



Occurrence Details

Occurrence Number: 117A 072
Occurrence Name: Boundary
Occurrence Type: Hard-rock
Status: Showing
Date printed: 12/15/2025 1:07:50 PM

General Information

Secondary Commodities: iron
Deposit Type(s): Iron Formation
Location(s): 68°29'59" N - -136°31'21" W
NTS Mapsheet(s): 117A09
Location Comments: .5 Kilometres
Hand Samples Available: No
Last Reviewed:

Capsule

Work History

First noted by the GSC in 1971 and later studied extensively by mineralogists and gem collectors.

This occurrence lies within a large area withdrawn from staking in July, 1978 pending creation of a National Wilderness Park, settlement of native land claims, and development of a management plan for the Porcupine Caribou Herd.

Capsule Geology

Thick deposits of siderite and phosphatic ironstone occur in shale within the Rapid Creek Formation, part of a flyschoid clastic wedge of Early Cretaceous age. The sequence consists of three units of cyclically interbedded siderite, mudstone and shale separated by two grey montmorillonite shale units.

A spectacular suite of approximately thirty unusual phosphate minerals, including ten new species, are present as epigenetic fracture fillings (veins) and lesser concentrations in vugs, bedding plane partings and fillings in fault breccia. Calcium-rich phosphate minerals occur in phosphatic mudstone, barium-rich minerals in conglomeratic slump deposits, sodium-rich minerals with phosphatic sandstone and iron-magnesium rich minerals with sideritic sandstone. Phosphate mineralization at this location is largely confined to recrystallized spherulitic replacements of ammonites and pelecypods and oblate concretionary phosphate nodules. The main minerals are pyrite, wolfeite, satterlyite, maricite, vivianite-baricite and varulite.

Work History

Date	Work Type	Comment
12/31/1974	Geochemistry	
12/31/1974	Geology	
12/13/1974	Lab Work/Physical Studies	Samples of various minerals studied.

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
090002	1975	Exploration Proposal Delta Iron Deposit	Rock - Geochemistry		
080340	1974	Delta Iron Deposit Mac 1-50 Mineral Claims, Mackenzie Mining District	Research/Summarize - Pre-existing Data		

Related References

Number	Title	Page(s)	Reference Type	Document Type
1992GeolV o13_02	Phosphorites, ironstones, and secondary phosphates in Mid-Cretaceous flysch of the blow trough, northern Yukon		Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report Paper