

24th October 2022

MAGMATIC SULPHIDE ZONE INTERSECTED AT WEST TANAMI

(100% owned, Western Australia)

- Stratigraphic diamond hole intersects 10m zone of significant sulphides, with visible pyrrhotite, chalcopyrite (copper mineralisation) and pyrite within mafic rocks.
- This intersection opens the West Tanami Project to orthomagmatic base metal potential, where it has not previously been considered.
- Gold mineralisation potential is being evaluated, to be confirmed by laboratory assays
- Drill hole was part funded by the WA Government EIS program

Further to the announcement released this morning, Killi Resources Limited ('Killi' or the 'Company') (ASX: KLI) provides further information on its drill programs at the West Tanami Project in the Kimberley region of Western Australia, as detailed in the JORC tables set out in pages 9 to 12 of this announcement. As part of this program the Company completed a shallow-angled 890.4m stratigraphic diamond hole at the Fox prospect, (previously Raven prospect) at the northern end of the project, to delineate the stratigraphic sequence within the Tanami Orogen.

The hole was drilled in partnership with the Department of Mining Industry Regulation and Safety, in which the WA government contributed \$150,000 towards completion of the hole, as part of the Exploration Incentive Scheme.

The geology intersected in the core showed an increased presence of intrusive mafic units, in particular a gabbro which exhibited significant localised copper sulphide mineralisation. The sulphide zone spans 10 metres, with increasing amounts of pyrrhotite and chalcopyrite, ranging from disseminated to massive, refer Figure 1. All reported sulphide intersections are based on visual observations.

Killi CEO, Kathryn Cutler commented, 'We are extremely excited to have intersected this significant sulphide zone at West Tanami.

'The purpose of the targeted hole was to determine where the prospective stratigraphy extended in the northern end of the Project, and whether we were in the right rocks for gold mineralisation like that seen at the 13Moz Callie gold mine down the road. The good news is the hole did pass through a large sequence of prospective looking folded sediments with zones of quartz veining, however of serious interest is the visual copper mineralisation seen within a mafic unit.

'The Tanami province has been explored for gold, uranium and rare earth elements previously, however the prospectivity for base metals, in particular orthomagmatic systems has not been documented. This is the first occurrence of this style of mineralisation on the project, and possibly the region, and provides a unique opportunity for the Company.'



Figure 1. Massive sulphides in TMDD0001, chalcopyrite, pyrrhotite and pyrite observed, 841m depth.

TMDD0001 was drilled to a total depth of 890m, at a shallow angle (-55°) to cover as much of the stratigraphy as possible with the sediments interpreted as sub-vertical isoclinal folds at the Fox prospect, Figure 2.

Of significance at ~840m depth (560m vertical depth), a gabbro (mafic) unit with distinctly high sulphide content was intersected. Sulphides were observed from ~834m – 840.8m ranging from trace to approximately 30% of the rock mass increasing with depth. From 840.8m – 841.5m semi-massive and massive sulphides were intersected, where classification of massive sulphides is based on sulphide content >80% of the rock mass, Figure 3 & Table 1. The dominant sulphides observed were pyrrhotite, chalcopyrite and pyrite, potentially representative of a magmatic base metal system. The pyrrhotite and chalcopyrite appear to be associated with the gabbro unit, with pyrite present in the sediments as well as the gabbro. At this point the pyrite is believed to be part of a hydrothermal overprint as it is seen throughout the hole and associated with varying degrees of quartz veining.

Previous work and mapping completed by the Geological Survey of Western Australia has only identified sediments with no interpretation of mafic units at the prospect, Figure 4. Dolerites have been loosely documented in the region to intrude the sedimentary sequence, however there is very limited drilling in which they have been intersected and limited analysis performed.

Further review of historical reports indicates there has been no prior exploration for magmatic sulphide mineralisation in the Tanami Province, which presents a unique opportunity for Killi to explore.

The Company plans to further evaluate the drill core with the assistance of experienced geologists of the Tanami region, and those with base metal experience. Geological work will continue with further analysis to establish timing relationships, alteration assemblages and metamorphic facies of the gabbro and surrounding sediments.



Figure 2. Location of drilling at Fox prospect, diamond and air core, with historical holes that have reached fresh rock. 1:100k map sheet 'Slatey Creek' GSWA is in the background.

Aircore drilling at Fox, saw the completion of 30 holes on two wide-spaced drill lines, 1.4km apart. Samples were taken as 4m composites downhole and have been sent for analysis via fire assay for gold. Given the development with the results of the diamond hole, the Company plans to complete multielement analysis on the downhole samples as well. Logging from the aircore program has also recorded and confirmed mafic units along the lines completed.



Figure 3. Core tray photographs of the gabbro intersected in TMDD0001, 833.1 - 845.8m.



Figure 4. Location diagram diamond drill hole and completed aircore drill lines at West Tanami, over regional magnetics (VRMI_SUN45_LIN), Geological Survey of Western Australia 250k map sheet geology, with nearby gold mines and rare earth element prospects.

Gold Potential

Diamond hole TMDD0001 was designed to cross the stratigraphy responsible for the gold mineralisation seen 120kms along strike at the Callie Gold Mine. The drill hole covered an extensive sedimentary sequence at the top of the hole, which was intruded by thin (3 - 5m) intervals of mafics, and cross-cutting quartz veins.

In the upper part of the hole there were multiple zones of interest displaying cross-cutting quartz veins within a sandstone, adjacent to a sedimentary-mafic contact. A particularly interesting quartz-pyrite vein was intersected at ~218m with a strong silica and hematite alteration halo, and at 173m there was a folded and sheared shale unit with quartz veining and silica/feldspar alteration, Figure 5, which is characteristic of gold mineralisation styles in the region.

The stratigraphy of the Tanami region has been difficult to delineate historically, due to the poor exposure at surface, and lack of available data, such as diamond core. Exploration has been intermittent from the early 1900's until the mid-1980's owing to the remoteness and cover and has focused on sediment hosted mineralisation, specifically for uranium, rare earth elements and gold.



Figure 5. A, Core tray photograph of quartz-pyrite vein intercepted within sandstone at ~218m, TMDD0001. B, folded and sheared sediments (shale), with k-feldspar, silica and pyrite alteration, indicative of hydrothermal alteration at ~173m.

Further Exploration

The Company plans to actively continue exploring the base metal potential of the project, from multiple fronts.

A downhole geophysical survey is planned to ascertain if there are any adjacent sulphide bodies in proximity to the diamond drill hole.

Review of historical work will continue with a wider view to include exploration for a potential of an orthomagmatic sulphide system.

Processing of the airborne magnetic and radiometric data from the survey is underway, with results to feed into the geological understanding of the project and to assist with target generation.

Results remain pending for air core and reverse circulation drilling, where the pulps will be further analysed for base metals and path finder elements to further geological understanding.

The Company will continue to keep the market updated as results flow in and understanding develops on the project geology.

Table 1. Diamond drill hole location details and geological logging.								
Hole ID	Easting	Northing	RL	Dip	Azi	Depth	Interval	Observation
						(m)	(m)	
TMDD0001	475803.2	7859279.5	421	-55	200	890.4	0-1.5	Alluvial cover.
							1.5 – 37.4	Regolith.
							37.4 – 74.7	Partially weathered dolerite.
							74.7 - 120	Sediments (sandstones)
							120 - 127.5	Dolerite, with stringer quartz veins.
							*127.5 –	Interbedded sediments (sandstone,
							195.7	siltstone, shale), with localised folding
								in shale units with additional feldspar
								and quartz veining.
							195.7 – 217.1	Sandstone with moderate silica
								alteration, and stringer quartz veins
							*217.1 – 218.1	Quartz vein with pyrite.
							218.1 - 353.8	Interbedded dolerites and siltstones.
							353.8 - 510	Zone of interbedded sediments with
								dolerite, where units were 20-30m in
								width and repeated. Quartz veining
								present at contacts between
								lithologies.
							510 – 746.4	Sequence of sediments, dominantly sandstone
							746.4 – 759.8	Gabbro unit. Coarse grained mafic,
								moderate leucoxene alteration, and
								quartz veinlets. Sulphide veins
								(pyrrhotite), 10% of unit.
							759.8 – 767.7	Bedded siltstone with weak pervasive
								silica alteration.
							767.7 – 818.7	Interbedded sandstone and siltstones.
							818.7 – 829.7	Gabbro, strong carbonate veining
							829.7 – 833.3	Sandstone
							833.3 - 834.1	Gabbro,
							*834.1 –	Gabbro with trace disseminated
							836.8	pyrite.
							*836.8 – 840.7	Gabbro with disseminated pyrrhotite up to 30%, 2% pyrite.
							*840.7 –	Gabbro with semi-massive sulphides.
							840.8	40% pyrrhotite up to 15%
								chalcopyrite, 5% pyrite.
							*840.8 –	Gabbro with massive sulphides. 70%
							841.6	pyrrhotite and 10-20% chalcopyrite.
							*841.6 –	Gabbro with disseminated sulphides,
							844.6	15% pyrrhotite and 5% pyrite.
							844.6 - 847.2	Quartz vein
							847.2 - 871.9	Dolerite
							871.9 - 881.1	Sandstone
							881.1 - 888.1	Gabbro
							888 1 - 890 4	Sandstone

* Units photographed and in Figures within the announcement.

The information in Table 1 is based solely on visual inspection of the core which is yet to be assayed. The presence of copper is supported by in-field portable XRF but is considered indicative only and subordinate to laboratory assays.

CAUTIONARY STATEMENT ON VISUAL ESTIMATES OF MINERALISATION

References in this announcement to visual results are from diamond drilling. Visible mineralisation in NQ core (TMDD0001) consisted of trace, disseminated, semi-massive and massive sulphides of pyrrhotite, chalcopyrite and pyrite. Visual estimates of percentages are based on preliminary visual observations of the drill core surface as presented in the core trays and may not be representative of the entire sample interval. Laboratory assays are required for representative estimates of copper and other metal contents abundance. It is intended half core samples will be sent for assays. This work will take some time and assay results are expected in late-November 2022.

