



Occurrence Details

Occurrence Number: 116A 012
Occurrence Name: Mike Lake
Occurrence Type: Hard-rock
Status: Prospect
Date printed: 6/14/2025 6:11:01 PM

General Information

Secondary Commodities: bismuth, copper, gold, silver
Aliases: Hamilton, Lorrie, Mike
Deposit Type(s): Vein Polymetallic Ag-Pb-Zn+/-Au
Location(s): 64°16'45" N - -137°53'34" W
NTS Mapsheet(s): 116A05
Location Comments: .5 Kilometres
Hand Samples Available: Yes
Last Reviewed:

Capsule

Work History

Staked as Gold cl (Y37945) in Jun/69 by Hart River Mines Ltd, which carried out geochemical sampling, EM surveying and hand trenching in 1970-71. Two packsack holes were attempted but could not be drilled on the gossan at the North showing.

Restaked as AS cl 1-8 (Y65640) and GH 1-2 (Y81731) in Aug/72 by Belmoral Mines Ltd, which carried out geological mapping, geochemical sampling and hand trenching in 1972 and 1973.

Restaked as Mike cl 1-24 (Y99705) in Jun/75 by Canalta Resources Ltd, which carried out geological mapping, hand trenching and drilled 4 shallow holes (199.6 m) on the south showing and hand trenching on the north showing later in the year. Belmoral conducted further hand trenching in 1976.

Restaked as Aine cl 1-24 (YA55689) in Jul/81 by S. Young, who carried out mapping later in the year. In Jan/84, Young transferred the claims to M. Boyle who sold his interest later in the month to Gallagher Explorations Ltd.

The two showings were restaked as part of the Jamie cl 1-4 (YB17905) and Lorrie cl 5-8 and 17-23 (YB17905) in Jul/88 and Lorrie cl 24-57, 80 and 81 (YB23265) in Oct/88 by Walhala Explorations Ltd which carried out short prospecting, mapping and geophysical programs in 1988 and 1989. In Jun/90, Walhala sold the Lorrie claims to Tombstone Explorations Company Ltd, which carried out prospecting, geological mapping, soil geochemical sampling and staked Jamie cl 5-215 (YB30680) in Jun/90 to surround the existing claims to the south.

Placer Dome Inc optioned the property in 1991 and carried out geological mapping and soil geochemical sampling before relinquishing its option in Dec/91.

In Nov/96 International Kodiak Resources Inc staked Bo cl 1-10 (YC03523) 1 km to the northwest and in Dec/96 Canadian United Minerals Inc staked MLN cl 1-10 (YC03543) and 25-30 (YC03559) to the north and carried out prospecting and geochemical sampling the following year before selling the claims to International Kodiak Resources in Dec/97.

In Sept and Oct/97 Homestake Canada Inc staked Java claims 1-48 (YC04562), 57-61 (YC04610) and 62-79 (YC05300) 1 km northeast of the north showing and partially surrounding the southern most MLN claim block. Homestake carried out geological mapping, prospecting, geochemical rock sampling and trenching at that time.

In 1998 International Kodiak carried out silt and soil sampling on the Bo and MLN claims.

Dynamite Resources carried out extensive soil sampling in 2004. In 2005 and 2006, Dynamite diamond drilled the property.

Capsule Geology

Gold, silver and copper occur in quartz-sulphide veins which cut Upper Proterozoic to Lower Cambrian calcareous argillite near the margin of a small mid-Cretaceous syenite stock. The occurrences appears to straddle the boundary between the Upper Proterozoic to Lower Cambrian Hyland assemblage and the Lower Cambrian, Gull Lake assemblage. Two occurrences are known: north (occurrence A) and south (occurrence B).

Hart River trenched the south showing but never reached bedrock. They described the showing as a 1.2 m wide vein which was exposed intermittently for a length of 243.8 m. Chip sampling returned 6.9 g/t Au with a trace of copper across widths of 0.15 to 1.5 m. Detailed work by Belmoral outlined four vertical quartz veins striking east which are up to 1.5 m wide and contain arsenopyrite and chalcopyrite. The veins are located at the syenite contact and extend into the intrusion. Assays ranged from 0.1 to 4.3% Cu, 3.2 to 229.2 g/t Ag and 0.1 to 21.9 g/t Au. A little bismuth was noted with the best silver assay.

