



Occurrence Details

Occurrence Number: 105H 021

Occurrence Name: Matt Berry

Occurrence Type: Hard-rock

Status: Deposit

Date printed: 5/31/2025 8:08:01 AM

General Information

Primary Commodities: antimony, lead, silver, zinc

Secondary Commodities: gold

Deposit Type(s): Volcanogenic Massive Sulphide (VMS) Kuroko Cu-Pb-Zn

Location(s): 61°28'32" N - -129°24'14" W

NTS Mapsheet(s): 105H06

Location Comments: .5 Kilometres

Hand Samples Available: Yes

Last Reviewed:

Capsule

Work History

The showing may have been discovered before 1887. It was rediscovered in the late 1930s by A.K. Money. Cominco investigated it in 1943 and Money staked it Nov/44 as the Betty and Joyce cl (4322), and again in Mar/49 as the Lakeshore cl (57565).

Restaked in Sep/55 as Cat and Rat cl (71150) by E. Brodhagen, who hand trenched in 1956-57. The showing was investigated by Datlasaka Mines Ltd in 1960-63.

Restaked as Matt cl 1-8 (86874) in May/66 by Matt Berry Mines Ltd, which also staked Jim cl 1-4 (86882) at the same time. In May/66 the company surrounded the claims with Berry cl 1-40 (Y7688). Later in the year the company trenched and drilled 13 diamond drill holes (646 m).

Between the fall of 1968 and the end of 1969 Matt Berry drilled an additional 16 diamond drill holes (1744.8 m) and carried out EM surveys. During the same period Radio Hill Mines Ltd staked Frances cl 1-28 (Y27758) north and south of Matt Berry's claims. Radio Hill optioned the claims to Matt Berry in 1969 and partially funded some of the diamond drilling undertaken that year.

The property was optioned in Sep/70 to joint venture group consisting of Canadian Nickel Company Ltd and Metallgesellschaft Canada Ltd which drilled 4 holes (426.7 m) in 1970.

In 1972, a new option was signed with Nordev Resources Ltd (Nordev Mines Ltd, Silver Key Mines Ltd and Impala Mines Ltd) and in 1973, a 40% interest was acquired by New Joburke Exploration Ltd. Cyprus Anvil Mining Corporation conducted soil sampling, mag and gravity surveys under a brief option and Nordev Resources Ltd made an offer to buy the Matt Berry Mines Ltd interest in 1974.

Restaked as Barb cl 1-8 (YA12548) in Mar/77 by Sovereign Metals Corporation, which added Barb cl 9-15 (YA20216) in Jun/77. The claims were optioned until late 1978 by Welcome North Mines Ltd and New Frontier Exploration Inc which explored with a pulse-type EM survey. Sovereign explored with bulldozer trenching in 1979 and staked Barb cl 17-32 (YA36636). In Feb/80 the claims were optioned to Cominco Ltd, which drilled 5 holes (1 229 m) and added Barb cl 33-175 (YA46974) in 1980 and conducted limited geological and geochemical surveys in 1981.

After Cominco dropped its option, the property was optioned to Tinto Gold Corporation in 1983. Sovereign changed its name to Barytex Resources Corporation in 1986 and optioned the property to Pulse Resources Ltd, which performed magnetic and geochemical surveys and tied on Beth cl 2, (YB00654) and cl 4-27 (YB00655) in Jul/87; cut baselines in Aug/88 and added Binti cl 1-8 (YB15412) in Oct/88; and performed mapping, soil sampling and geophysical surveys in 1989. Pulse Resources drilled four holes (303 m) on the Money zone located 1.5 km southeast of the deposit, before dropping its option in Aug/92.

In Nov/92 Barytex re-organized and changed its name to International Barytex Resources Ltd. The company performed 53 km of linecutting on the Barb, Binti, and Beth claims in Sep/93. and staked Pat cl 1-40 (YB51826) 5 km south of the deposit in Aug/94.

In 1995 International Barytex carried out geological mapping and prospecting on the Pat claims located south of the main Barb claim group. In 1998 the company conducted an airborne EM and magnetic geophysical survey over their entire property.

In Dec/2002 Kobex Resources Ltd optioned the Barb claims with the intention of carrying out an I.P. geophysical survey followed by diamond drilling. In Aug/2003 Kobex decided not to proceed with the work and cancelled the option.

Capsule Geology

The occurrence is located near, the eastern shore of the East Arm of Frances Lake, southeast of Thompson Creek. The area marks the western edge of the Selwyn Basin, where silicatic and carbonate deposition took place under different tectonic environments, from Late Proterozoic through Triassic.

