Lefroy Exploration

Burns Update
Drill Results Continue to Support larger Cu-Au-Ag system

- **Final assay results have been received from the remaining five holes of the July 9 hole RC drill program at Burns, and from a single hole of the recent 17 RC hole Burns corridor drill program. Results continue to support a growing Cu-Au-Ag Intrusion related mineral system.**

- **The single hole result is from LEFR297 that tested the edge of Lovejoy magnetic target located beneath Lake Randall. This intersected strongly altered diorite porphyry similar to that observed at Burns 2000m to the southeast. Assay results were:**

  - **10m @ 0.21g/t Au & 0.60% Cu & 2.5g/t Ag from 218m**
    Including 2m @ 0.41g/t Au & 1.56% Cu & 5.5g/t Ag from 225m
  - **8m @ 0.22g/t Au & 0.51% Cu & 1.75g/t Ag from 250m to EOH and**
    Including 2m @ 0.67g/t Au & 1.53% Cu & 5.0g/t Ag from 256m to EOH

- **Hole LEFR297 ended in Cu-Au-Ag mineralisation on the interpreted margin of the Lovejoy anomaly and had to be abandoned at 258m due to excessive water inflows. A specialised lake drilling rig has been secured to evaluate this priority target and will commence shortly.**

- **Results for the additional 16 RC holes, which evaluated other recognised multiple magnetic anomalies along the 3000m Burns corridor, are pending. These proof-of-concept holes intersected altered diorite and basalt similar to that seen at Burns at each of the locations tested and demonstrate the larger footprint of the Intrusion related system.**

- **Results from the final five holes of the July RC drill hole program drilled at Burns support and extend the mineralisation in both the Eastern Porphyry and the Western Basalt. Better results include:**

  - **11m @ 1.45g/t Au & 0.10% Cu & 0.59g/t Ag from 108m in LEFR290 (Eastern Porphyry)**
    Including 2m @ 5.04g/t Au & 0.13% Cu & 1.0g/t Ag from 114m
  - **40m @ 0.07g/t Au & 0.14% Cu from 42m in LEFR295 (Western Basalt)**
  - **2m @ 3.96g/t Au from 284m in LEFR291**

- **Preparation for the Stage 2 offshore drilling program to assess the footprint of the greater Burns system extending beneath Lake Randall is well advanced and is due to commence shortly.**

Lefroy Exploration Managing Director, Wade Johnson commented *"We are pleased with the results from the recent RC drill programs that provide further evidence to the growing footprint of the Burns system. The single results from altered diorite from the edge of Lovejoy are exciting and we are very keen to get the lake drilling underway to further expand the system and make that breakthrough that leads to a large Cu-Au-Ag discovery"*

Lefroy Exploration

Lefroy Exploration Limited (ASX: LEX) ("Lefroy" or "the Company") is pleased to report results from two RC drill programs evaluating the Burns copper (Cu) gold (Au) prospect. Burns is within the Eastern Lefroy tenement package, which is part of the wholly owned greater Lefroy Gold Project (LGP) located 50km southeast of Kalgoorlie (Figure 1).

The Burns copper gold prospect is situated on the eastern margin of a large interpreted felsic intrusion, termed the Burns Intrusion. The intrusion does not outcrop but features a distinctive annular aeromagnetic and gravity geophysical signature (Figure 2). The Company has not yet established the association between the larger Burns intrusion and the diorite porphyry intrusions intersected at Burns but consider there is a genetic relationship between them.

Broad high-grade gold mineralisation is hosted within a newly discovered hematite-pyrite-chalcopyrite-magnetite altered diorite porphyry (refer LEX ASX release 23 February 2021) that intrudes high Mg basalt at Burns. This porphyry, termed the Eastern Porphyry, is open to the north and south. The eastern extent of the Eastern Porphyry is now defined, on multiple drill sections, by foliated basalt (footwall basalt). The copper and gold mineralisation hosted by both the diorite porphyry, basalt and massive magnetite veins is considered by the Company to be a new and unique style of Au-Cu-Ag mineralisation in the area, a land position dominated by Lefroy (Figure 1). The existence of additional mineralisation further east and north under Lake Randall is not discounted by the current drilling campaign and will be the subject of more exploration and drilling that is about to commence.

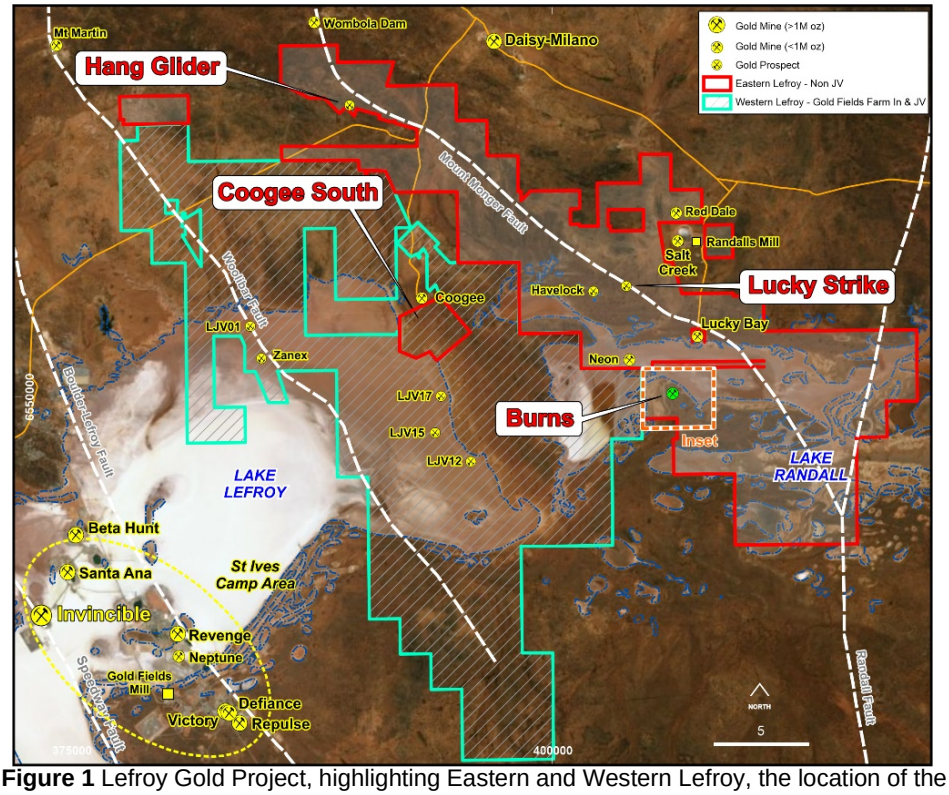

Figure 1 Lefroy Gold Project, highlighting Eastern and Western Lefroy, the location of the Burns prospect and proximity to Lucky Strike. Refer to Figure 3 for Burns drill hole plan.

