ASX ANNOUNCEMENT **August 1, 2022**

Mt York Project, Pilbara

High-grade lithium assays confirm significance of spodumene-bearing pegmatite

Results of up to 1.91% Li_2O just 4km from Pilbara Minerals' Pilgangoora lithium-tantalum mine; Drilling being planned for September

Highlights

- **Five pegmatite samples from the Lucky Sump prospect at Mt York have returned exceptional assays including:**
  - **1.91% Li_2O & 103 ppm Ta (MYR393)**
  - **1.56% Li_2O & 115 ppm Ta (MYR401)**
  - **0.58% Li_2O & 167 ppm Ta (MYR396)**
- **The spodumene-bearing pegmatite samples were discovered during routine earthmoving activities next to the flagship Mt York gold deposit**
- **The spodumene pegmatites are part of a larger interpreted dyke swarm at Mt York**
- **Planning underway to RC drill-test large area of Lucky Sump**

Kairos Managing Director, Dr Peter Turner said: **"The high-grade lithium results, combined with the confirmation of spodumene mineralogy, is a very exciting development.**

"In light of these exceptional results, we plan to expedite planning to drill all of Lucky Sump. We intend to test the entire interpreted pegmatite dyke swarm, which is under cover, with the first RC drilling anticipated in September.

"We are in a Tier 1 destination for spodumene pegmatite projects with two world-class Li-Ta deposits (ASX:PLS, ASX:MRL) in the neighbourhood and we have demonstrated that we have the right fertile geology for significant Lithium-Caesium-Tantalum (LCT) pegmatite discoveries".

Figure 1. Kairos Geologist Campbell Watts holding a piece of spodumene-bearing pegmatite (**MYR393 – 1.91% Li_2O**) discovered at 'Lucky Sump' during routine earth moving activities.

Five samples of pegmatites that were analysed by hyperspectral and XRD methods confirming the presence of spodumene mineralogy (see KAI Announcement dated 12 July 2022), were submitted to NAGROM Laboratories in Perth for chemical analysis. Photographs of the pegmatites are shown in **Figure 2**.

The samples were crushed and pulverised and a 200g subsample selected for Na-peroxide fusion with hydrochloric acid digestion. This method was selected as it is considered to be a complete dissolution of all resistate minerals they may contain the selected elements of interest. The analysis of the samples was conducted using inductively couple plasma mass spectrometry (ICP-MS) with the elements Li, Rb, Cs, Be, Mn, Fe, Ti and Ta selected. The results are shown in **Table 1**.

	Li	Li_2O	Rb	Cs	Be	Mn	Fe	Ti	Ta
Method	ICP005		ICP005	ICP005	ICP005	ICP005	ICP005	ICP005	ICP005
Units	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
MYR393	8850	1.91	386	18	13	1060	600	<100	103
MYR396	2700	0.58	499	15	20	910	400	<100	167
MYR397	180	0.04	560	16	53	970	300	<100	169
MYR401	7240	1.56	348	17	87	700	200	<100	115
MYR402	720	0.16	528	16	28	1180	1800	<100	166

Table 1. Assay results from NAGROM Laboratory, Perth. Conversion of Li ppm results to Li_2O involves a two-step process to divide the Li ppm result by 10,000 (conversion to Li %) and multiplying Li % by 2.153 to obtain the Li_2O equivalent. Method ICP005 refers to NAGROM's Inductively coupled plasma mass spectrometry analysis code.

