

EXPO PROPERTY

June 8/90

- discussion with Peter Dastler in Moraga Res. offices - 1030 - Stock Exchange Tower

Target Types:

- 1) Porphyry Cu-Au (à la Island Copper)
- 2) Massive sulphides - in Bonanza volcs.
- 3) Epithermal veins
- 4) Skarns

1) Porphyries: à la Island Copper - grades:
 .2 to .3% plus .01 to .015 opt Au
 - ab. siliceous (\pm phyrophyllite) caps
 → very high sulphide \pm breccia - Au inv. .002 to .007 opt Au
 - beneath → zone of Cu (cpx + bn)
 - Hishama dep. - moly zone
 - strong NW structures \pm strat. control
 - offset by younger NE faults
 - 40,000 ft. of dth with ~ 12 holes into dep.
 - need assistance in I.D. clays, etc.

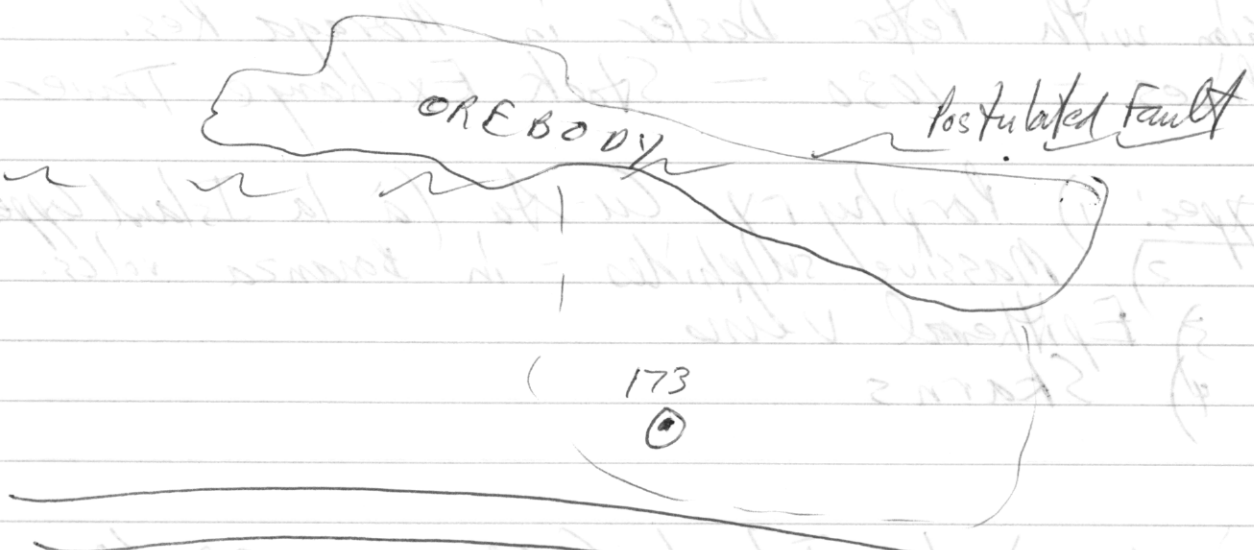
2) Massive sulphides: esp. Zn-rich in Bonanza volcs. \pm Patson Bay 'cherts'.

3) Epithermals: Amethyst veins present locally,
 - anomalous geochem: As, Te, Th
 - pt 2. 'streaming' (à la Red-Christ)

(OVER)

HUSHAMU

EXP0 PROPERTY



Other companies have done recent assessments.

eg. Echo Bay (by Barney Bowen)
 ~ 200,000,000 tons @
 1.27% Cu + 0.15 gpt Au

(OVER)

EXPO (Hushamui)

CIM, Dist. 6
(Campbell Ki.)

Oct. 2/92

- Peter Dahster

2011
153
206
1700 ft ddk below McIntosh Mtn
(thru silica cap) → intersected 'good' Cu.

Geol. res. = 383m tons @ .23% Cu / 0.01 opt Au / 0.01% Mo

- telescoped epithermal system (1 km)
(from top of McIntosh Mtn. to Hushamui zone in valley)

'Intermediate' area - bx complex - intense advanced argillic zone (kaolinite, zunyite, diaspore

bn, enargite - high sulphide system!
5-8% py

'Upper' - sil. bx. - vuggy - mottled texture

South McIntosh ~~Pemberton Hill~~ - extension

West Pemberton - valenite + late stage native sulfur

= shallow level epithermal maar/dome complex

- incl. bedded sul. in seds. (infilling in maar)

- no drilling since Feb. '92

2011 206 : 492 ft @ .31% Cu / .017 opt Au / .012% Mo

Cu rec. = 85%

Au rec. 70%

Res. = 191 m tons @

Est. Capital Cost = \$100m

Jan. 9/91

MEG 'Hit Parade'

CONTINUOUS LEARNING FOR THE ADAPTIVE MANAGER

Seminar Notes

① SIB - Rebayliati
 - 'Mackay' mudstones between Betty. Ct, epickistics + Dilworth
 - grad VLF (esp. Mackay mudstone) → extensive
 - potassic metasomatism.
 - similar response via J.P.
 - interbedded mudstone (Margarite mudstone) - above
 Mackay mudstone → up section to Luke mudstone (-exhalite)
 - crystalline silica + graphite + pyrobitumen + minor sericite
 (eg. DD7-90-50) → overlapping 'albitite' (not rhyolitic)
 - Min. (Luke Zone): - stibnite, PX, ZnS, Fr, ruby Ag, arsenopy, V₂O₅
 - Mackay mudstone - still potential for 'stacked' massive sul.
 - VG floats 'fready'

Bright Ideas

② EXPO - Peter Daster
 - silica caps in Bonanza vols.
 - excellent aerial view of Island Cu
 value (today) = \$2.84 billion
 (in 1980 \$)

→ NE structures appear to intersect most of large
 py-silica hydrothermal alteration zones.
 + assoc. QFP dyke systems (peripheral)

~ 65,000 ft of drilling in 90 holes on Bushy Zone.
 - Steffan, Roberts, Kirsten Eng. - modelling

Recovery: 9% Cu, 70% Au, 70% Mo
 - 2 pits
 Main Zone 107 M tons @ .53% Cu equiv.
 ie. .29% Cu + .010 Au + .01 Mo

Silica Cap: - McInch Zone
 ~ 350 m tons @ potential

③ Lockwood, Wa. - Gerry Rayner (Island) VMS Enrich. (Analogy: Seneca
 Excelsior, Wa.)
 - Nooksack vols. (U. West - High) ENE of Everett, Wa.
 - dust tufts (andesitic) + acidic rx. (rhyolite porph)
 - up to 120 ft thick Sul. section (3 to 7% Pyrite)
 - Polymetallic float - thinly banded with dsh
 #9 → 16 ft @ 3.3% Cu, 3.5% Zn, .072 Au, 2.6 Ag

[OVER]