**ASX ANNOUNCEMENT** **10 October 2022**

# Drilling Update at Mt York, Pilbara WA

## First hole intercepts pegmatite at Lucky Sump Prospect plus wide zones of silicification-sulphide hit in core drilling to extend resource

**Highlights – Lucky Sump**

- **First hole drilled at Lucky Sump (KMY216) intercepted 5m of pegmatite; Assays pending**
- **Pegmatite intervals of 2-3m drilled in two other holes at Lucky Sump**
- **In light of these results, further RC holes are being planned at Lucky Sump and at Zakanaka, 2km north of Lucky Sump**
- **RC samples will be sent for multi-element analysis to determine lithium grade and Hylogger-3 for mineralogy**

**Highlights – Mt York Gold Project**

- **Sulphide zones intercepted in all diamond drill holes, extending and expanding interpreted mineralised zones**
- **Spectacular wide and significant sulphide-silicified zones drilled outside of current resource envelope at Main Hill (KMYD070)**
- **Nine dimond holes for 2,844m completed in the 89-hole programme**
- **Core cutting and sample preparation to begin this month**

Kairos Managing Director, Dr Peter Turner said: **"We have made a highly promising start to our first lithium drilling programme, successfully intersecting pegmatites at Lucky Sump. We eagerly await both the mineralogical assessment and laboratory analyses of the samples. New planned holes at Lucky Sump and Zakanaka will be drilled upon receipt of the lithium assays from the initial programme.**

**"At our flagship Mt York Gold Project, drilling has intersected spectacularly wide silicified-sulphide zones within the mine stratigraphy in both hangingwall and footwall positions to the main mineralised banded iron formation.**

**"We expect to continue seeing very thick sulphide-silicified zones known to be associated with mineralisation outside the current resource estimate as we have just seen in hole KMYD070, because this deposit is very much untested by drilling.**

**"We feel extremely confident that our targeting strategy based on 3D modelling and structural interpretation will extend the mineralisation significantly beyond the current 1.1 Mozs resource in preparation for the prefeasibility study".**

## Lump Sump RC drilling

RC dilling completed 15 of the 16 planned holes on three drill lines. Drill holes were drilled at -60° to the northwest to intercept pegmatites within mafic-ultramafic host rocks. Pegmatites are interpreted to dip to the southeast. Holes were drilled 'toe-to-heel' to provide complete coverage over the entire Lucky Sump prospect (**Figures 1 & 2**). One hole, KMYC225 was unable to be drilled during this phase due to unprepared earthworks and holes KMYC221 and KMYC222 did not reach the 150m target depth due to excessively hard felsic volcanic rocks being encountered.

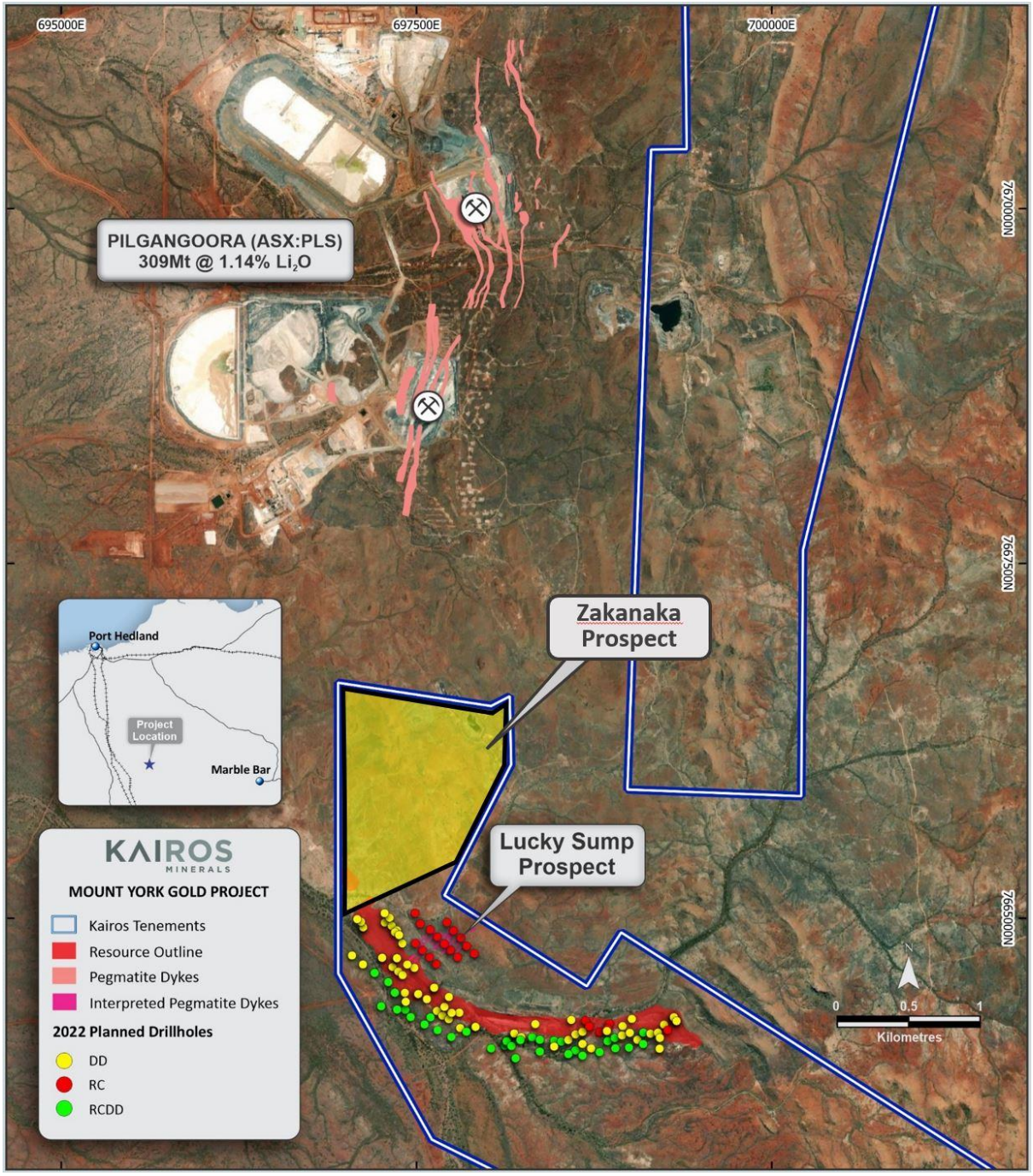


**Figure 1**. Lucky Sump and Zakanaka Prospect locations in relation to Pilbara Minerals' Pilgangoora's Lithium-Tantalum Mine and the Mt York Gold Project (red polygon is the Main Trend gold mineralisation).

