

Specogna - Cons.
Cinola 103F/9E
675877

Coffee Break — 3:00 *CIM Dist 6 Van Oct 1987*

Paper No. 3 — 3:30

The Graham Island (Cinola) Deposit Revisited — Evidence for an Epithermal Hot-Spring-Type Gold Deposit.

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The Graham Island (Cinola) gold deposit represents the exposed mid-upper levels of an epithermal hot-spring-type precious metal systems.

This interpretation is based on the results of the work conducted by City Resources (Canada) Limited during the period November 1986 through March 1987. City Resources geologists logged 9700 m of new core and cuttings from 30 diamond drillholes and 64 reverse circulation holes as well as relogging 27 900 m of existing core. Additionally, 340 m of the underground workings were remapped as well as 120 m of new crosscuts.

The deposit is characterized by intense pervasive silicification and argillic alteration, extending laterally away from an elongate zone of silica-flooded hydrothermal brecciation, adjacent to a rhyolite intrusive sheet intruded along a major fault zone. This major fault splay named the Footwall or Specogna fault is a right-lateral, normal fault downdropped to the east juxtaposing Cretaceous mudstones and argillites to the west, against Tertiary Miocene-Pliocene coarse to fine clastic sediments to the east.

Geologic studies currently underway are directed toward better understanding the hydrothermal system and alteration sequence as well as localization and characterization of the precious and other metals.

Notes on CIM Dist 6 Paper "The Graham Island (Cinola) Deposit Revisited - Evidence for an Epithermal Hot-Spring-Type Gold Deposit"

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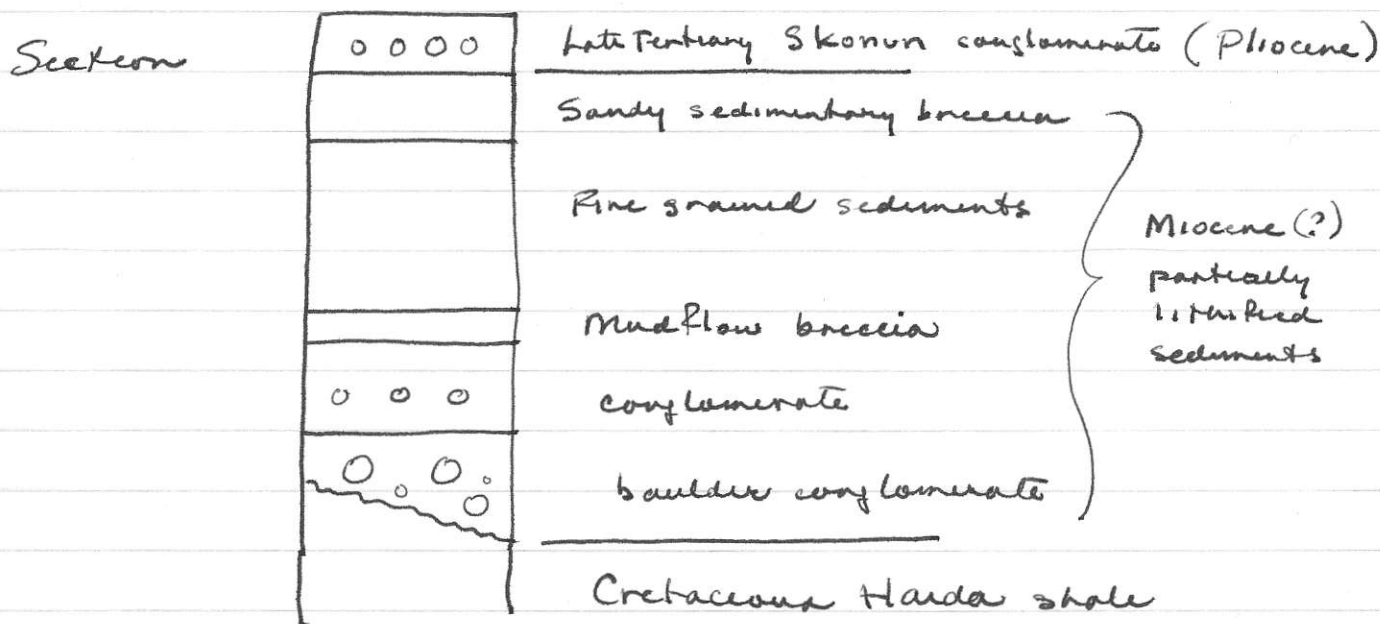
27,000 m diamond drilling done in present program
 underground 300m in 1980 + 120m in 1986 (drift plus 2 cross-cuts)

Reserve 40.7 Mt of 1.6 g/t Au

includes 24.8 Mt open pit ore grading 2.11 g/t Au

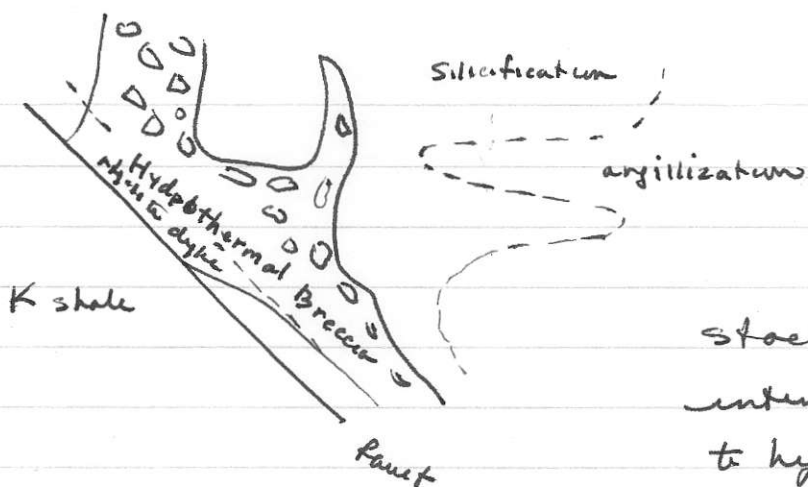
Total recoverable Au 1.7 Moz.

Mill capacity 6000 t pd.



About 5% carbonaceous material, wood in fine grained sediments

Sandy sed. breccia reflect fault scarp depositional environment?
 Hydrothermal rhyolitic breccia - intruded Harda shale/sediment
 contact adjacent to a fault. Pyritic, suggy 'worm rock'!



stockwork fracturing plus intense silicification adjacent to hydrothermal breccia.

Wallrock clasts stopped into hydroth. bx.

Fluidized matrix and recrystallization of clasts.

Some argillite clasts in footwall.

Right lateral movement related to movement on Sandspit Fault.

Seismic activity related to Fault movement, epithermal activity.

(?) Silica sinter detected in hole 88 - near surface interpretation.

High grade gold mineralization within HW stockwork zone.

Hydrothermal breccia filled Fault zone along scarp.

Hot spring systems caused sinter. Near-surface system.

Similar system seen in Papua New Guinea, Gordeagle I(?)

Scarp, alluvial fan, Fault, hot springs, etc.

Championy depth 1-1.8 km not appropriate. Drilling of 1500m of Skovon above conglomerate at East edge of basin.

See slide from E.

- Needs a careful fluid inclusion study of quartz, include fine grained silica if possible. Look for evidence of boiling.
- Identification of alteration minerals should be done on microprobe i.e. illite - kaolinite ± sericite, alunite (?)