

Critical Minerals Americas Inc. Announces Completion of a NI 43-101 Technical Report on Its Multi-Billion Tonne Critical Minerals and Rare Earth Elements Project at the SBH Project in Alberta

written by Raj Shah | October 15, 2025

October 15, 2025 ([Source](#)) – **Critical Minerals Americas Inc. (“CMAI” or “the Company”)**, a Canadian private company focused on the development of its vast Alberta based Critical Minerals and Rare Earth Elements “REE” project, is pleased to announce the completion of its National Instrument (NI) 43-101 technical report by APEX Geoscience Ltd. (APEX) of Edmonton Alberta.

CMAI is advancing the development of long-term domestic supplies of critical minerals and REE’s through it’s SBH Black Shale Project (“SBH Project”).

CMAI holds a 100 per cent (%) interest in nine (9) contiguous Alberta rock-hosted minerals permits collectively comprising an aggregate of 466.66 sq kms (46,666 hectares (ha)) which is located on the eastern slopes of the Birch Mountains of Northeastern Alberta, approximately 120 kilometres (km) north of Fort McMurray, Alberta, in the Athabasca oil sands region.

The Project is directly accessible by winter roads and air

(fixed-wing and helicopter) from Fort McMurray, Alberta. Fort McMurray is approximately 450 km by road North of Edmonton and is served by regular daily commercial flights from Edmonton, Calgary, Toronto and other communities.

The SBH Project is considered ***one of the largest known accumulations of recoverable Critical Minerals with Rare Earth Elements located in North America.***

Key Highlights:

- The Conceptual Exploration Tonnage Targets (the Exploration Targets) for the SBH Project are used to provide an estimate of the potential quantity and grades of a mineral deposit, based on known exploration data and additional geological evidence. It is an early-stage assessment of existing data that will help CMAI to guide further exploration but is not a mineral resource nor a mineral reserve and should not be treated as such.
- The Exploration Targets for the SBH Project were developed by APEX Geoscience, an independent geological consulting firm, using existing historical geological and drilling data, to provide a conceptual evaluation of the potential tonnages and grades of mineralized black shale horizons within the Project. These exploration tonnage targets were calculated for the Lower Buckton, Buckton South and Asphalt zones for each of the laterally continuous Labiche, Second White Specks, and the Belle Fourche/Shaftesbury Formations. Results are as follows in Table 1 below:

Table 1. Conceptual Mineralized Shale Exploration Tonnage Target Sizes (Billions of Tonnes – BT)

Target	Areal Extent (km ²)	Tonnage range (BT)	
		Low	High
Lower Buckton	9.6	2.3	3.5
Buckton South	66.9	10.3	15.4
Asphalt	47.4	6.9	10.3
Exploration Target Total	123.9	19.5	29.2

*The SBH Project Exploration Targets' potential quantity and grade is conceptual in nature, there has been insufficient exploration to estimate a mineral resource, and it is uncertain if further exploration will result in the estimation of a mineral resource. See Technical Report reference at the end for the details of the calculations for the Exploration Targets.

- The Lower Buckton Exploration Target contains a range of approximately 2.3 – 3.5 BT of total black shale material from the combined Labiche, Second White Specks, and Belle Fourche/Shaftesbury formations. Within this exploration target area and adjacent to the north, an historical Mineral Resource Estimate¹ (MRE) of 4.4 BT of Inferred Mineral Resources of metalliferous black shale was defined in 2013 within the former Buckton Zone by a previous operator. The portion of the historical Buckton Zone resource that falls within the current SBH Project represents approximately 12.9% (or 572.8 million tonnes) of the most recent Buckton Zone historical mineral resource (Figure 1).
- The Buckton South Exploration Target contains a range of approximately 10.3 – 15.4 BT of total black shale material from the combined Labiche, Second White Specks, and Belle Fourche/Shaftesbury formations. Within this exploration target area, an historical Inferred Mineral Resource² of 497 million tonnes of metalliferous black shale was

defined in 2013 by a previous operator (see Figure 1).