RC Drill programs-background

Two RC drilling campaigns were completed at Burns during the July to October 2021 period. The July program evaluated extensions immediately peripheral to the established Burns prospect while in October a 17 hole step out program was completed evaluating multiple magnetic anomalies along a 3000m corridor north of Burns (refer Figure 2).

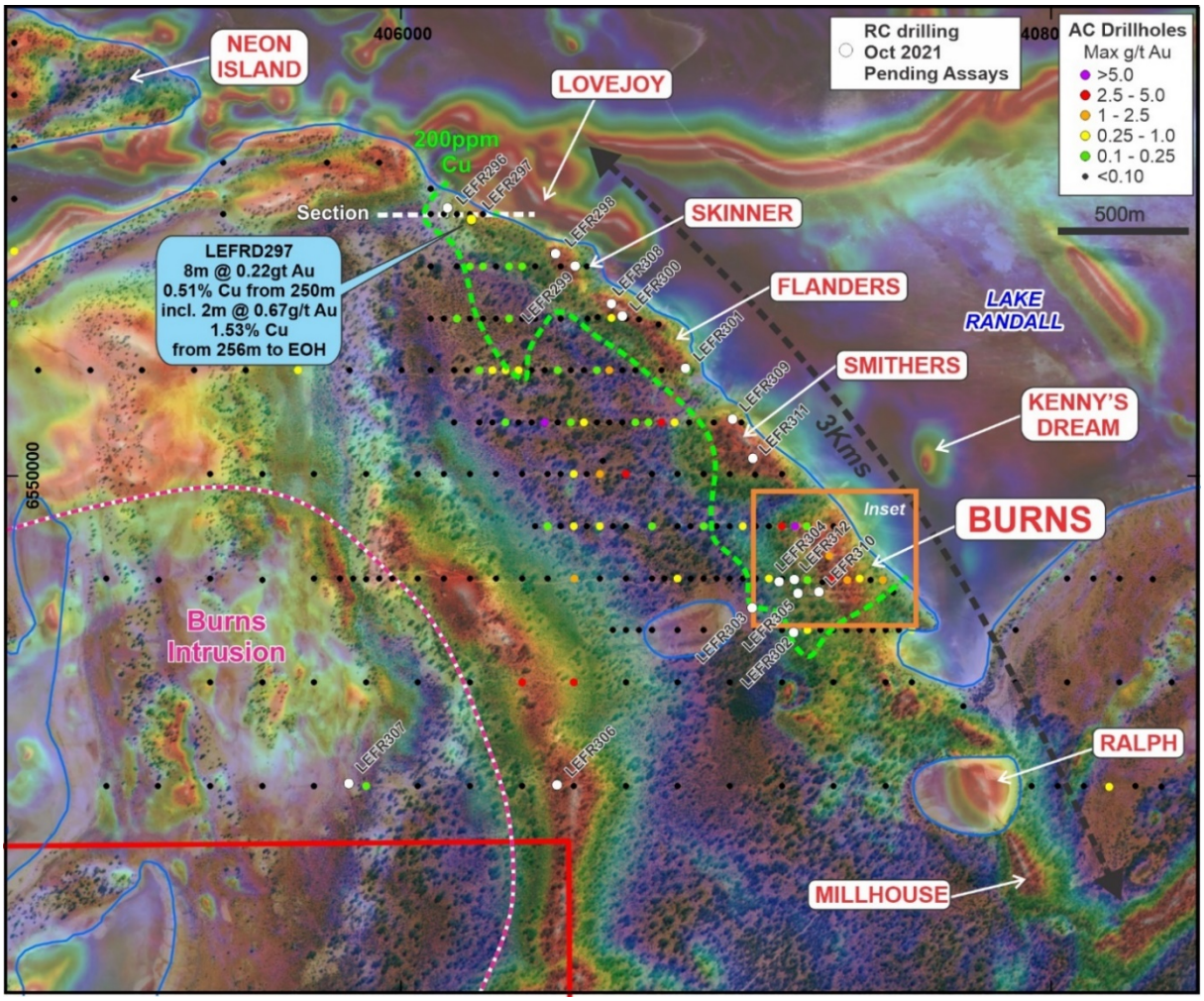

Figure 2 Combined satellite image with transparent TMI RTP aeromagnetic image highlighting the discrete magnetic anomalies along strike of Burns and the extent of the +200ppm copper anomaly. The inset area refers to the area of RC and diamond drilling at the Burns Au-Cu-Ag prospect (Figure 3). (Warm colours represent rocks beneath the surface with higher magnetite content). Coloured and black dots represent historical AC drill holes. The October RC drill holes are highlighted. Refer to Figure 3, the inset, for the July RC hole locations.

The nine-hole RC drill program (LEFR287-296) was commenced and completed in July 2021 (refer LEX ASX release 20 July 2021) to evaluate both strike extensions to the Eastern Porphyry and strike and down dip extensions to the Cu-Au mineralisation in the western basalt (refer Figure 3). A total of 2328m of drilling was completed testing 4 targets, including a single hole (LEFR296) testing the Smithers aeromagnetic anomaly.

The drilling targeted strike extensions to the Eastern Porphyry (LEFR290) and strike and down dip extensions to the Cu-Au mineralisation in the western basalt.

Four holes (LEFR290, 291, 292, 293) evaluated the northern extension of the Burns system (Figure 3). Hole LEFR290, a 40m step out to the north, intersected a 101m downhole interval of altered porphyry including a 10m interval containing intense magnetite-pyrite alteration. The porphyry is open to the north. Hole LEFR 292, an 80m step out from LEFR285 intersected a 30m down hole interval of massive magnetite containing up to 20% pyrite alteration in basalt.

A fence of three 80m spaced holes (LEFR287, 288, 289) were drilled on the 160S section line to evaluate the southern strike extension of the Au-Cu mineralisation in the LEFR273 (Figure 3) and the broad downhole intervals of dominantly copper mineralisation in the western basalt intersected in holes LEFR271, and LEFR272 located 80m to the north.

