
Emeralds in the Yukon Territory

Since 1997, there have been two discoveries of emeralds in, or near, the Yukon Territory. Significant emerald localities in North America are rare. A small, but quality emerald could easily be worth in excess of \$10,000.

The first discovery of emeralds in the north was made in 1997 by Whitehorse-based prospector Ron Berdahl. He discovered vanadium-rich emeralds near the Lened tungsten showing located in the westernmost Northwest Territories, adjacent to the Yukon border. The property is currently owned by Liberty Mineral Exploration Inc.

The Lened property is underlain by a rare-element-enriched, two-mica pluton and associated rare-element pegmatites. There are two other nearby two-mica plutons, locally known as the CAC and the RUDI.

Emeralds on the Lened property are associated with phlogopite schist developed along the contact zone between a rare-element pegmatite and Devonian-Mississippian black shales. The emeralds are vanadium-rich, transparent to translucent, and are up to 2 cm long and 0.50 cm wide.

While exploring a base-metal geochemical soil anomaly on one of its Yukon properties in the autumn of 1998, Expatriate Resources' field geologist, Bill Wengzynowski, discovered a second occurrence of emeralds at Regal Ridge (now known as the Tsa da Glizsa property). About one kilogram of emeralds was collected from float and outcrop during a two-hour examination within a 30 x 100 m area.



In a preliminary report, industry expert J.H. Montgomery wrote that the geological setting of the Expatriate emerald deposit closely resembles the setting of deposits in one of the world's major emerald producing areas. "Many of the emeralds are corroded, translucent and fractured, but some near-gem-quality stones are present. It is suspected that intense chemical and physical weathering may be responsible for some of the flaws".



The occurrence is in the Finlayson Lake area of southeastern Yukon. The geological setting is similar to "schist-type" occurrences where quartz-tourmaline pegmatites

cut phlogopite and chlorite-bearing schist. Information and photographs for this review were provided courtesy of Expatriate Resources and from a story published in the December 2, 1998 issue of the Whitehorse Star.

Expatriate undertook a small exploration program on the property between 1999 and 2001 and uncovered numerous other occurrences within a small portion of the property.

In 2002, ownership of the Tsa Da Glizsa property has been changed to True North Gems. Since then, extensive exploration programs have consisted of surface trenching, mini-bulk sampling, drilling, soil geochemical sampling and regional prospecting. Results have proven to be very positive.

Additional information and more current results are available from the True North Gems website at: <http://www.truenorthgems.com/>

The possibility of emerald occurrences in the Yukon were first suggested by Lori Walton (prior to their discovery) in her Open File entitled EXPLORATION CRITERIA FOR GEMSTONE DEPOSITS AND THEIR APPLICATION TO YUKON GEOLOGY. This publication is available as Open File 1996-2 (G).

Information about pegmatites is contained in GRANITE PEGMATITES IN THE CANADIAN CORDILLERA YUKON AND NORTHWEST TERRITORIES by Lee A. Groat, T. Scott Ercit, James K. Mortensen and Mark H.F. Mauthner, Open File 1995-14 (G) and GRANITIC PEGMATITES IN NORTH - WESTERN CANADA by Lee A. Groat, Open File 1996-3 (G).

