

ASX Announcement

24 September 2025

Expansion and Acceleration of Exploration Program at Catalyst Ridge REE - Antimony Project in World Class Mountain Pass District, California, USA

Great Northern Minerals Ltd (ASX:GNM) (GNM or the Company) is pleased to announce that it has significantly expanded the Catalyst Ridge Project exploration program to include the 96 additional claims identified as announced on 9 September 2025. The Company plans to accelerate its initial exploration program of work with field crews expected to be mobilised imminently.

HIGHLIGHTS:

- The exploration program for the Catalyst Ridge Project has now been expanded to include all 215 lode claims, covering a total area of approximately 18 km².
- The expanded exploration program will focus on heavy mineral, sediment stream and rock ship sampling with a particular focus on three high priority Rare Earth Elements (REE) and Antimony target areas based on structures and alteration interpreted from the geophysical review. The field program will collect of up to 250 samples across multiple high-priority zones.
- Samples to be sent to American Analytical Services in Idaho, with assay results expected within 2 weeks of submission. Results will allow for detailed geochemical and structural analysis to inform more targeted future exploration phases.
- Appointment of experienced senior geologist, Robert Kell, to lead the on-ground exploration team. Mr Kell has over 45 years of experience as a geologist, focused on North America exploration for base and precious metals deposits.

Non-Executive Chairman, Eddie King, commented: *"We are excited to commence the initial fieldwork program at the Catalyst Ridge Project, marking a significant step forward in our exploration efforts. This early-stage campaign builds on encouraging geological indicators identified during our preliminary desktop review.*

Our key objective is to validate surface mineralisation, which will inform and refine our future exploration strategy. The insights gained from this program will be critical in shaping the next phase of targeted fieldwork. We remain confident in Catalyst Ridge's potential to develop into a major Rare Earth Elements and Antimony asset."

Target Areas for Initial Exploration Program

GNM has completed a comprehensive desktop geological study across its Catalyst Ridge Project in California, USA. The work interpreted various highly prospective structures and associated alteration from acquired geophysics data (refer to ASX announcements dated 22 August 2025 and 9 September 2025). A target ranking exercise was conducted to focus on the first field campaign and has revealed three high-priority targets for REE and Antimony across the project area, providing a strong foundation for the upcoming fieldwork program. These targets were defined through an integrated desktop geological study and based on feedback from the US based Geological team.

The three target areas for the initial exploration work include:

- **Target 1:** This has been selected based on prominent NW-structure sub-parallel to structures that control the Mountain Pass REE deposit (Figure 2). This area also includes interesting copper occurrences along the trend line that are worthy of follow up given REE deposits can be associated with copper. Also, radiometric uranium anomalies occur on the eastern and western edges of the target (Figure 4) that are highly prospective for REE given Mountain Pass REE deposit is also associated with uranium.
- **Target 2:** The area has been identified as a high priority target area based on prominent NW-structure sub-parallel to mountain pass controlling structures that appear to extend to the northwest close to the Colosseum gold deposit and antimony occurrences (Figure 2). The Desert Antimony occurrence further supports the prospectivity of the target area. In addition, this area is located central to the edge of 3 gravity anomalies (Figure 3) which is similar to what is observed at Mountain Pass so the area may also be prospective for REE as well as antimony.
- **Target 3:** This area has been selected due to its potential for both antimony-gold and/or REE mineralisation since the area is located in an attractive complex geological setting where two prominent NW- and NNW structures that run sub-parallel to Mountain Pass controlling structures appear to intersect (Figure 2). The area is also located central to the edges of 2 gravity anomalies which is a similar setting to Mountain Pass (Figure 3) and displays prominent magnetic intensity which indicates a potential for strong magnetite alteration similar to the Colosseum gold deposit (Figure 2).

In addition to more detailed work at the three target areas, a comprehensive stream sediment sampling program is planned across the wider project area. The stream sediment sampling has been planned as a regional exploration strategy that has worked very effectively in the past that aims to sample washes and arroyos (drainages) as they will carry all mineralization and also help pick up covered areas or areas not surface traversed and provide focus for a phase two geologic work on the property.

Next Steps

This fieldwork is expected to mobilise at the end of this month and continue for approximately 3 weeks. Following the completion of initial fieldwork at the Catalyst Ridge Project, collected samples will be submitted to American Analytical Services in Idaho for assay. Results are expected within approximately two weeks of submission.

