

HOMESTAKE (Kamad)

Feb. 25/88

Dave Heberlein (Esso)

- 'Homestake Schist' package (Eagle Bay Fmn.) - subdiv. into 3 units
- 2 u/l~~6~~ adits

Reserves -- 'fairly reliable' (Esso)

250,000 tonnes @ 226 g Ag, 1% Pb, 2.2% Zn, .5 Cu, 36% Ba
+ ~0.5g Au

- ore in series of lenses (barite-rich) - entirely within gte-ser. schist

Background sulphides: 5 to 10% ^{what about dolomitic alb. Ca la partha etc?} (any pyrophyllite?)
- incl. 2 bands of exhalative chert (gerchem-anom. - As, Ba)
+ primary layering

- marker horizon argillites ^(graphitic) lie above + py porphyroblasts
(thin st. in 'horizon' - hope for fossils).
- phyllite lies above schist

- upper contact with schist + mafic rocks. = locally devel. small scale thrusts.

Lithogeochem: (~160 sa.) dacite → rhy. fields (Homestake schists)
cf. Homestake mafics → bsf - ands. fields

- Na depletion (w/ total alkalis) - also CaO

Flourine - essentially flat (2 to 3000 ppm range)

Ag increases (2x) - in pyrite horizon

Pb increases

Structure: intense folding - best observed in argillite unit + also cherty units in plane of F.H.
- very tight axial planar isoclinal folds.