

Drilling Underway at the Burns Au-Cu Prospect

- A combined 6000m RC and diamond drilling program is underway at the Burns gold-copper prospect at the Eastern Lefroy project 60km south east of Kalgoorlie
- The Burns prospect was discovered in 2011, with subsequent RC and diamond drilling by previous explorers intersecting broad zones of gold and copper mineralisation in magnetite biotite altered basalt and felsic intrusive rocks that includes:
 - 50m @ 0.9g/t Au & 0.5% Cu from 24m in OBURC16
 - 32m @1.7g/ Au & 0.6%Cu from 76m in OBURC011
 - 12m @1.5g/t Au & 0.5% Cu from 27m in OBURC021
 - 38.5m @ 0.5g/t Au & 0.2% Cu from 184.5m in and 55m @ 0.5g/t Au & 0.2% Cu from 229.85m in OBUIDD001 Including 0.9m @4.5g/t Au & 2.6% Cu from 256.4m
- The Burns Au-Cu system lies on the eastern margin of a large interpreted multiphase felsic intrusion, the majority of which is held by the Company through the Non-JV Eastern Lefroy or the Western Lefroy JV package with Gold Fields.
- The intrusion has only been partially explored by shallow aircore drilling and is considered a priority exploration target for an intrusion related gold system, (recent WA examples being Gruyere, Mandilla Well and Hemi), and/or porphyry gold-copper style of mineralisation (the key Archaean age example being Boddington).
- The 25-hole drilling program is designed to test both strike and depth extensions to the Burns system and two holes will also be drilled into the main monzonite intrusion to assist in advancing the geological model

Lefroy Exploration Managing Director, Wade Johnson said “we are excited to be drilling at Burns subsequent to the tenement grant in September 2020 and the heritage survey in November 2020. The unique geophysical signature, large geochemical footprint and associated gold, copper and silver mineralisation at Burns make it a very attractive target in the WA goldfields at a time of robust gold, copper and silver prices. We continue to grow the target portfolio at Eastern Lefroy and are very keen to complete this drill program at Burns that could deliver a very significant resource”

Lefroy Exploration Limited (ASX: LEX) (“Lefroy” or “the Company”) is pleased to advise that that a 6000m combined reverse circulation (RC) and diamond drilling program is underway at the Burns 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 Non-JV Eastern Lefroy tenement package covers 249km². It now spans 40 strike kilometres from the Hang Glider Hill prospect in the north west as one contiguous wholly owned land package to Lake Randall in the south east. The Lefroy Gold Project in its entirety covers 621km².

The Burns Prospect lies within the Lake Randall Exploration Hub that is immediately south east of the Lucky Strike-Havelock-Erinmore BIF trends. The hub contains tenement E15/1715 that covers an area of approximately 20km² containing the Burns gold-copper prospect that was discovered by Octagonal Resources Limited (“Octagonal”) in 2011.

