

## Burns Update: Assays confirm Gold, Copper & Cobalt Intersected in LEFD006

- Assay results from the 400m to 461m interval of the 1245m deep, diamond drill hole, LEFD006, at Burns has confirmed a new zone of gold (Au)-copper (Cu)-cobalt (Co) mineralisation, that provides further support for a polymetallic intrusion related system.
- Within this 61m interval is a new mineralised and altered diorite porphyry, situated west of the main 'Central Porphyry' suite at Burns, which returned results that correspond to the stronger zones of visually identified magnetite and sulphide mineralisation, and include:
  - 19.6m at 0.33g/t Au and 0.75% Cu from 428m-447.6m that includes
    - 3.50m at 0.86g/t Au, 0.72% Cu and 0.09% Co from 430m, and
    - 6.30m at 0.47g/t Au, 1.70% Cu and 223ppm Co from 433.5m
- This confirmation of previously unrecognised Au-Cu-Co mineralisation associated with strong magnetite veining in LEFD006 is an important new development for the strongly magnetite-altered Burns system.
- Assay results for the remainder of LEFD006 are expected in October.
- Prompted by these initial elevated Co results, the Company will select intervals from magnetite-altered intervals from previous drillholes at Burns for Co analysis.



LEFD006 Hematite altered porphyry with chalcopyrite 0.5g/t Au and 2.3% Cu. Refer Figure 3 for detail

**Lefroy Exploration Limited (ASX: LEX) (“Lefroy” or “the Company”)** is pleased to announce the first assay results from a four-hole diamond drill program completed at the Burns Au-Cu intrusion-related mineral system, located in the Company’s wholly owned Eastern Lefroy Gold Project, 70km southeast of Kalgoorlie.

Burns is a new and unique style of intrusion-related, gold (Au)-copper (Cu)-molybdenum (Mo)-silver (Ag) mineral system, hosted by Archean age rocks in the Eastern Goldfields Province (EGP) of Western Australia. The gold, copper, silver (and lesser molybdenum) mineralisation, which is hosted by multiple diorite-porphyry intrusives and high-magnesium basalt, is considered by the Company to be a new and unique style of gold-copper mineralisation in the Eastern Goldfields of Western Australia.

LEX is aiming to advance the understanding of the scale and genesis of this system through a deep diamond drilling program. Four holes, LEFD006-009, have now been completed for 2783 metres.

The original diamond drilling program at Burns comprised two holes, LEFD006-007. The diamond rig then completed an additional two holes, LEFD008 and LEFD009, at the priority Lovejoy prospect, located 1.5km north of Burns within the ‘Burns Corridor’ (LEX ASX release 20 September 2022). Lovejoy is considered to be part of the larger Burns Intrusive Complex (BIC).

Assay results have been received from the 400m to 461m interval in hole LEFD006. Results are pending for the remainder of this hole.

### ***Diamond Drillhole LEFD006.***

The first hole of the four-hole diamond drill program, LEFD006 (Table 1 and Figure 1), commenced on 12 July (refer LEX ASX release 12 July 2022) and was completed to a downhole depth of 1245.8m. Co-funding for this hole is being provided under the Exploration Incentive Scheme (EIS) managed by the WA Department of Mines, Industry Regulation and Safety (refer LEX ASX release 29 October 2021).

LEFD006 was designed to evaluate the Burns Au-Cu mineralised diorite-porphyry host rock to a target (vertical) depth of 1000m from surface, with key aims to:

- Test the continuity of the mineralisation discovered to date, at depth, on a vertical scale
- Test the lateral extent of the system by 250m west of the main known mineralisation
- Provide geological and geochemical information to support ongoing external research
- Support that Burns is a new, large, Archean age Au-Cu intrusion related mineral system

The completion of LEFD006 established four broad geological domains (Figure 2), each with contrasting alteration and geology, which now demonstrate that the Burns system has a width of at least 600m, with the western limit yet to be defined (refer LEX ASX release 1 September 2022).

The hole has also established continuity to the multiple porphyry units at depth, approximately 300m below the existing drilling on the baseline section (0N) and to 1000m vertically below surface. The system remains open at depth and along strike (Figure 1).