Dawson reported in 1887 that 'specimens of quartz veins containing iron and copper pyrite, from the east arm (of the lake), about midway up it, were found to contain traces of gold'. The discovery showing in the canyon is a single quartz vein more than 1.5 m wide containing chalcopyrite, galena, sphalerite and pyrrhotite.

Away from the creek canyon, a sheared massive sulphide deposit on trend with the vein has been traced with trenching and drilling for a length of about 300 m and a slope distance of about 350 m. It consists of galena, sphalerite, pyrite, minor chalcopyrite and jamesonite in a sheared and brecciated zone up to 9 m wide, which strikes north-northwest and dips moderately east.

Fonseca (2001) of the Yukon Geology Program examined the general geology of the area while mapping the Matt Berry deposit. The area is underlain by sandstone, limestone and shale that are intruded to the east by the mid-Cretaceous Mt Billings batholith. The sedimentary sequence was originally thought to be Silurian to Devonian in age. However, recent age dating by the Yukon Geology Program of galena collected from black phyllites at the deposit returned an Ordovician age suggesting that the sedimentary units in the area are coeval with Road River Group rocks. Also, examination of diamond drill core from the Matt Berry deposit revealed that the dark phyllites in the footwall of the Matt Berry zone are underlain by a strongly deformed, quartz-sericite augen schist of probable felsic volcanic protolith. The presence of the felsic volcanic rocks suggests that mineralization in the area, once thought to be mainly sedimentary-exhalative in nature may possess a strong volcanogenic component.

At least three sulphide bands are exposed at surface. In detail, these massive sulphide bands are up to 50 cm thick, lie parallel to the shear fabric and form envelopes around slivers of the host phyllite. Quartz-filled tension fractures also contain sulphides. The deposit is located within 2 km of the contact of the Cretaceous Mt Billings batholith, and the sulphides appear to be extensively remobilized and recrystallized. In Oc/69, Matt Berry Mines estimated total reserves at 376 486 tonnes grading 148.46 g/t Ag, 9.12% Pb, 6.25% Zn and 0.38% Sb.

Reserves calculated at the end of 1977 were 533,434 tonnes grading 6.1% Pb, 4.6% Zn and 102.86 g/t Ag. The deeper 1980 drill holes encountered the favourable horizon but were unmineralized. In 1983 Tinto Gold Coporation calculated that the higher grade core hosted reserves of 200,644 tonnes grading 144 g/t Ag, 7.9% Pb and 7.2% Zn.

A possible extension to the Matt Berry deposit 1.5 km to the southeast (the Money zone) is indicated by mineralized float and a polymetallic soil anomaly coincident with a shallow-dipping IP anomaly. Two parallel northwest-trending conductors extend over a length of 800 m. The upper anomaly is offset by a northeast-trending fault.

Three of the four holes drilled on the Money zone in 1991 intersected a 1 to 2 m wide zone of massive sulphides, however only Hole 91-1 returned significant results, intersecting 0.49 m grading 17 g/t Ag, 1.82% Pb and 5.85% Zn.

Geological mapping carried out on the Pat claims found that the quartz, augen-schist unit mapped on the adjoining Beth claims extends onto the Pat claims, however no mineralization was found. The airborne geophysical program outlined two high priority airborne EM anomalies parallel to and west of the Money zone. Both anomalies are coincident to an IP anomaly identified in an earlier program but not drill tested and appear to be on strike with the Matt Berry zone located one km to the north.

Work History		
Date	Work Type	Comment
12/31/1993	Other	Barytex performed 53 km of linecutting on Barb, Binti and Beth claims.
12/31/1991	Drilling	Four holes, 303 m. Drilled on the Money zone located 1.5 km. south of the deposit.
12/31/1989	Geology	
12/31/1989	Geochemistry	
12/31/1989	Ground Geophysics	Also Self Potential, VLF-EM and CEM surveys.
12/31/1987	Geochemistry	
12/31/1987	Ground Geophysics	
12/31/1981	Geology	
12/31/1981	Geochemistry	
12/31/1980	Drilling	Five holes, 374.6 m.
12/31/1979	Trenching	
12/31/1978	Ground Geophysics	Pulse EM survey .
12/31/1974	Geochemistry	
12/31/1974	Ground Geophysics	Also gravity survey .
12/31/1970	Drilling	Four holes, 426.7 m.
12/31/1969	Drilling	Sixteen holes, 1,744.8 m.
12/31/1966	Drilling	Thirteen holes, 646 m.
12/31/1966	Trenching	
12/31/1957	Trenching	
12/31/1956	Trenching	
12/13/1998	Airborne Geophysics	Also magnetic survey . Flown over all of International Barytex's properties.
12/13/1995	Geology	
12/13/1995	Other	

Assessment Reports that overlap occurrence					
Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
093989	1998	Data Compilation and Interpretation of Airborne EM Anomalies	Electromagnetic - Airborne Geophysics, Magnetic - Airborne Geophysics		
092114	1987	[Soil Survey Results on Barb Property]	Soil - Geochemistry, Magnetics - Ground Geophysics, Line Cutting - Other		
062299	1987	Geological, Geophysical & Geochemical Report on the Barb Group of Mineral Claims	Soil - Geochemistry, Bedrock Mapping - Geology, Magnetics - Ground Geophysics		
062176	1983	Report on the Barb Mineral Claims for Tinto Gold Corporation	Research/Summarize - Pre-existing Data		
090861	1981	Assessment Report Geology, Geochemistry Barb Property	Rock - Geochemistry, Silt - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology		
090669	1980	Diamond Drilling - 1980 Barb Property	Diamond - Drilling	5	1214.10
061968	1980	Summary Report on the Barb Group	Research/Summarize - Pre-existing Data		
090398	1978	Geophysical Report on a Pulse Electromagnetometer Survey on Behalf of New Frontier Exploration Inc.	EM - Ground Geophysics		
061799	1978	review of pulse EM geophysical survey on Barb claims	Process/Interpret - Pre-existing Data		
061798	1977	Report on Barb 1 to 15 Mineral Claims	Research/Summarize - Pre-existing Data		
090943	1971	Matt Berry Joint Venture Frances Lake Yukon Sections Showing D. D. Holes 1 to 31	Research/Summarize - Pre-existing Data		
060952	1970	Report on a Geochemical Orientation and Stream Sediment Survey	Silt - Geochemistry, Bedrock Mapping - Geology, EM - Ground Geophysics, IP - Ground Geophysics, Magnetics - Ground Geophysics		
060953	1970	Matt Berry Mines Limited Progress Report	Drill Core - Geochemistry, Data Compilation - Pre-existing Data, Research/Summarize - Pre-existing Data		
060699	1970	Geological Evaluation and Mineral Reserves, Matt Berry Mines Ltd	Property Evaluation - Other		

060698	1969	Matt Berry Mines Limited Thompson Creek Property East Arm, Frances Lake Yukon Territory	Diamond - Drilling, Hand - Trenching	25	1524
092934	1969	Report on a Turam Electromagnetic Survey	EM - Ground Geophysics		
060697	1969	Proposed Plans & Estimated Cost	Research/Summarize - Pre-existing Data		

Related References

Number	Title	Page(s)	Reference Type	Document Type
ARMC006880	Mineral potential map of Frances Lake area - Simplified and relative ranks		Property File Collection	Geoscience Map (Geological - Bedrock)
ARMC006881	Mineral assessment map - Frances Lake		Property File Collection	Geoscience Map (Geological - Bedrock)
ARMC006882	Bar graphs - Frequency vs. Bin - Matt Berry		Property File Collection	Miscellaneous Company Documents
ARMC006883	Map of MINFILE occurrences and geochemical values - Matt Berry		Property File Collection	Geochemical Map
ARMC006884	Matt Berry rankings - tracts		Property File Collection	Geoscience Map (Geological - Bedrock)
ARMC005684	Correspondence Re: Barytex - Highly leveraged, low-cost copper		Property File Collection	Miscellaneous Company Documents
ARMC005658	Sketch map of Matt Berry property		Property File Collection	Geoscience Map (General)
ARMC005659	Reports - Matt Berry deposit		Property File Collection	Report
ARMC010062	Soil geochemical survey map - Matt Berry grid - Frances Lake		Property File Collection	Geochemical Map
ARMC010084	Compilation map - Matt Berry		Property File Collection	Geoscience Map (General)
ARMC010085	Matt Berry grid map - Frances Lake		Property File Collection	Geoscience Map (General)
ARMC008519	Correspondence Re: Matt Berry Mines' silver-lead-zinc property, Frances Lake		Property File Collection	Miscellaneous Company Documents
ARMC008520	Annual report - 1970 - Matt Berry Mines Limited		Property File Collection	Report
ARMC008521	Progress report - Matt Berry Mines Limited		Property File Collection	Report
ARMC008522	Correspondence Re: Material covering out Matt Berry Mines project		Property File Collection	Miscellaneous Company Documents
ARMC008523	Table 4 - Summary of Matt Berry veins mineral reserves - Thompson Creek property		Property File Collection	Miscellaneous Company Documents
ARMC013729	Plan of camp and pits on mineral outcrops - Matt Berry Mines Ltd. - Frances Lake property, Y.T.		Property File Collection	Geoscience Map (General)
ARMC013745	Plan of Matt zone - Drill results & structure - Matt Berry Mines Ltd.		Property File Collection	Geoscience Map (Geological - Bedrock)
ARMC013753	Preliminary agreement between Sovereign and Cyprus Anvil on the old Matt Berry Property		Property File Collection	Report
ARMC013752	Report on New Joburke Explorations Limited - Frances Lake property, Yukon Territory		Property File Collection	Report
ARMC013744	Original DDH logs, assay results and notes on Matt Berry Mines Ltd.		Property File Collection	Drill Logs
ARMC013726	Property submission: Matt Berry Mines Ltd.		Property File Collection	Report
ARMC013754	Notes on Sovereign - Matt Berry Mines Ltd.		Property File Collection	Miscellaneous Company Documents
ARMC013741	Maps of DDH longitudinal sections - Matt Berry Mines Ltd. - Frances Lake property, Y.T.		Property File Collection	Geoscience Map (General)
ARMC013731	1971 program schedule - Joint venture - Canico-Metall-Matt Berry		Property File Collection	Miscellaneous Company Documents

