Th in Kevlar rope by NAA. Davis Earle Feb, 1995 SNO-STR-95-029

Five samples of Kevlar rope from the test supply were cut and wrapped in saran wrap at Guelph. Two of these samples were irradiated at NRU, the saran wrap was removed and the samples rewrapped. These samples were then gamma counted for Np and Pa with the CRL Ge-well detector. The samples were over 10 grams and so could not be placed in the well of the detector. Instead they were simply placed on the front face of the detector. The resulting reduction in counting efficiency was not a problem but the normalization to the Th/U monitors was more uncertain because the monitors were point sources whereas the rope samples had a significant volume. Qualitatively a geometrical correction was made to the yield and a systematic uncertainty of the same amount as the statistical uncertainty was added to the data. The spectra are plotted below. The Th concentration would appear to be not more than 200 ppt.



