

## Burns Resource Drill-out – Update #3

# Multiple Gold Intercepts Continue to Expand Burns

- The Burns Resource Drill-out program consists of 80 RC holes over 700m of strike length, with each hole evaluating a vertical depth of approximately 200m from surface. Sixty-one holes have now been completed, with 9 priority holes of the remaining 19 holes to be completed before the end of December 2022.
- Additional gold-only assay results have been received for four holes located on Lake Randall, LRR004-LRR007, and one land hole LEFR353. The holes are located on two 40m spaced sections north of the Burns Baseline (0N) section which contains discovery hole, LEFR260.
- The best gold intercepts were returned in holes LEFR353 and LRR004, both hosted within the Central Porphyry zone, as follows:

LEFFR353 - 48m @ 1.11g/t Au from 204m to EoH, including 4.0m @ 7.06g/t Au from 217m

LRR004 – 138m of mineralisation, including

38m @ 2.04 g/t Au from 27m, including 17m @ 3.90g/t Au from 38m, and

100m @ 0.47 g/t Au from 93m, including 8m @ 2.02 g/t Au from 100m

- The results from the Burns Resource drill-out continue to deliver multiple drillholes intersecting long downhole intervals of gold mineralisation and confirm the company's interpretation of the Burns geological model. This includes the existence of a broad, south-plunging, higher-grade gold zone within a structural trend that continues north under Lake Randall.
- Based on these results, the Company has prioritised three additional RC holes to further evaluate this higher-grade zone where previous drill rig access was limited by terrain at the lake shoreline.
- Copper and multi-element results remain pending and are expected to be returned between later in December 2022 and January 2023.
- The maiden Burns Mineral Resource estimate for the shallow part of the mineralised system is on schedule to be finalised in Q1/2023.

Lefroy Exploration Managing Director Wade Johnson said, *“It is extremely rewarding for Lefroy to continue to receive such positive assay results, particularly while the drill rods for this resource program continue to spin. These new, broad gold intersections reinforce the Company's geological model for Burns, first put forward 18 months ago, and which is a credit to our dedicated technical team. We eagerly await the associated copper results which are pending, which we anticipate will complement the already returned gold assays, increase the value of the Resource being calculated and further demonstrate that Burns is a large Archaean copper-gold system.”*

**Lefroy Exploration Limited (ASX: LEX) (“Lefroy” or “the Company”)** is pleased to report on the third batch of gold assay results for the Burns Resource drill-out program, currently underway at the Burns Copper (Cu)/Gold (Au) Project, which is within the Company’s wholly owned Eastern Lefroy Gold Project located 70km southeast of Kalgoorlie.

Burns is an intrusion-related Au-Cu-molybdenum (Mo) and silver (Ag) mineral system, hosted by multiple Archaean-age diorite-porphyry intrusives and high-magnesium basalt rocks. The Company considers this Au-Cu-Mo-Ag intrusion-related style of mineralisation to be entirely new to the Eastern Goldfields Province (EGP) of Western Australia.

A maiden 22-hole Reverse Circulation (RC) drill program completed in Jan-Feb 2021 at Burns intersected a spectacular gold and copper interval in hole LEFR260, returning **38m @ 7.63g/t Au and 0.56% Cu from 134m** in diorite porphyry. The results from that RC program provided the geological and geochemical data that highlighted the unique geological characteristics of Burns and are a key guide to subsequent and ongoing exploration activity.

Further targeted aircore, RC and diamond drilling at Burns since January 2021 has established a broad footprint to the system, which extends north beneath Lake Randall, and whose limits of mineralisation are still to be fully defined. The system may extend for 2000 metres or more along strike, based on drilling between Lovejoy in the north and the main Burns Central area in the south.

### **Reverse Circulation (RC) Resource Drill Program**

In October 2022, the Company commenced the Burns Resource drill-out program, originally planned at 15,000 metres of drilling, to evaluate the Burns Central system to 200 metres vertical from surface and over 700 metres of strike (Refer LEX ASX Release 6 October 2022). The data from this program, when combined with previous drilling data, will evaluate the three key geological domains at Burns Central (Central Porphyry, Western basalt, and Eastern deformation zone) and support the compilation of the Mineral Resource Estimate (MRE), scheduled to be finalised in Q1/2023.

To date, 61 holes for 15,060 metres have been completed, both onshore (land-based) and offshore on Lake Randall (salt-lake based refer to Figure 5). Drill spacing is a nominal 40 metre by 40 metre grid pattern, with angled holes planned to a nominal final downhole depth of 250 metres.

As previously reported, the first batch of gold-only assay results for drill holes, LRR001-LRR003 on the 160N section (Figures 1 & 2) (Refer LEX ASX Release 23 November 2022), followed-up the multiple gold and copper intersections outlined in previous aircore drilling located north of LEFR260 and in Lake Randall.

These holes returned multiple, consistent, broad zones of gold mineralisation hosted by altered basalt and diorite porphyry, including an outstanding interval of gold mineralisation of **103m @ 1.65 g/t gold from 25m, including 38m @ 3.83 g/t gold from 26m in hole LRR003**. Holes LRR001 and LRR002 returned lower tenor anomalous gold results over 18m downhole intervals, primarily located within the oxide zone, interpreted to be part of flat lying supergene zone.

More recently, gold-only assay results were returned for holes LRR004-007 located on Lake Randall and hole LEFR353 located on shore (Figure 1). These holes were completed to final downhole depths ranging from 252 – 258m and returned multiple intervals of broad gold mineralisation hosted in predominantly altered diorite-porphry and lesser basalt, which included higher-grade gold zones within them. The best mineralised zones were intersected in holes, LEFR353 and LRR004 (Table 1), including:

**LEFR353:**

- **48m @ 1.11 g/t Au from 204m to end of hole (EoH), including  
4.0m @ 7.06g/t Au from 217m**

**LRR004:**

- **38m @ 2.04 g/t Au from 27m, including 17m @ 3.90g/t Au from 38m and;**
- **100m @ 0.47 g/t Au from 93m, including 8m @ 2.02 g/t Au from 100m**

This new, broad zone of gold mineralisation intersected in hole LEFR353, has successfully extended mineralisation by approximately 50 metres down dip from previous drill hole LEFR285, which also ended in gold mineralisation (Figure 2). It also supports the Company's geological model for Burns and the increasing scale of the system. This includes a higher-grade south-plunging zone that is coincident with a north-south-trending structure. This northerly trending structure has a strike length of at least 600m and is open in both directions across the shoreline of and into Lake Randall (Figures 1 to 3). Hole LEFR353 will be extended with a diamond tail in the next phase of drilling.

Holes LRR005 – LRR007 were collared 40 metres south of the 160N section, which contained hole LRR003 with 103m @ 1.65 g/t gold from 25m. The original collar position of a planned fourth hole on this section was constrained by steep sand dunes occurring at the lake's edge (Figure 3). This hole has now been redesigned and will be drilled in the coming week. Each hole (LRR005-007) intersected the shallow, supergene, gold-enriched zone that was identified by previous aircore drillholes, LEFA1088-1089, on Lake Randall (Figure 2) (Refer LEX ASX Release 21 February 2022), in addition to intervals of lower grade gold at depth and to the end of hole in LRR005, including:

**LRR007:**

- **13m @ 0.93 g/t Au from 38m, including 4m @ 2.29 g/t Au from 28m, and  
5m @ 0.32 g/t Au from 174 m**

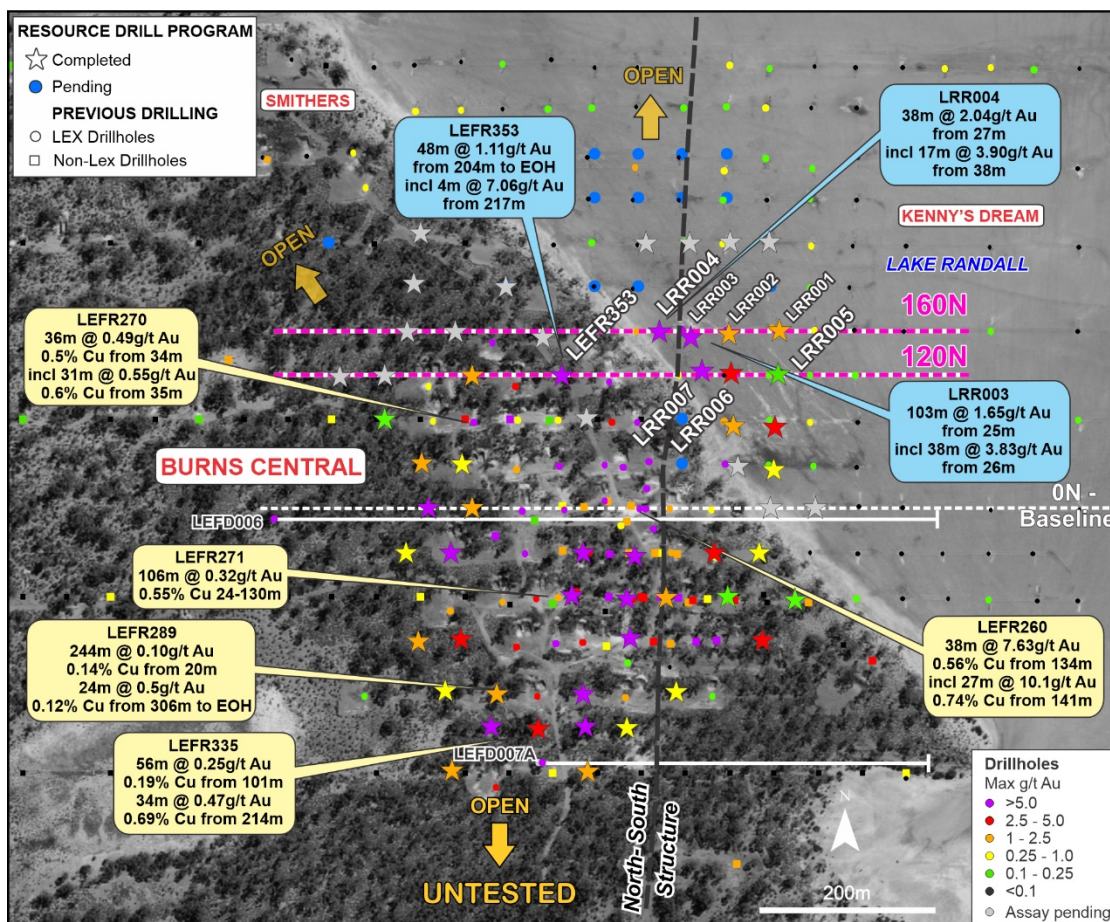
**LRR006:**

- **11m @ 0.70 g/t Au from 28m, including 2m @ 2.49 g/t Au from 29m, and  
2m @ 0.26 g/t Au from 199m**

