Occurrence Details

Occurrence Number: 105E 065
Occurrence Name: Dycer
Occurrence Type: Hard-rock
Status: Showing
Date printed: 8/6/2025 2:17:24 AM

General Information

Secondary Commodities: copper, lead, tungsten
Deposit Type(s): Skarn Cu
Location(s): 61°26'25" N - -134°1'15" W
NTS Mapsheet(s): 105E08
Location Comments: .5 Kilometres
Hand Samples Available: No
Last Reviewed:

Capsule

Work History

The Livingstone Creek area is a placer district which has seen intermittent mining operations since the 1898 discovery of gold in the area. The occurrence was discovered in the summer of 2005 by M. Colpron of the Yukon Geological Survey during a 1:50 000 scale geological mapping program.
The occurrence was previously staked within Hal cl 1-60 (YA24455) which were recorded in Jun/79 by Amax of Canada Ltd. The company carried out reconnaissance scale geological mapping and soil sampling programs later in the summer.

Capsule Geology

The occurrence is situated within the Livingstone Creek area, a significant placer mining area located approximately 80 km northeast of Whitehorse. Although known more for placer mining, the area has seen some bedrock exploration however despite numerous signs of past bedrock exploration activity very little documentation of this work exists.
Published bedrock geology maps of the Lake Laberge map sheet are limited to reconnaissance-scale studies of Bostock and Lees (1938; 1:253 440 scale) and Templeman-Kluit (1984; 1:250 000 scale). Subsequent studies have mainly focused on the structural and geochronological history of the area. Portions of map sheet 105E/8 were re-mapped by R.-L. Simard of Dalhousie University (2003) as part of a PhD thesis on the Semenof Hills. Detailed bedrock mapping of the Livingstone Creek area was undertaken by M. Colpron of the Yukon Geological Survey in 2004-2005 to establish the stratigraphic framework of the Yukon-Tanana Terrane in the area, and to place the Livingstone Creek area within the context of recent studies of the Yukon-Tanana Terrane in the Finlayson Lake and Glenlyon areas of the Yukon.
The Yukon-Tanana Terrane east and north of the South Big Salmon River comprises five successions of metasedimentary and metavolcanic rocks, from east to west: the Snowcap complex, and the Livingstone Creek, Mendocina, Last Peak and Dycer Creek successions. Metasedimentary rocks northeast of Mendocina Creek and those that occur in strands within and to the east of d¿Abbadie fault zone were previously assigned to Cassiar Terrane. Based on two seasons of fieldwork Colpron is now confident that they are part of the Yukon-Tanana Terrane.
The occurrence consists of a 1-m- thick horizon of semi-massive to massive pyrrhotite, which occurs in association with skarn-style mineralogy (garnet-diopside-epidote) in marble (unit PDCm) of the Upper Devonian and Older (?) Dycer Creek succession near the contact with the Early Cretaceous Dycer Creek stock. Assay results from four grab samples returned up to 1 883.65 ppm copper and 594.64 ppm lead. A Late Devonian to Early Mississippian augen meta-granite also intrudes the marble along its eastern margin.
The Dycer Creek stock consists of medium- to coarse- grained, equigranular two-mica granite dated at ca. 112 MA (U/Pb zircon). A contact metamorphic aureole, caused by emplacement of the stock, extends a few kilometers away from the intrusion. Along its western sides (including the occurrence area), contact metamorphism is most notably by development of coarse-grained garnet-diopside-epidote skarn mineralogy in marble near the intrusion. Farther west, contact metamorphism is more subtle and expressed by local talc-tremolite assemblage in the marble.
Amax of Canada noted two types of mineralization in the vicinity of this occurrence: a) rare, narrow veins of bornite-malachite-pyrite in silicified marble and b) pyroxene-garnet-pyrrhotite skarn bands containing variable amounts of scheelite as crystals and dissemination. Scheelite is associated with 2-50% pyrrhotite in skarn bands but the converse is not true. Float boulders of massive pyrrhotite with no visible scheelite were found along the intrusive-metasedimentary contact. Grab samples of mineralized skarn usually assayed between 0.1 and 2.0% WO3. A float boulder of pyrrhotite rich skarn found approximately 1.2 km northwest of the occurrence assayed 13% WO3. Soil sampling outlined two soil anomalies, located at the north and south ends of the claim block respectively, which returned up to 120 ppm tungsten.
The difference in assay results between the samples Colpron collected and those collected by Amax of Canada appears to be related to location. Amax appears to have collected their samples from a skarn zone located adjacent to the intrusive while Colpron collected his samples from a skarn zone located further west from the intrusive contact.

References

AMAX OF CANADA LTD, May/80. Assessment report #090618 by A.C. Hitchins.

BOSTOCK, H.S. AND LEES, E.J., 1938. Laberge map-area, Yukon. Geological Survey of Canada, Geological map (105E), 1:253 440 scale, and report, 33 p.

COLPRON, M., 2005. Preliminary investigation of the bedrock geology of the Livingstone Creek area (NTS 105E/8), south-central Yukon. In: Yukon Exploration and Geology 2004. D.S. Emond, L.L. Lewis and G.D. Bradshaw (eds.), Yukon Geological Survey, p. 95-107.

COLPRON, M., 2005. Geological map of Livingstone Creek area (NTS 105E/08), Yukon (1:50 000 scale). Yukon Geological Survey, Open File 2005-9.

COLPRON, M., 2006. Geology and Mineral potential of Yukon-Tanana Terrane in the Livingstone Creek area (NTS 105E/8), south-central Yukon. In: Yukon Exploration and Geology 2005, D.S. Emond, G.D. Bradshaw, L.L. Lewis and L.H. Weston (eds.), Yukon Geological Survey, p. 93-107.

MURPHY, D.C. ET AL., 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.

SIMARD, R.-L., 2003. Geological map of southern Semenof Hills (part of NTS 105E/1, 7, 8), south-central Yukon (1:50 000 scale). Yukon Geological Survey, Open File 2003-12.

SIMAARD, R-L. AND DEVINE, F., 2003. Preliminary geology of the southern Semenof Hills, central Yukon (105E/1, 7, 8). In: Yukon Exploration and Geology 2002, D.S. Emond, and L.L. Lewis (eds.), Exploration and Geological Services Division, Yukon Region, Indian and Northern Affairs Canada, p.213-222.

TEMPLEMAN-KLUIT. D.J., 1984. Geology, Laberge (105E) and Carmacks (115I), Yukon Territory. Geological Survey of Canada, Open File 1101, 1:250 000 scale.

Work History

Date	Work Type	Comment
12/31/1979	Geochemistry	
12/31/1979	Geology	
12/31/1979	Geochemistry	Work was carried out by Amax on adjoining showings located along marble-intrusive contact.

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
096140	2012	2011 Geochemical Sampling and Surficial Geology Mapping Program, Livingstone Property	Rock - Geochemistry, Silt - Geochemistry, Soil - Geochemistry, Regional Surficial Mapping - Geology		
095207	2008	Geological Assessment Report on the Kidlark Project	Rock - Geochemistry, Silt - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Magnetics - Ground Geophysics, Backhoe - Trenching		
090618	1979	1979 Geological & Geochemical Assessment Report	Rock - Geochemistry, Silt - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology		