



Occurrence Details

Occurrence Number: 105F 142
Occurrence Name: Gill Zone
Occurrence Type: Hard-rock
Status: Showing
Date printed: 10/3/2025 4:12:09 PM

General Information

Primary Commodities: gemstones
Secondary Commodities: beryllium, niobium, rare earths, zirconium
Aliases: True Blue
Deposit Type(s): Gemstone
Location(s): 61°30'.09" N - -132°27'23.26" W
NTS Mapsheet(s): 105F08
Location Comments: Based on showing location in AR 095343
Hand Samples Available: No
Last Reviewed:

Capsule

Work History

The occurrence area was explored by Ukon Joint Venture (Chevron and Kerr Addition) with rock sampling and a ground contour radiometric survey in 1976, despite being off the Guano claims 1-30 to the southwest. In 1990 an airborne magnetic , electromagnetic and VLF survey was carried out over the Mathew 1-146 claims by Granges Inc, which covered the occurrence. In 2000, Dr. Lee Groat from the University of British Columbia working for True North Gems Inc examined a sample collected by D. Eaton of Archer, Cathro and Associates Ltd. in 1976 at the occurrence, and identified the mineral as beryl. In Dec 2002, True North Gems Inc contracted Archer, Cathro and Associates (1981) Ltd to explore their various claims holdings for gemstone deposits. Archer, Cathro staked Shark cl 1-16 (YC23168) in Dec/2002 over the area they believed Eaton had previously discovered his blue beryl, and expanded the claim block to 94 claims in 2003. The 2003 exploration program was focused on locating the site of Eaton's initial find and prospecting for any potential beryl mineralization. In 2009, a silt sample was taken from a stream in the Gill Zone drainage. In 2010, contour soil sampling was carried out downhill from the occurrence and a helicopter aeromagnetic and radiometric survey was flown over the entire property.

Regional Geology

The occurrence is located on the Cassiar Platform, a curvilinear shelf that formed in the early Paleozoic, roughly parallel to the western margin of the North American craton but separated from it by the Selwyn Basin. Shallow marine miogeoclinal sediments were emplaced on the platform until Late Devonian time. Block faulting and local uplift during the Late Devonian and Mississippian resulted in deposition of carbonaceous shale and chert pebble conglomerate in the Selwyn Basin and across the platform. Local explosive volcanism produced volcanoclastic material and flows of the Pelly Mountains volcanic belt. The belt comprises localized submarine volcanic centres generated in an extensional environment that are separated by basins in-filled with sediments and volcanoclastic rocks. Several cogenetic syenite and trachyte domes and small stocks are the remains of vent areas. Subsequent deformation is a result of Mesozoic thrust faulting related to the Cordilleran orogeny, emplacement of Cretaceous intrusions and Tertiary strike-slip movement along the major northwest-trending Tintina Fault, 30 km to the northeast.

Property Geology

The occurrence is hosted in Devono-Mississippian True Blue Pluton syenite. The stock is medium to fine grained, equigranular and becomes increasingly mafic towards its margins. The original 1976 beryl location was rediscovered in 2003 in the Gill Zone, an area measuring 300 by 100 m where four occurrences of medium to deep blue beryl were found in tension gashes in syenite on either side of a ridge. It is primarily a beryl showing where fine blue beryl grains occur in the syenite ground mass. There are also a number of small dykes cutting the syenite that contain higher REE concentrations. One grab sample of a dyke returned 0.45% TREO, 2.64% ZrO2 and 0.12% Nb2O5.

Work History		
Date	Work Type	Comment
12/13/2010	Geochemistry	Contour soil sampling line downslope of occurrence.
12/13/2010	Airborne Geophysics	Great West Minerals optioned the claims from True North Gems
12/13/2010	Airborne Geophysics	
12/13/2009	Geochemistry	True North explores the occurrence with one silt sample taken from a stream in the Gill Zone drainage
12/13/2002	Other	Archer Cathro staked the Shark 1-94 claims on behalf of True North Gems in 2002 & 2003
12/13/1990	Airborne Geophysics	Granges Inc. explored the Mathew 1-146 claims
12/13/1990	Airborne Geophysics	
12/13/1990	Airborne Geophysics	VLF-EM
12/13/1976	Geochemistry	Ukon Joint Venture explored off-claims to the northwest of Guano 1-30 cl
12/13/1976	Ground Geophysics	

Related References				
Number	Title	Page(s)	Reference Type	Document Type
YEG1979_80-pg55	Rare earth elements in the Guano-Guayes skarn property Pelly Mountains, Yukon Territory		Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report Paper
MIR1976	Mineral Industry Report 1976		Indian & Northern Affairs Canada/Department of Indian & Northern Development: Geology	Annual Report
1979Chronicle	Geology of the Guano-Guayes rare earth element bearing skarn property, Pelly Mountains, Yukon Territory		University of British Columbia	MSc Thesis