

ASX ANNOUNCEMENT

10 August 2023

Roe Hills Project, Eastern Goldfields WA

# Drilling underway at large Black Cat lithium target

Program of up to 7000m of RC drilling will test lithium, rare earths and gold anomalies next to the Manna Lithium deposit

## Highlights

- Up to 76 holes planned across a two-month programme at Roe Hills, 100km east of Kalgoorlie and immediately south of Global Lithium's Manna Lithium-Tantalum deposit
- 39 drill holes will test the 2.8km-long Black Cat Li-Cs-Be-Sn soil anomaly, which is up to 300m wide
- 13 drill pads have been prepared at Black Cat for immediate infill drilling if pegmatites are intersected
- Several other compelling targets will be drilled after Black Cat, including the Crystal Palace lithium anomaly, the new Blue Jay rare earths anomaly and the Black Cat gold target

Kairos Managing Director, Dr Peter Turner said: **"The technical work we have done shows Black Cat is an extremely compelling target. It is a Manna look-alike, it is north-east striking and is characterised by a similar multi-element association."**

**"With the multi-element soil geochemistry indicating potential lithium pegmatites beneath Black Cat and Crystal Palace, the RC drilling will provide a good understanding of subsurface geology, mineralogy and lithium grades"**.

Kairos Minerals Ltd (ASX: KAI) is pleased to advise that RC drilling has started at the Black Cat Lithium Prospect within Kairos' 100 per cent-owned Roe Hills Project (**Figures 1 & 3, Photo 1**). The 76-hole programme will take approximately two months to complete and is fully-funded.

Roe Hills is 100km east of Kalgoorlie, WA and is located within a newly developing spodumene-bearing pegmatite province hosting the Manna Li-Ta project (ASX:GL1 36.0 Mt @ 1.13% Li<sub>2</sub>O<sup>1</sup>) and a number of lithium pegmatite prospects (**Figures 3 & 4**).

Global Lithium (ASX: GL1) recently announced a new discovery of rare earth elements adjacent to its Manna<sup>2</sup> deposit. Kairos' own soil geochemical sampling at Blue Jay<sup>3</sup> has also highlighted the potential of the Roe Hills area to hold significant rare earth element mineralisation. An initial 11-hole, 500m drill programme will test the main 1km x 600m rare earths Blue Jay anomaly and the north-south anomaly that extends towards the GL1 tenement boundary (**Figure 2**).

The planned drilling is shown on **Figure 2** and split into prospect & commodity targets in **Table 1**.

All heritage approvals for the drilling have been obtained and access to the Blue Jay and Crystal Palace anomalies are subject to a separate access agreement with the freehold block owners. The lithium prospects called **Whitehorse**, **Greyhound** and **Healey Dam** (**Figure 1**) will be further infilled with soil samples before likely drilling in the near future.

The vast majority of the drilling will be targeting lithium at Black Cat and Crystal Palace. In total 51 of the 76 holes will be drilled along the strikes of both large lithium anomalies at each location. Additional drill pads and sumps have been prepared already to infill the initial holes with more RC or diamond holes should pegmatites be intersected. Diamond drilling in particular would be favoured as it allows detailed lithological, structural and mineralogical assessment to be made on oriented core.

Kairos will maintain a high-degree of newsflow during drilling and once results have been reported.

Prospect	Commodity Target	Estimated number of drill holes	Comment
Black Cat	Lithium	31	
Black Cat	Lithium & Gold	8	Both Li and Au targets likely to be intersected
Black Cat	Gold	6	
Crystal Palace	Lithium	20	
Blue Jay	Rare Earths	11	

**Table 1. Estimated number of RC holes at each prospect, shown by commodity target**

<sup>1</sup> GL1 ASX announcement dated 26 July 2023 entitled 'Manna Lithium Resource Grows'

<sup>2</sup> GL1 ASX announcement dated 13 July 2023 entitled 'REE Discovery at Manna Project Area'

<sup>3</sup> KAI ASX announcement dated 13 April 2023 entitled '1 km-long rare earths anomaly highlights potential for significant discovery'

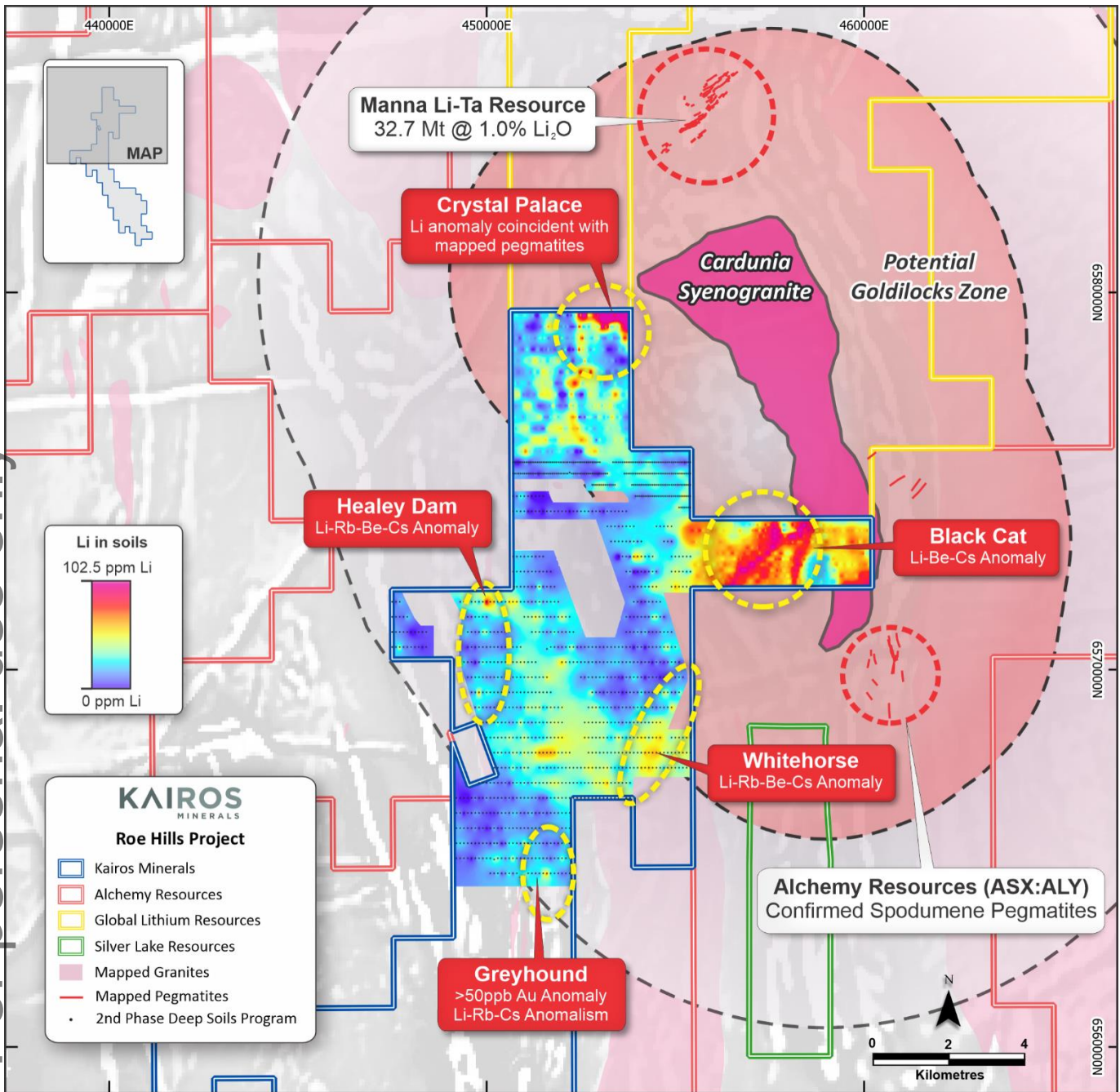
