

ASX ANNOUNCEMENT

#### **27 November 2024**

## Mt York Gold Project, Pilbara

# Strong Scoping Study forecasts robust financial returns

Strategy turns to resource growth in preparation for pre-feasibility study

# **Highlights**

- Scoping Study finds Mt York has the potential to be a technically and financially robust gold project, generating strong returns for Kairos
- 4 Mtpa conventional carbon in leach (CIL) processing plant with SAG & ball mill circuit (SABC) identified as the optimum pathway for best return-on-investment (ROI); Review of 2.5 and 5 Mtpa operations also provides positive and compelling options with different capital entries and operating costs
- Study estimates a pre-production capital requirement of A\$276M and forecasts lifeof-mine production target of 657,200oz over an 8-year mine life at an all-in sustaining cost (AISC) of \$2,205/oz
- Projected peak gold production is 123,000oz in year 3 and an average 115,000ozpa for years 2 to 4
- The Study forecasts compelling financial returns using a conservative A\$3,500/oz gold price:
  - Free Cash Flow (FCF) \$574M
  - Net Present Value (NPV)<sub>5%</sub> \$410M
  - Internal Rate of Return (IRR) 35.7%
  - Payback Period 2.7 years
  - All-in Sustaining Costs (AISC) \$2,205/oz
- The Study is based on mining and processing mineralisation from the 3km-long Main Trend deposit, which has a resource of 43.08Mt at 1 g/t Au for 1.4Moz (20.25 Mt @ 1.06 g/t Au for 690,000oz in indicated and 22.83 Mt @ 0.95 g/t Au for 697,000 ozs in inferred) and clean metallurgy
- Study based on >70% indicated resources (higher confidence) at Main Trend and largely excludes inferred (lower confidence) resources within the current Life of Mine (LOM) plan; Improvement opportunities likely through planned resource drilling
- In light of these strong results, Kairos intends to undertake an extensive drilling program early next year with the aim of further increasing the production profile
- Gold rights to a 1.5km extension of Mt York mine stratigraphy have been secured from Pilbara Minerals and resource drilling will be prioritised for significant resource



- growth in 2025 in preparation for the pre-feasibility study; The Company believes the additional drilling will provide an opportunity to grow the resource significantly
- Pre-feasibility Study work to commence whilst simultaneously progressing the mining lease grant
- Mt York remains one of the largest undeveloped gold projects in WA with excellent project infrastructure and access to world-class project building capabilities

#### **Cautionary Statement**

The Scoping Study ("Study") referred to in this announcement has been undertaken by Kairos Minerals Ltd (Kairos or the Company) to determine the viability of a standalone development, including open pit mining and processing at Kairos's Mt York Gold Project (Project or Mt York) in the Pilbara of Western Australia.

The Study is a preliminary technical and economic assessment of the potential viability of the Mt York Gold Project. It is based on low level technical and economic assessments, (+/-35% accuracy) and is insufficient to support estimation of Ore Reserves or an investment decision. Further evaluation work and studies are required before Kairos will be in a position to provide assurance of an economic development case at this stage, or to provide certainty that the conclusions of the Study will be realised.

The Study is based on Indicated and Inferred Mineral Resources defined within the Project estimated by a competent person in accordance with the requirements in the JORC 2012 Code, with a production target comprising a minimum of Indicated (~70%) and Inferred (~30%) Mineral Resources over the life of mine. Investors are cautioned that there is a low level of geological confidence in Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources, or that the production target itself will be realised.

Of the Mineral Resource tonnages scheduled for extraction in this Study's production target plan during the first three years, approximately 80% is classified as Indicated and 20% as Inferred, incorporating the projected 2.7 year payback period (from commencement of production). Kairos has concluded that the financial viability of the Project is not dependent on the inclusion of the Inferred Resources and Kairos has concluded that it has reasonable grounds for disclosing a production target and forecast financial information which includes Inferred Mineral Resource material.

The Mineral Resource estimate underpinning the production targets in this announcement have been prepared by a competent person in accordance with the requirements of the JORC 2012 Code.

The Study is based on the material assumptions outlined in this announcement, including assumptions about the availability of funding in the order of approximately \$276 million. Kairos considers that all material assumptions of this Study are based on reasonable grounds. However, investors should note that there is no certainty that Kairos will be able to raise the required amount of funding when it is required, either now or in the future. It is



also possible that said funding may only be available on terms that may be dilutive to or otherwise effect the value of Kairos's shares. It is also possible that Kairos could pursue other value realisation strategies such as a sale, partial sale or joint venture of the Project. This could materially reduce Kairos's proportionate ownership of the Project. While Kairos considers all the material assumptions to be based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated by the Study will be achieved.

