Uranium mineralization in the Moran Lake area of the central mineral belt of Labrador: new models and developments from the Crosshair Exploration project

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The Moran Lake property consists of 2544 claims covering advanced uranium, as well as polymetallic Iron Oxide–Copper–Gold (IOCG; e.g., Olympic Dam, Australia) intrusion-related targets in the Central Mineral Belt of Labrador. The property lies approximately 135 km north of Goose Bay and approximately 75 km southwest of the coastal community of Postville. The property is situated in the west-central portion of the Central Mineral Belt, a Proterozoic sequence of plutonic, volcanic, and sedimentary rocks which stretch inland from the coast for over 250 km.

Uranium mineralization, known on the property since the 1950s, occurs both in altered sedimentary rocks lying just above a major unconformity (“C” Zone), as well as in altered intrusive and sedimentary rocks (“B” Zone). A third area of significance is known as the Moran Heights boulder field, where over 300 sandstone boulders have been located with an average grade of 0.5% to 1.0% U$_3$O$_8$ with grades as high as 4.54% U$_3$O$_8$ reported from recent sampling.

The possibility of IOCG-type mineralization occurring on the property is supported by strong geological, geochemical, and geophysical evidence, including extensive iron-rich breccias and the presence of locally significant copper, silver, gold, and uranium mineralization, all of which are spatially associated with a significant airborne gravity anomaly.

Exploration activities in 2005 included the completion of a 7062 line-km airborne magnetic and radiometric survey which has identified numerous radiometric anomalies considered prospective for uranium as well as IOCG-type mineralization. Ground follow-up of a selected number of airborne anomalies has resulted in the discovery of several potentially significant uranium and polymetallic IOCG occurrences. Drilling on the property resumed in the winter of 2006.