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(ASX: GMN)

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Lithium Projects (Brazil)

Juremal
Custodia
Jacurici

Cerro Cora and Porta D'Água
Salinas II

Wabag Project (PNG)

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ASX Announcement/Press Release | 14 July 2023

Gold Mountain Limited (ASX:GMN)

Market Update - Brazil Lithium Exploration Update

Exploration at Logradouro finds over 250 Pegmatites

Investment highlights

Logradouro

- Over 250 pegmatites now known on the Logradouro tenements. More expected to be present. This tenement lies along strike from numerous known tantalum occurrences and one known lithium occurrence.
- The visited Logradouro pegmatites were up to 16 metres wide of continuous outcrop and in two instances, the pegmatites may have been up to 55 and 60 metres wide with discontinuous outcrops.

Cerro Corá - Porta D'Água

- Stream sediment sampling to locate the most significant lithium anomalies has been completed
- Additional LCT type pegmatites discovered on interpreted structures cross cutting regional structural trends in suitable host rocks distant from exposed granites.

Solonópole

- Field reconnaissance was carried out to assess required exploration methods. Dense vegetation and soil cover indicate drainage sampling is the most cost effective method of sampling.
- Experience by other explorers in the Solonópole region is that drainage sampling would be the preferred method of tenements initial assessment.
- Areas with quartz-tourmaline float, a lithium associated mineral, were found however outcrops could not be located.

Icó

- The known beryl producing pegmatite was visited and sampled. The Garimpo was recently dug and the rocks were fresh for sampling. The pegmatite is undeformed and likely to be related to Cambrian age granites.
- Additional targets have been interpreted from satellite imagery that crosscut regional trends. These could not be visited on the initial reconnaissance visit due to time and access constraints.

Salitre South

- Soil sampling over the deformed and younger undeformed pegmatites is near complete and a second undeformed pegmatite has also been found.

Custodia

- Stream sediment sampling commenced on Custodia, surrounding the known lithium in soil anomalies, but had to be postponed due to heavy continuous rains in the tenement and surrounding areas.

Geological Team

- An initial team of experienced geologists and a field technician has been assembled as a first step in towards rapidly progressing exploration. Further skilled and experienced staff are being sought.

Mine Visits

- Visits were made to a series of mines in the Seridó region of the Borborema Province and to Oceana Project in Solonópole. The extent of leaching of lithium, from spodumene in particular, was striking. Spodumene at one mine contained no lithium at a depth of 12-14 metres, due to weathering.

Gold Mountain Limited (ASX: GMN) (“Gold Mountain” or “the Company”) is pleased to announce that its Geological Team has been significantly upgraded with additional geologists and a field technician. Senior personnel from Australia went to Brazil to assist in further training in the field with the Gold Mountain team.

The team now consists of **Alexandre Bartosievicz**: *Geologist with 27 years of experience in mineral exploration, Master in Exploration Geology at UFPR (Brazil), with 10 years of experience in Cu-Au systems (IOCG, Epithermal and polymetallic VHMS), 5 years in Cu-Ni-PGE (mafic-ultramafic complex), 5 years in P-Ti and industrial minerals (Alkaline Complex), 3 years in base metals Pb-Zn (MVT and SEDEX) and 2 years in Halite for polyvinyl industry. Acting for 18 years as geoscience leader and project manager of greenfield and advanced mineral exploration projects including ore reserve definition and BFS programs and in mine environment developing brownfield programs. Experience and knowledge of the geology and mineralization in the LCT magmatic systems at Lithium Valley, including visits to Agua Santa mine, Morro Redondo mine and several workings in homogeneous and zoned pegmatites, including SRP type bodies and semi-precious stones, and deposits involving context of hosting plutons as sources of Lithium concentrations.*

Carlos Trigueiros: *Geologist with 7 years of experience of which 5 years in Ni deposits (mafic-ultramafic complexes) and 2 years in P-Nb (Carbonatite alkaline complex). Worked both greenfield exploration programs and in short-term mine environments. Has skills with geological mapping, geochemical sampling, geophysical data planning and analysis (IP, EM and Gamma), drilling, ore reconciliation and mine operation.*

Caio Alfenas: *Geologist with 4 years of experience having worked in field research at Mina Águas Teñidas VMS deposit (Huelva, Spain) and in the description of core samples and visits to the San Jose Lithium-Tin deposit, a zinnwaldite (lithium-iron mica) deposit with cross cutting quartz-amblygonite-cassiterite veins.*

Pedro Thiago: *Geology and Mining Technician, with 18 years of experience in mineral exploration and research programs, both in greenfield and mine environment (open pit and underground mine). Experience in Cu projects for 8*

years, REE for 5 years and LCT pegmatites, Nb and feldspar for 2.5 years. He has leadership skills acting as team leader, supervising drilling, geochemical sampling, data control, development, logistics and execution of activities.

Additional skilled staff are being sought to enable a more rapid appraisal of the Company's project areas and development of drilling targets.

Alexandre attended a field workshop on lithium deposits in the Lithium Valley region of Minas Gerais immediately prior to the field visit in June and the resulting knowledge is now being used to assist in assessing the Company's suite of lithium projects and make comparisons with mines visited in the Seridó Li-Pegmatite field in the Borborema Province of NE Brazil during June as part of the field work carried out.



Figure 1. Brazil team in the field, Alexandre in the white shirt, assessing a project area.

Logradouro tenements were visited and the interpreted pegmatites in two areas visited to assess whether they were actual pegmatites. All interpreted pegmatites were confirmed to be pegmatites, however more pegmatites than

interpreted from satellite imagery were present in the tenement areas visited. Most pegmatites in the Seridó area are geomorphological positive features in the landscape.

Approximately 250 pegmatites have been interpreted on the Logradouro tenements, which lie along strike from numerous mapped tantalum occurrences and a lithium occurrence.

Areas where pegmatites were not interpreted were road traversed and additional pegmatites were found in roadside gutters and in the road surface in some instances.



Figure 2. Typical outcrop of an interpreted and confirmed pegmatite at Logradouro. These are all strongly weathered. Additional barely outcropping pegmatites are also present in parts of the tenements.



Figure 3. Typical strongly weathered pegmatite outcrop which was not identified in satellite imagery at Logradouro due to very short strike of the exposed part of the pegmatite. It was able to be traced on the ground over a longer strike length.

These large pegmatites are strongly weathered so cannot be expected to provide ore grade lithium analyses from surface samples. Assessment of this project area is to be done by stream sediment sampling to focus on parts of the pegmatite swarm that contain lithium and pathfinder elements and then drill the geochemically anomalous pegmatites. In soil covered areas with non-outcropping pegmatites soil sampling prior to drilling will be required.



Figure 4. Strongly weathered outcropping pegmatite at Logradouro.



Figure 5. Detail of the strongly weathered pegmatite at Logradouro. These pegmatites will be tested for lithium in a stream sediment program commencing in September to find which ones are significantly lithium bearing.



Figure 6. Typical pegmatite at Logradouro, which have 100's of meters long exposures.

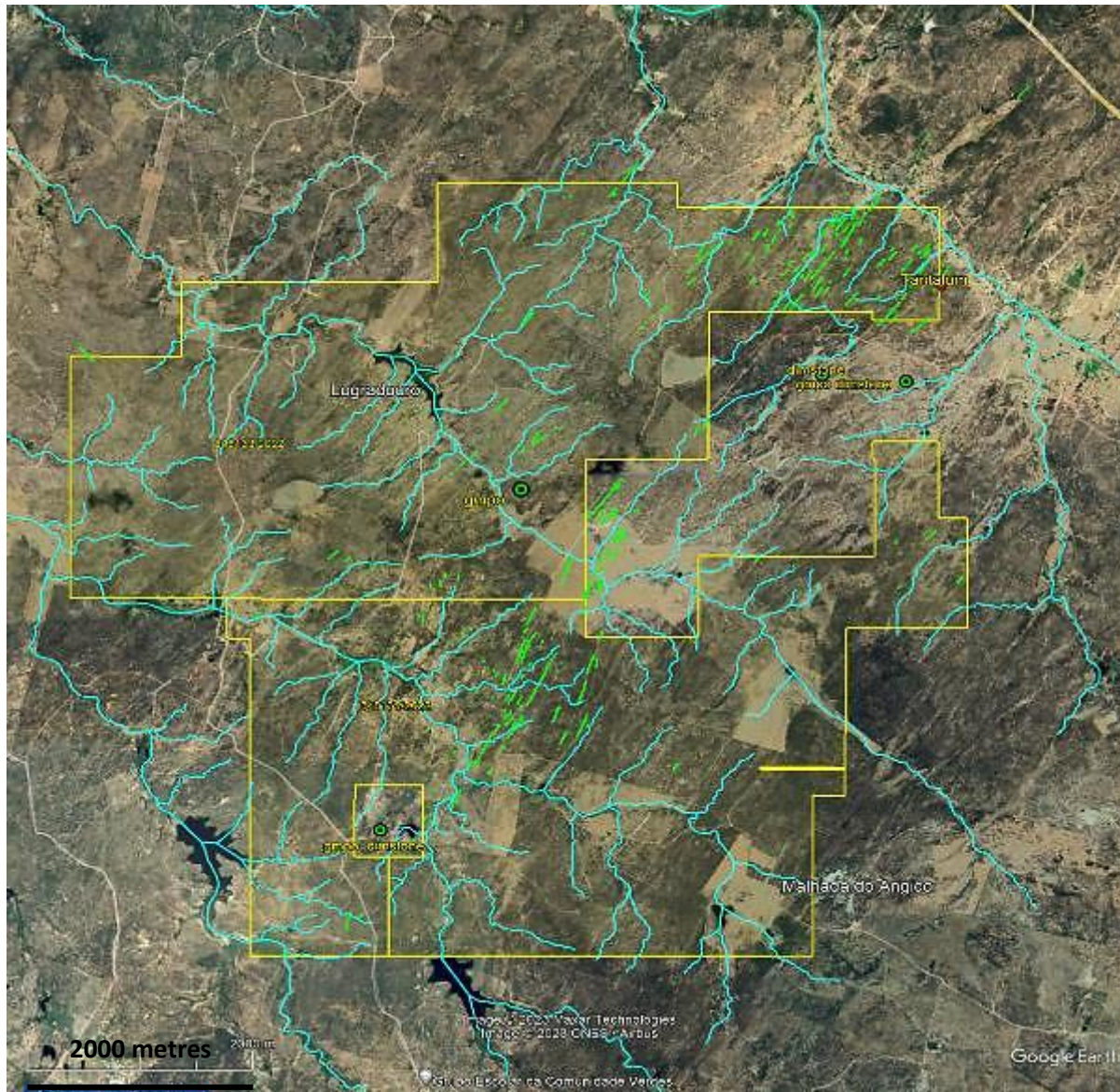


Figure 7. Logradouro tenements with approximately 250 interpreted pegmatites (green).

Pegmatites up to 16 metres wide individually with 100% outcrop were present and a broad zone of up to 60 metres wide with abundant outcropping pegmatite in that distance was also present. A second similar zone 55 metres wide is thought to be the junction of two or more subparallel pegmatites.



Figure 8. A minimum of three lines of pegmatite intrusives viewed from a fourth pegmatite at Logradouro. Pegmatites are usually continuous between the tall outcrops.

This project area is ranked very highly by Gold Mountain's technical team.

Cerro Corá – Porta D'água

Inspection of the tenements was undertaken by the geological team and the LCT pegmatites found to have very encouraging characteristics when compared to observed mineralised pegmatites in the Seridó Li-Pegmatite field. Gold Mountain previously reported the presence of LCT pegmatites in the Cerro Corá – Porta D'água tenements region (January 6 2023). Additional pegmatites were found on interpreted structures and indicate that many more pegmatites can be expected to be discovered in this very prospective area.

The Cerro Corá – Porta D'água tenements lie in the northern part of the Seridó Li-Pegmatite field.



Figure 9. Artisanal mine on a pegmatite mined for tantalum in the Cerro Corá-Porta D'água tenement region.



Figure 10. Schist-pegmatite contact in Porta D'Água showing 50% feldspar, 15% mica and 35% quartz growing at right angles from the schist contact. This can indicate the orientation of the pegmatite body but is not indicative of the presence of lithium

Solis Minerals (ASX:SLM) has secured the acquisition of 22 lithium exploration licences which make up the Borborema Project in northern Brazil. Solis says the tenements cover a total area of 24,800 hectares in primarily greenfield terrain, and have not been exposed to systematic modern exploration techniques targeting lithium-caesium-tantalum (LCT)-bearing pegmatite systems. Historically, the Borborema pegmatitic province has been reported to host several mineralised pegmatite occurrences and artisanal works producing beryllium (Be), niobium-tantalum (Nb-Ta), lithium (Li), tin (Sn), gems, quartz, feldspar, and others.

Figure 11 shows the location of the Cerro Corá-Porta D'água, Logradouro and Serrote Verde tenements in relation to the Seridó Li-Pegmatite field and to tenements held by Solis Minerals and other major lithium explorers.

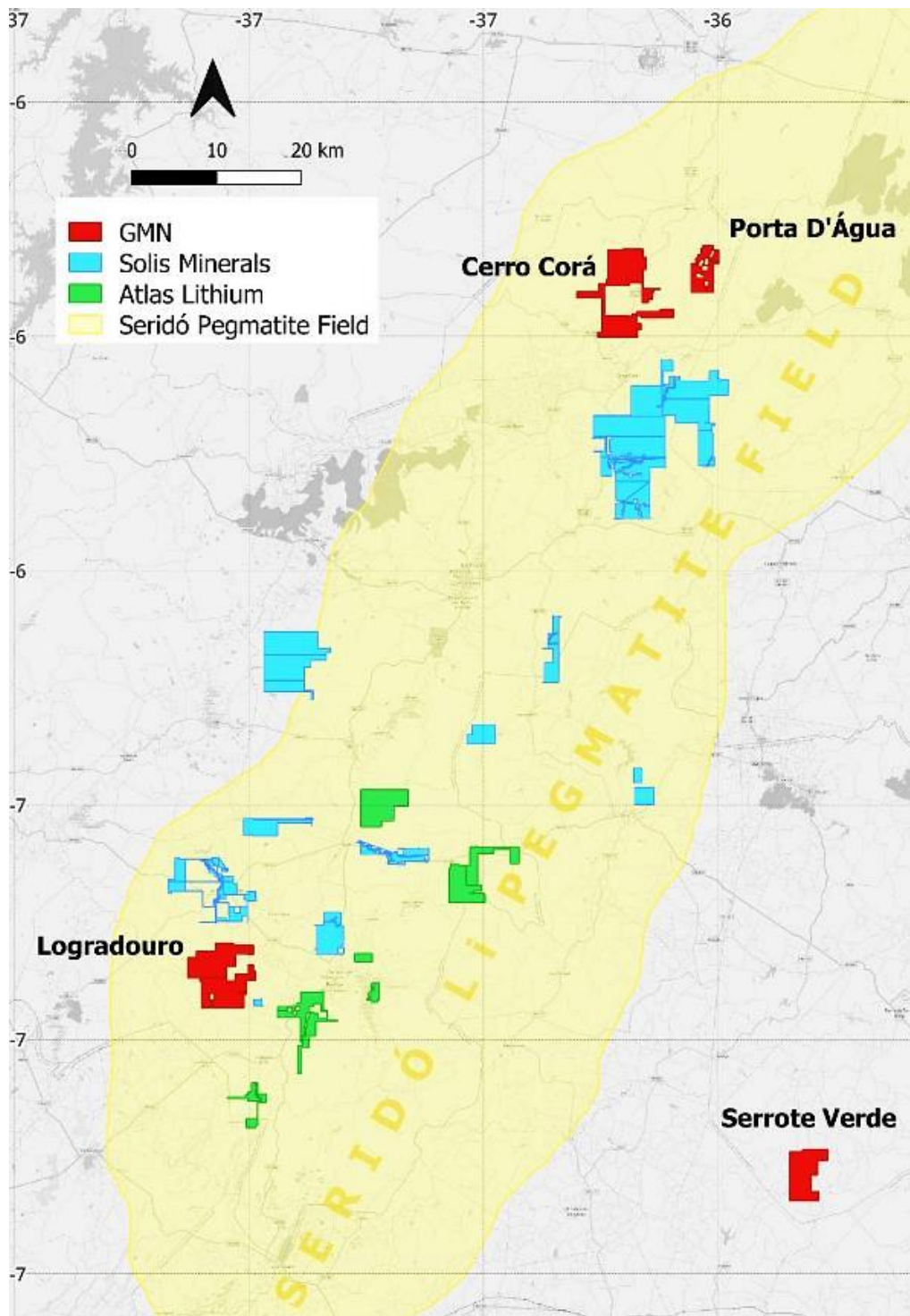


Figure 11. Location of the Cerro Corá-Porta D'água, Logradouro and Serrote Verde tenements in relation to the Seridó Li-Pegmatite field and major lithium explorers.



Figure 12. Old working at Porta D'água in typical extremely weathered pegmatite. A rock sample has been taken and dispatched to the laboratory. Results are anticipated in about 2 months.



Figure 13. Close up of detailed mineral assemblages of Porta D'Água pegmatites that area also seen in various visited mines in the Seridó region. This Porta D'Água pegmatite has 1% tourmaline, 3% muscovite, 46% quartz and 50% alkali feldspar. A rock sample has been taken and dispatched to the laboratory. Results are anticipated in about 2 months.

Stream sediment sampling is now complete on these tenements with a total of 75 stream sediment samples and 4 rock chip samples collected.

This project area is ranked very highly by the Company's technical team.

Solonópole

Solonópole tenements lie along structural strike from the Oceana tenements and contain similar rock sequences and granite suites. Occurrences of tourmaline were located near some satellite imagery anomalies, most of which were found to be related to scattered quartz float under thick vegetation.



Figure 14. Typical Quartz tourmaline float from Solonópole

Outcropping pegmatites were not found, a similar scenario to adjacent tenements held by Oceana where trenching, soil sampling and drilling are required to locate, define and test pegmatites present, unless artisanal miners had developed mines for tin or tourmaline on the pegmatites in the past.



Figure 15. Dense vegetation in many areas makes finding outcrops too difficult to be an effective way of testing the Solonópole tenements.

Stream sediment sampling is planned to test the Solonópole tenement areas and define the most anomalous areas for detailed exploration.

Icó

Icó tenements were visited and the original reported spodumene occurrence was visited in conjunction with the landowner. Dense vegetation meant that the strike of the pegmatite could not be determined, nor its width. A shaft had been sunk to 9 metres depth and waste rock piles were sampled for analysis. The pegmatite is a post tectonic pegmatite with a substantial quartz core visible in one side of the shaft. The pegmatite looks to be of interest and is associated with a major structural zone.

Production has been small amounts of beryl for market assessment purposes. Samples of the pegmatite have been submitted for analysis for LCT characteristics.



Figure 16. Shaft in the quartz-feldspar dominated pegmatite with the quartz core exposed in the right side of the shaft. Muscovite rich areas were also present at depth. Two rock samples have been taken and dispatched to the laboratory. Results are anticipated in about 2 months.