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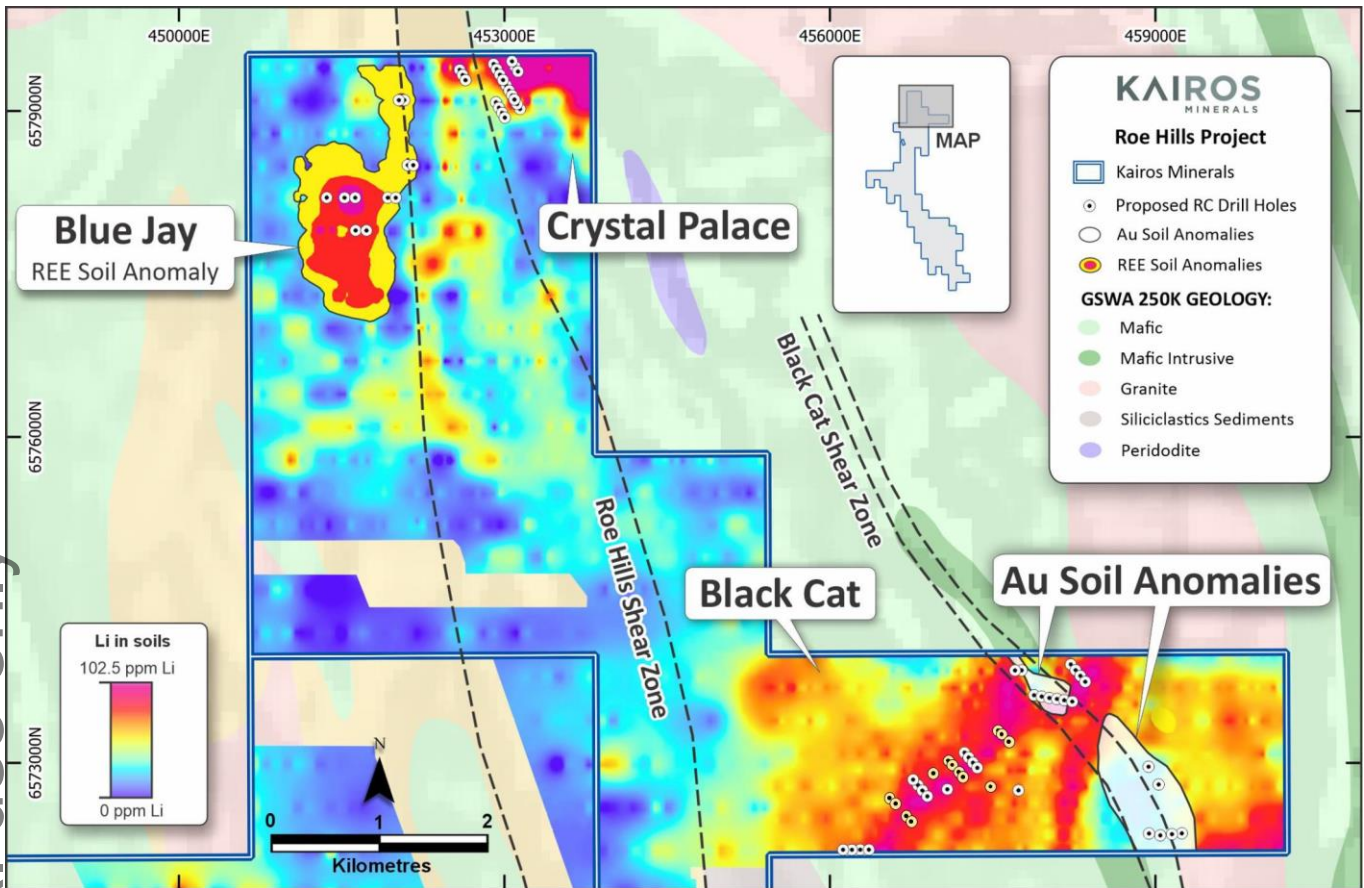
**Photo 1.** Orlando RC drill rig on RHRC132 at the Black Cat lithium target.

