Lefroy Exploration

ASX ANNOUNCEMENT I 3 OCT 2024

High Grade Shallow Resource to unlock value at Burns Central

ASX:LEX

HIGHLIGHTS

- **A significant shallow high-grade Au zone has been delineated within the existing Burns Central Mineral Resource Estimate (MRE).**
- **The Burns high grade zone totals 4.22Mt @ 1.18 g/t Au for 159,285 contained ounces (applying a 0.5g/t Au cut-off grade) which includes:**
  - **46,538 oz of gold (Au) in oxide,**
  - **8,154 oz gold (Au) in transitional; and**
  - **104,593 oz gold (Au) in fresh rock**
- **Burns Central displays a consistent high-grade corridor extending over 650m strike length, and open to the northeast and southwest, with significant previously reported intersections including:**
  - **61m@ 2.96 g/t Au (from 120m), including 37m @ 4.23 g/t Au (from 126m) in LEFR320**
  - **39m @ 3.87 g/t Au (from 26m) in LRR003; and**
  - **30m @ 2.43 g/t Au (from 27m), including 17m @ 3.9 g/t (from 38m) in LRR004**
- **The MRE is drilled to 98% Indicated status and 2% Inferred for gold, with 34% of the gold resource contained within oxide and transitional material.**
- **The deposit is contained within a well-defined structural control with additional targets located along-strike.**
- **The Company is in the final stages of preparing an MRE update for the Mt Martin deposit located elsewhere on its tenure.**

Lefroy Exploration Limited ("Lefroy" or "the Company") (ASX:LEX) is pleased to provide an update to the Resource Estimate (MRE) for the Burns Central prospect located in the Eastern Goldfields of Western Australia. The update is based on the original MRE statement (refer ASX release 4 May 2023) which was prepared by consultant, Mr Chris Grove, of Measured Group Pty Ltd in accordance with JORC 2012 guidelines.

LEFROY CEO GRAEME GRIBBIN, COMMENTED:

"We are pleased to be revisiting the deposits across our tenure to update the diverse Lefroy Resource base and unlock the value of our landholding.

"The reporting of the Company's maiden MRE at Burns Central in May 2023 demonstrated the expansive size and potential of the Au and Cu system at Burns. Applying a higher grade (0.5g/t) Au cut-off to the existing resource, we have now been able to demonstrate the significance high-grade gold potential of the Burns Central resource, with this higher-grading zone containing 159,000 near surface ounces grading 1.18g/t Au.

"The definition of this structurally controlled, shallow, high-grade core at Burns Central represents a remarkable opportunity for the Company to explore for and grow its existing portfolio of shallow mineral resources, currently totaling 1.1Million ounces."

AN EVOLVING BURNS RESOURCE STORY

The Burns Central Deposit forms part of the Burns Gold-Copper Project ('Burns' or 'Project'), 70km southeast of Kalgoorlie in the highly prospective Kalgoorlie Terrane of Western Australia. Burns is located within the broader Lefroy Gold Project, proximal to the St Ives gold camp (Gold Fields Ltd JSE: **GFI**) and the Daisy Milano and Mt Monger gold operations (Red 5 Limited ASX: **RED**).

The previously reported mineral resource estimate (MRE) at Burns Central (refer ASX release 4 May 2024) consisted of two volumes: "Min Enriched" for near-surface oxide and saprock enrichment, and "Min" for fresh rock sulphide mineralisation. Applying a nominal 0.1 cut-off value for each metal, this reported a total MRE of 42.95 million tonnes grading 0.36g/t Au and 0.14 % Cu.

REALISING VALUE WITH BURNS HIGH-GRADE CORRIDOR

In keeping with Lefroy's focus to progress and commercialise the Company's portfolio of shallow advanced gold deposits (refer ASX release 27 March 2024) an internal review of the high-grade potential of the Burns Central resource has now been completed.

The Company is pleased to report that a significant high-grade zone has been delineated within the existing Burns Central MRE. Reporting only blocks within 200m of surface and applying a cut-off grade of 0.5 g/t Au, this zone reports **4.22Mt @ 1.18 g/t Au for 159,285 contained ounces** (Table 1), reported across oxide, transitional and fresh mineralisation categories.

Significantly, this high-grade zone is reported at over 98% Indicated resource classification, with combined oxide and transitional material representing over 34% of the total resource.

Furthermore, the contained gold ounces (159,285 oz) within this recently calculated high grading central core represents 32% of the entire gold ounces (497,472 oz) reported in the May 2023 original MRE. Expressed differently, 32% of the contained gold ounces at Burns Central are contained within 10% of the defined tonnes (159,258 oz within 4.2Mt versus 497,472 oz within 42.95Mt).

Table 1: Mineral Resource Statement for Burns Central, including Gold (Au), Copper (Cu) and Silver (Ag), applying a cut-off above 0.5 g/t Au and maximum 200m depth from surface. Small discrepancies may occur due to the effect of rounding

			Average Value			Material Content		
Mineralisation	**Category**	**Mass** Mt	**Au** g/t	**Cu** %	**Ag** g/t	**Au** oz	**Cu** t	**Ag** oz
Oxide	Indicated	1.06	1.35	0.21	0.56	46,122	2,219	19,280
	Inferred	0.02	0.70	0.32	0.77	416	59	462
	Total	**1.08**	**1.34**	**0.21**	**0.57**	**46,538**	**2,279**	**19,741**
Transitional	Indicated	0.27	0.93	0.56	1.29	8,152	1,532	11,269
	Inferred	0.00	0.57	0.08	0.08	2	0	0
	Total	**0.27**	**0.93**	**0.56**	**1.29**	**8,154**	**1,532**	**11,269**
Fresh Rock	Indicated	2.78	1.15	0.19	0.57	102,941	5,368	51,104
	Inferred	0.08	0.62	0.15	0.29	1,652	124	769
	Total	**2.86**	**1.14**	**0.19**	**0.56**	**104,593**	**5,492**	**51,873**
Total	**Indicated**	**4.11**	**1.19**	**0.22**	**0.62**	**157,215**	**9,119**	**81,653**
	Inferred	**0.10**	**0.63**	**0.18**	**0.38**	**2,070**	**184**	**1,231**
	Total	**4.22**	**1.18**	**0.22**	**0.61**	**159,285**	**9,303**	**82,883**

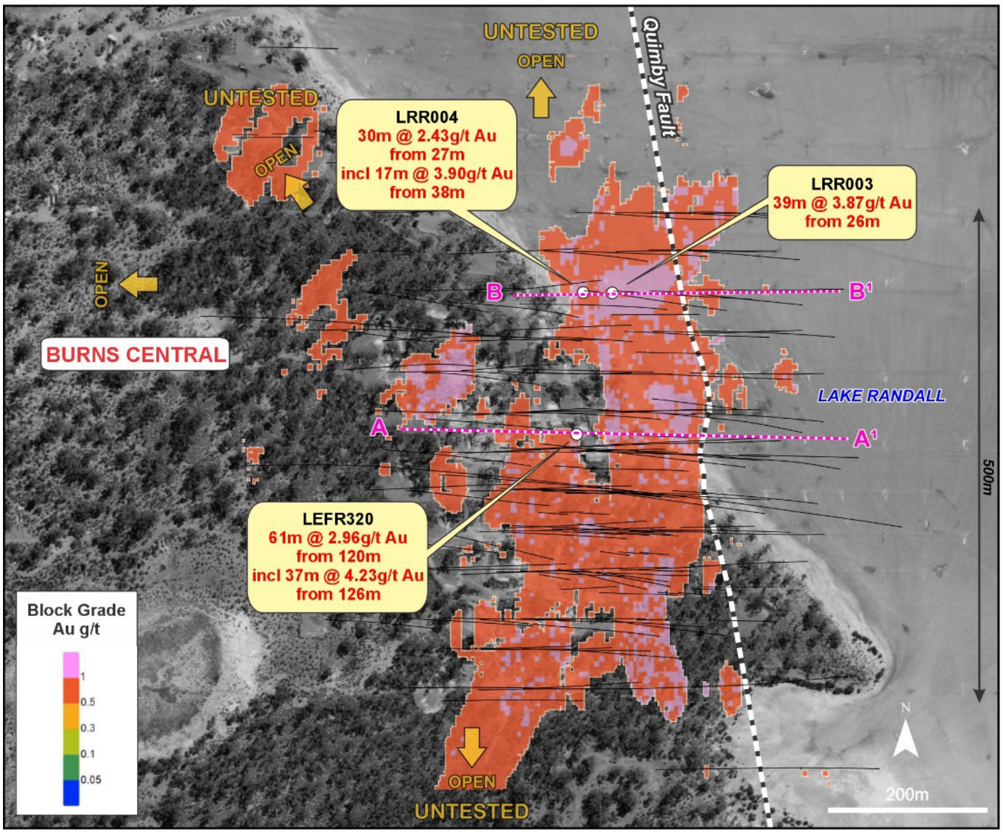

Figure 1: Burns Central Location depicting resource cut to 0.5g/t Au

As reported in the maiden MRE for Burns in May 2023, the Company recognised the importance of a significant north-south trending structure (now named the Quimby Fault). This fault coincides with and strikes sub-parallel to the eastern edge of the recognised high-grade Au zone at Burns (Figure 1).

Significant gold intersections are associated with this north-south trending fault, with the system remaining open to the north and south (Figure 1).

Several robust significant drill hole intersections we encountered within the last phase of drilling at Burns, with notable intercepts (using a 0.5g/t cut-off) reported (Figures 2 and 3) including:

- **61m@ 2.96 g/t Au (from 120m), including 37m @ 4.23 g/t Au (from 126m) in LEFR320**
- **39m @ 3.87 g/t Au (from 26m) in LRR003; and**
- **30m @ 2.43 g/t Au (from 27m), including 17m @ 3.9 g/t (from 38m) in LRR004**

These highly significant Au intersections, coupled with a sound understanding of the structural controls to high-grade gold mineralisation at Burns, and with the system remaining open north and south, represents a compelling exploration target for growing the high-grade resource.

