

ASX ANNOUNCEMENT

8 September 2022

Drilling set to start at Lucky Sump spodumene prospect, Pilbara WA

Program will follow up the high-grade pegmatite samples discovered just 4km from Pilbara Minerals' Pilgangoora lithium-tantalum mine

Highlights

- Drilling about to start at Lucky Sump Prospect, where spodumene pegmatite samples grading up to 1.91% Li₂O have been discovered¹ during routine earthmoving activities next to the flagship Mt York Gold Deposit
- 16 RC holes planned for initial 2,400m (nominal 150m hole depth)
- Target is multiple spodumene pegmatites that are part of a larger interpreted dyke swarm at Mt York
- Drill location is 4km south of Pilbara Mineral's Pilgangoora lithium-tantalum mine
- Samples will be sent for multi-element analysis to determine lithium grade and Hylogger-3 for mineralogy

Kairos Managing Director, Dr Peter Turner said: "The initial results from Lucky Sump were outstanding so we are eagerly awaiting this drilling program.

"We already know we have spodumene-bearing pegmatites which returned highgrade assays.

"And we have since found more, similar-looking pegmatites during sump preparation for this programme.

"This drilling program has potential to create significant value for Kairos shareholders and will be conducted in parallel with our major, extensional drilling programme for gold at the neighbouring 1.1 million-ounce Mt York Gold Deposit".

¹ See Kairos Minerals Ltd announcements dated 12 July 2022 & 1 August 2022



The RC rig from Orlando Drilling is scheduled to start drilling within a week to complete the 16 initial holes planned on three drill lines to 150m depth. Drill holes are planned at -60° to the northwest to intercept pegmatites that are interpreted to dip to the southeast. Holes are planned 'toe-to-heel' to provide complete coverage over the entire Lucky Sump prospect (**Figures 1 & 2**).

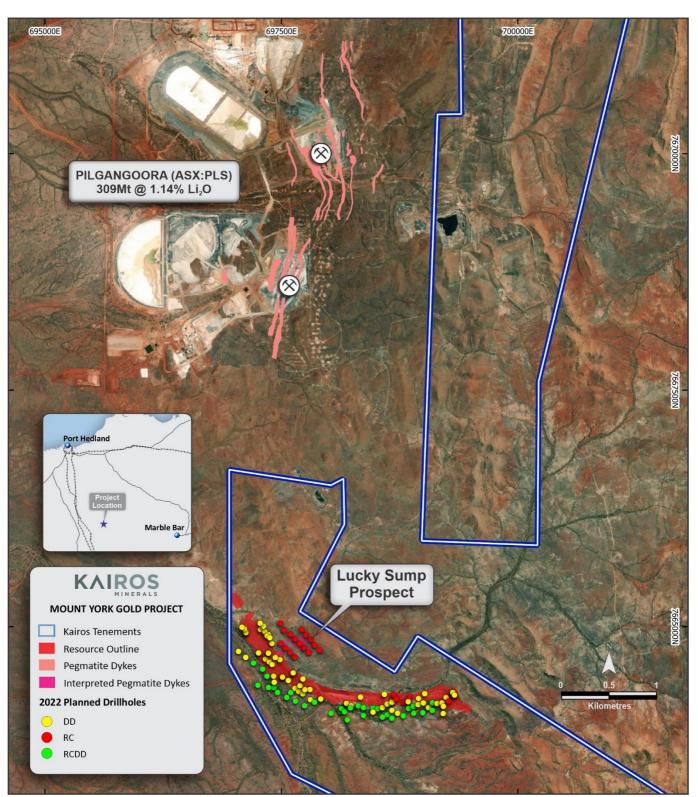


Figure 1. Lucky Sump Prospect location in relation to Pilbara Minerals' Pilgangoora's Lithium-Tantalum Mine and the Mt York Gold Project (red polygon is the Main Trend gold mineralisation).



