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FINAL REPORT

BIOMONITORING OF PCBs IN THE HUDSON RIVER

**I. RESULTS OF LONG-TERM MONITORING USING CADDISFLY
(INSECTA: TRICHOPTERA: HYDROPSYCHIDAE) LARVAE AND
MULTIPLATE RESIDUES**

**II. DEVELOPMENT OF FIELD PROTOCOL FOR MONITORING
PCB UPTAKE BY CAGED LIVE *Chironomus tentans* (INSECTA:
DIPTERA: CHIRONOMIDAE) LARVAE DURING DREDGING
OPERATIONS**

HUDSON RIVER PCB RECLAMATION DEMONSTRATION PROJECT

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GMM 002 0208

TABLE OF CONTENTS

List of Tables	iii
List of Figures	iv
Acknowledgements	vii
Summary	viii
General Introduction	1
SECTION I - LONG-TERM MONITORING	
Introduction	4
Description of Study Area	5
Materials and Methods	
Artificial Substrate Samplers	
Field Methods	10
Laboratory Methods	10
Statistical Methods	14
Hydropsychid Larvae	
Field Methods	18
Laboratory Methods	19
Statistical Methods	19
Results	
Artificial Substrate Samplers	
Composition of Multiplate Samples	20
Spatial and Temporal Trends	22
Hydropsychidae	
Composition of Samples	46
Spatial and Temporal Trends	46
Discussion	
Relation to Results of Previous Studies	58
Multiplates	60
Caddisflies	65

GMM 002 0209

Summary of Major Conclusions	67
Recommendations for Future Monitoring	68
SECTION II - SHORT-TERM MONITORING	
Introduction	69
Description of Study Area	70
Materials and Methods	
<u>Chironomus tentans</u> Culture	71
Field Methods	72
Laboratory Methods	74
Congener Uptake	75
Results	
Composition of Water Samples	77
Composition of <u>Chironomus tentans</u> samples	78
Congener Uptake	82
Discussion	
Water Samples	89
<u>Chironomus tentans</u> Samples	89
Congener Uptake	90
Suitability of the Technique as a Monitoring Tool	91
Summary of Major Conclusions	95
Literature Cited	96
Appendix A - Statistics for Multiplate Analyses	
Appendix B - <u>Chironomus tentans</u> Analyses	
Appendix C - Raw Data - Multiplates and Caddisflies	
Appendix D - Raw Data - <u>Chironomus tentans</u> and water samples	

GMM 002 0210

List of Tables

Section I.

1. Multiplate sampling stations, Hudson River, 1976-1985.	7
2. Caddisfly sampling stations, Upper Hudson River, 1978-1985.	9
3. Contribution of major taxonomic groups to the numbers of organisms on multiplate samplers in 1985.	21
4. Multiplate sample materials sieved with U.S. No. 30 sieve, 1978.	23
5. Analysis of variance table for time-specific spatial trends model.	30
6. Analysis of variance table for station-specific temporal trends model.	38
7. Analysis of variance table for final model, with interaction effects.	45
8. Hydropsychid caddisfly species collected in the Upper Hudson River, 1978-1985.	47
9. Sediment discharge (tons/day) at Stillwater, NY, July, August, September (1978-1985).	63

Section II

10. Total PCB concentrations in <u>Chironomus tentans</u> (ng/g dry weight) and water (ng/l), Thompson Island pool, July and September, 1985.	79
11. Uptake and elimination constants, bioconcentration factors, and estimated time to reach equilibrium for <u>Chironomus tentans</u> larvae.	83
12. Predicted uptake under dredging conditions for congeners 246,2' and 236,4' (ng/g) based on values of K_1 and K_2 calculated from September river exposures of <u>Chironomus tentans</u> .	86
13. Predicted uptake under dredging conditions for total PCBs based on values of K_1 and K_2 calculated from July and September exposures.	88

GMM 002 0211

List of Figures

Section I

1. Map of Hudson River basin, showing locations of multiplate sampling sites.	6
2. Map of Upper Hudson River basin, showing locations of caddisfly and multiplate sampling sites.	8
3. Multiplate sampler.	11
4. Placement of multiplate samplers in the river; attachment to navigation buoys (A) or floats (B).	12
5. Chromatogram of mixture of Aroclor 1016 and Aroclor 1254, indicating peaks used to quantify each Aroclor in multiplate and caddisfly samples.	15
6. Correlation of Aroclor 1016 and Aroclor 1254 for all stations, 1978-1985.	17
7. Concentration of total PCBs on multiplates, 1978-1981.	24
8. Concentration of total PCBs on multiplates, 1982.	25
9. Concentration of total PCBs on multiplates, 1983-1985.	26
10. Concentration of total PCBs on multiplates, 1978-1985; mean of all stations for each year sampled.	27
11. Multiplate samples, 1978-1985; 15 stations collected in each of 3 months over 8 year period, $\log ([\text{Aroclor 1016}] + 1)$.	29
12. Time-specific spatial trends model. (A) Mean for all 15 stations. (B) Station 1 vs. mean of all downriver stations.	32
13. Time-specific spatial trends model. (A) Addition of linear effects. (B) Addition of quadratic effects (complete model).	33
14. Time-specific spatial trends model. Complete model, showing pairs of stations - Station 1 - Station 8.	34
15. Time-specific spatial trends model. Complete model showing pairs of stations - Station 9 - Station 16.	35
16. Multiplate samples, 1978-1985; 8 years collected at 15 stations; $\log ([\text{Aroclor 1016}] + 1)$.	37
17. Station-specific temporal trends model, (A) Mean for all 8 years sampled. (B) Means for 2 eras - 1978 through 1980 and 1981 through 1985.	39
18. Station-specific temporal trends model (A) Addition of linear effects. (B) Addition of cubic effects.	40

19. Station-specific temporal trends model. (A) Addition of quartic effects for year. (B) Addition of linear effects for month (complete model).	41
20. Station-specific temporal trends model. Complete model, showing monthly effects for each year, 1978-1981.	42
21. Station-specific temporal trends model. Complete model, showing monthly effects for each year, 1982-1985.	43
22. Total PCBs in caddisflies, 1978-1979, showing station means for each month sampled.	48
23. Total PCBs in caddisflies, 1980-1981, showing station means for each month sampled.	49
24. Total PCBs in caddisflies, 1982-1983, showing station means for each month sampled.	50
25. Total PCBs in caddisflies, 1984-1985, showing station means for each month sampled.	51
26. Correlation of Aroclor 1016 and Aroclor 1254 for all caddisfly stations, 1978-1985.	53
27. Regression of Aroclor 1016 in caddisflies on station kilometer point, 1978-1981.	54
28. Regression of Aroclor 1016 in caddisflies on station kilometer point, 1982-1985.	55
29. Regression of Aroclor 1254 in caddisflies on station kilometer point, 1978-1981.	56
30. Regression of Aroclor 1254 in caddisflies on station kilometer point, 1982-1985.	57
31. Correlation of multiplate PCB concentrations and river discharge for sample stations in the Upper Hudson River, 1978-1984.	62

Section II

32. Nitex packet used to cage <u>Chironomus tentans</u> larvae for short-term monitoring of PCB levels in the Upper Hudson River.	73
33. Sample chromatograms from Hudson River water (A) and <u>Chironomus tentans</u> (B), PCB analyses, showing patterns of congener abundance.	80
34. Representative <u>Chironomus tentans</u> and water samples, showing relative contribution of the 4 most abundant PCB congeners.	81
35. Predicted uptake curves for congeners 246,2' (A) and 236,4' (B) for <u>Chironomus tentans</u> larvae at constant water concentrations of 0.001, 0.005, and 0.010 µg/l (ppb).	85

GMM 002 0213

36. Predicted uptake curves for total PCBs for Chironomus tentans larvae using K_1 and K_2 values calculated from results of July (A) and September (B) exposures, at constant water concentrations of 0.1, 0.5, and 1.0 $\mu\text{g/l}$ (ppb). 87

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GMM 002 0215

SUMMARY

Section I - Long-Term Monitoring

From 1976 - 1985, a sampling network consisting of 17 sites in the Hudson River from Hudson Falls to Nyack was maintained to monitor levels of polychlorinated biphenyls (PCBs). Artificial substrate samplers (multiplates) were suspended from floats or navigation buoys for 5 week periods from July to September. At the end of 5 weeks, macroinvertebrates, sediments and other materials or organisms deposited on the plates were extracted and analyzed for Aroclor 1016 and Aroclor 1254 by gas chromatography.

From 1978 - 1985, samples of hydropsychid caddisflies were also collected from 5 sites in the Upper Hudson River, extracted and analyzed for PCBs.

Aroclor 1016 and Aroclor 1254 were found to be positively correlated, and a model constructed from the 1978 - 1985 multiplate data showed that PCB levels, as measured by Aroclor 1016 concentrations, decreased at all sampling stations from 1978 to 1980; in 1981, however, levels increased again and remained stable at these levels through 1985.

Spatially, PCB levels were found to decrease generally along the length of the river from the station at Fort Edward, just below the sites of discharge of PCBs into the river, to the station at Nyack, 261 km downriver. There was no sharp decline in concentrations at Troy, the upriver point of the Hudson estuary. However, relative monthly PCB concentrations did shift near Troy. In the upper river above Troy, levels were higher in July than in August or September, while in the lower river, September samples contained higher concentrations than August or July.

Levels of Aroclor 1016 in caddisfly larvae also decreased from 1978/1979 to 1980, increased again in 1981, and remained relatively constant through 1985. Based on regression analysis, only 1980 had significantly lower Aroclor 1016 levels than other years. Aroclor 1254 levels decreased from 1980 to 1981, then increased and remained stable through 1985.

Spatial trends of PCB levels in caddisflies were not clear. In only 2 years, 1982 and 1985, was there a significant decrease in PCB levels (as measured by Aroclor 1016 and Aroclor 1254) downriver from the point of discharge at Fort Edward, to Waterford.

Section II - Short-Term Monitoring

In July and September 1985, experiments were conducted to determine the feasibility of using a macroinvertebrate as a means of monitoring PCB uptake by river biota during dredging operations. Laboratory-reared Chironomus tentans (Insecta:Diptera:Chironomidae) were caged, placed in the Thompson Island pool of the Upper Hudson River, and harvested at intervals of 0, 1, 2, 4, 8, 12, 24, 48, 72, and 96 hours. Corresponding water samples were also taken. The insects and water samples were analyzed by capillary column gas chromatography, using a column capable of separating 76 congeners.

Total PCB concentrations in the larvae at 96 hours averaged 6162 ng/g in the July experiment, and 7253 ng/g in September. Water samples averaged 92 ng/l in July and 42 ng/l in September.

The congener pattern in C. tentans differed substantially from that found in the water. The water samples were characterized by the abundance of 3 congeners - 2,2'-dichlorobiphenyl; 26-dichlorobiphenyl; and 26,2'-trichlorobiphenyl - which contributed up to 78% of the sample total, while the larval samples contained a greater number of congeners, with the most abundant contributing only 5-10% to total PCBs. At 48-96 hours, the dominant congeners in C. tentans were 24,2'5'-tetrachlorobiphenyl and 236,4'-tetrachlorobiphenyl.

Uptake (K_1) and elimination (K_2) rate constants, bioconcentration factors, and estimates of the number of days required to reach a practical equilibrium were calculated for 23 congeners, as well as for total PCBs. Results for some congeners differed substantially in July and September exposures. Bioconcentration factors (concentration in larvae/concentration in water) reached higher than 200,000 for several congeners. The number of days required to reach a practical equilibrium, defined as being within 10% of true equilibrium, differed for different congeners, and in general, was longer for the more highly chlorinated compounds.

The method may be feasible for use as a monitoring tool in predicting PCB uptake by river biota under dredging conditions, or for use in estimating water concentrations present during the time in which the insects are in the river.

GMM 002 0217

GENERAL INTRODUCTION

The contamination of the Hudson River by polychlorinated biphenyls (PCBs) occurred over a period of nearly 30 years, beginning about 1947, when General Electric capacitor manufacturing plants in Fort Edward and Hudson Falls, New York, discharged the materials into the river (Horn et al., 1979). Until 1973, the discharges occurred into a pool created behind the Fort Edward dam (latitude = $43^{\circ}16'07''$, longitude = $73^{\circ}35'48''$). With the removal of the dam in 1973, large quantities of PCB-containing sediment were transported downriver, several years before the possible health effects of PCBs became known. Additional sediments were scoured from the pool during a 100-year flood in April 1976 (Horn et al., 1979).

In 1976, an agreement between the New York State Department of Environmental Conservation and the General Electric Company provided a plan for reduction and elimination of PCB discharges as well as funds to be used for clean up of the material from the river.

The recommendations of a subsequent river study conducted for the Hudson River PCB Reclamation Demonstration Project included dredging portions of the Thompson Island pool, the reach of the river extending from Fort Edward downstream 8.4 km to the Thompson Island dam (Malcolm Pirnie, 1980). Upper Hudson sediments have been estimated to be moving downriver over the Federal Dam in Troy, and into the estuary at a rate of 7,200 lbs. per year (Malcolm Pirnie, 1980).

In 1977, extensive sampling of the sediments in this reach of the river was conducted by collecting of surface grabs and core samples (Normandeau Associates, 1977). "Hot spot" areas were designated as those sites containing greater than 50 ppm PCBs (Environ. Monitoring Program: NYSDEC Tech. Report, 1982). A complete hot spot dredging program, resulting in the removal of 40 areas has been estimated to remove approximately 12,000 kg of PCBs from

GMM 002 0218

the river, half of the PCB-contaminated sediments in the Thompson Island pool (Mark Brown, NYSDEC, pers. comm.).

The results of the Malcolm Pirnie, Inc. Environmental Impact Statement (1980) indicate that some PCBs will be lost to the water column during the dredging process. To insure that these losses do not result in the rise of air and water PCB levels above established state or federal guidelines, appropriate monitoring will be conducted during dredging.

Return of the commercial fishing industry in the Hudson is one of the long-term goals of the reclamation project. Since dredging operations could release additional PCBs into the water column, and actually cause increases in PCB content of fish flesh, fish will be examined during the dredging process to document any dredge-related increases that could delay reaching this goal.

Macroinvertebrates are another organism group of importance to the river; they occupy an intermediate position, in terms of both size and energy-flow, between microorganisms (bacteria, algae, and zooplankton) and vertebrates, which makes them especially critical to the fishing industry. Freshwater invertebrates include aquatic insects and other arthropods; mollusks, such as clams; and various worms. Because they are relatively immobile and some species are extremely sensitive to changes in water chemistry, they are often used in biological monitoring programs to assess the relative purity of surface waters (Gauvin, 1973; Goodnight, 1973), and will also be monitored during dredging.

Macroinvertebrates are also a potential component in toxic substance monitoring programs. With the organisms' immobility and life cycles generally of one year or less, contamination in field-collected individuals can be determined to have accumulated in a clearly defined space and time period. Field-collected macroinvertebrates have already been used for monitoring PCB levels in the Upper Mississippi River (Nauck and Olsen, 1977) and Raritan Bay (Stainken and Rollwagen, 1979).

Monitoring PCB levels in river macroinvertebrates is potentially useful for fisheries resource management. According to Gilman Veith, (pers. comm. to Ronald Mills, Malcolm Pirnie, 1980), PCB uptake in game fish occurs primarily through food intake when water column PCB levels are less than 0.1 µg/l and principally via exchange over the gills when water concentrations are higher. Macroinvertebrates are an important dietary component for many game fish, and thus may be an important continuing source of fish contamination.

Analysis of macroinvertebrates may also offer advantages over water samples. Because of the lipophilic nature of PCBs, these organisms bioaccumulate to levels sometimes thousands of times greater than water concentrations, allowing for more accurate analysis. While pulses in contaminant concentration may be missed by use of grab water samples, data from macroinvertebrate tissues integrate temporal fluctuations for the exposure period.

The macroinvertebrate sampling for PCBs in the Hudson River using artificial substrate samplers (see Long-Term Monitoring Materials and Methods section) described in this report has been conducted since 1976. Collection of hydropsychid caddisfly (Insecta: Trichoptera: Hydropsychidae) larvae began in 1978. Long-term trends indicated by the results of this monitoring will be used as a basis for analyzing the performance of hot spot dredging in two ways: its effect on the river biota during the procedure; and its effectiveness as a clean-up method as assessed after dredging is completed (Section I).

Also reported here are the results of experiments designed to assess the utility of using laboratory-reared Chironomus tentans larvae as a model species for short-term monitoring of PCB loss to the water column during dredging (Section II).

SECTION I

Long-Term Monitoring

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LONG-TERM MONITORING

INTRODUCTION

The long-term monitoring strategy for PCBs in the Hudson River evolved from the survey work of the Stream Biomonitoring Program which used macroinvertebrates to monitor the Upper Hudson River in 1972 and the Lower Hudson River in 1973 (Simpson, 1976). These surveys utilized artificial substrate multiple-plate samplers to collect macroinvertebrates at 12 sites in the upper river and 20 sites in the lower river. When the PCB issue arose in 1976, it was decided that the multiplates would be a suitable method for sampling PCBs in the water column, since these samplers accumulate both sediment and organisms independently of bottom substrate type. Most of the sites chosen for long-term PCB monitoring coincided with previous bio-monitoring stations; PCB sites were located roughly at every other bio-monitoring station. In order to insure that sufficient amounts of sediment and organisms were obtained at each site, the 3-plate sampler type was modified into a 10-plate sampler, as described in the Materials and Methods.

As part of the long-term PCB monitoring strategy, caddisfly (Insecta: Trichoptera: Hydropsychidae) larvae were first used in 1978 to supplement the multiplate samples. The multiplate samples reflect combined levels of PCBs in suspended sediments and organisms, and serve as a means to monitor along the length of the river. Separately monitoring the levels in macroinvertebrate tissues was of interest in order to document spatial and temporal trends in the biota, independent of sediment changes.

There is no macroinvertebrate species that occurs throughout the upper and lower river, due to the diverse habitat types and variable water chemistry. Chironomids occur over nearly the entire length of the river, but collection of adequate biomass at many locations is difficult.

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Caddisflies of the family Hydropsychidae were chosen for monitoring due to their abundance and relatively large size. These organisms are abundant in the riffle areas of the Upper Hudson River, dwelling in caselike retreats built of sand, pebbles, and debris, and attached to bottom rocks. They feed by constructing cup-shaped nets that face upstream, trapping materials suspended in the water column. Hydropsychids could not be used for monitoring in the Lower Hudson, below the Federal Dam of Troy, because of the lack of riffle areas.

DESCRIPTION OF STUDY AREA

The Hudson River is one of the major rivers of the east coast, utilized for drinking water, transport, sewage disposal, and recreation by more than 10 million people. It is 507 km in length, and the river basin (including the Mohawk River) covers 13,365 square miles.

The major portion of the upper river, from Fort Edward to Troy, New York, is part of the Champlain Canal, and is composed of a series of pools and dams. South of the Federal Dam in Troy, the river is estuarine, with a maximum tidal rise (at Troy) of 1.4 m. Under ordinary flow and tide conditions, the northernmost point of salt-water intrusion is near Beacon, New York.

The sampling network for the artificial substrate samplers consisted of 17 stations located from Hudson Falls to Nyack (Fig. 1; Table 1). The station at Hudson Falls was a control site, located 4.6 km above the site of the former Fort Edward dam.

The sites for collection of hydropsychid larvae were located from Hudson Falls to Waterford; a control site at Hudson Falls was near the artificial substrate control site. (Fig. 2; Table 2).

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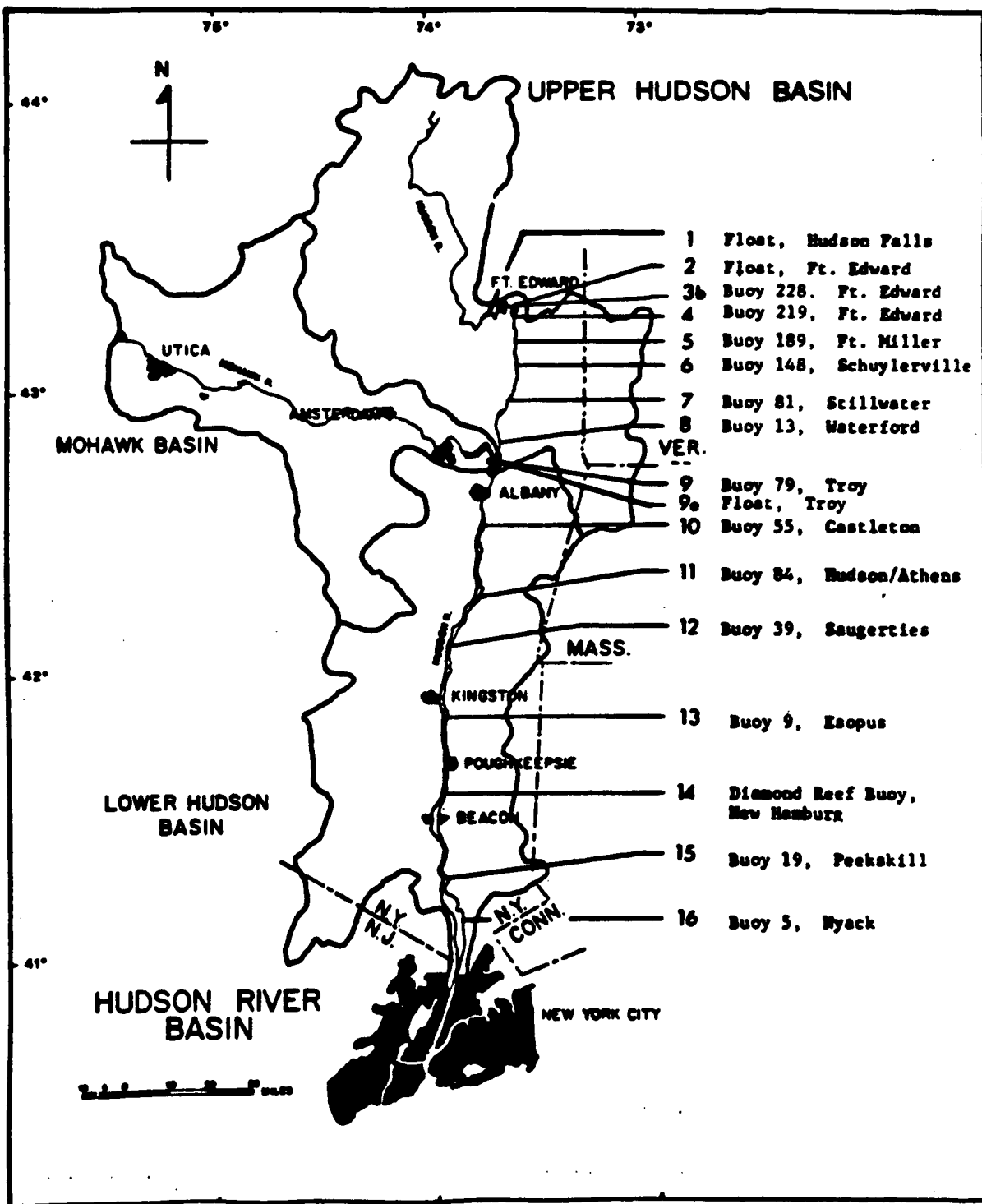


Figure 1. Multiplate sampling sites.

TABLE 1. Multiplate Sampling Stations, Hudson River, 1976 - 1985.

<u>Station</u>	<u>Location</u>	<u>Attachment</u>	<u>Distance from Fort Edward Dam Site (km)</u>	<u>Latitude</u>	<u>Longitude</u>
1	Hudson Falls	Float	- 4.6	43°18'16"	73°35'30"
2	Fort Edward	Float	1.3	43°15'38"	73°35'15"
3(b)†	Fort Edward	Buoy 228	1.4	43°15'43"	73°35'04"
4	Fort Edward	Buoy 219	2.3	43°15'04"	73°35'26"
5	Fort Miller	Buoy 189	8.6	43°11'58"	73°35'03"
6	Schuylerville	Buoy 148	20.7	43°06'05"	73°34'24"
7	Stillwater	Buoy 81	41.2	42°56'21"	73°38'25"
8	Waterford	Buoy 13	58.7	42°18'12"	73°39'39"
9	Troy	Buoy 79	66.3	42°44'29"	73°41'20"
9(e)ª	Troy	Float	66.3	42°44'28"	73°41'13"
10	Castleton	Buoy 55	91.4	42°31'55"	73°45'33"
11	Athens	Buoy 84	121.0	42°16'26"	73°47'08"
12	Saugerties	Buoy 39	147.6	42°04'08"	73°55'42"
13	Esopus	Buoy 9	172.4	41°51'26"	73°56'55"
14*	New Hamburg	Buoy (Diamond Reef)	203.1	41°35'04"	73°57'17"
15**	Peekskill	Buoy 19	241.7	41°16'46"	73°57'23"
16**	Wyack	Buoy 5	261.2	41°07'34"	73°52'45"

† not sampled in 1976-1979

* not sampled in 1976

+ not sampled in 1983

ª not sampled until 1983

- indicates station upstream from dam site;
all other stations are downstream

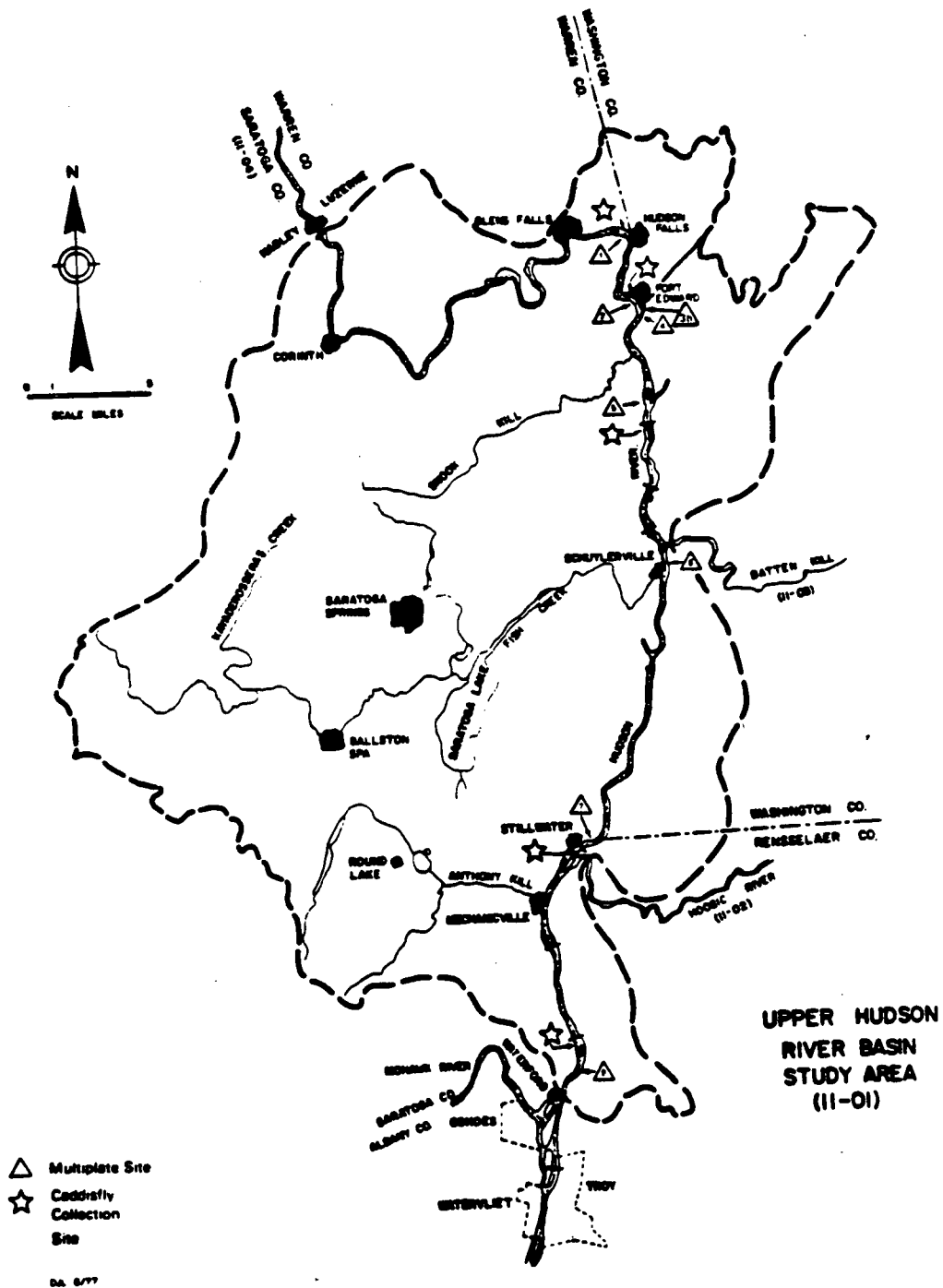


Figure 2. Caddisfly and multiplate sampling sites - Upper Hudson River.

TABLE 2. Caddisfly Sampling Stations, Upper Hudson River, 1978-1985

<u>Station</u>	<u>Location</u>	<u>Distance from Fort Edward</u> <u>Dam Site (km)</u>	<u>Latitude</u>	<u>Longitude</u>
1	Hudson Falls	- 4.6	43°18'18"	73°35'32"
2	Fort Edward	0.2	43°16'04"	73°35'34"
5	Fort Miller	10.0	43°11'18"	73°35'07"
7	Stillwater	42.5	42°56'08"	73°39'12"
8	Waterford	56.5	42°49'23"	73°39'47"

- indicates station upstream from dam site, all other stations are downstream

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MATERIALS AND METHODS

Artificial Substrate Samplers

Field Methods

The multiplate, or artificial substrate samplers are modified from the design of Hester and Dendy (1962), consisting of ten 15.2 x 15.2 cm hardboard plates, 4 separated by 0.3 cm thick spacers, and 6 separated by two 0.3 cm spacers (Fig. 3).

From 1976 through 1985, multiplates were placed at selected sites in the river (see Description of Study Area) in early June, and harvested and replaced with clean plates 5 weeks later. Collections were made once in July, August, and September. Samplers were suspended 1 m below the surface from navigational buoys or floats (Fig. 4), anchored with a cinder block (float) or stabilized with a brick (buoy). Two samplers were placed at each site, in case of loss or vandalism. Upon collection, aboard the boat or on shore, the samplers were disassembled, and the contents scraped into a galvanized steel pail containing river water. After allowing the contents of the pail to settle for 5-10 minutes, most of the water was poured off, and the sample transferred to a hexane-rinsed 1 quart wide mouth jar, fitted with a Teflon cap liner, and placed on ice for transport to the laboratory.

Laboratory Methods

In the laboratory, the remaining water layer was decanted, and the sediment/organism layer of each sample filtered by vacuum through #40 Whatman filter paper (Whatman Ltd., England), in a hexane-rinsed porcelain funnel, to remove as much of the water as possible. The residue was divided in half, weighed, freeze-dried, and reweighed. One half of each sample was retained unanalyzed. The samples were sent to the New York State Department of Environmental Conservation Hale Creek Analytical Laboratory for gas chromatographic analysis. Extraction and clean-up followed the method for organochlorine residues described in the FDA Pesticide Analytical Manual

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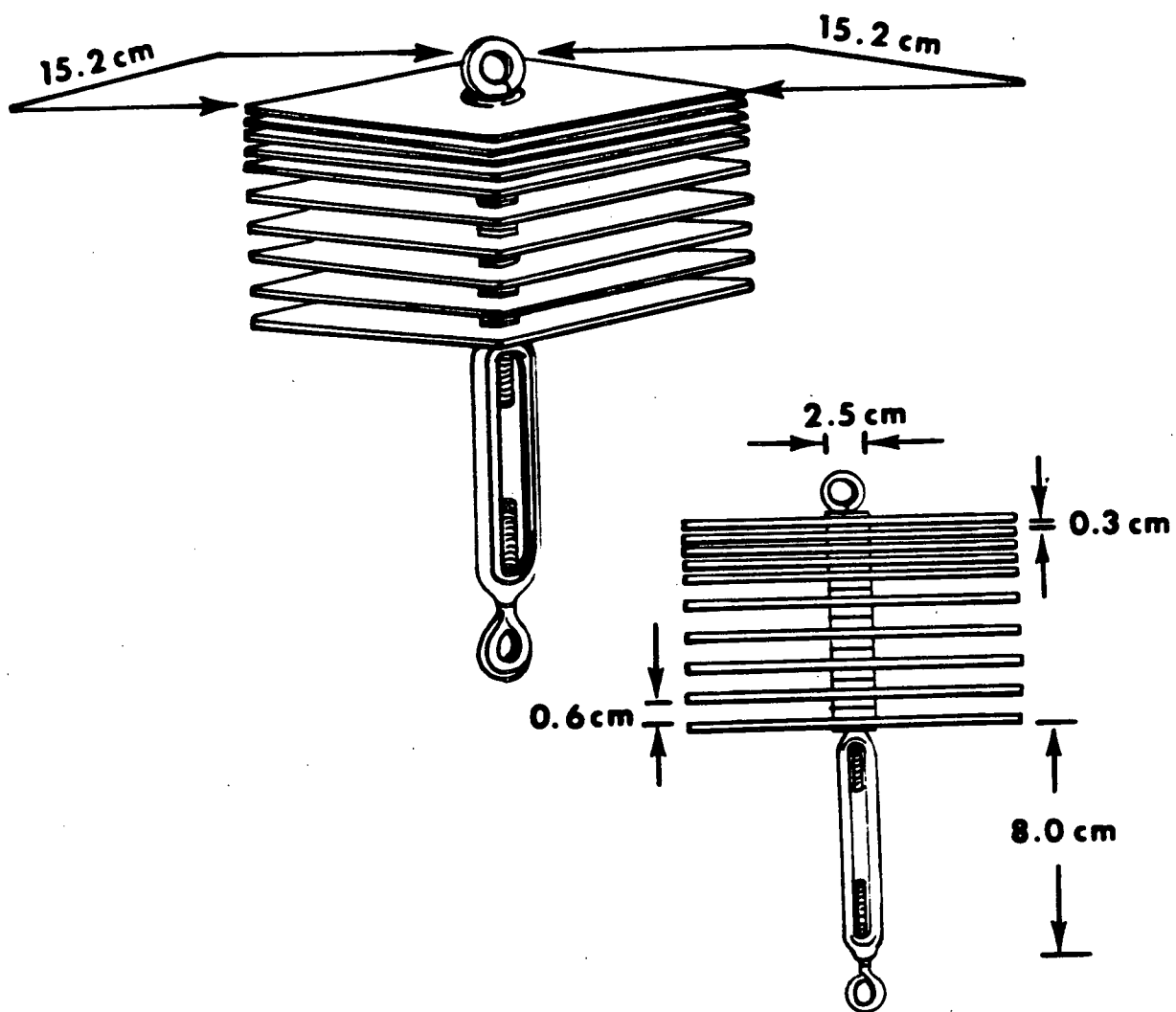


Figure 3. Multiplate sampler.

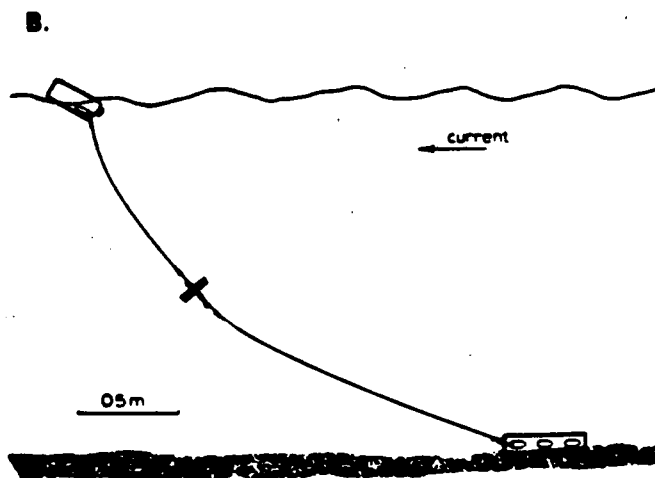
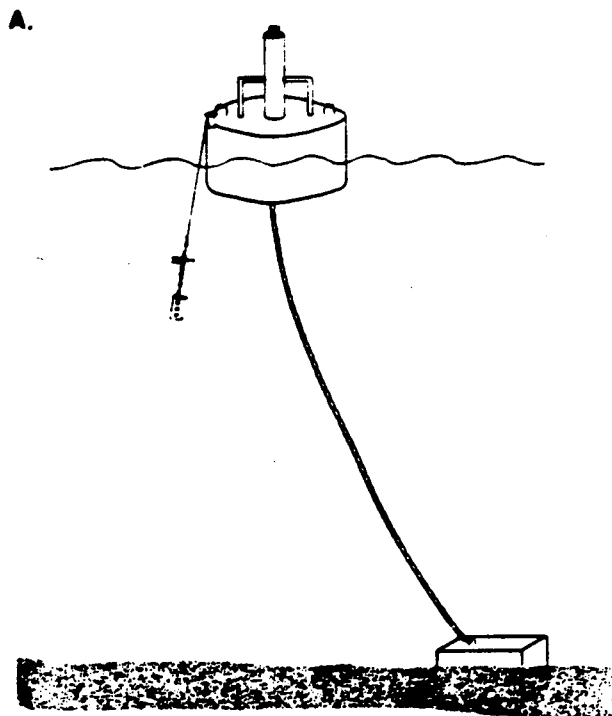


Figure 4. A. Placement of multiplate sampler attached to navigation buoy.
 B. Placement of multiplate sampler with float.

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Volume I (1982). Samples were analyzed on a Tracor 222 gas chromatograph, equipped with a ^{63}Ni electron-capture detector, operated in the DC mode, and fitted with a 1.8 m 2mm ID glass column, packed with 3 percent OV101 on Gas-Chrom Q 80/100 mesh. The detector temperature was 300°C and the inlet temperature was 225°C. The column was programmed from 140°C to 200°C at a rate of 3°C/min after an initial 6 min hold, with a final 10 min hold at 200°C. The detector output was analyzed by either a Columbia Scientific Supergrator 3 (1978 to 1983) or a Perkin-Elmer LCI-100 programmable integrator (1984 to 1985).

PCB concentrations were calculated by comparison with external standards (samples obtained from U.S. Environmental Protection Agency), using the general equation:

$$R = \frac{abc}{cd}$$

where

a = nanograms of standard represented by the standard peak

b = height (or area) of sample peak

c = height (or area) of standard peak

d = weight of original sample

e = dilution factor, derived as follows:

$$e = \frac{\text{ml of extracting solvent} \times \text{ml of final extract}}{\text{aliquot of original extract (ml)} \times \mu\text{l injected}}$$

Percent lipids (% hexane-extractable material) were calculated as follows:

$$\% \text{ lipids} = \frac{\text{wt of sample after Soxhlet extraction and evaporation}}{\text{dry wt of sample}} \times 100$$

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For the multiplate and caddisfly samples, however, lipid-based measurements were more variable than those based on total dry weight of the sample. Analyses were conducted on dry weight measurements.

Total PCBs were quantitatively determined by summation of peak areas calculated for 6 peaks identified as belonging to Aroclor 1016 and 9 peaks from Aroclor 1254 (Fig. 5). Each peak was composed of more than one PCB congener. The peak patterns did not match exactly those of a standard of pure Aroclor 1016 or 1254; these terms are used as a basis of comparison of the percent of chlorine in the congener blends (Sloan, et al., 1983).

Quality control procedures for the analytical methods were as follows:

- 1) At the beginning of analysis of each year's samples, the initial Soxhlet extraction was repeated to determine percent recovery of the extraction process.

- 2) Replicated samples, generated by splitting one sample prior to extraction (or after) were analyzed once per 20 samples.

- 3) Blanks (every 20 samples) and spiked blanks (every 30 samples) were run.

Quality control information is included in the appendices containing the raw data.

Statistical Methods

An empirical model was constructed to describe observable trends in the large amount of multiplate data. Since each site was sampled over time (3 months in each of 8 years), correlations among the observations within stations must be accounted for in the model. If concentrations at an individual station are essentially constant over time, any one of the 24 observations provides information on PCB concentration at that site, the other observations are redundant. The complex model adopted accounts for the within station correlations, and thereby provides a means for accurately assessing the redundancy in the collected information.

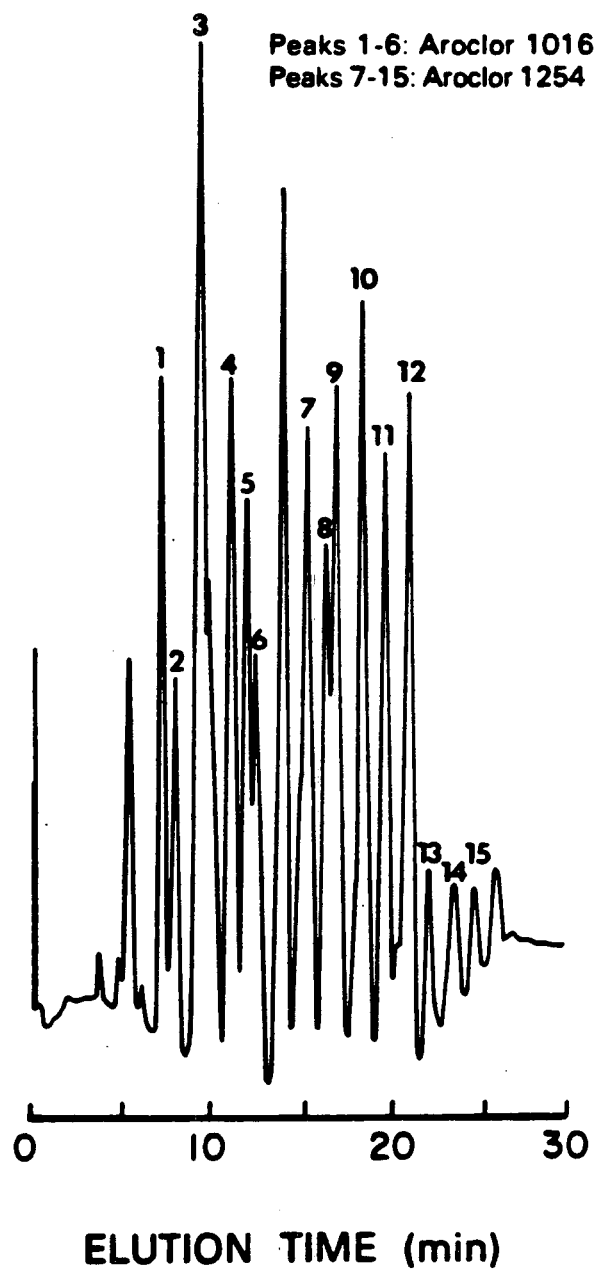


Figure 5. Chromatogram of mixture of Aroclor 1016 and Aroclor 1254, indicating peaks used to quantify each Aroclor in multiplate and caddisfly samples.

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Only two points in the river were sampled at two sites at the same approximate location (Fort Edward Stations 2 and 3b, Troy Stations 9 and 9e). PCB concentration at other stations was assessed by analysis of either a single multiplate sampler, or analysis of two samplers that had been combined in the field. Since stations without replication provide no indication of the size of laboratory error, changes in PCB concentrations in the river are not generally distinguishable from laboratory variation. The data may be characterized by a multivariate repeated measures analysis with a two factor factorial structure in time within stations (effects of month and year on each station), a single between station factor (distance from the dam formerly located at Fort Edward), and partial replication (Stations 2 and 3b, 9 and 9e). This approach, describing both the relationship between stations (spatial trends) and within individual stations over time (temporal trends), simultaneously fits two models, corresponding to each trend, to the data.

The original data contained concentrations of both Aroclor 1016 and 1254. Data with two responses collected in this way are referred to as doubly multivariate. To detect outlier points that might have been located had more replication been available, Aroclor 1016 was plotted against 1254 for all stations and all times (Fig 6). To normalize the data, concentrations were transformed by $\log ([\text{Aroclor}] + 1)$. The two sets of data are highly correlated ($r = .735$) except for a few points that seem to deviate from the general relationship. Most of these points were from the 1982 data (marked with a + symbol in the figure). Since it was impossible to determine whether these 1982 observations represent an excess amount of 1254 or a set of laboratory errors, these observations were considered to be outliers and eliminated from the analysis. The observations marked with the * symbol were eliminated by imposing the assumption that the data follow a bivariate normal distribution and robustly eliminating observations not in accord with this

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MULTIPLATES 1978-1985

$\ln(\text{Aroclor}1016+1)$ vs. $\ln(\text{Aroclor}1254+1)$

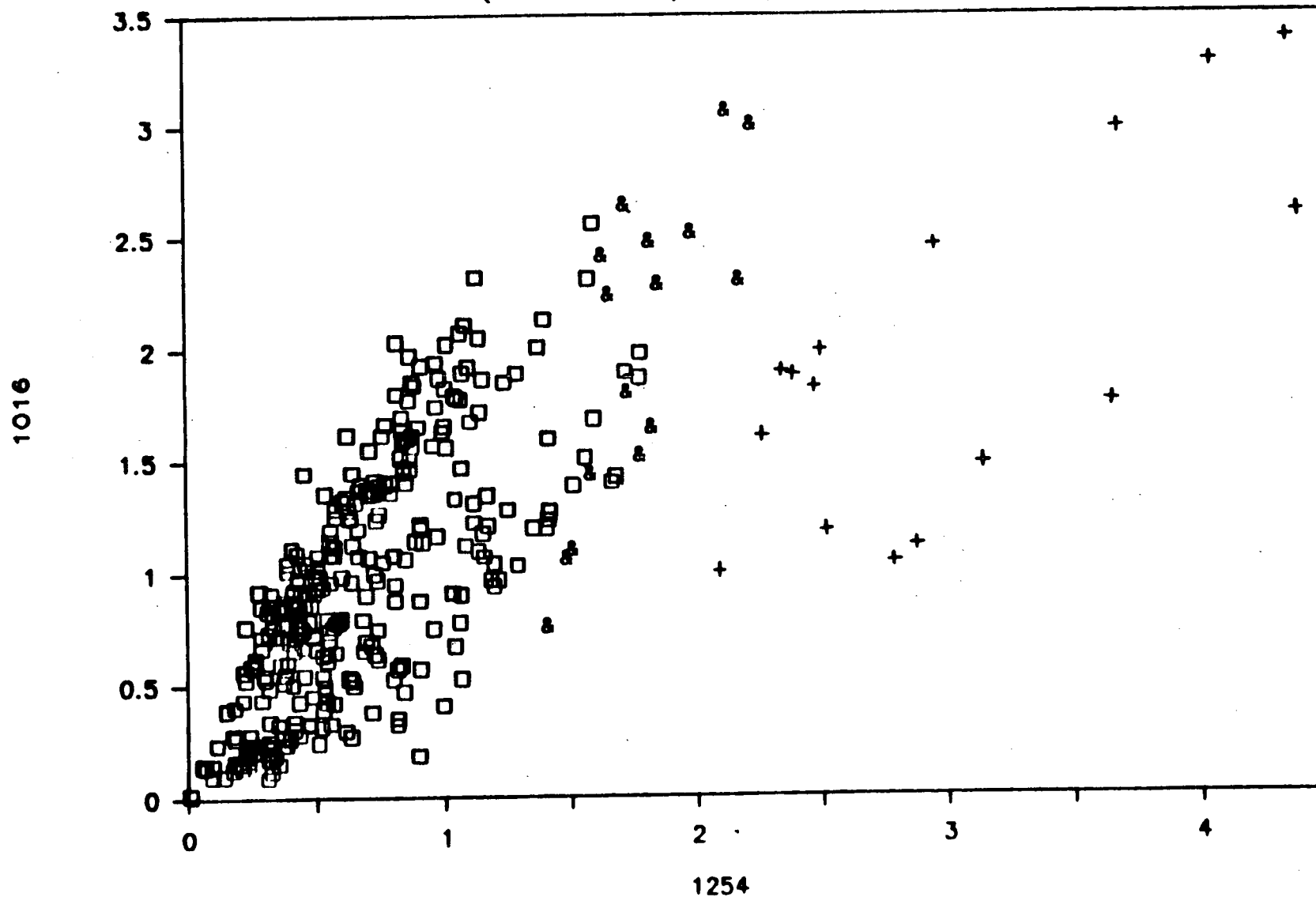


Figure 9. Correlation of Aroclor 1016 and Aroclor 1254 for all stations, 1978-1985 (values transformed by $\log [1016]+1$ and $\log [1254]+1$) $r = 0.735$.

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constraint (Paulson and Delehanty, 1983). Missing values, those occurring through loss of data (loss of sampler) as well as those due to the indicated eliminations, were estimated via the EM-Algorithm (Dempster et al., 1977).

Rather than pursuing a doubly multivariate analysis, it was decided to concentrate on one Aroclor. The above outlier detection procedure utilized the 1254 data to identify outliers in the Aroclor 1016 data. The high correlation between the two sets of values, however, indicated that analysis of either 1016 or 1254 would give substantially similar results. Aroclor 1016 is composed of a higher percentage of less highly chlorinated PCB congeners (2 to 4 chlorines), which elute earlier from gas chromatographic columns than more chlorinated congeners (Fig. 5). Since these peaks are sharper and should be measured with less error, and because the 1016 data displayed less variability, 1016 was selected for the analysis.

Hydropsychid Larvae

Field Methods

The collection and analysis of net-spinning hydropsychid caddisfly larvae was initiated as a PCB monitoring tool in the Hudson River in 1978. It was desirable to analyze a single macroinvertebrate species that was found over the entire length of the river, but, due to the diverse habitat types and variable water chemistry, no such species was found to occur abundantly throughout the upper and lower river. The most promising alternative was the use of hydropsychid caddisflies (Insecta: Trichoptera: Hydropsychidae), which are present in abundance in the riffle areas of large rivers, and which, because of their size, would provide adequate biomass for analysis. The lack of riffles in the lower river precluded the collection of caddisflies there, but since the upper river was the area of greatest PCB concentration and concern, caddisfly larvae were chosen to supplement the analysis of multiplate samples.

Larvae were collected by hand-picking individuals from rocks removed from the river bed at each of the five sites; larvae were placed in glass vials containing river water, and put on ice for transport to the laboratory. Collections were made in June, July, August, and September of each year from 1978 through 1985. The July, August, and September dates coincided with the collection of the multiplate samples.

Laboratory Methods

In the laboratory, the caddisflies were identified to the lowest possible taxon. A set of reference specimens was sent to Dr. Guenter Schuster (Eastern Kentucky University, Richmond, Kentucky) to verify the identifications. Samples of from 3 to 100 individuals of the same taxon were weighed on an electrobalance, freeze-dried, reweighed, and sent to the Hale Creek Laboratory as for the multiplate samples. Extraction and GC analysis procedures were conducted as for the multiplates.

Statistical Methods

Trends were analyzed by linear regression of log-transformed values of Aroclor 1016 and Aroclor 1254 ($\mu\text{g per gm dry wt. of sample}$) on station (expressed as distance from the site of the former Fort Edward dam). At the control site, PCB concentrations were sometimes below the limits of detection; these were conservatively estimated as being at the limit of detection.

For each of the 8 years sampled, data were fit to the equation:

$$y = \delta\beta_0 + (1-\delta)(\beta_1 + \beta_2x)$$

where $\delta=1$ if station = 1 (control site)

$\delta=0$ if station = 2, 5, 7, 8 (any downriver site)

$x=\text{km from dam site}$

This equation separates station 1, 4.6 km upriver from the PCB discharge point, from calculation of the regression equation for the downriver sites.

RESULTS

Artificial Substrate Samplers

Composition of Multiplate Samples

The multiplate sampling results reflect PCB levels of inorganic materials in the water column, such as silt and other fine particles, as well as algae, plankton, and macroinvertebrates attached to the plates. Most of the macroinvertebrates are bottom dwellers rather than water column dwellers; the samplers provide a substitute substrate for their attachment.

In 1985, the top plate was removed from the samplers and preserved, the number of organisms found was counted, and their relative contribution to the total sample was tabulated (Table 3). Percent contribution by weight was not calculated, but a qualitative assessment of the importance of the macroinvertebrates can be made. Based on routine annual macroinvertebrate surveys, populations and diversity have remained relatively constant (Simpson, 1976) over the multiplate sampling period; thus, these results can be used generally to represent samples over the ten year period of PCB multiplate sampling in the Hudson.

The most abundant macroinvertebrates on the samplers from Fort Edward (Station 2) to Saugerties (Station 12) were larvae and pupae of chironomid midges, contributing from 43 to 86 percent of the total organisms present. Oligochaete worms and caddisfly larvae (Insecta:Trichoptera) were the next most abundant taxa. In the upper river, the majority of the caddis larvae were in the family Hydropsychidae, the group of caddisflies also collected separately (see section on hydropsychids). Below Troy these riffle-dwelling organisms are not usually found, but other caddisflies are present. Taxa considered collectively, which contributed a smaller proportion of the samples included immatures of Ephemeroptera and Coleoptera, and amphipods, usually the

TABLE 3. Contribution of Major Taxonomic Groups to the Numbers of Organisms on Multiplate Samplers in 1985 (Top Plate Only, All Organisms Sorted and Counted)

Sampling Station	Total Individuals (Mean 3 Months)	% Contribution (Mean of 3 Months)			
		Chironomidae	Oligochaeta	Trichoptera	Other*
1	411	22%	68%	1%	9%
2	214	60	12	16	12
3b	532	52	43	2	4
4	469	83	5	10	2
5	229	86	8	3	3
6	514	61	16	15	8
7	350	84	1	14	1
8	739	86	8	1	5
9	1466	78	12	8	1
9e	1382	43	52	3	2
10	358	72	25	1	2
11	247	82	16	1	1
12	148	86	12	1	1
13	765	13	86	<1	<1
14	579	9	88	2	1
15	221	7	66	0	27
16	221	2	15	0	82

* Stations 1-14 :Ephemeroptera; Amphipoda; Elmidae

Stations 15-16 :Cirripedia (barnacles)

scud, Gammarus sp. Samples at Station 1 (Hudson Falls) and from Esopus (13) to New Hamburg (14) were dominated by the presence of oligochaete worms. The stations at Peekskill (15) and Nyack (16) are below the northernmost point of salt-water intrusion in the estuary under normal precipitation conditions; the organisms found at these locations were sharply different from all upriver sites. Oligochaete worms contributed a large proportion of the sample at Peekskill, but both here and at Nyack barnacles (Cirripedia) made up a significant part of the sample; at Nyack they were the most abundant organism.

In 1978, additional samples from the upper river were sieved with a U. S. No. 30 sieve, and the retained and unretained portions analyzed separately. The results are shown in Table 4. Material retained by the sieve represents essentially all macroinvertebrates in the samples, while the portion passing through the sieve was composed mainly of silt and other fine sediments, as well as microorganisms. While the retained portion weighed less in 84 percent of the samples, a large proportion of this was lipid, and at least half of the total PCB concentration was contributed by this part of the sample. These results can be used generally to represent samples in years succeeding 1978.

Spatial and Temporal Trends

A summary of the results of 8 years of multiplate sampling is shown in Fig. 7 through 9. The 1976 and 1977 samples were collected and analyzed in a slightly different manner, and will be discussed in relation to the results from 1978 to 1985. The 1982 results are represented separately on Figure 8 because PCB levels were much higher, and patterns between stations were somewhat different than in any of the other years sampled. The scale of Figure 8 is three times that of Figures 7 and 9. Mean PCB levels in ppm ($\mu\text{g/g}$) for all stations for each year are shown in Fig 10, indicating the magnitude of the increase in the 1982 data. No analytical changes could be

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TABLE 4. Multiplate Sample Materials Sieved with U.S. No. 30 Sieve, 1978

<u>Sampling Station</u>	<u>Sample Dry Weight (GM)</u>		<u>Sample % Lipids</u>		<u>Total PCBs (µg/g)</u>	
	<u>Retained</u>	<u>Unretained</u>	<u>Retained</u>	<u>Unretained</u>	<u>Retained</u>	<u>Unretained</u>
1 - July	2.4	7.5	0.5	1.4	3.4	0.5
2 - July	2.6	5.2	6.3	1.6	25.7	10.8
- Aug	4.2	4.6	1.2	1.0	4.8	3.0
- Sept	0.7	1.1	2.8	1.6	3.9	4.0
4 - July	2.5	4.0	4.3	1.5	35.8	30.9
- Aug	4.3	5.0	1.2	0.9	3.9	4.0
- Sept	2.1	1.1	1.2	2.0	2.0	0.6
5 - Sept	2.4	3.0	0.8	0.6	3.5	3.0
6 - July	3.1	8.1	3.6	0.6	29.3	12.4
- Aug	6.6	8.1	0.8	0.4	11.2	2.2
- Sept	2.4	2.8	1.4	1.2	7.0	4.7
7 - Aug	6.4	6.4	1.8	0.7	10.0	5.6
8 - Aug	5.4	6.1	1.0	0.4	6.1	4.1

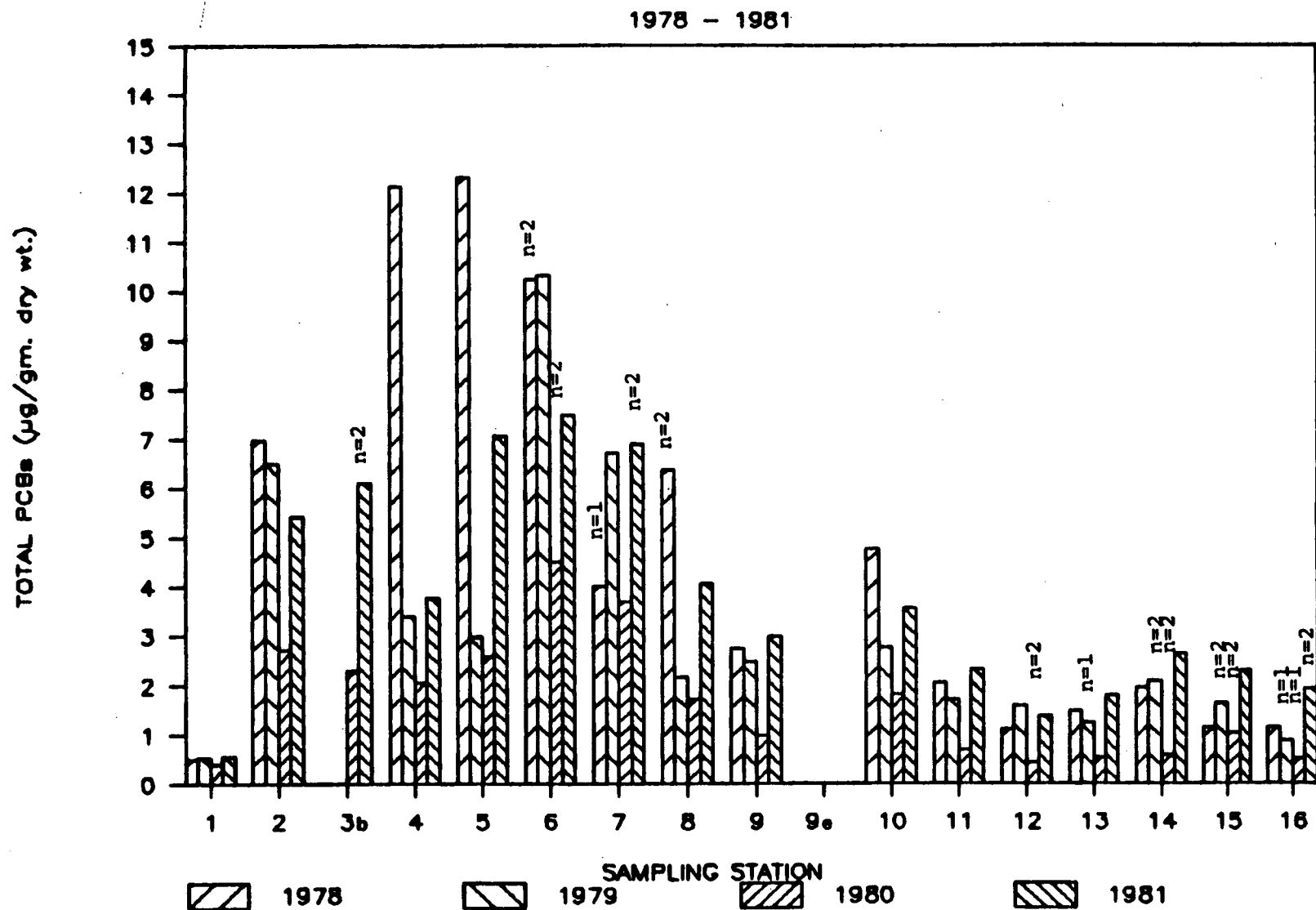


Figure 7. Concentration of total PCBs on multiplates, 1978-1981. Sampling stations are numbered in sequence down the length of the river; station 1 = Hudson Falls, station 16 = Nyack (see Table 1). For each bar $n=3$ (mean of July, Aug., Sept.) except where noted.

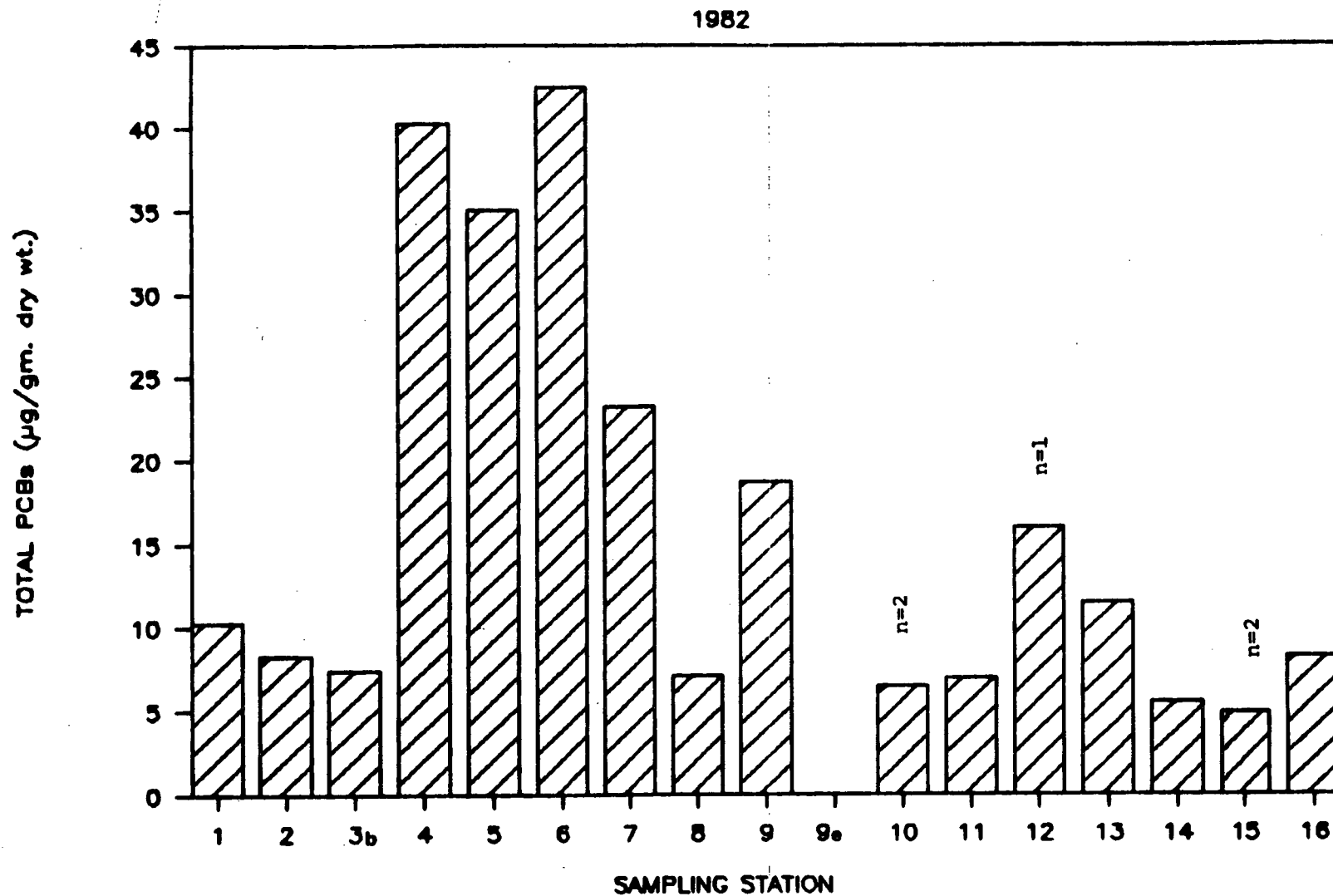


Figure 8. Concentration of total PCBs on multiplates, 1982. Sampling stations are numbered in sequence down the length of the river; station 1 = Hudson Falls, station 16 = Nyack (see Table 1). For each bar $n=3$ (mean of July, Aug., Sept.) except where noted.

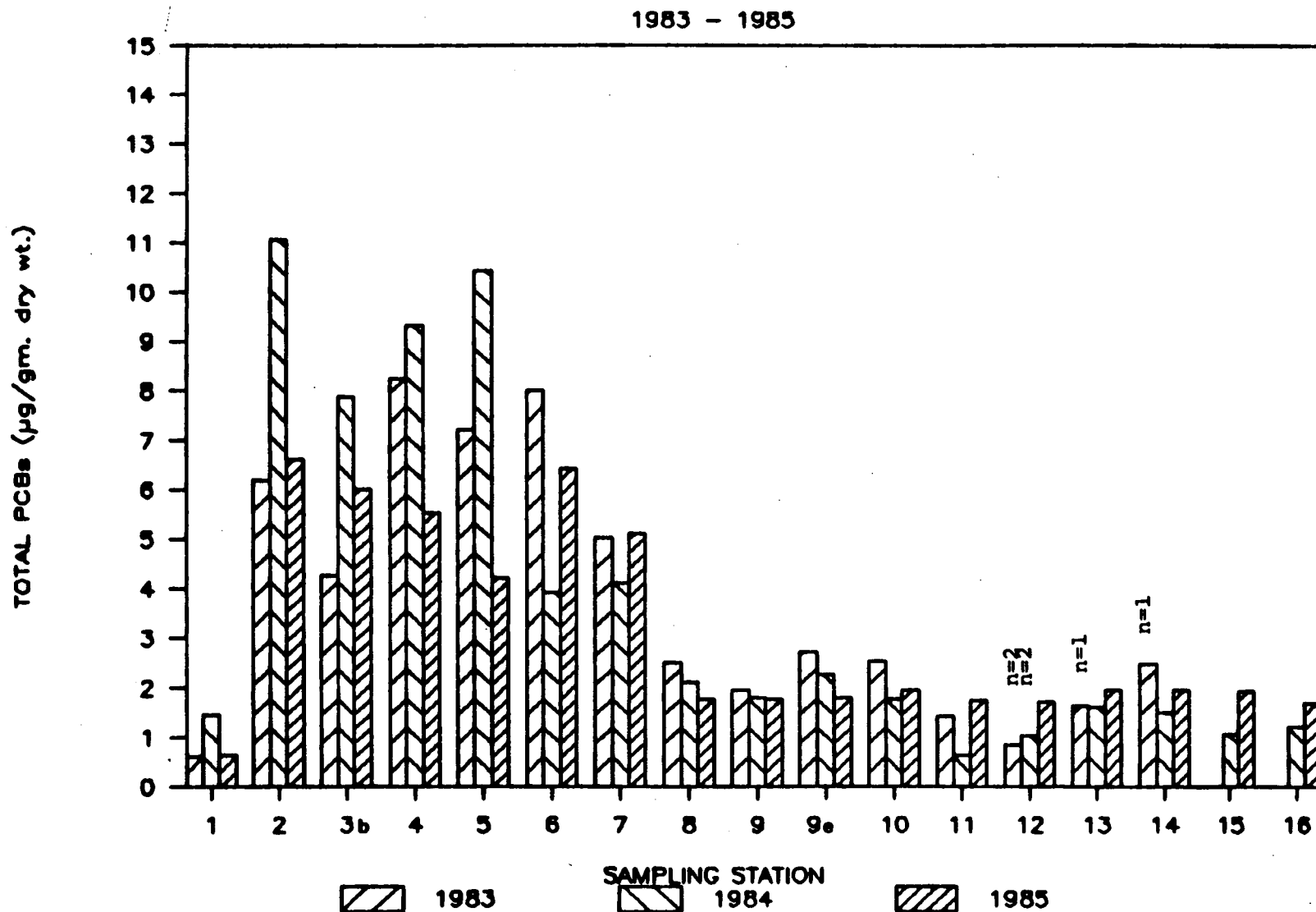


Figure 9. Concentration of total PCBs on multiplates, 1983-1985. Sampling stations are numbered in sequence down the length of the river; station 1 = Hudson Falls, station 16 = Nyack (see Table 1). For each bar $n=3$ (mean of July, Aug., Sept.) except where noted.

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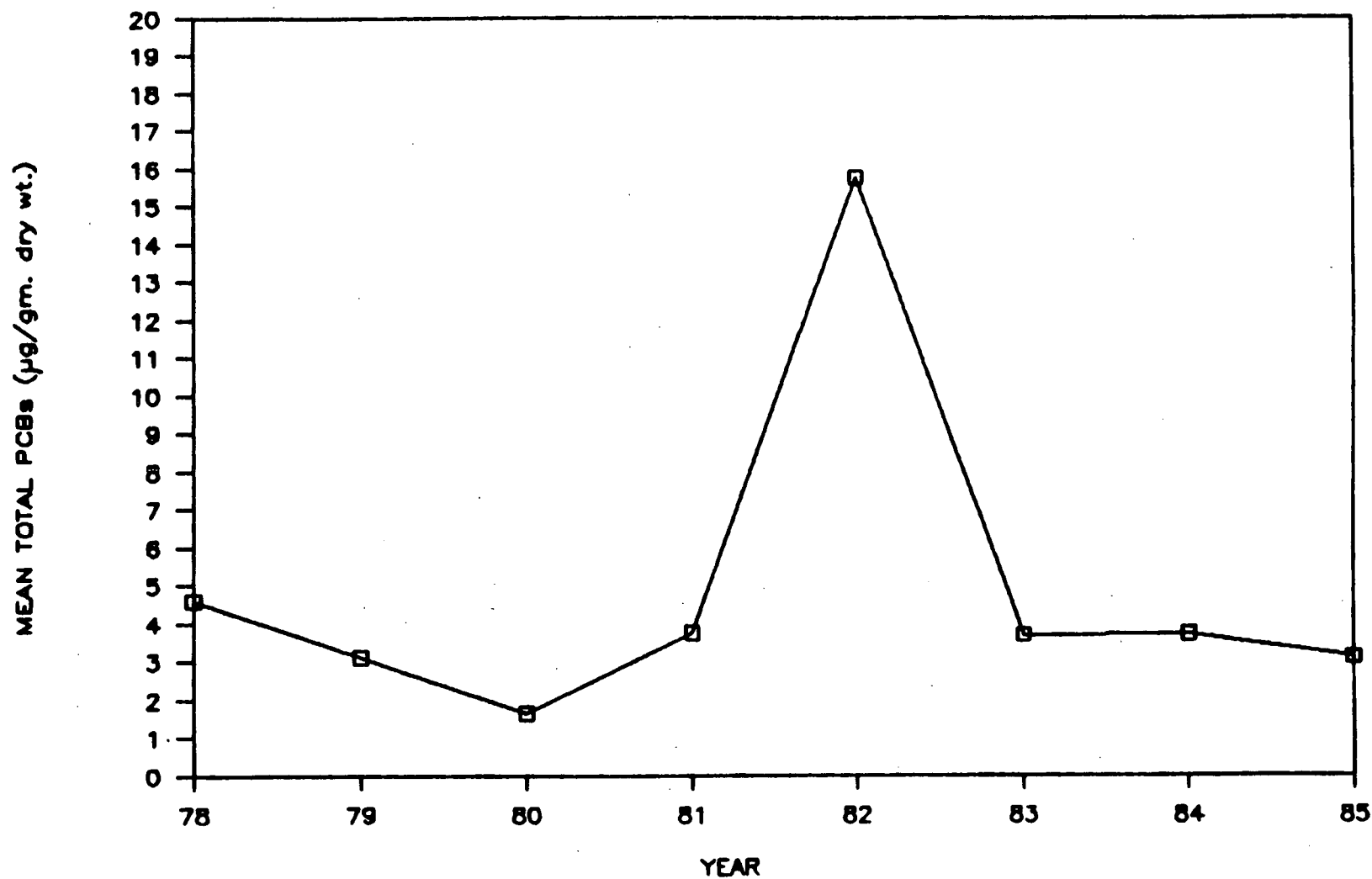


Figure 10. Concentration of total PCBs on multiplates, 1978-1985; mean of all stations for each year sampled.

detected that would cause such large variation in concentrations. As explained above, these uncharacteristically high 1982 values were treated as outliers, and excluded from the statistical treatment of the data.

For the other 7 years, concentrations in general decreased downriver from the site of the former dam, immediately upriver from Station 2. Total quantities of PCBs on multiplate samplers decreased for 1978 to 1980, but rose again in 1981, and remained high after 1982.

The extra-analytic information available for construction of a model for Aroclor 1016 concentration in the river was: 1) Station 1 at Hudson Falls was located upriver from the point of introduction of PCBs into the river, above the site of the former Fort Edward dam; 2) the Federal Dam at Troy, marking the upriver boundary of the estuarine portion of the Hudson River, has, in past studies, been considered to be a point of discontinuity in PCB concentrations; 3) downriver stations, in the past, have shown decreasing PCB concentrations related to their distance from the former dam site at Fort Edward. Since the data provided no evidence of a sharp decrease in concentration at Station 9 at Troy (analysis not shown), continuous polynomials were fit between stations, rather than considering the upper and lower rivers as separate units.

The model for change in Aroclor 1016 over the length of the river (time-specific spatial trends) developed for the data (Fig. 11) is based on the information in Table 5.

The highest between-stations effect that can be detected in the data is a polynomial of degree 2 (quadratic), indicating the model is curvilinear in shape. The development of the final model associated with the data in Fig. 11, including the between-stations design matrix and parameter estimates, are described in Appendix A.

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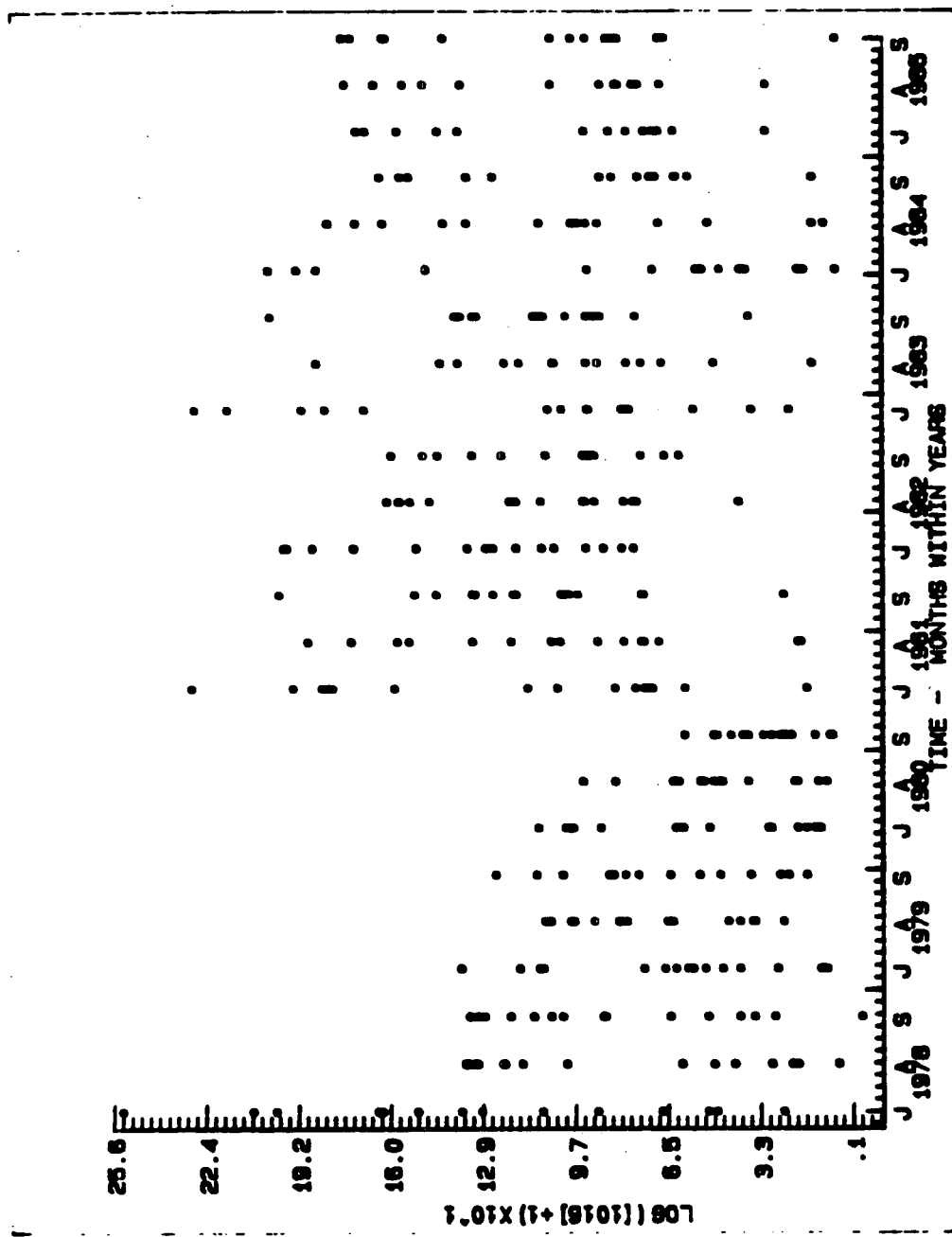


Figure 11. Multiplate samples, 1978-1985. 15 stations collected in each of 3 months (July:J, August:A, September:S) over 8 year period. Scale of log transformed data is shown as 101 for ease of plotting.

