

TROUT - 093F 044 NTS 93F/10W

890017

The Trout epithermal precious metal occurrence is located 90 kilometres southwest of Vanderhoof, on the Cutoff property, owned by Cogema Resources Inc. The property is accessible from the Kenney Dam road which extends to the southwest from Vanderhoof.

The property is underlain by felsic to intermediate volcanic and sedimentary rocks of the Jurassic Hazelton Group, Cretaceous Kasalka Group, Eocene Ootsa Lake Group and Tertiary Endako Group. Two prominent lineaments, a northeast-trending structure and a southeast-trending feature, intersect in the Swanson Creek valley near the main showing (Potter, 1985).

Epithermal quartz-adularia veins and gold-silver mineralization were discovered in 1984 during regional exploration for precious metals (Potter, 1985). Subsequent exploration of the property, including drilling in 1985, 1987 and 1990, targeted mainly on the 'discovery' zone, failed to trace the mineralization. In 1992 Cogema Resources Inc. staked the ground and a multiparameter (VLF-EM, magnetics and resistivity) geophysical survey was flown in March, 1993. Eleven diamond-drill holes totalling 1221 metres were completed in 1994 (K. Schimann, personal communication, 1994).

The 'discovery' or 'main' zone crops out southwest of Swanson Creek, and south of the camp, in a swampy valley bottom. The exposure is a northeast-trending ridge of rock, 50 metres long, 12 metres across and about 4 metres high. It consists mainly of pyroclastic breccia and overlying polymictic conglomerate of the Kasalka Group. The shallow southwest-dipping contact between the breccia and conglomerate acted as a conduit channelling mineralizing hydrothermal fluids. The hangingwall is flooded with silica and the footwall is pervasively silicified for about a metre below the contact.

Pyroclastic breccia is mottled green and maroon, and consists mainly of locally derived Kasalka Group maroon volcanic material. Clasts tend to be subangular, feldspar phyric and range in size from 3 to 10 centimetres. The breccia contains quartz veins up to several centimetres wide that have an average orientation of 050/80°SE. Veins are banded and consist of several phases of pale brown to cream and clear chalcedonic quartz. Many veins also contain drusy cavities and bladed textures (quartz after calcite or possibly barite). Sulphide minerals were not identified in the veins, but there is 1 to 2% disseminated pyrite in the hostrock.

Polymictic conglomerate overlies the pyroclastic breccia with apparent conformity. Clasts in the conglomerate are pebble to cobble sized and well rounded, possibly milled, and consist of locally derived sedimentary, volcanic and intrusive lithologies. Clasts are rimmed and cemented by banded chalcedonic quartz-adularia veins up to 8 centimetres wide. Samples from a 5-metre trench across the outcrop averaged 19.5 g/t Au (Schmidt, 1987).

Visible mineralization consists of traces of very fine grained pyrite and a tarnished steel-grey mineral (possibly argentite) that comprise dark grey bands 0.5 to 2 millimetres wide, and rare disseminated pyrite grains, within the quartz-adularia veins. Dark grey features, 0.5 millimetres wide by 2 to 3 millimetres long and comprised of very fine grained pyrite and possibly other metallic minerals, are oriented oblique to the clast margin in bands of white translucent fine-grained quartz closest to the clasts. Micron-size native gold and argentite have been identified in thin section (Potter, 1985).

Trout Rock Geochem Data

Element:	Au	Au (o/t)	Ag	Ag (o/t)	Mo	Cu	Pb	Zn	As	Sb	Ba
Method:	ICP	Fire Assay	ICP	Fire Assay	ICP	ICP	ICP	ICP	ICP	ICP	ICP
	ppm	Gravimetric	ppm		ppm	ppm	ppm	ppm	ppm	ppm	ppm
Field No.											
TS94-CT-1	2	0.068	40.7	1.18	2	11	7	64	5	2	15
TS94-CT-3	178	5.059	548	17.25	3	66	18	80	12	4	160
TS94-CT-7	9	0.245	54.1	1.58	2	17	6	36	78	4	20

Figures are in ppm unless otherwise shown.



TROUT epithermal gold prospect: a) Looking northward toward the 'discovery' outcrop or main zone. b) Polymictic conglomerate showing well rounded pebbles and cobbles cemented by numerous phases of chalcedonic quartz and adularia; c) close up of polymictic conglomerate showing banded quartz-adularia infill (sample TS94-CT-3); d) banded and bladed quartz-adularia vein from the contact between polymictic conglomerate and overlying pyroclastic breccia.