

# Gold Mountain Limited (ASX: GMN)

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#### **Directors and Management**

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**Rhys Davies** CFO & Company Secretary

#### **Projects**

#### Lithium Projects (Brazil)

Cococi region Custodia Iguatu region Jacurici Juremal region Salinas region Salitre Serido Belt

#### **Copper Projects (Brazil)**

Ararenda region Sao Juliao region Iguatu region

REE Projects (Brazil) Jequie

# Copper Projects (PNG)

Wabag region Green River region

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## ASX Announcement/Press Release | 27 August 2024

## Gold Mountain Limited (ASX:GMN)

# Strongly Anomalous Copper and Lithium Assays extend target areas on Iguatu Project

**Gold Mountain Limited (ASX: GMN) ("Gold Mountain" or "the Company" or "GMN")** is excited to announce it has received further batches totalling 133 stream sediment samples from the Iguatu Project area for a total of 364 samples. Extensive copper-gold anomalies indicative of IOCG copper mineralisation have been interpreted in the central and eastern part of the Iguatu and Iguatu north tenements which cover a total of 1,322 km2.

### Highlights

### Work Undertaken

- Major area of anomalous copper detected, with 38km<sup>2</sup> of anomaly within tenement and 14 km<sup>2</sup> of very highly anomalous copper. Gold anomalies in most areas of copper anomalies, with few gold anomalies not associated with copper.
- Strongly anomalous lithium results indicate LCT type pegmatites are present in tenements, including where pegmatites had been previously recorded.
- Five high priority copper geochemical targets have been identified and extensive additional regional sampling required
- Assays received from regional stream sediment sampling with widespread anomalies in a suite of elements including Cu, Au, Ag, Hg and Ba, indicative of Olympic dam style post tectonic Iron Oxide Copper Gold (IOCG) style mineralisation associated with some typical IOCG alteration assemblages.

#### Future Workplan

- Five IOCG copper anomalous areas for follow up sampling, mapping and target definition have been identified in results received.
- Infill drainage and soil sampling between anomalous areas is required as the initial sampling was wide spaced and targets designed to test the concept of prospectivity for IOCG mineralisation. Anomalous soil grid areas will have IP surveys carried out.
- Mapping and soil sampling for the confirmed lithium bearing LCT pegmatites will be carried out to define drill targets. CPRM mapped but untested pegmatites, reported on July 23 2024, will be sampled to determine potential.
- Additional structural interpretation will be carried out to determine whether local controls on mineralisation can be identified

Structural interpretations carried out in numerous Geological Survey and academic papers show that extensive structures, necessary for development of Olympic Dam breccia style IOCG deposits, are present in the Iguatu region and regional scale geochemical sampling had shown iron and base metal anomalies in the Iguatu Project areas.



Stream sediment sampling, initially to give broad coverage over the eastern part of the Iguatu Central, Potengi, Quincuncá, Magnesite and Iguatu North tenements was undertaken for lithium and IOCG mineralisation. All initial regional magnetic dipole type targets, potentially indicative of iron concentrations, have had stream sediment sampling completed, with some magnetic anomalies associated with the geochemical copper and gold anomalies.

Widespread, post tectonic, magnetite alteration, associated in some instances by tourmaline and chloritic alteration, has been mapped and considered to be probable IOCG type alteration.

The Iguatu Project location and prospect area names and known IOCG mineralisation is shown on figure 1.

### Images & Maps

Figure 1 shows prospect area names and known IOCG mineralisation on a major east-west structural zone similar to the zone covered by the Iguatu Project.

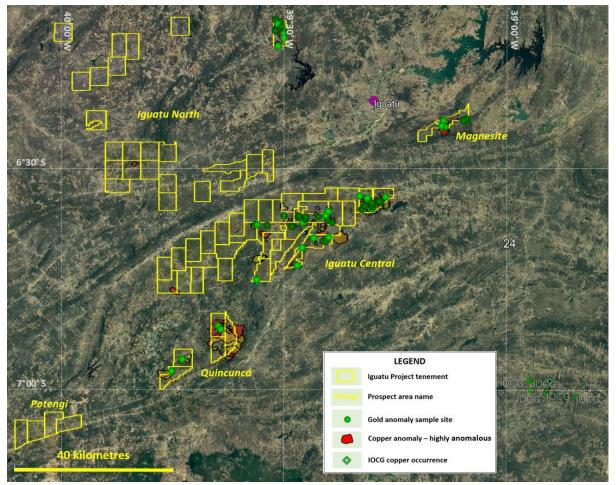


Figure 1. Iguatu project tenements and prospect names.



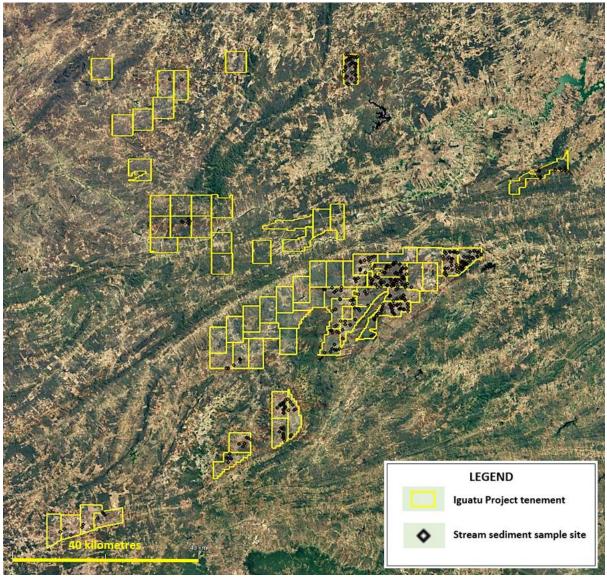


Figure 2 shows the extent of sample results received to date over the Iguatu Project

Figure 2. Coverage of sample results received so far. Significant areas still require sampling.



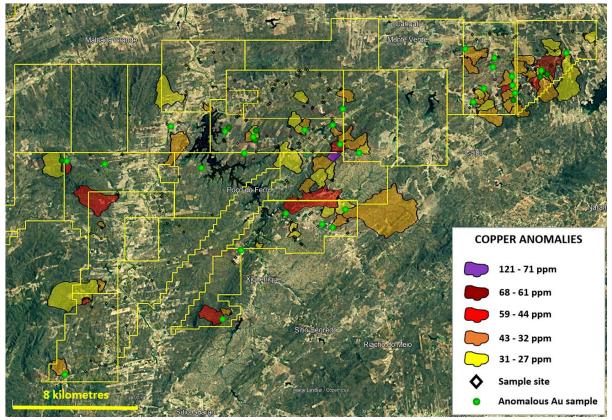


Figure 3. Copper anomalies identified in first pass regional scale stream sediment sampling at Iguatu Central plotted as anomalous catchments. Sample points with gold shown over the sample point.



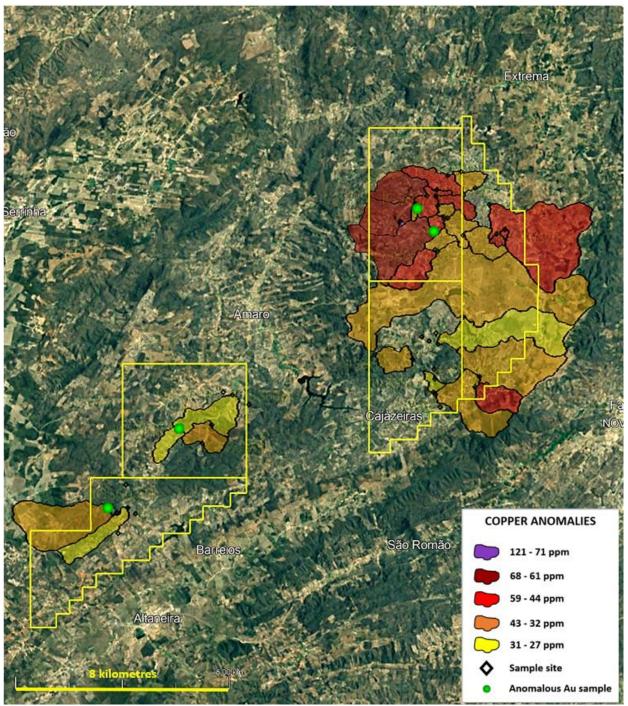


Figure 4. Copper anomalies identified in first pass regional scale stream sediment sampling at Quincuncá plotted as anomalous catchments. Sample points with gold shown over the sample point. Major copper anomaly has 38 km<sup>2</sup> of anomalous copper within tenement.



