

## Option to acquire 80% of Karonga Lithium Project

### HIGHLIGHTS

- *DY6 has secured a 6-month option to acquire an 80% interest in the Karonga Lithium Project located in northern Malawi, a granted licence covering a total area of 39km<sup>2</sup>*
- ***The licence borders the Company's recent exclusive prospecting license application at Karonga (for a combined ~75km<sup>2</sup>)***
- *Reconnaissance field work at the Karonga Lithium Project identified a number of **pegmatites of up to 500m metres in length with the potential to host lithium mineralisation***
- *Rock chip samples taken from the Karonga Lithium Project include **visually observed spodumene** and lithium micas (lepidolite)\*. Samples have been despatched for laboratory analysis in Johannesburg*
- *The Company is planning on undertaking a detailed geological mapping and sampling program across the Project early in 2024*

DY6 Metals Ltd (ASX: DY6) ("DY6", the "Company"), a strategic metals explorer targeting Heavy Rare Earths (HREE) and Niobium (Nb) in southern Malawi, is pleased to announce that it has entered into an exclusive option to acquire an 80% interest in the Karonga Lithium Project (granted licence EPL0659) (the Project) located in northern Malawi.

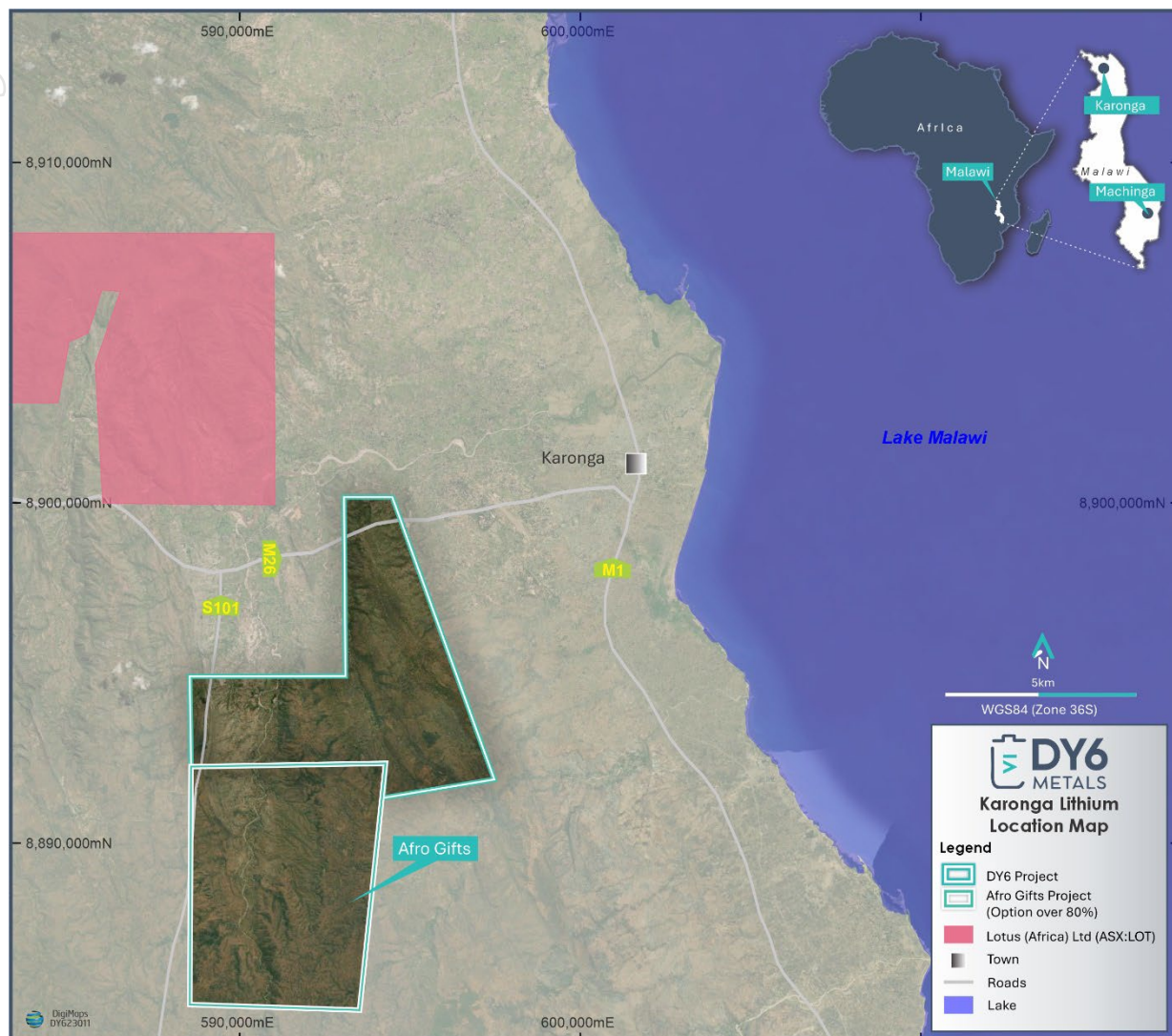
**The granted licence covers ~39km<sup>2</sup> and adjoins the Company's recent license application at Karonga (together, both licences cover ~75km<sup>2</sup>).**