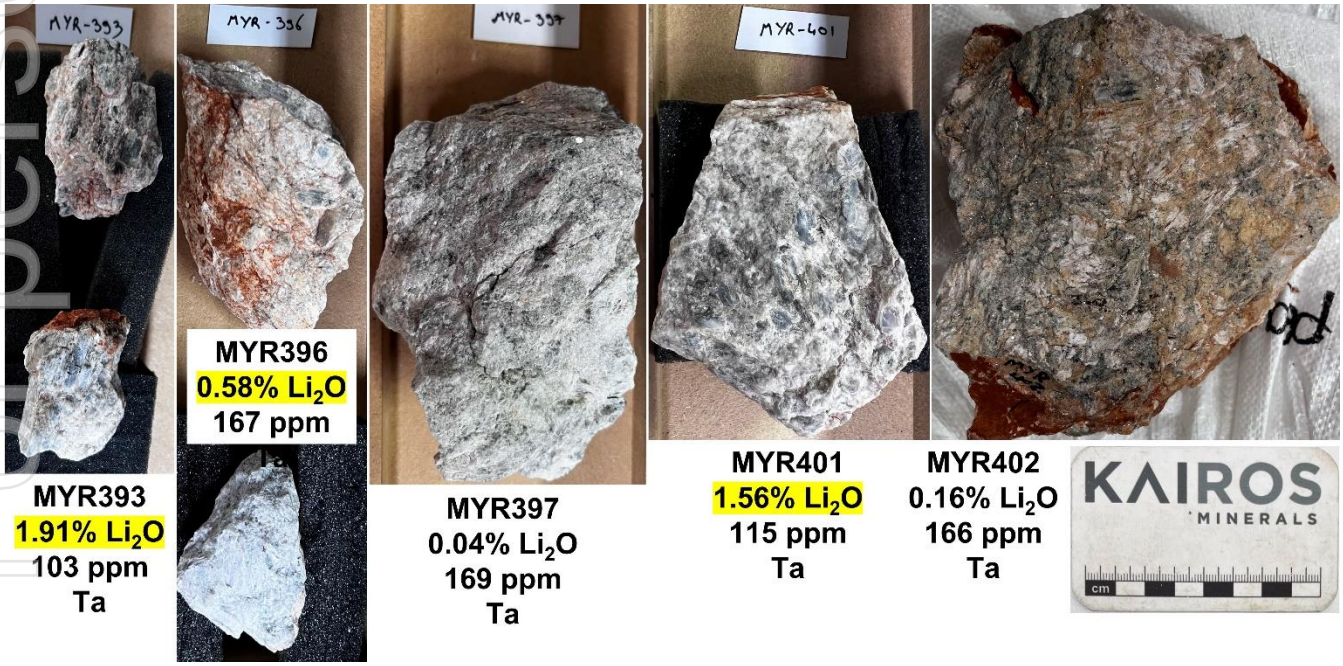

Figure 2. Lucky Sump pegmatite samples showing lithium and tantalum results.

