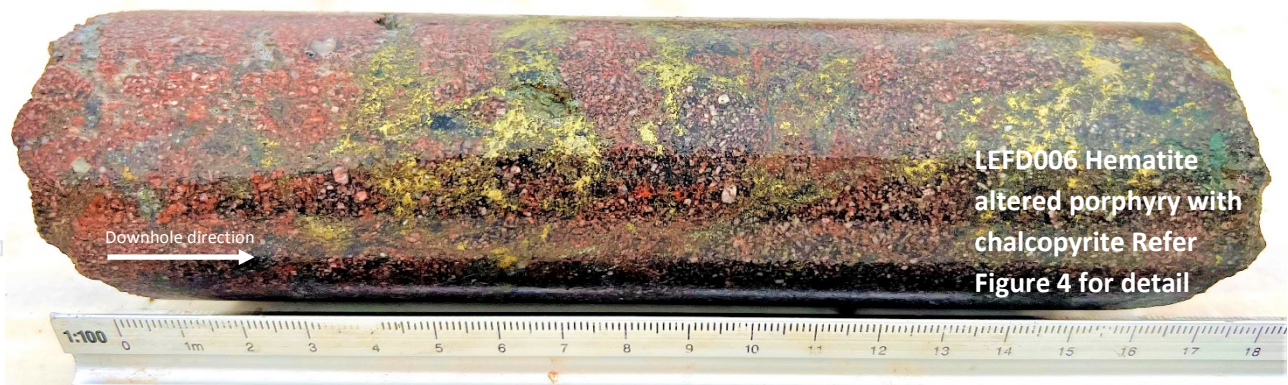


## Burns 1200m Diamond Drill Hole Update

- The Burns 1200m deep diamond hole, LEFD006, is on course & currently at 570m down-hole as of 29 July 2022
- LEFD006 has intersected multiple new & unexpected, mineralised diorite-porphyry intervals within altered high-Mg basalt. This includes:
  - 400m-440m downhole of potassic-altered multi-phase diorite intrusions with chalcopyrite, pyrite + molybdenite
- These visual results support a broader western lateral extent to the Burns Au-Cu system, which indicates:
  - the alteration zone is larger than previously interpreted with the contact of the main porphyry target-zone still yet to come (anticipated at ~650m down hole)
- Samples for the first 400m of diamond drilling have been submitted to the laboratory with preliminary results expected in October
- LEFD006 is part of a two-hole diamond program that is expected to conclude in August



Lefroy Exploration Managing Director Wade Johnson said “We are extremely pleased with the progress of hole LEFD006, and the geology observed to date. We believe it is indicative of a mineralised hydrothermal Archaean age porphyry system with an alteration footprint that is broader than we have anticipated. We are looking forward to the next +500m of drilling that is planned to intersect the main body of porphyry and we eagerly await the completion of the hole to confirm the geological and mineralisation model.”

Lefroy Exploration Limited (ASX: LEX) (“Lefroy” or “the Company”) is pleased to provide a progress report for the 1200m deep diamond drill hole underway to evaluate the Burns Au-Cu intrusion related mineral system at the Company’s wholly owned Eastern Lefroy Gold Project, located 70km southeast of Kalgoorlie.

Burns is a new and unique style of an intrusion-related gold (Au)- copper (Cu)-molybdenum (Mo) mineral system hosted by Archean age rocks in the Eastern Goldfields Province (EGP) of Western Australia, with understanding of the scale and genesis of the system to be advanced through this deep drilling program.

The gold, copper (and lesser molybdenum) mineralisation hosted by both the diorite porphyry, high-magnesium basalt and massive magnetite veins are considered by the Company to be a new and unique style of gold-copper mineralisation near Kalgoorlie and located within a land holding dominated by LEX.

### ***Diamond Drill Program***

The first hole, LEFD006 (Table 1), of the two-hole/1650m diamond drill program (Figure 1) commenced on 12 July (Refer LEX ASX release 12 July 2022).

