

ASX ANNOUNCEMENT**2 December 2024**

Mt York Gold Project – Updated Scoping Study

Kairos Minerals Ltd (ASX:KAI) (**Company**) refers to the announcement of its Scoping Study for the Mt York Gold Project released on 27 November 2024 (**Scoping Study Announcement**).

Annexed to this announcement is an updated version of the Scoping Study Announcement which includes the following additional disclosures:

- Additional information regarding the material assumptions underpinning the Scoping Study, including the timeframe for development and production, and the sequencing of the Mineral Resources in the production schedule.
- Additional information regarding the modifying factors considered as part of the Scoping Study.
- Clarifications regarding the parties involved in preparing the Scoping Study.

This announcement has been authorised for release by the Company's Board of Directors.

For further information, please contact:

Robbie Featherby
Company Secretary

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 life-of-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)_{5%} – \$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 forward-looking 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 Moz¹** 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

¹ 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 8-year 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 announced² 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".

² See ASX announcement dated 5 September 2024 entitled 'Completion of sale of non-core tenements to Pilbara Minerals and receipt of first \$10m'

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 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 pre-feasibility 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)	%	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 _{5%} (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

Study Team

The Scoping Study has been prepared by qualified and competent Kairos Minerals Ltd employees and supported by the following external, independent, expert consultants from the companies listed in the table below. Capital and operating costs for the Scoping Study have been generated by senior expert consultants from the companies listed in the table below.

Discipline	Responsible
Geology & Resource	
<i>Mineral Resource Estimate</i>	Encompass Mining Solutions Pty Ltd
<i>Database Management</i>	Kairos Minerals Limited
<i>Geological & Structural Interpretation</i>	Kairos Minerals Limited
Mining	
<i>Open Pit Optimisations</i>	Auralia Mining Consultants Pty Ltd
<i>Open Pit Designs</i>	Cube Consulting Pty Ltd
<i>Open Pit Mining Schedules</i>	Cube Consulting Pty Ltd
Geotechnical	
<i>Geotechnical Engineering (preliminary)</i>	MineGeoTech Pty Ltd
Metallurgical & Processing	
<i>Metallurgical Test Work (Laboratory)</i>	ALS Laboratory
<i>Metallurgical Test Work (Consulting)</i>	Independent Metallurgical Operations Pty Ltd
<i>Process Plant Design</i>	GR Engineering Services Limited
Operating & Capital Costs	
<i>Power Supply</i>	Kairos Minerals Limited
<i>Processing - Capital & Operating</i>	GR Engineering Services Limited
<i>Tailings Storage Facility (TSF) - Capital & Sustaining</i>	GR Engineering Services Limited
<i>Mining - Capital & Operating</i>	Cube Consulting Pty Ltd
<i>Site Infrastructure (accommodation, lay-downs etc)</i>	GR Engineering Services Limited
<i>General & Administration (G&A)</i>	GR Engineering Services Limited
Water Management	
<i>Water Management (desktop review for surface & ground water)</i>	Pentium Water Pty Ltd
Environmental	
<i>Environmental Management</i>	-
Heritage	
<i>Heritage & Compliance</i>	Kairos Minerals Limited

Table: Study Team used in the Mt York Gold Project Scoping Study

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.

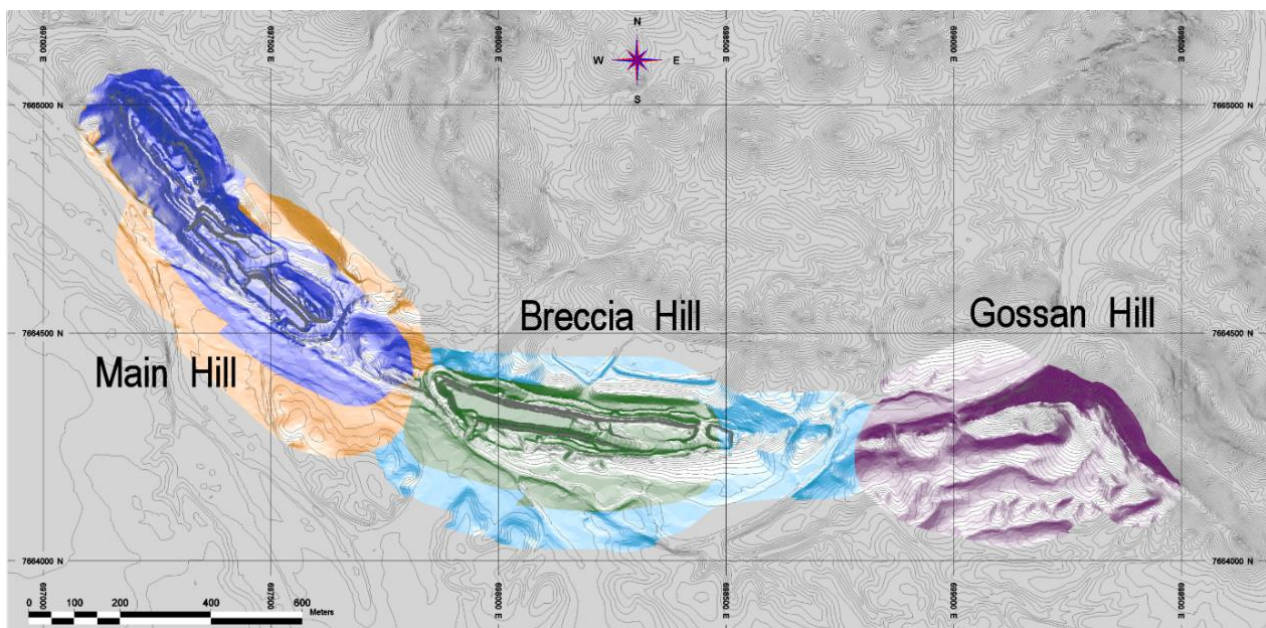


Figure: Pit stages at prospects Main Hill, Breccia Hill and Gossan Hill ('Main Trend').

