

# Commercialising resources to advance exploration targets

ASX:LEX

# **HIGHLIGHTS**

- The Company has engaged with multiple regional operators and prospective developers along its pathway to commercialise advanced gold resource projects within the broader Lefroy Gold Project.
- Recent exploration has confirmed the compelling exploration upside across the Company's flagship Lefroy project.
- New and emerging exploration targets at Wren, Carnilya South and the northern extensions of Havelock and Lucky Strike, with results including:
  - o 16 m@ 0.27 g/t Au (from 36 m), in LEFA2219 at Wren Prospect
- Multiple highly prospective shallow high-grade gold targets identified associated with structures over a 4km corridor extending from Neon to Burns North, with notable historical intersections including:
  - o 2m@ 2.67 g/t Au (from 20m), in SAL0746 west of Neon
  - o 7m @ 1.06 g/t Au (from 54m) in LEFD009 at Lovejoy
  - o 2m @ 2.76 g/t Au (from 76m) in LEFR322 at Flanders; and
  - o 7m @ 3.68 g/t Au (from 80m) in LEFR307
- Exploration at Coogee South due to recommence shortly (last explored in 2021) with shallow plunging gold targets representing a strong pathway to unlocking additional highgrade resources.

Lefroy Exploration Limited ("Lefroy" or "the Company") (ASX:LEX) is pleased to provide an update on its recently completed air core drilling program and ongoing targeting activities across its broader Lefroy Gold Project.

# LEFROY CEO GRAEME GRIBBIN, COMMENTED:

"We are focused on unlocking value for our shareholders across our tenure, with the dual strategic approach of discovery and commercialisation.

"We are very pleased with the result of our air core drilling, with the identification of a significant number of areas for follow up. These new targets provide us with confidence in our pathway to discovering high grade resources."



### COMMERCIALISING ADVANCED GOLD RESOURCE PROJECTS

The Company advised in the June quarter (refer ASX announcement 31 July 2024), that it remains focused on commercialising its existing gold resources. This includes both internal assessment of mining options, and engagement with regional operators and prospective developers to determine the best path forward to commence mining operations.

The Company is now in advanced conversations under confidentiality agreements with several parties towards an outcome of commercialising its advanced gold projects, with the clear goal of unlocking the value of its gold assets, through a strategic partnership.

The Company's main focus is to realise value for its shareholders and recognises that a partnership with plant owner operators and mining contractors substantially reduces risk. This is likely to be the fastest pathway to gold production and cashflow for Lefroy.

# **REGIONAL AIRCORE DRILLING RESULTS**

The Company embarked on an extensive air core drilling program in August 2024 (refer ASX release 25 July 2024). The program was designed to target 40km of significantly underexplored prospective strike potential along both the Mt Monger and Talcum Fault corridors, extending from Neon and Lucky Strike to the southeast, up into the Carnilya Hill trend and northwest across to the highly prospective Location 45 (Figure's 1,2 & 6).

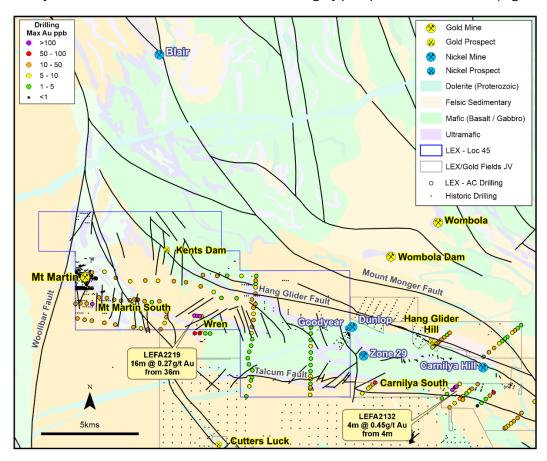


Figure 1: Regional Air core drilling program with significant Au results (Location 45 and Carnilya areas)



The Company holds significant tenure along the Mt Monger and Talcum Fault corridors, which already possess exceptional gold endowment, with 2 significant >400koz gold deposits anchoring both ends of the prospective trend, including Mt Martin (Figure 1) in the northwest down towards Burns in the southeast (Figure 2).

