Occurrence Details

Occurrence Number: 116C 025
Occurrence Name: Clinton Creek
Occurrence Type: Hard-rock
Status: Deposit
Date printed: 8/6/2025 1:46:21 AM

General Information

Primary Commodities: asbestos
Secondary Commodities: gold, magnesium, platinum
Aliases: Porcupine Pit
Deposit Type(s): Ultramafic-hosted asbestos
Location(s): 64°26'21" N - -140°42'58" W
NTS Mapsheet(s): 116C07
Location Comments: .5 Kilometres
Hand Samples Available: No
Last Reviewed:

Capsule

Work History

Although asbestos was noted in this area by placer miners prior to 1887, it was first staked as Eva, Dot, Ram, etc cl (78220) in Apr/57 by G. Walters and A. Anderson, who were grubstaked by F. Caley. The property was optioned by Conwest Exploration Company Ltd and was transferred to Cassiar Asbestos Corporation Ltd later in the year following prospecting and hand trenching. In 1957-58, Cassiar explored with trenching, diamond drilling and two adits (1249.7 m) in the main (west) zone on Porcupine Hill and a 366 m adit on a smaller zone to the east on Snowshoe Hill. The company also shipped bulk samples to Cassiar, British Columbia for test milling.
The property was then idle until 1963, when a map survey led to the drilling of about 45 surface holes (7742 m) and 29 underground holes (1310 m) and the discovery of the orebody. A production decision was made in 1964, and following a $36.5 million investment, milling commenced in Oct/67 and fluctuated between 3629 and 4082 tonnes/day until Aug/78. A total of 63 265 427 tonnes of waste were removed to permit the mining of 15 903 003 tonnes of open-pit ore for a total production of 940 095 tonnes of fibre. Of this, 76.9% was removed from the Porcupine Pit, 18.2% from the Snowshoe Pit, 2.7% from the Creek Pit and 2.2% was obtained in 1978 from the Caley occurrence (Cassiar Creek Pit).
All of the Clinton Creek Mine assets, including the buildings in the townsite were disposed of by public auction in Sep/78. The mine lease was fringe staked to the south as Toadsteak cl 1-75 (YA55300) in Jun/81 by Teslin Joint Venture (Brinco Mining Ltd, Cominco Ltd & Exploram Minerals Ltd), which explored with mapping, sampling and 40 excavator pits later in the year.
In Jul/95 J.G. McDonald and D. Templeman-Kluit staked Htoons Fault 1-4 (YB54203) and Claim to Fame 2 (YB54207) over top several of the existing town lots. The claims were allowed to lapse the following year.
In Aug/98 B. Sauer staked Eva cl 98-102 (YC12178) overtop of several existing town lots and carried out a small prospecting program. Sauer added Eva cl 95-97 (YC17387) and Ram cl 4-17 (YC17390) in Aug/99 and carried out additional prospecting and a magnetometer geophysical survey on the claims in 2000. In Aug/2001 the claims were transferred to Emma Korelew. In Jun/2004 B. Sauer spent 1 week prospecting on Eva cl 97-102.
In Aug/2006 the Yukon Government issued an Order in Council (O.I.C. 2006/173) prohibiting entry and staking of new mineral claims over most of the former Clinton Creek Mine site. The order was issued to facilitate the clean up and reclaimation of lands damaged by previous mining activity. The last remaining Eva claims expired at the end of Jul/2009 and the area covered by the order in council no longer hosts any mineral claims in good standing.

