

## Two large gold targets identified at Kairos' Skywell Project in the Pilbara

**Large anomalous gold target identified in a similar setting to where previous rock chip samples returned gold grades of up to 12.9 g/t**

### Highlights

- Coherent and robust gold anomalies, with values of up to 118ppb Au returned from Ultrafine+™ soil sampling plus elevated auriferous pathfinder elements, identified across two large gold target areas at the Skywell Project WA.
- The Kepler prospect is a targets that is 6km in length and is coincident with magnetic and structural features associated with Mallina Basin sediments and the Sisters Supersuit intrusion. This is a prospective setting for intrusion-related gold mineralisation similar to the Hemi discovery.
- The Akari prospect is characterised by elevated Au, As, and other pathfinder elements, extends over 4km and remains open, is associated with the Hardey Formation, and sits on the edge of a prominent magnetic anomaly.
- These highly encouraging results from this first-pass regional soil sampling program warrant further in-fill and extensional geochemical surveys.
- A desktop heritage study has also been initiated and a Program of Work submitted for additional exploration activities.



**Figure 1: Kepler prospect at Skywell Project.**

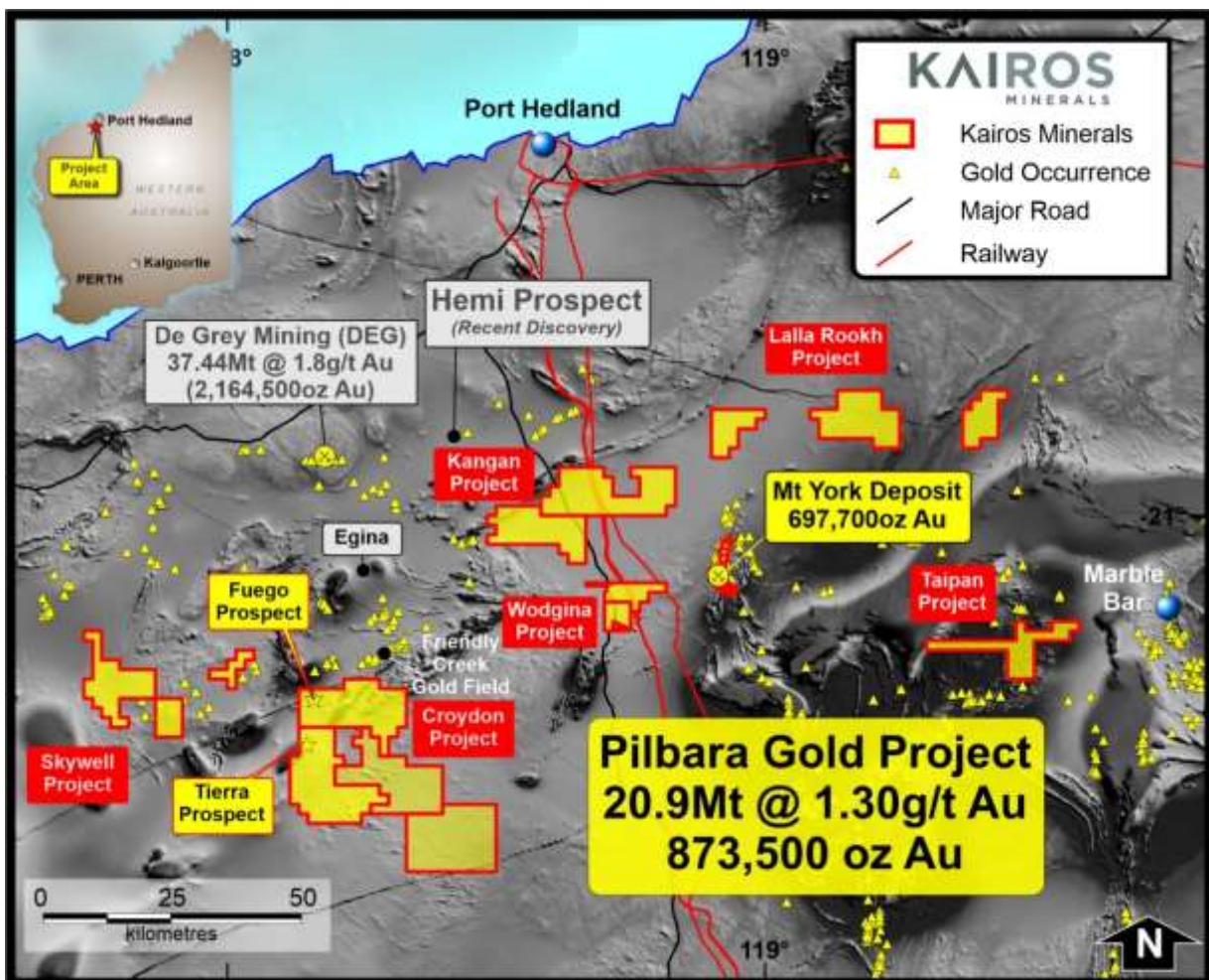
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Kairos' Executive Chairman, Terry Topping, said: *"The systematic soil geochemistry program across our key Pilbara Gold Project target areas is continuing to generate further gold targets. The delineation of these two large, robust gold targets at the Skywell Project follows the gold targets reported last week at our Kangan Project, just 20km from the Hemi discovery."*