Notwithstanding many components of this study, such as pit optimisations and pit shell design, capital costs, processing operating costs and other amounts may be more accurate than +/- 35%, Kairos has concluded it has a reasonable basis for providing the forwardlooking statements included in this announcement and believes it has a 'reasonable basis' to expect it will be able to complete the development of the Project as outlined in the attached Study.

This announcement has been prepared in compliance with the JORC Code 2012 Edition (JORC 2012) and the ASX Listing Rules. All material assumptions on which the forecast financial information is based have been provided in this announcement and are also outlined in the attached JORC 2012 table disclosures.

Given the uncertainties involved and listed above, investors should not make any investment decision based solely on the results of the Scoping Study.

Kairos Minerals Ltd (ASX: KAI) is pleased to announce the results of a Scoping Study for the Mt York Gold Project. The Study was completed by GR Engineering Services ('GRES'), supported by Cube Consulting Pty Ltd ('CUBE') for the mining study.

The project, which is the subject of a mining lease application, has resources of **43.08** Mt @ 1.00 g/t Au for 1.39 Moz<sup>1</sup> at a 0.5 g/t Au lower cutoff grade. At a 0.3 g/t Au lower cutoff grade, the resource increases to 62.95 Mt @ 0.81 g/t Au for 1.64 Moz.

The scoping study involved additional metallurgical test work to determine an optimal material grind size for mill design and operating cost inputs. The metallurgical test work confirmed that an optimal grind size of 75µm will provide recoveries >88% from fresh mineralisation. Improvement and optimisation studies will be undertaken on oxidised, partially-oxidised and fresh mineralised material aimed at increasing gold recoveries during the pre-feasibility study.

Mine design and mine production schedules were completed on the deposit by Cube for mill throughput rates of 2.5, 4.0 and 5.0 Mtpa. The Mine design and schedule targeted higher-confidence areas within the deposit, resulting in mill throughput of

<sup>&</sup>lt;sup>1</sup> See ASX announcement dated 15 May 2023 entitled 'Resource increases to 1.6 Moz and remains open' and ASX announcement dated 5 September 2024 entitled 'Completion of sale of non-core tenements to Pilbara Minerals and receipt of first \$10m'



>70% (and up to 93%) higher confidence indicated resources from the resource model in the target production.

The base case scenario chosen for the Mt York Scoping Study is a standalone mining and conventional CIL process plant with a 4 Mtpa throughput rate resulting in an 8year mine life based on current resources.

The Company has constrained the Scoping Study by using mostly indicated resources that carry a higher geological confidence as defined under the JORC code. Improvements will be sought as the Company embarks on a major drilling programme to increase resources and to convert existing inferred to indicated resources ahead of the next mineral resource estimate.

On September 5, 2024 Kairos announced<sup>2</sup> that it had completed a sales agreement with Pilbara Minerals Ltd (ASX:PLS) to sell non-core ground around Mt York for \$20m and receive gold and base metal rights to 367sqkm of exploration licences and applications surrounding Mt York (subject to negotiating a full-form exploration agreement). Importantly, this includes a 1,500m strike extension of the Mt York mine stratigraphy to the northwest that is mineralised. Kairos's next drill programme will drill this important zone and is confident that it will add additional gold resources ahead of a pre-feasibility study.

### Kairos Managing Director, Dr Peter Turner said:

"The Scoping Study shows Mt York has the potential to be an outstanding WA gold mine with strong margins, robust cashflow and excellent financial returns.

"The strength of the project is highlighted by the strong forecast IRR of 35 per cent and the rapid payback period of just 2.7 years.

"Importantly, there is immense scope to increase the production profile by continuing to grow the 1.4Moz resource.

"This will now be a key focus for Kairos, with an aggressive drilling program planned for early next year. We will drill-out the 1,500m extension of the Mt York Gold Deposit stratigraphy to the north-west, which we know is mineralised in preparation for a new mineral resource estimate that will lay the foundation for our pre-feasibility study".