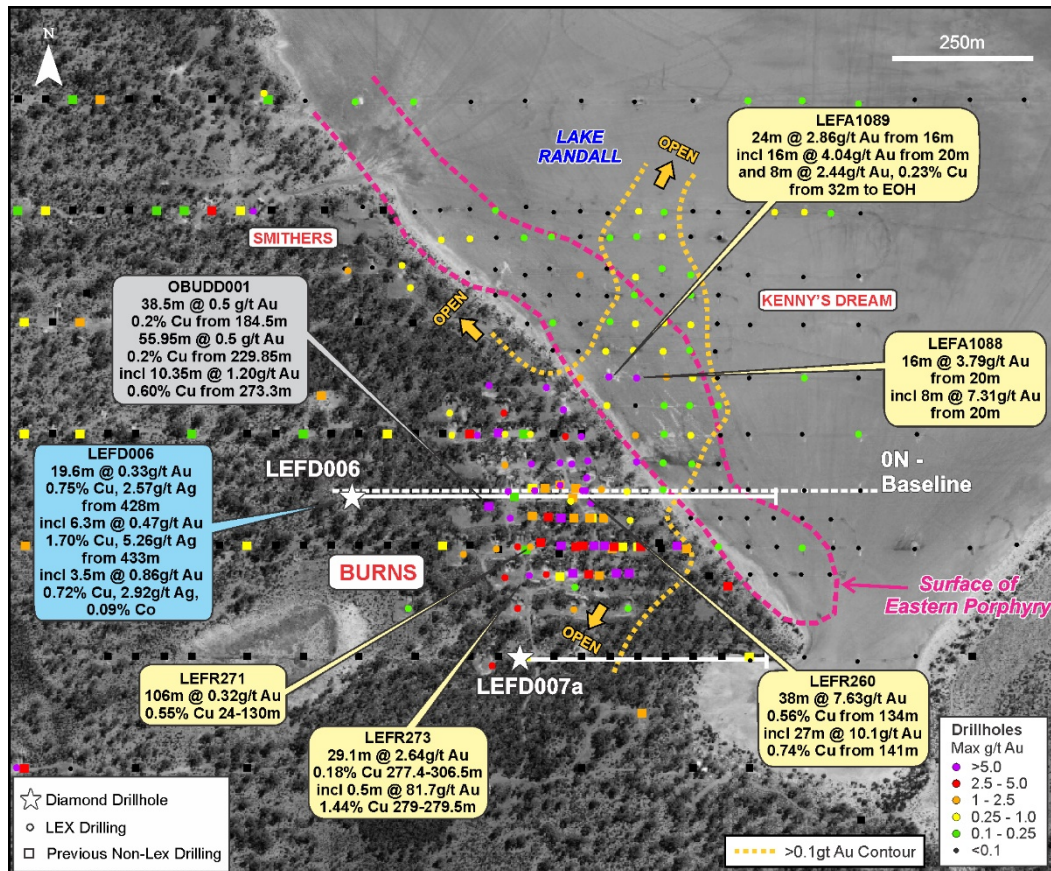


Figure 1. Burns Drill hole location highlighting position of LEFD006 and LEFD007a

The initial 570m of LEFD006 (Figure 2) intersected a wide downhole interval of predominantly high-Mg basalt (refer LEX ASX release 1 September 2022). The basalt is variably epidote-biotite-magnetite-altered with localised hydrothermal breccia intervals, gypsum veins and narrow cross-cutting porphyry intervals.

Mineralisation within the basalt interval includes fracture-fill native copper, with vein and/or fracture-fill chalcopyrite, pyrite, chalcocite and molybdenite (refer LEX ASX release 1 August 2022). This interval of altered basalt has increased the lateral extent of the copper mineralised Western Basalt zone by approximately 250m to the west. The alteration assemblage supports a large hydrothermal alteration cell, which is consistent with an intrusion related system.

The targeted Central diorite Porphyry zone was expected to be intersected at 600m down hole, however prior to this, within the hanging wall basalt/western basalt zone from ~400m to 440m, LEFD006 intersected an unexpected interval of multiple cross-cutting diorite intrusives (porphyry) that are predominantly potassic-altered hematite and biotite with associated pyrite-chalcopyrite and trace molybdenite mineralisation (Refer Table 2 LEX ASX release 1 August 2022). This new zone is approximately 100m west of the suite of porphyries that make up the Central Porphyry.



The chalcopyrite is stringer or fracture fill (Figure 3) in style and is most abundant between 415-440m. This intersection of diorite porphyry is separate to the Central Porphyry (that is deeper) and has defined an additional porphyry-related target for follow up drilling.

Assay results received (Table 2) from the 400m to 461m interval support the visually identified stronger intervals of sulphide (chalcopyrite, pyrite) and magnetite mineralisation identified in or adjacent to the diorite porphyry and include:

- **19.6m at 0.33g/t Au and 0.75% Cu from 428m-447.6m, that includes**
  - **3.50m at 0.86g/t Au, 0.72% Cu and 0.09% Co from 430m, and**
  - **6.30m at 0.47g/t Au, 1.70% Cu and 223ppm Cobalt (Co) from 433.5m**

The 19.6m interval from 428m downhole corresponds to a fault zone containing brecciated diorite-porphry (Figure 2), with pervasive hematite and biotite alteration (refer Table 2 LEX ASX release 1 August 2022). This interval contains a narrow 3.5m ductile shear zone, from 430m downhole, with intense hematite alteration, strong magnetite veining (Figure 4), pyrite and an elevated Co content.