*"The two large anomalies reported in today's announcement, respectively 6km and 4km in length, are characterised by robust gold values in the Ultrafine+ soil sampling program and sit in highly prospective geological positions coincident with important regional structures and strong geophysical features. The 6km long Kepler prospect is also located in similar setting to where we reported very high-grade results from previous rock chip sampling."*

*"We are continuing to build a pipeline of targets with outstanding potential to host intrusion-related gold mineralisation similar to De Grey Mining's Hemi discovery. While we won't be able to get on the ground to test all of these targets for drilling this year, we will be able to advance many of them to the next stage with follow-up in-fill geochemical sampling, mapping and additional field work – and we will certainly prioritise air-core drilling at the strongest and most significant of the new targets at Kangan and Skywell this year."*

*"RC drilling is continuing at the Fuego prospect, where we are also awaiting assay results from the first eight holes. Drill pad preparation has been completed at Mt York, which will be the next cab off the rank in terms of drilling, and we have our initial air-core program at the Kangan Project, which we are aiming to commence in early November."*



**Figure 2: Pilbara Gold Project, WA.**

Kairos Minerals Ltd (ASX: KAI; “Kairos” or “the Company”) is pleased to advise that it has identified significant new gold targets at its 100%-owned **Skywell Project**, located 50km south of Whim Creek and 70km south-west of the new Hemi gold discovery by De Grey Mining Limited (ASX: DEG).

The targets were identified following receipt of results from a recent successful geochemical sampling program, together with interpretation of data from a recently completed aeromagnetic survey.

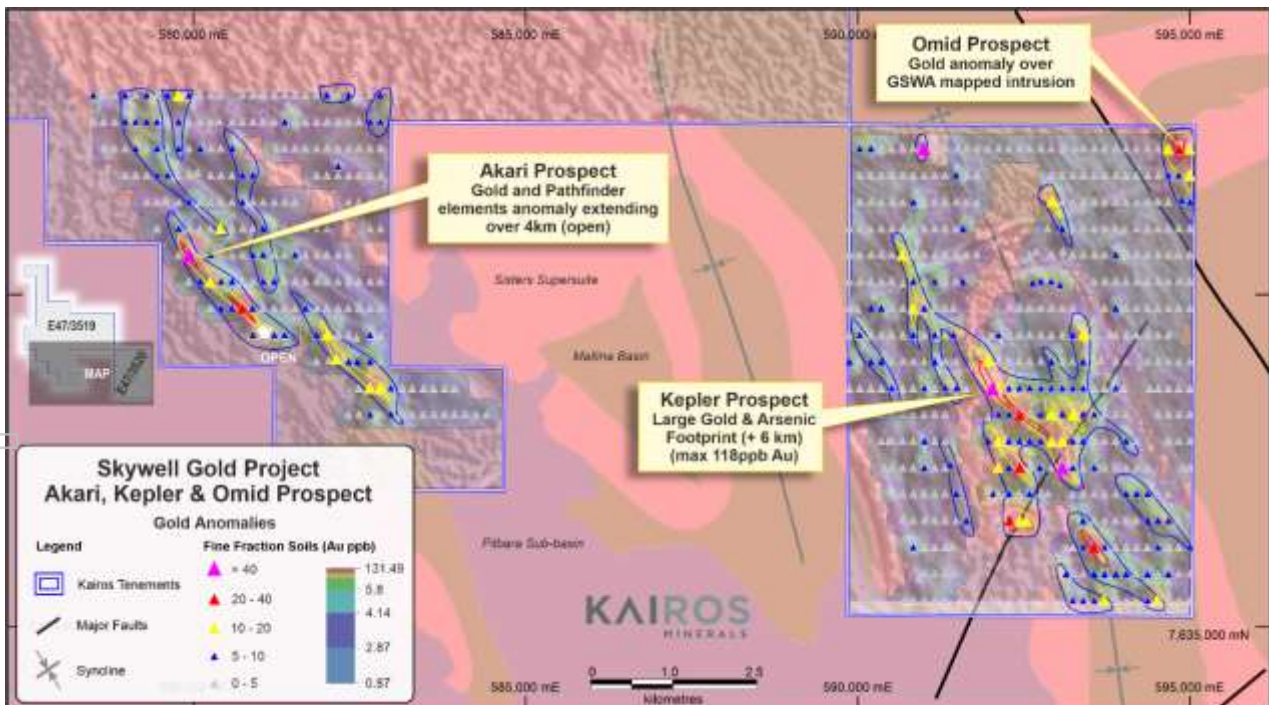
Two large distinct gold targets with an extensive surface footprint were identified: a robust and coherent anomaly associated with the Hardey Formation and a large gold and arsenic footprint that appears to be structurally controlled and is associated with Mallina Basin sediments and Sisters Supersuit intrusion.

