PCB - Company Cooks

FROM (NAME & LOCATION) E. S. Tucker - R&D Laboratories - South Second Street

DATE January 29, 1970

SUBJECT AROCLOR - WILDLIFE
MONTHLY SUMMARY

REFERENCE

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

TO : R. E. Keller
Research 1

The initial biologically populated river water degradation study on Aroclors 1221, 1242, 1248 and 1254 has been completed. An analysis of the results indicates that under the conditions employed the major isomers in Aroclor 1221 are readily degraded (Figures I and II). Aroclors 1242, 1248 and 1254 remained unaffected after an exposure period of five weeks. The samples from the last exposure period (8 weeks) are presently in the process of being analyzed. A report will be issued when the analysis of these samples has been completed.

The semi-continuous activated sludge degradation studies have so far confirmed the river water results in that the major isomers of ARoclor 1221 are readily degraded. Additionally, there are indications that some of the lower chlorinated isomers in Aroclors 1242 and 1248 are beginning to be effected.

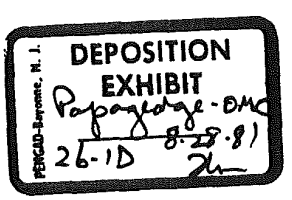
A review of the current Bio-Test toxicity results was held with our Medical Department to determine if the amount of residue support analysis could be trimmed still further. It was agreed by all present that the amount of planned analytical work could not be cut any further. Arrangements are being made with Bio-Test to have selected tissues presently in storage, shipped to Monsanto. It is hoped that we will be well into these studies by the end of next month.

Packed column electron capture gas chromatographic fingerprints of competitive PCB products (Electrophenyl, Phenoclor and Clophen) were not startlingly different from those obtained for the equivalent Aroclors. A special study report will be issued for the record.

An informal 2-day review of the Aroclor - Wildlife problem was held with corporate and divisional representatives.

FUTURE PLANS

Analysis of Bio-Test samples.



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Analysis of remaining detergent components.

Investigation of alternate chemical oxidation techniques for isolating and identifying PCBs.

Completion of S.C.O.T./EC/GC study.

Analysis of Gainesville, Florida Aroclor samples.