Capsule Geology

The Porcupine orebody consists of veins of cross-fibre chrysotile asbestos cutting massive and blocky jade-green serpentinite, which Gordey et al., (2003) assigned to the Carboniferous to Permian aged, Anvil assemblage. The ultramafic body, which is believed to belong to the Slide Mountain Terrane, is one of a series that occurs in this area. It is an irregular lens 1372 m long and up to 305 m wide that strikes 057 and widens at depth. The ore zone occurs on the north edge of the lens and is about 488 m long and 24 to 76 m thick with a dip of about 40 to the northwest.
The footwall consists of sheared, barren serpentinite and the hanging-wall consists of a rusty-brown, quartz-carbonate alteration zone 6 to 30.5 m wide composed of magnesite, quartz and hematite with minor amounts of opal, chalcedony, talc and ochre. The hanging wall alteration is interpreted as carbonatized and silicified serpentine produced by hydrothermal alteration associated with faulting. The ultramafic lens is bounded by argillite, quartz-sericite-muscovite schist and limestone of the Devonian, Mississippian and older, Nasina assemblage. The Nasina assemblage belongs to the Yukon-Tanana Terrane. Mine geologists have speculated that the schistose portions are derived from volcanic rocks.
Fibre veins are randomly oriented and range in width from 1.5 to 28.5 mm with most in the 6 to 9.5 mm category. The longest fibre tends to occur near the hanging wall. Picrolite is also present in minor amounts and magnetite occurs as egg-size nodules, thin veins and scattered grains. Overall production consisted of 13% CP grade, 50% CT, 34% CY and 3% CZ. No additional economic mineralization was located south of the mine lease and the mine close in Aug/78. The mineable reserves of the ore bodies were exhausted and 288 502 tonnes were unavailable because of pit wall instability.
Sauer collected 10 grab samples from waste piles, float and outcrop to check for economic mineralization other than asbestos. The best assay returned 17 ppb Au from a sample of finely laminated black argillite containing 0.25 to 0.5% pyrite cubes. Sauer continued looking for signs of mineralization in 2000. A sample of gossanous orange serpentinite returned 0.81% nickel, 9% magnesium and minor platinum and gold. Prospecting later in the fall uncovered several listwanite altered serpentinite samples one of which returned slightly elevated gold (7 ppb) and platinum (7 ppb).
Sauer hoped that the magnetic survey would outline the serpentine-argillite contact and any listwanite alteration zones present on the claims. The magnetic survey was able to defined the serpentine-argillite contact but could not clearly identify the presence of any listwanite zones. Sauer's 2004 prospecting program was again focused on identifying listwanite alteration zones. Twenty-eight rock samples were collected around the Porcupine pit and abandoned crusher station. The best result was obtained by a float/subcrop sample consisting of silicified serpentinite, cut by a 10 cm wide quartz vein containing a pod of chalcopyrite which assayed 881 ppm copper.
Due to the 2006 Order In Council this occurrence is withdrawn from further staking.

Work History

Date	Work Type	Comment
12/31/2004	Geochemistry	
12/31/2004	Other	
12/31/2000	Geochemistry	
12/31/2000	Ground Geophysics	
12/31/2000	Other	

12/31/1999	Geochemistry	
12/31/1999	Other	
12/31/1967	Development, Underground	Milling continued to 1978.
12/31/1963	Drilling	Seventy-four holes, 9,053 m. Surface and underground drilling.
12/31/1963	Ground Geophysics	
12/31/1957	Drilling	Two holes, 1,249.7 m.
12/31/1957	Trenching	
12/31/1957	Development, Underground	Sinking adits. Work continued to 1958.
12/31/1957	Other	
12/13/2006	Development, Surface	Order in Council passed prohibiting staking of new claims. Clean up and reclamation by government starts.
12/13/1998	Other	
12/13/1981	Trenching	
12/13/1981	Geochemistry	
12/13/1981	Geology	
12/13/1978	Development, Surface	Buildings and assets auctioned off in1978.

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
094234	2000	Prospecting Report on the EVA and RAM Claims	Rock - Geochemistry, Prospecting - Other, Data Compilation - Pre-existing Data		
091050	1981	Report on Geological Mapping and Soil Testing Survey-TATER 1-28 Claims	All Weather Road - Development, Surface, Soil - Geochemistry, Bedrock Mapping - Geology, Line Cutting - Other		
062231	1965	An Evaluation of the CLINTON CREEK Project	Data Compilation - Pre-existing Data, Research/Summarize - Pre-existing Data, Pre-feasibility - Studies, Resource Estimate - Studies		
092060	1955	[1956 Clinton Creek Asbestos Showing-Information for Mining Recorder]	Air Strip - Development, Surface, Bedrock Mapping - Geology		

Related References

Number	Title	Page(s)	Reference Type	Document Type
ARMC020341	Review report on abandonment plan for Clinton Creek asbestos mine - Report no. G 052-2		Property File Collection	Report
ARMC013228	Sketch map of claim locations and outcrops at Clinton Creek		Property File Collection	Geoscience Map (General)
ARMC013229	Field notes - Clinton Cr. asbestos		Property File Collection	Miscellaneous Company Documents
2003-9(D)	Yukon Digital Geology (version 2)		Yukon Geological Survey	Open File (Geological - Bedrock)

Drill core at YGS core library

Number	Property	Year Drilled	Core Size	Photos	Data
CS-125	Clinton Creek	1973	HQ	24	1