**Soil Geochemistry Program**

Kairos has now received all the results from a first-pass targeted regional soil geochemical program for the Skywell Project.

A total of 689 soil samples were collected within E47/3519 and E47/3520 and submitted to Labwest in Perth for Ultrafine+ Analysis with this geochemical program forming part of the regional CSIRO soil research initiative. Soil sampling was conducted on a 400m line spacing by 160m sample intervals covering intrusion-related gold mineralisation targets and structural targets defined by mapping and by the preliminary data from the airborne geophysical survey.

Initial interpretation of the Ultrafine gold and multi-element results, together with the results of the airborne magnetic survey, has generated one gold target within the E47/3519 and two gold targets within E47/3520 (Figures 3). The new targets are described in more detail below.



**Figure 3: Gold anomalies at the Skywell Project and the 500k GSWA Tectonic map.**

### **Kepler Prospect**

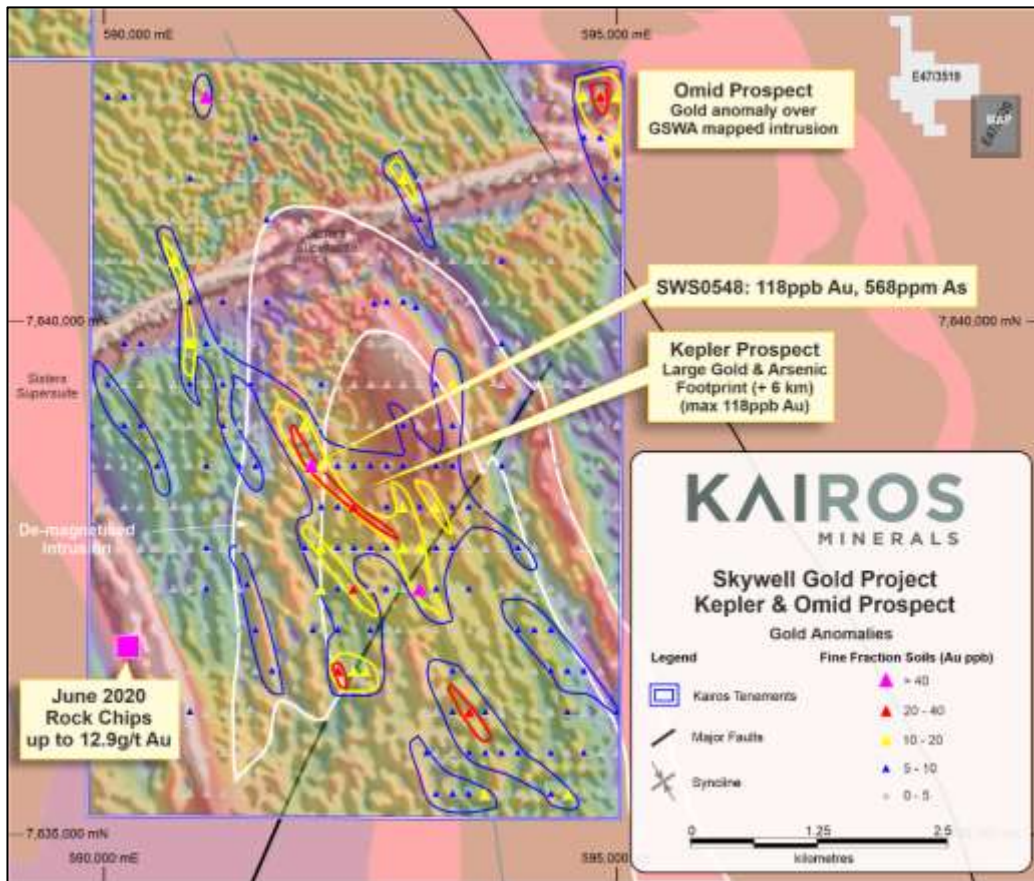
This target is defined by a 6km long geochemical anomaly that occurs over the Mallina Basin sediments and the metagabbro unit of the Sisters Supersuit intrusion. A previous Kairos rock chip sampling program in this area returned gold grades of between 1.8g/t Au and 12.9 g/t Au (refer ASX announcement of 6 July 2020). The anomaly appears to be trending in a northwest-southeast direction and could be bound to a structural corridor. The metagabbro unit generally stands out as a strong magnetic feature on the recently completed airborne magnetic survey image and, interestingly, appears to be de-magnetized in the central part of the anomalous strike length (Figure 4), where sample SWS0548 returned **118ppb Au and 568ppm As**. The core of the anomaly, which extends over 2km, sits in between the axis and the western limb of a syncline fold and is cross-cut by a major northeast-southwest fault, suggesting the potential for structurally controlled mineralisation (Figure 4).