LEFD006 is 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:

- Expand the continuity of the mineralisation discovered to date 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 research
- Demonstrate further that Burns is a new, large Au-Cu intrusion hosted mineral system

Co-funding for this hole is provided under the Exploration Incentive Scheme (EIS) managed by the Department of Mines, Industry Regulation and Safety (DMIRS) (refer LEX ASX release 29 October 2021).

As of July 29, LEFD006 has intersected a 570m interval of predominantly high-Mg basalt. The wide basalt interval is variably epidote-biotite-magnetite-gypsum altered (Figure 3 and 5) with localised hydrothermal breccia intervals and narrow cross-cutting porphyry intervals. Within this is a new, unexpected 40m interval of multi-phase diorite porphyry intrusives.

Mineralisation within the basalt interval includes fracture-fill native copper (Figure 4) from ~180m in fresh basalt down to a downhole depth of 440m with vein and/or fracture-fill chalcocite, pyrite, chalcocite and molybdenite (Table 2). This wide downhole interval of altered basalt has increased the lateral extent of the copper mineralised Western Basalt zone by approximately 250m. The alteration assemblage supports a large hydrothermal alteration cell consistent with an intrusion related system.

From ~400 to 440m, LEFD006 intersected an unexpected interval of multiple cross-cutting diorite intrusives that are predominantly potassic altered hematite and biotite with associated pyrite-chalcopyrite (Figure 4) and trace molybdenite mineralisation (Table 2).

The chalcopyrite is stringer or fracture fill (Figure 4) and is most abundant between 415-440m. This intersection of diorite porphyry is separate to the main porphyry target (that is deeper) and has created an additional target for follow up drilling.

This new tenor of alteration, mineralisation and the multiple porphyry intervals intersected in the hole to date support the Company's view that the contact of the main porphyry target-zone is near. The anticipated depth of this contact is approximately 650-700m downhole.

Two sample batches representing the first 450m of the drillhole have already been submitted to the laboratory for priority gold, copper, and multi-element downhole analysis. The results of the gold and copper analysis are expected in October with the completion of the diamond program scheduled to conclude in August.

The Company will continue to provide further updates as the drill program progresses, followed by a comprehensive geological summary on the entire hole (LEFD006) at its conclusion.

This announcement has been authorised for release by the Board



Wade Johnson  
Managing Director

**TABLE 1 LEFD006 Collar Details**

Hole ID	Collar E (MGA)	Collar N (MGA)	Collar RL	Depth (m)	Azimuth	Dip	Drill type	Comments
LEFD006	407000	6549760	290	In progress	90	-60	Diamond	Mud rotary pre-collar to 60m

