

ASX Announcement

19 December 2025

Significant discovery of 1km Antimony vein with surface rock chip sample assays up to 7.1% Sb

Great Northern Minerals Ltd (ASX:GNM) (GNM or the **Company**) is pleased to announce it has received rock assay results from the initial sampling program at its Catalyst Ridge Project. In addition, the Company has submitted the required applications to strategically expand the overall footprint of the Catalyst Ridge Project to 20.48km².

HIGHLIGHTS:

- The Company has submitted the required applications for a mineral prospecting permit to **expand the footprint of the Catalyst Ridge Project**.
- The expanded area is considered **highly prospective for Antimony** with the on-ground exploration team identifying a **quartz-stibnite (antimony sulphide)** vein that extends for up to 1km strike and observed widths of up to 6m.
- Initial rock chip samples have returned highlight assays up to **7.1%, 6.2% and 3.5% antimony** with other associated metals up to 23.3 g/t silver and 0.4% tungsten.
- Additional samples will be taken in the field before the end of the year with results expected in early 2026.
- The quartz-antimony vein structure appears to be in a **similar geological and structural setting to the Colosseum Gold deposit** and therefore also considered highly favourable for gold mineralisation at depth.
- The Company also **plans to conduct DDIP** to detect the depth of sulphide mineralisation to **firm up drill targets** for zoned **antimony near-surface as well as gold down dip**.

Non-Executive Chairman, Eddie King, commented: *"The expansion of the Catalyst Ridge Project to include the additional land holding, combined with the discovery of a significant stibnite-quartz vein and high-grade antimony in initial samples, reinforces the strategic potential of this region. We are excited about the geological similarities to known deposits in the area and look forward to advancing exploration to unlock further value for our shareholders."*



Figure 1: Photograph of Sample 258578 (see Table 1) from the Antimony Gulch adit which displays a quartz vein with approximately 8% coarse bladed stibnite (antimony sulphide) which assayed 6.16% antimony, 6.9 g/t silver.

Geochemical Sampling Program – Antimony Gulch Quartz-Stibnite Vein

A major field program was mobilised in the field in October 2025 which focused on stream sediment sampling across all the Catalyst Ridge tenure where a total of 125 samples were collected. The aim of this program was to identify any highly elevated areas for REE that require further investigation. At the time of writing the stream sediment data is still under review and QAQC. The program also involved assessing the potential of areas of open ground adjacent to the Catalyst Ridge claims where a total of 8 rock samples were conducted which were taken at the prospect now known at Antimony Gulch.

During the program an old adit mine shaft was observed in open ground which appeared to be mining stibnite antimony sulphide minerals that occur within a quartz veins. Samples from the mine dumps in some cases displayed spectacular coarse bladed stibnite minerals up to 6cm in length (Figure 1). The vein at the adit appears to be over 1m in width and strikes north-northwest and dipping steeply to the east. Interestingly the vein occurs within a felsic quartz-K-feldspar-plagioclase granitic or rhyolite intrusive. Assays from the dump material out of the mine returned assays of:

- 258579: **7.06% antimony**, 23.3 g/t silver and 0.41% tungsten;
- 258578: **6.16% antimony**, 5.2 g/t silver;
- 258576: **3.53% antimony**, 12.6 g/t silver; and
- 258577: **1.9% antimony**, 5.2 g/t silver.

Walking north-northwest and steadily up hill, the Antimony Gulch quartz-stibnite vein can be traced for approximately 1 kilometre and offset by various east or northeast-trending cross faults (Figure 2).