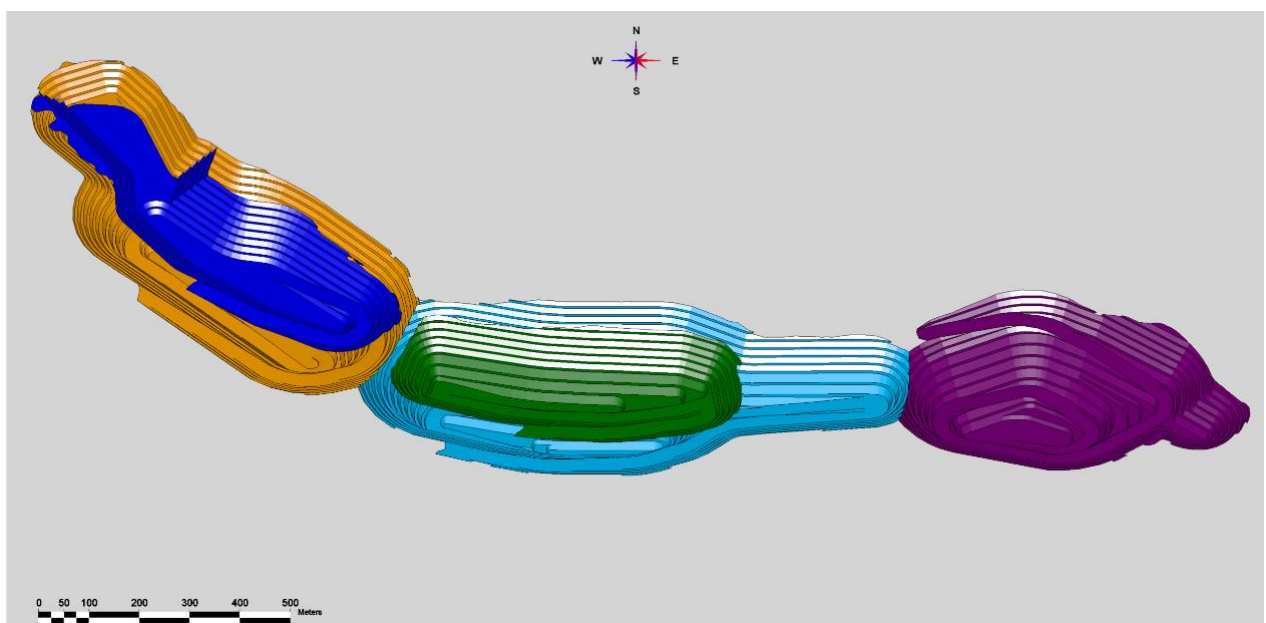


Figure: Isometric view of all Mt York design stages.

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 (see table below).

Mined	Unit	Total	Year							
			1	2	3	4	5	6	7	8
Ore mined	Mt	25.6	2.2	4.9	7.3	4.7	2.5	2.5	1.5	0.0
Waste mined	Mt	146.5	14.4	28.1	21.5	26.2	29.0	22.4	5.0	0.0
Ore processed	Mt	25.6	0.6	4.0	4.0	4.0	4.0	4.0	4.0	1.0
Stockpile reclaim	Mt	9.2	0.0	0.5	0.4	0.7	1.9	1.9	2.8	1.0
Au ore grade to mill	g/t	0.91	1.52	1.03	1.09	0.94	0.87	0.81	0.73	0.41
Indicated ore to mill	%	71.4	95.2	75.6	70.0	70.0	70.0	73.9	63.2	79.0
Inferred ore to mill	%	28.6	4.8	24.4	30.0	30.0	30.0	26.1	36.8	21.0
In situ ounces	koz	747	31	132	140	120	112	104	93	13
Recovered ounces	koz	657	27	116	123	106	98	92	82	11

Table: Breakdown of mined material for the 4.0 Mtpa operation including percentage of 'indicated' and 'inferred' resources by year

