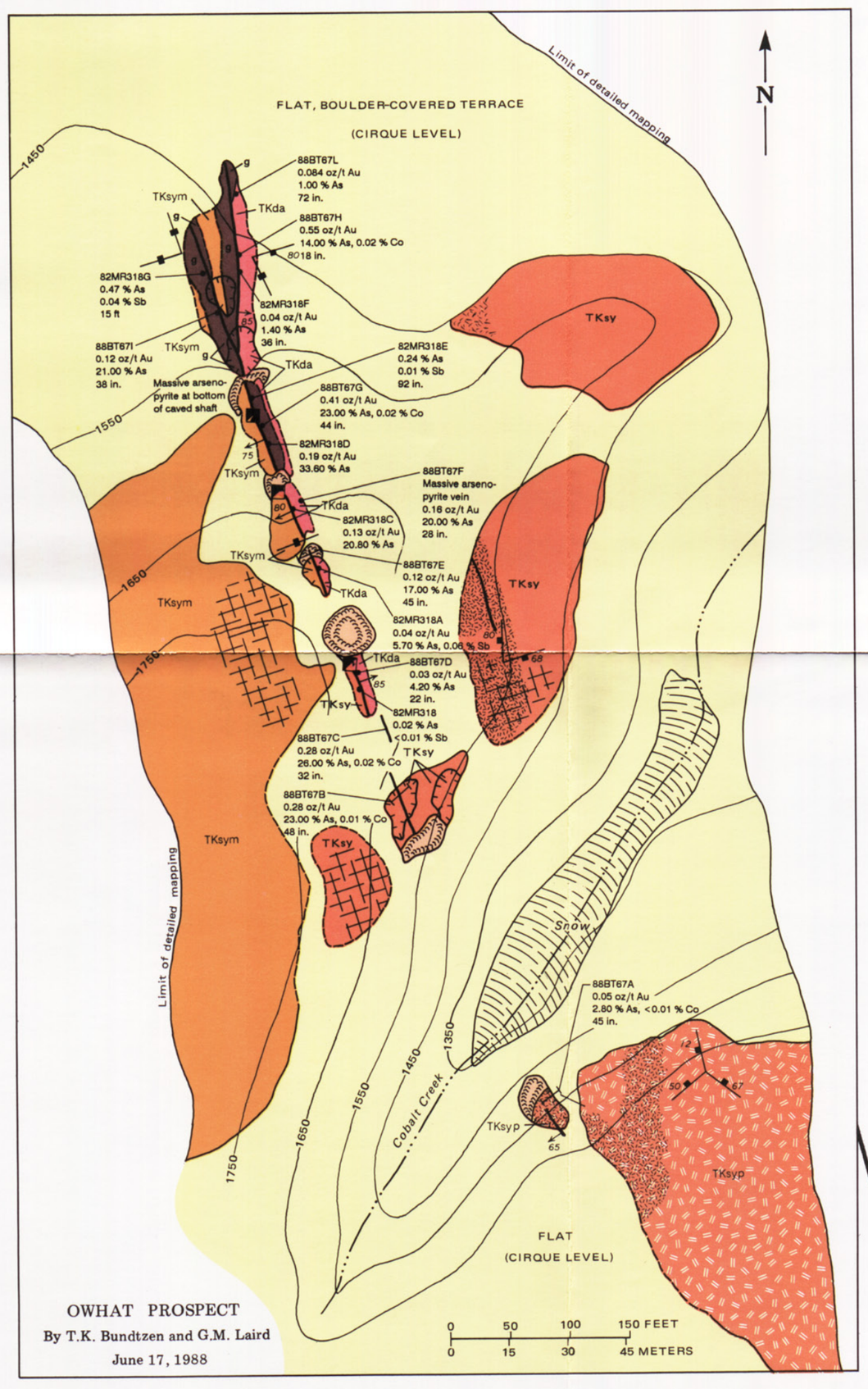
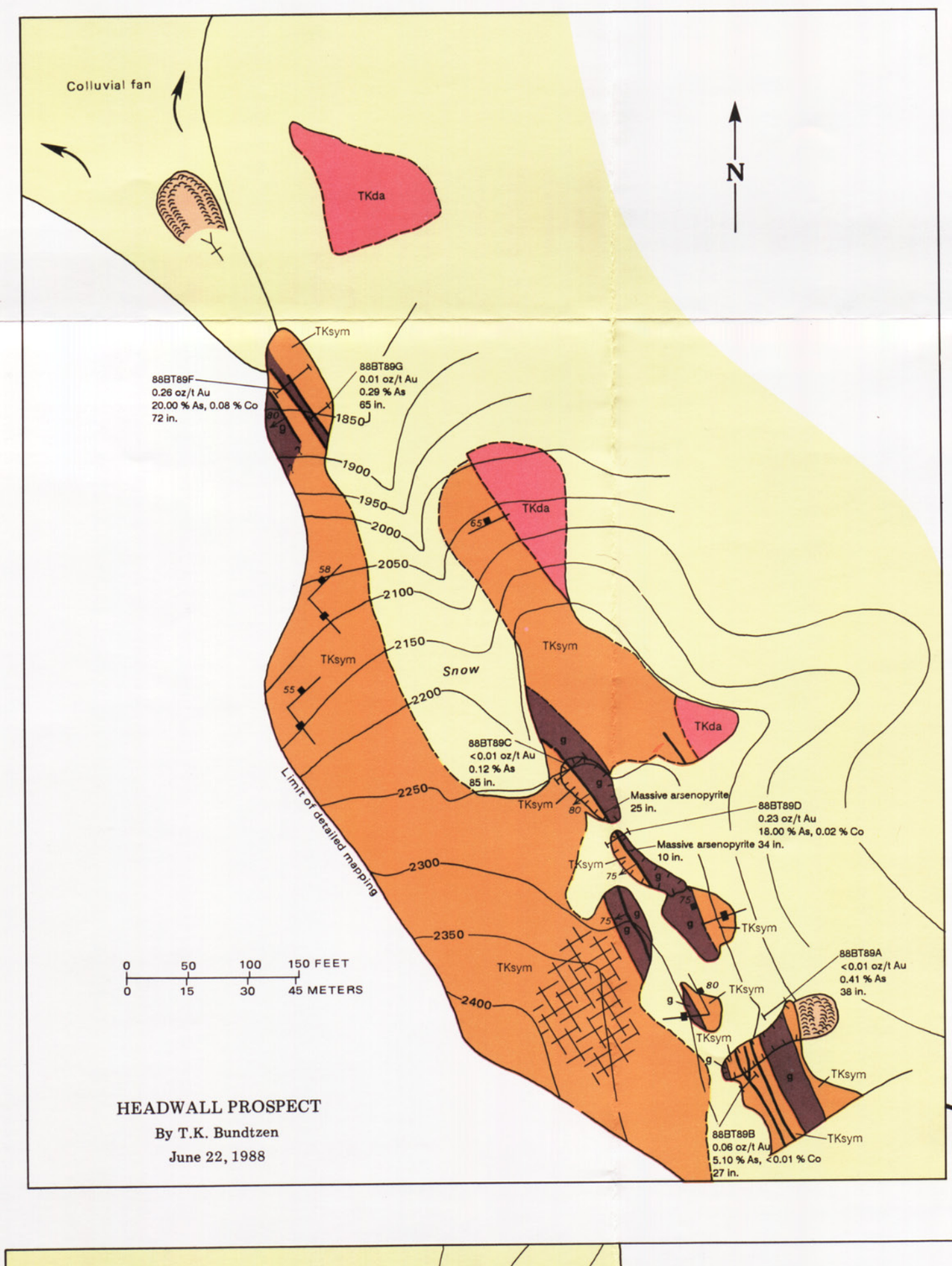
PR109-SH2