### **Akari Prospect**

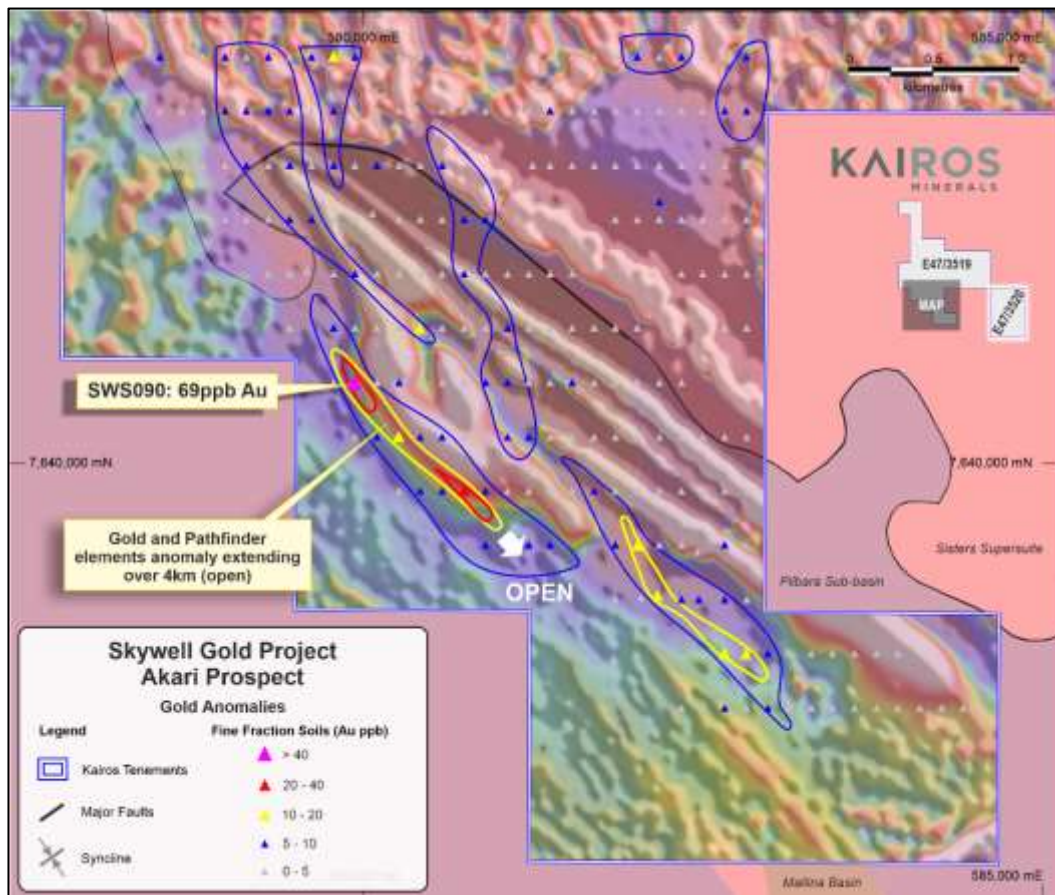
This target is defined by a coherent and robust anomaly characterised by elevated Au, As, Bi, Mo, Pb, Sb, Te, and W, and extending over a strike length of 4km. The main component of this anomaly, where sample SWS0090 returned **69ppb Au**, is associated with Hardey Formation and sits on the edge of a prominent magnetic anomaly (Figure 5). The second component of this anomalous zone sits on the sediments of the Mallina Basin (GSWA Mount Wohler 1:100,000 Geological Map). This anomalous zone remains open in one or more directions. A further in-fill and extensional soil sampling program, combined with detailed geological mapping, is required to identify the extension and nature of this anomaly.