The identification of the elevated cobalt content associated with the magnetite is a new and important development for the Burns system and further supports to the concept that Burns is a fertile multiphase mineral (gold copper cobalt silver) system.

Previous diamond and RC drilling at Burns has intersected numerous intervals of strong magnetite veining and alteration within the basalt and porphyry host rocks and these have not been routinely assayed for cobalt. The Company has initiated a program of retrieval and analysis of pulp samples in storage, for intervals containing strong magnetite veining and/or alteration.

The results from this program of cobalt analysis will highlight the extent of this mineralisation and its economic significance at Burns. Results from this re analysis are expected in November.

The Company will continue to provide further updates as assay results are received for each of the diamond holes.

This announcement has been authorised for release by the Board.



Wade Johnson  
Managing Director

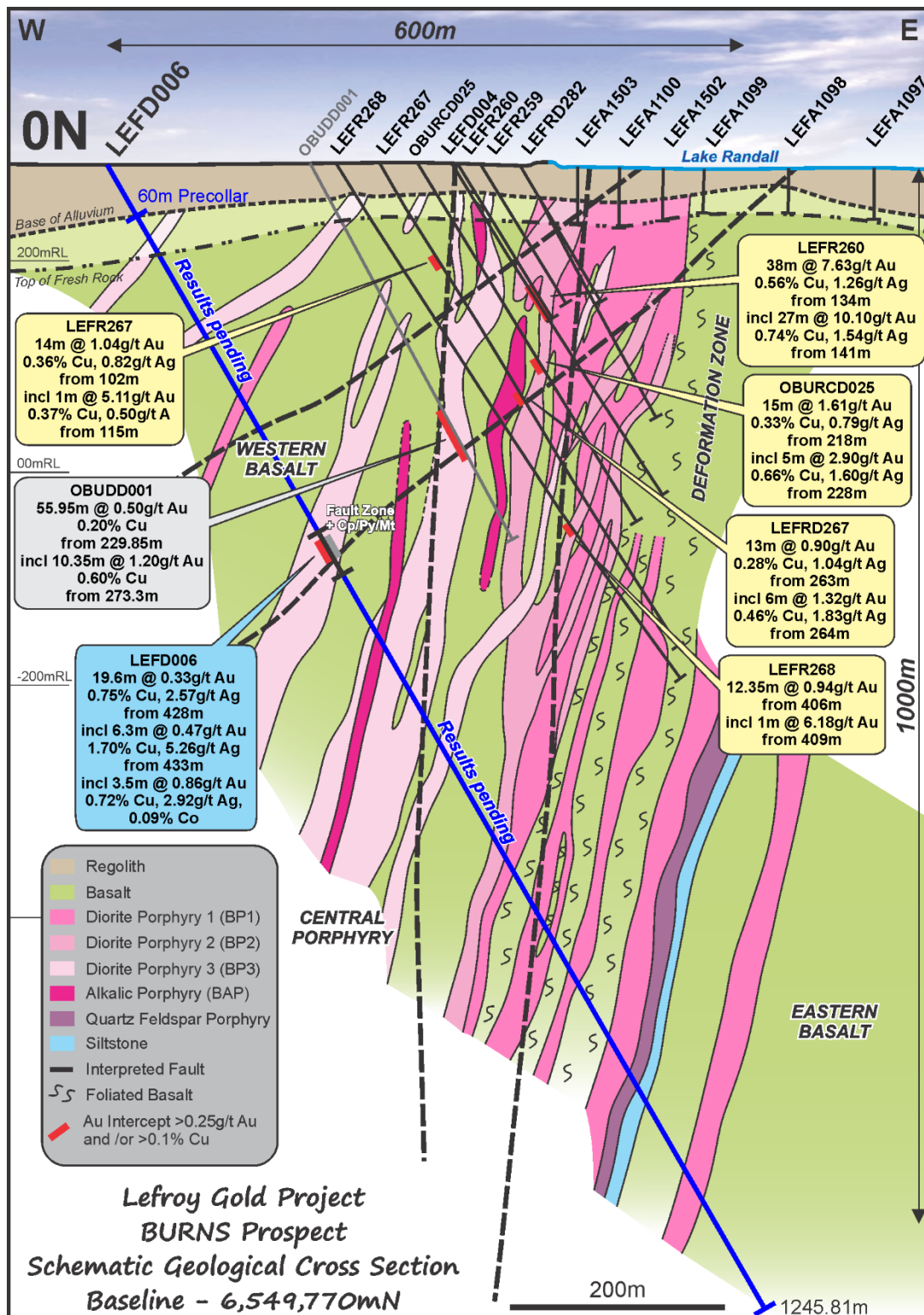
**TABLE 1 Burns Diamond Drill Program Collar Details**

