

→ SPECTRUM

887872

104G/9W

104G-036

1991 "SNAPSHOT" REVIEW FORM

PROPERTY/PROJECT

AUTHORS

Name: Spectrum  
NTS: 104-G-9  
Claims: Red Dog, Hawk (125 Units)

Wayne Roberts  
John Brock

Acreage: 6300 acres  
Commodities: gold, copper

AGREEMENTS - Columbia Gold Mines Ltd. may earn 70 percent in the Spectrum Property by completing a \$2.9 million exploration program on the Red Dog claims and a \$1.2 million program on the adjoining Hawk claims.

HISTORY

Past Exploration Techniques	By Whom	Amount	Type
1969 - 73	Spartan/Esso	450 m in 4 holes	Drilling
1975 - 83	Silver Ridge	3,294 m in 28 holes	Drilling, Geoch Geoph., Mapping
1984	Calnor/Cominco	50 km	Geoch, Geoph
1988 - 89	Calnor/Cominco	1,196 m in 10 holes	Drilling, Mapping

Past Development	By Whom	Amount	Type
1979 - 80	Newhawk/Northair	358 m	Drifting

GEOLOGY

Regional

Property lies in the North Iskut Gold Camp within the well known Stikine Arch Region of N.W. British Columbia where upper Triassic Stuhini Group andesite flows and tuffs contain minor sedimentary horizons that are intruded by Jurassic monzonite bodies and capped by flat lying Tertiary basalts.

Local

Elongate monzonite bodies intrude propylitic to potassic altered andesitic volcanics. Both structurally controlled north trending gold zones along with disseminated low grade gold-copper mineralization are associated with this large alteration system.

Alteration/Ore Forming Minerals

Within the altered zone measuring 2500 x 1400 meters, exploration of north-south structures has led to discovery and drill definition of the 500 Colour, QC, Porphyry and Boundary Zones which contain visible gold, pyrite and arsenopyrite within a quartz-carbonate gangue. Disseminated pyrite and chalcopyrite occur within the altered Jurassic monzonite and adjacent altered andesite volcanics.

## CURRENT EXPLORATION RESULTS - 1 )

### i) Geology

The QC Zone has now been outlined along a 550 metre length and to a depth of 90 metres. To date 12 of 15 holes drilled have reported significant gold values that average 12.3 gm/T Au over 5.0 metres, (0.36 oz/t over 16.3 feet). The three deepest holes, S-4, 90-46 and 90-59 indicate increasing thickness and grade with depth with values reaching 10.3 gm/T Au over 22.8 metres (0.30 oz/ton gold over 74.8 feet). The Zone remains open along strike and to depth.

Drilling along a 300 metre strike length of the Porphyry Zone to a depth of 60 metres has intersected values of 6.8 gm/T over 7.6 metres (0.20 oz/ton gold over 25 feet) with several additional holes intersecting narrower higher grade intervals. The Porphyry Zone, located approximately 30 metres west of the QC mineralization, also has a steep westerly dip and occurs within a broad zone of gold-copper values grading 1.4 gm/T gold and 0.10% copper over an average 45 metre thickness.

The 500 Colour Zone trends northwesterly and also dips steeply to the west. Five of 10 holes drilled have intersected an average grade of 15.4 gm/T over 5.0 metres (0.45 oz/ton gold over 16.3 feet) along a 760 metre strike length.

### ii) Geochemistry

Prior and recently completed grid soil sampling has outlined a 1000 metre by 1500 metre gold soil anomaly within the eastern portion of the altered zone. A copper soil anomaly is roughly coincident with gold values. Values above 100 ppb Au and 125 ppm Cu are considered anomalous.

### iii) Geophysics

Prior magnetometer surveys have indicated a large magnetic low signature coincident with the altered area. Partial VLF coverage appears to have identified post mineral fault structures.