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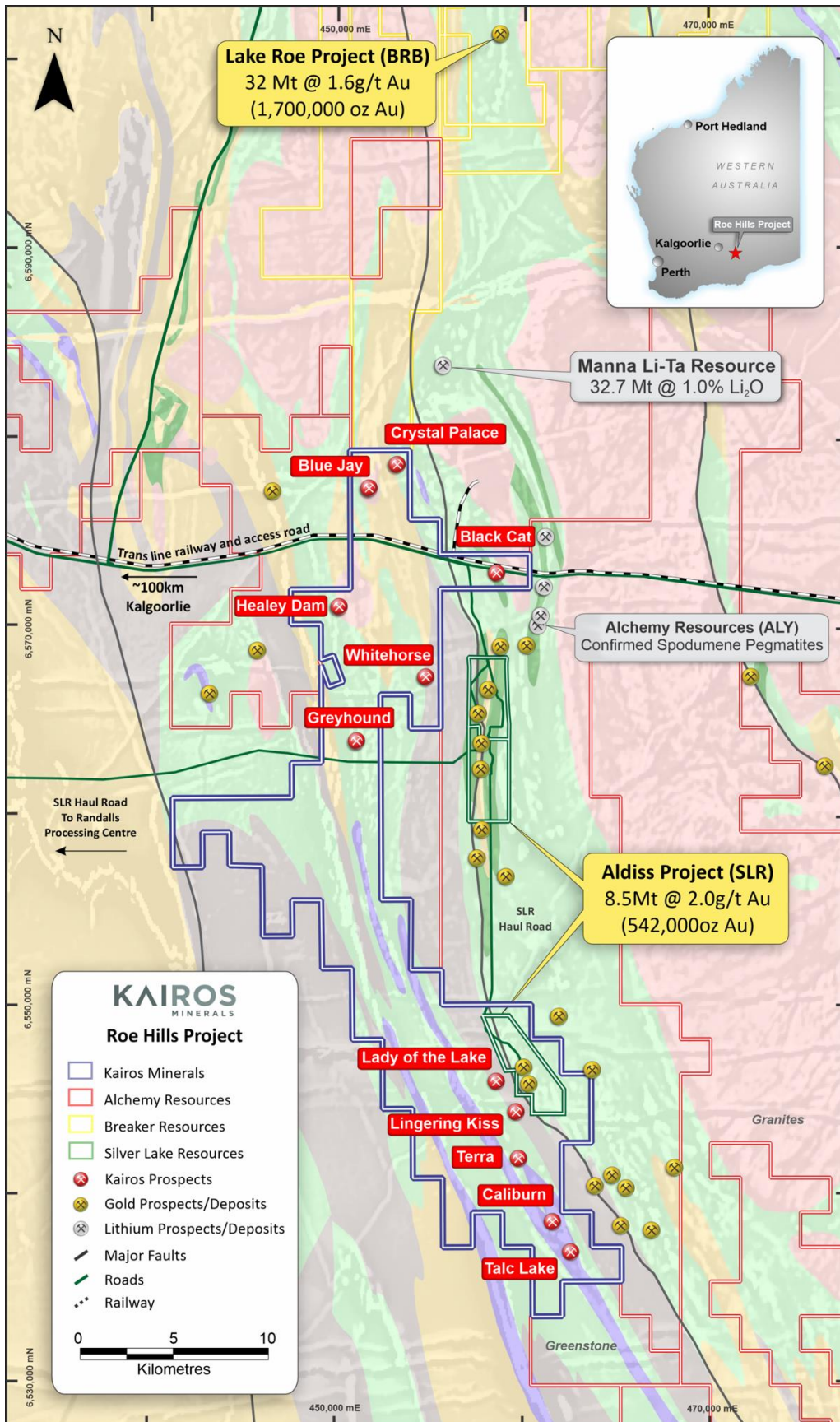
**Figure 1.** Kairos lithium anomalies generated from deep soil sampling programs at Roe Hill North. Infill deep soils at Healey Dam, Whitehorse and Greyhound will be undertaken ahead of drilling and the programme will continue to move south over high-priority geological targets for lithium exploration.