TABLE 5. Analysis of variance table for time-specific spatial trends model

Source of Variation	SS	DF	MS	F	Sig of F
CONSTANT	101.67	1	101.67	958.23	.000*
STATION 1 VS REST	1.84	1	1.84	17.34	.002*
LINEAR EFFECT OF STATIONS 2 THROUGH 17	9.05	1	9.05	85.28	.000*
QUADRATIC EFFECT OF STATIONS 2 THROUGH 17	1.78	1	1.78	16.78	.002*
CUBIC EFFECT OF STATIONS 2 THROUGH 17	.03	1	.03	.27	.614
QUARTIC EFFECT OF STATIONS 2 THROUGH 17	.07	1	.07	.64	.441
RESIDUAL ERROR	1.17	11	.11		

(Column "Sig of F" gives the probability that the null hypothesis is true based on the amount of data collected. Significant effects, marked with a *, are used for the development of Figures 12 - 15.)

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A sequence of models successively adding each of the above significant effects (Table 5: mean of all stations, Station 1 vs. mean of remaining stations, linear, and quadratic effects) is shown in Figs. 12 - 13. As seen in Figs. 11 and 12, the trend in the years 1978-1980, as described by Sloan et al (1983), is quite different from the trend in 1981-1985. Over the period of the first three years, PCB concentrations were decreasing, but rose again sharply in 1981. Fig. 12A (and column 2 of Table G_b, Appendix A) indicates that the increase in Aroclor 1016 in 1981 was observed at every station including the control station (Station 1), located 5 km above the site of the former dam pool into which PCBs were discharged. Increases are actually larger than those apparent in Fig. 11 and Fig. 12A, since log-transformed results are presented. For example, changes in concentration from 0.52 to 1.35 in units of log_e ([1016]+1), an increase of 0.83, backtransform to an increase of 2.18, from 0.68 to 2.86 µg/g. The increase at Station 1, however, was smaller than at the downriver stations (Fig. 12B). Figure 13 (and columns 3 through 5 of Table G_b of Appendix A) shows that the yearly change in concentration was also different in the first three years than it was in the last five years. Prior to 1981 a sharp linear decrease was observed at all stations but was most pronounced at upriver stations 2-5. This resulted in the convergence of concentrations toward one value. After 1980 the Aroclor 1016 concentrations were more widely separated and the sharp trend to lower concentrations was no longer seen.

All of the spatial model figures (Figs 12-13) indicate significant monthly differences. When averaged over stations as in Figure 12A it appears that the ordering is July > August > September. This monthly ordering is due to averages which are strongly influenced by the large decreases in monthly concentrations at the upriver stations. It is apparent from Figure

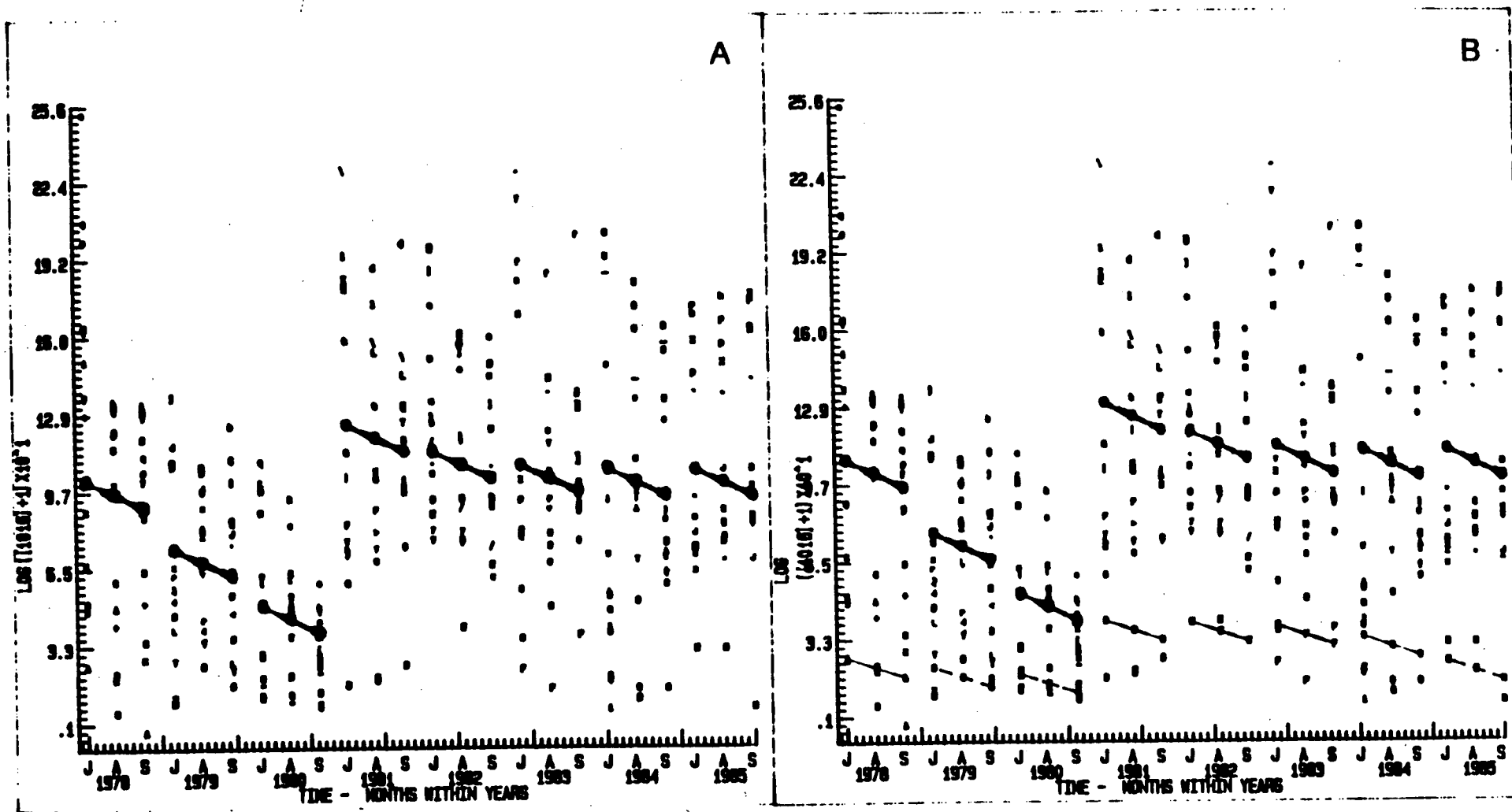


Figure 12. Time-specific spatial trends model. Each line indicates 3 months samples: July (J), August (A), September (S).

A. Mean for all 15 stations.

B. Station 1 (control station) vs. mean of all downriver stations.

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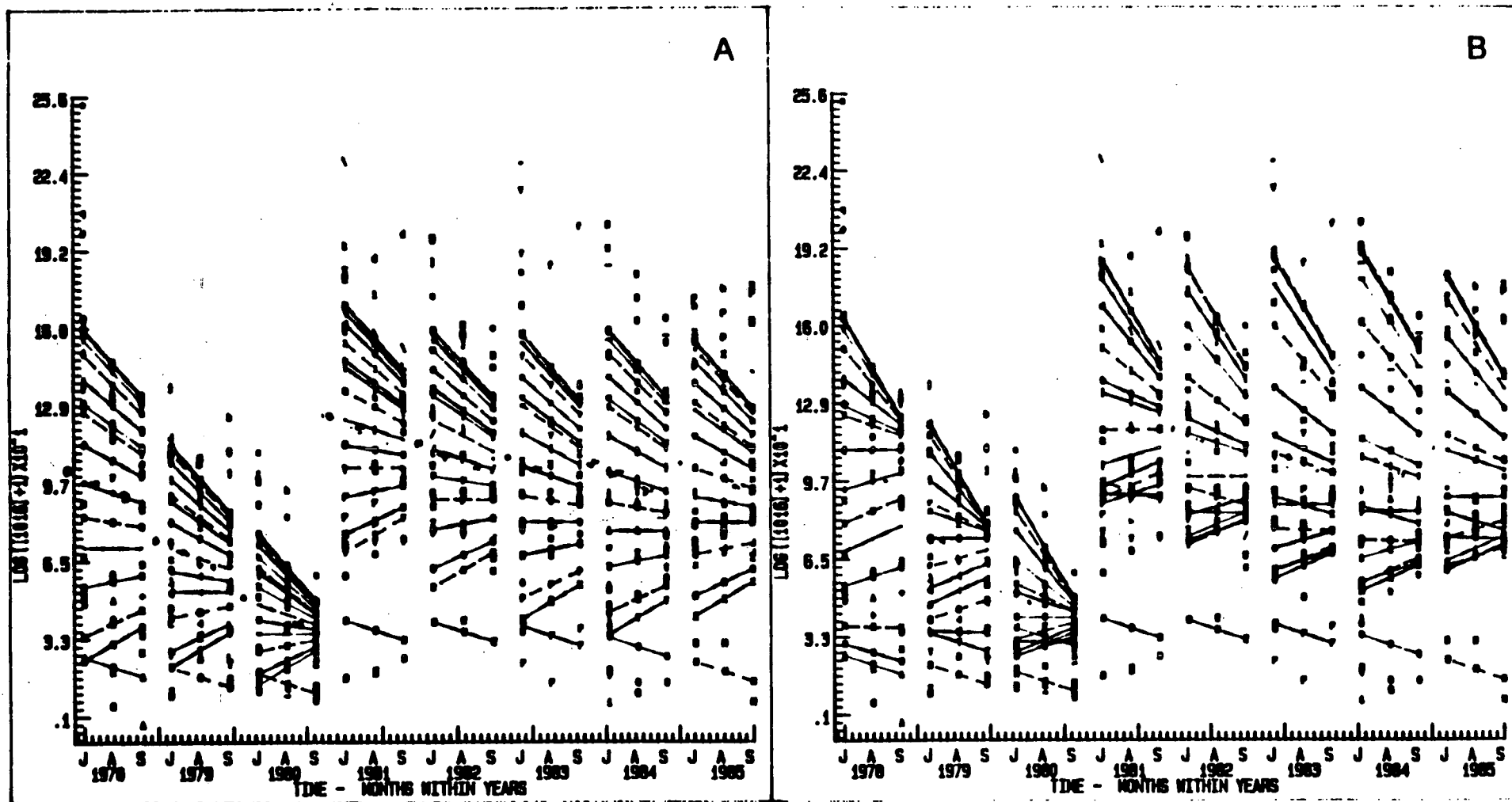


Figure 13. Time-specific spatial trends model. Each line indicates 3 monthly samples for one station (see Figs. 14 and 15 for individual stations displayed).
 A. Addition of linear effects.
 B. Addition of quadratic effects (complete model).

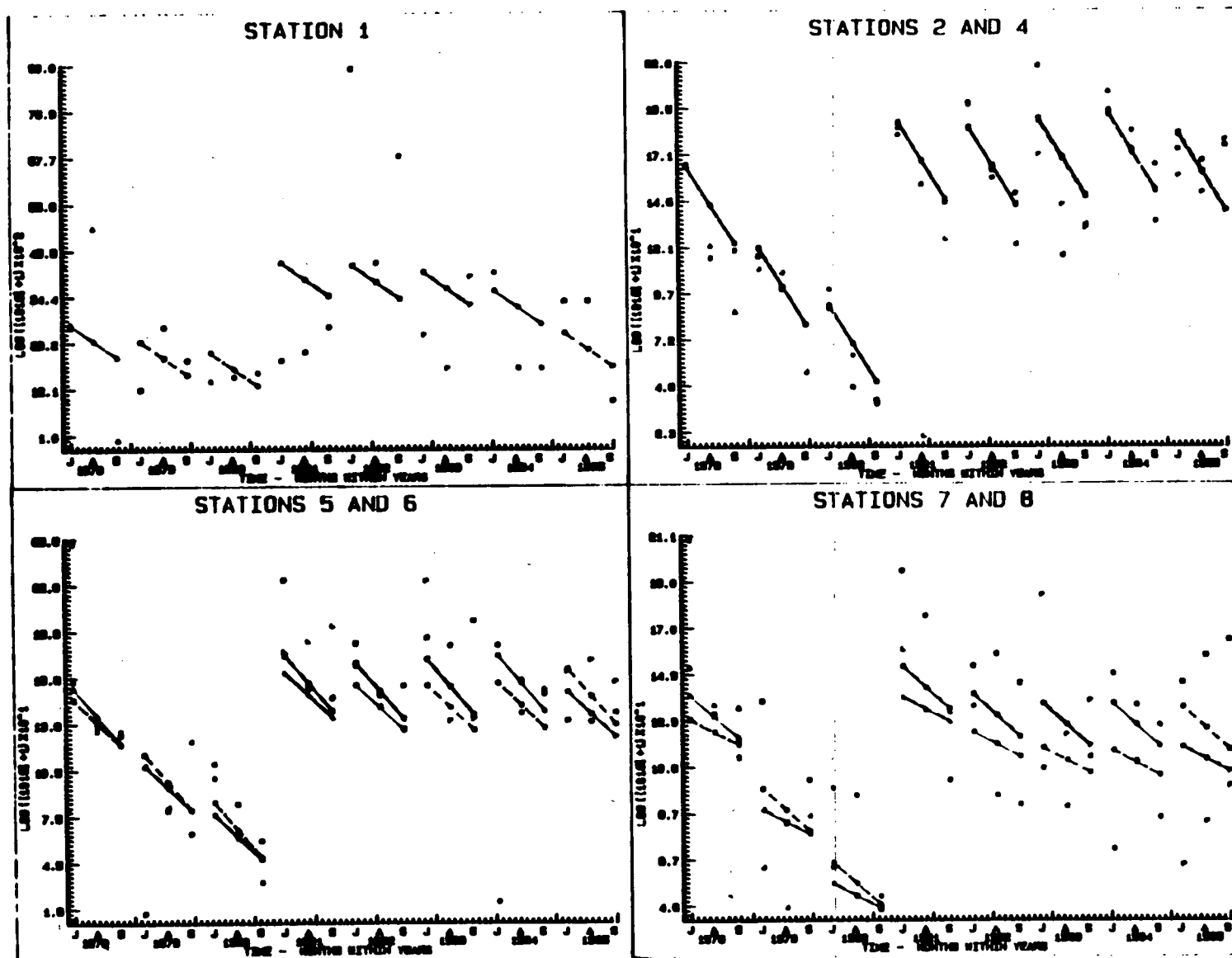


Figure 14. Time-specific spatial trends model. Complete model as in Fig. 13B, showing pairs of stations. Each line indicates 3 monthly samples for each station.

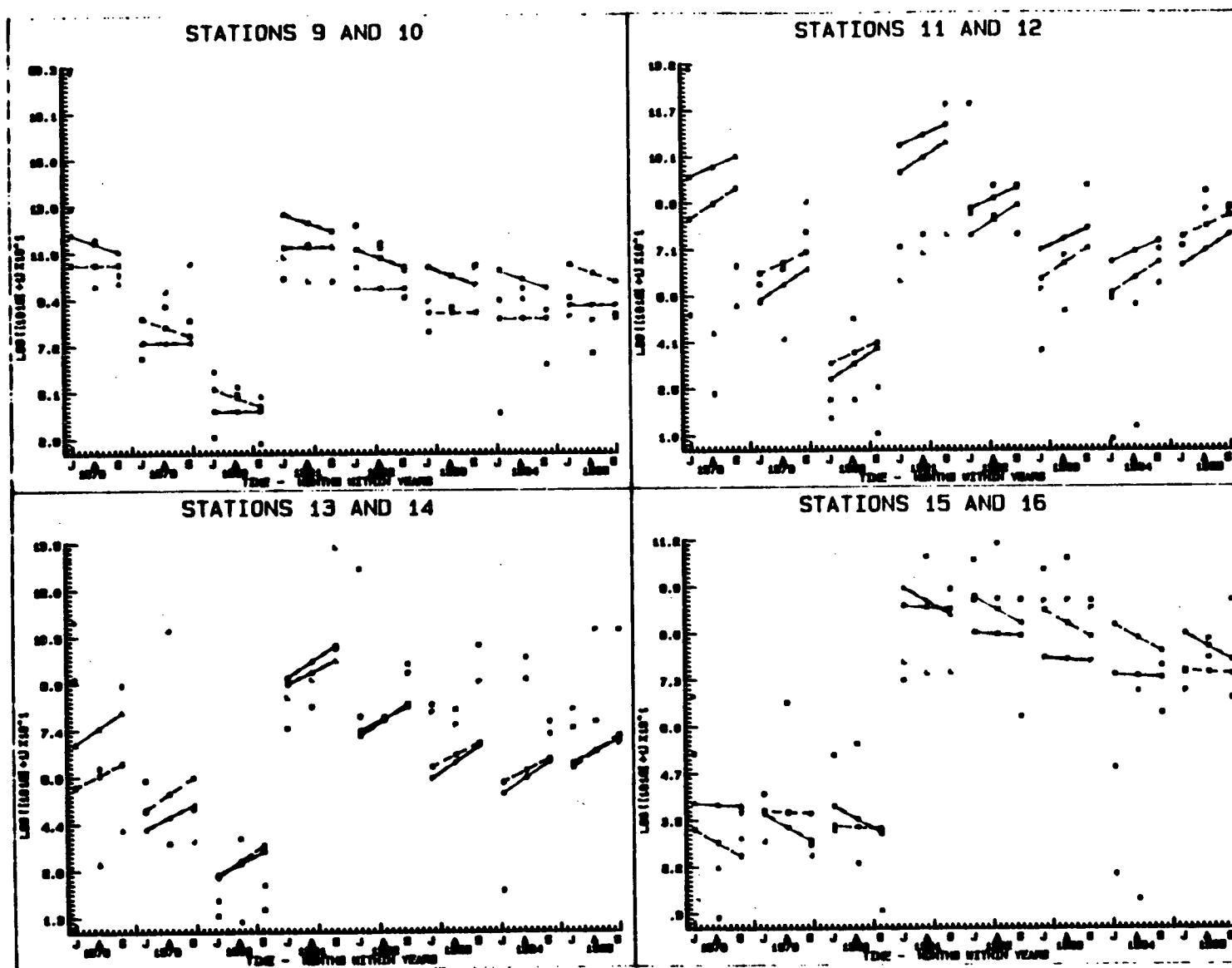


Figure 15. Time-specific spatial trends model. Complete model as in Fig. 13B, showing pairs of stations. Each line indicates 3 monthly samples for each station.

13, where changes at individual stations are plotted, that this effect varies by station. Upriver stations show the above ordering but downriver stations 11-14 show September > August > July ordering; mid-river stations (Stations 8-10; Waterford to Castleton) show smaller monthly effects (see also Appendix A, G_p column 5). This reverses again at Peekskill (Station 15); the two sites below the region of salt water intrusion again show the trend to July > August > September ordering. These monthly effects are seen more clearly in Figures 14 and 15, in which the results in Figure 13B are shown in pairs of sites.

The model for within-station change over time (station-specific temporal trends) is factorial in nature; sampling was conducted over 3 months in each of 8 years (Figure 16). However, no month-by-year interactions were discovered; that is, the pattern of monthly changes between July, August, and September was not significantly different in different years. A sequence of models (Figures 17-21), again using polynomials for the main effects, was prepared based on Table 6. The design matrix and parameter estimates are shown in Table W and Table G_w in Appendix A.

Fig. 17A shows the estimates at each station when all yearly sample months are averaged, and reveals the overall curvilinear (specifically quadratic) nature of the change in concentration for stations downriver from Station 1, as seen in the data (Figure 16). Any discontinuity at Troy (Station 9), if actually present, is not visible due to the variability of the data collected. Station 1, however, as suggested by its location upriver from the point of introduction of PCBs, has a much lower concentration. The data show that over time downriver stations have consistently lower PCB concentrations than preceding upriver stations, except for slight post-1981 increases at Stations 15 and 16. The concentration at the last downriver station does

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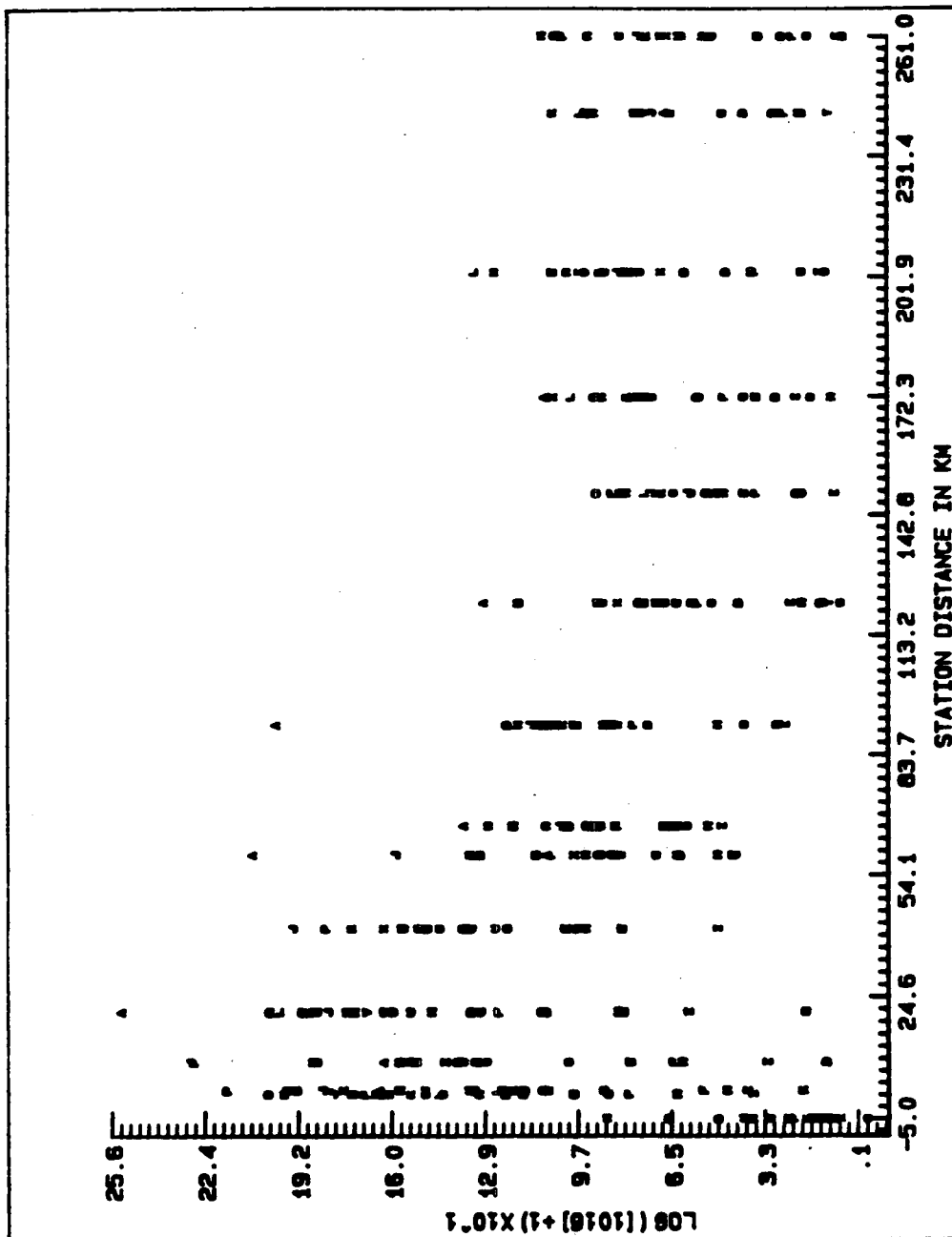


Figure 16. Multiplate samples, 1978-1985. 8 years collected over 15 stations. Scale of log transformed data is shown as 101 for ease of plotting.

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TABLE 6. Analysis of variance table for station-specific temporal trends model.

Source of Variation	SS	DF	MS	F	Sig of F
78-80 vs BEST	256.16502	1	256.16502	1030.13834	.000*
LINEAR EFFECT	3.51224	1	3.51224	66.05118	.000*
QUADRATIC EFFECT	.03866	1	.03866	1.02353	.333
CUBIC EFFECT	5.05091	1	5.05091	73.88324	.000*
QUARTIC EFFECT	7.04062	1	7.04062	93.96218	.000*
FIFTH POWER	1.04782	1	1.04782	12.77674	.004*
SIXTH POWER	2.74471	1	2.74471	46.96953	.000*

Effects Associated With Months					
LINEAR EFFECT	.96215	1	.96215	51.87268	.000*
QUADRATIC EFFECT	.00000	1	.00000	.00002	.997

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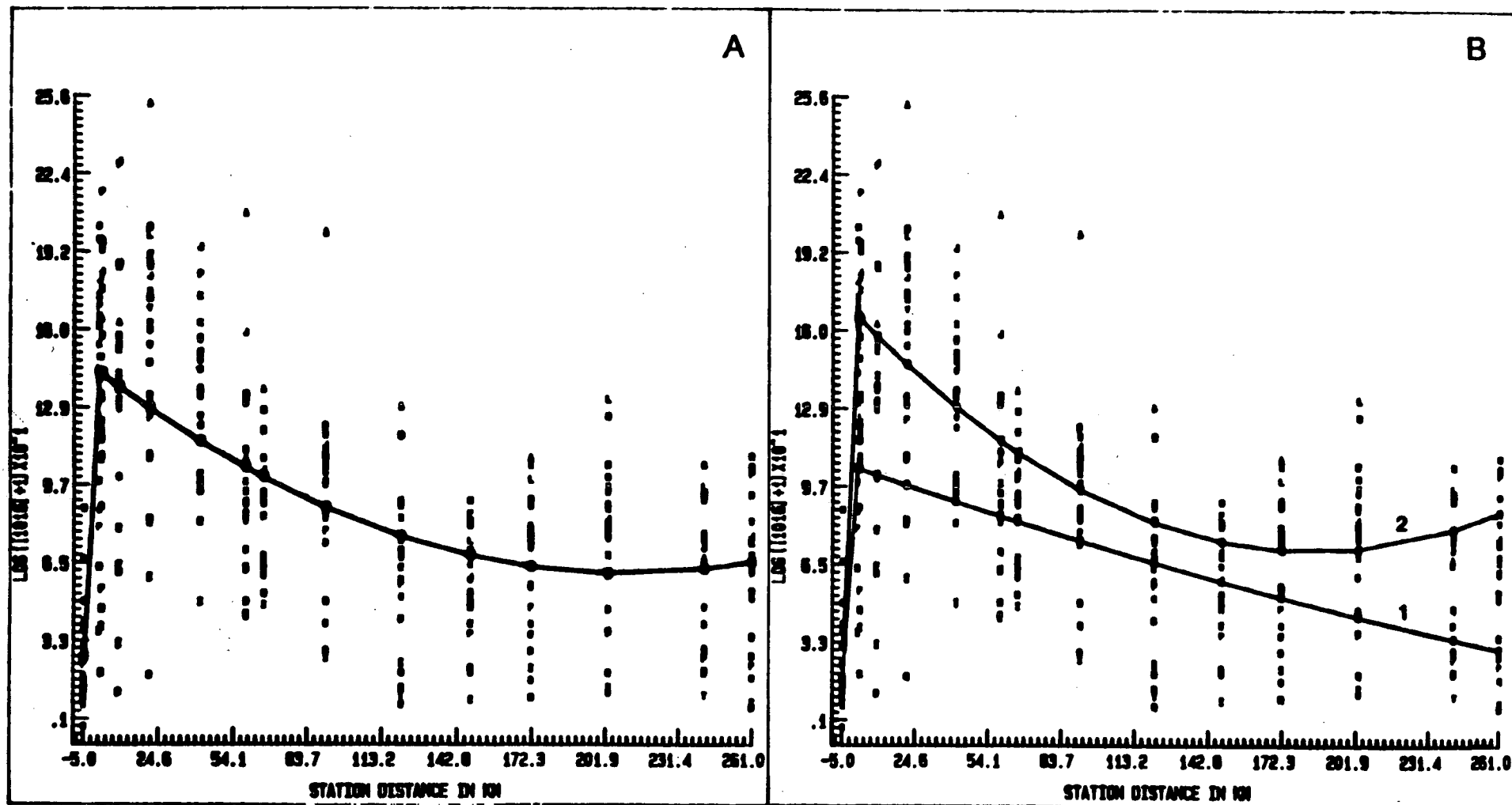


Figure 17. Station-specific temporal trends model.

A. Mean for all 8 years sampled.

B. Means for 2 eras - 1978 through 1980 (1) and 1981 through 1985 (2).

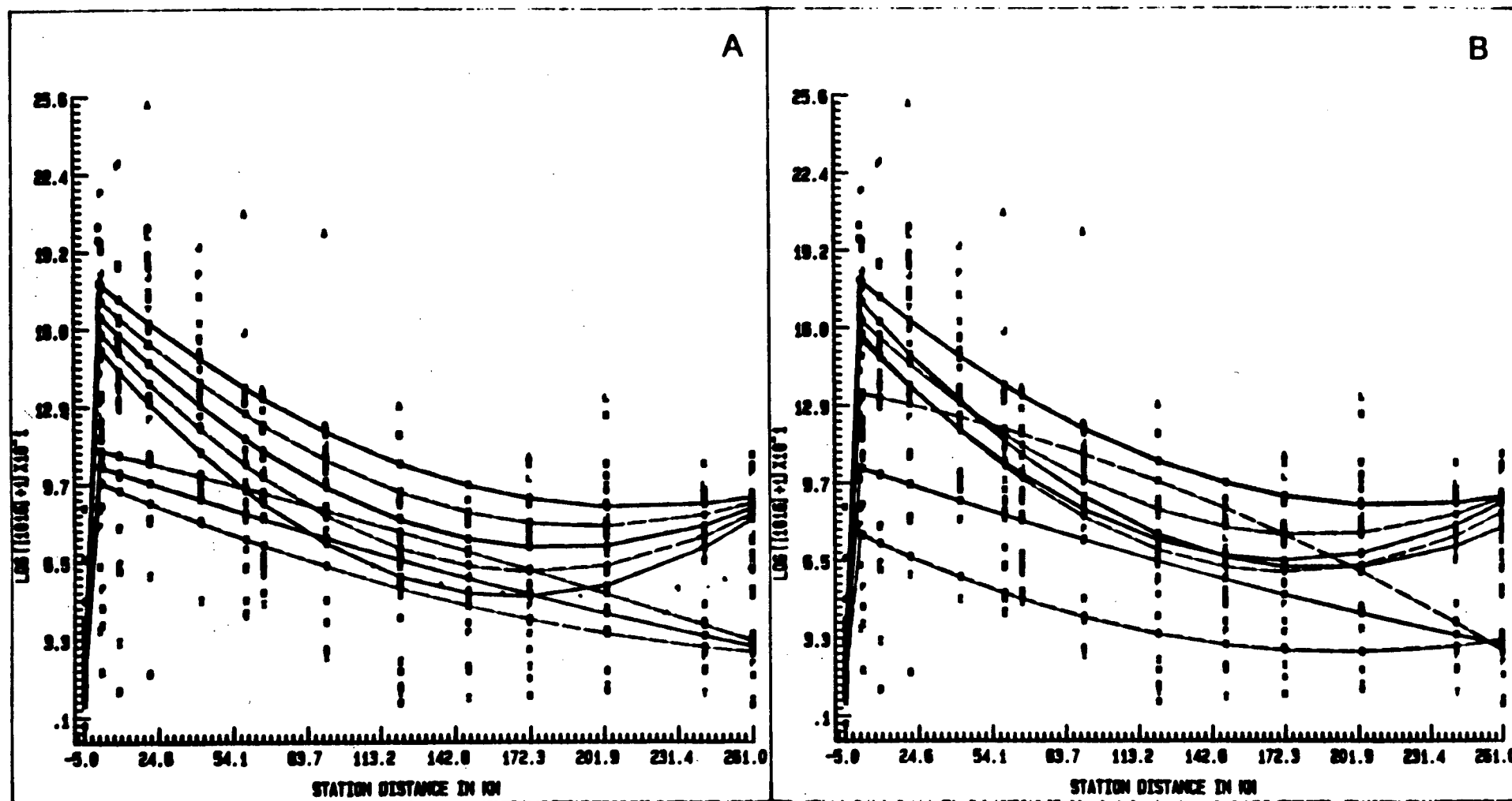


Figure 18. Station-specific temporal trends model. Each line indicates 1 of 8 years sampled, 1978-1985.
 A. Addition of linear effects.
 B. Addition of cubic effects.

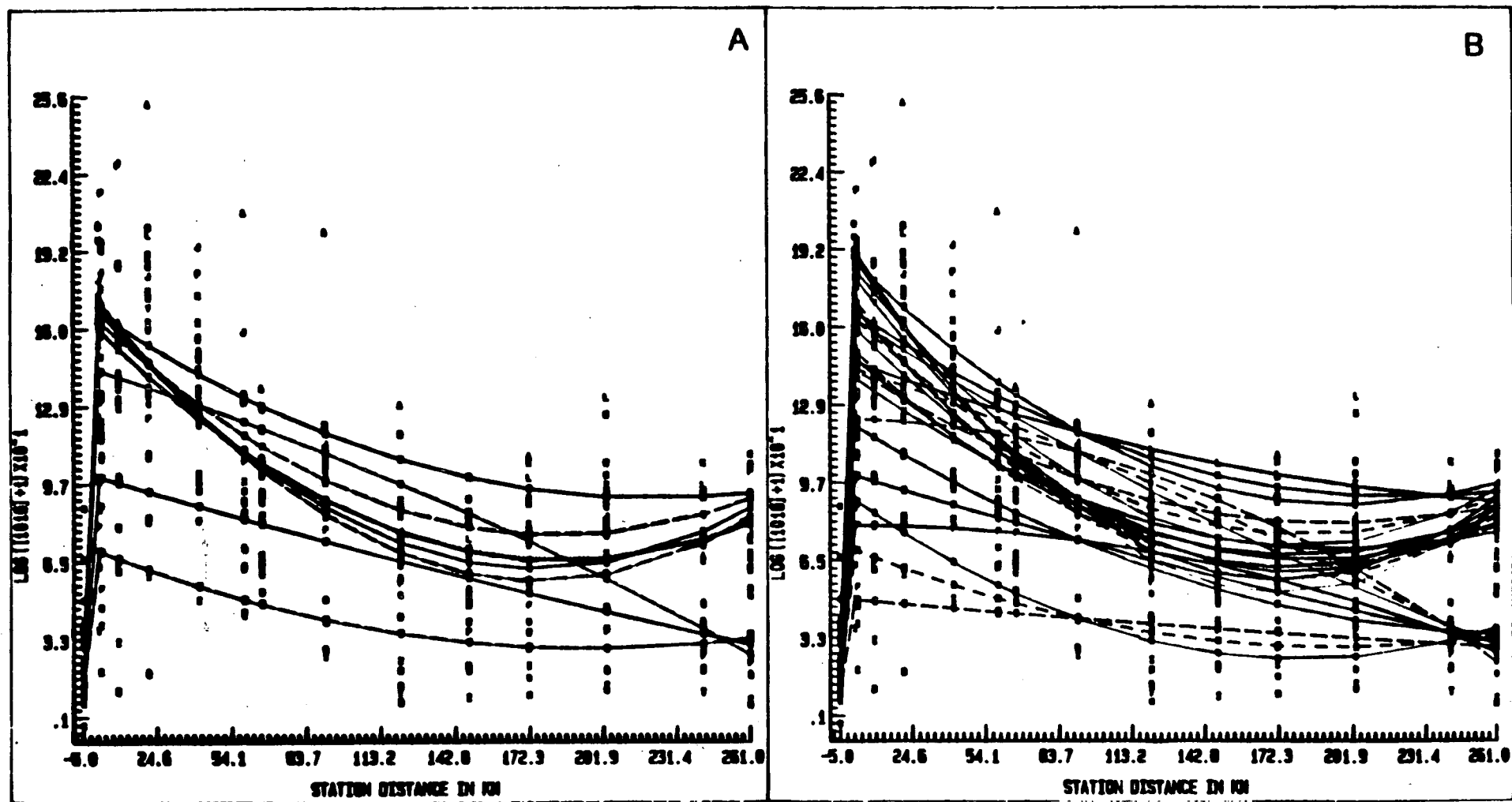


Figure 19. Station-specific temporal trends model.

- A. Addition of quartic effects for year. Each line indicates 1 of 8 years sampled, 1978-1985.
 B. Addition of linear effects for month. Each line indicates one month's samples: July (—); August (----); September (---). (complete model). (see Figs. 20 and 21 for individual years displayed.).

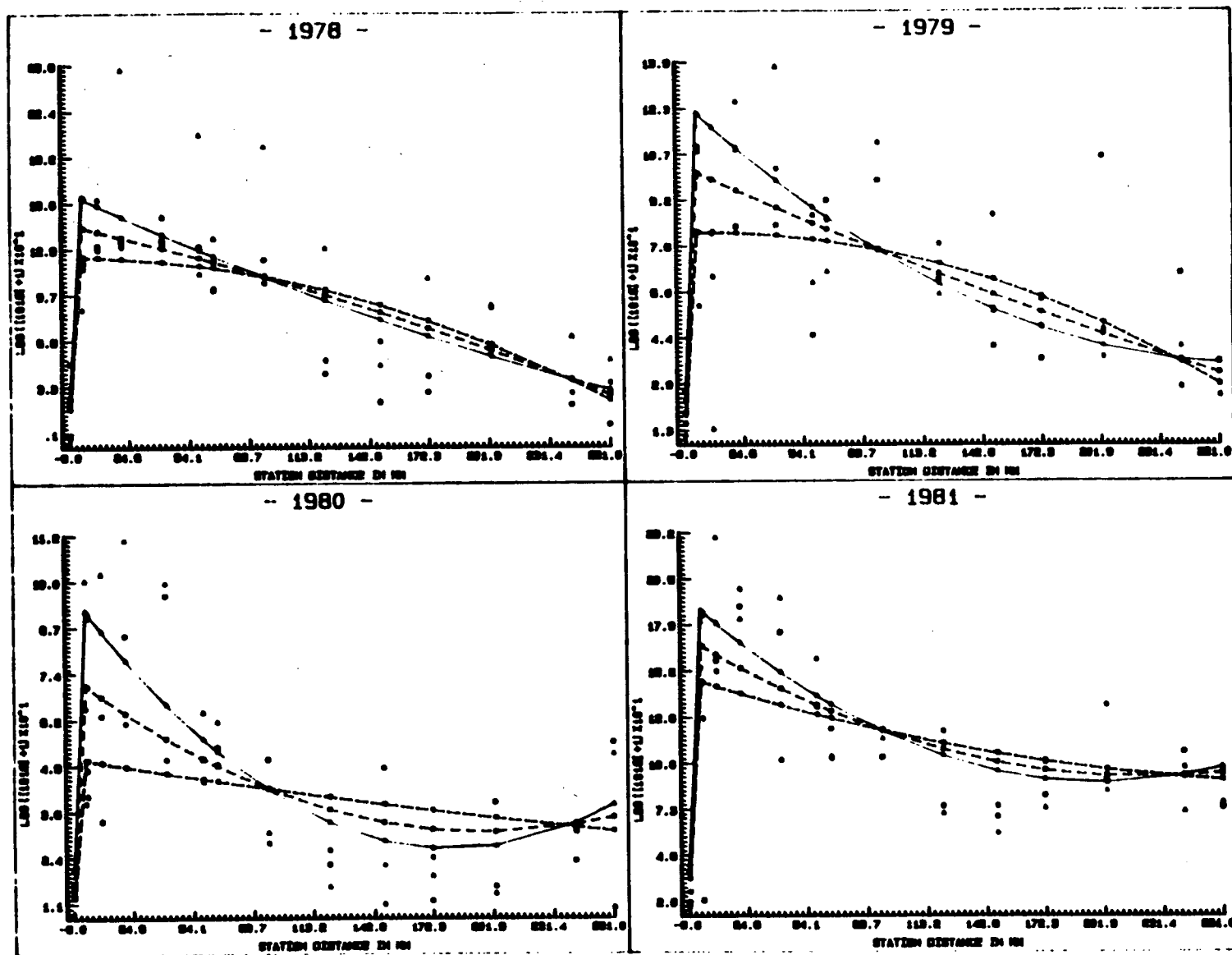


Figure 20. Station-specific temporal trends model. Complete model as shown in Fig. 19B, showing monthly effects for each year (July — ; August - - - ; September - - -).

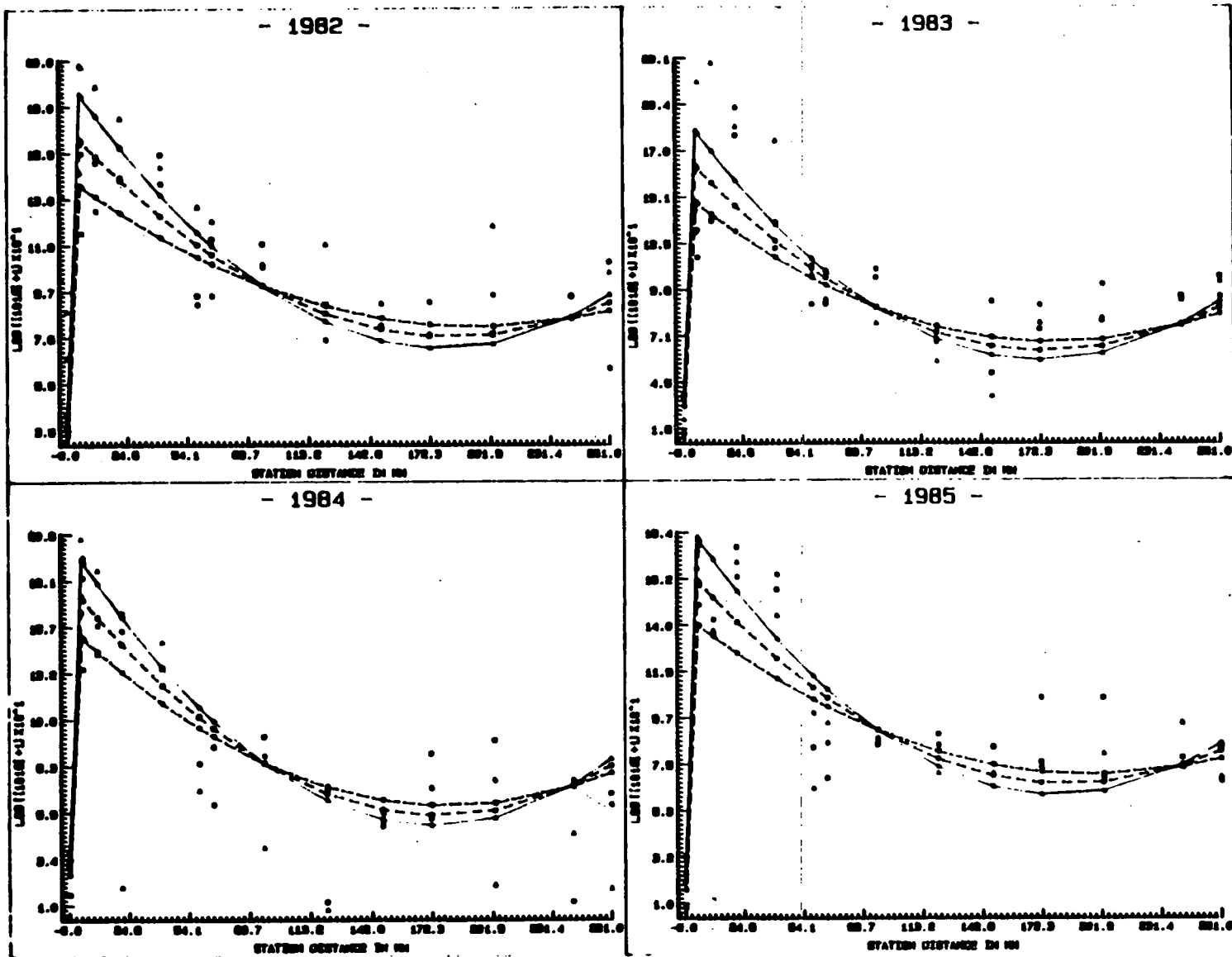


Figure 21. Station-specific temporal trends model. Complete model as shown in Fig. 19B, showing monthly effects for each year (July — ; August - - - ; September - · - ·).

not decrease to the level of Station 1 in either the 1978-1980 or 1981-1985 time period. Figure 17 shows averages segregated into before and after 1981 groups. Only 2 models are visible since the three pre-1981 models are identical as are the five post-1980 models.

The introduction of yearly effects (Figures 18, 19A) splits the two lines of Fig. 17B into 8 separate lines (3 for the period from 1978-1980; 5 for the period from 1981-1985). The eight possible individual plots have been overlaid to permit comparisons between years. In each case, the differing patterns of change over location in the river in each of the eight time periods (linear change prior to 1981; quadratic for 1981-1985) is clearly preserved. The introduction of linear monthly effects to the model (Figure 19B) splits each yearly line into three separate lines corresponding to each month; the resulting plot simultaneously displays 8 years x 3 months, or 24 possible individual plots. These monthly effects are shown more clearly in Figures 20 and 21, in which the July, August, and September samples are shown over the length of the river for each year. The statistical significance of the fifth and sixth powers of year (Table 6) indicates that sufficient data were collected to differentiate very small yearly effects; no year was statistically identical to the preceding year. However, the contribution of the 5th and 6th power effects is too small to substantively alter the view of yearly changes indicated by the selected model.

The preceding results have been presented in terms of separate models for the change among stations along the river and within individual stations. The final model fits both aspects simultaneously, and thereby introduces interaction effects. A strong interaction exists between the linear effect of station and the 1978-1980 vs. 1981-1985 effect; that is, the linear decrease in 1016 concentration downriver was different in 1978-1980 when compared to 1981-1985. This can be seen in Fig. 18; if there were no interaction, the

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TABLE 7. Analysis of variance table for final model, with interaction effects.

Variable	DF	SS	F	Sig. of F
Interactions with 78-80 vs 81-85				
Sta 1 vs REST	1	9.58537	38.54648	.000*
Sta Linear	1	19.67542	79.12245	.000*
Sta Quadratic	1	3.60272	14.48793	.003*
Residual	11	.24867		
Interactions with Year Linear				
Sta 1 vs REST	1	.11367	2.13777	.172
Sta Linear	1	.09012	1.69482	.220
Sta Quadratic	1	2.38115	44.78001	.000*
Residual	11	.05317		
Interactions with Year Cubic				
Sta 1 vs REST	1	.08627	1.26199	.285
Sta Linear	1	.92044	13.46401	.004*
Sta Quadratic	1	.15203	2.22391	.164
Residual	11	.06836		
Interactions with Year Quartic				
Sta 1 vs REST	1	.11691	1.56030	.238
Sta Linear	1	.05830	.77804	.397
Sta Quadratic	1	.00243	.03237	.860
Residual	11	.07493		
Interactions with Month Linear				
Sta 1 vs REST	1	.00000	.00006	.994
Sta Linear	1	.20277	10.93214	.007*
Sta Quadratic	1	.15946	8.59719	.014*
Residual	11	.01855		

lines would be parallel. Also, the increase in 1016 concentration observed for 1978-1980 vs 1981-1985 was different at different stations. This may be seen in Fig. 13; the increase associated with station 1 was much smaller than the average increase associated with the downriver stations. The parameter estimates for the interaction effects are described in Appendix A. Not all of the interaction effects are statistically significant; the seven significant interactions have been marked with an asterisk in Table 7.

Hydropsychidae

Composition of Samples

In 1978 and 1979, samples consisting of several species and described as mixed Hydropsychidae were collected. Beginning in 1980, identification to genus or species was carried out.

Seven taxa were collected in numbers large enough for samples, which varied from 3 to 100 individuals, depending upon larval size. Macronemum and Cheumatopsyche (green form) were identified to genus only, while five Hydropsyche were identified to species: H. betteni, H. dicantha, H. venularis, H. leonardi, and H. scalaris. H. dicantha and H. venularis were collected infrequently in quantities large enough for samples. Sample numbers and sizes are shown in Table 8.

Spatial and Temporal Trends

Untransformed monthly station means for total PCBs for each year are shown in Figures 22 through 25. Total PCBs at the control station (Station 1 - Hudson Falls) ranged from 1.0 to 16.3 µg/gm. Concentrations at the downriver stations ranged from 10.6 to 101.1 µg/gm dry weight. The number of samples each month at each station varied according to the availability of larvae and water conditions. Station 8 at Waterford was not sampled at several times because of high water conditions at the site.

TABLE 8. Hydropsychid Caddisfly Species Collected in the Upper Hudson River, 1978 - 1985

SPECIES	SAMPLES/STATION					TOTAL NUMBER OF SAMPLES
	Hudson Falls	Fort Edward	Fort Miller	Stillwater	Waterford	
<u>Cheumatopsyche</u> spp.	2	23	16	11	7	59
<u>Macronemum</u> sp.	0	0	3	9	1	13
<u>Hydropsyche betteni</u>	32	6	15	0	0	53
<u>Hydropsyche dicantha</u>	2	0	2	0	0	4
<u>Hydropsyche venularis</u>	2	0	0	4	2	8
<u>Hydropsyche leonardi</u>	1	12	24	27	17	81
<u>Hydropsyche scalaris</u>	1	11	7	5	2	26
Mixed hydropsychids	7	13	11	14	6	51

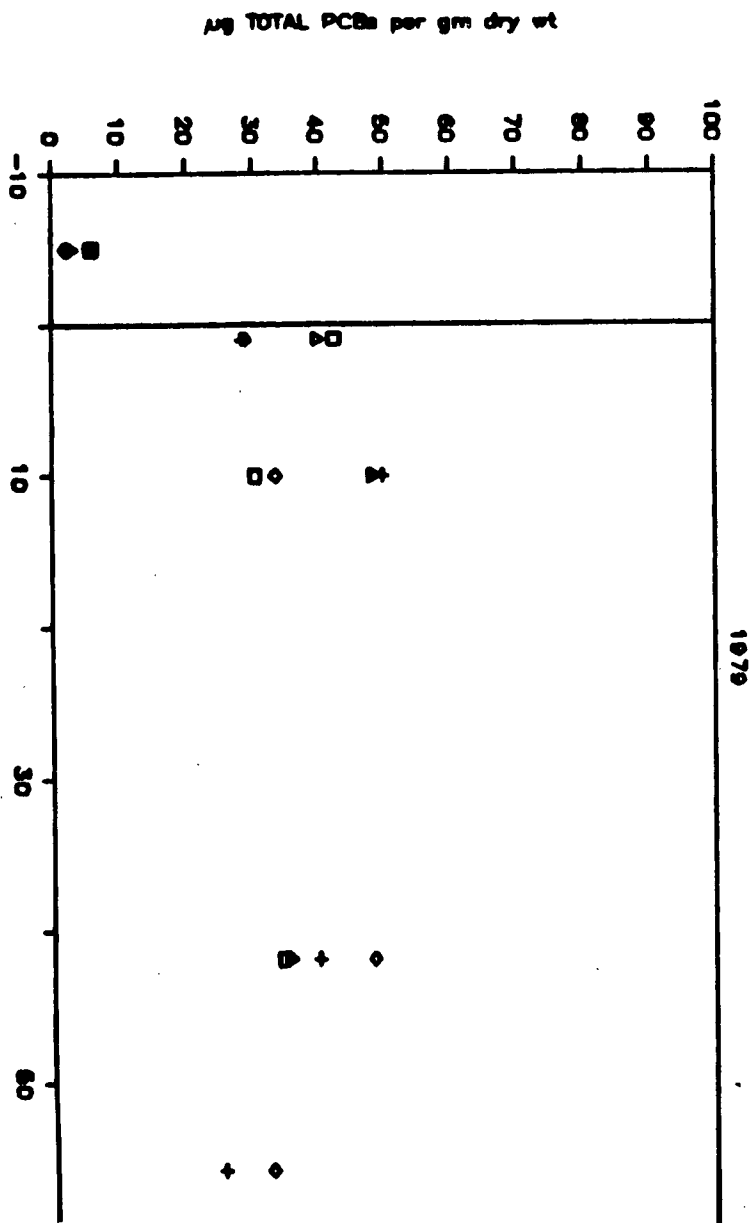
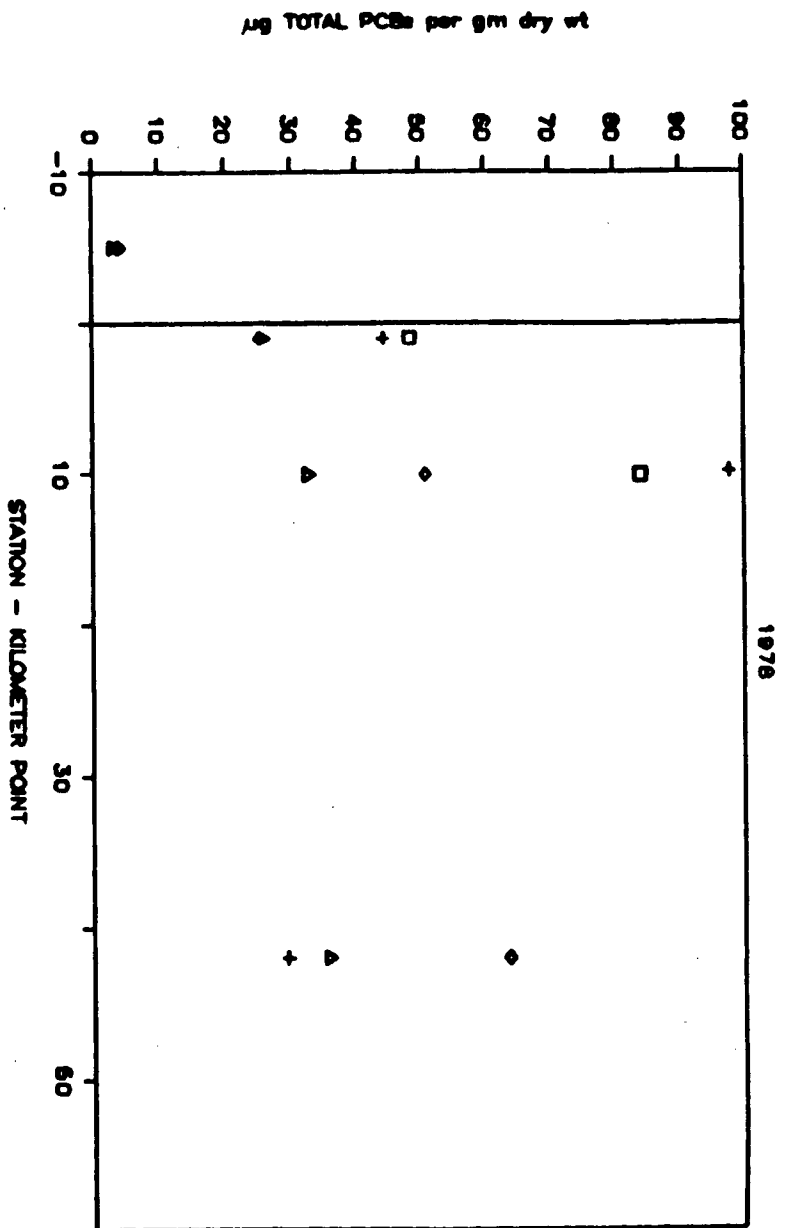


Figure 22. Total PCBs in caddisflies (ppm), 1978-1979. Shown are station means for each month sampled; each symbol is the mean of 1 to 3 samples. The 0 kilometer point is the site of the former Fort Edward dam.

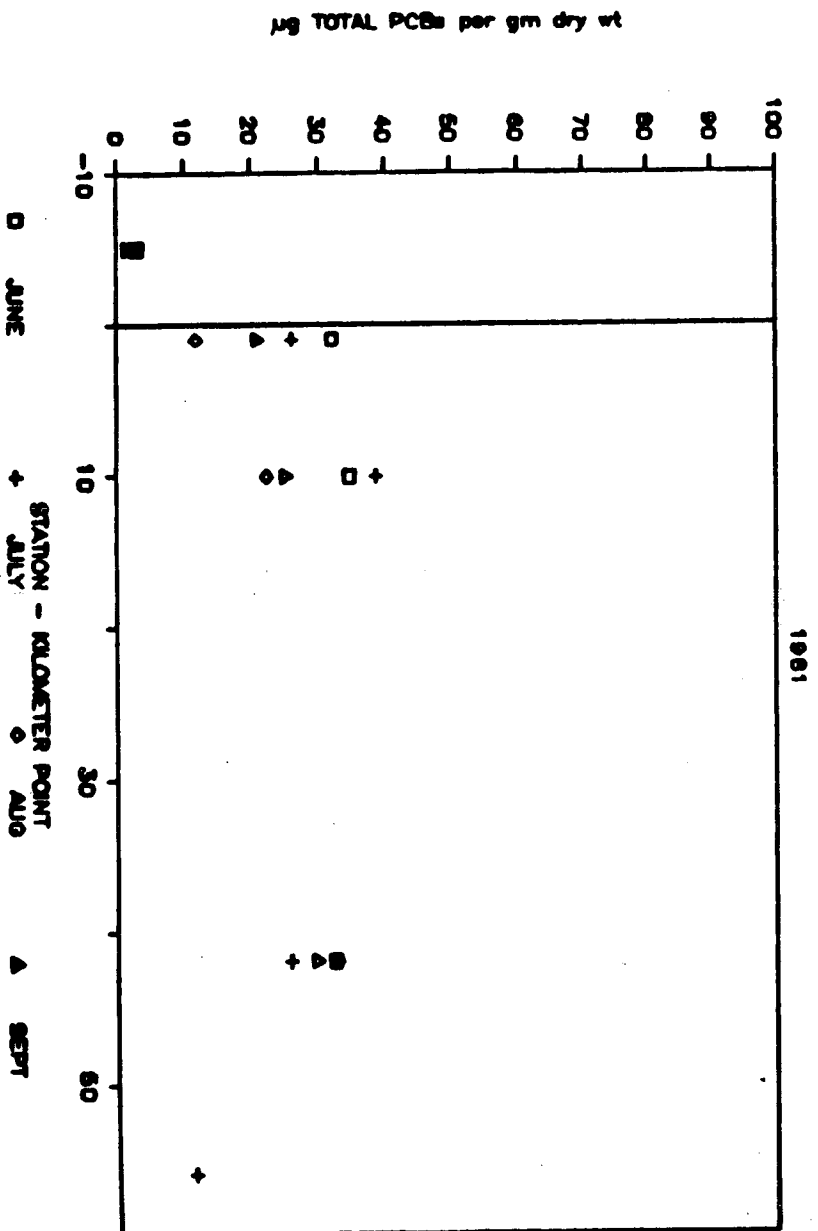
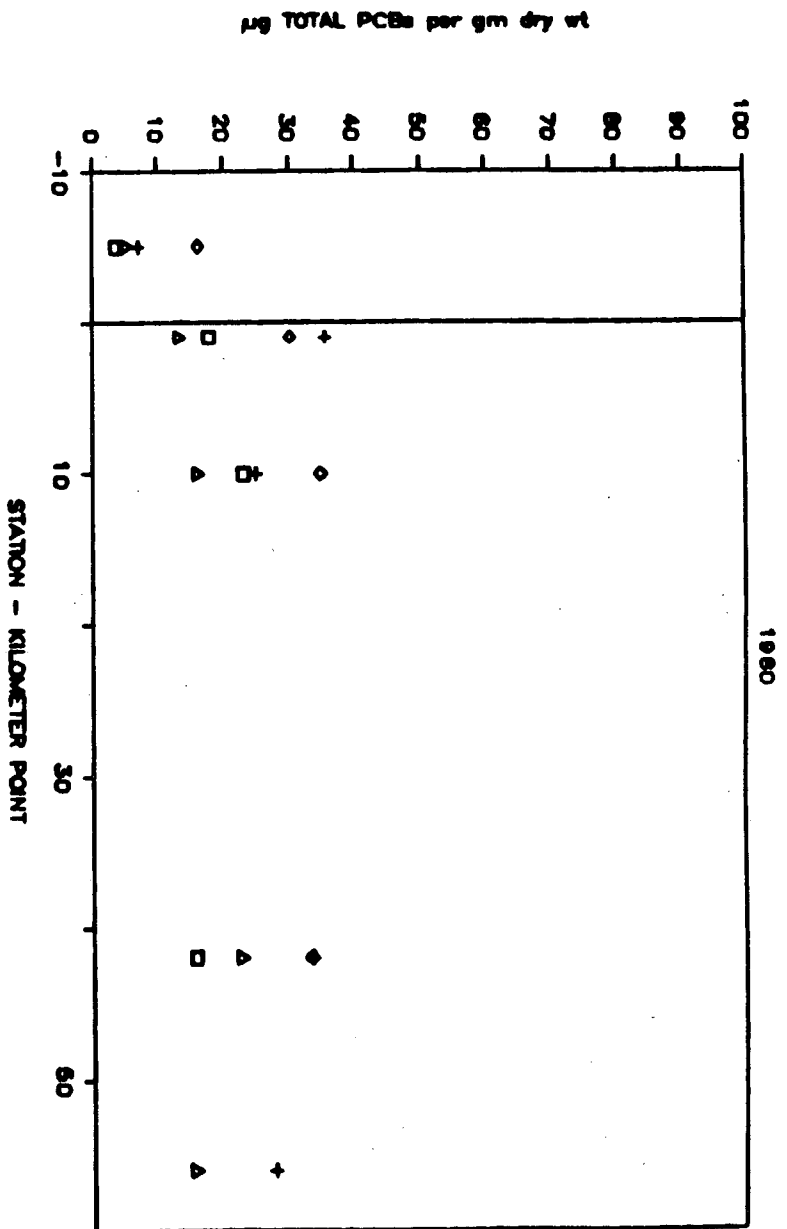


Figure 23. Total PCBs in caddisflies (ppm), 1980-1981. Shown are station means for each month sampled; each symbol is the mean of 1 to 4 samples. The 0 kilometer point is the site of the former Fort Edward dam.

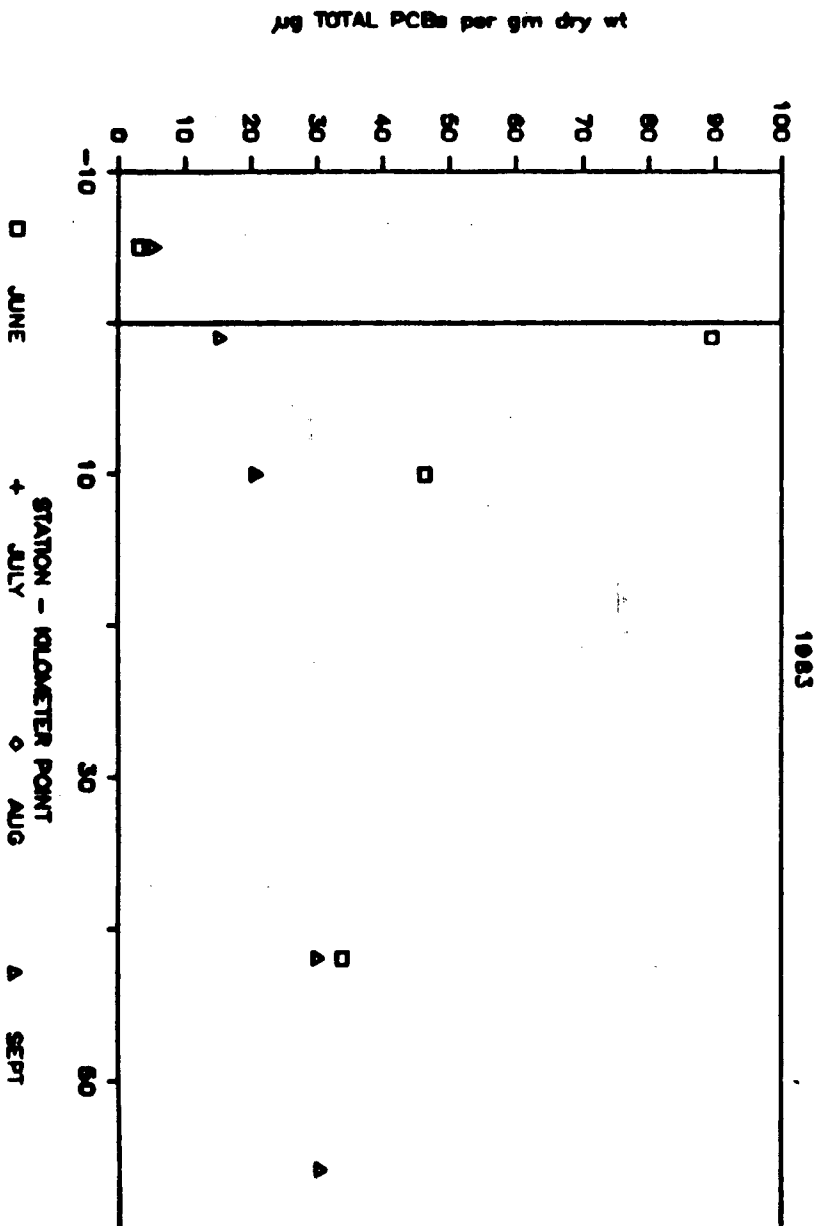
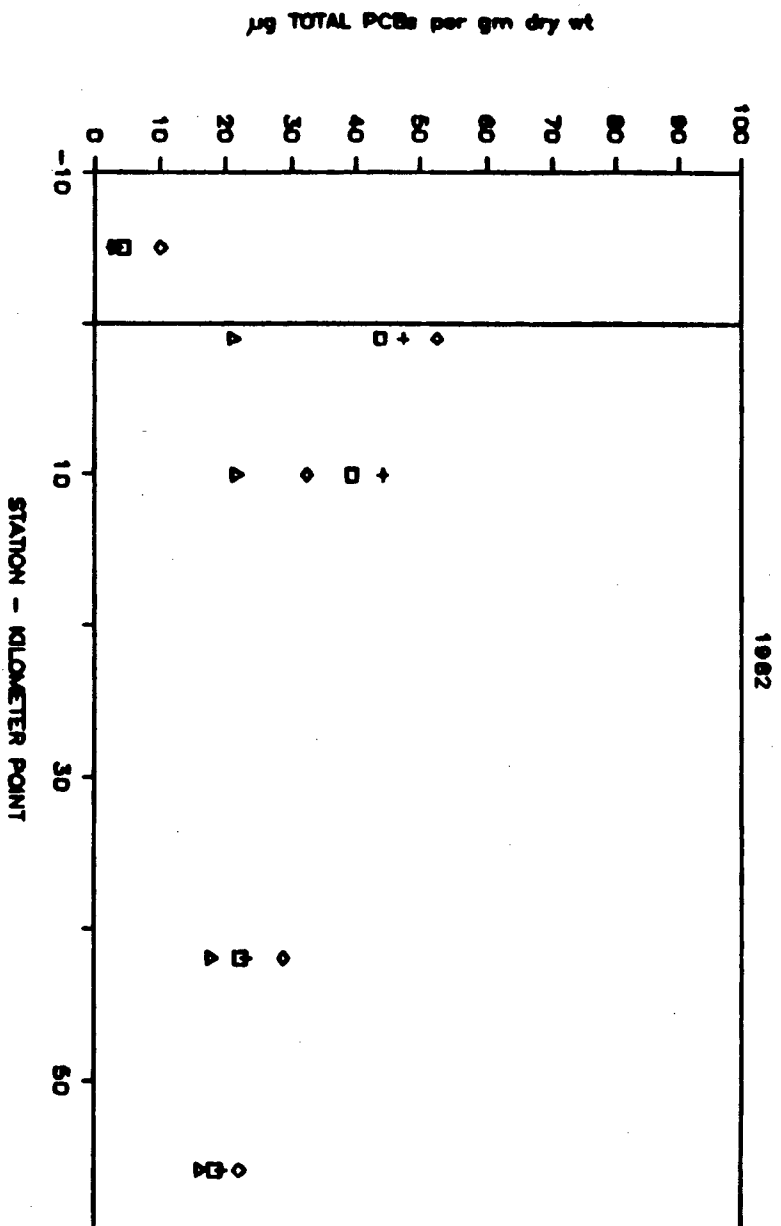


Figure 24. Total PCBs in caddisflies (ppm), 1982-1983. Shown are station means for each month sampled; each symbol is the mean of 1 to 4 samples. The 0 kilometer point is the site of the former Fort Edward dam.

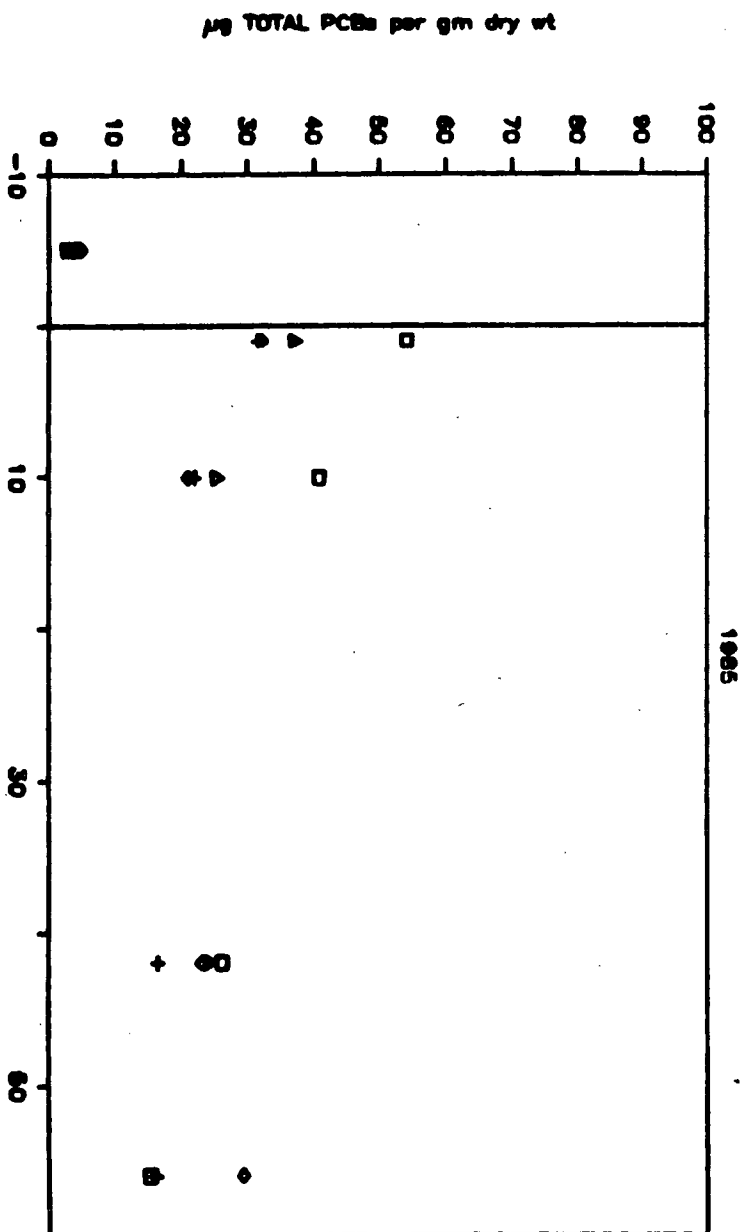
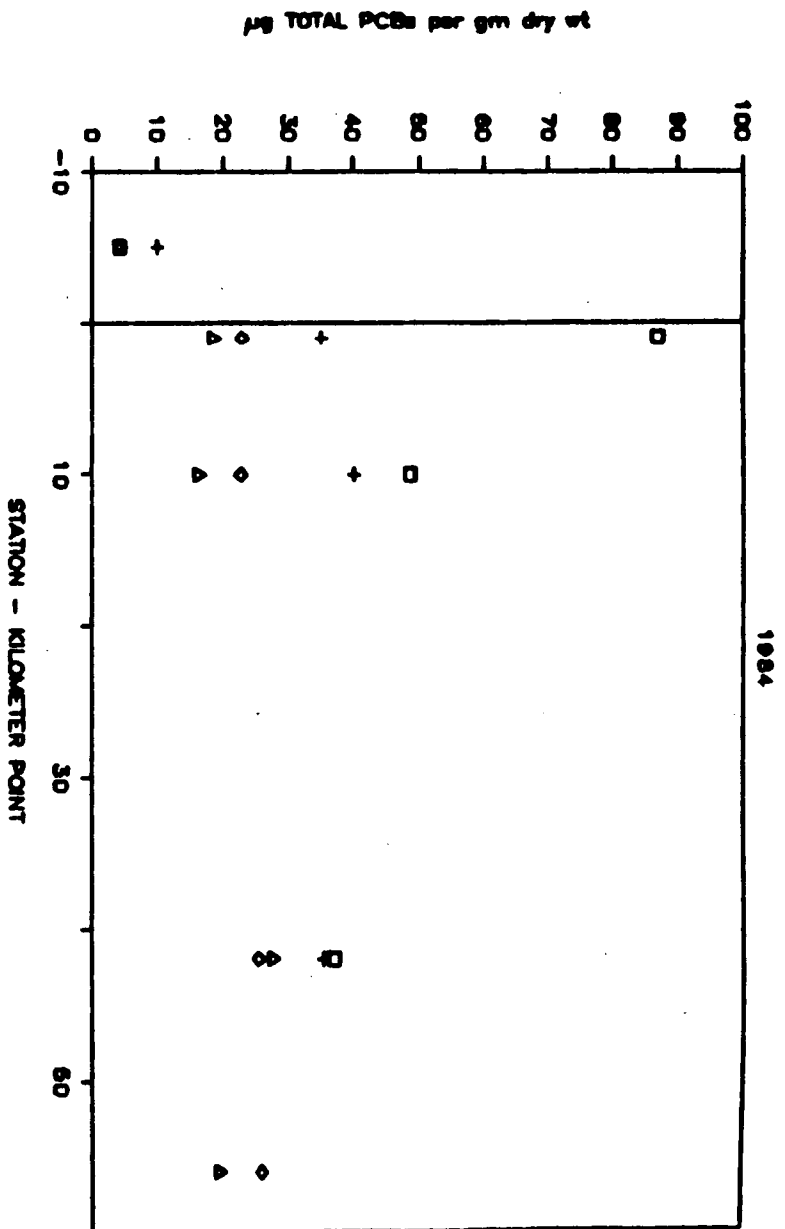


Figure 25. Total PCBs in caddisflies (ppm), 1984-1985. Shown are station means for each month sampled; each symbol is the mean of 1 to 6 samples. The 0 kilometer point is the site of the former Fort Edward dam.

GMM 002 0269

As with the multiplate samples, Aroclor 1016 and Aroclor 1254 were highly and positively correlated ($r = 0.687$) as shown in Figure 26. Trends from year to year and station to station are similar for Aroclor 1016 and 1254, and thus, for total PCBs.

In each year, the control station at Hudson Falls (Station 1) had significantly lower concentrations of both 1016 and 1254 than any of the downriver stations (Figures 22 to 25).

The years 1982 and 1985 were the only ones sampled in which significant decreases in either Aroclor 1016 or Aroclor 1254 concentrations could be detected over the reach of the river from Fort Edward (Station 2) to Waterford (Station 8).

For the other six years sampled, the slopes of the regression lines were not significantly different from zero. Thus, the intercepts of the regression lines can be used to make comparisons of changes with year. In these comparisons, 1982 and 1985 intercepts were used and treated as for the other years, although the intercept does not accurately describe the line for these two years. Figures 27 through 30 show the best-fit regression lines for each year and each Aroclor mixture, with 95% confidence intervals for the intercepts. These are shown to the left of the intercept for clarity. There are no clear cut trends toward decreasing concentrations of either Aroclor 1016 or Aroclor 1254. For Aroclor 1016 (Figure 27 and 28), levels decreased significantly from 1978/1979 to 1980, but rose again and remained high in 1981 through 1985. The concentrations of Aroclor 1016 were not significantly different in any year except 1980.

