

ASX ANNOUNCEMENT

12 October 2022

Strong lithium and gold targets identified at Croydon Project, WA

Soil sampling outlines several lithium targets, with values up to 177ppm and coincident mapped pegmatites, plus large gold anomalies up to 2.5km-long in the Pilbara

Highlights

- Strong results from more than 1,300 soil samples reveal highly prospective lithium and gold anomalies
- Four lithium anomalies with elevated pathfinder elements were identified, up to 8km-long and coincident with mapped pegmatites
- Viento is a new 2.5km-long target defined by a robust gold anomaly
- Aqua Prospect is a 1km-long anomaly up to 3,060 ppb Au with nearby Pb-Zn-Cu association with values of up to 3,115ppm Pb, 663ppm Zn, 265ppm Cu
- Tierra prospect: In-fill soil results confirm and refined the target area, with values up to 1,511ppb Au

Kairos Managing Director, Dr Peter Turner said: **“These are very strong results which demonstrate that Croydon has outstanding potential to host extensive lithium and gold mineralisation.**

“In light of these results, we are moving quickly to implement follow-up programs of field verification, mapping and drilling.

“It is important to note that the large Croydon Project was pegged for its geological characteristics and potential to host Hemi-style mineralisation – these results attest to its prospectivity not just for gold but for significant lithium mineralisation as well.

“The Viento-Fuego-Tierra-Aqua Prospects are significant gold anomalies arranged in clusters over 20km along a granitic margin and provide Kairos with an exciting pipeline of gold prospects with scale and tenor that warrant imminent drill-testing”.

