



Occurrence Details

Occurrence Number: 105G 119
Occurrence Name: Shot
Occurrence Type: Hard-rock
Status: Showing
Date printed: 12/16/2025 5:59:20 AM

General Information

Secondary Commodities: copper, lead, silver, zinc
Deposit Type(s): Skarn Pb-Zn
Location(s): 61°24'54" N - -130°53'28" W
NTS Mapsheet(s): 105G07
Location Comments: .5 Kilometres
Hand Samples Available: No
Last Reviewed:

Capsule

Work History

In Jun/94 Cominco Ltd staked Hot cl 1-28 (YB49632) 1.5 km to the southeast to cover airborne geophysical targets identified during a company sponsored survey conducted in early 1994. The following month the company carried out 1 day of geological mapping and prospecting on the claims. Staked as Shot cl 1-36 (YB56059) in Sep/94 by Expatriate Resources Ltd which carried out grid soil sampling, geological mapping and prospecting the following year. In Sep/95 the company added Shot cl 37-74 (YB61484) and staked Rink cl 1-20 (YB61425) 3 km to the east. In Oct/95 Expatriate added Rink cl 21-144 (YB68869) and Shot cl 75-110 (YB68893) to their holdings. The Shot and Rink claims comprise part of Expatriate's larger Slap Shot property. In the spring of 1996 Expatriate flew an airborne geophysical survey over the Shot and Rink claims followed by geological mapping, prospecting, hand trenching, grid soil sampling, ground geophysical surveys and 396 m of diamond drilling in 3 holes. In Jul/97 Cominco optioned the Hot claims to Pacific Bay Minerals Ltd which carried out a prospecting and evaluation survey later in the season. In Nov/98 Pacific Bay cancelled its option and returned the claims to Cominco Ltd.

Capsule Geology

Geological mapping in the Finlayson Lake area (Murphy et al., 2001) shows the area is dominantly underlain by a layered sequence of Devonian to Early Mississippian metavolcanic and metasedimentary rocks belonging to the Yukon-Tanana Terrane (YTT). The YTT is a volcanic-plutonic pericratonic arc assemblage that was strongly deformed and metamorphosed by Late Triassic time. Volcanic-hosted massive sulphide deposits exist at different stratigraphic positions within the YTT including the Fyre Lake deposit (Minfile Occurrence #105G 034) in the Devonian to lower Mississippian(?) Fire Lake mafic metavolcanic unit, the Kudz Ze Kayah deposit (Minfile Occurrence #105G 117) in the Mississippian Kudz Ze Kayah felsic metavolcanic unit, and the Wolverine deposit (Minfile Occurrence #105G 072) within the Lower Mississippian Wolverine Succession.

The occurrence is underlain by biotite-muscovite-feldspar-quartz schist and micaceous quartzite and marble (unit Dq). These units are overlain by the Fire Lake (DF) mafic metavolcanic unit, composed of massive to subtly layered biotite-plagioclase-actinolite-chlorite schist and lesser carbonaceous phyllite, quartzite and grey marble. Unit DF is in turn overlain by unit DK, (Kudz Ze Kayah felsic metavolcanic unit), composed of undifferentiated feldspar-muscovite-quartz schist, feldspar and less commonly quartz augen schist.

The metavolcanic and metasedimentary sequence is intruded by granitic to monzonitic metaplutonic rocks of the Early Mississippian Grass Lakes Plutonic Suite. Geological characteristics and stratigraphic relations suggests that the metaplutonic rocks are sills that flowed from dykes lying along the trend of thickness changes in the surrounding metavolcanic and metasedimentary rocks. South of the occurrence the metaplutonic rocks are intruded along the base of unit DF. On the southeast side of the Rink claims (north of Big Campbell Creek) the metaplutonic rocks intrude the lower part of unit Dq, below the calcareous member. A Cretaceous granitic intrusion probably intrudes along the southwest side of the Shot claims.

Field work by Cominco and Pacific Bay on the Hot claims was hampered by poor outcrop exposure (10% or less). Both companies mapped isolated outcrops of quartz-biotite gneiss/schists and skarned marble which contained minor amounts of disseminated pyrrhotite +/- galena. These outcrops probably represent small isolated roof pendants of the underlying metavolcanic and metasedimentary country rock. The best result from either program was returned by Pacific Bay which documented a float sample comprised of quartz veined biotite-quartz schist with trace disseminated chalcopyrite and pyrrhotite which returned 180 ppm Cu.

