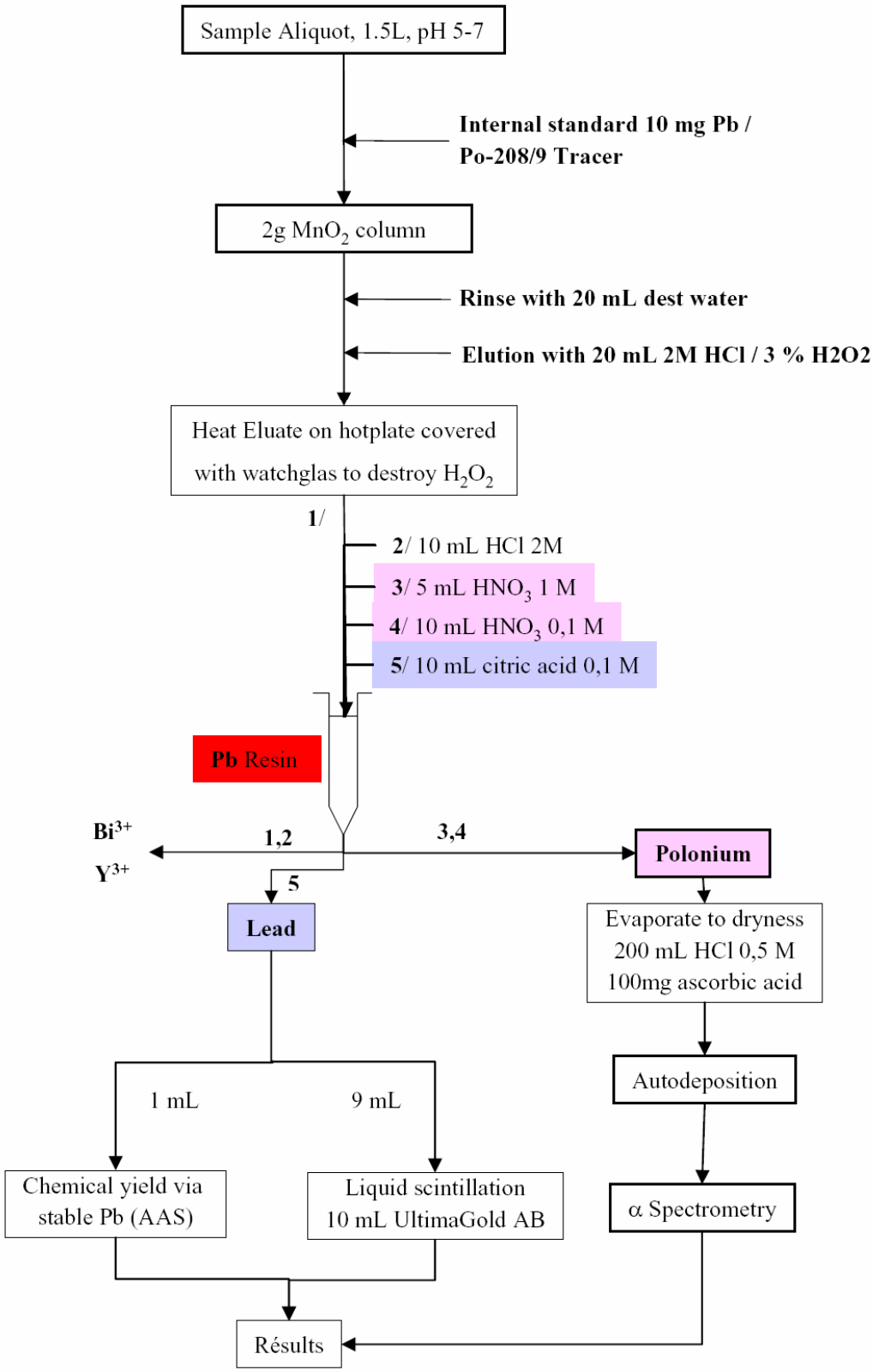
Sample Aliquot, 1.5L, pH 5-7
Internal standard 10 mg Pb / Po-208/9 Tracer
2g MnO2 column
Rinse with 20 mL dest water
Elution with 20 mL 2M HCl / 3 % H2O2
Heat Eluate on hotplate covered with watchglas to destroy H2O2
1/
2/ 10 mL HCl 2M
3/ 5 mL HNO3 1 M
4/ 10 mL HNO3 0,1 M
5/ 10 mL citric acid 0,1 M
Pb Resin
Bi3+
Y3+
1,2
3,4
Polonium
5
Lead
Evaporate to dryness
200 mL HCl 0,5 M
100mg ascorbic acid
Autodeposition
1 mL
9 mL
Chemical yield via stable Pb (AAS)
Liquid scintillation 10 mL UltimaGold AB
α Spectrometry
Résults