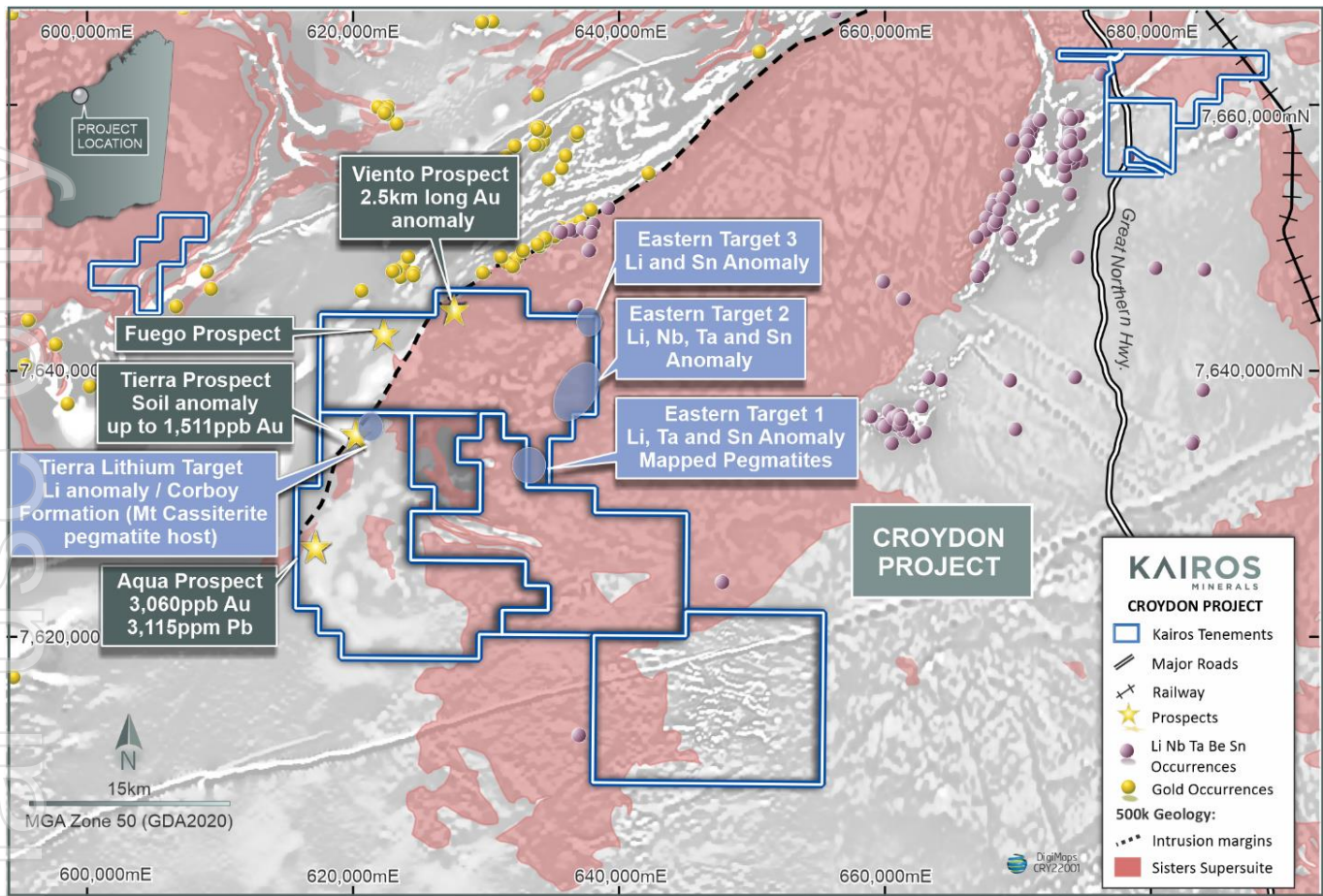


Figure 1. Kairos lithium and gold targets at Croydon Project.

Kairos Minerals Ltd (ASX: KAI) is pleased to advise that it has identified new gold and lithium targets at its 100 per cent-owned Croydon Project in WA's Pilbara.

The targets have been identified by the successful geochemical sampling program in which 1,304 soil samples were collected at 200m x 80m and 800m x 160m spacing and submitted for Ultrafine+™ analysis at the Labwest Laboratory in Perth.

The complete data analysis has identified a new gold target at the Viento prospect and four new lithium targets. The Tierra and Eastern 1 lithium