Resource/Reserve									
Year	Zone	Type	Commodity	Grade	Tonnage	A mount	Reported Amount	43-101 Compliant	Cut-off
1983	MTT BERRY - CORE ZONE RESERVES (UNDERGROUND)	Historical Estimate	lead	7.9 %	200,644		No	No	Unknown
Author used polygonal method and considered calculation Probable Reserve. Does not meet National Instrument 43-101 standards.; Assessment Report #062176 by C.K. Ikona. Author was asked to calculate reserves for core area.									
1983	MTT BERRY - CORE ZONE RESERVES (UNDERGROUND)	Historical Estimate	silver	144 g/t	200,644		No	No	Unknown
Author used polygonal method and considered calculation Probable Reserve. Does not meet National Instrument 43-101 standards.; Assessment Report #062176 by C.K. Ikona. Author was asked to calculate reserves for core area.									

1983	MATT BERRY - CORE ZONE RESERVES (UNDERGROUND)	Historical Estimate	zinc	7.2 %	200,644		No	No	Unknown
Author used polygonal method and considered calculation Probable Reserve. Does not meet National Instrument 43-101 standards.; Assessment Report #062176 by C.K. Ikona. Author was asked to calculate reserves for core area.									
1977	MATT BERRY - TOTAL RESERVE (UNDERGROUND)	Historical Estimate	lead	6.1 %	533,430		No	No	Unknown
Author considered this figure Inferred Ore Reserve. Calculated using block method. Do not meet National Instrument 43-101 standards.; Assessment Report #061798 by C.K. Ikona. This figure is repeated in succeeding reports.									
1977	MATT BERRY - TOTAL RESERVE (UNDERGROUND)	Historical Estimate	silver	102.86 g/t	533,430		No	No	Unknown
Author considered this figure Inferred Ore Reserve. Calculated using block method. Do not meet National Instrument 43-101 standards.; Assessment Report #061798 by C.K. Ikona. This figure is repeated in succeeding reports.									
1977	MATT BERRY - TOTAL RESERVE (UNDERGROUND)	Historical Estimate	zinc	4.6 %	533,430		No	No	Unknown
Author considered this figure Inferred Ore Reserve. Calculated using block method. Do not meet National Instrument 43-101 standards.; Assessment Report #061798 by C.K. Ikona. This figure is repeated in succeeding reports.									
1969	MATT BERRY - TOTAL RESERVE (UNDERGROUND)	Historical Estimate	antimony	.38 %	376,486		No	No	Unknown
Based on 25 drill holes. Calculated using 1.83 m mining width. Author used elementary block method of calculating tonages, thus figure are very rudimentary. Grades calculated from average drill hole values.; Assessment Report #060699.									
1969	MATT BERRY - TOTAL RESERVE (UNDERGROUND)	Historical Estimate	lead	9.12 %	376,486		No	No	Unknown
Based on 25 drill holes. Calculated using 1.83 m mining width. Author used elementary block method of calculating tonages, thus figure are very rudimentary. Grades calculated from average drill hole values.; Assessment Report #060699.									
1969	MATT BERRY - TOTAL RESERVE (UNDERGROUND)	Historical Estimate	silver	148.46 g/t	376,486		No	No	Unknown
Based on 25 drill holes. Calculated using 1.83 m mining width. Author used elementary block method of calculating tonages, thus figure are very rudimentary. Grades calculated from average drill hole values.; Assessment Report #060699.									
1969	MATT BERRY - TOTAL RESERVE (UNDERGROUND)	Historical Estimate	zinc	6.25 %	376,486		No	No	Unknown
Based on 25 drill holes. Calculated using 1.83 m mining width. Author used elementary block method of calculating tonages, thus figure are very rudimentary. Grades calculated from average drill hole values.; Assessment Report #060699.									