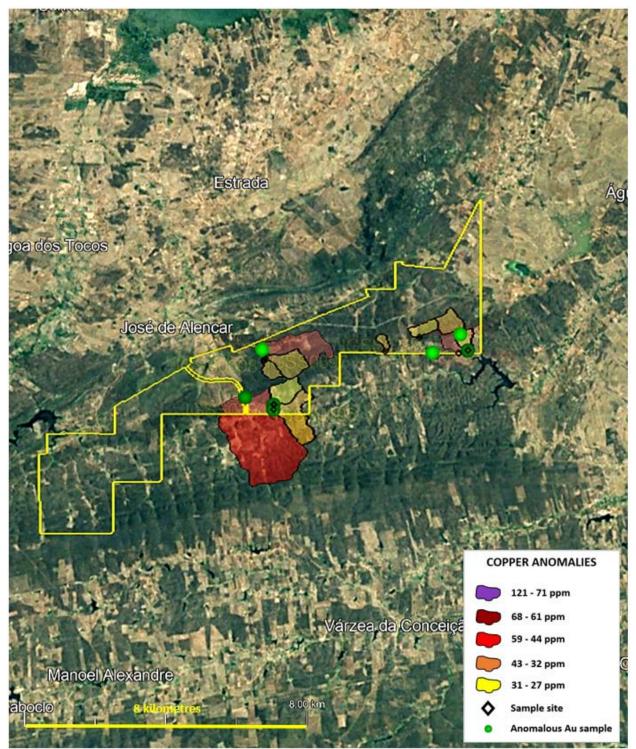


Figure 5. Copper anomalies identified in first pass regional scale stream sediment sampling at Magnesite plotted as anomalous catchments. Sample points with gold shown over the sample point.



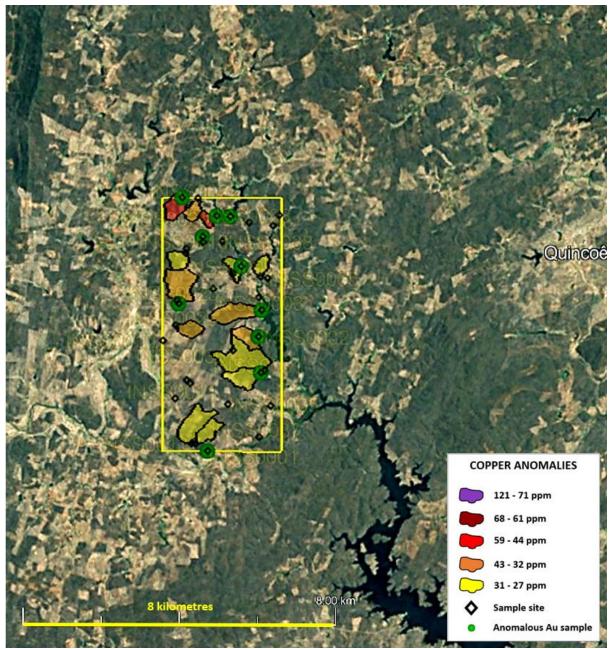


Figure 6. Copper anomalies identified in first pass regional scale stream sediment sampling at Iguatu North plotted as anomalous catchments. Sample points with gold shown over the sample point.



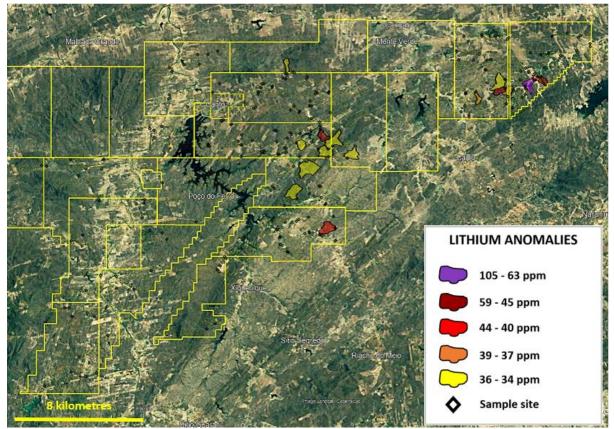


Figure 7. Lithium anomalies identified in first pass regional scale stream sediment sampling at Iguatu Central plotted as anomalous catchments.



