

VA Application Note No. V- 4

Title:	Zinc, cadmium, lead, copper and chromium in triglyceride
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Summary:	Determination of Zn, Cd, Pb, Cu and Cr in triglyceride
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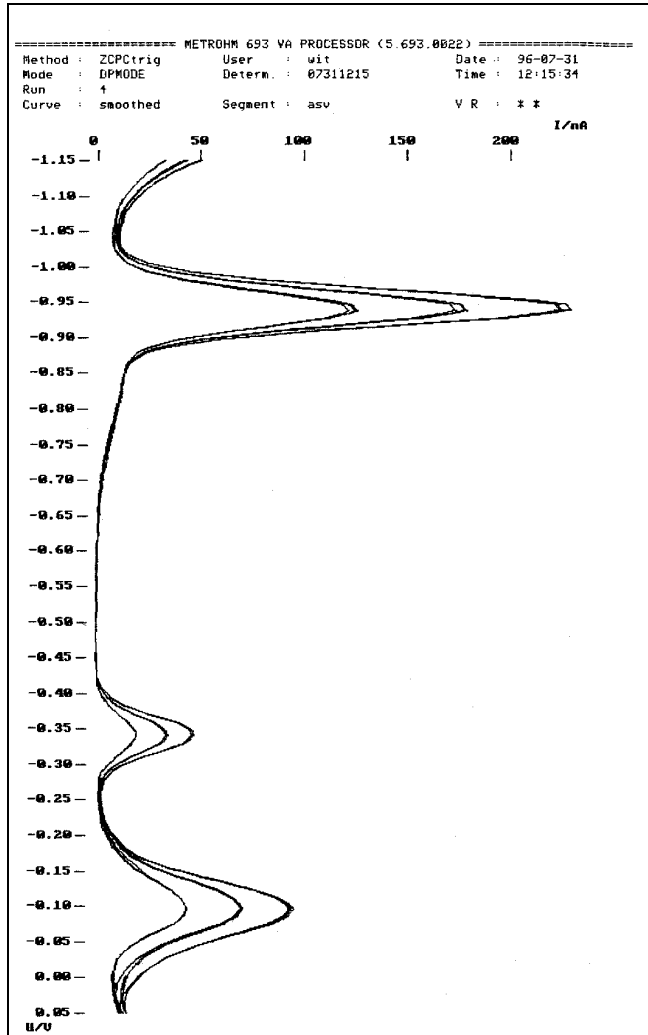
Sample:	Triglyceride
Sample Preparation:	Extraction of metals with HCl (boiling under reflux)

Zinc, cadmium, lead and copper:	
Electrolyte:	pH = 3 with NaOH
AE:	Pt
RE:	Ag/AgCl/KCl 3M
Parameters:	DPASV (+50 mV), HMDE $U_{\text{meas}} = -1150 \text{ mV (90s)}$, $U_{\text{start}} = -1150 \text{ mV}$, $U_{\text{end}} = +50 \text{ mV}$ $E_p(\text{Zn}) = -940 \text{ mV}$, $E_p(\text{Cd}) = -560 \text{ mV}$ $E_p(\text{Pb}) = -340 \text{ mV}$, $E_p(\text{Cu}) = -95 \text{ mV}$

Chromium:	
Electrolyte:	NaAc, DTPA (diethylenetriaminepentaacetic acid), NaNO_3 pH = 6.2 with NaOH
AE:	Pt
RE:	Ag/AgCl/KCl 3M
Parameters:	DPCSV (-50 mV), HMDE $U_{\text{meas}} = -1000 \text{ mV (60s)}$, $U_{\text{start}} = -1000 \text{ mV}$, $U_{\text{end}} = -1500 \text{ mV}$ $E_p(\text{Cr}) = -1260 \text{ mV}$

Results:	Zn mg/L	Cd $\mu\text{g/L}$	Pb $\mu\text{g/L}$	Cu mg/L	Cr $\mu\text{g/L}$
	1.75	3.04	673	1.07	< 1

Determination of zinc, cadmium, lead and copper



Determination of chromium

