

## ASX ANNOUNCEMENT

17 December 2024

ASX: PAT

### HIGH GRADE ASSAYS FROM KATWARO OPEN PIT - ZAMBIA

Patriot Lithium Limited ("**Patriot**" or the "Company"), is pleased to announce that the Company's recently completed open pit channel sampling program, has resulted in the delineation of high grade copper results.

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- First assays from reconnaissance pit sampling, confirms high grade copper and gold.
  - Best channel sample assay returned 4.45% Cu and 2.59g/t Au over 2.0m width.
  - Entire south eastern channel averaged 1.16% Cu and 0.68g/t Au over 14.0m including 4.45% Cu and 2.59g/t Au over 2.0m.
  - Geological surface mapping completed over the license area.
  - Reconnaissance work proves the project has strong potential to unlock a significant copper/gold deposit for the Company.
  - Several NW-SE trending quartz-carbonate metasiltstone zones identified during mapping which also conforms to the regional geological trend.
  - Further exploration, including a first pass drill program, is planned for 2025
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*Patriot Chairman commented: we could not have wished for a better start to our copper exploration program in Zambia. This program was designed and executed by our inhouse exploration team and we were able to generate high grade results, including 4.45%Cu over 2m and 1.16% Cu over 14m.*

*These results enable us to finish the year strong. We are now planning our program for the next year.*

Channel sampling of the historical pit was conducted as part of Phase 1 reconnaissance work which also included field mapping. Visual mapping of the pit showed strong copper mineralization mainly malachite, bornite and chalcopyrite. Sampled copper and gold bearing quartz-carbonate metasiltstone from the south eastern face averaged 1.16% Cu and 0.68 g/t Au over 14.0m *including 4.45% Cu and 2.59 g/t Au over 2.0m*, see Table 1. Grab samples were also collected on the exposed face to support the channel sampling assays.

**Table 1: Table of Assay Results**

Sample ID	Cu (%)	Au (g/t)	Comment	Average Intersection Cu (%)	Average Intersection Au(g/t)	High grade sample (%Cu, g/t Au)
U3701	1.03	0.11	Pit grabs	1.37% Cu		2.95% Cu
U3702	0.14	<0.01	Pit grabs			
U3703	2.95	0.03	Pit grabs			
U3704	0.29	<0.01				
U3705	0.12	<0.01				
U3706	0.02	<0.01				
U3707	0.79	0.54	Pit channel (0.0m-2.0m)	1.16% Cu over 14.0m	0.68 g/t over 14.0m	4.45% Cu, 2.59 g/t Au over 2.0m
U3708	2.22	0.15	Pit channel (2.0m-4.0m)			
U3709	0.23	0.28	Pit channel (4.0m-6.0m)			
U3710	0.19	0.44	Pit channel (6.0m-8.0m)			
U3711	0.03	0.05	Pit channel (8.0-10.0m)			
U3712	4.45	2.59	Pit channel (10.0-12.0m)			
U3713	0.20	<0.01	Pit channel (12.0-14.0m)			
U3714	0.05	<0.01	Pit channel (14.0-14.5m)			

Geological surface mapping was conducted over the entire license area, in order to better understand the lithological and structural controls acting on the copper-gold mineralization. This surface mapping identified several, parallel NW-SE trending and SW dipping, possibly mineralized zones similarly oriented to structures observed inside the pit.

Phase 1 reconnaissance work also focused on field mapping and sampling. Several possibly mineralized NW-SE trending quartz-carbonate metasilstone zones were identified during mapping which also conforms to the regional geological trend. The mapping program was further supported by available historical geophysical data.

A total of 17 samples were collected from the pit during channel sampling including QAQC samples with the majority of the samples recording anomalous to high grade assays. Work conducted proved that the project has significant potential based on information collected through mapping and channel sampling. The plan is to confirm and develop these interesting targets with a drilling program Q2,2025.