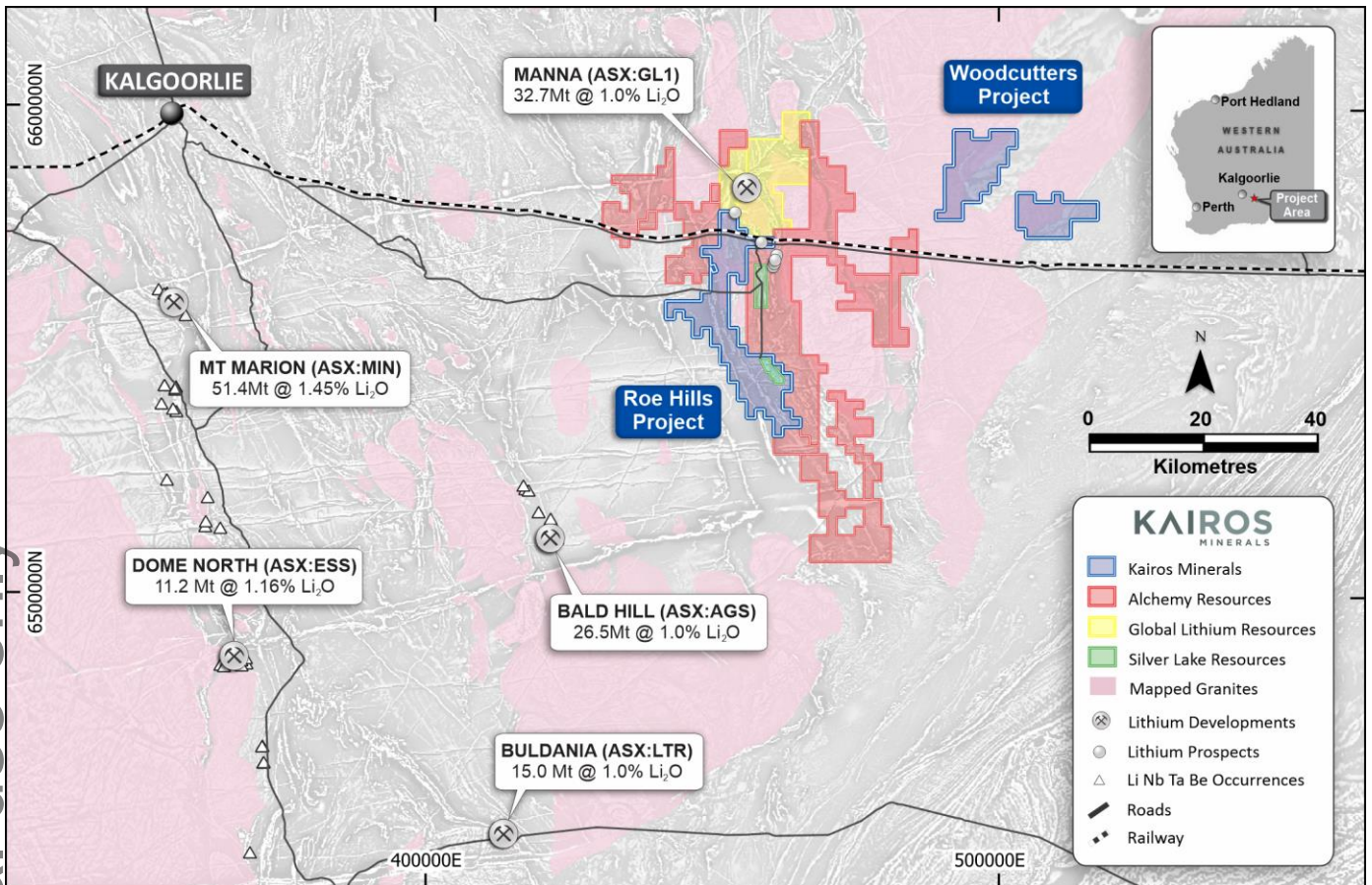
**Figure 2.** 76 Planned drill holes at Black Cat, Crystal Palace and Blue Jay Prospects targeting lithium, rare earths and gold. The primary target is the Black Cat Lithium anomaly. Background image is coloured on lithium grades in deep soils. The Blue Jay Rare Earth anomaly has been superimposed to show the footprint of the REE anomalies.

