Monsanto

FROM (NAME & LOCATION): E. S. Tucker - Technology Department - South Second Street

DATE: July 27, 1971

cc: R. E. Keller - Res. 1
E. P. Wheeler - GO
D. W. Miller - GO

SUBJECT: PCB ANALYSIS - ODA-FDD No. 42379, MONSANTO NO. 23

REFERENCE: JVC/EST Letter, June 7, 1971 (Attached)

TO: W. B. Papageorge
General Offices

Analysis of the raw milk sample received from J. V. Chambers, Laboratory Supervisor, Ohio Department of Agriculture, FDD Laboratory for PCB's has been completed. The sample was analyzed in duplicate in accordance with Analytical Chemistry Method No. 70-1, "Analysis of Biological Materials for Polychlorinated Biphenyls".

The level of PCB's present in the raw milk sample was estimated to be 4.27 + 0.02 ppm. The maximum PCB level, because of the alteration (see Figure I), was estimated by comparison of the total area of the electron capture (EC) envelope of the milk extracts to a calibration curve prepared by plotting the total area of the EC envelope of the most similar product (Aroclor 1254) vs the concentration of the product injected.

Comparison of the chromatograms in Figure I demonstrates that the residue in the milk has undergone considerable isomeric alteration relative to the original product and that the alteration is equivalent to that which is observed when a laboratory animal is deliberately exposed to Aroclor 1254.

E. S. Tucker

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Attach. - 2

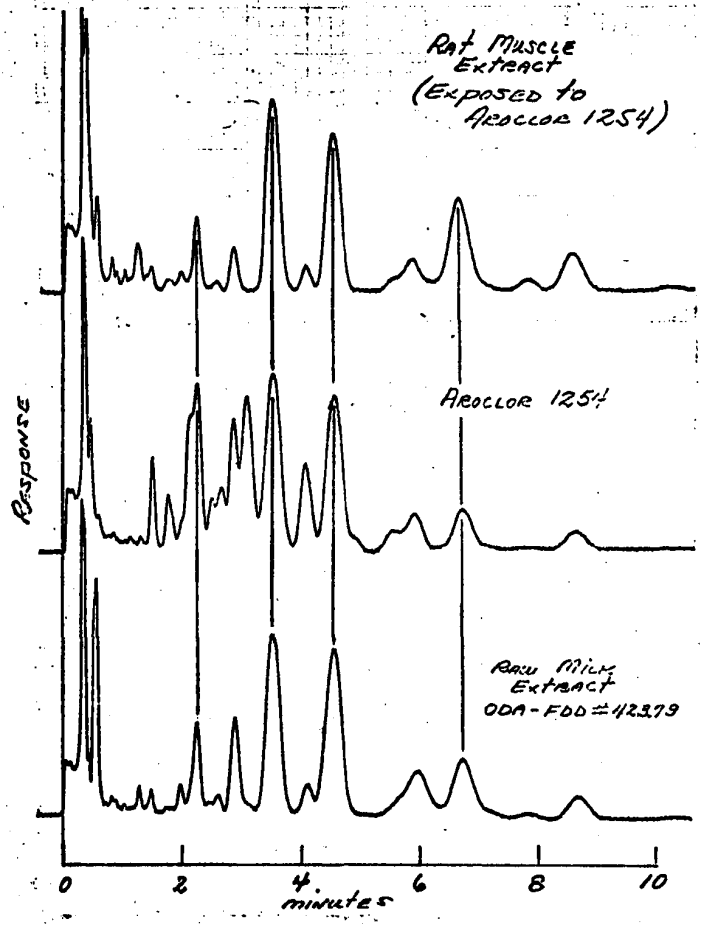


Figure I Electron capture chromatograms.

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