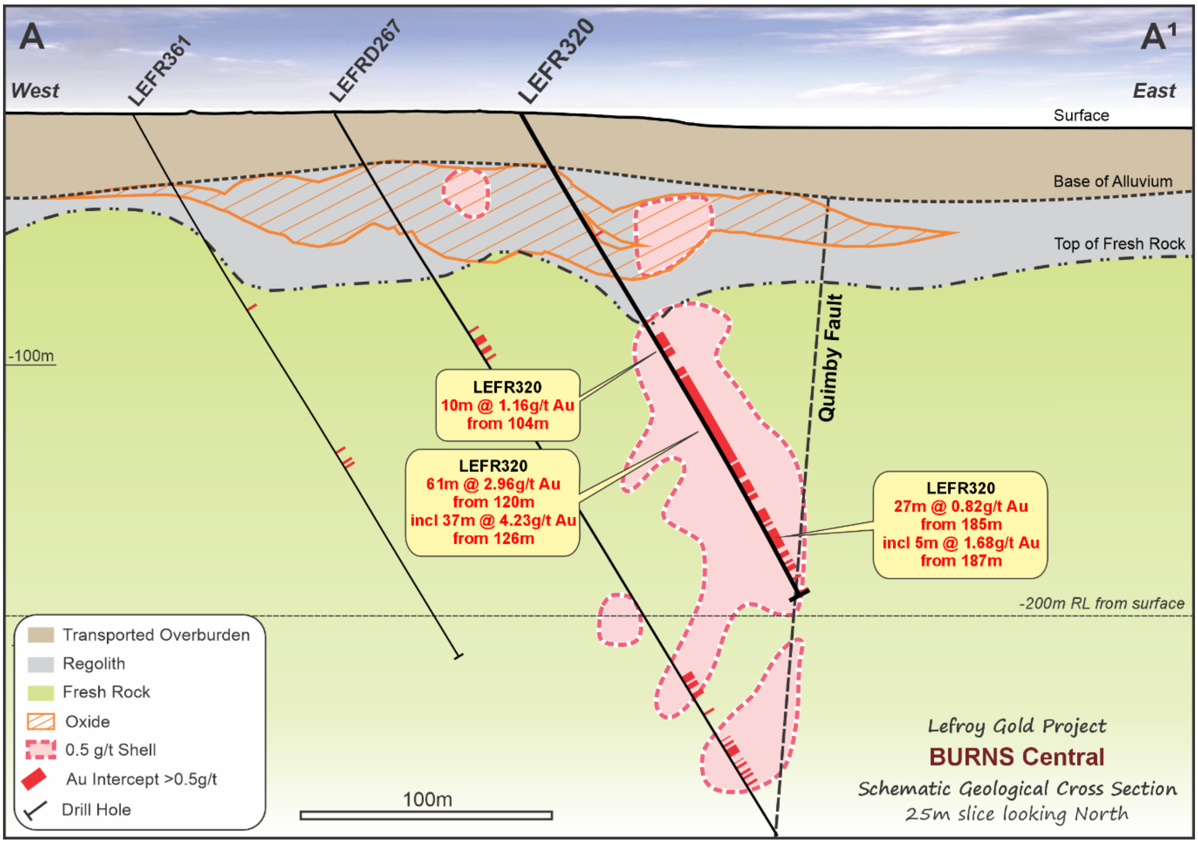

Figure 2: Burns Central A – A[1] cross section with 0.5g/t Au cut-off resource outline

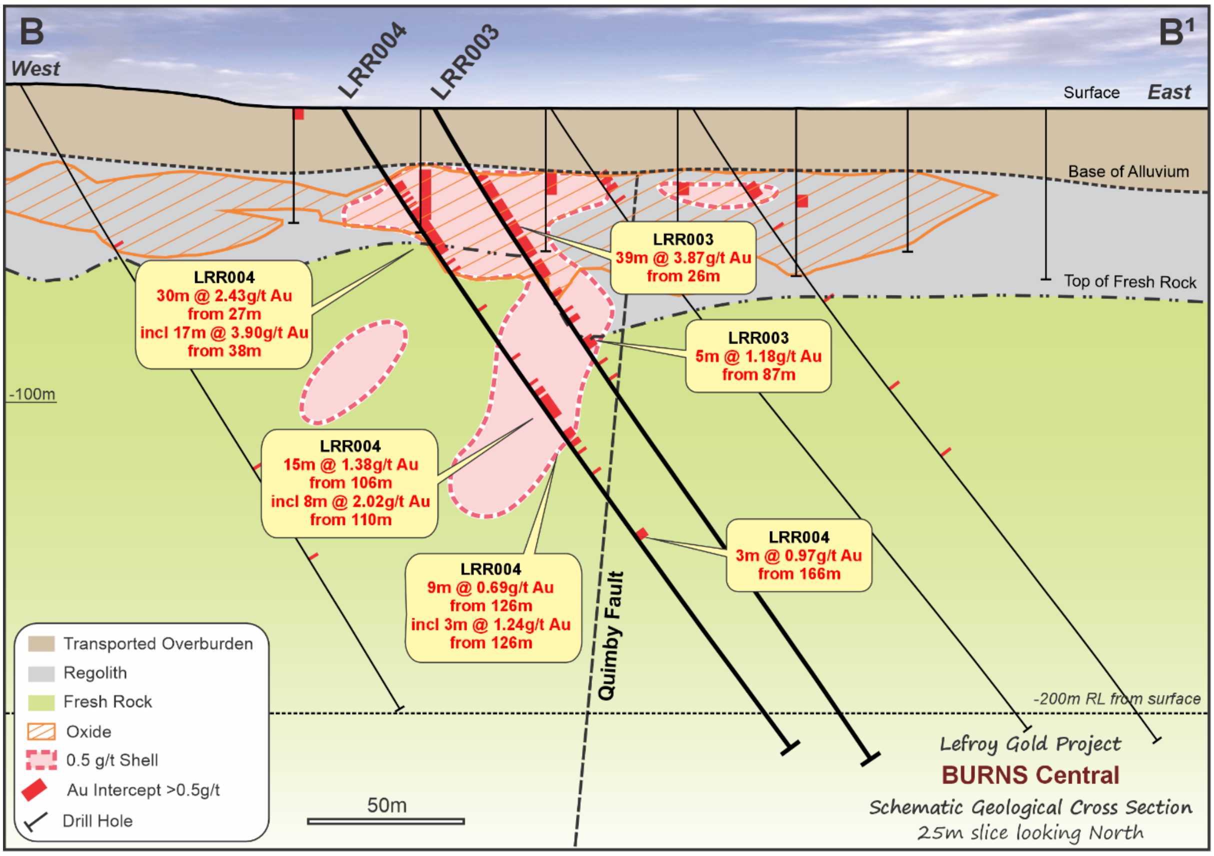

Figure 3: Burns Central B – B[1] cross section with 0.5g/t Au cut-off resource outline

The Company completed preliminary metallurgical test work in late 2023, submitting 6 composite samples representing the high-grade zone of Burns. Test work concluded that significant gravity recoverable gold was generated from all samples, averaging 41%.

Intensive cyanidation of the gravity concentrates dissolved between 95% and 99.7% of the contained gold.

No cyanidation was undertaken on the gravity tails, concluding it was not possible to determine the likely performance of a whole ore cyanide leach, however, this could be determined during a subsequent phase of test work.

UNLOCKING THE HIGH-GRADE POTENTIAL OF THE REGION

Extending over 4km, this corridor is defined by a series of discrete magnetic anomalies focused along a curvilinear corridor, associated with a series of early and late porphyry intrusive suites (Figure 4)

Reverse circulation drilling in 2021 (refer ASX announcement 3 November 2021) along with more recent drilling at Lovejoy (refer ASX announcement 27 November 2022) has recognised similar alteration and localised high-grade gold mineralisation, highlighting the potential of this corridor to unlock significant zones of gold mineralisation akin to Burns.

Additionally, the identification of numerous structural breaks along this 4km magnetic trend (located near Smithers, Flanders, Skinner and Lovejoy), are interpreted to represent north-south structures analogous to the Quimby Fault, potentially acting as additional controls towards focusing high-grade mineralisation similar to Burns (Figure 4).

The Company considers these targets, along with the exploration upside immediately surrounding Burns Central, to be high-priority exploration targets for advancement in the December quarter FY25.

