



Lefroy Exploration

ASX: LEX

WA FOCUSED GOLD, COPPER, NICKEL EXPLORER

*“Targeting high value gold, copper & nickel deposits,
in a highly prospective project portfolio”*

October 2022 Investor Presentation



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Investment Opportunity



Targeting high value gold, copper, nickel deposits



Projects in Tier 1 exploration & mining jurisdiction of Western Australia



Focused on gold & 'green' sustainable metals with future demand growth



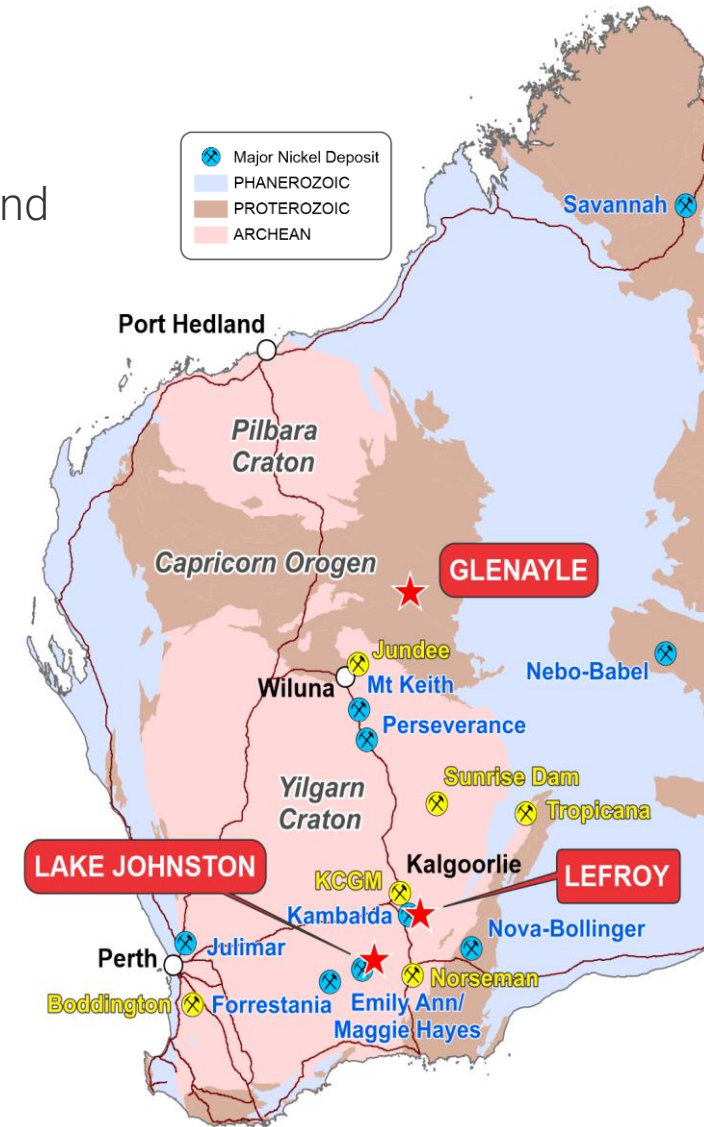
Flagship 'Burns' Project first-of-a-kind Archaean gold-copper porphyry system



\$25M Farm-in & Joint Venture with Gold Fields Ltd – our largest shareholder

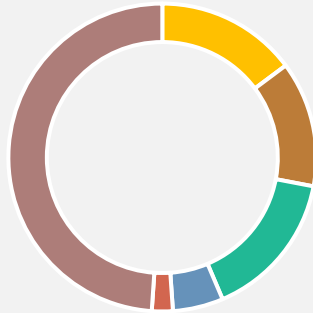


Highly experienced board with >20% significant share holding



Corporate Snapshot

LEX Major Shareholders



- Gold Fields Ltd 14.8%
- Noontide Investments Ltd 13.2%
- LEX Board 15.6%
- LEX Share Plan 5.3%
- Lowell Fund Resources 2.2%
- Other 49%

Key Metrics*

ASX Code	LEX
Issued Capital	145.87M
Market Capitalisation	\$42.3M*
Top 20 Shareholders	71.4%*
Board Ownership	20.2%*
Cash <small>(REFER JUNE QUARTERLY 2022)</small>	\$4.2M
Debt	No debt

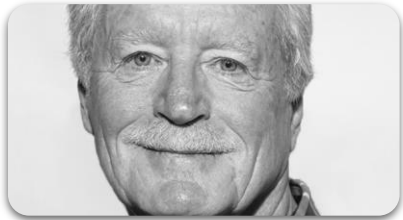
* AS OF 19 OCTOBER 2022

Experienced Board

Highly experienced board and management

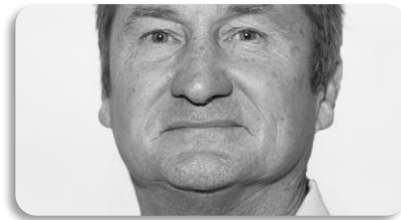
Leading exploration, regional and financial experience

Board investment >20%



Gordon Galt
Non-Executive Chairman

Mining Engineer
25+ years of experience in project development, management, directorship, banking



Wade Johnson
Managing Director

Geologist
25+ years experience in mineral exploration, development, management, directorship



Michael Davies
Non-Executive Director

Mining Finance Specialist
20+ years experience in resource financing, investment banking, directorship



Tara French
Non-Executive Director

Geologist
20+ years experience in exploration, management, development, mining, directorship & Current MD Cazaly Resources Ltd