Hole ID	Collar E (MGA)	Collar N (MGA)	Collar RL	Depth (m)	Azimuth	Dip	Area	Comments
LEFD006	407000	6549760	290	1245.8	90	-60	Burns	Mud rotary pre-collar to 60m
LEFD007a	407243	6549520	290	706.04	90	-60	Burns	Mud rotary pre-collar to 53.9m
LEFD008	406224	6550791	290	363.8	90	-60	Lovejoy	Mud rotary pre-collar to 19.5m
LEFD009	406210	6550790	290	467.38	90	-65	Lovejoy	Mud rotary pre-collar to 20m

**TABLE 2 Burns Diamond Drill Hole LEFD006 Significant Results from 440m-461m**

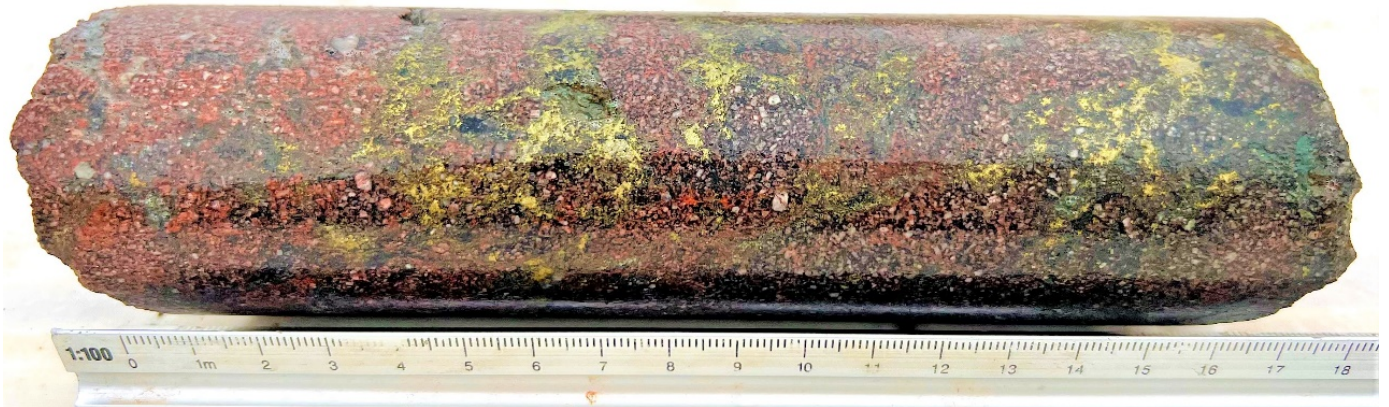
Hole Id	From (m)	To (m)	Interval (m)*	Au (g/t)	Cu (%)	Ag (g/t)	Mo (ppm)	Co (ppm)	Geology
<b>LEFD006</b>	428	447.6	<b>19.60</b>	0.33	<b>0.75</b>	2.57	126		Fault zone. Diorite breccia with intense pervasive hematite and biotite, weak magnetite
<b>Incl</b>	430	433.5	<b>3.50</b>	0.86	0.72	2.92	319	<b>928</b>	Ductile shear. Intense pervasive hematite, strong magnetite veining. 10% pyrite, 1% cpy
<b>Incl</b>	433.5	439.3	<b>6.30</b>	0.47	<b>1.70</b>	5.26	166	223	Diorite and sheared basalt. Intense pervasive biotite and strong magnetite veining.

Calculated with 0.1 % Cu cut off and maximum 2m internal dilution

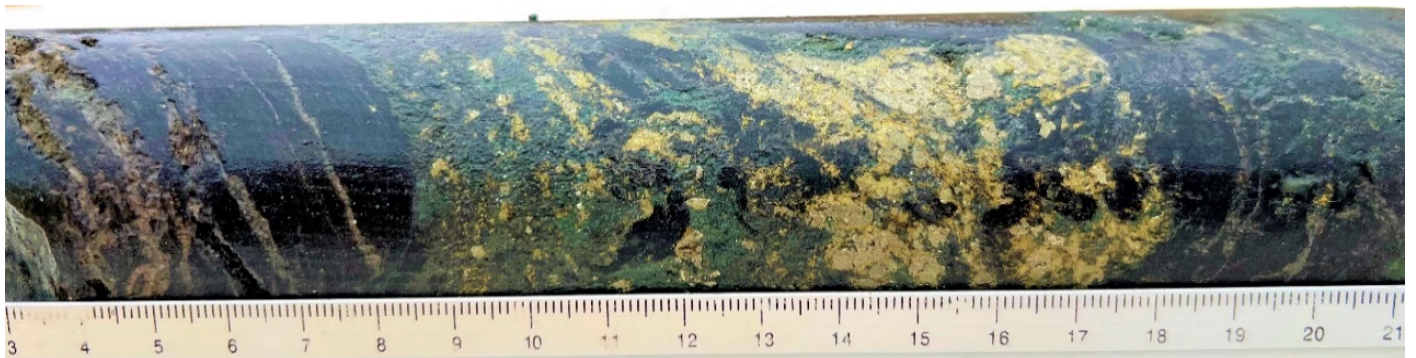


**Figure 2** Burns baseline drill section showing completed drill holes, extent of the multiphase porphyries that make up the Central porphyry and diamond hole LEFD006. The interval 400m-461m with results received to date is highlighted.

