

## Exploration Update: Drilling Underway at Bullseye nickel target

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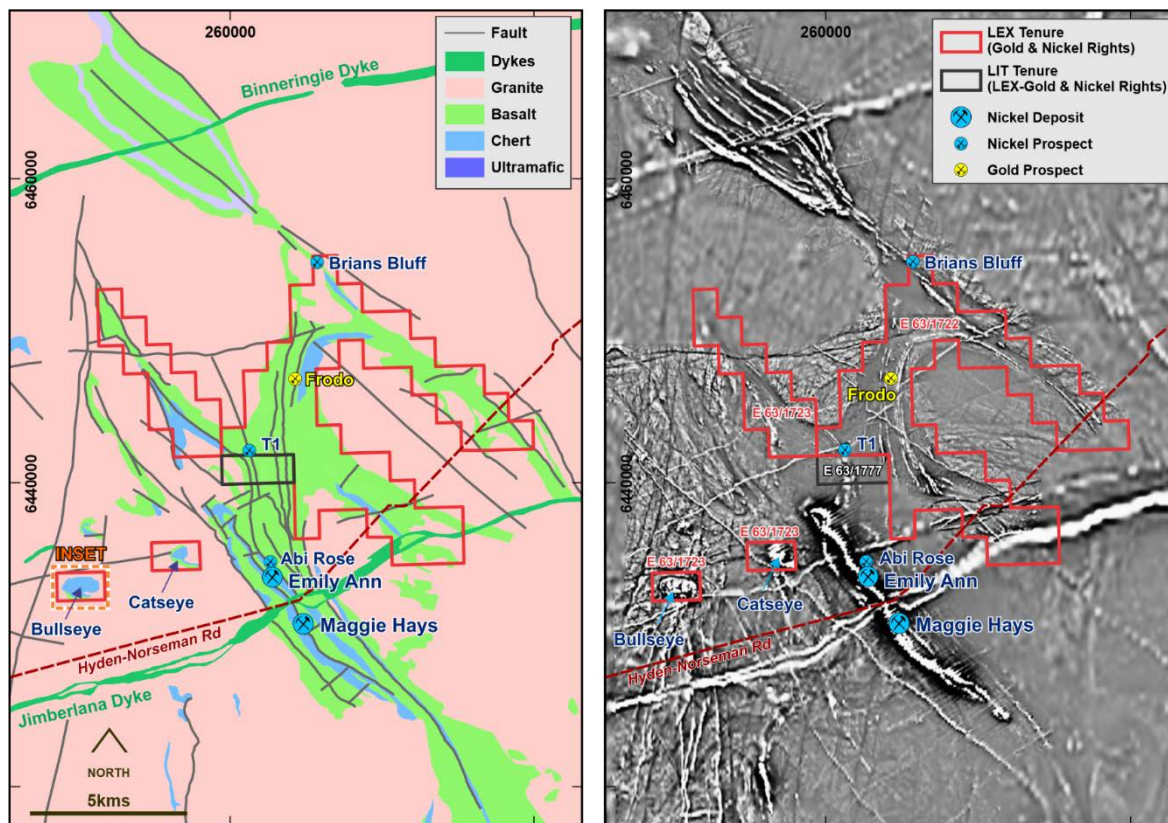
- The Company has commenced a 30-hole aircore drilling program at the Bullseye nickel target within the Company's Lake Johnston Project, 120km west of Norseman
- Bullseye is characterised by a distinctive 2.5km wide ovoid shaped high amplitude aeromagnetic feature interpreted by the Company to represent a mafic or ultramafic intrusion
- A single traverse of wide spaced RAB drilling in 1997 on the southern margin of Bullseye reported promising shallow nickel intersections including:
  - 18m at 0.46% Ni from 20m in hole RTRB16 including 4m at 0.58% Ni from 24m
  - 9m at 0.48% Ni from 4m in hole RTRB 24 including 4m at 0.68% Ni from 8m
- The previous drilling has not been followed up. Reinterpretation of the drilling and geophysical data by Lefroy suggests the broad magnetic feature may represent a buried mafic or ultramafic intrusion that has potential to host nickel sulphide mineralisation
- The 30-hole program is expected to take 5 days to complete and will consist of two traverses on the existing drill lines to determine the basement geology and multi-element geochemistry
- Drill results from the program are expected in late January 2021

*Lefroy Exploration Managing Director Wade Johnson said "we are excited to be finally drilling for nickel out at the Bullseye target in our Lake Johnston project. We have been compiling and reviewing the old drilling at Bullseye for some time and intrigued by the coincident magnetic feature and previous nickel intercepts from 1997 that were never followed up. The first pass 30-hole drill program will validate the previous drill results and better understand the basement geology to support an improved understanding of the magnetic anomaly. Bullseye adds to the growing pipeline of early-stage generative drill targets the Company continues to develop across its tenement portfolio and we eagerly await the results from this phase of drilling"*

Lefroy Exploration Limited (ASX: LEX) (“Lefroy” or “the Company”) is pleased to advise that a 30-hole aircore (AC) drilling program is underway evaluating the Bullseye nickel target in the Company’s Lake Johnston Project located approximately 120km west of Norseman.