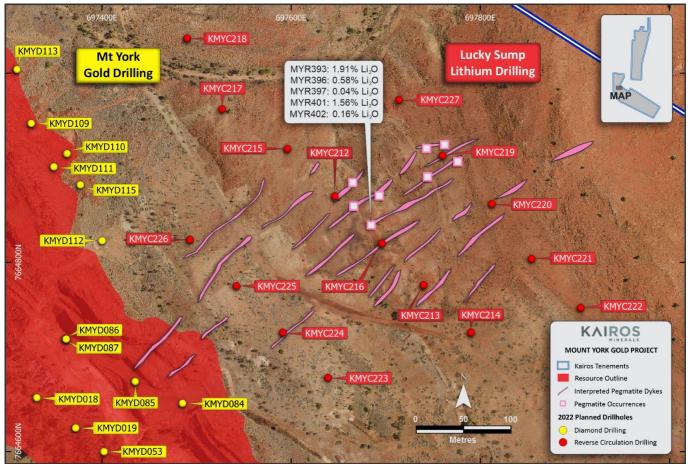


Figure 2. Lucky Sump Prospect showing planned drill holes targeting Lucky Sump spodumene-bearing pegmatites (red dots) and those targeting resource extensions at the Mt York Gold Project (yellow dots). The pegmatites are interpreted to strike to the northeast and potentially cut the Mt York Gold Deposit and stratigraphy at right angles.

Next Steps

- RC drill Lucky Sump pegmatites to 150m down-hole depths, 'toe-to-heel'
- Complete logging, sampling and export of samples
- Build camp infrastructure at Mt York including core farm, living and ablution blocks
- Complete 20,000m RC and DDH at Mt York Gold Project H2, 2022
- Contract negotiations with consultants for mining engineering studies, geo-metallurgical testwork, geotechnical studies, environmental and hydrological studies



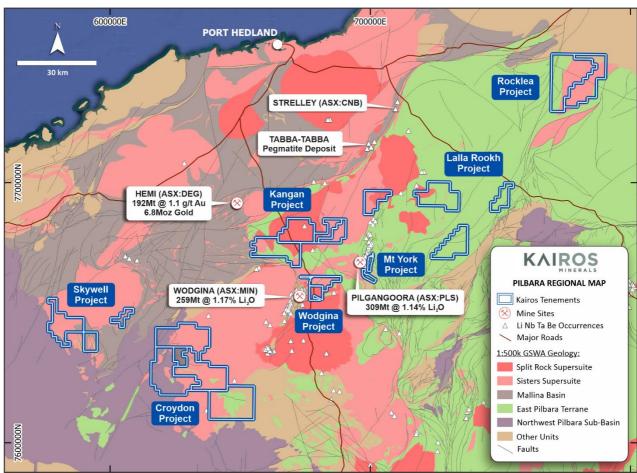


Figure 3. Kairos' Gold & Lithium Projects over the central Pilbara regional geology showing the position of the Mt York Project and nearby Pilgangoora Lithium-Tantalum mine.

About Kairos Minerals

Kairos Minerals (ASX:KAI) owns 100% of the flagship 1.1 Mozs **Mt York Gold Project** that was partially mined by Lynas Gold NL between 1994 and 1998. Pre-feasibility work is progressing rapidly underpinned by a +20,000m diamond and RC drilling campaign to collect important information for further resource expansion, metallurgical testwork, mining and process engineering to determine viability and optimal pathway to develop a sustainable, long-lived mining project. Current resources at a 0.7 g/t Au cutoff grade are shown in the table below.

	Indicated			Inferred			Total		
Deposit	Tonnes	Au	Ounces	Tonnes	Au	Ounces	Tonnes	Au	Ounces
	(MT)	(g/t)	(kozs)	(MT)	(g/t)	(kozs)	(MT)	(g/t)	(kozs)
Main Trend	11.02	1.26	446	12.26	1.15	452	23.27	1.20	899
Iron Stirrup	1.18	1.81	69	0.63	1.66	34	1.81	1.76	102
Old Faithful	1.73	1.19	66	1.19	0.96	38	2.93	1.1	103
Total	13.93	1.30	581	14.08	1.15	523	28.01	1.23	1,104

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. Kaiors has also discovered a 2,400m 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 Zane Lewis
Managing Director Non Executive Director

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COMPETENT PERSON STATEMENT:

The information in this report that relates to Exploration Results or Mineral Resources is based on information compiled and reviewed by Dr Peter Turner, who is the Managing Director of Kairos Minerals Ltd and who is also a Member of the Australian Institute of Geoscientists (AIG). Dr Turner has sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration and to the activity which they are undertaking to qualify as Competent Persons as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.' (the JORC Code 2012). Dr Turner has consented to the inclusion in the report of the matters based on their information in the form and context in which it appears.

The Mineral Resources were first reported in the announcement date 30 August 2022 (Announcement). The Company confirms that it is not aware of any new information or data that materially affects the information included in the Announcement and, in the case of estimates of mineral resources, that all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed.