x ($Pb(NO_3)_2$)= 75ppm = 0.0075% molar fraction

V(H_2O) = 9990 ml

m($Pb(NO_3)_2$) - ? mg

x $Pb(NO_3)_2$ = $\frac{n(Pb(NO3)2}{n(Pb(NO3)2) + n(H2O)}$ *100%

n(H_2O) = V(H_2O)/V_m = 9.99L/22.4 L/mol = 0.45 mol

$\frac{n(Pb(NO3)2}{n(Pb(NO3)2) + n(H2O)} = \frac{0.0075\%}{100\%}$ = $7.5*10^{-5}$

$7.5*10^{-5}$ *n($Pb(NO_3)_2$) +$7.5*10^{-5}$* n(H_2O) = n($Pb(NO_3)_2$)

(1-$7.5*10^{-5}$)*n($Pb(NO_3)_2$) = $7.5*10^{-5}$ *0.45 mol

n($Pb(NO_3)_2$) = $7.5*10^{-5}$ *0.45 mol / (1-$7.5*10^{-5}$) = $3.37*10^{-5}$mol

m($Pb(NO_3)_2$) = n($Pb(NO_3)_2$) * M($Pb(NO_3)_2$) =$3.37*10^{-5}$mol * 331g/mol = $1115*10^{-5}$g = 11.15mg