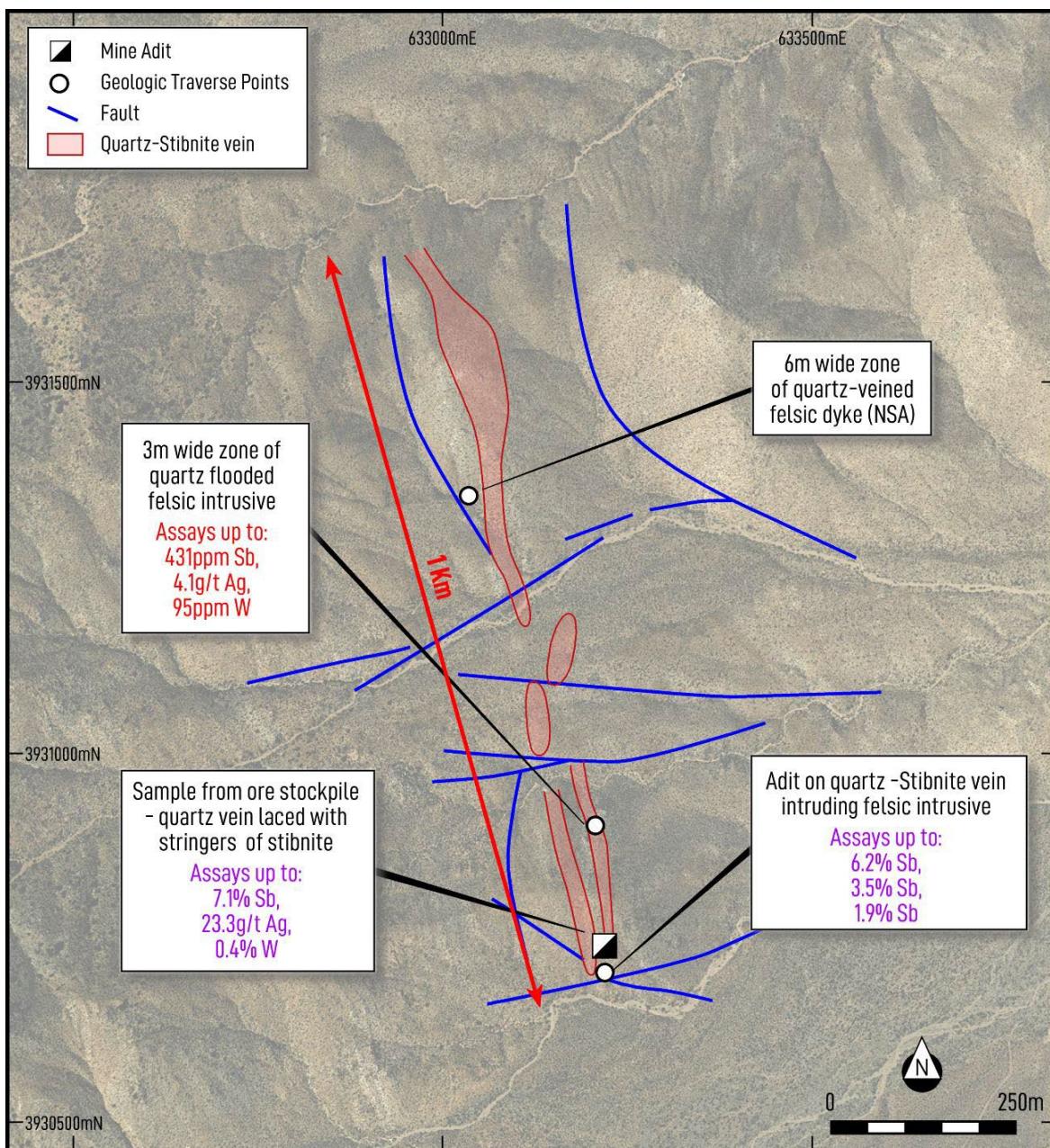


Figure 2: Simplified map of the Antimony Gulch quartz-stibnite vein intruding felsic porphyry intrusion showing highlight assay results.

Due to time constraints, only 6 other samples were taken along the vein to the north where the vein pinches and swells with widths up to 6m in places. Visible stibnite minerals have not yet been observed exposed at surface during this limited timeframe however assays indicate the vein remains highly elevated in antimony as well as silver and tungsten with samples up to **431 ppm antimony, 4.1 g/t silver and 94.3 ppm tungsten** within the central portions of the vein (Figure 2). More detailed mapping and sampling work is required to assess this potential. It should also be noted that the adit occurs at a lower elevation than many other parts of the exposed vein to the north suggesting a classic vertical zonation pattern displayed by many mineral deposits.