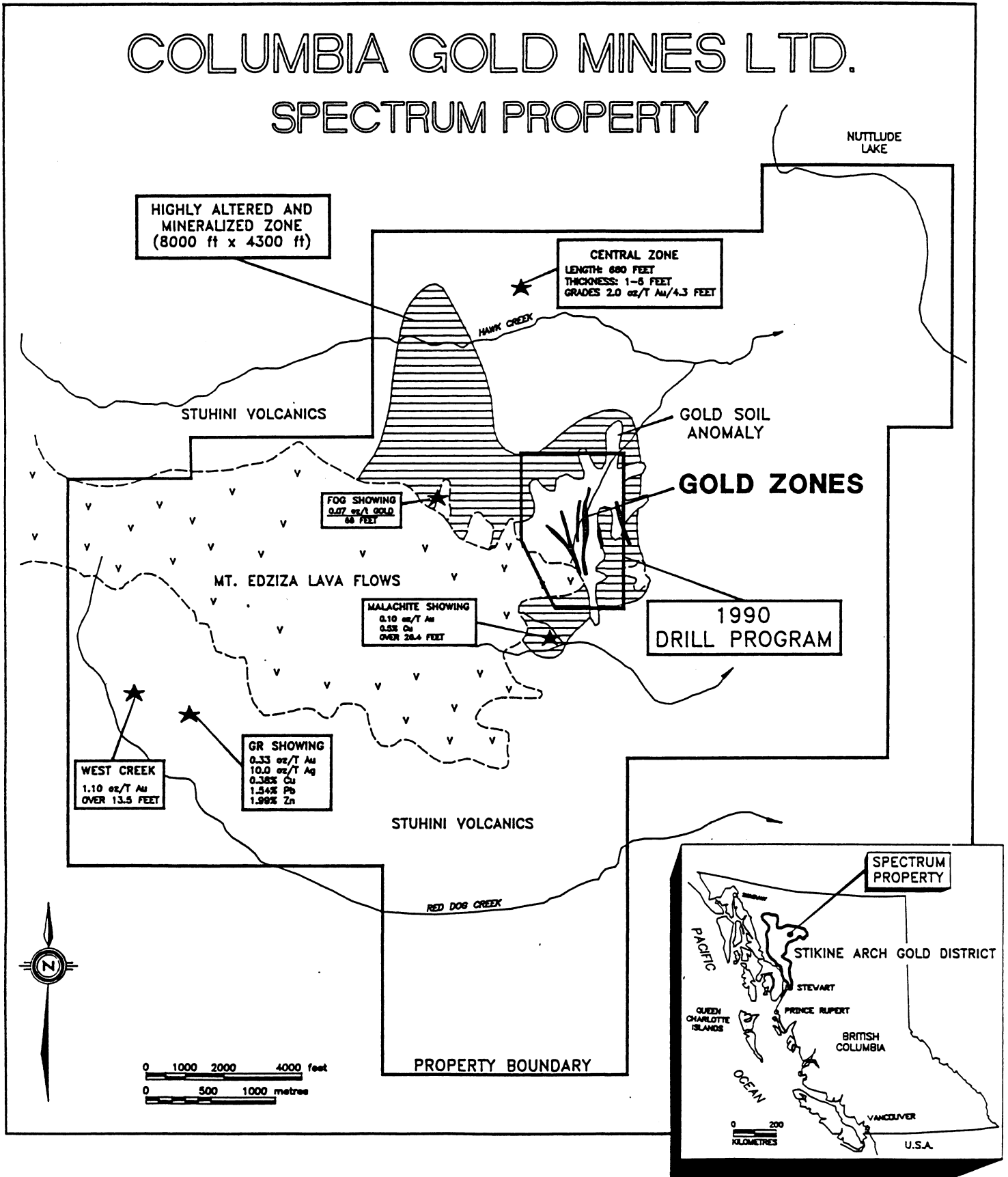
### iv) Sampling

Approximately 630 metres of surface trenching completed with 1 metre spaced samples. Total drilling of 2432 metres in 20 holes sampled at intervals of 1 metre or less.

