

(ASX: GMN)

**ASX RELEASE** 

22<sup>nd</sup> May 2020

# WIDE ZONES OF FRACTURE CONTROLLED COPPER MINERALISATION RECENTLY DISCOVERED IN OUTCROP AT THE MONOYAL PROSPECT

## **Highlights**

- Recent heavy rains and subsequent flooding at the Monoyal Prospect has exposed fresh mineralised outcrop at the Monoyal prospect in and around three streams
- Fresh rocks exposed in the three streams draining to the NW have revealed copper mineralisation in fractures, veins and as disseminations in the rock mass
- Streams are located between 50m to 300m south of drill hole MCD007 (from which assay are expected in mid-June)
- Additional mapping of the Monoyal prospect, aided by the flooding event has resulted in a better understanding of the prospect geology
- Monoyal Prospect area larger than first thought with zone of interest covering a 3 km long by 1 km wide area
- Additional rock chip sampling in and around other recently exposed area located between 100 to 500m, NW of the recent drilling area show promising signs of mineralisation

Gold Mountain Limited (ASX: GMN) is pleased to provide an update on the Company's ongoing exploration at the Monoyal prospect. The Monoyal Prospect is a copper – molybdenum – gold porphyry target and is one of multiple prospects comprising the Company's flagship Wabag Project in PNG.

While waiting for the assay results for drill holes MCD005 to MCD007, GMN has been undertaking additional geological mapping, trenching and rock chip sampling of the areas adjacent to the Monoyal Prospect. This work has been aided by flash flooding in many of the creeks draining the Monoyal area which has exposed new outcrops in the streams (Figure 1). Initial observations from this work indicate that the Monoyal prospect may be more extensive that initially thought, with the zone of interest now being targeted covering and area of approximately 3 km long and 1 km wide.



Three streams, draining predominantly to the north-west and which are located between 50m to 300m south of MCD007 were "flushed out" and revealed wide zones of mineralised tonalite. These streams, Monoyal Creek, Nale Creek and Mabob Creek (Figure 2) have been mapped and sampled with 1 meter channel samples taken on the outcropping rock. One other stream Kombamlam Creek located approximately 500m NW of MCD007 was also sampled. Trenches were excavated adjacent to the streams where exposures were less well developed.

As of the 20th of May, two trenches TRMC<sup>1</sup> 13 and TRMC 14 have been excavated and approximately 250 samples collected for further analysis either by pXRF or laboratory analysis. A further three trenches (TRMC 15 to TRMC 17) are planned (Figure 2).



Figure 1. Monoyal Creek "flushed out" by recent flash flooding

<sup>&</sup>lt;sup>1</sup> TRMC – Trench Mongae / Monoyal Creek





Figure 2. Stream and trench location map

Visible sulphide mineralisation (examples provided in in Figure 3, Figure 4 and Figure 5) includes copperbearing minerals (chalcopyrite and bornite), iron pyrite and molybdenum. The mineralisation that is exposed within these creeks and adjacent trenches typically occurs on fracture surfaces, in small (1mm to 10mm) veins and as fine disseminations in the rock (tonalite) matrix. This style of mineralisation is similar to that observed in MCD007<sup>2</sup>. To date, fracture-controlled mineralisation has been mapped over a 100m section in TRMC 13 and for 50m in TRMC 14. The description and locations of the rock chip samples presented in Figure 2 are included as Appendix 1, Laboratory assay results for these rock chip samples are expected in early July.

<sup>&</sup>lt;sup>2</sup>MCD007 mineralisation style was first reported in ASX Announcement of 4th May 2020: 'MCD007 Drill Hole Update" Competent Person: Mr Patrick Smith.





Figure 3. Rock sample (GGRC\_004) from TRMC 13, Pyrite – chalcopyrite and bornite on a rock chip collected from a fracture surface, in this instance, a 3mm layer of sulphides covers 100% of the fracture surface, with the main sulphide minerals comprising  $\sim$ 95% iron pyrite,  $\sim$ 3% chalcopyrite and  $\sim$ 2% bornite.



