Lefroy Exploration

Burns Continues to Grow – depth continuity for original mineralisation; porphyry widening; new mineralised zone

- **The third and deepest diamond hole at Burns to date, LEFRD267, has been completed. LEFRD267 was collared 65m west of LEFD004 to evaluate the host porphyry rocks vertically below the mineralisation found in LEFD004 and OBURCD025.**

- **Drilling found**
  - **A 246m interval of the Eastern Porphyry interleaved with basalt from 244m to 490m downhole, followed by massive basalt to EOH at 522.5m**
  - **The Eastern Porphyry contains multiple altered and mineralised intervals of porphyry and basalt totalling 102m, including:**
    - **A 72m interval that contains magnetite and sulphide veining (photo below) from 244.4m to 316.5m in the expected position based on the mineralisation found in LEFR260**
    - **A new 31m zone of porphyry and basalt hosted mineralisation from 430m to 461m**

LEFRD267 interval 311.3 – 311.4m Refer Figure 7 & 8 for detail

- **The DD program at Burns has now:**
  - **confirmed the vertical depth continuity of altered and mineralised porphyry at least 100m below the 37m zone of Au/Cu mineralisation in LEFR 260 (*38m @ 7.63g/t Au & 0.56% Cu from 134m),***
  - **expanded the Eastern Porphyry body to over 140m true width**
  - **established the broadening with depth of the altered and mineralised zone on the western side of the porphyry, and**
  - **discovered a new mineralised interval on the east side of the porphyry body**

- **A fourth diamond drill hole, LEFRD268, is now underway to evaluate the Eastern Porphyry a further 60m vertically under hole LEFRD267. The hole will extend the existing diamond hole from 330.8m to an estimated final depth of 560m and will be the deepest hole yet to be completed at Burns by the Company.**

- **Assays from holes LEFD004, OBURCD025 and LEFRD267 are expected in late June.**

Lefroy Exploration

Lefroy Exploration Limited (ASX: LEX) ("Lefroy" or "the Company") is pleased to report a further update to the current 3000m diamond drilling program evaluating the Burns copper (Cu) gold (Au) prospect. Burns is within the Eastern Lefroy tenement package, which is part of the wholly owned greater Lefroy Gold Project (LGP) located 50km south east of Kalgoorlie (Figure 1).

The Burns copper gold prospect is situated on the eastern margin of a large interpreted felsic intrusion, termed the Burns Intrusion. The intrusion does not outcrop but features a distinctive annular aeromagnetic and gravity geophysical signature.

Broad high-grade gold mineralisation is hosted within a newly discovered hematite-pyrite-chalcopyrite-magnetite altered porphyry (refer LEX ASX release 23 February 2021). This porphyry, termed the Eastern Porphyry, is open to the north and south and its eastern extent is unknown (Figure 2). The mineralisation is open at depth (Figure 3). The copper and gold mineralisation hosted by both porphyry and basalt is considered by the Company to be a new style of mineralisation in the area, a land position dominated by Lefroy (Figure 1).

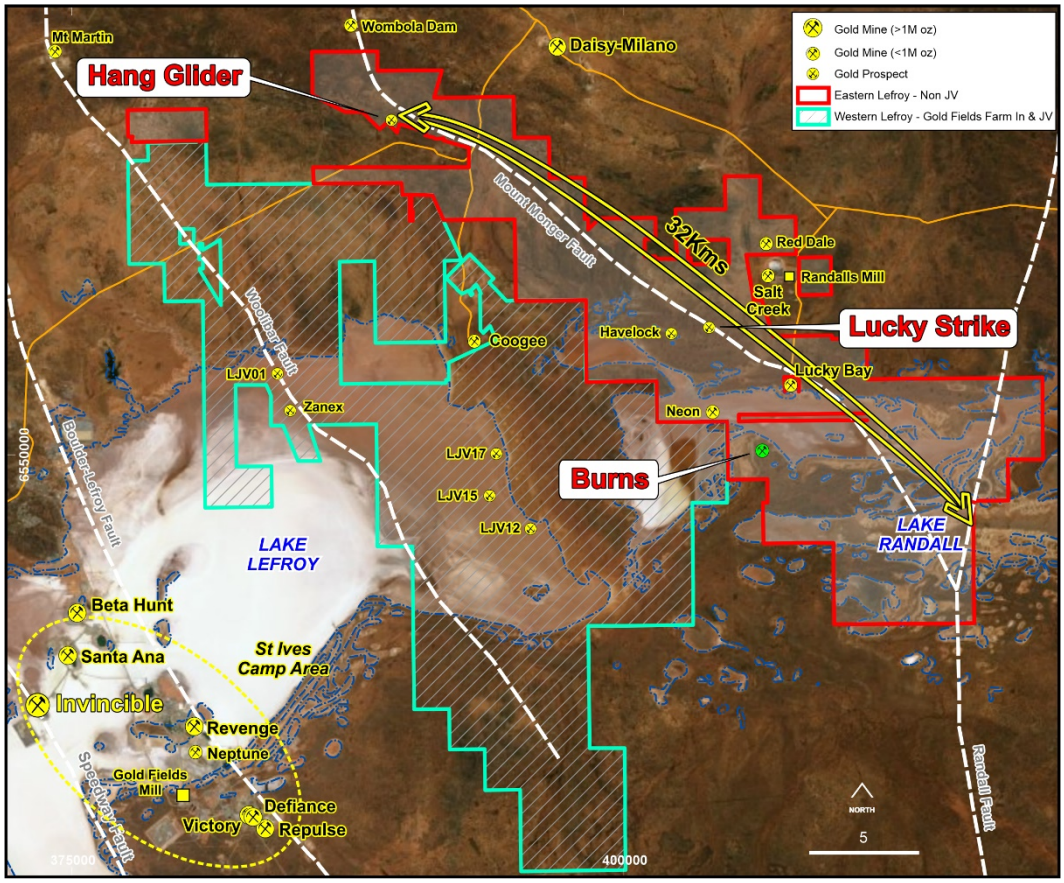


Figure 1 Lefroy Gold Project, highlighting Eastern and Western Lefroy, the location of the Burns prospect and proximity to Lucky Strike. Refer to Figure 2 for Burns drill hole plan.