The trends for Aroclor 1254 are less consistent than those for 1016. In 1978 - 1980, concentrations were not significantly different from each other, but dropped significantly in 1981. This trend was reversed in 1982, with a rise in 1254 levels, decreasing again in 1983 through 1985.

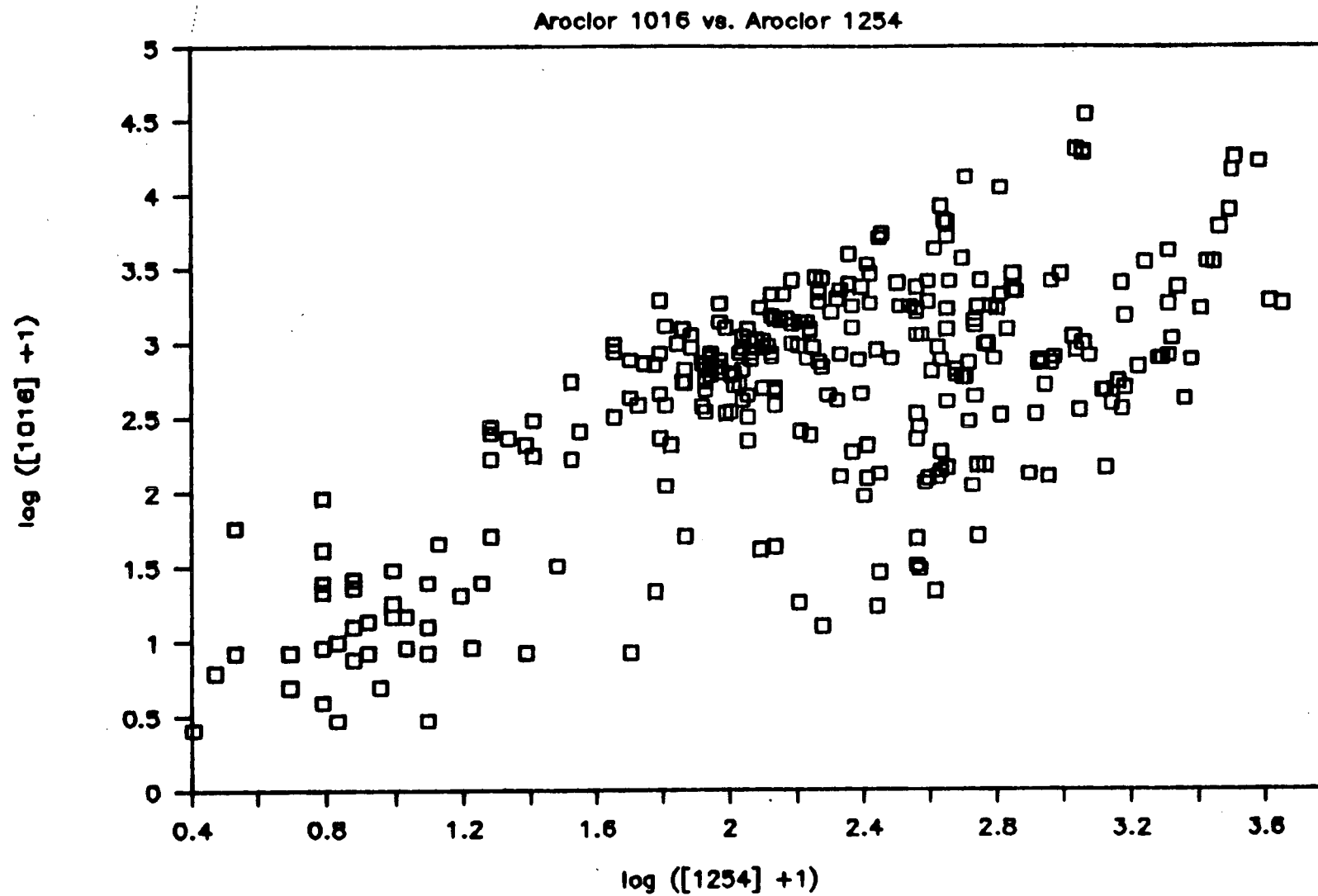


Figure 26. Correlation of Aroclor 1016 and Aroclor 1254 for all caddisfly stations, 1978 - 1985, (values transformed by $\ln([1016] + 1)$ and $\ln([1254] + 1)$); $r = 0.687$.

AROCLOR 1016: 1978 - 1981

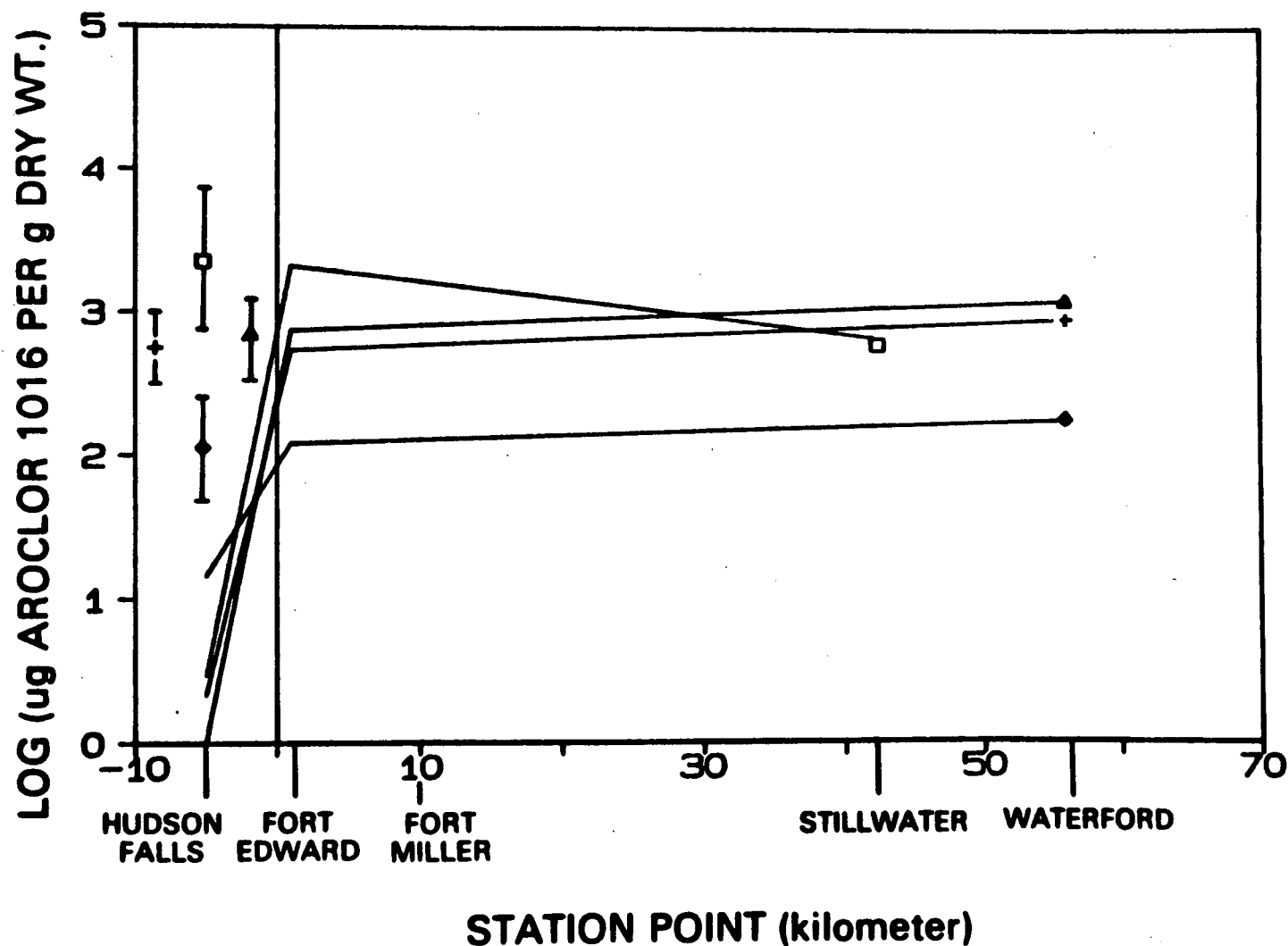


Figure 27. Aroclor 1016 in caddisflies, 1978-1981. Regression of log Aroclor 1016 on km point in river. 0 km point intercepts with 95% CL shown to left of line (78: □; 79: +; 80: ♦; 81: ▲). Hudson Falls (-5km) is control station, removed from calculation of regression line for downriver stations. Slopes of all lines are not significantly different from 0 at P=0.05.

AROCOR 1016: 1982 — 1985

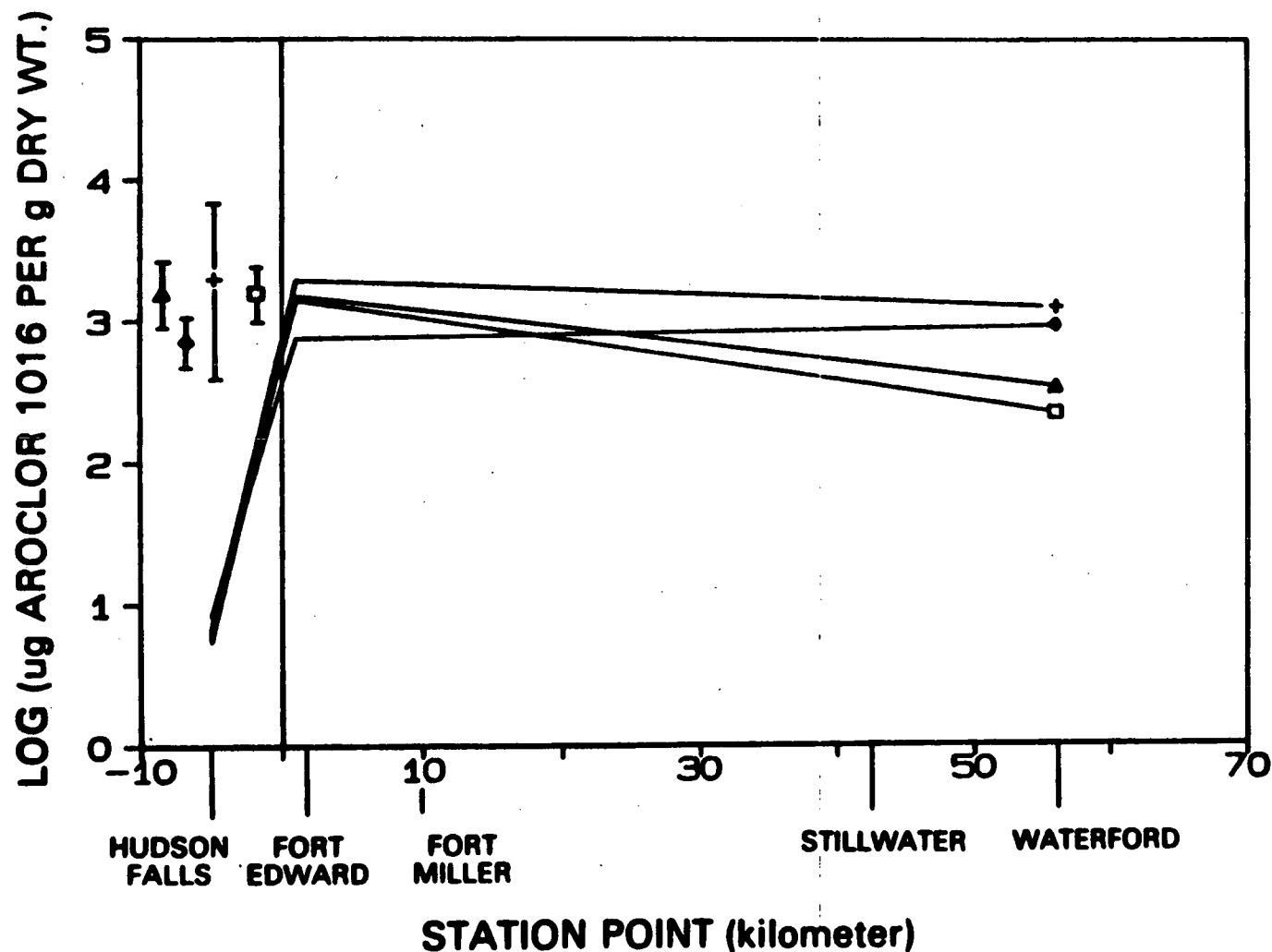


Figure 28. Aroclor 1016 in caddisflies, 1982-1985. Regression of log Aroclor 1016 on km point in river. 0 km point intercepts with 95% CL shown to left of line (82: $\square$; 83: $+$; 84: $\blacklozenge$; 85: $\blacktriangle$). Hudson Falls (-5km) is control station, removed from calculation of regression line for downriver stations. Slopes of lines for 1982 and 1985 are significantly different and for 1983 and 1984 are not significantly different from 0 at $P=0.05$.

AROCLOR 1254: 1978 - 1981

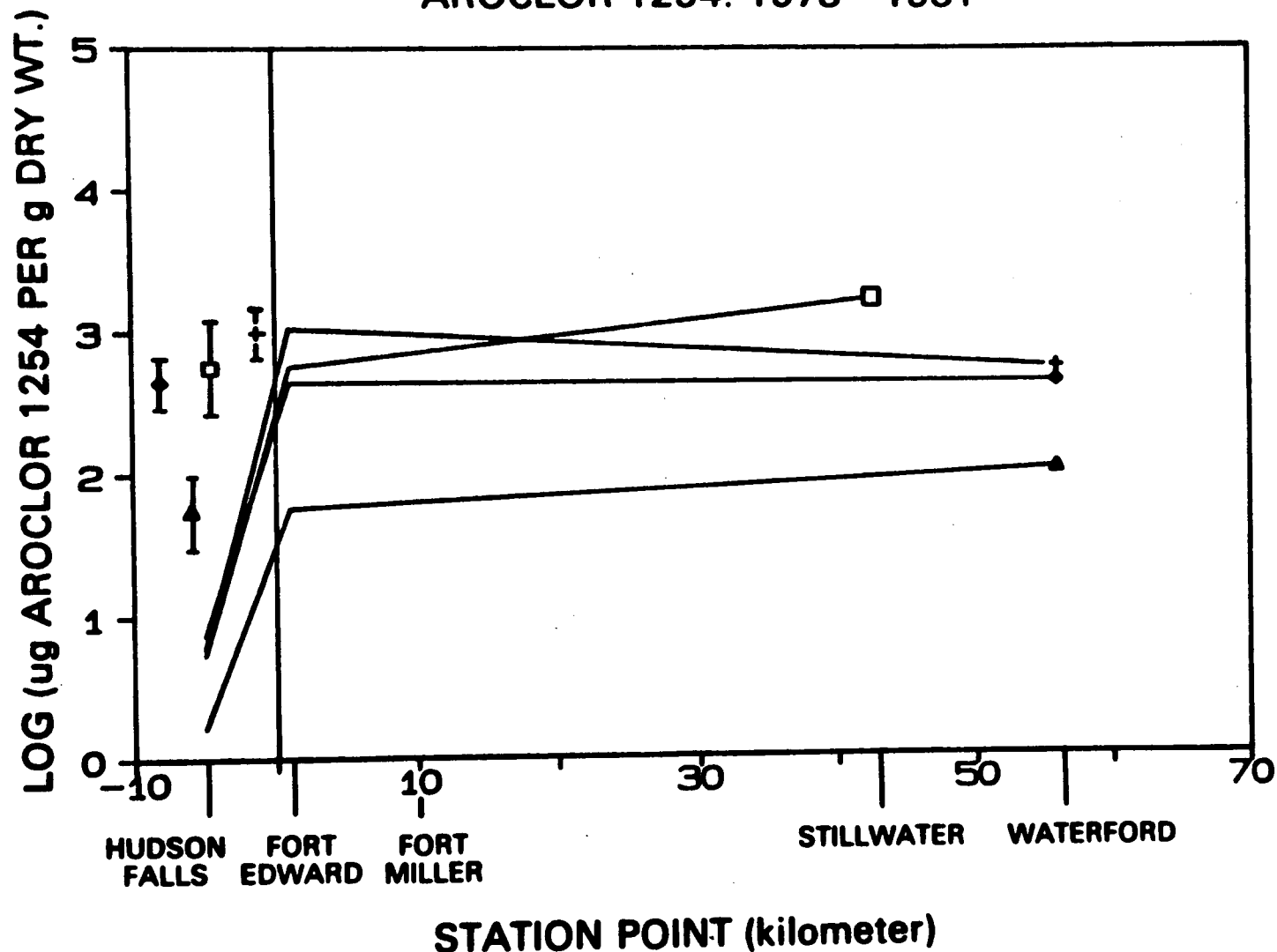


Figure 29. Aroclor 1254 in caddisflies, 1978-1981. Regression of log Aroclor 1254 on km point in river. 0 km point intercepts with 95% CL shown to left of line (78: □; 79: +; 80: ◆; 81: ▲). Hudson Falls (-5km) is control station, removed from calculation of regression line for downriver stations. Slopes of all lines are not significantly different from 0 at $P=0.05$.

AROCLOR 1254: 1982 — 1985

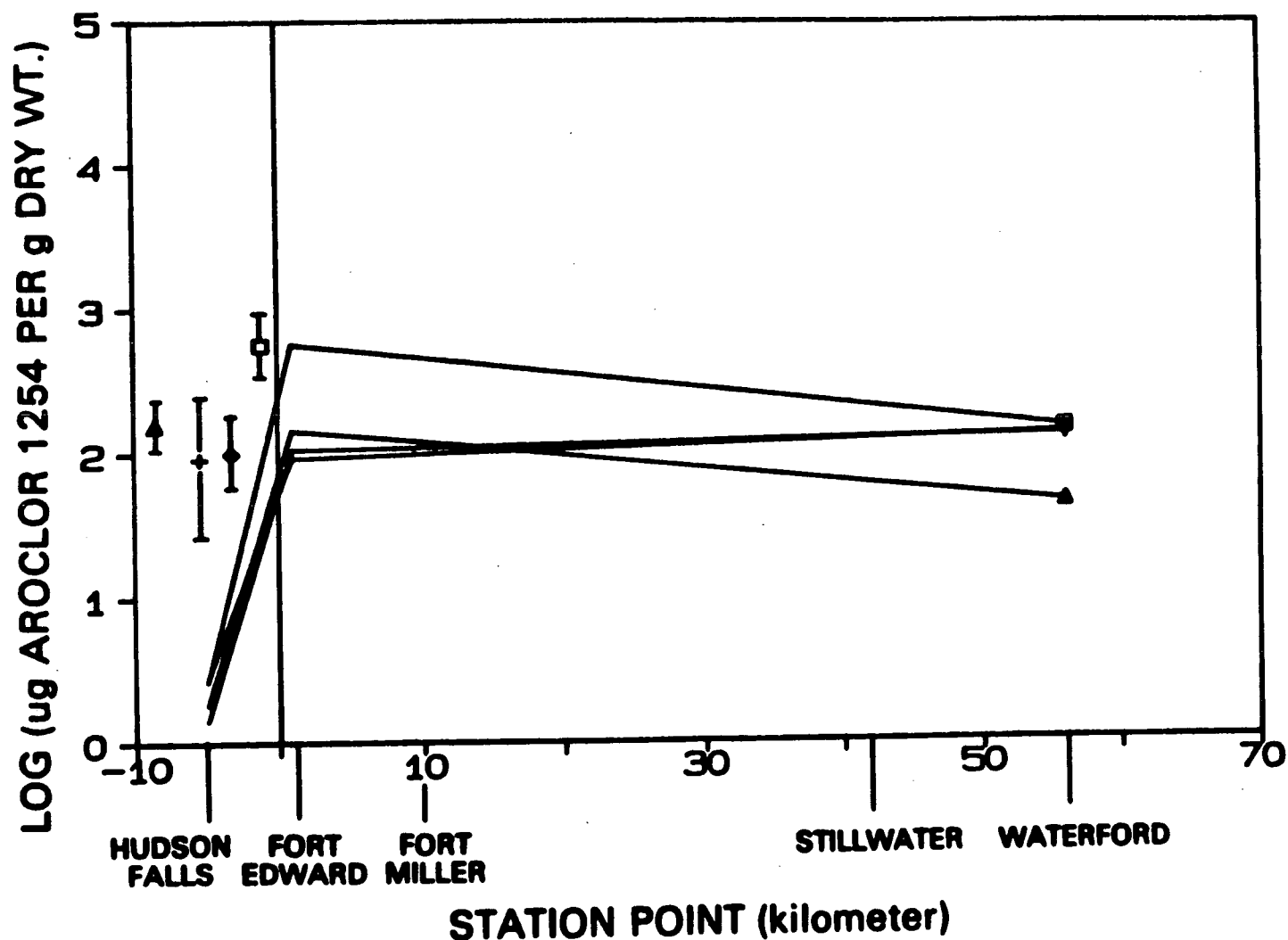


Figure 30. Aroclor 1254 in caddisflies, 1982-1985. Regression of log Aroclor 1254 on km point in river. 0 km point intercepts with 95% CL shown to left of line (82: $\square$; 83: $+$; 84: $\blacklozenge$; 85: $\blacktriangle$). Hudson Falls (-5km) is control station, removed from calculation of regression line for downriver stations. Slopes of lines for 1982 and 1985 are significantly different and for 1983 and 1984 are not significantly different from 0 at $P=0.05$.

DISCUSSION

Relation to Results of Previous Studies

Decreases in water and fish flesh PCB concentrations from 1977 to 1981 have been previously documented (Sloan et al, 1983; Brown et al, 1985). Sloan et al (1983), in summarizing some of the data reported here, noted decreases in multiplate PCB levels from 1978 to 1980, followed by an increase in 1981. Sloan et al (1983) and Brown et al (1985) concluded that for some samples, decreases in PCBs were due largely to decreases in concentrations of Aroclor 1016. These data suggested that Aroclor 1016, containing mainly di- and tri-chlorinated congeners, was less persistent in the environment and perhaps capable of being de-chlorinated by microorganisms or metabolized by higher animals, and was decreasing in the samples. The congeners in Aroclor 1254, containing mainly 5 or more chlorines, were thought to be more difficult to de-chlorinate, and thus, more persistent and likely to bioaccumulate. If this were occurring in multiplate and caddisfly samples, it could be expected that levels of Aroclor 1016 would decrease consistently over the entire sampling period. However, the results of the multiplate and caddisfly PCB sampling over the entire eight year period analyzed (1978 - 1985), reflect different trends than those apparently occurring in the multiplates from 1977 to 1980 or those observed in fish.

For both multiplates and caddisfly samples, Aroclor 1016 and Aroclor 1254 are strongly and positively correlated. As a percent of total PCBs Aroclor 1016 contributed higher quantities than Aroclor 1254, but in samples in which concentration of 1016 is high, 1254 concentration is also high.

Aroclor 1016 did decrease over the period from 1978 to 1980 for both types of macroinvertebrate samples, but increased dramatically in 1981, and remained high and stable through 1985. For caddisflies, concentrations of Aroclor 1254 may, in fact, have been less stable than those for Aroclor 1016.

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Concentrations of PCBs in caddisfly samples were higher than in the multiplate samples by approximately a factor of 5 (mean concentration of all multiplates = 5.02 µg/g; mean concentration of all caddisfly samples = 27.9 µg/g). This is expected, since in the caddisflies lipid or hexane-extractable materials comprise from 5 to 66 percent of the dry sample (mean = 18%), while percent lipids in the multiplate samples averaged 1 percent. A significant contribution to total sample weight by inorganic materials such as silt may affect total PCB concentrations, although PCBs adsorbed to inorganic particulate matter may contribute to the total concentration.

Direct comparisons with PCB levels in fish would be best made on measurements of PCBs per gram lipid, since studies have shown that, for fish, converting to lipid-based values is more precise, because it normalizes measurements taken on different species with varying lipid contents (Armstrong and Sloan, 1981). For both the caddisfly and multiplate samples, however, lipid-based measurements are more variable than those based on total dry weight of the sample, and all analyses reported here were conducted on dry weight-based measurements.

Several factors may account for this variability. Since approximately one-half by weight of the multiplate samples is composed of silt and other inorganic materials, changes in PCB levels in the inorganic portion of the sample affect the total PCB concentration, independently of changes in lipid content. Differential uptake of PCBs by different species found on the plates may affect total concentration. With small samples used for determination of percent lipids, weighing imprecision may introduce variability. Although lipid-based measurements are desirable in order to relate multiplate and caddisfly results to those of fish, for the delineation of long-term trends shown for these samples, analyses based on dry weight are more precise.

GMM 002 0277

Multiplates

The discovery of the large 1981 increase in 1016 concentration was unexpected, based on known changes that have occurred to the PCB load in the river. The statistical analysis indicated that the increase was not solely a uniform change in concentration; the differences between stations that had been converging to lower levels were suddenly expanded and the trend to lower levels was either stopped or slightly reversed (see Figures 12 - 13). Since both the relationship between stations and the station-by-month interactions were preserved in the 1978-1980 and 1981-1985 eras, the trend to higher concentrations in 1981 did not appear to be a laboratory artifact. It would be difficult to envision a yearly decay in laboratory performance that was suddenly corrected in 1981, while still preserving these effects.

The observation of monthly trends indicates that PCB concentrations vary on a circannual basis. Since the data do not include samples taken during months with the highest quantities of suspended sediment, the possibility that sample concentrations could vary substantially at other times of the year cannot be excluded.

The reversal of the monthly trends below the station at Waterford is of particular interest. Previous studies have used the Federal Dam at Troy, the point of demarcation of the estuarine portion of the Hudson River, as a cut-off point for PCB concentrations that were significantly higher above the dam than below it. While the present study found no evidence of a sharp decrease in concentration at this location, it is the point at which the shift from July to September as the month with the highest levels begins. The intermediate stations, 9 and 10, show little monthly effect. The reversal of the monthly trend below Waterford (Station 8) might be explained by turbulence and accompanying suspension of PCB-contaminated particles associated with late spring flows. In general, PCB concentration and river discharge do not appear

to be highly correlated (Figure 31) although several points from 1982 are associated with high river flows. At Station 7 (Stillwater), however, in the years from 1978 - 1984, the period from June to July during which samplers were in place in the river had higher amounts of suspended sediment than the periods in August and September (Table 9) in every year except 1979. If some suspended materials are restrained by and settle behind the dam at Troy, or if dilution of the contaminated sediments occurs over the length of the upper river, the same trends might not be important in the lower river. Concentrations in the lower river may be controlled by different factors. Late summer blooms of algae accumulating PCBs and deposited on the plates could result in the increased 1016 levels as summer progresses, while decreasing sediment loads in the upper river result in decreasing PCB loadings to the multiplates.

Post-1980 increases in PCB concentration must represent an increase in PCBs suspended or dissolved in the water column, and thus, an increase in river load available for uptake by macroinvertebrates or for deposition on the multiplates. Possible sources of the new load include: 1) some scouring and permanent redistribution of PCB-containing bottom sediments, exposing more highly contaminated layers to resuspension on a yearly basis; 2) new introductions of PCBs into the river. Since 1016 concentrations increased at the control station at Hudson Falls in 1981 and remained higher through 1985, a point upriver from Hudson Falls would be the most likely location of new PCB introduction.

The observed multiplate increases in Aroclor 1016 at the extreme downriver stations (15 and 16) are consistent with results reported that, for phytoplankton, peaks in PCB levels are present in the area of Cold Spring, Jones Point, and Indian Point, close to Station 15 at Peekskill. Local inputs to the river have been cited as possible sources of these peaks (J. M. O'Connor cited in Malcolm Pirnie, 1980).

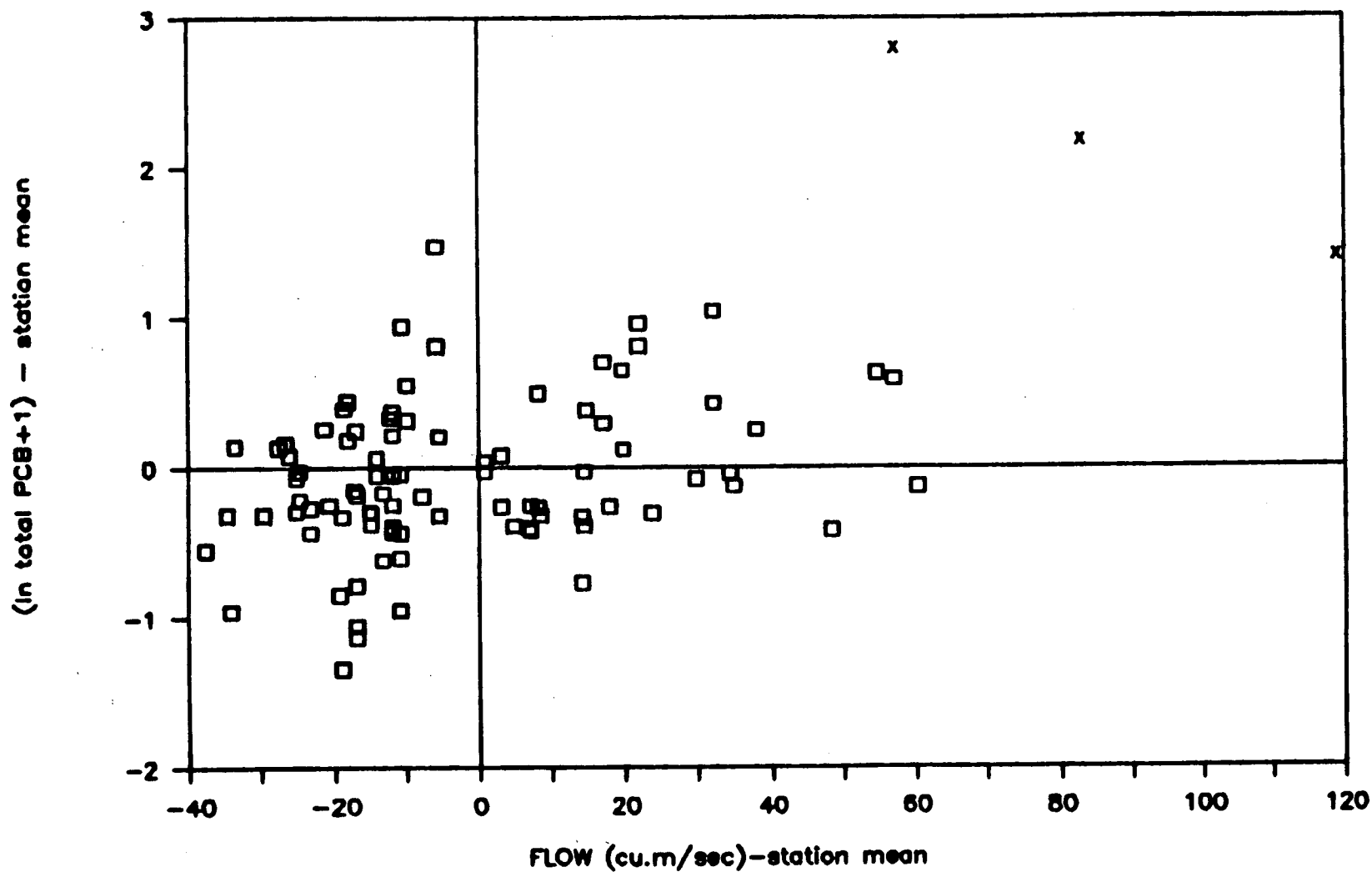


Figure 31. Correlation of multiplate PCB concentration and river discharge for sample stations in the Upper Hudson River, 1978-1984 (Stations 2,3,4,7,8). Total PCBs and flow are adjusted for station differences by subtracting the station mean from each point. Xs mark several 1982 samples.

TABLE 9. Sediment Discharge (Tons/Day) at Stillwater, NY, July, August, September (1978 - 1985) (USGS Water Resources Data Figures)

	<u>July*</u>	<u>August*</u>	<u>September*</u>
1978	72	68	52
1979	107	72	116
1980	70	55	31
1981	48	22	16
1982	178	25	26
1983	47	21	25
1984	105	41	86
1985†	-	-	-

* may include portions of other months; time periods designated as July, August, September correspond to time during which multiplate samplers were in place in the river

† figures not yet available

GMM 002 0281

The dramatically high values found in multiplate samples in July and August of 1982 remain unexplained. These values reached as high as 8 - 10 times as high as those for other years, and averaged 3 times higher than either September 1982 or those for other years (Figure 10). The fact that these levels were not seen in the caddisfly results from 1982 suggests one of two conclusions: 1) the high levels were real and were caused by PCBs contained in the inorganic sediment portion of the multiplate samples; 2) the high levels were not correct values, but were caused by sample contamination or laboratory error.

There is some evidence that could support the conclusion that these high levels are real and sediment-derived. In the June-July period of multiplate exposure, suspended sediment loads to the river as measured by the U. S. Geological Survey (Water Resource Records 1979-1985) at Stillwater were substantially higher than in any of the other years sampled (Table 9). This could help explain the high July values, but not the August values. The high 1982 values were removed from the statistical model because they varied greatly from the correlation of Aroclors 1016 and 1254 seen in the remaining 7 years of data (Figure 6). For this year Aroclor 1254 was present in much higher quantities relative to Aroclor 1016. Armstrong and Sloan (1981) have stated that Aroclor 1254 was the most widely used Aroclor mixture, and that it is likely that sporadic inputs of 1254 to the river continue. Whether or not a local or short-term input could result in such dramatic rises in PCB concentrations on multiplate samplers remains speculative. Based on the shift from the correlation of 1016 and 1254, the lack of supporting caddisfly data or comparable multiplate levels in any succeeding year, and the lack of any occurrence of extremely high water concentrations, sample contamination or laboratory error seems to be the more plausible explanation.

GMM 002 0282

In 1976 and 1977, some samples were collected at different sites than in subsequent years, and analyzed for different Aroclor mixtures. In 1976, Aroclor 1221, as well as 1016 and 1254 was analyzed, and in 1977, only 1221 and 1016 were measured. However, the values for mean total PCBs (the mean of all stations sampled as illustrated in Fig. 10) indicate that multiplate PCB levels were substantially higher for these two years (grand mean for 1976 = 11.9 µg/g; grand mean for 1977 = 6.4 µg/g). Elevated levels occurred down the length of the river. The occurrence of the 100-year flood in April 1976 (Horn et al, 1979) was possibly the greatest influence after the removal of the Fort Edward dam, in moving contaminated sediments downriver, and may have contributed to the very high levels in 1976.

Caddisflies

The caddisfly results in part reflect the results of the multiplate samples, but on the whole, provide less information. Limited sample sizes due to the physical limitations of collecting sufficient biomass may account, in part, for this. The caddisflies do not reflect the dramatically high PCB levels seen in the 1982 multiplate samples. A significant decline in Aroclor 1016 occurred from 1978 to 1980, but levels rose again and remained significantly higher in 1981 - 1985, as for the multiplates. For the caddisfly samples, distance from the original PCB discharge point was not an important predictor of PCB concentration. In only two years did Aroclor 1016 or Aroclor 1254 levels decrease significantly from Fort Edward to Waterford.

The lack of clear-cut trends in the caddisfly data may be due to species differences in PCB uptake among the seven species sampled. Sample sizes for individual species varied according to abundance, and PCB concentrations were not normally distributed even after use of the log transformation. Possible differences among species were examined by means of the Kruskal-Wallis distribution-free oneway analysis. Excluding the samples

identified only as mixed hydropsychids and Hydropsyche dicantha and H. venularis because of extremely small sample size ($n=4$, $n=8$). H. leonardi was found at these sample sizes, to have significantly lower total PCB concentrations than H. betteni, H. scalaris, Cheumatopsyche spp. or Macronemum sp. Analysis of concentrations without H. leonardi revealed fewer discernible trends, probably because of the smaller number of samples and thus, fewer degrees of freedom. Species in the same genus should be more likely to have similar patterns of PCB uptake than species in other genera, so these results may indicate that identification as mixed hydropsychids is sufficient, resulting in minimized sample process time. An alternative, reduction of sampling to only one species, would present problems of collecting adequate biomass in a realistic time period.

GMM 002 0284

SUMMARY OF MAJOR CONCLUSIONS

1. Overall levels of PCBs in the Hudson River, as measured in multiplate samples, declined steadily from 1978 to 1980, but increased in 1981 and changed little from 1981 to 1985.
2. Concentrations over the years 1978-1985 generally decreased downriver from Fort Edward to Nyack.
3. Greatly elevated PCB levels were measured in multiplate samples from July and August of 1982; however these levels are inconsistent with the remainder of the data and are being treated as possibly caused by sample contamination or laboratory error.
4. Caddisfly results reflected temporal trends seen in the multiplate data, but did not show spatial decreases downstream of Fort Edward for most years. The caddisfly results provided less information than multiplate results.

GMM 002 0285

RECOMMENDATIONS FOR FUTURE MONITORING

- 1) Replication of results by analyzing each multiplate sampler rather than combining materials scraped from the two samplers would provide information on sample variability.
- 2) In the delineating spatial and temporal trends, the amount of information derived from the collection and analysis of hydropsychid caddisflies was not sufficient to warrant the time and labor involved. Discontinuing this part of the long-term monitoring network is recommended.
- 3) Continuation of the use of all current stations in the monitoring network is recommended. Additional results would then be consistent with the existing data set.
- 4) A controlled study using multiplates, water, and fish samples could be useful in attempting to correlate multiplate PCB levels with average water and fish concentrations at specific locations.

GMM 002 0286

SECTION II

Short-Term Monitoring

GMM 002 0287

SHORT-TERM MONITORING

INTRODUCTION

In situ monitoring of aquatic chemical contaminants has been carried out using several different organisms, including freshwater clams, chironomid midges, and hydropsychid caddisflies (Hartley and Johnston, 1983; Bush et al., 1985; Simpson, unpubl.), selected for characteristics such as relative immobility, short life cycle, hardiness, and ease of collection and analysis.

In addition, numerous researchers have studied the mechanisms of uptake of various pollutants under laboratory conditions (Muir et al., 1983; Sanders and Chandler, 1972; Muir et al., 1985; Derr and Zabik, 1974). Midges in the genus Chironomus have been used extensively in genetic and toxicological research, and have been recommended as a bioassay organism by the United States Environmental Protection Agency (Peltier, 1978). Organisms such as these have been found to bioaccumulate compounds to concentrations much higher than present in their environment.

Derr and Zabik (1974) concluded in their studies with Chironomus tentans and p, p'-DDE [2,2-bis(p-chlorophenyl)-1,1-dichloroethylene] that bioaccumulation occurred through a process of physical partitioning through the cuticle (referred to as bioconcentration by Macek et al., 1979), since it was found that dead midges accumulated DDE as rapidly and to the same levels as live individuals.

The strategy of the present study was to place caged laboratory-reared Chironomus tentans (Insecta:Diptera:Chironomidae) in the water column to determine the extent to which this species bioaccumulates PCBs. During the proposed dredging process, it is expected that as much as 4 percent of PCBs dredged may be lost to the water column, resulting in increases of up to 0.5 µg/l above background levels (Malcolm Pirnie, 1980). Grab water samples taken during dredging may miss pulses of high PCB concentration. Measurement

GMM 002 0288

of midge PCB concentrations has the advantage of reflecting an average over time. It may also be possible to use the C. tentans results to estimate water concentrations for the time during which the larvae were in the river.

For this method to be useful as a monitoring tool, it was determined that five characteristics would be needed:

- 1) The technique must be easily carried out in the field and adaptable to different locations.
- 2) Chemical analysis must be completed in a realistic time period and at reasonable cost.
- 3) The technique must be sensitive enough to detect differences determined to be significant within and outside of the dredge plume.
- 4) The results must be repeatable.
- 5) The technique must provide useful information relevant to the biota; the model species must be representative of indigenous organisms.

Using third- and fourth-instar larvae from a laboratory culture, experiments were conducted in July and September 1985, to assess the feasibility of using these organisms to monitor changes in PCB loadings to the biota of the area during dredging.

DESCRIPTION OF STUDY AREA

The primary exposure site was located near the southern end of the Thompson Island pool, 250 m upstream from the Thompson Island dam, and 25 m from the eastern shore in the town of Northumberland. At this site, the water was 3 m in depth; current speed was 24 cm/s in July and 48 cm/s in September. Water temperature at the site in the July exposure was 21.5°C; in September the temperature was 18°C.

In July, exposure of caged midges in the river was conducted at the Thompson Island pool site only. In September, additional sites were

established to determine the effect of differing current speeds and PCB water concentrations on the final body burdens of PCBs in the test organisms. These sites were located 400 m upstream of the primary exposure site (an area of slower current-36 cm/s); 20 m downstream of the dam spillway (an area of more rapid current-1 m/s); 15 km upstream of Bakers Falls (above the point at which PCBs were discharged into the river); and in Fish Creek (a relatively uncontaminated stream entering the river at Schuylerville). Larvae were also placed in bottom sediments near the eastern shore of the pool, to determine if individuals directly exposed to sediments would accumulate higher concentrations of PCBs than those suspended in the water column.

MATERIALS AND METHODS

Chironomus tentans Culture

The midge culture was started with egg masses obtained from B.E. Townsend (Department of Fish and Oceans; Freshwater Institute; Winnipeg, Manitoba, Canada), and maintained, with modifications, after his rearing system (Townsend et al., 1981).

The insects were reared in 26.5 liter cylindrical pyrex jars (Corning Glass Works, Corning, New York), 18 in. high and with a 12 in. diameter. One inch of hexane-rinsed play sand (Basing, Inc., Gouverneur, New York) was placed in the bottom as a substrate, covered with three inches of deionized water. The airspace remaining (14 inches) above the water level provided enough room for mating to take place. Cheesecloth was placed over the tanks to prevent adults from escaping.

Each tank was aerated by an air stone attached to the laboratory air supply. An attempt was made to eliminate all possible sources of PCB contamination, by using glass, metal, and non-contaminating plastics. Tygon tubing was used throughout the system.

GMM 002 0290

Pet food treats (Dog Kisses; Hartz Mountain Corp., Harrison, New Jersey) were crushed and used as a food source, as recommended by Bievor (1965). Populations in each tank were asynchronous, and contained several hundred larvae at any one time. Food was added to the tanks every other day. De-ionized water was added as needed to replace the loss by evaporation. The light cycle was that of the normal activity pattern in the laboratory; approximately 9 hours light and 15 hours dark.

Field Methods

The cages in which the larvae were placed in the river were made from 15 cm x 15 cm sections of Nitex (monofilament nylon screening fabric, mesh opening 560 microns, Tetko, Inc., Elmsford, New York), folded and stapled to form an envelope-shaped packet (Fig. 32). Each finished packet measured 6.5 x 12 cm. Twenty-five third- and fourth-instar larvae were removed from the laboratory culture and placed in each packet. The packets were stapled closed and placed in a hexane-rinsed galvanized steel pail containing de-ionized water for transport to the exposure sites. In the field the packets were placed, in groups of ten, into 16.5 x 16.5 x 16.5 cm steel mesh baskets with tightly fitting mesh lids. Each basket was suspended from a float at a depth of 1 m, anchored to a cinder block on the river bottom with wire cable (see Fig. 4B, Section I, as for multiplate samplers). The insects placed directly in the bottom mud were put in the exposure packets in the lab, as for the other samples. In the field, mud from several different locations near the shore directly opposite the primary site was mixed, the exposure packets opened and filled with mud. The packets were sealed closed and placed in mesh baskets in the bottom of a rectangular stainless steel pan. One inch of the same mud was put in the mesh baskets and covered the bottom of the pan. The pan was anchored by cinder blocks in 2 feet of water ten feet from shore.

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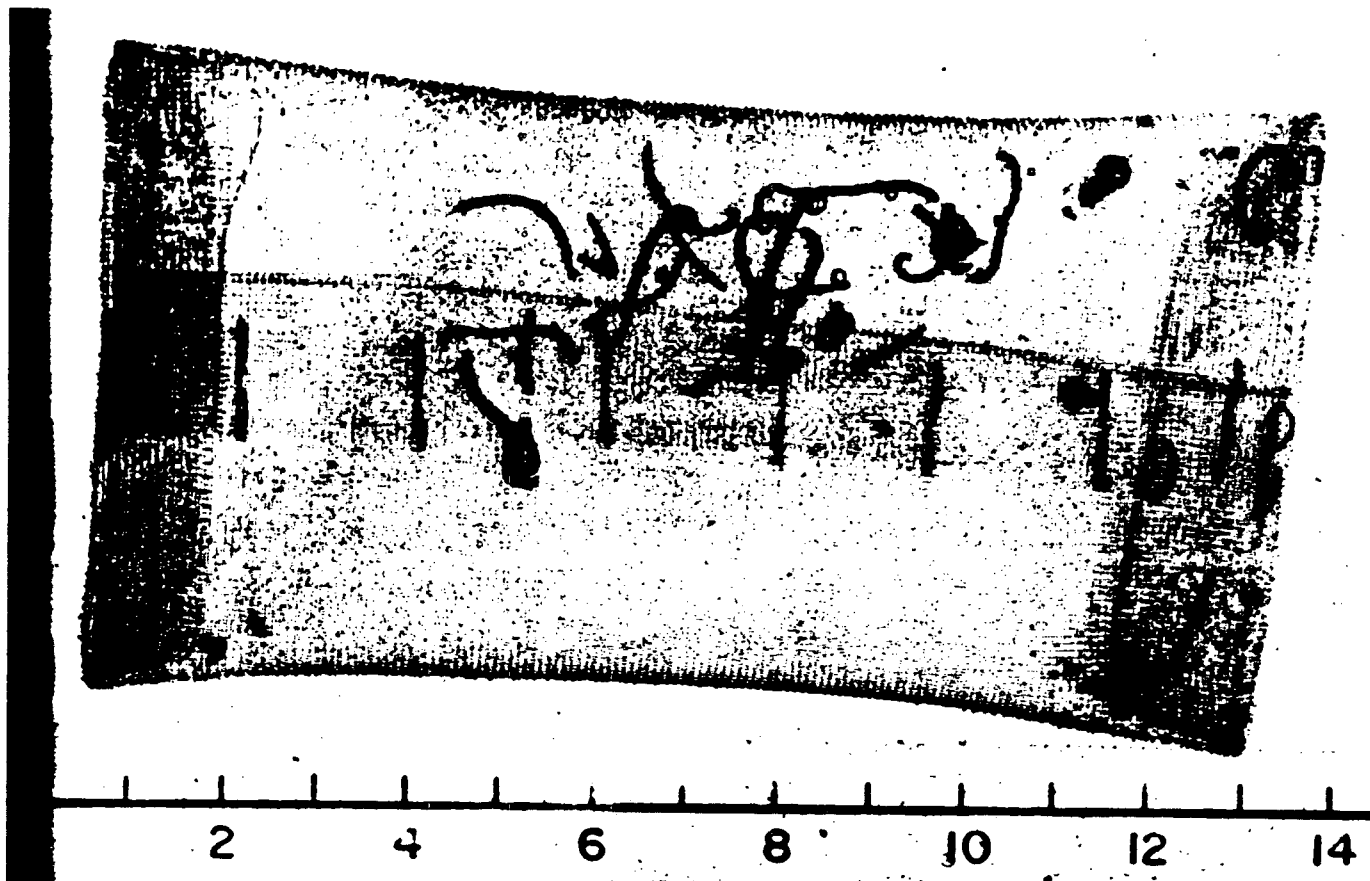


Figure 32. Nitex packet used to cage Chironomus tentans larvae for short-term monitoring of PCB levels in the Upper Hudson River. Scale is in centimeters.

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Insects were harvested from the primary site at 0, 1, 2, 4, 8, 12, 24, 48, 72, and 96 hours, and at all other sites at 96 hours only. Specimens used for controls (0 hours) were placed in packets and transported to the site, then removed and frozen, without being put into the river. Measurements of water depth, temperature, and current speed were taken on day two of each exposure period.

Three packets were removed from the wire baskets at each harvest time. The packets were opened, larvae removed with flexible forceps, and counted. A note was made of any pupae or dead larvae present. The insects were placed in glass scintillation vials, capped, and the vials put immediately on dry ice.

Triplicate water samples were taken at the time of each harvest. Water was collected 0.3 m below the surface, in hexane-rinsed 2 quart Mason jars fitted with Teflon cap liners. The jars were filled with river water and emptied three times to equilibrate PCBs on the inner surface, since these compounds adsorb to glass (Bush et al., 1985). After being filled the fourth time, the jars were capped and placed on ice for transport back back to the laboratory. In the laboratory, the water samples were stored at 4°C until analyzed.

Laboratory Methods

In the lab, each larval sample was weighed on an electrobalance, freeze-dried in a 5 ml vial, and reweighed. Two ml of n-hexane were added and the sample homogenized with a Tekman Tissuemixer until the insects were reduced to a fine powder. The contents were transferred to a 1 cm diameter glass column containing 10 g 2% deactivated Florisil and an upper layer of 2 cm sodium sulfate. The column was eluted with n-hexane and the first 40 ml of the eluate was collected and concentrated to 1.0 ml in a Kuderna-Danish evaporator (Bush and Barnard, 1982) for GC analysis.

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A 1400-1800 ml aliquot of each water sample was decanted into a 2000 ml separatory funnel for extraction. Ten ml of n-hexane were added and the sample shaken for 1 min., then allowed to separate. The extract was collected and dried with hexane-washed sodium sulfate. This process was repeated three times for each sample, and the collected extracts were concentrated to 1 ml using Kuderna-Danish evaporators with 3-ball Snyder columns. The extracted water samples were collected in conical flasks and the volumes measured accurately to ml.

Extracts of all samples were analyzed using a Hewett-Packard 5840A gas chromatograph with a 5880 splitless glass capillary inlet (Bush, et al., 1983), fitted with a 60 m Apiezon L soda glass column (0.25 to 0.3 mm I.D.). Quantities were calculated by using a reference peak compared to external standard runs of a known congener mixture (200 ng/ml mixture of Aroclors 1221, 1016, 1254, and 1260; 1:1:1:1 in hexane).

Quality assurance was maintained by recalibrating with one standard run after each 6 sample runs, followed by a hexane blank, to insure that no compounds from the standard run remained on the column.

Congener Uptake

Measurement of total PCBs can provide information for general comparisons of concentration levels, reflecting an average of all congeners. However, since PCB congeners may be expected to have different rates of uptake and elimination based on molecular structure, attention was focused on individual congeners.

Of the 76 congeners separated by the Apiezon L column, 23 were selected for study of uptake dynamics. Fifteen of these contributed 5% or more to the total PCB concentration in at least one larval sample. Several candidate congeners were eliminated because water concentrations were below the limits of detection (0.1-1.0 ng/l, depending on peak shape).

The uptake of PCB congeners by Chironomus tentans was measured over time (96 hour river exposure). For a single congener at t hours, for water with constant concentration at C_w , an equation modeling the uptake rate (Muir et al., 1983) is:

$$\frac{dC}{dt} = -K_2 C + K_1 C_w \quad [1]$$

where C = congener concentration in the larvae (ng/g)

K_1 = uptake rate constant (hr^{-1})

K_2 = elimination rate constant (hr^{-1})

Uptake of individual congeners can then be modeled from the equation for an uptake-elimination model obtained by integration of Equation 1:

$$\frac{C_t}{C_w} = \frac{K_1}{K_2} [1 - e^{-K_2 t}] \quad [2]$$

Water concentrations of PCB congeners in the river were observed to vary, so that uptake by the larvae actually depended on the instantaneous water concentration of each congener. To denote the dependence on time C_w was modified to $C_w(t)$. Assumptions about the model used in the analyses, accounting for the varying concentrations of the water, are contained in Appendix B.

The collected data on water and C. tentans PCB concentrations were subjected to a weighted classical non-linear least squares analysis, with weights equal to observed replicate variances. The lack of fit of the data to the model was examined for statistical significance. If a significant lack of fit was found, the offending observation was deleted. The estimates of K_1 and K_2 were not constrained to be positive in the analysis. Instead, detection of outlying observations was implemented in order to obtain positive values whenever possible.

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The ratio of K_1 to K_2 is a unitless quantity, but may be interpreted by noting that after long periods of exposure (t large), the expression for C becomes:

$$C = \frac{K_1}{K_2} C_w(t) \quad [3]$$

This represents an approximate equilibrium condition (when $C_w(t)$ is relatively constant) in which the concentration in the larvae is a fixed factor, K_1/K_2 , times the concentration in the river. When K_1/K_2 is greater than 1, uptake exceeds elimination, and the larvae concentrate PCB congeners. The ratio of K_1 to K_2 may be considered the bioavailability of the individual congener at a specific water concentration, or its bioconcentration factor at equilibrium.

A practical estimate of equilibrium was defined as being a value within 10% of the true value, as used by Sanders and Chandler (1972). K_1 and K_2 values, bioconcentration factors, and days to equilibrium (within 10%) were calculated for the 23 selected congeners. The number of days required to reach within 10% of equilibrium for each congener was calculated by:

$$\frac{\ln .10}{-K_2 \text{ hr}^{-1}} \div \frac{24 \text{ hours}}{\text{day}} \quad [4]$$

Uptake of congeners selected as suitable for monitoring, as well as for total PCBs, was calculated under conditions that could be found in a dredging situation at sites upriver, within the dredge plume, and downriver of the dredge site, using calculated K_1 and K_2 values.

RESULTS

Composition of Water Samples

At the primary exposure site in the Thompson Island pool, total PCB concentrations in the water samples ranged from 24 to 166 ng/l (July mean

92 ng/l; September mean 42 ng/l) (Table 10; congener concentrations are contained in Appendix D). The water samples were characterized by abundance of three congeners; 2,2'-dichlorobiphenyl (2,2'), 26-dichlorobiphenyl (26), and 26,2'-trichlorobiphenyl (26,2') (Figure 33A; Figure 34). In July, these contributed from 51 - 78% and in September from 21 - 49% of the total PCB concentration. The next most abundant congener was 25,2'-trichlorobiphenyl (25,2') (Figure 34). At the primary site, this pattern was consistent over each 96 hour sample period, although actual concentrations were more than twice as high in July as in September.

At the alternate Thompson Island pool sites, the patterns of congener abundance followed that of the primary site. At the two "clean water" sites, Bakers Falls and Fish Creek, 2,4'-dichlorobiphenyl (2,4') was the most abundant congener in 10 of 12 samples; in 4 of these, it was the only congener present above the limits of detection.

Composition of Chironomus tentans Samples

Total PCB concentrations for Chironomus tentans in the July study ranged from 33 ng/g dry weight in the 0 hour control samples (mean 111 ng/g) to 7500 ng/g after 96 hours (mean 6162 ng/g) (Table 10). The results from the second exposure range from 1040 ng/g at 0 hours (mean 1114 ng/g) to 9438 ng/g at 96 hours (mean 7253 ng/g).

The congener pattern of PCBs in C. tentans differed substantially from the water pattern (Figure 33B; Figure 34), and may therefore give a better representation of patterns that could be expected in other river organisms. The water pattern is dominated by 2 or 3 di- or tri-chlorinated congeners, contributing approximately 50% of the total concentration. The C. tentans samples are characterized by a greater number of congeners with the most abundant ones contributing only 5 - 10% (Figure 34). From 1 to 24 hours, 2,2' and 26,2' were often the most abundant congeners, as in the water samples. However, at 48, 72 and 96 hours, neither of these compounds was

TABLE 10. Total PCB Concentrations in Chironomus tentans (ng/g dry weight) and Water (ng/l), Thompson Island pool, July and September, 1985.

HOUR	JULY		SEPTEMBER	
	<u>C. tentans^a</u>	<u>Water^a</u>	<u>C. tentans^a</u>	<u>Water^a</u>
0	111 ± 124	95 ± 19	1114 ± 69	66 ± 8
1	815 ± 677	61 ± 4	1317 ± 51	59 ± 11
2	584 ± 508	72 ± 11	1664 ± 144	37 ± 12
4	1204 ± 127	110 ± 16	2121 ± 72	31 ± 40
8	1134 ± 429	113 ± 9	2601 ± 203	36 ± 2
12	2445 ± 1394	115 ± 13	3545 ± 119	36 ± 9
24	2879 ± 1254	84 ± 6	5344 ± 924	38 ± 3
48	4027 ± 464	101 ± 23	6646 ± 553	27 ± 2
72	3513 ± 794	66 ± 16	6486 ± 1550	38 ± 4
96	6162 ± 1105	129 ± 42	7254 ± 1840	33 ± 1
96 Thompson Island 36cm/sec current	-	-	8493 ± 877	36 ± 6 ^b
96 Thompson Island 1m/sec below Spillway	-	-	9260 ± 867	40 ± 7 ^b
96 Bakers Falls	-	-	2346 ± 185	1 ± 0.4 ^b
96 Fish Creek	-	-	1823 ± 427	2 ± 0.3 ^b
96 Larvae in mud			142775 ± 42821	50 ± 8 [†]

^a reported values are means of 3 samples ± 95% C.L.

- no samples taken

^b reported values are means of 6 samples ± 95% C.L.

[†] water samples taken near shore where larvae placed in mud

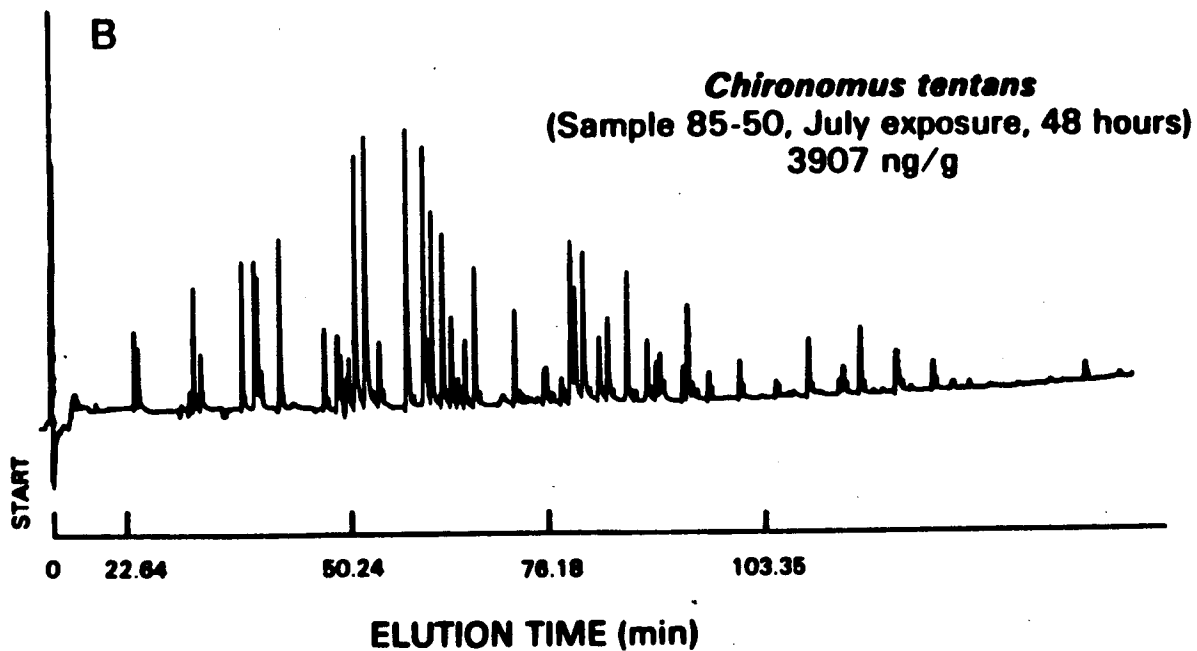
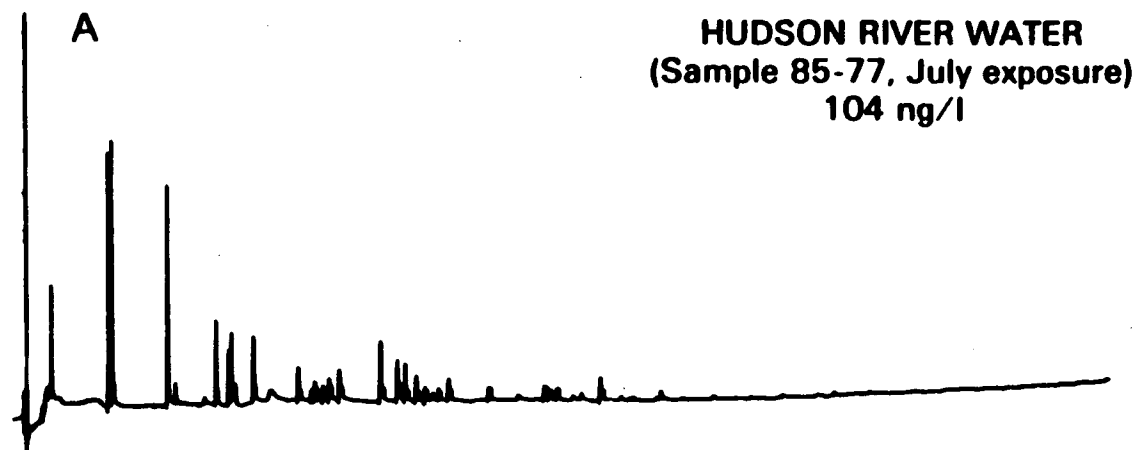


Figure 33. Sample chromatograms from Hudson River water (A) and Chironomus tentans (B) PCB analyses, showing patterns of congener abundance.

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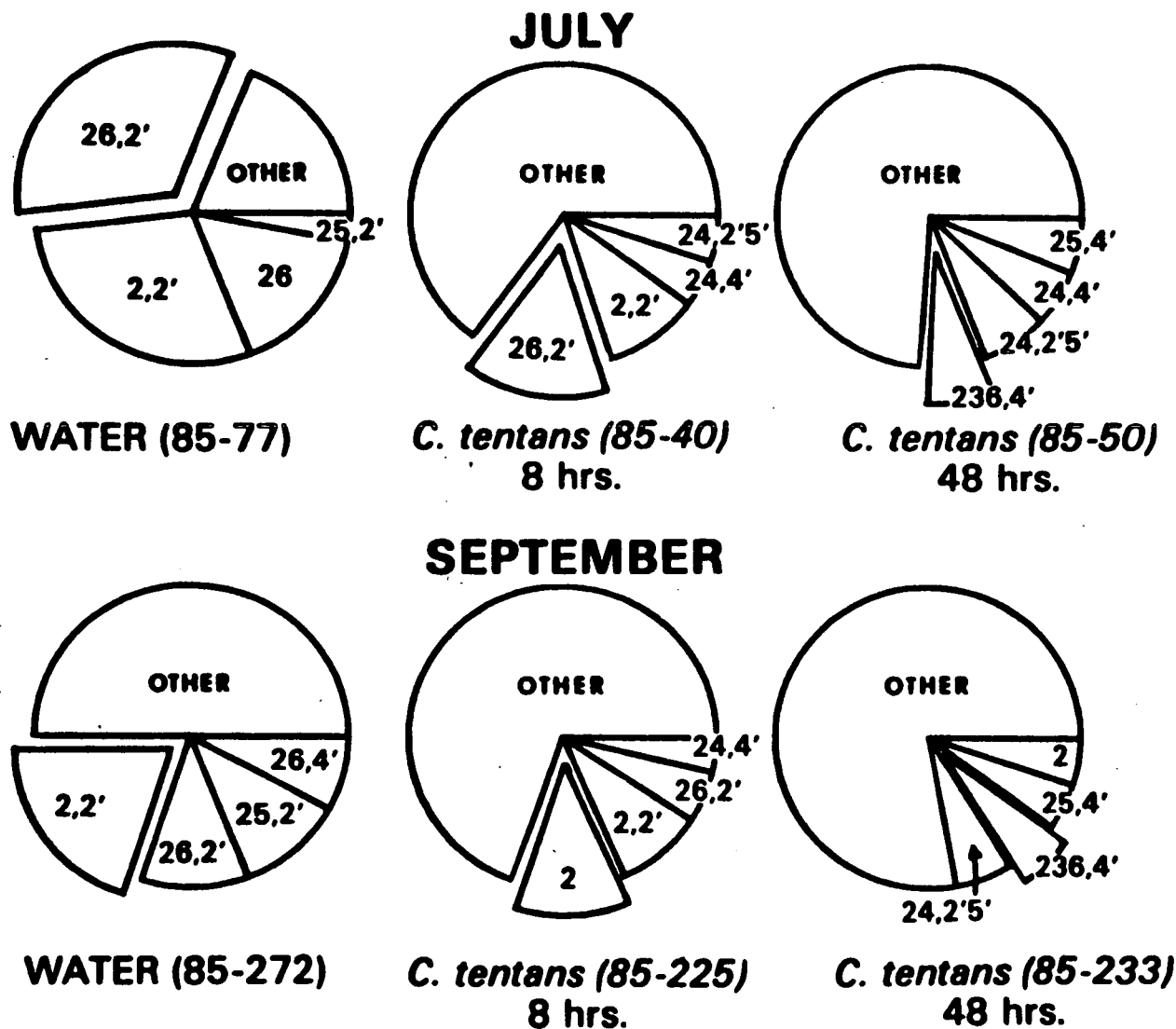


Figure 34. Representative Chironomus tentans and water samples, showing relative contribution of the 4 most abundant PCB congeners. The most abundant congener is shown separated from the remaining compounds.

dominant in the larvae; 2,4,2',5'-tetrachlorobiphenyl (2,4,2',5') and 2,3,6,4'-tetrachlorobiphenyl (2,3,6,4'), and other tri- and tetra-chlorinated congeners were the most abundant in 14 of 18 samples, although each contributed less than 10% of total PCB concentration.

The congener patterns for the sites in the Thompson Island pool of slower and more rapid current were similar to those for the primary site, and total PCB concentrations at 96 hours were not significantly different from the mean concentration at the primary site, based on 95% confidence limits (Table 10). At Bakers Falls and Fish Creek, the total PCB concentrations at 96 hours are lower than any of the sites in the Thompson Island pool. The larvae placed in the mud near the shore in Thompson Island pool accumulated more than 10 times the amount of total PCBs than those insects suspended in the water column (Table 10).

Congener Uptake

Even after weighting values and removing outlying points, the K_1 and K_2 values calculated were not consistent from the July to the September exposure, although for some congeners, the K_1 or K_2 values were in agreement. For each of the 23 congeners of interest, and for total PCBs, the best-fitting model explaining both sets of data with either 3 or 4 parameters (the best estimates of K_1 and K_2 for each exposure) is shown in Table 11. For some of the more highly chlorinated PCBs, the analysis does not provide positive estimates for K_2 ; negative values may be interpreted as an additional uptake parameter. The difference in calculations of the number of days required to reach equilibrium for total PCBs and individual congeners shows clearly how analysis of total PCBs can obscure uptake dynamics. Of the 23 congeners of interest, 9 would not reach a practical equilibrium in less than 7 days; K_2 for total PCBs indicated that equilibrium would be reached in no more than 5 days.

TABLE 11. Uptake and elimination constants, bioconcentration factors, and estimated time to reach equilibrium for Chironomus tentans larvae.

PCB CONGENER	JULY					SEPTEMBER			
	K 1	BCF	K 2	DAYS TO 10% EQ.		K 1	BCF	K 2	DAYS TO 10% EQ.
2,2'	2,368	5,834	0.406	0.2		6,983	43,028	0.162	0.6
26	1,036	4,188	0.247	0.4			21,667	0.048	2.0
26,2'	6,296	5,947	1.059	0.1			64,178	0.098	1.0
2,4'	10,560	116,553	0.091	1.1	20,487		226,129		
25,2'	1,862	37,022	0.050	1.9			64,659	0.029	3.3
24,2'	1,926	56,661	0.034	2.8	-		-	-	-
23,2'	-	-	-	-	3,258		162,916	0.020	4.8
26,4'	1,118	47,786	0.023	4.1	3,668		156,756		
246,2'	1,732	42,773	0.041	2.4	6,919		170,837		
25,3'	1,921	156,200	0.012	7.8	5,488		446,215		
25,4'	4,388	258,139	0.017	5.6	9,127		536,856		
24,4'	5,673	175,092	0.032	3.0			315,165	0.018	5.3
25,2'5'	3,587	77,482	0.046	2.1	5,100		531,247	0.010	10.0
24,2'5'	4,673	117,412	0.040	2.4			1,062,048	0.004	24.0
24,2'4'	4,835	131,379	0.037	2.6			690,676	0.007	13.7
23,2'3'	-	-	-	-	3,248		-1,624,135	-0.002	-48.8
236,3'	2,501	208,444	0.012	8.0	8,683		228,508	0.038	2.5
236,4'	5,610	137,850	0.041	2.4	8,723		214,317		
235,2'6'	5,079	176,966	0.029	3.3	1,841		-239,083	-0.008	-12.5
25,3'4'	8,116	294,049	0.028	3.5	3,841		-342,938	-0.011	-8.6
24,3'4'	6,659	361,879	0.018	5.2			-774,252	-0.009	-11.2
234,4'	18,485	336,099	0.055	1.7	-		-	-	-
245,2'5'	2,546	141,465	0.018	5.3	-		-	-	-
TOTAL PCBs	2,319	39,713	0.058	1.6	4,442		242,754	0.018	5.2

- 1) Negative K₂, bioconcentration factor, and days to equilibrium indicate rate of elimination is <0; no equilibrium will be reached.
- 2) BCF: Bioconcentration factor, C/C_w at equilibrium.
- 3) Absence of K₁ and K₂ values in July or September indicates constant calculated did not vary significantly from value calculated for the other month.
- 4) - indicates congener was not resolved chromatographically in that analysis.

In selecting the congeners most appropriate for monitoring, several were eliminated, (24,2'; 23,2'; 23,2'3'; 234,4'; and 245,2'5') since these were not always separated and quantified adequately by the Apiezon L column. Additionally the 9 congeners that, according to the results of both the July and September exposures, would not reach a practical equilibrium in less than 7 days were not considered, based on the objectives of the work plan. Since the less lipophilic congeners 2,2'; 26; 26,2'; and 2,4' are more water soluble and appear to be more variable in the environment, they were considered less desirable for use in monitoring. The following congeners: 25,2'; 26,4'; 246,2'; 25,4'; 24,4'; and 236,4' fulfill the criteria established for selection of congeners for monitoring, and should be considered in future use of this technique.

Congeners 246,2' and 236,4' had K_2 values that were not statistically different for the July and September exposures. Both congeners were present in the water samples at 0.5 - 2.5 ng/l. Under dredging conditions, an increase to 10 ng/l could possibly occur, based on estimates of increases in total PCBs given by Malcolm Pirnie (1980) of up to 0.5 µg/l. Concentrations of 5 ng/l for these two congeners downstream of the dredge plume might be expected.

Projected uptake of 246,2' and 236,4' by C. tentans larvae under constant water concentrations of 0.001, 0.005, and 0.010 µg/l, using the K_1 and K_2 values calculated from the results of the September exposure, are shown in Fig. 35 and Table 12.

Uptake for total PCBs by C. tentans larvae shown in Fig. 36 and Table 13, at water concentrations of 0.1, 0.5, and 1.0 µg/l (ppb) indicate the extent to which variability in calculations of K_1 , and K_2 can affect predictions of uptake under dredging conditions. If the values for K_1 and K_2 calculated from results of the July exposure are correct, uptake

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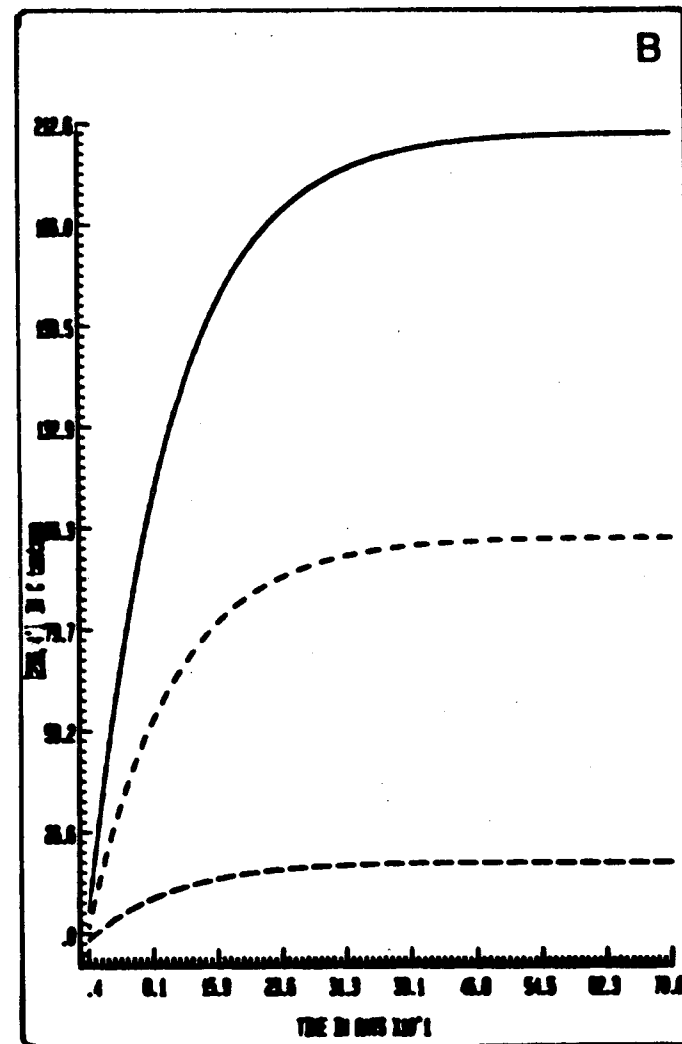
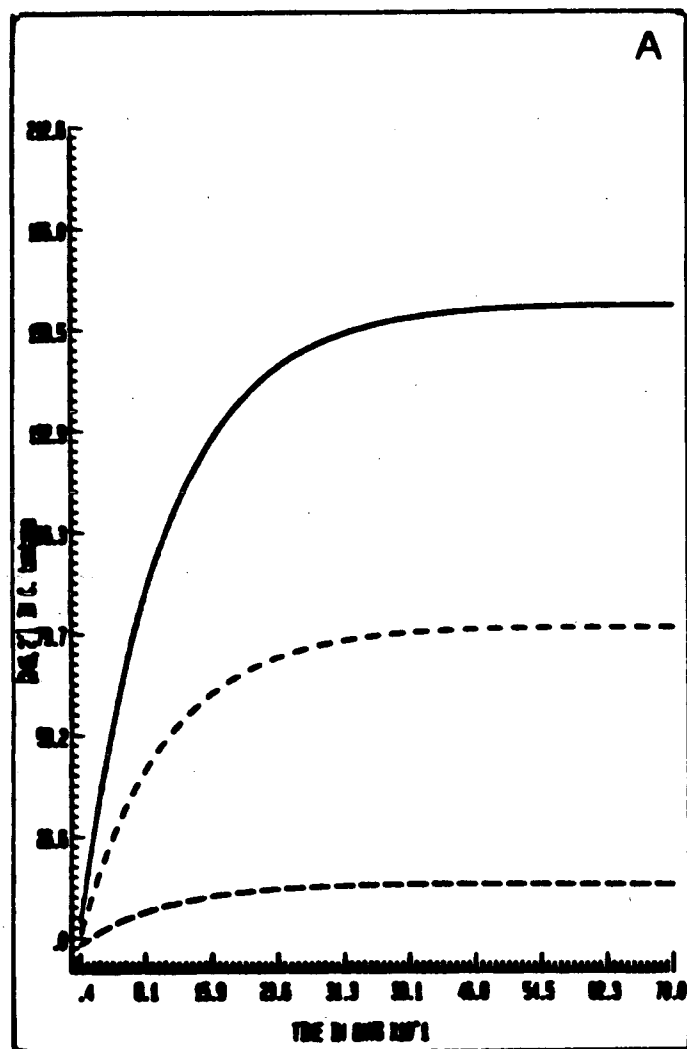


Figure 35. Predicted uptake curves for congeners 246,2' (A) and 236,4' (B) for *Chironomus tentans* larvae at constant water concentrations of 0.001, 0.005, and 0.010 $\mu\text{g/l}$ (ppb), using the equation $C = K_1/K_2(C_w)$ with K_1 and K_2 values calculated from September *C. tentans* exposure. *C. tentans* concentrations shown are in $\text{ng/g} \times 10^{-1}$.