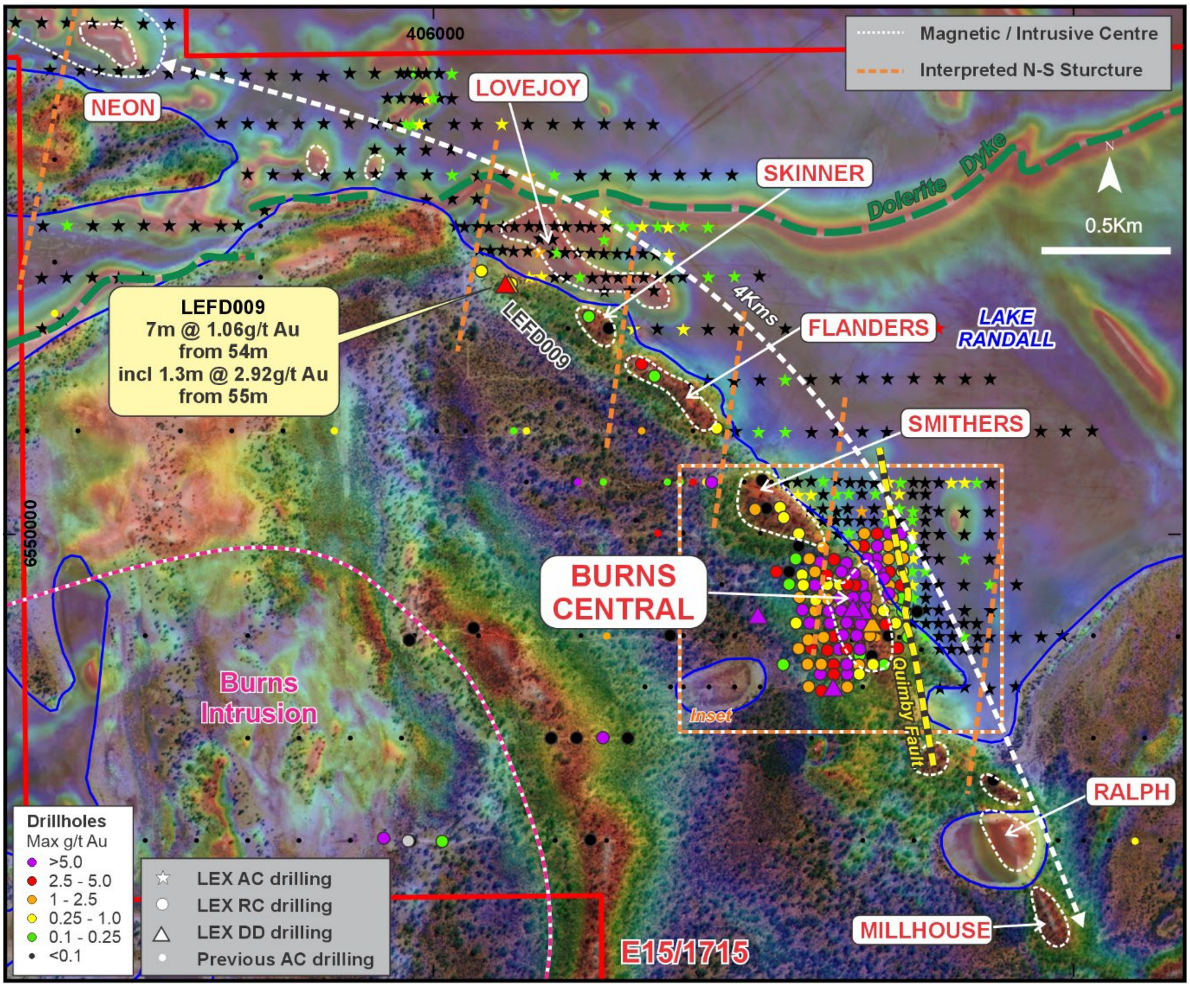

Figure 4: Burns district with regional high-grade Au targets

Burns Central Resource – Supporting Information

The mineral resources stated in Table 1 are a component of the global Burns Central MRE and were calculated based on the following parameters:

- The original "Min Enriched" (enriched oxide and saprock) and "Min" (fresh rock) domains within the Burns Central MRE were split into separate "Oxide", "Transitional" and "Fresh" rock domains based on the original wireframe surfaces generated from detailed lithological logging of resource drill holes.
- Separate wireframe volumes were generated for the Oxide, Transitional and fresh Rock Domains.

- The existing Burns Central Resource block model was interrogated in Leapfrog Geo Edge software and all resource block centroids within the new domains were reported using a >0.5g/t Au cut-off and a maximum 200m depth from surface.
- Pursuant to ASX Listing Rule 5.8, the Company confirms that all material assumptions underpinning the original Burns Central MRE as reported to the ASX on 4 May 2023 continue to apply and have not materially changed.

-Ends-

This announcement has been authorised for release by the Board of Directors.

Graeme Gribbin
CEO

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ABOUT LEFROY EXPLORATION LIMITED

Lefroy Exploration Limited (ASX:LEX) is an active West Australian exploration company focused on developing its growing gold and critical minerals projects. The Company's portfolio of high-quality projects includes the Lefroy Project, located in the heart of the world-class Kalgoorlie and Kambalda gold and nickel mining districts, the Lake Johnston Project 120km west of Norseman, and the large 2,872km^2 Glenayle Project 210km north of Wiluna.

The Lefroy Project is a contiguous land package of 635km^2 with a growing mineral resource inventory of approximately 1.1 million ounces of gold, 58,000 tonnes of contained copper and 14,780 tonnes of contained nickel, as at August 2023 (refer to LEX 2023 Annual Report).

In May 2023, Lefroy signed a Mineral Rights Agreement with title holder Franco-Nevada Pty Ltd, to acquire the mineral rights to Hampton East Location 45 (Location 45) (Refer ASX release 23 May 2023). Location 45 is a freehold property, located within 25km of Kambalda and 35km southeast of Kalgoorlie. The property hosts the historic Mt Martin gold mine, which has historically produced approximately 200,000 ounces of gold grading at 2.8g/t and which includes an existing resource of 501,175 oz gold (8.7Mt @ 1.79g/t Au) (refer to ASX release 5 September 2023).

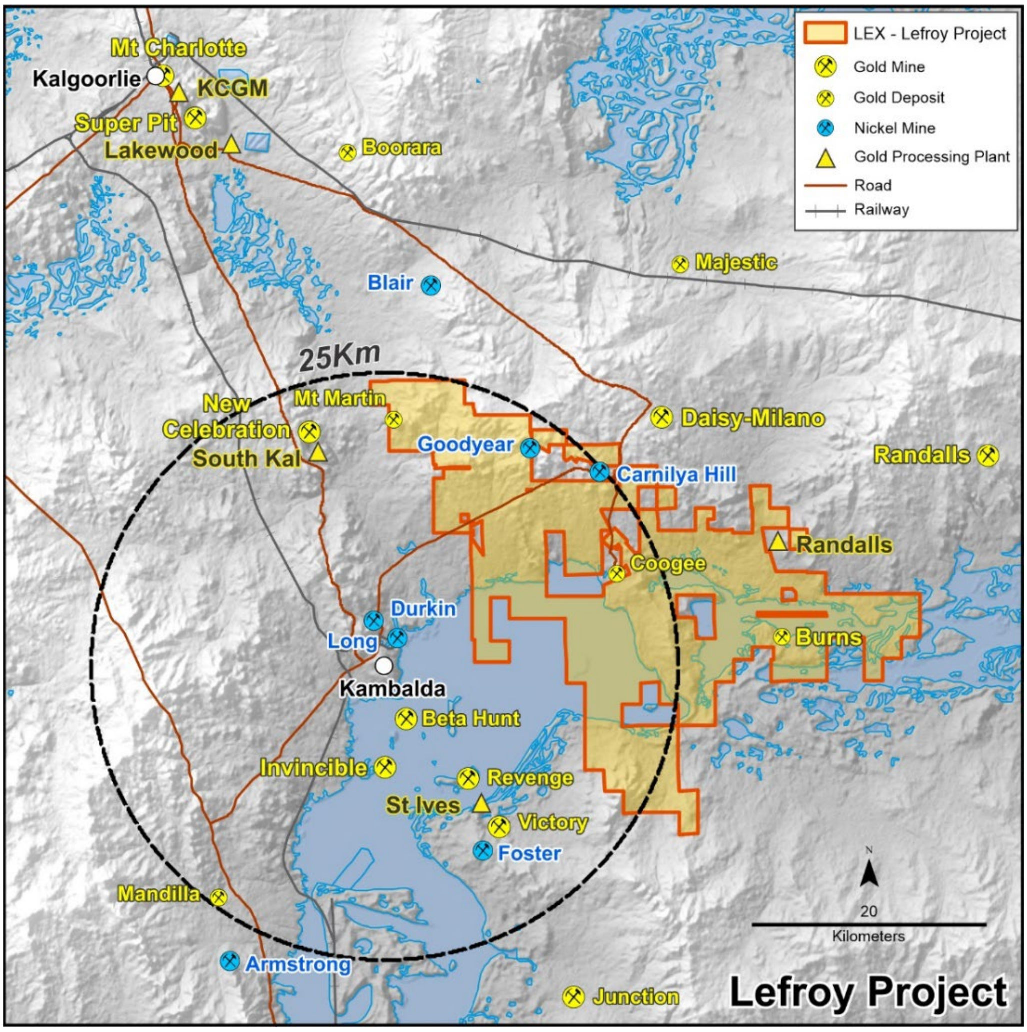

Figure 5: Regional location map of the Lefroy Project

SUPPORTING ASX ANNOUNCEMENTS

The following announcements were lodged with the ASX and further details (including supporting JORC Tables) for each of the sections noted in this announcement can be found in the following releases. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements. In the case of all Mineral Resource Estimate's (MRE), the Company confirms that all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed.

- Burns Update – Drill results continue to support larger Cu-Au-Ag system: 3 November 2021
- Multiple Broad Cu Au drill intersections at Lovejoy expand the scale of the Burns system: 27 November 2022
- Burns Project Demonstrates Significant Scale: 12 April 2023
- Half a million ounces of gold in Burns Central maiden resource: 4 May 2023
- Lefroy to recommence exploration of high-grade gold targets: 27 March 2024

COMPETENT PERSON STATEMENT

The information in this announcement that relates to exploration targets and exploration results is based on information compiled by Chris Hesford, a competent person who is a member of the Australian Institute of Geoscientists (AIG) and the Australian Institute of Mining and Metallurgy (AusIMM). Mr Hesford is employed by Lefroy Exploration Limited. Mr Hesford 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. Mr Hesford consents to the inclusion in this announcement of the matters based on his work in the form and context in which it appears.

