

Gold Mountain Limited
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Cococi region

Custodia

Iguatu region

Jacurici

Juremal region

Salinas region

Salitre

Serido Belt

Copper Projects (Brazil)

Arenda region

Sao Juliao region

Iguatu region

REE Projects (Brazil)

Jequie

Copper Projects (PNG)

Wabag region

Green River region

ASX Announcement/Press Release | 24 July 2024

Gold Mountain Limited (ASX:GMN)

Very High Grade REE Assays in Second Area confirmed on Down Under Project, Brazil

Gold Mountain Limited (ASX: GMN) ("Gold Mountain" or "the Company" or "GMN") is excited to announce it has received a second batch of 85 stream sediment samples from the Irajuba tenements in the Down Under Project area. Very high grade results in stream sediment samples compare very favourably with geochemical samples taken from known mineralised catchments and from results previously released.

Highlights

Work Undertaken

- Assays received from regional stream sediment sampling with peak values of **4,582 ppm TREO**
- Potential for ultra-high-grade hard rock monazite hosted REE-Nb-U-Sc mineralisation is indicated from the stream sediment sample results and generally are, but not always, coincident with higher value TREO anomalies
- TREO anomalous catchments and the samples indicating ultra-high-grade type mineralisation appear to be structurally or stratigraphically controlled in layers wrapping around nearby folds and a dome.
- Spectrometer radiometric Thorium anomalies correlate well with the areas of high grade IAC and potential ultra-high-grade hard rock style anomalies.

Managing Director – David Evans commented:

"GMN is very excited as we are targeting similar multi commodity ultra-high-grades Rare Earths and Niobium while Brazilian Rare Earths ASX:BRE, which is located close to GMN tenements, have grades of up to 40.5% TREO (405,000ppm), including up to 7.1% Nd+Pr (71,380 ppm) and 0.34% Dy+Tb (3,365ppm), 1.5% Niobium, 269ppm scandium and 5,250ppm uranium. We are finding what would normally be considered ore grades in our recent stream sediment samples, which is very encouraging and suggests we may be close to identifying a source with ultra-high-grades."

Future Workplan

- A second auger rig has been ordered and permits are being sought for drilling in the Irajuba area in NW Down Under Project
- Identification of specific drill sites will now be undertaken to cover known well preserved lateritic weathering areas.

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- Extensive radiometric traversing will be undertaken within the most highly anomalous catchments to search for potential ultra-high-grade hard rock deposits.
- A program of stream sediment pan concentrate sampling will also be undertaken.

There is outstanding potential for new ultra-high-grade rare earth discoveries along the geological and structural trends that host this world class province. The success of this ongoing first phase of greenfield exploration is very encouraging to GMN, with more results expected in the following weeks.

The Company identified broad contiguous catchment areas with strongly anomalous geochemical REE assay results. These results are all greater than the orientation sample results on known REE deposits in the region using identical sampling, sample preparation and analytical techniques.

Five high priority drilling targets have been identified over the areas with the greatest potential for ultra-high-grade hard rock mineralisation as well as the highest-grade TREE anomalies including the area with TREO of 4,582 in a -10 micron fraction stream sediment sample.

GMN believes these outstanding results, and the previous REE results, mark a significant change in the future of our ultra-high-grade monazite and IAC REE projects.

Images & Maps

Figure 1 shows GMN geochemical anomalies from stream sediment samples in the northwestern part of the Down Under Project part of the Down Under Project.

