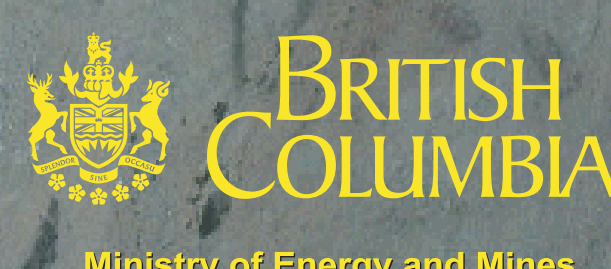


Cangold Partnership: regional geologic setting and geochronology of high sulphidation mineralization at the Thorn property

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Summary

Geological mapping and sampling conducted under the terms of the Thorn public-private partnership was to extend the revision mapping from the Stuhini Creek map area (Mihalynuk et al., 1995) to the area surrounding the Thorn property. In particular, it was to provide a new regional geological and temporal framework for the Thorn high sulphidation mineralization which appears to be genetically related to the quartz-feldspar porphyritic Thorn stock (stylized red zone in photo to right: a view to the southeast across the Sutlahine River).

We report here on new and

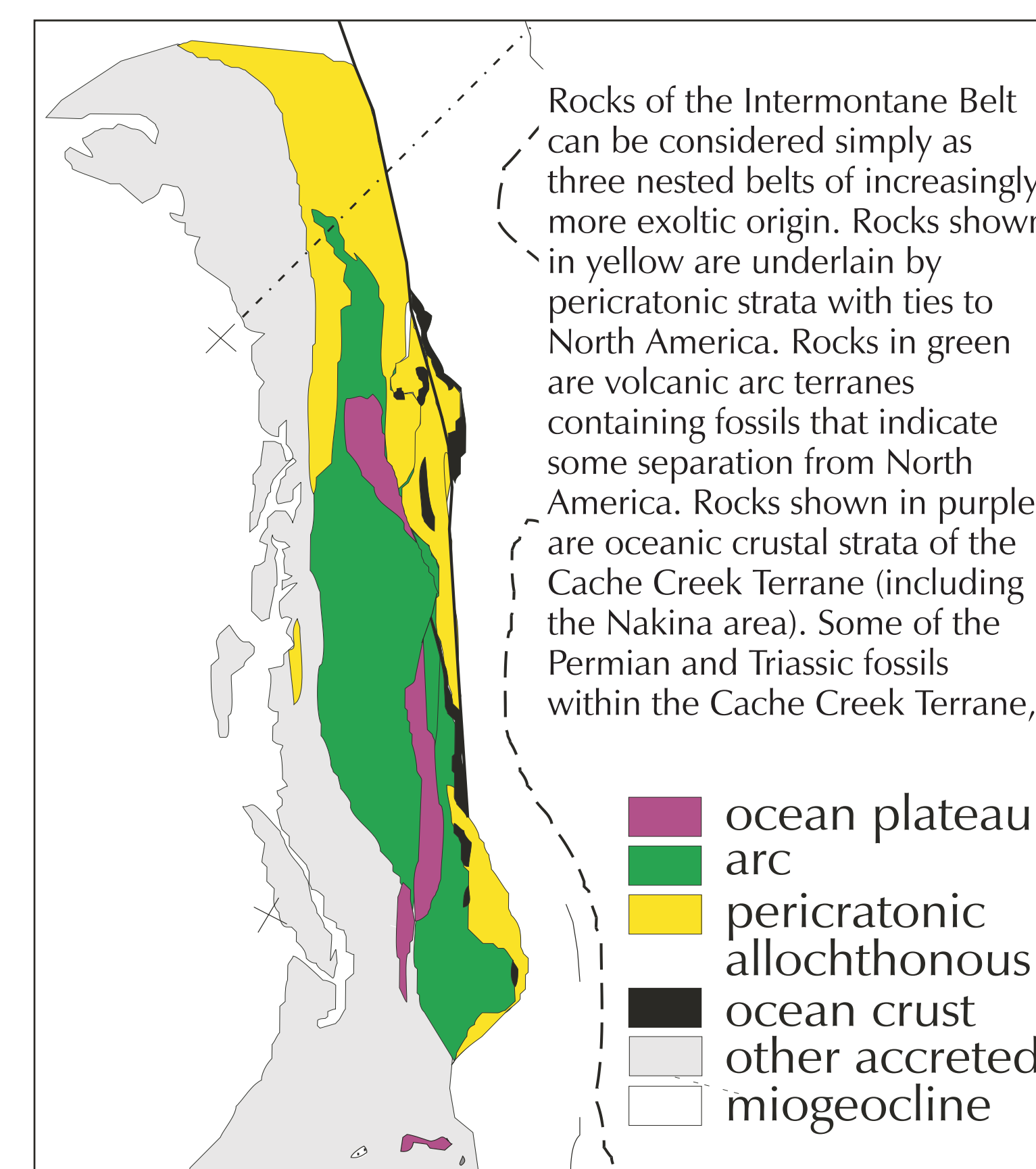
newly released age data from samples of Thorn mineralization yielding 91 ± 1 Ma, the stock at 93.3 ± 2.4 Ma, and plutons along strike to the northwest with provisional ages of 83.8 ± 0.2 Ma (Mount Lester Jones body) and 87.3 ± 0.9 Ma (Red Cap porphyry).