Table 2: Burns Central -Significant Assay Results (0.5g/t cut-off)

Hole ID	From (m)	To (m)	Interval (m)*	Au (g/t)	Au (g*m)
LRR003	**26**	**65**	**39**	**3.87**	**150.93**
	87	**92**	**5**	**1.18**	**5.9**
LRR004	**27**	**57**	**30**	**2.43**	**72.9**
incl	*38*	*55*	*17*	*3.90*	*66.3*
	106	**121**	**15**	**1.38**	**20.7**
incl	*110*	*118*	*8*	*2.02*	*16.16*
	126	**135**	**9**	**0.69**	**6.21**
incl	*126*	*129*	*3*	*1.24*	*3.72*
LEFR320	**104**	**114**	**10**	**1.16**	**11.6**
	120	**181**	**61**	**2.96**	**180.56**
incl	*126*	*163*	*37*	*4.23*	*156.51*
	185	**212**	**27**	**0.82**	**22.14**
incl	*187*	*192*	*5*	*1.68*	*8.4*

BURNS CENTRAL MRE JORC TABLE 1

Section 1 – Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections)

Criteria	Explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (e.g. 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 representativity 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 (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information.*	• The Burns Copper-Gold Project has been explored using multiple drilling campaigns from January 2010 to December 2022 • Sampling has been carried out using a combination of 166 Air Core Drilling (AC), 143 Reverse Circulation (RC), 8 Diamond Drilling (DD), and 8 RCDD (RC with DD tails) for a total of 325 holes within the limits of the Burns Cu-Au-Ag-Mo-Co resource model. • Sampling and QAQC protocols as per industry best practice with further details below. • AC drilling was carried out between 2010 and 2019 to identify and delineate gold (Au) anomalies in the regolith, located east of the primary intrusive formation. This drilling campaign employed a systematic 40x40 metre grid pattern, with borehole depths varying between 22 and 100 metres. The AC drill bit has a diameter of 78mm and collects samples through an inner tube to reduce contamination. Samples were collected in plastic buckets from a rig mounted cyclone and placed in neat rows of 10 sample piles on the ground. These piles were scoop or spear sampled into 4m composites into numbered calico bags for 40g fire assay for Au, with Atomic Absorption Spectrometry (AAS) analysis. • For RC, 1m split samples were collected from 0m to the end of the hole (EOH). 1m split samples were collected directly off the drill rig cone splitter into numbered calico bags attached to the cyclone. The sample collected generally weighed 2-3kg. Four-metre composite samples were collected from 0m to the base of transported regolith using a scoop to produce a 2-3kg sample. The samples were sent to the Bureau Veritas laboratory in Kalgoorlie and then sent to Perth for analysis. The samples were dried, pulverised, and split to produce a 40g charge for analysis by fire assay with Au determination by Atomic Absorption Spectrometry (AAS). Additional elements were derived using a mixed acid digest with an ICP finish for Cu, Ag, As, Mo, Fe, Pb, S, Te, W and Zn. • DD was conducted utilising HQ and then NQ-sized core as the pre-collar drilled into the fresh competent rock. This was left to the driller's discretion. The core was collected in core trays where it was marked up and logged by the supervising geologist. It was noted that there was excellent core recovery and only minor zones of core loss which were recorded by the geologist. Cutting and sampling is completed by first cutting the core in half using an Almonte core saw and collected in calico bags with a minimum sample width of 0.2m and a maximum of 1.2m to produce a 2-4kg sample through the interpreted mineralised zone. The samples were sent to the Bureau Veritas 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 Bureau Veritas 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 digest and sodium peroxide fusion with an ICP finish.

		• All end of hole AC samples and approximately 1 in 10 fresh rock RC and DD samples were analysed for 61 elements using a 4-acid digest with ICP-MS finish.
Drilling techniques	• *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. 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.).*	• AC drilling was completed by Raglan Drilling using a truck mounted rig and specialised track mounted lake rig. The AC drill bit has a diameter of 78mm and collects samples through an inner tube to reduce contamination, but also allows better penetration through any palaeochannel puggy clays and fine sands. Aircore drilling is to blade refusal and hence terminates in fresh or hard material such as quartz. In certain circumstances a hammer drill bit was used to obtain greater penetration in hard rock to obtain a fresh rock sample. • RC drilling was performed using KWL350 and Schramm T685 RC rigs from Challenge Drilling and Raglan Drilling, both based in Kalgoorlie. Raglan Drilling also completed the RC drilling using a specialized rig built for salt-lake drilling. Low air face sampling hammer drilling techniques were employed to penetrate the regolith and minimise contamination risk. • Diamond drilling was carried out by Raglan Drilling (Kalgoorlie). The drilling process began with a mud rotary technique to a depth of 60 metres, followed by HQ-sized core. NQ-sized core was primarily used when the drill core recovery became more competent. Accurate downhole orientation marks were captured using an Ace tool. In some cases, the diamond drilling commenced with HQ-sized core from surface and then transitioned to NQ-sized core as the drill core recovery improved. • Both drilling techniques focused on ensuring quality sample recovery, reducing contamination risk, and maintaining accurate hole orientation with the help of experienced drilling contractors.
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.*	• Good sample recovery was achieved through a combination of careful measurements, professional drilling practices, and diligent communication. Diamond core length measurements were compared to the drilled interval indicated by the drillers, allowing for the calculation of recovery percentages. Any core loss was diligently noted by the drill crew and geologist. The use of competent drilling contractors and an open line of communication minimised issues with sample recoveries and ensured a comprehensive understanding of core loss occurrences. • Sample recovery was visually inspected and recorded by the rig geologist and sampler. For RC drilling, occasional poor sample return occurred in the overlying transported material (0-10m), and some variability to 10% recovery was observed when drilling through transported paleochannel sands and clays. To mitigate these issues, drilling precautions such as clearing the hole at the start of the rod and regular cyclone cleaning were taken to reduce instances of wet, sticky samples and cross-contamination.
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.*	• Detailed logging of regolith, lithology, structure, veining, alteration, mineralisation, and recoveries was performed by qualified geologists for each hole. All drill holes were logged in their entirety (100%), ensuring a comprehensive understanding of the geological features. Geological logging is qualitative while the recovery, RQD (rock quality designation), and magnetic susceptibility measurements are quantitative.

	• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.* • *The total length and percentage of the relevant intersections logged.*	• Field logging data is captured efficiently and accurately using state-of-the-art Toughbook hardware and LogChief logging software. • RC chip logging procedures involved sieving 1-metre sample cuttings, washing them in water, and collecting a sample from each metre down the entire hole in plastic chip trays for future reference. This process allowed for the routine collection of data on rock type, colour, structure, alteration, and veining, as well as geotechnical information. Diamond core underwent detailed logging throughout the entire hole, with the data from a Toughbook transferred to the Lefroy drilling database after capture and validation. • Core and chip tray samples were photographed using a purpose-made camera stand and a high-quality digital SLR camera. These photographs, stored in the database, provide a visual record of the core and chip samples to supplement the logging data. This combination of visual and written records ensures that the logging data can support appropriate Mineral Resource estimation, mining studies, and metallurgical studies. • The comprehensive and detailed nature of the logging process, encompassing both qualitative and quantitative data collection, enables a thorough understanding of the geological features present in the drill holes. This information is critical for making informed decisions regarding resource estimation, mining operations, and metallurgical processes.
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.*	• For AC, each 1m sample is collected in buckets off the rig mounted cyclone and placed in neat rows of 10 samples on the ground. Composite samples of 4m were collected by scoop sampling 1m intervals into pre-numbered calico bags. Sample weight 2 - 3 kg. The last interval of each hole is a 1m sample and the second last composite can vary between 1-4m. A split o the last metre sample is sieved for clean chips and approximately 100g is placed in a Geochem sample packet for 4 acid digest analysis. • Both diamond drilling (DD) and reverse circulation (RC) drilling, samples were collected following industry best practices to ensure representativeness and quality. The sampling techniques used were tailored to the specific drilling methods, with half-drill core samples collected for DD and 1m and 4m interval samples obtained using a rig-mounted cone splitter for RC drilling. • For the DD core, half drill core samples were taken, with the remaining half retained in core trays for future reference. Sample intervals were determined by logging geologists, who ensured that samples were representative of lithological and mineralised boundaries. Field duplicates were not taken for half-diamond core samples. • In RC drilling, samples were collected at 1m intervals directly off a rig-mounted cone splitter into separate calico bags. Separate 4m composite samples (e.g. from AC drilling) were collected from 0m to the base of transported regolith using a scoop or PVC spear. In certain cases, duplicate RC samples were collected for quality assurance and quality control (QAQC) to assess the precision and repeatability of the sampling and analytical methods by comparing the results of primary and duplicate samples and to provide an increased level of confidence in the data, ensuring that the resource estimates derived from the data are reliable and accurate. This accounts for approximately 3.4% of the total number of RC samples.

		• All samples, both DD and RC, were placed in pre-numbered calico bags and sent to the laboratory for assay. Sample preparation for both RC and DD samples involved oven drying and pulverizing to produce a homogenous subsample for analysis. This consistent preparation technique ensured the quality and comparability of the samples. • To maintain rigorous quality control, standards and blanks were inserted regularly alongside submitted samples. Standards were certified reference material prepared by Geostats Pty Ltd. These measures, combined with careful sampling techniques and sample preparation, ensured the representativeness and quality of the samples collected.
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 (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	• AC, RC and DD samples are routinely analysed for gold at Bureau Veritas's Kalgoorlie or Perth Laboratory using the 40-gram Fire Assay digest method with an AAS (Atomic Absorption Spectroscopy) finish. • All RC and DD samples were also assayed for additional elements, including Cu, Ag, As, Mo, Fe, Pb, S, Te, W, and Zn, derived using a mixed acid digest with ICP (Inductively Coupled Plasma) finish. • Approximately 1 in 10 fresh RC and DD samples undergo further analysis for up to 61 additional elements using a mixed acid digest and ICP-MS (Inductively Coupled Plasma Mass Spectrometry) finish, or sodium peroxide fusion with ICP finish. • Quality control processes and internal laboratory checks are in place to ensure acceptable levels of accuracy in the assay data. These measures include regular assay repeats to verify consistency, lab standards to confirm the accuracy of the measurements, check assays to detect any potential analytical issues, and blanks to identify any contamination. • Certified Reference Materials (CRMs) and blanks are inserted into sample batches by Lefroy staff at regular intervals, with 1 in 20 intervals for CRMs and 1 in 100 for blanks in RC samples, or 1 in 50 for blanks in DD samples. The CRMs were prepared by Geostats Pty Ltd. • A hand-held KT-10 magnetic susceptibility meter is used to measure the magnetic susceptibility for each metre following the base of transported cover. This non-destructive measurement provides valuable information about the magnetic properties of the samples, which can be useful in identifying potential mineralisation zones. • Detailed analysis and review of the data established acceptable levels of precision and bias for all drillholes included in the resource model.
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*	• Verification through proximity to historic drill holes: new drill holes are strategically placed within a 40-metre range of historic drill holes, which are known to contain high-grade copper and gold. This proximity ensures that the new holes can effectively confirm and validate the accuracy of previous findings, helping to reinforce the reliability of past drilling programs. • Field logging data is captured efficiently and accurately using Toughbook hardware and LogChief logging software. This electronic data management system streamlines the process of exporting logged data as an excel spreadsheet or XML document, which is then sent to the company's external database managers for upload. • Comprehensive assay files and validation process: Assay files are received electronically from the laboratory and securely filed on the

		company's server. These files are then provided to external database managers who load the data into the company's Maxwell's Database Schema (MDS) 4.6.5. Rigorous validation checks are performed at this stage, ensuring that the integrity and accuracy of the assay data are maintained throughout the entire process. • Unaltered assay data and thorough review: The company takes a transparent approach to handle assay data, making no adjustments to the primary gold (Au) and other reported elements. These unaltered values were given preference for visualisation, interrogation, and reporting. Additionally, alternative company personnel meticulously review the results, identifying any minor sampling errors that may be present. These errors are then field-checked and corrected, further reinforcing the accuracy and reliability of the exploration data.
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.*	• Comprehensive drill hole positioning and collar surveys: Drill hole positions were surveyed using a handheld GPS operated by the rig geologist or field assistant across all projects. Post-drilling drill hole collars were surveyed by external contractors using a more precise DGPS by a third-party contractor, ensuring higher accuracy and reliability in data collection. • Detailed downhole surveys: The drill crew utilised a multi-shot gyro for downhole surveys, recording data every 5m down the hole. This technique allows for the continuous and precise monitoring of the drill path, providing essential information for mineral resource estimation. • Consistent grid system and topographic elevation: All projects consistently employed the MGA94 Zone 51 grid system to maintain uniformity in data collection. Topographic elevation was captured using the differential GPS, either during or after drilling, to provide accurate and consistent elevation data essential for geological modelling and resource estimation. • Emphasis on quality assurance and expert supervision: A supervising geologist was responsible for setting up the drill azimuth and ensuring the proper direction and alignment of drilling activities. External contractors were engaged for post-drilling surveys to maintain high-quality standards and independent assessment. The accuracy and quality of surveys, including drill hole locations, downhole surveys, and topographic control, were prioritised to guarantee reliable and robust data for mineral resource estimation.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• Hole spacing at the Burns prospect varies from 40x40m to 200m spaced intervals for step-out drilling. In general, this data spacing is sufficient to establish the degree of continuity needed for Mineral Resource estimates. • No sample compositing has been applied.

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.*	• East-west oriented drill traverses effectively evaluate the stratigraphy and sub-vertical mineralised structures, as they consider the north-south to northwest-southeast trending patterns, providing a comprehensive understanding of the geological structure. • The drill orientation is a reliable indicator of the "true" width of the host rock, as it accounts for the host rock unit's strike, which is predominantly northwest-southeast. This approach ensures accurate measurements and a better assessment of the geological formation. • Although the primary controls on the hypogene copper-gold (Cu-Au) system are not yet fully understood, ongoing research and analysis continue to uncover insights into the mechanisms that drive this complex mineralisation process. • By analysing data from previous drilling projects in conjunction with current drilling efforts, geologists have determined that the drill hole orientation is optimal for determining the true width of mineralisation. This approach not only enhances the accuracy of mineral deposit estimations but also contributes to the improvement of overall geological knowledge of the system.
Sample security	• *The measures taken to ensure sample security.*	• Samples were carefully bagged in labelled and numbered calico bags ensuring secure packaging and clear identification. Company field personnel were responsible for personally collecting and delivering these samples to the Bureau Veritas Laboratory (Kalgoorlie) to maintain the chain of custody and security. • Upon receipt of the samples, Bureau Veritas staff thoroughly sorted and checked them for inconsistencies against the lodged submission sheets provided by Lefroy Exploration Limited (LEX). This process ensured that any discrepancies, such as missing or extra samples, were identified and promptly communicated to LEX for resolution. • After the initial gold analysis was completed, pulp samples were sent to the Bureau Veritas Perth Laboratory for multi-element analysis. This additional testing provided a more comprehensive evaluation of the samples, including the identification of other elements that could be of interest or value to LEX. • Post-analysis, the samples, pulps, and residues were safely retained by the Bureau Veritas Laboratory in a secure storage yard, which featured strict access controls and monitoring systems. This secure storage solution ensured that the integrity and confidentiality of the samples were preserved, protecting LEX's interests and investment in the exploration process.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• All sampling and analytical results of the drill programs were reviewed by the Senior Exploration Geologist and Managing Director, with anomalous gold and copper intersections checked against library core photos, chip trays, and logging to correlate with geology. QAQC reports are auto-generated by the database managers for each sample batch and reviewed by staff. • A full audit of the drilling and assay database was completed prior to delivery of data for the Resource estimate. Detailed QAQC analysis and reporting was compiled by the Senior Geologist. • The Managing Director and Senior Geologist were actively involved in the various drilling programs, assisting with the logging of drill holes, reviewing, and verifying logging, inspecting core samples, and supervising sampling and assay management during the drilling process.

Section 2 - Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	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 southeast of 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 the report was completed on Exploration Lease E 15/1715, which 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) and/or the Department of Mines, Industry Regulation and Safety (DMIRS) of Western Australia. • The Lefroy Project's mineral tenement and land tenure status are secure, as all tenements are owned by LEX or its wholly owned subsidiary MEX and are in compliance with the respective regulatory authorities in Western Australia.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• 1968-1973 BHP: BHP was the first to recognize a magnetic anomaly in the TR 3697 area, which had been reserved for nickel exploration. The anomaly was evident on BMR's aeromagnetic contour maps, and BHP was investigating aeromagnetic anomalies that could have originated from ultramafic sources. Ground magnetic surveys confirmed the anomaly's presence, but two percussion holes drilled by BHP failed to reveal any bedrock anomalism, and no further exploration was pursued. • 1984 Coopers Resources/Enterprise Gold Mines: The land in the vicinity of Burns was acquired as three exploration licenses - E15/19-21. • 1985 BHP: BHP entered into a farm-in agreement for E15/21, after reinterpreting the magnetic anomaly as a potential carbonatite. Additionally, BHP's E15/57 covered the western third of the anomaly. Following ground magnetic surveys, BHP drilled two diamond core holes, LR 1 and 2. However, the results did not reveal the presence of carbonatite, prompting BHP to relinquish its interest in the area. • 1985-1989 CRAE: 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 acquired Exploration License E15/304, which covers areas with aeromagnetic anomalies, including the Burns anomaly. This license was subsequently incorporated into Kanowna Consolidated Gold Mines as a component of the St. Alvano project. • 1996-2001 WMC: WMC formed a joint venture for the St. Alvano project, which encompassed a total of 12 Exploration Licenses. They conducted a 50-meter line-spaced aeromagnetic survey and enlisted EHW for interpretation. Although Burns was not specifically highlighted, the magnetic anomalies forming parts of the annular ring were examined using air core drilling, leading to the discovery of the Neon gold prospect. Following the EHW study, a gravity survey was carried out, which successfully identified the Burns intrusive as a gravity low.

		• 2001-2003 Goldfields: Goldfields assumed control of exploration activities and carried out additional air core drilling at the Neon prospect. They identified S11, a target south of Burns, characterized by secondary gold dispersion in weathered bedrock and associated with magnetite enrichment. A series of north-south air core traverses were drilled at 640 x 160-meter intervals. However, the results were considered disappointing, leading to the eventual termination of the project. • 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 were surrendered and taken up as E15/1030. The northern sector including Burns was surrendered. • 2008 Gold Attire: The area encompassing Burns, which was relinquished by Sovereign, was acquired as Exploration License E15/1097. • 2008-2010 Newmont: Newmont entered into a joint venture with Sovereign and Gold Attire for their Exploration Licenses and conducted an 800m x 400m gravity survey to trace a north-south "Salt Creek-Lucky Bay" corridor through the tenements. The area was examined by four lines of air core drilling on a 640 x 160m spacing, and two air core traverses on a 1200 x 320m spacing were conducted across the interpreted intrusion and the surrounding magnetic halo. Infill drilling followed up on a 2.0m @ 5.0 g/t Au intercept found in a Goldfield's hole, SAL 1089, which was re-entered, and a diamond core tail was drilled. The location of this hole falls just inside Exploration License E15/1638, near the boundary with P15/6397. • 2010-2019 Octagonal Resources: In three phases of air core (AC) drilling, a gold in regolith anomaly was defined east of the main intrusive body. Two phases of reverse circulation (RC) drilling identified Ag-Cu-Au mineralisation on four sections spaced approximately 40 metres apart. Recognizing the copper mineralisation and its host rock association, Octagonal shifted focus from orogenic gold exploration to predominantly copper-focused intrusion-related hosted mineralisation. In 2013, surface geophysical techniques were applied to search for conductors representing massive sulphides. Ground EM failed to identify bedrock conductors, but magnetic surveys detected 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 within the RC-drilled area. It intersected a 3.6m wide mafic-dominant breccia zone, including 0.9m of massive magnetite-chalcopyrite, yielding 4.5 g/t Au and 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. This was interpreted as a west-dipping structure and the feeder conduit for the mineralisation. A second low-grade zone 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 the completion of two more diamond core holes. However, by 2016, the company was acquired by a third-party loan company and subsequently delisted from the ASX.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The Lefroy Project, located in the southern part of the Norseman Wiluna Greenstone Belt, involves a unique geological setting where the triple junction of three crustal units (Parker, Boorara, and Bulong