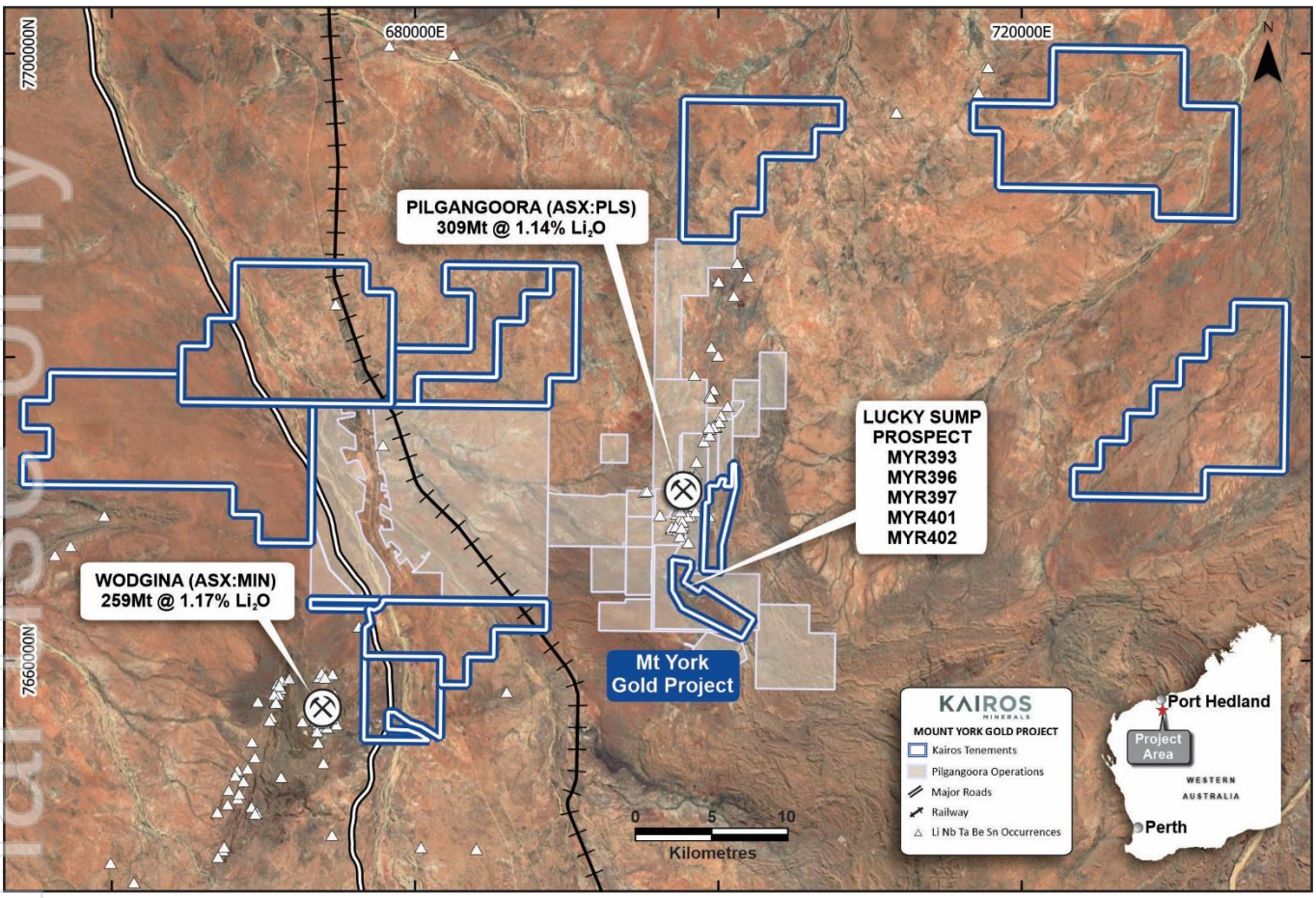

Figure 3. Location of the Lucky Sump Prospect in relation to Pilbara Minerals' Pilgangoora Lithium-Tantalum Mine and Mineral Resources' Wodgina Mine.

The results from NAGROM are outstanding and are considered high-grade for lithium-bearing pegmatite samples.

The results of both the chemical analysis and the hyperspectral work indicating spodumene in the samples has provided the company with the necessary confidence to plan an immediate drill campaign, focussing on drilling the whole 'Lucky Sump' Prospect.

Initially, 2,000m of drilling is planned to commence in September with a tender process already underway.

The interpreted pegmatite swarm does not crop-out at surface and drilling is required to determine the pegmatite locations and extents.

Kairos will update the market on any developments with respect to this exciting new project.

Next Steps

- Additional pegmatite sample collection at Lucky Sump and pegmatite mapping
- Camp establishment at Mt York ahead of major drilling campaign for both gold and now lithium

- Drill contract negotiations for 2,000m RC/DDH (lithium)
- Drill contract negotiations for 20,000m RC and DDH at Mt York H2, 2022 (gold)
- Contract negotiations with consultants for mining engineering studies, geo-metallurgical testwork, geotechnical studies, environmental and hydrological studies (gold)