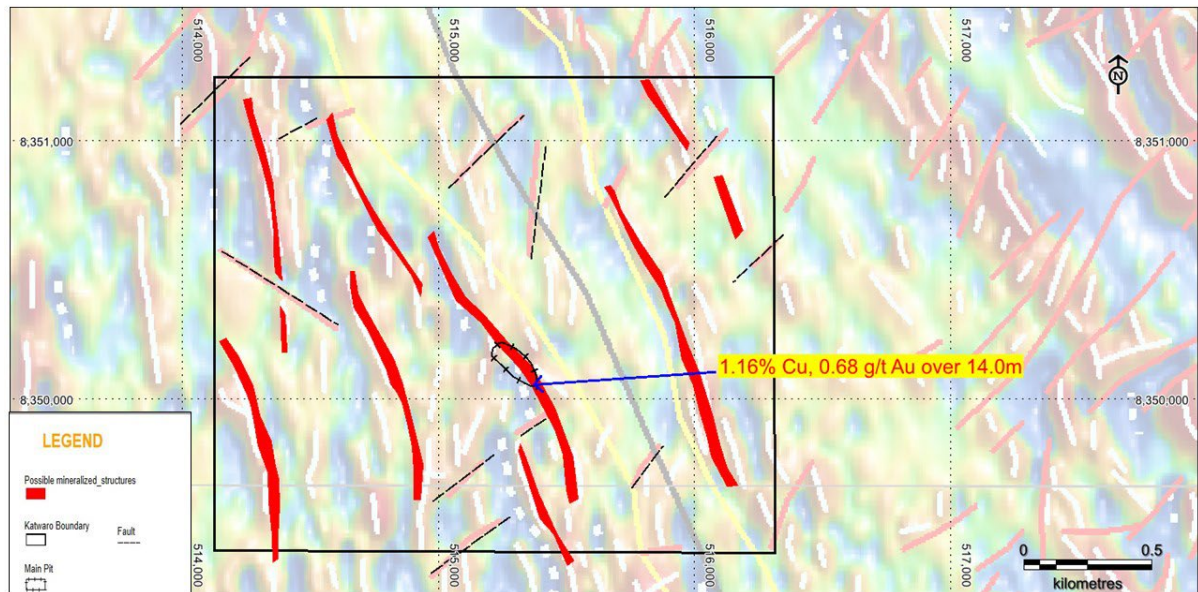


Figure 1: Field mapping interpretation showing pit assays

## Looking Forward

The information gathered during Phase 1 work is enough to justify moving the project into drilling phase in order to investigate these targets further. Drillhole planning, contractor sourcing and community engagements is scheduled for Q1, 2025.

## Caution Regarding Forward-Looking Information

Certain statements in this announcement relate to the future, including forward-looking statements relating to the Company and its business (including its projects). These forward-looking statements involve known and unknown risks, uncertainties, assumptions, and other important factors that could cause the actual results, performance or achievements of the Company to be materially different from future results, performance or achievements expressed or implied by such statements. Although the Company believes that its expectations, estimates and forecast outcomes are based on reasonable assumptions, it can give no assurance that they will be achieved.





*Figure 2: Sampled south east section of the pit*



*Figure 3: Channel sample from the pit*



## Katwaro Copper Project Background

The Katwaro Copper Project is located approximately 10km North-East from the town of Mumbwa and approximately 200km West of Lusaka, within the central province of Zambia. It covers approximately 400 hectares under small scale mining license 28424-HQ-SML (see Figure 4). Within the tenement there is a historical open pit mine exposing copper-bearing metasediments along 100m strike and is open ended. Regionally, polymetallic sulphide occurrences in the area have been known for centuries, but more recent geophysical and geochemical investigations led to the discovery of a copper-rich hydrothermal system, mostly associated with late-stage syenite intrusions of the Hook Batholith.

The Company is of the view that these exposed host rocks, and the known history of the area are grounds for consideration and assessment during the due diligence phase to determine if the Company should proceed with the acquisition and to invest funds into exploration programmes on the Project.