The Company's geological team recently undertook a reconnaissance field visit at the Karonga Lithium Project. Ten reconnaissance rock chip samples from four outcrops were collected and have been submitted for laboratory analysis in South Africa.

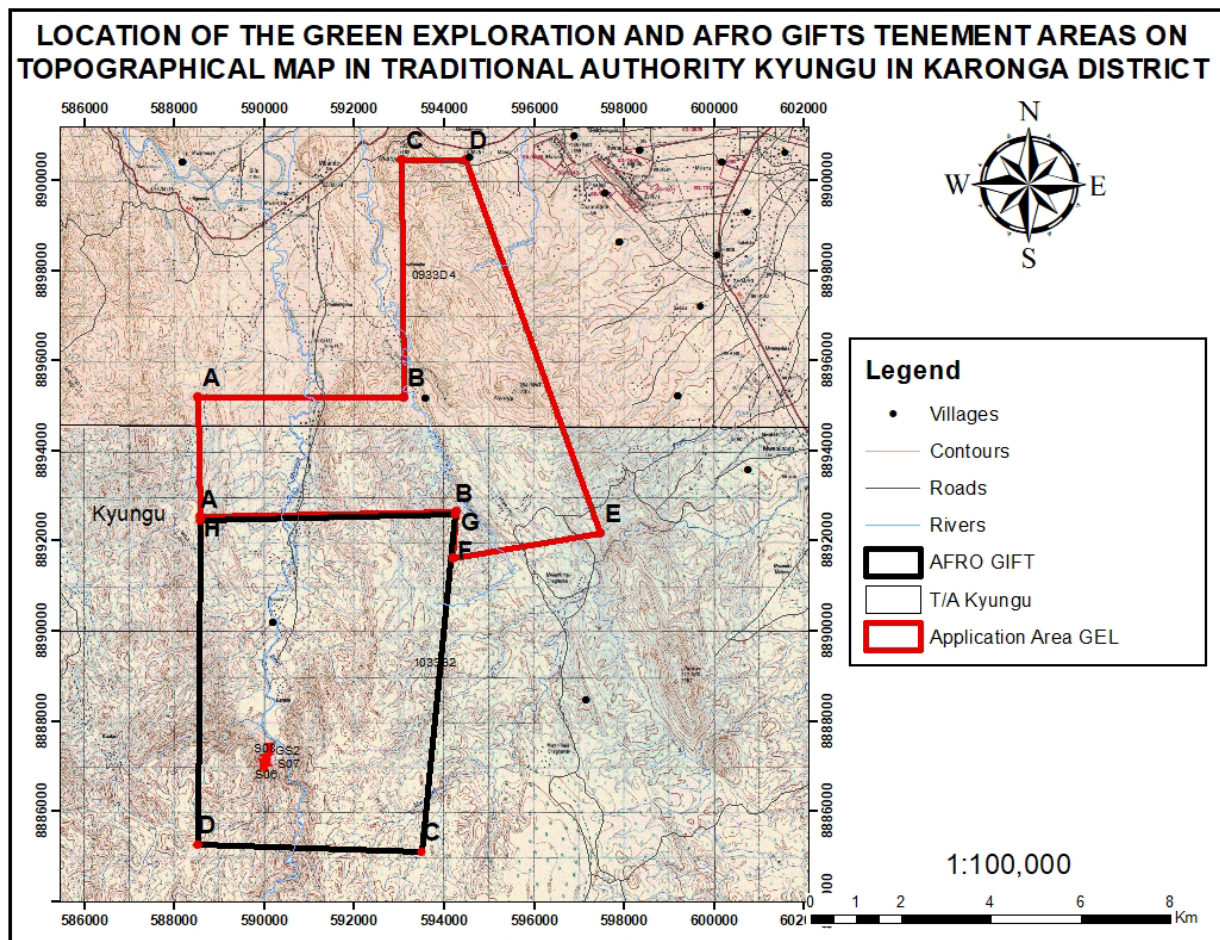
**The Company's CEO, Mr Lloyd Kaiser said:** "We are pleased to have reached an agreement to secure an 80% interest in the Karonga Lithium Project in northern Malawi. The project adjoins our recently applied for prospecting license near Karonga, adding scale potential. Importantly, field reconnaissance at the project identified a number of pegmatites – up to 25 metres in width and 500 metres in length – with visually observed lithium-bearing minerals. We await assay results from the reconnaissance rock chip sampling and look forward to getting back on the ground in the coming weeks."