The Lefroy Project: Overview

Strategic Commodity & District Focus

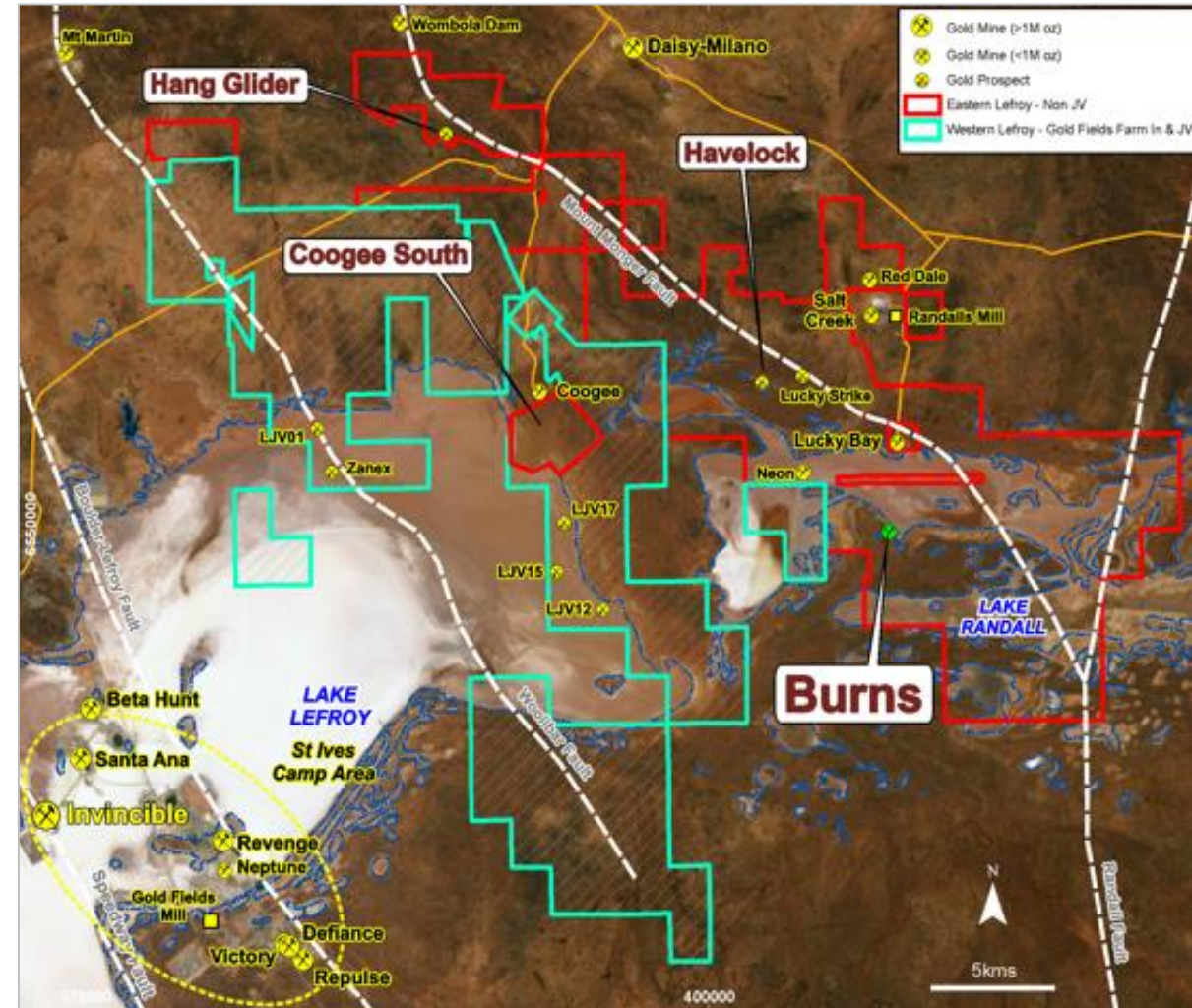
- Multiple **operating mines & mills** in region with access to **world-class infrastructure**
- **100% owned 530km²** contiguous land package

Western Lefroy JV & Farm-In Project

- \$25M Gold Fields Farm-In to earn 70% over 6 years
- Ongoing **46,000 m** Full Field Aircore Program

Eastern Lefroy Project

- **32km of strike** along a **major regional structure** to explore
- **Numerous highly prospective prospects** gold, copper, nickel
- Emerging '**Burns**' Gold-Copper (+Mo, Ag, Co) Discovery
- Burns **resource drilling** underway



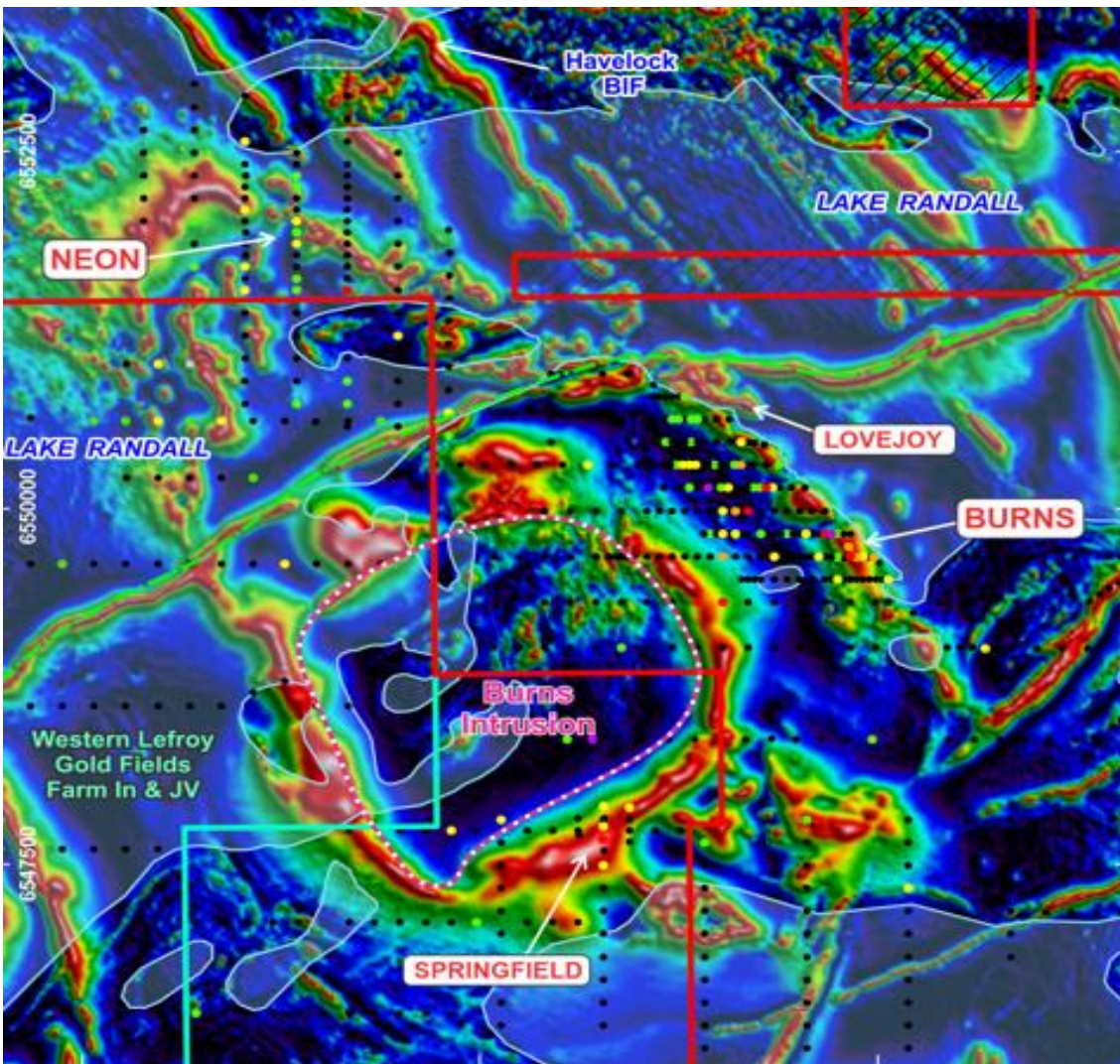
BURNS

A GROWING GOLD- COPPER DISCOVERY



Burns Background

Burns Magnetic Anomaly (TMI):



1985
BHP

- BHP identified **annular magnetic feature** typical of a carbonatite anomaly
- Drilled 2 diamond holes that intersected magnetite-bearing dolerite and porphyry

2008-2010
Newmont

- Newmont drilled 157 holes of **aircore** 2km west of *Burns* which intersected 1m @1.76g/t Au

2011-2016
Octagonal

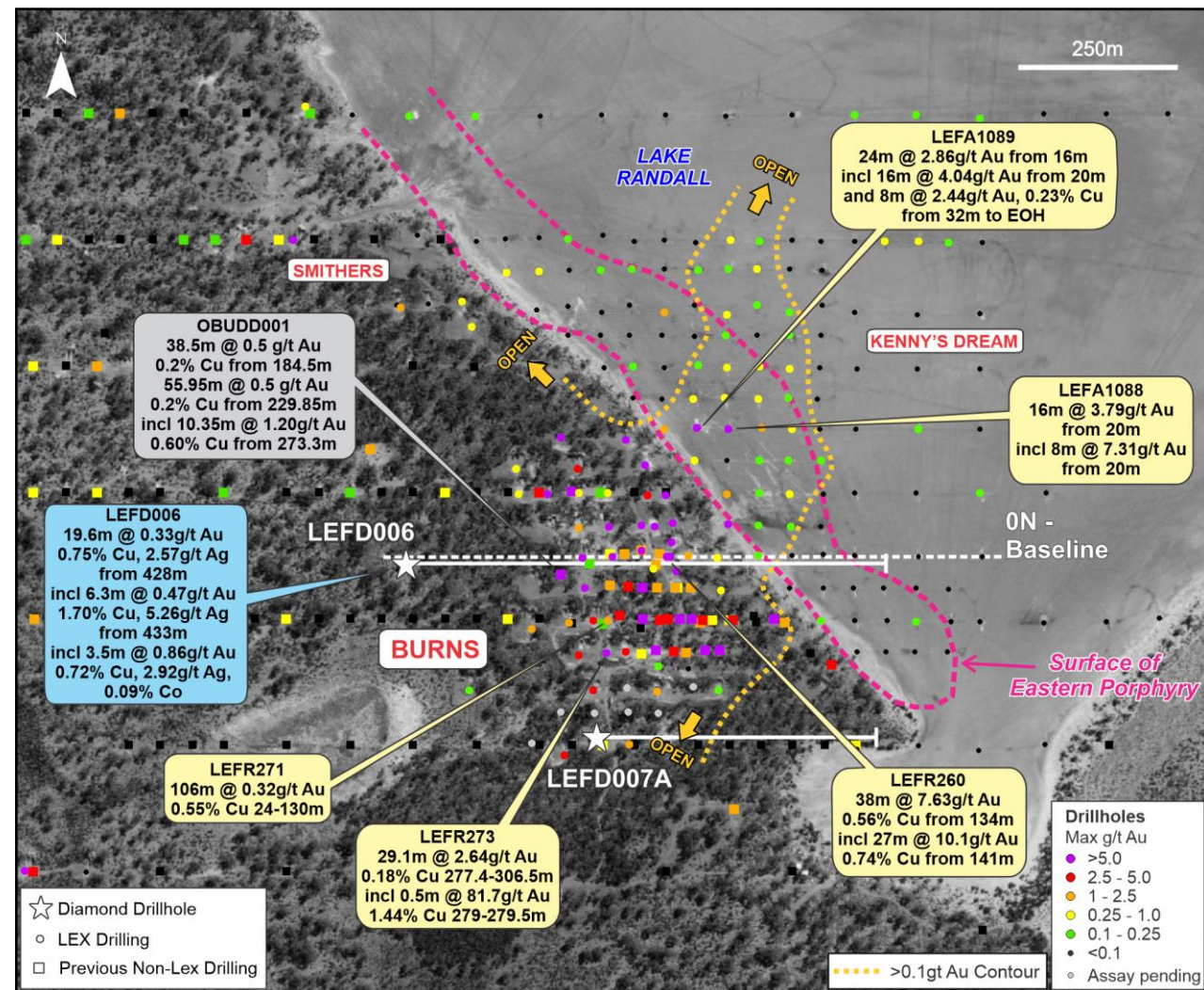
- *Burns* discovery & diamond hole *OBUDD001* intersects 55m @ 0.5g/t Au & 0.2% Cu from 230m in porphyry and basalt

Feb 2021
Lefroy

- LEX RC drilling targeting Burns intersects:
- 38m @7.63g/t Au & 0.56% Cu (LEFR260) from 134m in porphyry
- **Gold-copper + Molybdenum + silver porphyry** related system defined by further drilling