Upon receipt of results, GNM will undertake a detailed analysis of the geochemical data to define and rank priority exploration targets. Subject to assay outcomes, the Company will advance to the next

phase of exploration, which will include detailed geological mapping, targeted surface sampling on the new targets defined, followed by focused drilling to further assess the mineralisation potential.

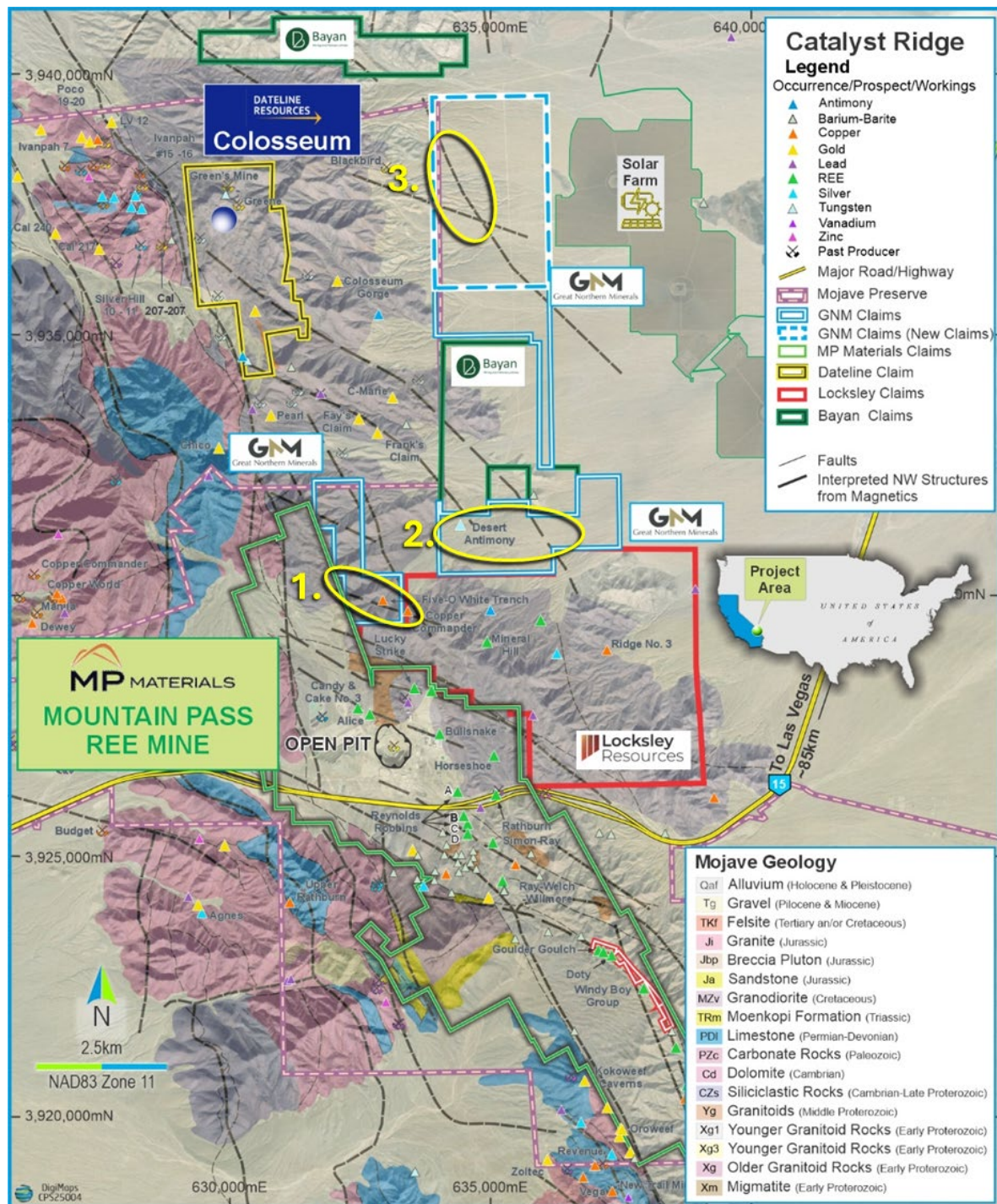


Figure 1: Interpreted bedrock geology map from the US Geological Survey¹ showing the location of the recently acquired GNM claims in relation to the Mountain Pass REE deposit, associated nearby mineral occurrences and other companies operating in the area.