Discussion of the Antimony Gulch Assay Results & Ongoing Work Programs

The Antimony Gulch vein displays many characteristics of the upper levels of a classic low-sulphidation epithermal mineral deposit system. Interestingly, the area appears to occur along a prominent north-northwest geological trend visible on the satellite imagery from the Colosseum epithermal-style breccia deposit (1Moz Au) held by Dateline (Figure 3).

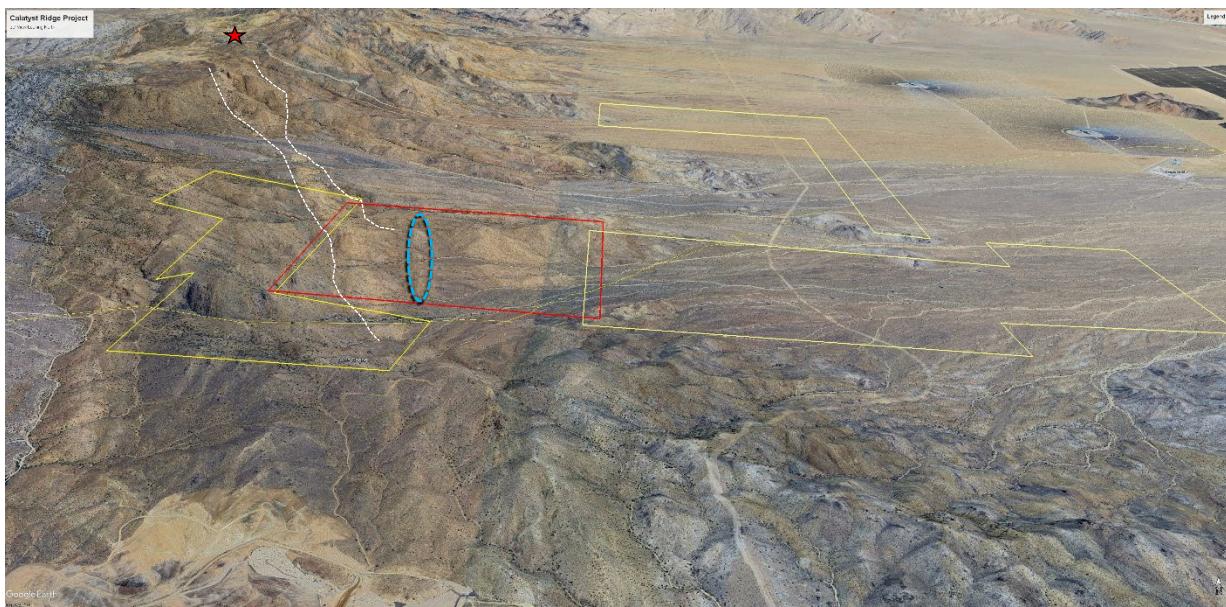


Figure 3: Google earth 3D image looking north showing the Antimony Gulch vein (blue dash oval), GNM Claims (yellow), GNM new application (red), Colosseum gold mine (red star), geological trend (white dash) and Mountain Pass Mine area in foreground (lower left).

Given this relationship, GNM believes the Antimony Gulch is prospective for 2 styles of mineral deposits:

1. Antimony sulphide (stibnite) mineralisation hosted in quartz veins very close to surface that may display some similarities to the nearby Desert Antimony Mine Prospect Locksley Resources Ltd (ASX: LKY) Mojave Project; and
2. Epithermal and breccia-style gold-silver deposits at depth. A suggested possible model for exploration could be represented in Figure 4.

Future exploration programs will focus on further detailed mapping and sampling of the quartz-stibnite vein followed by some DDIP (Dipole-Dipole-Induced Polarisation) surveys designed to detect disseminated sulphide accumulation at various depths that could form drill targets. This program would be designed to assist in defining targets for a drill program that will be mobilised shortly thereafter pending drill permits.

