



Lefroy Exploration

NOOSA MINING CONFERENCE PRESENTATION

Wade Johnson Managing Director

19 JULY 2023

ASX: LEX

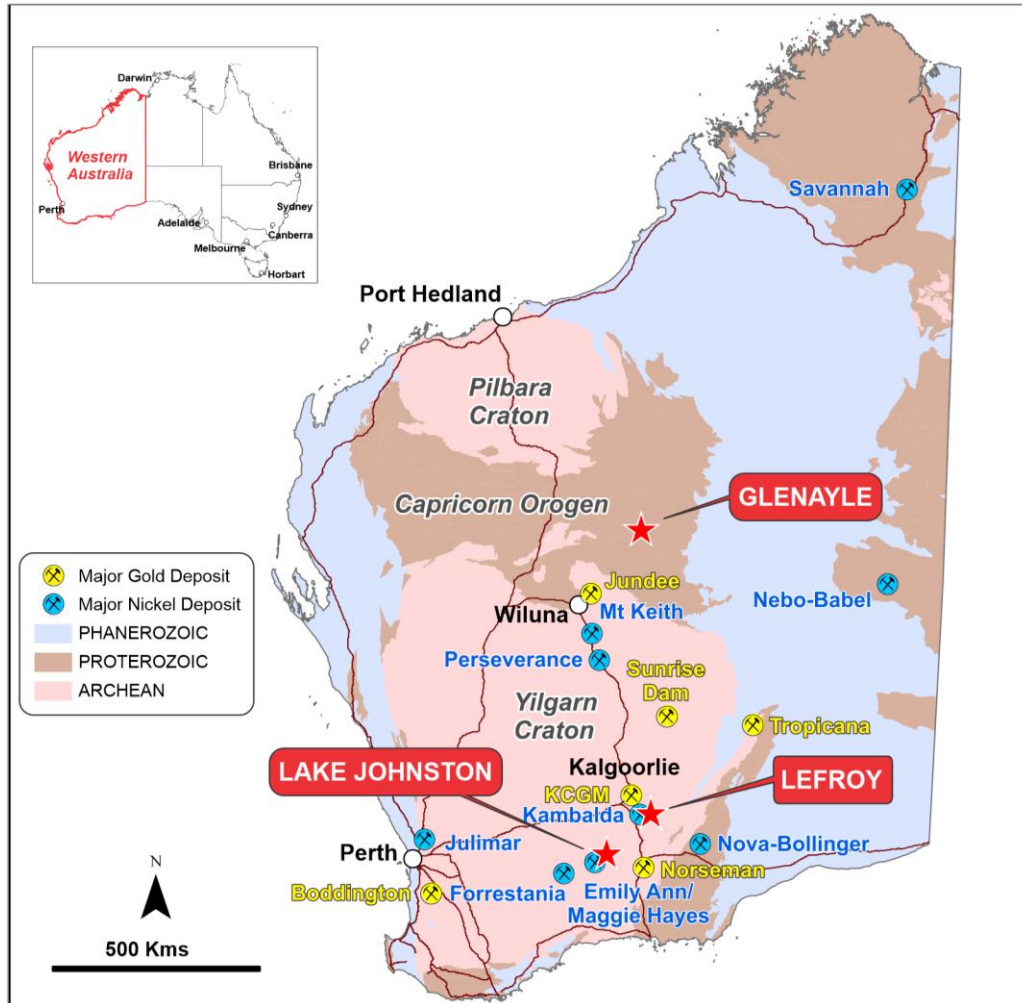
Disclaimer

This presentation contains summary information about Lefroy Exploration Limited (LEX) and is current as of 19 July 2023. It does not represent an offer of securities for subscription or sale in any jurisdiction nor a securities recommendation. The information contained in this presentation is of a general nature and does not purport to be complete and does not contain all information necessary for investment decisions. This presentation is not investment or financial product advice (nor tax, accounting or legal advice) and is not intended to be used for the basis of making an investment decision. The information contained in this presentation has been prepared without taking into account the objectives, financial situation or needs of individuals. Investors should obtain independent professional advice from an accountant, lawyer or other professional advisor before making any investment decisions in relation to LEX. Any figures, valuations, forecasts, estimates, opinions and projections contained in this presentation involve elements of subjective judgment and analysis and assumption. Any opinions expressed in this material are subject to change without notice, including as a result of using different assumptions and criteria.

This presentation contains “forward-looking statements”. Forward-looking statements are often, but not always, identified by the use of words such as “seek”, “anticipate”, “believe”, “plan”, “expect”, “predict”, “forecast”, “estimate”, “target” and “intend” and statements that an event or result “should”, “could”, “may”, “will” or “might” occur or be achieved and other similar expressions. Indications of, and guidance on, future earnings and financial position performance are always forward-looking statements. Forward-looking statements are subject to business, legal and economic risks and uncertainties and other factors that could cause actual results to differ materially from those contained in forward-looking statements. Forward-looking statements, opinions and estimates provided in this presentation are based on assumptions and contingencies at the date the statements are made and are subject to change without notice, as are statements about market and industry trends, which are based on interpretations of current market conditions. Forward-looking statements including estimates or projections as to events that may occur in the future (including projections of revenue, expense, net income and performance) are provided as a general guide only and should not be relied upon as an indication or guarantee of future performance and may or may not occur. The statements involve known and unknown risks, uncertainties and other factors associated with LEX and the mining exploration industry such as resource risk, environmental and regulatory risks, metals price volatility, currency fluctuations, increased production costs and variances in ore grade or recovery rates and operational risks. Many of risks these are beyond the control of LEX. It is believed that expectations reflected in the statements are reasonable but they may be affected by market conditions and a range of other variables which could cause actual results or trends to differ materially from those stated.

LEX does not undertake to update any forward-looking statements for events or circumstances that occur subsequently or to update or keep current any of the information contained in this presentation. Nothing contained in this presentation is, or shall be relied upon as, a promise or representation as to the past or future. Undue reliance should not be placed upon forward-looking statements. LEX has prepared this document in good faith based on information available to it at the time of preparation that was believed to have a reasonable basis. Neither LEX nor any of its directors, officers, agents, employees or advisors give any representation or warranty, express or implied, as to the fairness, accuracy, completeness or correctness of the information, opinions and conclusions contained in this presentation. Accordingly, to the fullest extent permitted by law, none of LEX, its directors, employees or agents, advisors or any other person accepts any responsibility or liability whatsoever, whether direct or indirect, express or implied, contractual tortious statutory or otherwise and expressly disclaim any and all liability, in respect of, the accuracy or completeness of the information or any opinions expressed in this presentation or for any errors, omissions or misstatements or for any loss howsoever arising, from the use of all or any part of this presentation or any of the information contained in it.

EXPLORATION PORTFOLIO



LEFROY GOLD PROJECT (635km²)

Company's flagship project with commanding land package
<50km from Kalgoorlie, comprised of:

- **Eastern Lefroy Project** (100% LEX)
 - Mt Martin (gold)
 - Burns (gold copper)
 - Goodyear (nickel)
- **Western Lefroy Project** (Gold Fields Ltd JV)

LAKE JOHNSTON PROJECT(180km²)

Nickel rights to highly prospective ground immediately north of the
high-grade Emily Ann and Maggie Hayes nickel mines

GLENAYLE PROJECT(2872km²)

Significant early-mover greenfields opportunity prospective for Nebo-Babel
style nickel and copper mineralisation

Multiple Opportunities in Tier 1 Mining Jurisdiction



HIGHLIGHTS: Lefroy Surpasses 1Moz GOLD



LEFROY GOLD PROJECT

1.1Moz



Resources include 501 Koz gold at Mt Martin Gold Mine, 500 Koz gold and 58kt Cu at Burns Central deposit in Eastern Goldfields, WA