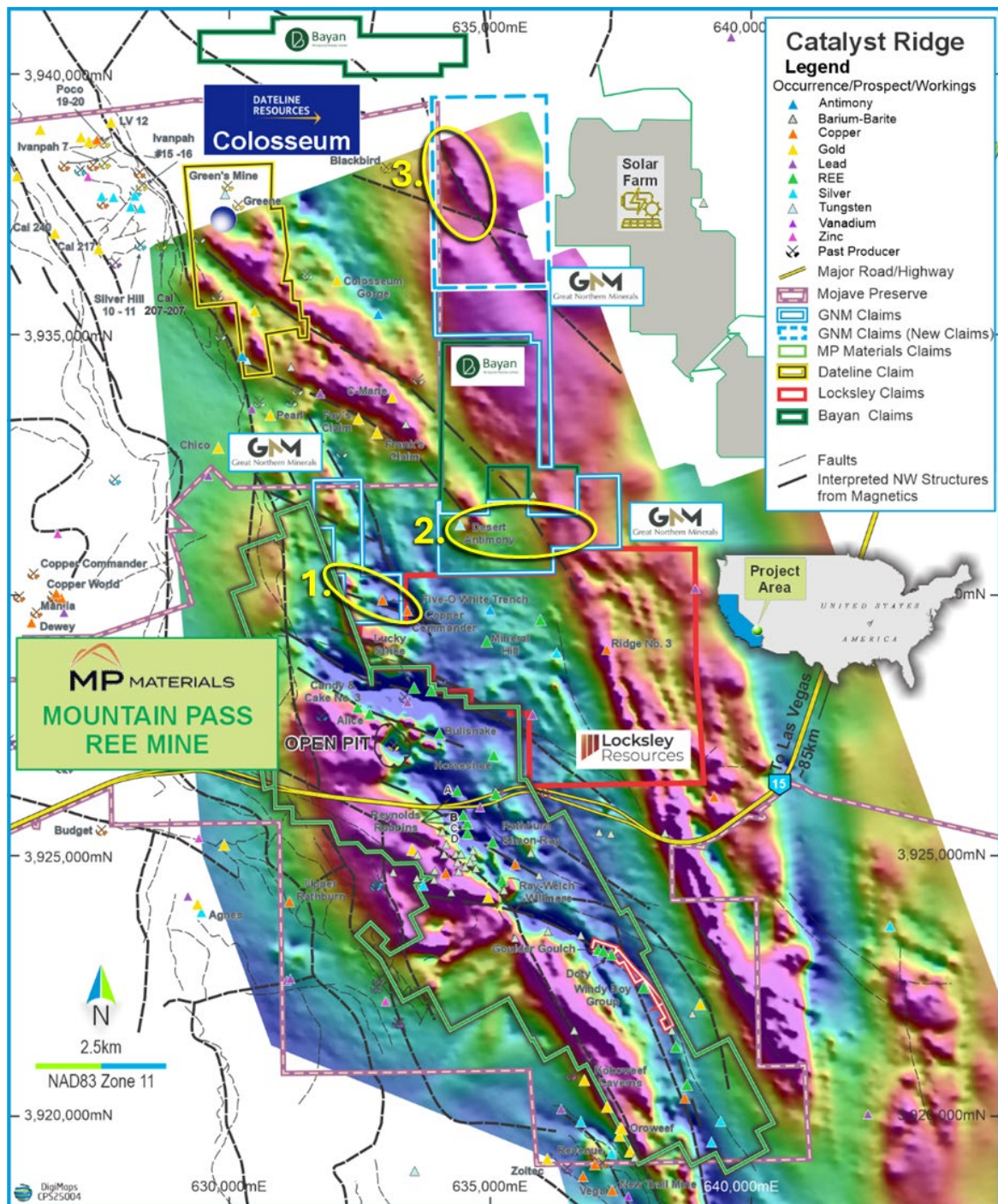


Figure 2: Airborne magnetic (TMI) map showing the location of the Catalyst Ridge GTM claims including the new claims, interpreted structures, Mountain Pass REE deposit, associated nearby mineral occurrences and other companies operating in the area.