Salitre South

Pegmatites of two ages are present on the Salitre South tenement, one deformed and a second suite of undeformed pegmatites. Samples of both types of pegmatite have been collected and sent for analysis. Scale of the undeformed pegmatites has not been determined at present but will be assessed when soil sampling over the deformed and one undeformed pegmatite is completed and analytical results received. Completion of the soil sampling is planned for the July-September quarter.



Figure 17. Mina Salgadinho Pegmatite (A) compared to Salitre South pegmatite (B). Both pegmatites have similar pink feldspar, greenish mica and quartz. A rock sample has been taken from the Salitre South pegmatite and dispatched to the laboratory. Results are anticipated in about 2 months.

Visual comparison of pegmatite samples from the spodumene producing Salgadinho mine in the Seridó Pegmatite Belt, 13 km north of Parelhas in Rio Grande do Norte state, showed close similarities in the character of the pegmatites present at Salitre South.

Two samples taken from the Salgadinho mine by the CPRM (the Geological Survey of Brazil) analysed at 7% Li_2O and 0.05% Li_2O . One was probably pure spodumene and the other may have been weathered or had a minor amount of spodumene or lithium bearing micas present. The similar mineralogical appearance however, does not indicate that the samples taken from Salitre South will also contain lithium.



Figure 18. Dissected terrain in the Salitre South tenement area that allows for outcrops to be found relatively easily and which is readily explored by either soils or stream sediment sampling.



Figure 19. Exposure of deeply weathered non deformed pegmatite at Salitre South, before excavation to obtain a less weathered sample.

Custodia

Planning of stream sediment sampling, concentrating around the known lithium in soil anomalies and pegmatites was completed. Sampling has now commenced and is planned to cover an area of approximately 50 km².

Lithium in soil anomalies were reported on 10th January 2023 and the full extent of the lithium responses within the current area of known lithium anomalism is now to be defined.

Juremal

Additional field traversing was undertaken, however due to the extensive grass cover, this did not result in finding additional pegmatite float. A re-assessment of past rock sample duplicates confirms that the leached spodumene previously found is of substantial interest and remains a worthwhile target.



Figure 20. Detailed view of leached spodumene collected from 870208/2022 in October 2022. No further float or outcrops of spodumene could be seen with the heavy vegetation following the wet season. Results for this sample were reported by GMN on ASX Announcement 6 January 2023

Juremal, Juremal North, Salitre, Salitre South, Campo Formoso and Jacurici Projects all lie within the Sao Francisco craton, in a region dominated by major north south oriented structural zones.

Figure 21 shows the location of these projects, except for Jacurici, in relation to the Solis Lithium Jaguar Project, approximately 40 km south of Juremal.

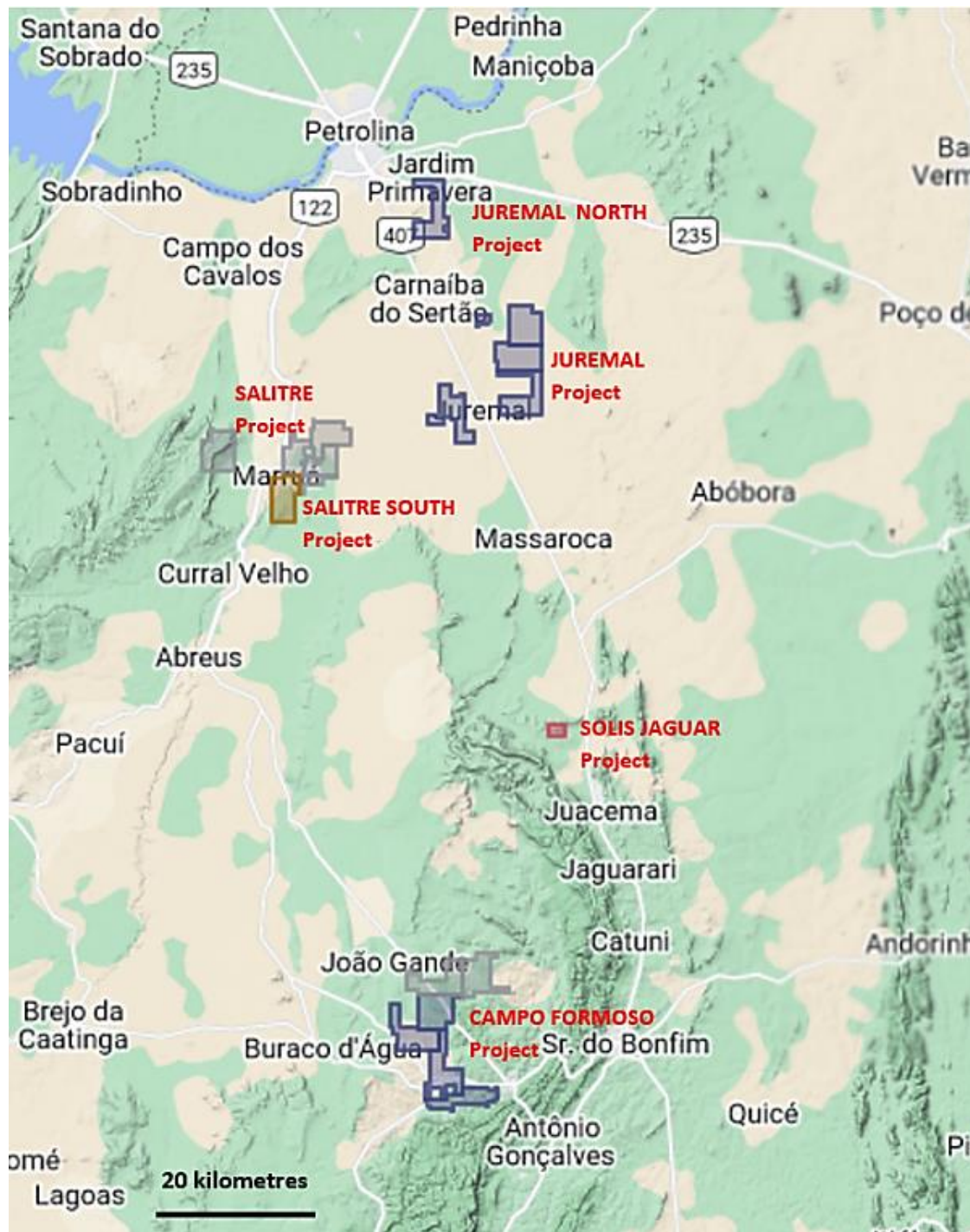


Figure 21. Location of the Gold Mountain projects in the northern part of the São Francisco Craton in relation to the Solis Lithium recently acquired Jaguar Project, containing a very large LCT pegmatite.

The generally low relief and lack of outcropping pegmatites means geochemical techniques will be the most rapid and effective exploration method. Stream sediment sampling has been fully planned and will commence in the July-September quarter 2023.

Casa Nova

Casa Nova tenements were visited and the area assessed for ease of exploration. The principal target of nickel-copper is likely to be associated with known mafic-ultramafic intrusives that form a series of dyke like and plug like bodies. Stream sediment sampling will be suitable for testing the tenements.

The spodumene occurrences were found to be misidentified epithermal, quartz-chalcedony veins and replacements, probably after carbonates, in a highly potassic appearance granite. Bladed and parallel bladed replacement textures predominate with some areas showing weathering surfaces suggesting that the earlier carbonates had not been fully replaced. Samples will be submitted for multi-element and REE analysis.

A post tectonic potassic granite, exposed at a very high level, was observed. The granite had numerous pegmatites present, indicating a large amount of very fluid residual magma was present in the granite. This potentially may give rise to lithium bearing pegmatites away from the granite.



Figure 22. Numerous pegmatites in the interpreted roof zone of a post tectonic granite

Additional lithium, lithium-tungsten and IOCG copper tenements

The additional lithium, lithium-tungsten and IOCG copper tenements were not visited due to time constraints.

Potential, particularly in the copper tenements, is well understood from published literature and a history of IOCG copper occurrences in the Borborema Province.

Programs of stream sediment sampling have been designed for all additional tenements.

Mine Visits

Mine visits were made to Oceana Lithium Ltd tenements at Solonópole and to mines operated by Casa Grande Mineração Ltda, a local Brazilian company near Parelhas, that has lithium pegmatites.

Additional mines, operated by Casa Grande Mineração Ltda, were visited further north in the Seridó Pegmatite Belt, closer to the Cerro Corá – Porta D'água tenements. Further mines and artisanal workings not held by Casa Grande Mineração Ltda were also visited.

Geological information relevant to exploration on Gold Mountain tenements was obtained at the various mines and prospects visited.



Figure 23. Gold Mountain's visit to OCN tenements; various pegmatites were visited and factors relevant to assessment of the Company's tenements adjacent to the OCN tenements were reviewed.



Figure 24. Gold Mountain's visit to Oceana Lithium sample processing lab.



Figure 25. Gold Mountain's visit to Salgadinho Mine (Casa Grande Group) Seridó Pegmatite Belt. A 35 metre deep mine in a large pegmatite with fresh spodumene at the 35 metre depth. Mica schist host rock.



Figure 26. Large tabular bright white pseudomorphs after spodumene at 12-14 metres depth in the Carrapateira mine, (Casa Grande Group) Seridó Pegmatite Belt. Alteration of the spodumene is due to weathering, leaching all lithium and replacing the spodumene by fine grained micas and kaolin. Surface sampling of this pegmatite would not give significant lithium results.



Figure 27. Pegmatite in an Aquamarine Mine visited in the Seridó Lithium Pegmatite Belt. Contact of pegmatite with the host rock at the back of the photo showing the potential size of pegmatites in the region.



Figure 28. Large pegmatite at an unnamed 32 garimpo in the Seridó Pegmatite Belt. The pegmatite base in the cut leading into the open pit has dips in opposite directions on each side of the road cut on the left of the photo. Trenching on this pegmatite, like many others seen, would not give reliable information on overall dips of the pegmatite.



Figure 29. Opposite side of road cut with pegmatite dipping to the opposite direction to the other side of the road cut.

Future Exploration

Deep weathering and variable removal of the deeply weathered surface, where near complete destruction of lithium minerals near surface has taken place, has been found to be widespread and high grade rock sample analyses can only be expected from old workings that have excavated below the surface weathering or from drill holes.

The Company is proceeding as rapidly as practical towards drilling with the sampling programs now in place and the expert team on the ground. The team is being enlarged with skilled personnel to progress exploration at a rapid rate.

Cerro Corá – Porta D’água: Stream sediment sampling has been completed on Cerro Corá – Porta D’Água tenements with additional soil sampling dependent on results. It is anticipated that soil grids will be required, particularly in the Porta D’água tenement area.

Custodia: Stream sediment sampling commenced and was suspended due to late heavy and persistent rainfall. A broader picture of anomalous areas is being sought so exploration is carried out in the highest ranked areas. The program will recommence when weather conditions improve

Salitre South: Soil sampling on the first grid over both a deformed pegmatite and a younger non deformed pegmatite is nearing completion. A second younger pegmatite has now been found and needs mapping and potentially soil sampling to determine potential.

Juremal: Drainage sampling has been fully planned together with access and will commence as soon as personnel are available to carry out the sampling work. This is anticipated to then require follow up soil sampling and mapping to define drilling targets.

Solonópole: Drainage sampling is the next step, fully planned for sites and access. The initial review and discussion with the Oceana exploration team indicates that drainage sampling will be the preferred option to identify LCT pegmatites. This is anticipated to then require follow up soil sampling and mapping to define drilling targets.

Icó: Sampling of the undeformed pegmatite at the garimpo that had produced beryl in the recent past will determine whether the pegmatite is an LCT type or not. Additional Interpreted pegmatites bodies will also be assessed in the field and stream sediment sampling carried out over parts of the tenements held by the Company.

Additional lithium, lithium-tungsten and IOCG copper tenements: The additional lithium, lithium-tungsten and IOCG copper tenements have stream sediment sampling programs planned in detail and will be progressed following field checks by the geological team.

Landowner Access Agreements: Gold Mountain’s team are progressing with landowner agreements on all tenements currently under exploration and on areas where exploration is planned in the future. Landowner agreements are a necessary part of both ANM requirements and the social licence requirements for the Company.

Cautionary Statement

Visual estimates of mineral abundance should never be considered a proxy or substitute for laboratory analyses where concentrations or grades are the factor of principal economic interest. Visual estimates also potentially provide no information regarding impurities or deleterious physical properties relevant to valuations.

Competent Persons Statement

The information in this presentation that relates solely to Exploration Results for the Gold Mountain is based on information compiled by Peter Temby, a Competent Person who is a Member of Australian Institute of Geoscientists. 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.

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 lithium, copper and gold, are now actively being explored.

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	- Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. - Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. - Aspects of the determination of mineralisation that are Material to the Public Report. - In cases where ‘industry standard’ work has been done this would be relatively simple (eg ‘reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay’). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.	- Rock chip samples were random chip samples from outcrops of weathered float and weathered outcrops in the field, they weighed approximately 2 kg. They are not considered representative of the possible grade of mineralisation at depth. - Style of mineralisation sought is pegmatite intrusion hosted lithium and tantalum. Sources are considered to be certain S type granites.
Drilling techniques	Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	No drilling undertaken
Drill sample recovery	- Method of recording and assessing core and chip sample recoveries and results assessed. - Measures taken to maximise sample recovery and ensure representative nature of the samples.	No drilling undertaken

Criteria	JORC Code Explanation	Commentary
	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.	
Logging	- Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. - Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. - The total length and percentage of the relevant intersections logged.	No drilling undertaken
Sub-sampling techniques and sample preparation	- If core, whether cut or sawn and whether quarter, half or all core taken. - If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. - For all sample types, the nature, quality and appropriateness of the sample preparation technique. - Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. - Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. - Whether sample sizes are appropriate to the grain size of the material being sampled.	- No drilling undertaken - All samples were crushed in full and a split or the entire sample pulverised in full to provide a representative sample of a composite rock chip sample depending on the laboratory used. - Sample size averages 2 kg and the samples were taken to confirm the presence of lithium rather than produce a grade form what may be a non-representative and often weathered sample
Quality of assay data and laboratory tests	- The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. - For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. - Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable	- The analytical techniques used are four acid digest and ICP-MS, or sodium peroxide fusion and sodium peroxide fusion followed by ICP-MS analysis. Sodium peroxide fusion is considered to be a total technique and the 4 acid digest method a partial digest technique, 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. - No standards duplicates or blanks accompany these initial samples that will not be used other than to indicate potentially interesting lithium and LCT pegmatite pathfinder element contents of the variably weathered samples.

Criteria	JORC Code Explanation	Commentary
	<i>levels of accuracy (ie lack of bias) and precision have been established.</i>	▪ 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.
Verification of sampling and assaying	▪ The verification of significant intersections by either independent or alternative company personnel. ▪ The use of twinned holes. ▪ Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. ▪ Discuss any adjustment to assay data.	▪ No verification will be undertaken for these initial samples that will not be used in any resource estimate. The samples are to determine the levels of Li and other valuable elements in grab samples
Location of data points	▪ Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. ▪ Specification of the grid system used. ▪ Quality and adequacy of topographic control.	▪ All sample locations were measured using a handheld Garmin GPS model 62s or 65 multiband in WGS84 and UTM coordinates. The accuracy is considered sufficient for a first pass sampling program.
Data spacing and distribution	▪ Data spacing for reporting of Exploration Results. ▪ Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. ▪ Whether sample compositing has been applied.	
Orientation of data in relation to geological structure	▪ Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. ▪ If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	▪ No drilling undertaken, surface sampling where drainages or interesting rocks found.
Sample security	▪ The measures taken to ensure sample security.	▪ Samples were securely packed and sent by a reliable commercial courier to the laboratory
Audits or reviews	▪ The results of any audits or reviews of sampling techniques and data.	▪ No audits or reviews of sampling data undertaken

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	- 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. - 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.	- One hundred and forty four tenements are held by Tatiana Barbosa de Souza Libardi who is the legal representative and holder of POA as well as the trustee on behalf of Mars Mines Brasil Ltda for all the tenements which have been applied for. - Four additional tenements are held by Neliton Dias Santos who is transferring those tenements 100% to Mars Mines Brasil Ltda. - One tenement is held by Carlos Augusto Batista da Silveira who has a 5% free carry in the tenement until decision to mine and is allowed to continue to work an aquamarine deposit within the tenement - One tenement held by Fertfos Mineracao E Fertilizantes Ltda which is selling tenement 872267/2021 to Mars Mines Brasil Ltda with transfer on completion of a series of staged payments totalling USD30,000. - A further 84 tenements are held by Mars Mines Brasil Ltda. - The tenements consist of 193 granted tenements and 47 applications going through the grant process. - There may be impediments to the grant of 870318/2023 being granted however that has not been clarified so far.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	No prior formal exploration is known on any of the Lithium tenements however there has been some informal exploration and production by artisanal miners on one of the Ico tenements and the Salitre South tenement. Minor formal exploration has been undertaken on one of the Ararenda tenements where an IP survey extended onto a current Mars tenement.
Geology	Deposit type, geological setting and style of mineralisation.	The mineralisation sought in the tenements is pegmatite intrusion related lithium and tantalum mineralisation associated with post orogenic intrusives, Mineralisation typically occurs as disseminated crystals or crystal clusters in the host pegmatite. The host to the pegmatite is commonly a greenschist to amphibolite facies sedimentary or volcanic sequence but can include many other rock types. In addition there is IOCG style copper mineralisation associated with several project areas and potential for Ni-Cu mineralisation in mafic-ultramafic complexes in two groups of tenements.

Criteria	JORC Code Explanation	Commentary
Drill hole Information	▪ A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: ○ easting and northing of the drill hole collar ○ elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar ○ dip and azimuth of the hole ○ down hole length and interception depth ○ hole length. ▪ 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.	▪ No drilling undertaken
Data aggregation methods	▪ In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. ▪ Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. ▪ The assumptions used for any reporting of metal equivalent values should be clearly stated.	▪ No drilling or sample aggregation undertaken, no cut off grades applied
Relationship between mineralisation widths and intercept lengths	▪ These relationships are particularly important in the reporting of Exploration Results. ▪ If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. ▪ If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	▪ No drilling undertaken
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	▪ No drilling undertaken; plan views of rock sample locations are provided

Criteria	JORC Code Explanation	Commentary
	<i>limited to a plan view of drill hole collar locations and appropriate sectional views.</i>	
<i>Balanced reporting</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.	All results are reported in this release
<i>Other substantive exploration data</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.	- Visually identified spodumene float, identified by a combination of crystal habit, density, hardness and host lithology are used to visually identify spodumene prior to laboratory analysis. Some spodumene was visually identified on site by the geologist at a producing spodumene mine. - Mapped pegmatite occurrences are reported as well as other geological factors thought to be relevant to exploration for LCT pegmatites.
<i>Further work</i>	- The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). - Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	- Additional work is regional stream sediment sampling followed up by soil sampling, followed by RC and diamond drilling to define resources. - Visually identified weathered spodumene in two project areas will be followed up with detailed mapping and soil sampling to develop drill targets - The work is at an early stage and soil sampling and mapping will be required to define areas of possible extensions. - Possible pegmatites have been interpreted from satellite imagery on several project areas and form high priority follow up targets. 11 interpreted pegmatites visited on the Logradouro Project area have all been found to be pegmatites on the ground. Additional pegmatites were also found at Logradouro that could not be identified from satellite imagery.