

VA Application Note No. V- 1

Title:	Iron, cadmium, lead and copper in cobalt acetate solution
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Summary:	Determination of Fe, Pb, Cd and Cu in $\text{Co}(\text{Ac})_2$ solution using the MME.
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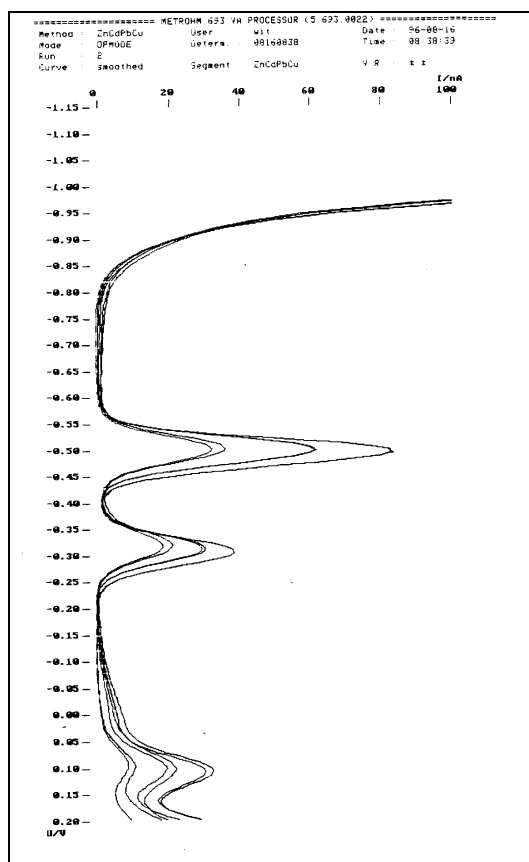
Sample:	$\text{Co}(\text{Ac})_2$ 5.5%
Sample Preparation:	none

Iron:	
Electrolyte:	Catechol, Pipes buffer, pH = 7.0
AE:	Pt
RE:	Ag/AgCl/KCl 3M
Parameters:	DPCSV (−50 mV), HMDE $U_{\text{meas}} = -100 \text{ mV}$ (60s), $U_{\text{start}} = -100 \text{ mV}$, $U_{\text{end}} = -700 \text{ mV}$ $E_p(\text{Fe}) = -405 \text{ mV}$

Cadmium, lead, copper:	
Electrolyte:	none
AE:	Pt
RE:	Ag/AgCl/KCl 3M
Parameters:	DPASV (+50 mV), HMDE $U_{\text{meas}} = -800 \text{ mV}$ (90s), $U_{\text{start}} = -800 \text{ mV}$, $U_{\text{end}} = +200 \text{ mV}$ $E_p(\text{Cd}) = -500 \text{ mV}$, $E_p(\text{Pb}) = -320 \text{ mV}$, $E_p(\text{Cu}) = +100 \text{ mV}$

Results:	Fe mg/L	Cd mg/L	Pb mg/L	Cu mg/L
	4.6	1.1	2.2	0.3

Determination of cadmium, lead and copper



Determination of iron