- The Asphalt Exploration Target contains a range of approximately 6.9 – 10.3 BT of total black shale material from the combined Labiche, Second White Specks, and Belle Fourche/Shaftesbury formations. Historic drilling took place at the Asphalt target, but a mineral resource was never disclosed.
- In accordance with NI 43-101, the potential quantity and grade of the Exploration Targets are conceptual in nature. There has been insufficient exploration to define a Mineral Resource as defined by NI 43-101 Standards of Disclosure for Mineral Projects, and it is uncertain if further exploration will result in the Exploration Targets being delineated as a Mineral Resource.

The critical minerals contained within the mineralised black shale formations include Mo, Ni, U, V, Zn, Cu, Co, Li, Sc and all REEs including La, Ce, Pr, Nd, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu, Y, Th except for Promethium. Analytical grade ranges for each Exploration Target area and formation are listed in the APEX Technical Report³.

The Exploration Targets are constrained to the Mineralised Zones/Formations and do not include prospective targets that CMAI has identified outside of the Exploration Target Areas. However, the Labiche, Second White Specks, and the Shaftesbury formations occur throughout the western portion of the Project area as confirmed by diamond drilling, oil and gas well logs, mapping, and sampling work. Based on average tonnages calculated for the Exploration Target areas, the total expansion potential for the SBH Project is approximately 97.9 km² with a potential to host an additional 15 to 23 BT (billion tonnes) of black shale in the Labiche, Second White Specks, and the Upper Belle Fourche/Shaftesbury Formations respectively, ***the total potential***

tonnage amounts to approximately 34.5 to 52.2 BT (Figure 2). In accordance with NI 43-101, the potential quantity and grade of the Exploration Targets and the expansion potential of the Exploration Targets are conceptual in nature. There has been insufficient exploration to define a Mineral Resource as defined by NI 43-101 Standards of Disclosure for Mineral Projects, and it is uncertain if further exploration will result in the Exploration Targets being delineated as a Mineral Resource.

“The Conceptual Exploration Target calculation and work represents a major milestone for CMAI as it validates the SBH Project has one of the largest known and easily accessed continuous critical minerals deposits in North America. The location of the SBH Project in proximity to the oil sands operations and infrastructure make it an ideal candidate for a mining, processing and creating a significant metals refining hub in Alberta.

Past metallurgical bioleaching test work on the SBH Project’s black shales was undertaken by the Government of Canada and the Province of Alberta as well as leading research and testing facilities including Bureau de Recherches Géologiques et Minières (BRGM), Actlabs, Alberta Innovates – Technology Futures (AITF), Alberta Research Council (ARC) and Natural Resources Canada, Canmet in Devon, Alberta. The results of then-best in class recovery methods from bioleaching showed promising economic viability of these deposits. CMAI intends to update and accelerate the technical efficiency of the bioleaching process,” said Denis Clement, President and CEO of CMAI.

“Alberta is an ideal location for a project of this scale and national importance, offering sound predictable policy, competitive taxes, rigorous but supportive regulations and permitting frameworks. Alberta’s quality extensive infrastructure, its long tradition of world-class research and

development expertise, both in terms of resource extraction and processing, with its substantial expertise and capabilities in resource development, including mining, and its skilled work force are compelling factors that support the timely development of the SBH project.

“The SBH Project can become a major secure source of supply for many of the key critical minerals and REEs Canada and its Western Allies must secure.”

“CMAI’s vision for SBH and Alberta goes beyond mining and recovery to include final downstream processing of minerals and REEs in Alberta. As a country, Canada should be developing value-added technologies, and the SBH Project can achieve this,” he added. “Based on the historical work carried out to date, CMAI is committed to continue accelerating the SBH Project to create value for its shareholders.”

“The SBH Project Conceptual Exploration Targets work highlight both the deposit scale potential of the SBH Project as well as its grades for the various metals and REEs present within the black shale formations, particularly in regards to the Buckton South and Lower Buckton exploration target areas that contain historical drilling and historical mineral resource estimates.” said CMAI’s Vice President of Exploration, Daniel Leroux. “Since these Exploration Target areas are flat-lying and outcrop in various areas of the property, the Mineralized Zones remain open along strike. There is significant potential for the lateral expansion of these exploration targets. We are currently planning our 2025-2026 diamond drilling program in order to focus on potentially identifying an initial 2-5 billion tonnes of mineralized black shale material from all three shale formations from the Buckton South and Asphalt target areas, respectively. The focus of the exploration and drilling will be to update the Exploration Targets for the Buckton South and

Asphalt target areas to current Inferred Mineral Resources.”

For further details on the SBH Project, please refer to the technical report prepared by Apex Geoscience titled ***“NI 43-101 Technical Report on The SBH Property Birch Mountains, Athabasca Region, Alberta, Canada”*** dated August 29, 2025. A copy of the Technical Report is available on CMAI’s website.

About Critical Minerals Americas Inc.

Critical Minerals Americas Inc. is a private company engaged in mineral exploration and development in the province of Alberta. CMAI holds a 100% interest in a 466.66 sq kms critical minerals and rare earth elements hosted black shale project called the SBH Project. The Project is located approx. 120 km northwest of Fort McMurray Alberta in the Athabasca region. CMAI is advancing the development of long-term domestic supplies of critical minerals and REEs.

Qualified Person

Mr. Michael Dufresne, P. Geol, P. Geo. is a Qualified Person as defined by NI 43-101, and member in good standing with the Association of Professional Engineers and Geoscientists of Alberta (APEGA) and with the Association of Professional Engineers and Geoscientists of British Columbia (APEGBC). Mr. Dufresne has reviewed and approved the technical information in this press release. Mr. Dufresne is the President of Apex Geoscience and is independent of the Company.

Daniel Leroux, P.Geo., is a Qualified Person as defined by NI 43-101, and member in good standing with the Professional Geoscientists of Ontario. Mr. Leroux has reviewed and approved the technical information in this news release. Mr. Leroux is the Vice President Exploration for CMAI.

For further information, please contact:

John MacKenzie

jmackenzie@criticalmineralsamericas.com

www.criticalmineralsamericas.com

Caution Regarding Forward-Looking Information

This press release contains “forward-looking statements” and/or “forward-looking information” (collectively, “forward-looking statements”) within the meaning of applicable securities legislation. All statements, other than statements of historical fact, are forward-looking statements. The use of any of the words “anticipate”, “plan”, “aim”, “target”, “contemplate”, “continue”, “estimate”, “expect”, “intend”, “propose”, “might”, “may”, “will”, “shall”, “project”, “should”, “could”, “would”, “believe”, “predict”, “forecast”, “pursue”, “potential”, “possible”, “capable” and similar expressions are intended to identify “forward-looking statements”. Forward-looking statements in this press release include, but are not limited to, the use of the proceeds of the Private Placement and the anticipated development and prospective nature of the Company’s property interests.

These forward-looking statements are based on the Company’s current beliefs as well as assumptions made by and information currently available to it and involve inherent risks and uncertainties, both general and specific. Risks exist that forward-looking statements will not be achieved due to a number of factors including, but not limited to, the receipt of applicable shareholder and regulatory approvals, availability of financing, the impact of changes in the laws and regulations regulating mining exploration, development, closure, judicial or regulatory judgments and legal proceedings.

Although management of the Company considers the assumptions

contained in forward-looking statements to be reasonable based on information currently available to the Company, those assumptions may prove to be incorrect. When making decisions with respect to the Company, investors and others should not place undue reliance on these statements and should carefully consider the foregoing factors and other uncertainties and potential events.

The Company does not undertake any obligation to release publicly revisions to any forward-looking statement to reflect events or circumstances after the date of this release, or to reflect the occurrence of unanticipated events, except as may be required under applicable securities laws. Investors should not assume that any lack of update to a previously issued forward-looking statement constitutes a reaffirmation of that statement. Continued reliance on forward-looking statements is at investors' own risk.

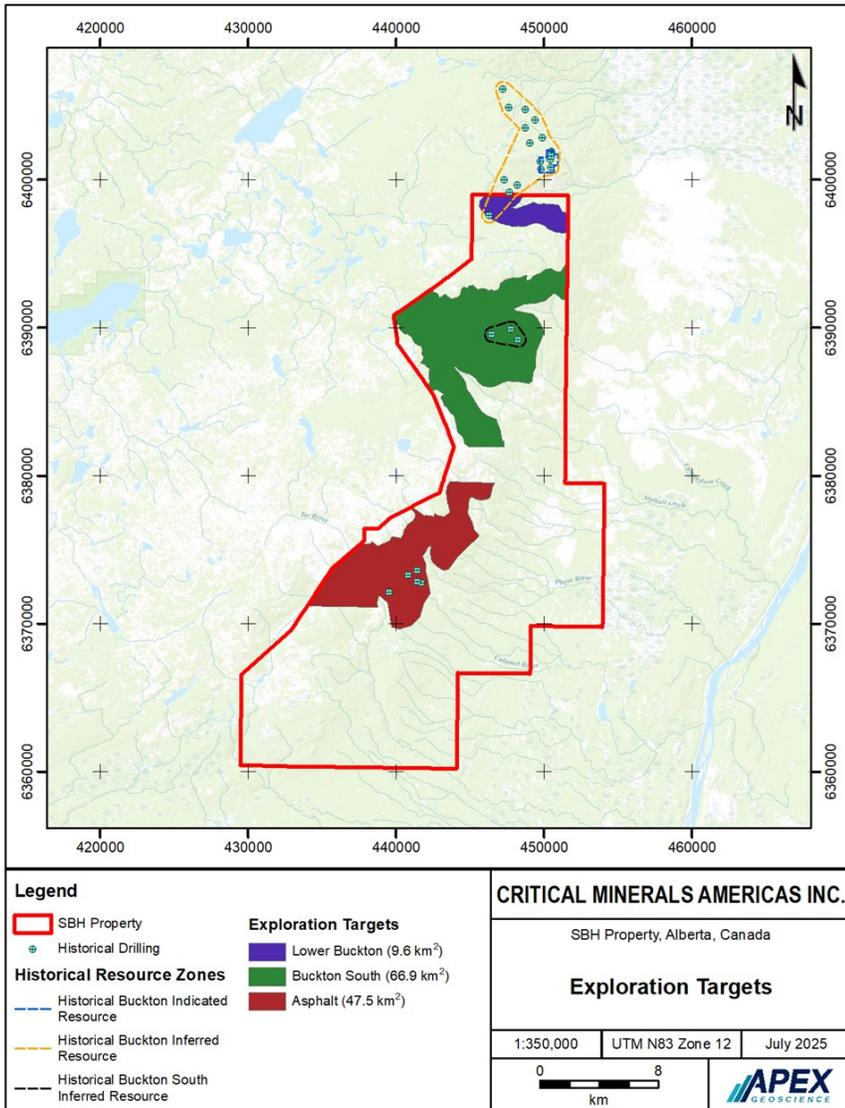


Figure 1. Exploration targets, historical drillholes and historical resource outlines for the SBH Project.

To view an enhanced version of this graphic, please visit:
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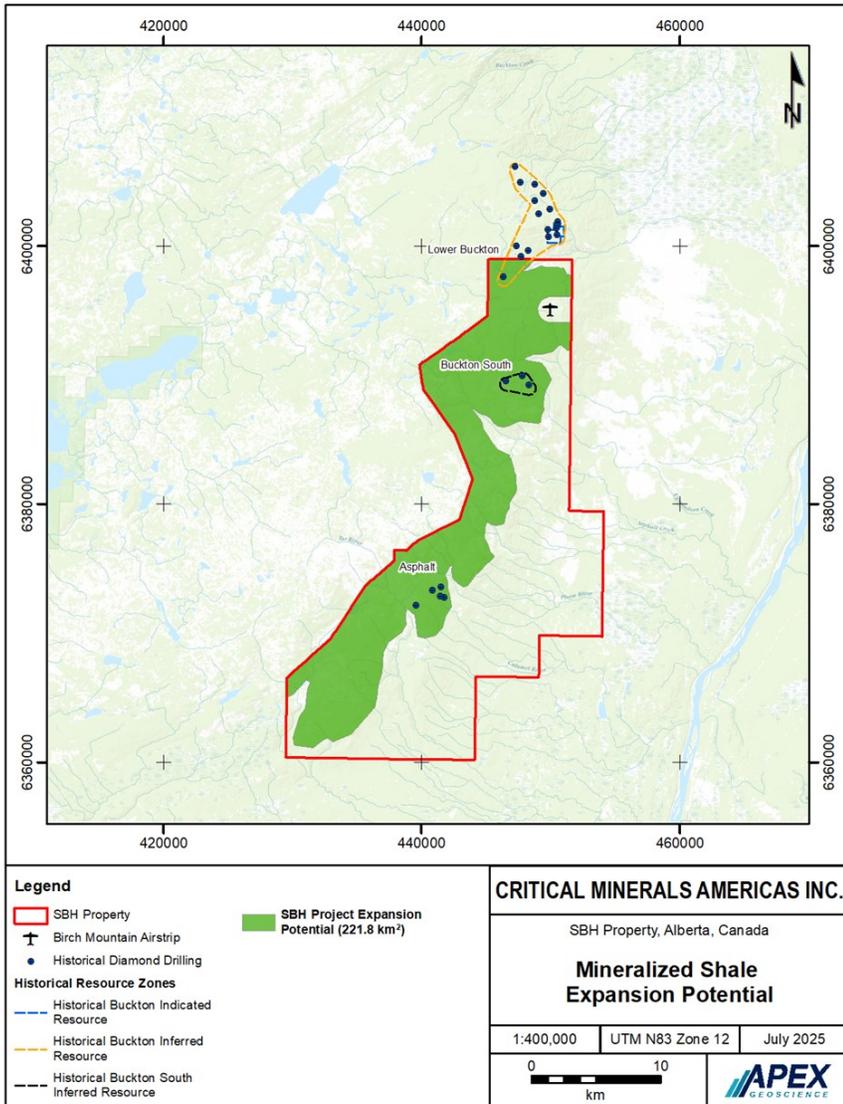


Figure 2. Exploration target expansion potential, historical drillholes and historical resource outlines for the SBH Project. Exploration targets are inclusive within the area.

To view an enhanced version of this graphic, please visit:

https://images.newsfilecorp.com/files/9351/270616_da341db524de2a80_002full.jpg

¹ Eccles, R., Nicholls, S., McMillan K. and Dufresne, M. 2013. National Instrument 43-101 Technical Report, Updated and Expanded Mineral Resource Estimate for the Buckton Zone, SBH Property, Northeast Alberta. Prepared for DNI Metals Inc. by

APEX Geoscience Ltd., September 9, 2013.

² Eccles, R., Nicholls, S. and Dufresne, M. 2013. National Instrument 43-101 Technical Report, Maiden Inferred Resource Estimate for the Buckton South Zone, SBH Property, Northeast Alberta. Prepared for DNI Metals Inc. by APEX Geoscience Ltd., March 1, 2013.

³ Dufresne, M. and Eccles, R. 2025. NI 43-101 Technical Report on the SBH Property Birch Mountains, Athabasca Region, Alberta, Canada. Technical Report prepared on behalf of Critical Minerals Americas Inc. by APEX Geoscience Ltd., August 29, 2025.