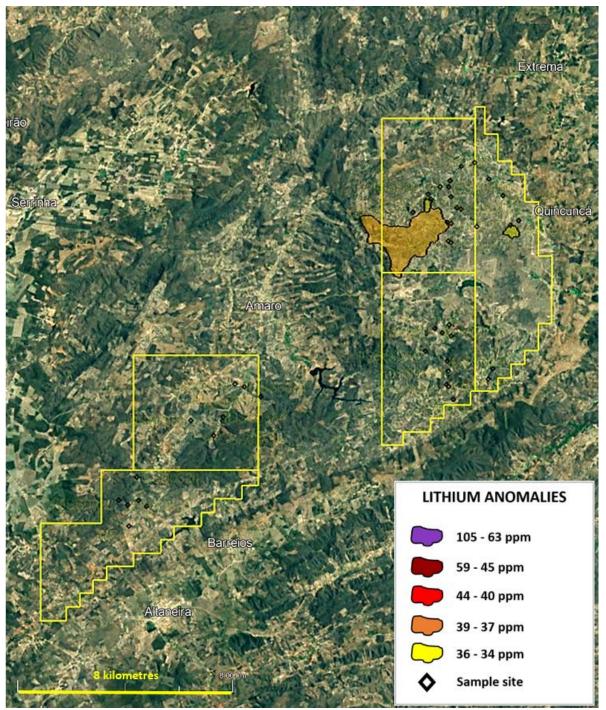


Figure 8. Lithium anomalies identified in first pass regional scale stream sediment sampling at Quincuncá plotted as anomalous catchments.



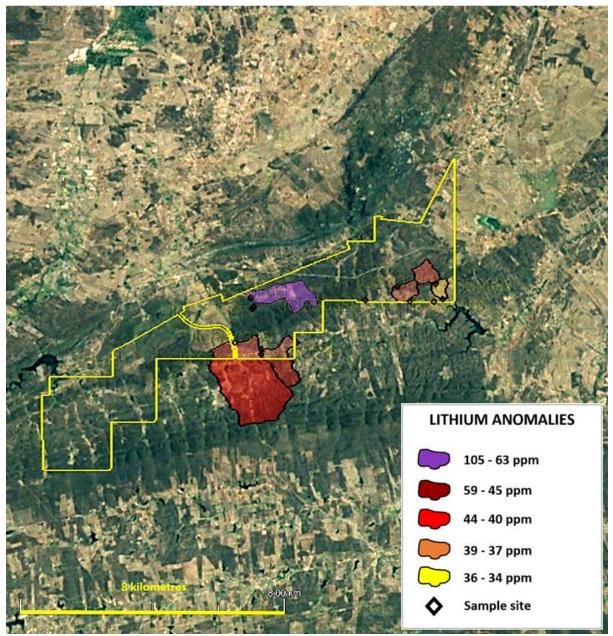


Figure 9. Lithium anomalies identified in first pass regional scale stream sediment sampling at Magnesite plotted as anomalous catchments.