The Lake Johnston Project comprises two granted exploration licences (E63/1722 & 1723) held under title by Lefroy and one granted exploration licence (E63/1777) held by Lithium Australia NL (ASX:LIT). These holdings form a cohesive package in excess of 250km<sup>2</sup> over the Lake Johnston Greenstone Belt (Figure 1). Lefroy holds the gold and nickel rights, and all other precious and base metals not associated with pegmatites on the package under a Tenement Rights Agreement executed with LIT in 2016.

The Project is considered prospective for both gold and nickel, with the tenement package covering the northern strike extension to the Maggie Hayes and Emily Ann nickel mines held by Poseidon Nickel Limited (“Poseidon”). Lake Johnston was host to the Emily Ann Mine which averaged a resource grade of 4.1% Nickel and produced 46,000tonnes of nickel (refer Poseidon ASX release 26 September 2018).



**Figure 1** Lake Johnston Project with tenements shown with geology on the left and with grey scale aeromagnetics on the right. Key nickel and gold occurrences are also shown. Refer to Figure 2 for inset map showing Bullseye.

The Company has commenced a phase of AC drilling at Bullseye to follow up previous nickel drill intercepts and to gain a better appreciation of the underlying geology associated with the large ovoid shaped aeromagnetic anomaly.

The Bullseye magnetic anomaly was recognised by two previous explorers with both interpreting it to be a raft of greenstone (Figure 2). Samantha Exploration NL drilled a single north-south line of drill holes (prefixed RQ) in 1988, but did not analyse for nickel (refer WAMEX item a27056). Goldfields Exploration Pty Ltd drilled a single east-west orientated drill line (Holes prefixed RTRB) of RAB holes in 1997 near the southern margin of the magnetic anomaly (refer WAMEX item a54574). That phase of drilling intersected promising nickel values in the regolith but was never followed up. Better results from the program include:

- **18m at 0.46% Ni from 20m in RTRB16 including 4m at 0.58% Ni from 24m**
- **9m at 0.48% Ni from 4m in RTRB 24 including 4m at 0.68% Ni from 8m**
- **16m at 0.24% Ni from 12m in RTRB 13**
- **16m at 0.26% Ni from 12m in RTRB 12**
- **10m at 0.33% Ni from 12m in RTRB 25**

Re-evaluation of the Bullseye target by the Company involving data compilation, ground reconnaissance and integration with geophysical data sets has highlighted an alternative model to explain the distinctive aeromagnetic feature. The Company interprets the anomaly to represent a mafic or ultramafic intrusive body which is supported by the relatively high nickel values from the prior drilling. Mafic Intrusions can be large hosts for Ni-Cu sulphide mineralisation that occur as basal accumulations in embayments on or near the basal margins of the intrusion. Bullseye has had little if any drilling that has focused on a magmatic intrusion model and remains unexplored.

The Company has now commenced (Figure 3) a 30-hole air core drill program to evaluate the mafic/ultramafic intrusion model and follow up the prior nickel intersections. Two drill lines are planned using the existing Samantha-Goldfields drill lines. The planned vertical drill holes will be spaced at 160m centres on each line. The AC holes are expected to have better depth penetration than the prior RAB drilling. A critical aim of the program is to determine the underlying basement geology. Planned drill holes relative to the previous drilling are depicted on Figure 2.

The program is expected to take 5 days to complete. Assay results are expected in January 2021.