We also report on two new mineral occurrences found during the course of mapping. One is a strong set of quartz veins, probably near the Jurassic-Triassic contact, that contains base metal sulphides. The other is a gossanous zone near the base of presumed Sloko Volcanic strata that contains arsenic, silver and minor gold.

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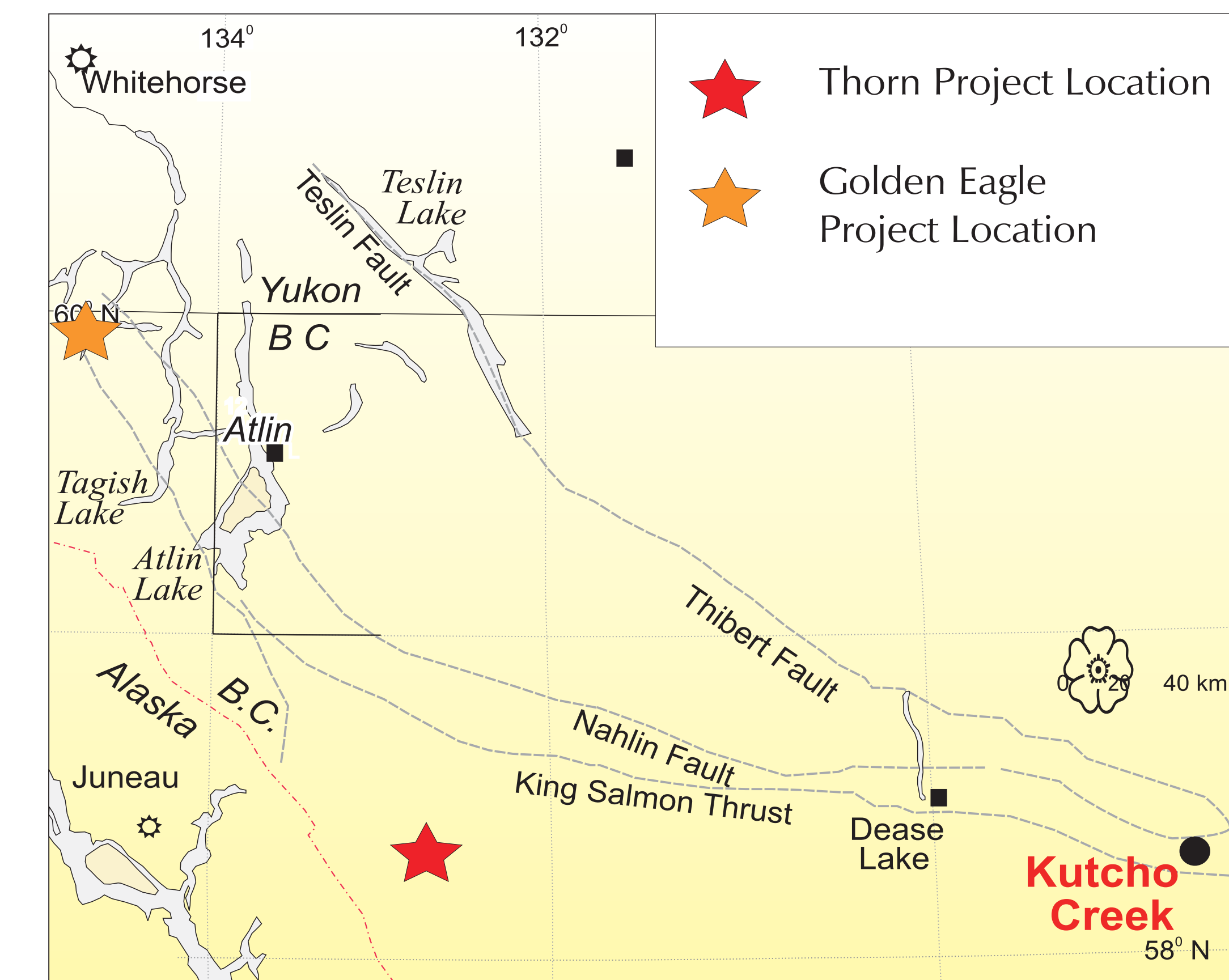
Thanks to Keith Taylor who dug into his old files and reconstituted the cooling data summarized here. Bob Archer of First Gold Strategies was instrumental in generating the capital that enabled the project to proceed.