**+ Cautionary Statement:** The Company notes that pegmatites contain varying abundances of typical LCT pegmatite non-Li-bearing minerals, predominantly feldspar, quartz, muscovite mica (as a group also referred to as Aplite) and accessory tourmaline. Investors should note that while LCT pegmatites are a known host for accessory lithium bearing minerals such as spodumene, it is also known that this is not a universal association. Visual observations of the presence of rock or mineral types and abundance should never be considered a proxy or substitute for petrography and laboratory analyses where mineral types, concentrations or grades are the factor of principal economic interest. Visual observations and estimates also potentially provide no information regarding impurities or deleterious physical properties relevant to valuations. At this stage it is too early for the Company to make a determinative view on the abundances of any of these minerals. These abundances will be determined more accurately through petrography, assay, and XRF analysis. The observed presence of pegmatite does not necessarily equate to lithium mineralisation. It is not possible to estimate the concentration of mineralisation by visual estimation and this will be determined by chemical analysis.

## Karonga Lithium Project



**Figure 1.** Location map of Karonga Li Project, granted licence EPL0659, which adjoins the Company's recent licence application (APL0526)



**Figure 2.** Topographical map of the Karonga Lithium Project

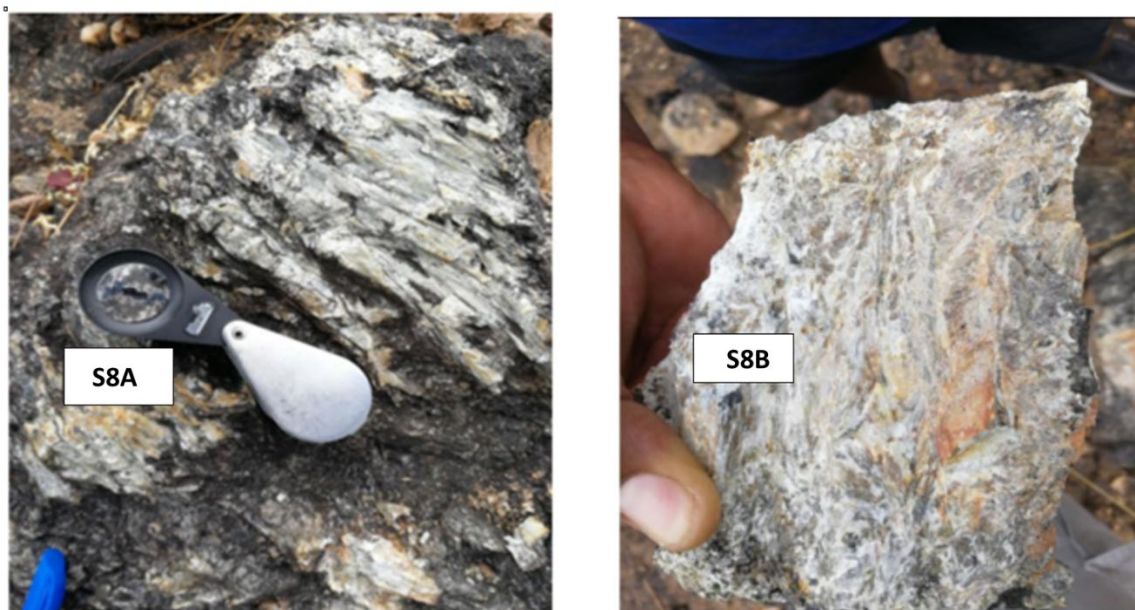
The Project is located about 440km north of the capital Lilongwe (refer Figure 2) and covers a total area of approximately 39.27km<sup>2</sup>. The area can easily be accessed using Karonga-Chitipa M1 Road turning to the west at Kasikisi School signpost along the M1 Road.