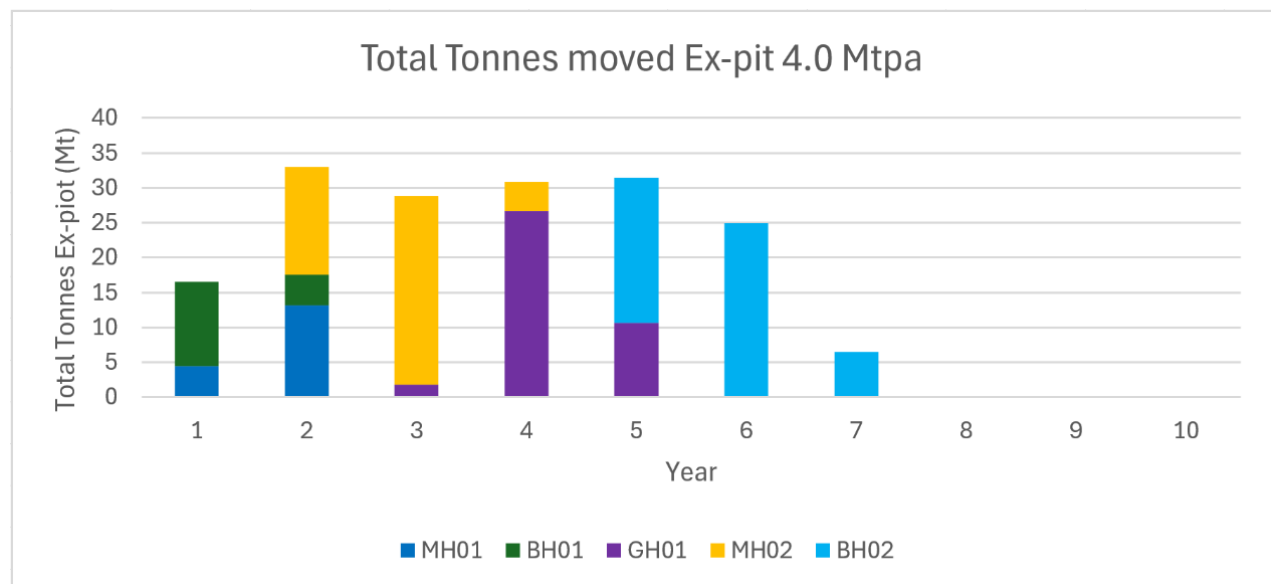


Figure: Total ex-pit movement by stage by year for the base case 4.0 Mtpa

Stage	Feed Tonnes (Mt)	Au (g/t)	Ounces (koz)	Waste Tonnes (Mt)	Total Tonnes (Mt)	Strip Ratio
MH01	4.1	0.84	111	13.5	17.6	3.3
MH02	10.0	0.84	269	36.7	46.7	3.7
BH01	2.4	0.98	76	14.1	16.5	5.8
BH02	4.6	1.06	157	47.7	52.3	10.4
GH01	4.5	0.92	133	34.6	39.1	7.7
Total	25.6	0.91	747	146.5	172.2	5.7

Table: Pit inventories used for production scheduling

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 (see table above).

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.

A construction time estimate to build all infrastructure and processing plant for a 4.0 Mtpa facility is 18-24 months.

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 Company³ 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).

³ See KAI press announcement dated 20 September 2023 entitled 'Metallurgical results show excellent recoveries from simple processing route'

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

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 ₈₀ mm	169
Product Size	P ₈₀ 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 dryt/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.

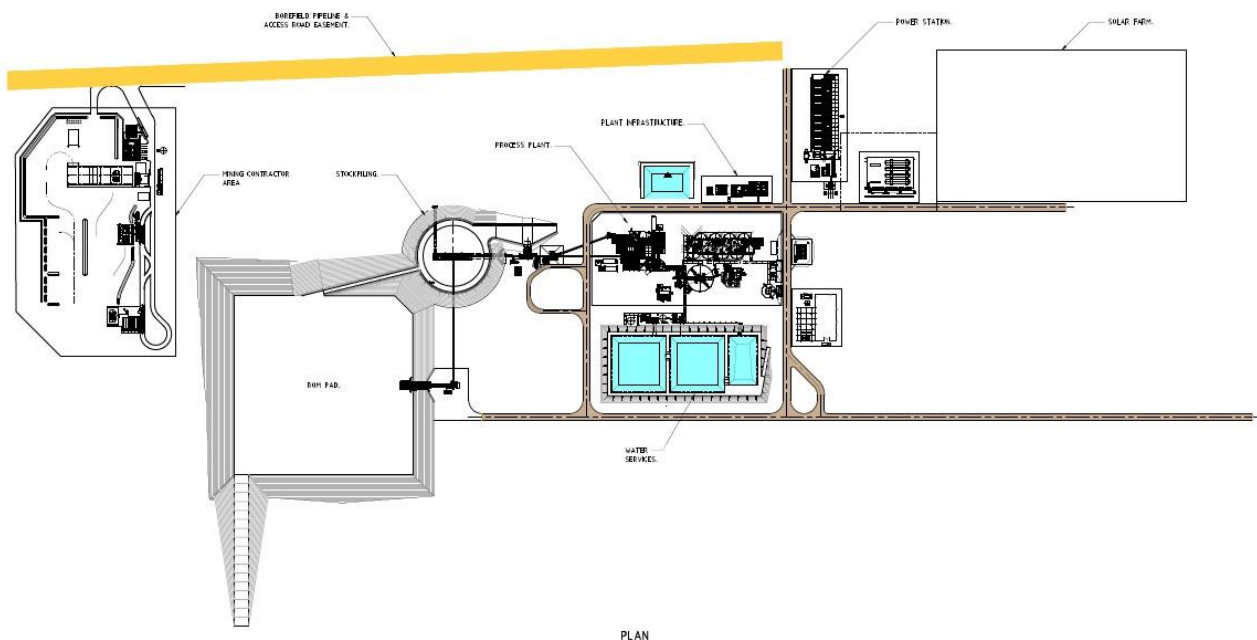


Figure: General site plan including ROM pad and process plant (schematic).

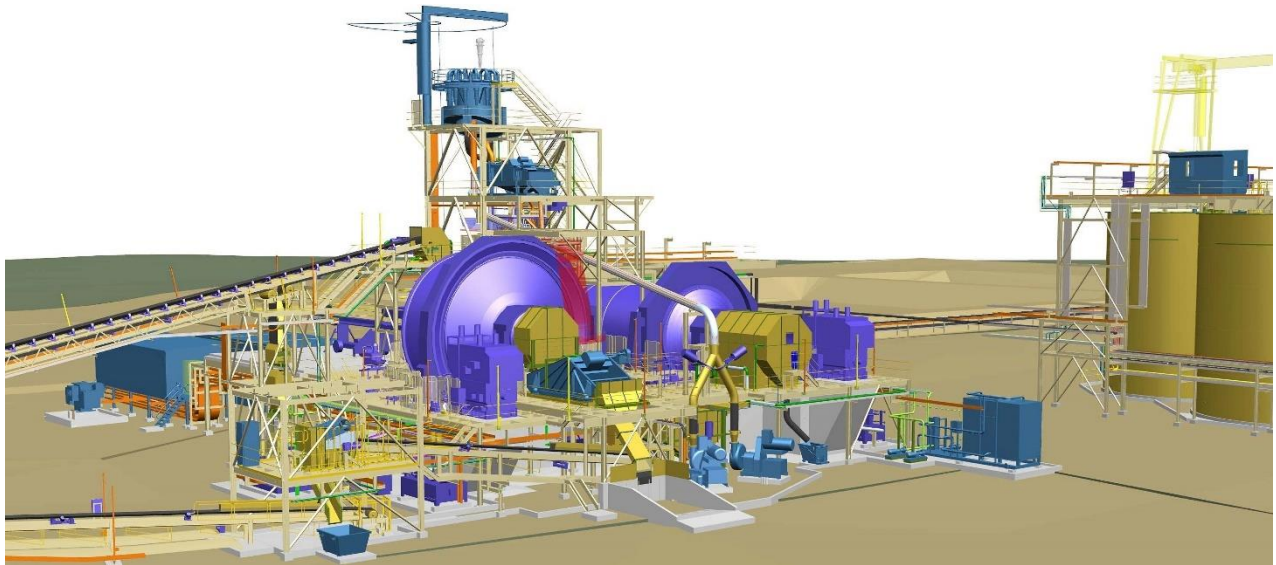


Figure: Schematic 3D design of 4 Mtpa process plant

Sensitivity Analysis

The Project financial outcomes point to a robust standalone gold operation with pre-production 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.