In total, 324 air core holes were completed across the broader Lefroy project area, for a total of 12,164m.

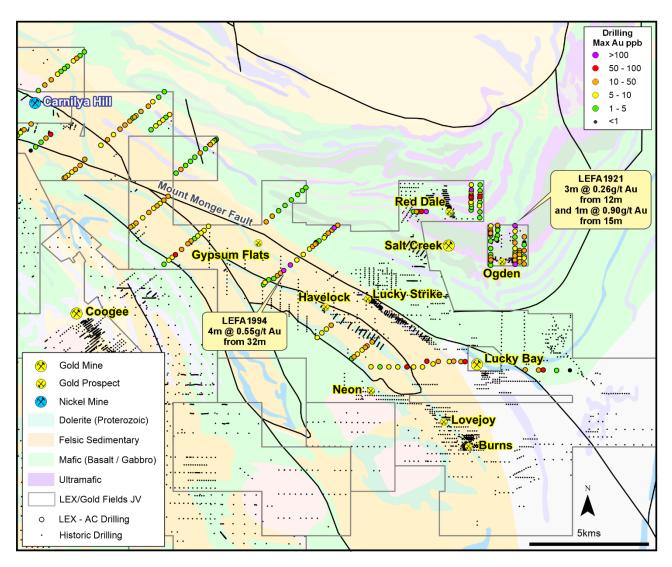


Figure 2: Regional Air core drilling program with significant Au results (Eastern Lefroy area).

Most notable was a thick intersection located at the Wren prospect within the Location 45 freehold property, with drilling returning 16m @ 0.27 g/t Au (from 36m) within LEFA2219 (Figure 1). Hosted within a partially weathered, quartz carbonate bearing talc-chlorite altered ultramafic schist, the intersection is positioned north of the Talcum Fault, a structure considered responsible for the introduction of early-stage gold mineralisation in the district.



Further consolidating the Company's view on the importance of the Talcum Fault as a locus for gold mineralisation, a shallow intersection of 4m @ 0.45 g/t Au (from 4m) within LEFA2132 and hosted in mafic saprolite was intersected at Carnilya South (Figure 1). With this intersection also located just north of the Talcum Fault, both of these early-stage anomalous gold intersections highlight the importance of this structure, and its role in potentially unlocking additional gold discoveries for Lefroy.

Within the eastern half of the Lefroy Project, further encouragement was received within the Havelock - Lucky Strike corridor, with a significant regional intersection of 4m @ 0.55 g/t Au (from 32m) within LEFA1994.

Located approximately 2.5km northwest and along strike from very encouraging intersections reported by the Company in May (refer ASX release 23 May 2024), this intersection, hosted within saprolitic sedimentary units further demonstrates the significant potential for this belt to host additional gold resources analogous to that already discovered and reported by the Company, including the Lucky Strike resource (refer ASX release 20 May 2020).

# A NEW FRONTIER OF TARGETS TO BE UNLOCKED NORTH OF BURNS

In early October, the Company announced the delineation of a high grade significant shallow gold zone within the existing Burns Central Mineral Resource (refer ASX announcement 3 October 2024).

Additionally, the Company recognised the importance of a significant north-south trending structure (now named the Quimby Fault), with this fault coinciding with and striking sub-parallel to the eastern edge of the recognised high-grade Au zone at Burns

Recognising the importance of the structural controls towards defining the potential for high-grade gold mineralisation in the district, the Company further reported that the identification of a series of structural breaks along this 4km magnetic trend (located near Smithers, Flanders, Skinner and Lovejoy), interpreted to represent structures analogous to the Quimby Fault, potentially acts as a control towards focusing high-grade mineralisation similar to that demonstrated at Burns (refer ASX announcement 3 October 2024).

