

Occurrence Details

Occurrence Number: 105G 123
Occurrence Name: Goal
Occurrence Type: Hard-rock

Status: Prospect

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General Information

Secondary Commodities: copper, lead, silver, zinc

Aliases: Goal Net

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

Location(s): 61°18'51" N - -130°33'53" W

NTS Mapsheet(s): 105G07

Location Comments: .5 Kilometres **Hand Samples Available:** Yes

Last Reviewed:

Capsule

Work History

Staked as Goal cl 1-24 (YB56129) in Sept/94 by Expatriate Resources Ltd. The following year the company carried out a preliminary exploration program on the claims. In Aug/95 Expatriate staked Goal cl 25-121 (YB60584) and in Oct/95 Goal cl 122-210 (YB68823).

In the spring of 1996 Expatriate flew a helicopter-borne EM/mag geophysical survey over the claims and in Feb/96 staked Goal cl 211-319 (YB76787). During the summer of 1996 the company carried out geological mapping, prospecting and soil sampling programs. In Oct/96 Expatriate staked Goal cl 320-335 (YB87595). The Goal claims are part of Expatriate's larger Goal Net property.

The 1997 and 1998 exploration programs were designed to follow-up various exploration targets detected in earlier programs.

In 2004, Yukon Zinc drilled four diamond drill holes for a total of 1034.6 m. Drilling on the Thunderstruck zone confirmed a continuous sheet of massive sulphide open in all directions. Drilling in 2004 also target the Skyblaze target in the Goal Net North area and the Fisher ridge.

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.

Outcrop in the area is scarce, however mapping completed by Murphy and Piercey and Wengzynowski of Expatriate Resources (1999) shows that the area is mainly underlain by biotite-muscovite-feldspar-quartz schist and micaceous quartzite belonging to unit Dq. A small occurrence of marble (unit Dqc) occurs to the northeast. Unit Dq is capped by a thin succession of mafic volcanics (unit DMF) belonging to the Devonian to Early Missippian Fire Lake mafic metavolcanic unit. To the south and west, a large body of Devonian to Mississippian variably serpentinized ultramafic rock (unit DMum) intrudes the sequence near the base of unit DMF. The ultramafic rocks also form small sill like bodies throughout the area. Murphy and Piercey suggest that the ultramafic rocks are sills that flowed from dykes lying along the trend of thickness changes in unit DMF. A Cretaceous, granitic intrusion (unit Kg) intrudes the sequence to

Initial grid soil sampling completed by Expatriate in 1995 outlined a number of Cu (>100 ppm), Pb(>100 ppm) and Zn (>500 ppm) anomalies, the strongest of which measures 2 000 mx 600 m and trends northwest. Several of the anomalies cover coincident airborne magnetic anomalies.

Prospecting between 1995-1998 identified several occurrences of pyrite, pyrrhotite, sphalerite and galena in float and bedrock, the majority of which are found in felsic metavolcanic rocks. Expatriate assigned these rocks to the Kudz Ze Kayah felsic metavolcanic unit (unit MK)(Wengzynowski, 1999), however mapping by Murphy and Piercey suggests that these rocks are more than likely small slices of felsic rocks which occur within the Fire Lake mafic metavolcanic unit (unit DMF) or older Devonian felsic rocks (unit Df).

Mineralization was found in a narrow fault zone and as thin foliaform horizons. A chip sample over a 3 cm foliaform horizon yielded 18.0 g/t Ag, 45 ppm Cu, 1.64% Pb and 3.34% Zn. Three hand trenches following up on float, soil geochemistry anomalies and small occurrences located minor amounts of mineralization. The highest assay returned 0.6 g/t Ag, 84 ppm Cu, 14 ppm Pb and 9 230 ppm Zn over 1.5 m from quartzite bands containing disseminations and rare laminae of pyrrhotite, pyrite, sphalerite and trace galena (Wengzynowski, 1999). Fine grained quartz float collected in the same area yielded up to 36.0 g/t Ag, 0.49% Cu, 1.66% Pb and 6.04% Zn (Eaton,1998).