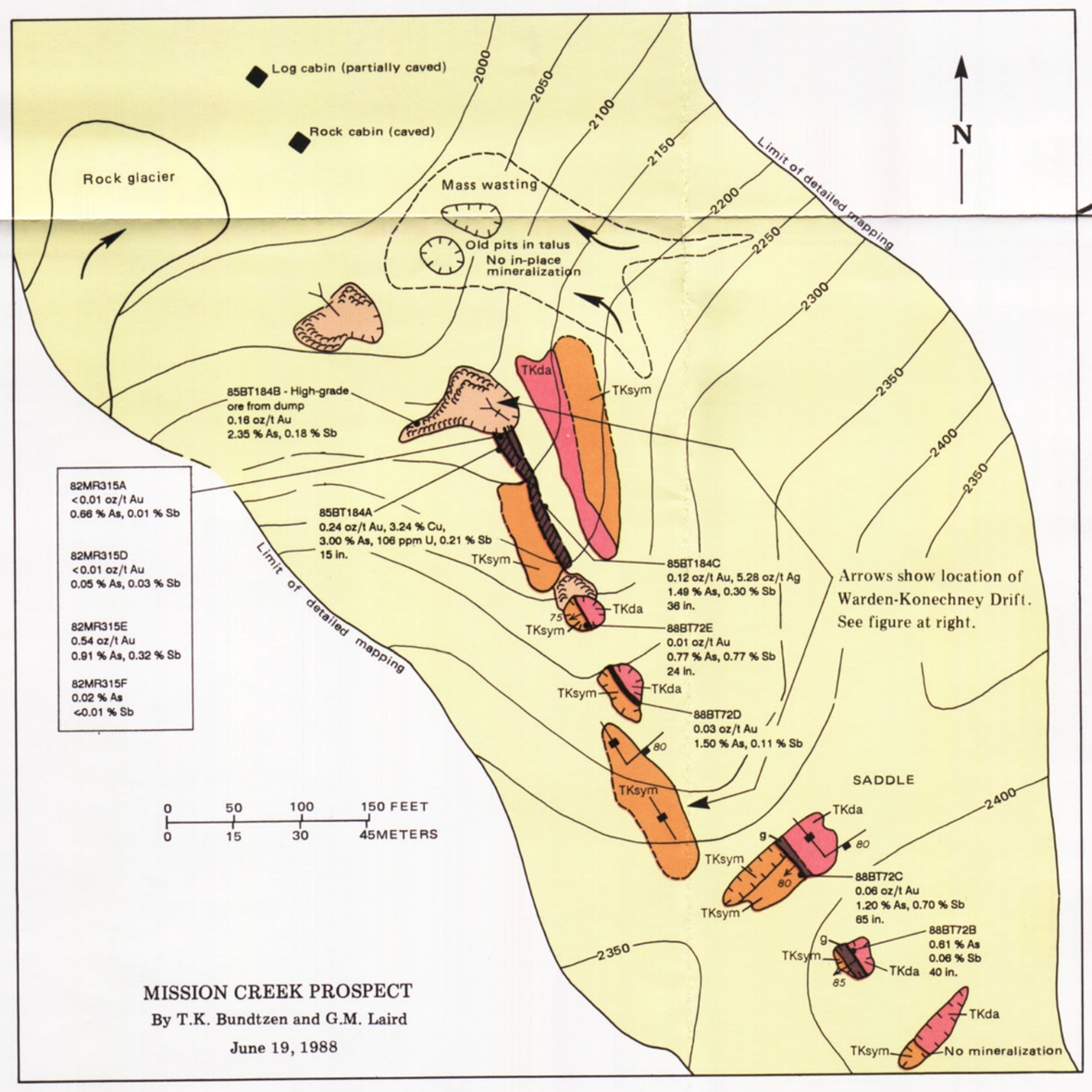
MAPS OF GOLD-ARSENIC-COPPER PROSPECTS IN THE RUSSIAN MOUNTAINS, RUSSIAN MISSION C-1 QUADRANGLE, ALASKA



