Occurrence Details

Occurrence Number: 105A 054
Occurrence Name: Gribbler Ridge-G-3N
Occurrence Type: Hard-rock
Status: Prospect
Date printed: 6/15/2025 9:11:00 AM

General Information

Primary Commodities: lead, silver, zinc
Aliases: Sa Dena Hes, West Zone, Jewel Box, G-3N
Deposit Type(s): Skarn
Location(s): N - W
NTS Mapsheet(s): 105A10
Location Comments: Location digitized from map in Anvil Range property visit report
Hand Samples Available: No
Last Reviewed:

Capsule

Work History

The Mt Hundere property (later to be renamed Sa Dena Hes) was first staked as PJ and OP cl (79569) in July/62 by Frances River Syndicate (Canex Aerial Exploration Ltd, Newconex Canadian Exploration Ltd, Kerr Addison Mines & Anglo-Huronian Ltd), which built a road and explored with trenching and 6 holes (443 m) in 1963. The fringing Tom cl (86929) were staked by Conwest Exploration Company Ltd in 1963.
The property was later transferred to a new company, Mt Hundere Mines Ltd, and optioned to Atlas Explorations Ltd, which performed bulldozer trenching and geochem and geophysical surveys in 1966. Atlas changed its name to Cima Resources Ltd in 1974 and restaked as Mica cl (YA416) in Aug/76. Cima added 103 Cima, etc cl (YA45288) and explored with bulldozer trenching and 18 holes (900 m) in 1979 and a further 26 holes (1300 m) in 1980. A feasibility study in 1980 recommended production at 227 tonnes/day. Cima entered a joint venture with Canadian Natural Resources Ltd in 1981 and drilled 19 holes (797 m) in 1981 and 9 holes (422 m) in 1982.
The property was sold in 1984 to Canamax Resources Inc, which performed remapping and geochemical sampling later in the year in conjunction with work on the adjoining Atilla (Minfile Occurrence #105A 013) occurrence. Canamax added Hun cl (YA71386) to the west in 1984-85, carried out geochemical and geophysical (mag, IP, and airborne EM) surveys in 1985 and drilled 37 holes (5468 m) in 1985, 30 holes in 1986, 14 holes (3990 m) in 1987, and 10 holes (2929 m) in 1988. Canamax added more Hun claims in Jun/88 and sold its interest to Hillsborough Resources Ltd in Apr/88, subject to a 10% net profits interest. Hillsborough transferred the Cima and Mica claims to 833051 Ontario Ltd in May/89. Frame Mining Corporation Ltd tied on Thunder cl 1-22 (YB16288) & Hawk cl 1-8 (YB16310) in Aug/89 and transferred them to Curragh Resources Inc in Nov/89. Diamond drilling in 1989 totaled 29 078 m in 155 holes.
In 1990, 104 more Hun claims were added, and the property was expanded to include the Eagle cl (YB16685), also held by Curragh. The joint venture was expanded to include the Kaska Nation, which was given an option to purchase 5% by December, 1993. A production decision was announced, and construction began with the collaring of two adits on Jewelbox Hill: an upper exploration/ventilation adit and a lower development/haulage adit.
Initial underground exploration consisted of a crosscut which intersected the upper ore body 65 m from the upper portal, and a drift which followed the hanging wall of the ore for 55 m.
Underground and surface drilling continued into the late fall of 1990 with 4244 m of drilling in 125 holes. The underground drilling (74 holes - 2120 m) tested a mineralized chimney which connects the upper and lower skarn zones.
After 10 months of construction, the concentrator and haul road were completed, and production from the Jewelbox Hill zone commenced in July, 1991 at a rate of 1500 tonnes/day. In 1991 the company mined 172 345 tonnes of ore and recovered 44 998 tonnes of lead-zinc concentrate, containing an average combined grade of 20.2 %. The following year the company mined 527 411 tonnes of ore and recovered 125 228 tonnes of lead zinc concentrate, containing an average combined grade of 18%. The concentrate contained significant silver credits. Exploration drilling for 1992 totalled 16 460 m in 79 holes, and the Burnick zone on North Hill (Minfile 105A 055) was explored with a short adit. Curragh Resources changed its name to Curragh Inc. in May/92.
The mine and mill were shut down Dec 2/92, primarily as a result of low metal prices. In Dec/93, a partnership of Teck Corporation Ltd, Cominco Ltd and Korea Zinc Company Ltd offered to purchase the Sa Dena Hes property from the receivers Coopers and Lybrand Ltd, subject to court and regulatory approval. The sale to Teck and Cominco was completed in Mar/94 with Korea Zinc granted the right to acquire a 50% interest in the mine.
In Aug/97 the consortium considered re-opening the mine during a rise in base metal prices but a subsequent down-turn in prices led to the cancellation of the project. The property is presently on care and maintenance status.
Cominco's 1999 Annual Report lists a proven and probable reserve (pre-NI 43-101) and a MEASURED+ INDICATED resource. Teck Cominco's 2003 to 2005 Annual Reports lists an INDICATED resource. Later reports do not list the property.

