Occurrence Details

Occurrence Number: 105F 036
Occurrence Name: Tub
Occurrence Type: Hard-rock
Status: Prospect
Date printed: 12/16/2025 5:04:27 PM

General Information

Secondary Commodities: copper, gold, lead, silver, tungsten, zinc
Aliases: Fox
Deposit Type(s): Volcanogenic Massive Sulphide (VMS) Kuroko Cu-Pb-Zn
Location(s): 61°51'18" N - -133°12'30" W
NTS Mapsheet(s): 105F14
Location Comments: .5 Kilometres
Hand Samples Available: Yes
Last Reviewed:

Capsule

Work History

Staked as Tab cl 1-4 (Y62689) in Oct/71 by P. Risby and optioned later in the year by Arrow Inter-America Corporation, which added Murph cl 1-60 (Y66330), Bat cl 1-40 (Y66716), Loy cl 1-4 (Y66763) and Jac cl 15-18 (Y66767) in Jun/72 and carried out geochemical sampling and prospecting later in the year. A. Arsenault and P. Versluce tied on Argo cl 1-24 (Y62868) to the southwest in Oct/71 but did no work.
Restaked as Au cl 1-6 (Y91929) in Jan/75 by P. Risby and optioned to Utah Mines Ltd, which carried out geological mapping and geochemical sampling in 1975 and staked Brie cl 1-128 (YA3651) in Sep/75. In 1976 the company carried out EM and gravity surveying, grid soil sampling, hand trenching and further geological mapping. The company also drilled five holes (640 m) and staked additional Brie claims.
Restaked in Jun/96 as Uno cl 1-126 (YB67132) by a group of stakers working for a unknown company. It appears they completed a soil sample survey, west of the occrrence but no work was ever filed for assessment and the claims were allowed to lapse the following year.
Restaked as Fox cl 1-6 (YC14012), cl 13-48 (YC14018) and cl 65-78 (YC14054) in Mar/99 by Tanana Exploration Inc which carried out prospecting and geochemical rock sampling later in the year. The company added Fox cl 7-12 (YC17993) in Jul/99 and in 2000 continued exploring the claim group with prospecting, geochemical sampling and hand trenching.

Capsule Geology

The occurrence is located on the Cassiar Platform, northwest of the South Canol road and south of the Tintina Trench. From Middle Proterozoic through Early Devonian time, a miogeoclinal sequence accumulated along the western margin of North America. Between mid-Cambrian and Silurian time a curvilinear shelf, known as the Cassiar Platform formed, roughly parallel to the craton edge 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 the Late Devonian and Mississippian resulted in deposition of carbonaceous shale and chert pebble conglomerate in the Selwyn Basin and across the Cassiar Platform. Local explosive volcanism produced thick tuffs and flows whose extremities intertongue with surrounding black shale. Some of these volcanic centres contain base metal mineralization. Calcareous argillite of Upper Paleozoic to Triassic age was deposited above the shale and volcanic sequence.
The area has not been re-mapped since 1977 when Templeman-Kluit published his geology maps for topographic map sheets 105F and G. Templeman-Kluit mapped a sequence of Late Proterozoic to Devonian metasediments and metavolvanic rocks in the area. These relationships are reflected in Gordey¿s 1999 Yukon Geology compilation map. However, recent mapping completed by the Yukon Geological Survey of the Yukon Tanana Terrane located to the northwest (topographic map sheet 105L) and southeast (105G) has raised speculation about the geology of the area. Based on this newer mapping and on field relationships recorded by Tanana Exploration Inc it is possible the area hosts some volcanic rocks which belong to the Pelly Mountains volcanic belt observed southeast of the South Canol Road. The Pelly Mountains volcanic belt is known to host numerous base metal deposits.
Three types of mineralization have been identified in and around the occurrence, which is underlain by complexly folded Cambrian to Ordovician orange-weathering phyllite with lenses of tuff and dolomite, cut by mid-Cretaceous hornblende diorite and andesite dykes up to 4.6 m wide;

(a) The first type of float consists of dark brown, limonite-stained quartz-carbonate with pyrite and chalcopyrite in bands and crosscutting fractures. The richest specimen assayed 3.6% Cu and 5.14 g/t Ag and trace Au. It occurs in siliceous lenses at the noses of small folds within the phyllite and tuff.

(b) The second type of float consists of white siliceous zones with banded sphalerite and minor galena. One specimen assayed 11.5% Pb, 10.2% Zn and 78.9 g/t Ag. This type is exposed in a 0.9 m wide siliceous lens in phyllite dipping 50 degrees north.

(c) The third type consists of crosscutting 0.15 to 0.92 m wide quartz-carbonate veins in phyllite, containing mariposite with pyrite and minor sphalerite, chalcopyrite, galena and tungsten.