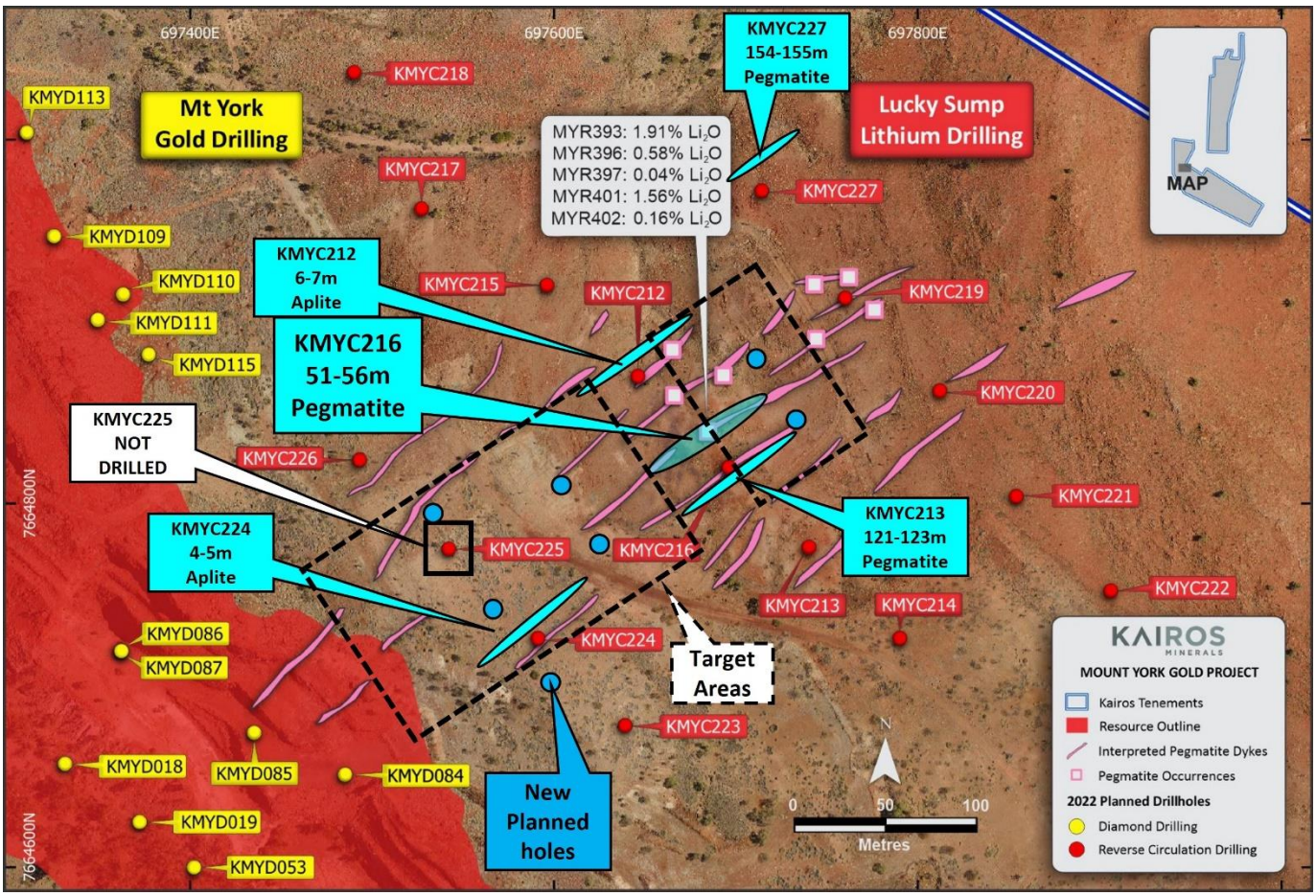


**Figure 2**. Lucky Sump Prospect showing RC drill holes (red dots) targeting Lucky Sump spodumene-bearing pegmatites and the recent drill chip observations (light blue comments). Yellow dots are planned holes for resource extensions at the Mt York Gold Project. The pegmatites are interpreted to strike to the northeast and potentially cut the Mt York Gold Deposit and stratigraphy at right angles. Geological assessment of the drill chips are added for intervals that have interpreted to be pegmatitic. Blue circles are planned new RC holes conditional upon receipt of results showing the presence of lithium-bearing pegmatites.