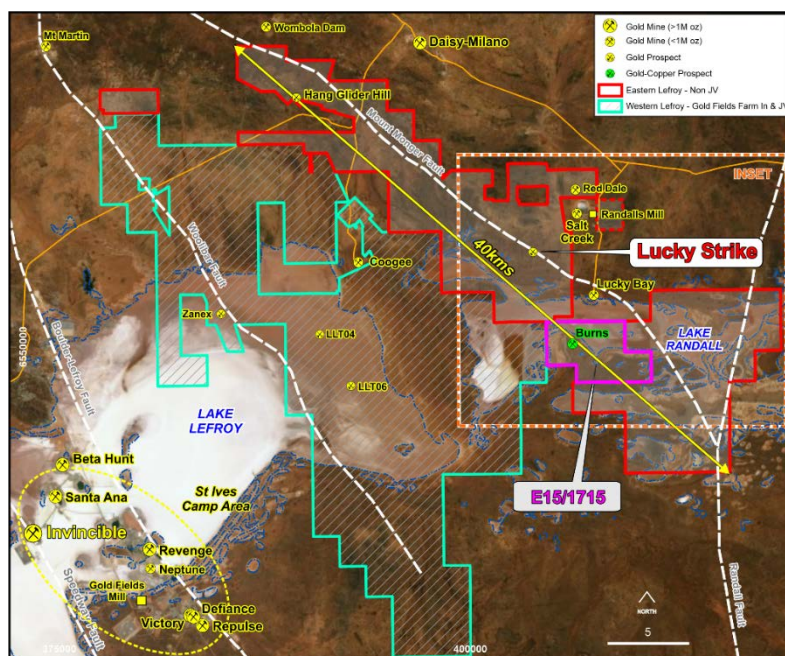


Figure 1 Lefroy Gold Project tenement plan highlighting granted tenement E15/1715, the Burns prospect and proximity to Lucky Strike. Refer to Figure 2 for the inset map.

The Burns gold copper prospect is situated on the eastern margin of a large interpreted felsic intrusion, termed the Burns Intrusion. The intrusion does not outcrop and has is represented by a distinctive annular aeromagnetic and gravity geophysical signature (Figure 2) (refer LEX ASX release 16 September 2020).

Burns Background

In 1985 BHP recognised an annular negative magnetic feature (Figure 2), at the time interpreted to represent a carbonatite intrusion. Two diamond drill holes were completed near the margin of the intrusion, one of which intersected abundant magnetite and porphyry intrusions.

The area was then identified as a priority exploration target area for greenstone hosted orogenic gold mineralisation based on targeting parameters developed by Western Mining Corporation (WMC) in the 1990's. Aircore drilling by WMC targeted the northwest and southeast margins of the Burns Intrusion with wide spaced aircore drilling, including drilling in Lake Randall. This drilling returned anomalous gold results that included 2m @2.67g/t Au in hole SAL746 at the Neon prospect on the north west margin of the intrusion (Figure 2).

During 2007 to 2010 Newmont Australia (Newmont) recognised the geophysical character and gold prospectivity of the area from regional targeting and completed wide spaced aircore drilling.

In May 2011 Octagonal Resources Limited (Octagonal) discovered significant gold and copper anomalism in the regolith (weathered rock) from aircore (AC) drilling. This defined a one square kilometre area of gold anomalism and a two-kilometre-long copper anomaly on the north eastern margin of the Burns Intrusion. This initiated subsequent multiple programs of reverse circulation (RC), diamond drilling (3 Holes) and geophysical surveys during the period 2012-2016. The drilling intersected broad zones of gold (Au) and copper (Cu) associated with magnetite-biotite alteration and hosted in high-magnesian basalt and intermediate intrusive rocks (Figure 3).

Significant results from that program include:

- o **9 metres @ 1.5 g/t Au & 1.0 % Cu from 58 metres in OBURC002**
- o **12 metres @ 0.8 g/t Au & 1.7 % Cu from 48 metres in OBURC004**
- o **4 metres @ 0.7 g/t Au & 2.0 % Cu from 40 metres in OBURC005**
- o **1 metre @ 8.5 g/t Au & 6.7 % Cu from 123 metres in OBURC007**
- o **32 metres @ 1.7 g/t Au & 0.6 % Cu from 76 metres in OBURC011**
- o **6 metres @ 4.9 g/t Au & 0.9 % Cu from 24 metres in OBURC012**
- o **50 metre @ 0.9 g/t Au & 0.5 % Cu from 24 metres in OBURC016**
- o **12 metres @ 1.5 g/t Au & 0.5 % Cu from 27 metres in OBURC021**
- o **19 metres @ 0.5 g/t Au & 1.0 % Cu from 44 metres in OBURC022**
- o **9 metres @ 1.0 g/t Au & 0.7 % Cu from 28 metres in OBURC025**
- o **3 metres @ 16.1 g/t Au & 0.5 % Cu from 35 metres in OBURC028**
- o **9 metres @ 1.0 g/t Au & 1.5 % Cu from 115 metres in OBURC031**
- o **12 metres @ 1.3 g/t Au & 0.8 % Cu from 163 metres in OBURC032**

In June 2014 Octagonal completed one diamond hole (OBUDD001), for 401.5m at Burns to test for the source of a strong magnetic anomaly defined by 3D inversion modelling of ground magnetic data. The drill hole was orientated away from the intrusion and intersected strongly fractured high-magnesian basalt intruded by multiple feldspar porphyritic rocks.