Authorised for release by the Board of Killi Resources Limited.

Media Enquires

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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.

Killi Resources Limited

Killi Resources (ASX: KLI) is a gold, copper and rare earth explorer with four wholly owned assets in Australia, with a focus on the Tanami region of Western Australia, Figure 6. The Company is focussed on underexplored provinces with the potential for a large-scale new discovery. Exploration has focussed on the West Tanami and Ravenswood North Projects since the Company listed in February 2022.



Figure 6. Location of Killi Resources Limited gold, copper and rare earth projects in Australia.

West Tanami

The Company owns 100% of the West Tanami Gold Project in the north-east of Western Australian. The land holding totals 1,634km² of granted tenure over 100km strike of the major gold corridor, Tanami Fault System, with existing gold endowment of the Tanami Gold Province greater than 19M oz Au. Within the district there are multiple gold deposits which include Callie Gold Mine (Newmont, ~13Moz Au), the Tanami Goldfields (3M oz Au), Buccaneer (0.5M oz Au) and the Coyote and Kookaburra mines (Black Cat Syndicate, ~1M oz Au), Figure 7.

Aside from gold, recent work completed by explorers in the area have highlighted the potential for hydrothermal Rare Earth systems, within the district.

85% of the tenement package is covered by shallow transported cover (12-15m depth) which provides an opportunity for the discovery of new mineral systems.



Figure 7. Location of West Tanami Project in relation to existing gold mines of the Tanami district.

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. 	No samples have been taken. Observations have been made from HQ and NQ diamond core by qualified geologists.
Assay (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). 	Diamond drilling was utilized for TMDD0001, from 0 to 890.4m depth.
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. 	Diamond core was logged visually by qualified geologist, that are employed by the company as well as contract geologists. The diamond core was logged in the field in a notebook, digitised and loaded into the Company's Aveza database.
Logging	 Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	Diamond core was logged for regolith, colour, lithology, alteration, veining, sulphides, structures, geotech, core recovery, core orientation, and magnetic susceptibility. The core was photographed prior to logging and after logging and markup.
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 	Observations were made from whole diamond core. No samples were taken.

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	 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. 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 	N/A
Verification of sampling and assaying	 been established. 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. Discurs any adjustment to assay data. 	Logging of the diamond core was completed by a project geologist employed by the Company and a consulting Senior Geologist.
Location of data points	 Discuss any adjustment to assay data. 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. 	The location of the diamond hole was recorded using a hand-held GPS, within the MGA94_55S grid-system, and reconciled with the database.
Data spacing and distribution	 Quality and adequacy of topographic control. 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. 	N/A
Orientation of data in relation to geological structure	 Whether sample compositing has been applied. 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. 	The diamond hole was -55 degrees towards 200 south in order to perpendicularly transect geology. The stratigraphy is interpreted as sub-vertical isoclinal folding of sediments.
Sample security	 The measures taken to ensure sample security. 	The diamond drill core was freighted by a specific contractor from the Tanami to a core yard in Malaga, which made no other collections or stops.
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 Code explan	ation	Commentary		
Mineral tenement and land tenure status	Type, reference nar including agreemer as joint ventures, pc interests, historical si environmental settir	me/number, location and ownership nts or material issues with third parties such artnerships, overriding royalties, native title ites, wilderness or national park and ngs.	The tenements relating to this announcement are held within Iron Bull Bangemall Ltd, which is a wholly owned subsidiary of Killi Resources limited. The results in this announcement are on Killi tenure. Tenements E80/5101, E80/5102, E80/5100, E80/5103 are all granted.		
	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.		
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.		Exploration has taken place on the tenement by Tanami Gold, Acacia Resources, Geographe Resources Limited, Barrick Gold of Australia Limited, Anglogold Australia Limited, Tanami Exploration NL, Afmeco Mining and Exploration Pty Ltd, Uranio Limited, Baracus Pty Ltd, Northern Minerals Limited, Hemisphere Resources Limited.		
Geology	Deposit type, geological setting and style of mineralisation.		Tenements E80/5101, E80/5102, E80/5100, E80/5103 are prospective for hydrothermal sediment hosted gold deposits. These tenements are along strike and adjacent the Kookburra, Coyote, Old Pirate, and Callie gold mines. In Western Australia and the Northern Territory.		
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:		Completed in Table 2.		
	(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			
	(~)	hole length.			
	If the exclusion of th information is not M from the understand should clearly expla	is information is justified on the basis that the aterial and this exclusion does not detract ding of the report, the Competent Person in 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. 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.		N/A no weighting applied.		

Criteria	JORC Code explanation	Commentary
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results.	N/A.
	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').	
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.	Diagrams have been provided within the text of the announcement to provide context and location of the drill results in relation to the tenement boundaries.
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 results can be found in Table 2.
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.	N/A
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, further geochemical programs and 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.	