

# **Occurrence Details**

Occurrence Number: 105F 083 Occurrence Name: Fox Occurrence Type: Hard-rock Status: Showing Date printed: 6/14/2025 4:58:59 PM

# **General Information**

Secondary Commodities: lead, silver, zinc Deposit Type(s): Vein Polymetallic Ag-Pb-Zn+/-Au Location(s): 61°36'43" N - -132°30'42" W NTS Mapsheet(s): 105F10 Location Comments: .5 Kilometres Hand Samples Available: Yes Last Reviewed:

## Capsule

#### Work History

Staked as Fox cl (YA21319) in Jul/77 by a joint venture between Cyprus Anvil Mining Corporation and Hudson's Bay Oil & Gas Ltd, which mapped and geochem sampled later in the year. Restaked within Ram cl 1-758 (YA71576) in Sep/84 by Regional Resources Ltd, which performed an extensive program of mapping, geochemical and geophysical surveys in 1985 and transferred its interests to Fairfield Minerals Ltd in 1986. Fairfield carried out additional geological mapping and soil sampling in 1987. Pacific Comox Resources Ltd acquired a 100% working interest in the Ram claims in Jan/93.

Restaked within Ice cl 19-104 (YB92850) in Sep/2000 by Eagle Plains Resources Ltd, which consolidated this occurrence with their larger Fire and Ice occurrences (Minfile Occurrences #105F 071 & 073). In 2001 the company carried out extensive reconnaissance geological mapping, silt and soil sampling programs in the vicinity of this occurrence. In 2002 the company collected two lines of soil samples in the vicinity of this occurrence. The company also began archiving all previously collected data using a Geographic Information System.

#### Capsule Geology

The area is located southwest of the Tintina Fault on the Cassiar Platform. The Cassiar Platform is a curvilinear shelf that formed, between mid-Cambrian and Silurian time, roughly parallel to the western margin of the North American craton but separated from it by the Selwyn Basin. Shallow water deposition on the Cassiar Platform continued until Late Devonian time. Block faulting and local uplift during 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 thick tuff and flows whose extremities intertongue with surrounding black shale. Some of these centres contain base metal mineralization. Calcareous argillite of Upper Paleozoic to Triassic age was deposited above the shale and volcanic sequence (Hunt, 1999).

The occurrence is located at the northwest end of the Pelly Mountains volcanic belt, an arcuate belt approximately 80 km long and up to 25 km wide that forms part of the Cassiar Platform. The belt is comprised of localized volcanic centers separated by basins in-filled with sediments and volcaniclastic rocks. The present deformed thickness of the volcanic section is highly variable, ranging from less than 100 m to as much as 1 700 m. Associated with these volcanic rocks are at least two volcanogenic massive sulphide (VMS) deposits, the Wolf (Minfile Occurrence #1056 008) and MM (Minfile Occurrence #105F 012) and numerous other historical showings including the Bnob ((Ice) - Minfile Occurrence #105F 073) and Chzerpnough ((Fire) i Minfile Occurrence # 105F 071).

The volcanic rocks are predominantly felsic but in some areas significant accumulations of andesite to basalt occur. The most common feature of the belt are flows, epi-zonal sills, and small plugs of trachyte. The trachyte flows and/or sills are laterally very extensive, probably due to low magmatic viscosity caused in part by high alkali element content. Typically the trachyte contains significant amounts of pyrite which gives rise to extensive gossans. The trachytes are commonly cream colored, with fine to medium grained phenocrysts of feldspar and rare quartz and locally massive, amygdaloidal or brecciated. Syenite intrusions have been noted at a number of locations within the Pelly Mountains volcanic belt and are thought to represent volcanic feeders. Although these intrusions were originally thought to represent plugs recent diamond drilling suggests that they are really sills.

The original Fox showing (this occurrence) was discovered by Regional Resources in 1985. The company reported finding replacement type mineralization in felsenmeer consisting of diffuse veinlets of galena, iron oxides, hydrozincite and minor sphalerite in dolomite and limestone. The lack of outcrop in the area makes stratigraphic relationships difficult to determine. However, Regional Resources assigned the dolomite and limestone unit, a Devonian to Mississippian age suggesting the clastic rocks are age equivalent to the Pelly Mountain volcanics. Later work by Gordey and Makepeace (2003) assigned the rocks to the Upper Devonian to Lower Mississippian Earn Group which is partially age equivalent to the Pelly Mountain volcanics. Alternatively the rocks may be Middle Silurian to Middle Devonian in age thus representing Cassiar Platform rocks, which are known to host replacement mineralization elsewhere in the area.

Soil sampling outlined widespread, anomalous silver-lead-zinc values surrounding the showing. A grab sample of the mineralized felsenmeer returned 37% lead, 0.04% zinc, 0.10 g/t gold and 739.5 g/t silver. Follow-up sampling failed to replicate the grab sample result.

In 1987, Fairfield Minerals discovered a second showing, the Fox/Falcon, 1.6 km north of this occurrence. This showing, found while following up anomalous soil sampling results, consists of ankerite-quartz veins and disseminated pyrite and galena in a rusty metavolcanic (rhyolite (?)) horizon. Grab samples from outcrop returned up to 1 700 ppm lead, 3 200 ppm zinc and 4.1 ppm silver. This occurrence is likely hosted by Pelly Mountain volcanic rocks.