OWHAT PROSPECT
By T.K. Bundtzen and G.M. Laird
June 17, 1988

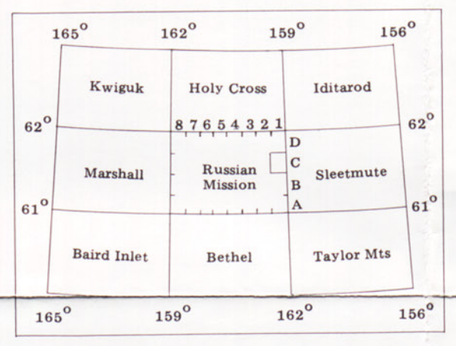


HEADWALL PROSPECT
By T.K. Bundtzen
June 22, 1988



MISSION CREEK PROSPECT
By T.K. Bundtzen and G.M. Laird
June 19, 1988

LOCATION INDEX



EXPLANATION

Qu — QUATERNARY DEPOSITS–Predominantly, coarse-grained frost riven talus derived from igneous bedrock.

TKsym — SYENITE TO MONZONITE AND QUARTZ MONZONITE–Medium-gray, medium-grained, locally subporphyritic, biotite-clinopyroxene syenite to monzonite and quartz monzonite. Zones of ankeritic alteration present near mineralized veins; purple to colorless axinite clots found throughout mapped intrusions at Mission Creek and Headwall prospects.

TKsy — QUARTZ SYENITE–Light- to medium-gray, medium-grained, equigranular, pyroxene-biotite quartz syenite. Stippled pattern marks zone of ankerite-sericite alteration.

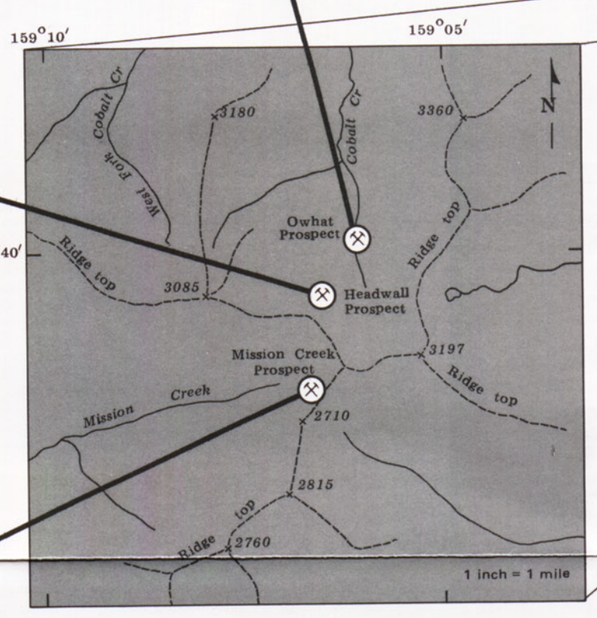
TKsyp — PORPHYRITIC QUARTZ SYENITE–Light-gray, partly bleached, fine-grained to porphyro-aphanitic, biotite-bearing quartz syenite. Stippled pattern marks zone of ankerite-sericite alteration.

TKda — ANDESITE PORPHYRY–Medium-green-gray, very fine grained to porphyro-aphanitic, biotite-axinite andesite porphyry. Axinite present throughout groundmass; tourmaline greisen developed locally.

