

Property/ProjectAuthors

Name : Tulsequah Chief-Big Bull Property  
 NTS : 104K  
 Claims : Crown grants and newer claims

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Acreage : 7700 hectares

Commodities : Volcanogenic massive sulphide (Kuroko type) Cu, Pb, Zn, Au, Ag

Agreements

Property is 100% owned by Redfern Resources Ltd. since July 1992.

History

Past Exploration Techniques	By Whom	Amount	Type	Cost
Past Development (if any)	By Whom	Amount	Type	Cost
Past Production (if any)	By Whom	Tonnage(s)	Method	Grade
1951-1957				
Tulsequah Chief	Cominco	575,000 tonnes	shrinkage &	1.5% Cu, 1.4% Pb,
Big Bull	Cominco	360,000 tonnes	open stope	6.9% Zn, 4.1 gm/ton.
				Au, 26.7 gm/tonne Ag
			Reasons for shut-down	
			Low metal prices	

GeologyRegional

Folded faulted and tilted basaltic-andesite flows and fragmentals with lesser felsics and sediments. Lower Carboniferous age (350 my).

Local

Massive sulphide host rocks are dacite felsic volcanoclastics tightly folded with fold axes plunging north at 60°.

Alteration/Ore Forming Minerals

Alteration pipe extends 750 meters into the footwall and is characterized by sericite, pyrite, silicification and minor cordierite - ore forming minerals are chalcopyrite, sphalerite and galena.

## Current Exploration Results

1987-1992

i ) Geology - Massive sulphides are contained in 2 lenses the AB and H. The stratigraphically higher H lens contains 85% of the reserves. The host rocks, comprised of felsic volcanoclastics are folded into a syncline plunging NNW at 60°. Sulphides are structurally thickened along the fold axis. True thicknesses range from 2 to 8 meters in the AB lens and from 2 to 38 meters in the H. Ore grade mineralization extends over a vertical range of 730 meters and up to 400 meters on strike and is open to depth and on strike to the west.

Approximately 27,000 meters of drilling has been completed to date. The potential for additional reserves is excellent as there are 3 other separate massive sulphide systems on the property which have yet to be explored.

Preliminary testing suggests excellent metallurgy. Competent wall rocks should result in good underground mining conditions.

Reserves: Geological, possible, 7.8 million tonnes 1991  
probable and/or proven est. 8.2 million tonnes 1992 all probable  
Number of ~~zones~~ lenses: 2  
Number of sample points 40 drill hole penetrations  
Average grade 1.6% Cu, 1.2% Pb, 6.5% Zn, 2.75 gm/tonne Au, 109.6 gm/tonne Ag  
Average thickness 10 meters  
~~Cut-off-grade~~

Costs: Recent exploration costs,  
i.e. (relating to above) 1987-1992 \$9 million

Projected exploration costs of  
program to development (if any) \$10-15 million

Projected development costs  
given positive economics \*estimate \$125 million

Projected operating costs  
given positive economics \*estimate \$50/tonne

\* Based on preliminary feasibility studies