In 2001, Eagle Plains Resources carried out geological mapping and extensive rock, soil and silt sampling programs in the vicinity of the Fox and Fox/Falcon showings. The following year, 2002, the company collected a line of detailed soil samples near both showings. Line F6 which tested the area down slope of the Fox showing returned scattered anomalous geochemical values including a 100 m section which returned 420 ppm lead. Line 21 which tested the area uphill and east of the Fox/Falcon showing returned moderately anomalous copper, lead and barium values. It does not appear that Eagle Plains spent any significant time examining either of the two actual showings.

#### References

EAGLE PLAINS RESOURCES LTD, Dec/01. Assessment Report #094267 by C.C. Downie.

EAGLE PLAINS RESOURCES LTD, Nov/02. Assessment Report #094392 by C.C. Downie and C. Gallagher.

EAGLE PLAINS RESOURCES LTD, Aug/2004. Web Site: www.eagleplains.bc.ca

FAIRFIELD MINERALS LTD, Sep/87. Assessment Report #092096 by J.J. Hylands.

FAIRFIELD MINERALS LTD, Nov/88. Assessment Report \*#092604 by J.J. Hylands.

GEORGE CROSS NEWSLETTER, 18 Jan/93.

GORDEY, S.P. AND MAKEPEACE, A.J. 2003: Yukon Digital Geology, version 2.0, S.P. Gordey and A.J. Makepeace (comp); Geological Survey of Canada, Open File 1749 and Yukon Geological Survey, Open File 2003-9 (D).

HUNT, J.A., 1999. Preliminary stratigraphy and distribution of Devono-Mississippian massive sulphide-bearing volcanic rocks in the Mount Vermillion area, Pelly Mountains (105G/5 and G/6), southeast Yukon. In: Yukon Exploration and Geology 1998, C.F. Roots and D.S. Emond (eds.), Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, p. 73-89.

HUNT, J.A., Volcanic-associated massive sulphide (VMS) mineralization in the Yukon-Tanana Terrane and coeval strata of the North American miogeocline, in the Yukon and adjacent areas. Exploration and Geological Services Division, Yukon Region, Indian and Northern Affairs Canada, Bulletin 12, 107 p.

REGIONAL RESOURCES LTD, Jan/86. Assessment Report #091768 by M.A. Stammers.

YUKON EXPLORATION 1985-86, p. 219-221; 1987, p. 154;

YUKON EXPLORATION AND GEOLOGY 2001, p. 10-11, 24.

## Work History

Date	Work Type	Comment
12/31/2002	Geochemistry	Follow-up of results obtain in 2001.
12/31/2001	Geology	Program was reconnaissance in scale.
12/31/2001	Geochemistry	Also silt sampling.
12/31/1987	Geochemistry	
12/31/1987	Ground Geophysics	Also magnetic and VLF-EM surveys.
12/31/1985	Geology	
12/31/1985	Geochemistry	
12/31/1985	Trenching	
12/31/1985	Other	
12/31/1977	Geology	
12/31/1977	Geochemistry	
12/13/2002	Pre-existing Data	

## Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
<u>095323</u>	2010	2010 Geological and Geochemical Assessment Report for the Fire (Chzerpnough) and Ice (BNOB) Properties	Rock - Geochemistry, Scintillometer - Ground Geophysics, Prospecting - Other		
<u>094905</u>	2007	2007 Geological and Geochemcial Assessment Report for the Fire (Chzerpnough), Ice (BNOB) and Melt Properties	Rock - Geochemistry, Silt - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology		
<u>094392</u>	2002	Geological Report for the Fire (Chzerpnough), Ice (BNOB) and Melt Properties	Rock - Geochemistry, Silt - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology		
<u>094267</u>	2001	Geological Report for the Fire(Chzerpnough), Ice(Bnob) and Melt Properties Pelly Mountain Project	Soil - Geochemistry, Prospecting - Other		
<u>094200</u>	2000	Diamond Drilling Geological Report for the FIRE(Chzerpnough) and ICE(BNOB) Properties	Diamond - Drilling, Soil - Geochemistry, Detailed Bedrock Mapping - Geology	7	616
<u>092096</u>	1987	Geological, Geochemical & Geophysical Report on the Ram 1-178 & Mat 1-12 Mineral Claims	Soil - Geochemistry, Bedrock Mapping - Geology, EM - Ground Geophysics, IP - Ground Geophysics, Magnetics - Ground Geophysics		

## **Related References**

Number	Title	Page(s)	Reference Type	Document Type
ARMC010063	Outline map of Cook showing - Fox group - Ross River		Property File Collection	Geoscience Map (Geological - Bedrock)
ARMC008738	Certificate of Analysis - iPL 96F0523 - Fire and Ice claims		Property File Collection	A ssay s
ARMC008739	Correspondence Re: Eagle Plains Resources Fire and Ice claims		Property File Collection	Miscellaneous Company Documents
<u>ARMC008740</u>	News releases - Fire and Ice claims		Property File Collection	News Release