

Cobalt Discoveries in Ontario

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Battery Mineral Resources Limited (BMR), an unlisted Australian company, has acquired a widespread and substantial portfolio of mining claims within an area peppered with historic cobalt prospects and cobalt mineral occurrences in eastern Ontario, Canada. The Company refers to this trend of extensive cobalt showings as the "Ontario Cobalt Belt" (OCB) because the BMR cobalt tenements mostly cluster within a broad arc trending 200 kilometers westward from the historic silver mining area centered on the village of Cobalt near the Ontario - Quebec border.

Importantly, the numerous cobalt occurrences in the OCB were largely overlooked by previous mineral explorers and prospectors who regularly identified cobalt minerals in outcrop while they searched for silver, copper, nickel or other metals, all of which are commonly associated with cobalt in this district. Miners in the early 1900's understood that substantial quantities of cobalt minerals occur within many of the spectacularly high-grade silver veins in the vicinity of the old silver mining camp at Cobalt. Prospectors also used cobalt minerals as indicators for base metal deposits during more recent exploration in the surrounding countryside. Many noted extensive pink 'blooms' of cobalt-arsenic oxide (erythrite) coatings on outcrops and the spotting of disseminated cobalt minerals in rocks adjacent to silver workings. Others identified massive cobaltite in veins and breccia containing silver ore.

Significantly, the projects that BMR has acquired all contain outcrops with very elevated cobalt contents and often with selected samples ranging over 5% cobalt. Although these elevated cobalt values may not be entirely representative of underlying or surrounding mineralization they are considerably higher than many operating cobalt mines where average resources typically have less than 0.1% cobalt and 0.5% cobalt is considered to be 'high-grade'.

The Company has capitalized on these oversights and observations. Since mid-2016 BMR has assembled numerous tenements in ten mineralized areas (Projects) within the Ontario Cobalt Belt through joint venture, purchase and staking new claims and BMR now controls >710 square kilometers of exploration area. Many of these include outcrops, costeans or shallow drill core intersections with percentage cobalt values and most have received only limited modern evaluation. BMR geologists have identified geological parameters that appear to explain many of these cobalt showings and have used these features, together with close-spaced helicopter-borne magnetic and radiometric surveys, to target, then stake or acquire the most promising cobalt prospects which include vein-hosted, fault breccia, skarn, intrusive-hosted and massive-disseminated sulphide deposits.

My talk will outline BMR's recent exploration strategy and discuss the geology of these high-grade cobalt mineralized systems.