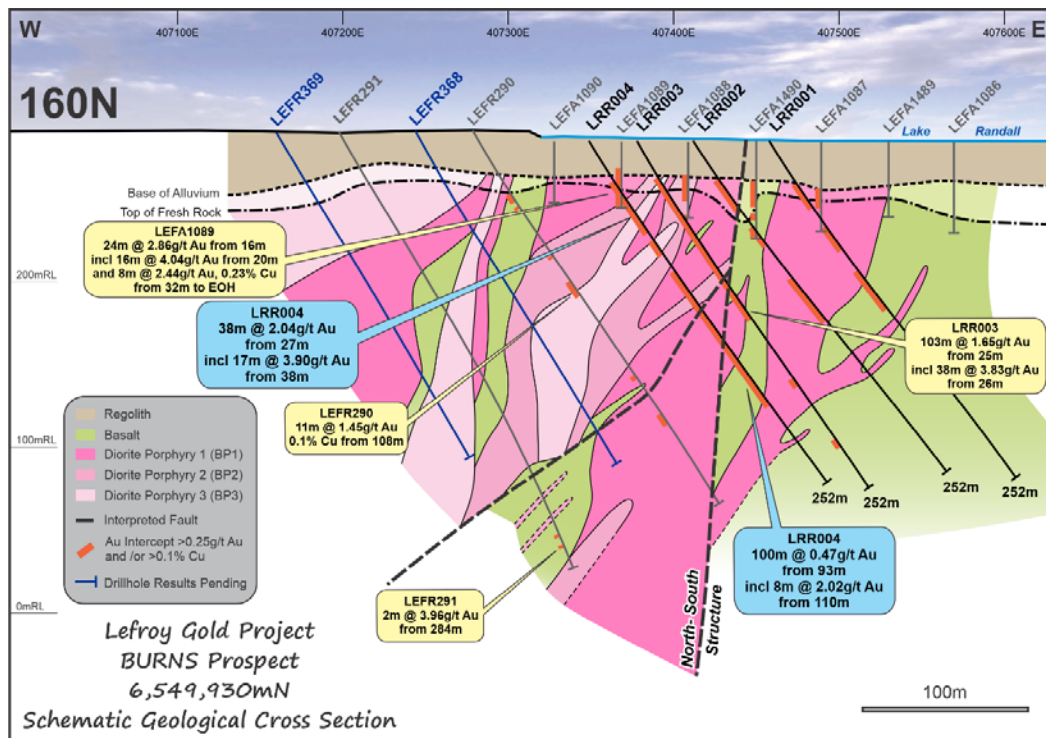
The Company now considers that holes LRR005 to LRR007 were drilled east of, and over the core target zone of, higher-grade mineralisation (Figure 3) interpreted to occur at depth. This interpretation is supported by the high-grade gold interval that was intersected to the end-of-hole in LEFR353 and also by LEFR285 (section 120N & Figure 3).

To adequately test this higher-grade target zone, the Company has extended this RC drill-out program by an additional 3 RC holes, with the new holes designed either side of the existing drill sections (120N & 160N), including one steep-dipping hole planned to the east of hole LEFR353 (Figure 3).

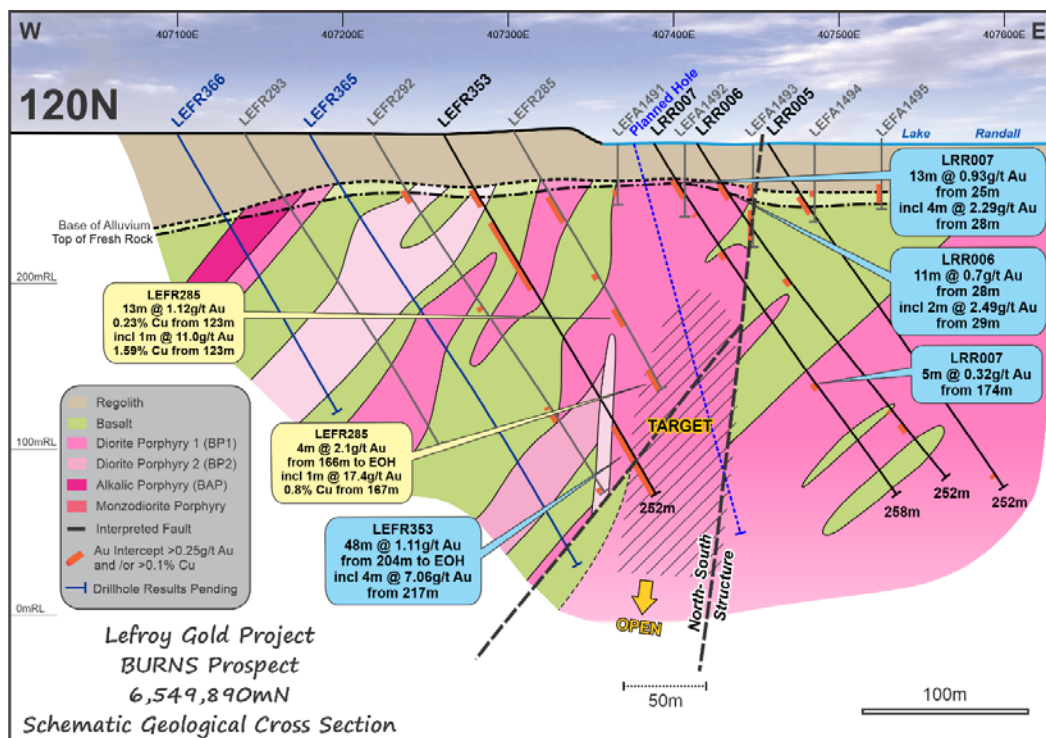
Based on anomalous copper values intersected in multiple adjacent drillholes including the discovery hole LEFR260, aircore hole LEFA1089 and others, including RC hole LEFR285 which returned a best copper intercept of 19m at 0.18% Cu from 44m (Refer LEX ASX Release 29 April 2021), the Company anticipates these new gold intersections will be supported by additional elevated copper assays which are pending. Multi-element results, including copper and silver assays, are expected between December 2022 and January 2023 (subject to laboratory turnaround).