E. S. Tucker

J. Litschgi

B. J. Westenberger

db

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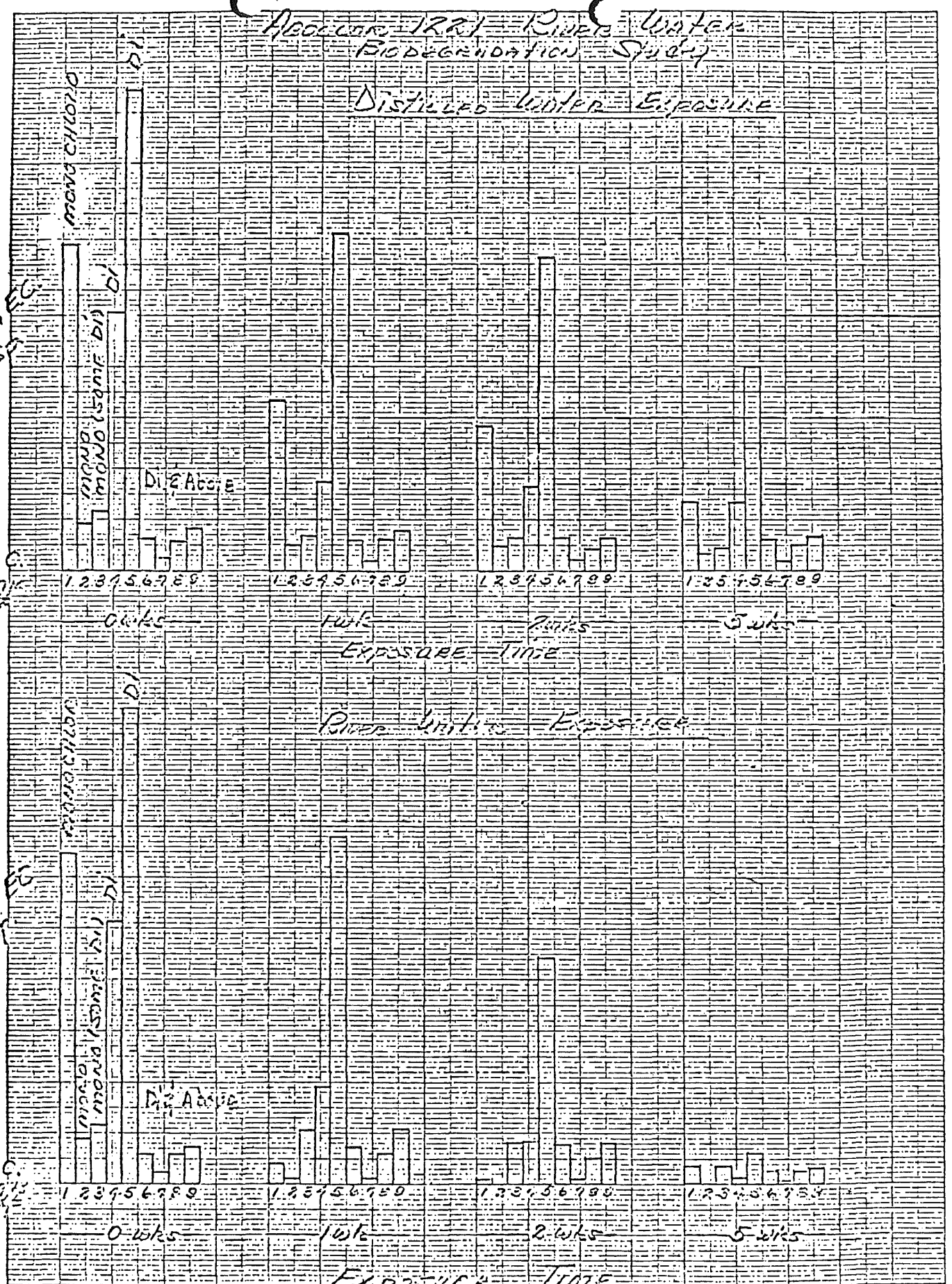

FIGURE I

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10 X 10 TO THE CENTIMETER 46 1512
10 X 25 CM.
KEUFFEL & ESSER CO.

