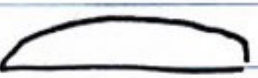
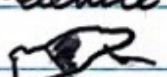
# Babb's Mill (Troost's Iron) (Tennessee, USA).

76 Sep 66 Flat slab, 1 face 2 × 2.5 cm² pol + etched 60 sec in nital. No structure, entire mass is a very fine, dark plessite, which has an indistinct spottiness on a scale of perhaps .02 mm. No inclusions to be seen. No weathering out to crust. Very similar to S. Byron.

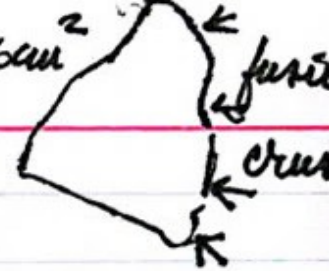
# Barranca Blanca (Atacama, Chile)

6 Sep 66. 13g sample from Brit. Mus.  3 cm², and adjacent side 2.5 cm². Etched @ 60 sec in nital. There is no Wid. pattern visible, but etch has revealed kam & taen very nicely. The kam occurs as large crystals, typical dimensions of the order of 1 cm. The taenite (or very reflective plessite!) occurs as irregular regions  of typical dimensions 0.5 mms, thus not just taenite borders. The "borderless" of the kam crystals are generally cracks stretching from one taen. region to another. These are invariably slightly oxidized and I can't determine whether they ~~might~~ also have schreib. in them. In many cases the taenite regions are not connected at all. There are many inclusions, most of which are rounded and typically 1-2 mm and occur ~~in~~bedded in kam. Some irreg. vein like schreib inclusions are next to taenite. The rounded inclusions are schreibersite, troilite, and one is  bronze (FeS?) and has some colorless trans. crystals in the chromite. black (chromite?). Oxidation is very light along cracks and near 2 exterior sides. Fletcher, Min Mag 8 263 sees chromite + a silicate.

Bartlett, Texas

22. IV. 66, USNM slab, ~ 12 x 15 cm
671 gm, clear Widmanstätten pattern, numerous elongated schreibersite inclusions, as veins ~ 1 mm x 5 cm typical size. very little oxidation. kamacite bands irregular 0.5-2.0 mm across, plessite has sometimes transformed by forming kamacite lamellae. IIIb?
new Hey lists iron octa 8.88% Ni, Goldyer, Amer. Min 25, 497 (194

# Ban Rong Du (Thailand)




4 g sample received from Prayong Angsuwathana
Heat altered zone extends inward about 5 mm in upper right of sketch, but is not visible next to fusion crust in lower right. Kamacite crossed by fine lines curves on right half of sample, with tiny rhabdites widely separates along these lines. But on left side are kamacite crystals that don't show these lines. Except in heat altered zone, all kamacite curves shows a high conc. of Neumann lines, in several sets showing different orientations Neumann lines are not bent (no evidence of cold working)

Four kamacites have islands of schreibersite, typically ~0.3 x 0.7 mm (but variable). The kamacite bands outcropping in this section (~1.6 cm²) are short and do not show parallel edges. The bandwidth is thus difficult to estimate - it may be 2 (± factor 2) mm

Plessite + taenite accounts for ~8-10% of the section. One region near the center has an area of 3 mm², ~20% of this is clear!

No inclusions other than schreibersite recognized.

# Bacubirito (Sinaloa, Mexico)

17.II.7. ASU No. 17a. Slab weighing ~ 200 g face ~ 5 × 6 cm Etched. Closely spaced fine bands. It appears that initial kam bands 0.2 mm typical width have split up into groups of 5 parallel (with irregular edges) of typical width 0.05 mm. Thus this is Off (Off?). There are no inclusions. Plessite is granular and also of typical grain size ~ 0.05 mm. Unoxidized, strange — have the fine bands + granular plessite resulted from reheating?

27 II 7. Sample from CNHM, 21 g. Polished on 3 sides, ~ 5 cm², and etched 45 sec nital. Same as above. Sample has some cracks.