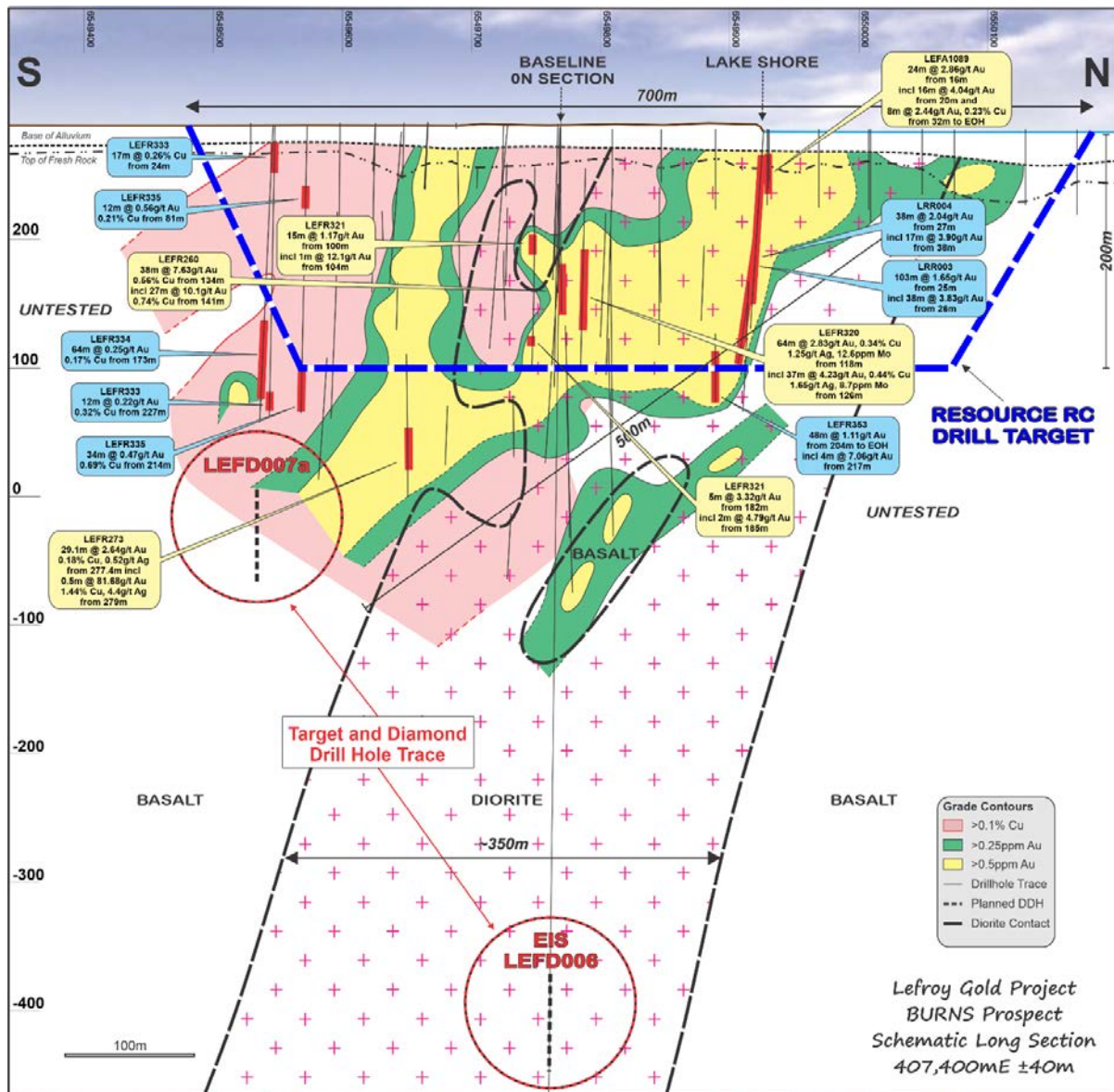
**Figure 1** Schematic geological cross-section for the 160 North (160N) drill traverse, highlighting recently drilled holes, LRR001-LRR004 and the multi-phase Burns Central Porphyry.



**Figure 2** Schematic geological cross-section for the 160 North (160N) drill traverse, highlighting drilled holes, LRR001-LRR004



**Figure 3** Schematic geological cross-section for the 120 North (120N) drill traverse, highlighting holes LRR005-007 which intersected a north-south trending mineralised target zone that is open.



**Figure 4** Schematic longitudinal section 407400N looking west and showing area of planned and completed RC drillholes (within blue dashed outline)

## Resource RC Drill-out Status

The drill program is ahead of schedule, with nine priority RC holes of the nineteen remaining expected to be completed by mid-December 2022.