Photographs of selected examples of core within the broader intervals are shown below (Figures 3,4.). These are not the only mineralised zones but are relevant examples to highlight the style of the chalcopyrite mineralisation in the host altered porphyry and basalt.



**Figure 3** LEFD006 interval 435.6-435.8m showing Burns diorite porphyry altered by pervasive hematite, crosscut by chalcopyrite and pyrite stringer veining. Representative sample from interval 435m to 435.8m grading 0.5g/t Au and 2.3% Cu.



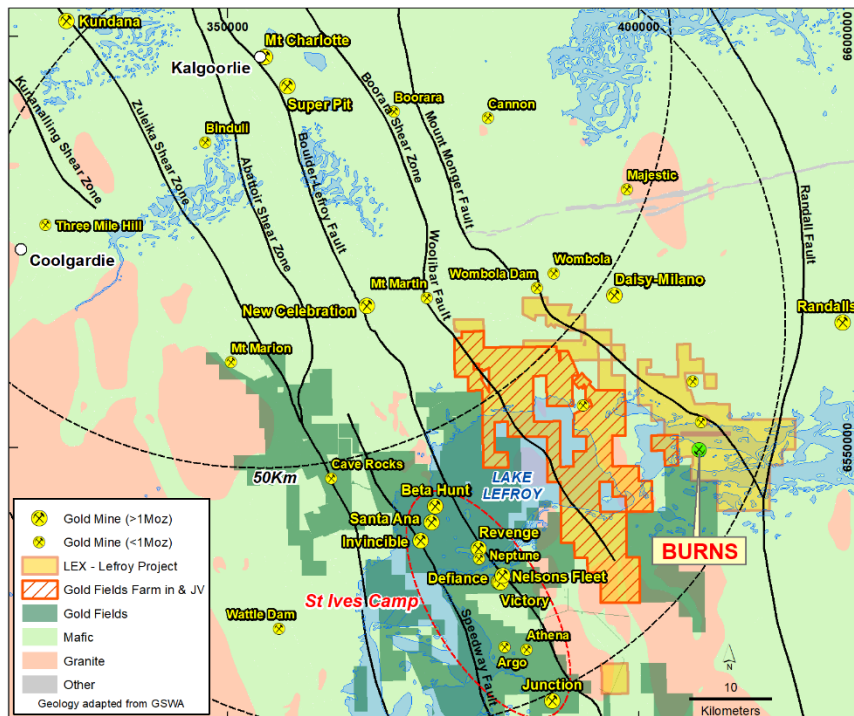
**Figure 4** LEFD006 interval 436.2-436.4m shows sheared to slightly brecciated high-magnesium basalt, mineralised with minor chalcopyrite and pyrite, and biotite-hematite alteration. Representative sample from interval 436.2m to 437m grading 0.42g/t Au and 2.67% Cu.



## About Lefroy Exploration Limited and the Lefroy Gold Project

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

The 100% owned Lefroy Gold Project contains mainly granted tenure and covers 534km<sup>2</sup> in the heart of the world class gold production area between Kalgoorlie and Norseman. The Project is 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 joint venture, and Gold Fields tenure is also highlighted

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## Notes Specific-ASX Announcements

The following announcements were lodged with the ASX and further details (including supporting JORC Reporting Tables) for each of the sections noted in this Announcement can be found in the following releases. Note that these announcements are not the only announcements released to the ASX but specific to exploration reporting by the Company of previous exploration at Burns at the Lefroy Gold Project.