Previous historical broad spaced air core (AC) and reverse circulation (RC) exploration drilling delivered encouraging early gold results and geochemical anomalism consistent with the original Burns Au-Cu discovery. Several historical anomalous gold intersections of note included:

- 2m@ 2.67 g/t Au (from 20m), in SAL0746 west of Neon
- 7m @ 1.06 g/t Au (from 54m) in LEFD009 at Lovejoy<sup>2</sup>
- 4m @ 1.22 g/t Au (from 109m) in LEFR308<sup>1</sup>
- 2m @ 2.76 g/t Au (from 76m) in LEFR322 at Flanders; and
- 3m @ 2.05 g/t Au (from 80m) in LEFR316
- 7m @ 3.68 g/t Au (from 80m) in LEFR307<sup>1</sup>



Follow-up exploration intends to target favourable structural and geochemical sites that could act as a focus for gold mineralising fluids. Priority targets include the tightly folded package of banded iron formation (BIF) units at Neon proximal to drill hole SAL0746 (refer to Lefroy Exploration Limited Prospectus - ASX lodgement date 8 Sept 2016) and second order fault structures analogous to the Quimby Fault. These structures will be prioritised in the next phase of exploration.

The Company is very encouraged by the scale and consistency of the gold anomalism demonstrated in the shallow AC drilling around the broader Burns intrusive complex. The majority of these anomalies have not yet been followed up and the company remains convinced of the potential for this system to host multiple significant gold deposits.

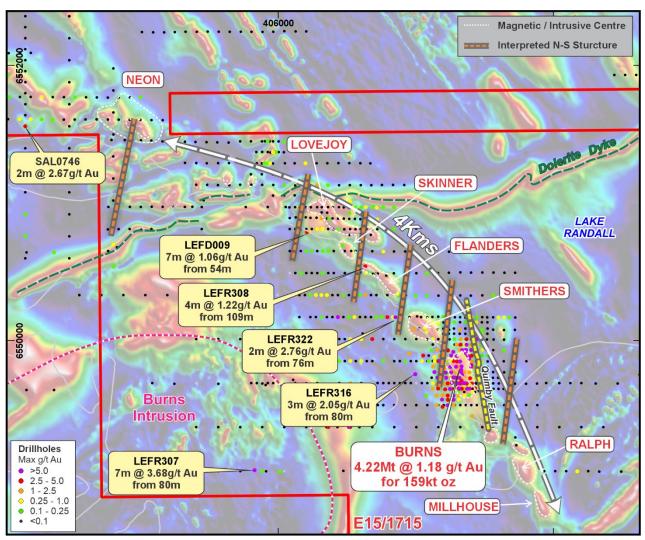


Figure 3: Burns district with regional high-grade Au targets



#### COOGEE

Mineralisation at Coogee is associated with a series of linear magnetic zones where diorite porphyries have intruded a sequence of intermediate and felsic volcaniclastic rocks. Gold mineralisation is localised within skarn-like biotite - K-feldspar – albite -epidote - magnetite alteration with associated pyrite and chalcopyrite. Mineralisation shows a shallow south-east plunging geometry and tracks a controlling shear structure that remains untested south of the Lefroy tenement boundary.

Previous AC drilling programs conducted by the Company during 2021 was successful in identifying a consistent gold anomaly extending for 2.5km south of the Coogee gold mine (Javelin Minerals Ltd and ASX: JAV), onto Lefroy tenure where the system remains open to the south (Figure 4). Significant results included 3m @ 0.99 g/t Au (from 24m) within LEFA967 (refer ASX announcement 4 November 2021).

A significant finding from this earlier drilling program was the recognition of an extensive siliceous hardpan formed at the bedrock interface (Figure 5). The company interprets that this hardpan could represent an albite alteration cap formed by a nearby buried diorite intrusion. The hardpan could not be penetrated with the earlier AC drilling programs, and Lefroy interprets that the previous RAB and AC programs were not effective in adequately testing the bedrock gold anomalies.

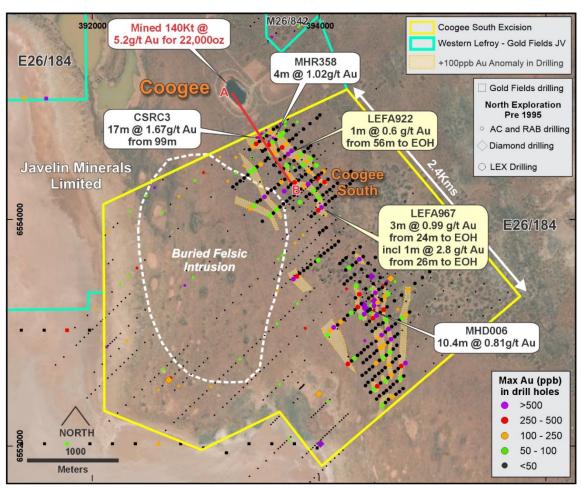


Figure 4: Coogee South Plan View and Au anomalism



In essence, the interpreted hardpan layers create a significant partially blind exploration target opportunity. The consistency and scale of the anomaly at Coogee South in the context of ineffective drill testing provides a significant opportunity for discovery of structurally controlled gold mineralisation around the margins of the buried diorite intrusion that can be easily tested with a targeted shallow RC drill program.

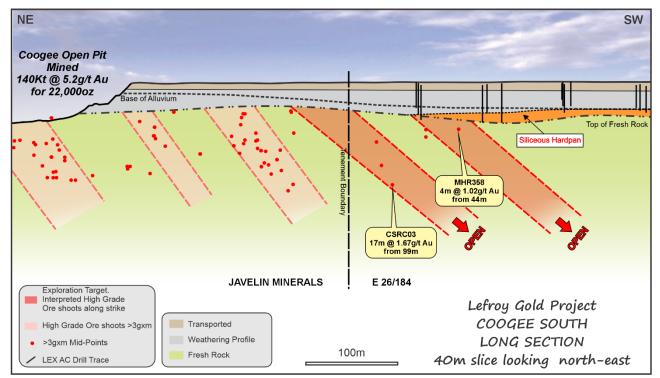


Figure 5: Coogee South Long Section (Looking north-east)

### -Ends-

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

Graeme Gribbin

Growno Gull

**CEO** 



For further information please contact:

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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<sup>2</sup> Glenayle Project 210km north of Wiluna.

The Lefroy Project is a contiguous land package of 635km<sup>2</sup> 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).

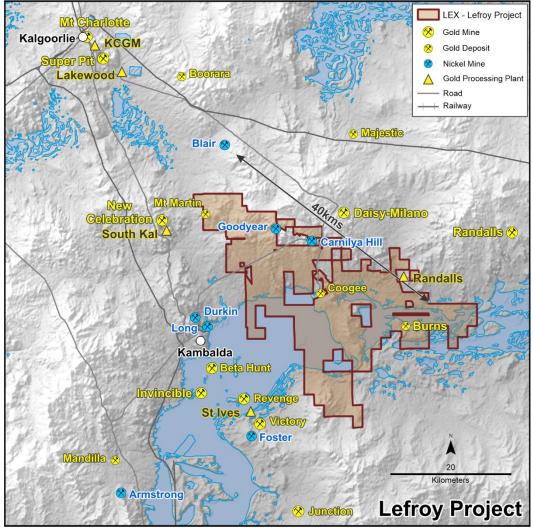


Figure 6: Regional location map of the Lefroy Project



#### 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.

- Maiden Lucky Strike Resource Estimate: 20 May 2020
- Burns Update Drill results continue to support larger Cu-Au-Ag system: 3 November 2021
- Coogee South Update Drilling Outlines Two Gold Anomalies: 4 November 2021
- RC Drill Results Outline New Gold Position at Burns: 25 January 2022<sup>1</sup>
- Impressive Au-Cu Intersection in New RC hole at Burns: 19 April 2022
- Multiple Broad Cu Au drill intersections at Lovejoy expand the scale of the Burns system: 29
   November 2022<sup>2</sup>
- Burns Project Demonstrates Significant Scale: 12 April 2023
- Half a million ounces of gold in Burns Central maiden resource: 4 May 2023
- Strategy to focus on Gold Development and Exploration: 23 February 2024
- Lefroy to recommence exploration of high-grade gold targets: 27 March 2024
- Positive Exploration Results at Havelock and Lucky Strike: 23 May 2024
- Lefroy Launches Major Gold Focused Air Core Drilling Program: 25 July 2024
- High Grade Shallow Resource to Unlock Value at Burns Central: 3 October 2024