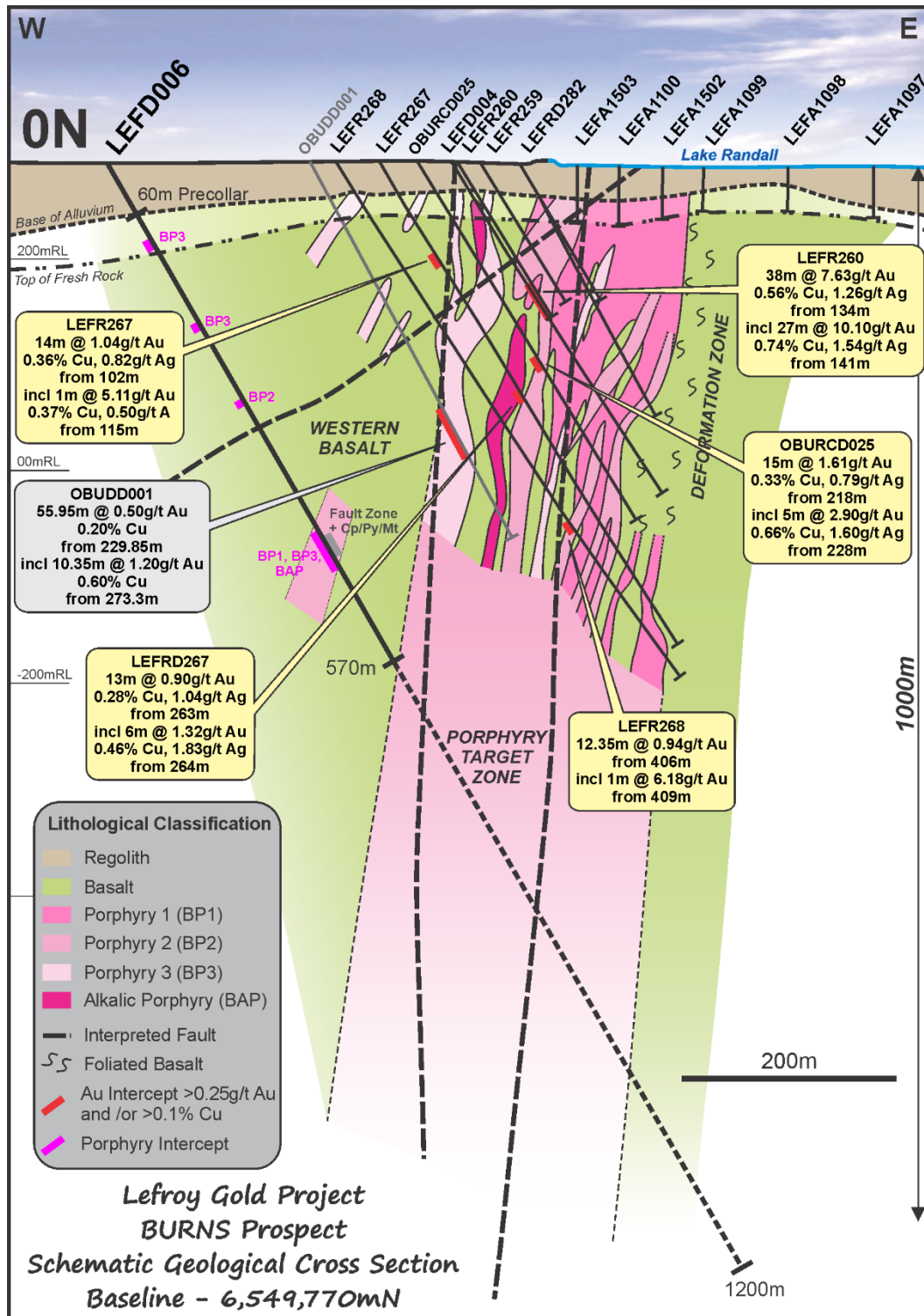
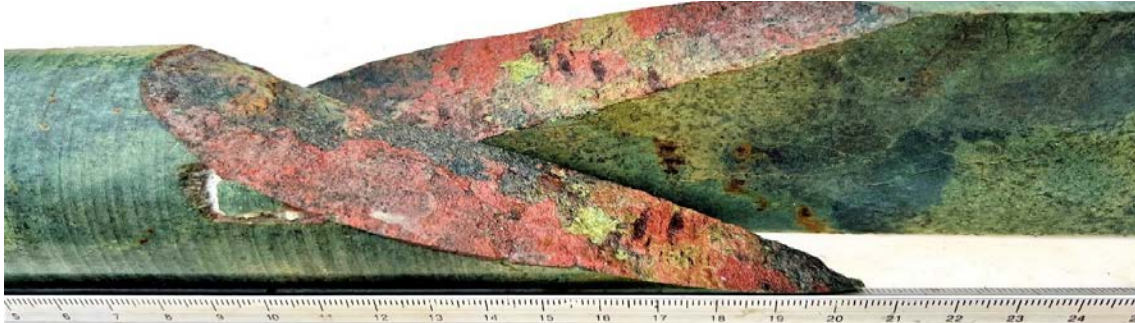
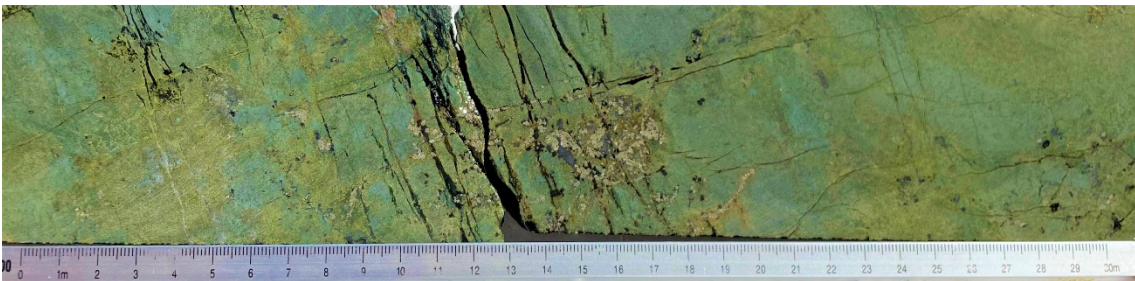