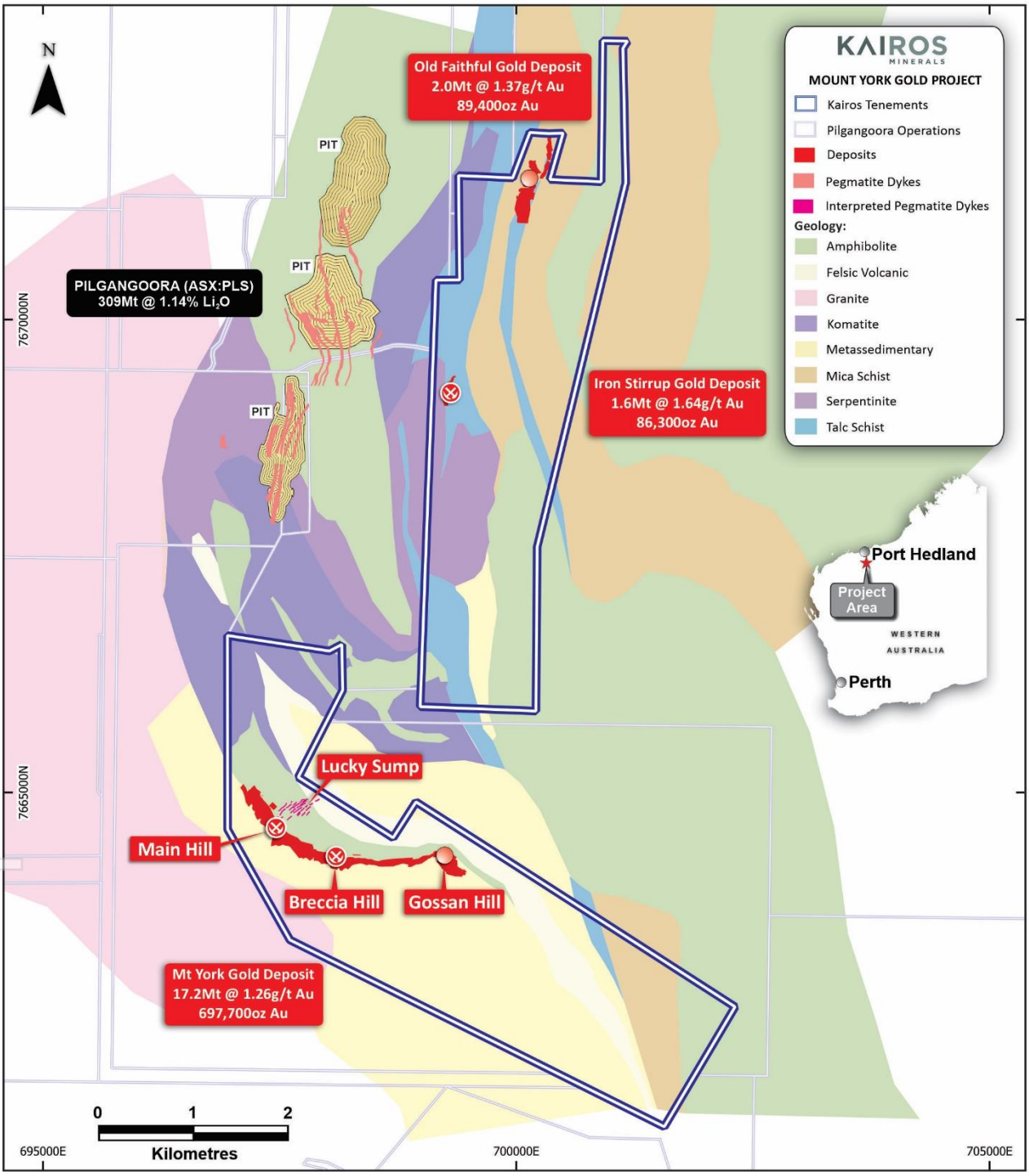

Figure 4. Geological interpretation of the Mt York and Pilgangoora areas. See **Figure 5** for a detailed view of the Lucky Sump Prospect.