		Domain) meet. The area is characterized by minimal outcrop exposure, being predominantly covered by alluvial, colluvial, and lacustrine materials. The Burns prospect, situated close to the lake margin, is concealed beneath a 20-25-metre layer of lake sediment and surface dune cover, resulting in a stripped profile with no significant dispersion or oxide component. • Mineralisation at the Burns prospect occurs within a high-magnesium basalt and porphyries of intermediate composition that intrudes the basalt. The primary minerals found in this region are gold and copper, which appear as native copper, chalcopyrite, and chalcocite. These minerals are associated with biotite-magnetite-hematite and chlorite-epidote alterations. The minerals are dispersed as disseminations, veins, veinlets, and fracture fills within the basalt and porphyries. • There is a strong upgrade of Cu and Au in the supergene environment approximately 50-100m downhole, and this is typically flat in its orientation. This zone is dominated by chalcocite mineralisation. A primary system (hypogene) occurs in the fresh rock below 100m depth, and is centred around a suite of alkalic diorite porphyries. Chalcopyrite dominant mineralisation is associated with shallow west dipping magnetite breccia structures and later fracture fill calcite-gypsum-magnesite-sulphide veins. An interpreted North-South trending brittle fault structure appears to upgrade grade mineralisation within the deposit.
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* • *easting and northing of the drill hole collar* • *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* • *dip and azimuth of the hole* • *down hole length and interception depth* • *hole length.* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case*	• Tables with drill hole collar, survey, and intersection data for material drill holes (gold intersections >0.25gpt Au with a maximum of 2m internal dilution or copper intersections >0.1% Cu with a maximum of 6m to 11m internal dilution) are included in the body of the announcement. • Drill hole collars completed by Lefroy are noted in the announcement. • The tables provided comprehensive collar information for AC, RC, and DD holes completed by Lefroy Exploration as well as those previously completed by Octagonal Resources. • No information has been excluded from the announcement.
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. 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*	• All grades have been length-weighted and reported as down-hole metres, with high grades not being cut. A lower cut-off of 0.1g/t Au and 0.1% Cu) has been used to identify significant results (intersections). • Higher-grade values are included in the intercepts table, with assay values equal to or >1.0 g/t Au or >1.0% Cu (and sometimes >200ppm Co) being stated on a separate line below the intercept, assigned with the text 'includes'. • Reported results have been calculated using 1m samples for RC and nominal 1m samples for DD, as noted in the body of the report. • No metal equivalent values or formulas have been used in the data aggregation methods.

	examples of such aggregations should be shown in detail. • *The assumptions used for any reporting of metal equivalent values should be clearly stated*	
Relationship between mineralisation widths and intercept length	• *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 (e.g. 'down hole length, true width not known').*	• All historical, new, and material results are based on down-hole metres. • Previous drill coverage, including structural measurements from the oriented core, has identified steeply dipping geology consisting of rocks containing basalt intruded by diorite porphyry. • Data from previous drilling and modelling of prior ground magnetic data support the orientation of drilling efforts. • Drill holes are designed to intercept the host sequence perpendicular to its strike or dip. • Results from these drill programs represent "true widths" as holes are specifically designed to intercept the host sequence perpendicular to its strike or dip.
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 report. • These diagrams provide visual representations of the geological data and findings. • The diagrams aid in the understanding of the geological context and drill results.
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 from the LEX RC and DD drill programs can be found in the provided tables. • Drill holes with no significant results (e.g., <2m and <0.50g/t Au or <0.1g/t Au or <0.1% Cu) are not reported. • References to significant assay results from historical or previous drilling by LEX are noted throughout 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.*	• The report comprehensively incorporates all pertinent data and geological observations related to the exploration project. • Findings from drilling results, geophysical measurements, and other relevant sources are compiled and presented. • This report serves as a complete resource for understanding the exploration project's outcomes and geological context.
Further work	• *The nature and scale of planned further work (e.g. 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.*	• Further work at Burns Central will be guided by the results from the current program and the outcome of the Mineral Resource Estimate and exploration targeting surrounding Burns Central.

Section 3 - Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	Explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	• Verification and validation of data: Electronic field logging and validation checks minimise errors and ensure data accuracy. • Data was directly and securely imported into the Maxwell Database Schema (MDS) 4.6.5. The Senior Geologist exported the drilling data from the database into CSV files for further analysis. • A full audit of the drilling and assay database was completed prior to delivery of data for the Resource estimate. Detailed QAQC analysis and reporting was compiled by the Senior Geologist. • Electronic data transfer from Lefroy Exploration to Measured Group: The Burns Project geoscience database was provided electronically in Excel CSV files, reducing the chance of transcription errors during data collection and transfer. • Leapfrog Geo validation process: Data validation was performed using the Leapfrog Geo software version 2022.1, identifying and rectifying errors, warnings, and invalid values. • Error handling: Issues such as invalid max depths, hole IDs not in the collar table, and missing intervals/values were identified and resolved during the validation process, ensuring database integrity. • Treatment of non-positive values: non-positive values in the assay data were replaced with lower detection limits to prevent false zero occurrences and maintain data accuracy for Mineral Resource estimation purposes.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• On April 11, 2023, Measured Group completed a site visit to confirm the locations of five drill sites (LEFDD007a, LEFD004, OBURCD025, LEFD006, and LEFD008). A handheld Garmin GPSMap 78sc was employed for location confirmation, with a general accuracy of within 3 metres. • The accuracy of the GPS readings may vary depending on factors like satellite geometry, signal blockage due to clouds or vegetation, and atmospheric conditions. However, the sky was mostly clear, and vegetation cover was minimal during the visit, resulting in relatively accurate readings. Before taking the readings, it was ensured that at least 4 satellites were tracked. • During the site visit, selected intervals from diamond holes LEFD004, LEF007a, and OBURCD0025 were inspected and photographed to confirm the presence of various rock types, alteration, and mineralisation. • Chris Hesford, Senior Geologist from LEX, supervised the field visit. He has substantial field experience in this environment and style of mineralisation.

Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.*
	• *Nature of the data used and of any assumptions made.*
	• *The effect, if any, of alternative interpretations on Mineral Resource estimation.*
	• *The use of geology in guiding and*
		• Geological models for the Burns prospect were developed using Leapfrog Geo version 2022.1.1 software, consisting of six models:
		  ○ Lithology_Detailed
		  ○ Lithology_Simple
		  ○ Alteration_Detailed
		  ○ Alteration_Simple
		  ○ Mineralisation
		  ○ Oxidation
		• Lithology_Detailed model includes six lithologies (Transported, Porphyry 3, Porphyry 2, Porphyry 1, Alkalic Porphyry, Basalt), while the Lithology_Simple model comprises Transported, Porphyry Unclassified, and Basalt. The porphyries were combined to simplify the model, using interpreted FLT_Flat West and FLT_HGS faults as inputs for structural trends in Leapfrog to determine spatial continuity in the model.
		• The alteration model features the top five abundant minerals (epidote, chlorite, magnetite, hematite, biotite) individually modelled, then grouped into Chlorite-Epidote and

	controlling Mineral Resource estimation. • The factors affecting continuity both of grade and geology.	Biotite-Magnetite-Hematite. The parameters used to model porphyry intrusions were similar, causing the alteration patterns to mimic intrusions, suggesting intrusions induced alteration at different stages. • Mineralisation models consist of two volumes: "Min_Enriched" for near-surface enrichment (Saprock), and "Min" for primary (Fresh) sulphide mineralisation. These were interpreted on section and plan view using combined models of copper per cent, gold ppm, and silver ppm models. A nominal 0.1-grade cut-off value was used. Near-surface mineralisation is sub-horizontal while primary mineralisation varies in orientation, reflecting intrusion and alteration surfaces. There is good continuity between drill hole intersections and moderate confidence in close-spaced drilling areas. • The oxidation model consists of High Oxidation, Moderate Oxidation, and Fresh. The zones characterized by high oxidation levels demonstrate a strong correlation with the presence of transported material. • Data and assumptions: geological models use data from Lefroy Exploration, including merged tables consisting of lithology, alteration, oxidation, and assays. The different porphyries were distinguished based on their distinct geochemical characteristics and elemental ratios as determined by S. Halley, 2021. Geological boundary assumptions were made in areas with incomplete geochemistry data using downhole logging information. This approach allowed for the estimation of the extent and continuity of mineralised zones, even in areas with limited sampling. The assumptions and interpretations are based on the best available data and knowledge at the time of analysis. • Alternative interpretations on mineral resource estimation: the varying levels of detail for different models for lithology, alteration, oxidation, and mineralisation could result in different mineral resource estimations. The lithology_simple and mineralisation models were used in this estimate. • Geology in mineral resource estimation: near-surface enrichment trends, and fault surfaces that influence structural trends were applied to the models to accurately reflect geological features and influence the mineralisation system. By incorporating these trends, surfaces are modified to better align with observed geological structures, leading to more accurate representations of lithology, alteration, and mineralisation patterns. • Factors that may affect the continuity of grade and geology: The presence of interpreted faults in geological formations can cause significant disruptions to the continuity of mineral deposits. In the existing model, no offsets have currently been interpreted in the Flat West and HGS faults, there may be other faults in the area that have not been identified. Identifying all relevant faults and understanding their impact on grade and geology continuity is crucial in accurately assessing Burns.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• Model limits: • X coordinates range from 406,893.93 to 407,756.06E • Y coordinates range from 6,549,409.54 to 6,550,200N • Z coordinates range from -800.0 to 320.0mRL • The mineralised zones in Burns Central (above -200mRL) have the following dimensions: • Min_enriched domain extends 785 metres in strike length x 560 metres in width, with a thickness that varies between 1 and 40 metres. • Min domain: measures 655 metres in strike length, 155 metres in width, and 400 metres in depth, suggesting a more concentrated area of mineralisation. • The resource also includes the Smithers area, located to the northwest has the following min_domain dimensions: 170 metres in strike length, 140 metres in width, and 50 metres in depth, illustrating a smaller zone of mineralisation within the overall resource.
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions,*	• To ensure the accuracy of the models, the topography, lithology, alteration, and grade models in 3D were visually validated and used statistical techniques. This ensured that the models were a reliable representation of the original data. • Given that 90% of the samples have a length of 1m, a composite length of 1m was selected for analysis. To accommodate residual lengths below 0.5m, they were added to the previous interval.