Figure 1 Burns baseline drill section showing completed drill holes, extent of the multiphase porphyries that make up the eastern porphyry and the current position of the 1200m diamond hole

Photographs of selected examples of core within the broader intervals are shown below (Figures 2,3,4). 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.



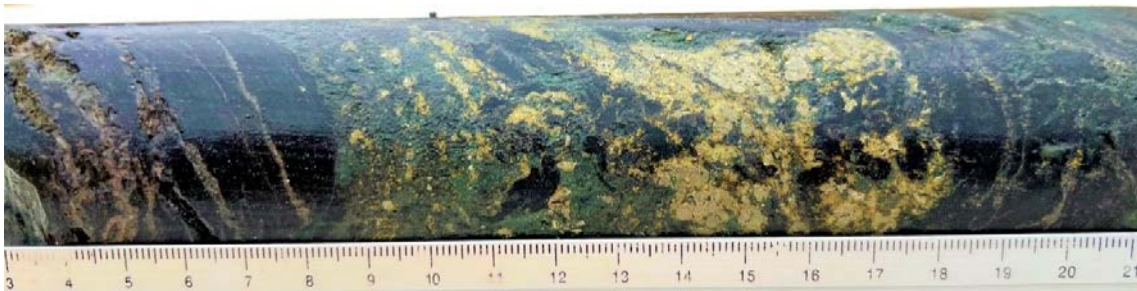
**Figure 2** LEFD006 interval 224.5 to 224.8m shows high-magnesium basalt, mineralised by native copper along fracture plane with a gypsum film, with epidote alteration and minor ex-sulphides



**Figure 3** LEFD006 interval 307.88-308.07m example of High-magnesium basalt strongly altered to epidote with oxidised pyrite veinlets



**Figure 4** LEFD006 interval 435.6-435.8m showing Burns diorite porphyry altered by pervasive hematite, cross-cut by chalcopyrite and pyrite stringer veining



**Figure 5** LEFD006 interval 436.2-436.4m shows sheared to slightly brecciated high-magnesium basalt, mineralised with minor chalcopyrite and pyrite, and biotite-hematite alteration

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**TABLE 2 Visual Estimate of Sulphide Mineralisation by Type from Alteration Zones in LEFD006**