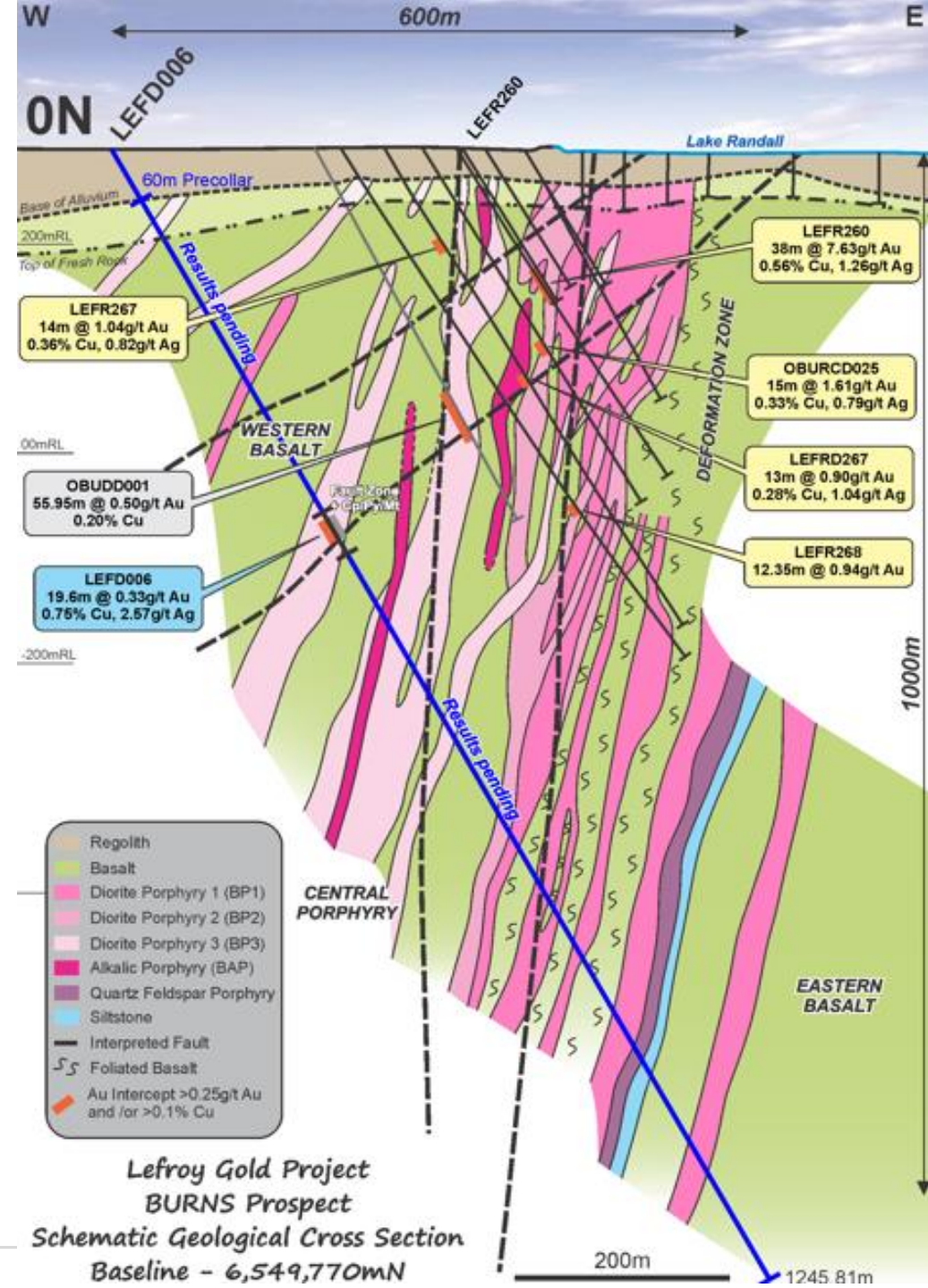
Burns: LEX Expands Mineralisation

- Multiple step-out & infill drill programs continue to expand mineralisation:
 - ~ **600m wide x 200m vertical AND OPEN**
- Geochronology & internal research indicates Burns may be **'first of a kind'** in Australia Archaean aged copper-gold porphyry system
- 2 deep diamond holes** drilled into *Burns Central*:
 - LEFD006* - 1.2km hole to further test the vertical & lateral extent
 - LEFD007* - 706m hole into high grade component as 250m step-out south of Burns



Burns: LEX Expands Mineralisation (Continued)

- LEFD006 & LEFD007a intersected **broad native copper** zones in highly altered drill core, highlighting:
 - 4 key geological domains over 600m** width in an intrusive related system (LEFD006)
 - 2 x 30m intervals of native copper blebs in basalt (149m-184m & 205m-231m)
 - Burns is a fertile, multi-stage mineralised system**
- 61m zone including potassic altered diorites + chalcopyrite, pyrite, molybdenite returned 19.6m @ 0.75% Cu and 0.33g/t Au from 400m **AND Cobalt** including 3.5m @ 0.72% Cu, 0.86 g/t Au, 0.09% Co from 430m
- Remaining assays for 1,139m are pending (expected late November)

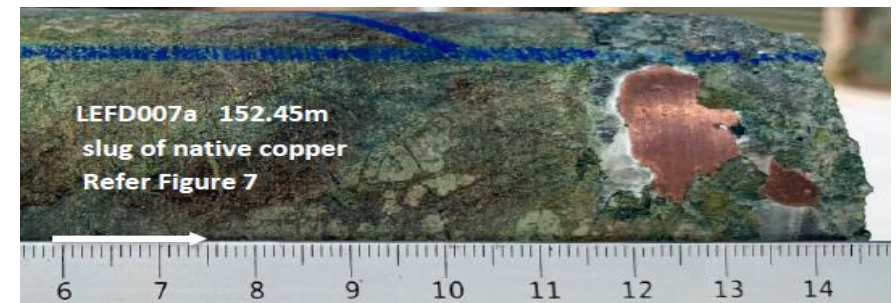


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LEFD006 – 0.5g/t Au and 2.3% Cu