Intersections from that hole include: -

- o **38.5m @ 0.5g/t Au & 0.2% Cu from 184.5m**
- o **55m @ 0.5g/t Au & 0.2% Cu from 229.85m in OBUDD001**
Including 0.9m @4.5g/t Au & 2.6% Cu from 256.4m

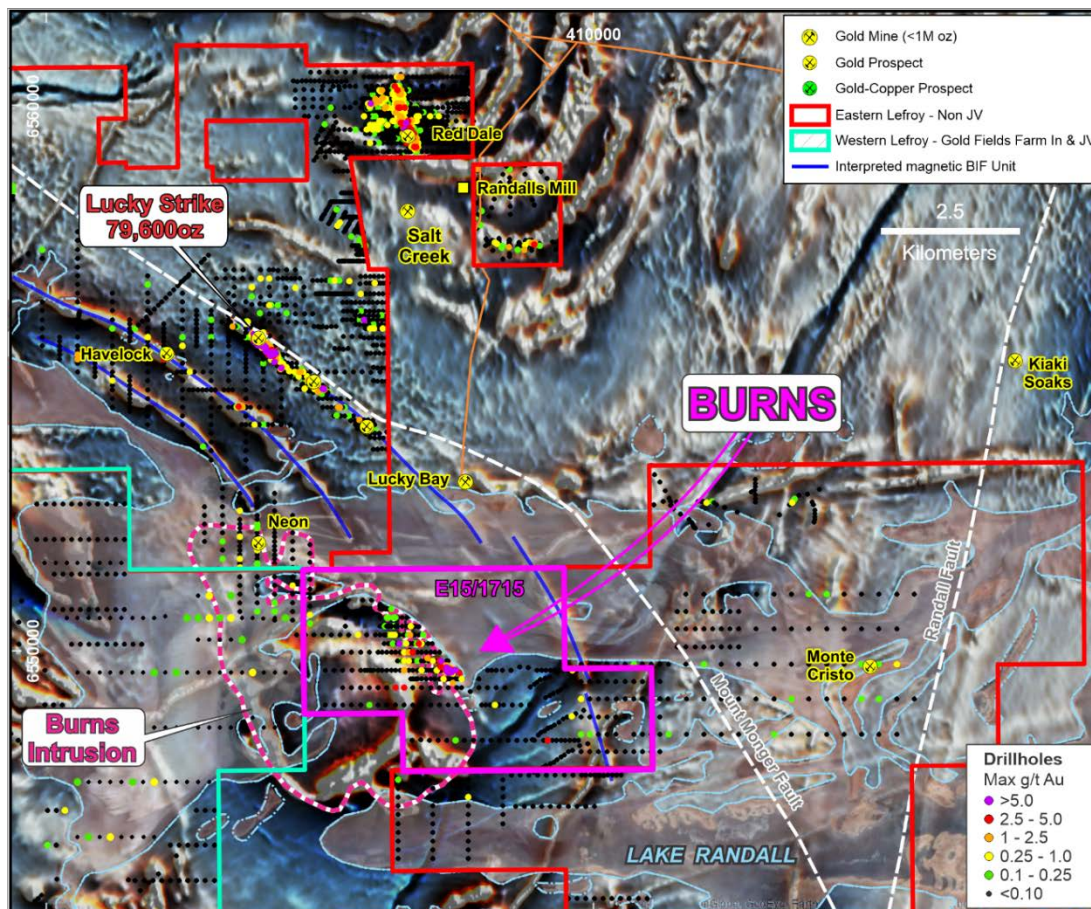


Figure 2 Inset plan highlighting tenement E15/1715, the Burns prospect, extent of the Burns Intrusion and proximity to Lucky Strike on a grey scale aeromagnetic image. The extent of Lake Randall is also shown with the underlying aeromagnetic image. The BIF trends are highlighted as blue lines. Refer to Figure 3 for detailed tenement map of Burns.