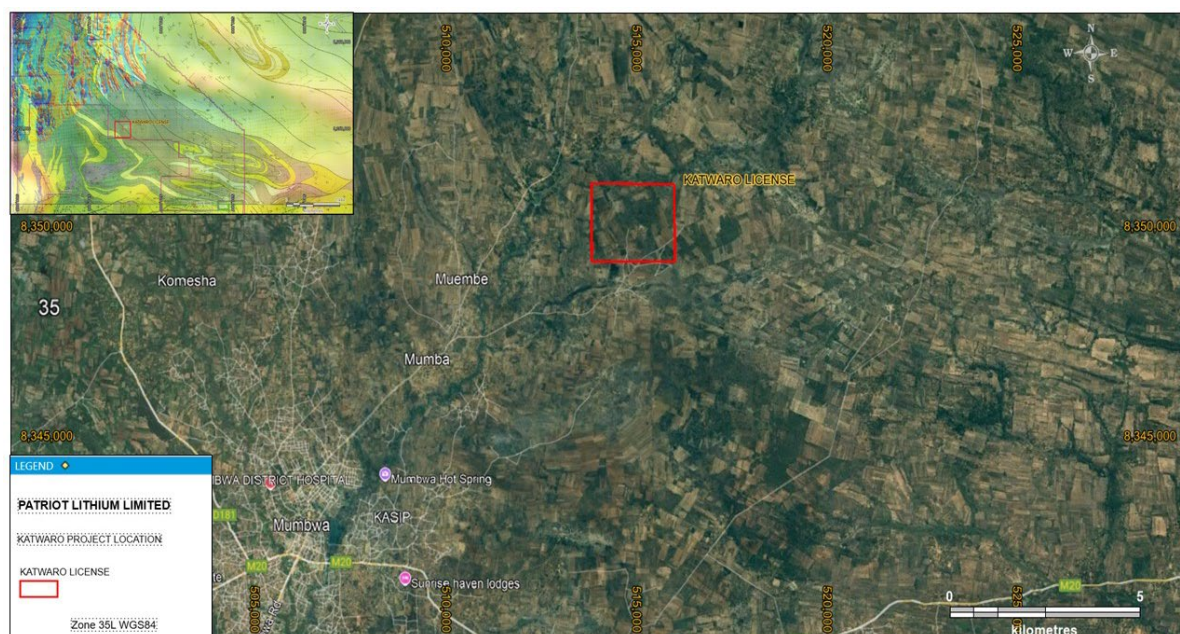


Figure 4: Location of Katwaro Project

## Geological Setting

The Katwaro Project is hosted by Neoproterozoic to early Paleozoic metasedimentary rocks of the Katanga Supergroup in the vicinity of late-tectonic syenite plutons. Sulphide mineralisation occurs along regional-scale lineaments, following a NNW-SSE trend defined by the Mumbwa fault Zone. The Hook Granitoid Suite intrudes a sequence of carbonates and calcarenites interlayered with shales and siltstones of the Katanga Supergroup. In addition to copper, zinc silicates, iron enrichments, minor gold and silver occurrences have been reported.

## **Competent Persons Statement**

The information in this report that relates to Exploration Results is based on information compiled by Mr Eugene Gotor, a member of The Australasian Institute of Mining and Metallurgy and The South African Institute of Mining and Metallurgy. Mr Gotor is the Company's Senior Geologist and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity he is 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". Mr Gotor consents to the inclusion of the information in the form and context in which it appears.

This announcement is authorised for ASX release by Board.

