



Occurrence Details

Occurrence Number: 115I 100

Occurrence Name: Pitts

Occurrence Type: Hard-rock

Status: Showing

Date printed: 6/15/2025 9:08:08 AM

General Information

Secondary Commodities: antimony, arsenic, gold, mercury

Aliases: Rainbow, Rubble

Deposit Type(s): Epithermal Au-Ag-Cu: High Sulphidation

Location(s): 62°32'40" N - -137°45'44" W

NTS Mapsheet(s): 115I12

Location Comments: .5 Kilometres

Hand Samples Available: No

Last Reviewed:

Capsule

Work History

Staked as Rainbow cl 1-12 (Y98896) in Jun/75 by DC Syndicate (Dome Exploration Ltd and Cominco Ltd) which performed geochemical sampling, mapping and bulldozer trenching later in the year.

Restaked as Mut cl 1-30 (YA551402) in Sep/80 by Stephen Explorations Ltd which remapped and sampled the trenches dug in 1975.

Restaked as Rain cl 1-48 (YA75517) in Apr/83 by Canadian Nickel Company Ltd, which explored with mapping, EM geophysical and geochemical surveys later in the year.

Restaked as Chopin cl 1-44 (YC57846) in Jan/2007 by Firestone Ventures Inc which carried out reconnaissance exploration around the occurrence later in the year.

In Jun/2008 Firestone Ventures spun off its Chopin claims and other Canadian exploration properties to a new company, Northern Tiger Resources Inc. In addition Firestone Ventures signed a Memoranda of Understanding with Sherwood Copper Corp and their wholly owned subsidiary Minto Explorations Ltd whereby Sherwood Copper vended a 100% interest in four Yukon (Dawson Range) exploration properties and an extensive historical exploration database to Northern Tiger Resources. Sherwood Copper and Northern Tiger also entered into a Regional Exploration Alliance Agreement whereby the companies would provide input and cooperation on planning and executing exploration projects and long term strategies in the area. In return for this assistance Sherwood Copper retained back-in rights to acquire a 65% interest in any of Northern Tigers projects located within a 50 km radius of Sherwood Copper's Minto Mine facilities (Minfile Occurrence 115I 021 & 022) located approximately 36 km to the northeast.

In Aug/2008 Northern Tiger Resources carried out reconnaissance exploration on the central and southern portions of the Chopin claim block. The southern portion of the claim block hosts (Minfile Occurrence #115I 101).

In 2011 Northern Tiger prospected and carried out a reconnaissance scale rock, soil and silt sampling around this occurrence (Pitts).

Capsule Geology

The area is located in the central Dawson Range, west-central Yukon approximately 36 km due southeast from Capstone Mining Corporation's Minto Mine. S. Johnston employed by the Yukon Geoscience office (now part of the Yukon Geological Survey) released a geological compilation in 1995 which covered the occurrence area. Johnston used data obtained from a Geological Survey of Canada Airborne Multiparameter Geophysical Survey (Open File 2816) to assist him in creating the compilation. Gordey and Makepeace (2003) released a geological compilation of the Yukon which included this area and various exploration companies have carried out geological mapping programs as part of their assessment requirements.

The occurrence area lies within the Yukon-Tanana terrane, an accreted terrane locally separated from strata of the ancestral North American margin by the northwest-trending Tintina fault. The majority of the occurrence area is underlain by massive and pyroxene porphyritic mafic basaltic and andesitic flows and metavolcanic sediments assigned to the Late Cretaceous Carmacks Group. To the east and north, schistose to gneissic mafic metavolcanics assigned to the Devonian to Mississippian Wolverine Creek Metavolcanic suite underlie the area. Several granitic stocks likely associated with the mid-Cretaceous Dawson Range Batholith intrude the area.

Weak arsenic and antimony soil anomalies were obtained from a steep, north-trending shear zone up to 168 m wide that cut a mid-Cretaceous quartz monzonite stock near a contact with Late Cretaceous Carmacks Group olivine basalt flows. The shear zone locally contains angular breccia fragments in a siliceous matrix but elsewhere it is composed of closely spaced quartz veinlets. Weak argillic alteration extends up to 30 m into the quartz monzonite on either side of the shear zone. The DC Syndicate cut four trenches across the shear zone which they referred to as the Rainbow zone (Occurrence A). Sampling of the trenches generally returned less than 3.4 g/t gold although one sample of sheared schistose granite returned 5.5 g/t gold. Gold values as high as 1.02 g/t were obtained from surface sampling.

In 1980, A. Morin employed by Exploration and Geological Services Division (now part of the Yukon Geological Survey) located a zone of chalcidonic veining within the stock about 750 m northwest of the Rainbow zone. Samples from the veining returned up to 77 ppb gold. Stephens Explorations Ltd restaked the Rainbow zone and the area containing the chalcidonic veining based on Morin's report. Soil sampling identified a weak arsenic-antimony soil geochemical anomaly over the Rainbow zone.

The Canadian Nickel Company's Rain claims covered the Rainbow zone, the chalcidonic veining and the Panther occurrence (Minfile Occurrence 115I 101) located approximately 4 km to the southwest. Rock and soil sampling over the Rainbow zone returned values similar to those obtained by the DC Syndicate. Prospecting/geological mapping led to the discovery of the Rubble zone (Occurrence B) located approximately 1.5 km due south of the Rainbow zone. The Rubble zone occurs in a mafic ash unit assigned to the Carmacks Group and consists of quartz veins and vein stockworks similar to the Rainbow zone. The mafic rocks display moderate to strong argillic alteration. No precious metal values were returned from rock samples collected from either the silicified volcanic rocks or from the quartz veins although a few samples from the zone were anomalous for mercury and arsenic. Gas chromatography, x-ray and fluid inclusion studies completed by Canadian Nickel Company and the banded nature of the chalcidonic quartz indicate an epithermal origin.

Firestone Ventures/Northern Tiger Resources' 2008 exploration program generally confirmed earlier results. No new zones or anomalies were found. Prospecting and reconnaissance sampling carried out in 2011 did not return any significant results.

References

CANADIAN NICKEL COMPANY LTD, Apr/84. Assessment Report #091530 by W.O. Manson.

FIRESTONE VENTURES INC, Jun/2008. Assessment #095007 by C. Schulze.

FIRESTONE VENTURES INC, Press Release. 3 Mar/2008, 23 Jun/2008, 27 Jun/2008.

FIRESTONE VENTURES INC, Jul/2004, Website: www.firestoneventures.com

MINERAL INDUSTRY REPORT 1975, p. 143.

NORTHERN TIGER RESOURCES INC, Apr/2009. Assessment Report #095085 by S. Schulze.

NORTHERN TIGER RESOURCES INC, Jun/2012. Assessment Report #095888 by D. Ouellette.

NORTHERN TIGER RESOURCES INC, Press Release. 23 Jun/2008, 27 Jun/2008, 24 Nov/2008.

NORTHERN TIGER RESOURCES INC., Feb/2010. Web Site: www.northerntiger.com.

YUKON EXPLORATION AND GEOLOGY 1983, p. 253.

YUKON GEOLOGY AND EXPLORATION 1979-80, p. 263.

Work History

Date	Work Type	Comment
12/31/2008	Geology	Central and southern portions of Chopin claim block.
12/31/2008	Geochemistry	Central and southern portions of Chopin claim block.
12/31/2007	Geology	Northern end of Chopin Claim block.
12/31/2007	Geochemistry	Northern end of Chopin Claim block.
12/31/1983	Geology	
12/31/1983	Geochemistry	
12/31/1983	Ground Geophysics	
12/31/1975	Geology	
12/31/1975	Geochemistry	
12/31/1975	Trenching	
12/13/2011	Geochemistry	Also rock and silt sampling. Reconnaissance sampling around this occurrence.
12/13/2011	Other	
12/13/2008	Geochemistry	
12/13/1980	Geochemistry	Re-sampled trenches.
12/13/1980	Geology	Re-mapped trenches.

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
095888	2011	Assessment Report on the 2011 Surface Geochemical Program, Chopin Property	Rock - Geochemistry, Silt - Geochemistry, Soil - Geochemistry, Prospecting - Other		
095085	2008	Assessment Report on the 2008 Surface Geological and Geochemical Program, CHOPIN Property	Rock - Geochemistry, Silt - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Line Cutting - Other, Prospecting - Other		
091530	1983	Geological, Geophysical and Geochemical Report Rain Project	Rock - Geochemistry, Bedrock Mapping - Geology, EM - Ground Geophysics, Petrographic - Lab Work/Physical Studies, Line Cutting - Other		

Related References

Number	Title	Page(s)	Reference Type	Document Type
2003-9(D)	Yukon Digital Geology (version 2)		Yukon Geological Survey	Open File (Geological - Bedrock)
1993-3(G)	Geological Map of Wolverine Creek (115I/12), Dawson Range, Yukon		Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Open File (Geological - Bedrock)
YEG1992-pg49	Preliminary results of 1:50 000-scale geologic mapping in Wolverine Creek map area (115 I/12), Dawson Range, southwest Yukon		Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report Paper
YEG1979-80-pg68	Element distribution in Yukon gold-silver deposits		Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report Paper
ARMC016	Geology map - 115I/12 - Mount Pitt		Property File Collection	Geoscience Map

