

# Exciting copper-gold porphyry targets identified at Mt Rawdon Project

- Multi-generational intrusive complex and geochemical pathfinders of potential porphyry copper-gold system identified.
- Baloo and Kaa prospects represent high priority copper-gold targets and are the focus
   of near-term exploration.
- Work completed to date provides solid exploration pipeline for the coming months.
- \$1.5 million raised to progress the Project, including Induced Polarisation survey and maiden drill program.
- Exploration commencing in coming weeks.

Killi Resources Limited ('**Killi**' or the '**Company**') (ASX: KLI) is pleased to announce the results of recent internal and external technical reviews of the Mt Rawdon West Project, which highlights further copper-gold potential at Baloo and Kaa prospects, Figure 1.

Using technology developed by the Centre for Exploration Targeting (CET), **multiple blind intrusives** have been identified confirming the target areas have seen multiple generations of potentially mineralised magma pulses. These blind intrusives, identified during this process, align with the current surface copper-gold-molybdenum anomalies.

Soil data was further evaluated, where dominant elements and metals were determined for each soil sampling point, a process which determines dominant metals in zones and is useful for magma controlled mineral systems.

This process identified two distinct **copper-gold-molybdenum zonations** at **Baloo and Kaa**. Element ratios were also completed for Cu/Zn, Sr/Y, and V/Sc, which indicates both targets bear the markings of a fertile and hydrous porphyry system.

### Chief Executive Officer, Kathryn Cutler said:

"This evaluation confirms a fertile porphyry system at the Mt Rawdon West Project. Pathfinder elements and metal distribution are in abundance, indicating we are potentially looking at a large-scale copper-gold porphyry system.

"The geology, geophysics and geochemistry has fallen into place to determine a strong coppergold porphyry target at Baloo and Kaa, which remain completely untested.

"The Company strongly believes in this project and its ability to deliver a new discovery. We are excited to get back out on the ground at Baloo and Kaa, and we look forward to testing the targets at the first opportunity."

### **DISCOVERY POTENTIAL FOR THE PROJECT**

Killi wholly owns a belt-scale land holding within the well-renown Mt Rawdon gold and copper mining district, controlling a 300km<sup>2</sup> tenement package, 10km's along strike from the 2Moz Mt Rawdon Gold Mine.

# The Mt Rawdon West Cu-Au Targets

The Baloo Corridor has been the initial focus of exploration, as geophysics highlighted a structurally complicated zone at the intersection of major regional faults, which are responsible for gold mineralisation in the region.

Soil samples and rock chips have focused across this corridor and returned large zones of both gold and copper enrichment at surface. In places the mineralisation has been of considerable grade, returning in assay, 7.2% Cu in bornite rich veins, 12.4g/t Au in quartz veins and 0.99% Mo from a quartz plug, all at surface.

Recent evaluations have added weight to the copper-gold porphyry potential of the targets.

Metal and element zonations have been determined for surface soil data and confirms the dominant metals at the project consist of a copper/gold/molybdenum core, flanked by bismuth-silver-tungsten, and more distally lead-zinc. A typical geochemical arrangement of pathfinder elements, indicative of fertile intrusive system, Figure 1.

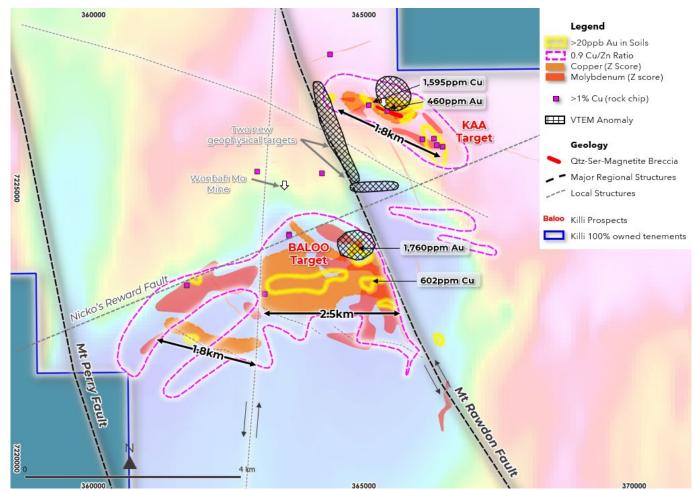


Figure 1. A total 6.1km copper-gold-molybdenum soil zonation across the Baloo and Kaa targets. Both targets align with blind intrusive identified by CET geophysical tool and are interpreted to be off-set by late-stage regional faulting, by the Mt Rawdon Fault.

# The Baloo Cu-Au Target

The Baloo target hosts a considerable **copper-gold-molybdenum anomaly extending consistently 2.5km x 1.7km** across the tenement at the intersection of regional structures, within the Tenningering Granodiorite, Figure 2.

Soil samples were also evaluated using a Copper/Zinc, Strontium/Yttrium, and Vanadium/Scandium ratios, a method of evaluating data for porphyry prospectivity. Associated with the Cu-Au-Mo anomaly, there is a >0.9 Cu/Zn ratio, >20 Sr/Y ratio and a >15 V/Sc ratio, Figure 5.

The V/Sc and Sr/Y ratios indicate the system to be both hydrous and fertile, a necessary vector for a mineralised porphyry system.

The historical geophysical (VTEM) data was processed using the Centre for Exploration Targeting (CET) intrusive tool to identify blind-intrusive features. A **500m<sup>2</sup> blind-intrusion feature has been identified** at the intersection of the regional fault structures, on the margin of the soil anomaly.

At Baloo, 16 rock chip samples have been collected to date with 10 samples returning >250ppm Cu, and 4 samples returning >50ppb Au. The peak gold value in soils is **1,760ppb Au** which sits in the centre of the VTEM anomaly, and **602ppm Cu**, located 600m south of the VTEM anomaly.

The anomalies occur on topographic high features (ranges) and are believed to remain in situ with little transport from their source of enrichment, which represents reasonable proximity to a mineral system.

There is no historical drilling on this project, and these targets remain untested.

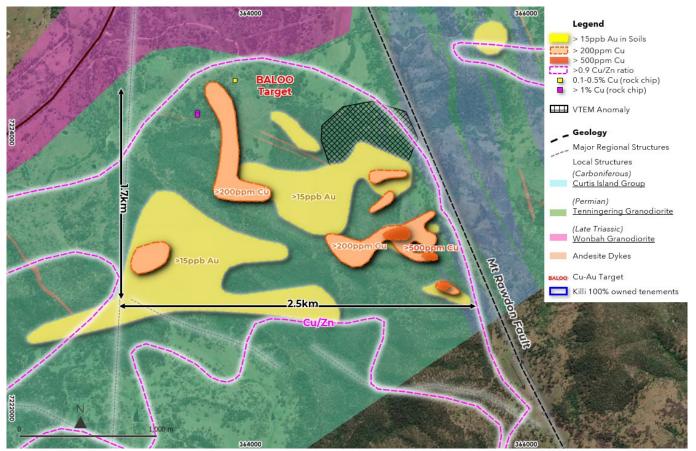


Figure 2. The Baloo target with Cu/Zn ratio envelope with copper and gold soil sample contours, and VTEM intrusive anomaly.

# The Kaa Cu-Au Target

A similar **1.8km long copper-gold-molybdenum anomaly** can be seen at the Kaa Prospect, where the Company has already reported up to 12.4g/t Au and 4.2% Cu from rock chip samples at the old workings, Figure 3. At the top of Wonbah Hill, at the Kaa prospect, soil samples have returned up to **1,595ppm Cu** and **460ppb Au**. All ten rock chip samples assayed returning greater than 1,000ppm Cu or 0.1% copper, Figure 3.

Mapping at Kaa has identified and confirmed a **120m long quartz-sericite-magnetite breccia**, believed to represent the top or cap of an intrusive/breccia pipe. The breccia is observed as a vuggy quartz-magnetite rock with sericite that has been weathered out, Figure 4. Magnetite is characteristic of epithermal-porphyry-style systems such as Cadia in new South Wales and is a common accessory mineral to copper-gold mineralisation.

The surrounding granodiorite has selective and abundant copper mineralisation in the form of chalcopyrite, malachite and bornite which are visible as veined and complete selective replacement within the host rock, Figure 4.