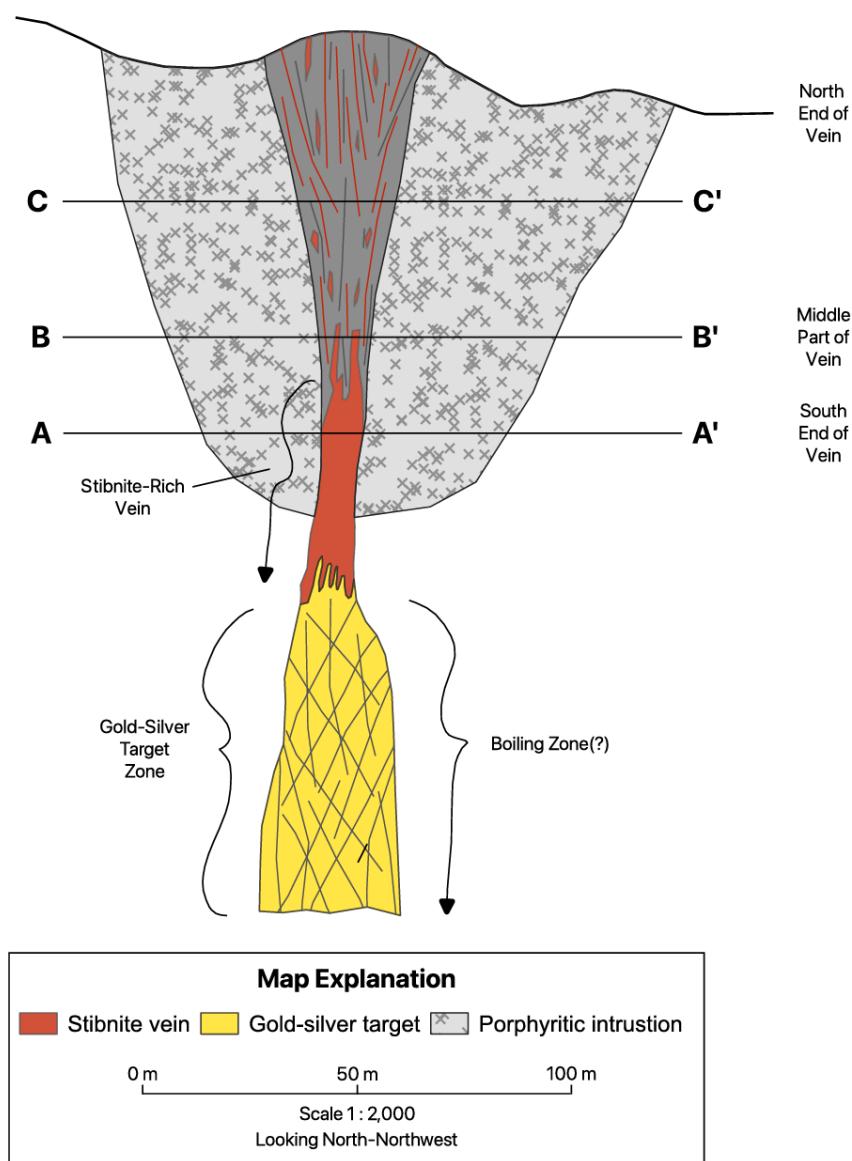


Figure 4: Conceptual Model for the Antimony Gulch prospect

Expanded Project Area

The new project area directly adjoins two of GNM existing claims area and totals 640 acres (Figure 5). The new area expands the overall footprint of the Catalyst Ridge Project to 20.48km². A mineral prospecting permit has been filed with the California State Lands Commission located in Sacramento, California. The Company has paid the required application fee and has been provided with confirmation that the application has been accepted. The permit application is in the process of being assessed by the California State Lands Commission. A mineral prospecting permit will be awarded once all conditions of the application have been satisfied, however there is no guarantee that the permit will be granted with the permit being subject to final confirmation by the California State Lands Commission. GNM will provide an update to the market once the mineral prospecting permit has been approved by the California State Lands Commission.

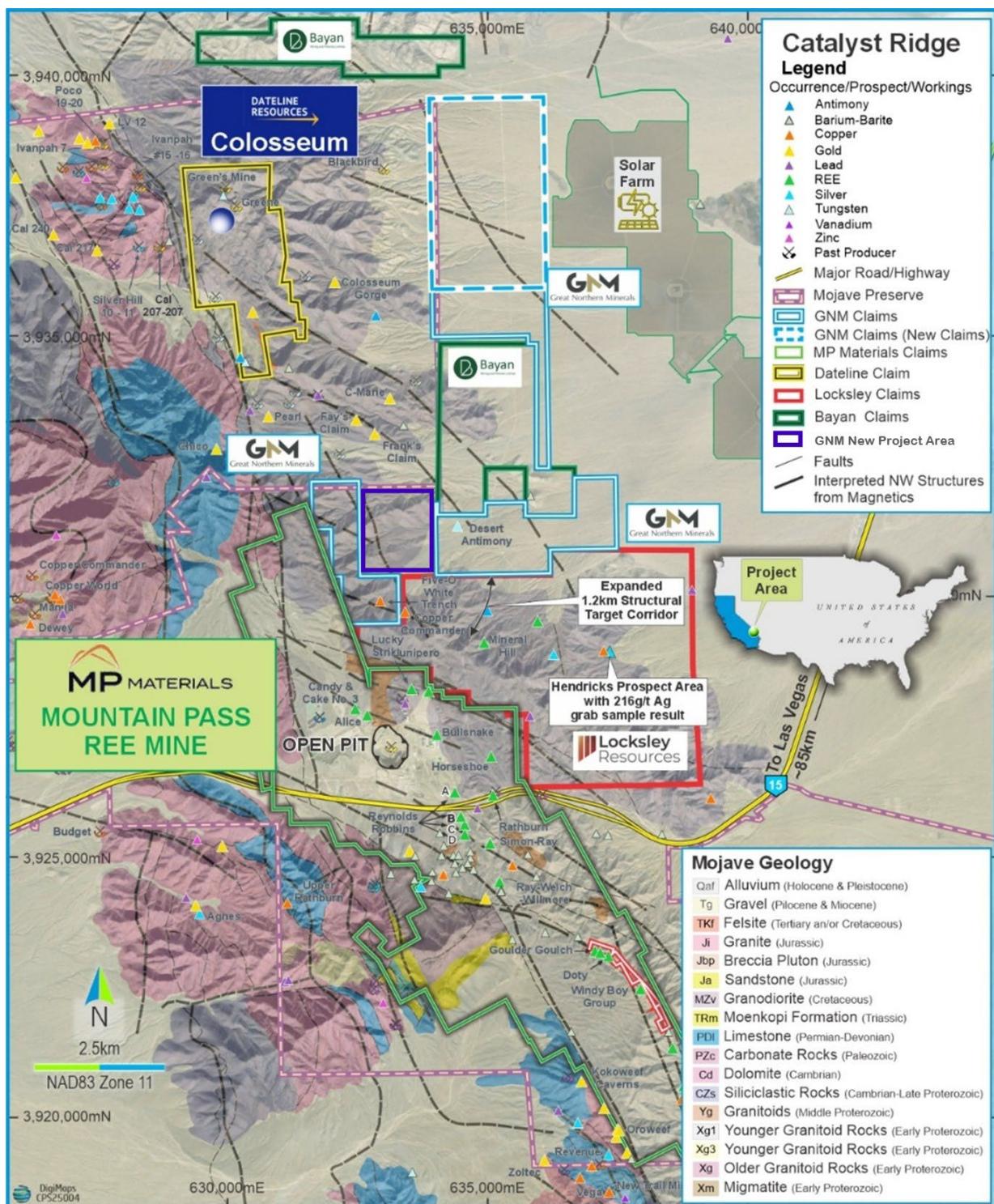


Figure 5: Interpreted bedrock geology map from the US Geological Survey¹ showing the location of GNM's claims existing claims and the new project area in relation to the Mountains Pass REE deposit, associated nearby mineral occurrences and other companies in the area.

References

¹Denton., K. Geophysical characterization of a Proterozoic REE terrane at Mountain Pass, eastern Mojave Desert, California, USA. USGS.