Like Cominco, Expatriate was hampered by poor outcrop exposure and the limits of reconnaissance scale geological mapping. Regional geology maps produced by Expatriate display only limited correlation with maps later produced by Murphy and Piercey, however detailed maps covering the occurrence area display good correlation.

Expatriate's 1995 exploration program was centred on Shot cl 1-36. Results from grid based soil sampling saw greater than 50% of the samples return anomalous Pb values (dominantly over the west half of the grid). Arsenic values are strongly coincident with moderately anomalous or higher Pb values, and Zn and Cu values are strongly coincident with Pb response but display less intensity. Prospecting uncovered a weakly to moderately mineralized portion of quartz sericite schist on the west side of the claim block. Mineralization consisting of variable amounts of foliaform chalcopyrite, sphalerite, galena and pyrite returned up to 2.54% Zn, 0.7% Pb 0.2% Cu and 20.8 g/t Ag. Most of the mineralized samples were strongly oxidized and leached with only remnant anglesite, malachite and cadmium staining remaining. Float samples collected below the outcrop returned up to 0.77% Zn, 9.34% Pb, 8.33% Cu and 234 g/t Ag. Strike extension of this showing was obscured by talus and scree.

The 1996 airborne magnetic/EM survey flown over the Shot and Rink claims outlined 6 conductive zones, three of which possess weak magnetic correlation. Several test lines of ground magnetic and electromagnetic geophysics were run over the mineralized occurrence identified on the west side of the Shot claims in 1995. Magnetic and electromagnetic response was subdued and no anomalies were identified leading the company to abandon further ground surveys.

Expatriate expanded the southern and western edges of 1995 soil grid and collected reconnaissance soil samples along claim lines covering the newly staked Shot and Rink claims. Soil samples collected on the periphery of the 1995 grid produced a number of anomalous values, especially for Pb and Zn. However, the response was generally less continuous and more subdued than results from the centre of the grid. The highest values were returned from samples collected downslope of the mineral occurrence discovered in 1995. The reconnaissance sampling identified numerous secondary targets, most consisting of one to two samples that were weakly to moderately anomalous for one or more of the indicator minerals.

Hand trenching on the mineralized showing uncovered a mineralized zone consisting of irregularly foliated, muscovite-quartz-feldspar gneiss with pitted rusty bands up to 10 cm thick. Interstitial malachite, chalcopyrite, sphalerite and pyrite are present in small amounts in the rusty bands. Crosscutting, white bull quartz veins containing coarsely crystalline galena occur locally. Chip sampling (3 m intervals) of the trench floor returned values as high as 0.24% Cu, 2.34% Pb, 4.24% Zn, and 41.5 g/t Ag. Whole rock analyses of 3 samples of muscovite gneiss shows that they compositionally correspond to granite or rhyolite.

Three drill holes were collared to test for stratiform or foliaform mineralization beneath the hand trench. All three holes intersected the same stratigraphy as mapped at surface.

Mineralization intersected consists of finely to coarsely crystalline sulphides mainly restricted to crosscutting white quartz veins. Pyrite is the dominant sulphide followed by lesser amounts of arsenopyrite, pyrrhotite, sphalerite, chalcopyrite and galena. No evidence of stratiform or foliaform mineralization was noted and the main showing is interpreted to be either a foliated vein or a small roof pendant within metaplutonic rocks.

Prospecting by Expatriate also uncovered numerous weakly mineralized skarned interbeds along the contact between the metaplutonic and underlying metasedimentary rocks. The skarned interbeds locally contain up to 10% massive banded pyrrhotite and < 1% disseminated pyrite and chalcopyrite, but returned only weakly anomalous values for all economic minerals.

References

BOND, J.D., MURPHY, D.C., COLPRON, M., GORDEY, S.P., PLOUFFE, A., ROOTS, C.F., LIPOVSKY, P.S., STRONGHILL, G., AND ABBOTT, J.G., 2002. Digital compilation of bedrock geology and till geochemistry, northern Finlayson Lake map area, Southeastern Yukon (105G), Exploration and Geological Services Division, Yukon Region, Indian and Northern Affairs Canada, Open File Report, 2002-7(D) and Geological Survey of Canada Open File 4243.

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EXPATRIATE RESOURCES LTD, Apr/96. Assessment Report #093412 by W.A. Wengzynowski.

EXPATRIATE RESOURCES LTD, Apr/97. Assessment Report #093587 by W.D. Eaton.

EXPATRIATE RESOURCES LTD, May/97. Assessment Report #093655 by R.W. Woolham.