Processing of the geophysical data using the CET tool identified a blind **600m<sup>2</sup> geophysical anomaly** on the northern side of the copper-gold-molybdenum soil anomaly. This anomaly is interpreted as an intrusion, a necessary feature of a multigenerational magma system.

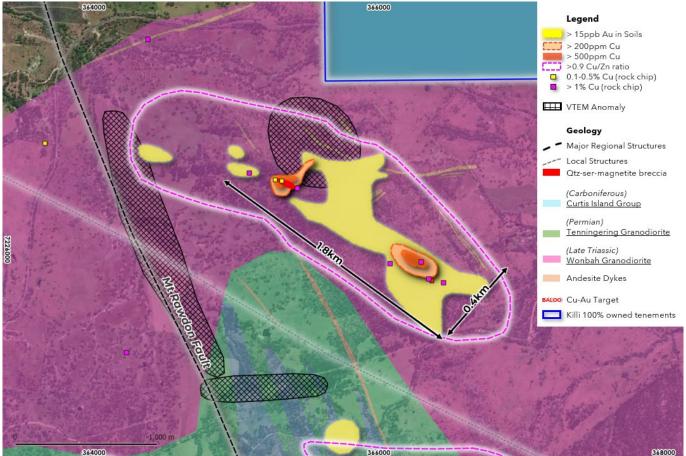


Figure 3. Kaa target with gold and copper anomaly in soils, intrusive unit from CET (geophysical) processing, rock chip samples, mapped andesite dykes and breccia-pipe.

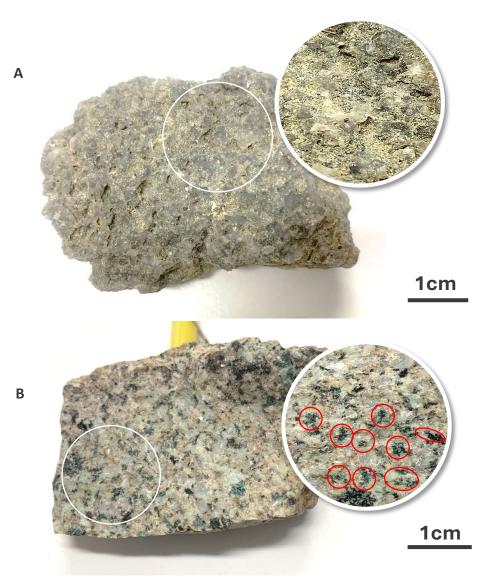


Figure 4. Host Rocks at the Kaa Prospect. A) Quartz-sericite-magnetite breccia, where the sericite has been weathered out. B) Wonbah Granodiorite, with complete replacement of specific minerals with copper bearing minerals (red circles) in the form of malachite, with selective biotite alteration.

**Two additional targets** were identified along the Mt Rawdon Fault, between the Kaa and Baloo targets, from the CET porphyry tool. The targets run parallel and perpendicular to the Mt Rawdon fault and have a lower target priority. These targets will require ground-truthing and mapping.

An **additional 1.8km anomaly** has also been determined south-west of Baloo and is interpreted as an offset of the original Baloo anomaly which has been cross-cut by a north-south fault, Figure 1.

Understanding the timing of the structures is important at the project, and indicates that the three copper-gold anomalies, may have once been from a single source, stretching 7km x 2.5km, Figure 5.

# **EXPLORATION STRATEGY**

### **EXPLORATION PROGRAM FOR BALOO & KAA**

From the work completed to date the Baloo and Kaa targets will remain the highest priority for the Company.

These anomalies are significant due to the following characteristics which align with epithermalporphyry style copper-gold systems;

- The size and scale of the copper-gold anomalies.
- The grade of copper and gold in soils (>250ppm Cu and >50ppb Au).
- The **elements associated** with the gold and copper, specifically molybdenum, and the zonations of elements, with lead and zinc on the periphery.
- The **ratios of elements** that indicate a hydrous and fertile system, necessary for a porphyry system.
- The **location** of the anomaly at the intersection of key geological units, Curtis Island sediments, with the Triassic and Permian Granodiorites.
- The presence of blind intrusive features adjacent the geochemical anomalies.