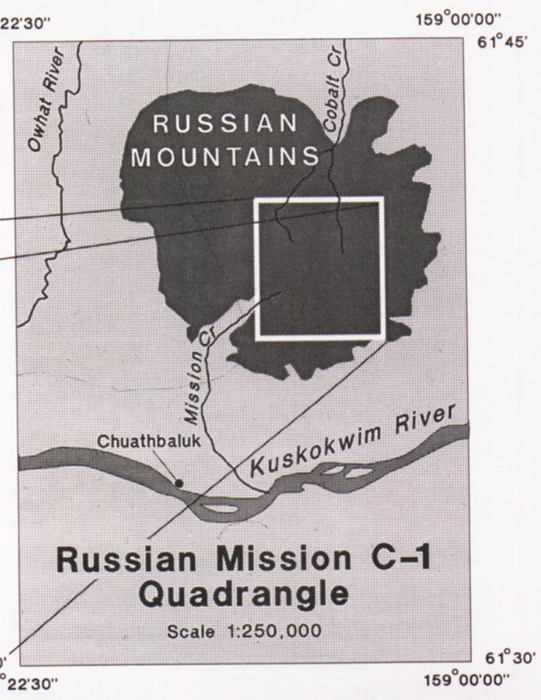
g — TOURMALINE SULFIDE GREISEN–Typically developed on footwall adjacent to quartz sulfide vein; locally extends 2 to 2.5 m (6 to 8 ft) into hanging wall. Associated minerals include massive streaks and veins of schorl (black tourmaline), patches of axinite, massive to disseminated chalcopyrite and arsenopyrite, minor galena, and traces of tetrahedrite; secondary comb quartz developed near hanging wall of vein. Paragenetic sequence for Owhat and Headwall prospects: tourmaline → quartz (early stage) → arsenopyrite → chalcopyrite → quartz (later stage) → tetrahedrite → free gold → bornite → galena → bismuth + lead sulfosalts. Paragenetic sequence for Mission Creek prospect: chalcopyrite + tourmaline + quartz (early stage) → arsenopyrite → pyrite + zindwaldite(?) → antimony sulfosalt or tetrahedrite + free gold → bornite + covellite + quartz (later stage).

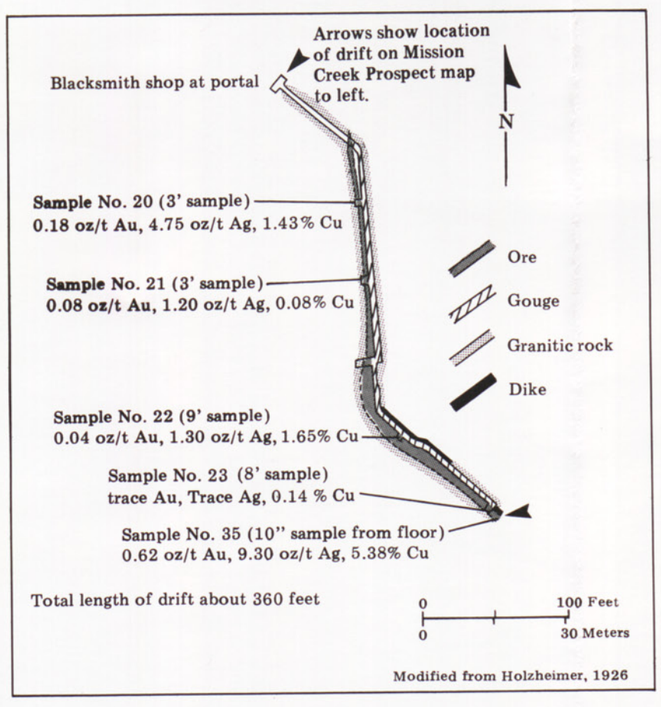
MAP SYMBOLS

- Contact–Dashed where approximately located
- Vein along fault–Dashed where approximately located. Arrow shows dip
- Quartz-sulfide float
- Strike and dip of joints
  - Inclined
  - Vertical
- Joint sets
- Vertical shaft
- Inaccessible adit
- Trench (left), opencut, and pit (right)
- Mine dump
- Location, number, selected assay values, and length of chip channel. Bar shows trace of channel where scale allows. Assays of 88BT channel samples by Nuclear Activation Services Ltd., Hamilton, Ontario; assays of 82MR channel samples by Bondar-Clegg, Vancouver, British Columbia. See text, table 3, for additional geochemical determinations.



LOCATION MAP OF THE
OWHAT, HEADWALL, AND MISSION CREEK PROSPECTS





WARDEN–KONECHNEY DRIFT,
MISSION CREEK PROSPECT
(Elevation 2150 feet)