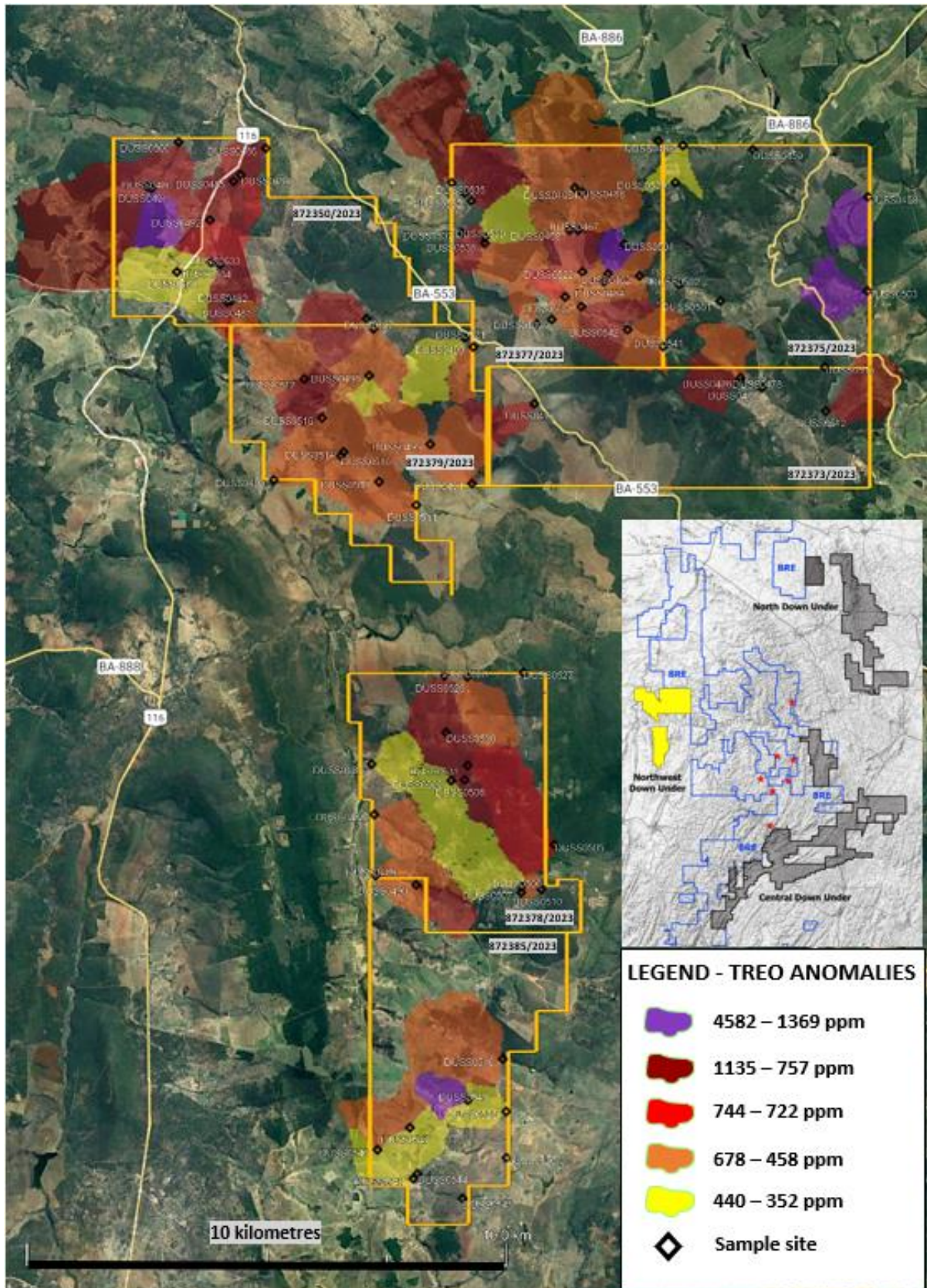


Figure 1. TREO anomalies plotted as anomalous stream sediment catchments. Maximum value of 4,582 ppm TREO. Location of the Irajuba prospect in North West Down Under Project shown in inset map.