TABLE 12. Predicted Uptake under Dredging Conditions for Congeners 246,2', 236,4' (ng/g). Based on Values of K_1 (Uptake Rate Constant) and K_2 (Elimination Rate Constant) Calculated from September River Exposures of Chironomus tentans larvae

Days	At 246,2' Water Concentrations of			At 236,4' Water Concentrations of		
	0.001 $\mu\text{g}/\ell$	0.005 $\mu\text{g}/\ell$	0.010 $\mu\text{g}/\ell$	0.001 $\mu\text{g}/\ell$	0.005 $\mu\text{g}/\ell$	0.010 $\mu\text{g}/\ell$
1	106 ng/g	528	1057	133	666	1332
2	145	726	1452	183	915	1830
3	160	800	1599	202	1008	2016
4	165	827	1655	209	1043	2086
5	168	838	1675	211	1056	2112
6	168	841	1683	212	1061	2122
7	169	843	1686	213	1063	2125

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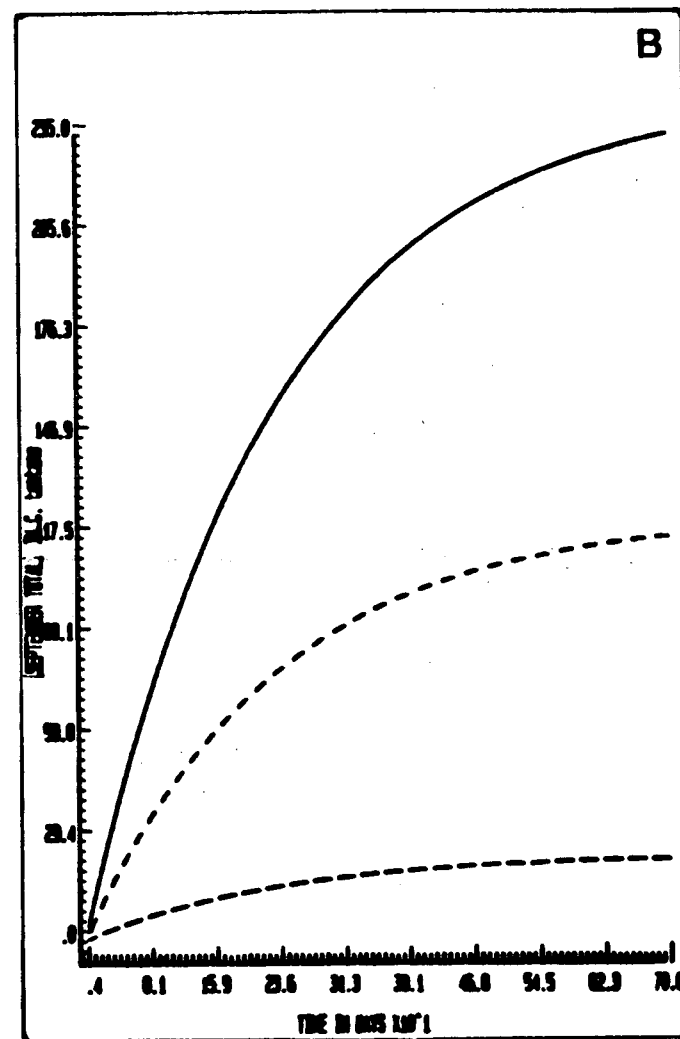
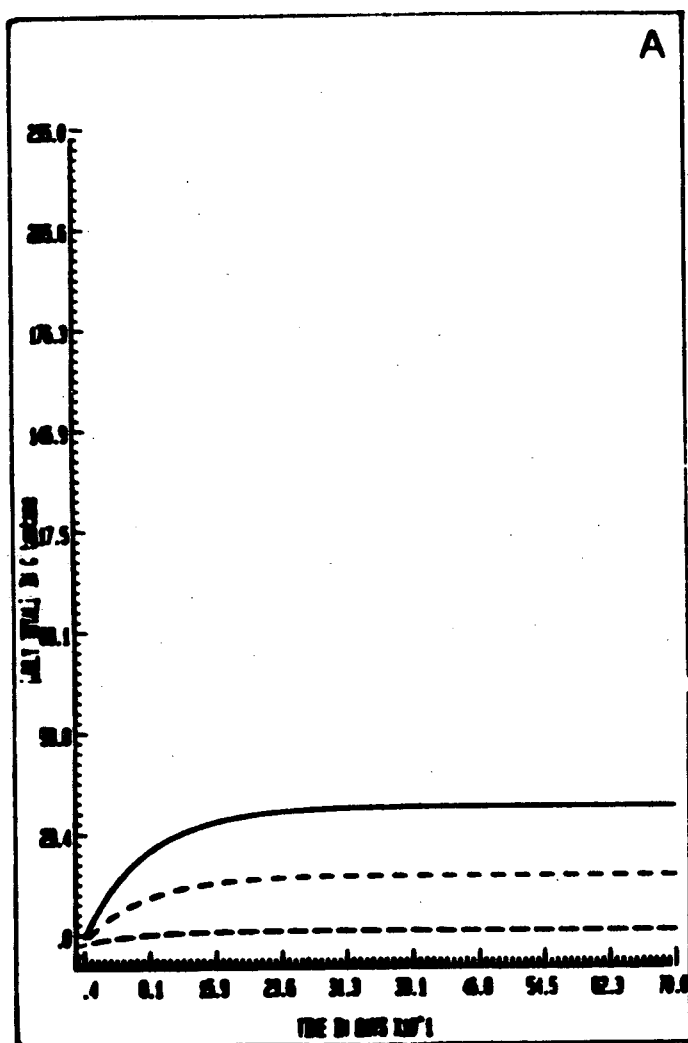


Figure 36. Predicted uptake curves for total PCBs for Chironomus tentans larvae using K_1 and K_2 values calculated from results of July (A) and September (B) exposures, at constant water concentrations of 0.1, 0.5, and 1.0 ug/l (ppb). $C = K_1/K_2(C_w)$. C. tentans concentrations shown are in ug/g (ppm).

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TABLE 13. Predicted Uptake under Dredging Conditions for Total PCBs (ng/g) Based on Values of K_1 (uptake rate constant) and K_2 (elimination rate constant) Calculated from July and September River Exposures

Days	JULY			SEPTEMBER		
	at 0.1 $\mu\text{g}/\ell$	0.5 $\mu\text{g}/\ell$	1.0 $\mu\text{g}/\ell$	0.1 $\mu\text{g}/\ell$	0.5 $\mu\text{g}/\ell$	1.0 $\mu\text{g}/\ell$
1	3004 ng/g	15,022	30,044	8657	43,284	86,567
2	3751	18,756	37,512	14,277	71,384	142,768
3	3937	19,684	39,369	17,925	89,627	179,253
4	3983	19,915	39,830	20,294	101,470	202,940
5	3994	19,972	39,945	21,832	109,159	218,318
6	3997	19,987	39,973	22,830	114,151	228,301
7	3998	19,990	39,980	23,478	117,391	234,783

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under the above water concentrations would be as illustrated in Fig. 36A and a practical equilibrium would be reached in less than 2 days. Fig. 36B shows expected uptake if the September K_1 and K_2 values are accurate; equilibrium would not be reached for 5 days.

DISCUSSION

Water Samples

The water results differ from those reported by Bush et al. (1985) for water samples collected in the Thompson Island pool in 1983. They reported substantially higher concentrations (approximately 500 ng/l), and found 2-chlorobiphenyl (2) to be one of the most abundant congeners at this location. In the present study, 2-chlorobiphenyl was not present above the limits of detection in any of the water samples, although it was detectable in some C. tentans samples.

Chironomus tentans samples

The source of the elevated control sample totals is unknown, but contamination in the laboratory colony itself was ruled out by analyzing insects and water taken directly from the rearing tanks, and not handled as for the control samples. Samples of the dog kisses and organic debris collected from the tanks were also analyzed. In each case, PCB concentrations were quite low; results of these analyses are presented in Appendix C. Contamination could possibly have occurred in handling of the insects between removal from the colony and placement in the river, or in handling procedures after their removal from the river, throughout the analytical process.

Relative to the first exposure, the congeners elevated the highest at 0 hours in the second exposure were 2-chlorobiphenyl, and 2,2'-dichlorobiphenyl. These are the most water soluble and volatile of the PCB congeners, and are considered to be less important in terms of possible health effects than more highly chlorinated congeners.

Congener Uptake

Values of K_1 and K_2 calculated for the selected congeners are consistent with values calculated by Muir et al. (1983) from a laboratory study of uptake by Chironomus tentans of 245,2'4'5'-hexachlorobiphenyl. They also reported for this congener that equilibrium was not yet reached after 96 hours. Similarly, some of the more highly chlorinated congeners in the present study did not reach equilibrium during the 96 hour exposure period.

Although values of K_2 were not always comparable in both exposures, in general, K_2 values decreased with increasing chlorination, consistent with the fact that the more highly chlorinated congeners are more lipophilic and taken up more slowly, but ultimately to higher levels.

The uptake constant (K_1) for congeners 2,4' and 234,4' was high relative to other similar compounds. The 4 (para) position appears in some cases to increase the lipophilic nature of the molecule, and thus, its uptake potential in animal tissue (Brian Bush, pers. comm.); this could perhaps partially explain these elevated values.

The projected uptake curves must be considered to be idealized; during both exposures, water concentrations did not remain constant. Fluctuations in water concentrations will affect total concentrations in C. tentans at the end of the selected exposure period.

The uptake curves generated for total PCBs indicate potential problems with measurements that do not take into account variations in congeners. Some congeners may fluctuate more widely than others, and measurements of total PCBs in C. tentans after a set exposure can reflect and magnify these fluctuations. If certain congeners are more constant in the river water, as appears to be the case, selection of these congeners would provide better consistency from one exposure to another.

Suitability of the Technique as a Monitoring Tool

The short-term monitoring technique described in this report can be evaluated using the 5 criteria outlined for monitoring methods: 1) physical feasibility; 2) time/cost-effectiveness; 3) sensitivity; 4) replicability, and 5) relevance of results.

1) **Physical Feasibility:** The technique was carried out with no major problems, and appears to be workable. The laboratory rearing of the midge larvae is a simple, low-maintenance culture method. The exposure cages were successful in serving the purpose of containing the midges and exposing them to the water flow with minimum clogging from silt and detritus. A small percentage of midges escaped from the cages but this could probably be eliminated by altering the method of fastening the packets. The method of suspending the exposure cages in the water column proved to be satisfactory and would be adaptable for nearly any stream situation. The data also indicated that the method could be used at sites of varying current speeds. Although congener rates were not calculated for the alternate Thompson Island pool sites with slower or more rapid current, total PCB and congener concentrations and congener patterns were similar.

Since some 4th instar larvae pupated in the river during the 96 hour exposure period, use of 3rd rather than 4th instar larvae would provide more flexibility if long exposure times were necessary.

2) **Time/Cost Effectiveness:** Most of the cost of this technique is attributable to analysis of midge tissues for PCB congeners. While gas capillary congener specific analysis is a more expensive method, its utility has been demonstrated in this study. Analysis time could certainly be realistic in terms of monitoring an on-going dredging operation, and the cost of congener analysis over Aroclor mixture analysis would be offset by the additional information obtained.

3) Sensitivity: In order to address the issue of sensitivity of the technique, it must first be defined at what level increases in PCB concentrations in the C. tentans larvae would be "significant" in a dredging situation. Although it has been estimated that the dredging operations may raise ambient water levels of PCBs by approximately 0.5 µg/l over background level (Malcolm Pirnie, 1980), the physical effect on river biota of this increase is unknown. The PCB uptake patterns of C. tentans differ substantially from the congener pattern found in Hudson River water. Congeners that are preferentially taken up by the insects are represented in relatively small amounts in water samples. The insects should be more indicative of changes to river biota than water samples, but the relation of PCB uptake patterns in C. tentans to those in other species should be investigated.

4) Replicability: The results from the July and September exposures and thus, bioconcentration factors and the values for K_1 and K_2 , the uptake and elimination rate constants, differ substantially. The bioconcentration factors for total PCBs in July was 39,713, while in September it was 242,754. Similar differences were present for some individual congeners. Since certain congener peaks in the water sample analyses are at or near the limits of detection, variability among triplicate samples is magnified, if one or more samples contains quantities of one or some congeners below detection limits. Variability among larval sample triplicates could possibly be reduced by careful use of only one instar, and removal of dead or moribund larvae and any pupae from harvested samples, prior to analysis. Selection of congeners for monitoring that are more constant in the water, rather than use of total PCB measurements, could also reduce variability.

In a dredging situation, the upriver, dredge plume, and downriver sites would be monitored and analyzed during the same time period.

thereby minimizing replicate variability. However, since dredging of all selected hot spot areas will presumably be carried out over a period of months, comparisons of PCBs released to the water column at different points during the clean-up procedure and taken up by exposed C. tentans larvae may be difficult.

5) Relevance of Results: As a model species, Chironomus tentans should be representative, in PCB uptake, of indigenous species. Yet many species in the river live in protected areas, such as the bottom sediments. In this study, larvae placed directly in mud near the shore in the Thompson Island pool accumulated more than 10 times the concentrations of total PCBs than those suspended in the water column. Therefore, while placing C. tentans into the water column in the dredge plume may be able to indicate the release of PCBs relative to upriver sites, natural populations of many species will not be affected in the same manner as those suspended in the water column. In addition, Malcolm Pirnie (1980), in citing a study conducted by the Great River Environmental Action Team (GREAT) on water quality following hydraulic dredging in the Upper Mississippi River, stated that the water column returned to normal 0.3 to 0.8 miles downriver. The effect on water column dwellers, such as fish, may be limited to a relatively small area of the river.

Derr and Zabik (1974) concluded that some chemicals (such as DDE) bio-accumulated by aquatic organisms were absorbed through the cuticle rather than via ingestion. Schroeder and Barnes (1983) found that during high river flow periods, the increase in PCB water concentrations was due in large part to resuspension of particulate matter with adsorbed PCBs, rather than to an increase in dissolved PCBs. Since dredging simulates the scouring of bottom material, it seems likely that the majority of PCBs lost to the water column during the dredging process will be

GMM 002 0312

adsorbed to particulate matter. If cuticular uptake is more important than ingestion of PCBs for C. tentans, uptake patterns for these organisms will not accurately reflect uptake by fish and other vertebrates, in which PCB absorption dynamics may differ.

The overall view of this technique is that it could meet the stated criteria under dredging conditions, but that analytical refinements are needed, and the perhaps objectives outlined in the work plan be redirected to make the data more useful.

Congeners selected for monitoring do not need to reach equilibrium in order to be useful. Water concentrations under non-dredging conditions fluctuate, as found here; during dredging operations greater fluctuations will probably occur, and no real or practical equilibrium will likely be reached. Since concentrations in the larvae are proportional to water concentrations, comparisons of sites both within and outside the dredge plume could be made without an equilibrium condition being reached.

Rather than using this method for detection of increases in PCB concentrations in river biota, it could be used as a means of determining water concentrations during the time that the C. tentans larvae are in the river. Since $C = \frac{K_1}{K_2} C_w$, measured C (concentration in larvae) and previously determined K_1 and K_2 values could be used to calculate C_w (concentration in water). K_1 values for C. tentans are much larger than K_2 values, so concentrations in the larvae could actually reflect an approximation of the highest water concentration present during the time period in which the larvae were exposed. Since one of the drawbacks of water samples has been thought to be the possibility of missing pulses of higher than normal PCB concentrations, measurements of water concentrations by use of C. tentans as a biological indicator might be more useful than its use as a model species for uptake of PCBs by other river biota.

GMM 002 0313

SUMMARY OF MAJOR CONCLUSIONS

- 1) Total PCB concentrations in Chironomus tentans larvae reached 6-7 ppm after a 96 hour exposure period.
- 2) The congener pattern in C. tentans differed substantially from that found in water.
- 3) The number of days that would be required to reach a practical equilibrium condition, varied for different congeners analyzed; in general this time period was longer for more highly chlorinated compounds.
- 4) The technique could be of value as a monitoring tool with some additional refinements, and could be a feasible method of determining PCB water concentrations during dredging operations, in addition to its use in monitoring uptake in river biota.

GMM 002 0314

LITERATURE CITED

GMM 002 0315

LITERATURE CITED

- Armstrong, R.W., and Sloan, R.J. Sept. 1981. PCB patterns in Hudson River fish. I. Resident/freshwater species. Proceedings of the Hudson River Environmental Society. Hyde Park, NY.
- Bievor, K.D. 1965. A rearing technique for the colonization of chironomid midges. Ann. Entomol. Soc. Amer. 58:135-136.
- Brown, M.P., Werner, M.B., Sloan, R.J., and Simpson, K.W. 1985. Polychlorinated biphenyls in the Hudson River. Environ. Sci. Technol. 19:656-661.
- Bush, B., and Barnard, E. 1982. Determination of nonpolar chlorinated hydrocarbons and PCB in microsamples. Analytical Letters. 15(A20):1643-1648.
- Bush, B., Connor, S., and Snow, J. 1983. High resolution gas chromatographic analysis of nonpolar chlorinated hydrocarbons in human milk. J. Assoc. Offic. Anal. Chem. 66:248-255.
- Bush, B., Simpson, K.W., Shane, L., and Koblintz, R. 1985. PCB congener analysis of water and caddisfly larvae (Insecta:Trichoptera) in the Upper Hudson River by glass capillary chromatography. Bull. Environ. Contam. Toxicol. 34:96-105.
- Dempster, A.P., Laird, N.M., and Rubin, D.B. 1977. Maximum likelihood from incomplete data via the EM algorithm. J. Royal Stat. Soc. Series B. 39:1-38.
- Derr, S.K., and Zabik, M.J. 1974. Bioactive compounds in the aquatic environment: Studies on the mode of uptake of DDE by the aquatic midge, Chironomus tentans (Diptera:Chironomidae). Arch. Environ. Contam. Toxicol. 2:152-164.

GMM
002
0316

Environmental Monitoring Program: Hudson River PCB Reclamation Demonstration Project. August 1982. Bureau of Water Research, Division of Water, New York State Department of Environmental Conservation, Albany, New York.

Food and Drug Administration. 1982. Pesticide Analytical Manual, Vol. I, Methods which detect multiple residues. Section 211. Washington, D.C. U.S. Dept. of Health and Human Services.

Gaufin, A.R. 1973. Use of macroinvertebrates in the assessment of water quality. pp. 96-116 in Cairns, J. Jr. and K.L. Dickson (eds.). Biological Methods for the Assessment of Water Quality. Am. Soc. Test. Mar. Spec. Publ. No. 528.

Goodnight, C.J. 1973. The use of macroinvertebrates as indicators of stream pollution. Trans. Am. Microsc. Soc. 92:1-13.

Hartley, D.M., and Johnston, J.B. 1983. Use of the freshwater clam Corbicula manilensis as a monitor for organochlorine pesticides. Bull. Environ. Contam. Toxicol. 31:33-40.

Hester, F.E., and Dendy, J.S. 1962. A multiple-plate sampler for aquatic macroinvertebrates. Trans. Am. Fish. Soc. 91:420-421.

Horn, E.G., Hetling, L.J., and Tofflemire, T.J. 1979. The problem of PCBs in the Hudson River system. Annals NY Acad. Sci. 320:591-609.

Macek, K.J., Petrocelli, S.R., and Sleight, B.H. III. 1979. Considerations in assessing the potential for, and significance of, biomagnification of chemical residues in aquatic food chains. Aquatic Toxicology. Special Techn. Publ. 667. Amer. Soc. for Testing and Materials, Philadelphia.

Malcolm Pirnie. 1980. PCB Hot Spot Dredging Program, Upper Hudson River, New York. Report prepared for the New York State Department of Environmental Conservation.

GMM 002 0317

- Mauck, W.L., and Olsen, L.E. 1977. Polychlorinated biphenyls in adult mayflies (Hexagenia bilineata) from the upper Mississippi River. Bull. Environ. Contam. Toxicol. 17:387-390.
- Muir, D.C.G., Townsend, B.E., and Lockhart, W.L. 1983. Bioavailability of six organic chemicals to Chironomus tentans larvae in sediment and water. Environ. Tox. Chem. 2:269-281.
- Muir, D.C.G., Townsend, B.E., and Webster, G.R.B. 1985. Bioavailability of ¹⁴C-1,3,6,8-tetrachlorodibenzo-p-dioxin and ¹⁴C-octachloro-dibenzo-p-dioxin to aquatic insects in sediments and water. pp. 89-102 in (L.H. Kerth, C. Rappe, and G. Choudhary, eds.), Chlorinated Dioxins and Dibenzofurans in the Total Environment II. Boston: Butterworth Publishers. 541 pp.
- Normandeau Associates. Sept. 1977. Hudson River Survey 1976-1977 with Cross-Section and Planimetric Maps. Bedford, New Hampshire, 351 pp.
- Paulson, A.S., and Delechanty, T.A. 1983. Sensitivity analysis in experimental design. In Computer Science and Statistics: Proceedings of the 14th Symposium on the Interface (July 5-7, 1982, Rensselaer Polytechnic Institute, Troy, NY). K.W. Heiner, R.S. Sacher, and J.W. Wilkinson, eds.) New York: Springer Verlag, Inc. 313 pp.
- Peltier, W. 1978. Methods of measuring the acute toxicity of effluents to aquatic organisms. Ecol. Res. Ser. EPA-600/4-78-012.
- Sanders, H.O., and Chandler, J.H. 1972. Biological magnification of a polychlorinated biphenyl (Aroclor 1254) from water by aquatic invertebrates. Bull. Environ. Contam. Toxicol. 7 (5):257-263.
- Schroeder, R.A., and Barnes, C.R. 1983. Trends in polychlorinated biphenyl concentrations in Hudson River water five years after elimination of point sources. U.S. Geological Survey. Water Resources Investigations Report 83-206. 28 pp.

Simpson, K.W. 1976. A water quality evaluation of the Hudson River, based on the collection and analysis of macroinvertebrate communities. Paper No. 24, In: Fourth Symposium on Hudson River Ecology, Hudson River Environmental Society, Inc.

Sloan, R.J., Simpson, K.W., Schroeder, R.A., and Barnes, C.R. 1983. Temporal Trends Toward Stability of Hudson River PCB Contamination. Bull Environ. Contam. Toxicol. 31:377-385.

Stainken, D., and Rollwagen, J. 1979. PCB residues in bivalves and sediments of Raritan Bay. Bull. Environ. Contam. Toxicol 23(4-5):690-697.

Townsend, B.E., Lawrence, S.G., and Flannagan, J.F. 1981. Chironomus tentans Fabricius. In S.G. Lawrence, ed., Manual for the Culture of Selected Freshwater Invertebrates. Canadian Special Publication of Fisheries and Aquatic Sciences #54. Ottawa: Department of Fisheries and Oceans. 169 pp.

United States Geological Survey, 1979-1985. Water resources data for New York, Water years 1978-1984: Albany, NY, Vol. I. New York excluding Long Island. U.S. Geol. Sur. Water-Data Rep. (issued annually).

GMM 002 0319

APPENDIX A
Statistics for Multiplate Analyses

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APPENDIX A

Complete Model

The joint model consists of a pre-multiplying between-stations design matrix, B , and a post-multiplying within-stations design matrix, W . Coupled with parameter estimates, G , a model for the data, Y , is formulated as $Y = B G W$. Two separate models may then be formed by considering either $G_B = G W$ (for the time-specific spatial trends or between-stations model), or $G_W = B G$ (for the station-specific temporal trends or within-stations model) to be estimates associated with $Y = B G_B$ and $Y = W G_W$.

In the analysis of variance tables reported in Section I, Tables 5 and 6, the list appearing under the heading Source of Variation refers to an orthogonal decomposition of the variability observed in the data. Each entry gives a test of a null hypothesis that can be constructed by prefixing the entry with 'the' and suffixing with 'is zero'. For example, the fifth entry in Table 5 tests the null hypothesis that the cubic effect of stations 2 through 17 is zero. The last column of the table gives the probability that the implied null hypothesis is true on the basis of the amount of data collected.

Time-specific spatial trends model: Month and Year Effects

The final model, $Y = B G_B$, developed for the data (displayed in Figure 11), on the basis of Table 5, excludes the cubic and quartic effects.

The between stations design matrix is:

B =				
MEAN	STA 1 VS REST	LINEAR	QUADRATIC	
1	-1	0	0	
1	0.07	1.05	1.10	
1	0.07	2	4	
1	0.07	9	81	
1	0.07	21	441	
1	0.07	41	1681	
1	0.07	59	3481	
1	0.07	66.05	4362.60	
1	0.07	91	8281	
1	0.07	121	14641	
1	0.07	148	21904	
1	0.07	172	29584	
1	0.07	203	41209	
1	0.07	242	58564	
1	0.07	261	68121	

GMM 002 0321

The first column is independent of a station's distance down the river and thereby introduces a mean over all stations. The second column coupled with the zeros occurring in row 1 contrast Station 1 with the remainder. Columns 3 and 4 introduce the distances of stations below the dam and their squares. The resulting set of parameter estimates is :

		G = B			
MONTH/YEAR		CONSTANT	1 VS REST	LINEAR	QUADRATIC
1978	JULY	1.584602	1.296276	-0.006563	0.000005
	AUGUST	1.387311	1.138985	-0.003387	-0.000004
	SEPTEM	1.190020	0.981693	-0.000211	-0.000014
1979	JULY	1.173780	0.927825	-0.006301	0.000011
	AUGUST	0.976489	0.770533	-0.003125	0.000002
	SEPTEM	0.779198	0.613242	0.000051	-0.000008
1980	JULY	0.888760	0.669709	-0.007271	0.000020
	AUGUST	0.691469	0.512418	-0.004095	0.000010
	SEPTEM	0.494178	0.355127	-0.000919	0.000001
1981	JULY	1.814824	1.379549	-0.010050	0.000025
	AUGUST	1.617532	1.222257	-0.006875	0.000015
	SEPTEM	1.420241	1.064966	-0.003699	0.000006
1982	JULY	1.790423	1.362469	-0.012881	0.000036
	AUGUST	1.593132	1.205178	-0.009705	0.000026
	SEPTEM	1.395841	1.047887	-0.006529	0.000017
1983	JULY	1.833980	1.422086	-0.015429	0.000044
	AUGUST	1.636689	1.264795	-0.012253	0.000035
	SEPTEM	1.439398	1.107503	-0.009077	0.000025
1984	JULY	1.859352	1.493180	-0.016279	0.000047
	AUGUST	1.662061	1.335888	-0.013103	0.000037
	SEPTEM	1.464770	1.178597	-0.009927	0.000027
1985	JULY	1.746967	1.483530	-0.013559	0.000037
	AUGUST	1.549676	1.326239	-0.010383	0.000028
	SEPTEM	1.352384	1.168947	-0.007208	0.000018

The first column represents the estimated mean averaged over all stations for each of the 8 year x 3 month = 24 time observations. The second column represents corrections to be made to this over all mean to account for the differential effect of station 1 which is located above the dam. The model combines these two columns by: 1) subtracting the second column from the first for the 24 observations associated with Station 1; 2) adding (1/14) times

column 2 to column 1 for the rest of the stations. This separates out Station 1 from the estimated mean averaged over all stations; Table 5 indicates that station 1 has significantly different (less) Aroclor 1016 than the rest of the stations. The third and fourth columns apply linear and quadratic corrections to the means indicated above. These columns provide month specific estimates of the rate of change in log (Aroclor 1016+1) concentration per km below the dam; column 4 gives linear rates of decrease while column 5 gives accelerations.

The improvement in fit of the sequence of models in Figures 12 and 13 occurring at the addition of an effect may be judged by comparing the plots. Since the above parameter estimates are not independent, removing any one of them leads to a new set of parameters which estimate the remaining effects. The full model estimates therefore correspond only to the model plotted in Figure 13B. As noted, Figures 12A and B display averages over all stations. Notice that adding the additional effect in Figure 12B produces two estimates for each time: one for Station 1 and one for the other stations. More precisely, each station has an estimate created for it so there are actually 15 models displayed. The averaging however means that 14 of the 15 models are identical and not individually visible. The addition of a linear term between stations, however, (Figure 13A) creates a separate model for each of the stations which are now individually displayed. The complexity of this plot is due to overlaying the 15 individual plots which might be separately generated. The graph therefore allows for a direct between station comparison; the vertical separation between months in any one year is due to the linear effect (distance in km) of differences between stations. Similar remarks apply to Figures 13A and B.

GMM 002 0323

Station-specific temporal trends model: Month and Year Effects

The within stations design matrix is:

$$W =$$

	78-80 VS 81-85	YEAR LINEAR	YEAR CUBE	YEAR QUAR	MONTH LIN
MEAN					
1	-1	1	1	1	1
1	-1	1	1	1	2
1	-1	1	1	1	3
1	-1	2	8	16	1
1	-1	2	8	16	2
1	-1	2	8	16	3
1	-1	3	27	81	1
1	-1	3	27	81	2
1	-1	3	27	81	3
1	0.6	4	64	256	1
1	0.6	4	64	256	2
1	0.6	4	64	256	3
1	0.6	5	125	625	1
1	0.6	5	125	625	2
1	0.6	5	125	625	3
1	0.6	6	216	1296	1
1	0.6	6	216	1296	2
1	0.6	6	216	1296	3
1	0.6	7	343	2401	1
1	0.6	7	343	2401	2
1	0.6	7	343	2401	3
1	0.6	8	512	4096	1
1	0.6	8	512	4096	2
1	0.6	8	512	4096	3

The first column is independent of time and thereby introduces a mean over all times. The second column contrasts the pre- and post-1981 eras. The last column introduces the linear effect of the measurement months. Since only 1 year occurs for each 3 month interval all entries to the left are in triplicate. The linear cubic and quartic terms are otherwise similar to those appearing in matrix B.

The associated parameter estimates are:

		G =				
		W				
Station	MEAN	YEAR 78-80 VS REST	YEAR LINEAR	YEAR CUBIC	YEAR QUARTIC	MONTH LINEAR
1	0.524691	0.143314	-0.055187	0.002405	-0.000268	-0.040000
2	3.059762	0.716439	-0.525034	0.015595	-0.001295	-0.187366
3	3.058027	0.716311	-0.524812	0.015572	-0.001293	-0.186966
4	3.042437	0.715161	-0.522813	0.015367	-0.001272	-0.183380
5	2.922753	0.706088	-0.507080	0.013810	-0.001113	-0.156403
6	2.724043	0.690023	-0.479327	0.011302	-0.000860	-0.113925
7	2.411001	0.661815	-0.430875	0.007574	-0.000490	-0.053712
8	2.148650	0.634895	-0.384921	0.004703	-0.000213	-0.010829
9	2.050219	0.623877	-0.366184	0.003696	-0.000118	0.003139
10	2.051585	0.624034	-0.366450	0.003710	-0.000119	0.002954
11	1.727601	0.583453	-0.297737	0.000728	0.000150	0.038953
12	1.385589	0.531058	-0.209619	-0.001683	0.000338	0.054870
13	1.121402	0.480455	-0.125032	-0.002766	0.000383	0.043749
14	0.921262	0.432733	-0.045645	-0.002864	0.000323	0.013627
15	0.711077	0.367272	0.062748	-0.001785	0.000107	-0.053472

The last four columns provide station specific estimates of the rate of change of log (Aroclor 1016+1) concentration on a per year and per month basis. Columns 3 and 6 give estimates of the speed of changes. Columns 4 and 5 give higher order yearly rate changes.

Simultaneous Within and Between Model: Interaction effects

The full model was specified by $Y = B G W$ where B and W are specified above and Y is a 15 by 24 element multivariate response matrix whose rows hold the within station data. The resulting parameter estimates are:

GMM 002 0325

G=						
		78-80 VS 81-85	YEAR LINEAR	YEAR CUBE	YEAR QUAR	MONTH LIN
STA.						
MEAN	2.940397*	0.669458*	-0.503940*	0.016287*	-0.001393*	-0.19729*
1vsR.	2.415706*	0.526144*	-0.448753	0.013883	-0.001125	-0.15729
LIN.	-0.011217*	-0.000392*	0.001249	-0.000182*	0.000019	0.00317*
QUAD.	0.000007*	-0.000003*	0.000004*	0.000000	0.000000	-0.00001*

The first row and first column of G contain the effects previously addressed. The remainder of the matrix contains terms which represent interactions between stations and times. Not all of the 15 interactions implied by matrix G are statistically significant. The seven significant interactions in Table 7 have been marked with a *. Since the introduction of a new main effect parameter for year introduces an entire column of parameters into the model, the statistically significant fifth and sixth power of year have been omitted in the interests of parsimony. The SS column of Table 6 indicates these contribute the least amount of variability.

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APPENDIX B

Chironomus tentans Analyses

GMM 002 0327

APPENDIX B

Chironomus tentans Analyses

Equation 1 in the Text:

$$\frac{dC}{dt} = -K_2 C + K_1 C_w,$$

assumes that water congener concentrations are constant. However, if concentrations are not constant, as was the case in these river based experiments, the uptake rate is governed by the equation:

$$\frac{dC}{dt} = -K_2 C + K_1 C_w(t),$$

whose solution is:

$$C_t = C_0 e^{-K_2 t} + K_1 \int_0^t C_w(\tau) e^{-K_2(t-\tau)} d\tau,$$

where the term involving the initial concentration, C_0 , may be neglected because the larvae are assumed to possess no initial PCBs. Approximating $C_w(t)$ as C_w , allows the integration to be carried out explicitly without the necessity of determining the functional form of $C_w(t)$:

$$\frac{C_t}{C_w} = \frac{K_1}{K_2} [1 - e^{-K_2 t}]$$

Using the available $C_w(t)$:

$$\frac{C_t}{C_w(t)} = \frac{K_1}{K_2} [1 - e^{-K_2 t}] \quad [1a]$$

improves the approximation. The corresponding differential equation is:

$$\frac{dC}{dt} = -K_2 C + K_1 C_w + \frac{K_1}{K_2} [1 - e^{-K_2 t}] \cdot \frac{dC_w}{dt}$$

The approximation to the desired differential equation will be good if: 1) K_1 is much smaller than K_2 ; 2) $K_2 t$ is near zero; 3) $C_w(t)$ changes very slowly over time.

In the present study, the above approximation proved inadequate, since K_1 is larger than K_2 . By assuming that between the observation times $T_1, T_2, \dots, T_s$, the change in concentration was linear, the unknown functional form of $C_w(t)$ can be approximated by a sequence of linear functions:

$$C_w(t) = \beta_{0i} + \beta_{1i}t \quad \text{for } T_{i-1} < t < T_i, \quad i = 1, \dots, s$$

where

$$\beta_{0i} = C_w(t) - \beta_{1i}t \quad \text{and} \quad \beta_{1i} = [C_w(T_i) - C_w(T_{i-1})] / [T_i - T_{i-1}].$$

At the beginning of each interval the value of $C_{T_{i-1}}$ is available as the initial concentration, and the integration indicated above now ranged from $t = T_{i-1}$ to T_i , and has the solution used in the analysis of both July and September time periods:

$$C_{T_i} = C_{T_{i-1}} e^{-K_2 T_i} + \frac{K_1}{K_2} [\beta_{1i} (T_i - T_{i-1}) e^{-K_2 (T_i - T_{i-1})} + (\beta_{0i} - \frac{\beta_{1i}}{K_2}) (1 - e^{-K_2 (T_i - T_{i-1})})].$$

This equation has a simplified form for the first time period when $T_{i-1} = 0$.

Then:

$$C_{T_1} = \frac{K_1}{K_2} [\beta_{11} T_1 + (\beta_{01} - \frac{\beta_{11}}{K_2}) (1 - e^{-K_2 T_1})].$$

This equation reduces to Equation 1a above when $\beta_{11} = 0$ so that

$\beta_{01} = C_w(t)$ represents constant extracellular concentration.

APPENDIX C

Raw Data - Multiplates and Caddisflies

GMM 002 0330

SUMMARY OF MACROINVERTEBRATE PCB MONITORING 976
IN HUDSON RIVER

Station	RMI	Exposure Period	EHC Access #	PCBs - ppm			
				1221	1016	1254	Total
Upper Hudson River							
1. Above Hudson Falls at Chase Bag Co.	197.0	5/10-6/7/76	4552	<0.4	0.4	<0.4	0.4
		6/7-7/12/76	5005 74	<0.2	0.6	0.2	0.8
		7/12-8/16/76					
		8/16-9/20/76					
2. At Ft. Edward former dam site	194.6	5/10-6/7/76	4553	<1.0	6.2	<1.0	6.2
		6/7-7/12/76	5006 26	<0.7	7.4	1.8	9.2
		7/12-8/16/76					
		8/16-9/20/76					
3. Champlain Canal above Lock 7 at Ft. Edward		5/10-6/7/76	4584	-----L.A.-----			
		6/7-7/12/76	5007	0.1	0.2	0.1	0.4
		7/12-8/16/76					
		8/16-9/20/76					
4. Below Ft. Edward at Buoy 219	193.4	5/10-6/7/76	4554	1.4	24.0	1.8	27.2
		6/7-7/12/76	5008 14.8	<2.2	57.0	6.9	63.9
		7/12-8/16/76					
		8/16-9/20/76					
5. Above Ft. Miller at Buoy 189	189.2	5/10-6/7/76	4555	9.5	16.0	1.2	26.7
		6/7-7/12/76	5009 4.8	<2.3	16.0	<3.2	21.5
		7/12-8/16/76					
		8/16-9/20/76					
6. Schuylerville at Buoy 179	181.6	5/10-6/7/76	4585	2.5	10.0	0.8	13.3
		6/7-7/12/76	5010	1.4	11.0	2.7	15.1
		7/12-8/16/76					
		8/16-9/20/76					
7. Stillwater at Buoy 81	168.6	5/10-6/7/76	4586	7.8	16.0	1.3	25.1
		6/7-7/12/76	-				
		7/12-8/15/76					
		8/16-9/20/76					
8. Waterford at Buoy 13	157.9	5/10-6/7/76	4587	0.6	5.0	0.9	6.5
		6/7-7/12/76	5011	<1.2	12.0	3.4	15.4
		7/12-8/16/76					
		8/16-9/20/76					
Lower Hudson River							
9. Troy, just below Federal Dam at Buoy 79	153.0	9/11-10/16/73		<0.1	30.3	2.1	32.4
		5/10-6/7/76	4588	1.2	2.1	0.6	3.9
		6/7-7/12/76	-				
		7/12-8/16/76					
		8/16-9/20/76					

GMM 002 0331

Station	RMI	Exposure Period	EHC Access #	PCB - ppm			
				1221	1016	1254	Total
10. Castleton at Buoy 53	136.0	9/11-10/16/73		< 0.1	19.1	1.4	20.5
		5/10-6/10/76	4589	0.8	4.1	0.6	5.5
		6/7-7/12/76	5012	0.5	10.0	2.3	12.8
		7/12-8/16/76					
		8/16-9/20/76					
11. Hudson/Athens at Buoy 88	116.0	9/11-10/16/73	-	-	-	-	-
		5/10-6/7/76	4590	0.6	2.0	0.3	2.9
		6/7-7/12/76	5013	< 1.2	5.0	1.7	6.7
		7/12-8/16/76					
		8/16-9/20/76					
12. Saugerties at Buoy 39	100.0	8/7-9/12/73	-	< 0.1	8.7	3.1	11.8
		5/10-6/7/76	4591	0.7	2.5	0.4	3.6
		6/7-7/12/76	5014	< 0.7	11.0	1.5	12.5
		7/12-8/16/76					
		8/16-9/20/76					
13. Esopus at Esopus Island North Shoal Buoy	85.0	8/8-9/12/73	-	< 0.1	6.5	2.1	8.6
		5/10-6/7/76	-				
		6/7-7/12/76					
		7/12-8/16/76					
		8/16-9/20/76					
... Peekskill	43.2	7/5-8/8/73		< 0.1	9.5	1.7	11.2

GMM 002 0332

AUGUST 1977 MULTIPLATE RESIDUES - analysed by B. Bush's lab

Station	% lipids	1221	1016	Total dr. wt. ppm	Total /lipids ppm
1	1.8	-	0.1	0.1	5.5
2	2.56	.04	2.58	2.62	102.3
" (Split sample)	2.78	.05	2.66	2.71	97.5
4	3.20	.18	2.44	2.62	81.9
" (Split sample)	2.78	.18	2.92	3.00	107.9
5	1.27	.88	3.22	4.10	322.8
6	2.12	.81	8.07	8.88	418.9
7	4.74	.30	10.53	10.83	228.5
8	.88	.16	5.02	5.18	588.6
9	.64	.05	2.40	2.45	382.8
10	1.49	-	2.84	2.84	196.6
11	2.50	.04	3.41	3.45	138.0
13	.90	-	1.58	1.58	175.5
14	1.04	.02	1.36	1.38	132.7
15	1.47	-	0.85	0.85	57.8

SEPTEMBER 1977 MULTIPLATE RESIDUES - analysed by B. Bush's lab

Station/sample	% lipids	Total dr. wt.	Total /lipids
1A	4.20	1.13	26.9
1B	4.46	0.86	19.5
2A	2.12	30.40	1447.6
2B	2.40	42.62	1775.8
4	1.82	14.97	831.7
5	1.38	15.03	1097.1
6	1.20	14.54	1213.7
7	1.51	13.47	893.8
8	1.00	8.49	852.4
9	0.96	3.08	319.8
10	1.26	6.67	526.8
11	1.53	5.69	370.9
12	1.06	3.83	362.7
13	1.22	3.74	305.3
14	0.96	6.20	647.8
15	0.81	4.16	513.6
16	1.35	4.36	323.2

0333 002 GMM

PCB's in multiplate residues, July 1978. Analyses by Nancy Moore (DL&R Quality Assurance Lab)

Location	Sample Type**	Date	Lab #	Wet weight (gm)	Dry weight (gm)	% lipid (dry wt.)	AR1016 (ugg ⁻¹ dry wt.)	AR1254 (ugg ⁻¹ dry wt.)	Total PCB's	Total PCB's (ugg ⁻¹ lipid)	VAR1016
Bakers Falls	E	18 July	1		3.90	1.43	0.32	0.19	0.51	35.	63
"	R	"	3		2.39	0.45	2.97	0.41	3.38	751	88
"	U	"	2		3.83	1.36	0.34	0.14	0.48	35	71
Ft. Edward I	E	18 July	4		3.10	2.16	8.83	5.41	14.24	658	62
"	R	"	6		2.61	6.33	16.14	9.52	25.66	405	63
"	U	"	5		5.22	1.60	6.83	3.93	10.76	673	63
Ft. Edward II	E	18 July	7		3.65	1.22	20.12	7.39	27.51	2255	73
"	R	"	9		2.48	4.26	25.11	10.74	35.85	841	70
"	U	"	8		4.03	1.47	20.99	9.92	30.91	2103	68
Ft. Miller	E	18 July	10		3.34	2.03	18.86	8.30	27.16	1338	69
"	R	"	11		1.28	3.75	19.13	10.55	29.68	791	64
Schuylerville	E	18 July	12		5.87	2.19	11.90	3.93	15.83	722	75
++	R	"	14		3.12	3.61	14.79	14.50	29.27	811	50
++	U	"	13		8.08	0.59	9.53	2.92	12.45	2110	77
Stillwater	E	18 July	15		4.45	--- not extracted ---					
Waterford	E	18 July	16		6.79	0.19	7.21	1.96	9.17	4827	79
Troy	E	19 July	17		8.45	1.02	3.03	0.96	3.99	391	76
Castleton	E	19 July	18		2.25	0.59	6.61	1.26	7.87	1334	83
Hudson/Athens	E	19 July	19		3.70	1.48	2.73	0.93	3.66	247	74
++Saugerties	E	19 July	20		7.81	0.83	0.67	0.45	1.12	135	60
Esopus	E	20 July	21		4.90	0.49	2.04	0.50	2.54	518	80
New Hamburg	E	20 July	22		3.17	0.61	1.50	0.32	1.82	298	83
Peekskill	E	20 July	23		3.56	1.15	1.01	0.73	1.74	151	58
Hyack	E	20 July	24		2.72	0.62	0.71	0.69	1.40	226	51

** E = entire sample (unprocessed residue from multiplate sampler)

R = retained (materials retained in a U.S. No. 30 Sieve)

U = unretained (silt and other small particles not retained by a U.S. No. 30 Sieve)

++ samples analysed by DEC's Hale Creek Field Station (Dr. S. Jackling)

0334 002 GMM

HOUMA RIVER - MACROINVERTEBRATE STUDY

JULY, AUGUST, SEPTEMBER 1978

LAB #	TAG #	% Lipid (Dry Wt.)	AR1016	AR1254 ($\mu\text{g g}^{-1}$ dry wt.)	Total PCB	AR1016	AR1254 ($\mu\text{g g}^{-1}$ in lipid)	Total PCB
91	1	1.26	0.69	0.25	0.94	54.76	19.84	74.60
92	2	1.60	2.80	2.61	5.41	175.0	163.1	338.1
93	3	1.23	2.35	2.47	4.82	191.1	200.8	391.9
94	4	1.02	1.31	1.69	3.00	128.4	165.7	294.1
95	5	1.25	1.97	1.97	3.94	157.6	157.6	315.2
96	6	0.91	2.18	1.85	4.03	239.6	203.3	442.9
97	7	1.14	2.24	2.17	4.41	196.5	190.4	386.9
98	8	0.87	2.82	2.22	5.04	324.1	255.2	579.3
99	9	0.85	7.01	4.21	11.22	824.7	495.3	1320.
100	10	0.42	0.98	1.21	2.19	233.3	288.1	521.4
101	11	1.77	5.99	4.05	10.04	338.4	228.8	567.2
102	12	0.73	3.37	2.25	5.62	461.6	308.2	769.8
103	13	0.99	3.84	2.28	6.12	387.9	230.3	618.2
104	14	0.41	2.48	1.62	4.10	604.9	395.1	1000.
105	15	0.59	1.11	1.09	2.20	188.1	184.8	372.9
106	16	1.12	2.44	1.08	3.52	217.9	96.4	314.3
107	17	1.24	0.57	0.62	1.19	45.97	50.00	95.97
108	18	0.72	0.28	0.37	0.65	38.89	51.39	90.28
109	19	0.78	0.10	0.31	0.41	12.82	39.74	52.56
110	20	0.75	0.88	0.69	1.57	117.3	92.00	209.30
111	21	0.53	0.26	0.36	0.62	49.06	67.92	117.0
112	22	0.83	0.09	0.36	0.45	10.84	43.37	54.22
113	23	1.37	2.09	2.21	4.29	152.6	161.3	313.9
114	24	2.02	2.63	2.67	5.30	130.2	132.2	262.4
115	25	1.43	1.90	1.88	3.78	132.9	131.5	264.4
116	26	0.79	0.66	0.54	1.20	83.54	68.35	151.9
117	27	1.05	ND	ND	ND	—	—	—
118	28	1.09	ND	ND	ND	—	—	—
119	29	1.51	ND	ND	ND	—	—	—
120	30	0.99	0.80	1.29	2.09	80.81	130.3	211.1
121	31	2.84	1.88	2.06	3.94	66.20	72.54	138.7
122	32	1.65	2.07	2.00	4.07	125.5	121.2	246.7
123	33	1.42	2.67	2.35	5.02	188.0	165.5	353.5

GMM 002 0335

INDSON RIVER - MACROINVERTEDRATE STUDY (cont'd)

1978

LAB #	TAO #	% Lipid (Dry Wt.)	AR1016	AR1254	Total PCB	AR1016	AR1254	Total PCB
			(ugg ⁻¹ dry wt.)			(ugg ⁻¹ in lipid)		
124	34	1.17	0.88	1.19	2.07	75.21	101.7	176.9
125	35	1.96	0.16	0.47	0.63	8.16	23.98	32.14
126	36	0.71	2.70	2.06	4.76	380.3	290.1	670.4
127	37	0.84	1.66	1.83	3.49	197.6	217.9	415.5
128	38	0.63	1.39	1.66	3.05	220.6	263.5	484.1
129	39	0.36	2.78	1.84	4.62	772.2	511.1	1283.
130	40	1.43	4.12	2.84	6.96	288.1	198.6	486.7
131	41	1.24	2.63	2.10	4.73	212.1	169.4	381.5
132	42	0.89	2.90	1.10	4.00	325.8	123.6	449.4
133	43	0.50	2.13	1.43	3.56	426.0	286.0	712.0
134	44	0.48	1.54	0.90	2.44	320.8	187.5	508.3
135	45	0.70	1.94	0.94	2.88	277.1	134.3	411.4
136	46	0.69	0.78	0.62	1.40	113.0	89.86	202.9
137	47	0.54	0.95	0.57	1.52	175.9	105.6	281.5
138	48	0.52	0.53	0.54	1.07	101.9	103.8	205.7
139	49	1.45	1.46	1.00	2.46	100.7	68.97	169.7
140	50	2.66	0.37	0.68	1.05	13.91	25.56	39.47
141	51	2.26	0.46	1.04	1.50	20.35	46.02	66.37
142	52	1.17	2.11	1.77	3.88	180.3	151.3	331.5
143	53	0.62	0.91	0.72	1.63	146.8	116.1	262.9
144	54	0.58	0.67	0.52	1.19	115.5	89.66	205.2
145	55	11.95	24.92	26.15	51.07	208.5	218.8	427.3
146	56	11.16	12.37	13.22	25.59	110.8	118.5	229.3
147	57	13.61	32.95	30.25	63.20	242.1	222.3	464.4
148	58	23.92	1.56	2.40	3.96	6.52	10.03	16.55
149	59	3.61	14.79	14.50	29.29	409.7	401.7	811.4
150	60	0.83	0.67	0.45	1.12	80.72	54.22	134.9

0336 002 GMM

HUDSON RIVER — SEDIMENTS

JULY, 1979

LAB #	TAG #	COLLECTION SITE	% LIPIDS (dry wt.)	AR1016 ($\mu\text{g g}^{-1}$ dry wt.)	AR1254 ($\mu\text{g g}^{-1}$ dry wt.)	TOTAL PCB	
691	79-40	Bakers Falls	2.54	0.14	0.07	0.21	
692	41	Rodgers Is.	2.38	5.34	4.74	10.08	4.74
693	42	PCB-4	1.56	2.07	1.96	4.03	
694	43	PCB-5	2.06	0.16	0.26	0.42	
695	44	PCB-6	3.50	15.84	11.91	27.75	7
696	45	PCB-6	3.19	2.09	3.61	5.70	
697	46	PCB-7	0.77	4.25	4.58	8.83	
698	47	PCB-7	3.44	1.75	2.72	4.47	
699	48	PCB-8	0.56	0.96	0.75	1.71	
700	49	PCB-8	0.73	0.86	0.82	1.68	
701	50	PCB-9	0.73	0.60	0.70	1.30	
702	51	PCB-9	0.70	0.69	0.71	1.40	
703	52	PCB-10	1.06	1.13	0.76	1.89	
704	53	PCB-11	1.25	0.84	0.72	1.56	
705	54	PCB-12	1.49	0.73	0.46	1.19	
706	55	PCB-13	1.48	0.81	0.43	1.24	
707	56	PCB-14	1.06	0.63	0.37	1.00	
708	57	PCB-15	1.21	0.53	0.71	1.24	
709	58	PCB-16	1.25	0.35	0.51	0.86	

GMM 002 0337

HUDSON RIVER MACROINVERTEBRATE PCB ANALYSIS

($\mu\text{g g}^{-1}$ Dry Weight)

LAB #	TAG #	LOCATION	DATE	WET WT.	DRY WT.	% LIPID	AR1016	AR1254	TOTAL PCB
Multiplate Sediments:									
1-80-H	79-78	PCB-1	13 Aug. 79	9.05g	1.72g	1.63	0.319	0.541	0.860
2	79	2		9.58	1.63	4.67	2.74	3.55	6.29
3	80	2		8.71	1.53	5.30	2.12	2.67	4.79
4	81	4		8.53	1.89	1.46	1.24	1.98	3.22
5	82	4		5.63	1.39	1.24	2.74	2.26	5.00
6	83	5		11.30	1.69	1.73	1.75	3.36	5.11
7	84	5		8.73	1.38	1.17	2.46	3.76	6.22
8	85	6		12.25	2.38	2.51	4.93	6.72	11.65
9	86	6		11.24	2.29	1.59	2.20	3.24	5.44
10	87	7		11.65	2.44	2.81	4.16	5.25	9.41
11	88	8		11.95	2.52	0.76	0.60	1.31	1.91
12	89	9	14 Aug. 79	10.05	2.45	0.82	1.89	1.33	3.22
13	90	10		5.40	1.91	0.90	1.71	1.06	2.77
14	91	11		7.74	2.23	0.60	0.93	0.65	1.58
15	92	12		10.35	3.08	0.71	0.54	0.33	0.87
16	93	14		7.95	1.29	2.17	1.94	1.23	3.17
17	94	15		7.11	0.96	1.72	0.97	1.04	2.01
		1							
31	108	1	17 Sep. 79	8.95	1.20	2.93	0.32	0.28	0.60
32	109	1		8.82	1.23	4.49	0.13	0.22	0.35
33	110	2		7.64	1.30	2.85	1.30	2.30	3.60
34	111	2		4.87	1.33	4.07	1.49	2.22	3.71
35	112	2		8.81	1.15	4.70	1.88	2.40	4.28
36	113	4		5.87	1.47	2.60	1.05	1.29	2.34
37	114	4		7.28	1.90	0.95	0.49	1.22	1.71
38	115	5		6.87	0.98	3.97	1.70	2.36	4.06
39	116	5		7.80	1.08	2.69	0.23	1.30	1.53
40	117	6		7.20	1.36	1.34	2.98	3.31	6.29
41	118	6		9.98	1.78	1.41	2.15	2.96	5.11
42	119	7		7.68	1.81	2.23	1.76	2.28	4.04
43	120	7		10.00	2.27	1.11	1.90	2.34	4.24
44	121	8		7.05	2.03	0.89	0.98	1.10	2.08
45	122	8		6.85	1.82	0.75	1.82	1.84	3.66
46	123	9	18 Sep. 79	4.65	1.96	1.23	1.47	1.48	2.95
47	124	9		6.42	2.47	0.80	1.68	0.99	2.67

8338 002 WNG

CONTINUED-

Lab #	Tag #	Location	Date	Wet Wt.	Dry Wt.	% Lipid	AR1016	AR1254	Total PCB
48-80-H	79-125	PCB-10	18 Sept. 79	3.35	1.64	1.60	2.11	1.50	3.61
49	126	11		11.14	3.01	1.03	1.19	0.80	1.98
50	127	12		11.55	3.35	1.01	1.01	0.60	1.51
51	128	12		9.34	0.75	4.35	1.79	1.88	3.67
Insects:									
18-80-H	79-95	Bakers Falls	17 Sept. 79	0.512	0.110	30.09	ND	ND	ND
19	96	"		0.434	0.088	25.45	< 3	< 2	< 5
20	97	Rogers Is.		0.753	0.164	16.77	17.28	20.72	38.00
21	98	"		0.735	0.167	17.96	16.96	25.56	42.52
22	99	"		0.838	0.306	32.12	14.85	26.58	41.43
23	100	"		0.847	0.385	45.53	6.87	18.53	25.40
24	101	Thompson Is.		0.535	0.127	25.04	17.31	26.38	43.69
25	102	"		0.526	0.128	23.05	24.07	29.21	53.28
26	103	Stillwater		0.373	0.102	30.20	36.26	33.74	70.00
27	104	"		0.581	0.127	46.54	14.52	22.66	37.18
28	105	"		0.578	0.134	15.75	19.41	26.62	46.03
29	106	"		0.655	0.132	9.85	15.87	18.85	34.72
30	107	"		2.232	0.666	27.03	5.63	13.37	19.00

5 SEPT. 80

GMM 002 0339

HUDSON RIVER - PCB MONITORING - 1980

Lab #	Tag #	Collection Date	Location	Sample Type *	Wet Weight (g)	Dry Weight (g)	% Lipid (dry wt.)	Dry Weight Basis			Lipid Basis	
								AR1016	AR1254	Total PCB	Total	Total PCB
Multiplate Residues:												
557-80-H	80-35	08JUL80	PCB-1		14.7	3.65	1.92	0.162	0.221	0.383	19.9	
558	36		2		11.1	2.24	2.21	1.12	3.11	4.23	191	
559	39		3B		14.1	4.03	1.39	1.18	1.89	3.07	221	
560	40		4		16.0	4.58	1.79	1.48	1.81	3.29	184	
561	41		5		17.1	4.16	2.02	1.81	2.64	4.45	220	
562	42		6		12.5	2.48	3.33	3.21	3.87	7.08	213	
563	43		7		12.9	2.52	3.08	2.00	3.50	5.50	179	
564	44		8		11.8	3.36	1.01	0.918	0.981	1.90	188	
565	123	11JUL80	9		16.9	5.86	0.98	0.481	0.693	1.17	120	
566	124		10		7.7	4.05	1.12	0.375	1.25	1.62	145	
567	125		11		9.6	3.01	1.30	0.180	0.384	0.564	43.4	
568	126		12		4.8	2.57	1.35	0.263	0.282	0.545	40.4	
569	127	10JUL80	13		12.5	7.10	0.48	0.217	0.359	0.576	120	
570	128		14		12.1	3.66	0.95	0.162	0.422	0.584	61.5	
571	129		15		17.5	2.03	1.55	0.390	0.744	1.13	73.2	
588-80-H	80-74	11AUG80	PCB-1		15.8	1.54	1.53	0.174	0.202	0.376	24.6	
589	75		2		18.3	2.17	1.85	1.12	1.60	2.72	147	
590	76		3B		13.9	3.49	0.93	0.773	1.47	2.24	241	
591	77		4		12.6	2.96	1.09	0.641	0.895	1.54	141	
592	78		5		16.3	3.29	0.78	0.895	0.721	1.62	207	
593	79		7		10.2	2.03	2.41	1.63	2.37	4.00	166	
594	80		8		18.3	4.18	1.30	0.689	1.22	1.91	147	
595	83	13AUG80	9		20.4	6.18	0.75	0.387	0.603	0.99	132	
596	84		10		9.3	2.76	0.83	0.690	1.90	2.59	313	
597	85		11		8.9	3.04	1.22	0.263	0.438	0.701	57.5	
598	86	14AUG80	13		16.3	6.78	0.32	0.137	0.228	0.365	114	
599	87		15		16.1	5.16	0.52	0.267	0.657	0.924	178	
Multiplate residues:												
610-80-H	80-88	15SEP80	PCB-1		8.8	1.65	1.85	0.175	0.256	0.431	23.3	
611	89		2		13.1	2.63	1.39	0.310	0.877	1.19	85.4	
612	90		3B		11.4	3.26	1.10	0.698	0.870	1.57	143	
613	91		4		4.6	1.96	1.30	0.520	0.759	1.28	98.4	
614	92		5		10.8	4.01	0.64	0.415	1.26	1.68	262	
615	93		6		8.7	3.32	1.08	0.849	1.09	1.94	180	
616	94		7		7.3	3.64	0.83	0.678	0.893	1.57	149	

HUDSON RIVER - PCB MONITORING - 1980

(continued)

Lab #	Tag #	Collection Date	Location	Sample Type *	Wet Weight (g)	Dry Weight (g)	% Lipid (dry wt.)	Dry Weight Basis			Lipid Basis
								AR1016	AR1254	Total PCB	Total PCB
617	113	17SEP80	8		14.3	4.00	0.42	0.593	0.700	1.29	308
618	114		9		17.3	6.04	0.36	0.304	0.480	0.784	218
619	115		12		15.0	4.91	0.60	0.126	0.190	0.316	52.7
620	117	19SEP80	10		14.9	6.67	0.34	0.340	0.839	1.18	347
621	118		11		13.9	5.42	0.55	0.309	0.443	0.752	137
622	119	22SEP80	13		13.3	6.73	0.48	0.282	0.371	0.653	136
623	120		14		4.6	2.17	1.03	0.188	0.356	0.544	52.8
624	121		15		10.5	3.08	0.68	0.379	0.600	0.979	144
625	122		16		19.2	3.77	0.68	0.124	0.382	0.506	74.4

09 JULY 81

GMM 002 0341

HUDSON RIVER - PCB MONITORING 1981

Multiplate Residues

ug/g

Lab #	Tag #	Collection Date	Location	Wet Wt. (g)	Dry Wt. (g)	% Lipid	Dry Wt. Basis			Lipid Basis Total PCB
							AR1016	AR1254	Total PCB	
666-81-H	81-18	07 JUL 81	PCB-1	12.23	2.03	1.30	<0.22	0.29	<0.51	<39.0
667	19		2	14.12	1.96	2.11	6.92	1.90	8.82	418
668	20		4	8.17	2.44	1.34	5.47	1.67	7.14	533
669	21		5	12.46	3.42	0.728	9.15	2.10	11.3	1545
670	22		6	13.74	4.11	0.871	5.38	1.40	6.78	779
671	23		7	13.62	3.44	1.22	6.16	1.38	7.54	618
672	24	09 JUL 81	8	10.35	3.53	0.861	4.03	0.862	4.89	568
673	25	07 JUL 81	9	9.23	3.44	0.634	1.84	0.472	2.31	364
674	26	09 JUL 81	10	6.13	2.57	0.471	2.20	1.64	3.84	815
675	27		11	8.59	3.63	0.452	1.08	0.373	1.45	321
676	28		12	11.29	4.41	0.420	0.848	0.297	1.15	274
677	29	10 JUL 81	13	14.39	6.00	3.47	1.14	0.247	1.39	40.1
678	30		14	7.26	2.65	0.442	1.36	0.516	1.88	425
679	31		15	15.65	6.97	0.263	1.10	0.528	1.63	620
680	32		16	11.95	1.97	1.11	1.21	0.966	2.18	196
692-81-H	81-45	10 AUG 81	PCB-1	11.45	2.57	0.934	0.254	0.265	0.519	55.6
693	46		2	7.98	2.37	2.83	2.93	0.950	3.88	415
694	47		3b	15.17	5.74	0.897	4.89	1.91	6.80	758
695	48		4	14.94	4.42	0.919	0.265	0.455	0.720	78.3
696	49		5	11.14	4.28	0.759	4.02	1.13	5.15	679
697	50		6	10.78	4.03	0.782	5.84	1.49	7.33	937
698	51		7	11.30	4.47	2.35	4.87	1.37	6.24	266
699	52		8	11.34	5.53	0.512	2.87	0.713	3.58	699
700	53	12 AUG 81	9	8.22	3.52	1.19	3.24	0.584	3.82	321
701	54		10	4.45	2.84	0.817	1.85	1.13	2.98	365
702	55		11	21.77	6.25	0.710	1.17	0.492	1.66	234
703	56		12	11.17	4.73	0.761	1.04	0.328	1.37	180

HUDSON RIVER - PCB MONITORING 1981

(continued)

Lab #	Tag #	Collection Date	Collection Site	Wet Wt. (g)	Dry Wt. (g)	% Lipid	Dry Wt. Basis			Lipid Basis
							ARI016	ARI254	Total PCB	Total PCB
704	57	13 AUG 81	PCB-13	6.62	3.98	0.666	1.29	0.360	1.65	248
705	58		14	14.43	3.95	0.643	1.50	0.551	2.05	319
706	59		15	7.44	3.94	0.401	1.93	0.772	2.70	673
707	60		16	7.60	4.31	0.406	1.13	0.537	1.67	411
715-81-W	81-68	14 SEP 81	PCB-1	9.57	2.64	0.746	<0.32	<0.27	<0.59	<79
716	69		2	7.94	2.19	1.00	2.74	0.833	3.57	357
717	70		3b	13.70	3.97	0.650	4.12	1.30	5.42	834
718	71		4	15.80	3.19	0.900	2.61	0.776	3.39	377
719	72	15 SEP 81	5	13.94	3.89	0.758	3.71	1.03	4.74	625
720	73		6	19.49	3.47	1.12	6.53	1.75	8.28	739
721	74		8	10.45	3.17	0.546	2.81	0.861	3.67	672
722	75		9	16.87	3.59	1.38	2.05	0.780	2.83	205
723	76	16 SEP 81	10	12.73	4.87	0.507	2.37	1.48	3.85	759
724	77		11	10.31	3.40	3.14	2.32	1.48	3.80	121
725	78		12	14.92	5.06	1.97	1.16	0.441	1.60	81.2
726	79		13	9.50	3.72	2.13	1.77	0.546	2.32	109
727	80	17 SEP 81	14	9.56	2.81	2.38	2.86	1.06	3.92	165
728	81		15	12.67	3.35	2.29	1.68	0.817	2.50	109

n = 45

11 MAY 82

GMM 002 0343

HUDSON RIVER - PCB MONITORING 1982

MULTIPLATE RESIDUES $\mu\text{g g}^{-1}$

Lab #	Tag #	Collection Date	Location	(n) Wet Wt.	(g) Dry Wt.	% Lipid	Dry Wt. Basis		Total PCB	Lipid Basis Total PCB
							AR 1016	AR 1254		
263-83-H	82-22	6 July 82	PCB-1	19.1	1.66	1.14	1.46	1.91	(3.37)	296
264	23	↓	2	17.4	3.41	1.17	6.22	4.94	11.2	957
265	24	↓	3	19.6	3.12	1.22	5.64	4.60	10.2	828
266	25	↓	4	22.4	2.73	1.40	29.1	77.9	107	7643
267	26	↓	5	17.0	4.24	0.894	26.1	57.5	83.6	9351
268*	27	↓	6	12.8	2.36	0.907	10.6	18.3	28.9	3186
269	28	↓	7	8.0	2.59	1.36	18.5	38.8	57.3	4213
270	29	↓	8	10.7	4.76	0.387	5.72	9.39	15.1	3902
271	30	8 July 82	9	15.7	4.99	0.479	3.99	8.48	12.5	2610
272	31	↓	10	7.5	2.74	0.394	3.17	4.39	7.56	1919
273	32	↓	11	12.7	6.12	0.482	2.31	2.88	5.19	1077
274	33	↓	12	13.6	5.46	0.333	5.33	10.6	15.9	4775
275	34	9 July 82	13	4.1	1.98	0.364	5.59	9.69	15.3	4203
276*	35	↓	14	8.9	3.54	0.254	2.59	2.50	5.09	2004
277	36	↓	15	13.4	5.06	0.225	3.53	3.76	7.29	3240
278	37	↓	16	9.3	3.96	0.879	1.92	2.19	4.11	468
279	82-50	9 Aug 82	PCB-1	12.2	2.35	1.61	3.36	21.9	(25.3)	1571
280	51	↓	2	22.5	2.58	4.51	4.39	3.93	8.32	184
281	52	↓	3	16.6	6.89	1.35	3.06	4.30	7.36	545
282	53	↓	4	12.6	3.70	1.84	5.47	4.90	10.4	565
283	54	↓	5	18.1	4.84	0.622	6.36	11.3	17.7	2846
284*	55	↓	6	15.4	2.83	1.79	12.7	80.0	92.7	5179
285	56	↓	7	18.5	3.02	1.73	3.94	3.12	7.06	408
286	57	↓	8	16.0	6.65	0.408	1.63	2.27	3.90	956
287-83-H	82-58	11 Aug 82	PCB-9	17.4	4.97	0.952	4.66	37.2	(41.9)	4401
288	59	↓	10	9.2	4.19	1.14	2.31	3.09	5.40	474
289	60	↓	11	13.6	5.43	0.803	2.27	11.4	13.7	1706
290	61	12 Aug 82	13	7.9	3.55	0.479	1.87	15.0	16.9	3528
291	62	↓	14	18.5	8.40	0.317	1.77	7.04	8.81	2779
292	63	↓	16	9.4	3.46	0.497	2.03	16.5	18.5	3722

Lab #	Tag #	Collection Date	Location	(u) Wet Wt.	(n) Dry Wt.	Lipid	Dry Wt. Basis			Lipid Basis	
							AR 1016	AR 1254	Total PCB	Total PCB	
293-83-H	82-70	13 Sep 82	PCR-1	13.0	1.29	1.78	<1.0	<1.0	<2.0	<112	
294*	71	↓	2	16.3	2.55	1.36	3.80	1.60	5.40	397	
295	72		3	13.1	2.89	0.768	3.33	1.38	4.71	613	
296	73		4	15.8	3.19	1.02	2.49	0.784	3.27	321	
297	74		5	20.5	4.74	0.637	2.87	1.05	3.92	615	
298	75		6	8.3	2.10	1.28	4.10	1.70	5.80	453	
299*	76	↓	7	11.1	3.18	0.767	3.34	1.92	5.26	686	
300	77		8	17.7	5.44	0.493	1.54	0.656	2.20	446	
301	78		9	19.2	6.60	0.491	1.09	0.727	1.82	371	
302	79		11	19.4	4.31	0.225	1.17	0.777	1.95	867	
303	80		13	6.3	5.94	0.436	1.55	0.686	2.24	514	
304	81	17 Sep 82	14	8.4	3.51	1.07	1.63	1.09	2.72	254	
305	82	↓	15	6.8	2.95	0.403	1.62	0.888	2.51	623	
306	83		16	13.5	3.34	0.662	0.886	1.06	1.95	295	

n = 44

Note: * values reported are means of replicate analyses

14 NOV 83

GMM 002 0345

HOOPER RIVER PCB MONITORING 1982
Quality Assurance Data

$\mu\text{g g}^{-1}$ Dry Weight

DUPLICATES:

LAB #	AR 1016		% Diff.	AR 1254		% Diff.	TOTAL PCB		% Diff.
	-1	-2		-1	-2		-1	-2	
247	27.7	23.1	17	36.0	36.3	1	63.7	59.4	7
248	16.3	19.6	17	19.0	20.5	7	35.3	40.1	12
254	8.36	5.76	31	13.8	11.8	14	22.2	17.6	21
258	10.8	8.09	25	12.7	11.3	11	23.5	19.4	17
261	9.22	10.4	11	8.23	8.52	3	17.5	18.9	7
268	9.40	11.8	20	17.9	18.6	4	27.3	30.4	10
276	2.60	2.57	1	2.52	2.48	2	5.12	5.05	1
284	14.4	10.9	24	79.2	80.7	2	93.6	91.6	2
294	4.99	4.69	6	1.38	1.39	1	6.37	6.08	5
299	3.29	3.38	3	1.92	1.92	0	5.21	5.30	2

Spike Recovery:

AR 1016
Amount Added 824 pg
Amount Recovered 782
% Recovery 94.9%

AR 1254
728 pg
837
115%

TOTAL PCB
1.552 pg
1.619
104%

17 NOV 83

HUDSON RIVER - PCB MONITORING 1983
MULTIPLATE RESIDUES (ppm)

LAB #	TAG #	COLLECTION DATE	LOCATION	WET WT. (g)	DRY WT. (g)	%LIPID	DRY WT. BASIS			LIPID BASIS TOTAL PCB
							ARI016	ARI254	TOTAL PCB	
04-84-H	83-74	11JULY83	PCB- 1	14.23	3.20	0.819	<0.30	<0.20	<0.50	<61
05	75		2	23.26	2.96	2.20	6.43	2.96	9.39	427
06	76		3b	23.18	3.69	0.764	3.24	1.32	4.56	597
07	77		4	24.30	2.79	4.41	13.0	4.62	17.6	399
08	78		5	9.64	2.00	2.22	9.08	3.83	12.9	581
09	79		6	3.62	1.26	1.42	5.95	1.63	7.58	534
10	80		7	8.14	1.97	1.34	5.44	2.18	7.62	569
11*	81		8	20.23	3.92	0.526	1.96	0.527	2.49	473
12	82	12JULY83	9	22.48	5.59	0.601	1.35	0.459	1.81	301
13	83		9e	21.04	4.95	0.705	1.85	0.581	2.43	345
14	84	13JULY83	10	18.80	4.23	0.381	1.25	0.391	1.64	430
15	85		11	13.00	4.40	0.561	0.809	0.302	1.11	198
16	86	14JULY83	12	17.13	5.04	0.246	0.474	0.163	0.637	259
17	83-130	15AUG83	PCB- 1	22.43	4.57	0.475	<0.20	<0.20	<0.40	<84
18	131		2	7.00	1.31	2.79	2.71	1.16	3.87	139
19	132		2	17.59	2.07	2.34	4.65	2.38	7.03	300
20	133		2	13.35	1.75	3.53	4.14	1.83	5.97	169
21	134		2	25.76	2.98	1.64	3.67	1.56	5.23	319
22	135		2	29.35	3.57	2.94	3.63	1.79	5.42	184
23	136		3b	28.34	3.06	0.941	2.88	1.20	4.08	434
24*	137		4	24.71	4.63	1.27	2.30	0.938	3.24	255
25	138		5	23.86	4.47	0.971	3.06	1.34	4.40	453
26	139		6	16.34	3.57	0.975	5.62	1.93	7.55	774
27	140		7	28.65	5.67	0.485	2.45	0.894	3.34	689
28	141		8	20.17	6.14	0.238	1.50	0.601	2.10	882
29	142	17AUG83	9	23.47	6.85	0.272	1.33	0.506	1.84	676
30	143		9e	29.08	5.17	0.482	1.69	0.636	2.33	483
31	144		10	10.27	3.50	0.334	1.91	1.02	2.93	877
32	145	18AUG83	11	25.17	6.31	0.345	1.01	0.412	1.42	412
33	146		12	23.39	7.01	0.312	0.691	0.348	1.04	333
34	147	19AUG83	13	25.71	7.40	0.296	1.15	0.474	1.62	547

MULTI-PLATE RESIDUES (ppm) 1983

LAB #	TAG #	COLLECTION DATE	LOCATION	WET WT. (g)	DRY WT. (g)	%LIPID	DRY WT. BASIS			LIPID BASIS TOTAL PCB
							AR1016	AR1254	TOTAL PCB	
35-84-H	83-212	19SEP83	PCB- 1	11.20	1.57	1.47	0.493	0.198	0.691	47.0
36	213		3b	11.97	2.38	0.739	3.10	1.07	4.17	564
37	214		2	14.25	3.01	0.409	2.53	1.17	3.70	905
38	215		2	14.63	3.16	0.494	2.52	1.05	3.57	723
39*	216		2	13.10	3.89	0.321	2.71	1.12	3.83	1193
40	217		2	19.08	4.00	0.388	2.39	1.12	3.51	905
41	218		2	12.89	2.95	0.566	2.54	1.08	3.62	640
42	219		4	16.5	2.47	1.91	2.84	1.02	3.86	202
43	220		5	20.23	5.00	0.630	3.08	1.22	4.30	683
44	221		6	7.90	1.86	1.22	6.75	2.13	8.88	728
45	222		7	19.32	6.00	0.517	3.01	1.11	4.12	797
46	223		8	16.62	6.25	0.336	2.14	0.739	2.88	857
47	224	21SEP83	9	5.06	2.17	0.502	1.65	0.542	2.19	436
48	225		9a	18.80	4.52	0.520	2.47	0.882	3.35	644
49	226		10	13.82	5.25	0.240	2.08	0.905	2.99	1246
50	227	22SEP83	11	14.12	3.81	0.451	1.21	0.532	1.74	386
51	228	23SEP83	14	13.20	4.88	0.236	1.81	0.663	2.47	1047

n=48

NOTE: *Reported values are means of duplicate analyses

17MAY84

002 0348 GMM

HUDSON RIVER - PCB MONITORING 1983
MULTIPLATE RESIDUES
QUALITY CONTROL
DATA

Duplicate Analyses: ug/g

Lab#	Tag #	AR 1016			AR 1254			TOTAL PCB		
		-1	-2	%Dif	-1	-2	%Dif	-1	-2	%Dif
11-84-H	83-81	2.03	1.89	6.9	0.596	0.457	23.3	2.63	2.35	10.6
24	137	2.23	2.37	5.9	0.956	0.920	3.8	3.19	3.29	3.0
39	216	2.72	2.69	1.1	1.13	1.11	1.8	3.85	3.80	1.3

NOTE: Lipid dissolved in solvent then subsampled by volume.

$$\%Dif = \frac{X_{high} - X_{low}}{X_{high}} \times 100$$

Blanks: 2 run - no interfering peaks.

Recovery: Known volume of standard solution run through florisil clean-up.

	AR 1016			AR 1254			TOTAL PCB		
	Theo.	Act.	%Rec.	Theo.	Act.	%Rec.	Theo.	Act.	%Rec.
05-07-84	1.96	1.53	78.1	1.57	1.40	89.2	3.53	2.93	83.0
05-11-84	1.96	1.99	102	1.57	1.72	110	3.53	3.71	105

17MAY84

0349 002 GMM

HUDSON RIVER-PCB MONITORING 1984
Multiplate Residues
(ug/g)

Page 1

LAB #	TAG#	COLLECTION DATE	LOCATION	WET WT. (g)	DRY WT. (g)	%LIPID	DRY WT. BASIS			LIPID BASIS	
							AR1016	AR1254	TOTAL PCB	TOTAL	PCB
1120-84-H	84-37	9 July 84	PCB- 1	11.62	1.85	1.28	<0.50	1.70	1.70	133	
1121	38		2	11.87	2.06	2.47	10.1	4.10	14.2	575	
1122	39		3B	18.80	2.67	1.28	7.41	3.05	10.5	820	
1123	40		4	13.84	2.05	2.87	10.9	5.21	16.1	561	
1124	41		5	22.47	4.07	1.01	5.60	2.63	8.23	815	
1125	42		6	13.15	1.77	0.165	<0.25	0.385	0.385	233	
1126	43		7	9.44	2.15	0.819	3.52	1.38	4.90	598	
1127	44		8	13.10	5.76	0.163	1.08	0.526	1.61	988	
1128*	51	11 July 84	9	18.27	6.67	0.805	1.07	0.630	1.70	211	
1129	52		9E	13.63	5.37	0.637	2.27	0.746	3.02	474	
1130	53		10	10.57	4.22	0.531	0.545	0.241	0.786	148	
1131	54		11	6.40	2.97	0.663	<0.10	<0.10	<0.20	<30	
1132	55		12	9.73	4.74	0.570	0.749	0.248	0.997	175	
1133	56	12 July 84	13	8.45	4.42	0.579	0.786	0.285	1.07	165	
1134	57		14	8.87	3.84	0.516	0.256	0.115	0.371	71.9	
1135	58		15	12.53	4.30	0.349	0.647	0.499	1.15	330	
1136	59		16	24.20	7.28	0.315	0.229	0.299	0.528	168	
1137-84-H	84-117	13 August 84	PCB- 1	7.30	1.51	1.05	<0.20	1.45	1.45	138	
1138	118	13	2	7.30	1.11	7.36	8.35	4.29	12.6	171	
1139*	119	13	3B	12.5	1.55	1.50	5.82	2.00	7.82	521	
1140	120	13	4	6.9	1.47	4.21	5.35	2.46	7.81	186	
1141	121	13	5	13.6	2.07	6.26	11.4	6.28	17.7	283	
1142	122	13	6	10.4	2.12	1.43	4.24	1.72	5.96	417	
1143	123	13	7	6.9	2.22	0.856	2.94	1.01	3.95	463	
1144	124	13	8	5.2	2.31	0.801	2.07	0.770	2.84	355	
1145	125	16	9	18.95	4.18	1.05	1.64	0.739	2.35	224	
1146	126	16	9E	6.2	2.47	0.648	1.61	0.667	2.28	352	
1147	127	16	10	6.3	2.70	0.452	1.75	0.664	2.41	533	
1148	128	16	11	8.2	2.33	0.172	<0.15	<0.06	<0.21	<122	
1149	129	16	12	6.6	1.79	0.598	0.719	0.345	1.06	177	
1150	130	15	13	10.3	4.65	0.497	1.52	0.509	2.03	408	
1151	131	15	14	7.3	2.92	0.332	1.68	0.671	2.35	708	
1152	132	15	15	5.1	2.44	0.061	<0.15	<0.10	<0.25	<410	
1153	133	15	16	11.7	5.17	0.321	1.04	0.628	1.67	520	

0350 002 WWS

HUDSON RIVER - PCB MONITORING 1984
MULTIPLATE RESIDUES
(ug/g)

Page 2

LAB #	TAG #	COLLECTION DATE	LOCATION	WET WT. (g)	DRY WT. (g)	%LIPID	DRY WT. BASIS			LIPID BASIS TOTAL PCB
							ART016	ART254	TOTAL PCB	
1154-84-H	84-166	09-17-84	PCB- 1	5.80	1.05	0.152	<0.20	<0.25	<0.45	< 296
1156	167		2	6.30	1.40	1.28	4.71	1.63	6.34	495
1157*	168		38	7.75	1.55	0.884	3.96	1.31	5.27	596
1158	169		4	12.30	1.55	1.12	2.93	1.11	4.04	361
1159	170		5	6.12	2.20	0.677	3.96	1.36	5.32	786
1160	171		6	6.87	1.51	1.05	3.79	1.40	5.19	494
1161	172		7	6.25	2.27	0.388	2.60	0.866	3.47	894
1162	173		8	14.20	5.80	0.167	1.39	0.499	1.89	1132
1163	174	09-19-84	9E	12.10	5.52	0.152	1.04	0.406	1.45	954
1164	175		9	5.08	2.49	0.514	0.820	0.472	1.29	251
1165	176		10	7.34	2.75	0.356	1.48	0.644	2.12	596
1166	177		11	9.27	3.16	0.655	1.05	0.427	1.48	226
1167	178	09-20-84	13	2.50	1.23	0.390	1.10	0.574	1.67	428
1168	179		14	8.94	3.80	0.208	1.19	0.598	1.79	861
1169	180		15	9.10	4.25	0.245	1.19	0.605	1.80	735
	181		16	11.65	3.65	0.370	0.917	0.514	1.43	386

n=50

HUDSON RIVER-PCB MONITORING 1984
CADDISFLY LARVAE
(ug/g)

LAB #	TAG#	DRY WT. (mg)	%LIPID	DRY WT. BASIS			LIPID BASIS TOTAL PCB
				ART016	ART254	TOTAL PCB	
1170-84-H	84-199J	98	17.4	12.1	5.17	17.3	99.4
1171*	200J	157	23.9	15.9	5.32	21.2	88.7
1172	201J	101	20.1	14.7	5.15	19.9	99.0
1173	202J	170	21.2	18.1	7.20	25.3	119

n=4

NOTE: *Reported results are means of duplicate analyses.

01FEB85

0351 002 GMM

HUDSON RIVER - PCB MONITORING 1984

QUALITY CONTROL DATA

DUPLICATE ANALYSES: ug/g wet weight.

LAB #	TAG #	AROCLOR 1016				AROCLOR 1254				TOTAL PCB			
		-1	-2	[dif]	%dif	-1	-2	[dif]	%dif	-1	-2	[dif]	%dif
1128-84-H	84- 51	1.08	1.05	0.03	2.8	0.634	0.625	0.009	1.4	1.71	1.68	0.03	1.8
1139	84- 119	5.76	5.87	0.11	1.9	1.96	2.03	0.07	3.4	7.72	7.90	0.18	2.3
1157	84- 169	2.90	2.95	0.05	1.7	1.09	1.12	0.03	2.7	3.99	4.07	0.08	2.0
1171	84-200J	16.0	15.7	0.3	1.9	5.17	5.45	0.29	5.3	21.2	21.2	0	0

NOTE: After extraction, samples were diluted to a known volume and then subsampled by volume.

Blanks: 2 run - no interfering peaks.

Recovery:

Spike #	Aroclor 1016			Aroclor 1254			Total PCB		
	Theor.	Act.	%Rec.	Theor.	Act.	%Rec.	Theor.	Act.	%Rec.
84-S18	1.104	1.06	96.0	0.434	0.434	100	1.538	1.494	97.1
84-S19	1.104	1.05	95.1	0.434	0.502	116	1.538	1.552	101

Extra Extraction:

LAB #	TAG #	Aroclor 1016			Aroclor 1254			Total PCB			%Lipid		
		Orig.	Xtra	%Rec.	Orig.	Xtra	%Rec.	Orig.	Xtra	%Rec.	Orig.	Xtra	%Rec.
1144-84-H	84-124	2.07	0.951	68.5	0.770	0.198	79.5	2.84	1.15	71.2	0.801	0.308	72.2
1161-84-H	84-173	1.39	ND	100	0.499	ND	100	1.89	ND	100	0.167	0.093	64.2

01FEB85

GMM 002 0352

age No. 1
02/25/86

HUDSON RIVER MULTIPLATE SEDIMENTS 1985
PPM DRY WEIGHT BASIS

LAB #	TAG #	DATE	LOC	WET WT	DRY WT	MOIS %	LIP %	AR 1016	AR 1254	TOTAL PCB	TOTAL PCB LIPID
1232-85-H	85-133	07/08/85	PCB-1	6.8	1.27	81.3	0.906	-.400	0.513	-.913	-101.0
1233-85-H	85-134	07/08/85	PCB-2	8.7	1.82	79.1	0.670	4.340	2.020	6.360	949.3
1234-85-H	85-135	07/08/85	PCB-3b	6.4	1.43	77.7	0.643	5.200	1.730	6.930	1077.8
1235-85-H	85-136	07/08/85	PCB-4	13.6	1.56	88.5	0.878	4.010	1.400	5.410	616.2
1236-85-H	85-137	07/08/85	PCB-5	10.9	2.02	81.5	0.782	3.070	1.200	4.270	546.0
1237-85-H	85-138	07/08/85	PCB-6	4.7	0.97	79.4	2.289	4.580	2.140	6.720	293.6
1238-85-H	85-139	07/08/85	PCB-7	6.0	1.23	79.5	1.390	3.360	1.320	4.680	336.7
1239-85-H	85-140	07/08/85	PCB-8	13.5	3.50	74.1	0.180	0.945	0.328	1.273	707.2
1240-85-H	85-141	07/10/85	PCB-9	7.6	2.20	71.1	0.655	1.540	0.620	2.160	329.8
1240-85-H2	85-141	07/10/85	PCB-9	7.6	2.20	71.1	0.655	1.980	0.563	2.543	388.2
1241-85-H	85-142	07/10/85	PCB-9a	10.0	3.45	65.5	0.261	1.480	0.382	1.862	713.4
1242-85-H	85-143	07/10/85	PCB-10	6.5	2.95	54.6	0.241	1.400	0.462	1.862	772.6
1243-85-H	85-144	07/10/85	PCB-11	6.7	2.55	61.9	0.275	1.070	0.368	1.438	522.9
1244-85-H	85-145	07/10/85	PCB-12	4.3	2.12	50.7	0.236	1.080	0.554	1.634	692.4
1245-85-H	85-146	07/11/85	PCB-13	6.9	2.92	57.7	0.212	1.140	0.392	1.532	722.6
1246-85-H	85-147	07/11/85	PCB-14	6.4	1.94	69.7	0.289	1.280	0.550	1.830	633.2
1247-85-H	85-148	07/11/85	PCB-15	5.3	1.95	63.2	0.359	1.130	0.557	1.687	469.9
1248-85-H	85-149	07/11/85	PCB-16	14.2	2.97	79.1	0.316	1.040	0.524	1.564	494.9

n = 18

NOTE: Lab #s ending in -H2 indicate duplicate analyses.
Negative numbers indicate detection limits.

GM 002 0353

Age No. 1
02/25/86

HUDSON RIVER MULTIPLATE SEDIMENTS 1985
PPM DRY WEIGHT BASIS

LAB #	TAG #	DATE	LOC	WET WT	DRY WT	MOIS %	LIP %	AR 1016	AR 1254	TOTAL PCB	TOTAL PCB LIPID
1249-85-H	85-182	08/12/85	PCB-1	5.3	1.32	75.1	0.455	-0.400	0.373	-0.773	-170.0
1250-85-H	85-183	08/12/85	PCB-2	4.7	1.00	78.7	1.330	4.920	1.860	6.780	509.8
1251-85-H	85-184	08/12/85	PCB-3b	4.8	1.61	66.5	0.683	3.950	1.330	5.280	773.1
1252-85-H	85-185	08/12/85	PCB-4	4.0	1.30	67.5	1.062	3.550	1.290	4.840	455.7
1253-85-H	85-186	08/12/85	PCB-5	3.7	1.17	68.4	0.538	3.030	1.160	4.190	778.8
1254-85-H	85-187	08/12/85	PCB-6	6.9	0.83	88.0	2.434	4.990	1.830	6.820	280.2
1255-85-H	85-188	08/12/85	PCB-7	2.7	0.75	72.2	1.840	3.890	1.310	5.200	282.6
1256-85-H	85-189	08/12/85	PCB-8	10.3	2.27	78.0	0.441	1.330	0.447	1.777	402.9
1257-85-H	85-190	08/14/85	PCB-9	8.9	2.51	71.8	0.717	0.737	0.245	0.982	137.0
1257-85-H2	85-190	08/14/85	PCB-9	8.9	2.51	71.8	0.717	0.762	0.227	0.989	137.9
1258-85-H	85-191	08/14/85	PCB-9e	10.0	2.31	76.9	0.519	1.340	0.445	1.785	343.9
1259-85-H	85-192	08/14/85	PCB-10	4.5	1.91	57.6	0.262	1.360	0.579	1.939	740.1
1260-85-H	85-193	08/14/85	PCB-11	6.5	1.55	76.2	0.465	1.480	0.553	2.033	437.2
1261-85-H	85-194	08/14/85	PCB-12	3.0	0.77	74.3	0.688	1.350	0.506	1.856	269.8
1262-85-H	85-195	08/15/85	PCB-13	5.5	2.33	57.6	0.421	1.180	0.449	1.629	386.9
1263-85-H	85-196	08/15/85	PCB-14	3.7	1.55	58.1	0.381	1.930	0.664	2.594	680.8
1264-85-H	85-197	08/15/85	PCB-15	4.2	1.71	59.3	0.468	1.220	0.720	1.940	414.5
1265-85-H	85-198	08/15/85	PCB-16	3.4	1.30	61.8	0.700	1.350	0.618	1.968	281.1

n = 18

NOTE: Lab #s ending in -H2 indicate duplicate analyses.
Negative numbers indicate detection limits.

GMM 002 0354

Page No. 1
02/25/86

HUDSON RIVER MULTIPLATE SEDIMENTS 1985
PPM DRY WEIGHT BASIS

LAB #	TAG #	DATE	LOC	WET WT	DRY WT	MOIS %	LIP %	AR 1016	AR 1254	TOTAL PCB	TOTAL PCB LIPID
1266-85-H	85-324	09/16/85	PCB-1	4.8	0.94	80.4	1.277	-1.100	-1.150	-1.250	-19.6
1267-85-H	85-325	09/16/85	PCB-2	4.5	1.26	72.0	0.484	5.270	1.420	6.690	1382.2
1268-85-H	85-326	09/16/85	PCB-3b	5.1	1.40	72.5	0.614	4.460	1.300	5.760	938.1
1269-85-H	85-327	09/16/85	PCB-4	4.2	1.25	70.2	0.664	5.040	1.260	6.300	948.8
1270-85-H	85-328	09/16/85	PCB-5	6.0	1.78	70.3	0.472	3.250	0.899	4.149	879.0
1271-85-H	85-329	09/16/85	PCB-6	2.7	0.83	69.3	1.120	4.220	1.460	5.680	507.1
1272-85-H	85-330	09/16/85	PCB-7	4.0	1.17	70.8	0.872	4.050	1.160	5.210	597.5
1272-85-H2	85-330	09/16/85	PCB-7	4.0	1.17	70.8	0.872	4.500	1.160	5.660	649.1
1273-85-H	85-331	09/16/85	PCB-8	8.2	2.26	72.4	0.288	1.750	0.468	2.218	770.1
1274-85-H	85-332	09/19/85	PCB-9	7.3	2.55	65.1	0.533	1.480	0.505	1.985	372.4
1275-85-H	85-333	09/19/85	PCB-9e	7.7	3.48	54.8	0.466	1.300	0.425	1.725	370.2
1276-85-H	85-334	09/19/85	PCB-10	4.6	2.09	54.6	0.282	1.440	0.577	2.017	715.2
1277-85-H	85-335	09/19/85	PCB-11	2.7	0.89	67.0	0.618	1.360	0.379	1.739	281.4
1278-85-H	85-336	09/18/85	PCB-12	2.3	1.09	52.6	0.294	1.340	0.330	1.670	568.0
1279-85-H	85-337	09/18/85	PCB-13	4.4	2.08	52.7	0.322	1.950	0.737	2.687	834.5
1280-85-H	85-338	09/18/85	PCB-14	5.7	1.61	71.8	0.522	1.020	0.399	1.419	271.8
1280-85-H2	85-338	09/18/85	PCB-14	5.7	1.61	71.8	0.522	1.050	0.410	1.460	279.7
1281-85-H	85-339	09/18/85	PCB-15	5.2	2.29	56.0	0.341	1.620	0.534	2.154	631.7
1282-85-H	85-340	09/18/85	PCB-16	4.4	1.34	69.5	0.358	1.000	0.476	1.476	412.3

n = 19

NOTE: Lab #s ending in -H2 indicate duplicate analyses.
Negative numbers indicate detection limits.

GMM 002 0355

CADDISFLIES
PCB's in HUDSON RIVER MACROINVERTEBRATES

June & July ~~1978~~ ^{August}, 1978

6/22/78	N	Number of Individuals	Dry weight (mg)	Lipids	ppm dry weight			ppm lipids	
					1016	1254	Total	Total	1016
Rogers Island (H2-20)	3	30	112	10.7	9.1	5.2	14.2	133.7	64
" (H2-21)		30	120	15.8	68.8	32.3	101.1	639.8	68
" (H2-22) <u>H. batteni</u>		30	213	10.3	87.8	31.8	79.6	788.8	80
Thompson Island (H2-6) <u>H. batteni</u>	2	30	190	16.8	42.6	30.8	73.4	436.9	58
" (H2-7) <u>?</u>		15	56	17.6	63.0	32.2	95.2	510.7	66

7/18/78

Bakers Falls (H1-25)

1 CONTAMINATED

Rogers Island (H1-26)

1 60 123 16.3 29.5 14.8 44.9 271.8 67

Thompson Island (H1-28)

1 15 115 13.9 66.7 35.2 101.9 733.1 65

Stillwater (H1-27)

1 40 137 16.1 7.6 21.7 29.3 182.0 26

8/22/78

Bakers Falls (H3-29, Hale Creek #58)

1 25 125 23.9 1.6 2.4 8.0 16.5 39

Rogers Island (H3-27, Hale Creek #56)

1 25 121 11.2 12.4 13.2 25.6 229.3 48

Thompson Isl. (H3-26, Hale Creek #55)

1 25 149 12.0 24.9 28.2 51.1 427.3 49

Stillwater (H3-28, Hale Creek #57)

1 25 144 13.6 33.0 30.2 63.2 464.4 52

9/26/78

Bakers Falls

1 30 112 13.4 1.6 1.8 3.4 25.3 47

Rogers Island

2 20 148 12.4 18.0 8.1 26.1 215.1 68

Thompson Island

2 40 112 13.0 20.0 15.5 35.5 276.8 56

Stillwater

2 25 118 15.0 21.0 36.0 252.1 42

GM 002 0356

HUDSON RIVER -- MACROINVERTEBRATE STUDY

June, July, August 1979

LAE #	TAG #	COLLECTION SITE	% LIPIDS (dry wt.)	AR1016 (ugg ⁻¹ dry wt.)	AR1254 (ugg ⁻¹ dry wt.)	TOTAL PCB
652	79-1	Bakers Falls	42.13	<1.5	<4.5	<6.0
653	2	Rodgers Is.	14.88	16.92	25.82	42.74
654	3	Thompson Is.	18.91	12.67	27.66	40.33
655	4	Thompson Is.	18.29	7.54	12.91	20.45
656	5	Stillwater	21.15	13.38	21.46	34.84
672	21	Bakers Falls	15.55	<2.8	<4.9	<7.7
673	22	"	31.22	2.02	1.99	4.01
674	23	Rodgers Is.	21.31	16.44	17.72	34.16
675	24	"	21.00	7.29	17.16	24.45
676	25	"	19.83	11.22	15.72	26.94
677	26	Thompson Is.	17.52	28.04	27.00	55.04
678	27	"	17.50	33.25	24.61	57.86
679	28	"	22.50	13.80	23.04	36.84
680	29	Stillwater	29.65	33.51	29.80	63.31
681	30	"	19.68	16.45	18.44	34.89
682	31	"	22.25	7.77	14.90	22.67
688	37	Lock 1	25.76	3.97	7.13	11.10
689	38	"	34.21	14.89	13.97	28.86
690	39	"	29.33	22.29	14.43	36.72
710	50	PCB-1	16.17	0.96	1.00	1.96
711	60	PCB-1	14.84	0.84	1.23	2.07
712	61	PCB-2	16.85	15.14	13.64	28.78
713	62	"	16.83	15.66	13.60	29.26
717	66	Thompson Is.	11.99	12.93	14.38	27.31
718	67	"	13.12	24.51	15.21	39.72
719	68	"	13.70	16.40	17.92	34.32
720	69	PCB-7	16.01	28.93	22.75	51.68
721	70	"	14.44	11.66	19.96	31.62
722	71	"	12.78	35.90	26.22	62.12
726	75	Lock 1	15.90	18.43	12.77	31.20
727	76	"	13.89	20.06	12.05	32.11
728	77	"	17.26	21.33	14.42	35.75

GMM 002 0357

HUDSON RIVER - PCB MONITORING - 1980

Lab #	Tag #	Collection Date	Location	Sample Type *	Wet Weight (g)	Dry Weight (g)	% Lipid (dry wt.)	Dry Weight Basis		Lipid Basis	
								AR1016	AR1254	Total PCB	Total PCB
Caddisfly larvae:											
545-80-H	80-1	12Jun80	PCB-1	2	0.407	0.097	33.0	1.48	2.05	3.53	10.7
546	4		2	1	0.356	0.075	39.8	3.40	12.1	15.5	38.9
547	5		2	4	0.300	0.079	25.1	6.72	14.3	21.0	83.7
548	7		5	2	0.480	0.116	25.9	7.03	12.44	19.5	75.2
549	9		5	2	0.470	0.111	18.2	7.77	14.6	22.4	123
550	10		5	1	0.173	0.034	28.5	11.8	22.9	34.7	122
551	11		5	4	0.538	0.142	29.4	4.49	14.6	19.1	65.0
552	18		7	1	0.375	0.075	30.4	3.47	12.0	15.5	51.1
553	19		7	4	0.367	0.089	29.2	4.42	12.0	16.4	56.2
Thompson Island Insects:											
554-80-H	80-26	23Jun80	PCB-5		0.460	0.064	38.9	4.16	6.12	10.3	26.4
555	28		5		0.392	0.071	36.6	2.44	16.1	18.5	50.5
556	31		5		0.770	0.268	11.3	11.9	17.2	29.1	258
Caddisfly larvae:											
572-80-H	80-45	08Jul80	PCB-1	5	0.246	0.043	33.3	4.46	2.62	7.08	21.3
573	47		2	3	0.438	0.076	21.8	7.60	13.2	20.8	95.4
574	48		2	1	0.209	0.049	31.2	24.8	37.6	62.4	200
575	52		5	3	0.389	0.062	18.9	7.26	10.6	17.9	94.5
576	53		5	1	0.362	0.074	41.2	13.6	21.7	35.3	85.7
577	55		7	1	0.362	0.100	34.8	22.8	23.0	45.8	132
578	56		7	3	0.652	0.137	17.1	7.25	18.2	25.4	149
579	58		9	3	0.283	0.058	49.3	16.8	17.6	34.4	69.8
580	59		9	1	0.325	0.073	26.0	10.4	12.1	22.5	86.5
Caddisfly larvae:											
581-80-H	80-64	11Aug80	PCB-1	2	0.710	0.159	16.5	6.20	10.1	16.3	98.8
582	66		2	3	0.731	0.162	37.8	11.4	12.0	23.4	61.9
583	67		2	1	0.229	0.046	39.8	18.9	20.3	39.2	98.5
584	68		5	3	0.722	0.139	33.9	17.2	18.6	35.8	105.5
585	70		5	1	0.317	0.060	33.5	12.3	22.1	34.4	103
586	71		7	3	0.658	0.148	17.4	11.4	17.5	28.9	166
587	72		7	1	0.420	0.106	15.9	19.7	19.7	39.4	248

HUDSON RIVER - PCB MONITORING - 1980

(continued)

Lab #	Tag #	Collection Date	Location	Sample Type *	Wet Weight (g)	Dry Weight (g)	% Lipid (dry wt.)	Dry Weight Basis			Lipid Basis	
								AR1016	AR1254	Total PCB	Total PCE	
Caddisfly larvae:												
600-80-H	80-95	15Sep80	PCB-1	1	0.284	0.056	20.7	3.47	3.43	6.90	33.3	
601	96		1	9	0.415	0.088	23.8	2.24	1.83	4.07	17.1	
602	99		2	1	0.474	0.103	26.6	2.52	2.05	10.6	40.3	
603	100		2	9	0.714	0.158	18.9	6.97	10.2	17.2	90.9	
604	103		5	1	0.270	0.050	49.4	6.84	12.3	19.1	38.7	
605	104		5	9	0.582	0.126	19.0	3.29	10.6	13.9	73.0	
606	107		7	1	0.486	0.125	24.1	16.9	15.3	32.2	134	
607	108		7	3	0.336	0.066	25.5	7.17	9.27	16.4	64.5	
608	111		9	1	0.301	0.072	24.6	8.64	13.0	21.6	88.0	
609	112		9	3	0.371	0.072	14.6	4.06	7.52	11.6	79.3	

09 JULY 81

GMM 002 0359

HUDSON RIVER - PCB MONITORING 1981

MACROINVERTEBRATES

ug/g

Lab #	Tag #	Collection Date	Location	Species	Wet Wt. (g)	Dry Wt. (g)	% Lipid	Dry Wt. Basis			Lipid Basis
								AR1016	AR1254	Total PCB	Total PCB
649-81-H	81-1	01 JUN 81	PCB-1	8,6,3,1	0.346	0.0842	27.8	<1.5	<1.5	<3.0	<10.8
650	2		2	1	0.437	0.0944	25.9	26.5	7.74	34.2	132.6
651	3		2	2	0.503	0.116	21.5	25.6	5.03	30.6	142.3
652	4		5	2	0.374	0.0969	26.9	28.8	11.20	40.0	148.7
653	5		5	3,4	0.626	0.124	21.1	22.0	8.19	30.2	143.1
654	6		7	5	0.879	0.228	37.6	29.6	8.79	38.4	102.1
655	7		7	4	0.420	0.0816	14.6	20.9	6.84	27.7	190.7
656-81-H	81-8	07 JUL 81	PCB-1	5	0.803	0.114	9.39	<0.64	<1.3	<2.0	<20
657	9		2	1	0.737	0.144	34.1	21.0	5.40	26.4	77.4
658	10		5	1	0.643	0.139	39.9	44.3	13.1	57.4	144
659	11		5	8	0.795	0.165	16.1	19.7	6.70	26.4	164
660	12		6	1	0.473	0.0889	15.1	14.5	7.44	21.9	145
661	13		7	1	0.391	0.0941	22.2	13.5	3.62	17.1	77.0
662	14		7	1	0.316	0.0793	24.2	17.2	5.99	23.2	96.3
663	15		7	3	0.698	0.155	15.5	21.9	6.21	28.1	181
664	16		7	2	0.587	0.131	16.9	21.1	6.28	27.4	162
665	17		9	1	0.551	0.108	13.0	8.45	3.10	11.6	89
681-81-H	81-33	10 AUG 81	PCB-1	6	0.656	0.149	15.6	<0.65	<2.0	<2.7	<17.8
682	34		2	1	0.304	<0.0593	17.4	9.11	<3.0	<12.0	<69.0
683	35		2	3	0.754	0.152	15.8	9.94	2.58	12.5	79.1
684	36		2	2	0.343	0.0610	19.0	8.25	2.64	10.9	57.4
685	37		5	1	0.471	0.0973	25.5	20.0	5.61	25.6	100
686	38		5	3	0.359	0.0679	33.6	15.7	5.47	21.2	63.1
687	39		5	6	0.641	0.155	12.8	16.3	4.90	21.2	166
688	40		7	1	0.629	0.158	15.8	24.0	13.2	37.2	235
689	41		7	3	0.651	0.152	16.4	24.2	7.13	31.3	191
690	42		7	2	0.824	0.224	19.1	26.6	7.43	34.0	178
691	43		7	7	0.410	0.0879	58.1	22.9	7.38	30.3	52.2

0360 002 GMM

HUDSON RIVER - PCB MONITORING 1981

(continued)

Lab #	# Tag	Collection Date	Location	Species	Wet Wt. (g)	Dry Wt. (g)	% Lipid	Dry Wt. Basis			Lipid Basis
								ARI016	ARI254	Total PCB	Total PCB
708-81-W	81-61	14 SEP 81	PCB-1	6	0.610	0.133	66.4	1.25	<0.63	<1.9	<2.86
709	62		2	6	0.464	0.0823	18.5	13.8	7.46	21.3	115
710	63		5	6	0.505	0.119	21.2	25.0	10.3	35.3	167
711	64		5	8	0.613	0.127	19.8	16.7	6.90	23.6	119
712	65		5	3	0.361	0.0736	22.6	13.1	6.75	19.9	88.1
713	66		7	3	0.633	0.122	13.0	15.6	6.67	22.3	172
714	67		7	9	0.641	0.174	22.1	30.5	10.3	40.8	185

n = 35

11 MAY 82

GMM 002 0361

HUDSON RIVER - PCB MONITORING 1982

MACROINVERTEBRATES

Aug 8¹

Lab #	Tag #	Collection Date	Location	Species	(g)		%	Dry Wt. Basis				Lipid Basis	
					Wet Wt.	Dry Wt.	Lipid	AR 1016	AR 1254	Total PCB	Total PCB		
224-83-H	82-1	1 June 82	PCB-1	8	0.696	0.152	15.9	<2.5	<1.7	<4.2	<26		
225	2			1	0.568	0.113	13.3	27.4	16.3	43.7	329		
226	3			1	0.630	0.137	15.3	24.0	15.5	39.5	258		
227	4			2	0.528	0.108	19.0	27.2	16.4	43.6	229		
228	5			8	0.919	0.212	16.2	23.5	11.9	35.4	219		
229	6			1	0.553	0.107	10.1	10.1	8.15	18.3	181		
230	7			2	0.519	0.100	14.7	13.2	10.0	23.2	158		
231	8			9	0.846	0.253	18.8	16.8	9.92	26.7	142		
232	9			1	0.832	0.172	18.5	11.1	6.75	17.9	96.8		
233	10			2	0.802	0.171	39.3	12.5	6.68	19.2	48.9		
234-83-H	11	6 July 82	PCB-1	8	0.744	0.188	16.4	<1.0	<1.6	<2.6	<16		
235	12			2	0.600	0.138	21.8	29.2	13.3	42.5	195		
236	13			3	0.575	0.130	19.2	39.6	13.2	52.8	275		
237	14			8	0.543	0.138	16.6	26.5	15.7	42.2	254		
238	15			2	0.355	0.088	23.4	30.6	19.0	49.6	212		
239	16			3	0.580	0.146	24.7	24.5	14.6	39.1	158		
240	17			3	0.510	0.132	22.3	30.5	16.3	46.8	210		
241	18			2	0.605	0.149	18.1	18.0	10.5	28.5	157		
242	19			3	0.503	0.087	13.7	8.98	10.2	19.2	140		
243	20			2	0.568	0.168	22.0	13.3	7.45	20.8	94.5		
244	21			3	0.598	0.095	12.0	8.58	9.70	18.3	153		
245-83-H	82-38	9 Aug 82	PCB-1	8	0.820	0.152	13.8	4.50	5.51	5.51	39.9		
246	39			1	0.683	0.125	15.7	16.8	26.3	43.1	287		
247*	40			3	0.479	0.077	12.1	25.4	36.2	61.6	509		
248*	41			1	0.475	0.087	12.9	18.0	19.8	37.8	293		
249	42			3	0.606	0.112	15.6	18.7	14.9	33.6	215		
250	43			8	0.561	0.111	14.0	16.4	14.2	30.6	219		
251	44			8	0.508	0.102	13.8	14.9	13.9	28.8	209		
252	45			1	0.589	0.120	13.5	16.7	12.9	29.6	219		
253	46			3	0.680	0.115	12.5	15.5	12.6	28.1	225		
254*	47			1	0.306	0.055	14.5	7.06	12.8	19.9	137		
255	48			3	0.401	0.082	16.5	10.8	14.1	24.9	151		

1982 (continued)

Lab #	Tag #	Collection Date	Location	Species	(n) Wet Wt.	(n) Dry Wt.	Lipid	Dry Wt. Basis			Lipid Basis
								AR 1016	AR 1254	Total PCB	
256	82-49	9 Aug 82	PCB-9	1	0.614	0.125	15.8	7.69	11.0	18.7	118
257-83-H	82-64	13 Sep 82	PCB-1	8	0.707	0.121	18.6	<1.7	<1.3	<3.0	<16
258*	65	↓	2	2	0.687	0.109	15.0	9.45	12.0	21.5	143
259	66		5	3	0.618	0.115	16.1	12.5	9.23	21.7	135
260	67		5	8	0.373	0.065	21.2	13.1	8.89	22.0	104
261*	68		7	3	0.739	0.123	11.1	9.81	8.38	18.2	164
262	69		8	3	0.820	0.141	10.4	9.44	6.82	16.3	157

n = 39

* values reported are means of replicate analyses

14 NOV 83

GMM 002 0363

Page No. 1
01/31/86

HUDSON RIVER MACROINVERTEBRATES 1983
PPM DRY WEIGHT BASIS

LAB #	TAG #	DATE	S LOC	WET WT MG	DRY WT MG	MOIS %	LIP %	AR 1016	AR 1254	TOTAL PCB	TOTAL PCB LIPID
188-85-H	83-1	06/06/83	3 PCB-1	512	127.0	75.2	15.00	-1.50	-1.50	-3.0	-20
188-85-HX	83-1	06/06/83	3 PCB-1	512	127.0	75.2	5.20	-1.50	-1.50	-3.0	-58
190-85-H	83-3	06/06/83	1 PCB-2	498	97.0	80.5	13.90	55.60	15.60	71.2	512
191-85-H	83-4	06/06/83	9 PCB-2	234	35.4	84.9	5.37	91.80	20.40	112.2	2089
192-85-H	83-7	06/06/83	6 PCB-5	302	65.9	78.2	15.20	28.60	9.59	38.2	251
193-85-H	83-8	06/06/83	9 PCB-5	237	51.5	78.3	14.80	43.70	13.20	56.9	384
198-85-H	83-2	06/06/83	9 PCB-1	206	46.6	77.4	20.80	-1.50	-1.50	-3.0	-14
201-85-H	85-SR-2	06/06/83	6 PCB-7	-99	107.0	-9.9	12.40	24.00	8.45	32.5	262
202-85-H	85-SR-4	06/06/83	6 PCB-7	-99	107.0	-9.9	12.50	26.80	8.99	35.8	286

Page No. 1
/31/86

HUDSON RIVER MACROINVERTEBRATES
PPM DRY WEIGHT BASIS

LAB #	TAG #	DATE	S LOC	WET WT MG	DRY WT MG	MOIS %	LIP %	AR 1016	AR 1254	TOTAL PCB	TOTAL PCB LIPID
194-85-H	83-148	09/19/83	3 PCB-1	877	145.0	83.5	15.70	-4.80	-0.70	-5.5	-35
195-85-H	83-150	09/19/83	9 PCB-2	452	68.0	85.0	12.20	10.40	2.55	13.0	107
196-85-H	83-151	09/19/83	1 PCB-2	894	136.0	84.8	19.60	14.50	3.58	18.1	92
197-85-H	83-153	09/19/83	8 PCB-5	950	165.0	82.6	12.10	14.30	5.53	19.8	164
198-85-H	83-155	09/19/83	9 PCB-5	630	100.0	84.1	10.30	15.90	6.12	22.0	214
199-85-H	83-166	09/19/83	6 PCB-8	862	253.0	70.6	20.80	27.30	9.30	36.6	176
199-85-H2	83-166	09/19/83	6 PCB-8	862	253.0	70.6	20.80	27.50	9.29	36.8	177
200-85-H	83-167	09/19/83	8 PCB-8	734	130.0	82.8	15.40	18.60	7.34	25.9	168
203-85-H	85-SR-6	09/19/83	6 PCB-7	498	166.0	-9.9	15.10	20.60	7.16	27.8	184
204-85-H	85-SR-8	09/19/83	6 PCB-7	-99	160.0	-9.9	15.90	22.70	8.10	30.8	194
205-85-H	85-SR-10	09/19/83	6 PCB-7	-99	160.0	-9.9	16.90	24.00	8.15	32.1	190

n = 20

Note: Lab #s ending in -H2 indicate duplicate analyses.

Lab #s ending in -HX indicate an extra extraction and analysis of the original sample.

Negative numbers indicate detection limits.

GMM 002 0364

Page No. 1
01/31/86

HUDSON RIVER MACROINVERTEBRATES 1984
PPM DRY WEIGHT BASIS

LAB #	TAG #	DATE	S LOC	WET WT MG	DRY MOIS WT MG	LIP %	AR %	AR 1016	AR 1254	TOTAL PCB	TOTAL PCB LIPID
206-85-H	84-2	06/12/84	3 PCB-1	485	95.8	80.2	15.40	-6.10	-1.15	-7.2	-47
207-85-H	84-3	06/12/84	3 PCB-1	491	93.6	80.9	16.10	-1.50	-1.00	-2.5	-16
208-85-H	84-4	06/12/84	3 PCB-1	590	102.0	82.7	16.30	-2.20	-1.70	-3.9	-24
209-85-H	84-5	06/12/84	8 PCB-2	510	76.8	84.9	10.90	59.50	14.00	73.5	674
210-85-H	84-9	06/12/84	1 PCB-2	444	72.6	83.6	15.40	71.50	20.30	91.8	596
211-85-H	84-10	06/12/84	1 PCB-2	439	73.6	83.2	13.20	70.30	20.20	90.5	686
212-85-H	84-11	06/12/84	1 PCB-2	482	85.3	82.3	14.30	72.60	19.80	92.4	646
213-85-H	84-14	06/12/84	8 PCB-5	576	102.0	82.3	15.70	36.60	12.70	49.3	314
214-85-H	84-16	06/12/84	1 PCB-5	450	81.5	81.9	7.85	34.10	13.90	48.0	611
215-85-H	84-19	06/12/84	6 PCB-7	344	88.2	74.4	14.20	24.60	9.69	34.3	242
216-85-H	84-20	06/12/84	6 PCB-7	345	84.8	75.4	12.90	27.80	9.97	37.8	293
217-85-H	84-21	06/12/84	6 PCB-7	389	75.9	80.5	13.40	27.80	11.90	39.7	296

Page No. 1
/31/86

HUDSON RIVER MACROINVERTEBRATES
PPM DRY WEIGHT BASIS

LAB #	TAG #	DATE	S LOC	WET WT MG	DRY MOIS WT MG	LIP %	AR %	AR 1016	AR 1254	TOTAL PCB	TOTAL PCB LIPID
218-85-H	84-23	07/09/84	3 PCB-1	423	85.1	79.9	13.20	-2.40	10.50	8.1	61
219-85-H	84-24	07/09/84	3 PCB-1	495	92.2	81.4	12.80	-2.80	12.70	9.9	77
220-85-H	84-25	07/09/84	3 PCB-1	512	103.0	79.9	14.30	-2.00	8.82	6.8	48
221-85-H	84-26	07/09/84	1 PCB-1	265	35.9	86.5	13.40	-1.50	-3.00	-4.5	-34
222-85-H	84-27	07/09/84	1 PCB-2	386	51.6	86.6	9.88	25.90	9.23	35.1	355
223-85-H	84-28	07/09/84	8 PCB-2	487	55.6	88.6	4.14	-9.99	-9.99	-20.0	-485
224-85-H	84-29	07/09/84	1 PCB-5	316	49.5	84.3	11.30	20.90	13.20	34.1	302
225-85-H	84-30	07/09/84	8 PCB-5	463	91.0	80.3	8.79	29.10	18.10	47.2	537
225-85-H2	84-30	07/09/84	8 PCB-5	463	91.0	80.3	8.79	29.30	18.80	48.1	547
226-85-H	84-31	07/09/84	1 PCB-7	348	52.1	85.0	7.48	24.60	11.40	36.0	481
227-85-H	84-32	07/09/84	1 PCB-7	343	52.0	84.8	6.73	20.00	12.20	32.2	478
228-85-H	84-33	07/09/84	1 PCB-7	336	46.7	86.1	9.42	21.10	9.71	30.8	327
229-85-H	84-34	07/09/84	8 PCB-7	373	71.0	81.0	16.00	29.20	12.40	41.6	260
230-85-H	84-35	07/09/84	8 PCB-7	415	73.2	82.4	14.20	24.00	11.90	35.9	253
231-85-H	84-36	07/09/84	8 PCB-7	484	79.2	83.6	15.40	25.20	12.40	37.6	244

n = 27

Note: Lab #s ending in -H2 indicate duplicate analyses.

Negative numbers indicate detection limits.

GMM 002 0365

Page No. 1
01/31/85

HUDSON RIVER MACROINVERTEBRATES 1984
FTH DRY WEIGHT BASIS

B #	TAG #	DATE	S LOC	WET WT MG	DRY WT MG	MOIS %	LIP %	AR 1016	AR 1254	TOTAL PCB	TOTAL PCB LIPID
232-85-H	84-84	08/13/84	3 PCB-1	338	61.4	81.8	12.50	-4.20	-2.10	-6.3	-50
233-85-H	84-85	08/13/84	3 PCB-1	378	65.2	82.8	12.70	-2.70	-2.30	-5.0	-39
234-85-H	84-86	08/13/84	3 PCB-1	422	62.2	85.3	13.30	-1.50	-0.70	-2.2	-17
235-85-H	84-87	08/13/84	8 PCB-2	478	81.1	83.0	13.80	17.80	5.30	23.1	167
235-85-H2	84-87	08/13/84	8 PCB-2	478	81.1	83.0	13.80	17.30	4.75	22.1	160
236-85-H	84-88	08/13/84	8 PCB-2	481	79.0	83.6	14.00	18.80	4.21	23.0	164
237-85-H	84-89	08/13/84	8 PCB-2	532	77.2	85.5	10.50	10.90	3.14	14.0	133
238-85-H	84-90	08/13/84	1 PCB-2	332	48.6	85.4	20.60	21.30	5.10	26.4	128
239-85-H	84-91	08/13/84	1 PCB-2	320	47.5	85.2	21.70	18.90	5.28	24.2	112
240-85-H	84-92	08/13/84	1 PCB-2	342	51.2	85.0	19.90	25.10	6.18	31.3	157
241-85-H	84-96	08/13/84	8 PCB-5	493	109.0	77.9	21.90	14.10	6.63	20.7	95
242-85-H	84-97	08/13/84	8 PCB-5	487	100.0	79.5	22.70	14.10	6.60	20.7	91
243-85-H	84-98	08/13/84	8 PCB-5	490	97.9	80.0	20.70	21.60	7.93	29.5	143
243-85-H2	84-98	08/13/84	8 PCB-5	490	97.9	80.0	20.70	22.20	8.66	30.9	149
244-85-H	84-99	08/13/84	1 PCB-5	343	53.0	84.5	14.70	13.70	7.24	20.9	142
245-85-H	84-102	08/13/84	8 PCB-7	394	80.0	79.7	16.40	16.60	8.67	25.3	154
246-85-H	84-103	08/13/84	8 PCB-7	370	75.1	79.7	16.00	17.50	9.27	26.8	168
246-85-HX	84-103	08/13/84	8 PCB-7	370	75.1	79.7	4.66	-2.00	-1.00	-3.0	-64
247-85-H	84-104	08/13/84	8 PCB-7	445	86.2	80.6	17.60	17.20	7.38	24.6	140
248-85-H	84-109	08/13/84	8 PCB-8	382	75.4	80.3	17.80	17.70	6.55	24.2	136
249-85-H	84-110	08/13/84	8 PCB-8	440	79.5	81.9	17.90	19.30	7.23	26.5	148
250-85-H	84-111	08/13/84	8 PCB-8	512	89.3	82.6	20.70	18.50	8.12	26.6	129
251-85-H	84-112	08/13/84	1 PCB-8	472	73.8	84.4	15.30	19.40	6.96	26.4	173

252-85-H	84-138	09/17/84	3 PCB-1	353	38.3	89.2	12.30	-2.10	-1.50	-3.6	-29
253-85-H	84-139	09/17/84	3 PCB-1	364	44.8	87.7	11.60	-3.40	-1.70	-5.1	-44
254-85-H	84-140	09/17/84	3 PCB-1	397	51.1	87.1	9.98	-3.10	-1.40	-4.5	-45
255-85-H	84-141	09/17/84	8 PCB-2	526	83.5	84.1	11.30	15.60	5.91	21.5	190
256-85-H	84-143	09/17/84	1 PCB-2	386	53.4	86.2	15.90	9.55	2.76	12.3	77
257-85-H	84-144	09/17/84	1 PCB-2	380	47.6	87.5	16.00	16.70	4.49	21.2	132
258-85-H	84-145	09/17/84	1 PCB-2	404	53.2	86.8	17.70	17.20	3.87	21.1	119
258-85-H2	84-145	09/17/84	1 PCB-2	404	53.2	86.8	17.70	18.40	4.56	23.0	130
259-85-H	84-146	09/17/84	8 PCB-5	345	55.7	83.9	12.20	13.20	4.95	18.1	148
260-85-H	84-147	09/17/84	8 PCB-5	384	61.2	84.1	9.64	12.10	5.78	17.9	186
261-85-H	84-148	09/17/84	8 PCB-5	383	67.1	82.5	13.00	14.40	5.37	19.8	152
262-85-H	84-150	09/17/84	1 PCB-5	347	41.5	88.0	8.92	8.21	3.62	11.8	132
263-85-H	84-155	09/17/84	8 PCB-7	355	69.6	80.4	10.90	16.70	6.19	22.9	210
264-85-H	84-156	09/17/84	8 PCB-7	322	56.5	82.5	10.10	17.70	7.40	25.1	249
265-85-H	84-157	09/17/84	8 PCB-7	362	74.0	79.6	15.00	27.20	9.89	37.1	247
265-85-H2	84-157	09/17/84	8 PCB-7	362	74.0	79.6	15.00	28.30	10.18	38.4	256
266-85-H	84-161	09/17/84	8 PCB-8	308	51.9	83.1	10.80	14.60	5.89	20.5	190
267-85-H	84-162	09/17/84	8 PCB-8	313	58.8	81.2	12.40	15.00	5.95	20.9	169
268-85-H	84-163	09/17/84	8 PCB-8	306	51.6	83.1	10.30	13.60	5.92	19.5	189
269-85-H	84-165	09/17/84	1 PCB-8	521	74.4	85.7	12.10	11.50	6.28	17.8	147

n = 43

Note: Lab #s ending in -H2 indicate duplicate analyses.

Lab #s ending in -HX indicate an extra extraction and analysis of the original sample.

Negative numbers indicate detection limits.

GMM 002 0366

Lab No. 1
02/13/86

HUDSON RIVER MACROINVERTEBRATES 1985
PPM DRY WEIGHT BASIS

LAB #	TAG #	DATE	S	LOC	WET WT MG	DRY WT MG	MOIS %	LIP %	AR 1016	AR 1254	TOTAL PCB	TOTAL PCB LIPID
1182-85-H	85-1	06/03/85	3	PCB-1	853	167.0	80.4	10.96	-3.00	-1.20	-4.2	-38
1183-85-H	85-2	06/03/85	3	PCB-1	810	158.0	80.5	13.42	-2.00	-1.40	-3.4	-25
1184-85-H	85-3	06/03/85	3	PCB-1	867	175.0	79.8	12.17	-2.90	-1.40	-4.3	-35
1185-85-H	85-4	06/03/85	9	PCB-2	468	114.0	75.6	20.88	40.60	10.70	51.3	246
1186-85-H	85-5	06/03/85	9	PCB-2	488	118.0	75.8	18.81	39.40	10.60	50.0	266
1187-85-H	85-6	06/03/85	9	PCB-2	413	84.0	79.7	15.36	49.00	13.00	62.0	404
1188-85-H	85-8	06/03/85	9	PCB-5	786	205.0	73.9	21.12	30.30	8.71	39.0	185
1188-85-H2	85-8	06/03/85	9	PCB-5	786	205.0	73.9	21.12	29.90	8.48	38.4	182
1189-85-H	85-9	06/03/85	1	PCB-5	432	90.0	79.2	15.67	32.70	10.20	42.9	274
1190-85-H	85-12	06/03/85	8	PCB-7	320	48.0	85.0	6.46	23.60	9.01	32.6	505
1191-85-H	85-14	06/03/85	5	PCB-7	712	189.0	73.5	22.33	18.40	5.61	24.0	107
1192-85-H	85-15	06/03/85	5	PCB-7	585	144.0	75.4	20.07	18.40	6.73	25.1	125
1193-85-H	85-16	06/03/85	5	PCB-7	601	139.0	76.9	19.35	17.60	6.88	24.5	127
1194-85-H	85-25	06/03/85	5	PCB-8	494	118.0	76.1	20.25	12.80	4.54	17.3	85
1195-85-H	85-26	06/03/85	5	PCB-8	520	115.0	77.9	18.35	11.10	4.19	15.3	83
96-85-H	85-27	06/03/85	8	PCB-8	425	90.0	78.8	13.89	10.10	3.69	13.8	99
1197-85-H	85-104	07/08/85	3	PCB-1	561	112.0	80.0	13.30	-1.40	-1.40	-2.8	-21
1198-85-H	85-105	07/08/85	3	PCB-1	408	58.0	85.8	7.59	-1.40	-1.40	-2.8	-37
1199-85-H	85-106	07/08/85	3	PCB-2	371	48.0	87.1	6.46	21.60	7.89	29.5	457
1200-85-H	85-107	07/08/85	3	PCB-2	280	42.0	85.0	11.43	22.40	7.49	29.9	262
1201-85-H	85-108	07/08/85	3	PCB-2	488	65.0	86.7	12.15	23.40	11.50	34.9	287
1201-85-H2	85-108	07/08/85	3	PCB-2	488	65.0	86.7	12.15	25.90	11.90	37.8	311
1202-85-H	85-112	07/08/85	8	PCB-5	383	56.0	85.4	7.68	11.60	6.41	18.0	234
1203-85-H	85-113	07/08/85	8	PCB-5	486	89.0	81.7	9.21	15.40	6.52	21.9	238
1204-85-H	85-114	07/08/85	8	PCB-5	370	59.0	84.1	8.81	12.20	7.51	19.7	224
1205-85-H	85-115	07/08/85	3	PCB-5	353	73.0	79.3	12.60	18.40	8.48	26.9	213
1206-85-H	85-116	07/08/85	3	PCB-5	380	76.0	80.0	13.82	18.40	7.20	25.6	185
1207-85-H	85-120	07/08/85	8	PCB-7	399	70.0	82.5	11.86	15.40	6.24	21.6	182
1208-85-H	85-121	07/08/85	8	PCB-7	324	52.0	84.0	10.58	6.70	5.12	11.8	112
1209-85-H	85-122	07/08/85	8	PCB-7	330	60.0	81.8	9.50	11.60	5.89	17.5	184
1210-85-H	85-126	07/08/85	8	PCB-8	369	78.0	78.9	12.95	12.20	4.63	16.8	130
1211-85-H	85-127	07/08/85	8	PCB-8	293	52.0	82.3	11.73	9.64	5.02	14.7	125
1212-85-H	85-128	07/08/85	8	PCB-8	296	61.0	79.4	13.77	12.20	5.07	17.3	126
1212-85-HX	85-128	07/08/85	8	PCB-8	296	61.0	79.4	9.67	-0.40	-0.80	-1.2	-12

n = 34

NOTE: Lab #s ending in -H2 indicate duplicate analyses.

Lab #s ending in -HX indicate an extra extraction and analysis of the original sample.

Negative numbers indicate detection limits.

GMM 002 0367

de No. 1
02/13/86

HUDSON RIVER MACROINVERTEBRATES 1985
PPM DRY WEIGHT BASIS

LAB #	TAG #	DATE	S LOC	WET WT MG	DRY WT MG	MOIS %	LIP %	AK 1016	AK 1254	TOTAL PCB	TOTAL PCB LIPID
1213-85-H	85-163	08/12/85	3 PCB-1	645	95.0	85.3	6.95	-2.80	-1.20	-4.0	-58
1214-85-H	85-164	08/12/85	3 PCB-1	656	114.0	82.6	10.44	-4.00	-1.20	-5.2	-50
1215-85-H	85-165	08/12/85	3 PCB-1	413	65.0	84.3	9.23	-3.00	-2.50	-5.5	-60
1216-85-H	85-166	08/12/85	8 PCB-2	332	55.0	83.4	12.55	16.40	4.71	21.1	168
1217-85-H	85-167	08/12/85	1 PCB-2	815	148.0	81.8	14.93	35.20	9.36	44.6	299
1217-85-H2	85-167	08/12/85	1 PCB-2	815	148.0	81.8	14.93	35.20	9.74	44.9	301
1218-85-H	85-168	08/12/85	1 PCB-2	627	103.0	83.6	17.77	26.80	8.72	35.5	200
1219-85-H	85-169	08/12/85	8 PCB-5	945	209.0	77.9	18.47	15.60	6.03	21.6	117
1220-85-H	85-170	08/12/85	3 PCB-5	510	115.0	77.5	12.00	15.10	6.42	21.5	179
1221-85-H	85-171	08/12/85	3 PCB-5	541	130.0	76.0	13.54	14.40	5.91	20.3	150
1222-85-H	85-172	08/12/85	8 PCB-7	501	110.0	78.0	14.91	16.90	6.87	23.8	160
1223-85-H	85-173	08/12/85	8 PCB-7	534	141.0	73.6	21.56	17.60	5.99	23.6	109
1224-85-H	85-174	08/12/85	8 PCB-7	518	128.0	75.3	17.03	16.20	5.89	22.1	130
1225-85-H	85-177	08/12/85	8 PCB-8	455	123.0	73.0	24.55	22.00	7.70	29.7	121
1225-85-H2	85-177	08/12/85	8 PCB-8	455	123.0	73.0	24.55	22.40	7.40	29.8	121
1226-85-H	85-318	09/16/85	3 PCB-1	542	112.0	79.3	17.23	-1.60	-1.20	-2.8	-16
1227-85-H	85-319	09/16/85	9 PCB-2	352	66.0	81.2	10.15	29.50	7.91	37.4	368
1228-85-H	85-320	09/16/85	3 PCB-5	403	91.0	77.4	17.36	21.00	8.40	29.4	169
1229-85-H	85-321	09/16/85	6 PCB-5	495	95.0	80.8	13.26	16.50	5.80	22.3	168
1230-85-H	85-322	09/16/85	8 PCB-7	544	93.0	82.9	10.11	14.00	6.53	20.5	203
1231-85-H	85-323	09/16/85	6 PCB-7	496	128.0	74.2	20.78	20.70	8.42	29.1	140

n = 21

NOTE: Lab #s ending in -H2 indicate duplicate analyses.

Lab #s ending in -HX indicate an extra extraction and analysis of the original sample.

Negative numbers indicate detection limits.

GMM 002 0368

APPENDIX D

Raw Data - Chironomus tentans and Water Samples

GMM 002 0369

Index of Accession Numbers

JULY EXPOSURE

<u>C. tentans</u>	<u>Hours in River</u>	<u>Water</u>	<u>Hour of Collection</u>
85-28	0	85-64	0
-29	0	-65	0
-30	0	-66	0
85-31	1	85-68	1
-32	1	-69	1
-33	1	-70	1
85-34	2	85-71	2
-35	2	-72	2
-36	2	-73	2
85-37	4	85-74	4
-38	4	-75	4
-39	4	-76	4
85-40	8	85-77	8
-41	8	-78	8
-42	8	-79	8
85-43	12	85-80	12
-44	12	-81	12
-45	12	-82	12
84-47	24	85-83	24
-48	24	-84	24
-49	24	-85	24
85-50	48	85-86	48
-51	48	-87	48
-52	48	-88	48
85-53	72	85-89	72
-54	72	-90	72
-55	72	-91	72
85-57	96	85-92	96
-58	96	-93	96
-59	96	-94	96

GMM 002 0370

SEPTEMBER EXPOSURE

<u>C. tentans</u>	<u>Hours in River</u>	<u>Water</u>	<u>Hour of Collection</u>
85-211	0	85-260	0
-212	0	-261	0
-213	0	-262	0
85-214	1	85-263	1
-215	1	-264	1
-216	1	-265	1
85-217	2	85-266	2
-218	2	-267	2
-219	2	-268	2
85-220	4	85-269	4
-221	4	-270	4
-222	4	-271	4
85-223	8	85-272	8
-224	8	-273	8
-225	8	-274	8
85-226	12	85-275	12
-228	12	-276	12
85-229	24	-277	12
-230	24	85-278	24
-231	24	-279	24
85-233	48	-280	24
-234	48	85-281	48
-235	48	-282	48
85-238	72	-283	48
-239	72	85-284	72
-240	72	-285	72
85-241	96	-286	72
-242	96	85-287	96
-243	96	-288	96
		-289	96

GMM 002 0371

SEPTEMBER EXPOSURE (continued)

<u>C. tentans</u>	<u>Hours in River</u>	<u>Water</u>	<u>Hour of Collection</u>
85-245	96 ("slow" current)	85-290	0 ("slow" current)
-246	96 " "	-291	0 " "
-247	96 " "	-292	0 " "
85-248	96 ("rapid" current)	85-293	0 ("rapid" current)
-249	96 " "	-294	0 " "
-250	96 " "	-295	0 " "
-251	96 (Bakers Falls)	85-296	96 ("slow" current)
-252	96 " "	-297	96 " "
-253	96 " "	-298	96 " "
85-254	96 (Fish Creek)	85-299	96 ("rapid" current)
-255	96 " "	-300	96 " "
-256	96 " "	-301	96 " "
85-257	96 (<u>C. tentans</u> in mud)	85-302	0 (Bakers Falls)
-258	96 " " " "	-303	0 " "
-259	96 " " " "	-304	0 " "
		-305	96 " "
		-306	96 " "
		-307	96 " "
		85-308	0 (Fish Creek)
		-309	0 " "
		-310	0 " "
		-311	96 " "
		-312	96 " "
		-313	96 " "
		<u>Shore</u>	
		85-315	96 (near shore)
		-316	96 " "
		-317	96 " "

GMM 002 0372

OTHER SAMPLES

85-314	Mud from Thompson Island in which <u>C. tentans</u> placed
85-341	<u>C. tentans</u> laboratory colony
-342	
-343	
no accession number	dog kisses
85-344A	organic debris from rearing tanks
-344B	
-344C	
no accession number	particulate matter from September exposure - settled water samples

GMM 002 0373

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 08/02/85

VIAL NUMBER: 5

DILUTION FACTOR: 19.530

SAMPLE NAME: 85-28 C.TENTANS

PCB SUBSTITUTION PATTERN	AROCLO MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCLO MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	0.000	0.00
2/2	21,16	0.000	0.00	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	0.000	0.00	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	0.000	0.00
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	0.000	0.00	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	0.000	0.00	34/34	48	0.000	0.00
25/2	16	0.000	0.00	2345/26(CL58)	54,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	54,60	0.000	0.00
NONACHLOROBENZENE	NA	0.000	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.000	0.00	245/34(2346/236)	54,60	0.000	0.00
26/4	16	0.000	0.00	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	0.000	0.00	234/34	54,60	0.000	0.00
25/3	16	0.000	0.00	245/245	54,60	13.788	40.27
236/2(35/2)	16	0.000	0.00	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	0.000	0.00	234/245	54,60	0.000	0.00
25/4(24/3)	16	0.000	0.00	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	0.000	0.00	2346/34(2356/245)	60	0.000	0.00
23/4	16	0.000	0.00	2356/245(CL7A)	54	0.000	0.00
25/25	16,54	0.000	0.00	234/234	54,60	0.000	0.00
24/25	16,54	0.000	0.00	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	0.000	0.00	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	0.000	0.00	2346/234(245/245)	54,60	0.000	0.00
23/24(CL4A)	16,54	0.000	0.00	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	0.000	0.00	HIREX	NA	0.000	---
236/3(CL4C)	16,54	0.000	0.00	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	0.000	0.00	2345/235	54,60	0.000	0.00
235/26(CL5A)	34,60	0.000	0.00	2345/245	54,60	0.000	0.00
NONACHLOROSTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	0.000	0.00	2346/2356	60	0.000	0.00
25/34	54,60	0.000	0.00	CL7	60	0.000	0.00
24/34	54,60	0.000	0.00	2345/2346	60	0.000	0.00
234/4	54,60	0.000	0.00	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	28.448	59.73	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000 CL2: 0.000 CL3: 0.000 CL4: 0.000
CL5: 28.448 CL6: 13.788 CL7: 0.000 CL8: 0.000

TOTAL PCB: 34.236

GMM 002 0374

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 08/02/85

VIAL NUMBER: 6

DILUTION FACTOR: 17.820

SAMPLE NAME: BS-29 C.TENTANS

PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	0.000	0.00
2/2	21,16	0.000	0.00	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	0.000	0.00	P,P'-DDE	NA	0.000	0.00
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	0.000	0.00
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	0.000	0.00	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	0.000	0.00	34/34	NA	0.000	0.00
25/2	16	0.000	0.00	2345/26(CL58)	54,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	0.000	0.00	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.000	0.00	245/34(2346/236)	54,60	0.000	0.00
26/4	16	0.000	0.00	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	0.000	0.00	234/34	54,60	21.398	64.92
23/3	16	0.000	0.00	245/245	54,60	0.000	0.00
236/2(35/2)	16	0.000	0.00	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	0.000	0.00	234/245	54,60	0.000	0.00
25/4(24/3)	16	0.000	0.00	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	0.000	0.00	2346/34(2356/245)	60	0.000	0.00
23/4	16	0.000	0.00	2356/245(CL7A)	54	0.000	0.00
25/25	16,54	0.000	0.00	234/234	54,60	0.000	0.00
24/25	16,54	0.000	0.00	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	0.000	0.00	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	0.000	0.00	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	0.000	0.00	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	0.000	0.00	MIKEX	NA	0.000	0.00
236/3(CL4C)	16,54	0.000	0.00	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	0.000	0.00	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	0.000	0.00	2345/245	54,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	0.00	2345/234	54,60	0.000	0.00
236/23	54,60	0.000	0.00	2346/2356	60	0.000	0.00
25/34	54,60	0.000	0.00	CL7	60	0.000	0.00
24/34	54,60	0.000	0.00	2345/2346	60	0.000	0.00
234/4	54,60	0.000	0.00	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	11.672	35.08	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000
CL5: 11.672

CL2: 0.000
CL6: 21.398

CL3: 0.000
CL7: 0.000

CL4: 0.000
CL8: 0.000

TOTAL PCB: 39.270

GM 002 0375

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 08/02/85

VIAL NUMBER: 7

DILUTION FACTOR: 15.060

SAMPLE NAME: 85-30 C.TENTANS

PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT % TOTAL % PCB %	PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	10.090	3.00	245/24	54,60	1.777	0.67
2/2	21,16	29.984	11.28	245/23	54,60	1.160	0.44
3	21	0.000	0.00	234/25	54,60	1.908	0.75
26	21,16	1.235	0.46	P,P'-DDE	NA	2.003	---
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.452	0.17	234/23	54,60	4.141	1.56
24	21,16	0.000	0.00	2356/25	54,60	1.114	0.42
2/3	21,16	1.340	0.50	2356/23	54,60	0.000	0.00
26/2	21,16	19.668	7.40	236/245(234/236)	54,60	1.506	0.57
2/4	21,16	6.973	2.62	34/34	48	0.000	0.00
25/2	16	10.346	3.09	2345/26(CL58)	54,60	0.000	0.00
24/2	16	1.250	0.47	234/236(2356/236)	54,60	0.000	0.00
NONACHLOROBENZENE	NA	2.741	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	4.634	1.75	245/34(2346/236)	54,60	4.036	1.52
26/4	16	13.072	4.92	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	1.747	0.66
246/2	16	1.160	0.44	234/34	54,60	0.000	0.00
25/3	16	3.117	1.17	245/245	54,60	12.756	4.80
236/2(35/2)	16	7.816	2.94	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	6.084	2.29	234/245	54,60	6.446	2.43
25/4(24/3)	16	0.584	0.23	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	12.726	4.79	2346/34(2356/245)	60	0.000	0.00
23/4	16	4.202	1.58	2356/245(CL7A)	54	2.967	1.12
25/25	16,54	10.964	4.13	234/234	54,60	0.000	0.00
24/25	16,54	0.182	0.05	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	6.822	2.57	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	9.066	3.41	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	2.711	1.02	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	0.000	0.00	MIREX	NA	0.000	---
236/3(CL4C)	16,54	5.572	2.10	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	7.334	2.76	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	2.515	0.95	2345/245	54,60	7.349	2.77
OCTACHLOROSTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	1.506	0.57	2346/2356	60	0.000	0.00
25/34	54,60	3.479	1.31	CL7	60	0.000	0.00
24/34	54,60	2.967	1.12	2345/2346	60	0.000	0.00
234/4	54,60	1.672	0.63	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	13.298	5.00	2345/2345	60	0.000	0.00

TOTAL CL1: 10.090
CL5: 30.421

CL2: 29.984
CL6: 23.569

CL3: 77.619
CL7: 10.316

CL4: 73.749
CL8: 0.000

TOTAL PCB: 265.749

GMM 002 0376

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 08/02/85

VIAL NUMBER: 8

DILUTION FACTOR: 14.900

SAMPLE NAME: 05-31 C.TENTANS

PCB SUBSTITUTION PATTERN	AROCOR MIX	MG PCB PER ML SAMPLE	PCT % TOTAL % PCB	PCB SUBSTITUTION PATTERN	AROCOR MIX	MG PCB PER ML SAMPLE	PCT % TOTAL % PCB
2	21,16	16.479	1.00 % 245/24		54,60	6.884	0.42
2/2	21,16	185.729	11.32 % 245/23		54,60	0.000	0.00
3	21	0.000	0.00 % 234/25		54,60	5.096	0.31
26	21,16	39.723	2.42 % P,P'-DDE	NA		0.000	---
4	21	0.000	0.00 % 234/24		54	0.000	0.00
25	21,16	0.000	0.00 % 234/23		54,60	19.862	1.21
24	21,16	0.000	0.00 % 2356/25		54,60	4.247	0.26
2/3	21,16	25.941	1.58 % 2356/23		54,60	0.000	0.00
26/2	21,16	191.763	11.69 % 236/245(234/236)		54,60	4.410	0.27
2/4	21,16	80.981	4.94 % 34/34	48		0.000	0.00
25/2	16	44.998	2.74 % 2345/26(CL58)		54,60	0.000	0.00
24/2	16	8.163	0.50 % 234/236(2356/236)		54,60	0.000	0.00
HEXACHLOROBENZENE	NA	138.421	--- % 2356/236(245/34)		54,60	0.000	0.00
23/2	16	7.331	0.45 % 245/34(2346/236)		54,60	11.220	0.68
26/4	16	82.581	5.09 % 2346/236(235/245)		54,60	0.000	0.00
4/4	21,16	66.260	4.04 % 235/245(CL5C)		54,60	4.932	0.30
246/2	16	19.713	1.20 % 234/34		54,60	0.000	0.00
25/3	16	95.294	5.87 % 245/245		54,60	33.510	2.04
236/2(35/2)	16	11.831	0.72 % 234/235(CL6A)		54,60	0.000	0.00
24/3(CL3A)	16	28.295	1.73 % 2356/34(CL6B)		54,60	0.000	0.00
24/26(CL3E)	16	20.577	1.25 % 234/245		54,60	16.301	0.99
25/4(24/3)	16	101.186	6.17 % 2356/235(2346/34)		54,60	0.000	0.00
24/4(23/3+24/4)	16	95.756	5.80 % 2346/34(2356/245)		60	0.000	0.00
23/4	16	39.912	2.47 % 2356/245(CL7A)		54	6.481	0.40
25/25	16,54	39.893	2.47 % 234/234		54,60	0.000	0.00
24/25	16,54	68.181	4.17 % 2346/245(2356/2356)		54,60	0.000	0.00
23/25	16,54	28.310	1.73 % 2356/234(2346/234)		54,60	0.000	0.00
24/24	16,54	52.120	3.18 % 2346/234(245/345)		54,60	0.000	0.00
23/24(CL4A)	16,54	15.382	0.93 % 2345/2356+245/345(23456/236)		54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	0.000	0.00 % NIREX	NA		0.000	---
236/3(CL4C)	16,54	33.749	2.06 % 2345/34		54,60	0.000	0.00
236/4(CL4D)	16,54	57.261	3.49 % 2345/235		54,60	0.000	0.00
235/26(CL5A)	54,60	12.248	0.75 % 2345/245		54,60	0.000	0.00
DETCALOROSTYRENE	NA	0.000	--- % 2345/234		54,60	0.000	0.00
236/23	54,60	24.310	1.49 % 2346/2356		60	0.000	0.00
25/34	54,60	25.807	1.57 % CL7		60	0.000	0.00
24/34	54,60	26.328	1.61 % 2345/2346		60	0.000	0.00
234/4	54,60	7.837	0.48 % 23456/245		60	0.000	0.00
236/236	54,60	0.000	0.00 % 23456/234		60	0.000	0.00
245/25	54,60	47.948	2.92 % 2345/2345		60	0.000	0.00

TOTAL CL1: 16.479
CL5: 127.768

CL2: 288.635
CL6: 63.480

CL3: 689.281
CL7: 6.481

CL4: 418.109
CL8: 0.000

TOTAL PCB: 1640.873

GMM C102 0377

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 08/02/85

VIAL NUMBER: 9

DILUTION FACTOR: 15.190

SAMPLE NAME: 85-32 C.TENTANS

PCB SUBSTITUTION PATTERN	AROCLOR MIX	MG PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCLOR MIX	MG PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	0.000	0.00
2/2	21,16	37.261	15.48	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	0.294	3.45	P,P'-DDE	NA	0.000	----
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	0.000	0.00
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	24.182	10.05	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	13.625	5.66	34/34	48	0.000	0.00
25/2	16	7.899	3.28	2345/26(CL58)	54,60	0.000	0.00
24/2	16	2.719	1.13	234/236(2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	0.000	0.00	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.000	0.00	245/34(2346/236)	54,60	0.000	0.00
26/4	16	13.625	5.66	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	2.734	1.14	234/34	54,60	0.000	0.00
25/3	16	2.537	1.05	245/245	54,60	0.000	0.00
236/2(35/2)	16	0.000	0.00	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	0.000	0.00	234/245	54,60	0.000	0.00
25/4(24/3)	16	15.661	6.51	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/34/24/4)	16	18.775	7.80	2346/34(2356/245)	60	0.000	0.00
23/4	16	0.000	0.00	2356/245(CL7A)	54	0.000	0.00
25/25	16,54	14.172	5.89	234/234	54,60	0.000	0.00
24/25	16,54	11.985	4.98	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	0.000	0.00	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	12.987	5.40	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	0.000	0.00	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	0.000	0.00	NIHREX	NA	0.000	----
236/3(CL4C)	16,54	3.220	1.34	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	15.190	6.31	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	4.420	1.84	2345/245	54,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	0.00	2345/234	54,60	0.000	0.00
236/22	54,60	0.000	0.00	2346/2356	60	0.000	0.00
25/34	54,60	5.362	2.23	CL7	60	0.000	0.00
24/34	54,60	5.316	2.21	2345/2346	60	0.000	0.00
234/4	54,60	0.000	0.00	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	28.719	8.61	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000
CL5: 25.139

CL2: 39.180
CL6: 0.000

CL3: 85.398
CL7: 0.000

CL4: 70.968
CL8: 0.000

TOTAL PCB: 240.606

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 08/06/85

VIAL NUMBER: 36

DILUTION FACTOR: 15.060

SAMPLE NAME: 85-33 C.TENTANS

PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	9.292	1.64	245/24	54,60	4.623	0.82
2/2	21,16	46.581	0.25	245/23	54,60	3.388	0.60
3	21	0.000	0.00	234/25	54,60	2.442	0.43
26	21,16	11.687	2.07	P,P'-DDE	NA	3.629	----
4	21	0.000	0.00	234/24	54	6.054	1.07
25	21,16	0.000	0.00	234/23	54,60	9.699	1.72
24	21,16	0.000	0.00	2356/25	54,60	2.635	0.47
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	31.521	5.58	236/245 (234/236)	54,60	2.876	0.51
2/4	21,16	9.488	1.68	34/34	68	0.000	0.00
25/2	16	15.256	2.70	2345/26 (CL58)	54,60	0.000	0.00
24/2	16	1.958	0.35	234/236 (2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	12.319	---	2356/236 (245/34)	54,60	0.587	0.10
23/2	16	2.334	0.41	245/34 (2346/236)	54,60	6.837	1.21
26/4	16	12.771	2.26	2346/236 (235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245 (CL5C)	54,60	1.082	0.33
246/2	16	2.334	0.41	234/34	54,60	2.154	0.36
25/3	16	4.503	0.80	245/245	54,60	12.530	2.22
236/2 (35/2)	16	0.000	0.00	234/235 (CL6A)	54,60	0.000	0.00
24/3 (CL3A)	16	0.000	0.00	2356/34 (CL6B)	54,60	0.000	0.00
24/26 (CL3B)	16	0.000	0.00	234/245	54,60	11.415	2.02
25/4 (24/3)	16	15.301	2.71	2356/235 (2346/34)	54,60	0.000	0.00
24/4 (23/34/24/4)	16	28.783	3.68	2346/34 (2356/245)	60	0.000	0.00
23/4	16	9.413	1.67	2356/245 (CL7A)	54	4.413	0.78
25/25	16,54	16.446	2.91	234/234	54,60	0.000	0.00
24/25	16,54	12.605	2.23	2346/245 (2356/2356)	54,60	0.000	0.00
23/25	16,54	14.909	2.64	2356/234 (2346/234)	54,60	2.169	0.38
24/24	16,54	7.485	1.33	2346/234 (245/345)	54,60	0.000	0.00
23/24 (CL4A)	16,54	0.000	0.00	2345/2356+245/345 (23456/236)	54,60	13.255	2.35
23/23+234/2 (CL4B)	16,54	182.212	18.09	MIREX	NA	0.000	----
236/3 (CL4C)	16,54	29.427	6.90	2345/34	54,60	0.000	0.00
236/4 (CL4D)	16,54	0.000	0.00	2345/235	54,60	0.000	0.00
235/26 (CL5A)	54,60	13.644	2.42	2345/245	54,60	3.085	0.69
OCTACHLOROSTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	7.756	1.37	2346/2356	60	1.340	0.24
25/34	54,60	11.596	2.05	CL7	60	0.000	0.00
24/34	54,60	11.431	2.02	2345/2346	60	0.000	0.00
234/4	54,60	6.476	1.15	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	32.706	5.00	2345/2345	60	2.711	0.48

TOTAL CL1: 9.292
CL5: 89.381

CL2: 67.755
CL6: 21.340

CL3: 113.839
CL7: 11.054

CL4: 224.921
CL8: 17.304

TOTAL PCB: 364.886

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 08/06/85

VIAL NUMBER: 37

DILUTION FACTOR: 14.490

SAMPLE NAME: 85-34 C.TENTANS

PCB SUBSTITUTION PATTERN	AROCLO MIX	MG PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCLO MIX	MG PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	0.000	0.00
2/2	21,16	69.117	18.18	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	16.823	4.42	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	6.028	1.59
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	53.541	14.08	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	16.258	4.28	34/34	48	0.000	0.00
25/2	16	16.852	4.43	2345/26(CL58)	54,60	0.000	0.00
24/2	16	1.594	0.42	234/236(2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	9.201	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.000	0.00	245/34(2346/236)	54,60	0.000	0.00
26/4	16	12.827	3.16	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	6.955	1.83	234/34	54,60	0.000	0.00
25/3	16	10.230	2.69	245/245	54,60	0.361	2.20
236/2(35/2)	16	0.000	0.00	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	0.000	0.00	234/245	54,60	4.419	1.16
25/4(24/3)	16	12.360	3.25	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	5.651	1.49	2346/34(2356/245)	60	0.000	0.00
23/4	16	7.941	2.09	2356/245(CL7A)	54	0.000	0.00
25/25	16,54	19.417	5.11	234/234	54,60	0.000	0.00
24/25	16,54	28.953	5.51	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	12.635	3.32	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	14.562	3.83	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	4.282	1.11	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	0.000	0.00	MIKEX	NA	0.000	---
236/3(CL4C)	16,54	6.520	1.71	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	18.855	4.75	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	4.043	1.06	2345/245	54,60	0.000	0.00
DETCALOROSTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	0.000	0.00	2346/2356	60	0.000	0.00
25/34	54,60	10.375	2.73	CL7	60	0.000	0.00
24/34	54,60	9.636	2.53	2345/2346	60	0.000	0.00
234/4	54,60	1.840	0.48	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	9.068	2.59	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000
CL5: 19.938