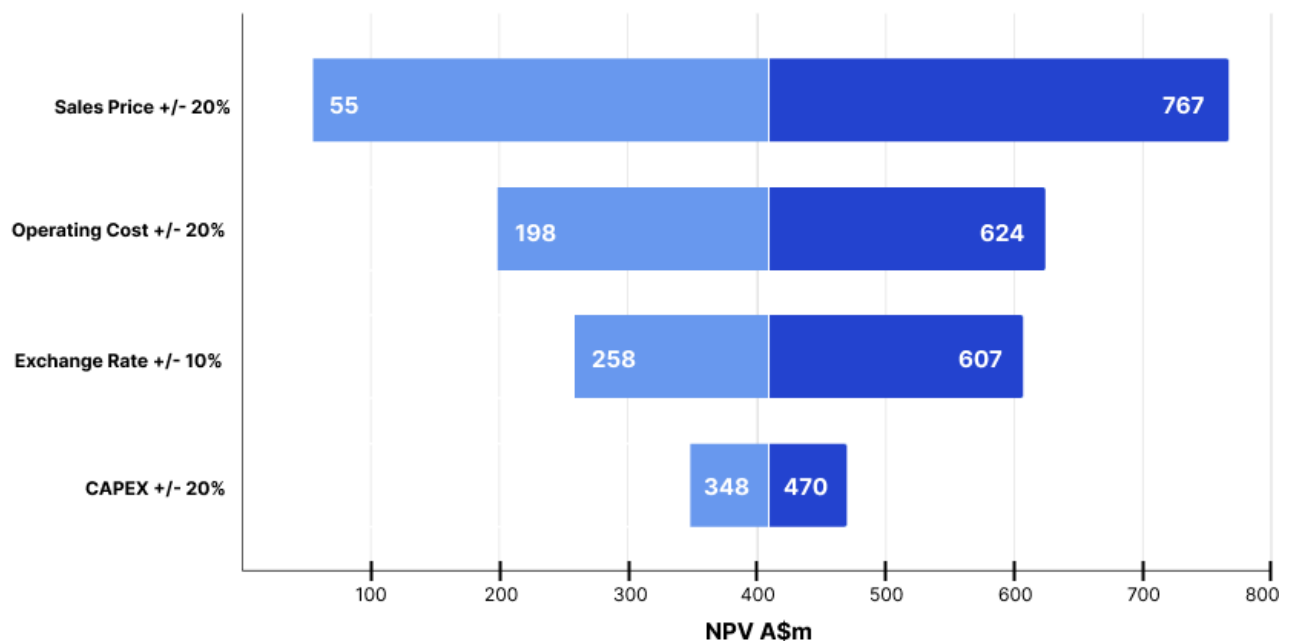


Chart: Tornado plot showing sensitivities in sales price, operating costs, exchange rate and total capital costs relative to the base case.

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 including⁴:

- 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.

⁴ See KAI press announcement on 1 August 2024 entitled 'Non-core Mt York ground sold to Pilbara Minerals for \$20m'