- Outstanding High-Grade Gold and Copper Mineralisation Intersected at Burns: 23 February 2020
- Exploration Update-Drilling Extends Porphyry at Burns: 26 March 2021
- Drill Results Extend Copper Gold Zones at Burns: 29 April 2021
- Multiple Intervals of Altered Porphyry Intersected at Burns: 3 May 2021
- Burns Drilling Update-first hole on 40N section confirms significant mineralisation extends to the north: 18 June 2021
- Exploration Update-RC drilling commences at the Burns Cu Au prospect: 20 July 2021
- Burns Update-Cu-Au mineralisation confirmed on 0N section, step out drilling extends system: 2 August 2021
- June 2021 Quarterly Activities Report: 28 July 2021
- Exploration Update-Advancing the Burns and Coogee South Prospects: 18 August 2021
- Results from 40N section Further Enhance Burns Cu-Au System: 21 September 2021
- Multiple magnetic anomalies highlight 3000m trend at Burns: 28 September 2021
- Drill testing of multiple magnetic targets underway at Burns: 5 October 2021
- Massive drilling planned for the Western Lefroy JV:13 October 2021
- Burns Update-Drill Results continue to support larger Cu-Au-Ag system: 3 November 2021
- Burns Update Drilling underway at Lovejoy anomaly: 22 November 2021
- Major Drilling Programs Resumed at Lefroy: 19 January 2022
- RC Drill Results Outline New Gold Zone at Burns: 25 January 2022
- High-Grade results expand the Burns Cu Au System: 21 February 2022
- Impressive Au-Cu intersection in New RC Hole at Burns: 19 April 2022
- AC Drill Results Continue to Expand the Burns Gold-Copper System Beneath Lake Randall: 4 July 2022
- Exploration Update 1200m Deep Diamond Hole Underway at Burns :12 July 2022
- Burns 1200m Diamond Drill hole Update: 1 August 2022
- Drilling Continues to Define Larger Scale to Burns Au Cu System: 1 September 2022
- Burns Update: Significant Copper Mineralisation Intersected at Lovejoy: 20 September 2022

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

**END**

**JORC CODE, 2012 Edition-Table 1 Report –Lefroy Project –Burns Cu-Au Prospect LEFD006 Diamond Hole**

**SECTION 1: SAMPLING TECHNIQUES AND DATA**

Criteria	JORC Code Explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li><i>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</i></li> <li><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li><i>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</i></li> </ul>	<ul style="list-style-type: none"> <li>The sampling noted in this release has been carried out using Diamond drilling (DD) at the Burns Copper (Cu) – Gold (Au) prospect. The drill program is attached this ASX release and reports on hole LEFD006. Hole depth and collar details are detailed in Table 1 of the report.</li> <li>Sampling and QAQC protocols as per industry best practice with further details below.</li> <li>DD was conducted utilising HQ and NQ sized core as the pre-collar drilled into fresh competent rock. This was left to drillers' discretion. 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.</li> <li>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 1.2m to produce a 2-4kg sample through the interpreted mineralised zone. Once at the lab samples will be dried, crushed and prepared to produce a 40g charge for fire assay analysis for gold (Au) by Atomic Absorption Spectrometry (AAS). Additional elements, will derived using a mixed acid digest with ICP finish for Cu, Ag, As, Mo, Co, Fe, Pb, S, Te, W and Zn.</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li><i>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</i></li> </ul>	<ul style="list-style-type: none"> <li>The diamond drilling is completed by Raglan Drilling (Kalgoorlie). The diamond holes were commenced using mud rotary to approximately 60m, then HQ sized core. NQ sized core was primarily used as core was generally competent. Accurate bottom of hole orientation marks were captured using an Ace tool.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li><i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li><i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i></li> </ul>	<ul style="list-style-type: none"> <li>Diamond core was measured 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.</li> <li>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.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li><i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i></li> <li><i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> <li><i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<ul style="list-style-type: none"> <li>Detailed logging of, regolith, lithology, structure, veining, alteration, mineralisation and recoveries recorded in each hole by qualified geologist.</li> <li>Diamond core underwent detailed logging through the entire hole with data to be transferred to the Lefroy drilling database after capture</li> <li>Analysis of rock type, colour, structure, alteration, veining and geotechnical data were all routinely collected.</li> <li>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.</li> <li>Recovery, RQD (rock quality designation) and magnetic susceptibility measurements were recorded and are considered to be quantitative in nature.</li> <li>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.</li> <li>All drill holes are logged in their entirety (100%).</li> </ul>