#### **Summary Study Highlights and Financial Outcomes**

The Company modelled three different mining operations and process rates (2.5, 4.0, 5.0 Mtpa) through the same processing circuit configuration. The base case chosen

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<sup>&</sup>lt;sup>2</sup> See ASX announcement dated 5 September 2024 entitled 'Completion of sale of non-core tenements to Pilbara Minerals and receipt of first \$10m'



for the scoping study was a 4.0 Mtpa process rate that shows advantages over the other scenarios in terms of capital cost entries and LOM operating cost savings. However, both the 2.5 and 5.0 Mtpa options will be considered again at a prefeasibility level of study. The aggressive drilling campaign that follows the scoping study will target resource growth and increased resource confidence that will have a significant impact on the project technical factors and ultimately the economic outcomes (see table below).



Key Operational Assumptions	Units	2.5 Mtpa	4.0 Mtpa	5.0 Mtpa
Mining Duration	Yrs	9.1	6.5	5.5
Mining – ore	Mt	25.6	25.6	25.6
Mining – waste	Mt	146.5	146.5	146.5
Ore Processed	Mt	25.6	25.6	25.6
Stockpile Reclaim	Mt	10.1	9.2	8.9
Average strip ratio (LOM)	Ratio	5.7	5.7	5.7
Processing Duration	Yrs	11.1	7.25	6.0
Process Rate	Mtpa	2.5	4.0	5.0
Indicated Resources to mill (LOM)	<u>.                                    </u>	71.4	71.4	71.4
Gold Grade (LOM)	g/t	0.91	0.91	0.91
In-situ ounces to mill (LOM)	Koz	747	747	747
Gold Recovery	%	88	88	88
Recovered ounces/payable metal (LOM)	Koz	657.2	657.2	657.2
Key Financial Assumptions				
Discount rate	%	5	5	5
Gold Price	A\$	3,500	3,500	3,500
Exchange Rate	US\$/A\$	1.53	1.53	1.53
Capital Estimates				
CAPEX – pre-production	A\$M	211	276	344
Sustaining CAPEX	A\$M	48	48	48
LOM Capital	A\$M	259	324	392
Key Project Outcomes				
Payable Metal	Koz	657.2	657.2	657.2
Gross Revenue	A\$M	2,300	2,300	2,300
Mining Costs - Total	A\$M	804	804	804
Processing Costs - Total	A\$M	511	502	486
General and Administrative Costs	A\$M	37	37	37
OPEX per year (LOM average)	A\$M	113	168	221
OPEX per oz (LOM average)	A\$/oz	2059	2044	2020
All-in Sustaining Costs (LOM average)	A\$/oz	2220	2205	2181
Royalties (% of Net Revenue)	A\$M	58	58	58
EBITDA	A\$M	890	899	915
Operating Profit	A\$M	631	575	533
Net Profit	A\$M	383	348	332
Project Returns				
Project Free Cash Flow (undisc and pre-tax)	A\$M	630	574	511
Project NPV <sub>5%</sub> (unleveraged and pre-tax)	A\$M	423	410	358
Project IRR (unleveraged, pre-tax, calculated on annual basis)	%	34.7	35.7	29.4
Payback Period (unleveraged and post-tax)	Years	3.2	2.7	2.9

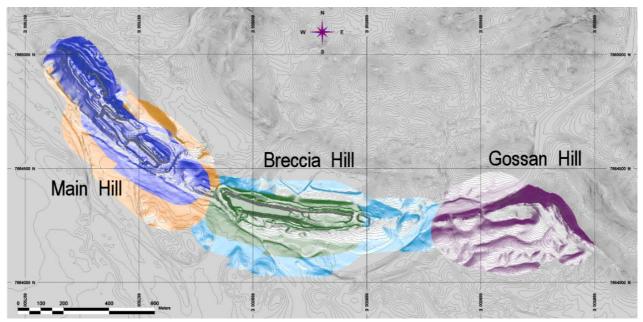
Table: Key project assumptions, cost estimates and financial outcomes for 2.5, 4 & 5 Mtpa



#### Mining, Production Schedule and Target

Mining Engineering consulting group, Cube Consulting Pty Ltd (Cube), developed mining schedules for the 2.5, 4.0 and 5.0 Mtpa mining & processing scenarios for the Main Trend gold mineralisation, assuming a contract mining operating strategy. Pit optimisations completed by Auralia in 2023 using a gold price of A\$3,100/ounce were used as a guide to develop newly completed pit and stage designs.