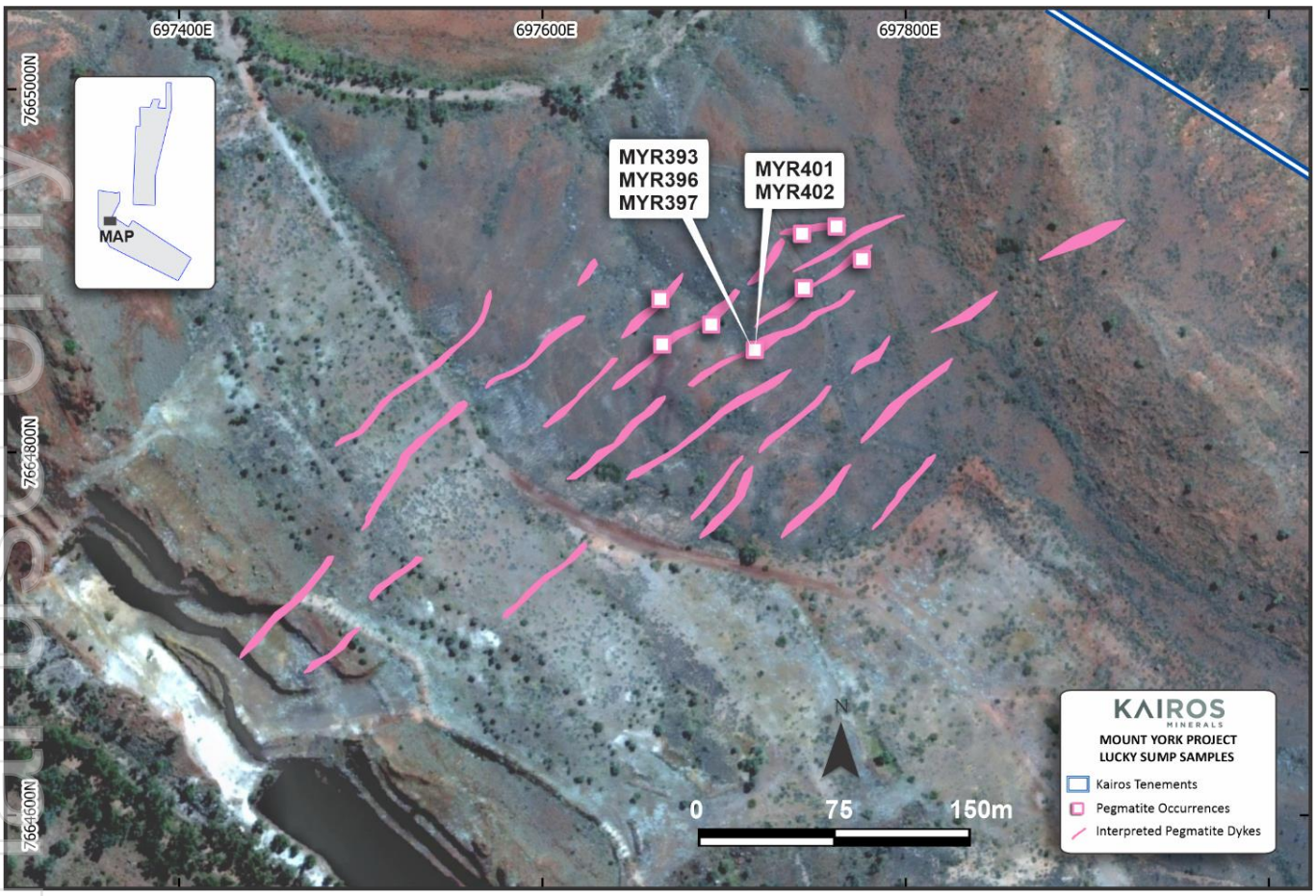

Figure 5. Detailed aerial image of the Lucky Sump Prospect showing the sample sites, mapped pegmatite occurrences within the interpreted pegmatite swarm. The interpreted dyke swarm is based on processed images of the RGB aerial scene. The dyke swarm is interpreted to be largely under shallow cover.