A single RC hole was also drilled at Smithers to evaluate this aeromagnetic anomaly approximately 250m to the north of Burns. The hole (LEFR294) was successful in penetrating the 90m downhole interval of palaeochannel cover to intersect diorite porphyry, which is similar to the porphyry at Burns and contains two narrow (3-5m) intervals of pyritic magnetite veining. The hole had to be abandoned at 156m down hole. This hole demonstrates that the Burns system extends to Smithers, a distance of at least 500m. This issue was further evaluated in the October RC drilling campaign.

Results for four of the 9 RC holes were reported in the September quarter (LEX ASX release 24 September 2021). Three of the four holes were from the 160S section (Figure 3). The westernmost hole (LEFR289) intersected an impressive 244m downhole interval of copper mineralisation from 20m, hosted by high Mg basalt. This was followed by a further 24m interval of copper mineralised basalt to the end of hole (EOH) at 330m, a combined downhole total of 268m of mineralisation.

The mineralisation is open along strike to the south and at depth. The copper mineralisation in LEFR289 is associated with more extensive and elevated magnetite alteration in the high Mg basalt. This Cu dominant zone at Burns is known as the Western Basalt and the mineralisation is open.

The final results from the remaining 5 RC holes of that program have been received and validated (Table 3). These results further support the growing scale of the mineralised system to the north and west. Significant results from those holes include:

- **11m @ 1.45g/t Au & 0.10% Cu & 0.59g/t Ag from 108m in LEFR290 (Eastern Porphyry) Including 2m @ 5.04g/t Au & 0.13% Cu & 1.0g/t Ag from 114m**
- **40m @ 0.07g/t Au & 0.14% Cu from 42m in LEFR295 (Western Basalt)**
- **11m @ 0.27g/t Au & 0.29% Cu from 84m in LEFR294 (Smithers)**
- **2m @ 3.96g/t Au from 284m in LEFR291**

The mineralisation hosted by the Eastern Porphyry in hole LEFR290 on the northern most section (160N) at Burns (Figure 3) is open, with the next RC holes located approximately 400m to the north at Smithers where results from a single hole (LEFR294) from this program intersected encouraging Au, Cu, Ag and molybdenite mineralisation, which is a similar geochemical signature to that observed at the Burns anomaly (Figure 3). This provides evidence that the Burns anomaly, the site of the discovery hole LEFR260, is a component of a much larger intrusive related system highlighted by the results from the August aeromagnetic survey (Figure 2)

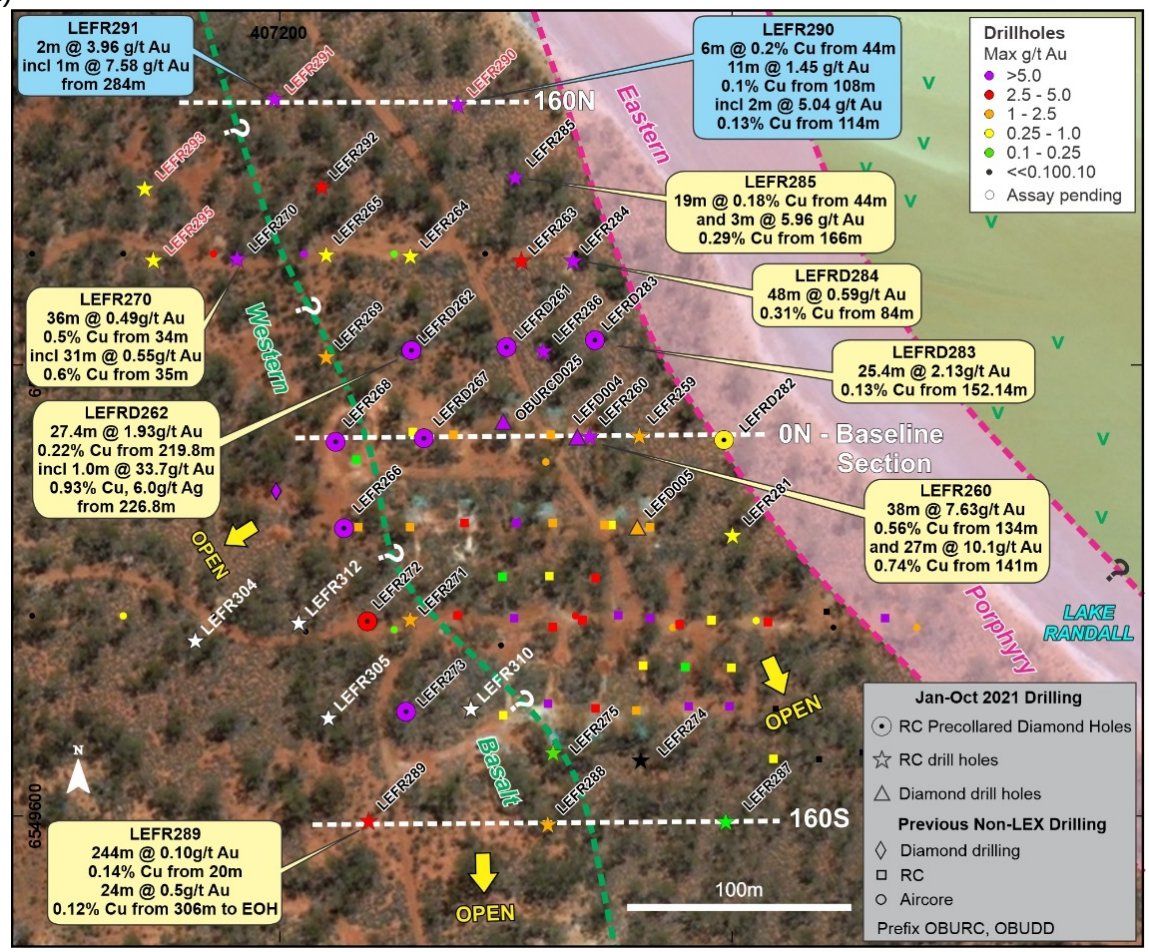

Figure 3 Drill hole plan at the Burns prospect highlighting the Jan-August 2021 drill program (LEFR259 to LEFR295) relative to LEFR260 and the interpreted extent of the Eastern Porphyry. Holes with recent results are highlighted in red font.

A detailed aeromagnetic survey completed over the broader Burns area in August 2021 that defined multiple Burns look alike magnetic anomalies over a 3000m trend (Figure 2), known as the Burns Corridor triggered the Company to commence a staged drilling program to assess the limits of the Burns mineral system. Stage 1 of the program involved drilling land-based targets using an RC rig, with stage 2 requiring a specialised lake aircore rig to evaluate targets (e.g., Lovejoy) in Lake Randall.