The Karonga area is associated with a series of N-S trending ridges with metamorphic Basement complex rocks commonly identified as windows within the Karroo System which overlies the basement. The Karroo System units are typically sandstones with carbonaceous shales formations.

Pegmatite float material was noted in the Mwesa River which cuts NE-SW through the area. The sampling focused on pegmatite intrusions that are traceable for up to 500m in length. In hand specimen, these pegmatites have high percentages of albite, microcline and occasional K-feldspar with associated muscovite and biotite micas. The pegmatites are within the basement complex as biotite schist and gneisses with medium sized dark coloured micas. Quartz-feldspathic granulites were also observed. Exposures of these were found with copper coatings on joints and weathered reddish brown cuprite was observed.

Within the pegmatites, light greenish to purplish elongated feldspar-like crystals were observed, using a hand lens and tentatively identified as spodumene\*. Samples were collected and some had structures which shows shearing effect depicting the structure of spodumene (refer Table 1).





**Figure 3 & 4:** pegmatite sample and float with prismatic structures and interpreted to be spodumene

### Next steps

DY6 is finalising a maiden exploration program at the Karonga Lithium Project, which will consist of detailed geological mapping, rock chip and soil sampling. This program, anticipated to take up to 4-weeks, will commence in January 2024.

### Transaction terms

DY6 has entered into a binding term sheet (**BTS**) with Afro Gifts Mining Limited (**Afro Gifts**), an unrelated party, to acquire 80% of the Karonga Lithium Project (**Project**) (**Acquisition**). The Company has paid Afro Gifts a non-refundable cash payment of A\$25k to secure an exclusive 6-month period to undertake due diligence of the Project.

Subject to successful due diligence, the consideration payable for the proposed Acquisition is:

- \$37,500 in cash on completion;
- \$37,500 payable in DY6 shares on completion (based on the 5-day VWAP prior to the completion date),
- DY6 to free-carry Afro Gifts 20% interest in the Project until completion of a prefeasibility study (**PFS**); and
- following completion of the PFS, DY6 to loan-carry Afro Gifts interest in the Project at the Australian Bank Bill Swap rate plus 8%, to be repaid out of profits of the joint venture.

The BTS is conditional on due diligence to be conducted on Afro Gifts and the Project to the satisfaction of the Company, any shareholder or regulatory approvals or third-party consents required by DY6 and there being no material breach of the Afro Gifts warranties prior to completion.

The BTS also contains other terms customary for a transaction of this nature.

## **Pegmatites – Information relating to observed pegmatites:**

### **1. The nature of the pegmatite minerals**

Pegmatites observed in the area are identified by the presence of weathered quartz, some flakes of weathered biotite, muscovite and phlogopite micas and kaolinised feldspars which forms reddish brown colour on the ground.