CL2: 182.198
CL6: 12.780

CL3: 120.195
CL7: 0.000

CL4: 125.150
CL8: 0.000

TOTAL PCB: 380.261

GMM 002 0380

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 08/06/85

VIAL NUMBER: 38

DILUTION FACTOR: 13.880

SAMPLE NAME: 85-35 C.TENTANS

PCB SUBSTITUTION PATTERN	AROCOR MIX	MG PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCOR MIX	MG PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	0.000	0.00
2/2	21,16	30.716	18.99	245/22	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	5.413	3.28	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	0.000	0.00
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	22.458	13.59	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	6.232	3.77	34/34	48	0.000	0.00
25/2	16	11.340	6.86	2345/26(CL58)	54,60	0.000	0.00
24/2	16	1.060	1.13	234/236(2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	0.000	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.000	0.00	245/34(2346/236)	54,60	0.000	0.00
26/4	16	12.089	7.32	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	4.206	2.54	234/34	54,60	0.000	0.00
25/3	16	3.262	1.97	245/245	54,60	0.000	0.00
236/2(35/2)	16	0.000	0.00	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	0.000	0.00	234/245	54,60	0.000	0.00
25/4(24/3)	16	9.896	5.99	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	13.117	7.94	2346/34(2356/245)	60	0.000	0.00
23/4	16	0.000	0.00	2356/245(CL7A)	54	0.000	0.00
25/25	16,54	10.438	6.32	234/234	54,60	0.000	0.00
24/25	16,54	7.440	4.50	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	0.000	0.00	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	7.537	4.56	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	0.000	0.00	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	0.000	0.00	HIRED	NA	0.000	---
236/3(CL4C)	16,54	0.000	0.00	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	6.732	4.07	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	1.721	1.04	2345/245	54,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	0.000	0.00	2346/2356	60	0.000	0.00
25/34	54,60	4.775	2.89	CL7	60	0.000	0.00
24/34	54,60	4.483	2.71	2345/2346	60	0.000	0.00
234/4	54,60	0.000	0.00	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	1.541	0.93	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000
CL3: 3.262

CL2: 42.362
CL6: 0.000

CL3: 74.822
CL7: 0.000

CL4: 45.610
CL8: 0.000

TOTAL PCB: 165.255

GMM
002
038

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 08/06/85

VIAL NUMBER: 35

DILUTION FACTOR: 14.900

SAMPLE NAME: 85-36 C.TENTANS

PCB SUBSTITUTION PATTERN	ARDCOLOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	ARDCOLOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	4.738	0.39
2/2	21,16	67.348	5.58	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	17.776	1.47	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	16.479	1.37
24	21,16	0.000	0.00	2356/25	54,60	2.160	0.12
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	82.933	6.87	236/245(234/236)	54,60	3.059	0.32
2/4	21,16	15.973	1.32	34/34	48	0.000	0.00
25/2	16	34.106	2.83	2345/26(CL58)	54,60	0.000	0.00
24/2	16	5.796	0.48	234/236(2356/236)	54,60	0.000	0.00
NONACHLOROBENZENE	NA	62.073	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.000	0.00	245/34(2346/236)	54,60	5.736	0.48
26/4	16	66.365	5.50	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	24.240	2.04	235/245(CL50)	54,60	0.000	0.00
246/2	16	15.630	1.30	234/34	54,60	0.000	0.00
25/3	16	55.190	4.57	245/245	54,60	18.193	1.51
236/2(35/2)	16	16.465	1.36	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	37.727	3.13	2356/34(CL68)	54,60	0.000	0.00
24/26(CL38)	16	24.585	2.04	234/245	54,60	10.341	0.86
25/4(24/2)	16	96.790	8.02	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	48.187	3.99	2346/34(2356/245)	60	0.000	0.00
23/4	16	27.327	2.26	2356/245(CL7A)	54	5.126	0.42
25/25	16,54	63.857	5.23	234/234	54,60	0.000	0.00
24/25	16,54	74.813	6.20	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	25.211	2.09	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	55.190	4.57	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	17.731	1.47	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(CL48)	16,54	0.000	0.00	MIREX	NA	0.000	---
236/3(CL4C)	16,54	53.267	4.41	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	62.520	5.18	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	9.581	0.79	2345/245	54,60	6.720	0.56
OCTACHLOROSTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	28.934	1.73	2346/2356	60	0.000	0.00
25/34	54,60	17.001	1.41	CL7	60	0.000	0.00
24/34	54,60	18.327	1.52	2345/2346	60	0.000	0.00
234/4	54,60	6.169	0.51	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	63.827	5.22	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000
CL5: 120.496

CL2: 135.337
CL6: 24.553

CL3: 454.420
CL7: 11.045

CL4: 449.965
CL8: 0.000

TOTAL PCB: 1206.617

GMM 002 0382

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 08/06/85

VIAL NUMBER: 39

DILUTION FACTOR: 12.560

SAMPLE NAME: 05-37 C.TENTANS

PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT 0 TOTAL 0 PCB 0	PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	44.274	3.36 0 245/24		54,60	5.438	0.41
2/2	21,16	169.074	12.09 0 245/23		54,60	0.000	0.00
3	21	0.000	0.00 0 234/25		54,60	4.710	0.36
26	21,16	42.067	3.25 0 P,P'-DDE	NA		0.000	—
4	21	0.000	0.00 0 234/24	54		4.710	0.36
25	21,16	0.000	0.00 0 234/23	54,60		12.974	0.98
24	21,16	0.000	0.00 0 2356/25	54,60		0.000	0.00
2/3	21,16	6.016	0.46 0 2356/23	54,60		0.000	0.00
26/2	21,16	171.758	13.03 0 236/245(234/236)	54,60		2.324	0.18
2/4	21,16	48.971	3.71 0 34/34	48		0.000	0.00
25/2	16	53.305	4.04 0 2345/26(CL58)	54,60		0.000	0.00
24/2	16	7.674	0.58 0 234/236(2356/236)	54,60		0.000	0.00
HEXACHLOROBENZENE	NA	89.013	— 0 2356/236(245/34)	54,60		0.000	0.00
23/2	16	0.000	0.00 0 245/34(2346/236)	54,60		6.054	0.46
26/4	16	55.038	4.17 0 2346/236(235/245)	54,60		0.000	0.00
4/4	21,16	0.000	0.00 0 235/245(CL5C)	54,60		0.000	0.00
246/2	16	16.667	1.26 0 234/34	54,60		0.000	0.00
25/3	16	32.216	2.44 0 245/245	54,60		11.945	0.91
236/2(35/2)	16	18.350	1.39 0 234/235(CL6A)	54,60		0.006	0.00
24/3(CL3A)	16	24.229	1.84 0 2356/34(CL6B)	54,60		0.000	0.00
24/26(CL3B)	16	17.521	1.33 0 234/245	54,60		4.911	0.37
25/4(24/3)	16	66.895	5.07 0 2356/235(2346/34)	54,60		0.000	0.00
24/4(23/3+24/4)	16	64.244	4.87 0 2346/34(2356/245)	60		0.000	0.00
23/4	16	29.416	2.23 0 2356/245(CL7A)	54		0.000	0.00
25/25	16,54	53.769	4.08 0 234/234	54,60		0.000	0.00
24/25	16,54	32.827	4.01 0 2346/245(2356/2356)	54,60		0.000	0.00
23/25	16,54	32.970	2.50 0 2356/234(2346/234)	54,60		0.000	0.00
24/24	16,54	41.511	3.15 0 2346/234(245/345)	54,60		0.000	0.00
23/24(CL4A)	16,54	17.948	1.36 0 2345/2356+245/345(23456/236)	54,60		0.000	0.00
23/23+234/2(CL4B)	16,54	6.393	0.48 0 HIREX	NA		0.000	—
236/3(CL4C)	16,54	38.182	2.90 0 2345/34	54,60		0.000	0.00
236/4(CL4D)	16,54	54.699	4.15 0 2345/235	54,60		0.000	0.00
235/26(CL5A)	54,60	8.729	0.66 0 2345/245	54,60		0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	— 0 2345/234	54,60		0.000	0.00
236/23	54,60	5.740	0.44 0 2346/2356	60		0.000	0.00
25/34	54,60	27.004	2.05 0 CL7	60		0.000	0.00
24/34	54,60	28.072	2.13 0 2345/2346	60		0.000	0.00
234/4	54,60	9.131	0.69 0 23456/245	60		0.000	0.00
236/236	54,60	0.000	0.00 0 23456/234	60		0.000	0.00
245/25	54,60	18.953	1.44 0 2345/2345	60		0.000	0.00

TOTAL CL1: 44.274
CL5: 67.309

CL2: 267.729
CL6: 19.179

CL3: 584.774
CL7: 0.000

CL4: 415.045
CL8: 0.000

TOTAL PCB: 1318.310

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 08/07/85

VIAL NUMBER: 40

DILUTION FACTOR: 16.330

SAMPLE NAME: 05-38 C.TENTANS

PCB SUBSTITUTION PATTERN	ANALOR MIX	MG PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	ANALOR MIX	MG PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	77.714	6.25	245/24	54,60	6.369	0.51
2/2	21,16	186.097	14.98	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	50.051	4.03	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	54	6.630	0.53
25	21,16	1.323	0.11	234/23	54,60	16.069	1.36
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	5.373	0.43	2356/23	54,60	0.000	0.00
26/2	21,16	155.364	12.50	236/245(234/236)	54,60	2.743	0.22
2/4	21,16	26.529	2.30	34/34	48	0.000	0.00
25/2	16	45.446	3.66	2345/26(CL58)	54,60	0.000	0.00
24/2	16	5.650	0.45	234/236(2356/236)	54,60	0.000	0.00
NONACHLORODIBENZENE	NA	77.029	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	10.010	0.81	245/34(2346/236)	54,60	4.474	0.36
26/4	16	44.744	3.60	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	13.603	1.09	234/34	54,60	13.293	1.07
25/3	16	19.678	1.58	245/245	54,60	0.000	0.00
236/2(35/2)	16	10.371	1.48	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	14.550	1.17	234/245	54,60	7.708	0.62
25/4(24/3)	16	47.978	3.86	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	57.171	4.60	2346/34(2356/245)	60	0.000	0.00
23/4	16	23.270	1.87	2356/245(CL7A)	54	3.544	0.29
25/25	16,54	40.794	3.93	234/234	54,60	0.000	0.00
24/25	16,54	49.839	4.01	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	34.195	2.75	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	38.604	3.11	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	15.154	1.22	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	5.895	0.47	MIEX	NA	0.000	---
236/3(CL4C)	16,54	30.570	2.46	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	49.904	4.02	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	10.239	0.82	2345/245	54,60	0.000	0.00
OCTACHLORODISTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	0.622	0.09	2346/2356	60	0.000	0.00
25/34	54,60	27.679	2.23	CL7	60	0.000	0.00
24/34	54,60	29.263	2.35	2345/2346	60	0.000	0.00
234/4	54,60	11.055	0.89	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	16.330	1.31	2345/2345	60	0.000	0.00

TOTAL CL1: 77.714
CL5: 69.533

CL2: 271.372
CL6: 23.744

CL3: 409.311
CL7: 3.544

CL4: 207.478
CL8: 0.000

TOTAL PCB: 1242.697

GMM 002 0384

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 08/07/85

VIAL NUMBER: 43

DILUTION FACTOR: 19.010

SAMPLE NAME: 05-39 C.TENTANS

PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER HL SAMPLE	PCT % TOTAL % PCB %	PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER HL SAMPLE	PCT % TOTAL % PCB %
2	21,16	12.128	1.15 % 245/24		54,60	4.182	0.40
2/2	21,16	115.980	11.03 % 245/23		54,60	0.000	0.00
3	21	0.000	0.00 % 234/25		54,60	6.026	0.57
26	21,16	30.549	2.91 % P,P'-DDE		NA	0.000	—
4	21	0.000	0.00 % 234/24		54	0.000	0.00
25	21,16	0.000	0.00 % 234/23		54,60	15.094	1.44
24	21,16	0.000	0.00 % 2356/25		54,60	1.990	0.19
2/3	21,16	0.000	0.00 % 2356/23		54,60	0.000	0.00
26/2	21,16	150.962	15.12 % 236/245(234/236)		54,60	4.448	0.42
2/4	21,16	11.729	1.12 % 34/34		48	0.000	0.00
25/2	16	25.530	3.38 % 2345/26(CL58)		54,60	0.000	0.00
24/2	16	4.410	0.42 % 234/236(2356/236)		54,60	0.000	0.00
HEXACHLOROBENZENE	NA	65.318	— % 2356/236(245/34)		54,60	0.000	0.00
23/2	16	0.000	0.00 % 245/34(2346/236)		54,60	6.216	0.59
26/4	16	26.917	3.31 % 2346/236(235/245)		54,60	0.000	0.00
4/4	21,16	0.000	0.00 % 235/245(CL5C)		54,60	0.000	0.00
246/2	16	11.444	1.09 % 234/34		54,60	0.000	0.00
25/3	16	16.634	1.58 % 245/245		54,60	23.344	2.22
236/2(35/2)	16	10.002	1.71 % 234/235(CL6A)		54,60	0.000	0.00
24/3(CL3A)	16	21.424	2.04 % 2356/34(CL6B)		54,60	0.000	0.00
24/26(CL3B)	16	15.113	1.44 % 234/245		54,60	13.573	1.29
25/4(24/3)	16	43.685	4.15 % 2356/235(2346/34)		54,60	0.000	0.00
24/4(23/3+24/4)	16	50.586	4.81 % 2346/34(2356/245)		60	0.000	0.00
23/4	16	19.143	1.82 % 2356/245(CL7A)		54	6.064	0.58
25/25	16,34	43.438	4.13 % 234/234		54,60	0.000	0.00
24/25	16,34	52.278	4.97 % 2346/245(2356/2356)		54,60	0.000	0.00
23/25	16,34	31.785	3.02 % 2356/234(2346/234)		54,60	0.000	0.00
24/24	16,34	26.024	3.43 % 2346/234(245/345)		54,60	0.000	0.00
23/24(CL4A)	16,34	11.062	1.13 % 2345/2356+245/345(23456/236)		54,60	0.000	0.00
23/23+234/2(CL4B)	16,34	0.000	0.00 % NIREX		NA	0.000	—
236/3(CL4C)	16,34	25.188	2.40 % 2345/34		54,60	0.000	0.00
236/4(CL4D)	16,34	48.837	4.64 % 2345/235		54,60	0.000	0.00
235/26(CL5A)	54,60	9.410	0.89 % 2345/245		54,60	6.825	0.65
OCTACHLOROSTYRENE	NA	0.000	— % 2345/234		54,60	0.000	0.00
236/23	54,60	5.874	0.56 % 2346/2356		60	0.000	0.00
25/34	54,60	26.272	2.50 % CL7		60	0.000	0.00
24/34	54,60	19.827	1.89 % 2345/2346		60	0.000	0.00
234/4	54,60	0.935	0.05 % 23456/245		60	0.000	0.00
236/236	54,60	0.000	0.00 % 23456/234		60	0.000	0.00
245/25	54,60	41.060	3.90 % 2345/2345		60	0.000	0.00

TOTAL CL1: 12.128
CL5: 88.663

CL2: 150.258
CL6: 43.362

CL3: 387.291
CL7: 12.089

CL4: 349.005
CL8: 0.000

TOTAL PCB: 1051.395

GMM

002

0385

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 08/07/85

VIAL NUMBER: 44

DILUTION FACTOR: 15.010

SAMPLE NAME: B5-40 C.TENTANE

PCE SUBSTITUTION PATTERN	AROCLOR MIX	MS PCB PER ML SAMPLE	PCB TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCLOR MIX	MS PCB PER ML SAMPLE	PCB TOTAL PCB
2	21,16	63.943	4.01	245/24	54,60	7.820	0.49
2/2	21,16	163.936	10.40	245/23	54,60	7.790	0.49
3	21	0.000	0.00	234/25	54,60	7.955	0.50
26	21,16	53.225	3.34	P,P'-DDE	NA	0.000	----
4	21	0.000	0.00	234/24	54	9.516	0.60
25	21,16	1.531	0.10	234/23	54,60	21.104	1.32
24	21,16	0.000	0.00	2356/25	54,60	2.206	0.14
2/3	21,16	5.989	0.38	2356/23	54,60	0.000	0.00
26/2	21,16	236.817	14.79	236/245(234/236)	54,60	3.662	0.23
2/4	21,16	31.566	1.98	34/34	48	0.000	0.00
25/2	16	57.804	3.62	2345/26(CL58)	54,60	0.000	0.00
24/2	16	7.205	0.45	234/236(2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	103.589	—	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.946	0.52	245/34(2346/236)	54,60	9.291	0.58
26/4	16	57.563	3.61	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	15.385	0.96	234/34	54,60	0.000	0.00
23/3	16	23.551	1.48	245/245	54,60	20.158	1.26
236/2(35/2)	16	21.389	1.34	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	24.016	1.51	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	21.644	1.36	234/245	54,60	10.282	0.64
25/4(24/3)	16	66.975	4.20	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	75.440	4.73	2346/34(2356/245)	60	0.000	0.00
23/4	16	38.230	1.85	2356/245(CL7A)	54	3.946	0.25
25/25	16,54	62.427	3.91	234/234	54,60	0.000	0.00
24/25	16,54	75.966	4.76	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	44.780	2.80	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	58.813	3.13	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	26.538	1.66	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	12.398	0.78	HIREX	NA	0.000	----
236/3(CL4C)	16,54	42.313	2.65	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	66.119	4.14	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	12.683	0.80	2345/245	54,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	—	2345/234	54,60	0.000	0.00
236/23	54,60	7.595	0.48	2346/2356	60	0.000	0.00
25/34	54,60	49.143	3.08	CL7	60	0.000	0.00
24/34	54,60	43.799	2.75	2345/2346	60	0.000	0.00
234/4	54,60	15.205	0.95	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	15.010	0.94	2345/2345	60	0.000	0.00

TOTAL CL1: 63.943
CL5: 98.766

CL2: 236.247
CL6: 26.389

CL3: 387.146
CL7: 3.948

CL4: 347.039
CL8: 0.000

TOTAL PCB: 1595.898

GMM 002 0386

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 08/07/85

VIAL NUMBER: 45

DILUTION FACTOR: 13.640

SAMPLE NAME: 85-41 C.TENTANS

PCB SUBSTITUTION PATTERN	AROCLO MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCLO MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	27.662	2.43	245/24	54,60	4.632	0.41
2/2	21,16	156.273	13.71	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	4.526	0.40
26	21,16	46.676	4.09	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	13.163	1.15
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	195.488	17.15	236/245(234/236)	54,60	1.910	0.17
2/4	21,16	15.009	1.39	34/34	48	0.000	0.00
25/2	16	30.219	3.35	2345/26(CL58)	54,60	0.000	0.00
24/2	16	4.979	0.44	234/236(2356/236)	54,60	0.000	0.00
NONACHLOROBENZENE	NA	82.126	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.000	0.00	245/34(2346/236)	54,60	4.935	0.43
26/4	16	30.301	3.36	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	12.712	1.12	234/34	54,60	0.000	0.00
25/3	16	10.373	1.61	245/245	54,60	10.216	0.90
236/2(35/2)	16	15.072	1.32	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	13.326	1.17	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	11.080	1.04	234/245	54,60	4.351	0.38
25/4(24/3)	16	47.576	4.17	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	53.960	4.73	2346/34(2356/245)	60	0.000	0.00
23/4	16	23.084	2.10	2356/245(CL7A)	54	0.000	0.00
25/25	16,54	46.353	4.08	234/234	54,60	0.000	0.00
24/25	16,54	35.992	4.91	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	35.464	3.11	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	37.701	3.31	2346/234(245/245)	54,60	0.000	0.00
23/24(CL4A)	16,54	17.827	1.56	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	0.000	0.00	MIREX	NA	0.000	---
236/3(CL4C)	16,54	36.132	3.17	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	53.810	4.72	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	7.787	0.68	2345/245	54,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	0.000	0.00	2346/2356	60	0.000	0.00
25/34	54,60	30.349	2.66	CL7	60	0.000	0.00
24/34	54,60	28.576	2.51	2345/2346	60	0.000	0.00
234/4	54,60	10.598	0.93	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	15.263	1.34	2345/2345	60	0.000	0.00

TOTAL CL1: 27.662
CL5: 30.236

CL2: 218.758
CL6: 16.477

CL3: 434.107
CL7: 0.000

CL4: 392.668
CL8: 0.000

TOTAL PCB: 1129.909

GMM 002 0387

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 08/08/85

VIAL NUMBER: 46

DILUTION FACTOR: 17.180

SAMPLE NAME: 05-42 C.TENTANS

PCB SUBSTITUTION PATTERN	AROCLO MIX	MG PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCLO MIX	MG PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	5.429	0.81
2/2	21,16	0.000	0.00	245/23	54,60	4.759	0.71
3	21	0.000	0.00	234/25	54,60	3.591	0.54
26	21,16	0.000	0.00	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	54	6.924	1.04
25	21,16	0.000	0.00	234/23	54,60	13.452	2.02
24	21,16	0.000	0.00	2356/25	54,60	1.855	0.26
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	0.000	0.00	236/245(234/236)	54,60	2.818	0.42
2/4	21,16	0.000	0.00	34/34	48	0.000	0.00
25/2	16	21.044	4.65	2345/26(CL58)	54,60	0.000	0.00
24/2	16	3.453	0.52	234/236(2356/236)	54,60	1.442	0.22
HEXACHLOROBENZENE	NA	28.449	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	6.168	0.92	245/34(2346/236)	54,60	6.168	0.92
26/4	16	33.518	5.02	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	1.821	0.27
246/2	16	0.865	1.33	234/34	54,60	1.460	0.22
25/3	16	13.177	1.97	245/245	54,60	10.600	1.59
236/2(35/2)	16	13.624	2.04	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	13.452	2.02	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	14.964	2.24	234/245	54,60	10.755	1.61
25/4(24/3)	16	55.715	8.35	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	21.025	7.64	2346/34(2356/245)	60	0.000	0.00
23/4	16	14.586	2.19	2356/245(CL7A)	54	2.611	0.39
25/25	16,54	25.882	5.26	234/234	54,60	0.000	0.00
24/25	16,54	28.569	5.78	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	24.396	3.65	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	28.570	4.28	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	14.088	2.11	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	21.336	4.69	MIREX	NA	0.000	---
236/3(CL4C)	16,54	25.684	3.85	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	26.844	5.40	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	7.994	1.14	2345/245	54,60	2.625	0.54
DITACHLOROSTYRENE	NA	0.000	---	2345/234	54,60	1.134	0.17
236/23	54,60	4.621	0.69	2346/2356	60	0.000	0.00
25/34	54,60	26.852	4.02	CL7	60	0.000	0.00
24/34	54,60	20.409	4.56	2345/2346	60	0.000	0.00
234/4	54,60	10.669	1.60	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	15.548	2.33	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000
CL5: 69.545

CL2: 0.000
CL6: 29.252

CL3: 222.137
CL7: 7.370

CL4: 339.150
CL8: 0.000

TOTAL PCB: 667.495

GMM
002
0388

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 08/08/85

VIAL NUMBER: 47

DILUTION FACTOR: 14.200

SAMPLE NAME: 05-43 C.TENTANS

PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT % TOTAL % PCB %	PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	127.147	3.11 % 245/24		54,60	24.310	0.60
2/2	21,16	304.650	9.42 % 245/23		54,60	20.420	0.50
3	21	0.000	0.00 % 234/25		54,60	20.547	0.50
26	21,16	81.650	2.00 % P,P'-DDE	NA		2.542	---
4	21	0.000	0.00 % 234/24		54	35.173	0.86
25	21,16	0.832	0.22 % 234/23		54,60	53.165	1.30
24	21,16	5.893	0.14 % 2356/25		54,60	6.106	0.15
2/3	21,16	9.358	0.23 % 2356/23		54,60	0.000	0.00
26/2	21,16	356.981	13.64 % 236/245(234/236)		54,60	6.087	0.17
2/4	21,16	81.806	2.00 % 34/34	48		3.010	0.07
25/2	16	126.811	3.09 % 2345/26(CL58)		54,60	0.000	0.00
24/2	16	19.127	0.47 % 234/236(2356/236)		54,60	5.566	0.14
HEXACHLOROBENZENE	NA	340.686	---		54,60	1.292	0.03
23/2	16	53.477	1.31 % 245/34(2346/236)		54,60	26.554	0.65
26/4	16	159.793	3.91 % 2346/236(235/245)		54,60	0.000	0.00
4/4	21,16	34.421	0.04 % 235/245(CL5C)		54,60	4.587	0.11
246/2	16	40.858	0.98 % 234/34		54,60	15.464	0.38
25/3	16	56.573	1.39 % 245/245		54,60	22.649	0.55
236/2(35/2)	16	28.102	0.69 % 234/235(CL6A)		54,60	0.000	0.00
24/3(CL3A)	16	33.640	0.82 % 2356/34(CL6B)		54,60	0.000	0.00
24/26(CL3B)	16	36.630	0.90 % 234/245		54,60	13.262	0.32
25/4(24/3)	16	178.082	4.36 % 2356/235(2346/34)		54,60	1.164	0.03
24/4(23/3+24/4)	16	188.221	4.61 % 2346/34(2356/245)		60	0.000	0.00
23/4	16	72.851	1.76 % 2356/245(CL7A)		54	5.907	0.14
25/25	16,54	118.164	2.78 % 234/234		54,60	0.000	0.00
24/25	16,54	283.813	4.99 % 2346/245(2356/2356)		54,60	5.112	0.13
23/25	16,54	119.564	2.93 % 2356/234(2346/234)		54,60	2.542	0.06
24/24	16,54	136.296	3.34 % 2346/234(245/345)		54,60	0.000	0.00
23/24(CL4A)	16,54	69.566	1.70 % 2345/2356+245/345(23456/236)		54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	93.791	2.30 % HIREX	NA		0.000	---
236/3(CL4C)	16,54	154.595	3.79 % 2345/34		54,60	0.080	0.02
236/4(CL4D)	16,54	213.795	5.24 % 2345/235		54,60	0.000	0.00
235/26(CL5A)	54,60	24.992	0.61 % 2345/245		54,60	7.171	0.18
OCTACHLOROSTYRENE	NA	0.000	---		54,60	2.130	0.05
236/23	54,60	34.705	0.85 % 2346/2356		60	1.732	0.04
25/34	54,60	123.483	3.02 % CL7		60	0.000	0.00
24/34	54,60	129.188	3.41 % 2345/2346		60	0.994	0.02
234/4	54,60	38.831	1.44 % 23456/245		60	0.000	0.00
236/236	54,60	0.000	0.00 % 23456/234		60	0.000	0.00
245/25	54,60	21.155	0.76 % 2345/2345		60	0.000	0.00

TOTAL CL1: 127.147
CL5: 286.485

CL2: 686.610
CL6: 39.938

CL3: 1443.955
CL7: 25.319

CL4: 1530.817
CL8: 2.726

TOTAL PCB: 4882.996

GMN

002

038

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 08/08/85

VIAL NUMBER: 48

DILUTION FACTOR: 14.400

SAMPLE NAME: 85-44 C.TENTANS

PCB SUBSTITUTION PATTERN	AROCLO MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCLO MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	89.712	4.19	245/24	54,60	10.469	0.49
2/2	21,16	240.610	11.25	245/23	54,60	11.074	0.52
3	21	0.000	0.00	234/25	54,60	0.899	0.42
26	21,16	62.827	2.94	P, P'-DDE	NA	0.000	----
4	21	0.000	0.00	234/24	54	16.589	0.78
25	21,16	3.456	0.16	234/23	54,60	26.021	1.22
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	18.570	0.49	2356/23	54,60	0.000	0.00
26/2	21,16	330.667	15.45	236/245 (234/236)	54,60	4.421	0.21
2/4	21,16	42.984	2.01	34/34	48	0.000	0.00
25/2	16	73.714	3.45	2345/26 (CL58)	54,60	0.000	0.00
24/2	16	9.634	0.45	234/236 (2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	146.635	---	2356/236 (245/34)	54,60	0.000	0.00
23/2	16	0.395	0.39	245/34 (2346/236)	54,60	10.987	0.51
26/4	16	81.835	3.82	2346/236 (235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245 (CL5C)	54,60	0.000	0.00
246/2	16	22.133	1.03	234/34	54,60	0.000	0.00
25/3	16	33.134	1.55	245/245	54,60	14.515	0.68
236/2 (35/2)	16	20.851	0.97	234/235 (CL6A)	54,60	0.000	0.00
24/3 (CL34)	16	20.334	0.96	2356/34 (CL6B)	54,60	0.000	0.00
24/26 (CL38)	16	19.541	0.91	234/245	54,60	0.467	0.40
25/4 (24/3)	16	86.760	4.06	2356/235 (2346/34)	54,60	0.000	0.00
24/4 (23/34/24/4)	16	97.862	4.57	2346/34 (2356/245)	60	0.000	0.00
23/4	16	39.715	1.86	2356/245 (CL7A)	54	3.586	0.17
25/25	16,54	88.272	4.13	234/234	54,60	0.000	0.00
24/25	16,54	100.800	4.71	2346/245 (2356/2356)	54,60	0.000	0.00
23/25	16,54	59.486	2.78	2356/234 (2346/234)	54,60	0.000	0.00
24/24	16,54	69.941	3.27	2346/234 (245/345)	54,60	0.000	0.00
23/24 (CL4A)	16,54	34.632	1.62	2345/2356+245/345 (23456/236)	54,60	0.000	0.00
23/234/234/2 (CL4B)	16,54	16.877	0.79	MIREX	NA	0.000	----
236/3 (CL4C)	16,54	63.648	2.97	2345/34	54,60	0.000	0.00
236/4 (CL4D)	16,54	92.362	4.32	2345/235	54,60	0.000	0.00
235/26 (CL5A)	54,60	14.674	0.69	2345/245	54,60	3.110	0.15
OCTACHLOROSTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	9.288	0.43	2346/2356	60	0.000	0.00
25/34	54,60	64.397	3.01	CL7	60	0.000	0.00
24/34	54,60	62.683	2.93	2345/2346	60	0.000	0.00
234/4	54,60	23.630	1.10	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	25.819	1.21	2345/2345	60	0.000	0.00

TOTAL CL1: 89.712
CL5: 132.819

CL2: 380.446
CL6: 27.403

CL3: 782.251
CL7: 6.696

CL4: 789.253
CL8: 0.000

TOTAL PCB: 2139.581

GMM 002 0390

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 08/09/85

VIAL NUMBER: 51

DILUTION FACTOR: 11.930

SAMPLE NAME: 85-45 C.TENTANS

PCB SUBSTITUTION PATTERN	AROCLOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCLOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
			0				
2	21,16	46.085	4.21 0 245/24		54,60	4.724	0.42
2/2	21,16	122.819	11.04 0 245/23		54,60	5.607	0.50
3	21	0.000	0.00 0 234/25		54,60	3.830	0.34
26	21,16	39.023	3.51 0 P,P'-DDE	NA		0.000	---
4	21	0.000	0.00 0 234/24		54	0.000	0.00
25	21,16	1.539	0.14 0 234/23		54,60	12.624	1.22
24	21,16	0.000	0.00 0 2356/25		54,60	0.000	0.00
2/3	21,16	5.738	0.52 0 2356/23		54,60	0.000	0.00
26/2	21,16	115.972	10.42 0 236/245(234/236)		54,60	2.804	0.25
2/4	21,16	24.278	2.18 0 34/34	48		0.000	0.00
25/2	16	44.010	3.96 0 2345/26(CL38)		54,60	0.000	0.00
24/2	16	5.667	0.51 0 234/236(2356/236)		54,60	0.000	0.00
HEXACHLOROBENZENE	NA	74.455	--- 0 2356/236(245/34)		54,60	0.000	0.00
23/2	16	4.175	0.38 0 245/34(2346/236)		54,60	6.144	0.55
26/4	16	41.612	3.74 0 2346/236(235/245)		54,60	0.000	0.00
4/4	21,16	0.000	0.00 0 235/245(CL5C)		54,60	0.000	0.00
246/2	16	12.348	1.11 0 234/34		54,60	9.437	0.85
25/3	16	17.621	1.58 0 245/245		54,60	0.000	0.00
236/2(35/2)	16	14.507	1.30 0 234/235(CL6A)		54,60	0.000	0.00
24/3(CL3A)	16	11.572	1.04 0 2356/34(CL6B)		54,60	0.000	0.00
24/26(CL3B)	16	11.560	1.04 0 234/245		54,60	4.939	0.44
25/4(24/3)	16	48.746	4.38 0 2356/235(2346/34)		54,60	0.000	0.00
24/4(23/3+24/4)	16	52.635	4.73 0 2346/34(2356/245)		60	0.000	0.00
23/4	16	23.765	2.14 0 2356/245(CL7A)		54	2.243	0.20
25/25	16,54	48.630	4.32 0 234/234		54,60	0.000	0.00
24/25	16,54	48.388	4.35 0 2346/245(2356/2356)		54,60	0.000	0.00
23/25	16,54	32.223	2.90 0 2356/234(2346/234)		54,60	0.000	0.00
24/24	16,54	37.006	3.40 0 2346/234(245/345)		54,60	0.000	0.00
23/24(CL4A)	16,54	18.399	1.67 0 2345/2356+245/345(23456/236)		54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	9.234	0.83 0 HIREX	NA		0.000	---
236/3(CL4C)	16,54	39.395	3.62 0 2345/34		54,60	0.000	0.00
236/4(CL4D)	16,54	51.120	4.59 0 2345/235		54,60	0.000	0.00
235/26(CL5A)	54,60	0.682	0.77 0 2345/245		54,60	3.233	0.29
OCTACHLOROSTYRENE	NA	0.000	--- 0 2345/234		54,60	0.000	0.00
236/23	54,60	8.997	0.86 0 2346/2356		60	0.000	0.00
25/34	54,60	38.418	2.73 0 CL7		60	0.000	0.00
24/34	54,60	29.812	2.14 0 2345/2346		60	0.000	0.00
234/4	54,60	9.795	0.88 0 23456/245		60	0.000	0.00
236/236	54,60	0.000	0.00 0 23456/234		60	0.000	0.00
245/25	54,60	35.940	5.83 0 2345/2345		60	0.000	0.00

TOTAL CL1: 46.085
CL5: 102.467

CL2: 193.397
CL6: 17.179

CL3: 365.774
CL7: 5.476

CL4: 381.426
CL8: 0.000

TOTAL PCB: 1112.684

GMM

002

0391

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 06/09/85

VIAL NUMBER: 52

DILUTION FACTOR: 13.940

SAMPLE NAME: BS-47 C.TENTANS

PCB SUBSTITUTION PATTERN	AROCLO MIX	MS PCB PER ML SAMPLE	PCT % TOTAL % PCB	PCB SUBSTITUTION PATTERN	AROCLO MIX	MS PCB PER ML SAMPLE	PCT % TOTAL % PCB
2	21,16	84.393	4.60	245/24	54,60	9.296	0.51
2/2	21,16	238.583	13.02	245/23	54,60	9.451	0.52
3	21	0.000	0.00	234/25	54,60	6.663	0.36
26	21,16	69.602	3.80	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	54	13.815	0.75
25	21,16	2.356	0.13	234/23	54,60	25.301	1.38
24	21,16	0.000	0.00	2356/25	54,60	2.649	0.14
2/3	21,16	7.123	0.39	2356/23	54,60	0.000	0.00
26/2	21,16	188.845	10.30	236/245(234/236)	54,60	3.875	0.21
2/4	21,16	34.306	1.87	34/34	48	0.000	0.00
25/2	16	57.196	3.12	2345/26(CL58)	54,60	0.000	0.00
24/2	16	7.048	0.43	234/236(2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	187.951	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	18.353	0.98	245/34(2346/236)	54,60	10.371	0.57
26/4	16	58.576	3.20	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	17.746	0.97	234/34	54,60	5.980	0.32
25/3	16	27.685	1.51	245/245	54,60	15.557	0.85
236/2(35/2)	16	21.732	1.19	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	18.247	1.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	21.830	1.19	234/245	54,60	13.424	0.73
25/4(24/3)	16	79.514	4.34	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/34/24/4)	16	79.890	4.36	2346/34(2356/245)	60	0.000	0.00
22/4	16	29.832	2.13	2356/245(CL7A)	54	3.750	0.20
25/25	16,54	72.586	3.96	234/234	54,60	0.000	0.00
24/25	16,54	78.663	4.29	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	58.351	2.75	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	68.368	3.29	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	28.716	1.57	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/234/234/2(CL4B)	16,54	9.577	0.52	MIREX	NA	0.000	---
236/3(CL4C)	16,54	51.216	2.79	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	79.723	4.35	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	13.281	0.72	2345/245	54,60	4.419	0.24
OCTACHLOROSTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	9.633	0.53	2346/2356	60	0.000	0.00
25/34	54,60	57.684	3.15	CL7	60	0.000	0.00
24/34	54,60	43.367	2.37	2345/2346	60	0.000	0.00
234/4	54,60	19.892	1.09	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	68.139	3.72	2345/2345	60	0.000	0.00

TOTAL CL1: 84.393
CL5: 171.852

CL2: 251.971
CL6: 35.585

CL3: 567.386
CL7: 8.169

CL4: 613.444
CL8: 0.000

TOTAL PCB: 1832.720

GMM- 002 0392

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 08/09/85

VIAL NUMBER: 53

DILUTION FACTOR: 14.640

SAMPLE NAME: 85-48 C.TENTANS

PCB SUBSTITUTION PATTERN	ANALOR MIX	MS PCB PER ML SAMPLE	PCT % TOTAL % PCB	PCB SUBSTITUTION PATTERN	ANALOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	23.483	0.98 % 245/24		54,60	12.986	0.54
2/2	21,16	213.495	8.93 % 245/23		54,60	13.557	0.57
3	21	0.000	0.00 % 234/25		54,60	10.687	0.45
26	21,16	70.902	2.97 % P,P'-DDE		NA	0.000	---
4	21	0.000	0.00 % 234/24		54	20.247	0.85
25	21,16	0.000	0.00 % 234/23		54,60	34.272	1.43
24	21,16	0.000	0.00 % 2356/25		54,60	3.094	0.16
2/3	21,16	3.367	0.14 % 2356/23		54,60	0.000	0.00
26/2	21,16	204.082	8.54 % 236/245(234/236)		54,60	4.963	0.21
2/4	21,16	36.673	1.53 % 34/34		48	0.000	0.00
25/2	16	81.267	3.40 % 2345/26(CL58)		54,60	0.000	0.00
24/2	16	11.633	0.49 % 234/236(2356/236)		54,60	2.577	0.11
HEXACHLOROBENZENE	NA	154.062	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	12.810	0.54 % 245/34(2346/236)		54,60	14.916	0.62
26/4	16	91.794	3.84 % 2346/236(235/245)		54,60	0.000	0.00
4/4	21,16	0.000	0.00 % 235/245(CL5C)		54,60	0.000	0.00
246/2	16	25.752	1.08 % 234/34		54,60	9.238	0.39
25/3	16	41.841	1.75 % 245/245		54,60	19.998	0.84
236/2(35/2)	16	27.186	1.14 % 234/235(CL6A)		54,60	0.000	0.00
24/3(CL3A)	16	25.561	1.07 % 2356/34(CL6B)		54,60	0.000	0.00
24/26(CL3B)	16	27.948	1.17 % 234/245		54,60	10.790	0.45
25/4(24/3)	16	129.564	5.42 % 2356/235(2346/34)		54,60	0.000	0.00
24/4(23/3+24/4)	16	128.085	5.36 % 2346/34(2356/245)		60	0.000	0.00
23/4	16	64.035	2.68 % 2356/245(CL7A)		54	5.124	0.21
25/25	16,54	85.132	3.56 % 234/234		54,60	0.000	0.00
24/25	16,54	182.331	5.53 % 2346/245(2356/2356)		54,60	0.000	0.00
23/25	16,54	80.374	3.36 % 2356/234(2346/234)		54,60	0.000	0.00
24/24	16,54	112.947	4.70 % 2346/234(245/345)		54,60	0.000	0.00
23/24(CL4A)	16,54	44.125	1.85 % 2345/2356+245/345(23456/236)		54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	85.732	3.59 % NIREX		NA	0.000	---
236/3(CL4C)	16,54	85.454	3.57 % 2345/34		54,60	0.000	0.00
236/4(CL4D)	16,54	128.730	5.38 % 2345/235		54,60	0.000	0.00
235/26(CL5A)	54,60	17.685	0.74 % 2345/245		54,60	5.856	0.24
OCTACHLOROSTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	12.620	0.53 % 2346/2356		60	0.000	0.00
25/34	54,60	84.678	3.54 % CL7		60	0.000	0.00
24/34	54,60	80.574	2.87 % 2345/2346		60	0.000	0.00
234/4	54,60	85.894	1.46 % 23456/245		60	0.000	0.00
236/236	54,60	0.000	0.00 % 23456/234		60	0.000	0.00
245/25	54,60	29.675	1.24 % 2345/2345		60	0.000	0.00

TOTAL CL1: 23.483
CL5: 175.085

CL2: 324.437
CL6: 42.222

CL3: 790.633
CL7: 10.980

CL4: 1023.365
CL8: 0.000

TOTAL PCB: 2391.004

GMM

002

039

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 08/09/85

VIAL NUMBER: 54

DILUTION FACTOR: 16.830

SAMPLE NAME: 85-49 C.TENTANS

PCB SUBSTITUTION PATTERN	AROCLO MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCLO MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	66.916	1.52	245/24	54,60	30.395	0.69
2/2	21,16	355.012	8.04	245/23	54,60	26.002	0.59
3	21	0.000	0.00	234/25	54,60	23.680	0.54
26	21,16	100.071	2.27	P,P'-DDE	NA	0.000	—
4	21	0.000	0.00	234/24	54	39.904	0.90
25	21,16	0.000	0.00	234/23	54,60	82.196	1.86
24	21,16	0.000	0.00	2356/25	54,60	17.133	0.39
2/3	21,16	30.025	0.68	2356/23	54,60	0.000	0.00
26/2	21,16	423.308	9.59	236/245(234/236)	54,60	17.046	0.40
2/4	21,16	93.324	2.12	34/34	48	0.000	0.00
25/2	16	126.074	2.86	2345/26(CL5B)	54,60	0.000	0.00
24/2	16	18.244	0.41	234/236(2356/236)	54,60	14.036	0.32
HEXACHLOROBENZENE	NA	353.161	—	2356/236(245/34)	54,60	0.000	0.00
23/2	16	20.028	0.45	245/34(2346/236)	54,60	22.734	0.74
26/4	16	196.608	4.45	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	25.228	0.57	235/245(CL5C)	54,60	9.761	0.22
246/2	16	60.268	1.37	234/34	54,60	14.356	0.33
25/3	16	185.019	2.38	245/245	54,60	40.712	0.92
236/2(35/2)	16	56.330	1.28	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	41.402	0.94	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	50.406	1.14	234/245	54,60	21.795	0.49
25/4(24/3)	16	238.885	5.41	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	280.630	4.55	2346/34(2356/245)	60	0.000	0.00
23/4	16	110.076	2.51	2356/245(CL7A)	54	10.014	0.23
25/25	16,54	158.993	3.60	234/234	54,60	0.000	0.00
24/25	16,54	250.548	5.68	2346/245(2356/2356)	54,60	3.181	0.07
23/25	16,54	121.529	2.75	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	172.137	3.90	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	69.643	1.58	2345/2356+245/245(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	75.617	1.71	NI/REX	NA	0.000	—
236/3(CL4C)	16,54	143.190	3.24	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	230.369	5.22	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	44.650	1.01	2345/245	54,60	10.939	0.25
DECHLOROSTYRENE	NA	0.000	—	2345/234	54,60	4.292	0.10
236/23	54,60	55.085	1.25	2346/2356	60	0.000	0.00
25/34	54,60	139.201	3.15	CL7	60	0.000	0.00
24/34	54,60	187.342	2.43	2345/2346	60	0.000	0.00
234/4	54,60	75.920	1.72	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	51.214	1.16	2345/2345	60	0.000	0.00

TOTAL CL1: 66.916
CL5: 480.217

CL2: 683.860
CL6: 121.277

CL3: 1481.074
CL7: 28.426

CL4: 1711.493
CL8: 0.000

TOTAL PCB: 4413.264

GMM 002 0394

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 08/09/85

VIAL NUMBER: 35

DILUTION FACTOR: 16.100

SAMPLE NAME: BS-50 C.TENTANS

PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	35.919	0.92
2/2	21,16	132.938	3.40	245/23	54,60	33.939	0.87
3	21	0.000	0.00	234/25	54,60	31.296	0.80
26	21,16	46.191	1.18	P,P'-DDE	NA	0.000	—
4	21	0.000	0.00	234/24	54	35.030	1.41
25	21,16	0.000	0.00	234/23	54,60	86.747	2.22
24	21,16	0.000	0.00	2356/25	54,60	10.578	0.27
2/3	21,16	3.252	0.08	2356/23	54,60	0.000	0.00
26/2	21,16	173.949	4.44	236/245(234/236)	54,60	11.495	0.29
2/4	21,16	35.114	0.90	34/34	48	0.000	0.00
25/2	16	96.793	2.40	2345/26(CL58)	54,60	0.000	0.00
24/2	16	14.941	0.38	234/236(2356/236)	54,60	7.293	0.19
HEXACHLOROBENZENE	NA	193.023	—	2356/236(245/34)	54,60	0.000	0.00
23/2	16	14.554	0.37	245/34(2346/236)	54,60	40.854	1.05
26/4	16	116.049	2.97	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	7.470	0.19
246/2	16	26.338	0.63	234/34	54,60	23.682	0.61
25/3	16	68.747	1.76	245/245	54,60	40.121	1.03
236/2(35/2)	16	42.890	1.10	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	44.404	1.14	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	46.630	1.20	234/245	54,60	23.780	0.61
25/4(24/3)	16	218.107	5.58	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	220.060	5.65	2346/34(2356/245)	60	0.000	0.00
23/4	16	188.482	2.78	2356/245(CL7A)	54	9.386	0.24
25/25	16,54	157.683	4.04	234/234	54,60	0.000	0.00
24/25	16,54	262.237	6.71	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	148.861	3.81	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	181.077	4.63	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	84.879	2.17	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/234/234/2(CL4B)	16,54	196.468	5.03	MIREX	NA	0.000	—
236/3(CL4C)	16,54	162.465	4.16	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	262.081	6.73	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	37.368	0.96	2345/245	54,60	9.724	0.25
OCTACHLOROSTYRENE	NA	0.000	—	2345/234	54,60	0.000	0.00
236/23	54,60	44.038	1.13	2346/2356	60	0.000	0.00
25/34	54,60	197.579	5.06	CL7	60	0.000	0.00
24/34	54,60	174.089	4.46	2345/2346	60	0.000	0.00
234/4	54,60	82.448	2.11	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	67.813	1.74	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000
CL5: 456.789

CL2: 217.495
CL6: 100.738

CL3: 1076.285
CL7: 19.111

CL4: 2036.386
CL8: 0.000

TOTAL PCB: 3907.003

GMM 002 0395

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 08/09/85

VIAL NUMBER: 56

DILUTION FACTOR: 21.450

SAMPLE NAME: 85-51 C.TENTANS

PCB SUBSTITUTION PATTERN	AROCOLOR MIX	MG PCB PER ML SAMPLE	PCT % TOTAL % PCB	PCB SUBSTITUTION PATTERN	AROCOLOR MIX	MG PCB PER ML SAMPLE	PCT % TOTAL % PCB
2	21,16	40.456	1.35 % 245/24		54,60	25.418	0.71
2/2	21,16	296.070	5.73 % 245/23		54,60	27.713	0.77
3	21	0.000	0.00 % 234/25		54,60	26.792	0.75
26	21,16	61.175	1.70 % P,P'-DDE	NA		0.000	---
4	21	0.000	0.00 % 234/24		54	43.157	1.20
25	21,16	4.440	0.12 % 234/23		54,60	68.168	1.90
24	21,16	0.000	0.00 % 2356/25		54,60	7.121	0.20
2/3	21,16	15.487	0.43 % 2356/23		54,60	0.000	0.00
26/2	21,16	222.286	6.18 % 236/245 (234/236)		54,60	9.116	0.25
2/4	21,16	53.539	1.49 % 34/34	48		0.000	0.00
25/2	16	118.576	3.30 % 2345/26 (CL58)		54,60	0.000	0.00
24/2	16	16.774	0.47 % 234/236 (2356/236)		54,60	3.218	0.09
NONACHLOROBENZENE	NA	199.464	---	0 2356/236 (245/34)		0.000	0.00
23/2	16	15.015	0.42 % 245/34 (2346/236)		54,60	32.904	0.92
26/4	16	129.365	3.60 % 2346/236 (235/245)		54,60	0.000	0.00
4/4	21,16	0.000	0.00 % 235/245 (CL5C)		54,60	5.384	0.15
246/2	16	34.234	0.95 % 234/34		54,60	18.940	0.53
25/3	16	65.680	1.83 % 245/245		54,60	34.063	0.95
236/2 (35/2)	16	34.899	0.97 % 234/235 (CL6A)		54,60	0.000	0.00
24/3 (CL3A)	16	34.706	0.97 % 2356/34 (CL6B)		54,60	0.000	0.00
24/26 (CL3B)	16	35.500	0.99 % 234/245		54,60	33.269	0.93
25/4 (24/3)	16	193.415	5.38 % 2356/235 (2346/34)		54,60	0.000	0.00
24/4 (23/34/24/4)	16	283.346	5.66 % 2346/34 (2356/245)		60	0.000	0.00
23/4	16	97.533	2.71 % 2356/245 (CL7A)		54	6.993	0.19
25/25	16,54	192.835	5.36 % 234/234		54,60	0.000	0.00
24/25	16,54	284.376	5.68 % 2346/245 (2356/2356)		54,60	0.000	0.00
23/25	16,54	133.005	3.72 % 2356/234 (2346/234)		54,60	0.000	0.00
24/24	16,54	155.169	4.32 % 2346/234 (245/345)		54,60	0.000	0.00
23/24 (CL4A)	16,54	79.316	2.04 % 2345/2356+245/345 (23456/236)		54,60	0.000	0.00
23/234/234/2 (CL4B)	16,54	46.075	1.28 % MIREX	NA		0.000	---
236/3 (CL4C)	16,54	138.117	3.84 % 2345/34		54,60	0.000	0.00
236/4 (CL4D)	16,54	222.050	6.18 % 2345/235		54,60	0.000	0.00
235/26 (CL5A)	54,60	32.454	0.90 % 2345/245		54,60	7.743	0.22
OCTACHLOROSTYRENE	NA	0.000	---	0 2345/234		0.000	0.00
236/23	54,60	34.406	0.96 % 2346/2356		60	0.000	0.00
25/34	54,60	166.967	4.64 % CL7		60	0.000	0.00
24/34	54,60	127.370	3.54 % 2345/2346		60	0.000	0.00
234/4	54,60	61.626	1.71 % 23456/245		60	0.000	0.00
236/236	54,60	0.000	0.00 % 23456/234		60	0.000	0.00
245/25	54,60	66.795	1.86 % 2345/2345		60	0.000	0.00

TOTAL CL1: 40.456
CL5: 376.748

CL2: 340.712
CL6: 92.171

CL3: 1896.636
CL7: 14.736

CL4: 1626.339
CL8: 0.000

TOTAL PCB: 3395.856

GMM
002
0396

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 08/18/85

VIAL NUMBER: 59

DILUTION FACTOR: 15.190

SAMPLE NAME: 85-52 C.TENTANS

PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT 0 TOTAL 0 PCB 0	PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	28.046	0.63 0 245/24		54,60	28.856	0.85
2/2	21,16	106.761	4.08 0 245/23		54,60	42.228	0.92
3	21	0.000	0.00 0 234/25		54,60	48.486	1.06
26	21,16	63.783	1.39 0 P,P'-DDE	NA		24.107	—
4	21	0.000	0.00 0 234/24	54		56.416	1.23
25	21,16	0.000	0.00 0 234/23	54,60		125.469	2.74
24	21,16	0.000	0.00 0 2356/25	54,60		32.734	0.71
2/3	21,16	5.544	0.12 0 2356/23	54,60		5.620	0.12
26/2	21,16	289.819	4.58 0 236/245(234/236)	54,60		45.008	0.98
2/4	21,16	48.578	1.06 0 34/34	48		0.000	0.00
25/2	16	111.890	2.44 0 2345/26(CL58)	54,60		0.000	0.00
24/2	16	16.436	0.36 0 234/236(2356/236)	54,60		32.719	0.71
HEXACHLOROBENZENE	NA	232.787	— 0 2356/236(245/34)	54,60		14.552	0.32
23/2	16	19.185	0.42 0 245/34(2346/236)	54,60		64.634	1.42
26/4	16	126.928	2.77 0 2346/236(235/245)	54,60		3.038	0.07
4/4	21,16	11.772	0.26 0 235/245(CL5C)	54,60		18.167	0.40
246/2	16	34.284	0.75 0 234/34	54,60		38.264	0.84
25/3	16	64.254	1.40 0 245/245	54,60		126.168	2.76
236/2(35/2)	16	41.637	0.91 0 234/235(CL6A)	54,60		11.636	0.25
24/3(CL3A)	16	35.332	0.77 0 2356/34(CL6B)	54,60		0.000	0.00
24/26(CL3B)	16	37.140	0.81 0 234/245	54,60		76.542	1.67
25/4(24/3)	16	201.981	4.41 0 2356/235(2346/34)	54,60		14.734	0.32
24/4(23/34/24/4)	16	211.884	4.62 0 2346/34(2356/245)	60		0.000	0.00
23/4	16	182.532	2.24 0 2356/245(CL7A)	54		37.990	0.83
25/25	16,54	147.956	3.22 0 234/234	54,60		0.000	0.00
24/25	16,54	231.788	5.06 0 2346/245(2356/2356)	54,60		78.775	1.72
23/25	16,54	143.485	3.13 0 2356/234(2346/234)	54,60		28.150	0.51
24/24	16,54	139.520	3.05 0 2346/234(245/245)	54,60		11.711	0.26
23/24(CL4A)	16,54	72.882	1.59 0 2345/2356+245/245(23456/236)	54,60		0.000	0.00
23/23+234/2(CL4B)	16,54	99.236	2.17 0 MIREX	NA		0.000	—
236/3(CL4C)	16,54	152.785	3.34 0 2345/34	54,60		16.208	0.35
236/4(CL4D)	16,54	225.997	4.34 0 2345/235	54,60		8.977	0.20
235/26(CL5A)	54,60	53.241	1.16 0 2345/245	54,60		96.831	2.10
OCTACHLOROSTYRENE	NA	0.000	— 0 2345/234	54,60		42.714	0.93
236/23	54,60	38.360	1.27 0 2346/2356	60		21.631	0.47
25/34	54,60	175.839	3.84 0 CL7	60		11.894	0.26
24/34	54,60	141.356	3.09 0 2345/2346	60		18.982	0.24
234/4	54,60	63.823	1.38 0 23456/245	60		15.236	0.33
236/236	54,60	25.474	0.56 0 23456/234	60		18.886	0.22
245/25	54,60	87.251	1.91 0 2345/2345	60		21.858	0.48

TOTAL CL1: 28.046
CL5: 613.266

CL2: 316.438
CL6: 380.277

CL3: 1899.741
CL7: 343.567

CL4: 1786.627
CL8: 79.793

TOTAL PCB: 4578.355

GMM 002 0397

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 08/10/85

VIAL NUMBER: 60

DILUTION FACTOR: 13.000

SAMPLE NAME: 05-53 C.TENTANS

PCB SUBSTITUTION PATTERN	AROCLO MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCLO MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	24.297	0.91
2/2	21,16	81.315	3.05	245/23	54,60	22.815	0.86
3	21	0.000	0.00	234/25	54,60	24.271	0.91
26	21,16	24.297	0.91	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	54	35.867	1.35
25	21,16	0.000	0.00	234/23	54,60	60.606	2.27
24	21,16	0.000	0.00	2356/25	54,60	7.306	0.27
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	91.299	3.42	236/245(234/236)	54,60	8.723	0.33
2/4	21,16	21.021	0.79	34/34	48	0.000	0.00
25/2	16	64.825	2.40	2345/26(CL58)	54,60	0.000	0.00
24/2	16	19.686	0.40	234/236(2356/236)	54,60	6.669	0.25
NONACHLOROBENZENE	NA	136.164	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	4.966	0.19	245/34(2346/236)	54,60	27.872	1.05
26/4	16	86.710	3.25	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	3.809	0.14
246/2	16	20.898	0.75	234/34	54,60	21.190	0.79
25/3	16	45.422	1.78	245/245	54,60	25.272	0.95
236/2(35/2)	16	25.025	0.94	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	28.626	1.07	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	28.262	1.06	234/245	54,60	17.420	0.65
25/4(24/3)	16	149.071	5.59	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	155.077	5.82	2346/34(2356/245)	60	0.000	0.00
23/4	16	75.010	2.81	2356/245(CL7A)	54	6.786	0.25
25/25	16,54	118.812	4.16	234/234	54,60	0.000	0.00
24/25	16,54	183.378	6.88	2346/245(2356/2356)	54,60	2.496	0.09
23/25	16,54	188.869	4.85	2356/234(2346/234)	54,60	2.047	0.11
24/24	16,54	113.750	4.27	2346/234(245/245)	54,60	0.000	0.00
23/24(CL4A)	16,54	98.474	2.19	2345/2356+245/245(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	145.301	5.45	HIREX	NA	0.000	---
236/3(CL4C)	16,54	117.468	4.41	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	179.699	6.74	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	26.852	0.98	2345/245	54,60	12.220	0.46
OCTACHLOROSTYRENE	NA	0.000	---	2345/234	54,60	5.499	0.21
236/23	54,60	32.175	1.21	2346/2356	60	2.249	0.08
25/34	54,60	139.889	5.21	CL7	60	0.000	0.00
24/34	54,60	123.318	4.63	2345/2346	60	0.000	0.00
234/4	54,60	55.562	2.08	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	43.992	1.63	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000
CL5: 219.137

CL2: 126.633
CL6: 69.199

CL3: 710.892
CL7: 29.048

CL4: 1488.225
CL8: 2.249

TOTAL PCB: 2646.183

GMM 002 0398

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 08/10/85

VIAL NUMBER: 61

DILUTION FACTOR: 23.640

SAMPLE NAME: 85-54 C.TENTANS

PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT % TOTAL % PCB	PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	39.030	1.12
2/2	21,16	116.947	3.35	245/23	54,60	36.629	1.05
3	21	0.000	0.00	234/25	54,60	37.232	1.07
26	21,16	26.855	1.06	P, P' -DOE	NA	0.000	—
4	21	0.000	0.00	234/24	54	60.566	1.74
25	21,16	0.000	0.00	234/23	54,60	100.470	2.88
24	21,16	0.000	0.00	2356/25	54,60	13.049	0.37
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	117.751	3.38	236/245(234/236)	54,60	14.397	0.41
2/4	21,16	23.522	0.67	34/34	40	0.000	0.00
25/2	16	72.126	2.07	2345/26(CL58)	54,60	0.000	0.00
24/2	16	12.364	0.35	234/236(2356/236)	54,60	11.394	0.33
NONACHLOROBENZENE	NA	154.629	—	2356/236(245/34)	54,60	0.000	0.00
23/2	16	14.468	0.41	245/34(2346/236)	54,60	44.892	1.29
26/4	16	102.739	2.95	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	7.423	0.21
246/2	16	27.021	0.77	234/34	54,60	29.266	0.84
25/3	16	35.625	1.59	245/245	54,60	40.188	1.15
236/2(35/2)	16	32.481	0.93	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	32.056	0.92	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	33.758	0.97	234/245	54,60	25.389	0.73
25/4(24/3)	16	167.560	4.80	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/34/4)	16	185.030	5.30	2346/34(2356/245)	60	0.000	0.00
23/4	16	91.936	2.64	2356/245(CL7A)	54	10.402	0.30
25/25	16,54	145.575	4.17	234/234	54,60	0.000	0.00
24/25	16,54	253.563	7.27	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	136.076	3.92	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	168.587	4.68	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	78.461	2.25	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	89.686	2.40	MIREX	NA	0.000	—
236/3(CL4C)	16,54	159.428	4.57	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	247.889	7.11	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	38.391	1.10	2345/245	54,60	13.897	0.38
OCTACHLOROSTYRENE	NA	0.000	—	2345/234	54,60	4.610	0.13
236/23	54,60	26.704	0.77	2346/2356	60	0.000	0.00
25/34	54,60	196.387	5.63	CL7	60	0.000	0.00
24/34	54,60	171.934	4.93	2345/2346	60	0.000	0.00
234/4	54,60	84.773	2.43	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	93.685	2.69	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000
CL5: 307.007

CL2: 177.324
CL6: 111.041

CL3: 651.635
CL7: 28.188

CL4: 1012.337
CL8: 0.000

TOTAL PCB: 3488.271

GM1

002

0399

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 08/10/85

VIAL NUMBER: 62

DILUTION FACTOR: 21.410

SAMPLE NAME: 85-55 C.TENTANS

PCB SUBSTITUTION PATTERN	AROCLOP MIX	MG PCB PER ML SAMPLE	PCT 0 TOTAL 0 PCB 0	PCB SUBSTITUTION PATTERN	AROCLOP MIX	MG PCB PER ML SAMPLE	PCT TOTAL PCE
2	21,16	38.688	0.00 0 245/24		54,60	41.664	0.95
2/2	21,16	132.378	3.82 0 245/23		54,60	39.073	0.89
3	21	0.000	0.00 0 234/25		54,60	28.881	0.69
26	21,16	42.520	0.97 0 P,P'-DDE	NA		0.000	—
4	21	0.000	0.00 0 234/24	54		61.725	1.41
25	21,16	3.019	0.87 0 234/23	54,60		97.308	2.22
24	21,16	0.000	0.00 0 2356/25	54,60		12.996	0.30
2/3	21,16	11.390	0.26 0 2356/23	54,60		0.000	0.00
26/2	21,16	157.149	3.98 0 236/245(234/236)	54,60		14.709	0.34
2/4	21,16	44.147	1.01 0 24/34	48		0.000	0.00
25/2	16	110.112	2.51 0 2345/26(CL5B)	54,60		0.000	0.00
24/2	16	18.027	0.41 0 234/236(2356/236)	54,60		0.628	0.20
HEXACHLOROBENZENE	NA	234.568	— 0 2356/236(245/34)	54,60		0.000	0.00
23/2	16	13.017	0.30 0 245/34(2346/236)	54,60		46.438	1.06
26/4	16	141.006	3.22 0 2346/236(235/245)	54,60		0.000	0.00
4/4	21,16	0.000	0.00 0 235/245(CL5C)	54,60		9.399	0.21
246/2	16	34.063	0.78 0 234/34	54,60		25.585	0.58
25/3	16	73.822	1.68 0 245/245	54,60		48.344	1.10
236/2(35/2)	16	37.194	0.85 0 234/235(CL6A)	54,60		0.000	0.00
24/3(CL3A)	16	48.700	0.93 0 2356/34(CL6B)	54,60		0.000	0.00
24/26(CL3B)	16	41.471	0.95 0 234/245	54,60		27.105	0.62
25/4(24/3)	16	230.992	5.27 0 2356/235(2346/34)	54,60		0.000	0.00
24/4(23/34/24/4)	16	243.710	5.56 0 2346/34(2356/245)	60		0.000	0.00
23/4	16	108.729	2.48 0 2356/245(CL7A)	54		11.048	0.25
25/25	16,54	181.921	4.15 0 234/234	54,60		0.000	0.00
24/25	16,54	315.827	7.19 0 2346/245(2356/2356)	54,60		0.000	0.00
23/25	16,54	168.668	3.85 0 2356/234(2346/234)	54,60		2.912	0.07
24/24	16,54	198.985	4.54 0 2346/234(245/345)	54,60		0.000	0.00
23/24(CL4A)	16,54	98.143	2.24 0 2345/2356+245/345(23456/236)	54,60		0.000	0.00
23/23+234/2(CL4B)	16,54	212.987	4.86 0 NIREX	NA		0.000	—
236/3(CL4C)	16,54	198.977	4.36 0 2345/34	54,60		0.000	0.00
236/4(CL4D)	16,54	236.122	6.75 0 2345/235	54,60		0.000	0.00
235/26(CL5A)	54,60	43.890	1.00 0 2345/245	54,60		12.418	0.28
OCTACHLOROSTYRENE	NA	0.000	— 0 2345/234	54,60		5.588	0.13
236/23	54,60	44.147	1.01 0 2346/2356	60		0.000	0.00
25/34	54,60	221.888	5.06 0 CL7	60		0.000	0.00
24/34	54,60	199.685	4.35 0 2345/2346	60		0.000	0.00
234/4	54,60	31.835	2.88 0 23456/245	60		0.000	0.00
236/236	54,60	0.000	0.00 0 23456/234	60		0.000	0.00
245/25	54,60	95.818	2.17 0 2345/2345	60		0.000	0.00

TOTAL CL1: 38.688
CL5: 533.730CL2: 233.455
CL6: 121.181CL3: 1137.256
CL7: 31.965CL4: 2287.916
CL8: 0.000

TOTAL PCB: 4384.190

GMM

002

0400

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 08/11/85

VIAL NUMBER: 64

DILUTION FACTOR: 28.400

SAMPLE NAME: 85-57 C.TENTANS

PCB SUBSTITUTION PATTERN	AROCLOR MIX	MS PCB PER ML SAMPLE	PCT % TOTAL % PCB	PCB SUBSTITUTION PATTERN	AROCLOR MIX	MS PCB PER ML SAMPLE	PCT % TOTAL % PCB
2	21,16	0.000	0.00	245/24	54,60	53.250	0.99
2/2	21,16	246.853	4.59	245/23	54,60	46.988	0.87
3	21	0.000	0.00	234/25	54,60	45.610	0.85
26	21,16	85.512	1.59	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	54	82.559	1.54
25	21,16	0.000	0.00	234/23	54,60	130.214	2.42
24	21,16	0.000	0.00	2356/25	54,60	15.961	0.30
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	203.685	3.79	236/245(234/236)	54,60	15.961	0.30
2/4	21,16	48.498	0.75	34/34	48	0.000	0.00
25/2	16	119.649	2.23	2345/26(CL58)	54,60	0.000	0.00
24/2	16	22.152	0.41	234/236(2356/236)	54,60	11.985	0.22
HEXACHLOROBENZENE	NA	246.114	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	19.085	0.36	245/34(2346/236)	54,60	56.601	1.05
26/4	16	176.336	3.28	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	10.110	0.19
246/2	16	36.664	0.68	234/34	54,60	39.306	0.73
25/3	16	92.754	1.73	245/245	54,60	53.562	1.00
236/2(35/2)	16	48.782	0.76	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	50.666	0.94	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	48.649	0.91	234/245	54,60	31.751	0.59
25/4(24/3)	16	286.187	5.33	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	215.070	5.86	2346/34(2356/245)	60	0.000	0.00
23/4	16	143.931	2.68	2356/245(CL7A)	54	13.007	0.24
25/25	16,54	205.040	5.63	234/234	54,60	0.000	0.00
24/25	16,54	246.594	6.45	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	195.562	3.64	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	244.183	4.54	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	119.081	2.22	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	148.589	2.77	HIREX	NA	0.000	---
236/3(CL4C)	16,54	241.002	4.49	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	374.397	6.97	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	52.718	0.98	2345/245	54,60	16.529	0.31
OCTACHLOROSTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	61.514	1.14	2346/2356	60	0.000	0.00
25/34	54,60	279.570	5.28	CL7	60	0.000	0.00
24/34	54,60	257.986	4.80	2345/2346	60	0.000	0.00
234/4	54,60	119.363	2.22	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	75.890	1.40	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000
CL5: 643.743

CL2: 372.064
CL6: 139.330

CL3: 1429.514
CL7: 29.536

CL4: 2758.265
CL8: 0.000

TOTAL PCB: 5373.251

GMM 002 04

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 08/11/85

VIAL NUMBER: 63

DILUTION FACTOR: 36.490

SAMPLE NAME: 05-58 C.TENTANS

PCB SUBSTITUTION PATTERN	AROCLOP MIX	MS PCB PER ML SAMPLE	PCT % TOTAL % PCB %	PCB SUBSTITUTION PATTERN	AROCLOP MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00 % 245/24		54,60	69.076	1.24
2/2	21,16	139.282	2.50 % 245/23		54,60	56.195	1.01
3	21	0.000	0.00 % 234/25		54,60	58.603	1.05
26	21,16	40.723	0.73 % P,P'-DDE	NA		0.000	—
4	21	0.000	0.00 % 234/24	54		95.275	1.71
25	21,16	0.000	0.00 % 234/23	54,60		152.200	2.72
24	21,16	0.000	0.00 % 2356/25	54,60		19.940	0.35
2/3	21,16	0.000	0.00 % 2356/23	54,60		0.000	0.00
26/2	21,16	143.625	2.58 % 236/245 (234/236)	54,60		20.179	0.36
2/4	21,16	26.309	0.47 % 34/34	48		0.000	0.00
25/2	16	99.545	1.79 % 2345/26 (CL5B)	54,60		0.000	0.00
24/2	16	19.413	0.35 % 234/236 (2356/236)	54,60		14.085	0.25
NONACHLOROBENZENE	NA	206.096	— % 2356/236 (245/34)	54,60		0.000	0.00
23/2	16	0.000	0.00 % 245/34 (2346/236)	54,60		72.907	1.31
26/4	16	136.217	2.44 % 2346/236 (235/245)	54,60		0.000	0.00
4/4	21,16	0.000	0.00 % 235/245 (CL5C)	54,60		12.188	0.22
246/2	16	22.843	0.41 % 234/34	54,60		33.096	0.59
25/3	16	87.941	1.58 % 245/245	54,60		56.195	1.01
236/2 (35/2)	16	33.753	0.61 % 234/235 (CL6A)	54,60		0.000	0.00
24/3 (CL3A)	16	39.847	0.71 % 2356/34 (CL6B)	54,60		0.000	0.00
24/26 (CL3B)	16	44.664	0.80 % 234/245	54,60		36.344	0.65
25/4 (24/3)	16	275.281	4.94 % 2356/235 (2346/34)	54,60		0.000	0.00
24/4 (23/34/24/4)	16	297.503	5.34 % 2346/34 (2356/245)	68		0.000	0.00
23/4	16	128.737	2.31 % 2356/245 (CL7A)	54		14.268	0.26
25/25	16,54	332.935	5.97 % 234/234	54,60		0.000	0.00
24/25	16,54	383.872	6.87 % 2346/245 (2356/2356)	54,60		0.000	0.00
23/25	16,54	220.765	3.96 % 2356/234 (2346/234)	54,60		0.000	0.00
24/24	16,54	380.821	5.38 % 2346/234 (245/345)	54,60		0.000	0.00
23/24 (CL4A)	16,54	133.590	2.40 % 2345/2356+245/345 (23456/236)	54,60		0.000	0.00
23/234/234/2 (CL4B)	16,54	316.332	5.68 % MIXED	NA		0.000	—
236/3 (CL4C)	16,54	240.971	4.47 % 2345/34	54,60		0.000	0.00
236/4 (CL4D)	16,54	415.585	7.46 % 2345/235	54,60		0.000	0.00
235/26 (CL5A)	54,60	39.990	1.00 % 2345/245	54,60		18.065	0.34
OCTACHLOROSTYRENE	NA	0.000	— % 2345/234	54,60		0.000	0.00
236/23	54,60	37.913	0.68 % 2346/2356	60		0.000	0.00
25/34	54,60	318.412	5.71 % CL7	60		0.000	0.00
24/34	54,60	291.482	5.23 % 2345/2346	60		0.000	0.00
234/4	54,60	146.544	2.63 % 23456/245	60		0.000	0.00
236/236	54,60	0.000	0.00 % 23456/234	60		0.000	0.00
245/25	54,60	183.960	1.87 % 2345/2345	60		0.000	0.00

TOTAL CL1: 0.000
CL5: 739.215

CL2: 206.314
CL6: 158.330

CL3: 1228.188
CL7: 33.133

CL4: 3208.968
CL8: 0.000

TOTAL PCB: 5574.067

GML 002 0402

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 08/11/85

VIAL NUMBER: 67

DILUTION FACTOR: 45.040

SAMPLE NAME: BS-59 C.TENTANS

PCB SUBSTITUTION PATTERN	ANALOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	ANALOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
			0				
2	21,16	0.000	0.00	245/24	54,60	83.324	1.11
2/2	21,16	199.617	2.65	245/23	54,60	73.235	0.97
3	21	0.000	0.00	234/25	54,60	69.677	0.92
26	21,16	53.958	0.72	P,P'-DDE	NA	0.000	—
4	21	0.000	0.00	234/24	54	122.869	1.63
25	21,16	0.000	0.00	234/23	54,60	207.860	2.76
24	21,16	0.000	0.00	2356/25	54,60	28.866	0.37
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	382.485	4.41	236/245(234/236)	54,60	31.796	0.42
2/4	21,16	31.573	0.42	34/34	48	0.000	0.00
25/2	16	180.768	1.04	2345/26(CL58)	54,60	0.000	0.00
24/2	16	26.123	0.35	234/236(2356/236)	54,60	22.115	0.29
HEXACHLOROBENZENE	NA	304.820	—	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.000	0.00	245/34(2346/236)	54,60	183.817	1.38
26/4	16	298.580	2.77	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	26.393	0.35
246/2	16	33.149	0.44	234/34	54,60	56.300	0.75
25/3	16	117.825	1.56	245/245	54,60	125.042	1.67
236/2(35/2)	16	50.552	0.78	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	51.256	0.68	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	35.174	0.73	234/245	54,60	71.749	0.95
25/4(24/3)	16	340.457	4.52	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	280.317	5.18	2346/34(2356/245)	54,60	0.000	0.00
23/4	16	164.756	2.19	2356/245(CL7A)	54	24.456	0.46
25/25	16,54	447.788	5.94	234/234	54,60	0.000	0.00
24/25	16,54	547.326	7.26	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	294.866	3.90	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	377.875	5.00	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	169.576	2.25	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	219.210	2.91	MIKEX	NA	0.000	—
236/3(CL4C)	16,54	339.632	4.51	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	546.470	7.25	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	81.883	1.09	2345/245	54,60	56.255	0.75
OCTACHLOROSTYRENE	NA	0.000	—	2345/234	54,60	28.989	0.28
236/23	54,60	32.291	0.69	2346/2356	60	0.000	0.00
25/34	54,60	399.640	5.30	CL7	60	0.000	0.00
24/34	54,60	375.814	4.99	2345/2346	60	0.000	0.00
234/4	54,60	182.142	2.42	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	167.954	2.23	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000
CL5: 1819.210CL2: 285.148
CL6: 285.957CL3: 1778.568
CL7: 111.639CL4: 4045.673
CL8: 0.000

TOTAL PCB: 7538.235

GMM 002 04

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 08/12/85
VIAL NUMBER: 75
DILUTION FACTOR: 0.676

SAMPLE NAME: 05-64 H20

PCB SUBSTITUTION PATTERN	AROCLOP MIX	MS PCB PER ML SAMPLE	PCT % TOTAL % PCB	PCB SUBSTITUTION PATTERN	AROCLOP MIX	MS PCB PER ML SAMPLE	PCT % TOTAL % PCB
2	21,16	0.000	0.00	245/24	54,60	0.587	0.50
2/2	21,16	24.766	21.12	245/22	54,60	0.840	0.72
3	21	0.000	0.00	234/25	54,60	0.835	0.71
26	21,16	13.060	11.82	P,P'-DDE	NA	0.000	----
4	21	0.000	0.00	234/24	54	1.007	0.86
25	21,16	0.000	0.00	234/23	54,60	2.371	2.02
24	21,16	0.000	0.00	2356/25	54,60	0.174	0.15
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	21.418	18.27	236/245(234/236)	54,60	0.331	0.28
2/4	21,16	0.480	0.41	34/34	48	0.000	0.00
25/2	16	3.069	3.30	2345/26(CL5B)	54,60	0.000	0.00
24/2	16	0.391	0.33	234/236(2356/236)	54,60	0.266	0.23
HEXACHLOROBENZENE	NA	7.378	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.687	0.59	245/34(2346/236)	54,60	1.295	1.10
26/4	16	3.593	3.06	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	1.043	0.89	234/34	54,60	1.084	0.92
25/2	16	0.611	0.52	245/245	54,60	0.702	0.60
236/2(35/2)	16	1.114	0.95	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	0.654	0.56	234/245	54,60	0.696	0.60
25/4(24/3)	16	1.226	1.05	2356/235(2346/34)	54,60	0.090	0.08
24/4(23/34/24/4)	16	2.272	1.94	2346/34(2356/245)	60	0.000	0.00
23/4	16	0.000	0.00	2356/245(CL7A)	54	0.138	0.12
25/25	16,54	3.503	2.99	234/234	54,60	0.000	0.00
24/25	16,54	3.510	2.99	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	2.005	2.39	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	2.265	1.93	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	1.174	1.00	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	1.618	1.38	HIREX	NA	0.000	----
236/3(CL4C)	16,54	2.689	2.29	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	3.021	3.26	2345/235	54,60	0.000	0.00
235/26,CL5A	54,60	0.756	0.65	2345/245	54,60	0.284	0.24
OCTACHLOROSTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	1.976	1.69	2346/2356	60	0.000	0.00
25/34	54,60	2.406	2.05	CL7	60	0.000	0.00
24/34	54,60	2.050	1.75	2345/2346	60	0.000	0.00
234/4	54,60	0.939	0.80	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	1.136	0.97	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000 CL2: 29.106 CL3: 34.067 CL4: 29.591
CL5: 11.089 CL6: 2.173 CL7: 0.422 CL8: 0.000
TOTAL PCB: 117.247