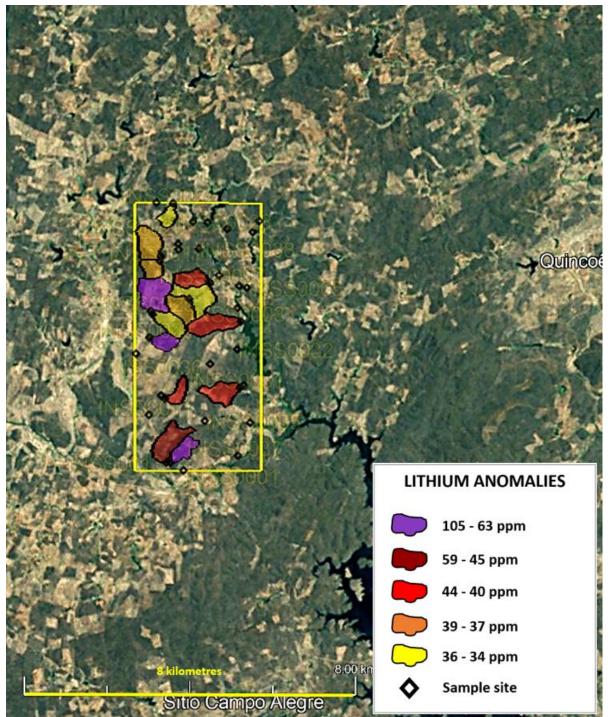


Figure 10. Lithium anomalies identified in first pass regional scale stream sediment sampling at Iguatu North plotted as anomalous catchments.



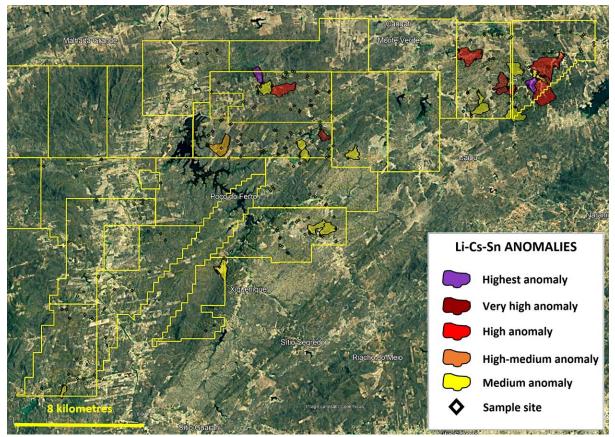


Figure 11. Lithium – caesium - tin anomalies identified in first pass regional scale stream sediment sampling at Iguatu Central plotted as anomalous catchments.

The lithium, caesium and tin values were normalised then summed and interpreted to identify anomalies. Good correspondence was seen with lithium as expected with strong correlation between lithium, caesium and tin in this province. The Li – Cs – Sn normalised values however do extend the area seen as prospective for lithium.



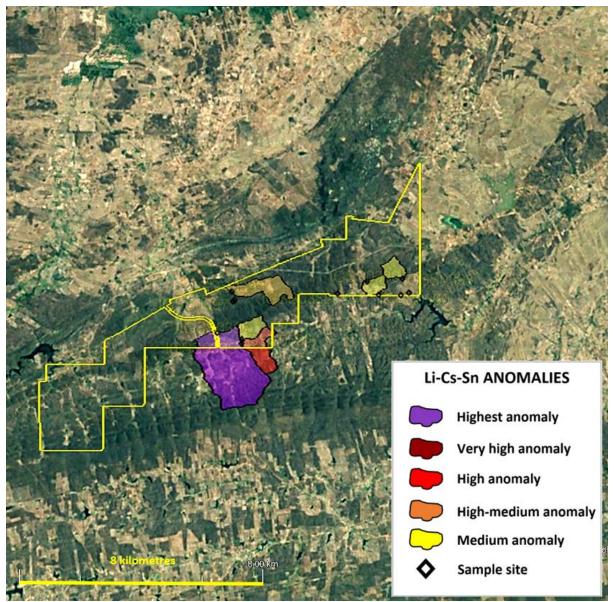


Figure 12. Lithium – caesium - tin anomalies identified in first pass regional scale stream sediment sampling at Magnesite plotted as anomalous catchments.



