



Occurrence Details

Occurrence Number: 105G 018

Occurrence Name: Grass

Occurrence Type: Hard-rock

Status: Showing

Date printed: 10/4/2025 3:30:20 AM

General Information

Secondary Commodities: molybdenum, tungsten

Deposit Type(s): Vein Polymetallic Ag-Pb-Zn+/-Au

Location(s): 61°22'15" N - -131°9'10" W

NTS Mapsheet(s): 105G06

Location Comments: .5 Kilometres

Hand Samples Available: No

Last Reviewed:

Capsule

Work History

Staked as Grass cl 1-24 (Y7079) in Apr/66 by Cassiar Asbestos Corporation Ltd on a showing reportedly found in 1954 by Pelly River Explorations Ltd (Pioneer Gold Mines Ltd, American Standard Mines Ltd, New York-Alaska Gold Dredging Corporation and Northwest Ventures Ltd) and investigated by Cassiar in 1961.

Restaked within a large block of Boot claims (approximately 124 - 221, YA33924) in Jul/78 by Chevron Canada Ltd. The entire claim block covered the north-central half of Topographic Map Sheet 105G 06 and was formally called the Grass Project. Chevron explored this occurrence with mapping, geochem sampling and hand trenching in 1978 and 1980.

Restaked as Oz cl 1-30 (YC23138) in Dec/2002 by True North Gems Inc which carried out geological mapping, soil and silt sampling, prospecting and hand pitting later in the year.

Capsule Geology

The area is located in the south-central portion of the Yukon-Tanana Terrane (YTT), northeast of the Tintina Fault. Beginning in 1996 Murphy and others (Murphy et al. 2001) began a systematic geological mapping program to update and unravel the complex geology of the YTT and explain the formation and stratigraphic relationships of the various volcanic-hosted massive sulphide and other deposits present in the YTT. The YTT is a volcanic-plutonic pericratonic arc assemblage that was strongly deformed and metamorphosed by Late Triassic time. Geological mapping shows the region is dominantly underlain by a layered sequence of Devonian to Early Mississippian metavolcanic and metasedimentary rocks belonging to the Grass Lakes Succession. Early Mississippian granitic metaplutonic rocks of the Grass Lakes Plutonic suite intrude the package.

Early geological mapping by Chevron Canada shows that the occurrence area is mainly underlain by augen gneiss. Several isolated outcrops of volcanic schist and interbedded skarn survived the intrusion of the gneiss. Murphy's mapping generally agrees with Chevron Canada work. Murphy's map shows the occurrence area is underlain by voluminous granitic meta-plutonic rocks assigned to the Early Mississippian Grass Lakes suite (Mgag). Murphy's map does not indicate any volcanic rocks in the area but he indicates that thin intervals of marble and calc-schist not mappable at 1:50 000 scale and assigned to unit (Dq), Upper Devonian occur in the area.

Chevron called this occurrence the Pika showing. Mineralization is described as narrow quartz veins containing pyrite, scheelite, wolframite, molybdenite or arsenopyrite. The veins are erratically distributed. Scheelite also occurs as disseminations in limy bands within calc-silicate schist. Grades are very low in all metals, including traces of tin and gold. Silt sampling in 1978 showed a moderate but even tungsten response along creeks in the area. Quartz veins found previously in this area contain tourmaline with traces of molybdenite and pyrite. Host rocks include Upper Devonian and older(?) schist (Dq) and the gneissic Grass Lakes intrusions.

True North Gems staked the Oz claims for their emerald potential. The company hired Archer, Cathro and Associates (1981) Ltd to lead the exploration program. Archer, Cathro carried out Chevron's earlier exploration program and made the original discovery at Regal Ridge (Minfile Occurrence 105G 147), the Yukon's first commercial emerald deposit. Archer, Cathro used their proprietary database to determine the threshold for various geochemical elements.

Prospecting outlined three zones of alteration (A, B and C), similar to those found at the Regal Ridge emerald deposit. These zones are characterized by rusty to golden weathered muscovite schists bands, recessive gullies, radiating bird's foot tourmaline along foliation planes in the schist and quartz-tourmaline veining. Zone A appears to be the best exposed zone. The zone measures approximately 100m by 100m and within this area orthogneiss (unit Dq) and Fire Lake biotite-chlorite-quartz schist (unit DF) are cut by a undeformed mafic dyke, an aplite dyke and quartz veins. The largest vein is 1.2 m thick and contains tourmaline masses and disseminate silver mica. Pervasive massive, green actinolite is developed in unit Dq up to 2m on either side of the quartz veins.