A total of five pit stages were developed, two each in Main Hill (MH) and Breccia Hill (BH), and one in Gossan Hill (GH) to the east. Pits will be developed using conventional open pit mining supported by 10m drill and blast benches, excavators working 5m flitches. Preliminary geotechnical assumptions of 55° batter face angles (BFA) and a 40° inter-ramp angle (IRA) were assumed for the study.



**Figure**: Pit stages at prospects Main Hill, Breccia Hill and Gossan Hill ('Main Trend').

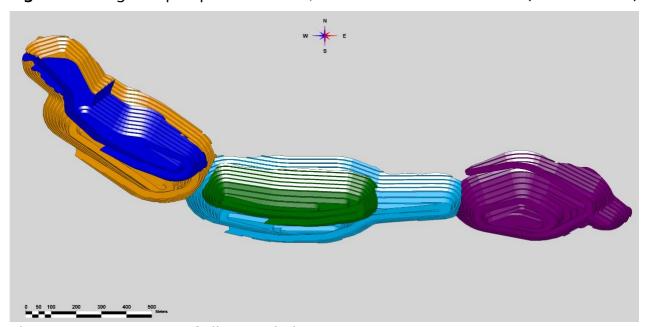
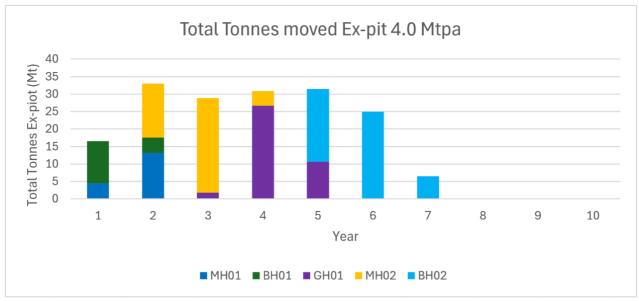


Figure: Isometric view of all Mt York design stages.



Priority consideration was given to indicated resources (higher confidence) over inferred resources (lower confidence) especially in the earlier years of mine development and the majority within the estimated payback period of the project.

The Scoping Study estimates that a total of 25.6 Mt of mineralisation at an average head grade of 0.91 g/t Au for 747,000 ounces of gold will be mined, producing 657,200 recovered ounces for each of the three process rate scenarios. Of this, 18.3 Mt of mineralisation is classified as 'indicated' and 7.3 Mt is classified 'inferred' with an average of 71.4% of the available mineralisation for LOM sitting in the indicated category.



**Figure**: Total ex-pit movement by stage by year for the base case 4.0 Mtpa

Mining during the five stages of development results in strip ratios (the measure of waste tonnes to ore tonnes) ranging from 3.3 to 10.4 with an average life of mine (LOM) ratio of 5.7.

Higher mining rates govern the larger processing throughputs for the 5.0 Mtpa resulting in a 5.5 year mine life, compared to 6.5 and 9.1 years for 4.0 and 2.5 Mtpa respectively.

A contract mining operation is assumed for the project supported by 240t excavators and 180t haul trucks. The mining method is conventional open pit, load and haul.



#### **Metallurgy and Processing**

Metallurgical recovery of 88% is estimated for fresh mineralised material through a conventional CIL circuit after new test work was completed for the Scoping Study by IMO under the guidance of GR Engineering Services (IMO 2024 results). This is lower, and more conservative, than previous leach test work results from the same mineralised samples completed by IMO in 2023 commissioned by the Company<sup>3</sup> where average gold recoveries of 91.3% were achieved at a grind size of 53 μm. Recovery improvements will be sought in future test work from fresh mineralisation and, importantly, the oxide and partially-oxidised mineralisation domains that have not been tested to date.

The process flow sheet developed for a 4 Mtpa at Mt York by GR Engineering Services includes a primary crusher and ore storage, followed by grinding to 80% passing 75 µm in a SAG mill/ball mill/pebble crusher (SABC) circuit. The ground product will be thickened and treated by cyanide leaching through a carbon-in-leach (CIL) circuit with an associated gold elution and electrowinning section. The CIL tailings stream will be thickened and pumped to the tailings storage facility (TSF).

The key process design criteria used to design the process flowsheet at Mt York is described in the table below.