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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Appendix 1 – Rock Assay Results Catalyst Ridge Project

Sample Number	Easting (m)	Northing (m)	As NAD83 / UTM 11N	Bi <5 ppm	Cd <1 ppm	Co <2 ppm	Cu <2 ppm	Mo <2 ppm	Sb <5 ppm	W <5 ppm	Zn <2 ppm
258575	633222	3930702	15.0	<5.00	<1.00	15.7	36.4	<2.00	<5.00	7.62	55.7
258576	633222	3930702	37.0	<5.00	<1.00	4.98	23.8	<2.00	35300	<5.00	75.5
258577	633222	3930702	14.9	<5.00	<1.00	3.58	12.5	<2.00	19000	<5.00	120
258578	633222	3930702	25.2	<5.00	<1.00	3.22	15.7	2.88	61600	<5.00	64.6
258579	633220	3930738	37.5	<5.00	<1.00	2.02	32.0	<2.00	70600	4120	802
258589	633221	3930705	31.4	10.6	<1.00	10.4	<2.00	<2.00	431	94.3	79.7
258590	633193	3930852	<5.00	<5.00	<1.00	2.40	3.38	<2.00	120	15.5	19.9
258591	633155	3930881	<5.00	<5.00	<1.00	<2.00	4.58	<2.00	217	9.80	7.80

Sample Number	Easting (m)	Northing (m)	Au NAD83 / UTM 11N	Ag 0.060 ppm
258575	633222	3930702	<0.060	<3.00
258576	633222	3930702	<0.060	12.6
258577	633222	3930702	<0.060	5.21
258578	633222	3930702	<0.060	6.86
258579	633220	3930738	<0.060	23.3
258589	633221	3930705	<0.060	4.11
258590	633193	3930852	<0.060	<3.00
258591	633155	3930881	<0.060	6.86

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>	<ul style="list-style-type: none"> <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. 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> 	<ul style="list-style-type: none"> Rock sampling by GNM is mainly outcrop rock samples, however in the absence of outcrop some samples have been taken from historical workings that are interpreted to be sourced close to outcrop. All sample types and descriptions were carefully recorded by the geologist. No drilling results reported in this announcement.

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Criteria	JORC Code explanation	Commentary
<i>Drilling techniques</i>	<ul style="list-style-type: none"> <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 type, whether core is oriented and if so, by what method, etc).</i> 	<ul style="list-style-type: none"> Drilling not reported in this announcement.
<i>Drill sample recovery</i>	<ul style="list-style-type: none"> <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> 	<ul style="list-style-type: none"> Drilling not reported in this announcement.

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Criteria	JORC Code explanation	Commentary
<i>Logging</i>	<ul style="list-style-type: none"> <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> 	<ul style="list-style-type: none"> Rock chip samples were logged in the field by qualified geologists, noting lithology, alteration, percentage of any ore minerals observed.
<i>Sub-sampling techniques and sample preparation</i>	<ul style="list-style-type: none"> <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>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> 	<ul style="list-style-type: none"> No sub-sampling was conducted for rock samples. Duplicates taken for 7 stream sediment samples throughout the sample batches to check for repeatability. Rock sampling is considered a reconnaissance sampling procedure to assess the potential for antimony minerals. The results do not represent the overall grade. More representative channel sampling and drilling required to evaluate the average grade across the vein.
<i>Quality of assay data and laboratory tests</i>	<ul style="list-style-type: none"> <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> 	<ul style="list-style-type: none"> The 125 stream sediment and 8 rock chip samples collected and referred to within this announcement were systematically sampled and numbered by the field team, and samples were submitted to American Analytical Services in Idaho at the completion of the sampling program. All samples were analysed by 35 multi-element ICP suite using M-ICP-35-4A (4-acid digest ICP

	<ul style="list-style-type: none"> 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. 	<p>analysis) and REEs were also assayed for stream samples using M-ICPMS-RE-4A (4-acid digest ICP analysis).</p> <ul style="list-style-type: none"> Analysis was undertaken for gold and silver by fire assay (FA-Ag/Au) for 8 rock chip samples. American Analytical Services laboratories are accredited to ISO/IEC 17025:2017.
Verification of sampling and assaying	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> No new drilling results reported in this announcement No adjustment to the data completed Data has been reviewed by the Competent Person.
Location of data points	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> All sample locations were located by handheld GPS (± 5 m accuracy) and plotted in NAD83 / UTM Zone 11N. Elevation data not recorded from handheld GPS due to inaccuracy, any follow up drilling or channel sampling will utilize a D-GPS to collect accurate elevation data