targets show similar geological settings to the Mt Cassiterite pegmatite suite, part of the 259Mt @ 1.17%Li₂O deposit, owned by Mineral Resources and Albemarle Corporation (ASX: MIN and NYSE: ALB).

Kairos has also completed the in-fill soil sampling program at Tierra and Aqua prospects, with targets now ready to be drill-tested.

Lithium Targets

The geochemical soil sampling program defined four new lithium targets based on elevated lithium and pathfinder elements and the local geology (**Figure 2**).

Tierra Lithium Target

Eastern Target 1

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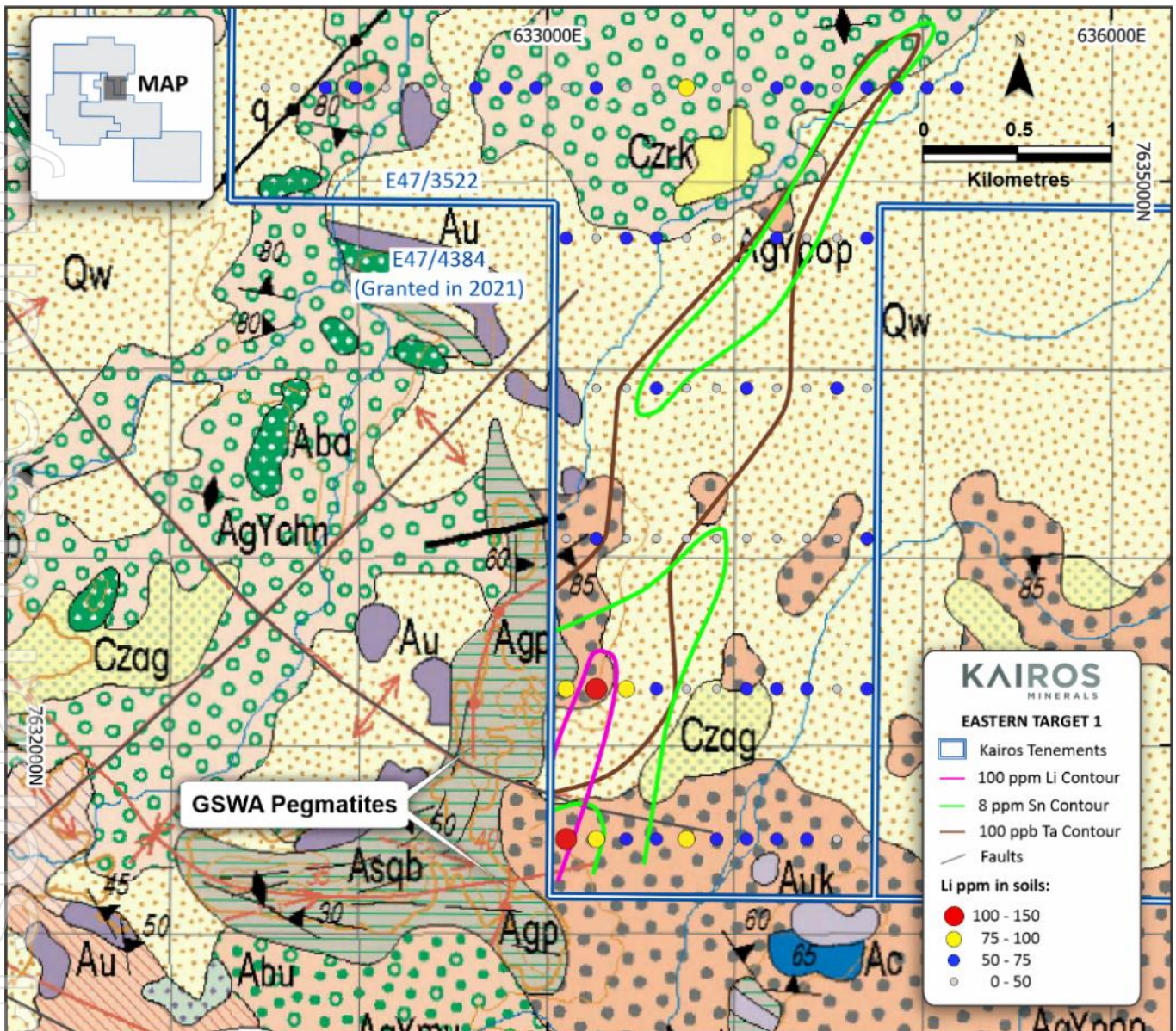


Figure 3. The Eastern Target 1, defined by the Ultrafine soil sampling program and the pegmatites (Agp) mapped by GSWA (1:100k Satirist sheet).

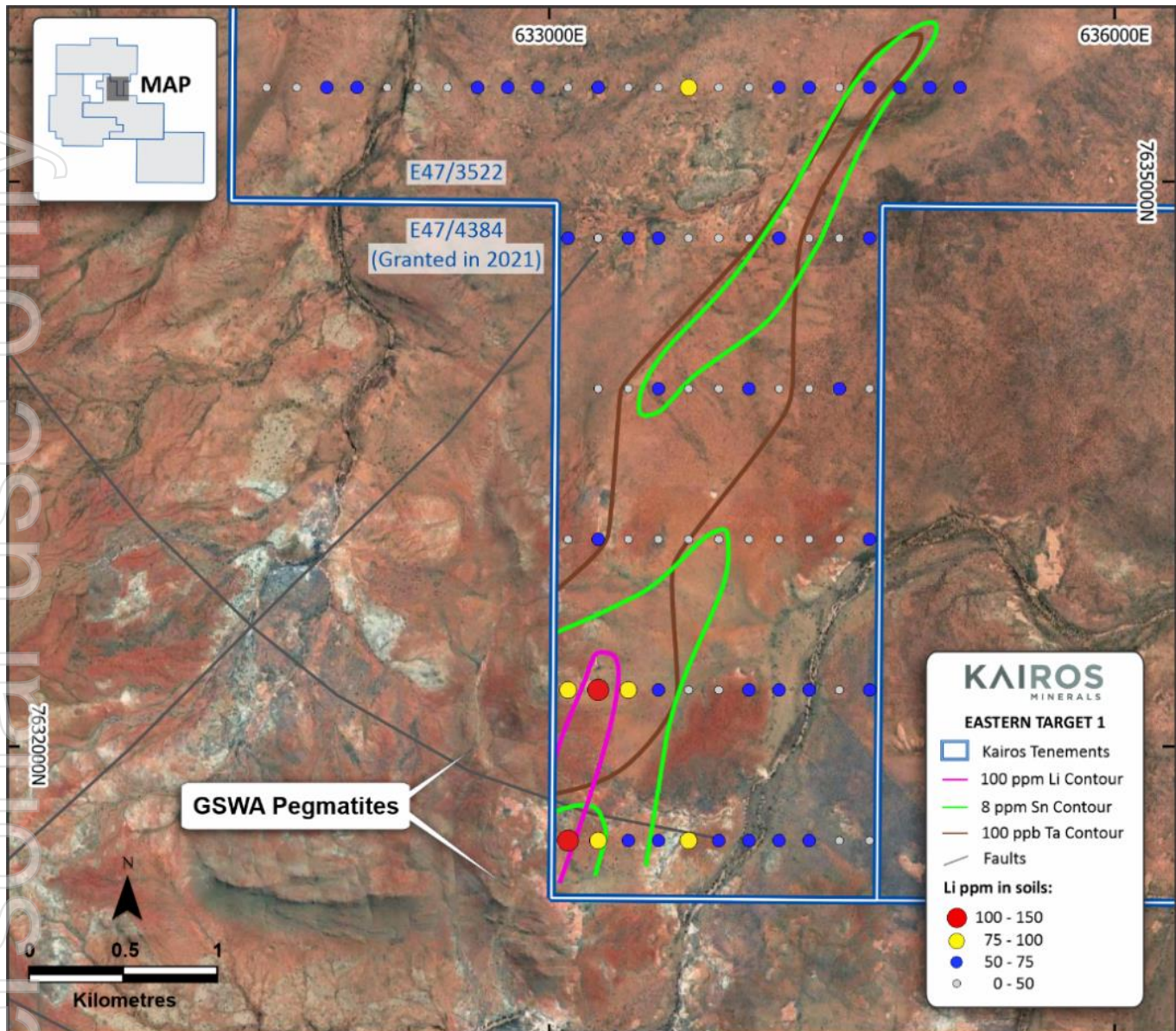


Figure 4. The Eastern Target 1, defined by the Ultrafine soil sampling program and the pegmatites (Apg) within the recently granted E47/4384 tenement.

Eastern Target 2

A 4km-long northeast striking target area is defined by lithium anomalies, up to 177ppm Li, with coincident elevated niobium, tin and tantalum. It sits near the contact between the Powder Monzogranite (2,935Ma) and the Cheearra Monzogranite (3,065Ma) of the Sister Supersuit; the Cheearra unit includes pegmatites that could be associated with the later intrusion of the younger Powder granites.

Eastern Target 3

This target is defined by lithium anomalies, up to 137ppm Li, with coincident elevated tin. The Warden Pool Tin Prospect is located 1.5km northwest of this anomaly in Sayona Mining tenement.

Gold Targets – Viento Prospect

The Ultrafine soil sampling program results identified a new target area defined by a 2.5km long gold anomaly. This target area is located on the highly prospective zone, the margins of the Sisters Supersuit intrusion. Several gold, copper, tin, tantalum, lithium, and tungsten prospects are located on the margins of this intrusion. See **Figure 1** for location of these prospects.