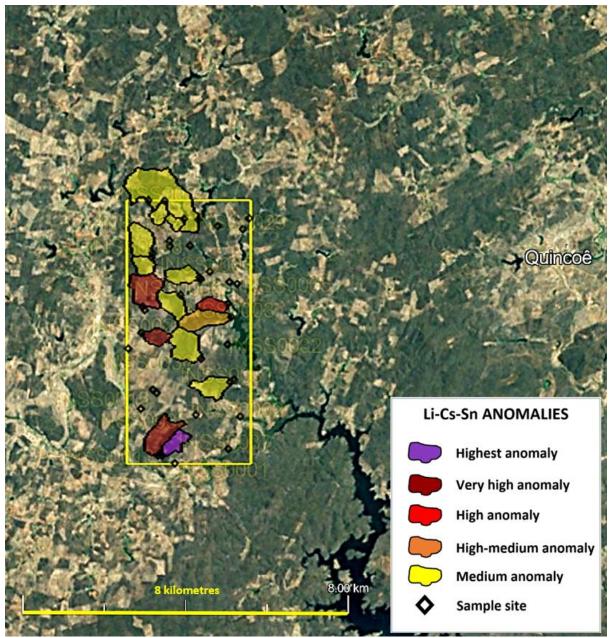


Figure 13. Lithium – caesium - tin anomalies identified in first pass regional scale stream sediment sampling at Iguatu North plotted as anomalous catchments.



## **Competent Persons Statement**

The information in this ASX release is based on information compiled by Peter Temby, a Competent Person who is a Member of Australian Institute of Geoscientists. No exploration results are included in this announcement apart from presenting mapping done as a part of stream sediment sampling. Peter Temby is an independent consultant working currently for Mars Mines Ltd. Peter Temby confirms there is no potential for a conflict of interest in acting as the Competent Person. Peter Temby has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken 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'. Peter Temby consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

- END –

This ASX announcement has been authorised by the Board of Gold Mountain Limited

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### About Us

Gold Mountain (ASX:GMN) is a mineral explorer with projects based in Brazil and Papua New Guinea (PNG). These assets, which are highly prospective for a range of metals including rare earth elements, niobium, lithium, nickel, copper and gold, are now actively being explored.

Gold Mountain has gradually diversified its project portfolio. The Company has highly prospective rare earth elements (REE), niobium, copper and lithium licenses located within the eastern Brazilian lithium belt, spread over parts of the Borborema Province and São Francisco craton in north-eastern Brazil including in Salinas, Mines Gerais.

In PNG, Gold Mountain is exploring the Wabag Project, which covers approximately 950km<sup>2</sup> of highly prospective exploration ground in the Papuan Mobile belt. This project contains three targets, Mt Wipi, Monoyal and Sak Creek, all lying within a northwest-southeast striking structural corridor. The three prospects have significant potential to host a porphyry copper-gold-molybdenum system and, or a copper-gold skarn system. Gold Mountain's current focus is Mongae Creek, which has been subjected to several phases of exploration, and the potential to host a significant copper-gold deposit is high. The current secondary targets are, in order of priority, Mt Wipi, Lombokai and Sak Creek. A new target , potentially another epithermal/porphyry system has been identified and is about to be sampled.

Gold Mountain has also applied for a total of 1,048 km<sup>2</sup> in two exploration licences at Green River where high grade Cu-Au and Pb-Zn float has been found and porphyry style mineralisation was identified by previous explorers. Intrusive float, considered to be equivalent to the hosts of the majority of Cu and Au deposits in mainland PNG, was also previously identified.

#### List of references

1. GMN ASX Release 23 July 2024 Strongly Anomalous IOCG Copper and LCT Pegmatites



- 2. GMN ASX Release 12 July 2024 Technical Presentation Brazil and PNG
- 3. GMN ASX Release 8 April 2024 Critical Minerals Copper investor Presentation
- 4. GMN ASX Release 7 March 2024 Investor Presentation
- 5. GMN ASX Release 11 December 2023 Investor Presentation
- 6. Benevides HC, 1984, Metallogenetic Maps and Mineral Resources Forecasting Project Folha SB. 24-Y-B Iguatu Scale 1:250000 Volume 1 Text and maps. CPRM.
- 7. Cox DP, Singer DA; Descriptive and grade-tonnage models and database for iron oxide Cu-Au deposits: U.S. Geological Survey Open-File Report 2007-1155
- 8. Ehrig K, McPhie J, Kamenetsky V, 2012, Geology and Mineralogical Zonation of the Olympic Dam Iron Oxide Cu-U-Au-Ag Deposit, South Australia, Society of Economic Geologists, Inc. Special Publication 16, pp. 237–267.
- Porter TM, 2010, Current understanding of iron oxide associated-alkali altered mineralised systems: Part I, An Overview; in Porter, T.M., (ed.), Hydrothermal Iron Oxide Copper-Gold and Related Deposits: A Global Perspective, v. 3 - Advances in the Understanding of IOCG Deposits; PGC Publishing, Adelaide, pp. 5-32.
- Skirrow R, 2022, Iron oxide copper-gold (IOCG) deposits A review (part 1): Settings, mineralogy, ore geochemistry and classification. Ore Geology Reviews, Volume 140, January 2022, 104569.
- 11. Vasconcelos AM, Mendonça FE, 1998, Iguatu Map SB.24- Y- B Scale 1:250.000, CPRM Brazilian Geological Service.
- Xueqiu Wang, Xuejing Xie, Zhizhong Cheng, Dawen Liu, 1999, Delineation of regional geochemical anomalies penetrating through thick cover in concealed terrains — a case history from the Olympic Dam deposit, Australia, Journal of Geochemical Exploration 66 (1999) 85–97.