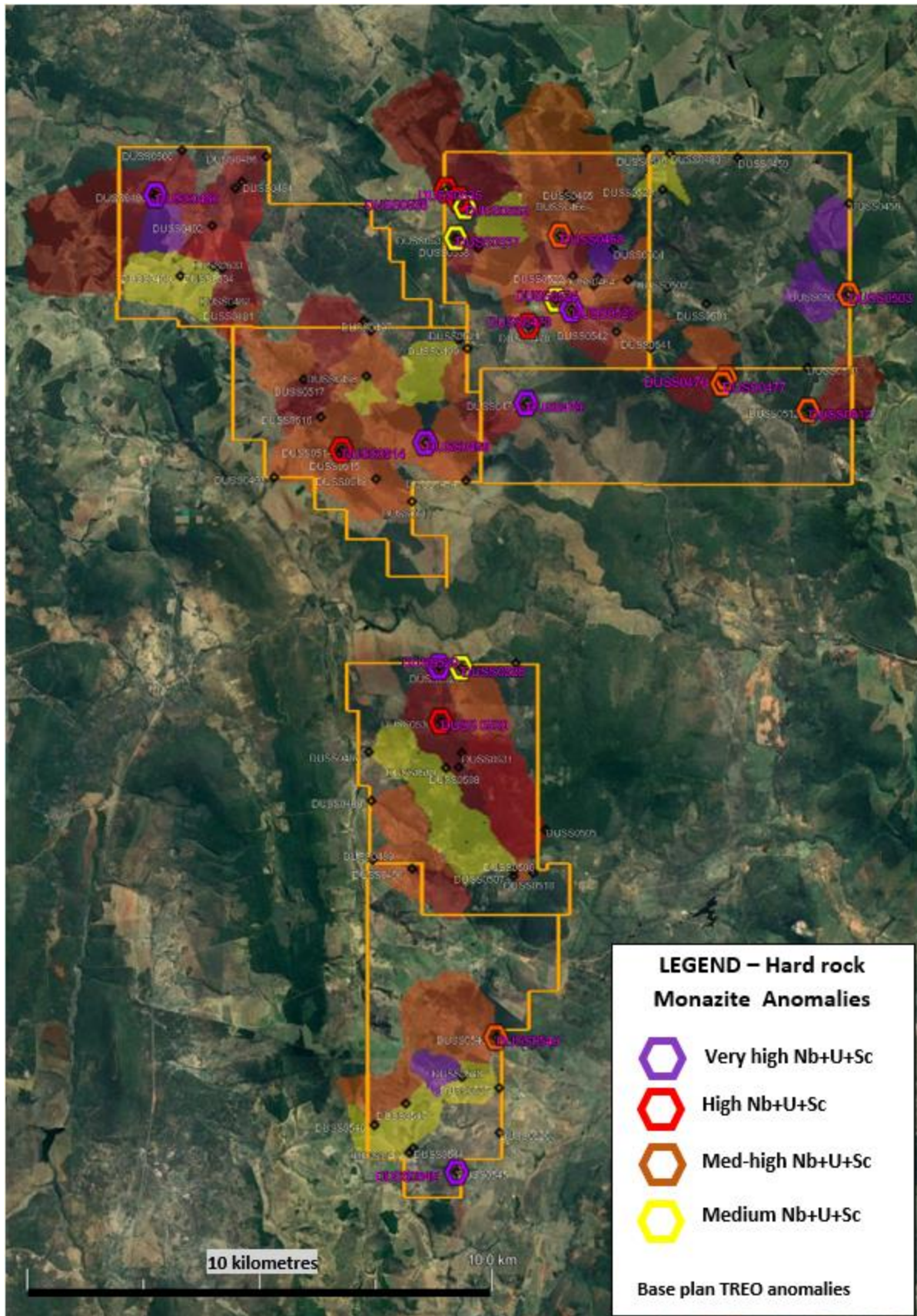


Figure 2. Combined niobium-uranium-scandium anomalies, indicative of hard rock monazite type mineralisation, a major focus of GMN exploration.