Further assay results are expected to be received between December 2022 and January 2023, however, the Company acknowledges the current constraints on laboratories being used, which is affecting the prompt return of assay results.

The Company aims to deliver a maiden gold-copper Mineral Resource Estimate (MRE) for the shallow part of the Burns system in the March 2023 Quarter. Drilling to date, including the aforementioned LEFR353 (Figure 3 & 4) that ended in anomalous gold mineralisation, clearly shows the mineralised envelope will extend at depth in excess of the current limits of drilling.

Planning for the next phase of RC and diamond drilling at Burns Central is underway with final drill hole design dependent on interrogation of the pending copper and multielement results.

## Deep Diamond Drill Results Update

Final results for the diamond holes, LEFD006-007a, completed at Burns Central in the September Quarter 2022, remain pending and are expected to be returned in the near term.



**Figure 5** Burns Central RC drill rig in Lake Randall, looking south

This announcement has been authorised for release by the Board

Wade Johnson  
Managing Director

**TABLE 1 Burns Resource RC Drill Program Significant Results LRR004-007 and LEFR353**

Hole Id	Collar E (MGA94_51)	Collar N (MGA94_51)	EOH Depth (m)	Depth From (m)	Depth To (m)	Interval (m)	Au (g/t)	Geology
<b>LEFR353</b>	407261	6549890	252	37	49	<b>12.0</b>	0.12	Lower saprolite clay
	Also			60	107	<b>47.0</b>	0.10	Basalt and diorite porphyry. Hematite-biotite-magnetite alteration.
	Also			204	252	<b>48.0</b>	<b>1.11</b>	Multiple cross-cutting diorite porphyries
	Including			204	207	<b>3.0</b>	2.50	Diorite porphyry with magnetite-hematite alteration and trace disseminated pyrite
	and			217	221	<b>4.0</b>	7.06	Diorite porphyry with biotite-epidote alteration
	and			230	234	<b>4.0</b>	2.66	Diorite porphyry with hematite dust alteration and pink calcite veining
	and			239	240	<b>1.0</b>	1.98	Diorite porphyry with hematite-epidote-biotite alteration.
<b>LRR004</b>	407349	6549930	252	27	65	<b>38.0</b>	<b>2.04</b>	Oxide and fresh rock consisting of hematite-magnetite altered diorite that is very fractured.
	Including			31	32	<b>1.0</b>	1.39	Lower saprolite clay
	and			38	55	<b>17.0</b>	3.90	Oxide and fresh rock consisting of hematite-magnetite altered diorite that is very fractured.
	and			60	61	<b>1.0</b>	1.09	Fresh rock consisting of hematite-magnetite altered diorite that is very fractured.
	and			63	64	<b>1.0</b>	2.20	Fresh rock consisting of hematite-magnetite altered diorite that is very fractured.
	Also			70	81	<b>11.0</b>	0.20	Hematite-biotite altered diorite porphyry. Highly fractured.
	Also			93	193	<b>100.0</b>	<b>0.47</b>	Diorite porphyry, basalt, and a deformation zone. Diorite is hematite-biotite-magnetite-pyrite altered and fractured.
	Including			97	98	<b>1.0</b>	4.81	Diorite porphyry with hematite-biotite alteration. Highly fractured.
	and			110	118	<b>8.0</b>	2.02	Diorite porphyry with hematite-magnetite-biotite-pyrite alteration. Pyrite is disseminated.
	and			126	128	<b>2.0</b>	1.59	Diorite porphyry with hematite alteration and 1% blebby pyrite. Highly fractured.
	and			142	143	<b>1.0</b>	2.16	Diorite porphyry with hematite alteration and 1% blebby pyrite. Highly fractured.
	and			167	168	<b>1.0</b>	1.77	Strongly foliated basalt with biotite, orange calcite veining, hematite, epidote, actinolite, and magnesite alteration.
	Also			230	232	<b>2.0</b>	0.14	Strongly foliated basalt with biotite, orange/white calcite veining, and 1% blebby pyrite.
<b>LRR005</b>	407457	6549891	252	32	44	<b>12.0</b>	0.18	Transported clay and lower saprolite clay
	Also			244	246	<b>2.0</b>	0.15	Diorite porphyry with biotite-epidote-quartz-calcite veining and 1% blebby pyrite.
<b>LRR006</b>	407414	6549892	252	28	39	<b>11.0</b>	0.70	Oxide - lower saprolite clay
	Including			29	31	<b>2.0</b>	2.49	Oxide - lower saprolite clay
	Also			98	103	<b>5.0</b>	0.14	Weakly foliated basalt with weak calcite veining and trace blebby pyrite
	Also			199	201	<b>2.0</b>	0.26	Biotite-hematite altered diorite porphyry with white/pink calcite veining and fracture fill/vein chalcopyrite and pyrite
	Also			210	216	<b>6.0</b>	0.12	Highly fractured diorite porphyry with hematite-biotite-calcite alteration and up to 10% disseminated pyrite
<b>LRR007</b>	407388	6549894	258	25	38	<b>13.0</b>	0.93	Oxide - lower saprolite clay and diorite porphyry
	Including			28	32	<b>4.0</b>	2.29	Oxide - lower saprolite clay and diorite porphyry
	and			36	37	<b>1.0</b>	1.15	Oxide - lower saprolite clay and diorite porphyry
	Also			49	51	<b>2.0</b>	0.26	Highly fractured diorite porphyry with hematite-biotite-epidote alteration
	Also			77	81	<b>4.0</b>	0.21	Highly fractured diorite porphyry with hematite-biotite alteration
	Also			174	179	<b>5.0</b>	0.32	Highly fractured diorite porphyry with hematite-biotite-magnesite-actinolite alteration and 1% blebby pyrite.