<u>RESERVES:</u> Geological, possible,	- geological 1,500,000 tons
probable and/or proven	(Target Reserve 3 - 5 million)
Number of zones	- 4 zones
Number of sample points	- 90
Average grade	- 0.28 oz/t Au
Average thickness	- 5.0 metres (16.0 feet)
Cut-off grade	- 0.15 oz/t Au

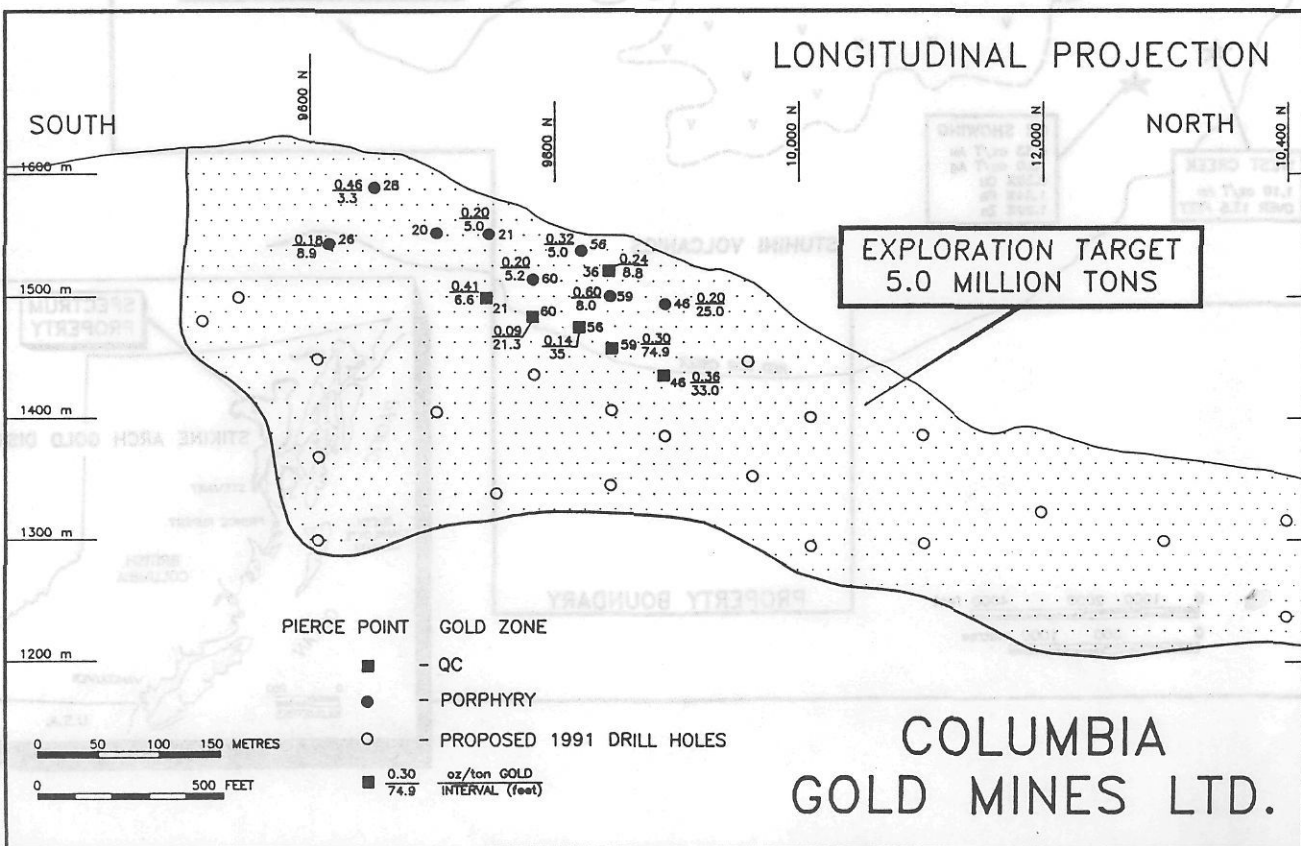
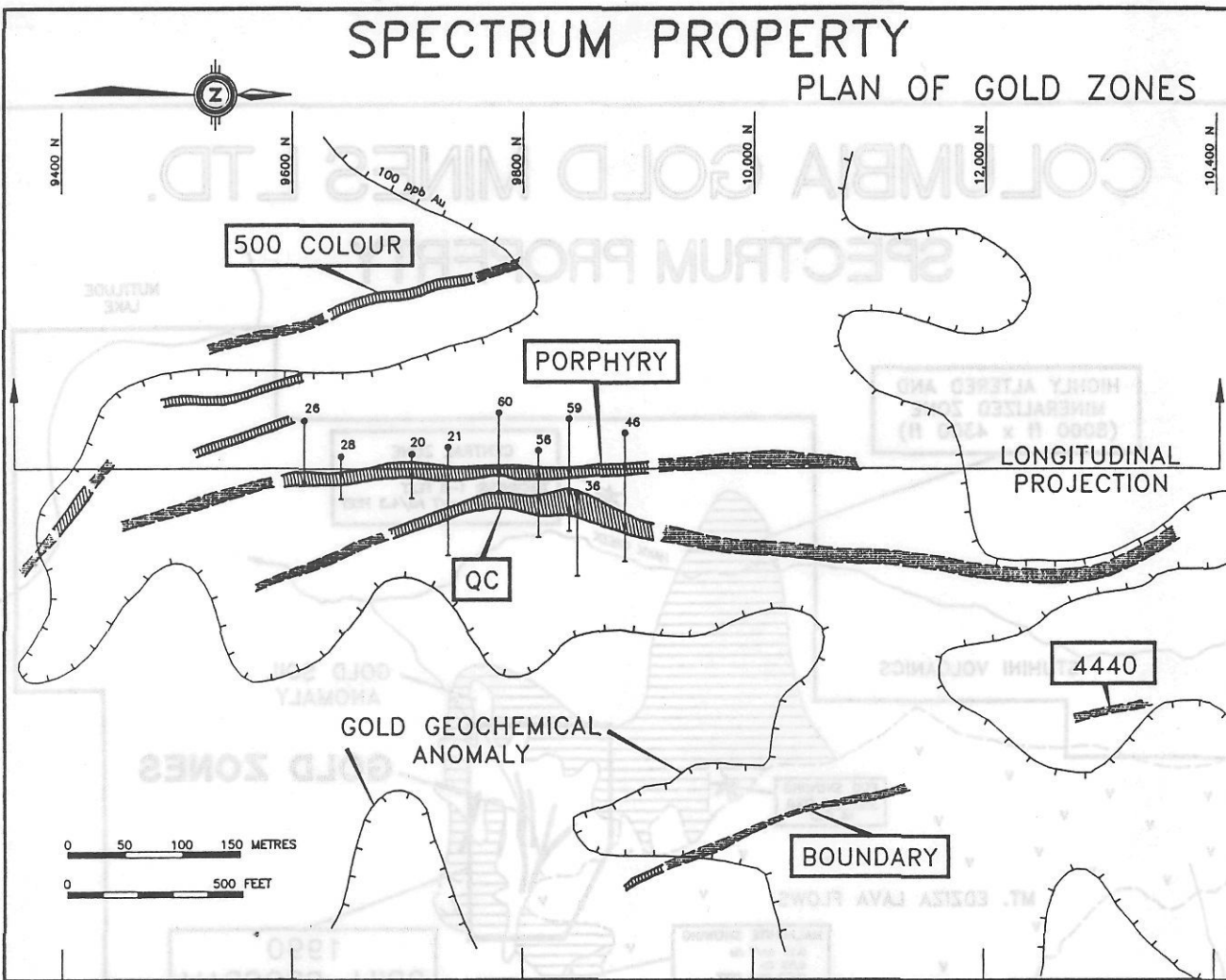
Costs: Recent exploration costs, i.e. (relating to above)	- \$ 700,000
Projected exploration costs of program to development (if any)	- \$ 4,000,000
Projected development costs given positive economics	- \$50,000,000
Projected operating costs given positive economics	- \$60/Ton

# COLUMBIA GOLD MINES LTD. SPECTRUM PROPERTY



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## PLAN OF GOLD ZONES



**COLUMBIA  
GOLD MINES LTD.**