Canalta's drilling on the south occurrence intersected erratic mineralization with 4.5 g/t Au across 1.4 m in DDH 1, 24.0 g/t Au across 0.33 m in DDH 3, and barren vein material in the other two holes. In 1989 Walhala found minor sulphide mineralization in hornfelsed sedimentary rocks about 500 m southwest of the south showing.

The north showing (occurrence A) is marked by a gossan measuring 10.7 m wide and 91.4 m long, overlying syenite. It consists of a 10 m wide zone of quartz carbonate veins containing arsenopyrite, pyrrhotite and minor magnetite. It was mapped and sampled by Canalta over a strike length of 1000 m. The zone coincides with an EM conductor on strike with a vein that assayed 6.9 g/t Au, 5.8 g/t Ag and 0.06% Cu. A grab sample taken in 1985 from a trench in the deeply weathered gossan assayed 15.0 g/t Au, and a 2 m chip sample of strongly weathered vein material assayed 4.04 g/t Au. Later sampling by Young and by Gallagher Explorations generally confirmed these results, and specimens collected in 1990 contained up to 14.78 g/t Au.

Placer Dome discovered a series of east-west trending quartz veins cutting calcareous Hyland Group rocks both southwest and northeast of the north showing. Specimens of the vein material assayed up to 10.52 g/t Au.

Two days of prospecting and sampling by Canadian United on the MLN claims revealed anomalous concentrations of Au, As, Bi, Cu and Sb in two silt samples collected from the creek draining the MLN cl 1-10.

Homestake discovered and staked a series of showings within a 7-10 m thick horizon of Late Proterozoic to Early Cambrian Hyland assemblage quartzite/calcareous grit/ limestone conglomerate on the Java claims. The showings consist of disseminated to massive sulfide mineralization hosted in skarn lenses within this horizon. Chip sampling returned 1.49 g/t Au over 12.5 m. Disseminated to massive arsenopyrite and pyrite hosted in quartz-carbonate altered shear and fracture zones, pyrrhotite and chalcopyrite within the alteration halo of the syenite stocks and intrusive hosted quartz sulfide veins were also recognized. Grab sampling of these other styles of mineralization returned values up to 11.15 g/t Au.

Stream sediment samples collected by International Kodiak from the Bo claims were consistently elevated in Au and As while contour soil sampling on the MLN claims returned a number of elevated Au and As values.

Work History

Date	Work Type	Comment
12/31/2006	Drilling	Ten holes, holes, 1698 m
12/31/2005	Drilling	Eighteen holes, 2220 m

12/31/2004	Geochemistry	
12/31/1998	Geochemistry	
12/31/1998	Geochemistry	
12/31/1997	Geology	
12/31/1996	Geology	
12/31/1996	Geochemistry	Also rock sampling.
12/31/1996	Other	
12/31/1996	Trenching	
12/31/1991	Geochemistry	
12/31/1991	Geology	
12/31/1991	Geochemistry	
12/31/1991	Other	
12/31/1990	Geology	
12/31/1990	Geochemistry	
12/31/1989	Geology	
12/31/1981	Geology	
12/31/1975	Drilling	Four holes, 199.64 m
12/31/1975	Geology	
12/31/1975	Trenching	
12/31/1973	Geochemistry	Also soil sampling.
12/31/1973	Geology	
12/31/1973	Trenching	
12/31/1972	Geology	
12/31/1972	Geochemistry	Also rock sampling.
12/31/1972	Trenching	
12/31/1971	Drilling	Two holes attempted.
12/31/1971	Geochemistry	Also rock sampling.
12/31/1971	Ground Geophysics	
12/31/1971	Trenching	
12/31/1970	Geochemistry	
12/31/1970	Ground Geophysics	
12/31/1970	Trenching	
12/13/1997	Geochemistry	
12/13/1997	Other	
12/13/1990	Other	
12/13/1988	Geochemistry	Also soil samples.
12/13/1988	Geology	
12/13/1988	Other	