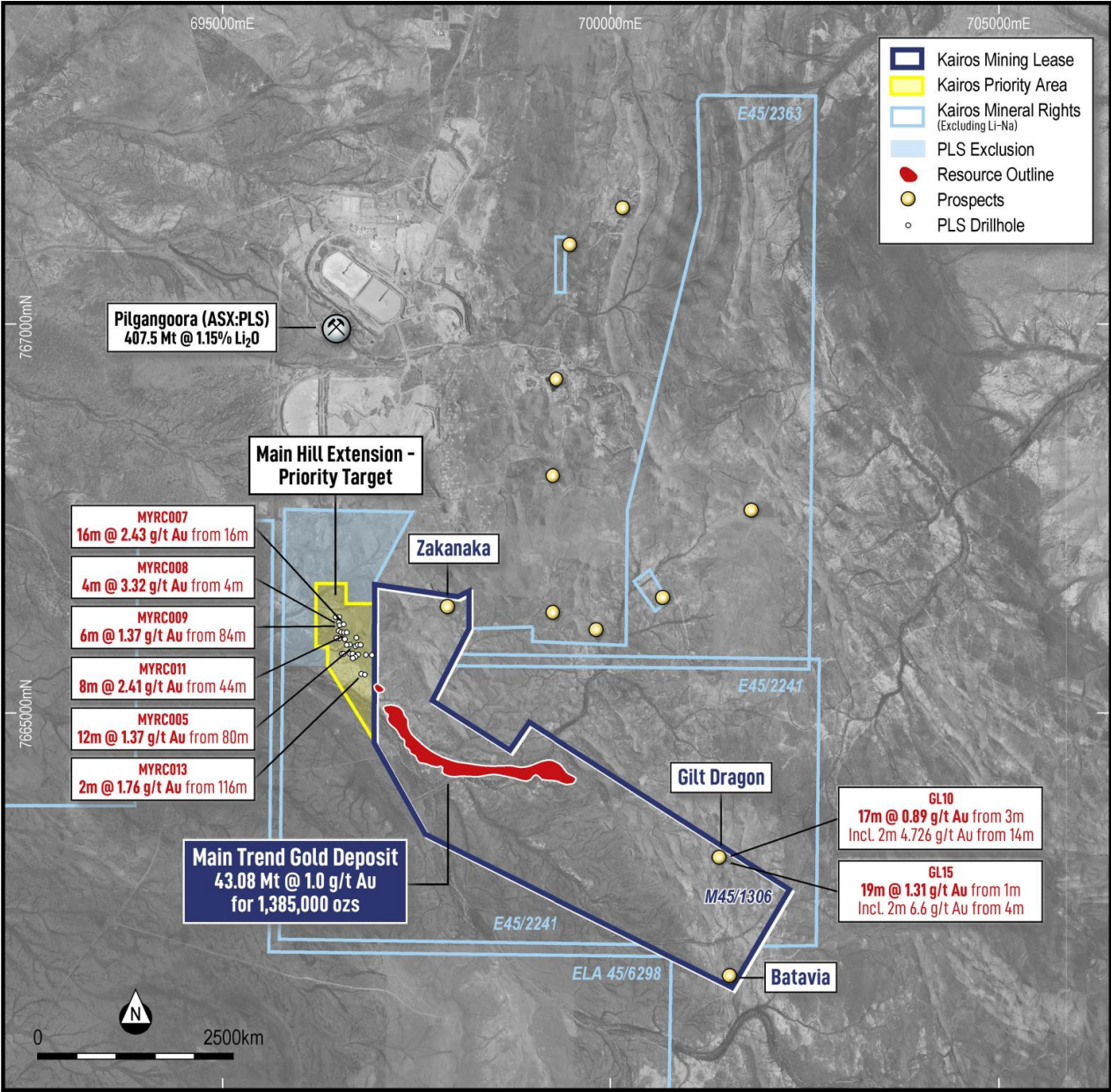


Figure: Resource growth targets/prospects surrounding Mt York.