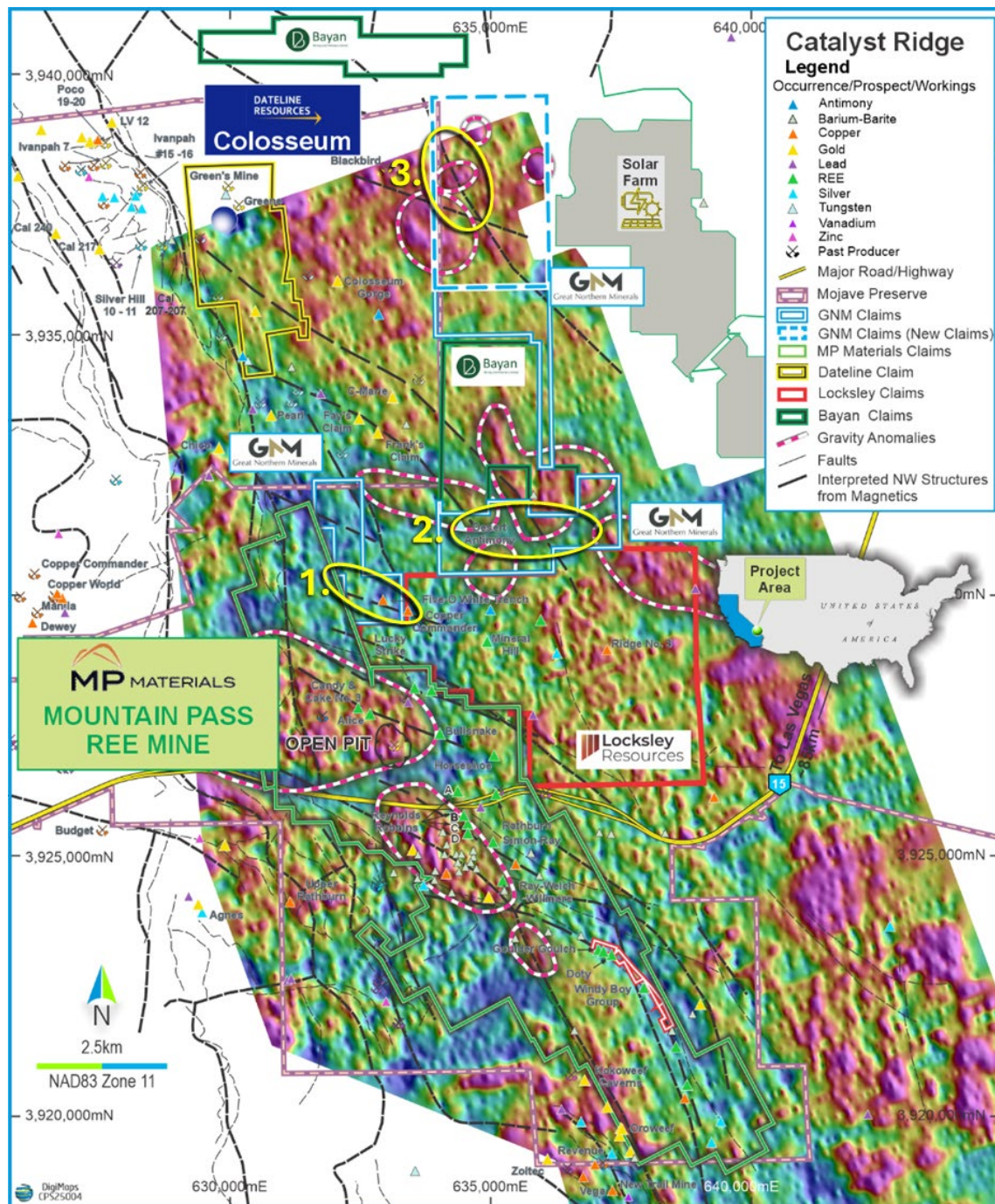


Figure 3: Airborne HeliFALCON Airborne Gravity Gradiometer (2km) map showing the location of the Catalyst Ridge GNM claims including the new claims as well as the Mountains Pass REE deposit, associated nearby mineral occurrences and other companies operating in the area.