The 1976 diamond drilling was carried out in the vicinity of Brie Creek and one of its tributaries to test for a bedrock source for the mineralized boulders and to test a electromagnetic anomaly. No mineralization was found and most geophysical conductors were found to be caused by graphitic zones in the phyllite. Subsequent investigation by Tanana Exploration suggests that this drilling intersected the barren footwall sequence.
Tanana Exploration spent their first exploration season verifying previous results and trying to trace mineralized float back to outcrop. Mineralized boulders returned values up to 14.61% Zn, 1.4% Cu, 1.11% Pb. 46.7 g/t Ag and 0.85 g/t Au. Prospecting located mineralization in outcrop.
Exploration in 2000 traced the mineralized boulders found in Brie Creek to the Ram zone located 1 km south of the occurrence, on the west, upslope side of the creek (near drill holes 76-4 and 5). Follow-up trenching revealed that the mineralized interval is in excess of 100 metres thick and occurs in the hanging wall sequence of a newly discovered fault. The mineralized interval consists of tuffaceous schist, followed by a quartz-sulfide rich zone, grading into phyllite. Three grab samples, representing a sampling distance of approximately 25 m returned values from 3.8% to 9.6% Zn.
Other promising areas found in 2000 include the Avalanche zone, a 200 by 300 m area of mineralized float grading in excess of 25% combined Zn-Pb along the northern boundary of the property and the Cirque Creek zone, located approximately 2 km east of the occurrence. Mineralization at the Cirque Creek zone consists of Zn in highgrade ¿blackjack¿ stringers in scree located below stratiform lenses of pyritic sulfides lying near the top of a very steep north facing slope. Prospecting activities also uncovered numerous other mineralized showings that require further work to evaluate their significance.

References

ARROW INTER-AMERICAN CORPORATION, Sep/72. Assessment Report #090942 by H.S. Lazenby.

GORDEY, S.P., AND MAKEPEACE, A.J., 1999. Yukon digital geology, S.P. Gordey and A.J. Makepeace (comp.); Geological Survey of Canada, Open File D3826, and Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, Open File 1999-1 (D)

MINERAL INDUSTRY REPORT 1975, p. 112-113; 1976, p. 153-155; 1977, p. 61.

MORTENSEN, J.K., 1981. Geological setting and tectonic significance of Mississippian felsic metavolcanic rocks in the Pelly Mountains, southeastern Yukon Territory. Canadian Journal of Earth Sciences, vol. 19, p. 8-22.

TANANA EXPLORATION INC, Dec/2000. Assessment Report #094157 by S. Traynor.

TEMPLEMAN-KLUIT, D.J., 1977. Quiet Lake and Finlayson Lake map areas, Yukon. Geological Survey of Canada, Open File 486 (two 1:250 000 scale maps and legend).

TRAYNOR, S., Feb/2000. Assessment Report #094086 by S. Traynor.

UTAH MINES LIMITED, Dec/75. Assessment Report #090059 by D.G. Cargill.

UTAH MINES LIMITED, Oct/76. Assessment Report #090136 by G. Norman et al.

YUKON EXPLORATION AND GEOLOGY 2000, p. 11, 24.

Work History

Date	Work Type	Comment
12/31/2000	Geochemistry	
12/31/2000	Geochemistry	
12/31/2000	Trenching	
12/31/2000	Other	
12/31/1999	Geochemistry	Program was reconnaisance in nature.
12/31/1999	Other	Program was reconnaisance in nature.
12/31/1996	Geochemistry	Evidence of a soil sample program observed in area, no resluts were ever filed for assessment.
12/31/1977	Drilling	Two holes, 260 m.
12/31/1977	Geology	
12/31/1977	Geochemistry	
12/31/1977	Ground Geophysics	EM, magnetometer and gravity surveys.
12/31/1977	Trenching	
12/31/1976	Drilling	Five holes, 641.3 m.
12/31/1976	Geology	
12/31/1976	Geochemistry	Also collected silt samples.
12/31/1976	Ground Geophysics	EM, gravity and magnetic surveys.
12/31/1975	Geology	
12/31/1975	Other	
12/31/1972	Geochemistry	Also collected chip samples.
12/31/1972	Other	
12/13/1975	Geochemistry	Silt and chip samples also collected.

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
094157	2000	Prospecting Report on the Fox Property	Rock - Geochemistry, Prospecting - Other		
094086	1999	Evaluation Report on the Fox Property	Rock - Geochemistry		
090136	1976	Geological, Geochemical and Geophysical Report on the Brie and Au Claims Groups 1 to 9	Silt - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, EM - Ground Geophysics, Gravity Survey - Ground Geophysics, Magnetics - Ground Geophysics		
090059	1975	Geological and Geochemical Report on the Au Claims in the Whitehorse Mining District	Rock - Geochemistry, Silt - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Prospecting - Other		
090942	1972	A Geochemical Evaluation of the Tab Claims	Rock - Geochemistry, Soil - Geochemistry		

Related References

Number	Title	Page(s)	Reference Type	Document Type
ARMC008119	Geochemical survey values map - Cu, Pb, Zn - 105F-14 - Fox Creek		Property File Collection	Geochemical Map