<70km



Proximal to Kalgoorlie and Kambalda gold and nickel districts

635 km²



Commanding land package holds 50km of strike on 100% owned tenure

Resource Inventory*

1.1Moz

GOLD

58kt

COPPER

15kt

NICKEL

DISCOVERIES

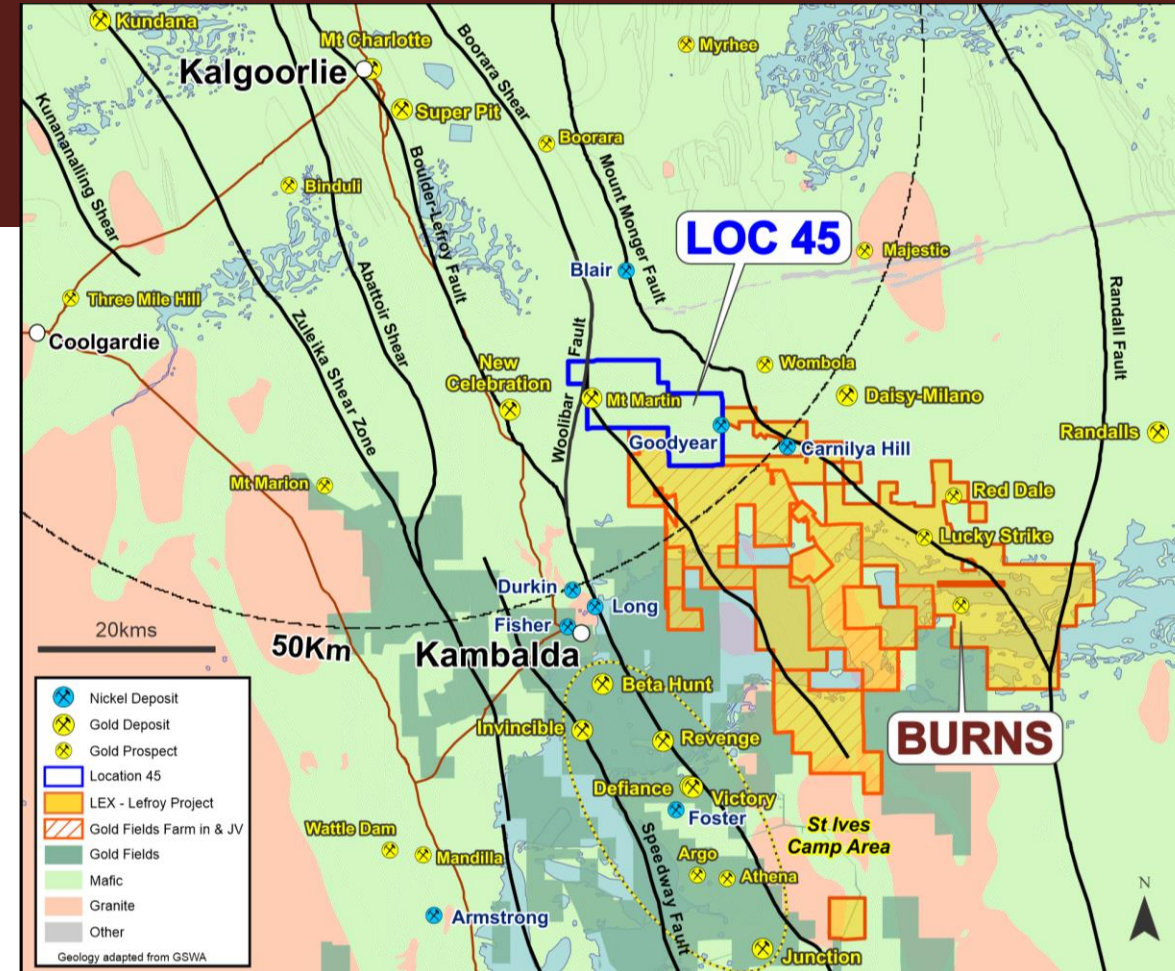
- **Burns Central ***
(500koz gold, 58kt copper, 490koz silver resource)
- **Lucky Strike and Red Dale** (105koz gold resource)

STRATEGIC ACQUISITION

- **Location 45 (Loc 45)** mineral rights 35km southeast of Kalgoorlie
- **Mt Martin Gold Mine** (501Koz Au Indicated & Inferred JORC 2012)
- **Goodyear Nickel deposit** (391kt @ 3.78% Ni (15kt contained Ni))

EXPLORATION AND PRODUCTION OPPORTUNITY

- Resources remain open with significant **exploration upside**
- Multiple options for open-cut, **low strip ratio gold operations**
- 63% of all gold resources in **Indicated resource** category



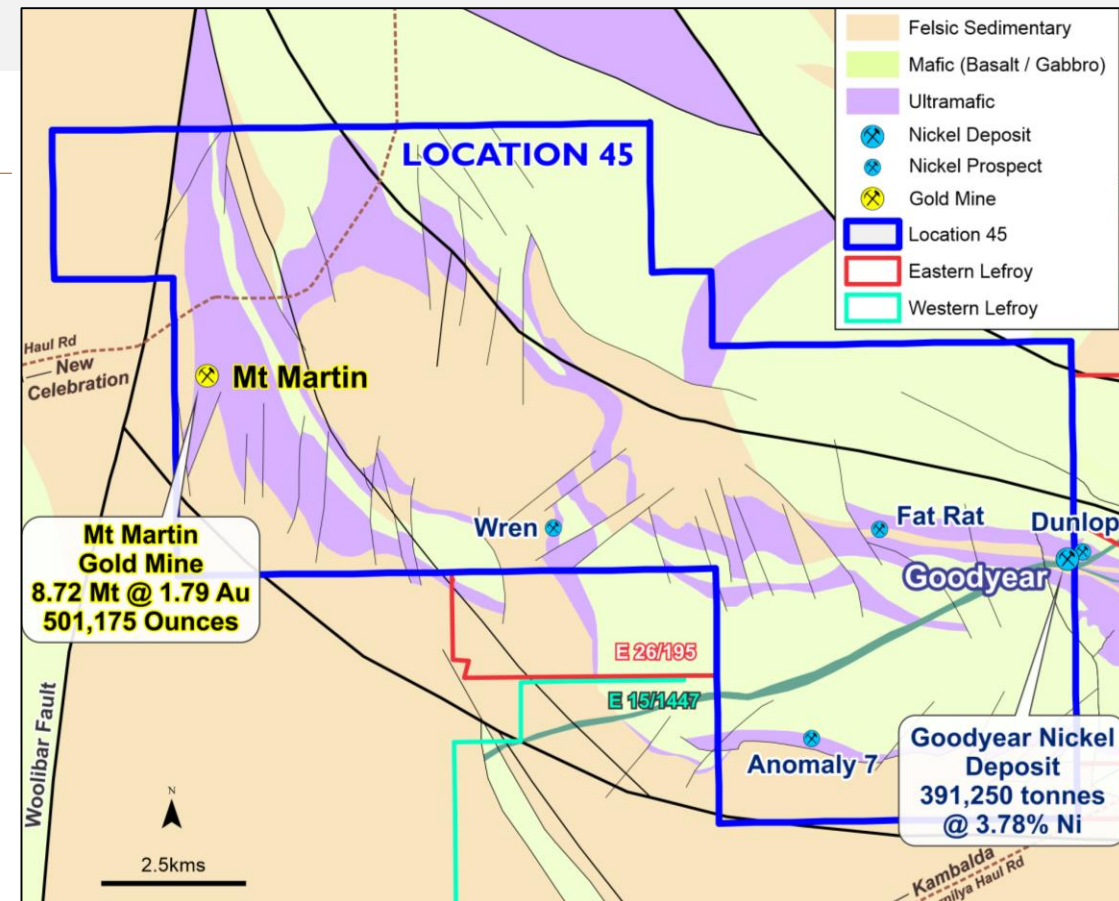
LOCATION 45: A Transformational Acquisition



MINERALS	LOCATION	KEY FOCUS	LAND PACKAGE
Gold Nickel	Kalgoorlie Terrane	Mt Martin Au Mine Goodyear Ni Deposit	76km ²

ACQUISITION DETAILS*

- Mineral rights agreement with Franco-Nevada for **21-year term** and 10 year option to extend with 4% production royalty and no state royalty
- Wholly-owned nickel subsidiary **Hampton Metals Ltd (HMT)** holds nickel, REE, lithium rights including Goodyear Nickel Deposit (**14,870t contained nickel**)
 - **strengthened nickel assets** with over 35km strike of prospective komatiite unit
 - supports proposed separate ASX listing of HMT for second half of 2023
- LEX holds gold & other mineral rights including Mt Martin Gold Mine (**501,175 Oz**)
 - **Expanded gold resources to over 1.1 million Oz**
 - **Provides Lefroy with optionality & opportunity to fast-track development**



