

8 July 2024

Kairos appoints GR Engineering for Scoping Study on 1.6Moz Mt York gold project

Decision to conduct study follows completion of internal economic assessment

<u>Highlights</u>

- Following encouraging internal valuation, Kairos has awarded a contract to complete a scoping-level study on its Mt York Gold Project in WA's Pilbara to GR Engineering Services (GRES)
- Study will assess an ore process rate of 4Mtpa with modelling variations at 3 and 5Mtpa
- Over 26,000m of recent drilling and strong metallurgical test results will be incorporated into the study
- Mt York has total gold resources of 49.24 Mt @ 1.02 g/t Au for 1,618,000 ounces (at a 0.5 g/t cutoff) or 70.17 Mt @ 0.84 g/t Au for 1,886,000 ounces (at a 0.3 g/t Au cutoff) attention will turn to growing the resources above 2Moz
- Scoping study to be completed in September quarter, 2024 and will include financial modelling using current cost estimates

Kairos Managing Director, Dr Peter Turner said: **"The decision to conduct the study is based on a host of data, including a vast amount of drilling, advanced metallurgical tests and a positive internal valuation exercise.**

"We believe Mt York has very strong technical and financial potential and that it has reached the point where an independent Scoping Study by a highly regarded firm such as GRES is completely warranted.

"In parallel with the study, Kairos will continue assessing the scope to grow the resource beyond 2Moz".

Kairos Minerals Limited (**ASX:KAI**) is pleased to announce that it has awarded the Mt York Gold Project scoping study to GR Engineering Services.

The Mt York Gold Project comprises 3km of continuous mineralisation within a banded iron formation that carries the bulk of the resource ounces, and two satellite deposits



called Iron Stirrup and Old Faithful that are situated on the second of two Mining Lease Applications ('MLAs') (**Figures 1** and **2**).

An internal valuation exercise recently completed by Kairos under the guidance of GRES indicated that the best commercial outcomes for the project were delivered using process rates higher than 1 Mtpa.

Sighter metallurgical testwork¹ of fresh metallurgical samples along the deposit's length indicate that the gold is non-refractory, was easily leached and would likely yield to a simple CIL process route. The large resource and the excellent metallurgical test work results will be fed into the new scoping study.

GRES will manage the scoping study to develop and reflect the optimal process development route and process design for 3, **4** and 5 mtpa ore process rate for the Mt York Gold Project. All costs incorporated in the study will be up-to-date costs from GRES's database. In particular, GRES will deliver:

- Process design criteria;
- Preliminary mass and water balance;
- Preliminary mechanical equipment lists;
- Major equipment selection;
- Capital cost estimate (+35%/-25%);
- Operating cost estimate (+25%/-20%);
- Study report.

The study will take 9-10 weeks to complete and will be announced to the ASX when completed.

¹ See KAI ASX announcement dated September 20, 2023 entitled 'Metallurgical results show excellent recoveries from simple processing route'



Figure 1. Mt York Gold Project deposits and prospects.





Next Steps

- Commencement of the Scoping Study for the Main Trend of the Mt York Gold Project using all historic and current data
- Negotiations with Nyamal Aboriginal Corporation to begin on a mining agreement with the Traditional Owners
- Regional target assessment to drive resource growth
- Initiation of environmental studies and water exploration targeting

About Kairos Minerals

Kairos Minerals (ASX:KAI) owns 100% of the flagship 1.62Mozs **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 1.62Moz base with significant exploration potential existing within the Mt York project area. A scoping study is underway by GR Engineering Services and will incorporate Mt York's current resource estimate (see below table) and metallurgical test work to provide important information for mining and process engineering to determine the 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	Au (m/t)	Ounces	Tonnes	Au (m/t)	Ounces	Tonnes	Au (m/t)	Ounces
	(MT)	(g/t)	(kozs)	(MT)	(g/t)	(kozs)	(MT)	(g/t)	(kozs)
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
Total	23.7	1.10	835	25.54	0.95	784	49.24	1.02	1,618

The information in this announcement that relates to the ore reserves and mineral resources of Kairos Minerals Ltd has been extracted from the ASX announcement titled "Resource increases to 1.6Moz and remains open" released on May 15, 2023 and available at <u>www.asx.com</u>. Kairos Minerals Ltd confirms that it is not aware of any new information or data that materially affects the information included in that announcement, and that all material assumptions and technical parameters underpinning the estimates in that announcement continue to apply and have not materially changed. Kairos confirms that the form and context in which the Competent Persons findings are presented have not been materially modified from that announcement.

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, cobalt, lithium and rare earth mineralisation. Kairos has recently discovered significant high-grade REE mineralisation at Black Cat within enriched lower saprolite clays overlying fertile REE-bearing syenite intrusions.

This announcement has been authorised for release by the Board.

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