
**Altius' Kamistuatasset Project: an Iron Maiden's
tour through Labrador West**

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The iron ore mining district of Labrador West and adjacent Quebec is Canada's largest iron ore producer with over 50 years of production. The district is located in the southern extension of the Labrador Trough within the Grenville tectonic province of the Canadian Shield. The area lies close to the Grenville Front within the Grenville Front Tectonic Zone. All of the past and present production and exploration programs in the district are centered on the Lower Proterozoic Superior-type iron formations of the Knob Lake Group. The Knob Lake Group is a continental-margin sedimentary sequence which was deformed and subjected to greenschist to upper amphibolites-facies metamorphism during the Grenville Orogeny. Regional deformation and metamorphism plays a key role in making the iron formation of the Knob Lake Group economic. The distribution of ore bodies in the district is controlled by superimposed F_1/F_2 synclines which causes thickening of the

iron formation through repetition. Ore mineralogy consists of specular hematite, magnetite, and locally martite, with quartz as the major gangue mineral. Regional metamorphism has caused an increase in grain size of the ore minerals making the ore more amenable to concentrating and pelletizing.

Altius has been active in Labrador West since 2003 and is now the second largest licence holder in the district with several iron ore exploration projects. The Kamistatusset Project is located in the heart of the region's transportation, power, and mining infrastructure. The property has seen limited previous exploration, but covers several significant iron ore prospects. Work by Altius includes a helicopter-borne magnetic survey, ground magnetic and gravity surveys, geological mapping, sampling, and 6008 m of diamond drilling, all of which confirm both a favorable geologic setting and ore mineralogy. The 2008 diamond drilling program returned results of up to 31.65% Fe (27.26% magnetite) over 120 m.