GMM
002
0404

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 08/13/85

VIAL NUMBER: 76

DILUTION FACTOR: 0.676

SAMPLE NAME: 85-65 K20

PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT % TOTAL PCB	PCE SUBSTITUTION PATTERN	AROCOR MIX	MS PCE PER ML SAMPLE	PCT TOTAL PCE
2	21,16	0.000	0.00	245/24	54,60	0.000	0.00
2/2	21,16	21.753	28.02	245/25	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	11.629	14.98	P, P'-DOE	NA	0.000	---
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	0.343	0.44
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	17.151	22.09	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	0.312	0.40	34/34	48	0.000	0.00
25/2	16	2.917	3.76	2345/26(CL58)	54,60	0.000	0.00
24/2	16	0.294	0.38	234/236(2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	5.641	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.518	0.67	245/34(2346/236)	54,60	0.000	0.00
26/4	16	2.954	3.80	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	0.758	0.98	234/34	54,60	0.000	0.00
25/3	16	0.328	0.42	245/245	54,60	0.000	0.00
236/2(35/2)	16	0.977	1.26	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	0.393	0.51	234/245	54,60	0.000	0.00
25/4(24/3)	16	0.730	0.94	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3424/4)	16	1.249	1.61	2346/34(2356/245)	60	0.000	0.00
23/4	16	0.000	0.00	2356/245(CL7A)	54	0.000	0.00
25/25	16,54	2.239	2.88	234/234	54,60	0.000	0.00
24/25	16,54	2.220	2.86	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	1.613	2.08	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	1.459	1.88	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	0.673	0.87	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/234234/2(CL4B)	16,54	0.784	1.01	MIREX	NA	0.000	---
236/3(CL4C)	16,54	1.595	2.05	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	2.112	2.72	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	0.292	0.38	2345/245	54,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	0.214	0.28	2346/2356	60	0.000	0.00
25/34	54,60	0.859	1.11	CL7	60	0.000	0.00
24/34	54,60	0.742	0.96	2345/2346	60	0.000	0.00
234/4	54,60	0.157	0.20	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.378	0.49	2345/2345			

TOTAL CL1: 0.000 CL2: 23.693 CL3: 26.142 CL4: 16.582
CL5: 1.226 CL6: 0.000 CL7: 0.000 CL8: 0.000

TOTAL PCB: 77.643

GMM

002

0405

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 08/13/85

VIAL NUMBER: 77

DILUTION FACTOR: 0.637

SAMPLE NAME: 85-66 H2O

PCB SUBSTITUTION PATTERN	AROCLOK MIX	NG PCB PER ML SAMPLE	PCT 0 TOTAL 0 PCB 0	PCB SUBSTITUTION PATTERN	AROCLOK MIX	NG PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00 0 245/24		54,60	0.000	0.00
2/2	21,16	24.449	26.94 0 245/23		54,60	0.000	0.00
3	21	0.000	0.00 0 234/25		54,60	0.000	0.00
26	21,16	13.917	15.33 0 P,P'-DOE	NA		0.000	----
4	21	0.000	0.00 0 234/24	54		0.000	0.00
25	21,16	0.000	0.00 0 234/23	54,60		0.380	0.42
24	21,16	0.000	0.00 0 2356/25	54,60		0.000	0.00
2/3	21,16	0.000	0.00 0 2356/23	54,60		0.000	0.00
26/2	21,16	20.337	22.41 0 236/245(234/236)	54,60		0.037	0.04
2/4	21,16	0.657	0.72 0 34/34	48		0.000	0.00
25/2	16	3.410	3.76 0 2345/26(CL58)	54,60		0.000	0.00
24/2	16	0.341	0.38 0 234/236(2356/236)	54,60		0.000	0.00
NONACHLOROBENZENE	NA	7.063	— 0 2356/236(245/34)	54,60		0.000	0.00
23/2	16	0.390	0.43 0 245/34(2346/236)	54,60		0.000	0.00
26/4	16	3.230	3.56 0 2346/236(235/245)	54,60		0.000	0.00
4/4	21,16	0.000	0.00 0 235/245(CL5C)	54,60		0.000	0.00
246/2	16	0.874	0.96 0 234/34	54,60		0.000	0.00
25/3	16	0.377	0.42 0 245/245	54,60		0.000	0.00
236/2(35/2)	16	1.163	1.28 0 234/235(CL6A)	54,60		0.000	0.00
24/3(CL3A)	16	0.000	0.00 0 2356/34(CL6B)	54,60		0.000	0.00
24/26(CL3E)	16	0.313	0.36 0 234/245	54,60		0.000	0.00
25/4(24/3)	16	0.775	0.85 0 2356/235(2346/34)	54,60		0.000	0.00
24/4(23/34/24/4)	16	1.531	1.69 0 2346/34(2356/245)	60		0.000	0.00
23/4	16	0.000	0.00 0 2356/245(CL7A)	54		0.000	0.00
25/25	16,54	2.657	2.93 0 234/234	54,60		0.000	0.00
24/25	16,54	2.616	2.88 0 2346/245(2356/2356)	54,60		0.000	0.00
23/25	16,54	1.966	2.17 0 2356/234(2346/234)	54,60		0.000	0.00
24/24	16,54	1.673	1.84 0 2346/234(245/345)	54,60		0.000	0.00
23/24(CL4A)	16,54	0.744	0.82 0 2345/2356(245/345)(23456/236)	54,60		0.000	0.00
23/234234/2(CL4B)	16,54	0.894	0.99 0 HIREX	NA		0.000	----
236/3(CL4C)	16,54	1.935	2.13 0 2345/34	54,60		0.000	0.00
236/4(CL4D)	16,54	2.684	2.87 0 2345/235	54,60		0.000	0.00
235/26(CL5A)	54,60	0.340	0.37 0 2345/245	54,60		0.000	0.00
NONACHLOROSTYRENE	NA	0.000	— 0 2345/234	54,60		0.000	0.00
236/23	54,60	0.254	0.28 0 2346/2356	60		0.000	0.00
25/34	54,60	1.018	1.12 0 CL7	60		0.000	0.00
24/34	54,60	0.958	1.06 0 2345/2346	60		0.000	0.00
234/4	54,60	0.265	0.29 0 23456/245	60		0.000	0.00
236/236	54,60	0.000	0.00 0 23456/234	60		0.000	0.00
245/25	54,60	0.462	0.51 0 2345/2345	60		0.000	0.00

TOTAL CL1: 0.000
CL5: 1.435

CL2: 39.023
CL6: 0.037

CL3: 30.391
CL7: 0.000

CL4: 19.879
CL8: 0.000

TOTAL PCB: 90.764

GMM
002
0406

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 08/13/85

VIAL NUMBER: 78

DILUTION FACTOR: 0.599

SAMPLE NAME: 85-68 H20

PCB SUBSTITUTION PATTERN	ANALOR MIX	NG PCB PER ML SAMPLE	PCT % TOTAL % PCB	PCB SUBSTITUTION PATTERN	ANALOR MIX	NG PCB PER ML SAMPLE	PCT % TOTAL % PCB
2	21,16	0.000	0.00	245/24	54,60	0.000	0.00
2/2	21,16	16.255	24.79	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	9.637	14.70	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	0.340	0.52
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	15.323	23.37	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	0.302	0.46	34/34	48	0.000	0.00
25/2	16	2.503	3.82	2345/26(CL58)	54,60	0.000	0.00
24/2	16	0.246	0.37	234/236(2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	4.865	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.355	0.54	245/34(2346/236)	54,60	0.000	0.00
26/4	16	2.482	3.79	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	0.692	1.06	234/34	54,60	0.000	0.00
25/3	16	0.287	0.44	245/245	54,60	0.000	0.00
236/2(35/2)	16	0.721	1.10	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3E)	16	0.392	0.60	234/245	54,60	0.000	0.00
25/4(24/3)	16	0.553	0.84	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	1.197	1.83	2346/34(2356/245)	60	0.000	0.00
23/4	16	0.000	0.00	2356/245(CL7A)	54	0.000	0.00
25/25	16,54	2.100	3.20	234/234	54,60	0.000	0.00
24/25	16,54	2.213	3.38	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	1.739	2.63	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	1.356	2.13	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	0.670	1.02	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	0.000	0.00	MIREX	NA	0.000	---
236/3(CL4C)	16,54	1.524	2.32	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	2.164	3.30	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	0.270	0.41	2345/245	54,60	0.000	0.00
OCTACHLORODISTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	0.000	0.00	2346/2356	60	0.000	0.00
25/34	54,60	0.822	1.25	CL7	60	0.000	0.00
24/34	54,60	0.776	1.18	2345/2346	60	0.000	0.00
234/4	54,60	0.150	0.23	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.464	0.71	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000
CL5: 1.074
TOTAL PCB: 65.573

CL2: 26.194
CL6: 0.000

CL3: 22.945
CL7: 0.000

CL4: 15.362
CL8: 0.000

GMM

002

0407

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 08/13/85
VIAL NUMBER: 79
DILUTION FACTOR: 0.592

SAMPLE NAME: 85-69 H2C

PCB SUBSTITUTION PATTERN	AROCLOP MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCLOP MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	0.000	0.00
2/2	21,16	15.552	26.29	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	0.972	15.17	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	0.109	0.32
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	14.007	23.68	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	0.277	0.47	34/34	48	0.000	0.00
25/2	16	2.325	3.93	2345/26(CL58)	54,60	0.000	0.00
24/2	16	0.218	0.37	234/236(2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	4.531	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.391	0.66	245/34(2346/236)	54,60	0.000	0.00
26/4	16	2.306	4.03	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	0.603	1.02	234/34	54,60	0.000	0.00
25/3	16	0.175	0.30	245/245	54,60	0.000	0.00
236/2(35/2)	16	0.013	1.37	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	0.308	0.52	234/245	54,60	0.000	0.00
25/4(24/3)	16	0.430	0.73	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	0.932	1.50	2346/34(2356/245)	60	0.000	0.00
23/4	16	0.000	0.00	2356/245(CL7A)	54	0.000	0.00
25/25	16,54	1.677	2.04	234/234	54,60	0.000	0.00
24/25	16,54	1.076	3.17	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	1.208	2.10	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	1.102	2.00	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	0.531	0.90	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	0.000	0.00	NIHREX	NA	0.000	---
236/3(CL4C)	16,54	1.341	2.27	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	1.073	3.17	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	0.218	0.37	2345/245	54,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	0.000	0.00	2346/2356	60	0.000	0.00
25/34	54,60	0.634	1.07	CL7	60	0.000	0.00
24/34	54,60	0.523	0.88	2345/2346	60	0.000	0.00
234/4	54,60	0.116	0.20	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.316	0.53	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000 CL2: 24.001 CL3: 28.066 CL4: 12.765
CL5: 0.723 CL6: 0.000 CL7: 0.000 CL8: 0.000
TOTAL PCB: 99.154

GMM 002 0408

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 08/13/85

VIAL NUMBER: 00

DILUTION FACTOR: 0.602

SAMPLE NAME: 85-70 H2C

PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT % TOTAL % PCB	PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	0.000	0.00
2/2	21,16	14.562	24.06	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	0.051	13.74	P,P'-DDE	NA	0.000	—
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	0.204	0.42
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	12.990	22.17	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	0.277	0.47	34/34	48	0.000	0.00
25/2	16	2.194	3.75	2345/26(CL58)	54,60	0.000	0.00
24/2	16	0.217	0.37	234/236(2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	0.638	—	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.000	0.00	245/34(2346/236)	54,60	0.000	0.00
26/4	16	1.928	3.29	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	0.602	1.03	234/34	54,60	0.000	0.00
25/3	16	0.117	0.20	245/245	54,60	0.000	0.00
236/2(35/2)	16	0.698	1.19	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	0.344	0.59	234/245	54,60	0.000	0.00
25/4(24/3)	16	0.435	0.74	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	0.972	1.66	2346/34(2356/245)	60	0.000	0.00
23/4	16	0.000	0.00	2356/245(CL7A)	54	0.000	0.00
25/25	16,54	1.713	2.92	234/234	54,60	0.000	0.00
24/25	16,54	1.901	3.24	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	1.900	2.22	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	1.243	2.12	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	0.549	0.94	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	0.000	0.00	NI/REX	NA	0.000	—
236/3(CL4C)	16,54	1.284	2.05	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	1.901	3.24	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	0.102	0.32	2345/245	54,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	—	2345/234	54,60	0.000	0.00
236/23	54,60	0.000	0.00	2346/2356	60	0.000	0.00
25/34	54,60	0.600	1.02	CL7	60	0.000	0.00
24/34	54,60	0.534	0.91	2345/2346	60	0.000	0.00
234/4	54,60	0.118	0.20	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	3.662	6.25	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000
CL5: 4.134

CL2: 22.895
CL6: 0.000

CL3: 18.852
CL7: 0.000

CL4: 12.708
CL8: 0.000

TOTAL PCB: 38.389

GMW

002

0409

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 08/14/85

VIAL NUMBER: 03

DILUTION FACTOR: 0.680

SAMPLE NAME: 85-71 H20

PCB SUBSTITUTION PATTERN	AROCOR MIX	NG PCB PER ML SAMPLE	PCT % TOTAL % PCB %	PCB SUBSTITUTION PATTERN	AROCOR MIX	NG PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	0.000	0.00
2/2	21,16	21.002	24.87	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	10.317	12.22	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	0.590	0.70
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	25.388	30.06	236/245 (234/236)	54,60	0.000	0.00
2/4	21,16	0.424	0.50	34/34	48	0.000	0.00
25/2	16	2.863	3.39	2345/26 (CL58)	54,60	0.000	0.00
24/2	16	0.305	0.36	234/236 (2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	7.229	---	2356/236 (245/34)	54,60	0.000	0.00
23/2	16	0.000	0.00	245/34 (2346/236)	54,60	0.000	0.00
26/4	16	2.664	3.15	2346/236 (235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245 (CL5C)	54,60	0.000	0.00
246/2	16	0.772	0.91	234/34	54,60	0.000	0.00
25/3	16	0.244	0.29	245/245	54,60	0.000	0.00
236/2 (35/2)	16	1.171	1.39	234/235 (CL6A)	54,60	0.000	0.00
24/3 (CL3A)	16	0.000	0.00	2356/34 (CL6B)	54,60	0.000	0.00
24/26 (CL3B)	16	0.430	0.51	234/245	54,60	0.000	0.00
25/4 (24/3)	16	0.702	0.83	2356/235 (2346/34)	54,60	0.000	0.00
24/4 (23/3+24/4)	16	1.323	1.57	2346/34 (2356/245)	60	0.000	0.00
23/4	16	0.000	0.00	2356/245 (CL7A)	54	0.000	0.00
25/25	16,54	2.481	2.94	234/234	54,60	0.000	0.00
24/25	16,54	2.464	2.92	2346/245 (2356/2356)	54,60	0.000	0.00
23/25	16,54	1.717	2.03	2356/234 (2346/234)	54,60	0.000	0.00
24/24	16,54	1.593	1.89	2346/234 (245/345)	54,60	0.000	0.00
23/24 (CL4A)	16,54	0.609	0.72	2345/2356+245/345 (23456/236)	54,60	0.000	0.00
23/23+234/2 (CL4B)	16,54	0.000	0.00	HIREX	NA	0.000	---
236/3 (CL4C)	16,54	1.563	1.85	2345/34	54,60	0.000	0.00
236/4 (CL4D)	16,54	2.406	2.85	2345/235	54,60	0.000	0.00
235/26 (CL5A)	54,60	0.332	0.39	2345/245	54,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/22	54,60	0.000	0.00	2346/2356	60	0.000	0.00
25/34	54,60	0.993	1.18	CL7	60	0.000	0.00
24/34	54,60	0.035	0.39	2345/2346	60	0.000	0.00
234/4	54,60	0.260	0.31	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	1.012	1.20	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000
CL5: 1.933

CL2: 21.743
CL6: 0.000

CL3: 33.488
CL7: 0.000

CL4: 17.294
CL8: 0.000

TOTAL PCB: 84.458

GMM 002 0410

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 08/14/85

VIAL NUMBER: 04

DILUTION FACTOR: 0.658

SAMPLE NAME: 05-72 H20

PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
			0				
2	21,16	0.000	0.00	245/24	54,60	0.000	0.00
2/2	21,16	17.134	24.99	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	0.460	12.34	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	0.324	0.47
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	21.022	30.67	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	0.470	0.69	34/34	48	0.000	0.00
25/2	16	2.442	3.56	2345/26(CL58)	54,60	0.000	0.00
24/2	16	0.244	0.36	234/236(2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	5.620	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.000	0.00	245/34(2346/236)	54,60	0.000	0.00
26/4	16	2.083	3.04	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	0.637	0.93	234/34	54,60	0.000	0.00
25/3	16	0.142	0.21	245/245	54,60	0.000	0.00
236/2(35/2)	16	0.923	1.35	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	0.351	0.51	234/245	54,60	0.000	0.00
25/4(24/3)	16	0.470	0.69	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	1.019	1.49	2346/34(2356/245)	60	0.000	0.00
23/4	16	0.000	0.00	2356/245(CL7A)	54	0.000	0.00
25/25	16,54	2.035	2.97	234/234	54,60	0.000	0.00
24/25	16,54	2.059	3.00	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	1.463	2.13	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	1.303	2.02	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	0.514	0.75	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	0.000	0.00	MIREX	NA	0.000	---
236/3(CL4C)	16,54	1.230	1.81	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	1.930	2.83	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	0.250	0.36	2345/245	54,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	0.000	0.00	2346/2356	60	0.000	0.00
25/34	54,60	0.772	1.13	CL7	60	0.000	0.00
24/34	54,60	0.543	0.79	2345/2346	60	0.000	0.00
234/4	54,60	0.129	0.19	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.507	0.74	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000
CL5: 1.000

CL2: 26.064
CL6: 0.000

CL3: 27.421
CL7: 0.000

CL4: 13.906
CL8: 0.000

TOTAL PCB: 68.552

GMW 002 0411

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 08/14/85

VIAL NUMBER: 85

DILUTION FACTOR: 0.581

SAMPLE NAME: 85-73 H20

PCB SUBSTITUTION PATTERN	ANALOR MIX	NG PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	ANALOR MIX	NG PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	0.000	0.00
2/2	21,16	16.728	26.98	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	7.068	12.69	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	0.000	0.00
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	19.129	30.85	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	0.206	0.33	34/34	48	0.000	0.00
25/2	16	2.141	3.45	2345/26(CL58)	54,60	0.000	0.00
24/2	16	0.213	0.34	234/236(2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	5.561	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.000	0.00	245/34(2346/236)	54,60	0.000	0.00
26/4	16	1.903	3.07	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	0.579	0.93	234/34	54,60	0.000	0.00
25/2	16	0.002	0.00	245/245	54,60	0.000	0.00
236/2(35/2)	16	0.029	1.34	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	0.318	0.51	234/245	54,60	0.000	0.00
25/4(24/3)	16	0.486	0.78	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	0.099	1.45	2346/34(2356/245)	60	0.000	0.00
23/4	16	0.000	0.00	2356/245(CL7A)	54	0.000	0.00
25/25	16,54	1.561	2.52	234/234	54,60	0.000	0.00
24/25	16,54	1.785	2.88	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	1.156	1.86	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	1.027	1.66	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	0.495	0.80	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	0.216	0.35	MIREX	NA	0.000	---
236/3(CL4C)	16,54	1.258	2.03	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	1.599	2.58	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	0.205	0.33	2345/245	54,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	0.000	0.00	2346/2356	60	0.000	0.00
25/34	54,60	0.626	1.01	CL7	60	0.000	0.00
24/34	54,60	0.440	0.71	2345/2346	60	0.000	0.00
234/4	54,60	0.114	0.18	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.216	0.35	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000
CL5: 0.421

CL2: 24.002
CL6: 0.000

CL3: 24.771
CL7: 0.000

CL4: 12.005
CL8: 0.000

TOTAL PCB: 61.998

GMM
002
0412

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 08/15/85

VIAL NUMBER: 5

DILUTION FACTOR: 0.654

SAMPLE NAME: 85-74 120

PCB SUBSTITUTION PATTERN	ANALOR MIX	MS PCB PER ML SAMPLE	PCT % TOTAL % PCB	PCB SUBSTITUTION PATTERN	ANALOR MIX	MS PCB PER ML SAMPLE	PCT % TOTAL % PCB
2	21,16	0.000	0.00	245/24	54,60	0.127	0.11
2/2	21,16	33.102	28.13	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	17.284	14.69	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/22	54,60	0.446	0.39
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	36.773	31.25	236/245(234/236)	54,60	0.094	0.09
2/4	21,16	0.289	0.25	34/34	48	0.000	0.00
25/2	16	3.459	2.94	2345/26(CL58)	54,60	0.000	0.00
24/2	16	0.339	0.29	234/236(2356/236)	54,60	0.000	0.00
MONOCHLOROBENZENE	NA	10.562	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.000	0.00	245/34(2346/236)	54,60	0.000	0.00
26/4	16	3.943	2.84	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	0.959	0.82	234/34	54,60	0.000	0.00
25/3	16	0.461	0.39	245/245	54,60	0.000	0.00
236/2(35/2)	16	1.122	0.95	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	0.460	0.39	234/245	54,60	0.139	0.12
25/4(24/3)	16	0.954	0.81	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	1.321	1.12	2346/34(2356/245)	60	0.000	0.00
23/4	16	0.000	0.00	2356/245(CL7A)	54	0.000	0.00
25/25	16,54	2.819	2.40	234/234	54,60	0.000	0.00
24/25	16,54	2.760	2.35	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	1.897	1.61	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	1.857	1.58	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	0.632	0.54	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	0.000	0.00	NIRES	NA	0.000	---
236/3(CL4C)	16,54	1.846	1.57	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	2.250	1.91	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	0.360	0.31	2345/245	54,60	0.274	0.23
OCTACHLOROSTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	0.249	0.21	2346/2356	60	0.000	0.00
25/34	54,60	0.823	0.70	CL7	60	0.000	0.00
24/34	54,60	0.689	0.59	2345/2346	60	0.000	0.00
234/4	54,60	0.225	0.19	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.322	0.27	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000
CL5: 1.584

CL2: 30.675
CL6: 0.232

CL3: 46.630
CL7: 0.274

CL4: 18.341
CL8: 0.680

TOTAL PCB: 117.676

GMM

002

0.4

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 08/15/85

VIAL NUMBER: 6

DILUTION FACTOR: 0.633

SAMPLE NAME: 85-75 H2O

PCB SUBSTITUTION PATTERN	AROCLOP MIX	MG PCB PER ML SAMPLE	PCT % TOTAL % PCB	PCB SUBSTITUTION PATTERN	AROCLOP MIX	MG PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	0.000	0.00
2/2	21,16	26.884	29.97	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	14.246	15.87	P,P'-DDE	NA	0.000	0.00
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	0.234	0.26
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	28.644	31.93	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	0.224	0.25	34/34	48	0.000	0.00
25/2	16	2.509	2.80	2345/26(CL58)	54,60	0.000	0.00
24/2	16	0.252	0.28	234/236(2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	0.156	0.17	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.000	0.00	245/34(2346/236)	54,60	0.000	0.00
26/4	16	2.387	2.66	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	0.742	0.83	234/34	54,60	0.000	0.00
25/2	16	0.282	0.31	245/245	54,60	0.000	0.00
236/2(35/2)	16	0.020	0.01	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3E)	16	0.349	0.39	234/245	54,60	0.000	0.00
25/4(24/3)	16	0.562	0.63	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3424/4)	16	0.947	1.06	2346/34(2356/245)	60	0.000	0.00
23/4	16	0.000	0.00	2356/245(CL7A)	54	0.000	0.00
25/25	16,54	1.824	2.03	234/234	54,60	0.000	0.00
24/25	16,54	1.872	2.09	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	1.220	1.36	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	1.221	1.36	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	0.453	0.51	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	0.000	0.00	MIREX	NA	0.000	0.00
236/3(CL4C)	16,54	1.157	1.29	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	1.491	1.66	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	0.227	0.25	2345/245	54,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	0.00	2345/234	54,60	0.000	0.00
236/23	54,60	0.000	0.00	2346/2356	60	0.000	0.00
25/34	54,60	0.544	0.61	CL7	60	0.000	0.00
24/34	54,60	0.250	0.28	2345/2346	60	0.000	0.00
234/4	54,60	0.093	0.10	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.285	0.32	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000
CL5: 0.747

CL2: 41.348
CL6: 0.000

CL3: 25.582
CL7: 0.000

CL4: 12.036
CL8: 0.000

TOTAL PCB: 89.714

GMM 002 0414

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 08/15/85

VIAL NUMBER: 7

DILUTION FACTOR: 0.645

SAMPLE NAME: BS-76 H20

PCB SUBSTITUTION PATTERN	AROCLO MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCLO MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	0.000	0.00
2/2	21,16	36.261	31.54	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	17.943	14.79	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	0.284	0.23
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	36.559	30.14	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	0.445	0.37	34/34	48	0.000	0.00
25/2	16	3.605	2.97	2345/26(CL58)	54,60	0.000	0.00
24/2	16	0.393	0.32	234/236(2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	9.445	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.384	0.32	245/34(2346/236)	54,60	0.000	0.00
26/4	16	0.066	2.53	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	0.631	0.57	234/34	54,60	0.000	0.00
25/3	16	0.613	0.51	245/245	54,60	0.000	0.00
236/2(35/2)	16	1.056	0.87	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3E)	16	0.435	0.36	234/245	54,60	0.000	0.00
25/4(24/3)	16	1.405	1.16	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	1.516	1.25	2346/34(2356/245)	60	0.000	0.00
23/4	16	0.000	0.00	2356/245(CL7A)	54	0.000	0.00
25/25	16,54	2.419	1.99	234/234	54,60	0.000	0.00
24/25	16,54	2.515	2.07	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	1.578	1.30	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	1.637	1.40	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	0.652	0.54	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	0.000	0.00	HIRES	NA	0.000	---
236/3(CL4C)	16,54	1.346	1.11	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	2.160	1.78	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	0.278	0.23	2345/245	54,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	0.000	0.00	2346/2356	60	0.000	0.00
25/34	54,60	0.790	0.65	CL7	60	0.000	0.00
24/34	54,60	0.309	0.42	2345/2346	60	0.000	0.00
234/4	54,60	0.226	0.19	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.468	0.39	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000
CL5: 1.031

CL2: 36.649
CL6: 0.000

CL3: 47.542
CL7: 0.000

CL4: 16.075
CL8: 0.000

TOTAL PCB: 121.297

GMM
002
0415

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 08/15/85

VIAL NUMBER: 8

DILUTION FACTOR: 0.645

SAMPLE NAME: 85-77 H2O

PCB SUBSTITUTION PATTERN	AROCLOP MIX	NG PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCLOP MIX	NG PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	0.000	0.00
2/2	21,16	20.163	29.10	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	16.062	15.50	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	0.000	0.00
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/2	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	23.719	32.53	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	0.302	0.29	34/34	48	0.000	0.00
25/2	16	3.057	2.95	2345/26(CL58)	54,60	0.000	0.00
24/2	16	0.317	0.31	234/236(2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	9.274	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.000	0.00	245/34(2346/236)	54,60	0.000	0.00
26/4	16	2.703	2.61	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	0.004	0.78	234/34	54,60	0.000	0.00
25/5	16	0.372	0.36	245/245	54,60	0.000	0.00
236/2(25/2)	16	1.017	0.98	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3E)	16	0.389	0.38	234/245	54,60	0.000	0.00
25/4(24/2)	16	0.742	0.72	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/34/4)	16	1.095	1.06	2346/34(2356/245)	60	0.000	0.00
23/4	16	0.000	0.00	2356/245(CL7A)	54	0.000	0.00
25/25	16,54	2.127	2.05	234/234	54,60	0.000	0.00
24/25	16,54	2.108	2.11	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	1.416	1.37	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	1.482	1.43	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	0.554	0.53	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/234234/2(CL4E)	16,54	0.000	0.00	MIREX	NA	0.000	---
236/3(CL4C)	16,54	1.231	1.19	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	1.939	1.87	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	0.238	0.23	2345/245	54,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	0.000	0.00	2346/2356	60	0.000	0.00
25/34	54,60	0.637	0.61	CL7	60	0.000	0.00
24/34	54,60	0.481	0.39	2345/2346	60	0.000	0.00
234/4	54,60	0.127	0.12	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.568	0.55	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000
CL5: 0.006

CL2: 46.526
CL6: 0.000

CL3: 42.004
CL7: 0.000

CL4: 14.311
CL8: 0.000

TOTAL PCB: 103.648

GMM 002 0416

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 08/15/85

VIAL NUMBER: 9

DILUTION FACTOR: 0.643

SAMPLE NAME: 85-76 H2C

PCB SUBSTITUTION PATTERN	AROCOR MIX	MG PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCOR MIX	MG PCB PER ML SAMPLE	PCT TOTAL PCB
			0				
2	21,16	0.000	0.00	245/24	54,60	0.000	0.00
2/2	21,16	32.717	26.73	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	16.901	13.81	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	0.391	0.32
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	37.440	30.59	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	0.504	0.41	34/34	48	0.000	0.00
25/2	16	3.756	3.07	2345/26(CL58)	54,60	0.000	0.00
24/2	16	0.408	0.33	234/236(2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	10.075	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.346	0.28	245/34(2346/236)	54,60	0.000	0.00
26/4	16	3.234	2.64	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	0.873	0.71	234/34	54,60	0.000	0.00
25/3	16	0.560	0.46	245/245	54,60	0.000	0.00
236/2(35/2)	16	1.266	1.04	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	0.493	0.40	234/245	54,60	0.000	0.00
25/4(24/3)	16	1.133	0.93	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	1.657	1.35	2346/34(2356/245)	60	0.000	0.00
23/4	16	0.000	0.00	2356/245(CL7A)	54	0.000	0.00
25/25	16,54	2.879	2.35	234/234	54,60	0.000	0.00
24/25	16,54	2.064	2.34	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	2.815	1.63	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	1.946	1.59	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	0.793	0.65	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	0.000	0.00	HIREDX	NA	0.000	---
236/3(CL4C)	16,54	1.924	1.57	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	2.541	2.08	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	0.296	0.24	2345/245	54,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	0.000	0.00	2346/2356	60	0.000	0.00
25/34	54,60	0.972	0.79	CL7	60	0.000	0.00
24/34	54,60	0.932	0.76	2345/2346	60	0.000	0.00
234/4	54,60	0.221	0.18	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	3.325	2.72	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000
CL5: 4.012

CL2: 30.122
CL6: 0.000

CL3: 40.534
CL7: 0.000

CL4: 19.721
CL8: 0.000

TOTAL PCB: 122.389

GMM 002 0417

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 08/15/85

VIAL NUMBER: 10

DILUTION FACTOR: 0.654

SAMPLE NAME: BS-79 H20

PCB SUBSTITUTION PATTERN	AROCLOP MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCLOP MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
			0				
2	21,16	0.000	0.00	245/24	54,60	0.000	0.00
2/2	21,16	31.572	27.71	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	16.689	14.65	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	0.326	0.29
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	35.303	30.99	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	0.508	0.45	34/34	48	0.000	0.00
25/2	16	3.481	3.06	2345/26(CL58)	54,60	0.000	0.00
24/2	16	0.376	0.33	234/236(2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	9.569	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.649	0.57	245/34(2346/236)	54,60	0.000	0.00
26/4	16	3.553	3.12	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	0.971	0.85	234/34	54,60	0.000	0.00
25/3	16	0.560	0.49	245/245	54,60	0.000	0.00
236/2(35/2)	16	1.034	0.91	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	0.521	0.46	234/245	54,60	0.000	0.00
25/4(24/3)	16	1.039	0.91	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	1.435	1.26	2346/34(2356/245)	54,60	0.000	0.00
23/4	16	0.000	0.00	2356/245(CL7A)	60	0.000	0.00
25/25	16,54	2.612	2.29	234/234	54,60	0.000	0.00
24/25	16,54	2.630	2.31	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	1.757	1.54	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	1.751	1.54	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	0.780	0.68	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	0.000	0.00	MIREX	NA	0.000	---
236/3(CL4C)	16,54	1.651	1.45	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	2.250	1.97	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	0.294	0.26	2345/245	54,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	0.000	0.00	2346/2356	60	0.000	0.00
25/34	54,60	0.093	0.78	CL7	60	0.000	0.00
24/34	54,60	0.697	0.61	2345/2346	60	0.000	0.00
234/4	54,60	0.232	0.20	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.356	0.31	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000
CL5: 0.976

CL2: 40.769
CL6: 0.000

CL3: 46.995
CL7: 0.000

CL4: 17.778
CL8: 0.000

TOTAL PCB: 113.919

GMM 002 0418

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 08/16/85

VIAL NUMBER: 13

DILUTION FACTOR: 0.709

SAMPLE NAME: 85-80 H2O

PCB SUBSTITUTION PATTERN	AROCLOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCLOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	0.230	0.19
2/2	21,16	21.026	24.99	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.257	0.29
2E	21,16	14.595	11.76	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	0.739	0.60
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	36.693	29.56	236/245(234/236)	54,60	0.155	0.13
2/4	21,16	0.632	0.51	34/34	48	0.000	0.00
25/2	16	4.147	3.34	2345/26(CL58)	54,60	0.000	0.00
24/2	16	0.456	0.37	234/236(2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	10.918	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.599	0.48	245/34(2346/236)	54,60	0.220	0.18
26/4	16	3.581	2.88	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	1.896	0.88	234/34	54,60	0.000	0.00
25/5	16	0.637	0.51	245/245	54,60	0.261	0.21
236/2(35/2)	16	1.866	0.86	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	0.588	0.47	234/245	54,60	0.000	0.00
25/4(24/3)	16	1.293	1.04	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	1.997	1.61	2346/34(2356/245)	60	0.000	0.00
23/4	16	0.000	0.00	2356/245(CL7A)	54	0.000	0.00
25/25	16,54	3.346	2.70	234/234	54,60	0.000	0.00
24/25	16,54	3.361	2.71	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	2.359	1.90	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	2.141	1.72	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	1.009	0.81	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	1.174	0.95	MIREDX	NA	0.000	---
236/3(CL4C)	16,54	2.280	1.84	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	3.003	2.42	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	0.527	0.42	2345/245	54,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	0.433	0.35	2346/2356	60	0.000	0.00
25/34	54,60	1.319	1.06	CL7	60	0.000	0.00
24/34	54,60	1.268	1.02	2345/2346	60	0.000	0.00
234/4	54,60	0.413	0.33	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	1.138	0.92	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000
CL5: 3.644

CL2: 46.259
CL6: 0.416

CL3: 49.403
CL7: 0.000

CL4: 24.424
CL8: 0.000

TOTAL PCB: 124.145

GMM
002
0419

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 08/16/85

VIAL NUMBER: 14

DILUTION FACTOR: 0.706

SAMPLE NAME: BS-01 H20

PCB SUBSTITUTION PATTERN	AROCLO MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCLO MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	0.000	0.00
2/2	21,16	7.611	45.17	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	3.128	18.57	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	0.000	0.00
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	6.110	36.26	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	0.000	0.00	34/34	48	0.000	0.00
25/2	16	0.000	0.00	2345/26(CL58)	54,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	0.000	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.000	0.00	245/34(2346/236)	54,60	0.000	0.00
26/4	16	0.000	0.00	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	0.000	0.00	234/34	54,60	0.000	0.00
25/2	16	0.000	0.00	245/245	54,60	0.000	0.00
236/2(35/2)	16	0.000	0.00	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	0.000	0.00	234/245	54,60	0.000	0.00
25/4(24/3)	16	0.000	0.00	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	0.000	0.00	2346/34(2356/245)	60	0.000	0.00
23/4	16	0.000	0.00	2356/245(CL7A)	54	0.000	0.00
25/25	16,54	0.000	0.00	234/234	54,60	0.000	0.00
24/25	16,54	0.000	0.00	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	0.000	0.00	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	0.000	0.00	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	0.000	0.00	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	0.000	0.00	HIREX	NA	0.000	---
236/3(CL4C)	16,54	0.000	0.00	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	0.000	0.00	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	0.000	0.00	2345/245	54,60	0.000	0.00
DETACHLOROSTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	0.000	0.00	2346/2356	60	0.000	0.00
25/34	54,60	0.000	0.00	CL7	60	0.000	0.00
24/34	54,60	0.000	0.00	2345/2346	60	0.000	0.00
234/4	54,60	0.000	0.00	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.000	0.00	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000
CL5: 0.000

CL2: 18.740
CL6: 0.000

CL3: 6.110
CL7: 0.000

CL4: 0.000
CL8: 0.000

TOTAL PCB: 16.049

GMN 002 0420

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 08/16/85

VIAL NUMBER: 15

DILUTION FACTOR: 0.689

SAMPLE NAME: 05-82 H20

PCB SUBSTITUTION PATTERN	AROCOR MIX	MG PCB PER ML SAMPLE	PCT 0 TOTAL 0 PCB 0	PCB SUBSTITUTION PATTERN	AROCOR MIX	MG PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00 0 245/24		54,60	0.000	0.00
2/2	21,16	30.614	28.96 0 245/23		54,60	0.000	0.00
3	21	0.000	0.00 0 234/25		54,60	0.000	0.00
26	21,16	12.441	11.78 0 P,P'-DDE	NA		0.000	---
4	21	0.000	0.00 0 234/24		54	0.000	0.00
25	21,16	0.000	0.00 0 234/23		54,60	0.385	0.37
24	21,16	0.000	0.00 0 2356/25		54,60	0.000	0.00
2/3	21,16	0.000	0.00 0 2356/23		54,60	0.000	0.00
26/2	21,16	30.667	29.03 0 236/245(234/236)		54,60	0.000	0.00
2/4	21,16	0.590	0.56 0 34/34	48		0.000	0.00
25/2	16	3.400	3.22 0 2345/26(CL58)		54,60	0.000	0.00
24/2	16	0.389	0.37 0 234/236(2356/236)		54,60	0.000	0.00
HEXACHLOROBENZENE	NA	0.635	--- 0 2356/236(245/34)		54,60	0.000	0.00
23/2	16	0.000	0.00 0 245/34(2346/236)		54,60	0.000	0.00
26/4	16	3.021	2.86 0 2346/236(235/245)		54,60	0.000	0.00
4/4	21,16	0.000	0.00 0 235/245(CL50)		54,60	0.000	0.00
246/2	16	0.936	0.89 0 234/34		54,60	0.000	0.00
25/3	16	0.651	0.62 0 245/245		54,60	0.000	0.00
236/2(35/2)	16	1.048	0.99 0 234/235(CL6A)		54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00 0 2356/34(CL6E)		54,60	0.000	0.00
24/26(CL3E)	16	0.450	0.43 0 234/245		54,60	0.000	0.00
25/4(24/3)	16	1.870	1.80 0 2356/235(2346/34)		54,60	0.000	0.00
24/4(23/3+24/4)	16	1.637	1.55 0 2346/34(2356/245)		60	0.000	0.00
23/4	16	0.000	0.00 0 2356/245(CL7A)		54	0.000	0.00
25/25	16,54	2.766	2.62 0 234/234		54,60	0.000	0.00
24/25	16,54	2.703	2.56 0 2346/245(2356/2356)		54,60	0.000	0.00
23/25	16,54	1.933	1.83 0 2356/234(2346/234)		54,60	0.000	0.00
24/24	16,54	1.673	1.58 0 2346/234(245/245)		54,60	0.000	0.00
23/24(CL4A)	16,54	0.773	0.73 0 2345/2356+245/245(23456/236)		54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	0.687	0.65 0 MIREX	NA		0.000	---
236/3(CL4C)	16,54	1.040	1.74 0 2345/34		54,60	0.000	0.00
236/4(CL4D)	16,54	2.247	2.13 0 2345/235		54,60	0.000	0.00
235/26(CL5A)	54,60	0.345	0.33 0 2345/245		54,60	0.000	0.00
DETACHLOROSTYRENE	NA	0.000	--- 0 2345/234		54,60	0.000	0.00
236/23	54,60	0.265	0.25 0 2346/2356		60	0.000	0.00
25/34	54,60	0.987	0.93 0 CL7		60	0.000	0.00
24/34	54,60	0.874	0.83 0 2345/2346		60	0.000	0.00
234/4	54,60	0.283	0.27 0 23456/245		60	0.000	0.00
236/236	54,60	0.000	0.00 0 23456/234		60	0.000	0.00
245/25	54,60	0.634	0.62 0 2345/2345		60	0.000	0.00

TOTAL CL1: 0.000
CL5: 1.633

CL2: 43.645
CL6: 0.000

CL3: 41.136
CL7: 0.000

CL4: 19.200
CL8: 0.000

TOTAL PCB: 105.633

GMM 002 0421

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 08/16/85

VIAL NUMBER: 16

DILUTION FACTOR: 0.649

SAMPLE NAME: 85-83 H20

PCB SUBSTITUTION PATTERN	AROCLOF MIX	MG PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCLOF MIX	MG PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	0.000	0.00
2/2	21,16	21.327	23.52	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	9.414	10.38	P,P'-DDE	NA	0.000	----
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	0.420	0.46
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	24.912	27.48	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	0.245	0.27	34/34	48	0.000	0.00
25/2	16	3.353	3.70	2345/26(CL58)	54,60	0.000	0.00
24/2	16	0.353	0.39	234/236(2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	7.231	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.747	0.82	245/34(2346/236)	54,60	0.000	0.00
26/4	16	2.002	3.09	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL50)	54,60	0.000	0.00
246/2	16	0.055	0.94	234/34	54,60	0.000	0.00
25/2	16	0.554	0.61	245/245	54,60	0.000	0.00
236/2(35/2)	16	0.035	0.92	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL35)	16	0.466	0.51	234/245	54,60	0.000	0.00
25/4(24/3)	16	1.198	1.31	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	1.034	2.02	2346/34(2356/245)	60	0.000	0.00
23/4	16	0.000	0.00	2356/245(CL7A)	54	0.000	0.00
25/25	16,54	2.634	2.93	234/234	54,60	0.000	0.00
24/25	16,54	2.617	2.09	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	1.959	2.16	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	1.619	1.79	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	0.817	0.90	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	3.285	3.62	MIREX	NA	0.000	----
236/3(CL4C)	16,54	1.078	2.07	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	2.479	2.73	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	0.306	0.34	2345/245	54,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	0.252	0.28	2346/2356	60	0.000	0.00
25/34	54,60	1.039	1.15	CL7	60	0.000	0.00
24/34	54,60	1.019	1.12	2345/2346	60	0.000	0.00
234/4	54,60	0.300	0.33	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	1.142	1.26	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000
CL5: 2.121

CL2: 30.906
CL6: 0.000

CL3: 35.743
CL7: 0.000

CL4: 21.021
CL8: 0.000

TOTAL PCB: 90.671

GMM
002
0422

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 08/16/85

VIAL NUMBER: 17

DILUTION FACTOR: 0.602

SAMPLE NAME: 85-04 H20

PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	0.000	0.00
2/2	21,16	19.570	24.04	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	0.906	11.31	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/22	54,60	0.297	0.35
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	23.068	29.29	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	0.280	0.36	34/34	48	0.000	0.00
23/2	16	2.090	3.62	2345/26(CL58)	54,60	0.000	0.00
24/2	16	0.292	0.38	234/236(2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	6.936	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.742	0.94	245/34(2346/236)	54,60	0.052	0.07
26/4	16	2.821	3.57	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL50)	54,60	0.000	0.00
246/2	16	0.704	0.89	234/34	54,60	0.000	0.00
25/3	16	0.436	0.55	245/245	54,60	0.000	0.00
236/2(35/2)	16	0.939	1.19	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL68)	54,60	0.000	0.00
24/26(CL3E)	16	0.376	0.48	234/245	54,60	0.000	0.00
25/4(24/3)	16	1.046	1.33	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/34/24/4)	16	1.401	1.78	2346/34(2356/245)	60	0.000	0.00
23/4	16	0.000	0.00	2356/245(CL7A)	54	0.000	0.00
25/25	16,54	2.231	2.83	234/234	54,60	0.000	0.00
24/25	16,54	2.131	2.71	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	1.562	1.98	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	1.391	1.77	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	0.630	0.82	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/234/234/2(CL4B)	16,54	0.739	0.94	MIREX	NA	0.000	---
236/3(CL4C)	16,54	1.437	1.82	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	2.096	2.66	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	0.244	0.31	2345/245	54,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	0.208	0.26	2346/2356	60	0.000	0.00
25/34	54,60	0.771	0.98	CL7	60	0.000	0.00
24/34	54,60	0.769	0.98	2345/2346	60	0.000	0.00
234/4	54,60	0.215	0.27	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.495	0.63	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000
CL5: 1.303

CL2: 28.756
CL6: 0.000

CL3: 32.700
CL7: 0.000

CL4: 16.011
CL8: 0.000

TOTAL PCB: 78.770

GMM

002

0423

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 08/17/85

VIAL NUMBER: 18

DILUTION FACTOR: 0.565

SAMPLE NAME: BS-BS H2C

PCE SUBSTITUTION PATTERN	AROCOLOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCE	PCB SUBSTITUTION PATTERN	AROCOLOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCE
2	21,16	0.000	0.00	245/24	54,60	0.000	0.00
2/2	21,16	22.532	26.90	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	9.726	11.61	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	0.290	0.35
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	24.078	29.70	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	0.457	0.54	34/34	48	0.000	0.00
25/2	16	2.945	3.52	2345/26(CL5B)	54,60	0.000	0.00
24/2	16	0.311	0.37	234/236(2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	7.459	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.668	0.80	245/34(2346/236)	54,60	0.000	0.00
26/4	16	2.048	3.40	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	0.767	0.92	234/34	54,60	0.000	0.00
25/2	16	0.467	0.56	245/245	54,60	0.000	0.00
236/2(35/2)	16	0.793	0.95	234/235(CL6A)	54,60	0.000	0.00
24/2(34/34)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	0.390	0.47	234/245	54,60	0.000	0.00
25/4(24/2)	16	0.928	1.11	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/34/24/4)	16	1.232	1.47	2346/34(2356/245)	60	0.000	0.00
23/4	16	0.000	0.00	2356/245(CL7A)	54	0.000	0.00
25/25	16,54	2.222	2.65	234/234	54,60	0.000	0.00
24/25	16,54	2.152	2.57	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	1.572	1.88	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	1.350	1.61	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	0.586	0.70	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	0.728	0.87	MIREX	NA	0.000	---
236/3(CL4C)	16,54	1.362	1.63	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	1.938	2.31	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	0.257	0.31	2345/245	54,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	0.206	0.25	2346/2356	60	0.000	0.00
25/34	54,60	0.632	0.83	CL7	60	0.000	0.00
24/34	54,60	0.671	0.80	2345/2346	60	0.000	0.00
234/4	54,60	0.224	0.27	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.576	0.63	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000
CL5: 1.329

CL2: 32.715
CL6: 0.000

CL3: 34.277
CL7: 0.000

CL4: 15.454
CL8: 0.000

TOTAL PCB: 83.775

GMN
002
0424

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 08/17/85

VIAL NUMBER: 23

DILUTION FACTOR: 0.662

SAMPLE NAME: 85-86 H2O

PCB SUBSTITUTION PATTERN	ANALOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	ANALOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	0.226	0.19
2/2	21,16	27.768	23.76	245/22	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.227	0.19
26	21,16	13.694	11.72	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/22	54,60	0.692	0.59
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/2	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	35.488	30.37	236/245(234/236)	54,60	0.146	0.12
2/4	21,16	0.635	0.54	34/34	48	0.000	0.00
25/2	16	3.909	3.35	2345/26(CL58)	54,60	0.000	0.00
24/2	16	0.399	0.34	234/236(2356/236)	54,60	0.000	0.00
NONACHLOROBENZENE	NA	6.106	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.593	0.51	245/34(2346/236)	54,60	0.236	0.20
26/4	16	3.303	2.83	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL50)	54,60	0.000	0.00
246/2	16	0.985	0.84	234/34	54,60	0.000	0.00
25/2	16	0.813	0.70	245/245	54,60	0.366	0.21
236/2(35/2)	16	1.147	0.98	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL68)	54,60	0.000	0.00
24/26(CL3B)	16	0.540	0.46	234/245	54,60	0.308	0.26
25/4(24/3)	16	1.711	1.46	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	2.044	1.75	2346/34(2356/245)	60	0.000	0.00
23/4	16	0.000	0.00	2356/245(CL7A)	54	0.000	0.00
25/25	16,54	3.035	2.60	234/234	54,60	0.000	0.00
24/25	16,54	3.077	2.63	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	2.249	1.92	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	1.917	1.64	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	0.974	0.83	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	0.953	0.82	MIREX	NA	0.000	---
236/3(CL4C)	16,54	2.090	1.80	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	2.906	2.49	2345/235	54,60	0.263	0.23
235/26(CL5A)	54,60	0.426	0.36	2345/245	54,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	---	2345/234	60	0.000	0.00
236/23	54,60	0.354	0.30	2346/2356	60	0.000	0.00
25/34	54,60	1.301	1.11	CL7	60	0.000	0.00
24/34	54,60	1.071	0.92	2345/2346	60	0.000	0.00
234/4	54,60	0.322	0.28	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.674	0.58	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000 CL2: 42.097 CL3: 40.260 CL4: 22.575
CL5: 2.039 CL6: 0.020 CL7: 0.263 CL8: 0.000

TOTAL PCB: 116.853

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 08/18/85

VIAL NUMBER: 24

DILUTION FACTOR: 0.654

SAMPLE NAME: 85-87 H2C

PCB SUBSTITUTION PATTERN	AROCLO MIX	NG PCB PER ML SAMPLE	PCT % TOTAL % PCB	PCB SUBSTITUTION PATTERN	AROCLO MIX	NG PCB PER ML SAMPLE	PCT % TOTAL % PCB
2	21,16	0.000	0.00	245/24	54,60	0.000	0.00
2/2	21,16	18.816	25.74	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	9.337	12.77	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	0.242	0.32
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	23.607	32.29	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	0.226	0.31	34/34	48	0.000	0.00
25/2	16	2.425	3.32	2345/26(CL5B)	54,60	0.000	0.00
24/2	16	0.258	0.35	234/236(2356/236)	54,60	0.000	0.00
NONACHLOROBENZENE	NA	3.803	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.000	0.00	245/34(2346/236)	54,60	0.000	0.00
26/4	16	2.102	2.88	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	0.633	0.89	234/34	54,60	0.000	0.00
25/3	16	0.463	0.63	245/245	54,60	0.000	0.00
236/2(35/2)	16	0.833	1.14	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	0.314	0.43	234/245	54,60	0.000	0.00
25/4(24/3)	16	0.962	1.32	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	1.158	1.58	2346/34(2356/245)	60	0.000	0.00
23/4	16	0.000	0.00	2356/245(CL7A)	54	0.000	0.00
25/25	16,54	1.748	2.39	234/234	54,60	0.000	0.00
24/25	16,54	1.983	2.71	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	1.492	2.04	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	1.212	1.66	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	0.584	0.69	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	0.000	0.00	MIREX	NA	0.000	---
236/3(CL4C)	16,54	1.070	1.46	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	1.787	2.33	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	0.216	0.30	2345/245	54,60	0.000	0.00
DETACHLOROSTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	0.000	0.00	2346/2356	60	0.000	0.00
25/34	54,60	0.698	0.96	CL7	60	0.000	0.00
24/34	54,60	0.316	0.71	2345/2346	60	0.000	0.00
234/4	54,60	0.131	0.18	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.431	0.59	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000
CL5: 0.000
TOTAL PCB: 73.104

CL2: 28.378
CL6: 0.000

CL3: 38.975
CL7: 0.000

CL4: 12.862
CL8: 0.000

GMM 002 0426

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 08/18/85

VIAL NUMBER: 25

DILUTION FACTOR: 0.637

SAMPLE NAME: BS-82 H2C

PCB SUBSTITUTION PATTERN	AROCOR MIX	NG PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCOR MIX	NG PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	0.122	0.12
2/2	21,16	27.296	23.95	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.141	0.12
26	21,16	13.639	11.96	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	0.425	0.38
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	34.504	30.27	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	0.619	0.54	34/34	48	0.000	0.00
25/2	16	3.639	3.19	2345/26(CL58)	54,60	0.000	0.00
24/2	16	0.388	0.34	234/236(2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	0.005	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.666	0.58	245/34(2346/236)	54,60	0.000	0.00
26/4	16	3.543	3.11	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL50)	54,60	0.000	0.00
246/2	16	0.907	0.80	234/34	54,60	0.000	0.00
25/3	16	0.689	0.60	245/245	54,60	0.000	0.00
236/2(35/2)	16	0.947	0.83	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	0.482	0.42	234/245	54,60	0.000	0.00
25/4(24/3)	16	1.507	1.32	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	1.781	1.56	2346/34(2356/245)	60	0.000	0.00
23/4	16	0.000	0.00	2356/245(CL7A)	54	0.000	0.00
25/25	16,54	2.772	2.43	234/234	54,60	0.000	0.00
24/25	16,54	2.005	2.46	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	2.005	1.76	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	1.793	1.57	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	0.062	0.76	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	3.428	3.01	MIREX	NA	0.000	---
236/3(CL4C)	16,54	1.082	1.65	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	2.601	2.28	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	0.327	0.29	2345/245	54,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	0.226	0.20	2346/2356	60	0.000	0.00
25/34	54,60	1.036	0.91	CL7	60	0.000	0.00
24/34	54,60	0.075	0.77	2345/2346	60	0.000	0.00
234/4	54,60	0.373	0.33	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	1.663	1.46	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000 CL2: 41.576 CL3: 46.716 CL4: 22.767
CL5: 2.917 CL6: 0.000 CL7: 0.000 CL8: 0.000

TOTAL PCB: 113.976

GMM

002

0427

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 08/18/85
VIAL NUMBER: 26
DILUTION FACTOR: 0.625

SAMPLE NAME: 85-85 H2C

PCB SUBSTITUTION PATTERN	AROCLOP MIX	NS PCB PER ML SAMPLE	PCT % TOTAL % PCB	PCB SUBSTITUTION PATTERN	AROCLOP MIX	NS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	0.000	0.00
2/2	21,16	17.635	25.25	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	9.089	13.01	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/22	54,60	0.000	0.00
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	22.531	32.26	236/245 (234/236)	54,60	0.000	0.00
2/4	21,16	0.141	0.20	34/34	48	0.000	0.00
25/2	16	2.300	3.29	2345/26 (CL5B)	54,60	0.000	0.00
24/2	16	0.231	0.33	234/236 (2356/236)	54,60	0.000	0.00
NONACHLOROBENZENE	NA	3.770	---	2356/236 (245/34)	54,60	0.000	0.00
23/2	16	0.000	0.00	245/34 (2346/236)	54,60	0.000	0.00
26/4	16	2.061	2.95	2346/236 (235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245 (CL5C)	54,60	0.000	0.00
246/2	16	0.477	0.68	234/34	54,60	0.000	0.00
25/3	16	0.372	0.53	245/245	54,60	0.000	0.00
236/2 (35/2)	16	0.781	1.12	234/235 (CL6A)	54,60	0.000	0.00
24/3 (CL3A)	16	0.000	0.00	2356/34 (CL6B)	54,60	0.000	0.00
24/26 (CL3B)	16	0.319	0.46	234/245	54,60	0.000	0.00
25/4 (24/3)	16	0.765	1.10	2356/235 (2346/34)	54,60	0.000	0.00
24/4 (23/3+24/4)	16	1.004	1.44	2346/34 (2356/245)	60	0.000	0.00
23/4	16	0.000	0.00	2356/245 (CL7A)	54	0.000	0.00
25/25	16,54	1.090	2.71	234/234	54,60	0.000	0.00
24/25	16,54	1.928	2.76	2346/245 (2356/2356)	54,60	0.000	0.00
23/25	16,54	1.289	1.85	2356/234 (2346/234)	54,60	0.000	0.00
24/24	16,54	1.170	1.68	2346/234 (245/345)	54,60	0.000	0.00
23/24 (CL4A)	16,54	0.523	0.75	2345/2356+245/345 (23456/236)	54,60	0.000	0.00
23/23+234/2 (CL4B)	16,54	0.000	0.00	HIRED	NA	0.000	---
236/3 (CL4C)	16,54	1.246	1.78	2345/34	54,60	0.000	0.00
236/4 (CL4D)	16,54	1.052	2.65	2345/235	54,60	0.000	0.00
235/26 (CL5A)	54,60	0.215	0.31	2345/245	54,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	0.000	0.00	2346/2356	60	0.000	0.00
25/34	54,60	0.663	0.95	CL7	60	0.000	0.00
24/34	54,60	0.329	0.47	2345/2346	60	0.000	0.00
234/4	54,60	0.630	0.90	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.403	0.58	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000
CL3: 0.618

CL2: 26.065
CL6: 0.000

CL4: 13.099
CL8: 0.000

TOTAL PCB: 69.046

GM 002

0428

SAMPLE NAME: 65-90 H2O

VIAL NUMBER: 27

DILUTION FACTOR: 0.662

PCB SUBSTITUTION PATTERN	AROCLOP MIX	MG PCB PER ML SAMPLE	PCB TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCLOP MIX	MG PCB PER ML SAMPLE	PCB TOTAL PCB
		0.000	0.00	245/24	54,60	0.000	0.00
2	21,16	21.296	26.48	245/23	54,60	0.000	0.00
2/2	21	0.000	0.00	234/25	54,60	0.000	0.00
3	21,16	11.248	13.99	P,P'-DDE	NA	0.000	---
26	21	0.000	0.00	234/24	54	0.000	0.00
4	21,16	0.000	0.00	234/23	54,60	0.000	0.00
25	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
24	21,16	0.000	0.00	2356/22	54,60	0.000	0.00
2/3	21,16	26.041	32.38	236/245(234/236)	54,60	0.000	0.00
26/2	21,16	0.172	0.22	34/34	48	0.000	0.00
2/4	16	2.661	3.31	2345/26(CL58)	54,60	0.000	0.00
25/2	16	0.263	0.33	234/236(2356/236)	54,60	0.000	0.00
24/2	16	4.394	---	2356/236(245/34)	54,60	0.000	0.00
MONOCHLOROBENZENE	NA	0.000	0.00	245/34(2346/236)	54,60	0.000	0.00
23/2	16	2.210	2.75	2346/236(235/245)	54,60	0.000	0.00
26/4	16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
4/4	21,16	0.662	0.82	234/34	54,60	0.000	0.00
246/2	16	0.377	0.47	245/245	54,60	0.000	0.00
25/3	16	0.786	0.98	234/235(CL6A)	54,60	0.000	0.00
236/2(35/2)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/3(CL3A)	16	0.361	0.45	234/245	54,60	0.000	0.00
24/26(CL3B)	16	0.649	0.81	2356/235(2346/34)	54,60	0.000	0.00
25/4(24/3)	16	1.012	1.26	2346/34(2356/245)	60	0.000	0.00
24/4(23/3+24/4)	16	0.000	0.00	2356/245(CL7A)	54	0.000	0.00
23/4	16,54	1.717	2.13	234/234	54,60	0.000	0.00
25/25	16,54	2.848	2.55	2346/245(2356/2356)	54,60	0.000	0.00
24/25	16,54	1.944	1.67	2356/234(2346/234)	54,60	0.000	0.00
23/25	16,54	1.280	1.49	2346/234(245/345)	54,60	0.000	0.00
24/24	16,54	0.461	0.57	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/24(CL4A)	16,54	0.000	0.00	MITREX	NA	0.000	---
23/23+234/2(CL4B)	16,54	1.383	1.72	2345/34	54,60	0.000	0.00
236/3(CL4C)	16,54	1.835	2.28	2345/235	54,60	0.000	0.00
236/4(CL4D)	54,60	0.202	0.25	2345/245	54,60	0.000	0.00
235/26(CL5A)	NA	0.000	---	2345/234	60	0.000	0.00
OCTACHLOROSTYRENE	54,60	0.000	0.00	2346/2356	60	0.000	0.00
236/23	54,60	0.683	0.85	CL7	60	0.000	0.00
25/34	54,60	0.375	0.47	2345/2346	60	0.000	0.00
24/34	54,60	0.667	0.83	23456/245	60	0.000	0.00
234/4	54,60	0.000	0.00	23456/234	60	0.000	0.00
236/236	54,60	0.759	0.94	2345/2345	60	0.000	0.00
245/25							

TOTAL	CL1:	0.000	CL2:	32.717	CL3:	33.215	CL4:	13.522
	CL5:	0.961	CL6:	0.000	CL7:	0.000	CL8:	0.000
TOTAL PCB:		00.414						

GMN 002 0429

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 08/16/85

VIAL NUMBER: 28

DILUTION FACTOR: 0.649

SAMPLE NAME: 85-91 H20

PCB SUBSTITUTION PATTERN	AROCLOP MIX	MS PCB PER M.L. SAMPLE	PCB TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCLOP MIX	MS PCB PER M.L. SAMPLE	PCB TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	0.000	0.00
2/2	21,16	11.918	25.50	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
2E	21,16	6.748	14.44	P,P'-DDE	NA	0.000	0.00
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	0.000	0.00
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	16.148	34.55	236/245(234/236)	48	0.000	0.00
2/4	21,16	0.085	0.18	34/34	54,60	0.000	0.00
25/2	16	1.589	3.40	2345/26(CL58)	54,60	0.000	0.00
24/2	16	0.151	0.32	234/236(2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	2.605	—	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.000	0.00	245/34(2346/236)	54,60	0.000	0.00
26/4	16	1.373	2.94	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	0.408	0.87	234/34	54,60	0.000	0.00
25/2	16	0.192	0.41	245/245	54,60	0.000	0.00
236/2(35/2)	16	0.502	1.07	234/235(CL6A)	54,60	0.000	0.00
24/2(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	0.208	0.44	234/245	54,60	0.000	0.00
25/4(24/3)	16	0.275	0.59	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	0.580	1.24	2346/34(2356/245)	60	0.000	0.00
23/4	16	0.000	0.00	2356/245(CL7A)	54	0.000	0.00
25/25	16,54	1.050	2.25	234/234	54,60	0.000	0.00
24/25	16,54	1.271	2.72	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	0.780	1.67	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	0.717	1.53	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	0.328	0.70	2345/2356+245/345(23456/236)	NA	0.000	0.00
22/23+234/2(CL4B)	16,54	0.000	0.00	MIXED	54,60	0.000	0.00
236/3(CL4C)	16,54	0.448	0.96	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	1.070	2.29	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	0.086	0.18	2345/245	54,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	—	2345/234	60	0.000	0.00
236/23	54,60	0.000	0.00	2346/2356	60	0.000	0.00
25/34	54,60	0.335	0.72	CL7	60	0.000	0.00
24/34	54,60	0.148	0.32	2345/2346	60	0.000	0.00
234/4	54,60	0.000	0.00	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.325	0.70	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000
CL5: 0.411

CL2: 18.752
CL6: 0.000

CL3: 28.309
CL7: 0.000

CL4: 7.265
CL8: 0.000

TOTAL PCB: 46.736

GMM 002 0430

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 08/19/85

VIAL NUMBER: 31

DILUTION FACTOR: 0.664

SAMPLE NAME: 85-92 H2O

PCB SUBSTITUTION PATTERN	AROCLOF MIX	MS PCB PER ML SAMPLE	PCT % TOTAL % PCB %	PCB SUBSTITUTION PATTERN	AROCLOF MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	7.730	0.70
2/2	21,16	39.030	3.53	245/23	54,60	9.380	0.85
3	21	0.000	0.00	234/25	54,60	11.574	1.05
26	21,16	15.835	1.43	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	54	11.202	1.01
25	21,16	0.000	0.00	234/23	54,60	24.481	2.22
24	21,16	0.000	0.00	2356/25	54,60	1.977	0.18
2/3	21,16	0.000	0.00	2356/23	54,60	0.501	0.05
26/2	21,16	65.239	5.91	236/245(234/236)	54,60	3.432	0.31
2/4	21,16	0.146	0.01	34/34	48	2.979	0.27
25/2	16	13.211	1.20	2345/26(CL58)	54,60	0.000	0.00
24/2	16	1.490	0.14	234/236(2356/236)	54,60	3.001	0.27
HEXACHLOROBENZENE	NA	29.365	---	2356/236(245/34)	54,60	0.405	0.04
23/2	16	4.357	0.39	245/34(2346/236)	54,60	11.793	1.07
26/4	16	36.947	3.34	2346/236(235/245)	54,60	0.001	0.00
4/4	21,16	0.000	0.00	235/245(CL50)	54,60	1.187	0.11
246/2	16	7.433	0.67	234/34	54,60	0.215	0.02
25/3	16	7.457	0.68	245/245	54,60	7.078	0.71
236/2(25/2)	16	26.306	2.38	234/235(CL6A)	54,60	1.323	0.12
24/3(CL3A)	16	2.921	0.26	2356/34(CL65)	54,60	1.662	0.15
24/26(CL3B)	16	9.703	0.88	234/245	54,60	0.541	0.05
25/4(24/3)	16	41.205	3.73	2356/235(2346/34)	54,60	1.539	0.14
24/4(23/34/24/4)	16	63.333	5.73	2346/34(2356/245)	60	0.096	0.01
23/4	16	51.874	4.70	2356/245(CL7A)	54	1.067	0.10
25/25	16,54	36.432	3.30	234/234	54,60	0.000	0.00
24/25	16,54	59.280	5.37	2346/245(2356/2356)	54,60	2.402	0.22
23/25	16,54	53.922	4.88	2356/234(2346/234)	54,60	0.663	0.06
24/24	16,54	28.353	2.57	2346/234(245/345)	54,60	0.714	0.06
23/24(CL4A)	16,54	25.290	2.29	2345/2356(245/345(23456/236)	54,60	1.264	0.11
23/23+234/2(CL4B)	16,54	55.882	5.06	MIXED	NA	0.000	---
236/3(CL4C)	16,54	58.808	5.32	2345/34	54,60	2.406	0.22
236/4(CL4D)	16,54	73.052	6.61	2345/235	54,60	0.367	0.03
235/26(CL5A)	54,60	9.901	0.90	2345/245	54,60	2.771	0.25
DECAHLORESTYRENE	NA	0.000	---	2345/234	54,60	1.520	0.14
236/23	54,60	16.023	1.45	2346/2356	60	0.556	0.05
25/34	54,60	60.121	5.44	CL7	60	0.466	0.04
24/34	54,60	69.926	6.33	2345/2346	60	0.291	0.03
234/4	54,60	23.142	2.10	23456/245	60	0.444	0.04
236/236	54,60	0.000	0.00	23456/234	60	0.240	0.02
245/25	54,60	12.458	1.13	2345/2345	60	0.622	0.06

TOTAL CL1: 0.000
CL5: 122.756

CL2: 35.011
CL6: 32.005

CL3: 288.040
CL7: 12.713

CL4: 330.628
CL8: 3.416

TOTAL PCB: 1104.568

GMM 002 0431

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 08/19/85

VIAL NUMBER: 32

DILUTION FACTOR: 0.632

SAMPLE NAME: 85-93 H2O

PCB SUBSTITUTION PATTERN	AROCLOF MIX	MS PCB PEP M. SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCLOF MIX	MS PCB PEP M. SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	0.250	0.15
2/2	21,16	44.959	27.01	245/23	54,60	0.356	0.22
3	21	0.000	0.00	234/25	54,60	0.451	0.27
26	21,16	21.167	12.72	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	0.965	0.59
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	43.694	26.25	236/245(234/236)	54,60	0.090	0.05
2/4	21,16	0.389	0.23	34/34	42	0.000	0.00
25/2	16	4.108	2.47	2345/26(CL58)	54,60	0.000	0.00
24/2	16	0.484	0.29	234/236(2356/236)	54,60	0.000	0.00
NONACHLOROBENZENE	NA	12.133	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.531	0.32	245/34(2346/236)	54,60	0.409	0.25
26/4	16	4.099	2.46	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL50)	54,60	0.000	0.00
246/2	16	1.199	0.72	234/34	54,60	0.000	0.00
25/3	16	0.975	0.59	245/245	54,60	0.195	0.12
236/2(25/2)	16	1.464	0.88	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL68)	54,60	0.000	0.00
24/26(CL3E)	16	0.689	0.41	234/245	54,60	0.187	0.11
25/4(24/3)	16	2.496	1.50	235/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	3.095	1.86	2346/34(2356/245)	60	0.000	0.00
23/4	16	1.205	0.72	2356/245(CL7A)	54	0.000	0.00
25/25	16,54	3.986	2.39	234/234	54,60	0.000	0.00
24/25	16,54	3.051	2.31	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	3.300	1.98	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	2.448	1.47	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	1.382	0.82	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/25+234/2(CL4B)	16,54	2.462	1.48	MIRED	NA	0.000	---
236/3(CL4C)	16,54	3.054	1.83	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	4.295	2.58	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	0.602	0.36	2345/245	54,60	0.000	0.00
NONACHLOROSTYRENE	NA	0.000	---	2345/234	60	0.000	0.00
236/22	54,60	0.530	0.32	2346/2356	60	0.000	0.00
25/34	54,60	2.517	1.51	CL7	60	0.000	0.00
24/34	54,60	2.496	1.50	2345/2346	60	0.000	0.00
234/4	54,60	0.047	0.51	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	1.222	0.73	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000 CL2: 66.515 CL3: 60.688
CL5: 4.788 CL6: 0.472 CL7: 0.000

TOTAL PCB: 166.453

CL4: 33.990
CL8: 0.000

GMM

002

0432

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 08/19/82

VIAL NUMBER: 33

DILUTION FACTOR: 0.621

SAMPLE NAME: 05-94 H20

PCB SUBSTITUTION PATTERN	AROCLOP MIX	MS PCB PER M. SAMPLE	PCB TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCLOP MIX	MS PCB PER M. SAMPLE	PCB TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	0.000	0.00
2/2	21,16	29.901	32.47	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	12.858	13.96	P,P'-DDE	NA	0.000	----
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	0.269	0.29
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
26/2	21,16	27.739	30.13	236/245(234/236)	54,60	0.000	0.00
2-4	21,16	0.122	0.13	34/34	48	0.000	0.00
25/2	16	2.436	2.65	2345/26(C15B)	54,60	0.000	0.00
24/2	16	0.282	0.31	234/236(2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	0.298	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.000	0.00	245/34(2346/236)	54,60	0.000	0.00
26/4	16	2.117	2.30	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(C15C)	54,60	0.000	0.00
246/2	16	0.684	0.74	234/34	54,60	0.000	0.00
25/2	16	0.435	0.47	245/245	54,60	0.000	0.00
236/2(25/2)	16	0.094	0.97	234/235(C16A)	54,60	0.000	0.00
24/3(C13A)	16	0.000	0.00	2356/34(C16B)	54,60	0.000	0.00
24/26(C13B)	16	0.312	0.34	234/245	54,60	0.000	0.00
25/4(24/2)	16	0.986	1.07	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/34/24/4)	16	1.018	1.11	2346/34(2356/245)	60	0.000	0.00
23/4	16	0.000	0.00	2356/245(C17A)	54	0.000	0.00
25/25	16,54	2.015	2.19	234/234	54,60	0.000	0.00
24/25	16,54	1.948	2.12	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	1.463	1.60	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	1.287	1.40	2346/234(245/345)	54,60	0.000	0.00
23/24(C14A)	16,54	0.460	0.50	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(C14B)	16,54	0.000	0.00	MIREX	NA	0.000	----
236/3(C14C)	16,54	1.349	1.46	2345/34	54,60	0.000	0.00
236/4(C14D)	16,54	1.575	1.71	2345/235	54,60	0.000	0.00
235/26(C15A)	54,60	0.216	0.23	2345/245	54,60	0.000	0.00
DECAHEXYLSTYRENE	NA	0.000	---	2345/234	60	0.000	0.00
236/23	54,60	0.000	0.00	2346/2356	60	0.000	0.00
25/34	54,60	0.720	0.78	CL7	60	0.000	0.00
24/34	54,60	0.617	0.67	2345/2346	60	0.000	0.00
234/4	54,60	0.122	0.13	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.246	0.27	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000 CL2: 42.881 CL3: 35.014 CL4: 13.451
CL5: 0.731 CL6: 0.000 CL7: 0.000 CL8: 0.000

TOTAL PCB: 92.077

GMM 002 0433

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 09/27/82

VIAL NUMBER: 4

DILUTION FACTOR: 15.820

SAMPLE NAME: 05-21: C.TENTONS

PCB SUBSTITUTION PATTERN	ANALOR MIX	MS PCB PER ML SAMPLE	PCB TOTAL PCB	PCB SUBSTITUTION PATTERN	ANALOR MIX	MS PCB PER ML SAMPLE	PCB TOTAL PCB
2	21,16	246.839	23.72	245/24	54,60	1.550	0.15
2/2	21,16	139.074	13.37	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	30.485	2.93	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	4.335	0.42	234/23	54,60	24.021	2.31
24	21,16	7.973	0.77	2356/25	54,60	0.000	0.00
2/3	21,16	17.576	1.69	2356/23	54,60	0.000	0.00
26/2	21,16	32.950	5.09	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	64.688	6.22	34/34	48	42.061	4.62
23/2	16	24.205	2.33	2345/26(CL5B)	54,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	6.534	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.543	0.02	245/34(2346/236)	54,60	0.000	0.00
26/4	16	19.933	1.92	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	3.370	0.32	234/34	54,60	0.000	0.00
25/3	16	9.017	0.87	245/245	54,60	11.074	1.06
236/2(35/2)	16	7.356	0.71	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	0.290	0.00	234/245	54,60	12.372	1.19
25/4(24/3)	16	28.349	2.72	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	24.822	2.39	2346/34(2356/245)	60	0.000	0.00
23/4	16	6.898	0.66	2356/245(CL7A)	54	12.292	1.16
25/25	16,54	29.409	2.83	234/234	54,60	0.000	0.00
24/25	16,54	21.942	2.11	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	15.171	1.46	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	15.250	1.47	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	0.669	0.03	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	0.000	0.00	NIRES	NA	0.000	---
236/3(CL4C)	16,54	0.000	0.00	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	65.804	6.25	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	4.398	0.42	2345/245	54,60	15.266	1.47
DECHLOROSTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	25.217	2.42	2346/2356	60	0.000	0.00
25/34	54,60	25.166	2.51	CL7	60	0.000	0.00
24/34	54,60	0.000	0.00	2345/2346	60	0.000	0.00
234/4	54,60	0.000	0.00	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.000	0.00	2345/2345	60	0.000	0.00

TOTAL CL1: 246.839
CL5: 35.196

CL2: 264.131
CL6: 23.445

CL3: 174.716
CL7: 27.958

CL4: 246.630
CL8: 0.000

TOTAL PCB: 1040.576

GMM 002 0434

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 09/28/85
VIAL NUMBER: 5
DILUTION FACTOR: 18.970

