Occurrence Details

Occurrence Number: 105F 138
Occurrence Name: Double A
Occurrence Type: Hard-rock
Status: Showing
Date printed: 4/29/2025 10:33:12 AM

General Information

Primary Commodities: rare earths
Secondary Commodities: niobium, thorium, uranium, zirconium
Aliases: Guano
Deposit Type(s): Unknown
Location(s): 61°29'11.29" N - -132°25'1.51" W
NTS Mapsheet(s): 105F08
Location Comments: Based on showing location in AR 095343
Hand Samples Available: No
Last Reviewed:

Capsule

Work History

Charta Mining Ltd, staked CPA cl 13-24 to extend their CPA 1-12 claim package over the occurrence. Area just to the east was staked as Guano, etc. cl (YA00242) in Jul-Sep/76 by Ukon Joint Venture (Chevron and Kerr Addision), which explored with mapping, geochem and radiometric surveys in 1976. Claims over the occurrence were restaked as PS cl (YB00978) in Aug/87 by Mountain Province Mining Inc. In 2010, soil sampling and rock sampling was carried out near the occurrence and a helicopter radiometric and magnetic 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 volcaniclastic 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 volcaniclastic 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 was first identified as Double A in AR 095343. This showing consists of a number of closely spaced radioactive dykes that are near vertical and trend north-northwest. The dykes crosscut Devonian-Mississippian Earn Group trachytic volcanics. The dykes are discontinuous and boudinaged, and vary from 5 cm up to 1 m thick. Magnetite occurs as small disseminated to semi-massive euhedral crystals in a fine grained to aphanitic matrix. Small quartz-carbonate ± fluorite extension veins are locally found within the dykes and these are typically sub horizontal. One of the best grab samples (sample 334014) in 2010 returned 1.04% TREO, 1.43% ZrO_2, 0.37% ThO_2, 0.06% U_3O_8 and 1.05% Nb_2O_5. Chip sampling of the gossan in the area returned 1.06% TREO, 0.39% ZrO_2, 0.14% ThO_2, and 0.55% Nb_2O_5 (AR 095343).

A sample sent for mineralogical studies confirmed that most of the rare earth elements are contained within allanite, apatite, zircon, cerium carbonate, thorite, pyrochlore, columbite, fergusonite, bastnasite and monazite (Whiteman and Oliveira 2010).

Work History

Date	Work Type	Comment
12/13/2010	Geochemistry	
12/13/2010	Airborne Geophysics	
12/13/2010	Airborne Geophysics	
12/13/1976	Geology	
12/13/1976	Airborne Geophysics	
12/13/1976	Geochemistry	

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
1979Chronic	Geology of the Guano-Guayes rare earth element bearing skarn property, Pelly Mountains, Yukon Territory		University of British Columbia	MSc Thesis