**ENDS**

## APPENDIX 1

### JORC Code, 2012 Edition

### Phase 1, Katwaro Channel Sampling Assays, December 2024

#### Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>Samples were taken at every 2.0 metre intervals for future use, which is the sampling of mineralised zones and is a key topic of this announcement.</li> <li>Sampling was done using a hammer and chisel to cut a channel across the face of the mineralized zone and roughly a &lt; 2.5kg sample unit was collected.</li> <li>All samples were geologically logged on-site, and collected into sample plastic bags for sample submission.</li> <li>Sampling techniques for field duplicate samples is discussed at Quality of assay data and laboratory tests below.</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>Not Applicable</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>Not Applicable</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</li> </ul>	<p><b>Pit Channel Sampling</b></p> <ul style="list-style-type: none"> <li>Channel samples were collected across the exposed face using</li> </ul>

	<p><i>Mineral Resource estimation, mining studies and metallurgical studies.</i></p> <ul style="list-style-type: none"> <li>• <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> <li>• <i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<ul style="list-style-type: none"> <li>• a hammer and chisel to cut rock chips.</li> <li>• 2.0 metre wide channels were proposed to allow for better sample recovery and representation.</li> <li>• Bias was minimized though it cannot be totally avoided due to the nature of the sampling method.</li> <li>• Geological data is recorded in the field using analog methods. Data recorded includes GPS location, Prospect location, exposure type, lithology, alteration and potential mineralization.</li> <li>• Alteration and mineralization are preliminary determined by field observation.</li> <li>• A geological description of each rock chip sample is recorded in the main table 1.</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<ul style="list-style-type: none"> <li>• High quality sampling procedures and appropriate sample preparation techniques were followed.</li> <li>• Several standards (commercial certified reference material) were inserted at intervals of 1 in 20 in rotation. Immediately following a blank, a standard was inserted.</li> <li>• Sample size (approximately 2kg in mass) considered appropriate to the grain size of material being sampled.</li> </ul>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li>• <i>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.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Certified laboratories utilised (SGS Kalulushi, Zambia), appropriate technique for elements assayed.</li> <li>• All samples have been prepared, crushed, pulverised and assayed at SGS Kalulushi Laboratory in Zambia.</li> <li>• The entire sample &lt; 2.5 Kg is dried in an electric oven set at 105°C + 5 °C for 4 or more hours (drying time dependent on moisture content), then crushed to 90% passing 2.36mm, split 0.25-1Kg and pulverized to 85% passing 75µm</li> <li>• For the copper assays mixed acid (HNO3/HClO4/HCl/HF) digest was used, 0.4g sample bulk to 100mls with AAS finish (AAS42S).</li> <li>• For the gold assays Aqua Regia (HCl/HNO3) digest was used</li> </ul>



		<p>with AAS finish on 5ml extract for Au (ARE155).</p> <ul style="list-style-type: none"> <li>• Several standards (commercial certified reference material) were inserted at intervals of 1 in 20 in rotation. Immediately following a blank a standard was inserted.</li> <li>• Field duplicates taken at every 1 in 14 samples for channel samples.</li> <li>• The sample was collected and cone and quartered in the field to create a duplicate</li> <li>• QA/QC monitored on the entire batch, re-analysis proposed where errors exceeded set limits</li> <li>• QAQC conducted by both company and laboratory suggests the quality of the assay data and laboratory test are satisfactory for the style of mineral exploration program undertaken.</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>• <i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li>• <i>The use of twinned holes.</i></li> <li>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li>• <i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• All geological data including the coordinates, lithological observations, strike, dip and mineralization etc. was recorded on prepared logging templates in the field by the geologist, then inserted into Excel spreadsheet template (2021).</li> <li>• All data was ultimately stored into Microsoft access database and shared with relevant members.</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>Specification of the grid system used.</i></li> <li>• <i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li>• GPS locations were recorded in WGS84 UTM Zone 35 South.</li> <li>• All geologically relevant features, i.e. pit workings, trenches, sampling points were surveyed by handheld Garmin 66S. No DGPS survey was undertaken for this current work</li> <li>• Tape and compass was also used to map the pit and measure the width of the channel under sampling.</li> </ul>
Data spacing and distribution	<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>• The nature of this exploration phase is target generated and still early stage.</li> <li>• Data spacing and distribution not yet sufficient to establish geological and grade continuity.</li> </ul>
Orientation of data in	<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</i></li> </ul>	<ul style="list-style-type: none"> <li>• Sampling was done perpendicular to the face of the mineralized unit from left to right.</li> </ul>