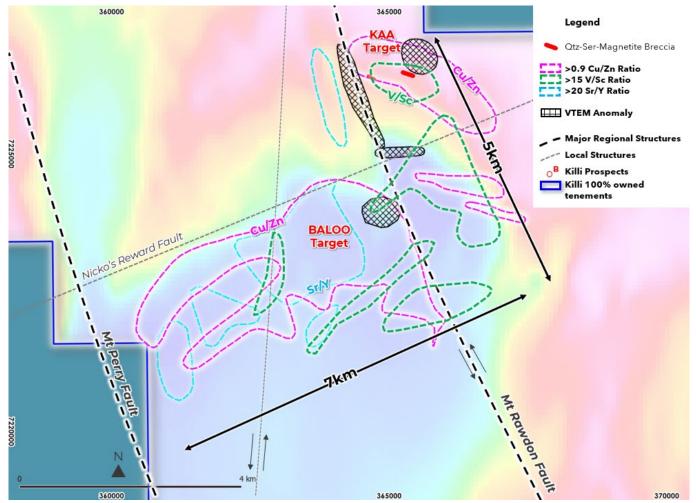
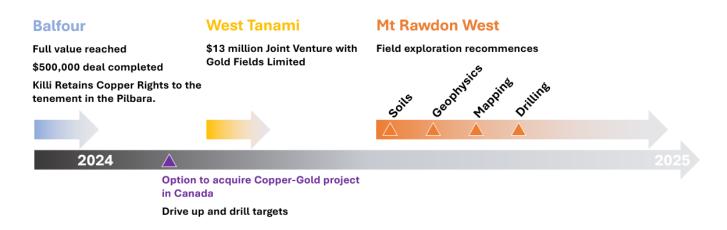


Figure 5. Location and distribution of copper, zinc, strontium, yttrium, scandium, and vanadium across the Baloo and Kaa targets. Elements indicative of a hydrous and fertile porphyry system.

# **ADVANCING THE ASSET PORTFOLIO**

The Company has worked through the projects in the portfolio to further develop avenues for opportunity, with the focus remaining on a new copper and/or gold discovery in Queensland.



The short-term exploration strategy will continue to focus on the Baloo and Kaa targets already identified and reported, as a priority at the **Mt Rawdon West Project**, exploring for a new copper-gold porphyry system, Figure 6.

Field Exploration is planned to recommence in the coming quarter, with further reconnaissance, mapping and soil sampling, as well as a ground IP geophysical survey at the Baloo and Kaa targets, Figure 7.

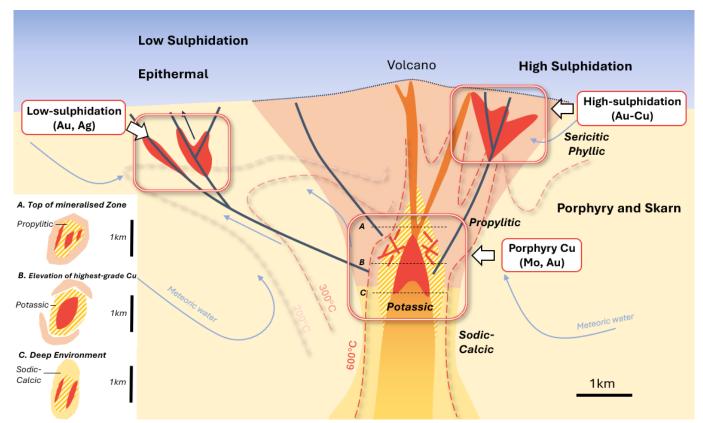


Figure 6. Schematic Geological setting for Epithermal and Porphyry/skarn style copper-gold deposits.

### **Exploration Pipeline:**

- 1. Field Exploration to recommence at Baloo and Kaa in May 2024.
- 2. Local mapping of the Baloo and Kaa Prospects is planned, with the focus to be on alteration and veining.
- 3. Surface geochemistry will be completed to infill the existing soil programs at Baloo and Kaa to assist zoning of pathfinder elements for a copper-gold system.
- 4. A Ground Induced Polarisation Survey has been planned to cover the Baloo and Kaa prospects and identify any sub-surface chargeable zones for drill targeting.
- 5. Drill campaign which will be the first holes ever at the Baloo and Kaa targets.
- 6. Possible acquisition of a new copper-gold opportunity in New Brunswick and Quebec, Canada.