# **COMPETENT PERSON STATEMENT**

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



Table 1: Significant Regional Air core results - Lefroy Project

Hole ID	From (m)	To (m)	Interval (m)*	Au (g/t)	Pt (ppb)	Pd (ppb)	Ni (%)	Cu (ppm)
LEFA1921	12	15	3	0.26				
	15	16	1	0.90				487
LEFA1923	28	29	1	0.24				
	29	30	1	0.02	45	25		
LEFA1981	32	36	4	0.12				
LEFA1982	28	36	8	0.23				
LEFA1994	32	36	4	0.55				
	40	44	4	0.11				
LEFA1995	20	24	4	0.26				
LEFA2006	24	28	4	0.27				
LEFA2132	4	8	4	0.45				
LEFA2134	84	88	4	0.11				
LEFA2203	60	64	4	0.12				
LEFA2219	24	28	4	0.18				
LEFA2219	36	52	16	0.27				
LEFA2220	32	48	16	0.11				
incl	44	48	4	0.14			0.20	
LEFA2221	20	28	8	0.12				
LEFA2000	9	10	1	0.02				965
LEFA2001	68	69	1	BDL*				627
LEFA2225	40	48	8	0.02			0.17	
LEFR316	80	83	3	2.05				
LEFR322	76	78	2	2.76				
LEFD009	54	61	7	1.06				
MHD006	44	54.4	10.4	0.81				
MHR358	44	48	4	1.02				

<sup>\*</sup>Below assay detection limits



 Table 2:
 Regional Air core program – Lefroy Project: Drill Hole Collar Details

	Collar E	Collar N	Collar RL	Depth	Dip	Azimuth
Hole ID	(MGA94_51)	(MGA94_51)	(m)	(m)	(deg)	(deg)
LEFA1921	408944	6558892	489	16	-90	0
LEFA1923	408961	6557278	479	30	-90	0
LEFA1981	407368	6560367	439	39	-90	0
LEFA1982	405758	6559450	407	41	-90	0
LEFA1994	400670	6556949	503	60	-90	0
LEFA1995	400907	6557179	505	86	-90	0
LEFA2006	402461	6558741	431	35	-90	0
LEFA2132	390621	6562822	361	33	-90	0
LEFA2134	390447	6562656	348	113	-90	0
LEFA2203	374567	6566856	355	65	-90	0
LEFA2219	379064	6566313	372	60	-90	0
LEFA2219	379064	6566313	372	60	-90	0
LEFA2220	379183	6566302	381	55	-90	0
LEFA2221	379301	6566288	378	55	-90	0
LEFA2000	401824	6558085	417	10	-90	0
LEFA2001	401825	6558125	419	69	-90	0
LEFA2225	379309	6565420	318	49	-90	0
LEFR316	406519	6549371	291	96	-90	0
LEFR322	407342	6549751	288	85	-90	0
LEFD009	406210	6550790	290	467.38	-65	90
MHD006	394480	6553296	300	130.4	-50	180
MHR358	393593	655473	300	80	-90	0



# APPENDIX A JORC TABLE 1

# Section 1 - Sampling Techniques and Data: Lefroy Project - Regional Aircore 23 Oct 2024

(Criteria in this section apply to all succeeding sections)