Discussion

A fourteen-hole diamond drill program commenced on 20 April 2021 to evaluate the Eastern Porphyry over a 200m strike length on 40m spaced drill sections (Figure 2). The first hole of the program (LEFD004) was completed on 3 May 2020. That hole was designed to twin and extend past the high-grade interval found in LEFR260 to determine the width of the Eastern Porphyry (Figure 3). Details of that drill hole were reported to the ASX on 3 May 2020.

The host Eastern Porphyry was intersected in LEFD004 from 117m to 304.5m, a down hole interval of 187.5m. The porphyry was interpreted to have a near vertical dip and an estimated true width of approximately 110m bounded by basalt to the west and east (Figure 3). That hole confirmed three distinct variations of the host diorite porphyry were observed in this interval and are interpreted as multi-phase intrusive events.

Details of the second hole of the program, OBURCD025, were reported to the ASX on 13 May 2021. The diamond drill hole commenced at 40m down a pre-existing RC hole and terminated at 396.6m downhole. The collar of that hole is located 35m to the west of LEFD004 and provided further important information to highlight the dimensions and constraints to the porphyry and the sulphide mineralisation on this baseline (0N) section (Figure 3). A 189m interval of the Eastern Porphyry was intersected from 179m, that also includes two narrow intervals of altered basalt (refer Table 2 for detail). The hole terminated in chlorite biotite altered basalt.

Multiple broad (10m-20m) zones of alteration and mineralisation where intersected in the porphyry in OBURCD025 from 201m to 291m and documented in the LEX ASX release dated 13 May 2021. The observations of the mineralisation in OBURCD025 supported the Company's interpretation that the strength of the Burns Cu-Au mineral system maybe increasing with depth that triggered the decision to adjust the drill program and bring forward the extension of hole LEFR267 (Figure 3).

RC drill Hole LEFR267 was part of the maiden Burns drill program completed in January 2021 and collared approximately 68m west of LEFR260. The hole was terminated in porphyry at 244m, unaware at the time that this was the commencement of the Eastern Porphyry. The diamond drill extension to LEFR267 terminated at 522.5m down hole, 80m deeper than proposed and is currently the deepest Lefroy drill hole at Burns.

The diamond extension (LEFRD267) intersected a 246m interval of the Eastern Porphyry from 244m downhole. The interval included multiple intervals of basalt up to 25m in length, some of which were deformed, carbonate veined and contain sulphides (chalcopyrite). This is the broadest downhole interval of the Eastern Porphyry intersected at Burns, and although includes intervals of basalt it suggests the porphyry body is becoming wider with depth.

Multiple broad zones of alteration and mineralisation were intersected in the Eastern Porphyry and also basalt in LEFRD267 with key intervals being:

- 244.4m-253m, an 8.6m interval down dip of the mineralisation in OBURC025 This interval contains strong red rock and magnetite altered diorite porphyry. With disseminated chalcopyrite (Cp)-magnetite-actinolite veinlets (2-3% Cp).

- 260m-273m, a 13m interval of strong hematite (red rock) altered porphyry and pervasive vuggy open space. Partly filled with Gypsum-magnesite-chalcopyrite. Strong disseminated 2-3% Cp.

- 273m-297.7m, a 24.7m interval consisting of strong red rock altered porphyry with 1% disseminated Chalcopyrite-Pyrite and trace magnetite stringer veins

- 310.5m-316.5m, a 6m zone of intense red rock and magnetite alteration. Epidote magnetite stringer veins with blebs of Cp (Figure 8). Open space gypsum/magnesite/Cp +-molybdenite veins. 2 specks visible gold at 311.8m.

- 430m-460.88m, a new broad 31m zone of basalt and porphyry with moderate epidote alteration and an estimated 2% disseminated/stringer pyrite.

Photographs of selected examples of core within the broader intervals are shown below (Figures 4 to 9). These are not the only mineralised zones but examples to highlight the style of the chalcopyrite mineralisation in the host altered porphyry and basalt.

Importantly, geological observations in this hole provide further support to the interpretation that the red rock (hematite) and magnetite-sulphide (pyrite, chalcopyrite) over prints each of the three variants of the host diorite porphyry and at this early stage is considered a final event in the paragenesis of the system (refer Figures 4 to 9).

Further, the observations from hole LEFRD267 support the Company's view that the tenor of alteration and mineralisation in the porphyry is broadening with depth in addition to the new mineralisation in the basalt intervals when compared with observations in OBURCD025. The new 31m interval from 430m is located close to the eastern boundary of the porphyry (Figure 3). The zone may represent an outer pyrite dominant mineralisation assemblage to the system.

Based on this interpretation and the encouragement of the observations in hole LEFRD267, the Company decided to adjust the drill program and bring forward the extension of hole LEFR268. The hole depth is planned to be 560m deep (Figure 3). The RC hole was originally extended in February 2021 as a diamond hole (tail) and terminated in porphyry at 330.8m.

The hole will test the depth extension to the host eastern porphyry and mineralisation a further 60m vertically beneath that observed in LEFRD267. This will provide additional important constraints to the system to approximately **320m** from surface and provide the baseline geological and assay results to support evaluation of the system on step out sections to the north and south.

Figure 4 LEFRD267 interval 265.2 – 265.5m showing (gypsum) vein hosted chalcopyrite in quartz feldspar porphyry.