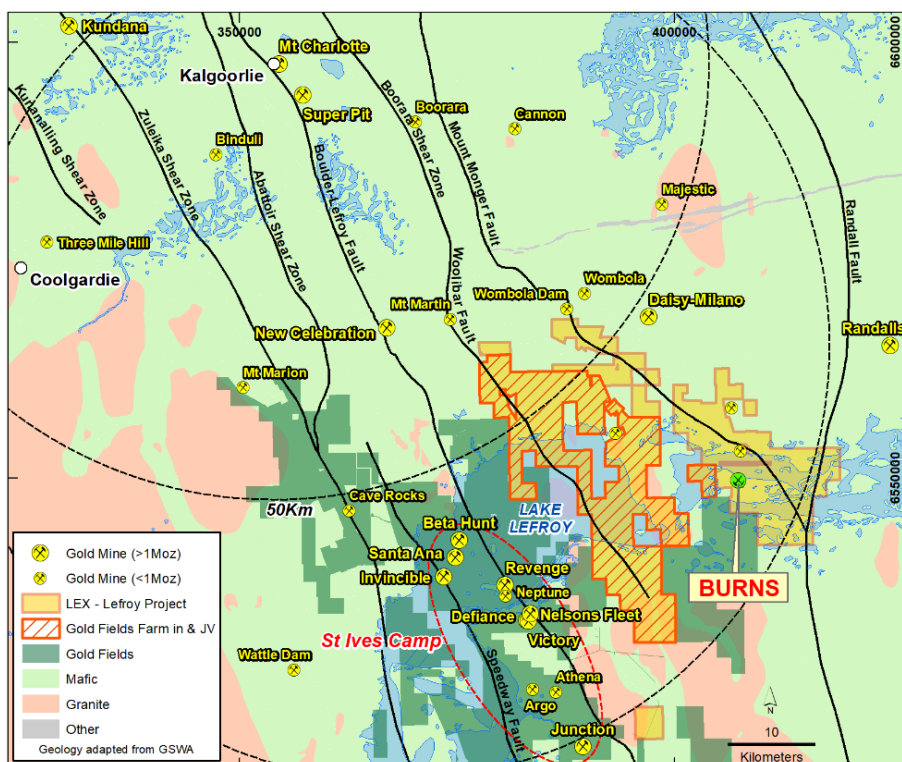
NB: All holes drilled at -60 degrees dip to an azimuth of 090 (East). Gold Intervals calculated with 0.1 g/t Au cut-off. Refer to attached JORC Tables for further details.



**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 534km<sup>2</sup> in the heart of the world class gold production area between Kalgoorlie and Norseman. The Project is proximal 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. The Western Lefroy tenement package subject to the Gold Fields joint venture, and Gold Fields tenure is also highlighted

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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 but specific to exploration reporting by the Company of previous exploration at Burns at the Lefroy Gold Project.

- Outstanding High-Grade Gold and Copper Mineralisation Intersected at Burns: 23 February 2020
- Exploration Update-Drilling Extends Porphyry at Burns: 26 March 2021
- Drill Results Extend Copper Gold Zones at Burns: 29 April 2021
- Multiple Intervals of Altered Porphyry Intersected at Burns: 3 May 2021
- Burns Drilling Update-first hole on 40N section confirms significant mineralisation: 18 June 2021
- Exploration Update-RC drilling commences at the Burns Cu Au prospect: 20 July 2021
- Burns Update-Cu-Au mineralisation confirmed, step out drilling extends: 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
- Massive drilling planned for the Western Lefroy JV:13 October 2021
- Burns Update-Drill Results continue to support larger Cu-Au-Ag system: 3 November 2021
- Burns Update Drilling underway at Lovejoy anomaly: 22 November 2021
- Major Drilling Programs Resumed at Lefroy: 19 January 2022
- RC Drill Results Outline New Gold Zone at Burns: 25 January 2022
- High-Grade results expand the Burns Cu Au System: 21 February 2022
- Impressive Au-Cu intersection in New RC Hole at Burns: 19 April 2022
- AC Drill Results Continue to Expand Burns Gold-Copper System Beneath Lake Randall: 4 July 2022
- Exploration Update 1200m Deep Diamond Hole Underway at Burns :12 July 2022
- Burns Drill Out- Update #1 Multiple Broad Copper/Gold Intersections: 21 November 22
- Burns Drill Update #2 Outstanding Gold Intersection on Lake Randall: 23 November 22
- Multiple Broad Cu Au Drill Intersections at Lovejoy Expand Scale of Burns System: 29 November 22

