Occurrence Details

Occurrence Number: 105M 010
Occurrence Name: Vanguard
Occurrence Type: Hard-rock
Status: Deposit
Date printed: 8/5/2025 2:23:39 PM

General Information

Primary Commodities: lead, silver
Deposit Type(s): Vein Polymetallic Ag-Pb-Zn+/-Au
Location(s): 63°55'21" N - -135°13'12" W
NTS Mapsheet(s): 105M14
Location Comments: location coordinates provided by Alexco
Hand Samples Available: No
Last Reviewed:

Capsule

Work History

Staked as Vanguard cl (13258) in Jul/20 by A. Nicol, who carried out trenching and shafting: surveyed the claims and took them to lease; shipped 11.6 tonnes of hand-cobbed ore in 1934; and shipped a further 31.8 tonnes of ore in 1948-49.
Optioned to Canex Exploration Ltd in Oct/50; to Amco Exploration Inc from Jun/52 to Feb/53; and to C. Warm in 1962, who carried out 91.4 m of cross-cutting in 1962-63.
The Vanguard claim and a number of adjoining claims, including the Quest cl (56622) and Quill cl (59273) to the east, were acquired by Canada Tungsten Mining Corporation Ltd in Mar/79.
Canada Tungsten carried out prospecting, geological mapping and geochemical rock sampling of the claims in Jun/79.
Ownership was transferred to Springmount Operating Company Ltd in 1987.

Capsule Geology

Silver-lead-zinc mineralization in the Elsa-Keno Hill mining camp occurs in north-northeast to east-northeast striking, steeply southeast dipping vein-faults located within a 23 km long by 6 km wide northeast trending belt of rocks on the south dipping limb of the McQuesten Antiform. The mineralized vein faults cut Devonian to Mississippian Earn Group phyllites, Mississippian Keno Hill quartzite and minor phyllite and Triassic meta-diorites. The vein-faults, are brittle displacement zones that show complex variations in style along their length. Narrow discrete planar fault segments pass into zones of tensional veining or shattered rock, brecciation and stockwork veining. The richest deposits occur in the vein-faults which cut the Keno Hill quartzites.
The Vanguard vein is a typical transverse vein-fault which cuts Keno Hill quartzite. Mineralization consists of galena and tetrahedrite in a carbonate gangue, with the ore grade material developed immediately above a flat lying fault of unknown offset. The grade of the ore from this vein is reported as 8 159.8 g/t Ag and 65% Pb for 1934 shipment and 10 285.4 g/t Ag and 51% Pb for the 1948-49 shipment.
Canada Tungsten reported that the adjoining claims were also underlayen by Keno Hill quartzite and that unmineralized white bull quartz veins up to 15 cm wide were widespread on the Quest claim. On the southeastern portion of the Quill claim, a small pit and a yellowish colored gossan zone in an outcrop of quartz-sericite schist was sampled for gold, but the assay results were not available at the time the company reported on the work in 1979.

References

BOND, J.D., 1998. Surficial geology of Keno Hill, Central Yukon, NTS 105M14. Exploration and Geological Services Division, Indian and Northern Affairs, Canada, Geoscience Map 1998-4, 1:50 000-scale map.

CANADA TUNGSTEN MINING CORPORATION LTD, Aug/79. Assessment Report #090951 by T.M. Elliot.

CANADA TUNGSTEN MINING CORPORATION LTD, Aug/79. Assessment Report #090952 by T.M. Elliot.

DEBECKIE, R.L. 1983. Yukon Mineral Industry 1941 to 1959; Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, p. 53.

GEOLOGICAL SURVEY OF CANADA Bulletin 111, p. 47.

GEOLOGICAL SURVEY OF CANADA Paper 63-38, p. 11.

MURPHY, D.C. and ROOTS, C.F., 1996. Geological map of Keno Hill area, Central Yukon (105M/14). Exploration and Geological Services Division, Indian and Northern Affairs Canada, Geoscience Map 1996-5, scale-1:50 000.

MURPHY, D.C., 1997. Geology of the McQuesten River Region, Northern McQuesten and Mayo Map Areas, Yukon Territory (115P/14, 15,16; 105M/13, 14). Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, Bulletin 6, 122 p.

ROOTS, C.F., 1997. Bedrock geology of Mayo map area, central Yukon (105M). Exploration and Geological Services Division, Indian and Northern Affairs Canada, Geoscience Map 1997-1, 1:50 000-scale.

ROOTS, C.F., 1997. Geology of the Mayo Map Area, Yukon Territory (105M). Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, Bulletin 7, 82 p.

Work History

Date	Work Type	Comment
12/31/1979	Geology	

12/31/1962	Other	Amount of work done: 91.4 METRES
12/31/1949	Other	Amount of work done: 5.7 TONNES
12/31/1948	Other	Amount of work done: 26.2 TONNES
12/31/1934	Other	Amount of work done: 11.6 TONNES
12/31/1920	Trenching	
12/31/1920	Other	
12/31/1920	Other	Work began in 1920 and continued sporadically until at least 1949.
12/13/2019	Geochemistry	
12/13/2019	Geology	
12/13/2019	Geochemistry	
12/13/2019	Other	
12/13/2006	Airphotography	
12/13/2006	Airphotography	
12/13/2006	Airborne Geophysics	
12/13/2006	Airborne Geophysics	
12/13/2006	Pre-existing Data	
12/13/2006	Remote Sensing	

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
096732	2014	Assessment Report Describing Metallurgical Test Pits, Metallurgical Auger Drilling, Geotechnical Auger Drilling, Geotechnical Study, Environmental Baseline Studies, Heritage Evaluation, and Water Quality and Climate Monitoring Surveys	Auger - Drilling, Water - Geochemistry, Metallurgical Tests - Lab Work/Physical Studies, Environmental Assessment/Impact - Studies, Geotechnical - Studies, Heritage/Archeological - Studies	9	96.77
095932	2011	Assessment Report on the 2011 Keno-Lighting Geophysical, Trench Mapping, Soil Geochemistry and Diamond Drilling Program	Electromagnetic - Airborne Geophysics, Reclamation - Development, Surface, Diamond - Drilling, Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Environmental Assessment/Impact - Studies	25	1819.30
094943	2006	2006 Geological, Aerial Photography and Orthophoto Assessment Report on the Keno Hill Property	Electromagnetic - Airborne Geophysics, Magnetic - Airborne Geophysics, Interpretation - Airphotography, Orthophoto - Airphotography, Digitizing Data - Pre-existing Data, Photogrammetry - Remote Sensing		
090564	1979	Geological, Geochemical, and Geophysical Report	Rock - Geochemistry, Silt - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, EM - Ground Geophysics, Seismic - Ground Geophysics, Research/Summarize - Pre-existing Data		

Related References

Number	Title	Page(s)	Reference Type	Document Type
ARMC007479	Correspondence Re: Strebchuck Alberta group		Property File Collection	Miscellaneous Company Documents
ARMC007480	Correspondence Re: Vanguard group, Keno Hill		Property File Collection	Miscellaneous Company Documents
ARMC007352	Correspondence Re: Vanguard group, Keno Hill		Property File Collection	Miscellaneous Company Documents