<i>relation to geological structure</i>	<p><i>the deposit type.</i></p> <ul style="list-style-type: none"> <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>Mineralisation is interpreted to strike 320° (NW-SE), dip steeply to the south west</li> <li>A channel was done at waist height following a set-line to avoid bias</li> <li>Geological mapping was undertaken at local scale to understand the local structural fabric before sampling</li> </ul>
<i>Sample security</i>	<ul style="list-style-type: none"> <li><i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>All channel samples were bagged in sample plastic bags at the pit site.</li> <li>These samples were stored at the project camp-site prior to transport by the geologist to Lusaka where the samples were shipped via DHL to SGS Kalulushi, Zambia.</li> <li>Samples were transported in polyweave bags and sealed with cable ties before transportation.</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 of the sampling procedures or protocols has taken place as yet.</li> <li>A review of all samples including mineralised intercepts was undertaken by the geologist.</li> </ul>

## Section 2 Reporting of Exploration Results

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 small-scale mining license <b>28424-HQ-SML</b> in Mumbwa, is held by Array Metals and Natural Resources Pty Ltd (Zambia), with Patriot Lithium Limited acquiring an option to acquire an 80% interest in the Katwaro Copper Project.</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>There is a regional geological map, 1;100 000 covering the small-scale license from the Geological Survey department, Zambia, 1998.</li> <li>A regional airborne magnetics survey was done over the area in 2004 by BHP Billiton and Blackthorn Resources.</li> <li>Mopani Copper mines conducted ground geomagnetics survey,</li> </ul>

		radiometrics survey and I.P over the area recently.
<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>Sequences of carbonates and calcarenites interlayered with shales and siltstones of the Katanga Supergroup can be mapped over the license.</li> <li>The geological setting is structurally controlled with major NW-SE trending faults.</li> </ul>
<i>Drill hole Information</i>	<ul style="list-style-type: none"> <li><i>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:</i> <ul style="list-style-type: none"> <li><i>easting and northing of the drill hole collar</i></li> <li><i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li><i>dip and azimuth of the hole</i></li> <li><i>down hole length and interception depth</i></li> <li><i>hole length.</i></li> </ul> </li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Not Applicable</li> </ul>
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <li><i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</i></li> <li><i>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</i></li> <li><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<ul style="list-style-type: none"> <li>No lower or upper limit to Cu and Au grades has been applied and all metal grades are reported as single element (Cu and Au).</li> <li>An average grade (Cu and Au) respectively of the entire assays was calculated for reporting purposes.</li> <li>No metal equivalent reported in this report</li> </ul>
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <li><i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li><i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg ‘down hole length, true width not known’).</i></li> </ul>	<ul style="list-style-type: none"> <li>The geometry of any mineralised bodies is unknown at this stage.</li> <li>Due to the very early nature and style of the exploration undertaken it cannot be known if intercepts reported represent true widths of mineralised structures, lodes or zones.</li> </ul>
<i>Diagrams</i>	<ul style="list-style-type: none"> <li><i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i></li> </ul>	<ul style="list-style-type: none"> <li>See body of announcement for plans showing project location, mapping interpretation, and tables of channel sampling results.</li> </ul>



<i>Balanced reporting</i>	<ul style="list-style-type: none"> <li>• <i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i></li> </ul>	<ul style="list-style-type: none"> <li>• All results of mineralised material have been reported, including low grade indications as well as higher grade zones (&gt;2% Cu and &gt;2g/t Au).</li> <li>• This report discusses the findings of recent reconnaissance sampling and field mapping observations.</li> </ul>
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Relevant data has been reported, refer to references in the text.</li> </ul>
<i>Further work</i>	<ul style="list-style-type: none"> <li>• <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li>• <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Patriot Lithium Limited is planning further exploration work programs, including geophysics, and further geochemical and drilling programs.</li> </ul>