

## **Occurrence Details**

Occurrence Number: 105F 132 Occurrence Name: Ukon Showing 2 Occurrence Type: Hard-rock Status: Showing Date printed: 4/29/2025 10:00:36 AM

# **General Information**

Primary Commodities: rare earths Secondary Commodities: niobium, uranium, zirconium Aliases: Guano Deposit Type(s): Skarn Location(s): 61°30'20.39" N - -132°25'29.54" W NTS Mapsheet(s): 105F09 Location Comments: Georeferenced from Map 14 in AR 095343 (p. 625). 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, geochemical sampling, hand trenching and radiometric surveys in 1976. A ground radiometric grid survey was undertaken over the occurrence in 1979. Restaked as part of the White 1-123 claims in 1987. Contour soil sampling took place just south of the occurrence in 1987. In 2010, Great Western Minerals carried out a property-wide airborne radiometric & magnetic survey over the property and soil lines to the south of the occurrence.

#### 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 Cordiileran 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 metasomatized Silurian-Devonian Askin Group clastics and carbonates. This occurrence is in an area of anomalous radioactivity and was first identified as Showing 2 in AR 090269. Hand trenching in 1977 failed to reach bedrock but did uncover a few radioactive skarn boulders. One sample assayed 0.074% U308. The 2010 radiometric survey confirmed the anomaly and showed that it is associated with a strong magnetic anomaly, though soil samples collected in 2010 only show a number of scattered, moderately anomalous samples. Chip samples of carbonate skarns were collected from outcrops in the area and the best result returned: 0.33% TREO, 0.55% ZrO2, 0.04% ThO2, 0.02% U308, 0.26% Nb2O5 (sample 25710).

## Work History

Date	Work Type	Comment
12/13/1987	Geochemistry	
12/13/1979	Geochemistry	
12/13/1977	Trenching	
12/13/1976	Ground Geophysics	
12/13/1976	Airborne Geophysics	
12/13/1976	Geology	
12/13/1976	Geochemistry	

## **Related References**

Number	Title	Page(s)	Reference Type	Document Type
<u>YEG1979_8</u> <u>0-pg55</u>	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
<u>MIR1976</u>	Mineral Industry Report 1976		Indian & Northern Affairs Canada/Department of Indian & Northern Development: Geology	Annual Report