Criteria	JORC Code Explanation	Commentary
Sampling techniques	<ul> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>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.</li> </ul>	<ul> <li>The sampling noted in this release has been carried out using Aircore (AC) drilling. The AC program comprises 327 vertical holes for 12165m, holes varying in depth from 1m-135m with an average depth of 37m.</li> <li>All holes were drilled vertically at predominantly 320m hole spacing with lines up to 2km apart.</li> <li>Sampling and QAQC protocols as per industry best practice with further details below.</li> <li>AC samples were collected from the rig mounted cyclone at 1m intervals and laid out in rows of 10 or 20 samples on the ground. Composite 4m samples were then collected by scoop sampling the 1m piles to produce a bulk 2-3kg sample which was sent to the Laboratory in Perth for analysis. Samples were dried, pulverised, split to produce a 40g sample for fire assay and analysis for Au, Pt and Pd by atomic absorption spectroscopy (AAS).</li> <li>Single metre samples were collected at end of hole and analysed for both Au, Pt, Pd by fire assay and a 59 element geochemical suite by 4-acid digest and ICP-MS finish. These pulp samples were also analysed for shortwave infrared (SWIR) spectral data via ASD.</li> </ul>
Drilling techniques	Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	The AC drilling was completed by Raglan Drilling (Kalgoorlie). The AC drill bit has a diameter of 78mm and collects samples through an inner tube to reduce contamination. Aircore drilling is to blade refusal and hence terminates in fresh or hard material such as quartz. In certain circumstances a face sampling hammer drill bit was used to obtain greater penetration in hard rock to obtain a fresh rock sample.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	<ul> <li>Nearly all of the samples collected from the AC drill program were dry.</li> <li>Sample recovery size and sample condition (dry, wet, moist) recorded. Recovery of samples estimated to be 80-</li> </ul>



Criteria	JORC Code Explanation	Commentary
	<ul> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul> <li>100%, with some poor sample return where high-water flows were encountered in some holes intersecting paleochannel sands during drilling.</li> <li>Drilling with care (e.g. clearing hole at start of rod, regular cyclone cleaning) if clays or water encountered to reduce incidence of sample contamination.</li> <li>Insufficient data to determine whether relationship exists between sample recovery and grade.</li> </ul>
Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>Detailed logging of regolith, lithology, structure, mineralisation and recoveries recorded in each hole by qualified geologists.</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> <li>Every hole was logged for the entire length.</li> <li>Magnetic susceptibility measurements were recorded on the last sample interval of each hole.</li> </ul>
Sub- sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>No core drilling completed</li> <li>Composite samples of 4m were collected by scoop sampling 1m intervals into pre-numbered calico bags. Sample weights of 2 - 3 kg are considered appropriate to detect anomalism within the weathered saprolite profiles. The last interval of each hole is consistently a 1m sample for geochemical analysis and the second last composite can vary between 1-4m.</li> <li>Upon delivery to the laboratory, the sample numbers are checked against the sample submission sheet. Sample numbers are recorded and tracked by the laboratory using electronic barcoding.</li> <li>The sample preparation of the AC follows industry best practice, involving oven drying, pulverising and splitting to produce a homogenous pulp sub sample for analysis.</li> <li>Along with composite samples, standards and blanks were randomly inserted (approximately every 40 samples) and were included in the laboratory analysis. Standards and blanks were certified reference material prepared by Geostats Pty Ltd.</li> </ul>
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.	<ul> <li>Only nationally accredited laboratories are used for the analysis of the samples collected.</li> <li>The laboratory oven dries, jaw crushed, and if necessary (if the sample is &gt;3kg), riffle split the sample and then pulverised (the entire 3kg sample), in a ring mill to a</li> </ul>