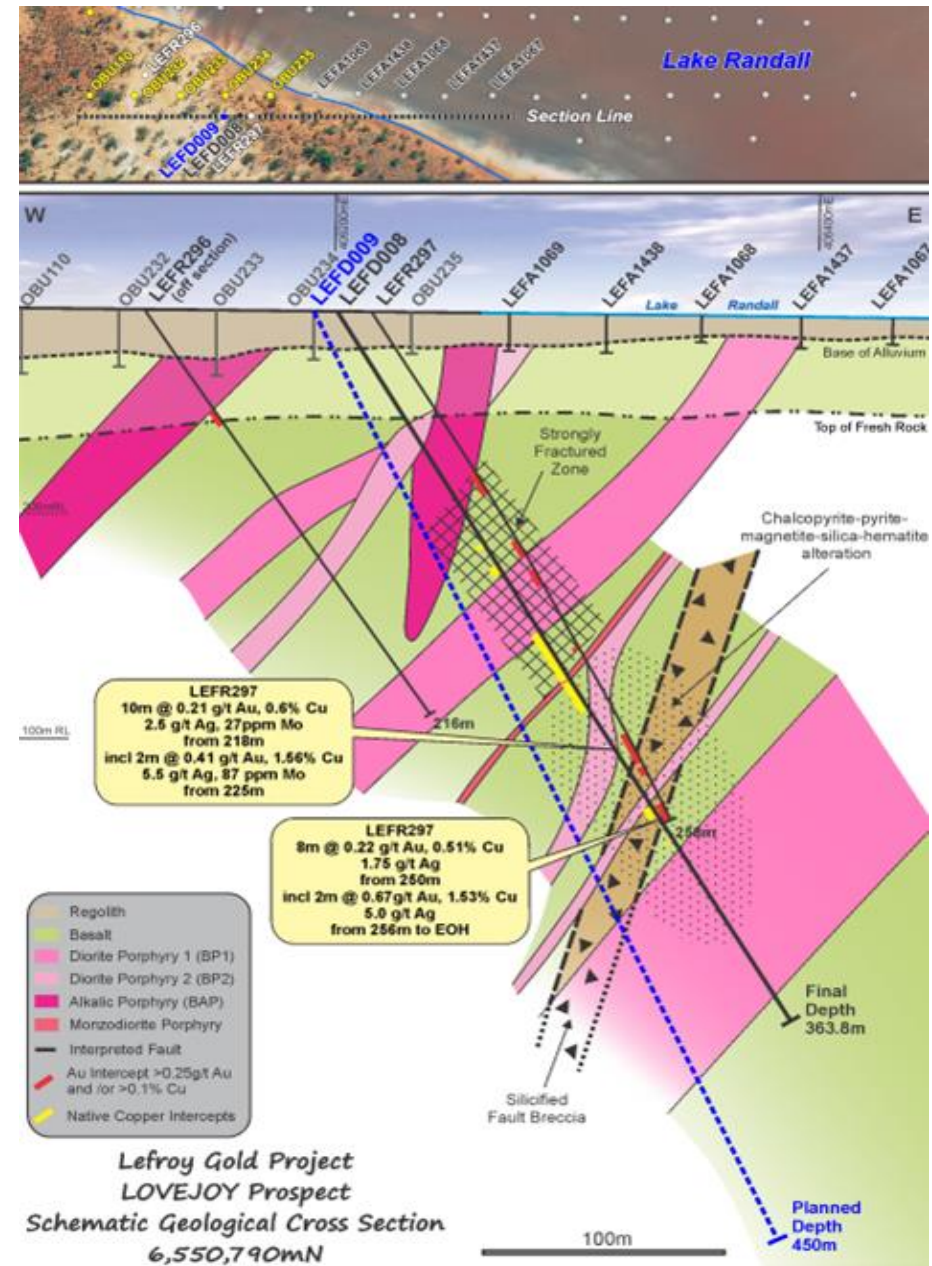


LEFD007a– Native copper in fracture plane drill core 152m

Burns: Lovejoy Prospect

Neighbouring target increases scale of system

- Located 1.5km north along strike of Burns
- A 364m diamond hole *LEFD008* intersected significant copper mineralisation:
 - 145m long interval @ 130m - 275m including;
 - 42m of hydrothermal breccia + native Cu & Cu sulphides from 233m – 275m
- Intense native copper zone coated several steel drill rods
- Follow-up hole *LEFD009* drilled 10m to west and 467m depth
- Fast-tracking assays for copper, gold, multi-elements at lab



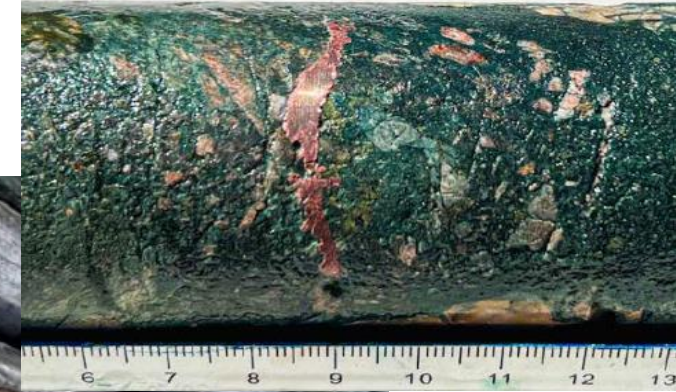
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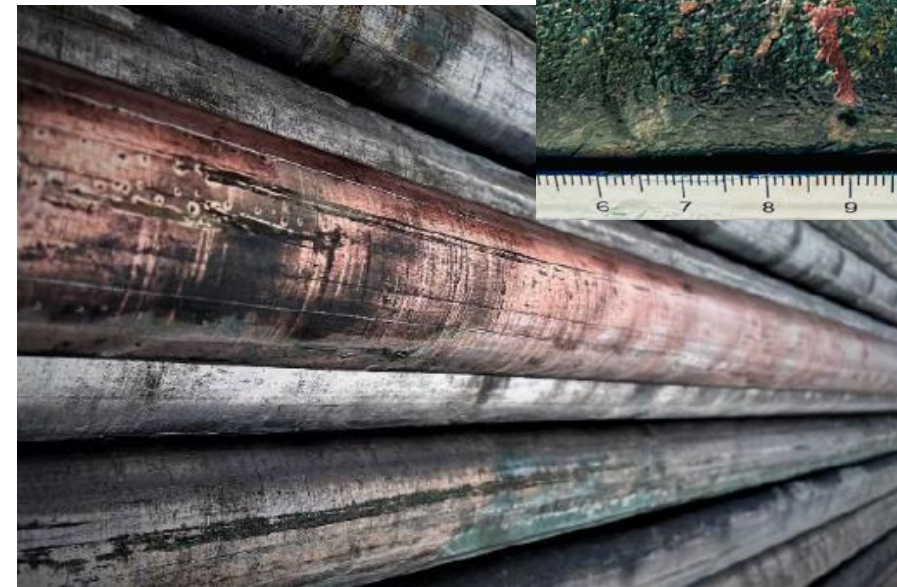
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LEFD008 –
Copper replacing
basalt clasts



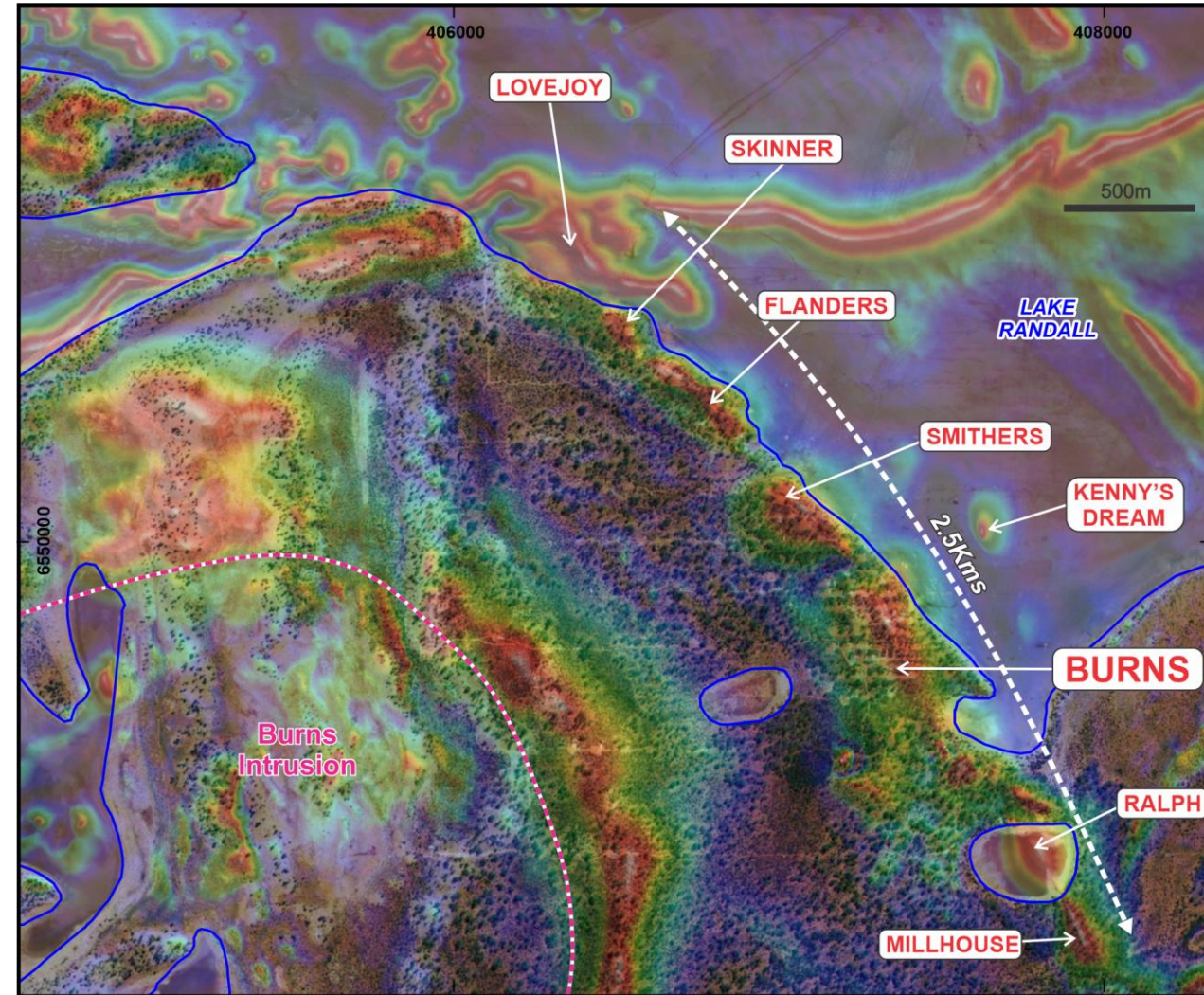
LEFD008 –
Copper nugget



LEFD0087 –
Copper coated drill rod

Burns: Large Scale Potential

- Visual breccia and native copper results confirm *Burns* & surrounding prospects source is part of a large gold-copper intrusion related hydrothermal system.
- Additional Burns-like targets over approx. 2.5km strike
 - *Ralph* - coincident gravity & magnetic anomaly on a similar scale to *Burns* & completely untested
 - *Smithers & Flanders* - limited AC & RC drilling with gold, copper, molybdenite geochemical signature like *Burns*
 - *Neon* historic gold anomaly tested by Western mining with broad gold, copper, molybdenum anomaly identified by LEX first pass infill aircore drilling
 - + MORE ~ *Millhouse, Skinner, Burns Intrusion*



Refer September 20 ASX Release

Burns & Lake Randall



Looking East

Kennys Dream

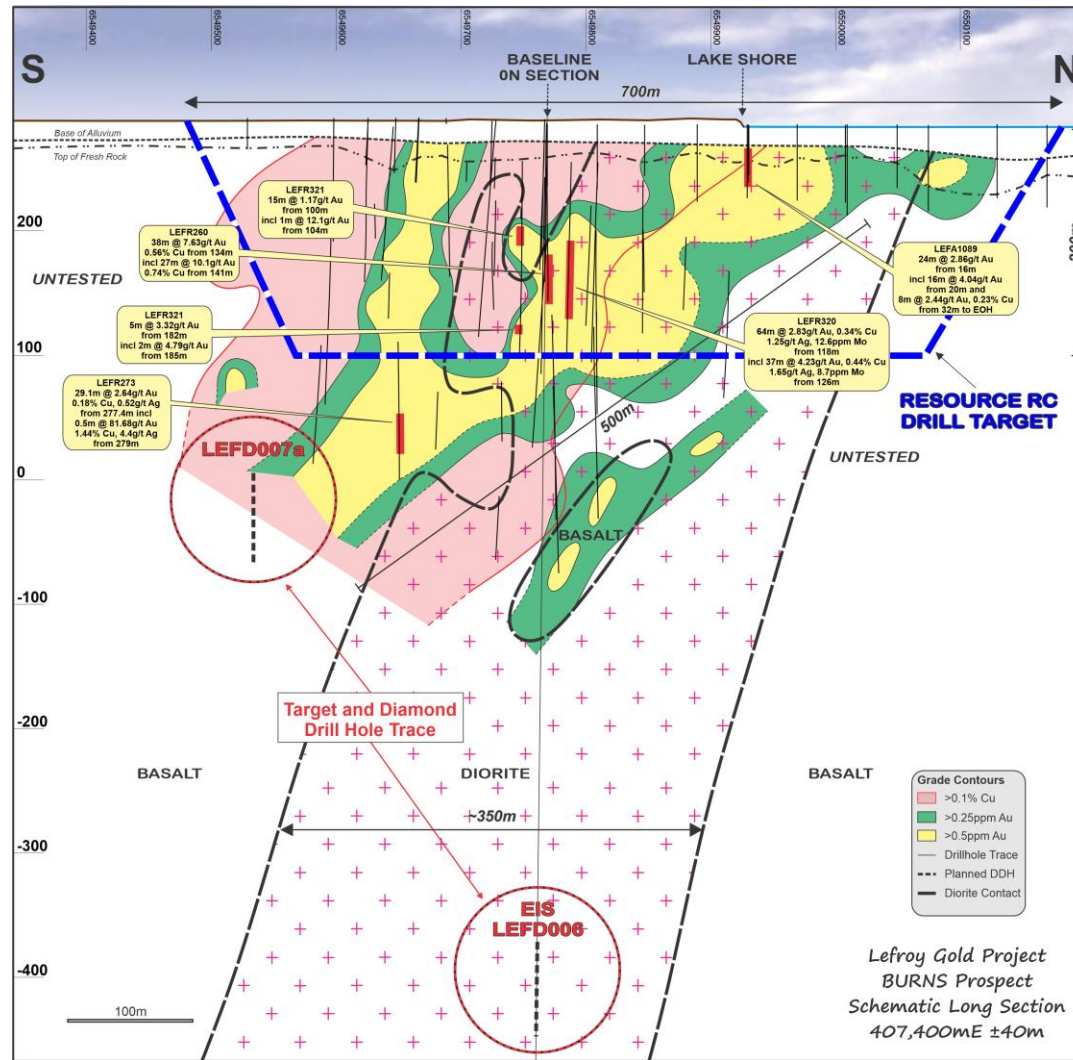
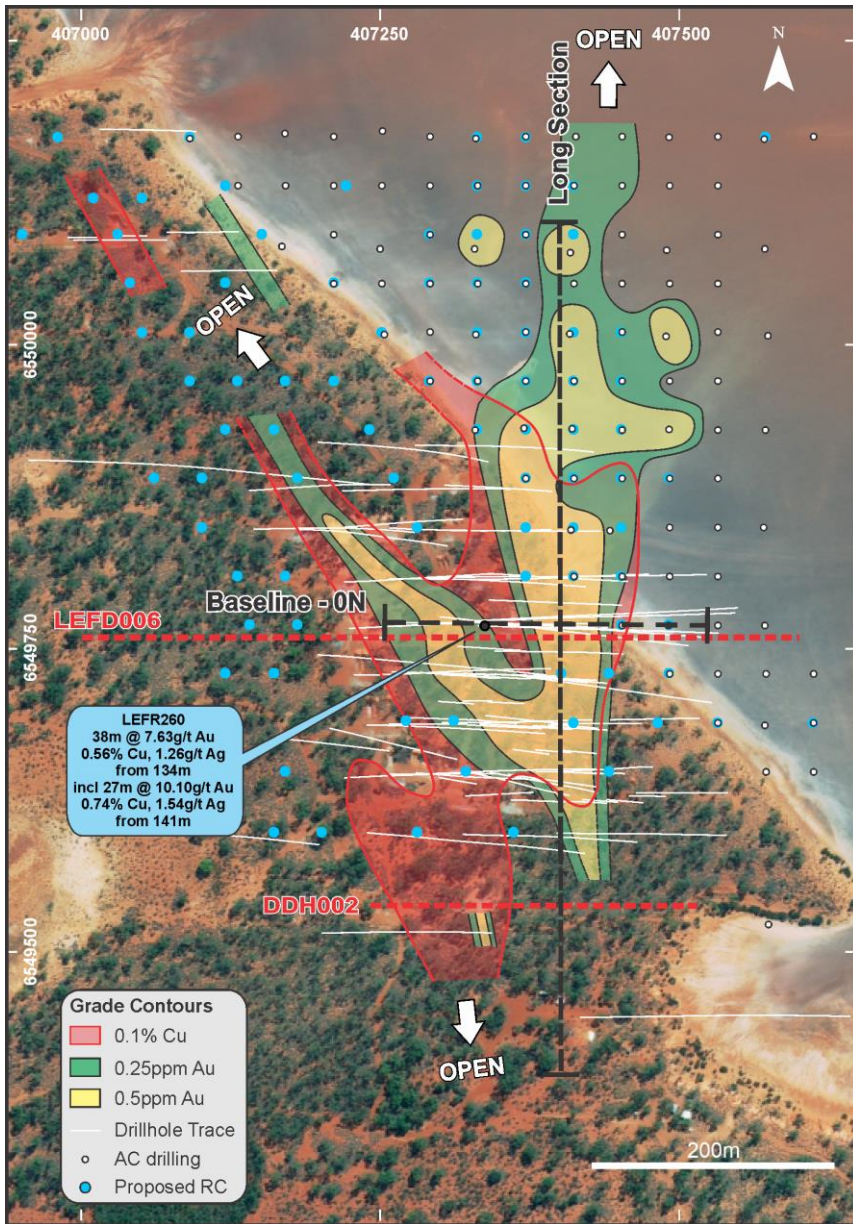
Smithers

Burns

Ralph

Millhouse

Burns: Deliver Maiden Resource CY23



- +100 RC hole program currently underway
- Targeting shallow open pitable gold-copper resource
- Aim to deliver resource estimate in Q1 CY23

Burns: Unique to the Goldfields, WA

Advancing a new style of mineralisation

Age – 2.6 billion years old (Archaean)

Location – Yilgarn, Eastern Goldfields

Rocks – diorite porphyries

- Alkalic porphyry gold-copper deposits are not documented in Western Australia
- Eastern Goldfields is not known to host alkalic porphyry style mineralisation

Geochemical Signature

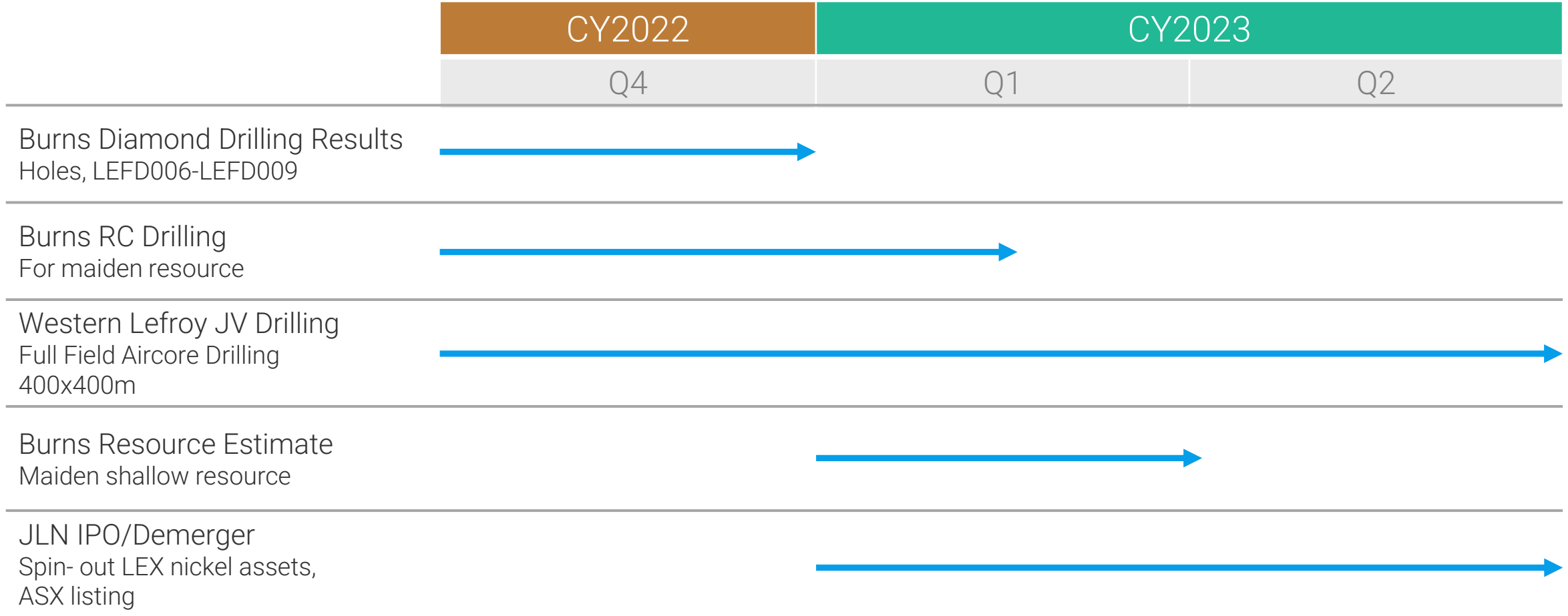
Zoned alteration assemblage analogous with modern porphyry systems:

- Gold + copper + molybdenum + silver association
- Potassic and magnetite alkalic alteration
- Sulphides

Canadian Examples of Alkalic Porphyry Systems

- Kwanika – NorthWestCopper – Quesnel Terrane BC Canada
- Galore Creek – Newmont/Teck – NW British Columbia
- Cote – IAMGOLD – Ontario, Canada

Activities & Newsflow: Next 6 Months



NB: LEX activities are subject to any changes and are subject to results, field conditions and going review

Proposed Nickel Assets Demerger / IPO

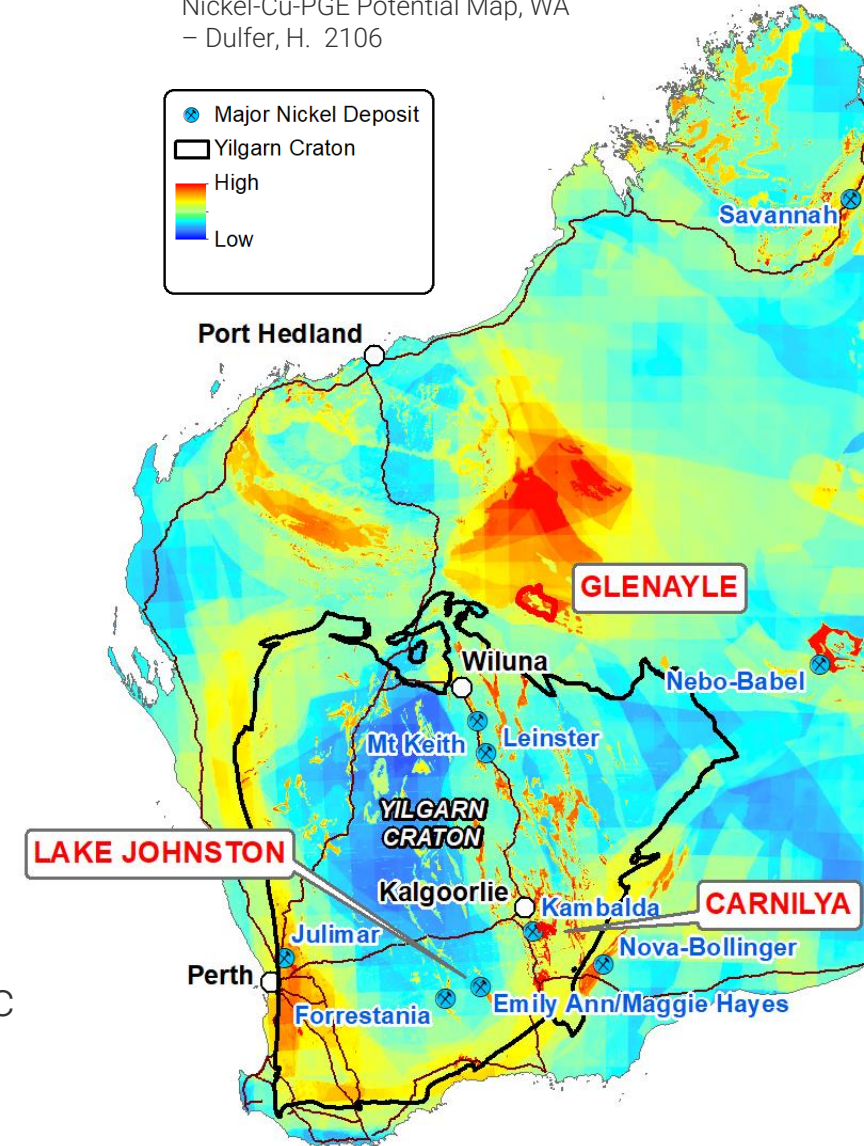
Johnston Lakes Nickel

- 100% wholly-owned LEX subsidiary Johnston Lakes Nickel Ltd -JLN
- Targeted ASX listing first half CY23
- Strategic move to unlock value of highly prospective nickel assets for LEX shareholders
- Highly credentialed Board & Management team, including two former Western Areas executives

Three Nickel Projects

- Carnilya South – 10km strike of Kambalda Komatiite 1km south of Carnilya nickel mine
- Lake Johnston – north of adjoining Emily Ann/Maggie Hays mine
- Glenayle – 2700 km² land package NE of Wiluna prospective for magmatic nickel-copper sulphide mineralisation with first mover advantage

Nickel-Cu-PGE Potential Map, WA
– Dulfer, H. 2106



Company Takeaways

- Strong commitment to generative exploration and discovery in a quality gold-copper-nickel portfolio
- Focused on a new style of high value gold-copper mineralisation within a tier one gold province
- Underpinned by the \$25 million Farm-In & JV with Goldfields Ltd at Western Lefroy
- Committed to creating long-term shareholder value
- Tight capital structure leverages share price to exploration success



Lefroy Exploration

THANK YOU

ACCELERATING EXPLORATION IN
A WORLD CLASS GOLD DISTRICT

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Competent Person Statement

Notes Specific-ASX Announcements Investor Presentation

The following announcements were lodged with the ASX (including supporting JORC Reporting Tables) and details for each of the sections noted in this Presentation and can be found in the announcements. Note that these announcements are not the only announcements released to the ASX since the last presentation dated 2 February 2022 but specific to exploration reporting. The Company confirms that it is not aware of any new information or data that materially affects the information previously reported.

- 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
- Resource RC Drilling Program Underway at Burns: 6 October 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 Johnson 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.