### **Omid Prospect**

This target comprises low-level gold and arsenic anomalies coincident with a magnetic feature over mapped granodiorite intrusion in sediments of the Mallina Basin. See Figure 3 for the location of this target.



**Figure 4: Kepler Prospect at the Skywell Project over the TMI 1VD image**



**Figure 5: Akari Prospect at the Skywell Project over the TMI 1VD image.**

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The results from this first-pass regional soil sampling program warrant further in-fill and extensional geochemical surveys. A desktop heritage study has been initiated and a Program of Work has been submitted to the Mines Department for the E47/3519, E47/3520 and E47/3521 licences.

### **Next Steps**

- Ongoing RC drilling at the Fuego prospect.
- Complete the SAM survey at the Tierra Prospect, Croydon Project.
- Data processing and interpretation for the SAM surveys.
- RC drilling at the Mt York Project.
- In-fill soil sampling program at the Kangan Project.
- Heritage survey and air-core drilling at the Skywell Project.
- In-fill and extensional soil sampling program at the Skywell Project.

Released with authority of the Board.

### **About Kairos Minerals**

Kairos Minerals (ASX: KAI) is a diversified West Australian-based exploration company which is focused on the exploration and development of two key project hubs located in WA's premier mining districts.

The Company's 100%-owned Pilbara Gold-Project has its central "hub" located ~100km south of Port Hedland in the world-class Pilgangoora district immediately adjacent to the major lithium-tantalum projects owned by Pilbara Minerals and Altura Mining, which are both currently in production.

Since acquiring the project in early 2016, Kairos has established a JORC Indicated 8.56Mt at 1.3 g/t for 366,000oz and Inferred 12.36Mt at 1.28 g/t for 507,000oz for a Total Mineral Resource of 20.93Mt @ 1.3g/t Au for 873,000oz (ASX announcement, 4 March 2020). The Project encompasses the historical Lynas Find gold project, which produced over 125,000oz of gold between 1994 and 1998.

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 recent exploration work has confirmed the potential for significant discoveries of high-grade gold, nickel and cobalt mineralisation. Kairos' tenure adjoins the emerging Lake Roe gold discovery, owned by Breaker Resources (ASX: BRB).

In the Pilbara, Kairos also holds 1,547 square kilometres of tenure (granted and applications) which is highly prospective for gold discoveries.

Kairos has been well recognised for its industry leading technical team that includes its Chairman Terry Topping (Taipan Resources NL, Cauldron Energy Ltd), Technical Director Neil Hutchison (Poseidon Nickel, Jubilee Mines) and consulting specialists.