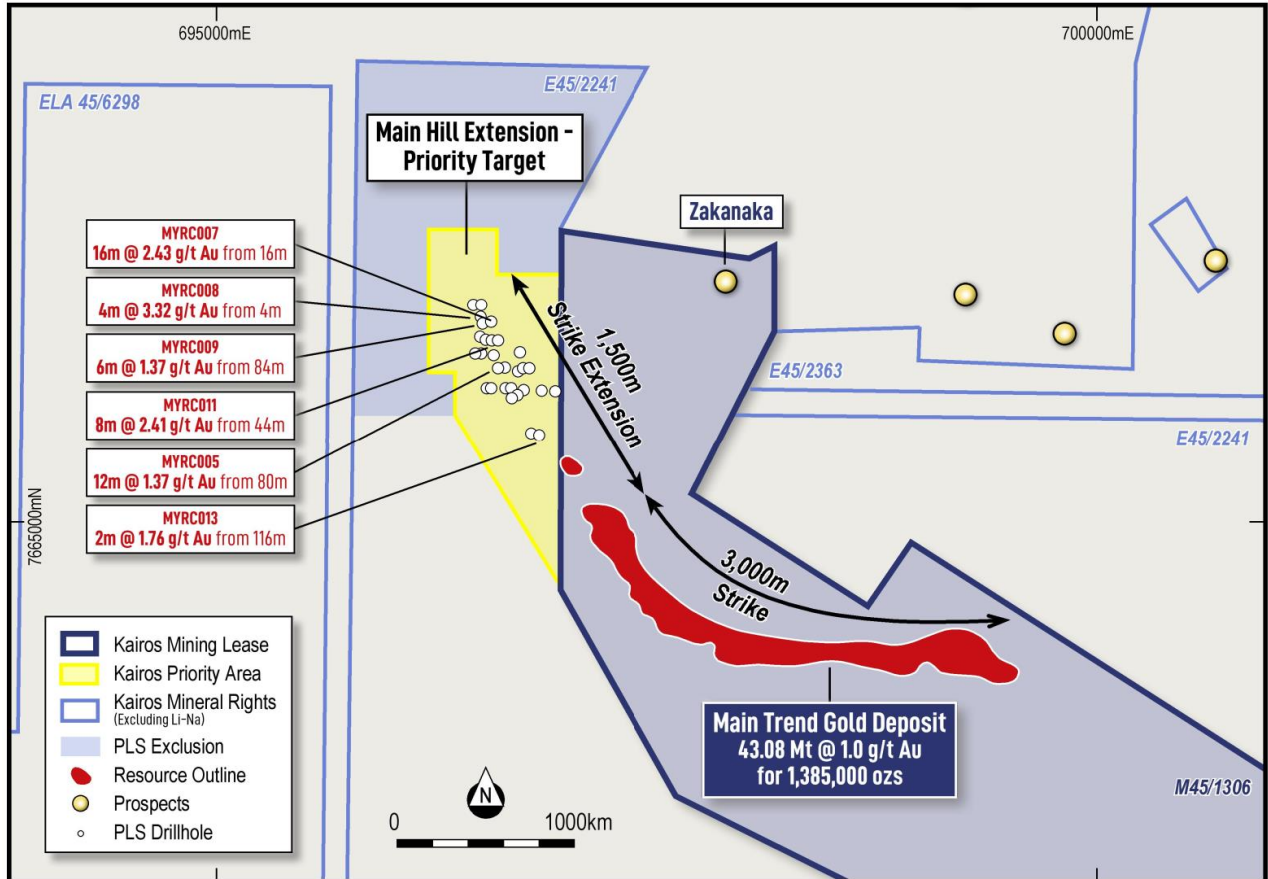


Figure: Priority drilling target at Main Hill Extension

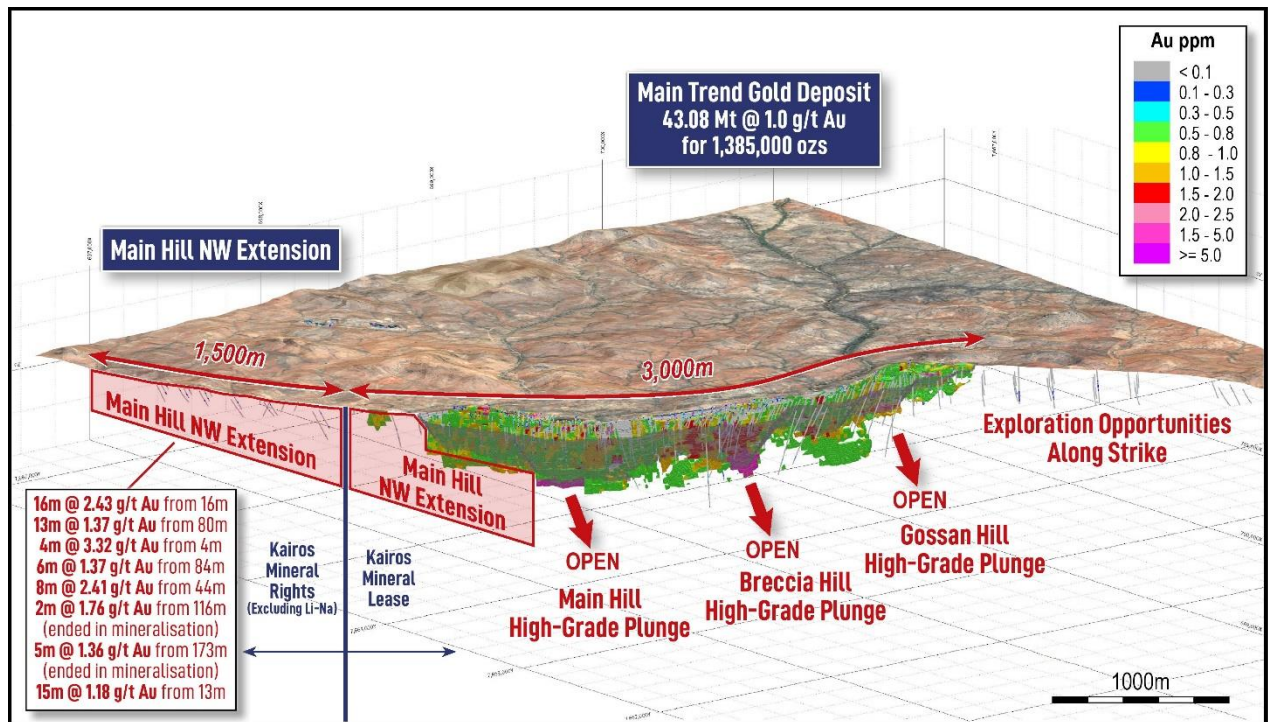


Figure: Oblique slice along the Mt York Gold Deposit showing mineralised blocks from the 2023 resource model, optimal pit shells and exploration upside, particularly at the Main Hill NW Extension prospect that offers another 1,500m of mineralised mine stratigraphy.

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 km² 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).

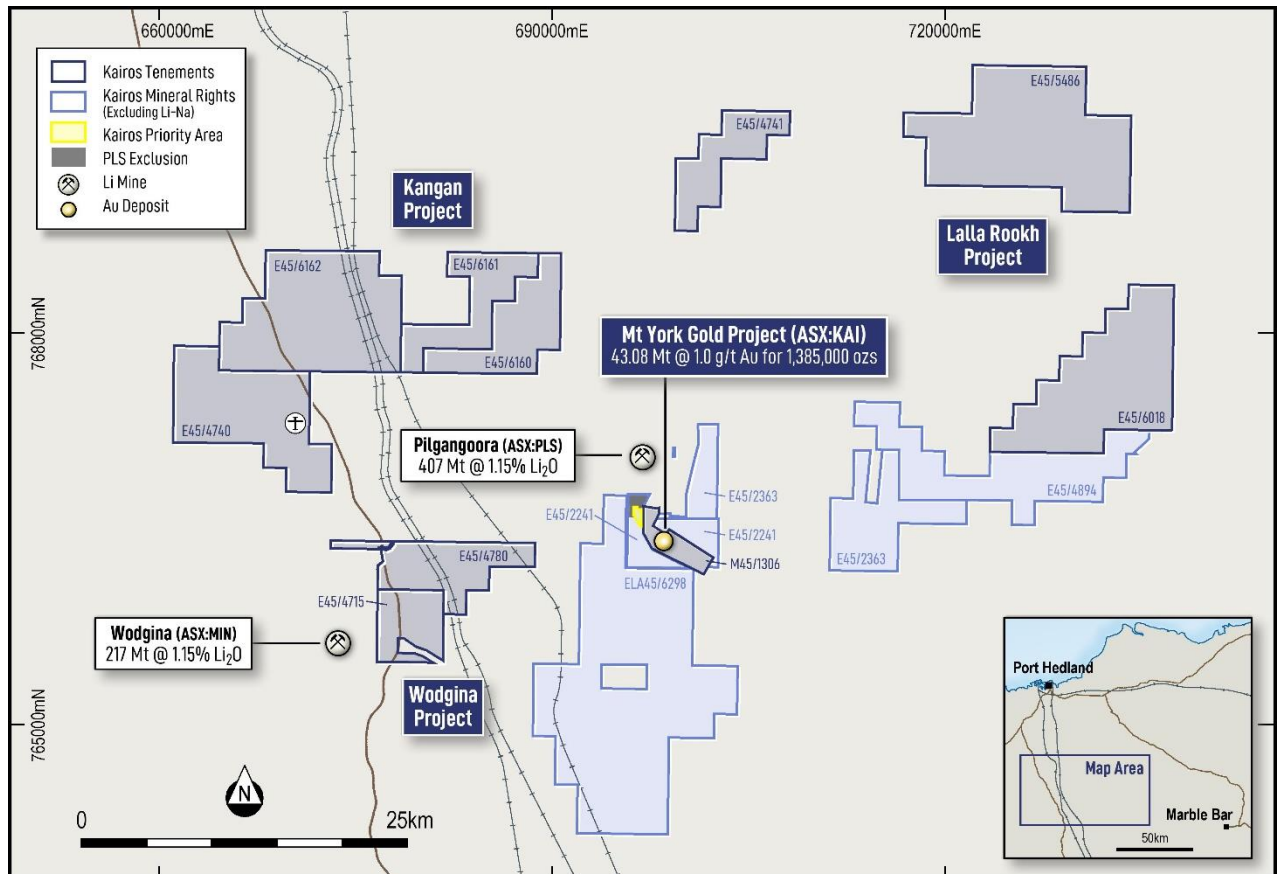


Figure: Kairo's gold and base metal mineral rights to 367km² of PLS tenements (light blue).

