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ASX Announcement **22 August 2025**

Strategic Acquisition of 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 entered into a binding agreement (**Agreement**) to acquire 100% of the Catalyst Ridge Project (**Catalyst Ridge** or the **Project**). The Catalyst Ridge Project comprises of 119 mineral claims prospective for rare earth elements (**REE**) and antimony (**Sb**), located within the Mountain Pass District, in California's Mojave Desert.

HIGHLIGHTS:

- **The Catalyst Ridge Project is located in the world-renowned Mountain Pass District, a globally significant rare earth element mining area in California's Mojave Desert. The Project is directly adjacent to MP Materials Corp. (NYSE: MP; US$12bn market cap), Locksley Resources Ltd (ASX:LKY), Bayan Mining and Minerals Ltd (ASX:BMM) and within 6km from Dateline Resources Ltd (ASX:DTR) Colosseum project.**
- **119 Lode Claims at Catalyst Ridge, in the world's mostly highly sought after rare earth corridor positioned within a strategic US critical metals hub, supported by strong government initiatives including Department of Defense and Department of Energy investment, funding and policies to secure domestic rare earth supply chains.**
- **The Catalyst Ridge Project is in a similar geological and structural setting of Early Proterozoic granitoid rocks and northwest-trending structures as the Mountain Pass REE deposit, the Colosseum Gold deposit and nearby antimony mineralisation. Similar structures are observed in the magnetics and associated circular gravity features all considered highly favourable for both REE and antimony-gold mineralisation at Catalyst Ridge.**
- **Appointment of General Manager to lead Catalyst Ridge development and advance US-based critical metals project assessments aimed at expanding the Company's strategic opportunities in the United States.**
- **$2.6M capital raising completed by CPS Capital, boosting cash reserves to fast-track Catalyst Ridge exploration and US critical metals growth strategy. The raise was mostly supported by existing shareholders as well as new strategic investors.**

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GNM's Non-Executive Chairman, Eddie King, commented: *"Catalyst Ridge represents an exciting opportunity to explore for significant discoveries of rare earth elements, antimony and gold in one of the most strategically important regions of the United States. This area is emerging as the focal point of the US critical minerals supply chain, with major recent developments reinforcing its importance.*

The US Department of Defense has implemented floor pricing for rare earth elements, alongside a substantial investment in MP Materials, to safeguard domestic supply. In a further boost, Apple has committed to purchasing rare earth magnets produced at MP Materials' Fort Worth, Texas facility and will collaborate with MP Materials to establish a rare earth recycling operation — located immediately adjacent to the Company's Catalyst Ridge Project.

With these global technology and defence leaders operating next door, Catalyst Ridge is strategically positioned to capitalise on the surging US demand for rare earths and antimony, and to advance its exploration program in a market increasingly focused on secure, local supply."