Soil sampling returned enriched beryllium levels but only weakly to moderately anomalous chromium values leading the company to speculate whether there was sufficient chromium enrichment to form emeralds. Further investigation of Zone A was suggested.

References

BOND, J.D., MURPHY, D.C., COLPRON, M., GORDEY, S.P., PLOUFFE, A., ROOTS, C.F., LIPOVSKY, P.S., STRONGHILL, G., AND ABBOTT, J.G., 2002. Digital compilation of bedrock geology and till geochemistry, northern Finlayson Lake map area, Southeastern Yukon (105G), Exploration and Geological Services Division, Yukon Region, Indian and Northern Affairs Canada, Open File Report, 2002-7(D) and Geological Survey of Canada Open File 4243.

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).

MURPHY, D.C. and PIERCEY, S.J., 1999. Geological map of parts of Finlayson Lake (105G/7, 8 and parts of 1, 2, and 9) and Frances Lake (parts of 105H/5 and 12) map areas, southeastern Yukon (1:100 000-scale). Exploration and Geological Services Division, Yukon Region, Indian and Northern Affairs Canada, Open File 1999-4.

MURPHY, D.C. AND PIERCEY, S.J., 2000. Syn-mineralization faults and their re-activation, Finlayson Lake massive sulphide district, Yukon-Tanana Terrane, southeastern Yukon. In: Yukon Exploration and Geology 1999, D.S. Emond and L.H. Weston (eds.), Exploration and Geological Services Division, Yukon Region, Indian and Northern Affairs Canada, p. 55-66.

MURPHY, D.C., COLPRON, M., GORDEY, S.P., ROOTS, C.F., ABBOTT, G., AND LIPOVSKY, P.S., 2001. Preliminary bedrock geological map of northern Finlayson Lake area (NTS 105 G) Yukon Territory (1:100 000 scale). Exploration and Geological Services Division, Yukon Region, Indian and Northern Affairs Canada, Open File 2001-33.

MURPHY, D.C., COLPRON, M., ROOTS, C.F., GORDEY, S.P. AND ABBOTT, J.G., 2002. Finlayson Lake Targeted Geoscience Initiative (southeastern Yukon), Part 1: Bedrock geology. In: Yukon Exploration and Geology 2001, D.S. Emond, L.H. Weston and L.L. Lewis (eds.), Exploration and Geological Services Division, Yukon Region, Indian and Northern Affairs Canada, p. 189-207.

CHEVRON CANADA LTD, Feb/79. Assessment Report #090439 by R.J. Cathro and U. Schmidt.

CHEVRON CANADA LTD, Feb/81. Assessment Report #090728 by R.J. Cathro and U. Schmidt.

MINERAL INDUSTRY REPORT 1978, p. 65.

TRUE NORTH GEMS INC, Aug/2004. Assessment Report #094469 by W. Wengzynowski.

Work History

Date	Work Type	Comment
12/31/2003	Geology	
12/31/2003	Geochemistry	
12/31/2003	Geochemistry	
12/31/2003	Other	
12/31/1980	Geology	
12/31/1980	Trenching	
12/31/1980	Other	
12/31/1978	Geology	
12/31/1978	Trenching	
12/31/1978	Other	

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
094469	2003	Assessment Report Describing Geology, Mineralogy and Geochemistry at the Oz Property	Silt - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Prospecting - Other, Hand - Trenching		
090728	1980	Report on Geological Mapping and Diamond Drilling on the Boot 1-284 & Marmot 1-24 Claims	Diamond - Drilling, Soil - Geochemistry, Detailed Bedrock Mapping - Geology	10	1232
019115	1966	Northlake Mines Limited, Gee Group of Claims: Report on Airborne Geophysical Surveys	Electromagnetic - Airborne Geophysics, Magnetic - Airborne Geophysics		

Related References

Number	Title	Page(s)	Reference Type	Document Type
ARMC016586	Geochemical map - 105G/6 - Upper Hoole River		Property File Collection	Geochemical Map
ARMC016576	Geology map - 105G/6 - Upper Hoole River		Property File Collection	Geoscience Map (Geological - Bedrock)