Tectonic Setting & Location



like the spiral fusulinid and conodont jaw plate shown above (from: Monger, 1975; Orchard et al., 2000), occur nowhere else in North America, but are the dominant species in the Tethyan realm of central Asia (Himalaya to Mediterranean). Just how these exotic rocks came to be

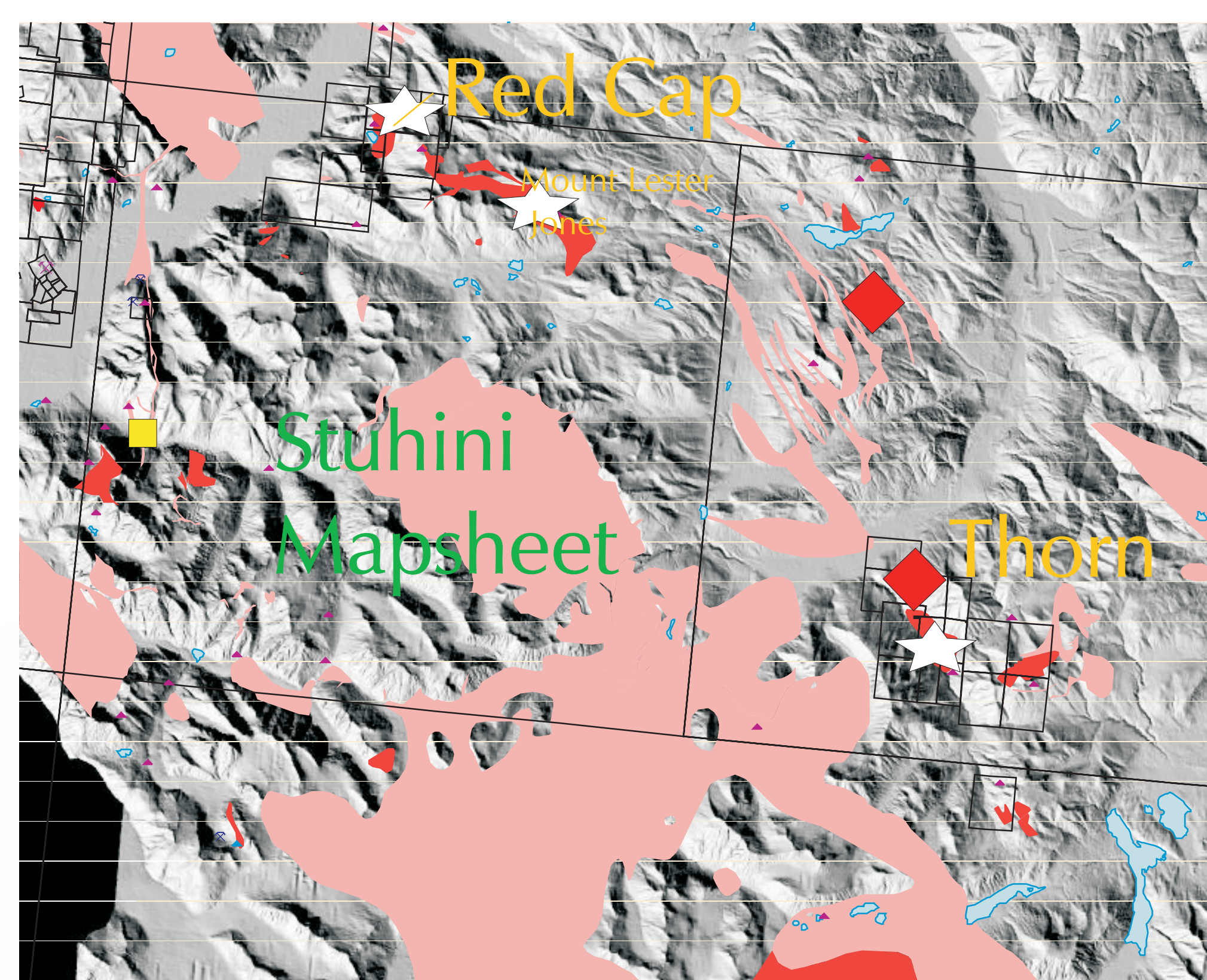
enclosed by increasingly less exotic rocks has been the focus of several tectonic models. One explanation is that the pericratonic and arc belts (yellow and green) formed a more-or-less continuous belt that was subsequently folded around the Cache Creek terrane in oroclinal



Both the Thorn project and the Golden Eagle project are located in the "outboard" Stikinian volcanic arc belt. It is possible to drive to the Golden Eagle property via the Klondike Highway (Figure above) about 120 km from Whitehorse. The highway bisects the property. In 2002 a drive-in field camp was established on the western shore of Tutshi Lake. Helicopter transport was

used to gain access to parts of the property southeast of the lake or the rugged mountainside above the lake to the west. Access to the Thorn, in contrast, is via helicopter, available for charter out of the town site of Atlin. A base camp was established on the shore of Little Trapper Lake which is float plane accessible.

Regional Geology



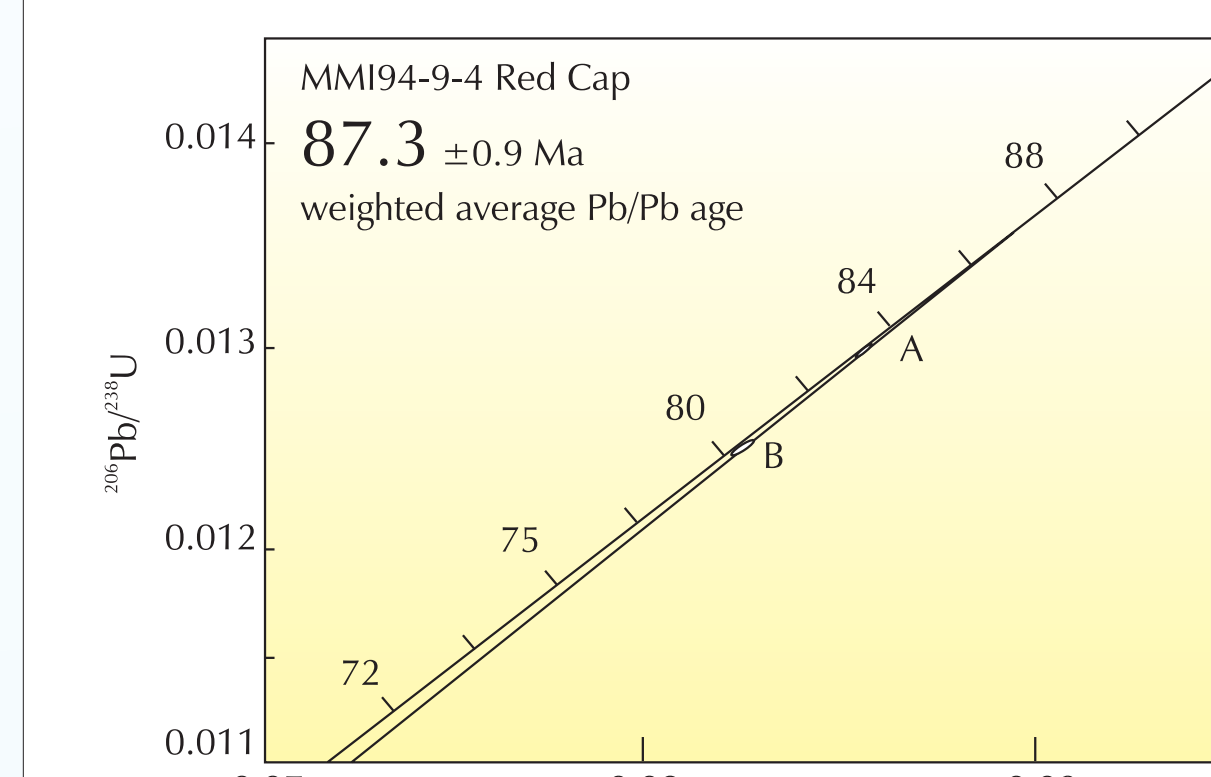
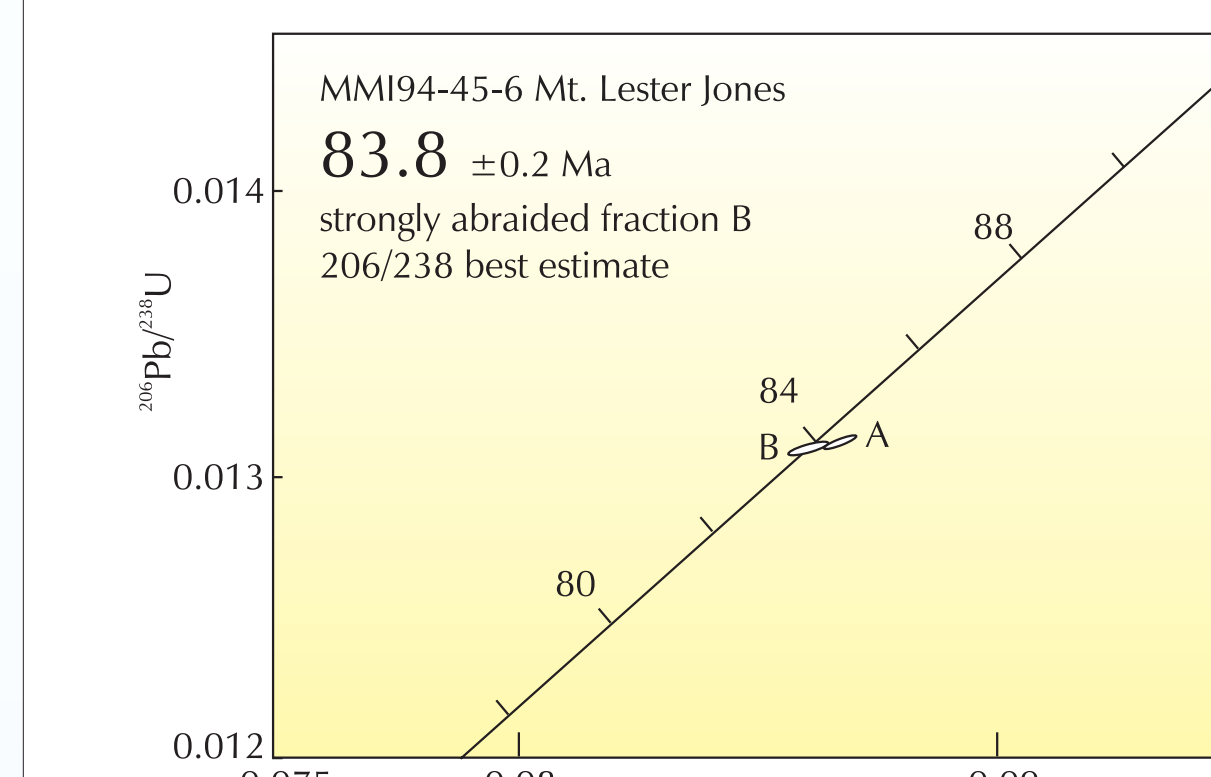
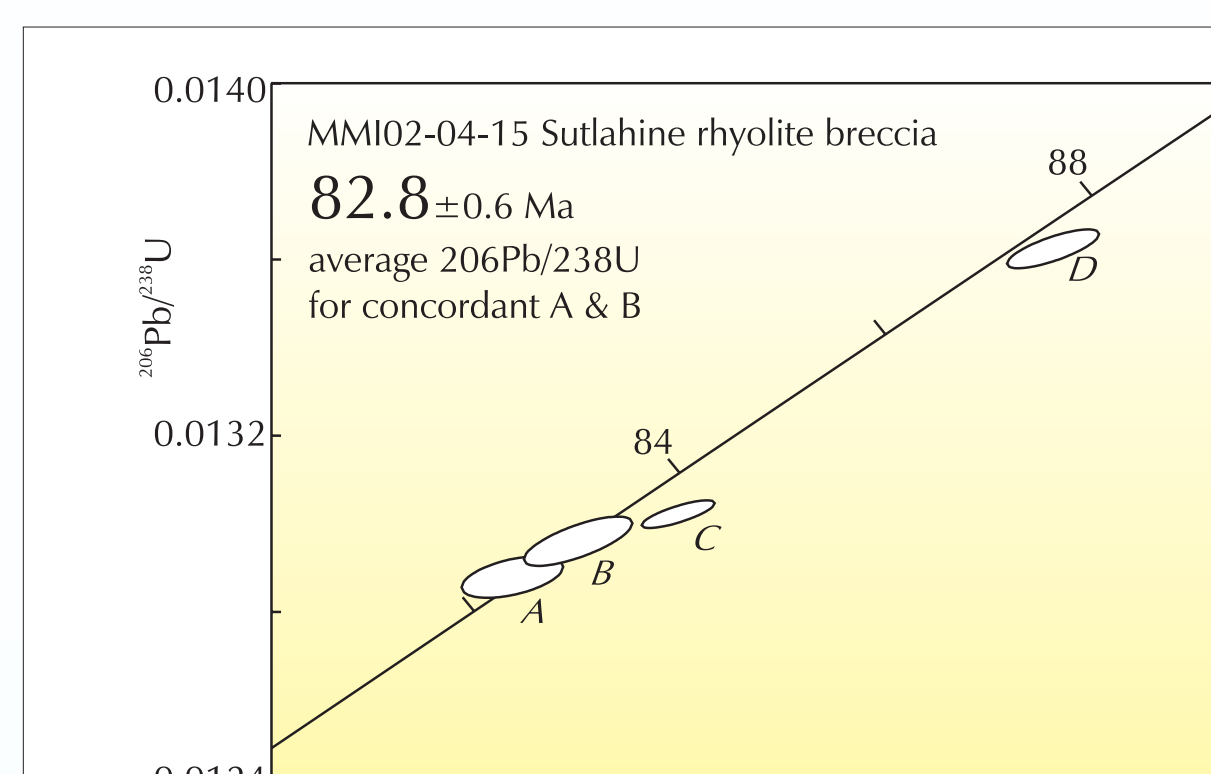
Mesozoic and Cenozoic plutons shown here are from the compilation in Map Place (Mihalynuk et al., 1996). Approximate locations of the age dating sample sites are shown by the stars. Note that the Mount Lester Jones body is a fresh, hornblende plagioclase porphyry and belong to a suite younger than that of the mineralized quartz-eye biotite porphyritic Thorn and Red Cap intrusions. Also, many of the Cenozoic, thin dike-like intrusions shown between the Thorn and Mount Lester Jones, may be Cretaceous in age.