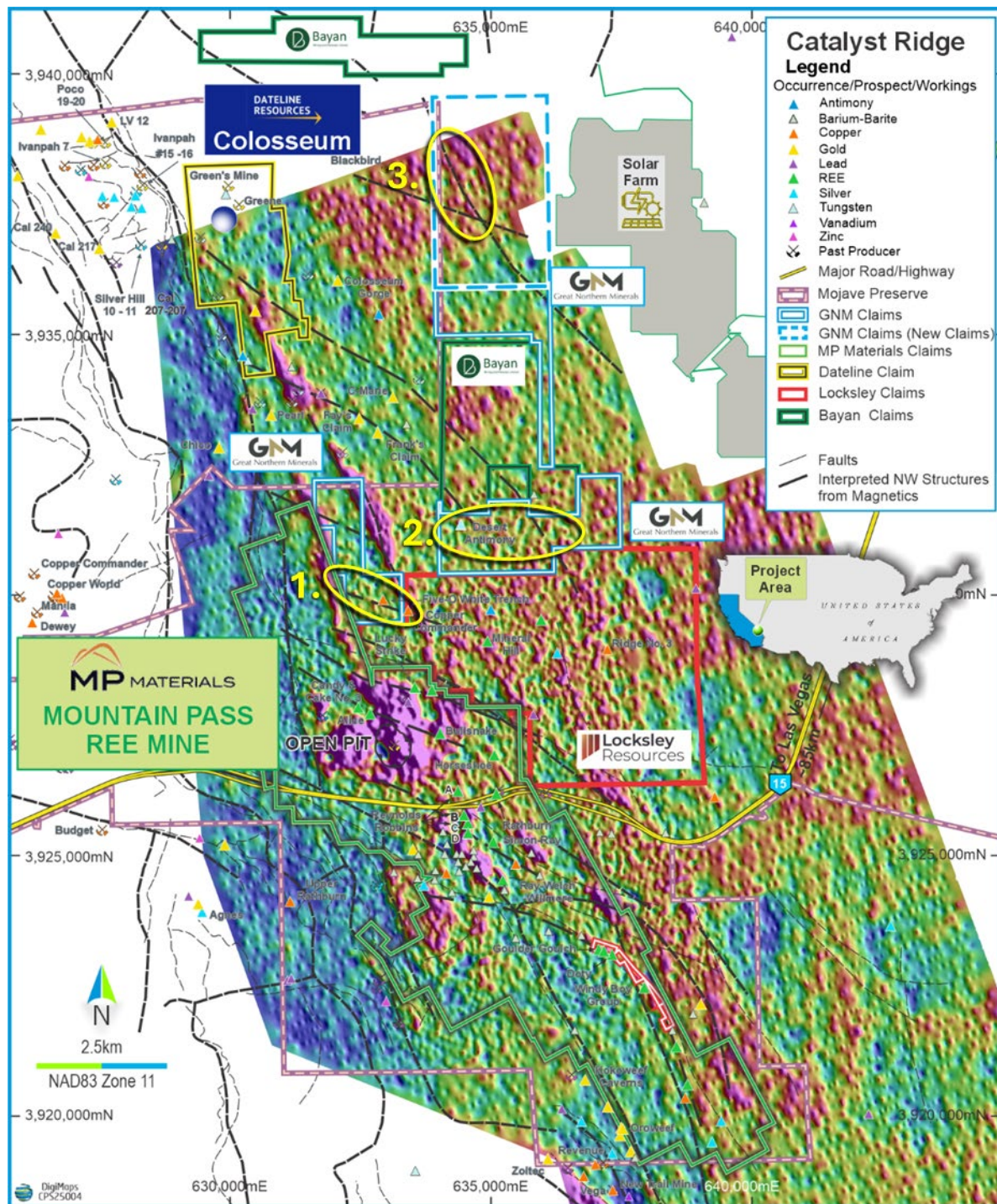


Figure 4: Airborne Radiometric Uranium map showing the location of the Catalyst Ridge GNM claims including the new claims.

Forward Looking and Cautionary Statements

Forward looking statements, opinions and estimates included in this announcement are based on assumptions and contingencies which are subject to change without notice, as are statements about market and industry trends, which are based on interpretations of current market conditions. Forward looking statements are provided as a general guide only and should not be relied on as a guarantee of future performance. Forward looking statements may be affected by a range of variables that could cause actual results to differ from estimated results, and may cause the Company's actual performance and financial results in future periods to materially differ from any projections of future performance or results expressed or implied by such forward looking statements.

