

825138

Crown Resources

Buckhorn

Buckhorn Pluton

spans border - prob respons
for skarnification

24 km NW of Republic

- Perm - Cret age island arc seds
affected by skarning

- sev 100 pits, etc on property

- started expl in summer 1988

- ground mag, soils (Au, Ag, Cu Pb Zn As Bi)

⇒ N-S trending anom 8000' of soil
mag.

- tested 5 anom by drilling

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cont drilling in 1989

mylonite = frag

streaked / banded

- Anarchist equiv seds.

not Anarch dior. Beckhorn

g dior

close correl between Au & Bi

Negs

all chrom remob

- chr. minor & small
- sampling problems

small grains of Pt & in refractory chromite.

Positive

- good grades
- good Pt/Pd ratio

- easy to prosp by rg aeromag.

Danny Aldrich - Iskut Area.

- mid Jur B Bas seds rimmed by Low Jur Hazelton seds.

Ore Potential in Andesitic Stratovolcanoes

- " self contained prolific ^{ore generation} factory "
- Epithermal, mes, porph Cu-Au volcanoes
- heat, source rx scavenging from andesite
- diff deposit types @ diff depths.

Gold skarns Etlinger & Ray
Favorable assemblages
= Nicola
Rosland.

Taseko - Bridge R. area.

Mid K - contraction Au vns
(Bralorne)

- Lake K - Eocene strike-slip

Listwanik

Eocene extension - uplift

- porph Mo

polymetallic vns

Shulaps ophiolite complex

Late Cret to Eocene strike-slip

- Xalakom & Marshall or Fault

- assoc list along faults

- assoc stib vns, cinnabar vns

Eocene - extension, plutonism, uplift.

Tulagish Lake area - Mitch Michaleynuk

ultramafics alt'd g/t - carb-mariposite
- where drainages cut
alt'd vms get placer streaks
(same as Athin).

Deer Horn Mine (Lindquist Lake)
Tweedsmuir Park.

Graeme Nixon - Pt in Alaskan-type U/M.

- intrusive in nature
- contacts commonly fault bounded
- dykes/stokes
- crudely zoned.

ie) Tulameen complex

- all sure examples are in Intermountain belt

- assoc with late Tr volcanics - ie Nicola

@ Tulameen ^{& most others} Pt/Pd occurs in
chromatite in dunite cores of
these bodies

placer coming from these chromatite
horizons within dunite - not dispersed
throughout dunite

Preto Expt Highlights

Mt Polley - near Likely
49 mill tons
@ .4% Cu .6 g/t Au
feasib March 190

Mt Milligan

200 mill

.3 % Cu .6 g/t Au

prod 1992

30,000 tpd.

Gold Skarns

- Merry Widow

- Little Billie (Tex Island)
(Freeport - MCM)
Vananda

1990 Forecast

Mass sulphide & Cu-Au porph
- road access

Ron Smith Director BC Geol Surv

< re >

reanalyze old regional geochem
for Au + 13 elements.

Iskut area Hazelton ^{minz in} Group ^{power} Jurassic

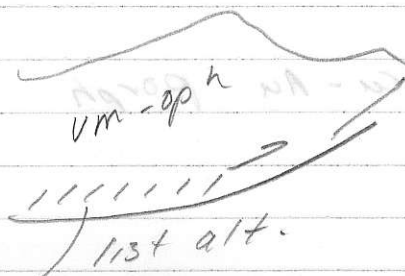
Listwanite = alt'd carb
= qtz / carb / mafics

Atlin - minz in high angle

faults in ophiolite / um
slice.

- placer = where streams cut

Listwanite on basal thrust



Mt Milligan

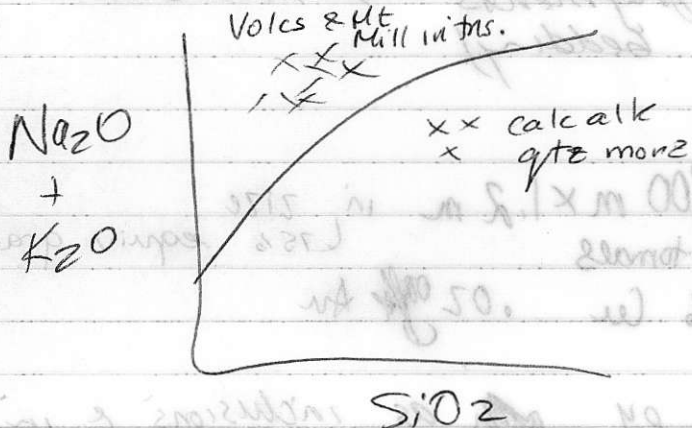
MEG

Feb 14/90

- 64 miles drilling
47,000 assays for Au, Cu

- in Quesnel Trough

upper Tr. lower J. alk volcs
bounded on W by Pinchi Cr Flt.
on west by Massey Cr Flt



Contour 250 ppb Au

Mt Mill not conspic Au soil

anomaly

> 100 ppm Cu

Mt Mill still not good soil anom.

but southern Star did show up well

after 3+ m till

- good IP anom over all soil anom areas

120 line km IP
240 ground mag

} invaluable
for property

1P delineated 10 sq km sulfide system

4 monz plutons intrude Takla vols (and, trach, latites)

and = coarse fragments + interbedded tuffs. (show graded bedding)

Main zone 900 m x 1.2 m in size
Mt Mill 200 m tonnage (75% equiv grade)
.3% Cu .02 oz Au

> 5 moz Au
400,000 oz Au ann prod.

Au in py as inclusions & in microfractures also detached & in close assoc with spy.