HUNT, J.A., 2001. Volcanic-associated massive (VMS) mineralization in the Yukon-Tanana Terrane and coeval strata of the North American miogeocline, in the Yukon and adjacent areas. Exploration and Geological Services Division, Yukon Region, Indian and Northern Affairs Canada, Bulletin 12, 107 p.

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MURPHY, D.C. and PIERCEY, S.J., 1999. Geological map of parts of Finlayson Lake (105G/7, 8 and parts of 1, 2, and 9) and Frances Lake (parts of 105H/5 and 12) map areas, southeastern Yukon (1:100 000-scale). Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, Open File 1999-4.

MURPHY, D.C. AND PIERCEY, S.J., 2000. Syn-mineralization faults and their re-activation, Finlayson Lake massive sulphide district, Yukon-Tanana Terrane, southeastern Yukon. In: Yukon Exploration and Geology 1999, D.S. Emond and L.H. Weston (eds.), Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, p. 55-66.

MURPHY, D.C., COLPRON, M., GORDEY, S.P., ROOTS, C.F., ABBOTT, G., AND LIPOVSKY, P.S., 2001. Preliminary bedrock geological map of northern Finlayson Lake area (NTS 105 G) Yukon Territory (1:100 000 scale). Exploration and Geological Services Division, Yukon Region, Indian and Northern Affairs Canada, Open File 2001-33.

MURPHY, D.C., COLPRON, M., ROOTS, C.F., GORDEY, S.P. AND ABBOTT, J.G., 2002. Finlayson Lake Targeted Geoscience Initiative (southeastern Yukon) , Part 1: Bedrock geology. In: Yukon Exploration and Geology 2001, D.S. Emond, L.H. Weston and L.L. Lewis (eds.), Exploration and Geological Services Division, Yukon Region, Indian and Northern Affairs Canada, p. 189-207.

PACIFIC BAY MINERALS LTD, Jul/98. Assessment Report #093855 by F. Moyle and G.L. Wesa.

YUKON EXPLORATION AND GEOLOGY 1996, p. 17, 30, 32.

Work History

Date	Work Type	Comment
12/31/1997	Geology	
12/31/1997	Other	
12/31/1997	Other	
12/31/1996	Drilling	Three holes, 396 m.
12/31/1996	Geology	
12/31/1996	Geochemistry	
12/31/1996	Trenching	
12/31/1996	Airborne Geophysics	Also magnetic survey.
12/31/1995	Geology	
12/31/1995	Geochemistry	
12/31/1995	Other	
12/31/1994	Geology	
12/31/1994	Airborne Geophysics	Also magnetic survey.
12/31/1994	Other	
12/13/1996	Ground Geophysics	Also magnetic survey.

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
095434	2010	Assessment Report of Geology, Geochemistry and Geophysics Work Completed on the Slapshot Property Yukon Territory, Canada	Rock - Geochemistry, Detailed Bedrock Mapping - Geology, EM - Ground Geophysics, Magnetics - Ground Geophysics, Prospecting - Other		
094502	2003	A Report on Prospecting and Geochemical Surveys	Rock - Geochemistry, Silt - Geochemistry, Soil - Geochemistry, Prospecting - Other		
			Electromagnetic - Airborne Geophysics, Magnetic - Airborne		

093587	1996	Assessment Report Describing Geological Mapping, Soil Sampling, Geophysical Surveying and Diamond Drilling at the Slap Shot Property	Geophysics, Diamond - Drilling, Soil - Geochemistry, Bedrock Mapping - Geology, EM - Ground Geophysics, Magnetics - Ground Geophysics, Line Cutting - Other, Prospecting - Other, Hand - Trenching	3	396
093655	1996	Report on a Combined Helicopter-Borne Electromagnetic and Magnetic Survey, Goal Net, Hat Trick, League, Offside, Power Play, Shutout and Slapshot Properties	Electromagnetic - Airborne Geophysics, Magnetic - Airborne Geophysics		
093412	1995	Assessment Report Describing Prospecting and Geochemical Surveys on the Shot 1-36 Claims	Soil - Geochemistry, Bedrock Mapping - Geology, Prospecting - Other		
093332	1994	1994 Assessment Report Hot Property Geological Mapping	Bedrock Mapping - Geology		
019115	1966	Northlake Mines Limited, Gee Group of Claims: Report on Airborne Geophysical Surveys	Electromagnetic - Airborne Geophysics, Magnetic - Airborne Geophysics		