

contamination was further reduced by replacing the first 2 metres of the column daily, or more often if required. To facilitate this operation, a zero dead volume fused silica union (J & W Scientific, Brockville, Ontario) was fitted to the front end of the column, to which a fresh 2 metre length of identical column could be joined to replace the contaminated piece, which was discarded.

Contamination of the mass spectrometer elements (lenses, ion volume, source and rods) was minimized by the use of oxygen as the CI reagent gas. These elements were cleaned only when deterioration of the peak shape or sensitivity indicated it to be essential.

Performance was checked using an external standard: a 200 pg/ul standard solution of HT-2 and T-2 toxins was run after every two or three samples. No carry-over of toxins from the standards to the next sample was found. Nevertheless, any sample giving a positive response was re-injected, with a blank run immediately preceding it.

3.3.3 Recovery of HT-2 and T-2 in Whole Blood

Whole blood from the Ottawa blood bank was used for this study. The plasma was extracted and analysed by the procedure described, which gave a fairly constant background intensity when monitored for 4 characteristic ions for the trichothecenes DAS, T-2 and HT-2 using a Multiple Ion