In April 2016 Octagonal drilled a further two diamond drill holes (OBUDD002 & 003) at Burns supported by the Western Australian Governments Exploration Incentive Scheme (EIS) co funding scheme. Both holes were drilled to the east and orientated away from the intrusion intersecting variably magnetite altered high magnesian basalt intruded by feldspar porphyritic intermediate intrusive rocks. The assays from this drilling returned a best intersection of 1.65m at 2.02% Cu from 362.5m in OBUDD003, including 0.4m at 0.26 g/t Au & 7.96% Cu from 362.5m (WAMEX report item 110434).

Subsequent work by Octagonal involved a detailed geological and geochemical review of the drill data to better understand the system and develop an exploration model. That work concluded from litho-geochemical evidence that the Burns prospect represents a porphyry-related exploration model (refer page 34 Final Report Government Co-Funded Drilling Grant DAG2015/0055929-October 2016). The intrusion has not had any systematic RC and or diamond drilling into the central position (core) to better define the geological model.

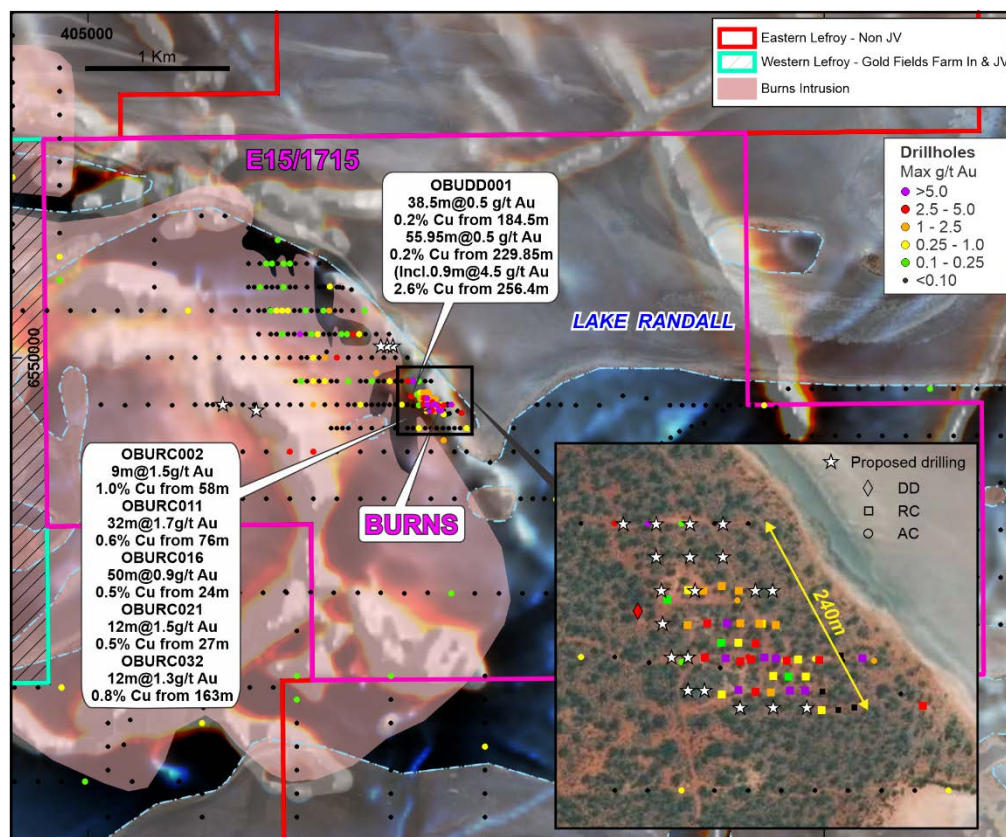


Figure 3 Inset plan highlighting granted tenement E15/1715, the Burns prospect, extent of the Burns Intrusion and the strike extension of the Lucky Strike BIF with compiled previous drill holes. Drill holes and data sourced from WAMEX items.

The gold and copper mineralisation within magnetite altered basalts at Burns and Neon on the immediate margin of the Burns intrusion is a unique style in the Archaean rocks of the Eastern Goldfields. Distal to the intrusion is the gold only mineralisation in magnetite bearing banded iron formations (BIF) along strike and to the north at Lucky Strike, Havelock and Erinmore and may suggest a genetic link between the styles of mineralisation. The interpreted position of the south east extension of the Lucky Strike BIF lies approximately 2km east of the Burns prospect and represents an additional target for gold mineralisation.