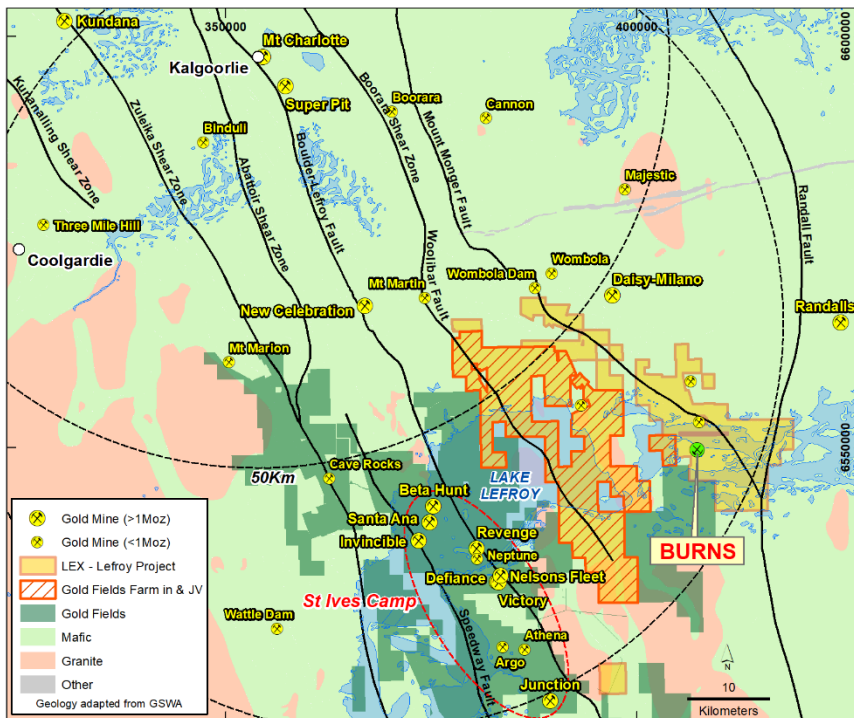
From (m)	To (m)	Interval (m)	Description	Mineral	Logged Visual Estimate (%)	Style
182.1	187.8	5.7	Oxidised native copper in variolitic high-Mg basalt with strong chlorite/ biotite alteration	Copper	1	Fracture fill
187.8	228.3	40.5	High-Mg basalt that is epidote-biotite altered with native copper, chalcocite, gypsum, rare azurite (0.5%) and chalcopyrite (0.5%) in fractures.	Copper	0.5	Fracture fill
				Chalcocite	0.5	Fracture fill
224.5	224.8	0.3	Epidote altered high-Mg basalt with native copper and gypsum in fracture planes minor sulphides + trace oxidised sulphides	Copper	1	Fracture fill
228.3	230.8	2.5	Highly fractured high-Mg basalt with strong chlorite-biotite alteration. Native copper and pyrite in fracture planes	Copper	1	Fracture fill
				Pyrite	0.5	Blebbly
230.8	256.0	25.2	High-Mg basalt with epidote, sericite, biotite, chlorite, calcite alteration. Trace oxidised sulphides (1%), native copper & magnesite in fracture planes	Copper	0.5	Fracture fill
256.0	258.3	2.4	Porphyritic diorite altered to intense patchy hematite, biotite, weak epidote with trace disseminated pyrite	Pyrite	0.5	Disseminated
				Copper	0.5	Fracture fill
258.3	307.6	49.3	High Mg basalt with strong pervasive epidote alteration + calcite and chlorite veining. Blebbly pyrite in fractures and native copper.	Copper	0.5	Fracture fill
				Pyrite	1	Blebbly
307.9	308.3	0.4	High-Mg basalt strongly altered to epidote with oxidised sulphide veinlets	Pyrite	2.5	Veinlet
				Pyrite	1	Blebbly
309.0	342.4	33.3	Chlorite-biotite-epidote-calcite-gypsum altered high-Mg basalt. Blebbly/fracture fill pyrite and chalcopyrite. Trace blebbly molybdenite.	Chalcopyrite	1	Blebbly
				Molybdenite	0.5	Blebbly
				Chalcopyrite	0.5	Stringer
343.4	364.9	21.5	Biotite-epidote-magnetite-sericite-calcite altered high-Mg basalt with trace blebbly/stringer chalcopyrite and bornite.	Chalcopyrite	0.5	Stringer
				Bornite	0.5	Stringer
366.6	375.3	8.7	Biotite-actinolite-hematite-biotite-epidote-calcite-magnesite altered high-Mg basalt with chalcopyrite and pyrite in association.	Chalcopyrite	1	Blebbly
				Pyrite	1	Blebbly
				Pyrite	0.5	Blebbly
375.8	391.8	16.0	Biotite-calcite-epidote-magnetite-hematite-magnesite altered high-Mg basalt with chalcopyrite and pyrite. Trace native copper.	Chalcopyrite	0.5	Blebbly
				Copper	0.5	Blebbly
				Pyrite	1	Blebbly
391.8	400.8	9.0	Shear zone dominated by intense biotite & hematite alteration plus calcite, quartz, feldspar, anhydrite veins and 1% blebbly pyrite and chalcopyrite.	Chalcopyrite	1	Blebbly
				Pyrite	1	Disseminated
400.8	402.8	2.0	Diorite altered to moderate hematite and biotite with quartz calcite veining and 1% disseminated pyrite	Pyrite	1	Disseminated
402.8	422.3	19.5	Highly fractured diorite with strong hematite and biotite alteration, minor quartz-calcite and magnetite veins. 1% disseminated pyrite	Pyrite	1	Disseminated
422.3	422.5	0.2	hydrothermal breccia with gypsum fill, quartz clasts, anhydrite, blebbly chalcopyrite.	Chalcopyrite	0.5	Blebbly
422.5	433.5	11.0	Strongly hematite-biotite altered diorite porphyry with disseminated pyrite and trace blebbly chalcopyrite	Pyrite	1	Disseminated
				Chalcopyrite	0.5	Blebbly
433.5	435.6	2.1	Brittle fractured dioritic fault zone with intense hematite, biotite and moderate magnetite alteration. 5% stringer chalcopyrite, trace molybdenite	Chalcopyrite	5	Stringer
				Molybdenite	0.5	Blebbly
435.6	435.8	0.2	Diorite porphyry altered by pervasive hematite, cross-cut by chalcopyrite and pyrite stringer veins	Chalcopyrite	5	Stringer
436.2	436.4	0.2	Shearing to slightly brecciated high-Mg basalt, with chalcopyrite, pyrite and altered to biotite-hematite	Chalcopyrite	4	Blebbly
				Pyrite	4	Blebbly
				Copper	3	Fracture fill
436.4	439.3	2.9	Strongly foliated basalt (shear zone) with intense biotite + magnetite veining. 1% chalcopyrite and pyrite veins, 3% native copper within fracture planes.	Chalcopyrite	1	Vein
				Pyrite	1	Blebbly
439.3	448.6	9.4	High Mg-basalt, brecciated with calcite-hematite-pyrite-chalcopyrite veins	Chalcopyrite	0.5	Blebbly
				Pyrite	0.5	Blebbly
448.6	488.0	39.4	High-Mg basalt with chlorite-biotite-epidote-calcite alteration. Trace vein/blebbly chalcopyrite and disseminated pyrite	Chalcopyrite	0.5	Blebbly
				Pyrite	1	Disseminated
488.0	510.0	22.0	High-Mg basalt with chlorite-biotite-epidote alteration and trace blebbly pyrite	Pyrite	0.5	Blebbly
510.0	570.0	60.0	Diorite porphyry with biotite-hematite alteration plus 3% disseminated pyrite	Pyrite	3	Disseminated