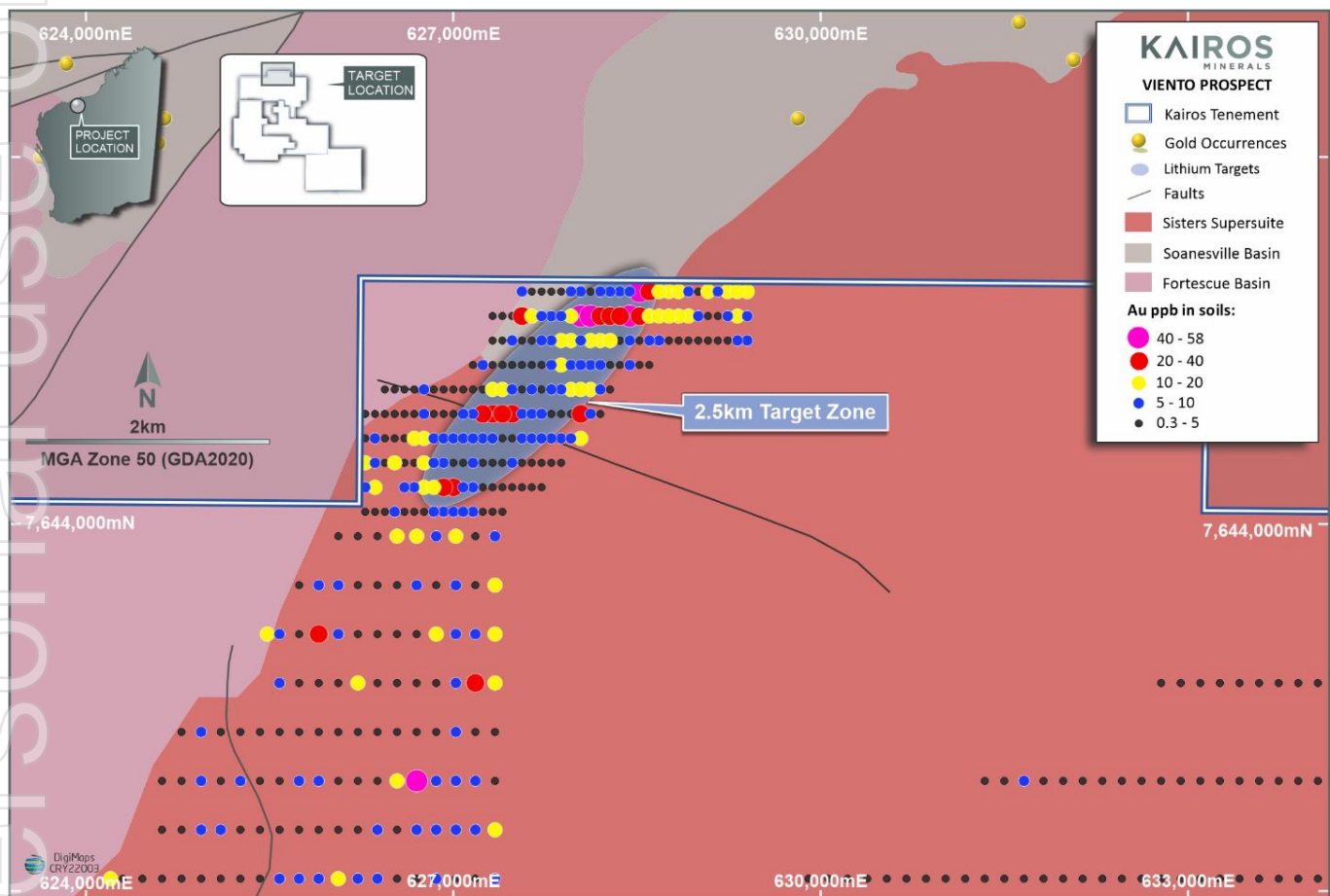


Figure 5. Detailed image showing the Viento Prospect and the gold results from the Ultrafine soil sampling program on 1:500k GSWA geology.

Gold Targets – Aqua and Tierra prospects

In 2021, Kairos conducted an in-fill and extensional soil sampling program at Aqua and Tierra prospects to refine previously defined targets and test new areas for intrusion-related gold mineralisation.

At the Aqua prospect, the analysis of the complete surface geochemistry data has generated a consistent and robust anomalous zone of elevated Pb, Cu and Zn, up to 3,115ppm Pb, 663ppm Zn, 265ppm Cu, next to a 1km long gold anomaly, up to 3,060ppb Au (**Figure 6**). The 1km anomalous zone is manifest as >100ppb Au results consistently over 7 of 10 sample lines illustrating the robustness of the anomalism. The underlying gold source is a high priority target that will be drill-

tested once Mt York PFS drilling is complete. This Viento-Fuego-Tierra-Aqua Prospects provide Kairos with an exciting pipeline of new gold prospect that require serious and imminent drill-testing.

