Occurrence Details

Occurrence Number: 105O 020
Occurrence Name: Samovar
Occurrence Type: Hard-rock
Status: Deposit
Date printed: 4/29/2025 2:13:27 AM

General Information

Primary Commodities: barite
Aliases: Tea
Deposit Type(s): Sediment hosted Stratiform Barite
Location(s): 63°1'22" N - -130°36'26" W
NTS Mapsheet(s): 105O02
Location Comments: 1 Kilometres
Hand Samples Available: No
Last Reviewed:

Capsule

Work History

Staked as Tea cl (Y98226) in Aug/75 by Welcome North Mines Ltd which carried out geological mapping and bulk sampled later in the year. The barite rights were optioned to Yukon Barite Company Ltd, which carried out bulk sampling and built a 12.5 km road to the showing in 1976 and explored with bulldozer trenching and shallow drilling in 1979. Yukon Barite drilled one hole (128 m) and shipped a 900 tonne test sample in a joint venture with Milchem Inc in 1980 and did some diamond drilling in 1981.

The VAR cl (YA7233) were added to the south in Oct/76 by Mackenzie Resources Ltd.

In 1982, Yukon Barite purchased the property and trucked 8 000 tonnes to Ross River for processing into drilling mud for the Beaufort Sea market. Construction of a processing plant in Ross River was deferred because of a lawsuit between the principals of the company. Minor bulldozer trenching was carried out in 1984 and 1985. A majority interest was awarded by the Yukon Court of Appeal to E.J. Eisenman in 1985, who drilled 4 holes (296 m) in 1986.

Part of the Tea cl were transferred from the estate of E.J. Eisenman to Coyne and Sons Ltd in Oct/89. J. Coyne restaked some claims as Tay (YBO3410) in Feb/90, and carried out trenching and development work in 1990.

In 1995 Coyne and Sons constructed a 40,000 tonne per year mill to process barite from the property. The company processed a 600 tonne bulk sample from material stockpiled at the mill site and produced 15,000 40 kg bags of barite. The company also drilled, blasted and stockpiled 743 cubic metres of barite ore for future processing.

Capsule Geology

A true thickness of nearly 92 m of baritic beds outcrop for a stike length of 305 m and are exposed by topographic relief for over 90 m down dip at the base of a shale member of the Devonian to Mississippian Earn Group. Bulk sampling in 1975 indicated that the barite is of high quality and averages 92.56% $BaSO_4$ with a specific gravity of 4.25. It requires only screening prior to grinding to yield a product exceeding minimum drilling mud specifications. Minor amounts of variscite occur with the barite. The deposit is easily amenable to open pitting with no stripping ratio and 225 503 tonnes of ore with a specific gravity of 4.2 or better was outlined by 1979 (Coolen, 1982).

The main showing grades from a carbonate-rich base (witherite and limestone), with grey baritic shale and black carbonaceous shale, to a sulphate-rich top (bedded barite). Minor interbedded chert occurs throughout the section but tends to be more common towards the base. At least three other small showings occur nearby.

The VAR claims cover an occurrence of gem quality variscite. Studies of the gold content of the deposit in 1984 showed that an average grade of 4 ppb Au was present and furthermore that siliceous, carbonaceous and pyritic shale intervals contain as much as 11 ppb Au. The gold enhancement in shale intervals was suggested to result from carbon and pyrite fixing of gold from pooled brines in starved basin sediments after the cessation of barium-rich exhalative activity. Three such cycles are represented. A localized footwall fracture zone, infilled with coarsely crystalline barite, quartz and carbonate may represent a feeder zone.

In 1984 an evalution of the deposit carried out by Eisenman, recalculated total reserve as 377 038 tonnes with an average specific gravity of 4.14.

Trenching in 1985 showed that the south end of the zone thickens westward to 40 m thick in the axis of a depositional trough. The 1986 drilling confirmed the trench results with 3 of 4 holes returning intersections of nearly massive barite ranging from 11.3 to 30 m in true thickness.

The barite processed in 1995 had an average specific gravity of 4.26. At the end of 1995, Coyne and Sons reported the estimated geological reserve of the deposit at 1 million tonnes.

References

CARNE, R.C., 1976. The Tea Barite Deposit. DIAND Open File Report 1976-16.

COOLEN, P.R., Jan/82. A Report on the Barite Potential of the Samovar Prospect - Tea Claims. Indian Minerals (West) Directorate, Department of Indian Affairs and Northern Development, Calgary, Alberta. Available in the EMR Library Whitehorse, Yukon.

EISENMAN, E.J., Oct/84. Assessment Report #092039 by A.W. Mitchell.

EISENMAN, E.J., Aug/86. Assessment Report #091851 by A.W. Mitchell.

GEOLOGICAL SURVEY OF CANADA Paper 85-1A, p. 651-668.

MINERAL INDUSTRY REPORT 1975, p. 29; 1976, p. 116-117.

WELCOME NORTH MINES LTD, Feb/76. Vancouver Stock Exchange Open File Report by J.S. Brock.

WHITEHORSE STAR, 16 Sep/82; and 13 Oct/82; 15 May/83.

YUKON BARITE COMPANY LTD, Sep/81. Feasibility Report - Samovar (Tea) Barite Mine and Grinding Plant Ross River, Yukon. by J.S. Dodge.

YUKON BARITE COMPANY LTD, 1984. Yukon Barite Company Limited Prospectus (15 Nov/84) by J.S. Dodge.

YUKON EXPLORATION 1985-86, p. 279-280.

YUKON EXPLORATION AND GEOLOGY 1983, p. 22.

YUKON EXPLORATION AND GEOLOGY 1995, p. 15.

Work History

Date	Work Type	Comment
12/31/1995	Other	Drilled, blasted and stockpiled 743 cubic metres of barite ore for future processing.
12/31/1986	Drilling	Number of holes drilled: 4 Amount of work done: 296 METRES
12/31/1984	Trenching	
12/31/1982	Other	Amount of work done: 8000 TONNES Stockpiled in Ross River, Yukon.
12/31/1980	Drilling	Number of holes drilled: 1 Amount of work done: 128 METRES
12/31/1979	Drilling	Number of holes drilled: 4 Amount of work done: 99 METRES
12/31/1979	Trenching	
12/31/1976	Geochemistry	
12/31/1976	Development, Surface	
12/31/1975	Geochemistry	
12/31/1975	Geology	

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
096309	2011	2011 Geological Report on Stream Sediment and Rock Chip Sampling and Geochemistry on the LFC and EOB Claims	Rock - Geochemistry, Silt - Geochemistry, Prospecting - Other		
093827	1997	1997 Geological Assessment Report on Emerald Lake Claims	Rock - Geochemistry, Silt - Geochemistry, Soil - Geochemistry		
091851	1986	Report on Geology of the Tea Claims or Samovar Property	Diamond - Drilling, Metallurgical Tests - Lab Work/Physical Studies, Property Evaluation - Other	3	232.87
092039	1981	Geological Maps of the Tea/Samovar showing	Detailed Bedrock Mapping - Geology		
019809	1968	Hess Area Project Proposed Property Follow-Up 1968 Field Season	Research/Summarize - Pre-existing Data		

Resource/Reserve

Year	Zone	Type	Commodity	Grade	Tonnage	Amount	Reported Amount	43-101 Compliant	Cut-off
1984	TEA (OPEN PIT)	Historical Estimate	barite	92.5 %	377,038		No	No	Unknown
Recalculation based on sections previously prepared by Coolen (1982). Grade is approximate.; Assessment Report #092039 by A. Wallace Mitchell.									
1982	TEA (OPEN PIT)	Historical Estimate	barite	92.5 %	225,503		No	No	Unknown
Based on four holes drilled by Yukon Barite in 1979. The barite has a specific gravity of 4.2 or better. Grade is approximate.; Report on the Barite Potential of the Samovar Prospect by P.R. Coolen, January/82 (available in EMR Library, Whitehorse, Yukon).									

Drill core at YGS core library

Number	Property	Year Drilled	Core Size	Photos	Data
TEA-5	Tea	1986	NTW	0	1
TEA-6	Tea	1986	NTW	0	1
TEA-7	Tea	1986	NTW	0	1
TEA-8	Tea	1986	NTW	0	1