An image from the new aeromagnetic survey (Figure 2) provided greater clarity and detail than the old (pre 2000 era) data. This highlights the annular magnetic anomaly surrounding the interpreted Burns Intrusion and a string of six magnetic anomalies to the east that define a distinct, Burns-like magnetic corridor (Figure 2). These anomalies form a 3000m trend, that includes Burns and extends out beneath Lake Randall. The Company interprets that the anomalies represent magnetite alteration zones within and surrounding porphyry dioritic intrusions that are additional to, and similar in style to, Burns

The largest and northernmost magnetic anomaly, designated Lovejoy, lies beneath Lake Randall (Figures 2). Lovejoy has a coincident, positive gravity anomaly (refer Figure 4 LEX ASX release 28 July 2021) is of a similar character to Burns.

In October the stage 1 "onshore" RC drilling program was completed. A total of 17 angled holes (Table 2) for 3336m evaluated 6 magnetic anomalies, including six holes at Burns (Figure 2). Hole depths ranged from 120m to 258m, with an average depth of 200m. This program included one vertical hole (LEFR307) drilled into the main Burns Intrusion. The nine RC holes evaluating the Smithers, Flanders, Skinner and Lovejoy magnetic anomalies up to 2000m north of Burns all intersected altered diorite and basalt similar to that observed at Burns. The strongest alteration in dioritic porphyry was intersected in holes at Lovejoy and Skinnner. Holes LEFR296 and 297 are on the western margin of Lovejoy. The strong magnetic anomaly beneath Lake Randall is yet to be tested.

Samples were dispatched in 17 laboratory jobs (one for each drill hole) to Perth for analysis with results expected in December. Two drill holes were prioritised for analysis and results for hole LEFR297 at Lovejoy have been received and validated (Table 4).

Hole LEFR297 (Figure 5) intersected significant intervals of hematite silica altered porphyry and associated Cu-Au-Ag mineralisation (Table 4). A fault zone with angular diorite clasts in an intense hematite altered silica matrix including strong fine disseminated magnetite and sulphides was intersected from 228m to 250m (Figure 4). A similar fault zone was observed in two RC holes to south at Skinner. Significant results from hole LEFR297 include:

- **10m @ 0.21g/t Au & 0.60% Cu & 2.5g/t Ag from 218m**
  Including 2m @ 0.41g/t Au & 1.56% Cu & 5.5g/t Ag from 225m
- **8m @ 0.22g/t Au & 0.51% Cu & 1.75g/t Ag from 250m to EOH**
  Including 2m @ 0.67g/t Au & 1.53% Cu & 5.0g/t Ag from 256m to EOH

The hole, located on the edge of lake Randall (Figure 4) was abandoned at 258m due to high flows of ground water. The last 2m of the hole ended in strong copper mineralisation hosted by altered diorite porphyry and basalt with associated gold and silver credits (Figure 4).

This stage 1 drilling program is in an important development for the greater Burns area. It has demonstrated that the altered and mineralised dioritic host rocks (porphyry) are far more extensive than initially interpreted and that the Burns Anomaly (Figure 3) is a component of a larger Burns Intrusive Complex (BIC) located over a 3000m corridor.

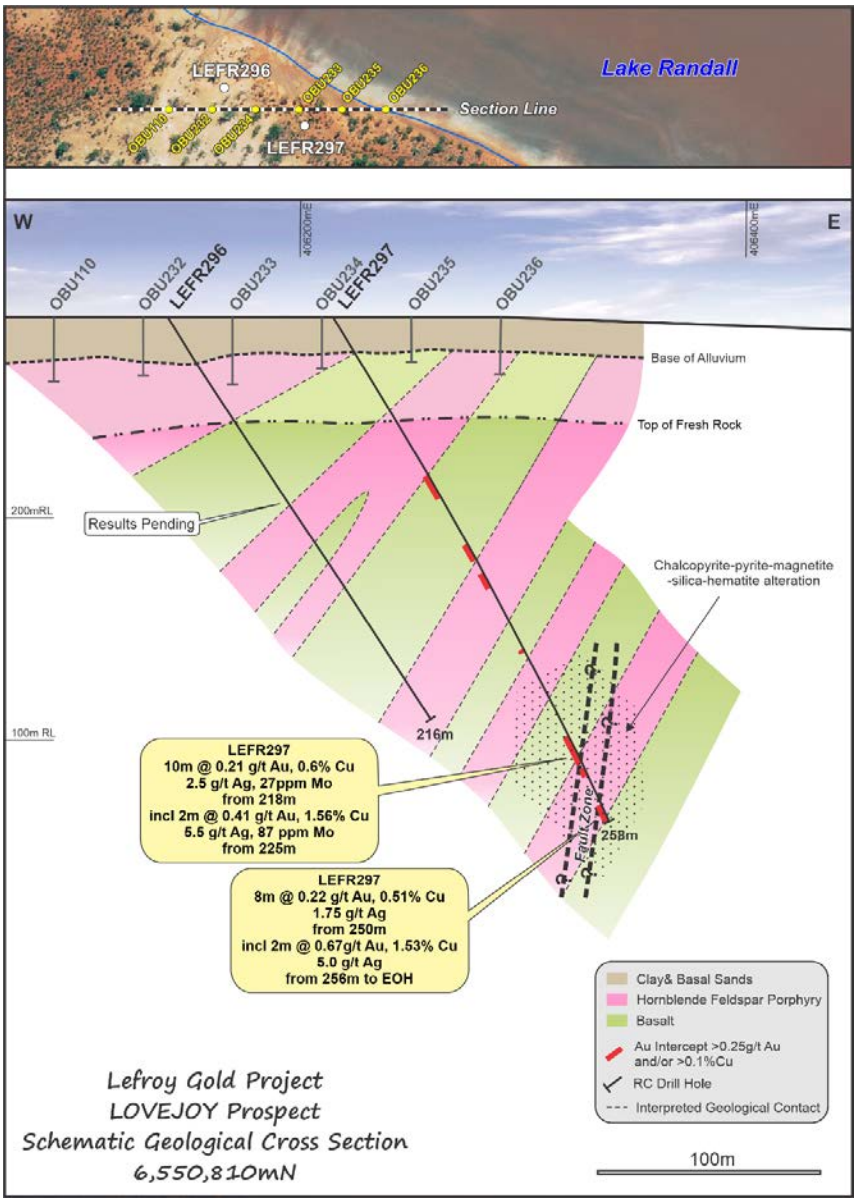

Figure 4 Lovejoy schematic drill section and plan view snapshot. RC holes are projected onto the section containing the historical aircore holes prefixed OBU.