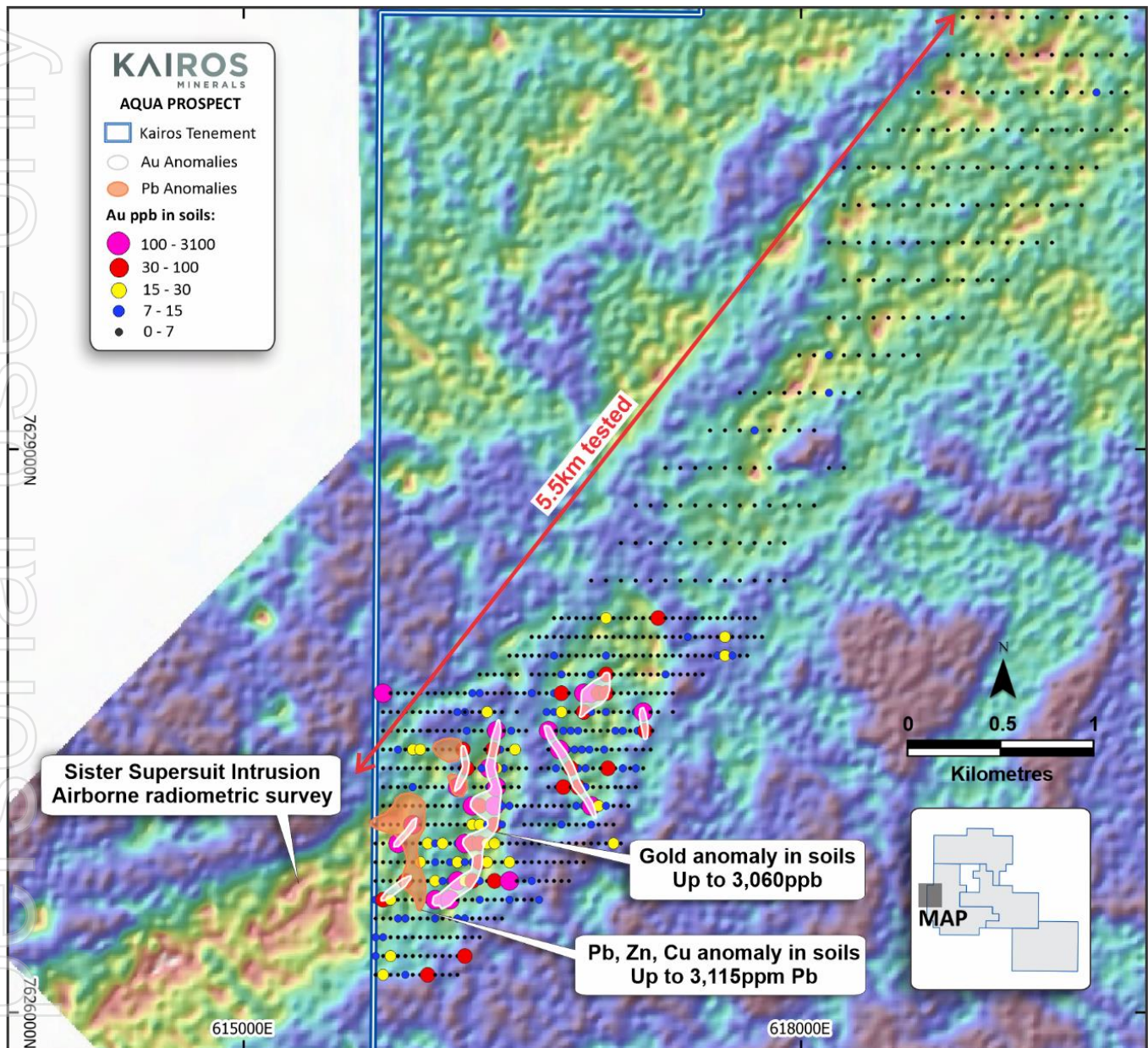


Figure 6. Complete results from the soil sampling program at Aqua prospect on the potassium radiometric image showing a strong, coherent gold anomaly over 1 km.

At the Tierra prospect, the in-fill soil sampling program confirmed and refined the previously defined target: the 2.5km long corridor of highly anomalous soils and rock chips, including outstanding surface copper and gold grades up to 16.8% Cu and 4.3 g/t Au. The in-fill sampling program returned the highest gold value from soils of 1,511ppm Au for this prospect. Kairos has conducted heritage and environmental surveys over the area of the mineralised corridor and has been granted a special permit to conduct a drilling program, which is planned once Mt York PFS drilling is complete.

Next Steps

- Field investigation of the new Li, Au targets at Croydon project
- Results from geochemistry sampling programs from Roe Hills and Mt York projects
- Additional heritage surveys at Kangan, Wodgina and Croydon projects