Approximate locations of the new showings are denoted by diamonds. The photograph at right is a view to the east across the Sutlahine River, up La Jaune Creek. Relatively flat-lying Cretaceous volcanic strata overlie Late Triassic Stuhini Group volcanic rocks which extend to the foreground.

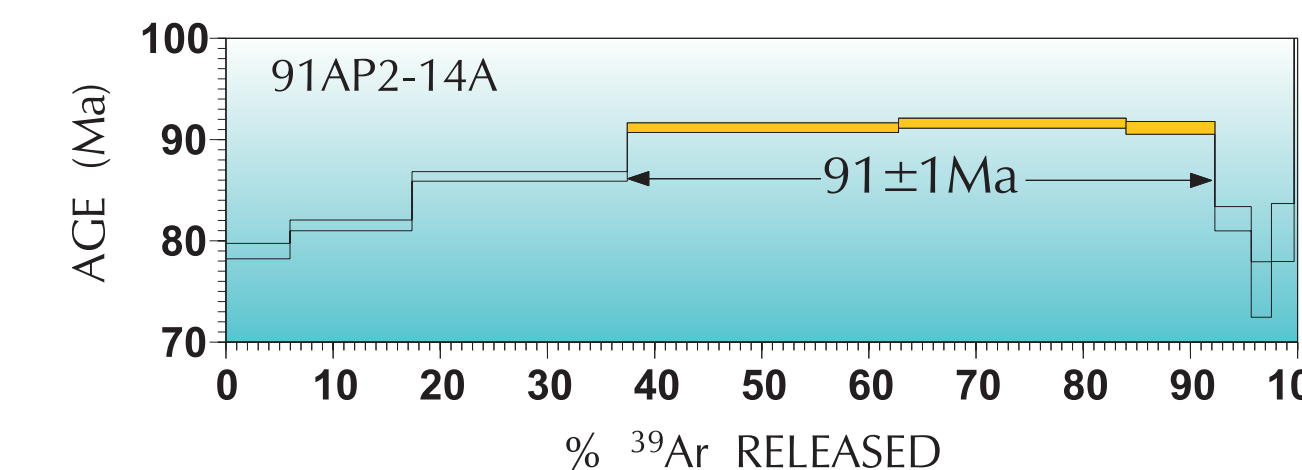
LEGEND
Intrusions
mainly Eocene
mainly Cretaceous
claim block



Geochronology & Geological History



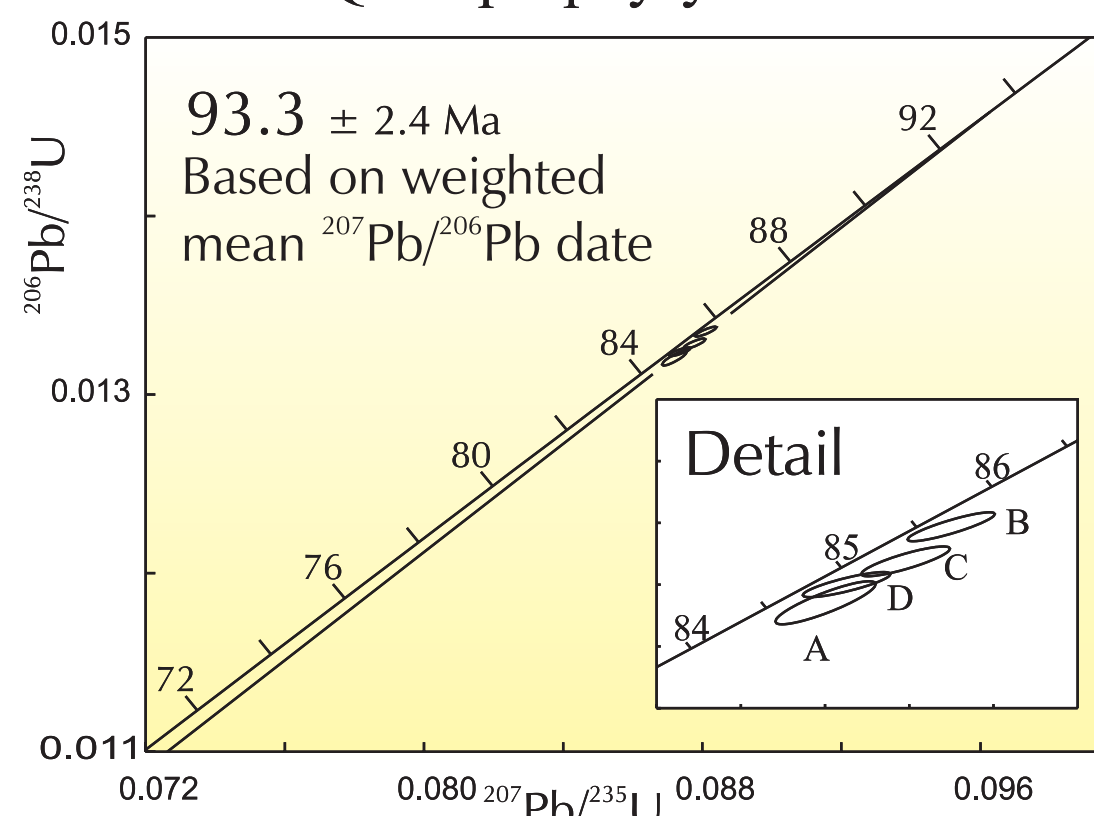
Sample 91AP2-14A was submitted by Andre Panteleyev to Keith Taylor at the Dalhousie Ar lab for isotopic age dating. The sample is an ultra-fine grained sericite / illite but lacked thin section or XRD analysis to confirm mineral identification. Analysis of the sample yields results commensurate with the sample identification and a real plateau is defined. The first 3 steps, comprising ~37% of the gas released, are fairly typical of fine grained sericitic materials in that they display grain size related gas loss and / or low temperature partial re-setting resulting in lowered ages. The loss is greatest at the lowest T early release sites and extends well into the spectrum resulting in an age gradient that just barely levels off at about 91 ± 1 Ma which probably represents a minimum age for the sample.