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.

Reasonable Basis for Forward-Looking Assumptions

No ore reserve has been estimated or declared for the Project. This document has been prepared in compliance with the JORC Code (2012) and the ASX Listing Rules. All material assumptions on which the Scoping Study production target and projected financial information are based have been included in this release and disclosed in the table below. The level of study does not support the estimation of Ore Reserves or provide any assurance that the Project will go ahead. However, the Scoping Study strongly supports progress to the next level of study being a Preliminary Feasibility Study (also termed 'Pre-Feasibility Study').

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	<ul style="list-style-type: none"> Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve. Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves. 	<ul style="list-style-type: none"> The Mineral Resource Estimate on which the Scoping Study for Mt York is based was previously announced on 15 May 2023 and 5 September 2024. No Ore Reserve has been declared as part of this Scoping Study.
Parties participating in the Scoping Study and Site visits	<ul style="list-style-type: none"> Comment on any site visits undertaken by the Competent Person and the outcome of those visits. 	<ul style="list-style-type: none"> Mark Falconer, the Competent Person for reporting of exploration results is the Exploration Manager for Kairos Minerals and conducts regular site visits. Chris Speedy, the Competent Person for the estimation and reporting of Mineral Resources at Mt York, has not conducted a site visit.
Study status	<ul style="list-style-type: none"> The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves. The Code requires that a study to at least Prefeasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered. 	<ul style="list-style-type: none"> The study undertaken at Mt York is a Scoping Study. No Ore Reserve has been declared.
Cut-off parameters	<ul style="list-style-type: none"> The basis of the cut-off grade(s) or quality parameters applied. 	<ul style="list-style-type: none"> The mine design and scheduling uses a 0.5g/t Au cut-off grade for run-of-mill feedstock, with stockpiling of low-grade 0.35-0.5g/t Au material for later processing towards the end of the operational life of the Project. Cut-off grades and parameters have been estimated on a A\$3,500/oz gold price and mining parameters outlined in the Mining, Production Schedule and Target section of this announcement

Criteria	JORC Code explanation	Commentary
Mining factors or assumptions	<ul style="list-style-type: none"> ▪ The method and assumptions used as reported in the Prefeasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design). ▪ The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc. ▪ The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc.), grade control and preproduction drilling. ▪ The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate). ▪ The mining dilution factors used. ▪ The mining recovery factors used. ▪ Any minimum mining widths used. ▪ The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion. ▪ The infrastructure requirements of the selected mining methods. 	<ul style="list-style-type: none"> ▪ No Ore Reserve has been declared. ▪ Appropriate consideration has been given to the selected open pit mining method, with conservative wall angles and conventional mining parameters used that are considered appropriate and suitable for the nature of the deposit. ▪ Mining dilution and ore recovery factors are considered appropriate given the wide nature of mineralised lodes within the Mt York deposit. ▪ The mine schedule has been designed to ensure that >70% Indicated material is available and prioritised in early production years to reduce risk. ▪ A total of 28.6% of Inferred material is contained within the mine design used for the Scoping Study, with Indicated material making up the bulk of the mineralisation at 71.4%. ▪ Refer to the Mining, Production Schedule and Target section of the announcement.
Metallurgical factors or assumptions	<ul style="list-style-type: none"> ▪ The metallurgical process proposed and the appropriateness of that process to the style of mineralisation. ▪ Whether the metallurgical process is well tested technology or novel in nature. ▪ The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied. ▪ Any assumptions or allowances made for deleterious elements. ▪ The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole. ▪ For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications? 	<ul style="list-style-type: none"> ▪ Metallurgical test work was completed on four separate composite samples constructed from 6 diamond drillholes spread across the deposit, including one composite from Main Hill, two composites from Breccia Hill and one composite from Gossan Hill. ▪ Metallurgical test work was completed by Independent Metallurgical Operations Pty Ltd (IMO) ▪ Initial leach test work on a grind size of 80% passing 53 microns was completed in 2023, with the results released to the ASX on 20 September 2023 in announcement titled "Metallurgical results show excellent recoveries from simple processing route" ▪ Additional leach tests were conducted as part of this study on a composite sample made up of the remaining drill core intervals used to construct the composites samples used in the 2023 test work ▪ Leach tests were conducted over a range of grind sizes of 53, 75, 106 and 150 microns, and under the same conditions as the 2023 test work

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> ▪ A split of the blended composite was used for comminution test work, with 20 samples of suitable size undergoing SMC testing, with the results being used to model the comminution circuit to size the grinding mills and calculate the grinding power requirements for this scoping study ▪ All metallurgical test work is considered appropriate to the style of mineralisation ▪ The metallurgical test work processes undertaken are considered well tested and standard practice ▪ Samples were tested for preg robbing, with low levels detected due to low levels of non-carbonate carbon ▪ No other deleterious elements were identified ▪ No bulk sampling or pilot scale test work has been conducted ▪ Refer to Metallurgy and Processing section in the announcement.
Environmental	<ul style="list-style-type: none"> ▪ <i>The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.</i> 	<ul style="list-style-type: none"> ▪ No waste rock characterisation work or detailed design of waste dumps and tailing storage facilities has been completed at this stage.
Infrastructure	<ul style="list-style-type: none"> ▪ <i>The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided or accessed.</i> 	<ul style="list-style-type: none"> ▪ Mt York is located approximately 135 km south of Port Hedland by road. ▪ Existing mine roads connect the Project to the Great Northern Highway. ▪ Port Hedland has suitable accommodation, an international airport and port services for required activities. ▪ Given the Project's location and proximity to Port Hedland, suitable labour is available for required activities from Port Hedland and Perth on a residential and FIFO basis respectively as assumed in the Scoping Study. ▪ Allowance for infrastructure construction has been included within the Scoping Study. ▪ A schematic site layout plan of infrastructure is provided in the Metallurgy and Processing section of the announcement, but no definitive locations or plans have been determined at this stage. ▪ The Project is surrounded by gently undulating, unimproved terrain suitable for infrastructure construction.