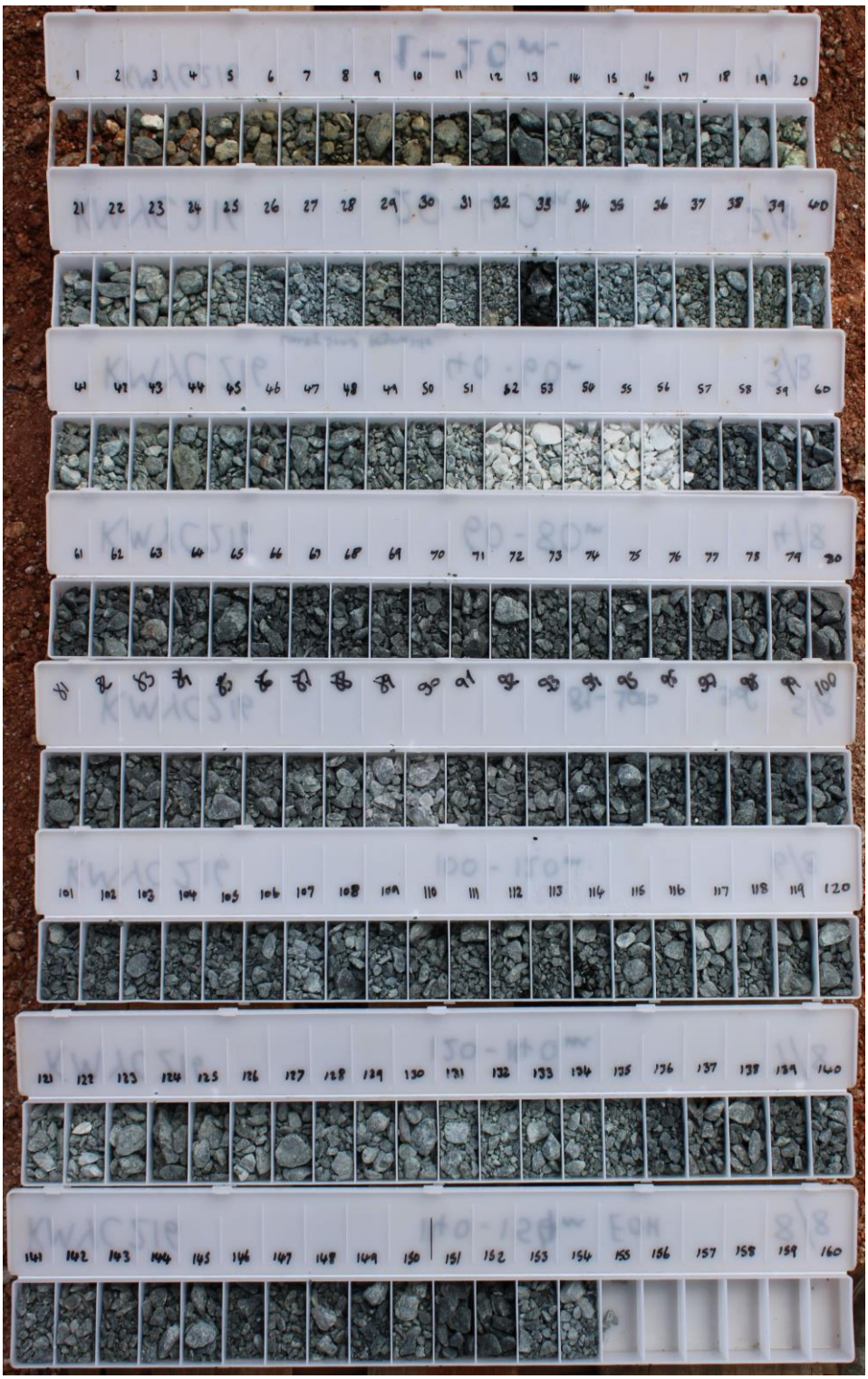

**Figure 3**. RC chips for hole KMYC216 drilled directly underneath Lucky Sump where surface spodumene-bearing pegmatite samples returned up to 1.91% $Li_2O$. Note the white chips in metres 52-56m. Results pending.

**Mt York DDH drilling**

Approximately 13% of the diamond and diamond-RC drilling into the Mt York Gold Project has been completed. Drilling has experienced difficulties particularly in the upper parts of the holes due to overburden but core quality has generally been excellent.

Drilling has been designed to test new areas of the resource where the Kairos technical team have targeted extensions of the resource outside of the current model. From this perspective, the initial drilling has been extremely successful.


**Figure 4.** Kairos geologist Will Coussens with core from hole **KMYD071** showing extremely silificied and sulphidised (pyrrhotite, pyrite, arsenopyrite) wall rocks at the hangingwall contact of a well mineralised banded iron formation. The mineralisation is typical of the hangingwall sequence and is **15.4m** in down-hole thickness at this location at Main Hill prospect (see **Figure 5**).


**Figure 5.** 15.4m of highly silicified-sulphidised core from hole KMYD071 at Main Hill.

Drilling to date has tested positions along much of the 3,000m strike length of the Main Trend mineralisation. The deposit has not been drilled effectively in the past and this new core is providing valuable data that will not only be used to update the new resource estimate but will be used for metallurgical testwork as part of the pre-feasibility work.

Summary geological-mineralisation observations for the drilling to date are shown in **Table 1**.