### **For further information, please contact:**

#### **Investors:**

Mr Terry Topping  
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Kairos Minerals Limited

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**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 Mr Terry Topping, who is a Director of Kairos Minerals Ltd and who is also a Member of AusIMM. Mr Topping 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 Topping 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 Australian Securities Exchange has not reviewed and does not accept responsibility for the accuracy or adequacy of this release.*

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**Appendix 1 – Kairos Minerals – Croyden Project**

**JORC Code, 2012 Edition – Table 1**

**Section 1 Sampling Techniques and Data**

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Individual soil samples are collected as ~500grams, -2mm sieved samples, from insitu soil horizons at between 15-20cm depth, on 400m spaced lines and 160m spaced samples.</li> <li>Samples were submitted to Labwest in Perth for gold and multi-element analysis utilizing the Ultrafine method. The ultrafine soil samples from the Skywell project are part of the CSIRO research program that utilizes the latest advanced technologies for geochemical mapping and targeting.</li> <li>Ultrafine is designed to analyse the clay sized fraction (&lt;2µm) for gold exploration, and also multi-element analysis for major and trace elements, salinity (EC) and pH, and clay mineralogy.</li> <li>All samples were delivered by Kairos personnel to RGR Road Haulage in Port Hedland for transport to Labwest in Perth WA for final analysis.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>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).</li> </ul>	<ul style="list-style-type: none"> <li>No drilling has been undertaken.</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>No drilling has been undertaken.</li> </ul>
Logging	<ul style="list-style-type: none"> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>The information collected about soil samples includes general geological observations and location.</li> </ul>

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Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>Soil samples are prepared and analysed by independent certified laboratory, Labwest Mineral Analysis Pty Ltd in Perth.</li> </ul>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Soil samples were submitted to Labwest in Perth for gold and multi-element analysis utilizing the Ultrafine method. The ultrafine soil samples from the Skywell project are part of the CSIRO research program that utilizes the latest advanced technologies for geochemical mapping and targeting.</li> <li>Ultrafine gold and multi-element analysis is by microwave assisted aqua regia digestion, ICPOES/ICPMS.</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>No drilling has been undertaken</li> <li>Sampling data is collected and collated by Kairos Geologists and entered into an electronic database</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>Soil samples collected were surveyed by GPS with an accuracy of +/- 5m.</li> <li>All samples are in MGA94 Zone 50 (GDA94).</li> <li>There is no historic drill hole in the area.</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>Soil sampling is conducted on east – west oriented lines at 400m line spacings. Samples are collected at 160m spacings along lines.</li> </ul>

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Criteria	JORC Code explanation	Commentary
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> <li>• <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The soil sampling is undertaken across the strike of the known geology and structures within the project area.</li> </ul>
<i>Sample security</i>	<ul style="list-style-type: none"> <li>• <i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>• All soils samples were collected in the field at the project site by Kairos personnel.</li> <li>• All samples were collected in number coded geochemical paper bags/secure labelled polyweave sacks by Kairos' geological and field personnel.</li> <li>• All samples were delivered directly to RGR Road Haulage Port Hedland by Kairos personnel prior to being transported to Labwest in Perth WA for final analysis.</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• No audits have been completed</li> </ul>

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## Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Kairos Minerals owns the Tenements 100%</li> <li>The Skywell Project has three granted Exploration License, E47/3519, E47/3520 and E47/3521.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>Minimum past work has been carried out by other parties. West Coast Holdings conducted trenching within the project area with no further work carried out.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>The targets are hydrothermal mineralisation, intrusion-related gold system, and sediment-hosted gold mineralisation.</li> </ul>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>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: <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>No drilling was completed.</li> </ul>

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Criteria	JORC Code explanation	Commentary
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>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.</i></li> <li><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<ul style="list-style-type: none"> <li>Due to the early stage of exploration and type of work completed to date, no data aggregation has been undertaken.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li><i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li><i>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').</i></li> </ul>	<ul style="list-style-type: none"> <li>No drilling has been undertaken</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Suitable summary plans have been included in the body of the report.</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li><i>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</i></li> </ul>	<ul style="list-style-type: none"> <li>All relevant results have been reported</li> </ul>
<b>Other substantive</b>	<ul style="list-style-type: none"> <li><i>Other exploration data, if meaningful and material, should be reported including</i></li> </ul>	<ul style="list-style-type: none"> <li>All relevant and meaningful data has been reported.</li> </ul>

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Criteria	JORC Code explanation	Commentary
<b>exploration data</b>	<i>(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.</i>	
<b>Further work</b>	<ul style="list-style-type: none"> <li><i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>Further mapping, geochemistry, rock chip sampling is planned</li> <li>Refer to diagrams in the body of the release</li> </ul>