

VA Application Note No. V - 68

Title: Determination of Cd and Pb in sea water

Summary: Cd and Pb can be determined in sea water samples in the ng/L concentration range by anodic stripping voltammetry on a mercury film electrode (MFE)

Sample: sea water acidified to pH 2 with HNO₃

Sample Preparation: UV digestion

Cadmium, Lead:

Electrolyte: 0.5 mol/L HCl + 10 mg/L Hg²⁺

AE: Pt

RE: Ag/AgCl/KCl 3mol/L

Parameters: DPASV on MFE

Deposition: -1100 mV (60 sec)

Determination: -900 mV to -300 mV

Peak potential Cd: -660 mV

Peak potential Pb: -470 mV

Results:	Cd	Pb
	19 ng/L	517 ng/L

Determination of Cadmium and Lead