| Hole ID | From | To | Interval | Lithology | Sulphide type | Sulphide % | Comments | Position |
|---|---|---|---|---|---|---|---|---|
| KMYD020 | 59.0 | 97.3 | 38.3 | Layered Sandstone/Conglomerate/Schist | Pyrrhotite/Pyrite | 1 | Pr occuring consistently in veinlets throughout Schistose units, with Py in joint planes and disseminated/blebby Py throughout sandstones/conglomerates | Hangingwall Sediments |
| | 97.3 | 98.0 | 0.7 | Aplite/Qz Veining | | | Aplite with fractionated smokey qz vein at footwall aplite contact | |
| | 98.0 | 131.5 | 33.5 | Schist | Pyrrhotite/Pyrite | 1 | Py veinlets along foliation and jointing, regular qz/cb veining with Pr & Py occuring as blebs and within vugs (up to 5% within qz/cb veining) | |
| | 131.5 | 136.9 | 5.4 | Quartzite | Pyrrhotite | 2 | Hangingwall contact with BIF, diss pr and assoc with brecciated contact to BIF | Hangingwall Contact |
| | 136.9 | 214.6 | 77.7 | BIF | Pyrrhotite | 2 | BIF with grunerite & magnetite banding, 2% blebby sulphide and Pr veinlets concordant with banding orientation, sulphide higher in isoclinally folded hinges | BIF |
| | 214.6 | 215.2 | 0.6 | BIF | Pyrrhotite | 5 | Siliceous BIF footwall position. Brecciated with Pr, qz/cb veining in breccia containing replacement, coarse, euhedral Py (up to 10%). Transitioning into footwall. | Footwall Contact |
| | 238.9 | 246.1 | 7.2 | Basalt | Pyrrhotite/Arsenopyrite | 5 | Brecciated, silicified footwall contact with regular Pr veinlets, and blebby As | |
| | 246.1 | 247.7 | 1.6 | Pegmatite | Pyrite | 0.5 | Coarse grained, felsic intrusion, minor Py blebs | Mafic |
| | 247.7 | 250.6 | 2.9 | Basalt | Pyrrhotite/Pyrite/Chalcopyrite | 3 | Brecciated, silicified Basalt with Pr veinlets, blebby Py (assoc with veining) and trace cp | |
| KMYD022 | 86.9 | 136.0 | 49.1 | BIF | Pyrrhotite | 15 | Fine diss sulphides within grunerite-rich BIF. Upper BIF contact | Hangingwall Contact |
| | 168.2 | 176.2 | 8.0 | BIF | Pyrrhotite | 30 | Highly sulphidic BIF | BIF |
| | 200.9 | 204.6 | 3.7 | Basalt | Pyrrhotite | 20 | Brecciated meta-basalt, diss - massive sulphides, Lower BIF contact | Footwall Contact |
| KMYD025 | 184.9 | 185.8 | 0.9 | BIF | Pyrrhotite/Pyrite | 10 | Suphidic BIF | BIF |
| | 242.0 | 261.0 | 19.0 | BIF | Pyrrhotite/Pyrite | 10 | Brecciated BIF, sulphidic veinlets, Lower BIF contact | Footwall Contact |
| KMYD027 | 171.7 | 177.3 | 5.6 | BIF | Pyrrhotite/Pyrite | 20 | Siliceous BIF with quartz veining, Upper BIF contact | Hangingwall Contact |
| | 177.3 | 198.0 | 20.7 | BIF | Pyrrhotite | 15 | Fine diss sulphides within grunerite/magnetite-rich BIF | BIF |
| | 250.5 | 252.0 | 1.5 | BIF | Pyrrotite/Chalcopyrite | 10 | Brecciated siliceous BIF, Lower BIF contact | Footwall Contact |
| KMYD033 | 190.2 | 196.2 | 6.0 | Quartzite | Pyrrhotite | 3 | Quartzite with Pr veinlets above Upper BIF contact | Hangingwall Contact |
| | 288.2 | 290.3 | 2.1 | BIF | Pyrrhotite | 5 | Fine diss sulphides within grunerite/magnetite-rich BIF | BIF |
| | 293.5 | 298.7 | 5.2 | Basalt | Pyrrhotite/Pyrite | 2 | Diss sulphides on lower BIF contact | Footwall Contact |
| KMYD051 | 42.1 | 58.7 | 16.6 | Sandstone/Conglomerate | Pyrite | 2 | Blebby pyrite | Hangingwall Sediment |
| | 159.1 | 160.4 | 1.3 | Quartzite | Pyrrhotite/Pyrite | 1 | Pr + Py in brecciated silica | |
| | 209.2 | 214.7 | 5.5 | Schist | Pyrrhotite/Pyrite | 1 | Blebby Pr + Py in 10cm qz/cb veins | |
| | 241.9 | 246.7 | 4.8 | Quartzite | Pyrrhotite/Pyrite | 3 | Sulphide veinlets with 3% Pr and brecciated qz vein with Pr and trace Py. Hangingwall contact | Hangingwall Contact |
| | 246.7 | 268.9 | 22.2 | BIF | Pyrrhotite | 0.5 | Minor veinlets of Pr and magnetite in grunerite rich BIF | BIF |
| | 268.9 | 276.7 | 7.8 | BIF | Pyrrhotite/Pyrite | 4 | Sulphide veinlets and brecciated sulphide veins with blebby to massive Pr, transition to footwall contact | Footwall Contact |
| | 300.0 | 307.9 | 7.9 | Basalt | Pyrite | 1 | Blebby pyrite in veining | Mafic |
| | 307.9 | 312.7 | 4.8 | Qz veining | Pyrite | 1 | Blebby pyrite in quartz veining | |
| KMYD058 | 156.9 | 164.5 | 7.6 | BIF | Pyrrhotite/Arsenopyrite | 5 | Grunerite banded, highly siliceous BIF. Lower BIF contact | Footwall Contact |
| | 164.5 | 170.1 | 5.6 | BIF | Pyrrhotite/Arsenopyrite | 10 | Brecciated BIF, semi massive Pr +/- As veinlets and blebs common, Lower BIF contact | |
| KMYD071 | 89.2 | 104.6 | 15.4 | Quartzite-BIF contact zone | Pyrrhotite/Arsenopyrite | 40 | Cataclastic/brecciated quartzite with 20-60% massive pyrrhotite matrix to Quartzite clasts, margins of gruneritic and chloritic quartzite with veinlets of Pr, Py & As, also with blebby to disseminated Py & As. Hangingwall transition into BIF. | Hangingwall Contact-BIF |
| | 181.2 | 182.3 | 1.1 | BIF | Pyrrhotite/Arsenopyrite/Chalcopyrite | 10 | Lower BIF contact, Pr +/- Cp and As sulphides | Footwall Contact |

**Table 1**. Geological-mineralisation summary observations for the first eight of 89 planned drill holes at the Mt York Gold Project. Assays are expected late 2022 or early 2023. See **Figure 6** for drill hole locations.

The Company notes that visual estimates should not be considered a proxy or substitute for laboratory analysis, which are required to determine the widths and grade of the mineralisation.

Core cutting will begin in October and results will begin to be available at the end of December or early January.