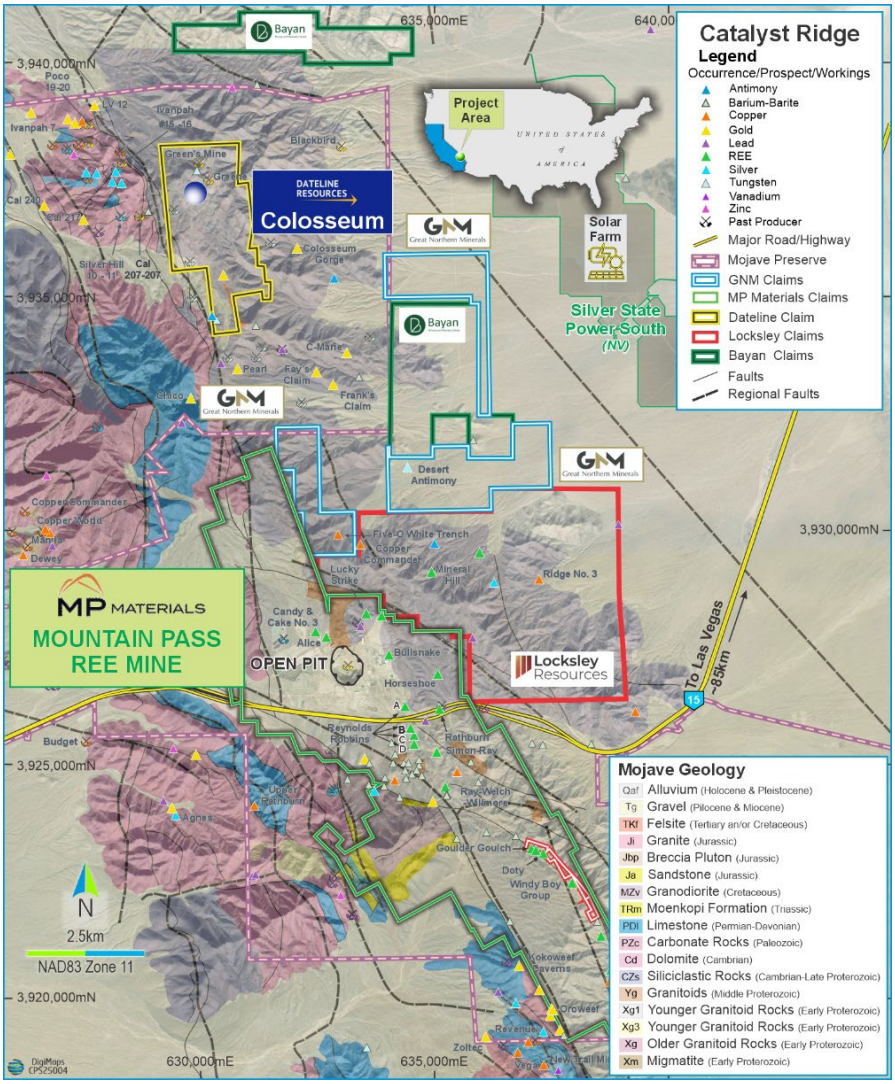

Figure 1: Interpreted bedrock geology map from the US Geological Survey[1] showing the location of the recently acquired GNM claims in relation to the Mountains Pass REE deposit, associated nearby mineral occurrences and other companies operating in the area.

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Catalyst Ridge Project Claims & Regional Geology

Catalyst Ridge comprises of 119 lode mining claims in the Proterozoic REE Belt of Mountain Pass Area California. The 119 claims are adjacent to both the Mountain Pass Mine and the associated Processing Facility owned by MP Materials Corp. (NYSE: MP) (**MP Materials**) and the Mojave Project owned by Locksley Resources Ltd (ASX: LKY) (**Locksley**). Mountain Pass is the only producing rare earths mine in the USA.

The lode mining claims were located in the first half of July 2025 and have been filed with San Bernardino County Recorders office in San Bernardino, California and the US Department of Interior Bureau of Land Management (BLM) California State Office located in Sacramento, California. All filing and recording fees have been paid by the Company to validate the mineral rights.

The geology of the region is such that the REE deposits occur in a 2.5 kilometre wide north-west trending zone in Mesoproterozoic rocks that are dated at 1.3-1.4 billion years old that include dikes, sills and stockworks. The 10 kilometre zone extends from the Clark Mountains south to the Mescal Range and Ivanpah Mountains.

Carbonatite ores are the primary source of the REE minerals present. The REE minerals are also present in stocks and sills present in the Paleoproterozoic basement rock. Field relations indicate the primary occurrence of abundant REE is in complex spatial and temporal associations between the ultrapotassic suite of rocks and carbonatite from primary mantle melts in three phases 1.38, 1.405 and 1.42 billion years ago.

Until recently, MP Materials, who own the Mountain Pass REE Mine, was solely focused on their current mine foot print and build up at their mine site and not regional exploration. In the last couple of years exploration along the 10km REE Mesoproterozoic trend has intensified by other companies to further identify other REE occurrence along the trend and their potential economic viability. It should also be noted that the nearby Colosseum gold magnetite-breccia deposit held by Dateline Resources Ltd (ASX:DTR) (**Dateline**) and nearby associated antimony occurrences are thoughts to also be related to the emplacement of the Mountain Pass carbonatites[4]. Currently Locksley and Dateline have been active in exploration efforts in the region. Recent work by GNM has indicated the newly acquired Catalyst Ridge project occurs in a highly prospective ground position based on regional geology, detailed airborne magnetics and gravity.

Geological & Geophysical Review of the Catalyst Ridge Project

The western block of the Catalyst Ridge claims are located within the early Proterozoic granites that host the Mountain Pass REE deposit and associated occurrences (Figure 1). The eastern blocks occur within the overlaying Permian to Devonian limestones that conceal the Proterozoic granites beneath.

Northwest- and north-northwest-trending structures are widely regarded as a key control on the formation and localisation of the carbonate pipes and dykes that host the REE mineralisation throughout the Mountain Pass area[2] and the regionally extensive structures have been mapped on the USGS regional geology maps[1]. GNM recently acquired open file 100m to 200m spaced Airborne Magnetic and HeliFALCON Airborne Gravity Gradiometer Data over the entire project area[3] to assist in the review of prospectivity of the Catalyst Ridge Claim area.

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The detailed magnetic data reveals highly compelling interpreted northwest- and north-northwest-trending structures that occur within parts of Catalyst Ridge claims in particular the western block adjacent to the MP Minerals Claims (Figure 2). These structures are considered highly prospective for REE-bearing carbonatites. It is also interesting the Five-O-White copper occurrence on the Catalyst Ridge western block is associated with one of these structures (Figure 2).

It is also important to note that the Colosseum gold carbonate-magnetite breccia deposit and nearby antimony occurrences are considered genetically linked to the carbonatite intrusive activity in the district[4] and also occurs associated with northwest- and north-northwest-trending faults (Figure 2). Interestingly, the eastern blocks of the Catalyst Ridge claims contain the Desert Antimony occurrence in close proximity to north-northwest trending faults and magnetic high features (Figure 2).

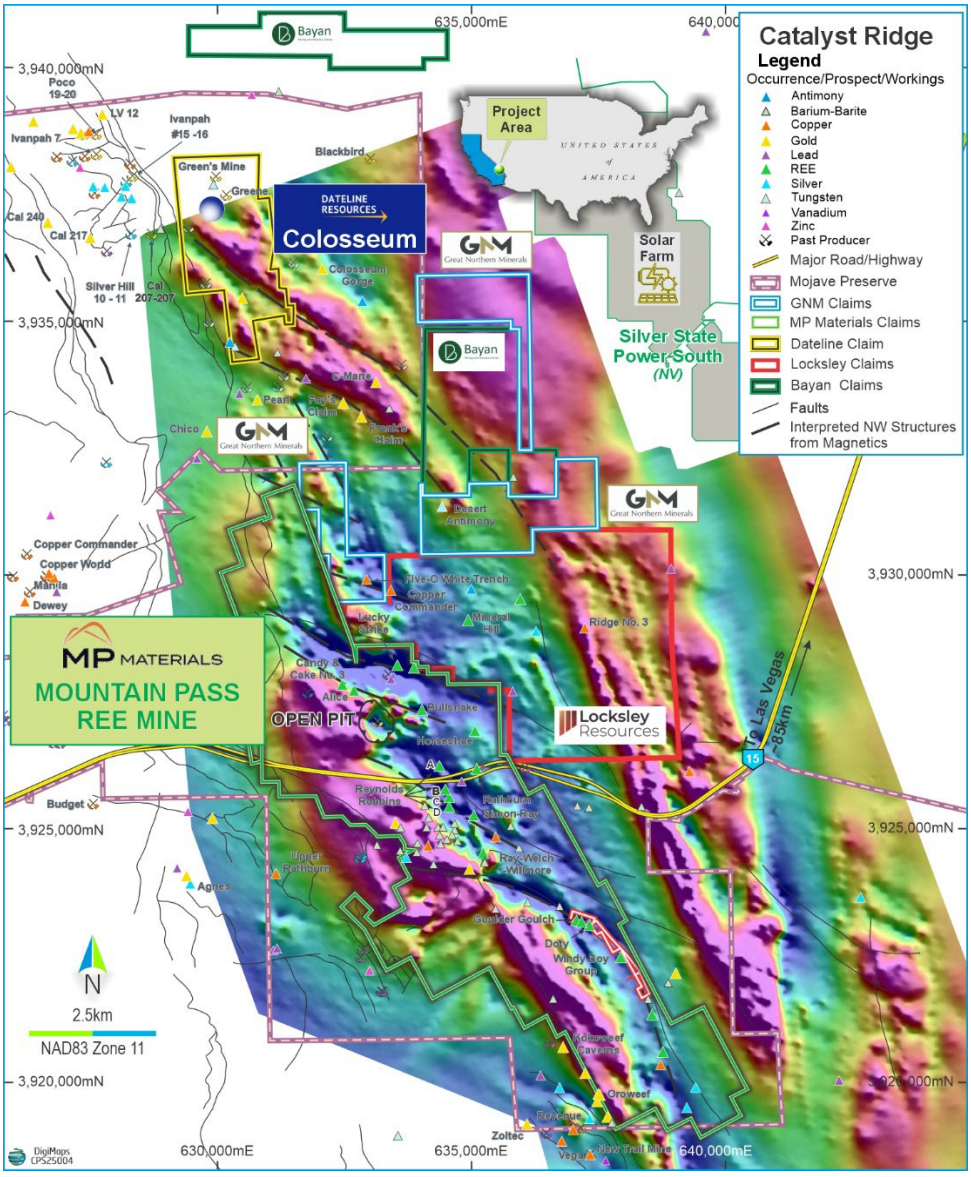

Figure 2: Airborne magnetic (TMI) map showing the location of the Catalyst Ridge GNM claims, interpreted structures, Mountain Pass REE deposit, associated nearby mineral occurrences and other companies operating in the area.

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Another important part of the review relates to the gravity geophysics data acquired in the area. Previous geophysics work at Mountain Pass have indicated that the intrusive suite associated with the mineralisation occurs associated with an observed "gravity terrace" of moderate strength[4] that occurs on the flanks of circular lobate gravity high features. This suggests carbonatite magmatism is related to the edges of deeper dense intrusions that can be mapped with gravity. Interestingly, one eastern block at Catalyst Ridge is located in the centre of least four circular gravity features where the edges may indicate higher prospectivity areas in the search for REE or other metals such as gold and antimony and therefore require further investigation.

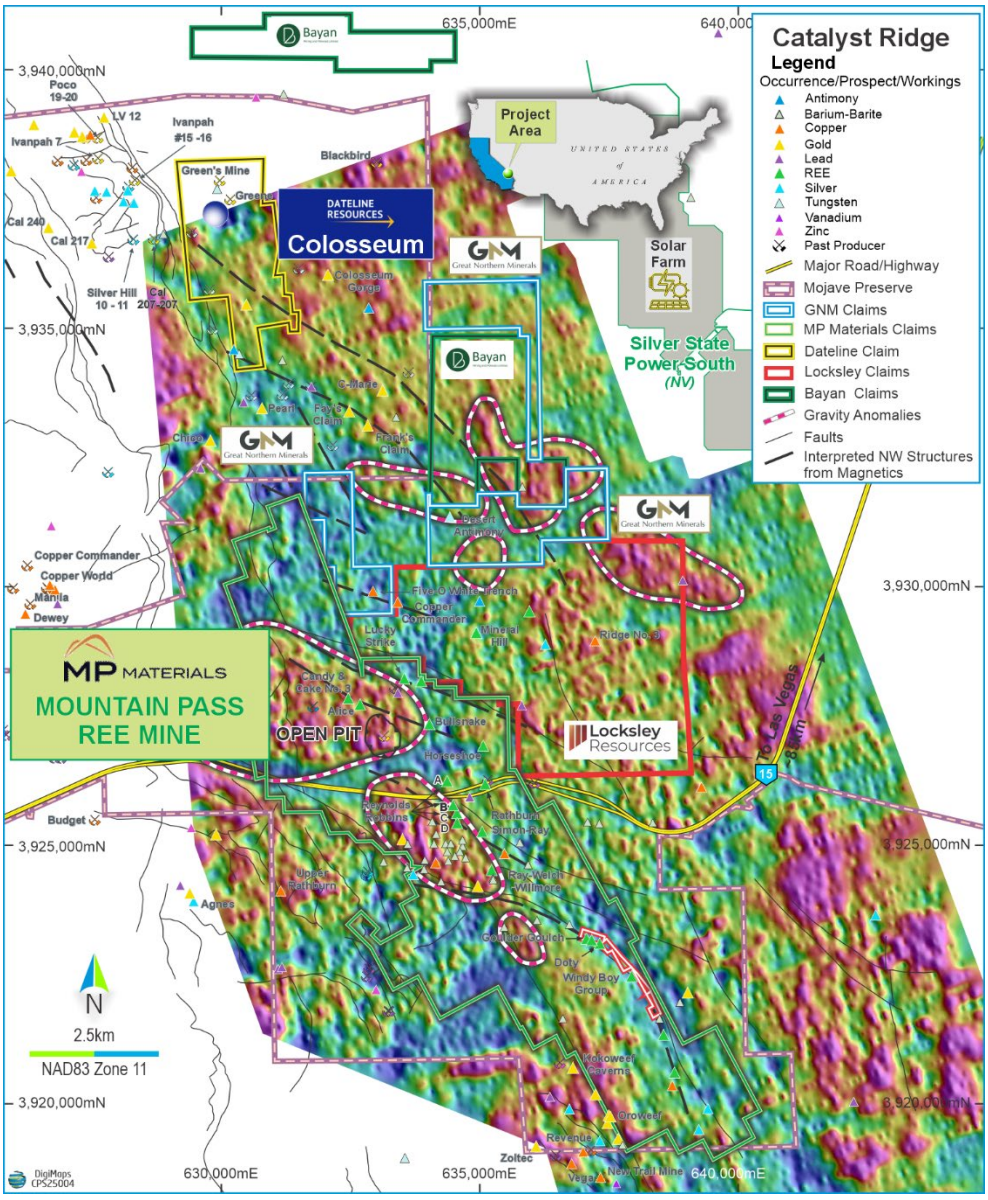

Figure 3: Airborne HeliFALCON Airborne Gravity Gradiometer (2km) map showing the location of the Catalyst Ridge GNM claims as well as the Mountains Pass REE deposit, associated nearby mineral occurrences and other companies operating in the area.

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Discussion & Ongoing Exploration at Catalyst Ridge

The geophysical and geological compilation work by GNM at Catalyst Ridge clearly indicates several very similar characteristics that are observed at both the Mountain Pass REE deposit and the Colosseum gold deposit and nearby antimony prospects. These features include the presence of:

- northwest- and north-northwest-trending structures from the magnetics;
- Magnetic high features indicative of alteration;
- prospective areas flanking prominent circular gravity features; and
- known minerals occurrences such as antimony and copper that are known to occur associated with carbonatite pipes and dykes.

These similarities clearly indicate several highly prospective areas that require detailed geochemical work programs. GNM is planning a systematic geochemical sampling program to commence this quarter across the Catalyst Ridge project with particular focus on the targets and structures identified from the geophysical review. The aim of this work is to vector into areas of outcropping REE or antimony-gold mineralisation with the view to developing drill targets for drill testing.

References

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

[2]Volk, J. et. al. 2009. Technical Report on Resources Molycorp Minerals LLC. Mountain Pass Rare Earth Element Project, Mountain Pass, California, USA.

[3]CGC Canada Services Ltd. 20016. USGS HeliFALCON™ Airborne Gravity Gradiometer, Magnetic, and Radiometric Survey. Mojave Desert, Nevada. Logistics and Processing Report.

[4]Theodore, T. 2007. USGS Bulletin 2160: Geology and Mineral Resources of the East Mojave National Scenic Area, San Bernardino County, California, USA.

Appointment of General Manager

The Company is pleased to announce the appointment of Scott Downsborough as General Manager of US projects, effective immediately. With 20 years of experience in global capital markets, Scott brings a proven track record of leadership as a CFO and in project management, including significant roles in London with leading investment banks. His career highlights include positions at HSBC, Credit Suisse, and Barclays, where he served in advisory, M&A, and financial transformation roles, managing complex transactions and implementing large-scale operational improvements. Scott's appointment underscores the Company's commitment to strengthening its operational leadership as it advances its strategic objectives, including building a robust US critical metals portfolio to support global supply chain resilience.

Capital Raising

The Company also proposes to conduct a capital raising to raise $2,600,000 (before costs) through the issue of 200,000,000 fully paid ordinary shares in the capital of the Company (**Shares**) at an issue price of $0.013 per Share (**Placement**), with one (1) free-attaching listed option (exercisable at $0.02 and

expiring two (2) years from the date of issue) (**Placement Option**) for every three (3) Shares subscribed for and issued under the placement (**Proposed Capital Raising**).

The Proposed Capital Raising will be conducted via two (2) tranches, as follows:

- (**Tranche 1**): The issue of up to 38,657,270 Shares to raise up to approximately A$502,545 (before costs) under the Company's existing Listing Rule 7.1 (23,194,362 Shares) and 7.1A capacity (15,462,908 Shares); and
- (**Tranche 2**): The issue of up to 161,342,730 Shares, to raise up to approximately A$2,097,455 (before costs), subject to shareholder approval under Listing Rule 7.1.

Shareholders will be provided with a notice of meeting in relation to an Extraordinary General Meeting (**EGM**) to approve all matters in relation to Tranche 2 of the Placement and the issue of the Placement Options in due course. The EGM is expected to be held mid-October 2025.

CPS Capital Group Pty Ltd will be acting as lead manager to the Company in respect of the Proposed Capital Raising and will receive a 6% Placement fee on funds raised under the Proposed Capital Raising plus 80,000,000 Lead Manager Options (exercisable at $0.02 and expiring two (2) years from the date of issue) (**Lead Manager Options**). The Lead Manager Options will be subject to shareholder approval at the upcoming EGM.

The Company will seek quotation of the Placement Options and Lead Manager Options, subject to satisfaction of the minimum quotation requirements set out in Chapter 2 of the ASX Listing Rules.

Use of Funds

The indicative use of funds for the Proposed Capital Raising is as follows:

Use of Funds	**A$**
Existing Assets	555,000
Catalyst Ridge Project – Exclusivity Fee	75,000
Catalyst Ridge Project – Reimbursement	60,000
Catalyst Ridge Project	500,000
Corporate Overheads	400,000
Capital Raising Costs	195,000
Working Capital	815,000
Total	**2,600,000**

The Company intends to progress its existing assets in the Golden Ant Joint Venture (JV) and Douglas Creek. The Company is working with its Joint Venture partner, Great Eastern Gold Ltd, to mobilise technical consultants for an imminent exploration program with a focus on undertaking a geophysics survey and thorough surface geochemical sampling program.

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The indicative use of funds for the Company's existing assets over the next 12 months, is as follows:

Existing Assets	**A$**
Douglas Creek:	
• Technical consultants	30,000
• Reporting costs	10,000
• Project overheads	10,000
Subtotal	**50,000**
Golden Ant:	
• **Geophysical surveys and data**	85,000
• Technical consultants	50,000
• Sampling and assays	50,000
• Drilling costs	200,000
• Mobilisation costs	50,000
• Reporting costs	40,000
• Site Rehabilitation	30,000
Subtotal	**505,000**
Total	**555,000**

The above use of funds is indicative only and is a statement of current intentions as of the date of this announcement. As with any budget, intervening events and new circumstances have the potential to affect the manner in which the funds are ultimately applied. The Board of GNM reserves the right to alter the way funds are applied on this basis.

Company Update

The Company currently intends to seek shareholder approval at its upcoming EGM for the issue of up to 66,333,333 options (exercisable at $0.02 and expiring 2 years from the date of issue at an issue price of $0.001 per option) (**New Options**) (**Options Placement**). CPS Capital Group Pty Ltd will be underwriting the Options Placement and will receive 20,000,000 Broker options (on the same terms as the New Options), subject to shareholder approval.

The New Options are intended to be offered to all holders of the GNMOC options on the basis of one New Option for every one GNMOC option held at the Expiry Date. The Company will issue a prospectus in relation to the issue of the New Options after shareholder approval is sought at the EGM. The primary purpose of the issue of the New Options is to enable the holders of the GNMOC options to continue to participate in the ongoing development of the Company.

The Company also intends to seek shareholder approval at its upcoming EGM for the issue of up to a total of 44,000,000 Performance Rights to the Board. The Performance Rights will comprise of two (2) classes as follows:

- (**Class A Performance Rights**): up to 22,000,000 Class A Performance Rights, to convert into fully paid ordinary shares in the Company (on a 1:1 basis) upon the Company achieving a 10-day VWAP of A$0.025 or more based on the days the Company's Shares have traded; and
- (**Class B Performance Rights**): up to 22,000,000 Class B Performance Rights, to convert into fully paid ordinary shares in the Company (on a 1:1 basis) upon the Company achieving a 10-day VWAP of A$0.04 or more based on the days the Company's Shares have traded.

Further details regarding the proposed issue of the Performance Rights (and the full terms and conditions), will be included in the Company's notice of meeting for the upcoming EGM.

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

For further information please contact:

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Non-Executive Chairman
Great Northern Minerals Limited
+61 8 9481 0389
info@greatnorthernminerals.com.au

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Annexure 1 - Key Terms of the Agreement

1. Parties	• Great Northern Minerals Ltd (**Purchaser**); and • Spire Investments WA Pty Ltd (**Spire**) • The shareholders of Spire (**Vendors**).
2. Acquisition	Subject to satisfaction or waiver of the Conditions Precedent, the Purchaser agrees to acquire and the Vendors irrevocably agrees to sell the legal and beneficial interest in 100% of the issued share capital in Spire Investments (**Sale Shares**), free from Encumbrances, on the terms and conditions set out in the Agreement (**Acquisition**).
3. Consideration	a) The Purchaser agrees to issue the Vendors (and/or their respective nominees): (i) up to 60,000,000 fully paid ordinary shares in GNM (**Shares**) (**Consideration Shares**); (ii) up to 30,000,000 options (exercisable at $0.02 and expiring two (2) years from the date of issue) (**Consideration Options**); and (iii) up to 40,000,000 performance rights (**Consideration Performance Rights**), comprising of: A. (**Class A Performance Rights**): up to 20,000,000 Class A Performance Rights, which convert into Shares (on a 1:1 basis) upon GNM announcing a drilling intercept of 5 metres at 5% TREE or 8% Sb on the Catalyst Ridge Project, expiring four (4) years from the date of issue; and B. (**Class B Performance Rights**): up to 20,000,000 Class B Performance Rights, which convert into Shares (on a 1:1 basis) upon GNM announcing a JORC compliant mineral resource of at least inferred category (as defined in the JORC Code 2012 Edition) on the Catalyst Ridge Project of at least 10Mt at 5% TREE or 8% SB, expiring three (3) years from the date of issue.
4. Convertible Note	Spire Investments has entered into a Convertible Note agreement with American Cheetah Metals Inc., a company incorporated in the United States (**Cheetah Metals**) which is the registered holder of the 119 mineral claims which make up the Catalyst Project and related mining information (**Assets**). Upon conversion of the Convertible Note (which is at the election of Spire Investments), Spire Investments will hold an 100% legal and beneficial interest in the total issued capital of Cheetah Metals.
5. Conditions Precedent	Settlement is subject to and conditional upon the satisfaction (or waiver) of the following conditions precedent: (i) the Purchaser carrying out and being satisfied (in its sole discretion) with the financial, technical and legal due diligence on the Company, Cheetah Metals and the Assets;

	(ii) evidence, to the reasonable satisfaction of GNM, being provided of the Convertible Note converting (in accordance with its terms), so that the Company owns a 100% legal and beneficial interest in Cheetah Metals and the Assets; (iii) the Purchaser obtaining confirmation from ASX that Listing Rules 11.1.2 and 11.1.3 do not apply to the Acquisition; and (iv) the Purchaser obtaining all other regulatory, shareholder and third party approvals (including shareholder approvals for the issue of the consideration securities), consents and/or waivers that are required to implement the transactions contemplated by the Acquisition (including, but not limited to, any in-country and/or governmental approvals), (together, the **Conditions Precedent**). The Conditions Precedent are for the benefit of the Purchaser and may only be waived by the Purchaser.

The Agreement otherwise contains representations, warranties and conditions considered standard for agreements of their nature.

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Annexure 2 – Catalyst Ridge Project Tenements and Mining Claims

Claim Count	Claim Name	Claim Type	Claim State	Claimant	Ownership	Serial Number	BLM Claim ID
1	IVAN 1	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
2	IVAN 2	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
3	IVAN 3	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
4	IVAN 4	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
5	IVAN 5	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
6	IVAN 6	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
7	IVAN 7	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
8	IVAN 8	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
9	IVAN 9	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
10	IVAN 10	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
11	IVAN 11	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
12	IVAN 12	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
13	IVAN 13	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
14	IVAN 14	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
15	IVAN 15	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
16	IVAN 16	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
17	IVAN 17	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
18	IVAN 18	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
19	IVAN 19	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
20	IVAN 20	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
21	IVAN 21	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
22	IVAN 22	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
23	IVAN 23	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
24	IVAN 24	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
25	IVAN 35	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
26	IVAN 36	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
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28	IVAN 48	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
29	IVAN 59	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
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34	IVAN 84	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
35	IVAN 95	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
36	IVAN 96	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
37	IVAN 97	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
38	IVAN 98	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
39	IVAN 99	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
40	IVAN 100	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available