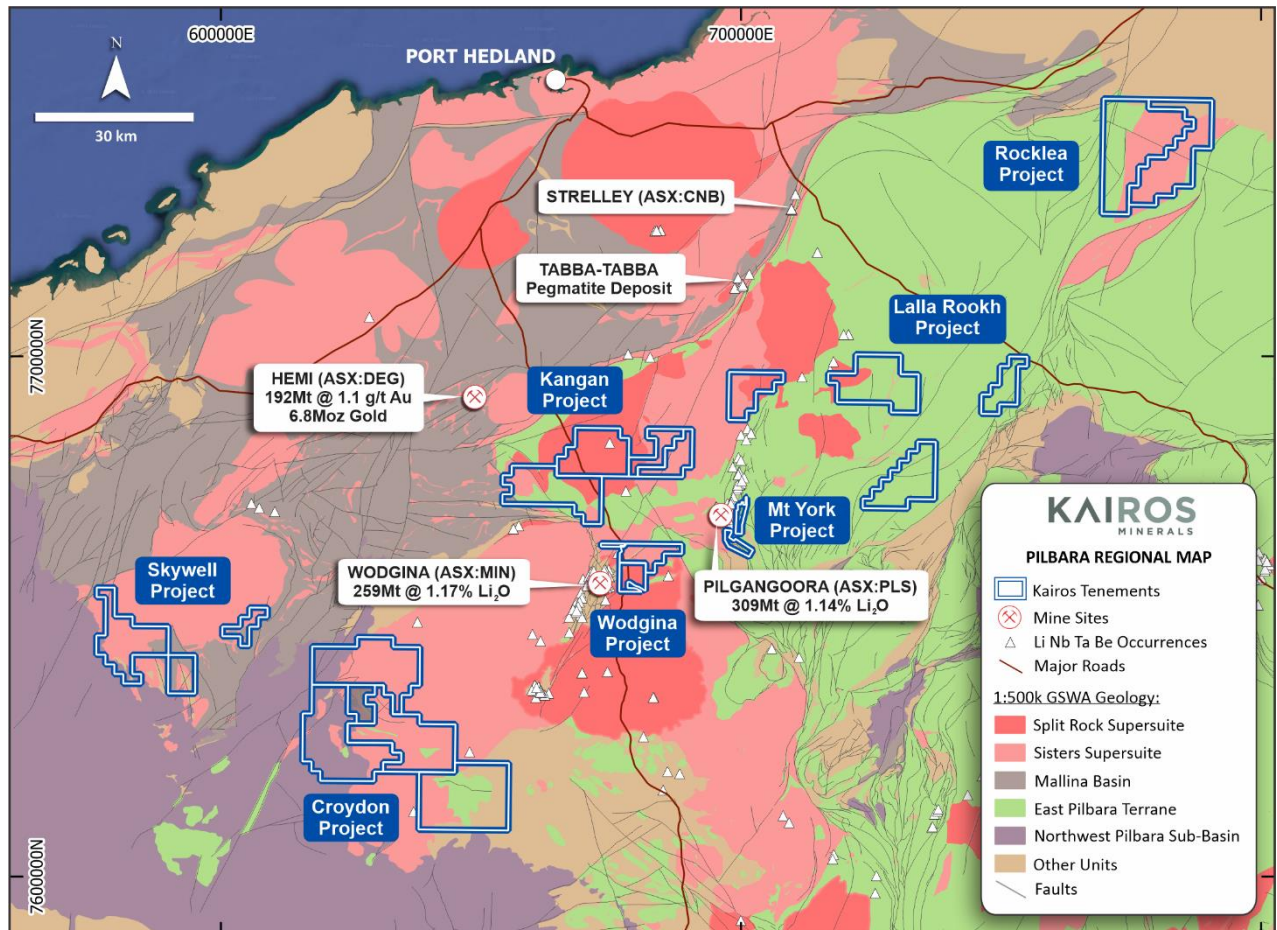


Figure 7. Kairos' Gold & Lithium Projects over the central Pilbara regional geology showing the position of the Mt York Project and nearby Pilgangoora Lithium-Tantalum mine.

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 (kcozs)	Tonnes (MT)	Au (g/t)	Ounces (kcozs)	Tonnes (MT)	Au (g/t)	Ounces (kcozs)
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. Kairos 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:

Paul Armstrong
Read Corporate
0421 619 084

COMPETENT PERSON STATEMENT:

The information in this report that relates to Exploration Results or Mineral Resources is based on information compiled and reviewed by Mr Eduardo Ruaro, who is a consultant to Kairos Minerals Ltd and who is also a Member of the Australian Institute of Geoscientists (AIG). Mr Ruaro 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 Ruaro 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	<ul style="list-style-type: none"> 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. 	<p>Ultrafine soils – Labwest Laboratory:</p> <ul style="list-style-type: none"> A total of 1,304 individual soil samples were collected as ~500grams, from <i>in situ</i> soil horizons at between 5-20cm depth. The samples were sieved -2mm in the field and submitted to Labwest Minerals Analysis Pty Ltd. laboratory in Perth. The ultrafine soil samples from Croydon Project are part of the CSIRO research program that utilises the latest advanced technologies for geochemical mapping and targeting. Ultrafine+ is designed to analyse the clay-sized fraction (<2µm) for gold exploration, and multi-element analysis for major and trace elements, salinity (EC) and pH, and clay mineralogy. <p>CN2000 and Aqua Regia – Intertek Laboratory:</p> <ul style="list-style-type: none"> Individual soil samples are collected as ~2000gram, -2mm sieved samples, from insitu soil horizons at between 20-30cm depth. Sample points are selected to avoid areas of transported alluvium and colluvium.
Drilling techniques	<ul style="list-style-type: none"> 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). 	<ul style="list-style-type: none"> No drilling is reported
Drill sample recovery	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> No drilling is reported
Logging	<ul style="list-style-type: none"> Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource 	<ul style="list-style-type: none"> Basic nature of soil description and site information was collected routinely