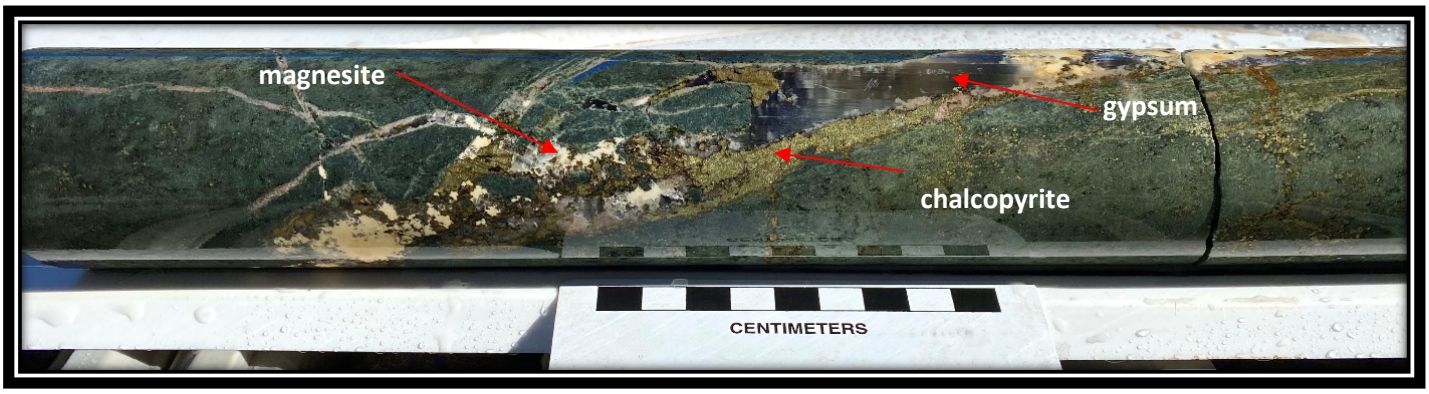


Figure 5 LEFRD267 interval 301 – 301.3m showing chalcopyrite in association with a gypsum magnesite vein in basalt.

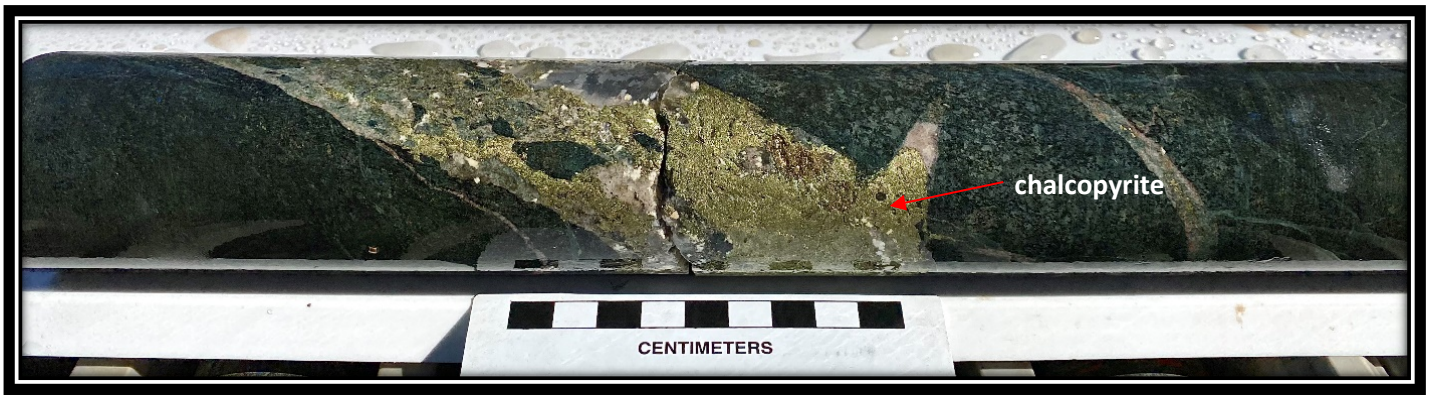


Figure 6 LEFRD267 interval 304.5 – 304.7m showing massive chalcopyrite associated with magnesite and gypsum in basalt.

Figure 7 LEFRD267 interval 311 – 311.5m showing chalcopyrite with anhydrite, magnesite and strong hematite (red) alteration in quartz feldspar porphyry. The interval also contains a mafic xenolith

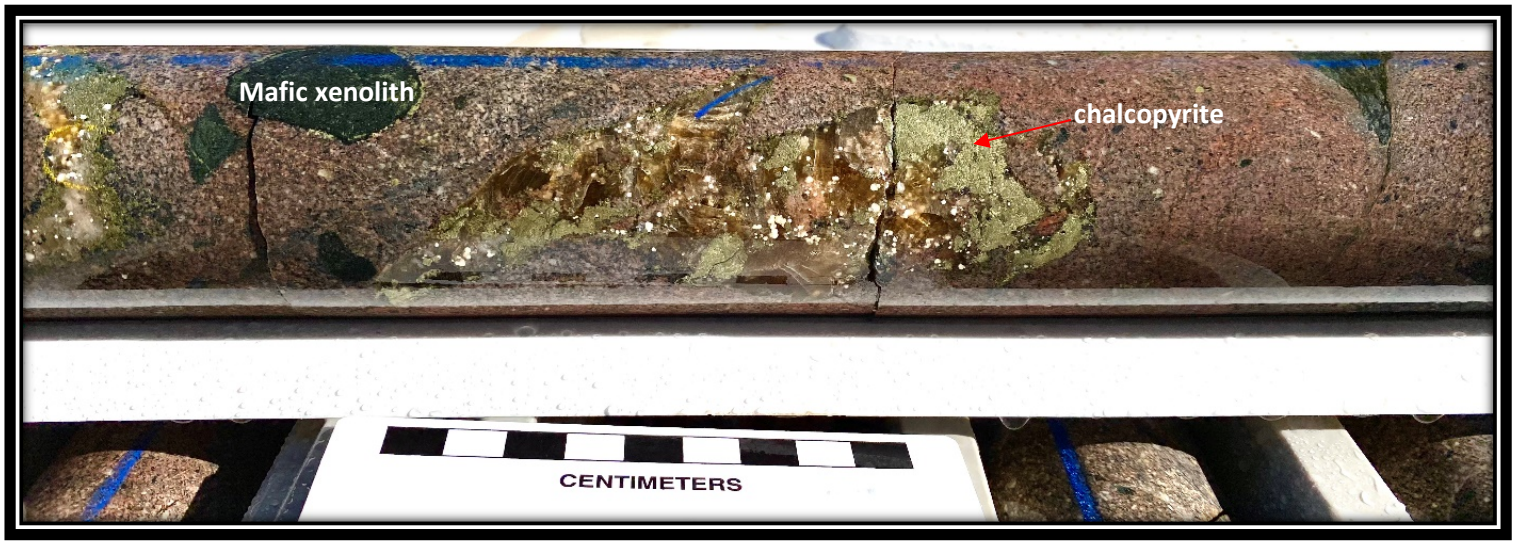


Figure 8 Close up LEFRD267 interval 311.3 – 311.4m showing chalcopyrite with anhydrite, magnesite and strong hematite (red) alteration in quartz feldspar porphyry and the mafic xenolith

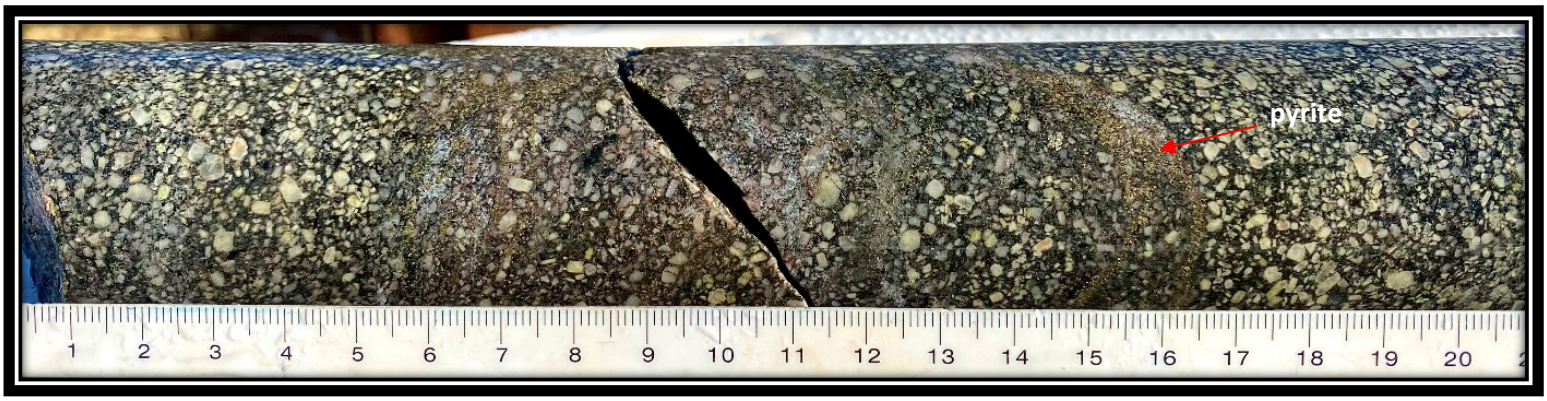


Figure 9 LEFRD267 interval 456.8 – 457m showing disseminated pyrite in quartz-feldspar porphyry (new zone).

An estimated 3000m of diamond drilling is planned in this diamond drill program. Drilling continues to be undertaken using one drill rig on a single shift, but planning is underway to commence double shift to accelerate the program. The 14-hole program is live and allows for flexibility to adjust holes (Figure 2), hole depths and priority dependent on the geology intersected in completed holes. The position of the Eastern Porphyry also gives scope for the Company to utilise older RC holes as pre collars.

The geological observations derived from each diamond hole that is completed will support and or refine the Burns geological model to provide further guidance to this Cu-Au-Ag mineral system and drill target selection.

Assay results for hole LEFRD267 are expected in late June.