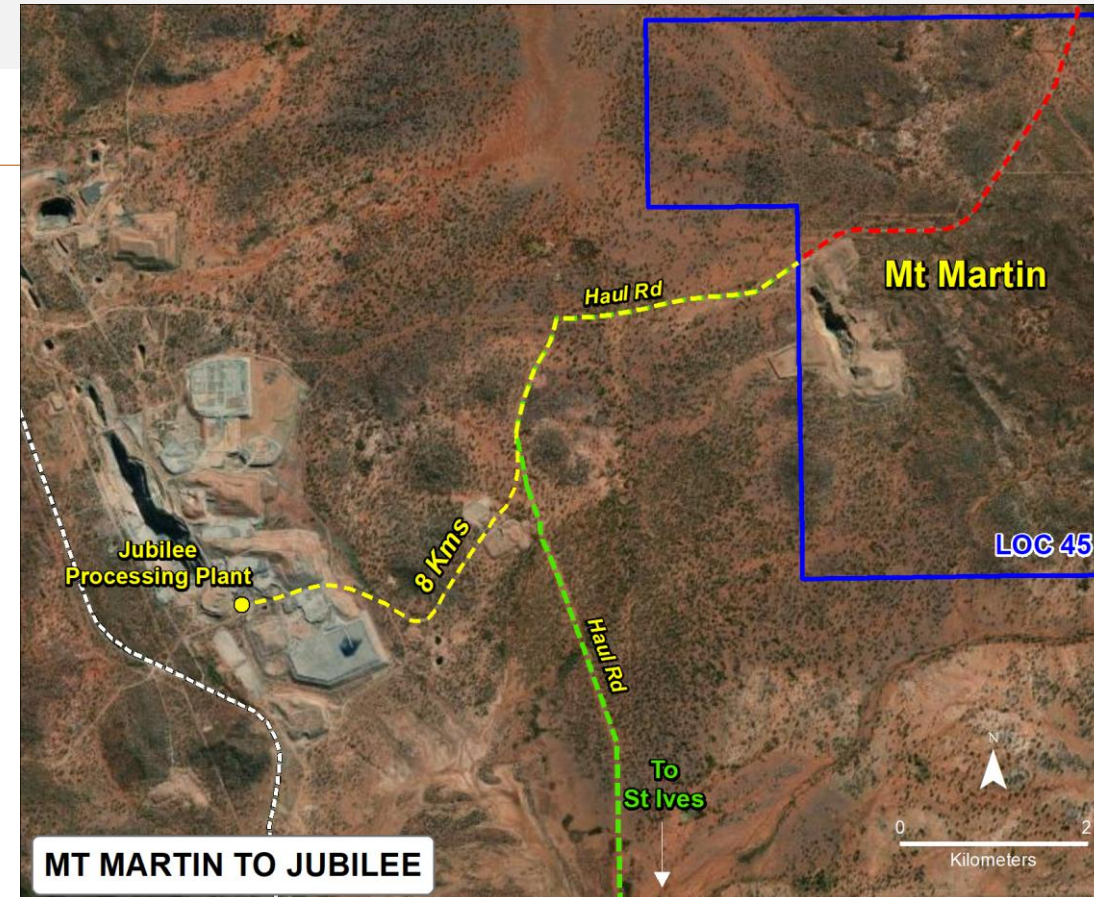
LOCATION 45: Mt Martin Gold Mine



 MINERALS	 LOCATION	 KEY FOCUS	 LAND PACKAGE
Gold	Kalgoorlie Terrane	Exploration & Development	76km ²

MT MARTIN GOLD MINE

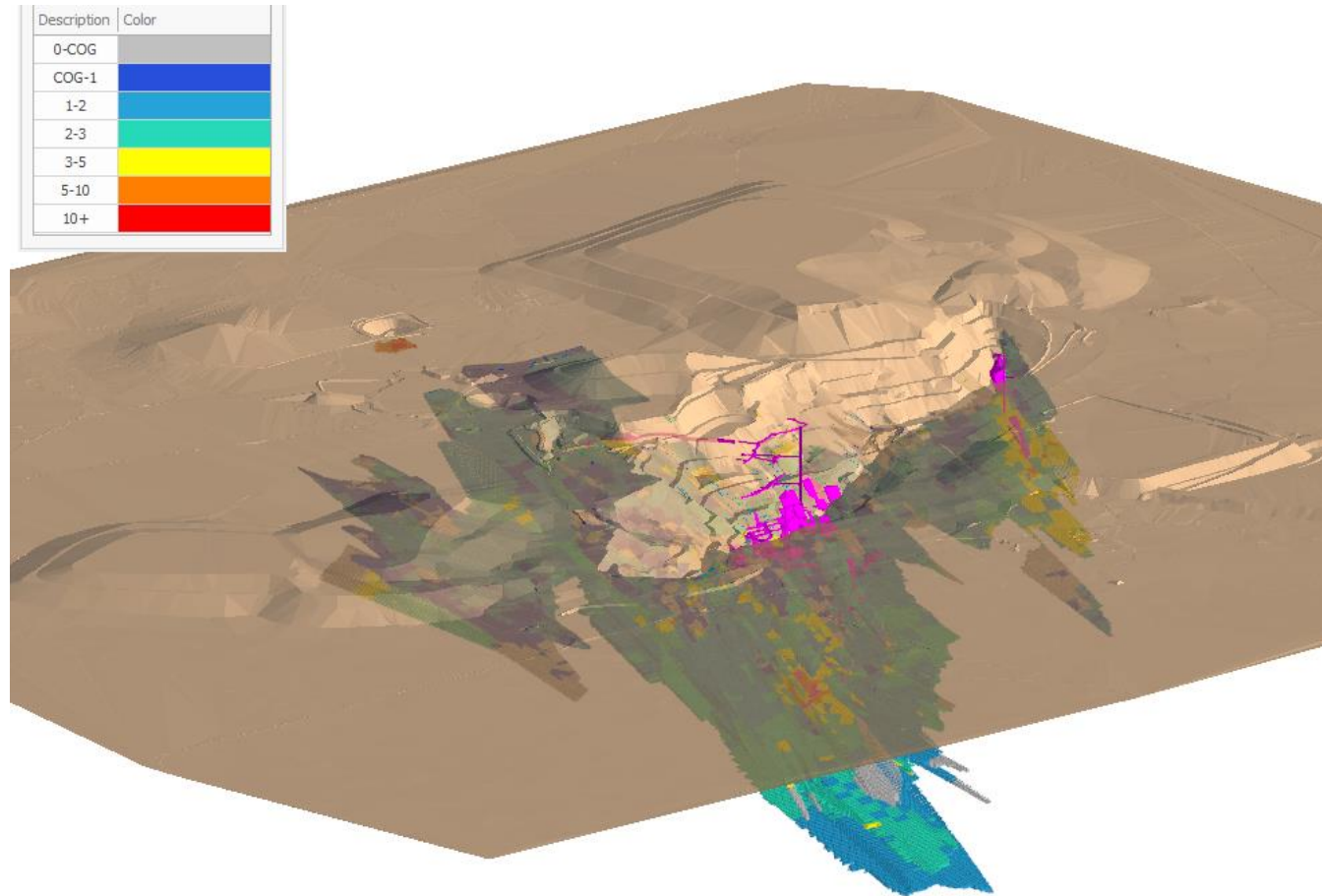
- Underground operation in 1980's
- Last mined 2009 by Dioro Exploration for 743kt @ 1.5g/t gold up (modest open cut) with no mining and limited exploration since
- Majority of ore processed at neighboring New Celebration Mill and Jubilee Mill (now on care and maintenance)
- Alacer Gold Corp reported Indicated/Inferred resource in 2013 of 501,175 Oz (8.7Mt @ 1.79 g/t gold)
 - ✓ Resource amenable to additional open-pit mining with existing haul roads from Mt Martin to Jubilee mill (8km) and ~20km to Gold Fields Ltd's St Ives mill
 - ✓ Resource block model, exploration and drilling database obtained
 - ✓ Detailed review and validation of historic mining data underway