This announcement has been authorised for release by the Board

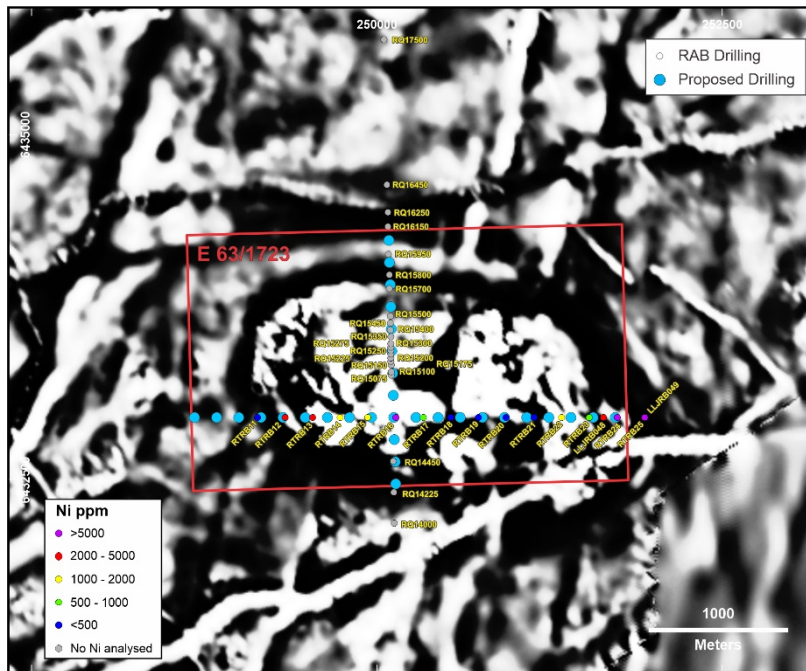


Wade Johnson

Managing Director

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**Figure 2** Grey scale aeromagnetic image of Bullseye with prior and planned drilling highlighted.

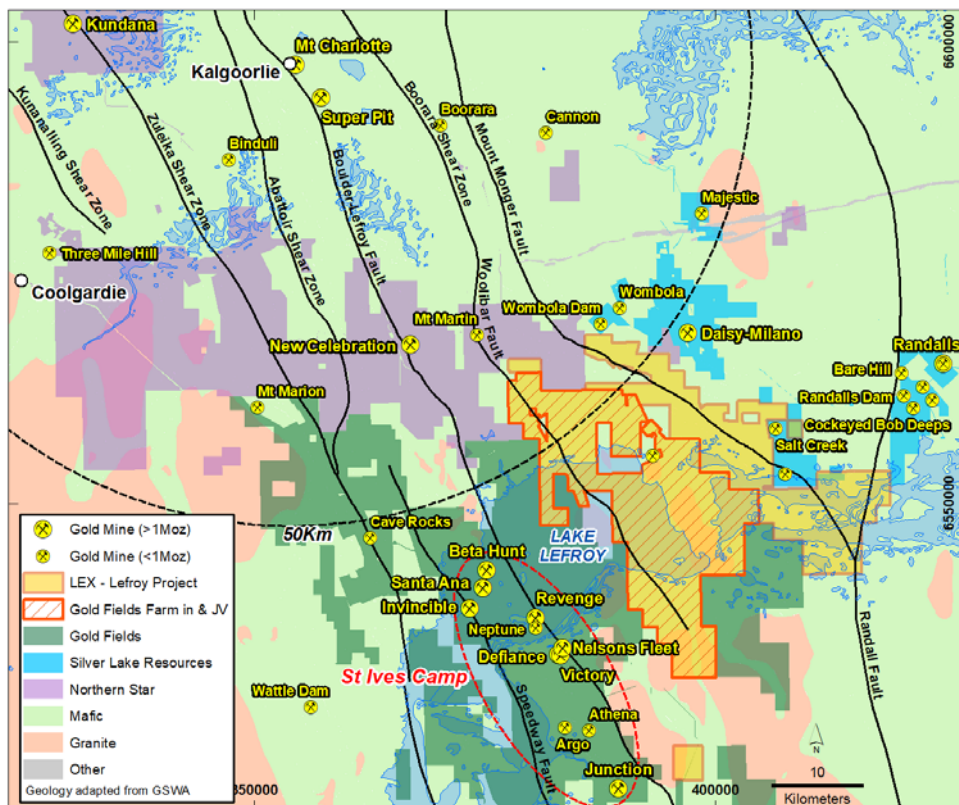


**Figure 3** Aircore drill rig underway at Bullseye.

## About Lefroy Exploration Limited

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

The 100% owned Lefroy Gold Project contains mainly granted tenure and covers 621km<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, major gold deposits in the district and land holdings of Gold Fields, Northern Star Resources Ltd and Silver Lake Resources Limited.**

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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 the drill results 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 on the Lake Johnston Project

- Lefroy Exploration Limited-Prospectus: 8 September 2016
- Exploration Update 23 December 2016
- September 2018 Quarterly Report: 29 October 2018
- 2018 AGM Presentation: 3 December 2018

*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.*

*WAMEX-Western Australia Mineral Exploration Reports- A database of exploration reports submitted annually to the Geological Survey of Western Australia and held on either closed or open file.*

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