**Figure 4.** Rock Chip sample (MCRC\_005) fracture surface almost entirely coated covered with 2mm layer of Molybdenite (MoS<sub>2</sub>) trace iron pyrite and bornite also observed





Figure 5. Rock chip sample (KBRC\_003) from Kombanlam Creek, fracture surface coated with sulphide layer which is 2mm thick, sulphides are predominantly iron pyrite( $\sim$ 70%) and molybdenum (30%), with only minor dissemination of sulphides (1%) in the rock matrix.

Additional geological mapping of the Monoyal area was undertaken in April and May, utilising exposures in streams and trenches. This work has culminated in an updated geology interpretation map for the prospect Figure 6. The map depicts the potential mineralised corridor and the extent of observed mineralisation at Monoyal. The mapping has highlighted extensions to the dominant NW – SE structural trend identified in the copper in soil geochemistry<sup>3</sup>, and has also confirmed the presence of several NE-SW orientated zones of mineralised fractures. Quartz-feldspar porphyry dykes have been mapped intruding into the tonalite, but these appear to be late stage and are usually unmineralized.

The mineralisation at Monoyal is extensive, with a 3km NW-SE zone mapped (Figure 6). The mineralised zone is open to the NW towards the Sak Creek and K-Lam prospects and to the SE towards the Mongae Creek prospect where holes MCD001 and MCD002 were drilled in 2018, with MCD002 intersecting 55m @ 0.11% Cu from 103m<sup>4</sup>.

The updated geological interpretation will be combined with pending assay data to assist in drill hole targeting. Drilling of the remaining four holes in the current programme is expected to resume at Monoyal in Q3 2020.

<sup>&</sup>lt;sup>3</sup> First reported in ASX Announcement of 5th February 2019: 'Gold Mountain Exploration Continues to Show High Potential at Key Prospects' Competent person Doug Smith

<sup>&</sup>lt;sup>4</sup> First reported in ASX Announcement of 30th November 2018: 'Significant Copper intercept in Drill hole MCD002 at Mongae Creek" Competent Person: Mr Douglas Smith



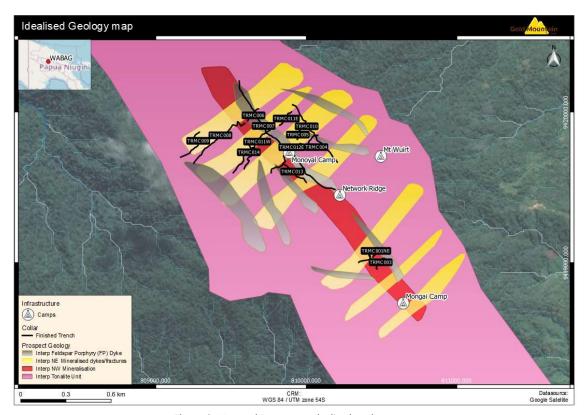


Figure 6. Monoyal Prospect – Idealised geology map

Geological mapping and rock chip sampling of the area northwest of Monoyal was also completed in April and May, with approximately 20 rock chip samples collected, with 12 of these containing visible sulphide mineralisation along fracture surfaces and in minor veins, the sulphide mineralisation comprised predominantly iron-pyrite (trace to 10% of the rock sample) with trace to 2% chalcopyrite and 0.2% molybdenum. These rock chip samples will be dispatched to ALS in Townsville and results will reported when the assays are to hand.

In compliance with the JORC Code (2012), GMN cautions investors and notes that these are selected pictures of the samples and should not be considered a proxy or substitute for laboratory analyses. The assay results for the rock samples are expected to be received in July.

Tim Cameron the CEO of GMN said, "Despite the constraints imposed on the company due to the Covid-19 situation, our field team has been able to continue exploring the Monoyal area and generate vital data to assist us in our search for a large copper+-molybdenum +- gold porphyry system. Nature has definitely worked in our favour with the localised flooding revealing extensive zones of mineralised outcrops which has allowed us to get a better understanding of the style of mineralisation at the Monoyal prospect and its areal extent.

The Monoyal area is highly prospective and the extent of observed mineralisation is significant and larger than we initially though. I am looking forward to the resumption of drilling in Q3 so we can test all the newly identified targets our field team are generating".



This announcement is authorised by the CEO of GMN, Tim Cameron.

