values equal to or > 1.0 g/t Au. • No metal equivalent values or formulas used.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• All results are based on down-hole metres. • Given the wide spaced reconnaissance nature of the drilling the geometry of the mineralisation reported is not sufficiently known and the true width is not known
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• Appropriate summary diagrams (drill hole plan) are included in the accompanying announcement.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• Significant assay results are provided in Table 2 for the entire drill program. • Drill holes with no significant results are not reported.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• All relevant data has been included within this report.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• As noted in this Quarterly report additional diamond drilling is scheduled to commence in late January 2021.