Criteria	JORC Code explanation	Commentary
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> <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> 	<ul style="list-style-type: none"> Rock samples were taken at selected outcrops and historic occurrences and workings where exposed and available for sampling. More sampling required to establish the true width of the veins and also to establish continuity. No drilling or channel composite samples reported in this announcement. Data spacing is variable. Sampling is not sufficient to calculate a mineral resource estimate. Sample compositing has not been applied.
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> <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> 	<ul style="list-style-type: none"> Rock samples were taken at selected outcrops and historic occurrences and workings where exposed and available for sampling. Veins at Antimony Gulch are dipping steeply to the east-northeast and striking north-northwest.. More detailed sampling required to establish the true width of the veins and also to establish continuity. No drilling or channel composite samples reported in this announcement. Stream sediment sampling was reconnaissance in nature and targeted drainages with potential upstream mineralisation.
<i>Sample security</i>	<ul style="list-style-type: none"> <i>The measures taken to ensure sample security.</i> 	<ul style="list-style-type: none"> Chain of custody for all samples have been managed by US based Minex Corp. Samples were collected, bagged, and tied in numbered coded calico bags, grouped together into larger bags. Bagged samples were delivered to by GNM consultant geologists to American Analytical Services in Idaho soon after the surface sampling program was completed.
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <i>The results of any audits or reviews of sampling techniques and data.</i> 	<ul style="list-style-type: none"> 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
Mineral tenement and land tenure status	<ul style="list-style-type: none"> <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 license to operate in the area.</i> 	<ul style="list-style-type: none"> Catalyst Ridge comprises 214 lode claims which are 100% held by American Cheetah Metals Inc. a subsidiary of Great Northern Minerals Ltd (ASX: 24 October 2025 – Completion of Catalyst Ridge REE-Antimony Acquisition). The 214 claims have been physically staked and filed with BLM, refer to ASX: 22 October 2025 – September 2025 Quarterly Activities Report for listing of claims and BLM serial numbers. A mineral prospectus permit has been applied for with the State of California for 640 acres of state-owned land, this application has been submitted and is being assessed by the state of California.
Exploration done by other parties	<ul style="list-style-type: none"> <i>Acknowledgment and appraisal of exploration by other parties.</i> 	<ul style="list-style-type: none"> There is no known work by previous explorers of significance over the Catalyst Ridge project areas
Geology	<ul style="list-style-type: none"> <i>Deposit type, geological setting and style of mineralisation.</i> 	<ul style="list-style-type: none"> 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.
Drill hole Information	<ul style="list-style-type: none"> <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> <ul style="list-style-type: none"> <i>easting and northing of the drill hole collar</i> <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i> 	<ul style="list-style-type: none"> Drilling not reported in this announcement

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> ○ <i>dip and azimuth of the hole</i> ○ <i>down hole length and interception depth</i> ○ <i>hole length.</i> <ul style="list-style-type: none"> ● <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>Data aggregation methods</i>	<ul style="list-style-type: none"> ● <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> 	<ul style="list-style-type: none"> ● Drilling not reported in this announcement.
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> ● <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 is known, its nature should be reported.</i> 	<ul style="list-style-type: none"> ● Rock samples are mainly important examples of quartz-stibnite veins at the Antimony Gulch prospect. ● At Antimony Gulch the true width of mineralisation has not yet been defined accurately although it appears to vary between 1 and 6m where exposed at surface ● More sampling work is required

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <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> 	<ul style="list-style-type: none"> Appropriate maps and tables are included in the body of the Report.
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <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> 	<ul style="list-style-type: none"> Reporting of rock assays at Antimony Gulch in this announcement is considered balanced by the competent person.
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <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> 	<ul style="list-style-type: none"> The geology and mineral occurrences displayed in Figure 5 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>	<ul style="list-style-type: none"> <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</i> 	<ul style="list-style-type: none"> Further work is detailed in the body of the announcement.

Criteria	JORC Code explanation	Commentary
	<i>future drilling areas, provided this information is not commercially sensitive.</i>	

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