Criteria	JORC Code Explanation	Commentary
	<ul> <li>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.</li> <li>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.</li> </ul>	<ul> <li>nominal 90% passing 75 microns.</li> <li>All samples are analysed via Fire Assay, using a 40g charge of the analytical pulp being fused with litharge. The resultant metal prill is digested in Aqua regia and the gold content determined by atomic adsorption spectrometry (AAS) - detection limit is 0.01 ppm Au.</li> <li>No geophysical tools were used.</li> <li>Quality Assurance and Quality Control (QA/QC) samples are routinely submitted and comprise certified standards, certified blanks, field duplicates, lab duplicates and repeat analyses. A total of 4 unique gold standards sourced from Geostats Pty Ltd were used to represent the expected grade ranges. Standards were routinely inserted at a rate of 1 in 40 samples and certified blanks at 1 in 100 samples.</li> <li>Field duplicate samples were taken at a frequency of approximately 1 in 100 composite samples. Data showed no discernible bias from limited data with significant gold grades.</li> <li>The results for these QA/QC samples are routinely analysed by Senior Geologists with any discrepancies dealt with in conjunction with the laboratory prior to the analytical data being imported into the database.</li> <li>The analytical techniques used are considered appropriate for the style of mineralisation being tested for - this technique is industry standard across the Eastern Goldfields.</li> <li>A detailed QAQC analysis of recent RC drilling data has been completed and compiled into an internal report. This report has determined that appropriate levels of accuracy and precision have been established.</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>The results have been reviewed by alternative company personnel and minor sampling errors identified were field checked and corrected.</li> <li>No holes were twinned.</li> <li>Capture of field logging is electronic using Toughbook hardware and Logchief software. Logged data is then exported as an excel spreadsheet to the Company's external database managers for upload to the Company's DATASHED database. Validation checks are completed to ensure data accuracy. Assay files are received electronically from the laboratory and automatically uploaded to the Company's database server. QAQC checks and validation are completed before any data is uploaded to the master database.</li> <li>There has been no adjustment to the assay data. The primary assay fields reported by the laboratory is the value used for plotting, interrogating, and reporting.</li> </ul>
Location of data points	<ul> <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> </ul>	<ul> <li>Drill hole positions were surveyed using a hand-held Garmin GPS with a horizontal (Easting Northing) accuracy of +-5m. No downhole surveys were completed on vertical holes.</li> <li>The final hole collar was later surveyed by a DGPS by a third-party contractor.</li> <li>Grid System – MGA94 Zone 51. Topographic elevation captured by using the differential GPS.</li> </ul>

Criteria	JORC Code Explanation	Commentary
Data spacing and distribution	<ul> <li>Quality and adequacy of topographic control.</li> <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</li> </ul>	<ul> <li>Hole spacing at nominal 320m centres on orientated drill lines oriented perpendicular to the regional geology. Line spacing varying from 320m to 2km as a first-pass bedrock geochemical sampling program.</li> <li>AC samples composite range 1-4m but generally 4m. No assay compositing has been applied.</li> <li>Drill data spacing is not yet sufficient for mineral resource estimation.</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>has been applied.</li> <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> <li>The drill traverses were orientated to evaluate the north westerly trending geology and interpreted structural trends. The drilling was a geochemical reconnaissance program and the holes are orientated appropriately to ensure unbiased sampling of the geological trends.</li> <li>The AC drilling is reconnaissance in nature, being relatively wide spaced and the orientation of the gold mineralised structures intersected is yet to be confirmed.</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>Individual composite samples were collected in bulka bags and personally delivered to the Bureau Veritas Laboratory in Kalgoorlie by the Lefroy Field Supervisor. Samples were sorted and despatched to Bureau Veritas Perth laboratory.</li> <li>Bureau Veritas reconcile the sample numbers received against the Lefroy submission form to notify of any errors. Following analysis, the sample pulps and residues are retained by the laboratory in a secure storage yard.</li> </ul>
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	All results of this drill program were reviewed by the Exploration Manager and Managing Director, and anomalous gold intersections inspected in the field to correlate with geology. No specific site audits or reviews have been conducted.



# Section 2 - Reporting of Exploration Results: Lefroy Project - Regional Aircore 23 Oct 2024

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

Criteria	JORC Code Explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>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.</li> <li>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.</li> </ul>	<ul> <li>The Lefroy Project is located approximately 50 km in a south easterly direction from Kalgoorlie, Western Australia and consists of a contiguous package of tenements covering approximately 640 square kilometres.</li> <li>The work described in this report was undertaken on Exploration Licences E25/587, E25/524, E26/182, M25/362, E26/183, E26/176, P26/4391, P26/4392, P26/4393, P26/4394, E26/195 and the Hampton East Location 45 freehold title.</li> <li>The tenements are current and in good standing with the Department of Mines, Industry Regulation and Safety (DMIRS) of Western Australia. The tenements are held under title by Monger Exploration Pty Ltd, a wholly owned subsidiary of Lefroy Exploration Ltd.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>For Full details of exploration completed by other parties at the Lefroy Project refer to the Independent Geologists Report ('IGR') attached to the LEX prospectus (2016).</li> <li>The area subject of the regional AC program has been actively explored by various companies including:</li> <li>1968-1973 BHP: Conducted regional scale geophysics, mapping and targeted drilling programs exploring the mafic stratigraphy for nickel sulphides resulting in the discovery of the Carnilya Hill nickel deposit.</li> <li>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.</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 and generate a structural interpretation. Magnetic anomalies forming portions of the Burns anomaly were tested with air core, leading to the discovery of the Neon prospect.</li> <li>2001-2003 Goldfields: Goldfields took over exploration and conducted further lake AC drilling at Neon.</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.</li> <li>2005-2013 Integra Mining Limited: The North-Eastern portion of the tenure was systematically explored by Integra between 2005 and 2013 and led to the discovery of several economic gold deposits that were subsequently</li> </ul>