LOCATION 45: Mt Martin Gold Mine



Isometric projection of Mt Martin gold resource, existing pit shell, underground workings (Looking south-east):



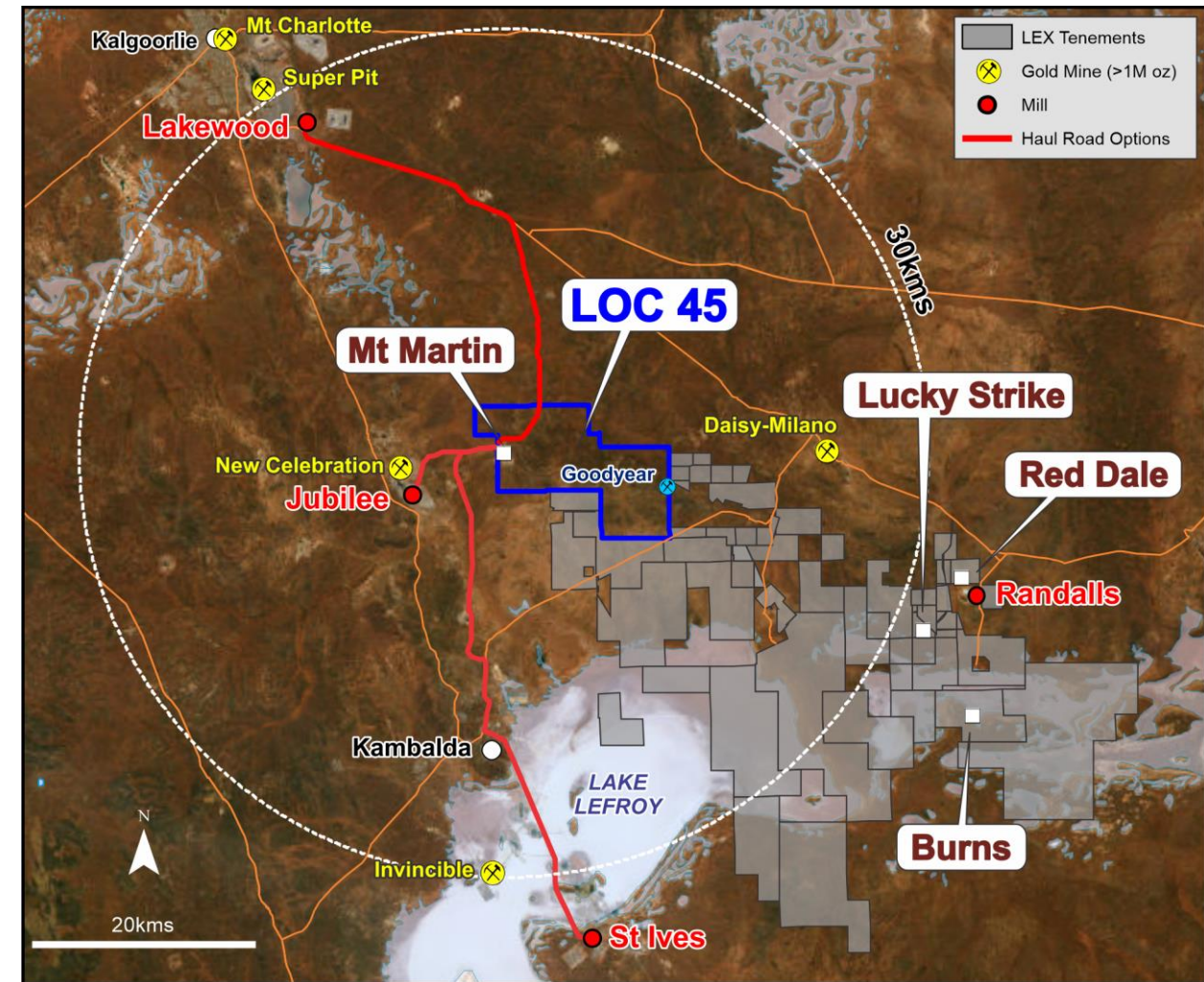
Mt Martin open pit, last mined in 2009 for 743kt @1.5g/t gold (Looking south)



LOCATION 45: A New Growth Opportunity



Priority next steps:



Lefroy Gold Project: Multiple options for haulage and ore treatment

BURNS GOLD-COPPER PROJECT



MINERALS

Gold, Copper



LOCATION

Kalgoorlie Terrane



KEY FOCUS

Resource expansion
Exploration growth



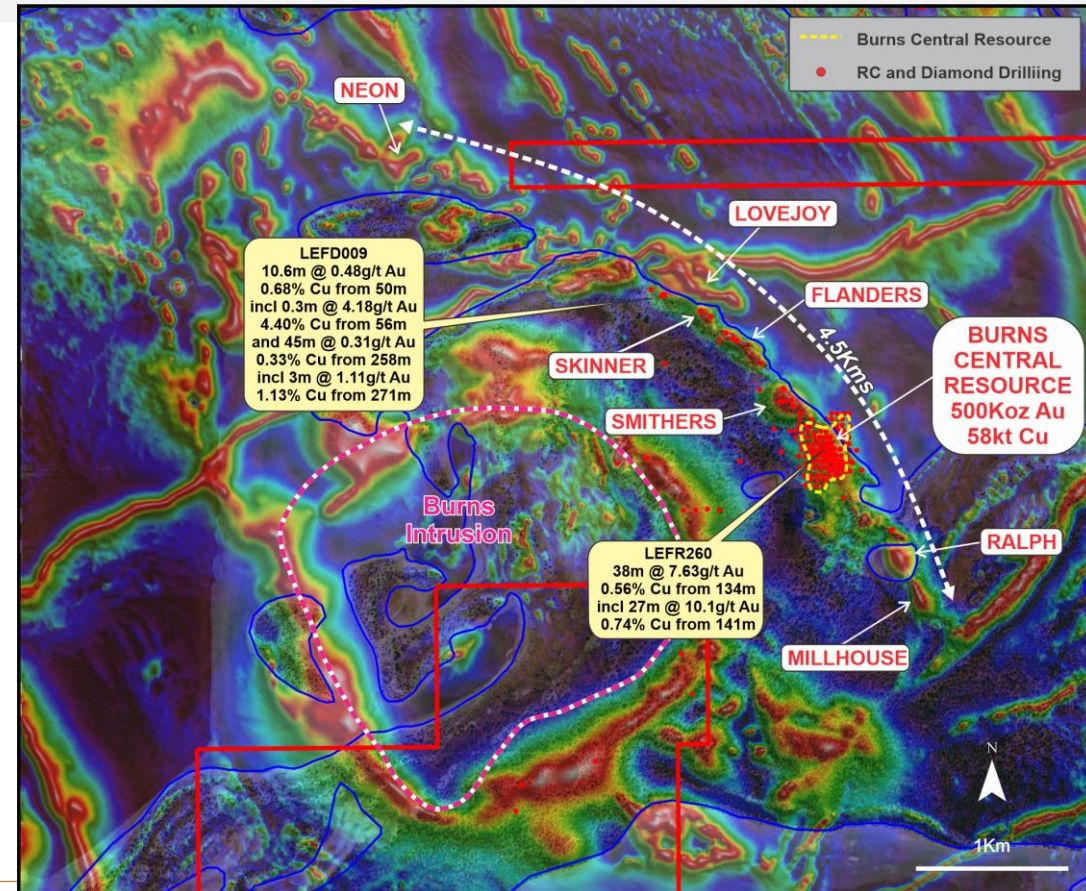
LAND PACKAGE

Within 312km² Eastern
Lefroy Project

SIGNIFICANT RESOURCE AT FLAGSHIP PROJECT

- New style of mineralisation within the Eastern Goldfields
- Approx. 70km SE of Kalgoorlie in 100%-owned Eastern Lefroy Project
- **Burns Central Deposit** is a component of a major gold-copper porphyry system
- Maiden Mineral Resource Estimate released May 2023*:
 - **43Mt @ 0.36 g/t gold, 0.14% copper**
 - 0.5Moz gold
 - 58kt copper
- Located <10km south of LEX's Lucky Strike and Red Dale gold resources
- Most advanced of seven gold-copper prospects within at least 2.5km strike
- This 2.5km trend is a regional structure known as 'Burns Corridor'
- → **significant exploration and development upside**

*refer LEX ASX release 15 May 2023



*refer LEX ASX release 15 May 2023

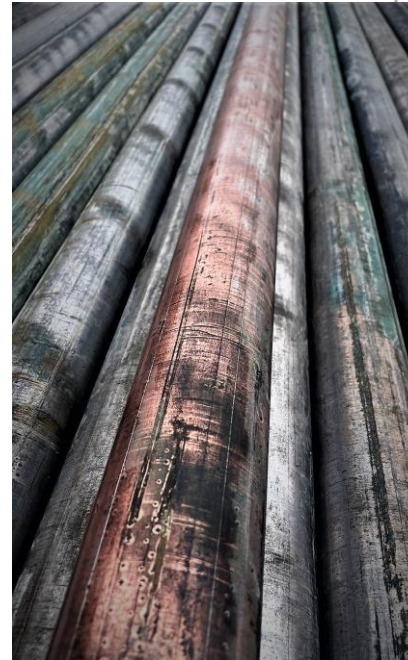
BURNS EXPLORATION UPSIDE



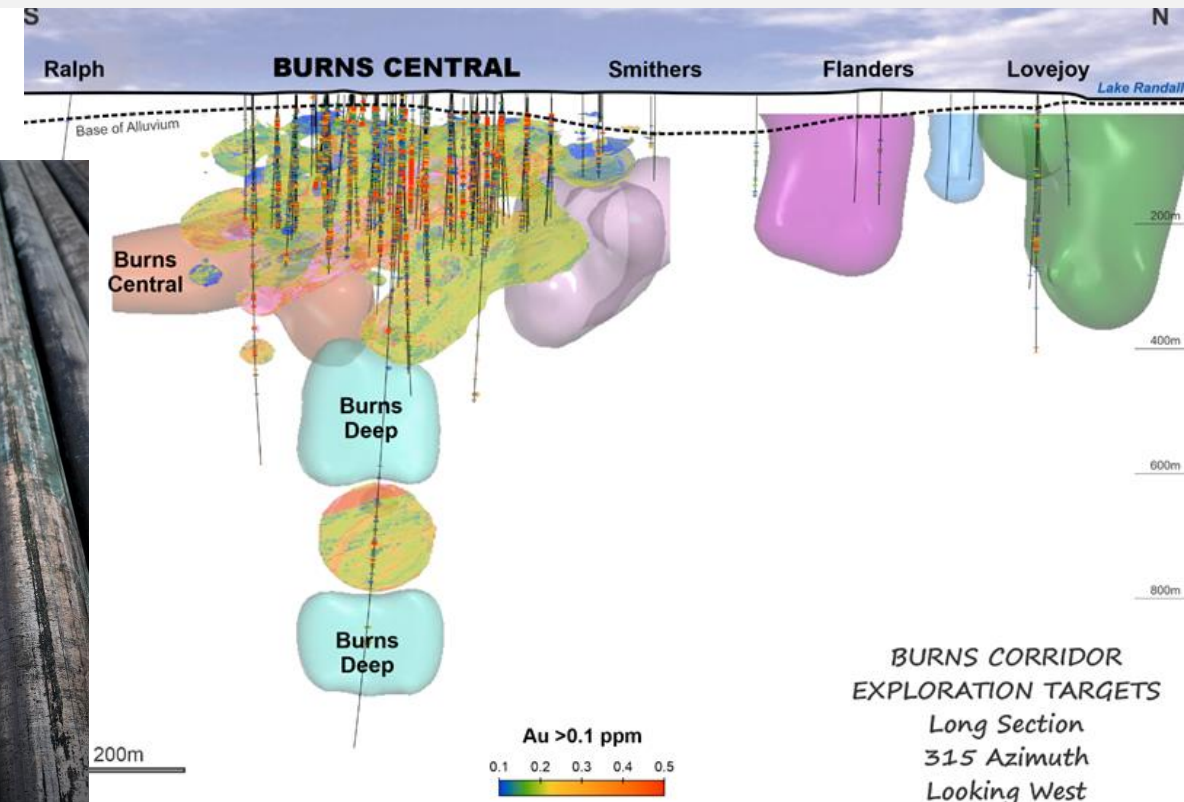
 MINERALS	 LOCATION	 KEY FOCUS	 LAND PACKAGE
Gold, Copper	Kalgoorlie Terrane	Resource expansion Exploration growth	Within 386km ² Eastern Lefroy Project

BURNS EXPLORATION UPSIDE*

- Independent **Exploration Target** estimated by Measured Group Pty Ltd
- Multiple targets present **outstanding resource growth potential** at Burns Central Deposit and over at least 2.5km strike in Burns Corridor trend
- Total Exploration Target ranges up to **175Mt @ 2.5 g/t gold**
- **Targets that can add tonnes quickly** include:
 - **Burns Central** with higher-grade gold concentrated at core of porphyries, which plunges south & is **open**
 - Three additional gold-copper targets along strike of Burns Central at **Smithers, Flanders, Lovejoy** which remain **open** at depth