	including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was*	• The following parameters were estimated for each of the domains ("Min_Enriched" and "Min") using a hard boundary: Cu % (calculated from the original parts per million value), Au ppm, Ag ppm, Mo ppm, and Co ppm. • Values were left uncapped, and normal score transformations were applied for transformed variography. The resulting variogram was utilised to estimate the spatial correlation structure of the transformed data. • Radial plots were used to model the transformed variograms, which illustrate the variance of differences between pairs of points as distances between them increase. The experimental variograms were then fitted with a variogram consisting of 2 spherical structures, considering the nugget effect (to account for spatial variability at very short distances), the sill (representing the total variance in the data), and the range (representing the distance at which spatial autocorrelation reaches the sill). • To better reflect geological and alteration features and influence the mineralisation domains, models were developed by considering near-surface enrichment trends and interpreted fault surfaces (Flat West, HGS). By incorporating these trends, surfaces were modified to better align with observed geological structures, leading to more precise representations of the mineralisation patterns. Variable orientation was used to model and visualize geological trends with varying orientations across the deposit. Accounting for the variable orientation helps create more accurate and realistic models that capture the complexity of the geology, leading to improved resource estimation. • Grades were estimated using 3 multipass-kriging (Kr) methods. In the 1st pass, ellipsoid ranges were calculated using one-third of the maximum, intermediate, and minimum ranges from the 2nd structure's major, semi-major, and minor axes of the transformed variogram models. In the 2nd pass, ellipsoid ranges were multiplied by 2, and in the 3rd pass, the appropriate range was multiplied to ensure that all the blocks with values. • Here are Maximum : Intermediate : Minimum ellipsoid ratios for each of the domains • Min_enriched: • Au_ppm: 2.25 : 1 : 1 • Cu_pct: 2.15 : 1.63 : 1 • Ag_ppm: 2.5 : 1.25 : 1 • Mo_ppm: 2.6 : 2 : 1 • Co_ppm: 2.5 : 1.25 : 1 • For Min: • Au_ppm: 10 : 2.5 : 2 • Cu_pct: 10 : 2 : 1.33 • Ag_ppm: 15 : 1.5 : 1.5 • Mo_ppm: 10 : 2 : 1 • Co_ppm: 2.5 : 2 : 2 • Minimum and maximum samples of 4 and 32 were used for the first pass, 2 and 23 for the second pass, and 1 and 15 for the third pass, respectively. Occasional octant and quadrant searches were conducted, and the maximum samples per drill hole were adjusted to avoid negative estimates. • To compare the results with the first-pass Ordinary Kriged estimates, a single-pass estimation of each element in each domain was carried out using the Inverse Distance (ID) estimator. Swath plots were used for the comparison. Declustering was applied to ID estimators with an ellipsoid range of 5x5x1m (with overlapping windows) to minimize the influence of high-density clusters of data points on the estimation of spatial variables, reduce bias, and improve the estimation of spatial variables in situations where there is spatial clustering of sample points. • The software versions used were Leapfrog Geo and Edge version 2022.1.1. Leapfrog Geo is a 3D geological modelling software that allows for the visualization and interpretation of complex data in mineral exploration and mining. Edge, on the other hand, is a module or extension of Leapfrog Geo that provides advanced geostatistical estimation and resource modelling, integrating seamlessly with Leapfrog Geo's capabilities.

	used to control the resource estimates. • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	• This is a maiden resource estimate for Central Burns, and no prior resource estimates are available for this site. • No assumptions were made regarding the recovery of by-products. • Estimates for deleterious elements were not considered. • Kriging Neighbourhood Analysis (KNA) was performed using Isatis.Neo 2022.12 software to enhance or optimize the parameters of the kriging estimation process. These parameters include the search radius, the number of data points to consider, and the anisotropy ratio. The maximum number of samples considered is 34, particularly in the first pass. • The optimized parent block size of 5x5x1m was determined based on data density and distribution, geological complexity, and estimation method performance. The sub-block size was determined to be 2.5x2.5x0.5m. • Within the Min_Enriched zone, none of the five variables showed any correlation. However, within the Min zone, correlation analysis revealed a strong positive correlation of 74% between Cu and Ag, while the remaining variables were found to not correlate. • The large difference between the maximum values and the Q95 for all elements suggests the presence of outliers. Additionally, the distribution in both the Min_Enriched and Min zones appears to be positively skewed, as the mean consistently exceeds the median (Q50) for all elements. Capping in variography can be used to minimize the influence of extreme outliers, resulting in improved variogram models and a more accurate representation of spatial continuity. However, capping may lead to conservative estimates, which may underestimate or overestimate grades. To address this issue, a Gaussian transformation was utilised, which helped improve estimates for highly skewed data by stabilizing variance, reducing the impact of extreme values, and facilitating proper variography. • To validate the block model results, the Block Status feature in Leapfrog was used to visually confirm whether blocks contained values or were categorized as "blank", "without-value," or "errors". Ellipsoid ranges were adjusted to fix blank blocks, while blocks without values were replaced with 0.01. In instances where negative estimates were observed, quadrant and/or sector searches were employed, along with a maximum of two samples per drill hole, and replaced with 0.01, depending on the block's location of the data point. Drillhole grades and blocks showed good agreement between estimates (Kriged, Inverse Distance vs. data) using swath plots. • To determine the degree of similarity between the kriging and Inverse Distance results (only for Au, Cu and Ag), the percentage difference between the material content for each cut-off grade was calculated. Per cent differences were then classified as close (percentage difference <= 5%), moderate (5% < percentage difference <= 15%), or large (percentage difference > 15%). • For Au, most of the percentage differences were found to be between 3% and 5%, indicating a close similarity between the kriging and Inverse Distance results. • For Cu, the percentage differences between the grade-tonnage curves were moderate, ranging from 0.19% to 7.19%, which can be considered close to moderate based on the provided data. • For Ag, the percentage differences between the grade-tonnage curves were moderate, ranging from 1.28% to 9.73%, which can also be considered close to moderate based on the provided data.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• Tonnages were estimated on a dry basis.

Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• To reflect mining operations of comparable deposits with disseminated alkalic porphyry style of mineralisation, a cut-off grade of 0.1% for Cu and 0.1 g/t Au was selected. This cut-off grade is commonly used in operating mines in both Australia and overseas. The choice of cut-off grade is consistent with the Reasonable Prospects assumption, which ensures that only economically viable material is considered in the mineral resource estimation process.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	• It appears that the deposit has potential for mining through bulk mining methods from an open pit since the deposit is close to the surface and is characterised by a large volume of low-grade disseminated mineralisation. The metal extraction process could involve either Carbon-In-Leach (CIL) technology to recover gold only or flotation to recover a copper-gold concentrate. These processes can be used to efficiently and effectively recover metals from low-grade, generally disseminated mineralisation. • The selection of the appropriate mining method must depend on the expertise of mining engineers who will perform a comprehensive evaluation of the deposit. This evaluation considers critical factors such as the deposit's depth and shape, the size and geometry of the orebody, the rock strength and stability, the ore distribution, and the regulatory and infrastructure environment in the local area. Only after considering all these factors can the engineers decide on the most appropriate mining method.
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes*	• Burns deposit is dominantly sulphide-hosted, consisting of chalcocite, chalcopyrite, and minor pyrite and bornite, which is favourable for potential economic extraction. Additionally, an extensive multi-element geochemical dataset indicates that there are no significant levels of potentially deleterious elements, further supporting the viability of the deposit for economic extraction. Further detailed metallurgical testing is planned before a decision is made on the most appropriate method for metal extraction. • Preliminary sighter metallurgical test work has been completed at Bureau Veritas Minerals in Canning Vale, under the supervision of consultants from Sedgman Pty Ltd. • Test work was completed on composite sample residues from 6 RC collected during the Burns resource drilling program as follows •

Criteria	JORC Code explanation	Commentary
	and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	(see tables and text below)

Drill Hole	From (m)	To (m)	Wet Weight (kg)	Dry Weight (kg)
LRR003	31	34	55.6	47.7
LRR023	81	84	85.7	80.4
LEFR335	113	116	77	69.6
LEFR338	54	57	65.3	55
LEFR347	81	84	104.9	100
LEFR360	198	201	81.1	77.4

- The individual samples were dried, crushed and split into portions for the subsequent Au testwork programme which consisted of: head assays, mineralogical analysis, gravity separation and intensive leaching tests.
- Head assays were as follows:

Sample	Au g/t	Ag g/t	Cu %	Co g/t	Mo g/t	Ga g/t	Fe %	S %	Sulphide S %	Sulphate S %
LRR003	15	1.5	0.08	125	6	28.4	12.5	0.33	0.08	0.24
LRR023	4.32	2.5	0.66	195	226	16.8	10.9	1.61	1.47	0.14
LEFR335	1.5	0.5	0.54	50	3	14.6	9.14	0.11	<0.01	0.11
LEFR338	4.22	1	0.83	90	26	20.4	12.5	0.16	0.02	0.13
LEFR347	3.46	15	4.92	240	840	11.4	18.8	5.58	5.32	0.34
LEFR360	1.64	1.5	0.21	150	27	17.4	4.72	2.16	1.59	0.57