*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*

**END**

**Lefroy Gold Project: Burns Central Resource RC Drilling –5 December 2022**

**JORC Table 1**

**Section 1 Sampling Techniques and Data**

Criteria	JORC Code Explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The sampling noted in this release has been carried out using Reverse Circulation (RC) drilling at the Burns copper-gold project. The RC program in progress comprises approximately 80 angled RC holes for approximately 20,000m of drilling. Additional gold assay results have been received for RC holes drilled in Lake Randall and hole LEFR353 drilled on land. LRR004-006 and LEFR353 were each drilled to 252m depth. Hole LRR007 was drilled to 258m. Holes were drilled on a 40m line spacing (traverse) with holes at 40m centres. All holes were drilled at 60° dip toward 090° (East).</li> <li>• Sampling and QAQC protocols as per industry best practice with further details below.</li> <li>• RC samples were collected from the cyclone at 1m intervals in green plastic mining bags and laid out in rows of 30m (30 samples) on the ground. Four metre composite samples were collected from 0m through the transported overburden (approximately 24m downhole), to the base of alluvium, by sampling the 1m sample bags with a flour scoop or PVC spear to produce a bulk 2-3kg sample. Individual 1m split samples were collected through bedrock (below base of alluvium) to end of hole (EOH). These 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 for analysis where the samples were dried, pulverised, and split to produce a 40g sample for analysis by fire assay with Au determination by Atomic Absorption Spectrometry. The pulp samples were sent to the Perth laboratory for additional elements, derived using a mixed acid digest with ICP finish for Cu, Co, Ag, As, Bi, Mo, Fe, Pb, S, Sb, Te, W and Zn. Approximately 1 in 10 samples were analysed for 59 elements using a mixed acid digest and sodium peroxide fusion with ICP-MS finish.</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>• <i>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).</i></li> </ul>	<ul style="list-style-type: none"> <li>• The Reverse Circulation (RC) was completed by a Schramm T685 RC rig from Raglan Drilling (Kalgoorlie). Low air face sampling hammer drilling proved satisfactory to penetrate the regolith and reduce contamination risk.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>• <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li>• <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The use of professional and competent 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 any sample loss may have occurred.</li> <li>• Sample recovery visually inspected and recorded by the rig geologist and sampler.</li> <li>• Some poor sample return in the overlying transported material (0-10m) where less than 50% of the sample was able to be returned.</li> <li>• Sample recovery size and sample condition (dry, wet, moist) visually inspected and recorded by the rig geologist and sampler. Recovery of samples estimated to be 80-100%, with some variability to 10% recovery particularly drilling through moist transported clays-gravels.</li> <li>• Drilling with care (e.g. clearing hole at start of rod, regular cyclone cleaning) if water encountered to reduce incidence of wet –sticky sample and cross contamination.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> <li>• <i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Detailed logging of drill chips for regolith, lithology, structure, veining, alteration, mineralisation and recoveries recorded in each hole by qualified geologist.</li> <li>• Geological logging is qualitative in nature and relies on the geologist logging the hole to make assumptions of the character based on their experience and knowledge.</li> <li>• Logging carried out by sieving 1m sample cuttings, washing in water and the entire hole collected in plastic chip trays for future reference.</li> </ul>

Criteria	JORC Code Explanation	Commentary
		<ul style="list-style-type: none"> <li>• Chip trays for each hole were photographed using a purpose made camera stand and a quality digital SLR camera and stored in the database.</li> <li>• Magnetic susceptibility measurements were recorded and considered to be quantitative in nature.</li> <li>• All drill holes are logged in their entirety (100%).</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<ul style="list-style-type: none"> <li>• No core drilling completed</li> <li>• A 4m composite sample was collected from 0m to the base of transported cover for each hole. Sample weight 2 - 3 kg. The composite samples were collected by using a scoop or PVC spear 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.</li> <li>• 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.</li> <li>• The sample preparation of the RC samples follows industry best practice, involving oven drying, pulverising, to produce a homogenous sub sample for analysis.</li> <li>• 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.</li> <li>• Hole LRR004 was drilled as a duplicate sample hole. Two 1m samples were collected into calico bags off opposing sides of the cone splitter for each sample interval. These duplicate samples will be used for QAQC.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li>• <i>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.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• RC samples routinely analysed for gold using the 40gram Fire Assay digest method with an AAS finish at Bureau Veritas's Kalgoorlie or Perth Laboratory. Additional elements will be derived using a mixed acid digest with ICP finish for Cu, Ag, As, Bi, Mo, Fe, Pb, S, Sb, Te, W and Zn.</li> <li>• Selected samples will be analysed for an additional 59 elements using a mixed acid digest with ICP-MS finish.</li> <li>• 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.</li> <li>• A hand-held KT-10 was used to measure the magnetic susceptibility for each metre following the base of transported cover. Measurements were taken with the instrument pressed to the sample bag.</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>• <i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li>• <i>The use of twinned holes.</i></li> <li>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li>• <i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• 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 Dashed database and validation checks completed to ensure data accuracy. Assay files are received electronically from the laboratory and field to the Company's server and provided to the external database manager.</li> <li>• There has been no adjustment to the assay data. The primary gold (Au) and copper, plus additional elements reported by the laboratory are the priority values used for plotting, interrogating and reporting.</li> <li>• The results have been reviewed by alternative company personnel and any minor sampling errors identified were field checked and corrected.</li> <li>• No holes were twinned however selected holes were drilled as duplicate holes for QAQC purposes.</li> </ul>