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**Figure 3.** Kairo's tenements in relation to neighbouring companies over the Roe Hills area overlain on a magnetic image highlighting interpreted granites. Lithium mines and advanced projects with resources are shown with quoted mineral resources.



**Figure 4.** Kairos' lithium & gold prospects over the Roe Hills area overlain on a simplified geological-magnetic image highlighting interpreted granites. Lithium and gold mines/advanced projects with resources are shown.

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## About Kairos Minerals

Kairos Minerals (ASX:KAI) owns 100% of the flagship 1.6 Mozs **Mt York Gold Project** that was partially mined by Lynas Gold NL between 1994 and 1998. Kairos has recognised that the resource has significant potential to grow further from its current 1.62 Moz base with significant exploration potential existing within the Mt York project area. Pre-feasibility work will progress rapidly underpinned by the resource expansion work that will collect important information for metallurgical testwork, mining and process engineering to determine viability and optimal pathway to develop a sustainable, long-lived mining project. Current resources at a 0.5 g/t Au cutoff grade above 325m depth are shown in the table below.

Deposit	Indicated			Inferred			Total		
	Tonnes (MT)	Au (g/t)	Ounces (kzs)	Tonnes (MT)	Au (g/t)	Ounces (kzs)	Tonnes (MT)	Au (g/t)	Ounces (kzs)
Main Trend	20.25	1.06	690	22.83	0.95	697	43.08	1.00	1385
Iron Stirrup	1.28	1.72	70	0.71	1.54	35	1.99	1.66	106
Old Faithful	2.17	1.07	75	2	0.81	52	4.17	0.95	127
<b>Total</b>	<b>23.7</b>	<b>1.10</b>	<b>835</b>	<b>25.54</b>	<b>0.95</b>	<b>784</b>	<b>49.24</b>	<b>1.02</b>	<b>1618</b>

Kairos has recently discovered spodumene-bearing pegmatites adjacent to the Mt York Gold Project and is evaluating their potential to become part of a value-adding lithium project into the future.

Kairos's 100%-owned Roe Hills Project, located 120km east of Kalgoorlie in WA's Eastern Goldfields, comprises an extensive tenement portfolio where the Company's exploration work has confirmed the potential for significant discoveries of high-grade gold, nickel and cobalt mineralization. Kairos has also discovered a 2,800m long Li-Cs-Rb soil anomaly in an exciting and emerging lithium province that will be drill-tested.

This announcement has been authorised for release by the Board.

**Peter Turner**  
 Managing Director

**Zane Lewis**  
 Non Executive Director

### For Investor Information please contact:

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### COMPETENT PERSON STATEMENT

The information contained in this report has been previously reported by the Company as referenced above (Announcements). The Company confirms that it is not aware of any new information or data that would materially affect the information included in the Announcements and, in the case of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates, released on 30 August 2022, continue to apply and have not materially changed.