<sup>&</sup>lt;sup>3</sup> See KAI press announcement dated 20 September 2023 entitled 'Metallurgical results show excellent recoveries from simple processing route



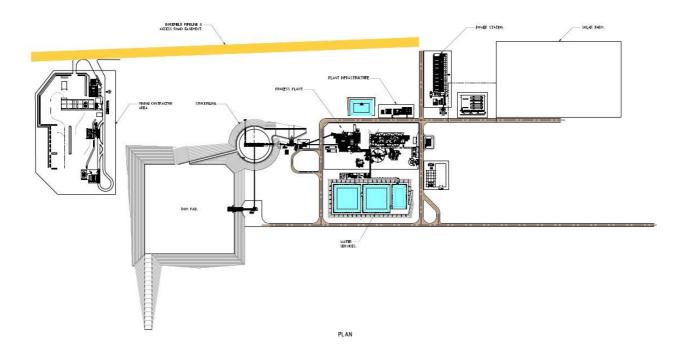
Parameter	Units	Value		
Production				
Annual Throughput	Mtpa	4		
Head Grade	Au g/t	1.00		
Leach Extraction	Au %	88		
Gold Extracted	oz/a	113,171		
Comminution Parameters				
SMC A x b		27.8		
SMC ta		0.20		
Rod Mill Work Index*	kWh/t	12.9		
Ball Mill Work Index*	kWh/t	19.1		
Abrasion Index*		0.207		
Crushing				
Utilisation	%	80		
Feed Rate to Vibrating Grizzly	t/h	571 (401 Oversize to Jaw)		
Primary Crusher		Jaw		
Installed Power	kW	250		
Grinding				
Utilisation	h/a	8,000		
Feed Rate	t/h	500		
Primary Grinding Mill		SAG Mill		
Installed Power	MW	9		
Drive		Variable Speed		
Secondary Grinding Mill		Ball Mill		
Installed Power	MW	7.5		
Drive		Fixed Speed		
Feed Size	P <sub>80</sub> mm	169		
Product Size	P <sub>80</sub> µm	75		
Cyanidation				
Leach Feed Thickener Diameter	m	26		
CIL Residence Time	h	30		
Elution Type		Split AARL with single columns		
Elution Batch Size	t	11		
CIL Tailings Thickener Diameter	m	26		

Table: Key Process Design Criteria

The processing plant is designed to operate seven days per week at a nominal rate of 500 dry t/h to the grinding circuit, operating with a utilisation rate of 91.3% or 8,000 h/a. The processing facility unit processes are based on conventional technology for gold extraction and recovery following a processing route of:



- Open circuit primary crushing using a 250 KW jaw crusher to a crushed ore stockpile;
- Stockpile reclaim with two apron feeders;
- Closed circuit grinding using a 9 MW semi-autogenous grinding (SAG) mill with a 7.5 MW ball mill and a pebble crusher in closed circuit (SABC circuit);
- Classification in a cluster of 400 mm diameter hydrocyclones to a product size of 80% passing 75 µm;
- Thickening of the ground product in a 26 m diameter thickener prior to leaching;
- Leaching in a hybrid carbon-in-leach (CIL) circuit comprising one leach tank followed by six CIL adsorption tanks;
- Acid washing and elution of the loaded carbon in a single column split AARL elution circuit, and thermal regeneration of the barren carbon prior to return to the CIL circuit;
- Electrowinning of the pregnant eluate and smelting of cathode sludge to produce a final product of gold doré;
- Thickening of the CIL tailings in a 26 m diameter thickener to maximise the recovery of process water;
- Treatment of the tailings slurry to reduce the residual cyanide as required;
- Pumping of the final tailings to the TSF with water recovery for recycling back to the process plant, and
- All of the major slurry and water pumping systems in the plant will include duty/standby pumps.



**Figure**: General site plan including ROM pad and process plant (schematic).



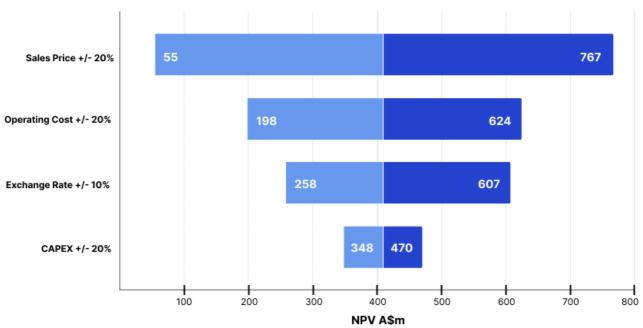


Figure: Schematic 3D design of 4 Mtpa process plant

#### **Sensitivity Analysis**

The Project financial outcomes point to a robust standalone gold operation with preproduction capital of \$276M, gross revenues of \$2.3Bn, strong free cash-flows estimated at \$574M, short payback period of 2.7 years and an 8 year mine life.

Based on a gold price of A\$3,500/oz the Project's ungeared and pre-tax NPV $_{5\%}$  is \$410M and the IRR is 35.7%. The Project's NPV is most sensitive to changes in the gold (sales) price, operating costs, USD:AUD exchange rate and total capital costs as shown in the chart below.



**Chart**: Tornado plot showing sensitivities in sales price, operating costs, exchange rate and total capital costs relative to the base case.



#### **Resource Growth Upside**

Aggressive resource growth drilling on high priority targets is planned for early 2025 including drilling the 1,500m of strike extent NW of Main Hill Prospect, where Pilbara Minerals have previously reported drill intercepts including 16m @ 2.43 g/t Au along the same mine stratigraphy as seen at Main Hill. If the planned 20,000m to 30,000m of drilling in Q2, 2025 is successful in determining new mineralisation as expected, a new mineral resource estimate will be completed and underpin future study phases that the Company is planning.

This includes an additional 1,500m of strike extension of the Main Trend mineralisation that has historical drill results including<sup>4</sup>:

- 12m @ 1.37 g/t from 80m (MYRC005)
- 16m @ 2.43 g/t Au from 16m (MYRC007)
- 4m @ 3.32 g/t Au from 4m (MYRC008)
- 6m @ 1.37 g/t Au from 84m (MYRC009)
- 8m @ 2.41 g/t Au from 44m (MYRC011)
- 2m @ 1.76 g/t Au from 116m (MYRC013)
- 5m @ 1.36 g/t Au from 173m (MYRC014)
- 15m @ 1.18 g/t Au from 13m (WSRC02)

Importantly, the Company recognises that there are some higher-grade mineralised intercepts included in the drilling and will look to expand the resource base especially looking at higher-grade, near surface mineralisation that may have a positive impact on future studies.

<sup>&</sup>lt;sup>4</sup> See KAI press announcement on 1 August 2024 entitled 'Non-core Mt York ground sold to Pilbara Minerals for \$20m'



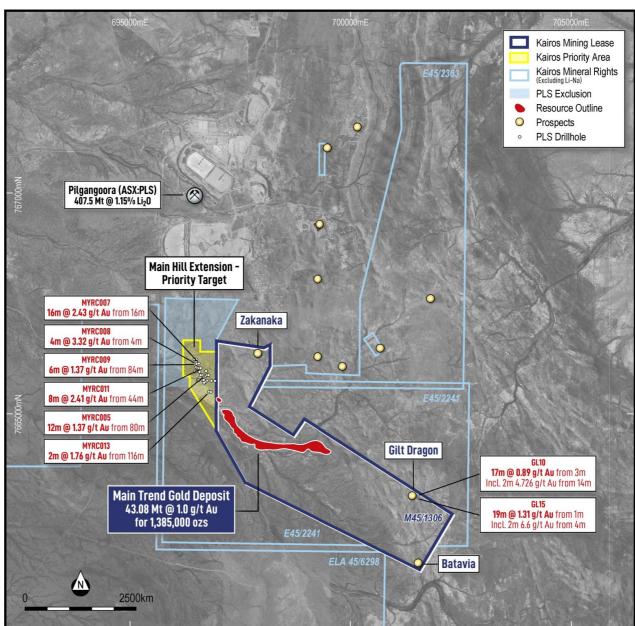


Figure: Resource growth targets/prospects surrounding Mt York.



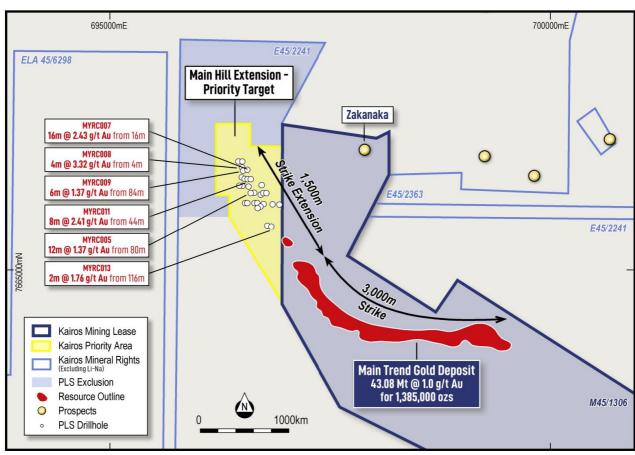
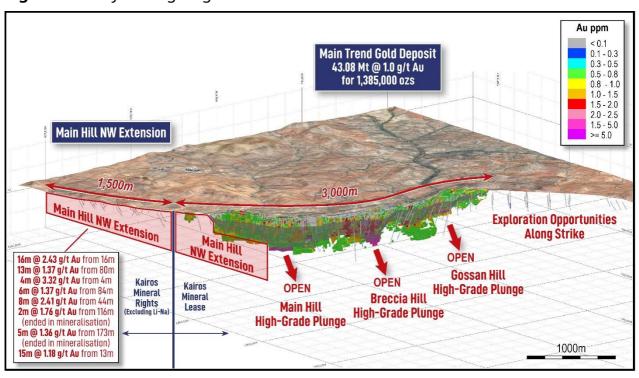


Figure: Priority drilling target at Main Hill Extension



**Figure:** Oblique slice along the Mt York Gold Deposit showing mineralised blocks from the 2023 resource model, optimal pit shells and exploration upside, particularly at the Main Hill NW Extension prospect that offers another 1,500m of mineralised mine stratigraphy.



#### **Potential Project Improvements**

The scoping study has provided a range of mining and milling scenarios for open cut operations for the Main Trend mineralisation at Mt York only. The gold deposit is a single continuously mineralised body and the Company has examined a 2.5, 4 and 5 Mtpa processing rate and associated mining operations in the study. Despite all the scenarios providing a positive outcome in terms of financial returns for a potential future stand-alone mining and processing operation, the Company has chosen the 4 Mtpa process rate (base case) as it provides the most effective return on investment (ROI) for the initial capital intensity.

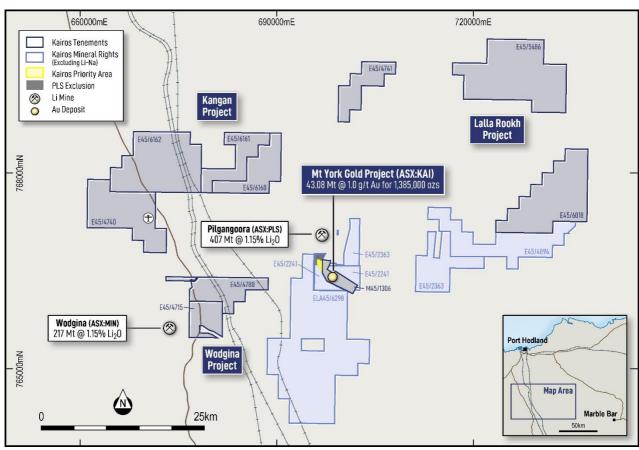
The scoping study is based on sound technical data and cost estimates, however, the Company considers that the largest single factor that can potentially improve the project and economics is resource improvements in terms of **resource size**, **grade** and **resource category** (ie, conversion of inferred to indicated). Converting current 'inferred' resources to 'indicated' will make available more resource inventory for mining – the current scoping study excludes most 'inferred' resources in the mine schedule.

To that end, the Board of Kairos supports a drilling programme up to 30,000m along the 4,500m of mineralised strike length at Main Trend, concentrating on the additional 1,500m extension called **Main Hill Extension** that Kairos secured the gold rights to (subject to negotiating a full-form exploration agreement) from Pilbara Minerals Ltd on August 1, 2024.

The Main Hill Extension area has seen only sparse drilling by Pilbara Minerals Ltd in the past but has prospective mineralised mine stratigraphy as seen at Mt York with some results suggesting there are also higher-grades of mineralisation than those seen at Mt York. Irrespective of the grade, the Company is excited to be drilling this prospect as a top priority in 2025.

Pilbara Minerals has offered Kairos the gold and base metal rights to 367 km<sup>2</sup> of exploration licences and applications which includes exploration licence application E45/6298 which is underlain by lookalike geology to the Mt York area and hosts banded iron formation (BIF) (see Figure below).





**Figure**: Kairos's gold and base metal mineral rights to 367km<sup>2</sup> of PLS tenements (light blue).

Other potential improvements to the Scoping Study include:

- Review of mine design and production schedule, mining equipment, mining operations and haulage modelling to optimize cost performance;
- Review and compare owner operator versus contractor models;
- Undertake additional metallurgical test work on completely oxidized, partially oxidized and additional fresh resource domain samples;
- Review a processing model to provide a pre-concentrate product for sale to a third party;
- Undertake gravity recovery amenability test work to improve early gold recoveries;
- Complete & review oxygen uptake test work; carbon adsorption and loading test work; dynamic thickening test work;
- Review power supply options including fuel type and contributions of renewables:
- Review potential comminution power savings achievable via 3 stage (vs 1 stage) crushing;
- Review fuel supplier agreements and potential savings under a BOO model.