Competent Person's Statement

The information in this announcement that relates to Exploration Results is based on information compiled under the supervision of Leo Horn, a technical advisor to Great Northern Minerals Limited. Mr Horn is a member of the Australian Institute of Geoscientists and has sufficient experience of relevance to the styles of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves." Mr Horn consents to the inclusion in this announcement of the matters based on his information in the form and context in which they appear.

This announcement has been authorised by the Board of Great Northern Minerals Limited.

*****ENDS*****

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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.	No drilling or surface geochemistry reported in this announcement.
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).	Drilling not reported in this announcement.
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. - 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.	Drilling not reported in this announcement.

Criteria	JORC Code explanation	Commentary
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.	Drilling not reported in this announcement.
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.	Drilling not reported in this announcement.
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 levels of accuracy (ie lack of bias) and precision have been established.	No drilling or surface geochemistry reported in this announcement.
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.	Drilling not reported in this announcement.
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	Location of the USGS HeliFALCON™ Airborne Gravity Gradiometer Magnetic, and Radiometric Survey data projected grid coordinates have been supplied in UTM Zone 11N projection, referenced to the NAD83 datum.

Criteria	JORC Code explanation	Commentary
<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>	The USGS HeliFALCON™ Airborne Gravity Gradiometer Magnetic, and Radiometric Survey data was run at 70-250 degrees traverse line direction and 100-200m traverse line spacing which is appropriate for the geology and structures known in the district.
<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>	The USGS HeliFALCON™ Airborne Gravity Gradiometer Magnetic, and Radiometric Survey data was run at 70-250 degrees traverse line direction and 100-200m traverse line spacing which is appropriate for the geology and structures known in the district. The data is considered appropriate and significant for the detection of subtle gravity and magnetic variation in the bedrock geology and the reporting of exploration results.
<i>Sample security</i>	<i>The measures taken to ensure sample security.</i>	No sampling reported in this announcement.
<i>Audits or reviews</i>	<i>The results of any audits or reviews of sampling techniques and data.</i>	Audits and reviews have not been undertaken.

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>	- 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 license to operate in the area.	- Catalyst Ridge comprises 215 lode claims which are 100% held by American Cheetah Metals Inc. Following settlement of the Agreement to acquire 100% of the Catalyst Ridge (ASX: 22 August 2025), American Cheetah Metals will be a subsidiary of Great Northern Minerals Ltd. - The 215 claims have been physically staked and filed with BLM confirmation pending.
<i>Exploration done by other parties</i>	Acknowledgment and appraisal of exploration by other parties.	There is no known work by previous explorers of significance over the Catalyst Ridge project areas
<i>Geology</i>	Deposit type, geological setting and style of mineralisation.	Mineralisation has not yet been identified at Catalyst Ridge. The targeted deposit styles are the carbonatite-hosted REE deposits such as Mountain Pass and magnetite-breccia-hosted gold deposits such as Colosseum and nearby associated antimony mineralisation which are considered to be genetically linked.
<i>Drill hole Information</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: - 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.	Drilling not reported in this announcement
<i>Data aggregation methods</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. - Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation	Drilling not reported in this announcement.

Criteria	JORC Code explanation	Commentary
	<i>should be stated and some typical examples of such aggregations should be shown in detail.</i> The assumptions used for any reporting of metal equivalent values should be clearly stated.	
<i>Relationship between mineralisation widths and intercept lengths</i>	- 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').	Mineralisation has not yet been identified on the project within rock samples or drilling.
<i>Diagrams</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.	See relevant maps in the body of this announcement.
<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 available data has been presented in figures.
<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.	- In 2016 CGG conducted a high-sensitivity aeromagnetic and HeliFALCON™ Airborne Gravity Gradiometer (AGG) survey over the Mojave Desert survey area under contract with USGS. This data is open source and has been downloaded by GNM and utilised to produce a suite of standard images and presented in this announcement. - The geology and mineral occurrences displayed in Figure 1 are sourced from open file information from the USGS see: https://www.usgs.gov/tools/mineral-resources-online-spatial-data-access-tool
<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.	Further work is detailed in the body of the announcement.