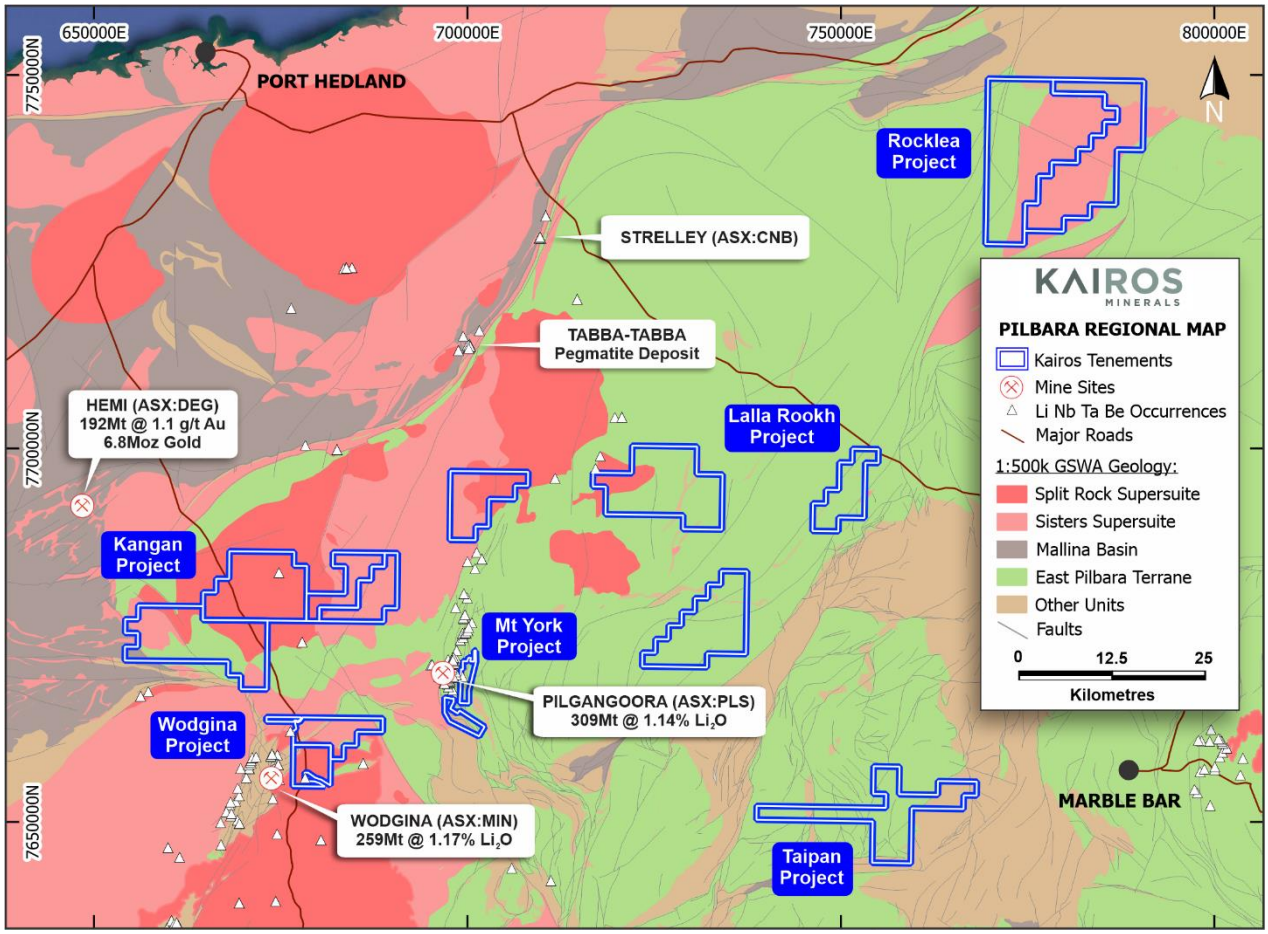

Figure 6. Kairos' Gold & Lithium Projects over the central Pilbara regional geology showing the position of the Mt York Project and nearby Pilgangoora & Wodgina Lithium-Tantalum mines. Note that Kairos' Croydon and Skywell Projects are to the west of this map.

About Kairos Minerals

Kairos Minerals (ASX: KAI) is a diversified West Australian-based exploration company focused on the exploration and development of its 100%-owned, high-quality gold and lithium projects centred around the advanced Mt York Gold Project.

Kairos owns 100% of the flagship Mt York Gold Project that was partially mined by Lynas Gold NL between 1994 and 1998. Since acquiring the project in early 2016, Kairos has rapidly established an 873,000oz JORC 2012 compliant gold mineral resource with the resource categories shown for each deposit shown in the Table below.

Deposit	Indicated			Inferred			Total		
	Tonnes (kt)	Au (g/t)	Ounces (koz)	Tonnes (kt)	Au (g/t)	Ounces (koz)	Tonnes (kt)	Au (g/t)	Ounces (koz)
Mt York	6,844	1.29	284	10,419	1.23	413	17,263	1.26	698
Iron Stirrup	797	1.63	41	843	1.65	45	1,639	1.64	86
Old Faithful	925	1.33	39	1,102	1.41	50	2,027	1.37	89
Total	**8,565**	**1.33**	**366**	**12,364**	**1.28**	**507**	**20,929**	**1.30**	**873**

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 in an exciting and emerging lithium province.

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:

Competent Person: 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.

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.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *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.*	• Samples MYR393, MYR396, MYR397, MYR401 & MYR402 are hand-specimens picked from a recently excavated drill sump spoil heap. They are considered to be in-situ samples that have been ripped up from a primary source below by the excavator. • A selection of various samples was taken, prioritising those samples that may include spodumene minerals.
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).*	• Not applicable – drilling was not undertaken
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *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.*	• Not applicable – drilling was not undertaken
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*	• Not applicable – drilling was not undertaken