Criteria	JORC Code explanation	Commentary
Costs	<ul style="list-style-type: none"> ▪ <i>The derivation of, or assumptions made, regarding projected capital costs in the Study.</i> ▪ <i>The methodology used to estimate operating costs.</i> ▪ <i>Allowances made for the content of deleterious elements.</i> ▪ <i>The source of exchange rates used in the Study.</i> ▪ <i>Derivation of transportation charges.</i> ▪ <i>The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.</i> ▪ <i>The allowances made for royalties payable, both Government and private.</i> 	<ul style="list-style-type: none"> ▪ Capital costs have been estimated by Senior GRES and by Cube personnel using recent pricing from their databases, contacts, and similar scaled WA mining operations. ▪ Operating costs have been provided by Senior GRES and Cube personnel for the planned operations from their databases, first principals, and supplier quotes. ▪ All costs are considered appropriate and in line with costs used for similar WA mining projects and operations. ▪ No deleterious elements exist. ▪ All amounts are in Australian dollars (AUD). ▪ No transportation costs have been applied. ▪ A 2.5% WA State Government royalty has been applied in the financial modelling.
Revenue factors	<ul style="list-style-type: none"> ▪ <i>The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.</i> ▪ <i>The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and coproducts.</i> 	<ul style="list-style-type: none"> ▪ Head grades have been established via the mine scheduling which in turn is based on the Mineral Resource model. ▪ The gold price used for the financial modelling is A\$3,500/oz based on the spot gold price being at or above this level for the previous 6 months.
Market assessment	<ul style="list-style-type: none"> ▪ <i>The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.</i> ▪ <i>A customer and competitor analysis along with the identification of likely market windows for the product.</i> ▪ <i>Price and volume forecasts and the basis for these forecasts.</i> ▪ <i>For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.</i> 	<ul style="list-style-type: none"> ▪ Gold output will be sold at spot market price. ▪ N/A. ▪ N/A. ▪ N/A.
Economic	<ul style="list-style-type: none"> ▪ <i>The inputs to the economic analysis to produce the net present value (NPV) in the Study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.</i> ▪ <i>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</i> 	<ul style="list-style-type: none"> ▪ All the economic inputs used to derive the financial outputs were supplied by Senior Consultants from GR Engineering and Cube Consulting and are based on reasonable grounds. ▪ No inflation was applied, the discount rate used is 5%. ▪ NPV sensitivities to variations in significant assumptions and inputs were tested and can also be found in the Sensitivity Analysis section.

Criteria	JORC Code explanation	Commentary
Social	<ul style="list-style-type: none"> The status of agreements with key stakeholders and matters leading to social licence to operate. 	<ul style="list-style-type: none"> Considerable engagement is occurring with various local stakeholders and traditional owner groups No issues are expected around forming agreements with key stakeholders.
Other (incl Legal and Governmental)	<ul style="list-style-type: none"> To the extent relevant, the impact of the following on the Project and/or on the estimation and classification of the Ore Reserves: Any identified material naturally occurring risks. The status of material legal agreements and marketing arrangements. The status of governmental agreements and approvals critical to the viability of the Project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Prefeasibility or Feasibility Study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent. 	<ul style="list-style-type: none"> No Ore Reserve has been declared. No naturally occurring risks have been identified. The Project is owned 100% by Kairos Minerals and there are no marketing arrangements in place. A mining lease application (E45/1306) was submitted in November 2022 and is progressing through the approvals process.
Classification	<ul style="list-style-type: none"> The basis for the classification of the Ore Reserves into varying confidence categories. Whether the result appropriately reflects the Competent Person's view of the deposit. The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any). 	<ul style="list-style-type: none"> No Ore Reserve has been declared. No Ore Reserve has been declared. No Ore Reserve has been declared.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of Ore Reserve estimates 	<ul style="list-style-type: none"> No Ore Reserve has been declared.
Discussion of relative accuracy/ confidence	<ul style="list-style-type: none"> Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. 	<ul style="list-style-type: none"> No Ore Reserve has been declared. N/A.

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage. It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available 	<ul style="list-style-type: none"> N/A. N/A.

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 Talkuarrana Heritage site, Main Hill NW Extension and Lucky 13 Prospects in preparation for resource expansion drilling
- Begin water exploration work over the Company's licences
- 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 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
Managing Director

Zane Lewis
Non Executive Director

For Investor Information please contact:

Paul Armstrong – Read Corporate
0421 619 084

COMPETENT PERSON STATEMENT:

The information in this report that relates to Exploration Results 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 information in this report that relates to Mineral Resources is based on information compiled and reviewed by Christopher Speedy a fulltime employee of Encompass Mining Consultants who is also a Member of the Australian Institute of Geoscientists (AIG). Mr Speedy 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). The Resource Estimation has been prepared independently in accordance with the JORC Code. Mr Speedy has no vested interest in Kairos Minerals or its related parties, or to any mineral properties included in this report. Fees for the report are being levied at market rates and are in no way contingent upon the results. Mr Speedy 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 dated 15 May 2023 (Announcement) and subsequently updated in an announcement dated 5 September 2024. 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.