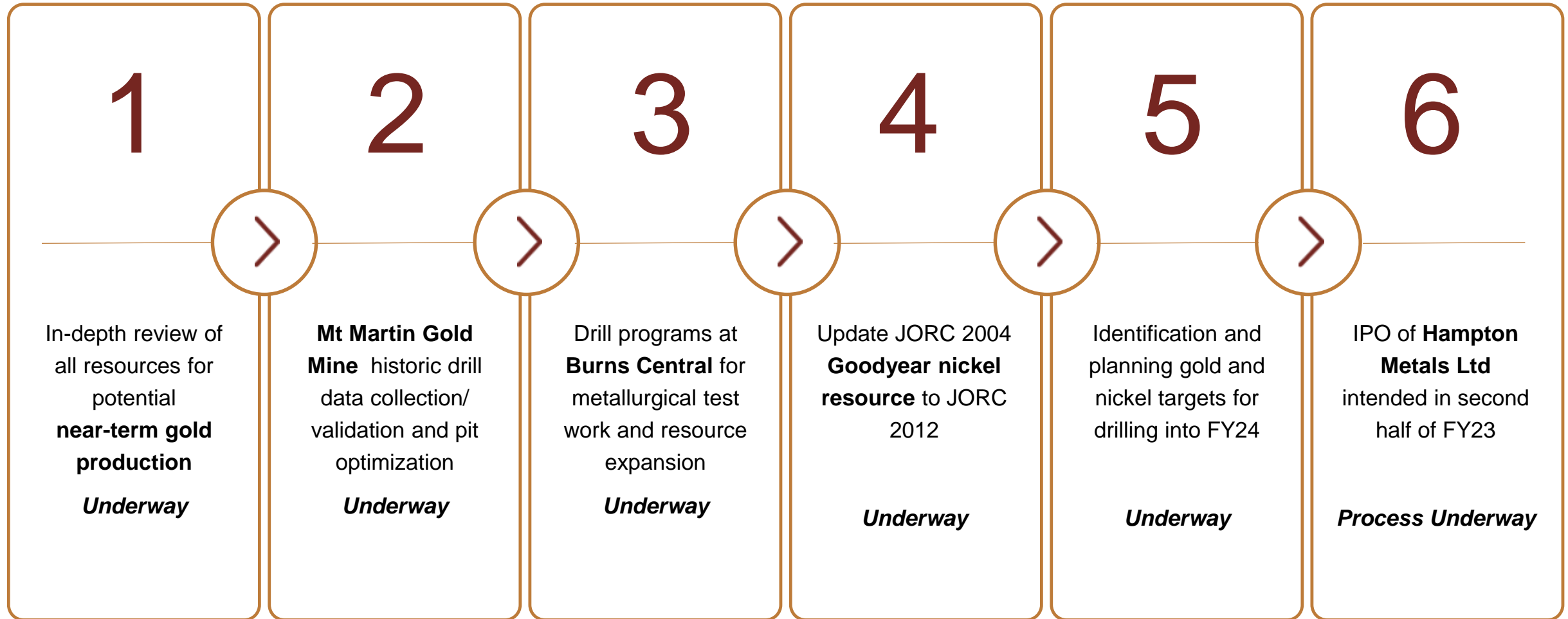
Copper staining drill rods from Lovejoy



BURNS CORRIDOR
EXPLORATION TARGETS
Long Section
315 Azimuth
Looking West

*refer LEX ASX release 15 May 2023

LEFROY NEXT STEPS



CORPORATE SNAPSHOT

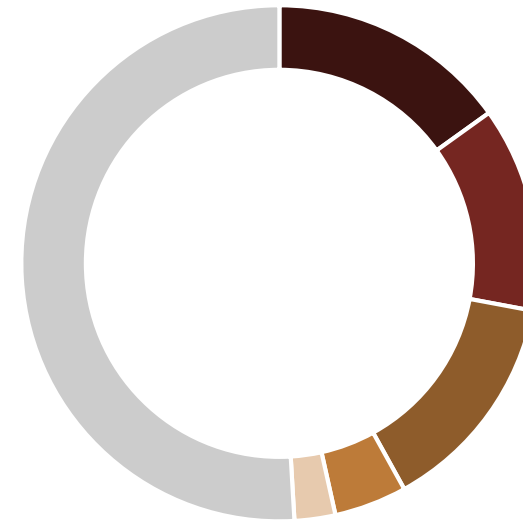


Lefroy Exploration Limited is a Western Australian focused mineral resources exploration company with the flagship Lefroy Project located near Kalgoorlie. The Company also holds a portfolio of nickel projects held by its wholly owned subsidiary, Hampton Metals Ltd, which is advancing toward a separate ASX listing and IPO in 2023.

LEFROY EXPLORATION LTD

Shares on issue (at 19 July 2023)	160.5M
Price (at 19 July 2023)	A\$0.24
Average 90 Day Trading Volume (at 19 July 2023)	86.8k
Market Cap (at 19 June 2023)	A\$38.5M
Cash (at 31 March 2023)	A\$1.5M

Shareholder Information – as of 19 July 2023



Noontide Investments Ltd 15.8%	LEX Share Plan 4.77%
Gold Fields Ltd 13.47%	Lowell Fund Resources 2.68%
LEX Board 14.68%	Other Shareholders 53.36%

EXCELLENCE & INTEGRITY



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 and Current MD Cazaly Resources Ltd.

ASX: LEX



Lefroy Exploration

THANK YOU

Level 3, 7 Rheola St
West Perth WA 6005
Australia

+61 08 9321 0984

leeroyex.com



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 19 October 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.

Maiden Lucky Strike Resource Estimate: 20 May 2020

Red Dale Resource Increases by 28% to 25,230oz: 3 June 2020

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

Burns 1200m Diamond Drill hole Update: 1 August 2022

Drilling Continues to Define Larger Scale to Burns Au Cu System: 1 September 2022

Resource RC Drilling Program Underway at Burns: 6 October 2022

Strong Gold and Copper Intersections Continue to Expand Burns Central: 2 March 2023

0.5M Ounces of Gold in Burns Central Maiden Resource: 4 May 2023

Lefroy Increases Gold Resources to 602,000 oz: 15 May 2023

Acquisition of Mineral Rights Transforms Lefroy: 23 May 2023

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.

JORC 2012 Resource Table



Deposit	Indicated					Inferred					Total Resource				
	Mt	Au (g/t)	Cu (%)	Oz	Cu (t)	Mt	Au (g/t)	Cu (%)	Oz	Cu (t)	Mt	Au (g/t)	Mt*Au	Oz	Cu (t)
Burns Central	32.31	0.38	0.16	394,308	50,253	10.65	0.30	0.08	103,165	8,047	42.96	0.36	15.47	497,472	58,300
Red Dale	0.64	1.21	-	24,660	-	0.03	0.60	-	570	-	0.67	1.18	0.79	25,230	-
Lucky Strike	0.70	1.93	-	43,400	-	0.57	1.97	-	36,200	-	1.27	1.95	2.48	79,600	-
Mt Martin	5.31	1.82	-	311,048	-	3.41	1.73	-	190,127	-	8.72	1.79	15.61	501,175	-
TOTAL	39.0	0.62	0.16	773,416	50,253	14.66	0.70	0.08	330,062	8,047	53.62	0.64	34.34	1,103,477	58,300

Notes:

- 1) The Lucky Strike and Red Dale Mineral Resource Estimates are reported using a 0.5g/t Au cut off.
- 2) The Lucky Strike MRE was announced to the ASX of 20 May 2020
- 3) The Red Dale MRE was announced to the ASX on 3 June 2020
- 4) The Burns Central MRE was announced to the ASX on 4 May 2023. The mineralisation domains were defined by wireframes using a 0.1 g/t Au, 0.1 % Cu cut-off grade.
- 5) The Mt Martin MRE was announced to the ASX on 23 May 2023.
- 5) Small discrepancies may occur due to rounding.

Cautionary Statement: The Company is not aware of any new information or data that materially affects the information included in the relevant market announcement. In the case of estimates of the Mineral Resources the Company confirms that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed.

Mineral Resources : notes on resources



Burns Central

The Company engaged Measured Group Pty Ltd in 2023 to compile the Burns Central Mineral Resource Estimate. The Company announced the Resource to the ASX on 4 May 2023 and reported in accordance with JORC 2012. The Company confirms there has been no exploration activity, including resource compilation, at the Burns Central Deposit since 4 May 2023 that would alter the Resource Statement.

The Mineral Resource estimate and the Exploration Targets for the Burns Au-Cu-Ag-Mo-Co deposit were prepared by Mr Chris Grove of Measured Group Pty Ltd, who is a Member of The Australasian Institute of Mining and Metallurgy (MAusIMM) and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (JORC Code). Mr Grove consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Red Dale

The Company engaged Resource Evaluation Services in 2020 to compile the Mineral Resource Estimate. The Company announced the Resource to the ASX on 3 June 2020 and reported in accordance with JORC 2012. The Company confirms there has been no exploration activity, including resource compilation, at the Red Dale Deposit since 3 June 2020 that would alter the Resource Statement.

The Red Dale resource estimate was compiled in accordance with the guidelines of the Australasian Code for Reporting of Identified Mineral Resources and Ore Reserves (JORC, 2012). The resource estimate was undertaken by Stephen Godfrey, Principal Resource Geologist with Resource Evaluation Services, who is a Fellow of the Australasian Institute of Mining and Metallurgy and a Member of the Australian Institute of Geoscientists. Mr Godfrey has sufficient relevant experience to be considered a "Competent Person" as defined the JORC Code (2012).of Exploration Results, Mineral Resources and Ore Reserves. Mr. Godfrey consents to the inclusion in this report of the matters based on his information in the form and context in which they appear.

Lucky Strike

The Company engaged Resource Evaluation Services in 2020 to complete the Mineral Resource estimate. The Company announced the Resource to the ASX on 20 May 2020 and reported in accordance with JORC 2012. The Company confirms there has been no exploration activity, including resource compilation at the Lucky Strike Deposit since 20 May 2020 that would alter the Resource Statement.

The information in this report that relates to the Mineral Resource estimate at the Lucky Strike deposit is based on, and fairly represents, information which has been compiled by Mr Stephen Godfrey. Mr. Godfrey was Principal Resource Geologist at Resource Evaluation Services, a Fellow of the Australasian Institute of Mining and Metallurgy and a Member of the Australian Institute of Geoscientists. Mr. Godfrey has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that is being undertaken to qualify as Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr. Godfrey consents to the inclusion in this report of the matters based on his information in the form and context in which they appear.