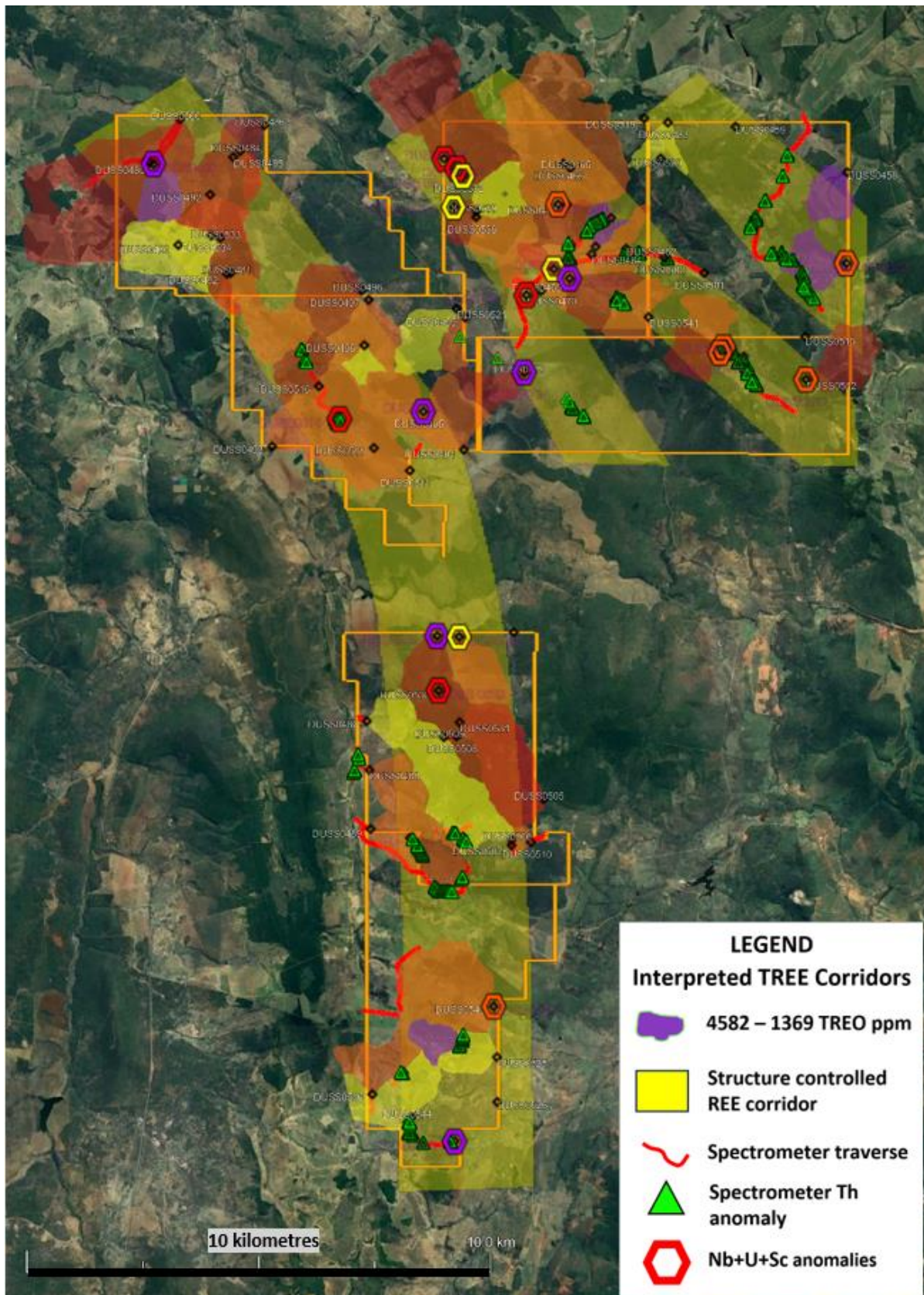


Figure 3. Interpreted Structural or stratigraphic controls on mineralised catchments. Yellow corridors follow regional structure, parallel to a fold seen as vegetated inverted U shapes immediately west of the southern tenements. A dome to the east controls part of the two northeast structures.

