

Notes by Tom Schroeter and Bob Lane from
MEG Luncheon Talk on Eskay Creek
 presented by Ron Britten, Homestake

January 17, 1995

GENERAL:

- Early prospecting and exploration from 1932-1980s.
- Discovery of 21A zone in 1985 by Kerrisdale Resources (ddh KDL-85-4).
- Delineation of 21B zone from 1988-1991 by Calpine/Stikine/Prime: > 700 surface ddhs and > 100,000 m of diamond drilling in total.
- Production from u/g in 21B zone @ 360 tpd using drift (cut) and fill methods at a cash cost of US\$183/oz of gold produced--more than 70% of this cost is attributed to smelting and transportation.
- Grade of ore is approx. 3 oz/t Au equivalent.
- First 9 mos. production was approx. 300,000 oz of Au equivalent (including 6.9M oz Ag) for a net income of \$25M.
- Ore is crushed on site and trucked, @ 30 - 40 tonnes per truck load, either to Stewart for barging to smelters in Japan or to railhead for transportation to smelters in Quebec.
- Barge turnaround is about 3 weeks.

GEOLOGY:

- Anticline plunges 30-50°N.
- Black matrix "carapace" breccia lies above the rhyolite.
- Transition zone (chl-ser rich) immediately underlies the 21B zone (below mudstones).
- mafic sill/dyke complex within mudstones--textures (pepperite etc) suggest intrusion into wet sediments.

ORE:

- coarse and fine-grained clastic beds to very fine laminated beds of sulphides and barite with rip up clasts scour marks etc.
- post-mineral structural disruption.
- footwall rhyolite including the 109 zone contains colloidal pyrite.
- rugged basement topography at north end of 21B zone prior to (or syn-depositional) deposition of rhyolite (presence of growth faults); post-rhyolite paleotopography was much more subdued due to rhyolite infill.
- 1995 discovery: NEX (northeast extension to 21B) zone occurs below HW zone in contact mudstone unit some 20 - 30 m above rhyolite; one of the better diamond drill intersections graded 74 g/t Au, 3128 g/t Ag, 21% Zn 12% Pb and 3% Cu over 4.8m with very low concentrations of deleterious elements (As, Sb, Hg).
- 109 zone believed to be the feeder for the 21B (and NEX) zone.
- deposition of the sulphides was thought to take place on the sea floor in a shallow extrusive (exhalitive) VMS environment at 5-1500m below water at temperatures near 200°C.