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
096411	2013	Airborne Geophysical Interpretation of the Mike Lake Property	Electromagnetic - Airborne Geophysics, Electromagnetic - Airborne Geophysics, Gamma-Ray Spectrometry - Airborne Geophysics, Gamma-Ray Spectrometry - Airborne Geophysics, Magnetic - Airborne Geophysics, Magnetic - Airborne Geophysics		
095029	2007	Assessment Report Describing the Geology, Mineralization and Diamond Drilling of the Mike Lake Property	Diamond - Drilling, Bedrock Mapping - Geology, Prospecting - Other	9	1822
094916	2006	Assessment Report Describing the Geology, Geophysics and Diamond Drilling of the Mike Lake Property	Diamond - Drilling, EM - Ground Geophysics, Magnetics - Ground Geophysics	17	2250

094614	2005	Assessment Report Describing the Geology, Geophysics and Diamond Drilling of the Mike Lake Property	Diamond - Drilling, Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, EM - Ground Geophysics, IP - Ground Geophysics, Magnetics - Ground Geophysics	19	2462.55
094574	2004	Assessment Report Describing the Geology, Geochemistry and Prospecting at the Mike Lake Property	Soil - Geochemistry, Bedrock Mapping - Geology, Prospecting - Other, Data Compilation - Pre-existing Data		
094510	2004	Assessment Report Describing the Geology, Geochemistry and Prospecting at the Mike Lake Property	Soil - Geochemistry, Bedrock Mapping - Geology, Prospecting - Other		
093922	1998	Assessment Report 1998 Geological, Geochemical and Geophysical Program Mike Lake Property	Magnetic - Airborne Geophysics, Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, IP - Ground Geophysics, Handblast - Trenching		
093880	1997	Report on the 1997 Assessment Work on the MLN Claims	Rock - Geochemistry, Silt - Geochemistry		
093010	1991	Geological and Geochemical Report on the LORRIE Property	Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Prospecting - Other		
092912	1990	Report on the 1990 Geological and Geochemical Exploration Work on the Lorrie Property	Rock - Geochemistry, Silt - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Prospecting - Other		
091446	1982	Report on the Geology of the Aine Claims	Rock - Geochemistry, Cursory Property Visit - Other		
090917	1981	Report for Assessment Lake 1-30 Claims	Rock - Geochemistry, Detailed Bedrock Mapping - Geology, Data Compilation - Pre-existing Data		
062204	1981	Report on the Geology of the Aine Claims	Rock - Geochemistry, Cursory Property Visit - Other		
090124	1975	Report on the Mike Mineral Claims	Diamond - Drilling, Rock - Geochemistry, Hand - Trenching	4	189
060904	1973	Geological Report on the AA and GH Mineral Claims	Rock - Geochemistry, Detailed Bedrock Mapping - Geology, Prospecting - Other, Hand - Trenching		

Related References

Number	Title	Page(s)	Reference Type	Document Type
1999-1(D1)	Yukon Digital Geology		Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Open File (Geological - Bedrock)
BROCK00007	Geochemical survey maps - Mike Lake Intrusion, Lorrie Lake Intrusion, and Anvil Lake Intrusion		Property File Collection	Geochemical Map
BROCK00008	Sample location and rock geochemistry maps - Au - Lorrie Lake, Mike Lake, and Anvil Lake areas		Property File Collection	Geochemical Map
BROCK00009	Sample location map with additional markings - Java - Mike Lake property - Figure 5.2		Property File Collection	Geochemical Map
BROCK00010	North Vein soil grid with markings - Java - Mike Lake property		Property File Collection	Geochemical Map
BROCK00011	Geological map with annotations - Lorrie property		Property File Collection	Geoscience Map (General)

Drill core at YGS core library

Number	Property	Year Drilled	Core Size	Photos	Data
SKDH08-018	Mike Lake	2008	NQ2	0	5
SKDH08-028	Mike Lake	2008	BTW	0	5
SKDH08-061	Mike Lake	2008	BTW	0	5
SK-05-02	Mike Lake	2005		0	3