

Red Chris is a large porphyry copper-gold deposit in northwestern BC, located approximately 80 km south of Dease Lake and 12 km east of Tatogga. Explored since the mid 1950's, the project has now become economically viable.

Geology

The property covers the eastern portion of a large east-northeasterly trending, stratigraphically distinct, fault bounded upland, known as the Todagin Plateau. A suite of Early Jurassic stocks and dykes occur throughout the region. These intrusions are compositionally variable, ranging from hornblende quartz diorite to quartz monzodiorite, and are characteristically medium-grained, equigranular to porphyritic and weather a buff-white to light gray colour. The largest intrusion of this suite is the Red stock which hosts the Red Chris deposit. It intrudes Upper Triassic massive volcanic wackes, siltstone and possibly augite-porphyritic basalt within the Red Chris property.

Most of the mineralization is closely associated with individual and sheeted quartz/carbonate veining, and quartz/carbonate stockwork zones. A significant portion of the mineralization also occurs as very fine- to fine-grained disseminations and fracture-fillings.

Within the Red Stock, a series of economically mineralized zones occur, which in combination, make up the Red Chris deposit. They include the large Main and East Zones, along with the smaller Gully and Far West Zones.

Pyrite, chalcopyrite and lesser bornite are the principal sulphide minerals of the Red Chris deposit. Minor covellite occurs as inclusions in pyrite, and molybdenite, sphalerite, and galena occur locally in trace amounts. Gold, second in economic importance to copper, occurs as electrum spatially- and genetically-associated with the copper mineralization. Silver values are geochemically significant but are of minor economic importance.

Mineralogy

		Approximate Percentage Distributions	
		<u>Main Zone</u>	<u>East Zone</u>
Sulphides:	Pyrite	15 – 26	2 - 8
	Chalcopyrite	1 – 2	1 – 3
	Bornite	nil	0.2 – 1.0
Iron Oxides:	Hematite/Magnetite	Trace	2 – 5
Carbonates:	Ankerite, siderite, calcite	5 – 10	28 – 35
Silicates:	Chalcedony, chlorite, fluorapatite,	15 – 30	40 – 50
	hornblende, illite, kaolinite,		
	leucoxene, plagioclase, quartz,		
	rutile, sphene, tourmaline		
Micas:	Biotite, muscovite, sericite	40 – 55	10 - 20

Drill Core Display

The drill core displayed represents typical ore intersections in holes from both the Main and East Zones.

Location: Ore zone within the East Zone

Hole 03-261 Core Depth 242.2m – 248.1m

Drill Log: Plutonic plagioclase – hornblende main phase porphyry. Strongly silicified. Islands of carbonate, sericite and hematite altered intrusive occur locally. The balance of the interval is composed of dark gray to light gray silica-flooded rock and quartz veining. Whispy bands of red to gray hematite possibly after pervasively silicified and absorbed wall rock clusters occur throughout. These are aligned on planes and create a banded appearance in the core at ~50 to 65° TCA.

Very fine grained pyrite and chalcopyrite occur as disseminations in the quartz with fine hematite and lesser magnetite. Chalcopyrite and pyrite also form later particles and fine fracture fillings, which locally occur. White sericite fillings and veins at times accompanied by particles of bornite in places.

Location: Ore zone within the Main Zone

Hole 03-265 Core Section represents a depth of 202.2m – 207.9m

Drill Log: Plutonic plagioclase – hornblende main phase porphyry. The core is intensely fractured with large, angular inclusions. Intensely silicified and pyrite flooded wall rock fragments in a matrix of quartz and quartz veins. All quartz flooding and veining is fractured and cracked. The fractures are in-filled with sulphides. Extremely variable pyrite as disseminations in fractures and veinlets. Blebs and large irregular clusters in quartz. Average pyrite content 7 – 10%. Extremely variable chalcopyrite as fine to coarse disseminations, veinlets, blebs and large irregular clots.



Photograph of a piece of high-grade drill core from the East Zone with significant chalcopyrite, bornite and pyrite minerals present.