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## For further information please visit the website www.goldmountainltd.com.au or contact:



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#### **Reference to Previous Releases**

Drilling and soil sampling results referred to in this announcement have been previously announced to the market in the reports dated the 30th November 2018, the 5th of February 2019 and the 4th May 2020 and are available to view and download from the company website www.goldmountainltd.com.au.

Gold Mountain Limited confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements. Gold Mountain Limited confirms that the form and context in which the Competent Person's (Mr Pat Smith) findings are presented here have not been materially modified from the original market announcements

#### **COMPETENT PERSON STATEMENT**

The information in this report that relates to Exploration Results is based on information compiled by Patrick Smith, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy.

Patrick Smith is an external consultant to the Company. Mr Smith confirms there is no potential for a conflict of interest in acting as a Competent Person. Mr Smith 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'. Mr Smith consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.



## Appendix 1 Locations for Rock Chip Samples recorded on Figure 2

Monoyal	Monoyal Prospect - Rock Chip Locations and Descriptions					
Easting	Northing	RL	sample_id	creek_name	creek_id	Geology Description
809,687	9,419,827	1,546	GG_RC001	GG Creek	GG	15m wide outcrop generally trending(230), networkings of molly veinlets +-Cpy
809,688	9,419,832	1,582	GG_RC002	GG Creek	GG	7cm massive Ccite+Cpy+Bn+Molly Vein(250/68)
809,662	9,419,783	1,562	GG_RC003	GG Creek	GG	coatings of Cpy+Bn+Moly on sheeted fracture(030)_5m outcrop
809,674	9,419,766	1,591	GG_RC004	GG Creek	GG	coatings of Cpy+Bn+Moly on sheeted fracture(030)_5m outcrop
809,669	9,410,717	1,568	GG_RC005	GG Creek	GG	dss'd molly+-cpy+-bn along fracture(060/86)
809,599	9,420,268	1,442	KB_RC001	Kombamlam	KB	Tonalite Outcrop_10m wide generally trending 260-280, dissemnated 2% Molly+-Cpy
809,666	9,420,163	1,461	KB_RC002	Kombamlam	KB	Fracture Coatings (330/80)_Calcocite+Cpy+Bornite+-Molly
809,666	9,420,163	1,461	KB_RC003	Kombamlam	KB	Mineralized Float _Cpy+Bn
809,684	9,420,150	1,478	KB_RC004	Kombamlam	KB	Cpy disseminated as fracture coatings(160/60)
809,738	9,420,061	1,502	KB_RC005	Kombamlam	KB	Tonalite o/c,10-12m wide, trends 260-280_traces of Cpy + Bn,diss. in rock matrix, styleof mlz is seen along the ck
810,072	9,419,664	1,736	MC_RC001	Mabob Creek	MC	5cm gossanous structure(260/64)_Py+Ccite+-Cpy,strong phylic selvages
810,069	9,419,642	1,730	MC_RC002	Mabob Creek	MC	disseminated molly+-Cpy as coatings along fracture (060/50), highly oxidized 10m outcrop-strong sericite minerals
810,089	9,419,582	1,777	MC_RC003	Mabob Creek	MC	15m outcrop_molly +Ccite coatings along fracture(270/50)
810,143	9,419,606	1,724	MC_RC004	Mabob Creek	MC	4cm massive Molly+Py+Qz+-Cpy(350/50)
810,164	9,419,590	1,731	MC_RC005	Mabob Creek	MC	molly coatings along fractrure(080/70), this style of mineralization obeseved from this point to start of creek



## JORC Code, 2012 Edition – Table 1

## **Section 1 Sampling Techniques and Data**

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (e.g. 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 (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>Rock samples collected from floats and outcrop via rock chipping.</li> <li>SOPs for all work were used to safeguard representivity of the sampling which was carried out using best and standard practice.</li> <li>This report relates to exploration results of a preliminary nature. Visual inspections will be superseded by laboratory analysis when it becomes available (expected in July).</li> <li>Other than providing descriptions of visible mineralisation and presenting several photos of visible mineralisation, no further sampling results are included in this announcement.</li> </ul>
Drilling techniques	<ul> <li>Drill type (e.g. core, reverse circulation, openhole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. 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>	No drilling being reported in this release.
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>	No drilling being reported in this release.
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 being reported in this release.</li> <li>Rock chip samples were photographed and geologically logged</li> </ul>
Sub-sampling techniques and sample preparation	<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> </ul>	<ul> <li>No drilling being reported in this release.</li> <li>SOPs for all work were used to safeguard representivity of the sampling and drilling, which was carried out using</li> </ul>



