Monsanto

FROM (NAME & LOCATION) E. S. Tucker - R&D Laboratories - 1700 So. Second

DATE : July 29, 1969

SUBJECT : MONTHLY SUMMARY - AROCLOR WILDLIFE ANALYTICAL STUDIES

REFERENCE

cc: W. R. Richard - GO
E. P. Wheeler - GO
M. W. Farrar - Res. 1

TO : R. E. Keller
Res. 1

A high temperature electron capture gas chromatographic procedure for the detection of 5460 in biological tissue extracts has been developed. A 1/4" X 1 meter, metal, 4% OV-17 on 80/100 mesh, Chromosorb W column was used in conjunction with a high temperature ^{63}Ni-cell. This system provides only partial resolution of the terphenyl components. The resolution is, however, adequate for the quantitative detection of absolute quantities of one nanogram (10^{-9}g) or less 5460.

PCB and pesticide residue analysis of water and fish samples from the Bio-Test fish toxicity experiments are about 50% completed. In the experiment, bluegill and trout fry were exposed to Aroclors and pesticides in the ppb to ppm range for 96 hours. The analytical data so far accumulated is not consistent with the experiments as defined by Bio-Test. Bio-Test has been informed and a meeting has been scheduled to see if the discrepancies can be resolved.

Because of the emphasis put on the resolution of the fish toxicity studies, the analysis of plant environmental samples and the completion of reports was delayed several weeks. Samples have been received from Anniston, Krummrich and Newport. The analysis of these and the Florida test plot samples has been started.

E. S. Tucker

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