Criteria	JORC Code Explanation	Commentary
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>• <i>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<p><b>DD</b></p> <ul style="list-style-type: none"> <li>• Half drill core has been sampled and placed in numbered calico bags.</li> <li>• Sample intervals are determined by the logging geologist on nominal 1m intervals. Care is taken to ensure samples are representative of lithological and mineralised boundaries.</li> <li>• Sampling is checked by both field staff and geologist.</li> <li>• Field duplicates are not taken for half diamond core.</li> <li>• The remaining half core is retained in core trays for future reference.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li>• <i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i></li> <li>• <i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The DD Samples will be analysed for gold using the 40gram Fire Assay digest method with an AAS finish at Bureau Veritas's Perth Laboratory. Additional elements will derived using a mixed acid digest with ICP finish for Cu, Ag, As, Mo, Fe, Pb, S, Te, W and Zn.</li> <li>• Selected samples were analysed for an additional 61 elements using a mixed acid digest with ICP-MS finish.</li> <li>• Quality control process and internal laboratory checks demonstrate acceptable levels of accuracy.</li> <li>• Certified standards and blanks are inserted into sample batches by LEX staff at regular intervals. At the laboratory regular assay repeats, lab standards, duplicate checks and blanks are analysed.</li> <li>• Results of the sample analysis have not yet been received.</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>• <i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li>• <i>The use of twinned holes.</i></li> <li>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li>• <i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Capture of field logging is electronic using Toughbook hardware and Logchief software. Logged data is then exported as an 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.</li> <li>• No assay data to report</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>Specification of the grid system used.</i></li> <li>• <i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Drill hole position was surveyed using a GPS operated by the rig geologist/field assistant. Post drilling, hole collars are surveyed using a DGPS by a third-party contractor. Down holes surveys are completed by Raglan drill crew using a multi-shot gyro which records a survey every 30m down the hole during the drilling.</li> <li>• Grid System – MGA94 Zone 51. Topographic elevation captured by using the differential GPS.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>• <i>Data spacing for reporting of Exploration Results.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Data spacing for first pass exploration is conducted at roughly 80m x 160m hole spacing.</li> <li>• Data spacing is not sufficient to establish the degree of continuity required for Mineral Resource estimates.</li> <li>• No sample compositing has been applied.</li> </ul>



Criteria	JORC Code Explanation	Commentary
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>• <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The east-west orientated drill traverses are considered effective to evaluate the roughly north-west/south-east trending stratigraphy and structures that dip steeply to the West.</li> <li>• 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.</li> <li>• At this stage the primary controls on the hypogene copper-gold (Cu-Au) system are not completely understood, however analysis of previous drilling in conjunction with this drilling have determined the drill hole orientation is optimum to determine the approximate true width of mineralisation and improve geological knowledge of the system.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>• <i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Samples were bagged in labelled and numbered calico bags, collected and delivered to the Bureau Veritas Laboratory (Kalgoorlie) by Company field personnel. Samples were then sent to the BV lab in Perth. Samples were then sorted and checked for inconsistencies against lodged submission sheet by Bureau Veritas staff.</li> <li>• Bureau Veritas checked the samples received against the Lefroy Exploration Limited (LEX) submission sheet to notify of any missing or extra samples. Following analysis, the sample pulps and residues are retained by the laboratory in a secure storage yard.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• 1m intervals of core have been sampled from 60m to 1245.8m</li> <li>• The Managing Director and Senior Geologist reviewed and verified the logging of LEFD006.</li> </ul>

**Section 2: REPORTING OF EXPLORATION RESULTS – LEFROY PROJECT- Burns Cu-Au Prospect LEFD006**  
**Diamond Drilling program**

Criteria	JORC Code Explanation	Commentary
<p><b>Mineral tenement and land tenure status</b></p>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>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.</li> <li>E 15/1715 is held 100% by Monger Exploration Pty Ltd a wholly owned subsidiary of Lefroy Exploration Limited</li> <li>The tenements are current and in good standing with the Department of Mines and Petroleum (DMP) of Western Australia.</li> </ul>
<p><b>Exploration done by other parties</b></p>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>1968-1973 BHP: The earliest recognition of the magnetic anomaly was by BHP. The area fell within TR 3697, which had been taken up for nickel. The anomaly stood out on the BMR aeromagnetic contoured plans and BHP was testing aeromagnetic anomalies that could have an ultramafic source. The anomaly was confirmed by ground magnetics but an attempt to drill test with two percussion holes failed to identify any bedrock and no further work was attempted.</li> <li>1984 Coopers Resources/Enterprise Gold Mines: The ground encompassing Burns was taken up as three Els, E15/19-21.</li> <li>1985 BHP: BHP farmed into E15/21 having re-interpreted the magnetic feature as a potential carbonatite. BHP's E15/57 covered the western one third of the anomaly. Following ground magnetic traverses, BHP drilled two diamond core holes, LR 1 and 2. LR 1 falls within Goldfields E15/1638 and LR 2 falls within P15/6397. The results, which are covered in the next section, did not indicate a carbonatite and so BHP withdrew their interest in the area.</li> <li>1985-1989 CRAE: Meanwhile CRAE was conducting exploration for gold on adjacent tenements and had engaged Jack Hallberg to carry out geological mapping. He mapped suites of intermediate dykes (plagioclase-quartz-hornblende porphyry) intruding basalt in outcrops to the northwest of Burns.</li> <li>1992: M. Della Costa took up E15/304 over aeromagnetic anomalies including Burns. The EL was vended into Kanowna Consolidated Gold Mines as part of the St Alvano project.</li> <li>1996-2001 WMC: WMC joint-ventured into the St Alvano project, which comprised a total of 12 ELs. They flew 50m line-spaced aeromagnetics and engaged EHW to interpret. Burns was not highlighted as such but the magnetic anomalies forming portions of the annular ring were tested with air core, leading to the discovery of the Neon prospect. Subsequent to the EHW study a gravity survey was conducted which did identify the Burns intrusive as a gravity low.</li> <li>2001-2003 Goldfields: Goldfields took over exploration and conducted further air core drilling at Neon. They identified S11 as a target to the south of Burns. The target was secondary gold dispersion in weathered bedrock associated with magnetite enrichment. A series of north-south air core traverses were drilled on 640 X 160m. Results were regarded as disappointing and the project was dropped.</li> <li>2005-2008 Gladiator Resources: The area was taken up by Sovereign following their assessment of previous work. They identified Homer's Inlet and the S11 area as priority targets. In 2007 a JV was established with Newmont/Sipa covering the gold rights. In 2008 the southern and eastern sectors of W15/774 was surrendered and taken up as E15/1030. The northern sector including Burns was surrendered.</li> <li>2008 Gold Attire: The ground surrendered by Sovereign over Burns was taken up as E15/1097.</li> <li>2008-2010 Newmont: Newmont joint ventured into the Sovereign and Gold Attire ELs. It conducted an 800 X 400m gravity survey to trace a north-south "Salt Creek-Lucky Bay" corridor through the tenements. This was tested by four lines of</li> </ul>