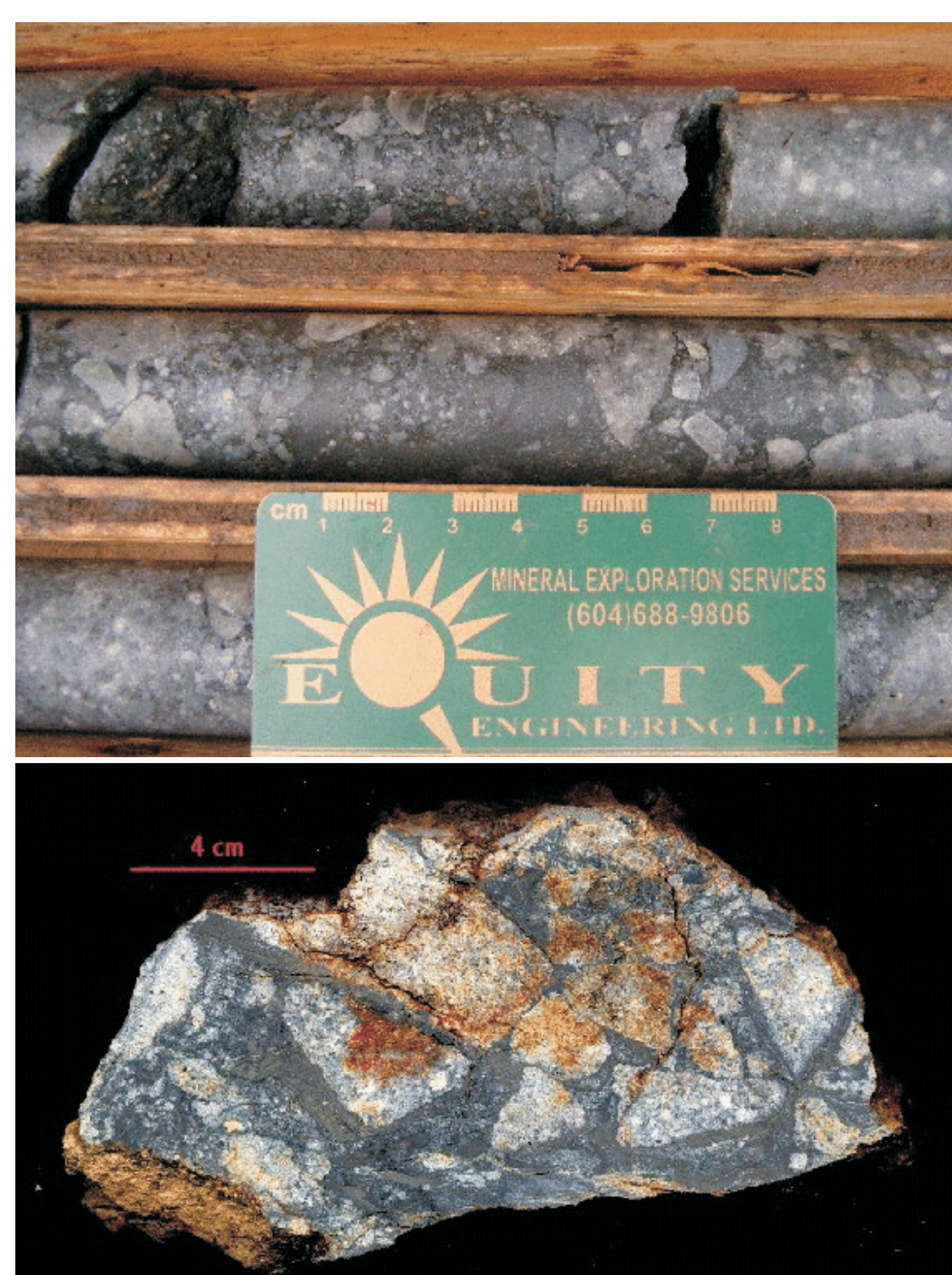
Top Left. A new age determination from felsic volcanic strata comprising most of the mountaintop north of the Thorn stock indicates an age similar to volcanic rocks west of the townsite of Atlin that are known as the Windy-Table suite (Mihalynuk, 1999). This age is nearly coeval with the age of a medium-grained hornblende-biotite granodiorite sample of the intrusion near Mount Lester Jones (center left) and may be comagmatic. Prior to this age determination, the volcanic rocks were assumed to correlate with the ~55Ma Sloko Group.

Biotite-quartz-feldspar porphyry at the Red Cap prospect is about 3.5 m.y. older than the hornblende-bearing granodiorite. Red Cap porphyry rocks

