TRITIUM BIOASSAY REPORT

Name_____ SSN_____ Birth Date _____

Sample Date_____ Building_____ Room/Lab Number_____

Concentration of Tritium (H-3)

C_s (gross sample counts per minute) = _____ cpm

C_b (background counts per minute) = _____ cpm

E (counting efficiency for tritium) = _____

V (volume of sample) = _____ ml

Concentration = [$C_s - C_b$] / [(2.22 x 10^6 dpm/µCi) E V]

Concentration = _____ µCi/ml

Minimum Detectable Activity Determination

R_b (background count rate) = _____ cpm

T (counting time) = _____ minutes

E (counting efficiency for tritium) = _____

V (volume of sample) = _____ ml

MDA = [2.71 + 4.65 $(R_b T)^{1/2}$] / [(2.22 x 10^6 dpm/µCi) E V T]

MDA = _____ µCi/ml

Sample prepared by_____ Sample counted by_____ Date_____