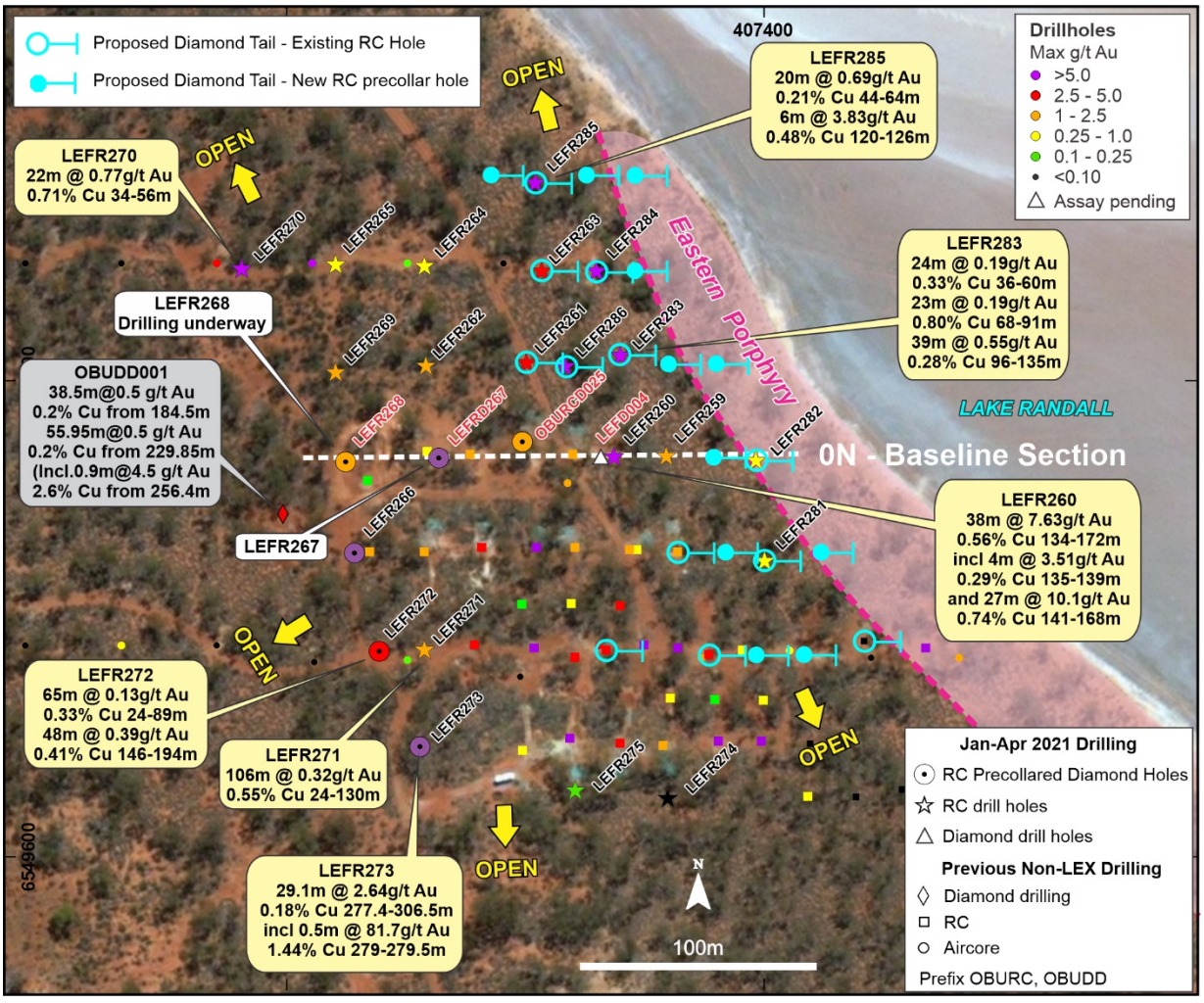


Figure 2 Drill hole plan at the Burns prospect highlighting the Jan-Mar 2021 drill program (LEFR 259 to LEFR 286) planned diamond drill tails (blue open circles) relative to LEFR260 and the interpreted extent of the Eastern Porphyry (refer Figure 3 for the Baseline drill section and LEFRD267). Th three holes completed and LEFR268 in progress are shown highlighted in red.

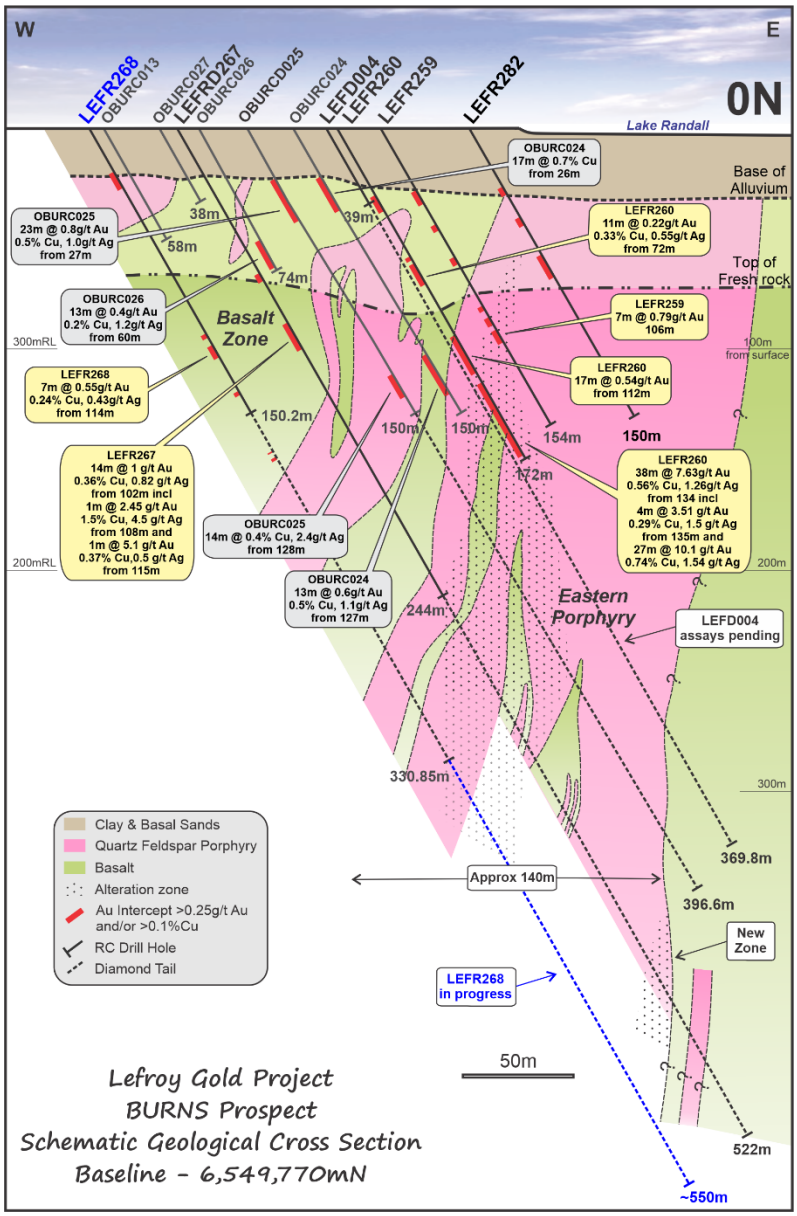


Figure 3 Baseline drill section 0N highlighting position of hole LEFRD267 and the extension to hole LEFR268 (blue dash line) that is currently underway to evaluate the Eastern Porphyry

This announcement has been authorised for release by the Board

Wade Johnson
Managing Director

END

Lefroy Exploration

Table 1

Burns drill hole collar details-April-May 2021 Diamond Drill Program

Hole ID	Collar E (MGA)	Collar N (MGA)	Collar RL	Depth (m)	Azimuth	Drill type	Comments
LEFD004	407331	6549769	290	369.8 (EOH)	91	Diamond	Mud rotary pre-collar to 39m
OBURCD025	407299.1	6549776.3	?	396.6 (EOH)	95	Diamond	Wedge off of RC pre-collar at 40m
LEFRD267	407263.0	6549768.4	290.4	522.8m (EOH	86.75	Diamond	RC pre-collar to 244m.
LEFR268	407223.9	6549766.8	290	Target depth 550m	88	Diamond	RC Pre-collar to 150.2m, NQ Diamond from 330.85m

Drill Type

RC-reverse circulation

Table 2

Visual Estimate of Sulphide Mineralisation by Type from alteration zones in LEFRD267

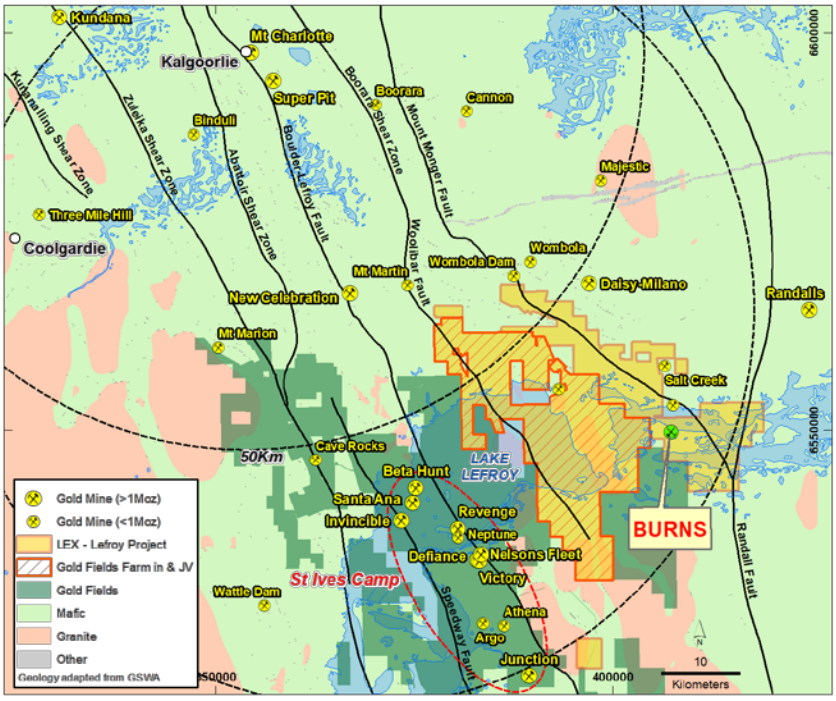
From (m)	To (m)	Interval (m)	Description	Mineral	Logged Visual Estimate (%)	Style
244.4	253	8.6	Weakly flow banded feldspar porphyritic diorite. Strong red rock/magnetite altered. Disseminated Magnetite/ Actinolite/ Chalcopyrite veinlets	Chalcopyrite	2 - 3	Disseminated
254.5	256.7	2.2	Dark chlorite/biotite altered diorite	Pyrite	2	Disseminated
260	273	13	Fine-medium grained Fsp/Qz diorite. Strong red rock alteration and pervasive open space vugs partly filled with Gypsum/ Magnesite/ Chalcopyrite.	Chalcopyrite	2 - 3	Fracture fill
273	297.7	24.7	Medium grained Fsp/Qz diorite. Strong red rock alteration and trace magnetite/chalcopyrite stringer veins.	Chalcopyrite	1	Disseminated
				Pyrite	Trace	Disseminated
298.2	300	1.8	Fine grained massive diorite. Strong red rock alteration with intense disseminated magnetite. Blebby Chalcopyrite/Magnesite stringer veins	Chalcopyrite	Trace	Veins
300	310.5	10.5	Blady textured high magnesian basalt. Large fracture fill veins of gypsum/magnesite with massive blebby chalcopyrite to 50mm.	Chalcopyrite	1	Veins
310.5	316.5	6	Intense red rock and magnetite alteration. Epidote/magnetite stringer veins with blebs of chalcopyrite. Weak open space Gypsum/ Magnesite/ Chalcopyrite +-Mo veins. Two 1mm specks of visible gold at 311.8m.	Chalcopyrite	1	Veins
				Molybdenite	Trace	Veins
				Gold	Trace	Specks
319.06	329	9.94	Moderate red rock altered diorite. Trace stringer veins of Qz/Cb/Ms/Cp	Chalcopyrite	Trace	Fracture fill
349	350.3	1.3	Fault zone within basalt. Strong shearing and gouge/breccia filled by carbonate/ magnetite/ actinolite. Disseminated pyrite and trace molybdenite.	Pyrite	1	Disseminated
				Molybdenite	Trace	Disseminated
376.8	378.8	2	Brecciated fault zone within diorite. Strong red rock alteration with actinolite/biotite fracture fill. Disseminated pyrite and trace molybdenite.	Pyrite	1	Disseminated
				Molybdenite	Trace	Disseminated
396.8	412.83	16.03	Massive quarz feldspar porphyry with weak magnesite and gypsum veins and disseminated pyrite.	Pyrite	2	Disseminated
430	460.88	30.88	Broad zone of basalt and porphyry with moderate epidote alteration. Disseminated/stringer pyrite and pyrrhotite.	Pyrite	2	Disseminated/Fracture fill
				Pyrrhotite	Trace	Disseminated
472	510	38	Broad zone of basalt, lamprophyre and porphyry with trace stringer chalcopyrite and pyrite.	Pyrite	1	Disseminated/Fracture fill
				Chalcopyrite	Trace	Fracture Fill

Mineral Abbreviations-Fsp-Feldspar, Qz-quartz, Mo-molybdenite, Cb-Carbonate, Ms-magnesite

About Lefroy Exploration Limited and the Lefroy Gold Project

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

The 100% owned Lefroy Gold Project contains mainly granted tenure and covers 621km^2 in the heart of the world class gold production area between Kalgoorlie and Norseman. The Project is in close proximity to Gold Fields' St Ives gold camp, which contains the Invincible gold mine located in Lake Lefroy and is also immediately south of Silver Lake Resources' (ASX:SLR) Daisy Milano gold mining operation. The Project is divided into the Western Lefroy package, subject to a Farm-In Agreement with Gold Fields and the Eastern Lefroy package (100% Lefroy owned). The Farm-In Agreement with Gold Fields over the Western Lefroy tenement package commenced on 7 June 2018. Gold Fields can earn up to a 70% interest in the package by spending up to a total of $25million on exploration activities within 6 years of the commencement date.



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

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Notes Specific-ASX Announcements

The following announcements were lodged with the ASX and further details (including supporting JORC Reporting Tables) for each of the sections noted in this Announcement can be found in the following releases. Note that these announcements are not the only announcements released to the ASX but specific to exploration reporting by the Company of previous exploration at Burns at the Lefroy Gold Project. Exploration results by the previous explorer that refer to the Burns prospect are prepared and disclosed by the Company in accordance with the JORC 2004 code. The Company confirms that is it not aware of any new information or data that materially affects the information included in this market announcement.