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		<p>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.</p> <ul style="list-style-type: none"> <li>2010-2019 Octagonal Resources: Three phases of AC to define a gold in regolith anomaly east of the main intrusive body. Two phases of RC identified Ag-Cu-Au mineralisation on four sections spaced approx. 40m apart. The drilling recognised Cu mineralisation which due to the host rock association, Octagonal believed there was potential for a much larger intrusion related system so the emphasis was switched from orogenic gold style exploration to predominately copper focussed intrusion related hosted mineralisation. In 2013 surface geophysical techniques were applied looking for conductors that might represent massive sulphides. Ground EM failed to identify any bedrock conductors, but the magnetic surveys did identify anomalies. In 2014, a diamond core hole, OBUIDD001, 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.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li><i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <li>The Lefroy Project is located in the southern part of the Norseman Wiluna Greenstone Belt and straddles the triple junction of three crustal units, the Parker, Boorara and Bulong Domain. The Lefroy project tenements are mostly covered by alluvial, colluvial and lacustrine material with very little outcrop. Burns is proximal to the Lake margin and is subsequently under &gt;20-25m of lake sediment and surface sand dune cover. A stripped profile below this cover means that there is no significant dispersion or oxide component to the Burns prospect. Mineralisation is hosted with a High Mg Basalt and in intermediate composition porphyries 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.</li> </ul>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li><i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</i> <ul style="list-style-type: none"> <li><i>eastings and northing of the drill hole collar</i></li> <li><i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li><i>dip and azimuth of the hole</i></li> <li><i>down hole length and interception depth</i></li> <li><i>hole length.</i></li> </ul> </li> <li><i>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the</i></li> </ul>	<ul style="list-style-type: none"> <li>Table containing drill hole collar details are included in the Table in the body of the announcement.</li> <li>No Information has been excluded.</li> <li>Table 1 of drill hole collars completed by Lefroy is noted in this announcement.</li> </ul>



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	<i>Competent Person should clearly explain why this is the case.</i>	
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li><i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</i></li> <li><i>Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</i></li> <li><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<ul style="list-style-type: none"> <li>All grades have been length weighted and reported as down-hole metres. High grades have not been cut.</li> <li>A lower cut off of 0.25g/t Au and 0.1% Cu has been used to identify significant results (intersections) with a maximum of 2m internal dilution.</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 and/or 1% Cu have been stated on a separate line below the intercept assigned with the text 'includes'.</li> <li>No metal equivalent values or formulas are used.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li><i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li><i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</i></li> </ul>	<ul style="list-style-type: none"> <li>All assay results are based on down-hole metres.</li> <li>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.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li><i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i></li> </ul>	<ul style="list-style-type: none"> <li>Appropriate summary diagrams (plan and section) are included in the accompanying announcement.</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li><i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i></li> </ul>	<ul style="list-style-type: none"> <li>Assay data is reported for the interval 400m-461.32m of hole LEFD006. All other assays remain pending.</li> <li>Significant assay results are provided in Table 1 for the LEFD006 drill program.</li> <li>Assays with no significant results (&lt;2m and &lt;0.25g/t Au or 0.1% Cu) are not reported.</li> <li>Reference to significant assay results from historical or previous drilling by LEX are noted in the body of the report.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li><i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i></li> </ul>	<ul style="list-style-type: none"> <li>All relevant data and geological observations have been included within this report.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li><i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>The appropriate next stage of exploration planning is currently underway and noted in the body of the report.</li> <li>The diamond drill program is ongoing.</li> </ul>