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		mined including Salt Creek, Lucky Bay and the Randalls BIF deposits. In 2013 Integra merged with Silver Lake Resources via a scheme of arrangement and continue active mining operations and processing at the Randalls Mill.  2008-2010 Newmont: Newmont joint ventured into the Sovereign and Gold Attire Els neighbouring Integra. It conducted an 800 X 400m gravity survey to trace an interpreted north-south structural corridor through the tenements south of Salt Creek. Newmont conducted preliminary reconnaissance drilling, assayed for a select handful of elements and decided none of the anomalies fit their bullet-proof model for a tier 1 orogenic gold discovery and walked away.  2010-2019 Octagonal Resources: Octagonal conducted several phases of AC and RC drilling over untested regional geophysical anomalies in the vicinity of Lake Randall. Octagonal were responsible for identifying new gold prospects at Burns, Sideshow (re-named Lucky Strike) and the nickel prospect at Lisa's Dune.
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <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 bedrock geology West of the Randall Fault is stratigraphically and geochemically equivalent to the mafic sequences at Kalgoorlie and Kambalda. East of the Randall Falt the geology transitions to a sedimentary sequence of greywackes and BIF comprising the Belches sequence.</li> <li>The Lefroy project tenements are mostly covered by alluvial, colluvial and lacustrine material with very little outcrop. A stripped profile below this cover means that there is often limited dispersion and often no significant surface anomalism over buried mineral deposits such as Lucky Strike and Burns. This has limited historic exploration programs using traditional surface exploration techniques such as soil sampling.</li> <li>Gold deposits have been proven to develop in a range of lithologies and styles including quartz vein stockworks in mafic dolerites (Salt Creek), sulphide replacement of BIF (Lucky Strike) and porphyry style Au-Cu associated with diorite intrusions (Burns).</li> </ul>
Drill hole	A summary of all information	Table containing drill hole collar, survey, and intersection
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	<ul> <li>data for material (Au intersections &gt;0.10gpt Au) drill holes are included in Table 1 in the body of the announcement.</li> <li>No material Information has been excluded.</li> <li>There are numerous historical drill holes within the regional AC project that have been reported previously. These are depicted on the drill hole plans in the announcement.</li> </ul>

Criteria	JORC Code Explanation	Commentary
Data aggregation methods	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.  • In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.  • Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of	<ul> <li>All reported grades have been length weighted. High grades have not been cut.</li> <li>Significant Au intersections are reported if greater than 2m using a lower cut-off of 0.1gpt Au and a maximum of 4m internal dilution to identify significant results.</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> </ul>
	low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.  The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalent values or formulas used.
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	<ul> <li>All results are based on down-hole metres.</li> <li>Given the wide spaced reconnaissance nature of the drilling the geometry of the mineralisation reported is not sufficiently known and the true width is not known</li> </ul>
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	Appropriate summary diagrams (section & plan) are included in the accompanying announcement.

Criteria	JORC Code Explanation	Commentary
	a plan view of drill hole collar locations and appropriate sectional views.	
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.	<ul> <li>Significant assay results are provided in Table 1 for the recent LEX drill program.</li> <li>Significant assay results from historical drilling are noted in the text and figures of the report.</li> </ul>
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	All relevant data has been included within this report.
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	Follow up AC, RC and diamond drilling is being considered to allow for further testing of the anomalies defined by the air core drilling and historical data.