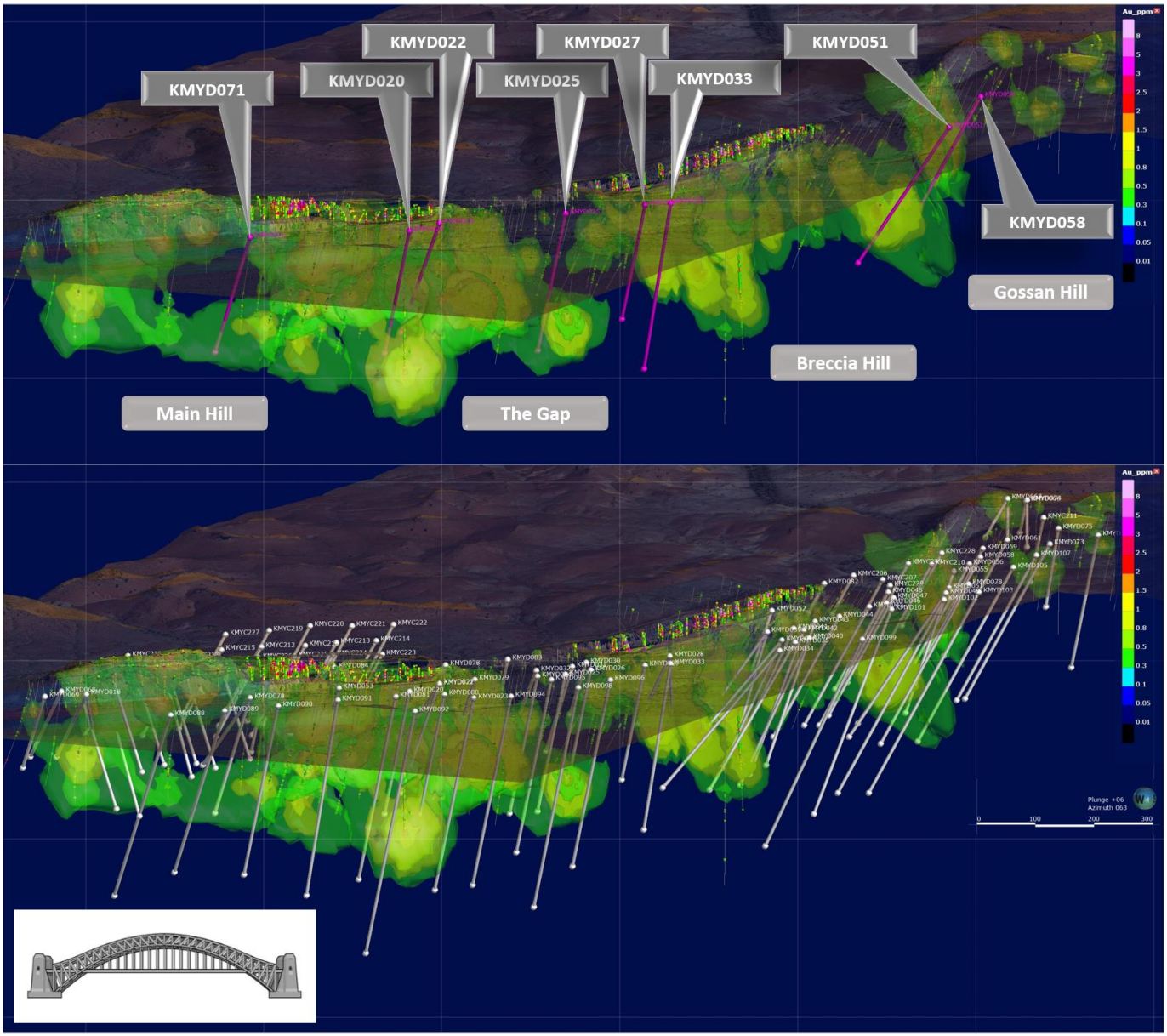


**Figure 6**. Completed drill holes as of 5/10/2022 (top) and total planned holes (bottom) at the Mt York Gold Project. Total provisional planned holes is 89 for a total of 22,000m. Leapfrog™ generated grade shells above 0.5 g/t Au for the Main Trend are shown, legend shown top right. Sydney Harbour Bridge icon is shown bottom-left for scale.

## Next Steps

- RC drill sample export to the laboratory
- RC drill planning at Lucky Sump and the new prospect of Zakanaka
- Continue diamond drilling of Mt York Gold Project for resource, metallurgical and geotechnical data
- Build camp infrastructure at Mt York including core farm, living and ablution blocks
- Contract negotiations with consultants for process engineering & geo-metallurgical testwork, environmental and hydrological studies
- Mining Licence applications
- Aboriginal Heritage negotiations

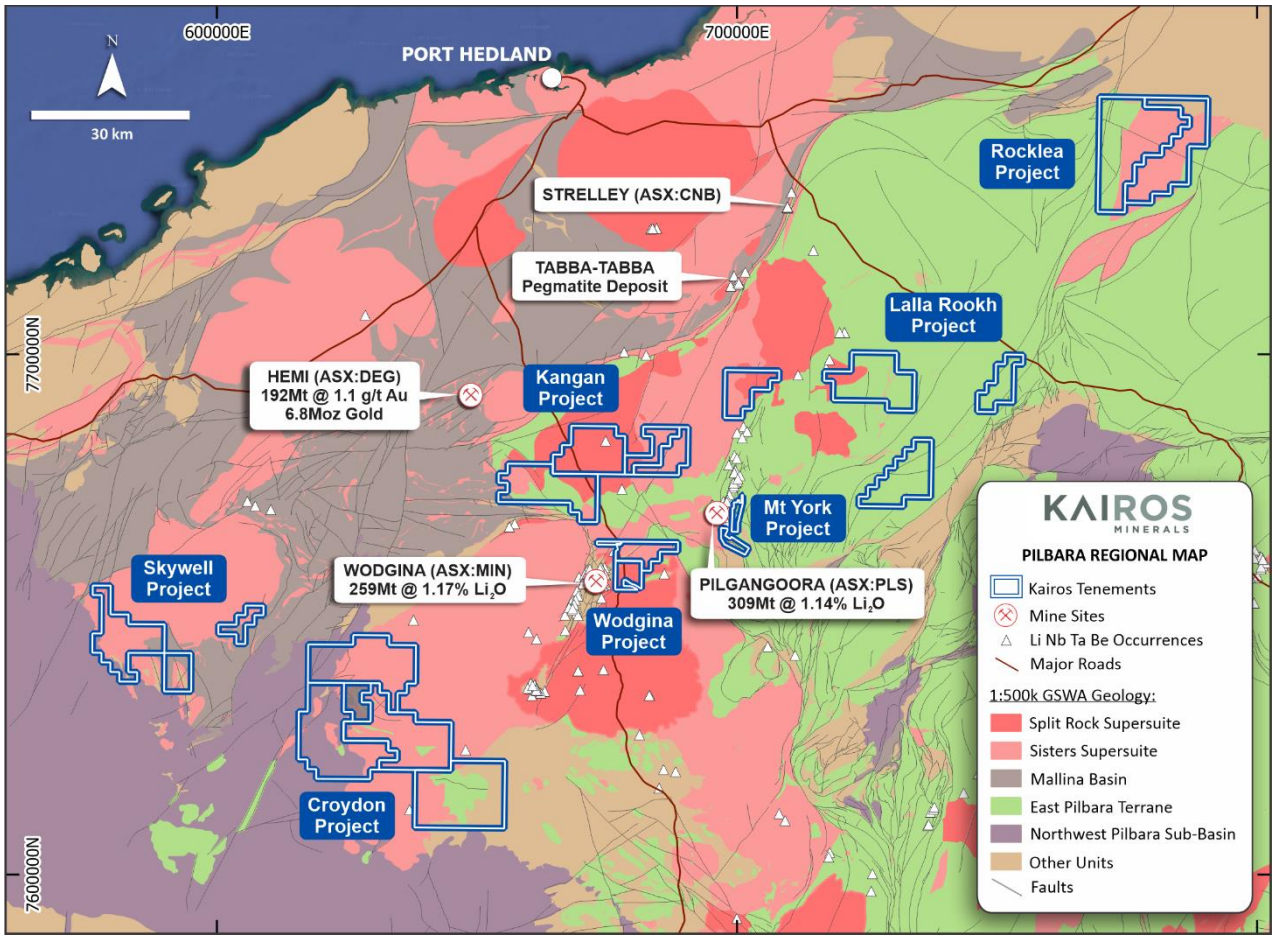


**Figure 6**. Kairos' Gold & Lithium Projects over the central Pilbara regional geology showing the position of the Mt York Project and nearby Pilgangoora Lithium-Tantalum mine.

## 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.

| 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 | 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**
**Managing Director**

**Zane Lewis**
**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 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.

# Appendix A - JORC Code, 2012 Edition – Table 1

## Section 1 Sampling Techniques and Data

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| ***Sampling techniques*** | • *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.*<br>• *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*<br>• *Aspects of the determination of mineralisation that are Material to the Public Report.*<br>• *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.* | • All sampling relevant to the work completed by Kairos and referred to in this release is based on either RC or diamond drilling.<br>• Sample recoveries are monitored to ensure RC samples weighed 2.5kg- 3.5kg, and field procedures are in place to ensure no contamination/loss/alteration of the sample occurs to minimise any sampling collection errors<br>• RC samples were split on a 1m sample interval at the rig cyclone. Diamond core has been metre-marked, ori-line marked, geologically logged and photographed and will be sampled on a 1m basis of half-core once cut. Selections to the intervals submitted to the laboratory will be determined by the logging geologist.<br>• All samples will be dried, crushed and pulverised to get at least 85% passing 75µm<br>• Samples for gold analysis will be submitted to a contract laboratory for crushing, pulverizing to produce a 50g charge for fire assay.<br>• Samples for multi-element lithology discrimination will be selected from the pulps of the gold samples selected and will undergo 4-acid digest and ICP-MS/OES finish.<br>• Samples for lithium analysis and associated elements will be selected based on the lithological logs and submitted per 1-metre interval for Na-peroxide fusion and ICP-MS analysis. |
| ***Drilling techniques*** | • *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).* | • All RC drilling completed at Lucky Sump was carried out by Orlando Drilling Pty Ltd using an track mounted RC drill rig with track mounted booster compressor. 3.5" diameter drill rods, 106mm diameter blade bit, 104mm diameter face sampling hammer.<br>• Diamond drill holes were completed by Orlando Drilling using either Rig 21, a track-mounted, small-footprint diamond rig or Rig 22 which is a truck-mounted diamond rig.<br>• Diamond drilling was mostly carried out with NQ2 sized equipment, using standard tube.<br>• All holes were surveyed by the Drilling Supervisor/Senior Driller at regular intervals downhole as the drilling progressed using a north seeking gyroscopic survey instrument. |
| ***Drill sample recovery*** | • *Method of recording and assessing core and chip sample recoveries and results assessed.*<br>• *Measures taken to maximise sample recovery and ensure representative nature of the samples.* | • Drilling and exploration standard operating procedures (SOPS) utilised by the drilling contractor, contracted to Kairos ensured all material ended in the correct bag. Use of drilling fluids was needed at times, with slow penetration rates experienced in deeper holes |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.* | along with an increase of water ingress. Further booster air compression was brought onto site to remove the water to ensure dry samples.<br>• The drilling contractor had specific SOPS with regard to difficult drilling conditions to maximise recovery. If there was an issue in recovery, it was noted, and further analysis was undertaken after receipt of the sample and assay result to check for any bias. Sample recoveries for the RC holes are high, especially within the mineralised zones. No significant bias is seen. |
| ***Logging*** | • *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*<br>• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.*<br>• *The total length and percentage of the relevant intersections logged.* | • Detailed geological logging of the entirety of each hole by Kairos geologists is carried out on the RC chips and diamond core and recorded as qualitative description of colour, lithological type, grain size, structures, minerals, alteration, and various other features.<br>• For RC drill holes, representative material is sieved and collected as 1m individual samples in number coded plastic chip trays and stored at the Company's site storage facility or in Perth.<br>• Photography of RC chips is routinely done.<br>• Detailed petrological studies are planned for selected samples to assist ongoing evaluation.<br>• All drilling data captured at the exploration site and later recorded from laboratory analysis data is captured in the company's database that will be exported once drilling is completed for resource estimation by a competent third-party company |
| ***Sub-sampling techniques and sample preparation*** | • *If core, whether cut or sawn and whether quarter, half or all core taken.*<br>• *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*<br>• *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*<br>• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*<br>• *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.*<br>• *Whether sample sizes are appropriate to the grain size of the material being sampled.* | • All RC samples were dry largely due to the routine use of an auxillary booster compressor. Minor water ingress occurred during rod/bit changes however samples were generally dry once active drilling recommenced.<br>• RC samples were collected as 1m intervals via on-board cone splitters then collected in large, numbered green plastic bags<br>• Sample quality was ensured by monitoring sample volume and by regularly cleaning the rig cyclone & sample splitters.<br>• Sampling sheets were prepared and checked by Kairos' site geologists and field technicians to ensure correct sample representation.<br>• QAQC samples will be included at the rates of 1:25 at a minimum as field duplicate and 1:50, certified reference material (standard) at a minimum.<br>• Sample sizes (1.5kg to 3kg) at Main Trend and Iron Stirrup are considered to be a sufficient size to accurately represent the gold mineralisation based on the mineralisation style, the width and continuity of the intersections, the sampling methodology, the coarse gold variability and the assay ranges for the gold. Field duplicates will routinely be collected to ensure monitoring of the sub- sampling quality.<br>• Laboratory duplicates (sample preparation split) |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | will also be completed roughly every 15th sample to assess the analytical precision of the laboratory. Acceptable level of repeatability and precision will be routinely monitored by Kairos. |
| ***Quality of assay data and laboratory tests*** | • *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*<br>• *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.*<br>• *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.* | • Samples have yet to be sent to the laboratory in Perth but the intended analytical technique used will be a 50g fire assay. Samples are intended to be sent to Intertek Minerals in Perth.<br>• Fire Assay is industry standard for gold and considered appropriate.<br>• Samples for multi-element lithology discrimination will be selected from the pulps of the gold samples selected and will undergo 4-acid digest and ICP-MS/OES finish.<br>• Samples for lithium analysis and associated elements will be selected based on the lithological logs and submitted per 1-metre interval for Na-peroxide fusion and ICP-MS analysis.<br>• Certified Reference Material (CRM or standards) and blanks will be inserted at a minimum of every 50th sample to assess the assaying accuracy of the external laboratories. Field duplicates were inserted every 25th sample to assess the repeatability from the field and variability of the gold mineralisation. Laboratory duplicates were also completed approximately every 15th sample to assess the precision of assaying. Evaluation of both the resource definition drilling submitted standards, and the internal laboratory quality control data, indicates assaying to be accurate and without significant drift<br>• Results of the QAQC sampling are considered acceptable for an Archaean gold deposit. Substantial focus has been given to ensuring sampling procedures met industry best practise to ensure acceptable levels of accuracy and precision were achieved in a coarse gold environment. |
| ***Verification of sampling and assaying*** | • *The verification of significant intersections by either independent or alternative company personnel.*<br>• *The use of twinned holes.*<br>• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*<br>• *Discuss any adjustment to assay data.* | • Primary data was collected using Excel templates utilizing lookup codes on laptop computers by Senior Supervising Geologists.<br>• No twin holes were drilled.<br>• All data will be received and stored securely in digital format in the Company's database.<br>• Final data will be rigorously interpreted by Kairos' geoscientific personnel.<br>• Significant intersections are calculated by Kairos supervising geoscientists & verified by senior management |
| ***Location of data points*** | • *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*<br>• *Specification of the grid system used.* | • All Mount York hole collars are in MGA94 Zone 50 (GDA94).<br>• All Kairos RC & DD holes will surveyed down hole with north seeking gyroscopic survey instruments by the Supervising/Senior driller.<br>• Topographic surface has been prepared from |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | • *Quality and adequacy of topographic control.* | satellite and mine surveys. The existing pit floors have been provided by Kairos.<br>• Kairos will maintain consistency across old and new data with respect to downhole surveys and hole pickups. |
| ***Data spacing and distribution*** | • *Data spacing for reporting of Exploration Results.*<br>• *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.*<br>• *Whether sample compositing has been applied.* | • Current drilling is partly infill drilling between holes that are 100m apart within the main resource model, or extensional drilling along-strike or below the current resource estimate.<br>• Data intercept points for the current DDH drilling at Main Trend has been planned at approximately 50m from an existing hole for resource category definition of indicated and 100m for inferred for resource upgrade.<br>• The mineralised domains have sufficient grade continuity in both geology and grade to be considered appropriate for the Mineral Resource and Ore Reserve estimation procedures and classification applied under the 2012 JORC Code. |
| ***Orientation of data in relation to geological structure*** | • *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*<br>• *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.* | • The majority of RC/DD holes were drilled at an inclination of -60 deg to provide true width intersections of the targeted horizon at Main Trend. The targeted gold bearing structures are interpreted to be moderately to steeply dipping to the southwest (in the west) and to the south (in the central and eastern parts of the deposit).<br>• RC drilling at Lucky Sump targeting pegmatites were drilled at an inclination of -60 to the northwest to intersect interpreted pegmatites that are dipping moderately to the southeast.<br>• No sampling bias is known to exist, though it is not precluded |
| ***Sample security*** | • *The measures taken to ensure sample security.* | • For drilling completed by Kairos the sample chain of custody is managed by Kairos. All samples were collected in the field at the project site in number coded calico bags/secure labelled polyweave sacks by Kairos' geological and field personnel at the Kairos secure camp<br>• All samples will be delivered directly to Port Hedland by Kairos personnel prior to being transported to Intertek Laboratory in Perth WA for final analysis by RGR Couriers |
| ***Audits or reviews*** | • *The results of any audits or reviews of sampling techniques and data.* | • No review or audits have been conducted |

## Section 2 Reporting of Exploration Results

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| ***Mineral tenement and land tenure status*** | • *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* | • Kairos Limited owns 100% of the tenements that define the Pilbara Gold Project.<br>• The project consists of 12 PL's<br>• P45/2987 – 2998 inclusive<br>• The Project is Located on Wallareenya & Strelley Pastoral Co Pastoral leases. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.* | • Kairos is not aware of any existing impediments nor of any potential impediments which may impact ongoing exploration and development activities at the Project site. |
| ***Exploration done by other parties*** | • *Acknowledgment and appraisal of exploration by other parties.* | • Significant past work has been carried out by other parties including open pit mining of previously defined gold resources.<br>• During the early to mid-1970's, the Lynas Find project area was part of a large area held and explored for volcanogenic base metal deposits, initially by McIntyre Mines Pty Ltd, and then by Esso Minerals. Esso completed some induced polarization and ground magnetic geophysical surveys, and some diamond drilling over the area including Main Trend.<br>• The Main Trend Gold Deposit was discovered by Carpentaria Exploration Company Pty Ltd in 1986. Lynas Gold NL acquired the project in the early 1990's and mined a number of deposits as a successful open pit operation by that company between 1994 – 1998. Other companies to have explored the area include Austamax, MIM and Trafford Resources.<br>• The Old Faithful area was initially drilled by AMAX with one hole to test geochemical high and small workings. Lynas followed up with several programs of RAB, RC and diamond drilling from 1987 through to 1996.<br>• Significant historical Au exploration including, surface geochemical sampling, airborne and ground electromagnetic geophysical surveys, RAB, AC, RC, and DD drilling. This is acknowledged in past ASX announcements and Company reports.<br>• No exploration drilling has been done for lithium over the exploration licences although some rock chip sampling near Zakanaka and Lucky Sump was completed and released to the market in 2016 |
| ***Geology*** | • *Deposit type, geological setting and style of mineralisation.* | **Regional Geology**<br>• The Pilbara Gold Project lies within the Pilgangoora Greenstone Belt of the Archaean Pilbara Craton. The Pilbara Craton is composed of greenstone and sediment units which have been deformed by tight isoclinal folds during the intrusion of diapiric granites.<br>• The Pilgangoora Greenstone Belt is dominated by the Pilgangoora Syncline, which contains a sequence of steep dipping, inward younging volcano-sedimentary rocks belonging to the two lower groups of the Pilbara Supergroup, the Warrawoona, and Gorge Creek Groups.<br>**Local geology**<br>• The Iron Stirrup ultramafic is the main host |