## Appendix 1 JORC Code, 2012 Edition – Table 1

## Section 1 - Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections)

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>	<ul> <li>Stream sediment sampling was carried out in drainages over 500 metres long with spacing planned at approximate 1 km on drainages.</li> <li>Stream sediment samples weighed approximately 1 kg each. Sample is preprocessed to a -10 micron sample fraction that is submitted to the laboratory. They are not considered representative of the possible grade of mineralisation at depth</li> </ul>
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</li> </ul>	<ul> <li>No drilling undertaken</li> </ul>



		Limited
Criteria	JORC Code Explanation	Commentary
	<i>core is oriented and if so, by what method, etc).</i>	
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>	<ul> <li>No drilling undertaken</li> <li>Not applicable no drilling undertaken</li> <li>Not applicable no drilling undertaken</li> </ul>
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>	<ul> <li>No drilling undertaken</li> <li>Stream sediment sampling is subjective however the fraction sampled and the preparation and analytical procedures used make the samples readily compared and more representative than -80 # samples.</li> </ul>
<i>Sub- sampling techniques and sample preparation</i>	<ul> <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</li> </ul>	<ul> <li>No drilling undertaken</li> <li>All samples were collected at 1 kg bulks in the field, screened at approximately 2.5 mm then securely packaged</li> <li>Sample preparation undertaken prior to sample dispatch to ALS at Belo Horizonte was to separate in an apparatus using Stokes Law to produce a nominal -10 micron fraction for dispatch to the lab after drying</li> <li>Sample representativity of the catchment was well represented in the -10 micron samples</li> </ul>



		Linited
Criteria	JORC Code Explanation	Commentary
	<i>instance results for field duplicate/second-half sampling.</i> <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	
<i>Quality of assay data and laboratory tests</i>	<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>	<ul> <li>The analytical techniques used are four acid digest and ICP-MS, the 4 acid digest method is a partial digest technique, compared to fusion digests and then ICP-Ms, however differences in the analytical values of certified reference materials by the two methods suggest that 4 acid digests are suitable for non-resource sampling in exploration work. ALS codes used were ME-MS41L.</li> <li>No standards duplicates or blanks accompany these initial samples that will not be used other than to indicate potentially interesting element contents of the variably weathered samples</li> <li>Checks of the analytical values of CRM's used by the laboratory against the CRM specification sheets were made to assess whether analyses were within acceptable limits</li> </ul>
<i>Verification of sampling and assaying</i>	<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>	<ul> <li>No samples analysed</li> <li>No adjustments were made to any data.</li> <li>No verification will be undertaken for these initial samples, which will not be used in any resource estimate. The samples are to determine the levels of Cu, Li and other valuable elements in stream sediment samples</li> </ul>
<i>Location of data points</i>	<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> </ul>	<ul> <li>Data points are measured by hand held Garmin 65 Multiband instruments with accuracy to 3 metres</li> <li>Grid system used is SIRGAS 2000 which is equivalent to WGS84 for hand held GPS instruments</li> </ul>