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**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

**For Further Information please contact:**

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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

*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
<p><b>Sampling techniques</b></p>	<ul style="list-style-type: none"> <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 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 details are detailed in Table 1 of the report</li> <li>Sampling and QAQC protocols as per industry best practice with further details below. 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 the there was excellent core recovery and only minor zones of core loss which were recorded by the geologist. Hole LEFD006 has been sampled to 460m. 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, Fe, Pb, S, Te, W and Zn.</li> </ul>
<p><b>Drilling techniques</b></p>	<ul style="list-style-type: none"> <li>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).</li> </ul>	<ul style="list-style-type: none"> <li>The diamond drilling (DD) is being drilled by Raglan Drilling (Kalgoorlie). The hole LEFD006 was commenced using mud rotary to 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>
<p><b>Drill sample recovery</b></p>	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <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 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>
<p><b>Logging</b></p>	<ul style="list-style-type: none"> <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 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>The hole LEFD006 was logged for the entire length.</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>• 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>	<p><b>DD</b></p> <ul style="list-style-type: none"> <li>• Half drill core has been sampled</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>• The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <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 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>• Quality control process and internal laboratory checks demonstrate acceptable levels of accuracy. At the laboratory regular assay repeats, lab standards, checks and blanks were analysed.</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <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 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>• Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>• Specification of the grid system used.</li> <li>• Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>• Drill hole position was surveyed using a GPS operated by the rig geologist/field assistant. Post drilling, drill 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>• 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> </ul>	<ul style="list-style-type: none"> <li>• 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 plunge toward the south-east, hence the drill orientation toward the east.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>• Whether 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>• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>• If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul style="list-style-type: none"> <li>• The roughly east-west orientated drill traverses considered effective to evaluate the roughly north-south to north-west south-east trending stratigraphy.</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 true width of mineralisation and improve geological knowledge of the system.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>• The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>• Samples are yet to be collected</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>• The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>• 1m intervals of core have been sampled from 60m to 460m</li> <li>• The Managing Director reviewed the logging of LEFD006</li> </ul>