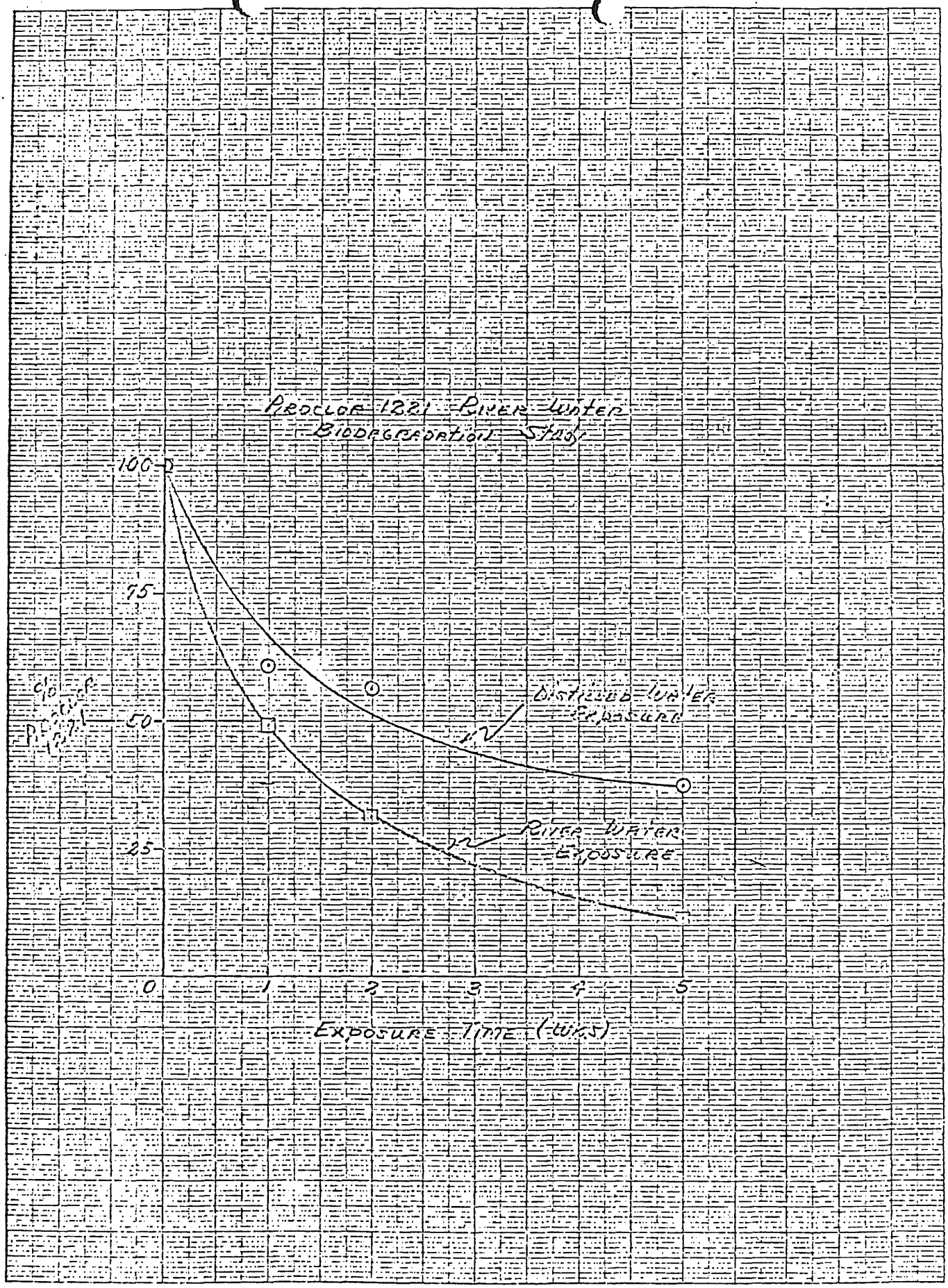

FIGURE 11

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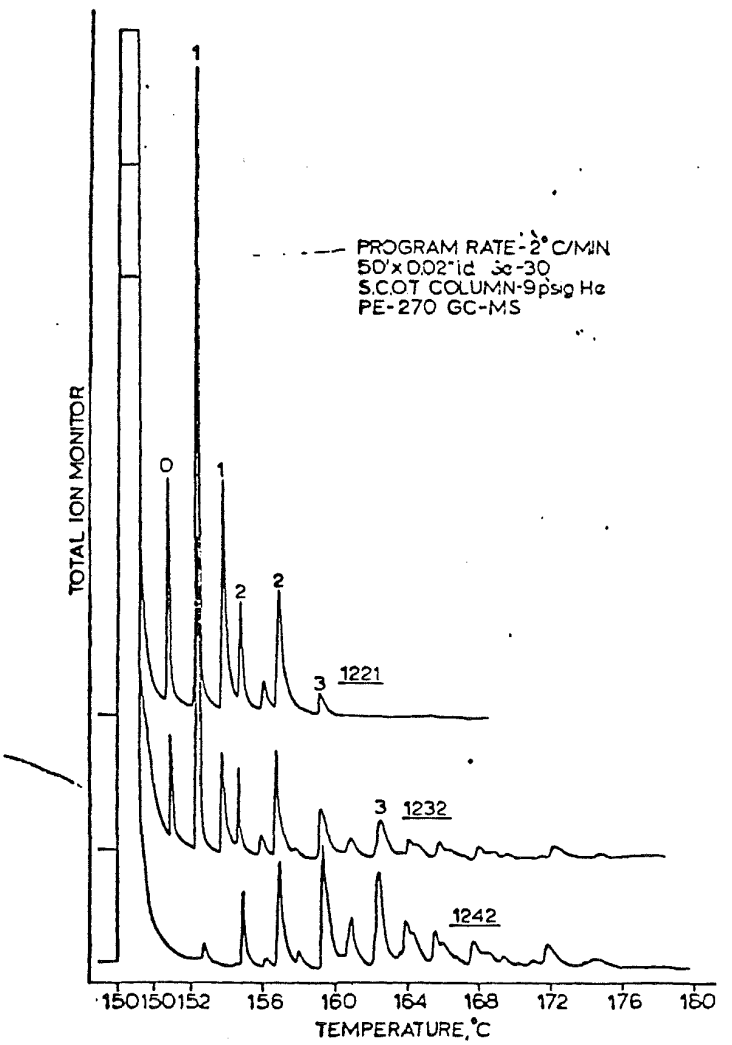
WATER_PCB-00054814

K&E 10 X 10 TO THE CENTIMETER 46 1512
10 X 25 CM.
MADE IN U.S.A.
KEUFFEL & ESSER CO.

POE [redacted]
Analytical



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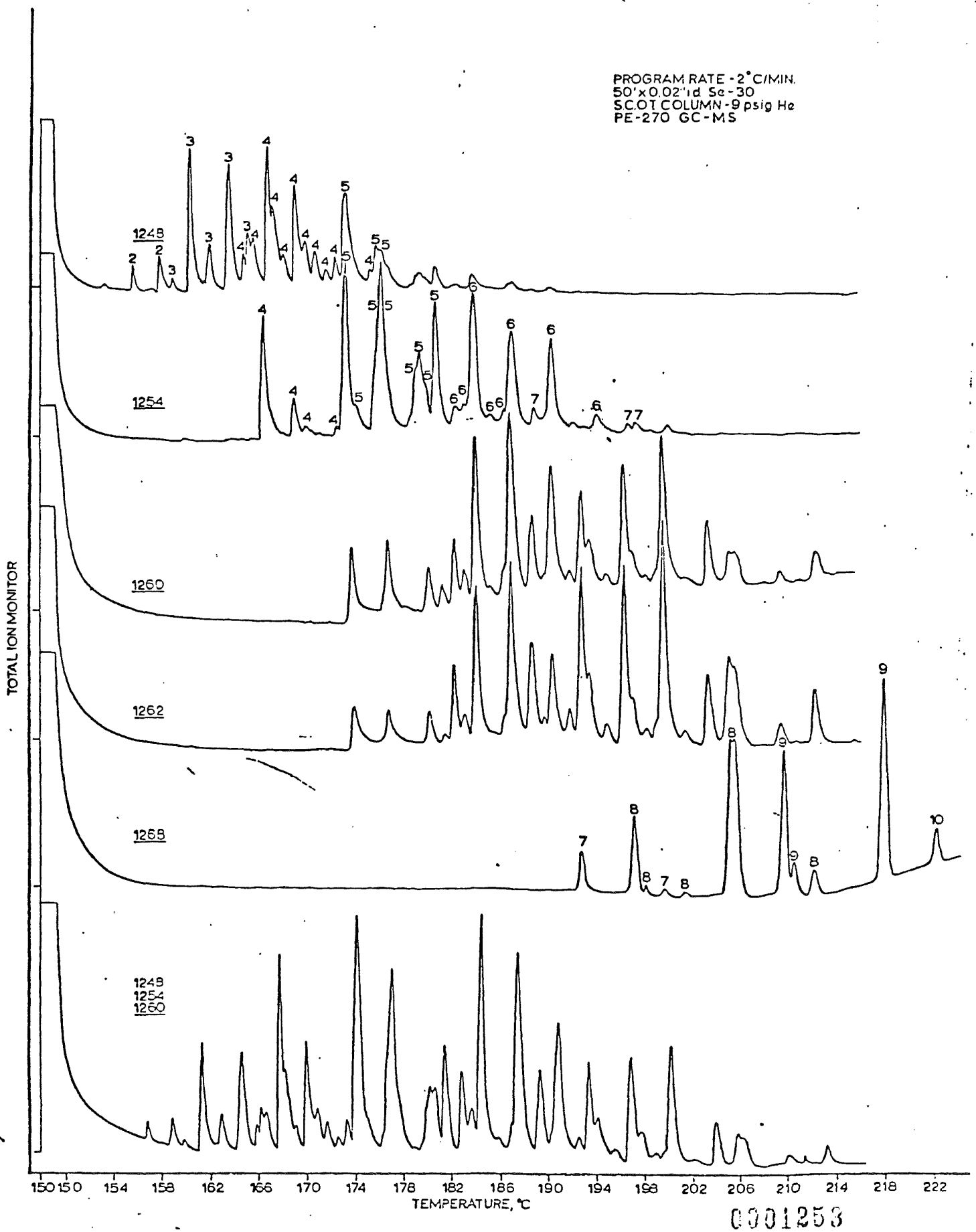

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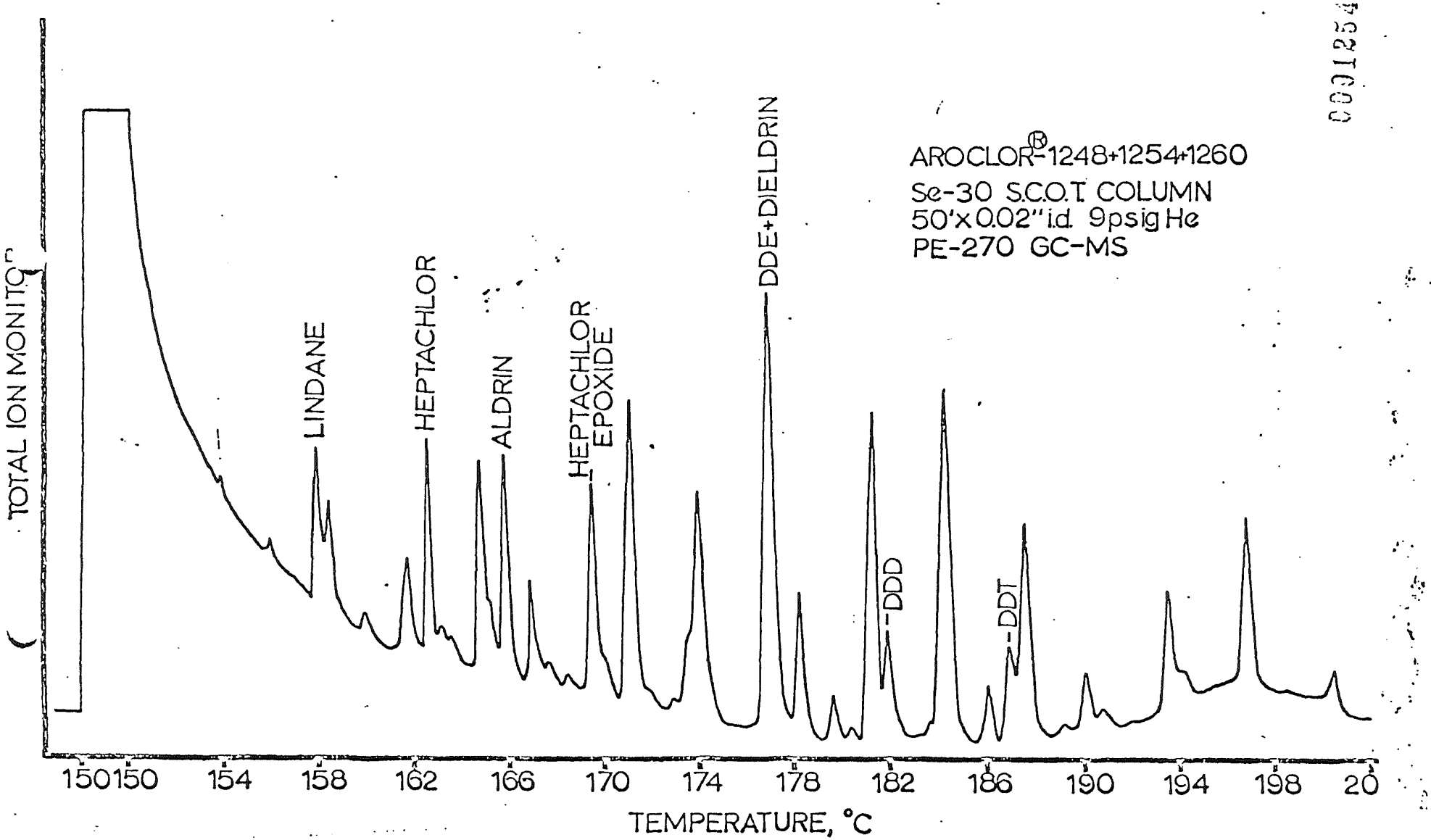
WATER_PCB-00054816