Capsule Geology

At Mt Hundere, several high grade zinc-lead-silver replacement zones occur along contacts between Lower Cambrian limestone and phyllite. At the start of production, "proven plus probable" reserves stood at approximately 3.9 million tonnes in 5 main zones, with an average grade of 3.9 g/t Pb, 12.7% Zn and 58 g/t Ag. In addition 1.2 million tonnes of sulphide mineral inventory grading 5.2% Pb, 12.5% Zn and 84 g/t Ag was assigned to "possible reserves". A further 527 000 tonnes of oxide material containing 8.1% Pb, 12.7% Zn and 109 g/t Ag was also identified. The ore is coarse-grained and free of most impurities. The waste rock and tailings are non-acid generating due to the limestone host rock and the negligible amount of pyrite or pyrrhotite in low grade mineralization in both the ore and the low grade mineralization.

Beneath Jewelbox Hill, the Upper and Lower mineralized replacement zones form lensoid bodies 1 to 15 m thick in two sheared, brecciated limestone layers with locally developed cavernous porosity. A chimney of high grade mineralization connects the Upper and Lower replacement zones. Other mineralization is contained in the Main zone, the East zone and the Gribbler zone, as well as in the Attila and Burnick zones beneath North Hill. Zinc to lead ratio is 2:1 in all zones except the Burnick, where it is 30:1. Based on drilling up to May 1990, the average grade is estimated at about 16.6% combined Zn-Pb.

On Jewelbox Hill the main ore type consists of coarse actinolite-diopside-quartz-andradite skarn with massive sphalerite and galena. Copper-iron skarns and replacement bodies containing magnetite, chalcopyrite, pyrrhotite and minor pyrite and hematite also occur locally. The highest silver values on the property come from prograde diopside-rich skarn on the east side of Jewelbox Hill. Two vertical, ENE trending faults filled with quartz-fluorite breccia occur near the ore, and some fluorite extends into the ore.
The mineralization at Mt Hundere is epigenetic and is believed to be the product of retrograde thermal metamorphism related to a buried intrusion inferred from the presence of a dome-shaped uplift in the Mt Hundere area (Abbott, 1977). The only igneous rocks outcropping on the property are quartz-albite porphyry dykes. D. Sinclair obtained a 50 Ma K/Ar age from one such dyke on North Hill.
The property currently (?) hosts probable mineral reserves of 1 400 000 tonnes, grading 2.5% lead, 10.2% zinc and 44 g/t silver and indicated mineral resources (possible reserves) of approximately 700 000 tonnes grading 4.6% lead, 11.8% zinc and 56 g/t silver.
Cominco's 1999 Annual Report lists a proven and probable reserve (pre-NI 43-101) of 1.3M tonnes grading 10.1% Zn and 2.3% Pb and a MEASURED+ INDICATED resource of 0.7M tonnes grading 11.9% Zn and 4.6% Pb.

Teck Cominco's 2003 to 2005 Annual Reports lists an INDICATED resource of 2.19M tonnes grading 10.4% Zn and 2.6% Pb.

Work History

Date	Work Type	Comment
12/1/1988	Drilling	
12/1/1988	Geochemistry	
12/1/1987	Drilling	
12/1/1986	Drilling	
12/1/1986	Geochemistry	
12/1/1986	Development, Surface	
12/1/1984	Geochemistry	
12/1/1984	Geochemistry	
12/1/1982	Drilling	
12/1/1981	Trenching	
12/1/1981	Drilling	
12/1/1981	Other	
12/1/1981	Geochemistry	
12/1/1981	Geology	
12/1/1980	Drilling	
12/1/1980	Other	
12/1/1980	Geochemistry	
12/1/1980	Geochemistry	
12/1/1980	Geology	
12/1/1966	Trenching	
12/1/1966	Geology	
12/1/1966	Geochemistry	

Related References

Number	Title	Page(s)	Reference Type	Document Type
ARMC000393	Report - Sa Dena Hes Mine		Property File Collection	Report