Importantly interpretation of the whole rock geochemistry from this single hole at Lovejoy has a similar character to that observed at the Burns anomaly. Results for the remaining 16 RC holes of this program are expected in December 2021. The delay in results is due the assay turnaround at the assay laboratory.

Ongoing Burns Program

The key objective to progress evaluation of the Burns system in the December Quarter is the completion of the AC drilling in Lake Randall to evaluate multiple targets near to Burns. This stage 2 program as noted above will commence shortly. The program will evaluate multiple targets beneath Lake Randall and filling the geological knowledge gap immediately to the east of the Burns anomaly (baseline section).

The priority target is the Lovejoy magnetic anomaly, but also Kenny's Dream. The results from hole LEFR297 that just intersects the edge of the Lovejoy anomaly provides confidence that additional altered and mineralised diorite can be discovered beneath Lake Randall.

The combined results from this AC and the recent RC drill program will provide the broad geochemical and geological baseline framework over the 3000m trend to then focus more detailed drill evaluation.

Figure 5 Lovejoy drill hole LEFR297 on the edge of and looking northeast over lake Randall

This announcement has been authorised for release by the Board

Wade Johnson
Managing Director

END

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Table 1

Burns drill hole collar details- July 2021 RC Drill Program

Hole ID	Collar E (MGA)	Collar N (MGA)	Collar RL	Depth (m)	Azimuth	Dip	Target
LEFR287	407396.4	6549599.1	290.1	264	90	-60	Burns
LEFR288	407318.0	6549598.1	289.8	276	90	-60	Burns
LEFR289	407238.7	6549599.5	288.9	330	90	-60	Burns
LEFR290	407278.5	6549916.6	291.2	270	90	-60	Burns
LEFR291	407197.5	6549919.1	290.7	300	90	-60	Burns
LEFR292	407217.8	6549879.5	290.9	258	90	-60	Burns
LEFR293	407140.3	6549879.6	291.0	222	90	-60	Burns
LEFR294	406993.8	6550084.7	290.9	156	90	-60	Smithers
LEFR295	407144.3	6549847.9	290.7	252	90	-60	Burns

Table 2

Burns Corridor drill hole collar details- October 2021 RC Drill Program

Hole ID	Collar E (MGA)	Collar N (MGA)	Collar RL	Depth (m)	Azimuth	Dip	Target
LEFR296	406139.2	6550829.5	291.5	258	90	-60	Lovejoy
LEFR297	406215.0	6550795	284	258	90	-60	Lovejoy
LEFR298	406474	6550690	286	162	90	-60	Skinner
LEFR299	406535	6550652	290	198	90	-60	Skinner
LEFR300	406680	6550499	290	210	90	-60	Flanders
LEFR301	406873	6550336	295	186	90	-60	Flanders
LEFR302	407207	6549524	290	246	90	-60	Burns
LEFR303	407079	6549600	291	222	90	-60	Burns
LEFR304	407162	6549679	290	186	90	-60	Burns
LEFR305	407221	6549645	290	252	90	-60	Burns
LEFR306	406479	6549054	294	138	90	-60	Burns Intrusion
LEFR307	405836	6549059	285	120	90	-60	Burns Intrusion
LEFR308	406646	6550536	293	216	90	-60	Flanders
LEFR309	407020	6550180	293	162	90	-60	Smithers
LEFR310	407284	6549649	293	192	90	-60	Burns
LEFR311	407082	6550060	289	156	90	-60	Smithers
LEFR312	407208	6549687	291	216	90	-60	Burns

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Table 3

Significant Assay Results from 5 of July 2021 9 RC Hole program

Hole Id	From (m)	To (m)	Interval (m)*	Au (g/t)	Cu (%)	Ag (g/t)	Mo (ppm)	Geology
LEFR290	44	50	**6.00**	0.03	0.19	0.60	0.50	Oxide - Basalt
LEFR290	53	55	**2.00**	0.03	0.15	0.00	1.00	Oxide - Basalt
LEFR290	89	91	**2.00**	0.30	0.16	2.75	18.00	Porphyry with magnetite
LEFR290	108	119	**11.00**	1.45	0.10	0.59	22.00	Porphyry with massive magnetite
Incl	109	110	**1.00**	1.36	0.32	2.00	56.00	Porphyry with massive magnetite
Incl	114	116	**2.00**	5.04	0.13	1.00	18.00	Porphyry with massive magnetite
LEFR290	177	180	**3.00**	1.14	0.01	0.00	6.00	Porphyry with magnetite
LEFR290	190	191	**1.00**	3.42	0.00	0.00	3.00	Hematite altered porphyry
LEFR290	205	213	**8.00**	0.26	0.00	0.00	2.00	Porphyry
LEFR291	277	279	**2.00**	0.56	0.01	0.00	17.00	Foliated basalt with quartz carbonate veining
LEFR291	284	286	**2.00**	3.96	0.00	0.00	24.00	Foliated basalt with quartz carbonate veining
Incl	284	285	**1.00**	7.58	0.00	0.00	39.00	Foliated basalt with quartz carbonate veining
LEFR293	50	60	**10.00**	0.02	0.44	0.50	3.00	Oxide - Porphyry
LEFR293	150	152	**2.00**	0.54	0.14	0.50	3.00	Basalt
LEFR293	220	222	**2.00**	0.29	0.29	1.00	10.00	Basalt
LEFR294	84	95	**11.00**	0.27	0.29	0.23	1.70	Paleochannel
LEFR294	99	105	**6.00**	0.26	0.08	0.00	1.00	Basalt & Porphyry
LEFR294	111	118	**7.00**	0.45	0.09	0.07	2.00	Basalt
Incl	112	113	**1.00**	1.00	0.14	0.00	2.00	Basalt
LEFR294	124	129	**5.00**	0.42	0.22	0.80	13.00	Basalt with magnetite alteration
LEFR295	42	82	**40.00**	0.07	0.14	0.10	3.00	Basalt & Porphyry
LEFR295	191	204	**13.00**	0.06	0.11	0.23	4.00	Porphyry
LEFR295	215	218	**3.00**	0.07	0.15	0.67	3.00	Porphyry

NB- Assay results for LEFR287, 288, 289 and 293 previously reported

Table 4

Lovejoy-LEFR297 Assay Results- October 2021 RC Hole program

Hole Id	From (m)	To (m)	Interval (m)*	Au (g/t)	Cu (%)	Ag (g/t)	Mo (ppm)	Geology
LEFR297	84	92	**8.00**	0.06	0.24	0.75	4	Basalt
LEFR297	120	126	**6.00**	0.01	0.20	0.42	6	Basalt
LEFR297	133	145	**12.00**	0.04	0.14	0.29	8	Porphyry
LEFR297	172	174	**2.00**	0.34	0.65	1.25	5	Basalt
LEFR297	218	228	**10.00**	0.21	0.60	2.50	27	Basalt & Porphyry
Incl	225	227	**2.00**	0.41	1.56	5.50	87	Basalt & Porphyry
LEFR297	231	237	**6.00**	0.12	0.25	0.50	17	Fault zone
LEFR297	250	258	**8.00**	0.22	0.51	1.75	5	Fault zone
Incl	256	258	**2.00**	0.67	1.53	5.00	2	Basalt

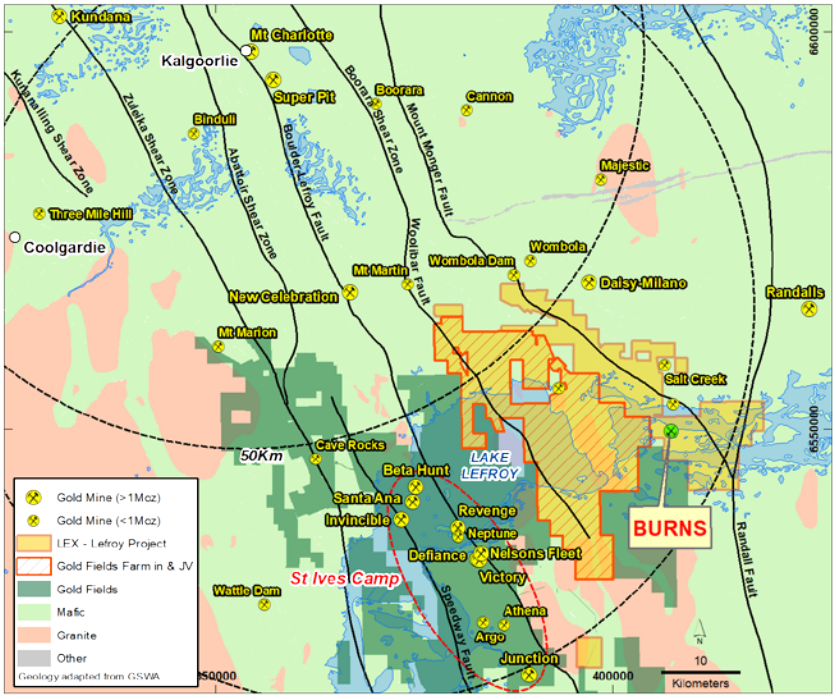
Calculated with 0.25 g/t Au cut off and 2m internal dilution

NB Au-gold, Cu-copper, Ag-silver, Mo-molybdenum

About Lefroy Exploration Limited and the Lefroy Gold Project

Lefroy Exploration Limited is a WA based and focused explorer taking a disciplined methodical and conceptual approach in the search for high value gold deposits in the Yilgarn Block of Western Australia. Key projects include the Lefroy Gold Project to the southeast of Kalgoorlie and the Lake Johnston Project 120km to the west of Norseman.

The 100% owned Lefroy Gold Project contains mainly granted tenure and covers 637.6km^2 in the heart of the world class gold production area between Kalgoorlie and Norseman. The Project is near Gold Fields' St Ives gold camp, which contains the Invincible gold mine located in Lake Lefroy and is also immediately south of Silver Lake Resources' (ASX:SLR) Daisy Milano gold mining operation. The Project is divided into the Western Lefroy package, subject to a Farm-In Agreement with Gold Fields and the Eastern Lefroy package (100% Lefroy owned). The Farm-In Agreement with Gold Fields over the Western Lefroy tenement package commenced on 7 June 2018. Gold Fields can earn up to a 70% interest in the package by spending up to a total of $25million on exploration activities within 6 years of the commencement date.



Location of the Lefroy Gold Project relative to Kalgoorlie. The Western Lefroy tenement package subject to the Gold Fields Farm In and Joint Venture, and Gold Fields tenure are also highlighted

For Further Information please contact:
Wade Johnson
Managing Director
Telephone: +61 8 93210984

Email: wjohnson@lefroyex.com

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 but specific to exploration reporting by the Company of previous exploration at Burns at the Lefroy Gold Project. Exploration results by the previous explorer that refers to the Burns prospect are prepared and disclosed by the Company in accordance with the JORC 2004 code. The Company confirms that is it not aware of any new information or data that materially affects the information included in this market announcement.

- 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 0N section, step out drilling extends system: 2 August 2021
- June 2021 Quarterly Activities Report: 28 July 2021
- Exploration Update-Advancing the Burns and Coogee South Prospects: 18 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
- LEX Expands Nickel Portfolio Securing a Major Land Package: 26 October 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

JORC CODE, 2012 Edition-Table 1 Report – Lefroy Project – Burns Cu-Au Prospect Jul-Oct 2021 RC drilling program

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 using Reverse Circulation (RC) drilling at the Burns Copper (Cu) – Gold (Au) prospect. The drill program comprises 52 RC holes of which 10 have a DD tail. 2 holes were drilled with a diamond rig from surface. Holes varying in depth from 150m to 585m with an average depth of 200m. All holes were drilled at 60^0 dip toward 090^0 (East) apart from LEFR307 which was vertical. • Sampling and QAQC protocols as per industry best practice with further details below. • RC bulk samples were collected from the cyclone at 1m intervals in plastic buckets and arranged in rows of 30 samples. Four metre composite samples were collected from 0m to the base of transported regolith using a scoop to produce a 2-3kg sample. 1m split samples were collected from the base of transported regolith to end of hole (EOH). 1m split samples were collected directly off the drill rig cone splitter into calico bags attached to the cyclone. The sample collected generally weighed 2-3kg. The samples were sent to the Laboratory in Kalgoorlie then sent to Perth for analysis. The samples were dried, pulverised, split to produce a 40g charge for analysis by fire assay with Au determination by Atomic Absorption Spectrometry (AAS). Additional elements will be derived using a mixed acid digest with ICP finish for Cu, Ag, As, Mo, Fe, Pb, S, Te, W and Zn. Approximately 1 in 10 samples were analysed for 61 elements using a mixed acid digest and sodium peroxide fusion with ICP finish.
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) was completed by an RC rig from Raglan Drilling (Kalgoorlie). Low air face sampling hammer drilling proved satisfactory to penetrate the regolith and reduce contamination risk.
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 use of professional and competent core drilling contractors minimised the issues with sample recoveries. An honest and open line of communication between the drill crew and the geologist allowed for a comprehensive understanding of where core loss may have occurred. • Sample recovery visually inspected and recorded by the rig geologist and sampler. • Some poor sample return in the overlying transported material (0-10m) and where high water flows were encountered in some holes intersecting deep paleochannel sands during RC drilling.
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 for regolith, lithology, structure, veining, alteration, mineralisation and recoveries recorded in each hole by qualified geologist. • Analysis of rock type, colour, structure, alteration, mineralisation, veining and geotechnical data were all routinely collected. • Geological logging is qualitative in nature and relies on the geologist logging the hole to make assumptions of the core character based on their experience and knowledge. • Magnetic susceptibility measurements were recorded and are considered to be quantitative in nature. • Chip trays for each hole were photographed using a purpose made camera stand and a quality digital SLR camera and stored in the database. • All drill holes are logged in their entirety (100%).

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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.*	**RC** • A 4m composite sample was collected from 0m to the base of transported regolith for each hole. Sample weight 2 - 3 kg. The composite samples were collected by using a scoop to collect a representative "split" from each bulk sample that made up a 4m composite interval, this was placed into a pre-numbered calico bag. • The remainder of each hole was sampled at 1m intervals directly off a rig-mounted cone splitter into separate pre-numbered calico bags. Pre-numbered calico bags containing the samples were despatched to the laboratory for assay. • The sample preparation of the RC samples follows industry best practice, involving oven drying, pulverising, to produce a homogenous sub sample for analysis. • Along with submitted samples, standards and blanks were inserted on a regular basis of 1 in 20 for standards and 1 in 100 for blanks. Standards were certified reference material prepared by Geostats Pty Ltd.
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 checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• RC samples routinely analysed for gold using the 40gram Fire Assay digest method with an AAS finish at Bureau Veritas's Perth Laboratory. Additional elements, will be derived using a mixed acid digest with ICP finish for Cu, Ag, As, Mo, Fe, Pb, S, Te, W and Zn. • Selected samples will be analysed for an additional 61 elements using a mixed acid digest and sodium peroxide fusion with ICP finish. • Quality control process and internal laboratory checks demonstrate acceptable levels of accuracy. At the laboratory regular assay repeats, lab standards, checks and blanks were 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.*	• Capture of field logging is electronic using Toughbook hardware and Logchief software. Logged data is then exported as an xml document to the Company's external database managers which is then loaded to the Company's DATASHED database and validation checks completed to ensure data accuracy. Assay files are received electronically from the laboratory and filed to the Company's server and provided to the external database manager. • There has been no adjustment to the assay data. The primary gold (Au) plus additional elements field reported by the laboratory is the priority 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.*	• Drill hole positions were surveyed using a handheld GPS operated by the rig geologist/field assistant. The final RC collar was later surveyed by a DGPS by a third-party contractor. • Down holes surveys were completed by Raglan drill crew using a multi-shot gyro which records a survey every <5m down the hole. • Grid System – MGA94 Zone 51. Topographic elevation captured by using the differential GPS.
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.*	• Hole spacing is variable from approximately 40m at Burns to 200m spaced intervals for step out drilling. • Mineralisation at the Burns prospect is primarily hosted by a magnetite-biotite altered High Mg basalt which has been intruded by later diorite porphyry intrusions. The contacts of which are not uniform however the intrusion appears to be sub-vertical. Mineralisation is predominantly Cu plus Au. There is an association between Cu and Au mineralisation but they can occur independently of one another. There is a strong upgrade of Cu and Au in the supergene environment approximately 50-100m down-hole and this is typically flat in its orientation.

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Data spacing and distribution	• *Whether sample compositing has been applied.*	• A primary system (hypogene) occurs in the fresh rock below 100m depth and at this stage the orientation and main controls on mineralisation is not known. It is thought that the mineralisation may dip toward the west-south-west and plunge toward the south-east, hence the drill orientation toward the east. • Drill data spacing is not yet sufficient for mineral resource estimation. • No compositing has been applied to assay results.
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 orientated drill traverses are considered effective to evaluate the roughly North-West to South-East trending stratigraphy and sub-vertical mineralised structures. • The drill orientation is an effective test of "true" width of the host rock due to the fact the host rock unit is striking roughly North-South and dipping 70^0 to the West. • At this stage the primary controls on the hypogene copper-gold (Cu-Au) system are not completely understood, however analysis of previous drilling in conjunction with this drilling have determined the drill hole orientation is optimum to determine the true width of mineralisation and improve geological knowledge of the system.
Sample security	• *The measures taken to ensure sample security.*	• Samples were bagged in labelled and numbered calico bags, collected and personally delivered to the Bureau Veritas Laboratory (Kalgoorlie) by Company field personnel. Samples were then on sent to the BV lab in Perth. Samples were then sorted and checked for inconsistencies against lodged Submission sheet by Bureau Veritas staff. • Bureau Veritas checked the samples received against the Lefroy Exploration Limited (LEX) submission sheet 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 sampling and analytical results of the drill program were reviewed by the Senior Exploration Geologist and Managing Director. Anomalous gold and copper intersections were checked against library core photos and logging to correlate with geology. QAQC reports are auto generated by the database managers and reviewed by staff.

Section 2: REPORTING OF EXPLORATION RESULTS – LEFROY PROJECT- Burns Cu-Au Prospect Jul-Oct 2021 RC Drilling program

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 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 Monger Exploration Pty Ltd. The work described in this report was completed on Exploration lease E 15/1715. • E 15/1715 is held 100% by Monger Exploration Pty Ltd a wholly owned subsidiary of Lefroy Exploration Limited • 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.*	• 1968-1973 BHP: The earliest recognition of the magnetic anomaly was by BHP. The area fell within TR 3697, which had been taken up for nickel. The anomaly stood out on the BMR aeromagnetic contoured plans and BHP was testing aeromagnetic anomalies that could have an ultramafic source. The anomaly was confirmed by ground magnetics but an attempt to drill test with two percussion holes failed to identify any bedrock and no further work was attempted. • 1984 Coopers Resources/Enterprise Gold Mines: The ground encompassing Burns was taken up as three Els, E15/19-21. • 1985 BHP: BHP farmed into E15/21 having re-interpreted the magnetic feature as a potential carbonatite. BHP's E15/57 covered the western one third of the anomaly. Following ground magnetic traverses, BHP drilled two diamond core holes, LR 1 and 2. LR 1 falls within Goldfields E15/1638 and LR 2 falls within P15/6397. The results, which are covered in the next section, did not indicate a carbonatite and so BHP withdrew their interest in the area. • 1985-1989 CRAE: Meanwhile CRAE was conducting exploration for gold on adjacent tenements and had engaged Jack Hallberg to carry out geological mapping. He mapped suites of intermediate dykes (plagioclase-quartz-hornblende porphyry) intruding basalt in outcrops to the north west of Burns. • 1992: M. Della Costa took up E15/304 over aeromagnetic anomalies including Burns. The EL was vended into Kanowna Consolidated Gold Mines as part of the St Alvano project. • 1996-2001 WMC: WMC joint-ventured into the St Alvano project, which comprised a total of 12 ELs. They flew 50m line-spaced aeromagnetics and engaged EHW to interpret. Burns was not highlighted as such but the magnetic anomalies forming portions of the annular ring were tested with air core, leading to the discovery of the Neon prospect. Subsequent to the EHW study a gravity survey was conducted which did identify the Burns intrusive as a gravity low. • 2001-2003 Goldfields: Goldfields took over exploration and conducted further air core drilling at Neon. They identified S11 as a target to the south of Burns. The target was secondary gold dispersion in weathered bedrock associated with magnetite enrichment. A series of north-south air core traverses were drilled on 640 X 160m. Results were regarded as disappointing and the project was dropped. • 2005-2008 Gladiator Resources: The area was taken up by Sovereign following their assessment of previous work. They identified Homer's Inlet and the S11 area as priority targets. In 2007 a JV was established with Newmont/Sipa covering the gold rights. In 2008 the southern and eastern sectors of W15/774 was surrendered and taken up as E15/1030. The northern sector including Burns was surrendered. • 2008 Gold Attire: The ground surrendered by Sovereign over Burns was taken up as E15/1097.

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		• 2008-2010 Newmont: Newmont joint ventured into the Sovereign and Gold Attire ELs. It conducted an 800 X 400m gravity survey to trace a north-south "Salt Creek-Lucky Bay" corridor through the tenements. This was tested by four lines of aircore on 640 X 160m spacing. Two aircore traverses on a 1200 X 320m spacing were also and conducted across the interpreted intrusion and the surrounding magnetic halo. Infill drilling was conducted following up on the 2.0m @ 5.0 g/t Au intercept in a Goldfields hole, SAL 1089. The hole was re-entered and a diamond core tail drilled. This hole falls just inside E15/1638 close to the boundary with P15/6397. • 2010-2019 Octagonal Resources: Three phases of AC to define a gold in regolith anomaly east of the main intrusive body. Two phases of RC identified Ag-Cu-Au mineralisation on four sections spaced approx. 40m apart. The drilling recognised Cu mineralisation which due to the host rock association, Octagonal believed there was potential for a much larger intrusion related system so the emphasis was switched from orogenic gold style exploration to predominately copper focussed intrusion related hosted mineralisation. In 2013 surface geophysical techniques were applied looking for conductors that might represent massive sulphides. Ground EM failed to identify any bedrock conductors, but the magnetic surveys did identify anomalies. In 2014, a diamond core hole, OBUDD001, was drilled at -60 degrees to 090 east to 401.5m in order to test the source of the magnetic anomalism, which occurred within the area tested by the RC drilling. It intersected a 3.6m wide zone of mafic-dominant breccia including 0.9m of massive magnetite-chalcopyrite which returned 4.5 g/t Au, 2.6% Cu from 256.4m, within a low-grade zone of 55.95m @ 0.5 g/t Au and 0.2% Cu from 229.85m It was interpreted to be a west-dipping structure and the feeder conduit for the mineralization. A second zone of low-grade mineralization of 38.5m @ 0.5 g/t Au and 0.2% Cu was intersected from 184.5m. An EIS grant in 2015 and a loan from a third-party company allowed for two more DD holes to be completed, however by 2016 the Company was acquired by the third-party loan company and subsequently delisted from the ASX.
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. Burns is proximal to the Lake margin and is subsequently under >20-25m of lake sediment and surface sand dune cover. A stripped profile below this cover means that there is no significant dispersion or oxide component to the Burns prospect. Mineralisation is hosted with a High Mg Basalt and in an intermediate composition porphyry which intrudes the basalt. Mineralisation is primarily gold associated with magnetite alteration and copper occurring as native copper and chalcopyrite in veins and veinlets throughout the basalt and porphyry.
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*	• Tables containing drill hole collar, survey and intersection data for material drill holes (gold intersections >0.25gpt Au with a max of 2m internal dilution) are included in the Tables 1-4 in the body of the announcement. • Table 1 and 2 of drill hole collars completed by Lefroy is noted in this announcement. • No Information has been excluded.

Criteria	JORC Code Explanation	Commentary
	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.	
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.*	• All grades have been length weighted and reported as down-hole metres. High grades have not been cut. A lower cut off of 0.25gpt Au has been used to identify significant results (intersections). • Where present, higher grade values are included in the intercepts table and assay values equal to or > 1.0 g/t Au have been stated on a separate line below the intercept assigned with the text 'includes'. • Reported results have been calculated using 1m and 4m samples and is noted in the body of the report. • No metal equivalent values or formulas are 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 material results are based on down-hole metres. • Previous drill coverage and structural measurements from oriented core has provided guidance for the presence of steeply dipping geology comprising a package of rocks containing basalt intruded by diorite porphyry. This data and modelling of prior ground magnetic data provides support for orientation of the drilling. • Results from this drill program do not represent 'true widths' however holes are designed to intercept the host sequence perpendicular to its strike.
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 (plan) and cross sections 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 & 3 for the recent LEX RC drill programs. • Drill holes with no significant results (<2m and <0.50g/t Au) are not reported. • Reference to significant assay results from historical drilling are noted in the body of the report.
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.*	• The appropriate next stage of exploration planning is currently underway and noted in the body of the report.