Occurrence Details

Occurrence Number: 105M 016
Occurrence Name: Runer
Occurrence Type: Hard-rock
Status: Deposit
Date printed: 6/14/2025 5:03:10 PM

General Information

Primary Commodities: lead, silver
Secondary Commodities: gold, zinc
Aliases: Mt. Keno
Deposit Type(s): Vein Polymetallic Ag-Pb-Zn+/-Au
Location(s): 63°54'50" N - -135°14'33" W
NTS Mapsheet(s): 105M14
Location Comments: location coordinates provided by Alexco
Hand Samples Available: No
Last Reviewed:

Capsule

Work History

The early history is unknown although an adit was apparently driven about 30 m between 1920 and 1930 and a few tonnes of hand cobbed ore were shipped. Restaked in Sep/46 as Thunderbird, etc cl (55520) by E.W. Runer who sank two shafts (7.6 and 12.1 m).
The claims were sold in Oct/50 to Canadian Exploration Ltd, which carried out bulldozer trenching before transferring them Mt Keno Mines Ltd in Jan/51. Amco Exploration Inc optioned the property from 1952-53 and drove a 305 m upper adit (3900 ft elev) and a 91 m lower adit (3800 ft elev), from which 43.4 tonnes of ore were hand cobbed.
J. Hogan leased the property from Mt Keno from 1954-56 and shipped more than 136 tonnes from the upper adit. Another lessee, J.B. O'Neill, shipped 5.4 tonnes from the upper adit and drove a 45.7 m adit above it which produced 6.4 tonnes of ore from 1958-59. The property was subsequently optioned by United Keno Hill Mines Ltd from 1964 to 1974, which carried out geochemical soil sampling.
J.B. O'Neill leased the property again in 1975 and carried out bulldozer trenching from 1975 to 1978. O¿Neill shipped 15.7 tonnes of hand cobbed ore in 1979, 19.1 tonnes in 1980 and 6.4 tonnes in 1981, all from a new vein about 30 m east at the 3800 level adit.
In 1980 Canada Tungsten Mining Corporation Ltd optioned and later acquired a group of 25 claims, including these and other adjoining claims and fractions (this occurrence and Minfile Occurrence # 105M 015), from United Keno Hill Mines Ltd. Canada Tungsten carried out geochemical sampling, prospecting and geological mapping across the claim group during August and Sep/80 and rehabilitated the upper adit, drilled 10 percussion holes (1 524 m) and carried out bulldozer trenching in 1981.
Springmount Operating Company Ltd (M. Swyzinski) leased the property in 1982, shipped about 73 tonnes of hand cobbed ore in 1982-83 from the new vein, drifted 35.4 m in a new adit near the 3820 ft level from August to Dec/83, drilled one hole (143.3 m) and shipped 399.2 tonnes of hand cobbed ore to Cominco in 1984 and 61.7 tonnes in 1985.
Springmount collared a new exploration adit on the Ironclad vein on the Thunderbird claim in late 1986 and conducted an extensive trenching program on the south slope of Keno Hill along the boundary between the Thunderbird and Jib claims in 1987. Canada Tungsten transferred ownership of the all 25 claims in the group to Springmount in May/87.s

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.
Galena, tetrahedrite and sphalerite occur with pyrite in siderite gangue, within a transverse vein up to 1.5 m wide cutting Keno Hill quartzite that is displaced by numerous crossfaults. The 1952 shipment assayed 74% Pb and over 16 456.7 g/t Ag, while the 1958-59 shipments graded 60% Pb and 21 976.6 g/t Ag (5.4 tonnes) and 15 462.4 g/t Ag (6.4 tonnes).
The 1979 shipment graded 12 387.1 g/t Ag, 0.34 g/t Au, 46.4% Pb and 1.0% Zn and was mined from a new structure about 15.2 m east of the collar of the lower adit, where bulldozer trenching exposed massive galena over a length of 10.7 m and a width of 15 to 46 cm. The 1980 shipment was obtained from a 6.7 m shaft on this vein structure, which narrowed to some 10 cm in width and graded 16 011.0 g/t Ag and 53.4% Pb.
The 1982-85 shipments averaged about 13 714 g/t Ag and 50% Pb and were obtained from the new adit and from trenches along strike of the shaft.
Trenching along strike on the Ironclad vein in 1987 initially revealed only vein gouge and siderite. Excavation below the the 3580 level revealed minor amounts of galena down to the 3570 level, at which point the dip of the vein brought it to close to the west wall of the trench necessitating a widening of the trench before it could be further excavated.

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, Dec/80. Assessment Report #092043 by G. Norman and M. Philpot.

GEOLOGICAL SURVEY OF CANADA Bulletin 111, p. 46-47.

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.

SPRINGMOUNT OPERATING COMPANY LTD, Nov/87. Assessment Report #093107, aka Yukon Exploration Incentives Program Report NO. 87-021 by F.A. Widmann.

Work History

Date	Work Type	Comment
12/31/1987	Trenching	Extensive trenching carried out along boundary between Thunderbird and Jib claims.
12/31/1986	Other	Collared a new exploration adit.
12/31/1985	Other	
12/31/1984	Drilling	Number of holes drilled: 1 Amount of work done: 143.2 METRES
12/31/1984	Other	
12/31/1983	Other	
12/31/1983	Other	Amount of work done: 35.3 METRES
12/31/1982	Other	
12/31/1981	Drilling	Number of holes drilled: 10 Amount of work done: 1524 METRES
12/31/1981	Trenching	
12/31/1981	Other	
12/31/1980	Other	
12/31/1979	Other	
12/31/1975	Trenching	
12/31/1964	Other	
12/31/1958	Other	
12/31/1958	Other	Amount of work done: 45.7 METRES
12/31/1954	Other	
12/31/1952	Other	
12/31/1952	Other	Amount of work done: 396.2 METRES
12/31/1950	Trenching	
12/31/1946	Other	Amount of work done: 19.8 METRES
12/31/1920	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	
12/13/1987	Geochemistry	
12/13/1987	Drilling	
12/13/1987	Trenching	
12/13/1987	Development, Underground	
12/13/1986	Trenching	
12/13/1986	Development, Underground	

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		
092043	1980	Geological, Geochemical and Geophysical Report on the Mount Keno Leases	Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Detailed Bedrock Mapping - Geology, EM - Ground Geophysics, Line Cutting - Other, Prospecting - Other, Research/Summarize - Pre-existing Data, Mechanical - Trenching		
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
86-032	Report on the Thunderbird South Exploration Trench		Yukon Government: Energy, Mines and Resources	YMEP Report
87-021	Springmount Operating Company Ltd. 1987 Exploration Project Yukon Exploration Incentives Program Designation Number EIP 87021		Yukon Government: Energy, Mines and Resources	YMEP Report
86-008	Report on the Thunderbird East Exploration Trench		Yukon Government: Energy, Mines and Resources	YMEP Report