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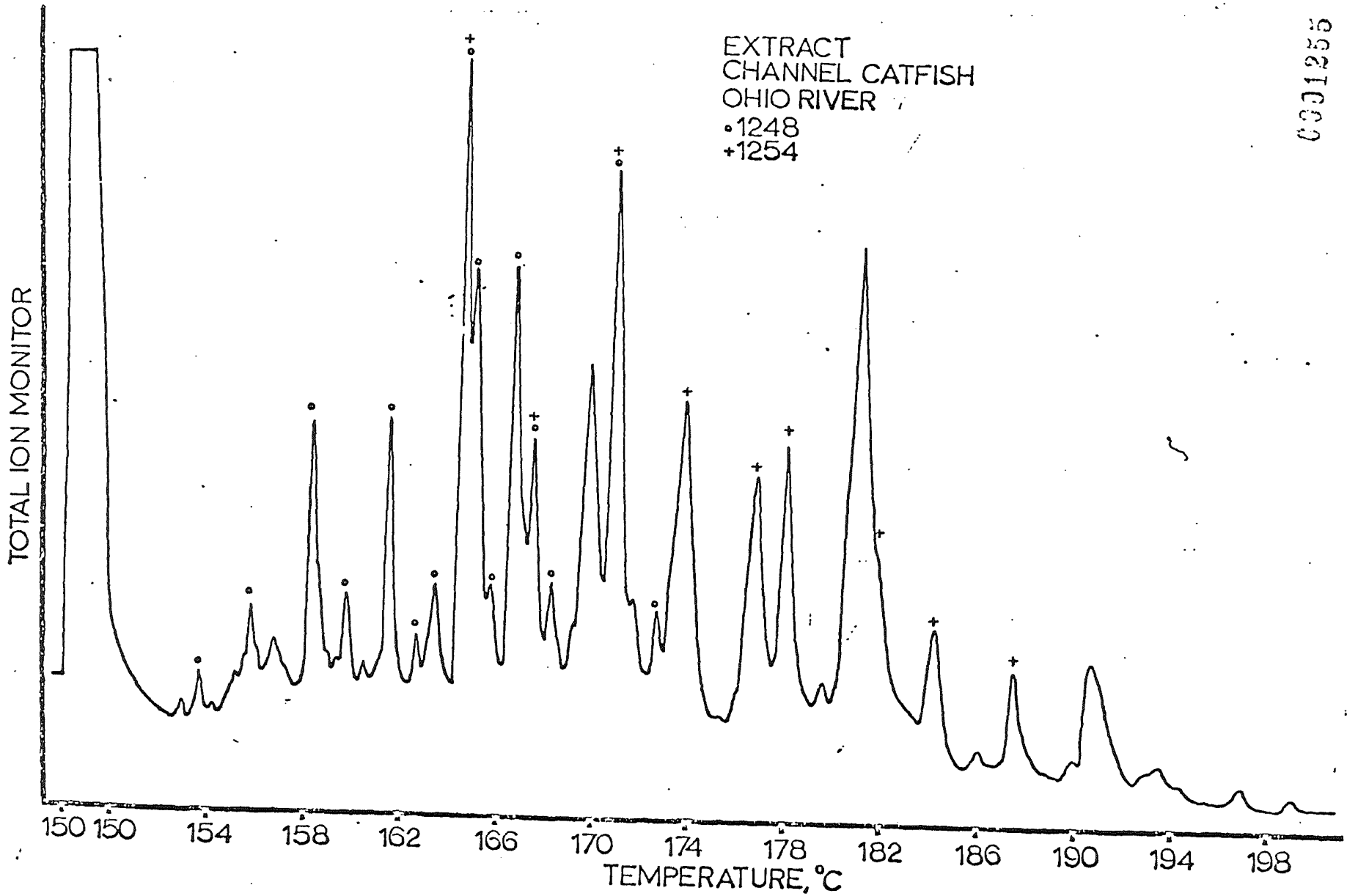

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