Initial litho-geochemical investigations by Octagon report that the Au-Cu mineralisation at the Burns prospect and adjacent monzonite intrusion may have an affinity with a porphyry copper model (refer page 31 Final Report Government Co-Funded Drilling Grant DAG2015/0055929-October 2016). The intrusion has not had any systematic RC and or diamond drilling into the central position (core) to better define the geological model. The Company considers the intrusion represents a key target for gold and or gold-copper mineralisation. Gold mineralisation associated with large felsic intrusive bodies is not uncommon in the Archaean stratigraphy of Western Australia and include, the recent Mandilla Well (west of Kambalda), the Hemi discovery in the Pilbara and Gruyere in the north Eastern Goldfields.

Drill Program

A 25-hole combined RC and diamond drill program totalling approximately 6000m is designed to evaluate the depth and strike extensions to the Burns system. Hole depths of up to 350m will evaluate the system at depth on five 40m spaced sections with two 40m spaced step out sections testing the northern strike extent.

A single traverse of three RC holes are proposed to evaluate a magnetic anomaly approximately 400m to the north of the Burns prospect. The anomaly has a similar character to that at Burns but a weaker magnetic feature due to up to 50m of palaeochannel cover. The magnetic feature could represent another magnetite biotite altered porphyry similar to that at Burns.

Two additional RC holes are planned to evaluate the main monzonite intrusion to assist in developing the geological model.

The program is expected to be completed in February.



Figure 4 LEX RC Drill hole 1 at Burns (Looking West)

This announcement has been authorised for release by the Board



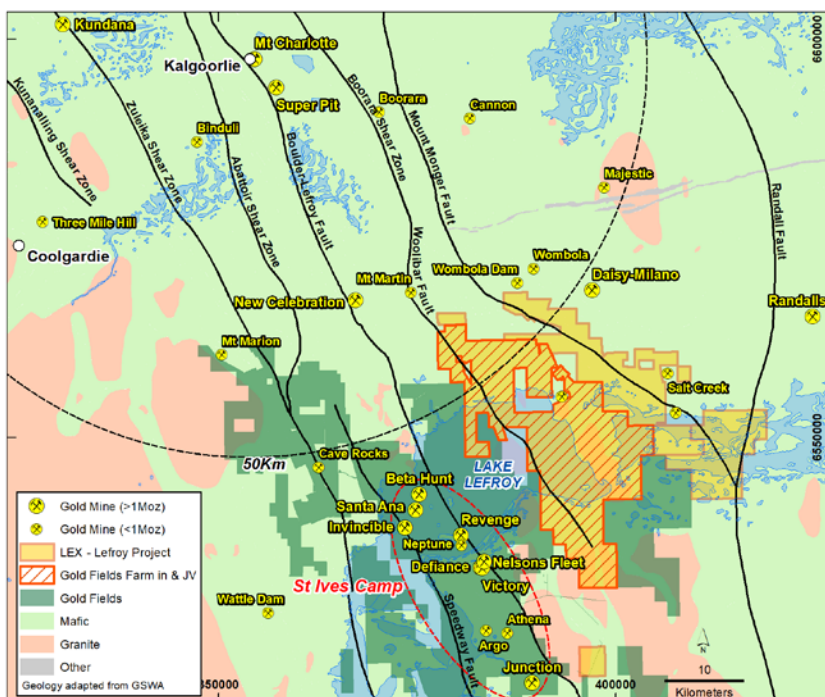
Wade Johnson
Managing Director

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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 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 621km² 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 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.

- 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

Further information regarding the Burns Prospect has been sourced from the following documents

Independent Geologists Report within the Octagonal Resources Limited Scheme Booklet that was lodged with the ASX on 21 December 2015.

2km Long Copper Anomaly at the Burns Prospect, Western Australia_Octagonal Resources Limited, ASX release dated 8 March 2013.

WAMEX report item 110434 Final Report -Government Co-Funded Drilling Grant DAG2015/00559291-Burns Prospect-Exploration Licence E15/1097

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

Definitions

WAMEX- Western Australian Mineral Exploration (Western Australian Government publicly available mineral exploration reporting and enquiry system)