AG PROSPECT
(93M/7W)

By T. G. Schroeter

INTRODUCTION

The AG (Mineral Inventory 93M-13) (formerly Sue, Red, Foss) prospect, consisting of 6 units, is located 60 kilometres north of Smithers, approximately 5 kilometres northwest of French Peak. Access is by helicopter from Smithers. In July 1983, Golden Gate Exploration Ltd. completed eight diamond-drill holes totalling approximately 610 metres.

HISTORY

In 1964 Falconbridge Nickel Mines Limited staked the Red claims; during 1964 to 1965 they conducted geological surveys and a self-potential survey and stripped an area approximately 40 metres by 18 metres. In 1973, Canadian Superior Exploration Limited conducted a geochemical survey. In 1980, Doug Whelan sampled the property; it is now owned by Golden Gate Exploration Ltd.

GEOLOGY AND MINERALIZATION

The property is underlain by arkosic and argillaceous tuffaceous sandstones and argillites of the Hazelton Group which have been intruded by Cretaceous (?) sills of feldspar porphyry.

Pyrrhotite, chalcopyrite, pyrite, marcasite, arsenopyrite, tetrahedrite, sphalerite, galena, stibnite, and owyheeite (Pb$_2$Ag$_2$Sb$_6$S$_{13}$) occur as replacement veins (up to 1 metre in width) with quartz-carbonate ± tourmaline gangue. Sphalerite appears to be late stage, as are veinlets of calcite and siderite. Two main areas of mineralization are known:

1. **Hepworth Creek**
   A strong lineament that runs up Hepworth Creek has a 1.2-metre to 1.8-metre shear zone in it striking 135 degrees with a near vertical dip. Branching veins of massive sulphide are up to 37 centimetres wide; adjacent fine sulphide disseminations may extend into the wallrock for as much as 60 centimetres. Veins strike at 120 degrees and are vertical.

2. **Boomer Creek**
   A 0.3-metre quartz vein with owyheeite and tourmaline occurs approximately 45 metres south of the junction of Hepworth and Boomer Creeks (Fig. 34).

Gold values in excess of 0.1 ounce per ton and silver values in excess of 40 ounces per ton have been obtained (unpub. company report, 1983).

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Figure 34. Location map for the AG prospect (93M/7W).