- Lefroy Exploration Limited-Prospectus: 8 September 2016
- Managing Directors AGM Presentation: 5 December 2016
- Lefroy Expands Tenement Holding & Secures Au-Cu Prospect: 10 December 2019
- June 2020 Quarterly Activities Report: 31 July 2020
- Multiple Gold Trends Confirmed from Eastern Lefroy: 1 September 2020
- Tenement Granted over Burns Au-Cu Prospect: 16 September 2020
- September 2020 Quarterly Activities Report: 29 October 2020
- Drilling Underway at Burns Au-Cu Prospect: 12 January 2021
- Drilling Update-Native copper Intersected at Burns Prospect: 2 February 2021
- Outstanding High-Grade Gold and Copper Mineralisation Intersected at Burns: 23 February 2020
- New Basalt Hosted Gold-Copper Zone Supports Large Burns Mineral System: 9 March 2021
- Exploration Update-Drilling Extends Porphyry at Burns: 26 March 2021
- Diamond Drilling Underway at the Burns Cu-Au Prospect: 21 April 2021
- Resampling of RC holes at Burns confirms and better defines recent Copper Gold intersections: 27 April 2021
- Drill Results Extend Copper Gold Zones at Burns: 29 April 2021
- Multiple Intervals of Altered Porphyry Intersected at Burns: 3 May 2021
- Burns Success Continues-55m vertical depth extension and more strong mineralisation established: 13 May 2021

The information in this announcement that relates to exploration targets and exploration results is based on information compiled by Wade Johnson a competent person who is a member of the Australian Institute of Geoscientists (AIG). Wade Johnson is employed by Lefroy Exploration Limited. Wade has sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 edition of the JORC Code. Wade Johnson consents to the inclusion in this announcement of the matters based on his work in the form and context in which it appears

JORC CODE, 2012 Edition-Table 1 Report –Lefroy Project –Burns Cu-Au Prospect May 2021 Diamond drilling program

SECTION 1: SAMPLING TECHNIQUES AND DATA

Criteria	JORC Code Explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	No sampling has yet been carried out
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 diamond drilling (DD) was completed by Raglan Drilling (Kalgoorlie). The hole LEFRD267 was commenced using at 40m using HQ sized core. NQ sized core was primarily used when the drill core recovery became more competent. Accurate bottom of hole orientation marks were captured using an Ace tool.
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.*	• Diamond core was measured by a field assistant and compared to drilled interval indicated by the drillers. From this, a percentage of recovery can be calculated. Where core loss occurred, this has been diligently noted by the drill crew and geologist. • The use of professional and competent core drilling contractors minimised the issues with sample recoveries. An honest and open line of communication between the drill crew and the geologist allowed for a comprehensive understanding of where core loss may have occurred.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• Detailed logging of, regolith, lithology, structure, veining, alteration, mineralisation and recoveries recorded in each hole by qualified geologist. • The hole LEWFR267 was logged for the entire length. • Diamond core underwent detailed logging through the entire hole with data to be transferred to the Lefroy drilling database after capture • Analysis of rock type, colour, structure, alteration, mineralisation, veining and geotechnical data were all routinely collected. • Geological logging is qualitative in nature and relies on the geologist logging the hole to make assumptions of the core character based on their experience and knowledge. • Recovery, RQD (rock quality designation) and magnetic susceptibility measurements were recorded and are considered to be quantitative in nature. • Core within the core trays for each hole was photographed using a purpose made camera stand and a quality digital SLR camera and stored in the database.

Criteria	JORC Code Explanation	Commentary
		• All drill holes are logged in their entirety (100%).
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.*	**DD** • The drill core is yet to be sampled
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• The drill core is yet to be sampled and assayed
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Capture of field logging is electronic using Toughbook hardware and Logchief software. Logged data is then exported as an excel spreadsheet to the Company's external database managers which is then loaded to the Company's DATASHED database and validation checks completed to ensure data accuracy. Assay files are received electronically from the laboratory and filed to the Company's server and provided to the external database manager. • No assay data to report
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Drill hole positions were surveyed using a GPS operated by the rig geologist/field assistant. The RC hole collar was surveyed by a DGPS by a third-party contractor. Down holes surveys were completed by Raglan drill crew using a multi-shot gyro which records a survey every <5m down the hole. • Grid System – MGA94 Zone 51. Topographic elevation captured by using the differential GPS.
Data spacing and distribution ***Data spacing 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 approximately 40m spaced intervals • Mineralisation at the Burns prospect is primarily hosted by a magnetite-biotite altered High Mg basalt which has been intruded by a later felsic to intermediate porphyry intrusion. The contacts of which are not uniform however the intrusion appears to be roughly vertical. Mineralisation is predominantly Cu plus Au. There is an association between Cu and Au mineralisation but they can occur independently of one another. There is a strong upgrade of Cu and Au in the supergene environment approximately 50-100m down-hole and this is typically flat in its orientation. A primary system (hypogene) occurs in the fresh rock below 100m depth and at this stage the orientation and main controls on mineralisation is not known. It is thought that the mineralisation may dip toward the west-south-west and

Criteria	JORC Code Explanation	Commentary
		plunge toward the south-east, hence the drill orientation toward the east.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• The roughly east-west orientated drill traverses considered effective to evaluate the roughly north-south to north-west south-east trending stratigraphy. • The drill orientation is a more effective test of "true" width of the host rock due to the fact the host rock unit is striking roughly North-West/South-East. • At this stage the primary controls on the hypogene copper-gold (Cu-Au) system are not completely understood, however analysis of previous drilling in conjunction with this drilling have determined the drill hole orientation is optimum to determine the true width of mineralisation and improve geological knowledge of the system.
Sample security	• *The measures taken to ensure sample security.*	• Samples are yet to be collected
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No sampling conducted • The Managing Director reviewed the logging of and inspected the core from LEFR267

Section 2: REPORTING OF EXPLORATION RESULTS – LEFROY PROJECT- Burns Cu-Au Prospect May 2021 Diamond Drilling program