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	<ul> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all subsampling 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> <li>Photographs of samples in this document are selective and are included to show what type of rock and style of mineralisation has been observed at the Monoyal prospects. Not all rock chips collected contain the amount of mineralisation shown in the photographs</li> <li>QC procedures - No duplicate samples collected in the field.</li> <li>Sample sizes are appropriate for the type of material being sampled to ensure good representivity.</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<ul> <li>No assay results are reported herein.</li> <li>These rock chip samples will be dispatched to ALS in Townsville for multi-element geochemical analysis.</li> <li>Methods and results will be reported when the assays are to hand.</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>No drilling being reported.</li> <li>No quality control sampling has been undertaken to date.</li> <li>All primary data recorded in field logs and notebooks, then transferred to access database.</li> </ul>
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>Sample locations were recorded by conventional GPS, which is fit for the purpose of this stage of exploration.</li> <li>Grid system used was WGS84, Zone 54S.</li> <li>Good topographic control is not yet available.</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Sample spacing was determined by the location of targeted zones of mineralisation.</li> <li>Data spacing is not relevant for this stage of exploration. It is not</li> </ul>



	no sample compositing to address.
data in unbiased sampling of possible structures and the extent to which this is known, considering geological 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.	Several mineralised orientations have been recorded from surface mapping and sampling. No drilling being reported. Samples from outcrop have no relevance with regards to orientation as they are chip samples.
security	Samples are currently stored in a locked shed at the newly constructed Monoyal sample preparation site. Batches of samples are transported by company personnel to Mount Hagen and despatched by courier (TNT) to the analytical Laboratory. Sample security was ensured through Chain of Custody SOPs and managed by senior GMN personnel on site.
,,	No audits or reviews have been carried out.

### Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<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>Samples collected within Exploration         Licence 2306</li> <li>EL2306 was granted to Khor Eng Hock &amp;         Sons (PNG) Limited (KEH) on 14 December         2015. Gold Mountain Limited (ASX:GMN) is         the manager of the exploration         programmes under an agreement with KEH.</li> <li>A warden's hearing for the renewal of         EL2306 was held in October 2019, there         were no objections to the renewal at the         hearing. There are no impediments to         conduct exploration programmes on the         tenements.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	All exploration programs conducted by Gold Mountain Limited.



Criteria	JORC Code explanation	Commentary
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>EL2306 contains the potential for porphyry copper- molybdenum - gold deposits, intrusive-related gold and epithermal gold deposits and copper skarn structurally controlled gold lode deposits.</li> </ul>
Drill hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results.</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> <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>	<ul> <li>No drilling or drilling results being reported.</li> <li>Sample locations as per table in Appendix 1</li> </ul>
Data aggregation methods	<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>	No assays have been reported as part of this release.
Relationship between mineralisation widths and intercept lengths	<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</li> </ul>	<ul> <li>No assays have been reported as part of this release.</li> <li>No drilling being reported in this release.</li> </ul>



Criteria	JORC Code explanation	Commentary
	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.	Refer to figures 2 and 6 in the body of the report.
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.	<ul> <li>No drill core assay results included as part of this release, hence no reported grade intersections.</li> <li>The Company believes this ASX announcement provides a balanced report of the current and past exploration results referred to in this announcement.</li> </ul>
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.	<ul> <li>Previous geological fieldwork comprising geological mapping of rocks types, alteration and structures identified a potential porphyry copper-gold system.</li> <li>This announcement makes reference to three previous ASX announcements dated 30th November 2018, the 5th of February 2019 and the 4th May 2020.</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 stepout 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>	Geochemical sampling, geological mapping and trenching to identify other areas of potential copper, molybdenum and gold mineralisation to assist in the siting of further drill holes.