Criteria	JORC Code explanation	Commentary
	metallurgical studies. • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *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.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• No core • No drill samples • The 5 hand-specimen samples were sent to the NAGROM Laboratory in Perth where the whole sample was crushed and pulverised and a representative subsample was analysed for lithium and an associated suite of elements by sodium peroxide fusion and digested in hydrochloric acid. The resultant solution is analysed by an Inductively-Coupled Plasma Mass Spectrometer (ICP-MS). • 200g of sample was pulverised for analysis from a 1-2kg of submitted sample. This amount is considered representative. • Procedure is considered representative, no field duplicates were taken • Sample size is appropriate for the original sample collected
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.* • *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.* • *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.*	• The digestion method is industry-standard and best-practice. The selection of digest (Na-peroxide fusion and hydrochloric acid acid digest) is considered a 'total' dissolution of the sample that chemically dissolves all resistate minerals including those minerals that contain the sought elements. • Not applicable • No standards were submitted. The only standards and blanks that were used were internal standards from NAGROM Laboratories, where they inserted two OREAS standards in sequence with the 5 rock samples. NAGROM also undertook a repeat analysis of one of the 5 samples with results that were within acceptable limits

Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Not applicable
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.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• All 5 samples were selected from a spoil heap area called 'Lucky Sump'. Handheld GPS control was used to position the samples. • Sample locations were collected and stored using coordinate reference system GDA94 / MGA UTM Zone 50 (EPSG:28350) • Survey pickups of the samples were by hand-held GPS with an accuracy of approximately ±5m in the X & Y
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *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.* • *Whether sample compositing has been applied.*	• Not applicable
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.* • *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.*	• Not applicable
Sample security	• *The measures taken to ensure sample security.*	• All hand-specimen samples were bagged and remained with the Kairos Exploration Team before being freighted to Perth from Port Hedland. As these samples are hand-specimens rather than prepared samples, their integrity on arrival to the laboratory facility was never in doubt.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No audits or reviews have been conducted as the volume and significance of 5 rock chip samples is considered low by the Company. The results, however have provided the impetus for drilling of the prospect by RC and DDH techniques where a programmme of full QAQC will be

Criteria	JORC Code explanation	Commentary
		adopted.

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.* • *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.*	• The samples were collected from Prospecting Licence P45/2994 owned 100% by Kairos Minerals Ltd • The licence was granted on 7/7/2015 and is in good standing. • Kairos is not aware of any impediments nor any potential impediments which may impact any exploration and development activities at the project site.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Kairos is aware that pegmatites rich in lithium occur in the Lucky Sump area and previously released results in 2016 of samples from this prospect and other prospects around the Mt York area. However, no previous works pertaining to LCT pegmatite exploration in this area by other parties is known.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The samples of spodumene-bearing pegmatites at the Lucky Sump Prospect are the first detailed account of LCT pegmatites at this particular location. The host rocks which the pegmatites are likely to be intruding are thought to be basaltic or gabbroic in nature. Satellite imagery and high-resolution aerial photography interpretation suggests that these samples may be part of a dyke swarm with an approximate strike of 045º. Mapping of the area by a third-party consultant is currently being negotiated.

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:*
	  ○ *easting and northing of the drill hole collar*
	  ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  ○ *dip and azimuth of the hole*
	  ○ *down hole length and interception depth*
	  ○ *hole length.*
	• *If the exclusion of this information is justified on the basis that the information is not Material and this*
		• Not applicable – no drilling was undertaken

Criteria	JORC Code explanation	Commentary
	exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	
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.*	• Not applicable
	• *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.*	• Not applicable
	• *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• Li ppm concentrations were converted to Li_2O% by dividing the Li ppm number by 10,000 to determine Li% conversions before multiplying by 2.153 to convert Li% to Li_2O equivalent
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *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').*	• Not applicable – no drilling was undertaken
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.*	• A geological map is presented as Figure 4 in the announcement that has been compiled from various sources.
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.*	• All exploration results have been released
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 relevant exploration information has been reported

Criteria	JORC Code explanation	Commentary
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• A geological mapping contract by a third-party consultant is at an advanced stage. Aboriginal Heritage Survey to be completed over parts of the Mt York Gold Project ahead of drilling and camp-building activities in July 2022. Camp establishment at Mt York ahead of major drilling campaign for both gold and now lithium exploration. A minimum of 2,000m of RC and possibly an additional 500m of DDH drilling is proposed and planning is underway at Lucky Sump. 20,000m of drilling is anticipated within H2, 2022 at our nearby Mt York Gold Project • Figure 5 gives an interpretation of the likely extensions of the pegmatite swarm in the area