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Claim Count	Claim Name	Claim Type	Claim State	Claimant	Ownership	Serial Number	BLM Claim ID
41	IVAN 101	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
42	IVAN 116	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
43	IVAN 117	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
44	IVAN 118	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
45	IVAN 119	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
46	IVAN 120	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
47	IVAN 121	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
48	IVAN 122	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
49	IVAN 123	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
50	IVAN 124	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
51	IVAN 125	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
52	IVAN 126	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
53	IVAN 127	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
54	IVAN 128	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
55	IVAN 129	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
56	IVAN 130	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
57	IVAN 131	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
58	IVAN 132	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
59	IVAN 133	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
60	IVAN 134	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
61	IVAN 135	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
62	IVAN 136	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
63	IVAN 137	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
64	IVAN 138	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
65	IVAN 139	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
66	IVAN 140	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
67	IVAN 141	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
68	IVAN 142	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
69	IVAN 143	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
70	IVAN 144	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
71	IVAN 145	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
72	IVAN 146	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
73	IVAN 147	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
74	IVAN 148	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
75	IVAN 149	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
76	IVAN 150	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
77	IVAN 151	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
78	IVAN 152	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
79	IVAN 153	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
80	IVAN 154	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
81	IVAN 155	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available

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Claim Count	Claim Name	Claim Type	Claim State	Claimant	Ownership	Serial Number	BLM Claim ID
82	IVAN 156	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
83	IVAN 157	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
84	IVAN 158	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
85	IVAN 159	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
86	IVAN 160	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
87	IVAN 161	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
88	IVAN 162	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
89	IVAN 163	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
90	IVAN 164	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
91	IVAN 165	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
92	IVAN 166	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
93	IVAN 167	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
94	IVAN 168	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
95	IVAN 169	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
96	IVAN 170	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
97	IVAN 171	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
98	IVAN 172	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
99	IVAN 173	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
100	IVAN 174	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
101	IVAN 175	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
102	IVAN 176	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
103	IVAN 177	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
104	IVAN 178	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
105	IVAN 179	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
106	IVAN 180	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
107	IVAN 181	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
108	IVAN 182	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
109	IVAN 183	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
110	IVAN 184	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
111	IVAN 185	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
112	IVAN 186	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
113	IVAN 187	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
114	IVAN 188	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
115	IVAN 189	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
116	IVAN 190	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
117	IVAN 191	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
118	IVAN 192	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available
119	IVAN 193	Lode Mining Claim	CA	American Cheetah Metals, Inc.	100%	Not yet available	Not yet available

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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.

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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*	• Location of the USGS HeliFALCON™ Airborne Gravity Gradiometer Magnetic, and Radiometric

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	workings and other locations used in Mineral Resource estimation. • *Specification of the grid system used.* • *Quality and adequacy of topographic control*	Survey data projected grid coordinates have been supplied in UTM Zone 11N projection, referenced to the NAD83 datum.
Criteria	**JORC Code explanation**	**Commentary**
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.*	• 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.
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.*	• 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.
Sample security	• *The measures taken to ensure sample security.*	• No sampling reported in this announcement.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• Audits and reviews have not been undertaken.

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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 license to operate in the area.*	• Catalyst Ridge Claims outlined in Table 1 are 100% held by American Cheetah Metals Inc., a subsidiary of Great Northern Minerals Ltd.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• There is no known work by previous explorers of significance over the Catalyst Ridge project areas
Geology	• *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

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.*
		• Drilling not reported in this announcement

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*	• Drilling not reported in this announcement.

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Criteria	JORC Code explanation	Commentary
	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.*	
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').*	• Mineralisation has not yet been identified on the project within rock samples or drilling.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• See relevant maps in the body of this announcement.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• All available data has been presented in figures.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• 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
Further work	• *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*	• Further work is detailed in the body of the announcement.

Criteria	JORC Code explanation	Commentary
	interpretations and future drilling areas, provided this information is not commercially sensitive.	

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