The pegmatites identified were classified as zoned type with well-defined zones; wall rock, intermediate and a core as the centre. The wall zone is made up of a fine-grained mass of quartz, feldspar, micas and partly superficial deposit of kaolinized feldspar materials. Intermediate zone is made up of feldspars between the core at the centre and the wall-rock zone and were made up of matrix of medium grained quartz, feldspar and muscovite with occasional garnets. Feldspars usually occur in large partly kaolinized crystals of micro perthite with a pinkish colour.

At the core, large quartz crystals measuring more than 5cm in width, inter-growth with pinkish microcline to white Albite feldspars and large books of various micas types were observed.

### **2. Minerals observed**

The minerals visually observed in the outcrops of the observed pegmatites are as follows:

- Na/Ca Feldspar
- K-Feldspar
- Quartz
- Mica – including muscovite, biotite and other mineral species
- Spodumene
- Lepidolite

### **3. Estimates of abundance of minerals observed**

The estimates of mineral abundance may not be accurate due to the low number of reconnaissance sampling done. Please note that the outcrops of the observed pegmatites were weathered and therefore estimations may be inaccurate. Lab analysis will be a broad analysis for associated elements given that lithium can be very mobile in the weathered environment.

**Cautionary Statement:** In relation to the disclosure of visual mineralisation, the Company cautions that visual estimates of mineral abundance should never be considered a proxy or substitute for laboratory analysis. At this stage it is too early for the Company to make a determinative view on the abundances of any of these minerals. These abundances will be determined more accurately through petrography, assay, and XRF analysis. The observed presence of pegmatite does not necessarily equate to lithium mineralisation. It is not possible to estimate the concentration of mineralisation by visual estimation and this will be determined by chemical analysis.

The Company notes that pegmatites contain varying abundances of typical LCT pegmatite non-Li-bearing minerals, predominantly feldspar, quartz, muscovite mica (as a group also referred to as Aplite) and accessory tourmaline. Investors should note that while LCT pegmatites are a known host for accessory lithium bearing minerals such as spodumene, it is also known that this is not a universal association.

-ENDS-

This announcement has been authorised by the Board of DY6.

## More information

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## Competent Persons Statement

*The Information in this announcement that relates to exploration results, mineral resources or ore reserves is based on information compiled by Mr Allan Younger, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Younger is a consultant of the Company. Mr Younger has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activity that he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the 'Australian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves' (the JORC Code). Mr Younger consents to the inclusion of this information in the form and context in which it appears in this announcement. Mr Younger holds shares in the Company.*

## Cautionary Statement

*The Company notes that pegmatites contain varying abundances of typical LCT pegmatite non-Li-bearing minerals, predominantly feldspar, quartz, muscovite mica (as a group also referred to as Aplite) and accessory tourmaline. Investors should note that while LCT pegmatites are a known host for accessory lithium bearing minerals such as spodumene, it is also known that this is not a universal association. Visual observations of the presence of rock or mineral types and abundance should never be considered a proxy or substitute for petrography and laboratory analyses where mineral types, concentrations or grades are the factor of principal economic interest. Visual observations and estimates also potentially provide no information regarding impurities or deleterious physical properties relevant to valuations. At this stage it is too early for the Company to make a determinative view on the abundances of any of these minerals. These abundances will be determined more accurately through petrography, assay, and XRF analysis. The observed presence of pegmatite does not necessarily equate to lithium mineralisation. It is not possible to estimate the concentration of mineralisation by visual estimation and this will be determined by chemical analysis.*

## Technical References

Carter, G.S. & Bennet, J.D. (1973). The geology and mineral resources of Malawi. Bulletin Geological Survey Malawi, 6.

Černý, P., (1991b). Rare-element granitic pegmatites, part I—Anatomy and internal evolution of pegmatite deposits: Geoscience Canada, v. 18, no. 2.

Dill, H.G. (2007). A review of mineral resources in Malawi: with special reference to aluminium variation in mineral deposits. Journal of Africa Earth Sciences.

Gaskell, J.L. (1973). The geology of the Mzimba area. Bulletin of Geological Survey of Malawi, 37.