- A 5 kg portion of each sample was ground to a P80 of 106µm before being subjected to gravity separation test, the gravity concentrates were then leached with a high strength cyanide solution (2.5% NaCN, 0.25% NaOH and 0.5% LeachWell®) at 10% solids for 24 hours. The leach solution, the leach residue and the gravity separation tails were submitted for assay. The assay results are summarised in the following tables:

Leach Assay Results

	Gravity Con								
	Solution		Residue		Total	Gravity Tail		Feed (calc)	
Sample	Volume (ml)	Au (g/t)	Mass (g)	Au (g/t)	Au (g/t)	Mass (g)	Au (g/t)	Mass (g)	Au (g/t)
LRR003	1000	38.3	92.77	1.25	414	4907.23	13.6	5000	21.03
LRR023	1000	7.93	64.74	4.63	127	4935.26	1.69	5000	3.31
LEFR335	1000	2.4	66.18	0.19	36.4	4933.82	0.82	5000	1.29
LEFR338	1000	8.41	86.61	2.84	99.9	4913.39	1.89	5000	3.59
LEFR347	1000	2.66	78.27	20.6	54.6	4921.73	2.63	5000	3.44
LEFR360	1000	4.43	67.95	3.44	68.6	4932.05	0.98	5000	1.9

Gold Distribution Summary

	Gravity Concentrate					
	Leach		Fresh Feed Basis			
Sample	Solution %	Residue %	Solution %	Residue %	Total %	Gravity Tail %
LRR003	99.7	0.3	36.4	0.1	36.5	63.5
LRR023	96.4	3.6	47.9	1.8	49.7	50.3
LEFR335	99.5	0.5	37.2	0.2	37.4	62.6
LEFR338	97.2	2.8	46.9	1.4	48.2	51.8
LEFR347	62.3	37.7	15.5	9.4	24.8	75.2
LEFR360	95	5	46.6	2.5	49.1	50.9

Criteria	JORC Code explanation	Commentary
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable*	• A baseline survey of the flora and fauna in the area has been completed, and no threatened species have been identified. However, further studies will be conducted to assess the potential impacts of waste disposal options on the environment. • Lefroy Exploration acknowledges that the determination of potential environmental impacts, particularly for a greenfields project like the Burns project, may not always be well advanced at this stage. However, the company reports that it is committed to ensuring that all potential environmental impacts are thoroughly considered and addressed as part of the project development process.

	prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit.*	• SG determinations were undertaken on all diamond core samples at approximately 5m intervals, or one sample per core tray, by measuring the SG on the full core before cutting and sampling. • The balance was levelled in a stable position with the basket entirely immersed in clean water. After zeroing and calibration with standard weights, a dry weight measurement was taken on an interval of core approximately 30cm-50cm in length. • The identical sample was then transferred to the lower basket for wet weight measurement in water, and all fragments were returned to the core tray. • Leached/porous samples were noted, and regular calibration checks were conducted on the balance during long periods of use. All data, including sample interval, dry weight, and wet weight, were entered into the SG table in Logchief software for auto-calculation of the SG column. • SG was calculated using this formula: SG = Weight in Air / Weight in Air - Weight in water.

	• *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials*	

Classification

- *The basis for the classification of the Mineral Resources into varying confidence categories.*
- *Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).*
- *Whether the result appropriately reflects the Competent Person's view of the deposit.*

- There are 2 resource classifications: Indicated and Inferred.
- The initial Indicated classification is based on the 1st Kriging pass, while the Inferred resource results from a combination of the 2nd and 3rd Kriging passes. To improve the classification in areas with an inconsistent or "spotty". appearance, solids were generated from polylines, leading to a "Resource Classification" model that was incorporated into the block model.
- A majority of the mineral resource is classified as Indicated, reflecting both the drill density and the level of confidence in the geological model.
- To classify the indicated and inferred resources, we used different ranges for the kriging passes. Pass 1 was classified as indicated, while Pass 2 and Pass 3 were classified as inferred. If any of the classified blocks appeared spotty, we refined them further by creating a classification model, which was evaluated against the block model. The model was created by generating volumes from polylines and using a distance buffer of 25m to draw the shapes.

General			Ellipsoid Ranges		
Interpolant Name	Domain	Numeric Values	Maximum	Intermediate	Minimum
Kr, 01_Au_ppm: Min_enriched_P1	Min_enriched	Au_ppm_corrected	45	20	15
Kr, 01_Au_ppm: Min_enriched_P2	Min_enriched	Au_ppm_corrected	90	40	30
Kr, 01_Au_ppm: Min_enriched_P3	Min_enriched	Au_ppm_corrected	180	80	60
Kr, 02_Cu_pct: Min_enriched_P1	Min_enriched	Cu_pct_corrected	70	65	40
Kr, 02_Cu_pct: Min_enriched_P2	Min_enriched	Cu_pct_corrected	140	130	80
Kr, 02_Cu_pct: Min_enriched_P3	Min_enriched	Cu_pct_corrected	280	260	160
Kr, 03_Ag_ppm: Min_enriched_P1	Min_enriched	Ag_ppm_corrected	50	25	20
Kr, 03_Ag_ppm: Min_enriched_P2	Min_enriched	Ag_ppm_corrected	100	50	40
Kr, 03_Ag_ppm: Min_enriched_P3	Min_enriched	Ag_ppm_corrected	200	100	80
Kr, 04_Mo_ppm: Min_enriched_P1	Min_enriched	Mo_ppm_corrected	65	50	25
Kr, 04_Mo_ppm: Min_enriched_P2	Min_enriched	Mo_ppm_corrected	130	100	50
Kr, 04_Mo_ppm: Min_enriched_P3	Min_enriched	Mo_ppm_corrected	260	200	100
Kr, 05_Co_ppm: Min_enriched_P1	Min_enriched	Co_ppm_corrected	50	25	20
Kr, 05_Co_ppm: Min_enriched_P2	Min_enriched	Co_ppm_corrected	100	50	40
Kr, 05_Co_ppm: Min_enriched_P3	Min_enriched	Co_ppm_corrected	200	100	80
Kr, 06_Au_ppm: Min_P1	Min	Au_ppm_corrected	30	12	10
Kr, 06_Au_ppm: Min_P2	Min	Au_ppm_corrected	60	25	20
Kr, 06_Au_ppm: Min_P3	Min	Au_ppm_corrected	300	115	100
Kr, 07_Cu_pct: Min_P1	Min	Cu_pct_corrected	30	15	10
Kr, 07_Cu_pct: Min_P2	Min	Cu_pct_corrected	60	30	20
Kr, 07_Cu_pct: Min_P3	Min	Cu_pct_corrected	300	150	100
Kr, 08_Ag_ppm: Min_P1	Min	Ag_ppm_corrected	15	10	10
Kr, 08_Ag_ppm: Min_P2	Min	Ag_ppm_corrected	30	20	20
Kr, 08_Ag_ppm: Min_P3	Min	Ag_ppm_corrected	150	100	100
Kr, 09_Mo_ppm: Min_P1	Min	Mo_ppm_corrected	50	25	5
Kr, 09_Mo_ppm: Min_P2	Min	Mo_ppm_corrected	100	50	10
Kr, 09_Mo_ppm: Min_P3	Min	Mo_ppm_corrected	500	250	50
Kr, 10_Co_ppm: Min_P1	Min	Co_ppm_corrected	75	45	45
Kr, 10_Co_ppm: Min_P2	Min	Co_ppm_corrected	150	90	90
Kr, 10_Co_ppm: Min_P3	Min	Co_ppm_corrected	1125	675	675

- Maximum average Euclidean distance (AvD) of sample per domain (Min_Enriched and Min) for multipass kriging. The AvD increases as the kriging pass number increases from 1 to 3, indicating decreasing accuracy and increasing uncertainty in the estimates.

	Passes	AvD (m)		Passes	AvD (m)
Au_Min_Eriched	1	42.66	**Au_Min**	1	29.59
	2	80.94		2	59.84
	3	139.3		3	181.4
Cu_Min_Eriched	1	67.29	**Cu_Min**	1	29.41
	2	119.8		2	59.82
	3	226.2		3	181.4
Ag_Min_Eriched	1	45.52	**Ag_Min**	1	14.81
	2	92.13		2	29.87
	3	142.6		3	146.5
Mo_Min_Eriched	1	60.26	**Mo_Min**	1	48.73
	2	99.64		2	99.64
	3	399.3		3	399.3
Co_Min_Eriched	1	45.35	**Co_Min**	1	74.2
	2	92.38		2	147.2
	3	196.3		3	299.4

AvD = Average Euclidean distance to sample

- The Competent Person has reviewed the model and selectively downgraded any areas which are of lower confidence to an Inferred classification based on any uncertainty.

Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• There are no existing external audit of the Mineral Resource estimate has been undertaken.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with*	• The Mineral Resource estimate is considered to be in line with industry standards for accuracy and confidence. This is attributed to the fact that the spatial data distribution used in the calculation falls well within the geostatistical range of the mineralisation, as determined by variography. Additionally, the assay quality meets or surpasses industry benchmarks, and the geological interpretation is a reasonable representation of the available data. • Multiple interpolation methods and varying geological orientations of the search ellipsoid were explored, including Ordinary Kriging and Inverse Distance Weighting. Ultimately, the final Kriging method provided the most reasonable representation of the composited data. • The Mineral Resource represents a global estimate of the volume, density, tonnage, and average grade of Au, Cu, Ag, Mo, and Co, as well as the metal content for each. Summary figures for mineralisation above the cut-off grade offer insights into the potential economic viability of the deposit under various scenarios, which may or may not be specified. These summary figures are calculated by summing the block tonnages for blocks with grades exceeding the specified cut-off, while the average grade is determined by a tonnage-weighted estimate of the block grades.

	production data, where available.	