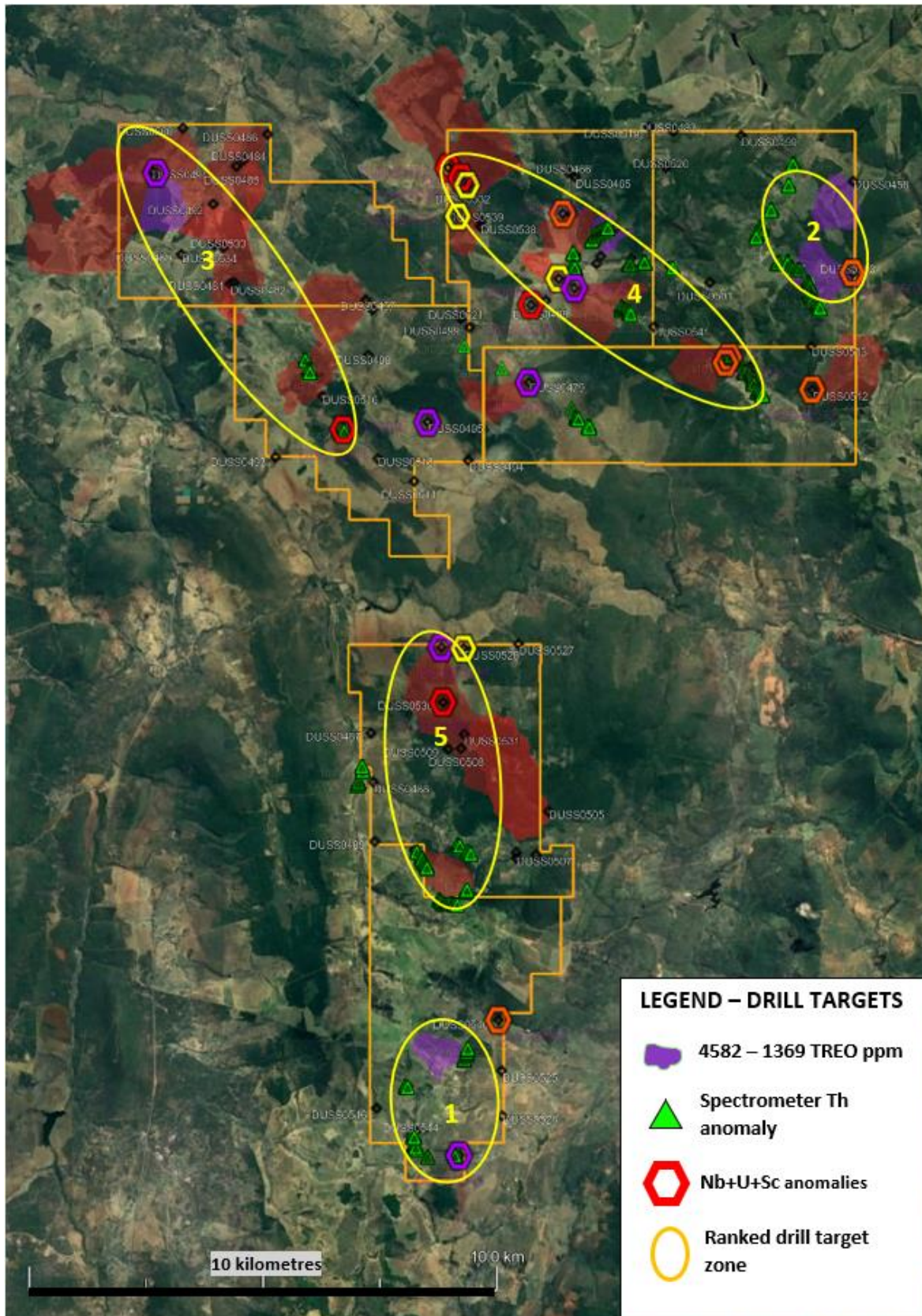


Figure 4. Ranked drilling target zones for first pass auger drilling followed up by diamond drilling of ultrahigh grade monazite mineralisation and Sonic or RC drilling of IAC resources. High grade stream sediment samples, coupled with the Nb-U-Sc anomalies is considered indicative of ultra-high grade hard rock mineralisation.

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 element, 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 950km² 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 km² 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 22 July 2024 Rare Earth (REE) drill targets defined at Down Under Project
2. GMN ASX Release 8 July 2024 Highly anomalous Widespread Rare Earths Assays and Radiometric anomalies confirmed on Down Under REE Project
3. GMN ASX Release 7 June 2024 Significant anomalies identified on Ronaldinho Project
4. GMN ASX Release 2 April 2024 GMN acquires Ronaldinho Rare Earths Project
5. GMN ASX Release 21 March 2024 GMN identifies rocks prospective for high grade REE
6. GMN ASX Release 15 February 2024 Exploration commences on Clay Hosted REE tenements
7. GMN ASX Release 2 February 2024 Down Under Rare Earths Project Update
8. GMN ASX Release 11 December 2023 Investor Presentation REE
9. GMN ASX Release 1 December 2023 Massive Prospective Brazil REE tenement applications.
10. Brazil Geological Survey (CPRM) website <https://geosgb.sgb.gov.br/> and the Brazil National Mining Agency (ANM) website <https://geo.anm.gov.br/portal/apps/webappviewer/index.html?id=6a8f5ccc4b6a4c2bba79759aa952d908>
11. Jitauna Project presentation. December 2023, .Gerson Romano, GR Consultoria em Prospecção Mineral Ltda
12. Google Earth, <https://earth.google.com/intl/earth/download/ge/agree.html>
13. SRTM, <https://www.earthdata.nasa.gov/sensors/srtm#:~:text=The Shuttle Radar Topography Mission,global dataset of land elevations.>