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**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 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. Burns was not highlighted as such but the magnetic anomalies forming portions of the annular ring were tested with air core, leading to the discovery of the Neon prospect. Subsequent to the EHW study a gravity survey was conducted which did identify the Burns intrusive as a gravity low.</li> <li>2001-2003 Goldfields: Goldfields took over exploration and conducted further air core drilling at Neon. They identified S11 as a target to the south of Burns. The target was secondary gold dispersion in weathered bedrock associated with magnetite enrichment. A series of north-south air core traverses were drilled on 640 X 160m. Results were regarded as disappointing and the project was dropped.</li> <li>2005-2008 Gladiator Resources: The area was taken up by Sovereign following their assessment of previous work. They identified Homer's Inlet and the S11 area as priority targets. In 2007 a JV was established with Newmont/Sipa covering the gold rights. In 2008 the southern and eastern sectors of W15/774 was surrendered and taken up as E15/1030. The northern sector including Burns was surrendered.</li> </ul>

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Criteria	JORC Code Explanation	Commentary
		<ul style="list-style-type: none"> <li>• 2008 Gold Attire: The ground surrendered by Sovereign over Burns was taken up as E15/1097.</li> <li>• 2008-2010 Newmont: Newmont joint ventured into the Sovereign and Gold Attire ELs. It conducted an 800 X 400m gravity survey to trace a north-south “Salt Creek-Lucky Bay” corridor through the tenements. This was tested by four lines of aircore on 640 X 160m spacing. Two aircore traverses on a 1200 X 320m spacing were also 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.</li> <li>• 2010-2019 Octagonal Resources: Three phases of AC to define a gold in regolith anomaly east of the main intrusive body. Two phases of RC identified Ag-Cu-Au mineralisation on four sections spaced approx. 40m apart. The drilling recognised Cu mineralisation which due to the host rock association, Octagonal believed there was potential for a much larger intrusion related system so the emphasis was switched from orogenic gold style exploration to predominately copper focussed intrusion related hosted mineralisation. In 2013 surface geophysical techniques were applied looking for conductors that might represent massive sulphides. Ground EM failed to identify any bedrock conductors, but the magnetic surveys did identify anomalies. In 2014, a diamond core hole, OBUDD001, was drilled at -60 degrees to 090 east to 401.5m 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 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.</li> </ul>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>• <i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</i> <ul style="list-style-type: none"> <li>• <i>easting and northing of the drill hole collar</i></li> <li>• <i>elevation or RL (Reduced Level – elevation above sea level in metres) of</i></li> </ul> </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>

Criteria	JORC Code Explanation	Commentary
	<p><i>the drill hole collar</i></p> <ul style="list-style-type: none"> <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> <ul style="list-style-type: none"> <li><i>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</i></li> </ul>	
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li><i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</i></li> <li><i>Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</i></li> <li><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<ul style="list-style-type: none"> <li>No assay data to report for the hole LEFD0065 that is in progress</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 historical 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) 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>No assay data to report from holes LEFD006</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li><i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i></li> </ul>	<ul style="list-style-type: none"> <li>All relevant data has been included within this report.</li> </ul>
<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>