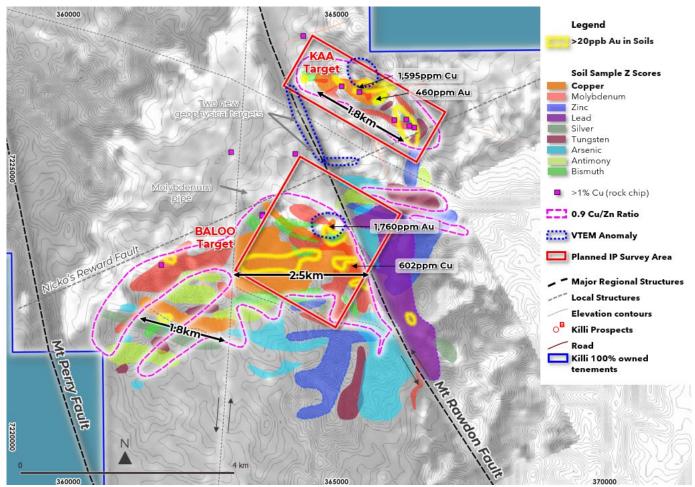


Figure 7. Baloo and Kaa geochemical and geophysical anomalies, with the area planned for the ground IP Survey.

Authorised for release by the Board of Killi Resources Limited.

### Enquires

Kathryn Cutler Chief Executive Officer +61 8 9322 7600 admin@killi.com.au

#### **Compliance Statement**

The information in this report that relates to prior Exploration Results for the Mt Rawdon West Project is extracted from the ASX Announcement listed below which is available on the Company website <u>www.killi.com.au</u> and the ASX website (ASX code: KLI):

Date	Announcement title
24 February 2022	Drill ready gold targets for Mt Rawdon West Qld
13 July 2023	Drilling intersects geochemically anomalous intrusive breccias at Rocky Prospect
7 September 2023	High-grade copper up to 7.2% Cu and gold 12.4g/t Au at surface, Baloo
30 October 2023	Large-scale copper-gold porphyry targets defined, Mt Rawdon West
15 November 2023	High-grade results extend the Rocky Prospect, Ravenswood North

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the estimates in the market announcements continue to apply and have not materially changed. The Company confirm that form and context in which the Competent Person's finding are presented have not been materially modified from the original market announcements.

#### **Competent Person's Statement**

The information in this report that relates to Exploration Results is based on information compiled by Ms Kathryn Cutler. Ms Cutler is a Member of The Australasian Institute of Mining and Metallurgy. Ms Cutler has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Ms Cutler consents to the inclusion in this report of the matters based on this information in the form and context in which it appears.

### About Killi Resources Limited

The Company is focussed on exploring for a new major mineral discovery at its projects in Western Australia and Queensland, Figure 8. The projects are belt-scale land holdings, located in well-endowed mineral provinces, that are significantly underexplored and amenable to a new large-scale discovery.

The Company has recently entered into a Earn-In Joint Venture with Gold Fields Limited at its West Tanami Project in the Tanami, where Gold Fields can earn up to 85% of the Gold Project.

The Company also retains copper rights to the Balfour Project in the Pilbara of Western Australia, where the project was originally pegged for its copper prospectively. In early 2024 the Company completed the same of the project to Black Canyon (ASX: BCA), where Killi received \$500,000 worth of Black Canyon shares for the deal.

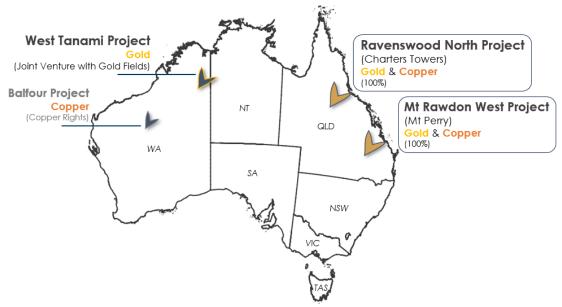


Figure 8. Location of Killi Resources Limited gold and copper projects in Australia.