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
<i>Sampling techniques</i>	<i>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.</i> <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i> <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i> <i>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.</i>	<i>Radiometric traversing using a Medusa MS350 hand held spectrometer was carried out.</i> <i>Calibration was carried out in March 2024 and is valid for 3 years on the instrument used.</i> <i>Sample interval was set at 1 reading per second and readings averaged over 3 seconds.</i> <i>Channels recorded were U, Th, K, Cs and GPS location</i> <i>Style of mineralisation sought is Ion Adsorbed Clay type REE mineralisation as well as lag deposits of REE mineralisation derived from hard rock sources in the weathering profile.</i> <i>High grade hard rock deposits of REE hosted by mafic to ultramafic host rocks are also a style of mineralisation being sought.</i> <i>Stream sediment sampling was carried out in drainages over 500 metres long with spacing planned at approximate 1 km on drainages.</i> <i>Stream sediment samples weighed approximately 1 kg each. Sample is pre-processed 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</i>
<i>Drilling techniques</i>	<i>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</i>	<i>No drilling undertaken</i>

Criteria	JORC Code Explanation	Commentary
	<i>type, whether core is oriented and if so, by what method, etc).</i>	
<i>Drill sample recovery</i>	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i> <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i> <i>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.</i>	<i>No drilling undertaken</i>
<i>Logging</i>	<i>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.</i> <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i> <i>The total length and percentage of the relevant intersections logged.</i>	<i>No drilling undertaken</i> <i>Radiometric sampling is quantitative and dependent on instrument characteristics. Interpretation requires understanding of the immediate surface characteristics as readings only relate to the surface 30-45 cm depth.</i> <i>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.</i>
<i>Sub-sampling techniques and sample preparation</i>	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i> <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> <i>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i>	<i>No drilling undertaken</i> <i>All samples were collected at 1 kg bulks in the field, screened at approximately 2.5 mm then securely packaged</i> <i>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</i> <i>Sample representativity of the catchment was well represented in the -10 micron samples</i>

Criteria	JORC Code Explanation	Commentary
	<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>	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> <i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i> <i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i>	<i>Radiometric traversing using a Medusa MS350 hand held spectrometer was carried out. Calibration was carried out in March 2024 and is valid for 3 years on the instrument used.</i> <i>Sample interval was set at 1 reading per second and readings averaged over 3 seconds.</i> <i>Channels recorded were U, Th, K, Cs and time, total count, count rate, GPS location, pressure, temperature and humidity</i> <i>Duplicated traverses gave very similar thorium profiles.</i> <i>The analytical techniques used are four acid digest and ICP-MS, the 4 acid digest method is 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. ALS codes used were MS41L-REE.</i> <i>No standards duplicates or blanks accompany these initial samples that will not be used other than to indicate potentially interesting REE and REE pathfinder element contents of the variably weathered samples</i> <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</i>
<i>Verification of sampling and assaying</i>	<i>The verification of significant intersections by either independent or alternative company personnel.</i> <i>The use of twinned holes.</i> <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> <i>Discuss any adjustment to assay data.</i>	<i>No samples analysed</i> <i>Data were downloaded from the spectrometer as csv files, organised into time order and then interpreted.</i> <i>No adjustments were made to any data.</i> <i>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 REE and other valuable elements in grab samples</i>

Criteria	JORC Code Explanation	Commentary
<i>Location of data points</i>	<i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i> <i>Specification of the grid system used.</i> <i>Quality and adequacy of topographic control.</i>	<i>Data points are measured by hand held Garmin 65 Multiband instruments with accuracy to 3 metres and by the GPS built into the spectrometer.</i> <i>Grid system used is SIRGAS 2000 which is equivalent to WGS84 for hand held GPS instruments and latitude and longitude by the spectrometer</i> <i>Elevations are measured by hand held GPS and the GPS built into the spectrometer and are sufficiently accurate for this stage of exploration.</i> <i>Stream sediment sample sites are measured by hand held Garmin 65 multiband instruments with 3 metre accuracy in open conditions.</i>
<i>Data spacing and distribution</i>	<i>Data spacing for reporting of Exploration Results.</i> <i>Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i> <i>Whether sample compositing has been applied.</i>	<i>Radiometric data sampling was taken a 1/second and averaged over 3 readings. This gives points at approximately 1.1-1.3 metre readings averaged over a 3.3-4 metre interval.</i> <i>Data spacing is sufficient to search for the narrow targets that constitute the high grade hard rock sourced targets as well as the diffuse IAC type targets.</i> <i>Stream sediment sampling was carried out at approximately 1 km intervals on drainages over 500 metres long.</i>
<i>Orientation of data in relation to geological structure</i>	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i> <i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i>	<i>No drilling undertaken.</i> <i>Main target is expected to be flat lying or gently dipping, reflecting pre laterite surfaces with the high grade targets being 5-10 metres wide, steeply dipping and with unknown orientation.</i> <i>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.</i>
<i>Sample security</i>	<i>The measures taken to ensure sample security.</i>	<i>Radiometric readings taken are downloaded from the spectrometer daily, kept in GMN computers all of which are password protected. Stream sediment samples are taken to the GMN laboratory daily and kept under</i>