Criteria	JORC Code Explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• The Lefroy Project is located approximately 50 km in south east from Kalgoorlie, Western Australia and consists of a contiguous package of wholly owned tenements held under title by LEX or its wholly owned subsidiary Monger Exploration Pty Ltd. The work described in this report was completed on Exploration lease E 15/1715. • E 15/1715 is held 100% by Monger Exploration Pty Ltd a wholly owned subsidiary of Lefroy Exploration Limited • The tenements are current and in good standing with the Department of Mines and Petroleum (DMP) of Western Australia.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• 1968-1973 BHP: The earliest recognition of the magnetic anomaly was by BHP. The area fell within TR 3697, which had been taken up for nickel. The anomaly stood out on the BMR aeromagnetic contoured plans and BHP was testing aeromagnetic anomalies that could have an ultramafic source. The anomaly was confirmed by ground magnetics but an attempt to drill test with two percussion holes failed to identify any bedrock and no further work was attempted. • 1984 Coopers Resources/Enterprise Gold Mines: The ground encompassing Burns was taken up as three Els, E15/19-21. • 1985 BHP: BHP farmed into E15/21 having re-interpreted the magnetic feature as a potential carbonatite. BHP's E15/57 covered the western one third of the anomaly. Following ground magnetic traverses, BHP drilled two diamond core holes, LR 1 and 2. LR 1 falls within Goldfields E15/1638 and LR 2 falls within P15/6397. The results, which are covered in the next section, did not indicate a carbonatite and so BHP withdrew their interest in the area. • 1985-1989 CRAE: Meanwhile CRAE was conducting exploration for gold on adjacent tenements and had engaged Jack Hallberg to carry out geological mapping. He mapped suites of intermediate dykes (plagioclase-quartz-hornblende porphyry) intruding basalt in outcrops to the north west of Burns. • 1992: M. Della Costa took up E15/304 over aeromagnetic anomalies including Burns. The EL was vended into Kanowna Consolidated Gold Mines as part of the St Alvano project. • 1996-2001 WMC: WMC joint-ventured into the St Alvano project, which comprised a total of 12 ELs. They flew 50m line-spaced aeromagnetics and engaged EHW to interpret. Burns was not highlighted as such but the magnetic anomalies forming portions of the annular ring were tested with air core, leading to the discovery of the Neon prospect. Subsequent to the EHW study a gravity survey was conducted which did identify the Burns intrusive as a gravity low. • 2001-2003 Goldfields: Goldfields took over exploration and conducted further air core drilling at Neon. They identified S11 as a target to the south of Burns. The target was secondary gold dispersion in weathered bedrock associated with magnetite enrichment. A series of north-south air core traverses were drilled on 640 X 160m. Results were regarded as disappointing and the project was dropped. • 2005-2008 Gladiator Resources: The area was taken up by Sovereign following their assessment of previous work. They identified Homer's Inlet and the S11 area as priority targets. In 2007 a JV was established with Newmont/Sipa covering the gold rights. In 2008 the southern and eastern sectors of W15/774 was surrendered and taken up as E15/1030. The northern sector including Burns was surrendered.

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		• 2008 Gold Attire: The ground surrendered by Sovereign over Burns was taken up as E15/1097. • 2008-2010 Newmont: Newmont joint ventured into the Sovereign and Gold Attire ELs. It conducted an 800 X 400m gravity survey to trace a north-south "Salt Creek-Lucky Bay" corridor through the tenements. This was tested by four lines of aircore on 640 X 160m spacing. Two aircore traverses on a 1200 X 320m spacing were also and conducted across the interpreted intrusion and the surrounding magnetic halo. Infill drilling was conducted following up on the 2.0m @ 5.0 g/t Au intercept in a Goldfields hole, SAL 1089. The hole was re-entered and a diamond core tail drilled. This hole falls just inside E15/1638 close to the boundary with P15/6397. • 2010-2019 Octagonal Resources: Three phases of AC to define a gold in regolith anomaly east of the main intrusive body. Two phases of RC identified Ag-Cu-Au mineralisation on four sections spaced approx. 40m apart. The drilling recognised Cu mineralisation which due to the host rock association, Octagonal believed there was potential for a much larger intrusion related system so the emphasis was switched from orogenic gold style exploration to predominately copper focussed intrusion related hosted mineralisation. In 2013 surface geophysical techniques were applied looking for conductors that might represent massive sulphides. Ground EM failed to identify any bedrock conductors, but the magnetic surveys did identify anomalies. In 2014, a diamond core hole, OBUDD001, was drilled at -60 degrees to 090 east to 401.5m in order to test the source of the magnetic anomalism, which occurred within the area tested by the RC drilling. It intersected a 3.6m wide zone of mafic-dominant breccia including 0.9m of massive magnetite-chalcopyrite which returned 4.5 g/t Au, 2.6% Cu from 256.4m, within a low-grade zone of 55.95m @ 0.5 g/t Au and 0.2% Cu from 229.85m It was interpreted to be a west-dipping structure and the feeder conduit for the mineralization. A second zone of low-grade mineralization of 38.5m @ 0.5 g/t Au and 0.2% Cu was intersected from 184.5m. An EIS grant in 2015 and a loan from a third-party company allowed for two more DD holes to be completed, however by 2016 the Company was acquired by the third-party loan company and subsequently delisted from the ASX.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The Lefroy Project is located in the southern part of the Norseman Wiluna Greenstone Belt and straddles the triple junction of three crustal units, the Parker, Boorara and Bulong Domain. The Lefroy project tenements are mostly covered by alluvial, colluvial and lacustrine material with very little outcrop. Burns is proximal to the Lake margin and is subsequently under >20-25m of lake sediment and surface sand dune cover. A stripped profile below this cover means that there is no significant dispersion or oxide component to the Burns prospect. Mineralisation is hosted with a High Mg Basalt and in an intermediate composition porphyry which intrudes the basalt. Mineralisation is primarily gold associated with magnetite alteration and copper occurring as native copper and chalcopyrite in veins and veinlets throughout the basalt and porphyry.
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* • *easting and northing of the drill hole collar*	• Table containing drill hole collar details are included in the Table in the body of the announcement. • No Information has been excluded. • Table 1 of drill hole collars completed by Lefroy is noted in this announcement.

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	• *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.*	
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• No assay data to report for the hole LEFRD267 just completed or LEFRD268 that is in progress
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• All historical results are based on down-hole metres. • Previous drill coverage has provided guidance for the presence of steeply dipping geology comprising a package of rocks containing basalt intruded by diorite porphyry. The data from this and modelling of prior ground magnetic data provides support for orientation of the drilling. Results from this drill program do not represent 'true widths' however holes are designed to intercept the host sequence perpendicular to its strike.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• Appropriate summary diagrams (plan) are included in the accompanying announcement.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• No assay data to report from hole LEFRD267
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• All relevant data has been included within this report.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• The appropriate next stage of exploration planning is currently underway and noted in the body of the report. • The diamond drill program is ongoing.