## Licence Details

Tenement No.	Tenement Holder	Size (km <sup>2</sup> )	Grant Date	Expiry Date
EPL0659	Afro Gifts Mining Limited	39.27	22/04/2022	21/04/2025

**Table 1 – Sample Outcrop Locations and Details for Karonga Lithium Project**

Outcrop ID	Sample ID	Eastings (UTM, Zones 36S)	Northings (UTM, Zones 36S)	Outcrop/ Boulder/ Float	Rock Type	Grain Size (cm)	Quartz (%)	Ca/N a Feld spar (%)	K Feld spar (%)	Mica (%)	Other Minerals (%)	Spodumene %
25KAW001A	S01, S02, S03, S04, GS1	590016	8886992	Outcrop	Pegmatite	2 - 5	3 - 40	45 - 94	3 - 10	4 - 30	0 - 1	1-5%
25KAW001B	S05, S06	590064	8887068	Outcrop	Pegmatite	1	45 - 60	15 - 45	4	5 - 20	0	0-1%
25KAW001B	S07	590078	8887107	Outcrop	Pegmatite	1 - 2	30 - 60	15 - 60	4	5 - 20	0	0-1%
25KAW001B	S08A	590078	8887107	Outcrop	Pegmatite	1 - 2	20 - 40	10 - 50	10	5-20	0	1-5%
25KAW001B	S08B	590078	8887107	Outcrop	Pegmatite	1 - 2	30 - 60	15 - 60	4	5-20	0	5-10%
25KAW001B	GS2	590064	8887068	Float	Pegmatite	4	25	60	1	4	0	5-10%



# JORC Code, 2012 Edition – Table 1 report template

## Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

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>Reconnaissance random rock chip samples have been collected intermittently from exposures within the region.</li> <li>These are hoped to be representative of the styles of pegmatites intrusives within the area.</li> <li>The samples will not be representative of any mineralisation potentially within the pegmatites.</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 is being reported</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 is being reported</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</li> </ul>	<ul style="list-style-type: none"> <li>No drilling is being reported</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p>studies.</p> <ul style="list-style-type: none"> <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>	
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>No sub-sampling has been undertaken</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>Portion of the reconnaissance samples are being prepared for petrographic study with the balance to be dispatched to a commercial laboratory for 4 acid ICP analysis.</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 being reported</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>All locations determined by handheld GPS using WGS 84 datum in Zone 36S.</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> <li><i>Data spacing for reporting of Exploration Results.</i></li> <li><i>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.</i></li> <li><i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>Sample type and spacing are not designed to be used in an MRE.</li> <li>No compositing has been applied.</li> </ul>
<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>Sampling was of a reconnaissance nature only and was designed to achieve unbiased sampling.</li> <li>No drilling being reported.</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>Samples were bagged in the field and delivered to the Malawi Geological Survey by DY6 staff.</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 or reviews have been undertaken by DY6 Metals staff.</li> </ul>

## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>The Exploration Licence is owned 100% by Afro Gifts Mining Limited.</li> </ul>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li><i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<ul style="list-style-type: none"> <li>The tenement areas have been prospected and intermittently mined by artisanal miners.</li> </ul>
<i>Geology</i>	<ul style="list-style-type: none"> <li><i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <li>The project area occurs within orthogneisses, schist and granulite units in the Mesoproterozoic Irumide orogenic belt that extends from around Lundazi in eastern Zambia into Malawi; this belt hosts several</li> </ul>

Criteria	JORC Code explanation	Commentary
		granitic pegmatite swarms which are mined for gemstones including beryl varieties and other related metal deposit types.
Drill hole Information	<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 is being reported.</li> </ul>
Data aggregation methods	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>No aggregation methods are being used.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	<ul style="list-style-type: none"> <li>No mineralisation widths have been reported</li> </ul>
Diagrams	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Location maps of projects are within the release with relevant exploration contained.</li> </ul>
Balanced reporting	<ul style="list-style-type: none"> <li>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</li> </ul>	<ul style="list-style-type: none"> <li>The reporting of exploration results is considered balanced by the competent person. The locations of samples are included in this release.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<i>Exploration Results.</i>	
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>No other exploration to report</li> </ul>
<i>Further work</i>	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>Further surface sampling, mapping and drilling of potential targets once tenure is granted.</li> </ul>