The Company owns 100% of the **Mt Rawdon West Project** located inland from Bundaberg in Queensland. The project consists of one granted 305km<sup>2</sup> tenement. The land holding covers the intersection of the highly prospective Mt Rawdon gold corridor with the Mt Perry copper-gold corridor, within the Mt Perry region, Figure 8.

The Mt Rawdon gold mine is only 8km from Killi's tenement boundary. The Mt Rawdon Gold Mine has produced 1.8 million ounces of gold to date, consistently producing 75,000 - 80,000oz annually.

The controlling mineral structures from Mt Rawdon and Mt Perry deposits intersect in the centre of Killi tenure, at the Wonbah and Baloo prospects, and the Company is actively exploring the project for Porphyry Copper/Gold Systems.

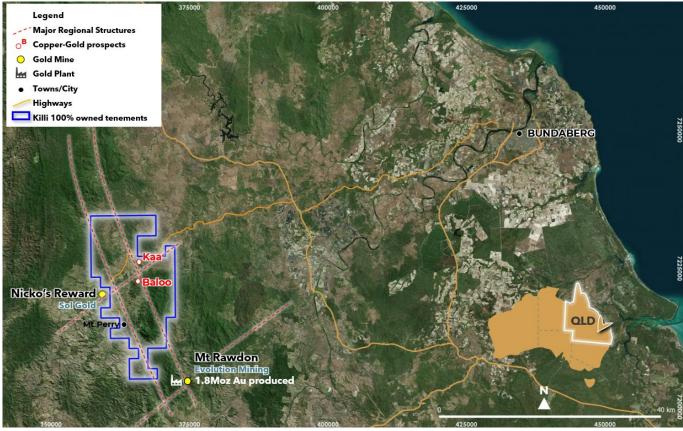


Figure 9. Location of the Mt Rawdon West Project 70 kilometres inland from Bundaberg, land holding of 309km<sup>2</sup>.

The Company also owns 100% of the **Ravenswood North Project** located near Charters Towers in Queensland. The project consists of six granted tenements, totalling ~660km<sup>2</sup>. The majority of the land holding covers the prospective Ravenswood-Charters Towers gold corridor, host to Ravenswood Gold Mine (~9Moz Au system), Charters Towers (~14Moz Au Resource), Mt Leyshon (3.8Moz Au produced), Mt Wright, Mt Success and Piccadilly all within 60kms of the project, Figure 10.

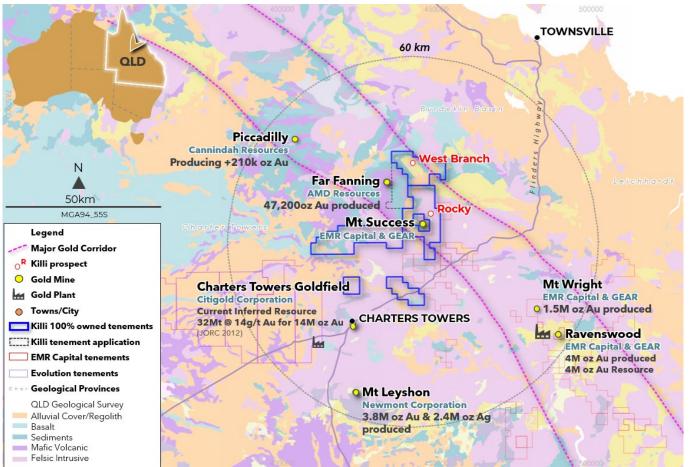


Figure 10. Location of the Ravenswood North Project in relation to existing gold mines of the Charters Towers area.

#### Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <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>	All surface rock chip and soil samples have been previously reported. Results in this announcement refer to targets generated from the re-processing of historical Airborne Electro-Magnetic data, collected by Acapulco/Sol Gold in 2007, by the below parameters: 25Hz base frequency 25 channels 152A current Single Z component sensor dB/dt 50m line spacing. All VTEM channels were imaged and delivered and GIS files. Cultural artefacts from roads etc were removed.
Drilling techniques	<ul> <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>	N/A
Drill sample recovery	<ul> <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>	N/A
Logging	<ul> <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>	N/A
Sub-sampling techniques and sample preparation	<ul> <li>The total length and percentage of the relevant intersections logged.</li> <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</li> </ul>	N/A

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	<ul> <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>	N/A
Verification of sampling and assaying	<ul> <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>	N/A
Location of data points	<ul> <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>	Original data provided from the survey Company was acquired and used, with topographic features used as markers to ensure data is in the correct position. MGA94_56S
Data spacing and distribution	<ul> <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>	Data and flight lines adequately spaced, at 50m, where multiple lines should cross a single feature.
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	Orientation of the AEM survey was appropriate for the style of system being explored for and the orientation of the geology.
Sample security	The measures taken to ensure sample security.	Data was obtained from the Queensland Geological Survey, from Annual Reports.
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	The company has completed an internal audit on the data to confirm the Company QAQC guidelines are followed.

### Section 2 Reporting of Exploration Results

Criteria	JORC Co	de explanation	Commentary
Mineral tenement and land tenure status	(a)	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	The tenements relating to this announcement are held within Access Australia Mining Pty Ltd, which is a wholly owned subsidiary of Killi Resources limited. The results in this announcement are on granted Killi Resources tenure.
		settings.	Tenement EPM 27828 is granted.
(b) 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.	At this point the company is not aware of any reasons that inhibit the company to operate on the tenement in the future.		
			There are no overriding royalties, joint ventures or partnerships over this ground.

Criteria	JORC Cod	e explanation	Commentary
Exploration done by other parties	(c)	Acknowledgment and appraisal of exploration by other parties.	Exploration has taken place on the tenements by Equigold NL, Solgold and Acapulco. Exploration has included the collection and analysis of stream, soil, and rock chip samples across the tenement, and an airborne VTEM survey was completed by Solgold.
Geology	(d)	Deposit type, geological setting and style of mineralisation.	Tenement EPM 27828 is prospective for intrusion-related gold deposits and porphyry copper gold systems. This tenement is immediately adjacent to the New Moonta and Nicho's reward copper/goldfields and along strike from the 1.8M oz Mt Rawdon Gold Mine owned by Evolution.
Drill hole Information	(e)	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:	N/A
		(i) easting and northing of the drill hole collar	
		(ii) elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar	
		(iii) dip and azimuth of the hole	
		(iv) down hole length and interception depth	
		(v) hole length.	
	(f)	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.	
Data aggregation methods	and/or mir	g Exploration Results, weighting averaging techniques, maximum imum grade truncations (eg cutting of high grades) and cut-off usually Material and should be stated.	N/A
	and longer aggregatio	regate intercepts incorporate short lengths of high-grade results lengths of low-grade results, the procedure used for such n should be stated and some typical examples of such ns should be shown in detail.	
	The assum clearly sta	ptions used for any reporting of metal equivalent values should be red.	
Relationship between	These rela Results.	tionships are particularly important in the reporting of Exploration	N/A
mineralisation widths and		netry of the mineralisation with respect to the drill hole angle is nature should be reported.	
intercept lengths		nown and only the down hole lengths are reported, there should be tement to this effect (eg 'down hole length, true width not known').	
Diagrams	should be include, b	e maps and sections (with scales) and tabulations of intercepts included for any significant discovery being reported These should ut not be limited to a plan view of drill hole collar locations and e sectional views.	Diagrams have been provided within the text of the announcement to provide context and location of the VTEM layers and the targets generated.
Balanced reporting	representa	nprehensive reporting of all Exploration Results is not practicable, tive reporting of both low and high grades and/or widths should be o avoid misleading reporting of Exploration Results.	Diagrams have been provided within the text of the announcement to provide context and location of the VTEM layers and the targets generated.

Criteria	JORC Coc	le explanation	Commentary
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.		VTEM data was processed using the Centre for Exploration Targeting tool, which is an automated process to pick blind intrusive porphyry targets from magnetic data. The tool uses erosion level, overprinting etc to detent radial symmetry in the magnetic data.
Further work	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).		Killi Resources plans to carry out further exploration work programs on the tenement, including geophysics, and further geochemical and drilling programs.
	(g)	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Diagrams have been completed as in interpretation of the geology from existing geophysical data and observations from the field.