Mt Martin

The Company announced the Mineral Resource Estimate with supporting Tables to the ASX on 23 May 2023 and reported in accordance with JORC 2012. Alacer Gold Corp (Alacer) reported in 2013 a combined (Indicated and Inferred) resource of 8.72 million tonnes grading 1.79g/t Au for 501,175 contained ounces ¹. Following the sale of Loc45 by Alacer Corp to Metals X Limited in 2013, the property has remained largely unexplored for gold and nickel mineralisation and the total resource figures, which include the Mount Martin, Swift and Adelaide deposits, have remained unchanged since the Alacer report in 2013. The Company confirms there has been no exploration activity, including resource compilation at the Mt Martin Deposit since 23 May 2023 that would alter the Resource Statement.

¹ Refer to ASX Announcement - Alacer Gold Corp (AQG), April 3, 2012 "South Kalgoorlie Operations Technical Report"



Lefroy Exploration

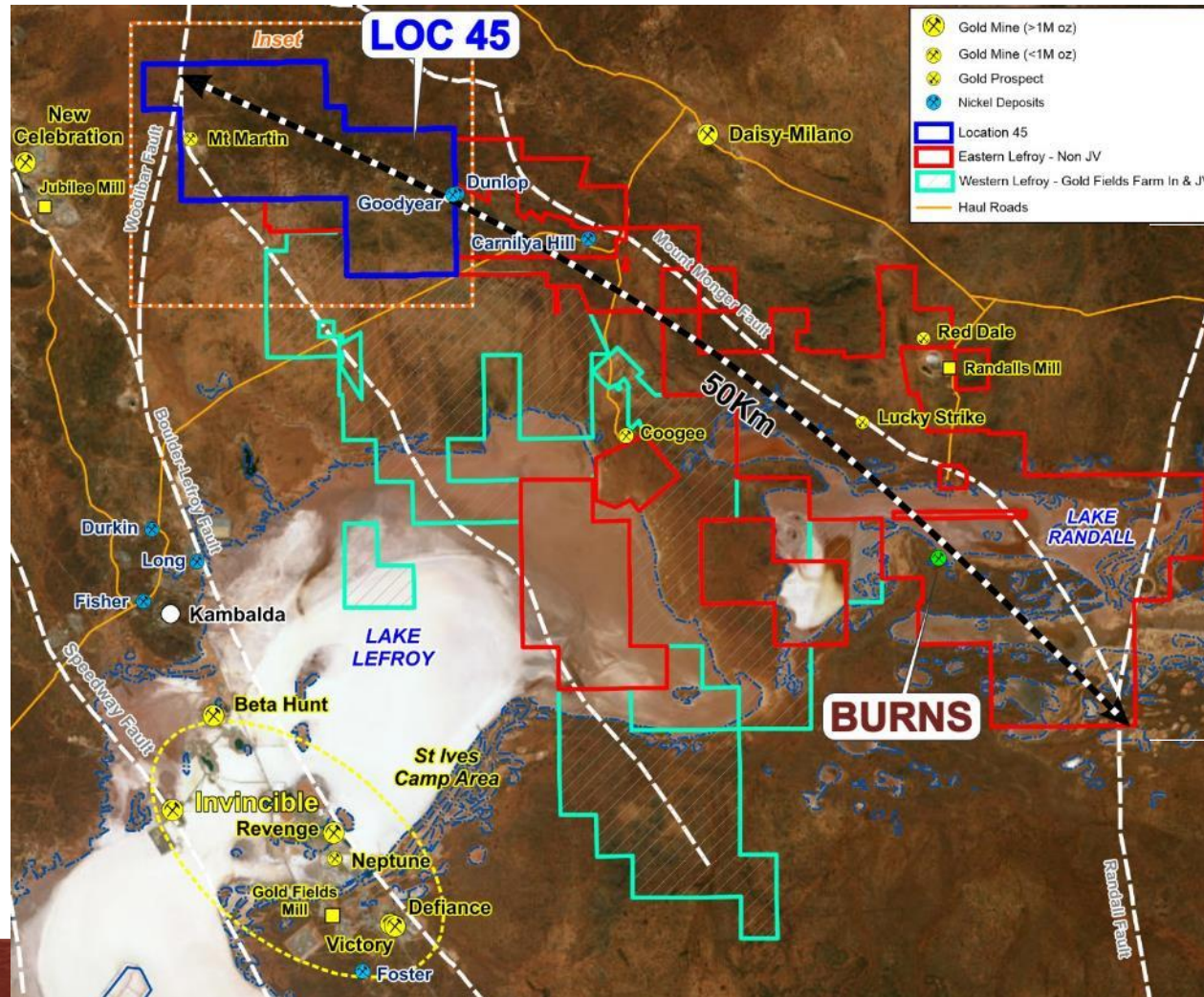
Appendices

Level 3, 7 Rheola St
West Perth WA 6005
Australia

+61 08 9321 0984

lefroyex.com

LEFROY GOLD PROJECT



WESTERN LEFROY JV & EARN-IN PROJECT (246km²)

- Gold Fields Ltd to earn up to 70% of Project by spending \$25m in six years
- Stage 1 completed in July 2021 by Gold Fields satisfying \$10m spend for 51% interest
- Stage 2 underway and requires Gold Fields funding a further \$15m by 30 July 2024 for total interest of 70%

EASTERN LEFROY PROJECT (386km²)

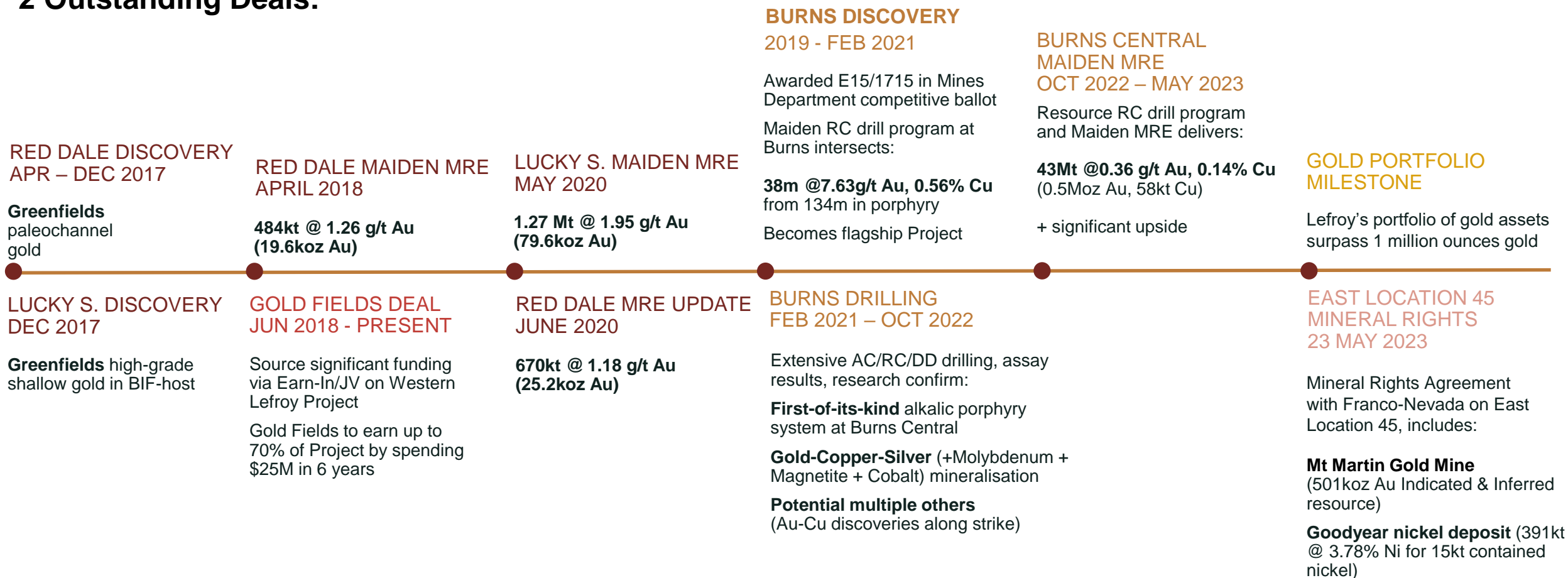
- 100% owned tenure includes 50km strike of highly prospective geology along Mt Monger Fault
- Numerous highly-prospective gold-copper-nickel targets
- Contains flagship Burns Gold-Copper Deposit and Mt Martin Gold Mine
- Gold and other minerals rights held on freehold property East Location 45