<b>Criteria</b>	<b>JORC Code Explanation</b>	<b>Commentary</b>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Specification of the grid system used.</li> <li>• Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>• Drill hole positions were surveyed using a handheld GPS operated by the rig geologist/field assistant. In the future post drilling, drill hole collars will be surveyed using a DGPS by a third-party contractor.</li> <li>• Drill azimuth is set up by the supervising geologist.</li> <li>• Down hole surveys were completed by Raglan drill crew using a multi-shot gyro which records a survey every 5m downhole.</li> <li>• Grid System – MGA94 Zone 51. Topographic elevation will be captured by using the differential GPS when surveyed.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>• Data spacing for reporting of Exploration Results.</li> <li>• 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.</li> <li>• Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>• Hole spacing is 40x40m and infilling between existing 80m spaced drilling.</li> <li>• 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 with a steep southerly plunge. 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. A primary system (hypogene) occurs in the fresh rock below 100m depth. 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.</li> <li>• The spacing of the drill holes is considered sufficient for Mineral Resource estimate procedures.</li> <li>• No compositing has been applied to assay results.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• 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° to the West.</li> <li>• 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 optimal to determine the true width of mineralisation and improve geological knowledge of the system.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>• The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>• Samples were bagged in labelled and numbered calico bags, collected and personally delivered to the Bureau Veritas (BV) Laboratory (Kalgoorlie) by Company field personnel. Samples were then sorted and checked for inconsistencies against the lodged Submission sheet by BV staff.</li> <li>• BV reconcile the samples received against the Lefroy Exploration Limited (LEX) submission sheet to notify of any missing or extra samples. Following initial gold analysis, the pulp samples are sent to the BV Perth Laboratory for multi-element analysis. Post analysis, the samples, pulps and residues are retained by the laboratory in a secure storage yard.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>• The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>• All sampling and analytical results of this drill program were reviewed by the Senior Exploration Geologist and Managing Director. Anomalous gold and copper intersections were checked against library chip trays and logging to correlate with geology. QAQC reports are auto generated by the database managers and reviewed by staff.</li> </ul>

## Lefroy Gold Project: Burns Central Resource RC Drilling – 5 December 2022

### Section 2 Reporting of Exploration Results

Criteria	JORC Code Explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The Lefroy Project is located approximately 50 km southeast 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 (MEX). The work described in this report was completed on Exploration lease E 15/1715.</li> <li>• E 15/1715 is held 100% by Monger Exploration Pty Ltd a wholly owned subsidiary of Lefroy Exploration Limited</li> <li>• The tenements are current and in good standing with the Department of Mines, Industry Regulation and Safety (DMIRS) of Western Australia.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>• <i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• 1984 Coopers Resources/Enterprise Gold Mines: The ground encompassing Burns was taken up as three ELs, E15/19-21.</li> <li>• 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.</li> <li>• 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 northwest of Burns.</li> <li>• 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.</li> <li>• 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.</li> <li>• 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.</li> <li>• 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.</li> </ul>

Criteria	JORC Code Explanation	Commentary
		<ul style="list-style-type: none"> <li>• 2008 Gold Attire: The ground surrendered by Sovereign over Burns was taken up as E15/1097.</li> <li>• 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 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.</li> <li>• 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 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.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>• <i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <li>• 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 &gt;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 within 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/chalcocite in veins, veinlets and fractures throughout the basalt and porphyry.</li> </ul>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>• <i>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:</i> <ul style="list-style-type: none"> <li>• <i>easting and northing of the drill hole collar</i></li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Tables containing drill hole collar, survey and intersection data for material drill holes (gold intersections &gt;0.1g/t Au or copper intersections &gt;0.1% Cu with up to a maximum of 10m internal dilution) are included in Table 1 in the body of the announcement.</li> <li>• No Information has been excluded.</li> </ul>

Criteria	JORC Code Explanation	Commentary
	<ul style="list-style-type: none"> <li>• <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li>• <i>dip and azimuth of the hole</i></li>   <li>• <i>down hole length and interception depth</i></li> <li>• <i>hole length.</i></li>   <li>• <i>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.</i></li> </ul>	
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>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.</i></li> <li>• <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<ul style="list-style-type: none"> <li>• All grades have been length weighted and reported as down-hole metres. High grades have not been cut. A lower cut off of 0.1g/t Au has been used to identify significant results (intersections) with a maximum of 10m of consecutive internal dilution below cut-off.</li> <li>• Where present, higher-grade values are included in the intercepts table and assay values equal to or &gt; 1.0 g/t Au have been stated on a separate line below the intercept assigned with the text ‘includes’.</li> <li>• Reported results have been calculated using 1m samples and is noted in the body of the report.</li> <li>• No metal equivalent values or formulas are used.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>• <i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li>• <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li>• <i>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’).</i></li> </ul>	<ul style="list-style-type: none"> <li>• All material results are based on down-hole metres.</li> <li>• 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.</li> <li>• Results from this drill program do not represent ‘true widths’ however holes are designed to intercept the host sequence perpendicular to its strike.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Appropriate summary diagrams (plan) and cross sections are included in this announcement. (Figure 1,2, &amp; 3)</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Significant assay results are provided in Table 1 for the recent LEX RC drill program.</li> <li>• Drill holes with no significant results (&lt;2m and &lt;0.1g/t Au) are not reported.</li> <li>• Reference to significant assay results from historical or previous drilling by LEX are noted in the body of the report.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• All relevant data has been included within this report.</li> </ul>



Criteria	JORC Code Explanation	Commentary
<b>Further work</b>	<ul style="list-style-type: none"> <li>• <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li>• <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The exploration program is currently underway and noted in the body of the report. Further work at Burns Central will be directed by the results from this RC program and the outcome of the Mineral Resource Estimate.</li> </ul>