Criteria	JORC Code Explanation	Commentary
	• <i>Quality and adequacy of topographic control.</i>	<ul> <li>Elevations are measured by hand held GPS and are sufficiently accurate for this stage of exploration.</li> <li>Stream sediment sample sites are measured by hand held Garmin 65 multiband instruments with 3 metre accuracy in open conditions.</li> </ul>
<i>Data spacing and distribution</i>	<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>	<ul> <li>Stream sediment sampling was carried out at approximately 1 km intervals on drainages over 500 metres long.</li> </ul>
<i>Orientation of data in relation to geological structure</i>	<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>	<ul> <li>No drilling undertaken.</li> <li>Many streams are controlled by regional structure which may also control mineralisation and may bias results to some degree. The close spacing of samples is thought to have removed much of the potential bias present.</li> </ul>
Sample security	<ul> <li>The measures taken to ensure sample security.</li> </ul>	• Stream sediment samples are taken to the GMN laboratory daily and kept under secure conditions. Prepared samples are securely packed and dispatched to ALS by reliable couriers or hand delivered by GMN personnel.
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	<ul> <li>No audits or reviews of the stream sediments sampling was undertaken.</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> <li>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.</li> <li>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.</li> </ul>	<ul> <li>GMN holds 68 granted tenements in the Iguatu and Iguatu North Project. GMN has 75% ownership of the 68 granted tenements</li> <li>There are no known serious impediments to obtaining a licence to operate in the area.</li> </ul>
<i>Exploration done by other parties</i>	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul> <li>No known exploration for IOCG Copper has been carried out on the exploration licence areas. Exploitation of occurrences of other mineral resources is known over the licence areas, mainly for artisanal mining for tourmaline, rose quartz and amethyst in pegmatites and marble, talc, asbestos, clay, quartzite, magnesite, manganese, granite, marble and calcrete.</li> </ul>
Geology	<ul> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul> <li>Principal deposit type sought is IOCG type copper of post tectonic structurally controlled type similar to Olympic Dam. Post tectonic IOCG mineralisation is known along strike to the west and east.</li> <li>Second type of target is LCT pegmatites and the occurrences of gem tourmaline and rose quartz are indicative of evolved pegmatites.</li> </ul>
Drill hole Information	<ul> <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:</li> <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> </ul>	<ul> <li>No drilling undertaken</li> <li>Locations of all stream sediment samples and of anomalies are shown on maps in this report.</li> </ul>



Criteria	JORC Code Explanation	Commentary
	<ul> <li>down hole length and interception depth</li> <li>hole length.</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>	
<i>Data aggregation methods</i>	<ul> <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> <li>No drilling undertaken, no cut off grades applied         <ul> <li>All sample results were included in the interpretations of the stream sediment data and no cut off was applied to results.</li> </ul> </li> </ul>
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul> <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>	• No drilling undertaken
Diagrams	<ul> <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</li> </ul>	<ul> <li>No drilling undertaken; plan views of tenement geochemical sample locations are provided</li> </ul>



Criteria	IOBC Code Explanation	Commentany
Cillena	JORC Code Explanation	Commentary
	<i>hole collar locations and appropriate sectional views.</i>	
<i>Balanced</i> <i>reporting</i>	<ul> <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 Exploration Results.</li> </ul>	■ The range of anomalous results in ppm is given for the principal elements .           Stream Sediment Values All samples           Element         Highest         Lowest         Median           Li ppm         105         1.3         18.9           Cu ppm         121         1.11         22.65           Au ppm         0.0822         0.0001         0.0006           Ba ppm         971         19.3         212           Nb ppm         8.8         0.191         1.85           Sn ppm         4.43         0.22         1.21           Fe %         7.21         0.49         3.38           Na %         0.099         0.0005         0.016
<i>Other</i> <i>substantive</i> <i>exploration</i> <i>data</i>	<ul> <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> <li>Artisanal mining for tourmaline, rose quartz and amethyst in pegmatites and marble, talc, asbestos, clay, quartzite, magnesite, manganese, granite, marble and calcrete. Has been carried out in and adjacent to the GMN tenements.</li> </ul>
Further work	<ul> <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> <li>Additional work is continuing regional stream sediment sampling and grid soil sampling and mapping of outcrop to define areas for IP and for resource drilling.</li> <li>Maps show anomalous target areas based on current results which will probably be subject to change as further results are obtained.</li> </ul>