#### **Project funding sources and strategy**

Given the technical and economic attractiveness of the Study, Kairos has reasonable grounds to believe the project could be financed via a combination of debt and equity. To achieve the range of outcomes indicated in the Study, \$276 million of capital is required prior to reaching production.

At this stage of the project, no formal discussions have yet commenced with potential financiers. However, consistent with typical project development financing, Kairos expects debt could potentially be secured from a range of sources including Australian banks, international banks, the high yield bond market, resource credit funds, export credit agencies, Government agencies, or in conjunction with product sales or offtake agreements. Alternative funding options, including undertaking a corporate transaction, a joint venture partnership, a partial asset sale and/or offtake pre-payment, could be undertaken if it maximises shareholder value over the long term.

Given the early stage of the project, there is no certainty that Kairos will be able to source funding as and when required. It is also possible that required funding may only be available on terms that may be dilutive to or otherwise affect the value of the existing shares in Kairos.

Kairos has formed the view that there is a reasonable basis to believe that requisite future funding for development of the Project will be available when required based on the following:

- Kairos has a market capitalisation of approximately \$42 million and a strong track record of raising equity funding for the advancement of the project. ~\$51 million has been raised to date.
- The significant and varied potential improvements to the outcomes of the Study as outlined above.
- The project is in Western Australia, one of the world's best mining jurisdictions
  with a stable political and regulatory environment. This is highly attractive for
  financiers and partners due to the low levels of sovereign, legal, operational
  and financial risk.
- Economic viability at this early stage of the project, in a range of scenarios, has been demonstrated by strong free cashflow and a short capital investment payback period of ~2.7 years as outlined in the Study.



#### **Next Steps**

- Plan and commence resource growth drilling in early 2025
- Continue Mining Lease application process update including Mining Agreement negotiation with Nyamal Aboriginal Corporation (NAC)
- Undertake Heritage Protection survey over the Talkuwarrana Heritage site, Main Hill
   NW Extension and Lucky 13 Prospects in preparation for resource expansion drilling
- Plan and execute desktop and site Environmental studies
- Commence pre-feasibility study work

#### **About Kairos Minerals**

Kairos Minerals (ASX:KAI) owns 100% of the flagship 1.4 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 1.4 Moz base with significant exploration potential existing within the Mt York '**Main Trend'** and its extension towards the northwest where Kairos owns the mineral rights for gold. Scoping study results point to a robust, open-cut mining operation processing 4 Mtpa of free-milling mineralisation over 8 years. The next steps are to drill the extensions of Main Trend and nearby gold prospects for resource increases whilst targeting near-surface, high-grade shoots to further improve the project economics.

During the resource expansion work, Kairos will collect important additional information to fine-tune metallurgical processing, geotechnical engineering and mine scheduling for further development studies. Current resources at a  $0.5 \, \text{g/t}$  Au cutoff grade above 325m depth are shown in the table below.

Deposit	Indicated		Inferred			Total			
	Tonnes (MT)	Au (g/t)	Ounces (kozs)	Tonnes (MT)	Au (g/t)	Ounces (kozs)	Tonnes (MT)	Au (g/t)	Ounces (kozs)
Main Trend	20.25	1.06	690	22.83	0.95	697	43.08	1.00	1,385
Total	20.25	1.06	690	22.83	0.95	697	43.08	1.00	1,385

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 and importantly, rare earth element (REE) mineralisation. Kairos's 2023 drilling programme at Black Cat intercepted significant, clay-hosted REE mineralisation

This announcement has been authorised for release by the Board.

Peter Turner Zane Lewis
Managing Director Non Executive Director

#### **For Investor Information please contact:**

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#### **COMPETENT PERSON STATEMENT:**

The information in this report that relates to Exploration Results or Mineral Resources is based on and fairly represents information compiled and reviewed by Mr Mark Falconer, who is a full-time employee of Kairos Minerals Ltd and who is also a Member of the Australian Institute of Geoscientists (AIG). Mr Falconer 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). Mr Falconer has provided his prior written consent 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 dated 15 May 2023 (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.