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| | | rock for gold mineralisation at the Mount York prospects. The unit is dominantly talc-carbonate schist with some talc- carbonate-chlorite and talc-chlorite assemblages.<br>• The Main Trend deposit tenements lie on the eastern limb of the Pilgangoora Syncline. The area contains the older Warrawoona Group of basalts, felsic volcanic, sediments and cherts and the younger Gorge Creek Group of medium to coarse-grained clastic sediments and schists. Gold mineralisation in the area is contained within an Archaean banded iron formation (BIF). between 150 to 450 m thick.<br>• The BIF is unconformably overlain to the southwest by a lenticular pebble-cobble conglomerate horizon up to 15m thick<br>• The gold mineralisation at Main Trend is contained within a well foliated Talc-carbonate-magnetite-serpentite rock with associated pyrite and pyrrhotite, dipping approximately 60 degrees to the west<br>• The mineralisation at Iron Stirrup extends to a vertically drilled depth of at least 125m, in part of the zone and remains open at depth throughout most of the indicated strike length, and dips westerly at around 70-80°.<br>• The main structural control at Old Faithful is a strongly asymmetric synform with a moderately east-dipping west limb and a west limb which, in the central area, dipping flatly east but in the northern and southern area, dips more steeply. The primary mineralisation wireframe is split into two, to the south the mineralisation shows a gradual plunge to the north of 10 degrees. In Area C (as Lynas referred to it) the primary mineralisation is thrust downwards (inferred faults) another 20-30m before continuing its gradual plunge of 10 degrees to the north.<br>• Another secondary zone of mineralisation occurs in the north-east of the prospect where en-echelon shears occur within the talc-carbonate-chlorite-schist, and primarily dip to the east.<br>• Lucky Sump pegmatites are thought to be D3-D4 in age and cross-cut the main mafic hosts obliquely. |
| ***Drill hole Information*** | • *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*<br>○ *easting and northing of the drill hole collar*<br>○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* | • The coordinates and other attributes of all drillholes relevant to the work being described are included in summary tables within the body and appendices of the release and previous ASX releases, please refer to the following announcements.<br>• 20/06/2016 – Thick zones of high-grade gold identified Mount York<br>• 01/08/2016 – Kairos Initial JORC Gold Resource of 135koz at Mount York (Old |

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| | ○ *dip and azimuth of the hole*<br>○ *down hole length and interception depth*<br>○ *hole length.*<br>• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.* | Faithful & Iron Stirrup)<br>• 05/10/2016 – Gold Resource Upgrade to 250koz – Mount York<br>• 17/11/2016 – High-Grade Gold hits up to 20 g/t at Mount York Project in WA's Pilbara Region<br>• 19/12/2016 – Further strong results from Mount York<br>• 10/02/2017 – Multiple stacked gold lodes intersected week beyond current resources at Mount York<br>• 29/05/2017 – Strong drilling results from Mount York<br>• 30/11/2017 – Outstanding drill results confirm significantly larger gold system at Mount York Project<br>• 18/12/2017 – Final strong results from Mount York Drilling<br>• 02/10/2018 – New high-grade results confirm strong potential to expand 643koz Resource at Pilbara Gold Project, WA<br>• 23/12/2020 – Pilbara Gold Project – Exploration Update<br>• 17/02/2021 – High-grade gold hits of up to 6.37 g/t at Mount York Project<br>• 15/09/2021 – Exceptional high-grade gold zone intersected at Mount York<br>• 23/11/2021 – Further high-grade gold zones intersected at Mount York<br>• 13/01/2022 – Significant new gold target identified at Mount York, with anomalous rock chip samples of up to 4.6 g/t Au<br>• 25/05/2022 – Wide drill intersections highlight scope for significant resource upgrade at Mount York Gold Project in Pilbara<br>• 29/07/2022 – Quarterly report for the period ending June 30, 2022<br>• 30/08/2022 – Gold resource increases 26% to 1.1 Moz<br>• 8/09/2022 – Drilling set to start at Lucky Sump spodumene prospect<br>• Lucky Sump – drill holes are the first drill holes into this target. The holes have been planned to to drilled -60 towards the northwest to intercept pegmatite dykes that may be dipping to the southeast.<br>• Aerial photography interpretation has aided the interpretation of the strikes of the pegmatites<br>• Any reference to pegmatite intercept depths are based on downhole depths only and not to actual widths of pegmatites.<br>• Follow-up drilling is planned at Lucky Sump to try to ascertain more information on pegmatite strikes and dips |

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| ***Data aggregation methods*** | • *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.*<br>• *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.*<br>• *The assumptions used for any reporting of metal equivalent values should be clearly stated.* | • Exploration results are not being reported.<br>• Not applicable as a Mineral Resource is being reported.<br>• Metal equivalent values have not been used. |
| ***Relationship between mineralisation widths and intercept lengths*** | • *These relationships are particularly important in the reporting of Exploration Results.*<br>• *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.*<br>• *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').* | • No intercept assay values are reported here<br>• All 'intercepts' are geological observations only and include information on sulphide types, sulphide percentages and geological information such as rock types – all reported in down hole metres.<br>• All holes are oriented to provide intersections which are orthogonal or close to orthogonal to the respective targeted horizon. |
| ***Diagrams*** | • *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.* | • Relevant diagrams have been included within this report. |
| ***Balanced reporting*** | • *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.* | • Exploration results are not being reported. |
| ***Other substantive exploration data*** | • *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.* | • All interpretations for the Main Trend and Iron Stirrup mineralisation are consistent with observations made and information gained during previous mining of the open pits.<br>• All interpretations for the Main Trend and Iron Stirrup deposits, are consistent with observations made in historic reports.<br>• Exploration including mapping, geochemical sampling has been completed and has aided interpretations for the Mineral Resource Estimate. |
| ***Further work*** | • *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).*<br>• *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and* | • A contract to drill 20,000m (nominally 7,000m of RC and 13,000m of NQ/HQ core) has been signed with Orlando Drilling and is approximately 13% complete. Drilling is set to commence in the first week of September or earlier and is targeting a significant increase in the global resource including all |

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| | *future drilling areas, provided this information is not commercially sensitive.* | higher-grade plunging shoots that remain open at depth and increasing confidence in all categories of resource (conversion of inferred to indicated and unclassified to inferred resource categories) in preparation for a pre-feasibility study. It has been designed to acquire all geotechnical information required by the geotechnical engineers for open pit design and for all metallurgical samples for ore process studies and design. |