LEFROY MILESTONES TIMELINE



3 Discoveries, 3 Mineral Resource Estimates, 2 Outstanding Deals:



EAST LOCATION 45 (freehold parcel)

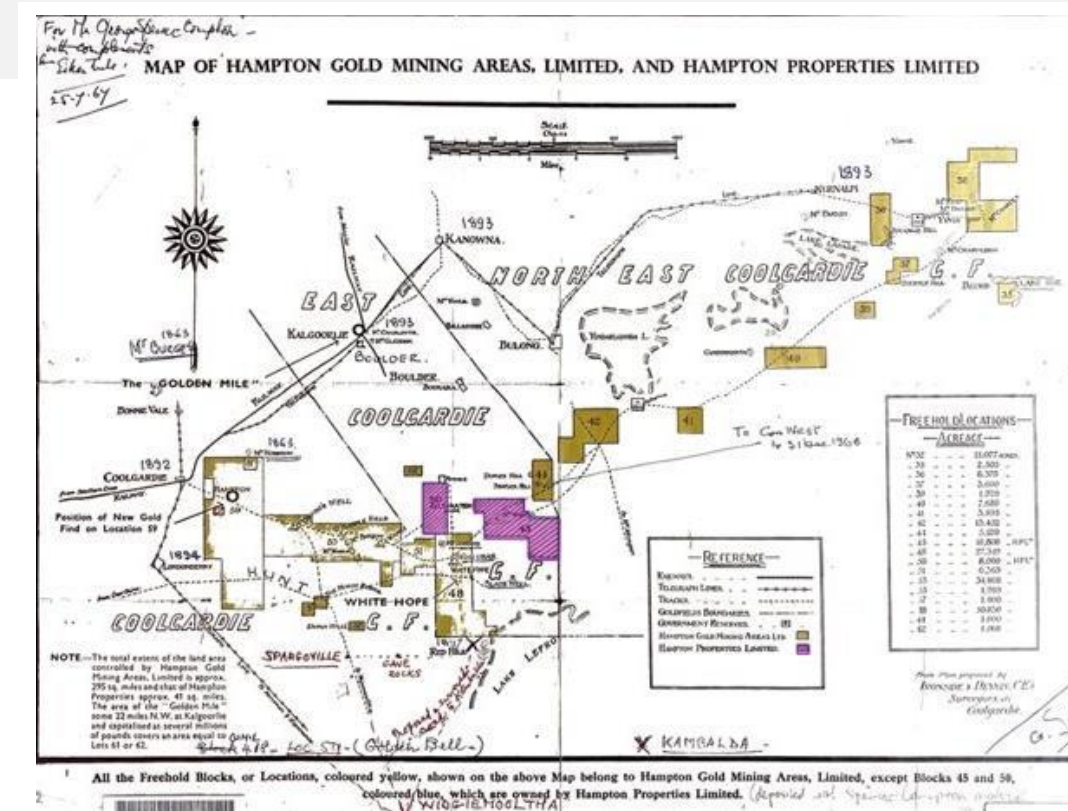
	MINERALS		LOCATION		KEY FOCUS		LAND PACKAGE
	Gold Nickel		Kalgoorlie Terrane		Mt Martin Au Mine Goodyear Ni Deposit		76km ²

EAST LOCATION 45

- A rare portion of the freehold Hampton lands in WA < 30km to Kalgoorlie
- Acquired from TSX royalty major Franco-Nevada via Mineral Rights Agreement
- Directly bolts onto LEX's wholly contiguous Eastern Lefroy Project

HISTORY OF HAMPTON FREEHOLD LANDS

- Explored by Charles Hunt (1863-1867) for pastoral use and named "Hampton Plains" in honour of his sponsor Governor Hampton
- Land acquired by Scottish investors from "The Hampton Lands and Rail Syndicate" Syndicate purchased 19 freehold blocks (216k acres) for 2 shillings 6 pence/acre
- Under the Land Act of 1882, the mineral rights are owned by the land owner (not the crown) with no requirement for a mining tenement under the Mining Act 1978
- The 1890s gold discoveries in Coolgardie, Kalgoorlie ends ongoing freehold land grants



Journal of Australasian Mining History, Vol. 2, September 2004

Loc 45 Plus a Nickel Deposit

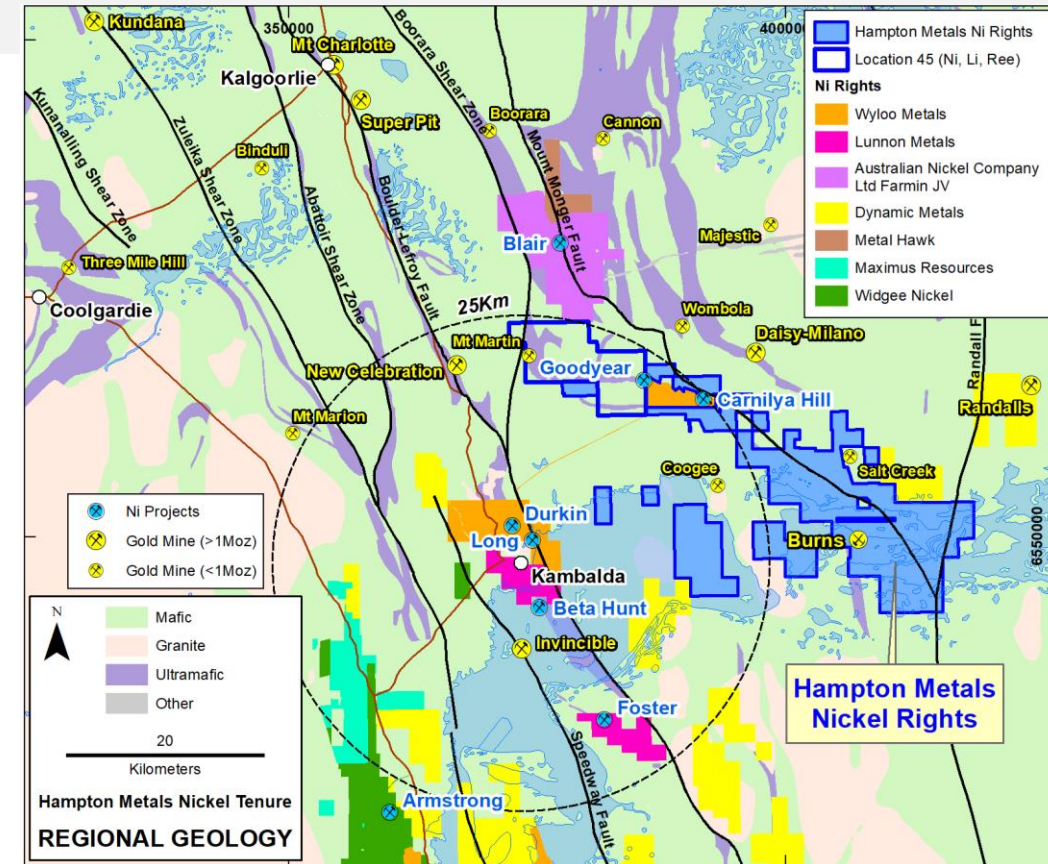


MINERALS	LOCATION	KEY FOCUS	LAND PACKAGE
Nickel	Kalgoorlie Terrane	Exploration Resource definition	76km ²

GOODYEAR NICKEL SULPHIDE DEPOSIT

- Unmined with 391,250t @ 3.78% Ni for 14,780t contained nickel (JORC 2004)*
- Contains the down-dip extension of the Dunlop deposit which lies immediately east of Location 45's tenement boundary
- Located 4km west of Mincor Resources' Carnilya Hill nickel deposit and 20km north of Kambalda and BHP's nickel concentrator
- Strengthens Hampton Metals' +3,000km² nickel portfolio, which includes Carnilya South with 7km of strike of Kambalda Komatiite, and the Lake Johnston and Glenayle Projects

TIER 1 NICKEL SULPHIDE EXPLORATION AND MINING DISTRICT



BURNS GOLD-COPPER PROJECT



Looking East

Kennys Dream

Burns

Ralph

Smithers