Thorn QFBi porphyry MM102-01-03

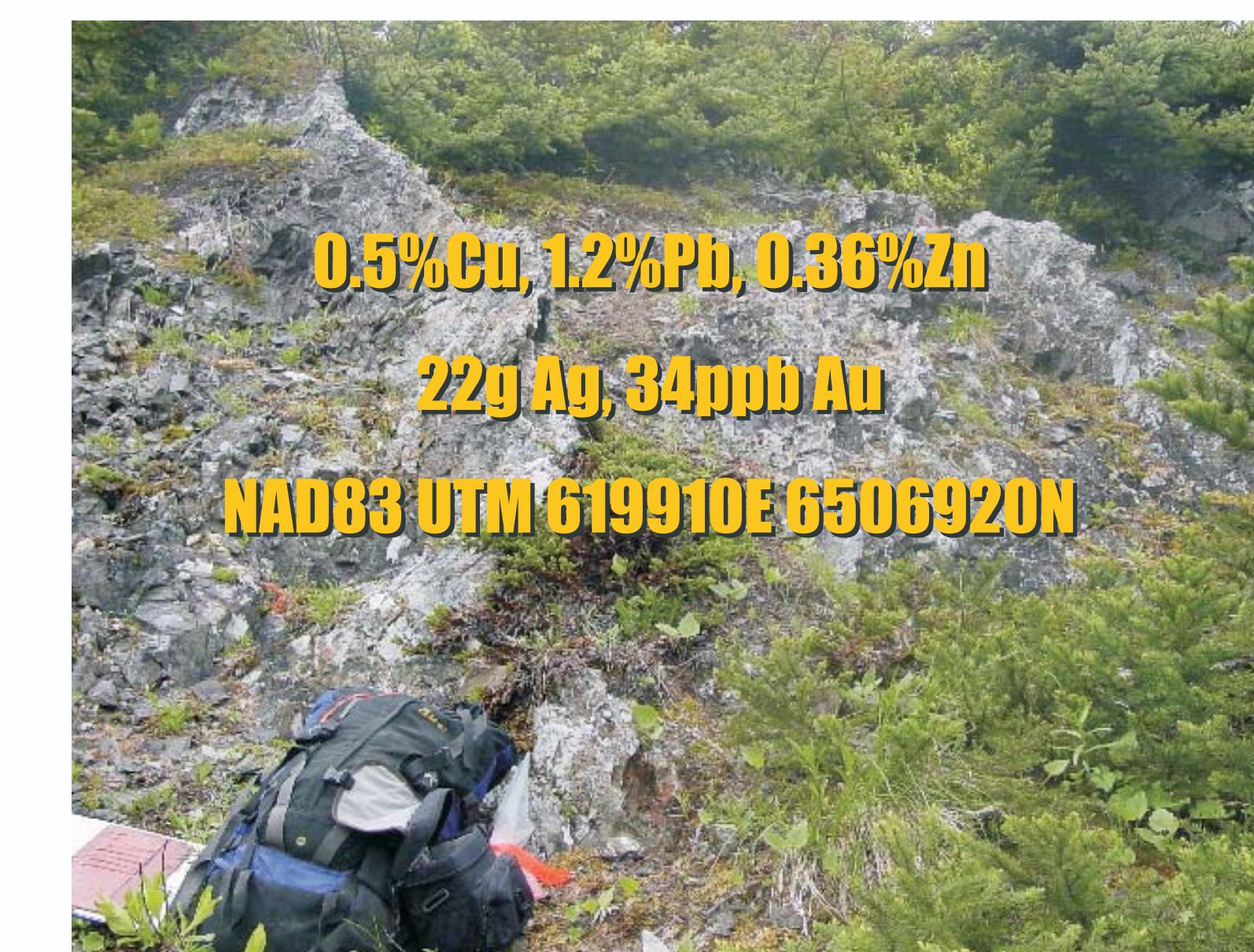


Zircons from sample MM102-01-03 of quartz-feldspar-biotite porphyry, are clear, pink, euhedral prisms with rare clear bubble and rod-shaped inclusions. A small proportion of grains with visible cloudy cores were avoided. Approximately 30 grains were selected for analysis. They were the coarsest (>150 micrometers in length) in the most nonmagnetic split. Prior to dissolution, the grains were strongly air abraded and divided into 5 fractions on the basis of size. Four of these fractions have



Camp zone in La Jaune Creek. A relatively fresh sample of quartz-feldspar-biotite porphyry was collected for U-Pb analysis upstream from this point. New mineralization (photo above left) from Oban zone discovered in 2002 underscores the untested potential in the area.

"New" Mineralization



A strong set of parallel quartz-base metal sulphide veins crops out within the trees between King Salmon Lake and the Sutlahine River (UTM coordinates shown above with ICP analyses; Sample MM102-2-5). The veins display symmetrical crustiform and cockscomb growth. Sulphides occur throughout the veins, but are concentrated towards the vein centers. In the one lithochemical sample collected, Bi was 7g. Veins are oriented 270 degrees and dip 75 degrees to the north. They are area wide and cut a fine-grained, dark green felted igneous rock. Some strongly vesicular and bubbly zones may be flow tops.

There is evidence of work on the surrounding ridges, but not at this outcrop. The descriptions of mineralization at the nearest MINFILE occurrence (Madnut) are unlike the mineralization described here.

Sample MM102-4-9, NAD83 UTM 628353E 6495200N Collected from strongly bleached and locally pyritic zone (<1%) in medium to coarse feldspar porphyry. A rusty, dark to light brown, blocky-weathering zone about 4m across is partly silicified and contains quartz stringers ~ arsenopyrite stibnite? and sphalerite? ICP results are: Pb 0.65%, Ag 18g, As 0.7%, Sb 166ppm, Bi ~4g. There are signs of previous disturbance and old flagging 50-100 metres away, but not at the immediate sample site.