

Occurrence Details

Occurrence Number: 105F 140 Occurrence Name: Guano Ridge Occurrence Type: Hard-rock

Status: Showing

Date printed: 10/4/2025 3:29:49 AM

General Information

Primary Commodities: rare earths

Aliases: Guano

Deposit Type(s): Unknown

Location(s): 61°29'42.62" N - -132°24'37.07" W

NTS Mapsheet(s): 105F08 Hand Samples Available: No

Last Reviewed:

Capsule

Work History

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. In 1979, work was carried out in other parts of the claim block. White 1-123 claims covered the occurrence from 1987 to 1989. In 2003, the Shark 1-94 claims covered the occurrence. Work was carried out in 2009 in other parts of the claim block. In 2010, a helicopter aeromagnetic and radiometric survey was flown over the entire property by Great Western Minerals.

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 infilled 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

Guano Ridge is the original rare earth showing in the area and consists of several small east-west trending discontinuous dykes cross-cutting carbonates that have been strongly modified by contact metamorphism (skarnified). Chronic (1979) broke the dykes out into two basic types: melagranite dykes up to 5 cm thick and mafic dykes up to 20 cm thick. Samples collected by Chronic of the melagranite dykes contained between 276 to 6500 ppm Total REE; the mafic dykes contained 15,100 to 20,400 ppm Total REE.

Ukon REE showings 1, 2 & 3 shown in AR 095343) were taken from the talus slope on the Bench below Guano Ridge, but the analytical results were only semi-quanitative. Turner (2010) sampled dykes from the same area and received assays as high as 4.06% TREE, however, sampling in 2010 by Great Western in the same area reported values only a fraction of those documented in Turner's thesis.

A sample from the 2010 season was submitted for mineralogical analysis, and it was found that nearly all REE are contained within rare earth minerals: zircon, allanite, apatite, thorite pyrochlore and fergusonite (Whiteman and Oliveira 2010).

In 1976, a chip sample 240 m northeast of the occurrence assayed 700 ppm beryllium.

Work History

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

Related References

Number	Title	Page(s)	Reference Type	Document Type
YEG1979_8 0-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
<u>1979Chroni</u> <u>c</u>	Geology of the Guano-Guayes rare earth element bearing skarn property, Pelly Mountains, Yukon Territory		University of British Columbia	MSc Thesis