Criteria	JORC Code Explanation	Commentary
		<i>secure conditions. Prepared samples are securely packed and dispatched to ALS by reliable couriers or hand delivered by GMN personnel.</i>
<i>Audits or reviews</i>	<i>The results of any audits or reviews of sampling techniques and data.</i>	<i>No audits or reviews, except for comparison with known mineralised zone over which the orientation traverses and stream sediments sampling was undertaken.</i>

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>	<i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i> <i>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</i>	<i>GMN holds 62 tenements in the Down Under Project. GMN has 100% ownership of the 57 granted tenements and 5 tenement applications.</i> <i>There are no known serious impediments to obtaining a licence to operate in the area.</i>
<i>Exploration done by other parties</i>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	<i>No known exploration for REE has been carried out on the exploration licence application areas. No known exploration for other minerals is known over the licence areas except for one underground excavation for muscovite.</i>
<i>Geology</i>	<i>Deposit type, geological setting and style of mineralisation.</i>	<i>The mineralisation in the region consists of Ionic adsorbed clay and residual heavy mineral concentrations of REE elements associated with deeply weathered profiles over Middle Archean ortho and para granulite facies rocks and Late Archean high K ferroan A type granitoid sequences. The Archean sequences were metamorphosed to granulite facies in the Transamazonian orogeny and then intruded by Paleoproterozoic post tectonic charnockitic granites. Post tectonic potassium rich pegmatites that crosscut regional gneissic foliation are also present.</i> <i>Concentrations of REE minerals are present in the Later Archean A type granitoids and in small mafic intrusive bodies which can host very high grade monazite hosted REE-Nb-U-Sc mineralisation. Mineralisation is predominantly Ionic Adsorbed Clay type. Post tectonic intrusive bodies are known to carry REE mineralisation so the age of mineralisation and the host rocks may be very different.</i>

Criteria	JORC Code Explanation	Commentary
<i>Drill hole Information</i>	<i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</i> <i>o easting and northing of the drill hole collar</i> <i>o elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i> <i>o dip and azimuth of the hole</i> <i>o down hole length and interception depth</i> <i>o hole length.</i> <i>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</i>	<i>No drilling undertaken</i> <i>Locations of all stream sediment samples and of anomalies are shown on maps in this report.</i>
<i>Data aggregation methods</i>	<i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</i> <i>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</i> <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	<i>No drilling undertaken, no cut off grades applied</i> <i>Sample aggregation and averaging over 3 second intervals has been undertaken, giving reported samples at 3.3-4 metre spacings.</i> <i>All sample results were included in the interpretations of the stream sediment data and no cut off was applied to results.</i>
<i>Relationship between mineralisation widths and</i>	<i>These relationships are particularly important in the reporting of Exploration Results.</i> <i>If the geometry of the mineralisation with respect to the drill hole angle</i>	<i>No drilling undertaken</i>

Criteria	JORC Code Explanation	Commentary
<i>intercept lengths</i>	<i>is known, its nature should be reported.</i> <i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</i>	
<i>Diagrams</i>	<i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i>	<i>No drilling undertaken; plan views of tenement geochemical sample and radiometric data locations are provided and a table of all radiometric traverses.</i>
<i>Balanced reporting</i>	<i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i>	<i>Selected traverse profiles of Thorium give all relevant results for the profile traversed.</i>
<i>Other substantive exploration data</i>	<i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i>	<i>Artisanal mining for muscovite in underground workings has been carried out at one location recorded by the Thin layers of alluvium were observed to reduce radiometric readings to background levels.</i>
<i>Further work</i>	<i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>	<i>Additional work is continuing regional stream sediment sampling, radiometric mapping, channel sampling and reconnaissance and grid soil auger sampling and mapping of outcrop to define areas for resource drilling.</i>