Criteria	JORC Code explanation	Commentary
	<p>estimation, mining studies and metallurgical studies.</p> <ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The soil samples were prepared and analysed by the independent certified laboratories, Labwest Mineral Analysis and Intertek Laboratory in Perth. The sample size was appropriated to analyse ultrafine particles (<2µm) at Labwest and multi-element Aqua Regia at Intertek. A Intertek, soil samples are dried and milled to 95% passing 75µm, prior to gold and multi-element analysis by AR25/MS and CN2000/MS methods. Most of the samples were dry.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The laboratories apply quality control procedures. The ultrafine soil samples are analysed by Labwest Minerals Analysis Pty Ltd. laboratory in Perth. Ultrafine gold and multi-element analysis are by microwave-assisted aqua regia digestion, ICP-OES/ICP-MS. The other soil samples are submitted to independent certified laboratory, Intertek Genalysis in Perth for sample preparation and analysis for gold and multi-element analysis by AR25/MS and CN2000/MS methods for the soils. Au_CN2000_MS: Twenty four hour Bulk Cyanide Leach (2kg sample). Analysed by Inductively Coupled Plasma Mass Spectrometry. AR_25: Aqua-Regia digest. Analysed by Inductively Coupled Plasma Mass Spectrometry. Repeats - Au_CN2000_MS: Twenty four hour Bulk Cyanide Leach (2kg sample). Analysed by Inductively Coupled Plasma Mass Spectrometry. Due to the early stage of exploration and type of work completed to date, no external, additional standards, blanks or duplicates have been used. QAQC relies on the supplied laboratory report
Verification of	<ul style="list-style-type: none"> The verification of significant intersections by either independent or 	<ul style="list-style-type: none"> All data is received and stored securely in digital format in the Company's database.

Criteria	JORC Code explanation	Commentary
sampling and assaying	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Final data is rigorously interpreted by Kairos' geoscientific personnel and consultants Due to the early stage of exploration and type of work completed to date, no independent verification has been undertaken to date
Location of data points	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Kairos' soil samples were surveyed by handheld GPS with an accuracy of +/- 5m. All location data are in MGA94 Zone 50 (GDA94).
Data spacing and distribution	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The soil sampling program was conducted on different grids: from 50m line spacing by 50m sample intervals, up to 800m line spacing by 160m sample interval.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The soil sampling was undertaken across the strike of the known geology and structures within the project areas.
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> The sample chain of custody is managed by Kairos. All samples were collected in the field at the project site in number-coded calico or geochem bags/secure labeled poly weave sacks by Kairos' geological and field personnel. All samples were delivered directly to the responsible laboratory or associated carrier by Kairos personnel before being transported to the laboratory in Perth WA for final analysis.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> No review or audits have been conducted

Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> 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, 	<ul style="list-style-type: none"> The Croydon project consists of four granted Exploration Licenses: 47/3522 to 3523 and 47/4384 to 47/4385. Kairos is not aware of any existing impediments nor of any potential

Criteria	JORC Code explanation	Commentary
	<p>historical sites, wilderness or national park and environmental settings.</p> <ul style="list-style-type: none"> 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. 	<p>impediments which may impact ongoing exploration and development activities at the project site.</p>
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> No significant past work has been carried out by other parties
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<p>Regional Geology</p> <ul style="list-style-type: none"> The Croydon Project lies across Granite-Greenstones 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. The mineralisation targets are intrusion/shear zone-hosted Au deposits and LCT pegmatite deposits (lithium)
Drill hole Information	<ul style="list-style-type: none"> 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"> 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 exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	<ul style="list-style-type: none"> No drilling was completed
Data aggregation methods	<ul style="list-style-type: none"> 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. 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. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	<ul style="list-style-type: none"> Not applicable

Criteria	JORC Code explanation	Commentary
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> 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'). 	<ul style="list-style-type: none"> Not applicable
Diagrams	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Relevant diagrams have been included within this report.
Balanced reporting	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> All exploration results have been reported without grade cuts
Other substantive exploration data	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Other relevant and meaningful data has been previously reported
Further work	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Field investigations of the new targets at Croydon are warranted based on the tenor and scale of the results Additional Heritage Surveys are likely to be undertaken