Expatriate also noted weakly disseminated pyrrhotite and sphalerite in crosscutting fracture zones, up to a metre wide, developed within biotite-muscovite quartzite adjacent to a Cretaceous granite stock. A sample from a fracture zone returned a weighted average of 1.7 g/t Ag, 100 ppm Cu, 800 ppm Pb and 3 500 ppm Zn (Wengzynowski, 1999). In 2004, a new massive sulphide occurrence, the Thunderstruck Zone, was discovered. The new zone is just south of drill holes that intersected mineralization at Goal Net North in 2000 and 2001. Z chip sample of the mineralization at the Thunderstruck Zone assayed 13.4% zinc, 5.07% lead, 0.34% copper, 40.7 g/t silver and 0.04 g/t gold with low selenium content. The massive sulphide mineralization is 0.3 metre thick in the discovery outcrop and was followed along strike for 200 metres to the east before disappearing in thick overburden.

References

EXPATRIATE RESOURCES LTD, Apr/96. Assessment Report #093413 by W.A. Wengzynowski.

EXPATRIATE RESOURCES LTD, Apr/97. Assessment Report #093573 by A. Burgert.

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

EXPATRIATE RESOURCES LTD, May/98 Assessment Report #093788 by W.D. Eaton

EXPATRIATE RESOURCES LTD, Jun/99. Assessment Report #094016 by W.A. Wengzynowski.

 ${\tt EXPATRIATE\ RESOURCES\ LTD,\ Jan/2001.\ Web\ Site:\ www.expatriateresources.com}$

EXPATRIATE RESOURCES LTD, News Release, 8 Sept/04; 7 Jan/05;

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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., 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.

YUKON EXPLORATION AND GEOLOGY 1996

YUKON GEOLOGY AND EXPLORATION 1997, p. 16, 36. 1999, p. 29. 2000, p. 9, 25, 27.

Work History					
Date	Work Type	Comment			
12/31/1998	Trenching	Three trenches.			
12/31/1997	Geology				
12/31/1997	Geochemistry				
12/31/1996	Geology				
12/31/1996	Geochemistry				
12/31/1996	Airborne Geophysics	Also magnetic survey.			
12/31/1996	Other				
12/31/1995	Geochemistry				
12/31/1995	Other				
12/13/2004	Drilling	Four holes, 1,034.6 m. Collared on Thunderstruck zone.			
12/13/1998	Geology				
12/13/1998	Geochemistry	Fill in sampling.			
12/13/1998	Other				

Assessment Reports that overlap occurrence							
Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled		
<u>094668</u>	2004	Assessment Report Describing Prospecting, Geological Mapping, and Diamond Drilling on the Goal Net Property	Diamond - Drilling, Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Prospecting - Other	4	1034.60		
<u>094526</u>	2003	Geological and Geochemical Report on the Goal Net Claim Block	Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology				
<u>094016</u>	1998	Assessment Report Describing Geological Mapping, Prospecting, and Soil Geochemistry on the Goal Net Property	Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Backhoe - Trenching				
<u>093788</u>	1997	Assessment Report Describing Geological Mapping, Prospecting, and Soil Geochemistry on the Goal Net Property	Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Bedrock Mapping - Geology, Prospecting - Other, Backhoe - Trenching, Hand - Trenching				
<u>093573</u>	1996	Assessment Report Describing Geological Mapping, Prospecting, and Soil Geochemistry and Geophysical Surveys on the Goal Net Property	Electromagnetic - Airborne Geophysics, Magnetic - Airborne Geophysics, Soil - Geochemistry, Bedrock Mapping - Geology, Prospecting - Other				
<u>093655</u>	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				
<u>093413</u>	1995	Assessment Report Describing Prospecting and Geochemical Surveys on the Goal 1-24 Claims (YB56129-YB56152), Net 1-34 Claims (YB56095-YB56128), Net 35-58 Claims (YB59119-YB59142)	Soil - Geochemistry, Prospecting - Other				