SAMPLE NAME: 05-212

PCB SUBSTITUTION PATTERN	AROCLO MIX	MS PCB PER ML SAMPLE	PCT % TOTAL % PCB	PCB SUBSTITUTION PATTERN	AROCLO MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCE
2	21,16	305.834	27.50 % 245/24		54,60	0.000	0.00
2/2	21,16	144.836	13.02 % 245/23		54,60	0.000	0.00
3	21	0.000	0.00 % 234/25		54,60	0.000	0.00
26	21,16	22.631	2.03 % P,P'-DDE	NA	0.000	0.000	0.00
4	21	0.000	0.00 % 234/24		54	0.000	0.00
25	21,16	5.558	0.50 % 234/23		54,60	0.000	0.00
24	21,16	9.106	0.82 % 2356/25		54,60	0.000	0.00
2/3	21,16	19.539	1.76 % 2356/23		54,60	0.000	0.00
26/2	21,16	37.029	3.33 % 236/245(234/236)		54,60	0.000	0.00
2/4	21,16	69.999	6.29 % 34/34	48	9.902	0.89	
25/2	16	29.252	2.63 % 2345/26(CL58)		54,60	0.000	0.00
24/2	16	0.000	0.00 % 234/236(2356/236)		54,60	0.000	0.00
NONACHLOROBENZENE	NA	0.992	0.09 % 2356/236(245/34)		54,60	0.000	0.00
23/2	16	7.967	0.72 % 245/34(2346/236)		54,60	0.000	0.00
26/4	16	26.691	2.40 % 2346/236(235/245)		54,60	0.000	0.00
4/4	21,16	0.000	0.00 % 235/245(CL5C)		54,60	0.000	0.00
246/2	16	3.035	0.27 % 234/34		54,60	23.236	2.09
25/2	16	5.596	0.50 % 245/245		54,60	0.000	0.00
236/2(35/2)	16	7.076	0.64 % 234/235(CL6A)		54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00 % 2356/34(CL6B)		54,60	22.271	2.00
24/26(CL3E)	16	6.658	0.60 % 234/245		54,60	0.000	0.00
25/4(24/3)	16	25.780	2.32 % 2356/235(2346/34)		54,60	0.000	0.00
24/4(23/3+24/4)	16	24.585	2.21 % 2346/34(2356/245)		60	0.000	0.00
23/4	16	9.144	0.82 % 2356/245(CL7A)		54	19.653	1.77
25/25	16,54	27.048	2.50 % 234/234		54,60	0.000	0.00
24/25	16,54	37.693	3.39 % 2346/245(2356/2356)		54,60	27.184	2.44
23/25	16,54	20.507	1.84 % 2356/234(2346/234)		54,60	16.921	1.52
24/24	16,54	12.312	1.11 % 2346/234(245/245)		54,60	0.000	0.00
23/24(CL4A)	16,54	7.797	0.70 % 2345/2356+245/345(23456/236)		54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	0.000	0.00 % HIREX	NA	0.000	0.000	0.00
236/3(CL4C)	16,54	0.000	0.00 % 2345/34		54,60	0.000	0.00
236/4(CL4D)	16,54	36.859	3.31 % 2345/235		54,60	26.311	2.37
235/26(CL5A)	54,60	2.144	0.19 % 2345/245		54,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	0.00 % 2345/234		60	0.000	0.00
236/23	54,60	16.466	1.48 % 2346/2356		60	0.000	0.00
25/34	54,60	44.883	4.04 % CL7		60	0.000	0.00
24/34	54,60	0.000	0.00 % 2345/2346		60	0.000	0.00
234/4	54,60	0.000	0.00 % 23456/245		60	0.000	0.00
236/236	54,60	0.000	0.00 % 23456/234		60	0.000	0.00
245/25	54,60	0.000	0.00 % 2345/2345		60	0.000	0.00

TOTAL CL1: 305.834
CL5: 18.610

CL2: 271.669
CL6: 45.509

CL3: 166.044
CL7: 90.070

CL4: 214.570
CL8: 0.000

TOTAL PCB: 1112.306

GMM

002

04

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 09/26/85

VIAL NUMBER: 6

DILUTION FACTOR: 21.325

SAMPLE NAME: 85-213

PCS SUBSTITUTION PATTERN	AROCLOF MIX	NG PCB PER ML SAMPLE	PCT % TOTAL % PCS	PCS SUBSTITUTION PATTERN	AROCLOF MIX	NG PCB PER ML SAMPLE	PCT % TOTAL % PCS
2	21,16	323.446	27.17 % 245/24		54,60	0.000	0.00
2/2	21,16	164.526	13.82 % 245/23		54,60	0.000	0.00
3	21	0.000	0.00 % 234/25		54,60	0.000	0.00
26	21,16	31.296	2.63 % P,P'-DDE	NA		0.000	---
4	21	0.000	0.00 % 234/24		54	0.000	0.00
25	21,16	5.735	0.48 % 234/23		54,60	12.302	1.03
24	21,16	10.127	0.85 % 2356/25		54,60	0.000	0.00
2/3	21,16	20.766	1.74 % 2356/23		54,60	0.000	0.00
26/2	21,16	31.573	4.33 % 236/245(234/236)		54,60	0.000	0.00
2/4	21,16	82.871	6.96 % 34/34	46		48.354	4.06
25/2	16	33.344	2.80 % 2345/26(CL58)		54,60	0.000	0.00
24/2	16	0.000	0.00 % 234/236(2356/236)		54,60	0.000	0.00
HEXACHLOROBENZENE	NA	9.082	0.76 % 2356/236(245/34)		54,60	0.000	0.00
23/2	16	7.675	0.64 % 245/34(2346/236)		54,60	0.000	0.00
26/4	16	33.408	2.81 % 2346/236(235/245)		54,60	0.000	0.00
4/4	21,16	0.000	0.00 % 235/245(CL50)		54,60	0.000	0.00
246/2	16	3.923	0.32 % 234/34		54,60	0.000	0.00
25/2	16	11.193	0.94 % 245/245		54,60	12.600	1.06
236/2(35/2)	16	0.912	0.75 % 234/235(CL6A)		54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00 % 2356/34(CL6B)		54,60	0.000	0.00
24/26(CL3E)	16	10.170	0.85 % 234/245		54,60	0.336	0.70
25/4(24/3)	16	35.796	3.01 % 2356/235(2346/34)		54,60	0.000	0.00
24/4(23/3-24/4)	16	30.125	2.53 % 2346/34(2356/245)		60	0.000	0.00
23/4	16	16.139	1.36 % 2356/245(CL7A)		54	11.044	0.93
25/25	16,54	27.140	2.28 % 234/234		54,60	0.000	0.00
24/25	16,54	31.863	2.61 % 2346/245(2356/2356)		54,60	0.000	0.00
23/25	16,54	24.347	2.04 % 2356/234(2346/234)		54,60	0.000	0.00
24/24	16,54	20.297	1.70 % 2346/234(245/345)		54,60	0.000	0.00
23/24(CL4A)	16,54	9.253	0.78 % 2345/2356+245/345(23456/236)		54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	0.000	0.00 % HIREX	NA		0.000	---
236/3(CL4C)	16,54	0.000	0.00 % 2345/34		54,60	0.000	0.00
236/4(CL4D)	16,54	35.413	2.97 % 2345/235		54,60	0.000	0.00
235/26(CL5A)	54,60	4.949	0.37 % 2345/245		54,60	12.323	1.03
OCTACHLOROSTYRENE	NA	0.000	0.00 % 2345/234		54,60	0.000	0.00
236/23	54,60	0.000	0.00 % 2346/2356		60	0.000	0.00
25/34	54,60	32.788	4.43 % CL7		60	0.000	0.00
24/34	54,60	0.000	0.00 % 2345/2346		60	0.000	0.00
234/4	54,60	0.000	0.00 % 23456/245		60	0.000	0.00
236/236	54,60	0.000	0.00 % 23456/234		60	0.000	0.00
245/25	54,60	0.000	0.00 % 2345/2345		60	0.000	0.00

TOTAL CL1: 323.446
CL5: 16.631

CL2: 215.323
CL6: 20.936

CL3: 219.255
CL7: 23.367

CL4: 271.639
CL8: 0.000

TOTAL PCB: 1190.637

GMN 002 0436

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 09/28/85

VIAL NUMBER: 7

DILUTION FACTOR: 17.820

SAMPLE NAME: 85-21.4

	PCB SUBSTITUTION PATTERN	AROCOLOR MIX	NG PCB		PCB SUBSTITUTION PATTERN	AROCOLOR MIX	NG PCB	
			PER ML SAMPLE	TOTAL PCB			PER ML SAMPLE	TOTAL PCB
2		21,16	327.906	24.45	0 245/24	54,60	3.38E	0.25
2/2		21,16	151.648	11.31	0 245/22	54,60	0.000	0.00
3		21	0.000	0.00	0 234/25	54,60	0.000	0.00
26		21,16	24.339	2.56	0 P,P'-DDE	NA	0.000	---
4		21	0.000	0.00	0 234/24	54	0.000	0.00
25		21,16	3.885	0.29	0 234/23	54,60	0.000	0.00
24		21,16	0.019	0.60	0 2356/25	54,60	12.972	0.97
2/3		21,16	17.588	1.31	0 2356/23	54,60	0.000	0.00
26/2		21,16	60.392	4.50	0 236/245(234/236)	54,60	0.000	0.00
2/4		21,16	67.805	5.06	0 34/34	4E	12.953	0.97
25/2		16	33.359	2.49	0 2345/26(CL5E)	54,60	14.121	1.05
24/2		16	0.000	0.00	0 234/236(2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE		NA	10.318	---	0 2356/236(245/34)	54,60	0.000	0.00
23/2		16	12.492	0.93	0 245/34(2346/236)	54,60	0.000	0.00
26/4		16	49.522	3.63	0 2346/236(235/245)	54,60	0.000	0.00
4/4		21,16	0.000	0.00	0 235/245(CL5C)	54,60	0.000	0.00
246/2		16	4.027	0.30	0 234/34	54,60	0.000	0.00
25/3		16	9.409	0.70	0 245/245	54,60	11.295	0.84
236/2(35/2)		16	11.262	0.84	0 234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)		16	0.000	0.00	0 2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)		16	11.904	0.89	0 234/245	54,60	7.110	0.53
25/4(24/3)		16	41.253	3.08	0 2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)		16	43.178	3.22	0 2346/34(2356/245)	60	0.000	0.00
23/4		16	22.685	1.63	0 2356/245(CL7A)	54	9.231	0.69
25/25		16,54	36.353	2.71	0 234/234	54,60	0.000	0.00
24/25		16,54	35.355	2.64	0 2346/245(2356/2356)	54,60	0.000	0.00
23/25		16,54	27.632	2.06	0 2356/234(2346/234)	54,60	0.000	0.00
24/24		16,54	21.152	1.50	0 2346/234(245/345)	54,60	54.102	4.02
23/24(CL4A)		16,54	12.153	0.91	0 2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)		16,54	12.723	0.95	0 NIREX	NA	0.000	---
236/3(CL4C)		16,54	30.401	2.27	0 2345/34	54,60	57.809	4.31
236/4(CL4D)		16,54	38.705	2.89	0 2345/235	54,60	0.000	0.00
235/26(CL5A)		54,60	6.166	0.46	0 2345/245	54,60	5.453	0.41
OCTACHLOROSTYRENE		NA	0.000	---	0 2345/234	54,60	0.000	0.00
236/22		54,60	0.000	0.00	0 2346/2356	60	0.000	0.00
25/34		54,60	15.913	1.19	0 CL7	60	5.417	0.40
24/34		54,60	0.000	0.00	0 2345/2346	60	0.000	0.00
234/4		54,60	0.000	0.00	0 23456/245	60	0.000	0.00
236/236		54,60	0.000	0.00	0 23456/234	60	0.000	0.00
245/25		54,60	0.000	0.00	0 2345/2345	60	0.000	0.00

TOTAL CL1: 327.906
CL5: 9.952

CL2: 283.285
CL6: 183.320

CL3: 272.250
CL7: 74.202

CL4: 278.597
CL8: 0.000

TOTAL PCB: 1341.151

GMW
002
0437

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/26/85

VIAL NUMBER: 4

DILUTION FACTOR: 44.440

SAMPLE NAME: 85-215 C.TENTANS

PCB SUBSTITUTION PATTERN	AROCLOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCLOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCE
2	21,16	241.443	19.26	245/24	54,60	0.000	0.00
2/2	21,16	173.805	13.86	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	37.774	3.01	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	9.955	0.79	234/23	54,60	0.000	0.00
24	21,16	22.131	1.77	2356/25	54,60	0.000	0.00
2/3	21,16	30.841	2.46	2356/23	54,60	0.000	0.00
26/2	21,16	35.908	2.86	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	186.523	8.50	34/34	48	0.000	0.00
25/2	16	47.640	3.80	2345/26(CL38)	54,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	54,60	2.622	0.21
HEXACHLOROBENZENE	NA	22.263	—	2356/236(245/34)	54,60	0.000	0.00
23/2	16	16.665	1.33	245/34(2346/236)	54,60	0.000	0.00
26/4	16	30.841	2.46	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	11.243	0.90	234/34	54,60	0.000	0.00
25/3	16	12.710	1.01	245/245	54,60	32.797	2.62
236/2(35/2)	16	0.000	0.00	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	0.000	0.00	234/245	54,60	0.000	0.00
25/4(24/3)	16	41.818	3.34	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/34/24/4)	16	35.417	4.42	2346/34(2356/245)	60	0.000	0.00
23/4	16	24.264	1.94	2356/245(CL7A)	54	0.000	0.00
25/25	16,54	42.262	3.37	234/234	54,60	0.000	0.00
24/25	16,54	68.171	5.44	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	53.586	4.27	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	56.261	4.49	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	24.486	1.95	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/234/234/2(CL4B)	16,54	6.533	0.52	MIREX	NA	0.000	---
236/3(CL4C)	16,54	19.821	1.64	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	29.374	3.14	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	15.687	1.25	2345/245	54,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	—	2345/234	54,60	0.000	0.00
236/23	54,60	0.000	0.00	2346/2356	60	0.000	0.00
25/34	54,60	0.000	0.00	CL7	60	0.000	0.00
24/34	54,60	0.000	0.00	2345/2346	60	0.000	0.00
234/4	54,60	0.000	0.00	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.000	0.00	2345/2345	60	0.000	0.00

TOTAL CL1: 241.443
CL5: 15.687

CL2: 381.829
CL6: 35.419

CL3: 265.262
CL7: 0.000

CL4: 214.857
CL8: 0.000

TOTAL PCB: 1253.637

GMN
002 0438

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 09/28/85

VIAL NUMBER: 12

DILUTION FACTOR: 25.92

SAMPLE NAME: 85-216

PCR SUBSTITUTION PATTERN	ANALOR MIX	NG PCB PER ML SAMPLE	PCB TOTAL PCB	PCB SUBSTITUTION PATTERN	ANALOR MIX	NG PCB PER ML SAMPLE	PCB TOTAL PCB
2	21,16	371.717	27.39	245/24	54,60	0.000	0.00
2/2	21,16	124.839	9.20	245/25	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	32.699	2.41	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	7.463	0.55	234/23	54,60	0.000	0.00
24	21,16	12.199	0.90	2356/25	54,60	0.000	0.00
2/3	21,16	26.288	1.94	2356/23	54,60	0.000	0.00
26/2	21,16	72.717	5.36	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	84.342	6.21	34/34	48	4.019	0.30
25/2	16	46.223	3.55	2345/26(CL58)	54,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	13.108	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	30.546	2.25	245/34(2346/236)	54,60	0.000	0.00
26/4	16	54.896	4.05	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL50)	54,60	0.000	0.00
246/2	16	11.362	0.84	234/34	54,60	0.000	0.00
25/2	16	16.768	1.24	245/245	54,60	18.394	1.36
236/2(35/2)	16	15.333	1.13	234/225(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL69)	54,60	0.000	0.00
24/26(CL38)	16	14.496	1.07	234/245	54,60	0.000	0.00
25/4(24/2)	16	56.308	4.15	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	48.223	3.55	2346/34(2356/245)	60	0.000	0.00
23/4	16	18.872	1.39	2356/245(CL7A)	54	14.112	1.04
25/25	16,54	45.663	3.36	234/234	54,60	0.000	0.00
24/25	16,54	44.467	3.28	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	31.192	2.30	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	26.384	1.94	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	23.489	1.73	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	13.036	0.96	MIREX	NA	0.000	---
236/3(CL4C)	16,54	20.906	1.54	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	26.430	2.68	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	9.520	0.70	2345/245	54,60	12.080	0.89
DETACHLOROSTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	0.000	0.00	2346/2356	60	0.000	0.00
25/34	54,60	10.118	0.75	CL7	60	0.000	0.00
24/34	54,60	0.000	0.00	2345/2346	60	0.000	0.00
234/4	54,60	0.000	0.00	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.000	0.00	2345/2345	60	0.000	0.00

TOTAL CL1: 371.717
CL5: 9.520

CL2: 287.829
CL6: 18.394

CL3: 946.553
CL7: 26.192

CL4: 296.895
CL8: 0.000

TOTAL PCB: 1357.101

GMM
002
0439

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 09/29/85

VIAL NUMBER: 13

DILUTION FACTOR: 19.69

SAMPLE NAME: 85-217

PCB SUBSTITUTION PATTERN	AROCLOF MIX	NG PCB PER ML SAMPLE	PCT % TOTAL % PCB	PCB SUBSTITUTION PATTERN	AROCLOF MIX	NG PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	353.964	23.83	245/24	54,60	0.000	0.00
2/2	21,16	102.710	6.92	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	26.765	1.80	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	5.943	0.40	234/23	54,60	72.399	4.81
24	21,16	11.001	0.74	2356/25	54,60	0.000	0.00
2/3	21,16	23.616	1.59	2356/23	54,60	0.000	0.00
26/2	21,16	72.068	4.85	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	75.217	5.06	34/34	48	2.499	0.17
25/2	16	51.640	3.48	2345/26(CL5B)	54,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	12.280	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	26.666	1.80	245/34(2346/236)	54,60	0.000	0.00
26/4	16	45.815	3.08	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	5.412	0.36	234/34	54,60	0.000	0.00
25/3	16	15.192	1.02	245/245	54,60	16.532	1.11
236/2(35/2)	16	15.311	1.03	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	14.052	0.95	234/245	54,60	0.000	0.00
25/4(24/3)	16	63.035	4.24	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	57.052	3.84	2346/34(2356/245)	60	0.000	0.00
23/4	16	38.219	2.57	2356/245(CL7A)	54	11.611	0.76
25/25	16,54	41.879	2.82	234/234	54,60	0.000	0.00
24/25	16,54	51.483	3.47	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	26.998	2.09	2356/234(2346/234)	54,60	12.613	0.82
24/24	16,54	27.158	1.83	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	13.756	0.93	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	17.089	1.20	HIRES	NA	0.000	---
236/3(CL4C)	16,54	37.746	2.54	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	38.947	2.62	2345/235	54,60	0.295	0.56
235/26(CL5A)	54,60	0.344	0.56	2345/245	54,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	0.000	0.00	2346/2356	60	0.000	0.00
25/34	54,60	60.516	4.07	CL7	60	0.000	0.00
24/34	54,60	23.970	1.61	2345/2346	60	0.000	0.00
234/4	54,60	0.000	0.00	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.000	0.00	2345/2345	60	0.000	0.00

TOTAL CL1: 353.964
CL5: 79.743

CL2: 245.252
CL6: 16.531

CL3: 369.689
CL7: 32.511

CL4: 387.617
CL8: 0.000

TOTAL PCB: 1485.388

GMN 002 0440

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 09/29/85

VIAL NUMBER: 14

DILUTION FACTOR: 25.830

SAMPLE NAME: 85-212

PCB SUBSTITUTION PATTERN	AROCLOP MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCLOP MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	428.365	24.18	245/24	54,60	0.000	0.00
2/2	21,16	147.489	0.32	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	36.834	2.08	P,P'-DDE	NA	0.000	----
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	6.432	0.36	234/23	54,60	51.815	2.92
24	21,16	14.671	0.83	2356/25	54,60	0.000	0.00
2/3	21,16	30.040	1.70	2356/23	54,60	0.000	0.00
26/2	21,16	83.818	4.73	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	107.634	6.07	34/34	48	3.125	0.18
25/2	16	45.228	2.35	2345/26(CL58)	54,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	14.361	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	15.962	0.90	245/34(2346/236)	54,60	0.000	0.00
26/4	16	32.882	1.86	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL50)	54,60	0.000	0.00
246/2	16	9.247	0.52	234/34	54,60	0.000	0.00
25/2	16	19.605	1.11	245/245	54,60	34.173	1.92
236/2(35/2)	16	19.605	1.11	234/235(CL6A)	54,60	0.000	0.00
24/2(CL34)	16	0.000	0.00	2356/34(CL62)	54,60	0.000	0.00
24/26(CL3E)	16	18.649	1.05	234/245	54,60	0.000	0.00
25/4(24/2)	16	72.040	4.07	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	68.940	3.89	2346/34(2356/245)	60	0.000	0.00
23/4	16	33.217	1.87	2356/245(CL7A)	54	15.240	0.86
25/25	16,54	61.656	3.48	234/234	54,60	0.000	0.00
24/25	16,54	38.254	2.16	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	34.199	1.93	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	21.489	1.77	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	20.974	1.18	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	23.479	1.33	NIHREX	NA	0.000	----
236/3(CL4C)	16,54	45.409	2.56	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	69.328	3.91	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	0.214	0.46	2345/245	54,60	15.111	0.85
DECAHCHLOROSTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	36.730	2.07	2346/2356	60	0.000	0.00
25/34	54,60	32.719	2.98	CL7	60	0.000	0.00
24/34	54,60	39.262	2.22	2345/2346	60	0.000	0.00
234/4	54,60	0.000	0.00	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.000	0.00	2345/2345	60	0.000	0.00

TOTAL CL1: 428.365
CL5: 96.759

CL2: 343.100
CL6: 34.173

CL3: 371.694
CL7: 30.350

CL4: 467.316
CL8: 0.000

TOTAL PCB: 1771.757

GMM 002 0431

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 09/29/85

VIAL NUMBER: 18

DILUTION FACTOR: 10.140

SAMPLE NAME: 85-219

PCE SUBSTITUTION PATTERN	AROCLOP MIX	MS PCE PER ML SAMPLE	PCT % TOTAL % PCE	PCE SUBSTITUTION PATTERN	AROCLOP MIX	MS PCE PER ML SAMPLE	PCT TOTAL PCE
2	21,16	944.370	19.84 % 245/24		54,60	0.000	0.00
2/2	21,16	208.447	12.01 % 245/23		54,60	0.000	0.00
3	21	0.000	0.00 % 234/25		54,60	0.000	0.00
26	21,16	42.157	2.43 % P,P'-DDE	NA		0.000	---
4	21	0.000	0.00 % 234/24		54	0.000	0.00
25	21,16	7.619	0.44 % 234/23		54,60	3.029	0.17
24	21,16	12.009	0.69 % 2356/25		54,60	5.787	0.33
2/3	21,16	26.974	1.55 % 2356/23		54,60	0.000	0.00
26/2	21,16	91.988	5.30 % 236/245(234/236)		54,60	0.000	0.00
2/4	21,16	95.181	5.48 % 34/34	48		4.608	0.27
25/2	16	54.547	3.14 % 2345/26(CL58)		54,60	0.000	0.00
24/2	16	0.000	0.00 % 234/236(2356/236)		54,60	0.000	0.00
NONACHLOROBENZENE	NA	15.256	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	23.818	1.37 % 245/34(2346/236)		54,60	0.000	0.00
26/4	16	47.146	2.72 % 2346/236(235/245)		54,60	0.000	0.00
4/4	21,16	0.000	0.00 % 235/245(CL55)		54,60	5.279	0.31
246/2	16	9.796	0.56 % 234/34		54,60	0.000	0.00
25/3	16	17.541	1.01 % 245/245		54,60	12.899	0.74
236/2(35/2)	16	18.267	1.05 % 234/235(CL60)		54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00 % 2356/34(CL68)		54,60	0.000	0.00
24/26(CL3B)	16	17.650	1.02 % 234/245		54,60	0.000	0.00
25/4(24/2)	16	68.732	3.96 % 2356/235(2346/34)		54,60	40.561	2.34
24/4(23/3+24/4)	16	63.744	3.67 % 2346/34(2356/245)		60	0.000	0.00
23/4	16	24.797	1.43 % 2356/245(CL7A)		54	10.340	0.60
25/25	16,54	33.658	3.09 % 234/234		54,60	0.000	0.00
24/25	16,54	33.767	3.10 % 2346/245(2356/2356)		54,60	0.000	0.00
23/25	16,54	39.745	2.29 % 2356/234(2346/234)		54,60	0.000	0.00
24/24	16,54	22.735	1.06 % 2346/234(245/345)		54,60	0.000	0.00
23/24(CL4A)	16,54	19.081	1.15 % 2345/2356+245/345(23456/236)		54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	15.111	0.87 % MIREX	NA		0.000	---
236/3(CL4C)	16,54	36.824	2.12 % 2345/34		54,60	0.000	0.00
236/4(CL4D)	16,54	48.706	2.81 % 2345/235		54,60	0.000	0.00
235/26(CL5A)	54,60	6.948	0.40 % 2345/245		54,60	15.401	0.89
OCTACHLOROSTYRENE	NA	0.000	---	2345/234	54,60	22.629	1.30
236/23	54,60	25.446	2.04 % 2346/2356		60	0.000	0.00
25/34	54,60	35.137	2.82 % CL7		60	0.000	0.00
24/34	54,60	26.679	2.11 % 2345/2346		60	0.000	0.00
234/4	54,60	0.000	0.00 % 23456/245		60	0.000	0.00
236/236	54,60	26.521	1.53 % 23456/234		60	0.000	0.00
245/25	54,60	0.000	0.00 % 2345/2345		60	0.000	0.00

TOTAL CL1: 944.370
CL5: 45.423

CL2: 292.386
CL6: 38.484

CL3: 292.314
CL7: 82.940

CL4: 422.063
CL8: 0.000

TOTAL PCB: 1735.980

GMV 002 0442

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 09/29/85

VIAL NUMBER: 19

DILUTION FACTOR: 23.690

SAMPLE NAME: 05-220

PCB SUBSTITUTION PATTERN	AROCLO MIX	NG PCB PER ML SAMPLE	PCT % TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCLO MIX	NG PCB PER ML SAMPLE	PCT TOTAL PCB
			0				
2	21,16	289.326	13.97 % 245/24		54,60	0.000	0.00
2/2	21,16	225.055	10.87 % 245/23		54,60	0.000	0.00
3	21	0.000	0.00 % 234/25		54,60	0.000	0.00
26	21,16	44.656	2.16 % P,P'-DDE	NA		0.000	---
4	21	0.000	0.00 % 234/24		54	0.000	0.00
25	21,16	9.666	0.47 % 234/23		54,60	0.000	0.00
24	21,16	13.859	0.67 % 2356/25		54,60	0.000	0.00
2/3	21,16	29.802	1.44 % 2356/23		54,60	0.000	0.00
26/2	21,16	120.914	5.84 % 236/245(234/236)		54,60	0.000	0.00
2/4	21,16	106.250	5.13 % 34/34		48	0.000	0.00
25/2	16	84.123	4.06 % 2345/26(CL58)		54,60	0.000	0.00
24/2	16	0.000	0.00 % 234/236(2356/236)		54,60	13.527	0.65
HEXACHLOROBENZENE	NA	20.681	— % 2356/236(245/34)		54,60	0.000	0.00
23/2	16	32.526	1.57 % 245/34(2346/236)		54,60	0.000	0.00
26/4	16	46.788	2.26 % 2346/236(235/245)		54,60	0.000	0.00
4/4	21,16	0.000	0.00 % 235/245(CL5C)		54,60	0.000	0.00
246/2	16	14.285	0.69 % 234/34		54,60	0.000	0.00
25/3	16	26.177	1.26 % 245/245		54,60	9.713	0.47
236/2(35/2)	16	27.291	1.32 % 234/235(CL6A)		54,60	0.000	0.00
24/3(CL3A)	16	12.864	0.62 % 2356/34(CL6B)		54,60	0.000	0.00
24/26(CL3B)	16	21.676	1.05 % 234/245		54,60	0.000	0.00
25/4(24/3)	16	92.794	4.48 % 2356/235(2346/34)		54,60	0.000	0.00
24/4(23/34/24/4)	16	93.812	4.53 % 2346/34(2356/245)		60	0.000	0.00
23/4	16	58.964	2.85 % 2356/245(CL7A)		54	5.639	0.27
25/25	16,54	79.632	3.56 % 234/234		54,60	0.000	0.00
24/25	16,54	72.397	3.50 % 2346/245(2356/2356)		54,60	0.000	0.00
23/25	16,54	95.885	2.70 % 2356/234(2346/234)		54,60	0.000	0.00
24/24	16,54	44.111	2.13 % 2346/234(245/345)		54,60	0.000	0.00
23/24(CL4A)	16,54	28.475	1.38 % 2345/2356(245/345(23456/236)		54,60	0.000	0.00
23/23-234/2(CL4E)	16,54	36.056	1.74 % MIXED	NA		0.000	---
236/3(CL4C)	16,54	64.460	3.11 % 2345/34		54,60	0.000	0.00
236/4(CL4D)	16,54	189.892	5.27 % 2345/235		54,60	0.000	0.00
235/26(CL5A)	54,60	9.381	0.45 % 2345/245		54,60	14.972	0.72
OCTACHLOROSTYRENE	NA	0.000	— % 2345/234		54,60	0.000	0.00
236/23	54,60	46.788	2.26 % 2346/2356		60	0.000	0.00
25/34	54,60	63.333	2.96 % CL7		60	0.000	0.00
24/34	54,60	29.541	1.43 % 2345/2346		60	0.000	0.00
234/4	54,60	0.000	0.00 % 23456/245		60	0.000	0.00
236/236	54,60	45.835	2.17 % 23456/234		60	0.000	0.00
245/25	54,60	0.000	0.00 % 2345/2345		60	0.000	0.00

TOTAL CL1: 289.326
CL5: 56.169

CL2: 429.287
CL6: 68.275

CL3: 568.963
CL7: 20.610

CL4: 638.256
CL8: 0.000

TOTAL PCB: 2870.885

GMM 002 0443

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 09/30/85

VIAL NUMBER: 20

DILUTION FACTOR: 20.400

SAMPLE NAME: 85-221

PCB SUBSTITUTION PATTERN	ANALOG MIX	NG PCB PER M. SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	ANALOG MIX	NG PCB PER M. SAMPLE	PCT TOTAL PCB
2	21,16	415.038	18.78	245/24	54,60	4.162	0.19
2/2	21,16	222.401	10.06	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	45.206	2.05	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.894	0.40	234/23	54,60	48.491	2.19
24	21,16	12.566	0.57	2356/25	54,60	0.000	0.00
2/2	21,16	27.989	1.27	2356/23	54,60	0.000	0.00
26/2	21,16	118.320	5.35	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	102.041	4.62	34/24	48	4.468	0.20
25/2	16	80.437	3.64	2345/26(2158)	54,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	22.236	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	32.660	1.48	245/34(2346/236)	54,60	0.000	0.00
26/4	16	64.750	2.93	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(2150)	54,60	0.000	0.00
246/2	16	18.890	0.85	234/34	54,60	0.000	0.00
25/3	16	24.970	1.13	245/245	54,60	13.993	0.63
236/2(35/2)	16	26.051	1.16	234/235(216A)	54,60	0.000	0.00
24/2(215A)	16	13.922	0.63	2356/34(216B)	54,60	0.000	0.00
24/26(213B)	16	18.625	0.84	234/245	54,60	0.000	0.00
25/4(24/3)	16	103.556	4.68	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	187.406	4.06	2346/34(2356/245)	60	0.000	0.00
23/4	16	41.392	1.87	2356/245(217A)	54	9.690	0.44
25/25	16,54	77.785	3.52	234/234	54,60	0.000	0.00
24/25	16,54	78.336	3.54	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	58.548	2.65	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	45.961	2.08	2346/234(245/345)	54,60	0.000	0.00
23/24(214A)	16,54	31.640	1.43	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(214B)	16,54	46.981	2.13	MIREX	NA	0.000	---
236/3(214C)	16,54	65.790	2.96	2345/34	54,60	0.000	0.00
236/4(214D)	16,54	97.981	4.43	2345/235	54,60	0.000	0.00
235/26(215A)	54,60	9.384	0.42	2345/245	54,60	12.893	0.58
OCTACHLOROSTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	15.769	0.71	2346/2356	60	0.000	0.00
25/34	54,60	23.725	1.07	217	60	0.000	0.00
24/34	54,60	27.601	1.25	2345/2346	60	0.000	0.00
234/4	54,60	0.000	0.00	23456/245	60	0.000	0.00
236/236	54,60	52.020	2.35	23456/234	60	0.000	0.00
245/25	54,60	0.000	0.00	2345/2345	60	0.000	0.00

TOTAL CL1: 415.038
CL5: 77.806

CL2: 419.098
CL6: 65.953

CL3: 987.418
CL7: 22.583

CL4: 622.304
CL8: 0.000

TOTAL PCB: 2210.279

GMM 002 0444

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 09/30/85

VIAL NUMBER: 21

DILUTION FACTOR: 17.300

SAMPLE NAME: 05-222

PCB SUBSTITUTION PATTERN	AROCLOP MIX	MS PCB PER ML SAMPLE	PCT % TOTAL % PCB	PCB SUBSTITUTION PATTERN	AROCLOP MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	330.568	15.08	245/24	54,60	7.837	0.38
2/2	21,16	202.652	9.74	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	9.700	0.47
26	21,16	41.589	2.00	P,P'-DDE	NA	9.672	---
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	7.872	0.38	234/23	54,60	37.929	1.82
24	21,16	10.761	0.52	2356/25	54,60	9.860	0.47
2/3	21,16	21.832	1.05	2356/23	54,60	0.000	0.00
26/2	21,16	117.571	5.65	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	85.220	4.09	34/34	48	3.304	0.16
25/2	16	84.908	4.08	2345/26(CL58)	54,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	54,60	0.000	0.00
NONACHLOROBENZENE	NA	20.933	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	33.597	1.61	245/34(2346/236)	54,60	0.000	0.00
26/4	16	67.401	3.24	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL50)	54,60	0.000	0.00
246/2	16	15.778	0.76	234/34	54,60	0.000	0.00
25/2	16	25.483	1.22	245/245	54,60	10.380	0.50
236/2(35/2)	16	25.414	1.22	234/235(CL6A)	54,60	0.000	0.00
24/2(CL36)	16	11.695	0.56	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL36)	16	16.971	0.82	234/245	54,60	0.000	0.00
25/4(24/2)	16	81.396	3.91	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	69.927	3.36	2346/34(2356/245)	60	0.000	0.00
23/4	16	32.939	1.58	2356/245(CL7A)	54	0.227	0.39
25/25	16,54	78.525	3.77	234/234	54,60	0.000	0.00
24/25	16,54	69.338	3.33	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	58.568	2.83	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	42.420	2.04	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	28.182	1.35	2345/2356+245/345(23456/236)	54,60	38.614	1.86
23/23+234/2(CL4B)	16,54	44.496	2.14	HIREX	NA	0.000	---
236/3(CL4C)	16,54	67.020	3.22	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	95.531	4.59	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	0.961	0.43	2345/245	54,60	0.425	0.40
OCTACHLOROSTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	28.656	0.99	2346/2356	60	0.000	0.00
25/34	54,60	74.701	3.59	CL7	60	0.000	0.00
24/34	54,60	38.129	1.83	2345/2346	60	0.000	0.00
234/4	54,60	0.800	0.00	23456/245	60	0.000	0.00
236/236	54,60	44.911	2.16	23456/234	60	0.000	0.00
245/25	54,60	0.800	0.00	2345/2345	60	0.000	0.00

TOTAL CL1: 330.568
CL5: 85.899

CL2: 369.926
CL6: 65.152

CL3: 324.917
CL7: 16.643

CL4: 650.376
CL8: 38.614

TOTAL PCB: 2081.294

GMM 002 0445

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 09/30/85

VIAL NUMBER: 3

DILUTION FACTOR: 21.368

SAMPLE NAME: 05-223 C.TENTANS

PCB SUBSTITUTION PATTERN	AROCLO MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCLO MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	351.389	13.37	245/24	54,60	0.000	0.00
2/2	21,16	241.052	9.17	245/23	54,60	10.235	0.39
3	21	0.000	0.00	234/25	54,60	19.573	0.74
26	21,16	59.005	2.05	P,P'-DDE	NA	0.000	—
4	21	0.000	0.00	234/24	54	20.300	0.77
25	21,16	7.005	0.30	234/23	54,60	18.547	0.71
24	21,16	12.052	0.46	2356/25	54,60	1.309	0.05
2/3	21,16	27.693	1.05	2356/23	54,60	0.000	0.00
26/2	21,16	179.406	6.82	236/245(234/236)	54,60	16.475	0.63
2/4	21,16	127.546	4.85	34/34	40	0.000	0.00
25/2	16	100.665	3.83	2345/26(CL5B)	54,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	29.424	—	2356/236(245/34)	54,60	0.000	0.00
23/2	16	41.262	1.57	245/34(2346/236)	54,60	0.013	0.30
26/4	16	60.420	2.60	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	21.240	0.81	234/34	54,60	0.000	0.00
25/3	16	20.697	1.09	245/245	54,60	16.603	0.63
236/2(35/2)	16	27.992	1.06	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	13.398	0.51	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	21.624	0.82	234/245	54,60	13.060	0.53
25/4(24/3)	16	93.100	3.54	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	126.007	4.79	2346/34(2356/245)	60	0.000	0.00
23/4	16	71.004	2.72	2356/245(CL7A)	54	10.740	0.71
25/25	16,54	94.317	3.61	234/234	54,60	0.000	0.00
24/25	16,54	101.005	3.86	2346/245(2356/2356)	54,60	60.306	2.61
23/25	16,54	74.003	2.83	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	59.403	2.26	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	85.941	1.37	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	56.796	2.16	HIREX	NA	0.000	—
236/3(CL4C)	16,54	70.634	2.59	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	100.307	3.82	2345/235	54,60	9.466	0.36
235/26(CL5A)	54,60	11.261	0.43	2345/245	54,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	—	2345/234	54,60	0.000	0.00
236/23	54,60	21.112	0.80	2346/2356	60	0.000	0.00
25/34	54,60	95.172	2.10	CL7	60	0.000	0.00
24/34	54,60	42.245	1.61	2345/2346	60	0.000	0.00
234/4	54,60	61.134	2.32	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.000	0.00	2345/2345	60	0.000	0.00

TOTAL CL1: 351.389
CL5: 109.041

CL2: 470.032
CL6: 40.304

CL3: 722.339
CL7: 96.712

CL4: 601.493
CL8: 0.000

TOTAL PCB: 2629.700

GMN 002 0446

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 09/30/85

VIAL NUMBER: 4

DILUTION FACTOR: 25.445

SAMPLE NAME: 85-224 C.TENTANS

PCB SUBSTITUTION PATTERN	AROCLO MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCLO MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
			0				
2	21,16	288.887	10.82	245/24	54,60	6.259	0.22
2/2	21,16	255.886	9.10	245/23	54,60	12.977	0.46
3	21	0.000	0.00	234/25	54,60	23.918	0.85
26	21,16	56.488	2.01	P,P'-DDE	NA	0.000	—
4	21	0.000	0.00	234/24	54	19.364	0.69
25	21,16	9.618	0.34	234/23	54,60	61.577	2.20
24	21,16	13.246	0.47	2356/25	54,60	6.438	0.23
2/3	21,16	38.385	1.00	2356/23	54,60	0.000	0.00
26/2	21,16	183.458	6.54	236/245(234/236)	54,60	11.832	0.42
2/4	21,16	117.388	4.21	34/34	60	0.000	0.00
25/2	16	118.791	4.23	2345/26(CL38)	54,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	54,60	0.000	0.00
HEXACHLOROCYCLOPENTADIENE	NA	23.384	—	2356/236(245/34)	54,60	0.000	0.00
23/2	16	38.825	1.78	245/34(2346/236)	54,60	22.417	0.80
26/4	16	90.533	3.23	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL3C)	54,60	0.000	0.00
246/2	16	27.735	0.99	234/34	54,60	0.000	0.00
25/3	16	34.354	1.23	245/245	54,60	13.130	0.47
236/2(35/2)	16	34.885	1.24	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	14.275	0.51	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	25.954	0.93	234/245	54,60	9.542	0.34
25/4(24/3)	16	188.879	3.88	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	143.832	5.18	2346/34(2356/245)	60	0.000	0.00
23/4	16	67.887	2.42	2356/245(CL7A)	54	12.886	0.43
25/25	16,54	114.273	4.87	234/234	54,60	0.000	0.00
24/25	16,54	123.459	4.40	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	86.971	3.18	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	68.523	2.44	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	89.262	1.48	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	42.722	1.52	NO DET	NA	0.600	—
236/3(CL4C)	16,54	76.818	2.74	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	134.629	5.31	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	21.886	0.78	2345/245	54,60	18.127	0.36
DETACHLOROSTYRENE	NA	0.000	—	2345/234	54,60	0.000	0.00
236/23	54,60	24.251	0.87	2346/2356	60	3.257	0.12
25/34	54,60	75.521	2.69	CL7	60	0.000	0.00
24/34	54,60	89.134	2.47	2345/2346	60	0.000	0.00
234/4	54,60	38.483	1.09	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.000	0.00	2345/2345	60	0.000	0.00

TOTAL CL1: 288.887 CL2: 482.832 CL3: 811.385 CL4: 978.371
 CL5: 192.678 CL6: 48.941 CL7: 22.213 CL8: 3.257
 TOTAL PCB: 2884.295

GMP 002 0447

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/01/85

VIAL NUMBER: 5

DILUTION FACTOR: 13.459

SAMPLE NAME: 85-225 C.TENTHNS

PCB SUBSTITUTION PATTERN	AROCLO MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCLO MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
			0				
2	21,16	297.538	12.56	245/24	54,60	11.077	0.47
2/2	21,16	227.269	9.60	245/23	54,60	11.044	0.50
3	21	0.000	0.00	234/25	54,60	27.927	1.18
26	21,16	32.907	2.23	P,P'-DDE	NA	0.000	—
4	21	0.000	0.00	234/24	54	18.320	0.78
25	21,16	5.949	0.25	234/23	54,60	46.999	1.98
24	21,16	7.699	0.33	2356/25	54,60	5.343	0.23
2/3	21,16	29.350	0.86	2356/23	54,60	0.000	0.00
26/2	21,16	153.285	6.47	236/245(234/236)	54,60	5.276	0.22
2/4	21,16	31.925	3.00	34/34	48	0.000	0.00
25/2	16	81.427	3.44	2345/25(CL58)	54,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	54,60	1.642	0.07
NONACHLOROBENZENE	NA	25.001	—	2356/236(245/34)	54,60	0.000	0.00
23/2	16	36.004	1.32	245/34(2346/236)	54,60	26.582	1.54
26/4	16	60.996	2.38	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	24.791	1.05	234/34	54,60	19.435	0.82
25/3	16	30.827	1.27	245/245	54,60	17.053	0.72
236/2(35/2)	16	26.030	1.10	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	14.913	0.63	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	18.029	0.80	234/245	54,60	10.485	0.44
25/4(24/3)	16	85.855	3.63	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/34/24/4)	16	185.319	4.46	2346/34(2356/245)	60	0.000	0.00
23/4	16	45.855	1.94	2356/245(CL7A)	54	9.596	0.41
25/25	16,54	31.279	3.05	234/234	54,60	0.000	0.00
24/25	16,54	94.913	4.01	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	61.427	2.39	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	57.833	2.44	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	39.298	1.41	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/234/234/2(CL4B)	16,54	47.186	1.99	NI/REX	NA	0.000	—
236/3(CL4C)	16,54	69.099	2.92	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	105.465	4.45	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	14.226	0.60	2345/245	54,60	6.999	0.30
NONACHLOROSTYRENE	NA	0.000	—	2345/234	54,60	0.000	0.00
236/23	54,60	20.000	0.84	2346/2356	60	0.000	0.00
25/34	54,60	64.065	2.71	CL7	60	0.000	0.00
24/34	54,60	53.944	2.28	2345/2346	60	0.000	0.00
234/4	54,60	29.354	1.66	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.000	0.00	2345/2345	60	0.000	0.00

TOTAL CL1: 297.538
CL5: 206.689

CL2: 406.098
CL6: 39.798

CL3: 613.939
CL7: 16.595

CL4: 787.432
CL8: 0.000

TOTAL PCB: 2368.638

GM 002 0448

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/01/85

VIAL NUMBER: 6

DILUTION FACTOR: 19.763

SAMPLE NAME: 85-226 C.TENTANS

PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT 0 TOTAL 0 PCB 0	PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	216.406	9.29 0 245/24		34,60	22.253	0.65
2/2	21,16	270.279	7.06 0 245/23		34,60	17.391	0.51
3	21	0.000	0.00 0 234/25		34,60	20.071	1.14
26	21,16	61.463	1.79 0 P,P'-DDE	NA		0.000	—
4	21	0.000	0.00 0 234/24		34	29.961	0.87
25	21,16	11.344	0.33 0 234/23		34,60	76.147	2.21
24	21,16	13.330	0.39 0 2356/25		34,60	9.111	0.26
2/3	21,16	22.945	0.56 0 2356/23		34,60	0.000	0.00
26/2	21,16	202.630	5.09 0 236/245(234/236)		34,60	17.066	0.52
2/4	21,16	120.637	4.03 0 34/34	40		0.000	0.00
25/2	16	121.523	3.33 0 2345/26(CL38)		34,60	0.000	0.00
24/2	16	0.000	0.00 0 234/236(2356/236)		34,60	0.000	0.00
HEXACHLOROBENZENE	NA	37.066	— 0 2356/236(245/34)		34,60	0.000	0.00
23/2	16	52.095	1.51 0 245/34(2346/236)		34,60	20.415	0.59
26/4	16	00.366	2.60 0 2346/236(235/245)		34,60	0.000	0.00
4/4	21,16	0.000	0.00 0 235/245(CL3C)		34,60	0.000	0.00
246/2	16	20.637	0.03 0 234/34		34,60	0.000	0.00
25/3	16	44.091	1.20 0 245/245		34,60	25.316	0.74
236/2(35/2)	16	30.269	1.14 0 234/235(CL6A)		34,60	0.000	0.00
24/3(CL3A)	16	21.344	0.62 0 2356/34(CL6B)		34,60	0.000	0.00
24/26(CL3B)	16	29.170	0.05 0 234/245		34,60	15.395	0.45
25/4(24/3)	16	127.720	4.00 0 2356/235(2346/34)		34,60	0.000	0.00
24/4(23/34/4)	16	179.191	5.21 0 2346/34(2356/245)		60	0.000	0.00
23/4	16	95.394	2.70 0 2356/245(CL7A)		34	9.526	0.20
25/25	16,34	120.230	4.05 0 234/234		34,60	0.000	0.00
24/25	16,34	162.009	4.73 0 2346/245(2356/2356)		34,60	0.000	0.00
23/25	16,34	117.452	3.41 0 2356/234(2346/234)		34,60	0.000	0.00
24/24	16,34	90.716	2.07 0 2346/234(245/245)		34,60	0.000	0.00
23/24(CL4A)	16,34	39.407	1.73 0 2345/2356+245/245(23456/236)		34,60	0.000	0.00
23/23+234/2(CL4B)	16,34	36.799	1.03 0 HIREX	NA		0.000	—
236/3(CL4C)	16,34	124.724	3.32 0 2345/34		34,60	0.000	0.00
236/4(CL4D)	16,34	100.140	3.24 0 2345/235		34,60	0.000	0.00
235/26(CL5A)	34,60	23.973	0.70 0 2345/245		34,60	6.097	0.20
OCTACHLOROSTYRENE	NA	0.000	— 0 2345/234		34,60	0.000	0.00
236/23	34,60	40.732	1.10 0 2346/2356		60	0.000	0.00
25/34	34,60	114.307	3.33 0 CL7		60	0.000	0.00
34/34	34,60	96.039	2.82 0 2345/2346		60	0.000	0.00
234/4	34,60	30.005	1.15 0 23456/245		60	0.000	0.00
236/236	34,60	0.000	0.00 0 23456/234		60	0.000	0.00
245/25	34,60	0.000	0.00 0 2345/2345		60	0.000	0.00

TOTAL CL1: 216.406
CL5: 269.943

CL2: 920.265
CL6: 67.600

CL3: 943.762
CL7: 16.423

CL4: 1297.203
CL8: 0.000

TOTAL PCB: 3439.771

GMM

002

0449

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/03/05

VIAL NUMBER: 4

DILUTION FACTOR: 23.009

SAMPLE NAME: 05-228 TEN

PCB SUBSTITUTION PATTERN	AROCLO MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCLO MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
			0				
2	21,16	497.465	13.63	245/24	34,60	5.009	0.16
2/2	21,16	286.104	7.04	245/23	34,60	16.190	0.44
3	21	0.000	0.00	234/25	34,60	13.119	0.36
26	21,16	66.499	1.82	P, P' -DOE	NA	0.000	—
4	21	0.000	0.00	234/24	34	26.237	0.99
25	21,16	11.119	0.30	234/23	34,60	67.308	1.04
24	21,16	14.300	0.40	2356/25	34,60	0.000	0.00
2/3	21,16	33.833	0.93	2356/23	34,60	0.000	0.00
26/2	21,16	194.639	5.33	236/245(234/236)	34,60	4.286	0.12
2/4	21,16	139.092	3.81	34/34	40	0.000	0.00
25/2	16	120.069	3.29	2345/26(CL50)	34,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	34,60	0.000	0.00
NONACHLOROBENZENE	NA	30.309	—	2356/236(245/34)	34,60	0.000	0.00
23/2	16	50.204	1.00	245/34(2346/236)	34,60	31.428	0.06
26/4	16	121.783	3.34	2346/236(2356/245)	34,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	34,60	0.000	0.00
246/2	16	35.499	0.97	234/34	34,60	0.000	0.00
25/3	16	44.094	1.21	245/245	34,60	26.618	1.00
236/2(35/2)	16	40.056	1.12	234/235(CL6A)	34,60	0.000	0.00
24/3(CL3A)	16	21.952	0.60	2356/34(CL6B)	34,60	0.000	0.00
24/26(CL3B)	16	30.642	0.84	234/245	34,60	29.237	0.00
25/4(24/3)	16	169.472	4.64	2356/235(2346/34)	34,60	0.000	0.00
24/4(23/3+24/4)	16	170.591	4.67	2346/34(2356/245)	60	0.000	0.00
23/4	16	103.593	2.84	2356/245(CL7A)	34	22.047	0.60
25/25	16,34	135.235	3.71	234/234	34,60	0.000	0.00
24/25	16,34	153.997	4.22	2346/245(2356/2356)	34,60	0.000	0.00
23/25	16,34	105.031	2.90	2356/234(2346/234)	34,60	0.000	0.00
24/24	16,34	97.307	2.67	2346/234(245/245)	34,60	0.000	0.00
23/24(CL4A)	16,34	35.046	1.31	2345/2356+245/245(23456/236)	34,60	0.000	0.00
23/23+234/2(CL4B)	16,34	60.260	1.30	HIRES	NA	10.238	—
236/3(CL4C)	16,34	107.593	2.95	2345/34	34,60	0.000	0.00
236/4(CL4D)	16,34	100.949	4.41	2345/235	34,60	0.000	0.00
235/26(CL5A)	34,60	24.300	0.67	2345/245	34,60	0.905	0.24
NONACHLOROSTYRENE	NA	0.000	—	2345/234	34,60	0.000	0.00
236/23	34,60	74.594	2.04	2346/2356	60	0.000	0.00
25/34	34,60	101.593	2.70	CL7	60	0.000	0.00
24/34	34,60	63.000	1.75	2345/2346	60	0.000	0.00
234/4	34,60	60.641	1.00	23456/245	60	0.000	0.00
236/236	34,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	34,60	0.000	0.00	2345/2345	60	0.000	0.00

TOTAL CL1: 497.465
CL5: 263.066

CL2: 331.226
CL6: 70.141

CL3: 1004.470
CL7: 20.952

CL4: 1226.239
CL8: 0.000

TOTAL PCB: 2649.305

GM 002 0450

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/04/85

VIAL NUMBER: 5

DILUTION FACTOR: 20.964

SAMPLE NAME: 05-229 TEN

PCB SUBSTITUTION PATTERN	AROCOLOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCOLOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	370.916	7.46	245/24	54,60	27.005	0.54
2/2	21,16	293.349	5.80	245/23	54,60	34.423	0.69
3	21	0.000	0.00	234/25	54,60	64.063	1.30
26	21,16	70.942	1.43	P,P'-DDE	NA	0.000	—
4	21	0.000	0.00	234/24	54	93.982	1.89
25	21,16	9.388	0.19	234/23	54,60	82.305	1.65
24	21,16	13.165	0.26	2356/25	54,60	6.059	0.12
2/3	21,16	22.093	0.44	2356/23	54,60	0.000	0.00
26/2	21,16	216.915	4.36	236/245(234/236)	54,60	23.564	0.47
2/4	21,16	143.394	2.80	34/34	40	0.000	0.00
25/2	16	171.406	3.45	2345/26(CL38)	54,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	54,60	2.474	0.05
NONACHLOROBENZENE	NA	95.492	—	2356/236(245/34)	54,60	0.000	0.00
23/2	16	70.229	1.41	245/34(2346/236)	54,60	93.035	1.89
26/4	16	156.035	3.14	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL3C)	54,60	17.019	0.36
246/2	16	42.913	0.86	234/34	54,60	0.000	0.00
25/3	16	67.019	1.36	245/245	54,60	32.662	1.06
236/2(35/2)	16	94.737	1.80	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	30.041	0.60	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	41.089	0.83	234/245	54,60	25.744	0.52
25/4(24/3)	16	267.015	5.30	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	280.939	5.65	2346/34(2356/245)	60	0.000	0.00
23/4	16	140.446	2.80	2356/245(CL7A)	54	17.324	0.36
25/25	16,54	216.396	4.35	234/234	54,60	0.000	0.00
24/25	16,54	240.576	5.02	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	167.230	3.36	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	131.004	2.63	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	75.600	1.52	2345/2356+245/245(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	110.200	2.22	MIXED	NA	0.000	—
236/3(CL4C)	16,54	165.067	3.30	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	250.226	5.03	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	34.129	0.69	2345/245	54,60	10.005	0.30
OCTACHLOROSTYRENE	NA	0.000	—	2345/234	54,60	0.000	0.00
236/23	54,60	182.703	3.66	2346/2356	60	0.000	0.00
25/34	54,60	224.336	4.51	CL7	60	0.000	0.00
24/34	54,60	135.230	2.72	2345/2346	60	0.000	0.00
234/4	54,60	42.826	0.85	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.000	0.00	2345/2345	60	6.268	0.13

TOTAL CL1: 370.916
CL5: 533.324

CL2: 963.031
CL6: 120.221

CL3: 1409.724
CL7: 36.729

CL4: 1926.022
CL8: 6.268

TOTAL PCB: 4975.155

GMM

002

0451

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/04/85

VIAL NUMBER: 6

DILUTION FACTOR: 22.075

SAMPLE NAME: 05-230 TEN

PCB SUBSTITUTION PATTERN	AROCOLOR MIX	MS PCB PER ML SAMPLE	PCT 0 TOTAL 0 PCB 0	PCB SUBSTITUTION PATTERN	AROCOLOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
			0				
2	21,16	219.756	4.94 0 245/24		34,60	30.574	0.78
2/2	21,16	289.067	4.40 0 245/23		34,60	32.252	0.50
3	21	0.000	0.00 0 234/25		34,60	45.497	0.70
26	21,16	65.635	1.01 0 P,P'-DDE	NA		0.000	—
4	21	0.000	0.00 0 234/24		34	160.816	2.48
25	21,16	13.532	0.21 0 234/23		34,60	129.911	2.01
24	21,16	0.389	0.13 0 2356/25		34,60	144.459	2.23
2/3	21,16	24.216	0.53 0 2356/23		34,60	0.000	0.00
26/2	21,16	228.829	3.53 0 236/245(234/236)		34,60	44.724	0.69
2/4	21,16	145.872	2.25 0 34/34	48		0.000	0.00
25/2	16	235.049	3.64 0 2345/26(CL38)		34,60	0.000	0.00
24/2	16	0.000	0.00 0 234/236(2356/236)		34,60	12.252	0.19
HEXACHLOROBENZENE	NA	70.308	— 0 2356/236(245/34)		34,60	0.000	0.00
23/2	16	182.163	1.50 0 245/34(2346/236)		34,60	83.686	1.29
26/4	16	285.739	3.18 0 2346/236(235/245)		34,60	0.000	0.00
4/4	21,16	0.000	0.00 0 235/245(CL3C)		34,60	0.000	0.00
246/2	16	32.627	0.01 0 234/34		34,60	10.764	0.29
25/3	16	80.675	1.37 0 245/245		34,60	0.000	0.00
236/2(35/2)	16	71.346	1.10 0 234/235(CL6A)		34,60	0.000	0.00
24/3(CL3A)	16	39.404	0.61 0 2356/34(CL6B)		34,60	0.000	0.00
24/26(CL3B)	16	32.737	0.01 0 234/245		34,60	39.514	0.61
25/4(24/3)	16	272.140	5.75 0 2356/235(2346/34)		34,60	0.000	0.00
24/4(23/34/24/4)	16	417.262	6.44 0 2346/34(2356/245)		60	0.000	0.00
23/4	16	214.300	3.32 0 2356/245(CL7A)		34	39.333	0.51
25/25	16,34	277.130	4.28 0 234/234		34,60	0.000	0.00
24/25	16,34	327.593	5.06 0 2346/245(2356/2356)		34,60	0.000	0.00
23/25	16,34	242.000	3.74 0 2356/234(2346/234)		34,60	0.000	0.00
24/24	16,34	186.007	2.09 0 2346/234(245/345)		34,60	0.000	0.00
23/24(CL4A)	16,34	127.660	1.97 0 2345/2356/245/345(23456/236)		34,60	0.000	0.00
23/234/234/2(CL4B)	16,34	100.551	2.79 0 MIXED	NA		0.000	—
236/3(CL4C)	16,34	255.930	3.95 0 2345/34		34,60	139.713	2.16
236/4(CL4D)	16,34	349.977	5.40 0 2345/235		34,60	0.000	0.00
235/26(CL5A)	34,60	42.406	0.65 0 2345/245		34,60	0.013	0.12
OCTACHLOROSTYRENE	NA	0.000	— 0 2345/234		34,60	0.000	0.00
236/23	34,60	00.432	1.37 0 2346/2356		60	0.000	0.00
25/34	34,60	283.973	4.39 0 CL7		60	0.000	0.00
24/34	34,60	154.525	2.39 0 2345/2346		60	0.000	0.00
234/4	34,60	35.717	0.06 0 23456/245		60	0.000	0.00
236/236	34,60	0.000	0.00 0 23456/234		60	0.000	0.00
245/25	34,60	0.000	0.00 0 2345/2345		60	0.000	0.00

TOTAL CL1: 219.756
CL5: 633.575

CL2: 357.570
CL6: 289.425

CL3: 1904.962
CL7: 41.346

CL4: 2830.609
CL8: 0.000

TOTAL PCB: 6475.306

GMM
002
0452

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/04/85

VIAL NUMBER: 7

DILUTION FACTOR: 21.505

SAMPLE NAME: 05-231 TEN

PCB SUBSTITUTION PATTERN	AROCOLOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCOLOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	481.928	0.77	245/24	54,60	28.688	0.63
2/2	21,16	293.049	6.40	245/23	54,60	22.000	0.48
3	21	0.000	0.00	234/25	54,60	25.000	0.57
26	21,16	74.966	1.64	P,P'-DDE	NA	7.763	—
4	21	0.000	0.00	234/24	54	61.268	1.34
25	21,16	10.473	0.23	234/23	54,60	98.149	2.14
24	21,16	12.774	0.28	2356/25	54,60	10.946	0.24
2/3	21,16	32.903	0.72	2356/23	54,60	0.000	0.00
26/2	21,16	214.684	4.69	236/245(234/236)	54,60	24.000	0.52
2/4	21,16	139.202	3.04	34/34	48	0.000	0.00
25/2	16	171.997	3.75	2345/26(CL38)	54,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	94.816	—	2356/236(245/34)	54,60	0.000	0.00
23/2	16	75.762	1.65	245/34(2346/236)	54,60	70.407	1.54
26/4	16	157.481	3.44	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL3C)	54,60	18.279	0.40
246/2	16	39.161	0.85	234/34	54,60	0.000	0.00
25/3	16	61.999	1.35	245/245	54,60	41.006	0.91
236/2(35/2)	16	31.635	1.13	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	26.682	0.58	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	39.419	0.86	234/245	54,60	57.526	1.26
25/4(24/3)	16	240.839	5.42	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/34/24/4)	16	266.778	5.82	2346/34(2356/245)	60	0.000	0.00
23/4	16	137.352	3.00	2356/245(CL7A)	54	15.333	0.33
25/25	16,54	186.943	4.08	234/234	54,60	0.000	0.00
24/25	16,54	218.061	4.76	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	154.449	3.37	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	126.923	2.77	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	75.375	1.65	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/234/234/2(CL4B)	16,54	98.729	2.16	NI INDEX	NA	0.000	—
236/3(CL4C)	16,54	122.342	2.67	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	218.211	4.39	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	29.728	0.65	2345/245	54,60	22.989	0.50
OCTACHLOROSTYRENE	NA	0.000	—	2345/234	54,60	0.000	0.00
236/23	54,60	78.923	1.35	2346/2356	60	0.000	0.00
25/34	54,60	168.965	3.63	CL7	60	0.000	0.00
24/34	54,60	121.761	2.68	2345/2346	60	0.000	0.00
234/4	54,60	32.359	0.71	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.000	0.00	2345/2345	60	0.000	0.00

TOTAL CL1: 481.928
CL5: 487.194

CL2: 963.366
CL6: 192.956

CL3: 1369.686
CL7: 38.322

CL4: 1636.932
CL8: 0.000

TOTAL PCB: 4588.365

GMM
002
0453

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 11/04/85

VIAL NUMBER: 3

DILUTION FACTOR: 10.000

SAMPLE NAME: 85-233

PCB SUBSTITUTION PATTERN	AROCOLOR NOX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCOLOR NOX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	357.104	4.87	245/24	54,60	79.142	1.00
2/2	21,16	239.236	3.26	245/23	54,60	59.421	0.81
3	21	0.000	0.00	234/25	54,60	98.534	1.23
25	21,16	85.485	0.89	P,P'-DDE	NA	0.000	—
4	21	0.000	0.00	234/24	54	182.302	1.39
25	21,16	14.811	0.20	234/23	54,60	135.859	2.12
24	21,16	16.282	0.22	235/25	54,60	38.635	0.42
2/3	21,16	36.639	0.50	235/23	54,60	0.000	0.00
25/2	21,16	243.967	3.33	236/245(234/236)	54,60	28.158	0.27
24	21,16	187.767	2.56	34/34	NA	0.000	0.00
25/2	16	198.768	2.71	234/26(23,38)	54,60	0.000	0.00
24/2	16	0.000	0.00	234/236(235/236)	54,60	26.897	0.50
1,2,4-DICHLOROBENZENE	NA	71.388	—	235/236(245/34)	54,60	4.731	0.06
23/2	16	72.383	0.99	245/34(234/236)	54,60	85.882	1.17
25/4	16	228.628	3.12	234/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(23,38)	54,60	12.344	0.17
24/2	16	59.318	0.73	234/34	54,60	0.000	0.00
25/3	16	92.800	1.26	245/245	54,60	75.564	1.03
236/2(35/2)	16	76.995	1.05	234/235(23,38)	54,60	0.000	0.00
24/3(23,38)	16	48.681	0.68	235/34(23,38)	54,60	0.000	0.00
24/26(23,38)	16	85.743	0.98	234/245	54,60	98.812	1.24
25/4(24/3)	16	263.756	4.39	235/235(234/34)	54,60	0.000	0.00
24/4(23/34/24/4)	16	359.387	4.82	234/34(235/245)	54	0.000	0.00
23/4	16	218.250	2.87	235/245(23,38)	54	26.420	0.50
25/25	16,34	359.146	4.77	234/234	54,60	0.000	0.00
24/25	16,34	433.861	5.91	234/245(235/235)	54,60	45.008	0.61
23/25	16,34	273.358	3.73	235/234(234/234)	54,60	28.746	0.39
24/24	16,34	259.815	4.08	234/234(245/245)	54,60	77.214	1.05
23/24(23,38)	16,34	162.595	2.20	234/235(245/245(234/236)	54,60	0.000	0.00
23/234/234/2(23,38)	16,34	198.888	2.71	NOIEX	NA	0.000	—
235/3(23,38)	16,34	339.968	4.63	234/34	54,60	0.000	0.00
236/4(23,38)	16,34	424.597	5.79	234/235	54,60	0.000	0.00
235/25(23,38)	54,60	59.382	0.81	234/245	54,60	22.842	0.45
1,2,4,5-TETRACHLOROBENZENE	NA	0.000	—	234/234	54,60	0.000	0.00
236/23	54,60	59.335	1.23	234/235	54	0.000	0.00
25/34	54,60	217.782	4.39	23,38	54	0.000	0.00
24/34	54,60	248.891	3.27	234/234	54	0.000	0.00
234/4	54,60	138.424	2.16	234/245	54	0.000	0.00
236/236	54,60	0.000	0.00	234/234	54	0.000	0.00
245/25	54,60	0.000	0.00	234/234	54	0.000	0.00

TOTAL CL1: 357.104 CL2: 339.968 CL3: 1811.365 CL4: 3393.556
 CL5: 722.857 CL6: 266.678 CL7: 224.362 CL8: 0.000
 TOTAL PCB: 7286.873

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/05/85

VIAL NUMBER: 4

DILUTION FACTOR: 29.850

SAMPLE NAME: 85-234

PCB SUBSTITUTION PATTERN	ANALOR MIX	MS PCB PER ML SAMPLE	PCT 0 TOTAL 0 PCB 0	PCB SUBSTITUTION PATTERN	ANALOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	388.485	7.96 0 245/24		34,68	62.267	0.99
2/2	21,16	285.888	4.53 0 245/23		34,68	37.223	0.59
3	21	0.000	0.00 0 234/25		34,68	58.584	0.93
25	21,16	71.678	1.14 0 P,P'-DDE		NA	0.000	—
4	21	0.000	0.00 0 234/24		34	182.887	1.62
25	21,16	14.149	0.23 0 234/23		34,68	113.639	1.81
24	21,16	16.537	0.26 0 235/25		34,68	26.925	0.43
2/3	21,16	39.000	0.63 0 235/23		34,68	0.000	0.00
25/2	21,16	228.442	3.63 0 236/245(234/236)		34,68	28.889	0.32
2/4	21,16	137.848	3.14 0 34/24		48	0.000	0.00
25/2	16	185.667	2.95 0 2345/26(C138)		34,68	0.000	0.00
24/2	16	0.000	0.00 0 234/236(235/236)		34,68	9.483	0.15
NONACHLOROBENZENE	NA	65.183	— 0 235/236(245/24)		34,68	0.000	0.00
23/2	16	86.563	1.38 0 245/24(234/236)		34,68	175.996	2.80
25/4	16	181.687	2.89 0 2346/236(235/245)		34,68	0.000	0.00
4/4	21,16	0.000	0.00 0 235/245(C15C)		34,68	28.925	0.46
246/2	16	43.888	0.78 0 234/24		34,68	0.000	0.00
25/3	16	74.237	1.18 0 245/245		34,68	46.885	0.74
236/2(25/2)	16	71.648	1.14 0 234/235(C16A)		34,68	0.000	0.00
24/3(C13A)	16	34.686	0.55 0 235/24(C16B)		34,68	11.671	0.19
24/26(C13B)	16	88.536	0.96 0 234/245		34,68	38.835	0.61
25/4(24/3)	16	283.887	4.82 0 235/235(2346/24)		34,68	0.000	0.00
24/4(23/24/24/4)	16	282.463	5.29 0 2346/24(235/245)		88	0.000	0.00
23/4	16	185.488	2.95 0 235/245(C17A)		34	28.228	0.29
25/25	16,34	230.485	4.67 0 234/234		34,68	0.000	0.00
24/25	16,34	257.424	5.69 0 2346/245(235/2356)		34,68	0.000	0.00
23/25	16,34	221.994	3.69 0 235/234(2346/234)		34,68	0.000	0.00
24/24	16,34	228.854	3.63 0 2346/234(245/245)		34,68	0.000	0.00
23/24(C14A)	16,34	123.987	1.97 0 2345/2356+245/245(23456/236)		34,68	0.000	0.00
23/23+234/2(C14B)	16,34	137.578	2.31 0 INDEX		NA	0.000	—
236/2(C14C)	16,34	212.472	3.38 0 2345/24		34,68	0.000	0.00
236/4(C14D)	16,34	222.887	5.14 0 2345/235		34,68	0.000	0.00
235/26(C15A)	34,68	38.685	0.59 0 2345/245		34,68	12.836	0.20
NONACHLOROBENZENE	NA	0.000	— 0 2345/234		34,68	0.000	0.00
236/23	34,68	74.446	1.18 0 2346/2356		88	0.000	0.00
25/24	34,68	228.561	3.88 0 C17		88	0.000	0.00
24/24	34,68	185.473	2.97 0 2345/2346		88	0.000	0.00
234/4	34,68	118.564	1.76 0 23456/245		88	0.000	0.00
236/236	34,68	0.000	0.00 0 23456/234		88	0.000	0.00
245/25	34,68	0.000	0.00 0 2345/2345		88	0.000	0.00

TOTAL C1: 388.485 C2: 624.283 C3: 1812.169 C4: 2629.457
C5: 682.888 C6: 194.652 C7: 21.674 C8: 0.000

TOTAL PCB: 6294.888

GMM 002 155

--- SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/05/05

VIAL NUMBER: 5

DILUTION FACTOR: 21.106

--- SAMPLE NAME: 05-235

PCB SUBSTITUTION PATTERN	AROCOR RELX	MS PCB PER ML SAMPLE	PCT 0 TOTAL 0 PCB 0	PCB SUBSTITUTION PATTERN	AROCOR RELX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	223.333	5.12 0 245/24		34,60	62.414	0.99
2/2	21,16	234.677	3.71 0 245/23		34,60	33.813	0.54
3	21	0.000	0.00 0 234/25		34,60	32.439	0.83
36	21,16	29.427	0.94 0 P,P'-DDE		34	0.000	---
4	21	0.000	0.00 0 234/24		34	30.104	1.43
25	21,16	12.640	0.20 0 234/23		34,60	123.747	1.36
24	21,16	13.338	0.21 0 235/25		34,60	14.767	0.23
2/3	21,16	34.354	0.35 0 235/23		34,60	0.000	0.00
26/2	21,16	195.161	3.10 0 236/245(234/236)		34,60	20.974	0.33
24	21,16	171.477	2.71 0 34/34		34	0.000	0.00
25/2	16	172.772	2.73 0 2345/26(2,30)		34,60	0.000	0.00
24/2	16	0.000	0.00 0 234/236(235/236)		34,60	13.729	0.22
HEXACHLOROCYCLOPENTADIENE	10A	39.067	0.00 0 235/236(245/34)		34,60	0.000	0.00
23/2	16	35.338	0.30 0 245/34(234/236)		34,60	140.120	2.23
26/4	16	198.403	3.02 0 2346/236(235/245)		34,60	0.000	0.00
44	21,16	0.000	0.00 0 235/245(2,30)		34,60	12.663	0.20
24/2	16	40.823	0.65 0 234/34		34,60	0.000	0.00
25/3	16	75.337	1.19 0 245/245		34,60	61.228	0.97
236/2(35/2)	16	65.394	1.04 0 234/235(2,30)		34,60	0.000	0.00
24/2(2,30)	16	36.306	0.30 0 2356/34(2,30)		34,60	0.000	0.00
24/26(2,30)	16	35.168	0.57 0 234/245		34,60	65.079	1.05
25/4(24/3)	16	213.887	3.06 0 2356/235(2346/34)		34,60	0.000	0.00
24/4(23/34/24/4)	16	360.735	5.71 0 2346/34(2356/245)		34	0.000	0.00
23/4	16	130.356	2.01 0 2356/245(2,30)		34	25.068	0.41
23/25	16,34	221.932	4.32 0 234/234		34,60	0.000	0.00
24/25	16,34	260.565	5.71 0 2346/245(2356/2356)		34,60	22.817	0.36
23/25	16,34	247.643	3.92 0 2356/234(2346/234)		34,60	41.906	0.66
24/24	16,34	223.275	3.63 0 2346/234(245/245)		34,60	0.000	0.00
23/24(2,30)	16,34	138.063	2.19 0 2345/2356(245/245(23456/236)		34,60	0.000	0.00
23/234/234/2(2,30)	16,34	221.267	3.19 0 HIREX		34	0.000	---
236/3(2,30)	16,34	204.761	4.31 0 2345/34		34,60	0.000	0.00
236/4(2,30)	16,34	249.215	5.53 0 2345/235		34,60	0.000	0.00
235/26(2,30)	34,60	49.333	0.78 0 2345/245		34,60	32.775	0.52
HEXACHLOROCYCLOPENTADIENE	10A	0.000	0.00 0 2345/234		34,60	0.000	0.00
236/23	34,60	77.329	1.22 0 2346/2356		34	0.000	0.00
25/34	34,60	200.100	4.36 0 2,7		34	0.000	0.00
24/34	34,60	222.333	3.92 0 2345/2346		34	0.000	0.00
234/4	34,60	132.320	2.09 0 23456/245		34	0.000	0.00
236/236	34,60	0.000	0.00 0 23456/234		34	0.000	0.00
245/25	34,60	0.000	0.00 0 2345/2345		34	0.000	0.00

TOTAL CL1: 223.333
CL3: 630.333

CL2: 223.321
CL4: 120.445

CL5: 1397.396
CL7: 123.366

CL6: 2325.310
CL8: 0.000

TOTAL PCB: 6317.730

SAMPLE TYPE: DIPOLINDIAL

DATE ANALYZED: 10/05/85

VIAL NUMBER: 6

DILUTION FACTOR: 24.271

SAMPLE NAME: 85-238

PCB SUBSTITUTION PATTERN	AROCOR RELX	MS PCB PEL HL SAMPLE	PCT 0 TOTAL 0 PCB 0	PCB SUBSTITUTION PATTERN	AROCOR RELX	MS PCB PEL HL SAMPLE	PCT TOTAL PCB
2	21,16	385.423	3.67 0 245/24		34,60	75.993	1.12
2/2	21,16	223.504	3.29 0 245/23		34,60	46.115	0.68
3	21	0.000	0.00 0 234/25		34,60	36.794	0.04
26	21,16	62.571	0.32 0 P,P'-800		34	0.000	---
4	21	0.000	0.00 0 234/24		34	38.686	1.45
25	21,16	15.145	0.22 0 234/23		34,60	143.927	2.12
24	21,16	15.970	0.24 0 2356/25		34,60	10.761	0.28
2/3	21,16	35.404	0.32 0 2356/23		34,60	0.000	0.00
26/2	21,16	177.275	2.61 0 236/245(234/236)		34,60	12.552	0.20
2/4	21,16	104.232	1.34 0 34/24		48	0.000	0.00
25/2	16	167.616	2.47 0 2345/26(CL38)		34,60	0.000	0.00
24/2	16	0.000	0.00 0 234/236(2356/236)		34,60	0.000	0.00
HEXACHLOROBENZENE	30	61.327	0.32 0 2356/236(245/34)		34,60	0.000	0.00
23/2	16	84.463	1.24 0 245/34(2346/236)		34,60	104.074	1.53
26/4	16	207.274	3.05 0 2346/236(235/245)		34,60	0.000	0.00
4/4	21,16	0.000	0.00 0 235/245(CL3C)		34,60	10.003	0.27
246/2	16	20.761	0.37 0 234/34		34,60	0.000	0.00
25/3	16	81.515	1.21 0 245/245		34,60	75.987	1.11
236/2(25/2)	16	88.782	0.89 0 234/235(CL6A)		34,60	0.000	0.00
24/3(CL3A)	16	38.445	0.57 0 2356/34(CL6B)		34,60	0.000	0.00
24/26(CL3B)	16	34.100	0.80 0 234/245		34,60	85.855	1.26
25/4(24/2)	16	306.226	4.95 0 2356/235(2346/34)		34,60	0.000	0.00
24/4(23/24/24/4)	16	253.386	3.20 0 2346/34(2356/245)		34	0.000	0.00
23/4	16	104.230	2.71 0 2356/245(CL7A)		34	22.232	0.33
25/25	16,34	943.410	9.06 0 234/234		34,60	0.000	0.00
24/25	16,34	413.257	6.17 0 2346/245(2356/2356)		34,60	77.619	1.14
23/25	16,34	263.243	3.88 0 2356/234(2346/234)		34,60	20.936	0.44
24/24	16,34	277.927	4.89 0 2346/234(245/245)		34,60	0.000	0.00
23/24(CL4A)	16,34	139.776	2.35 0 2345/2356+245/245(23456/236)		34,60	0.000	0.00
23/234/234/2(CL4B)	16,34	228.904	3.37 0 NO IEX		34	0.000	---
236/3(CL4C)	16,34	223.212	4.85 0 2345/34		34,60	0.000	0.00
236/4(CL4D)	16,34	423.682	6.24 0 2345/235		34,60	0.000	0.00
235/26(CL5A)	34,60	38.663	0.86 0 2345/245		34,60	19.450	0.29
HEXACHLOROCYCLOPENTADIENE	30	0.000	0.00 0 2345/234		34,60	0.000	0.00
236/23	34,60	32.085	1.37 0 2346/2356		34	0.000	0.00
25/34	34,60	304.356	3.66 0 CL7		34	0.000	0.00
24/34	34,60	163.077	2.40 0 2345/2346		34	0.000	0.00
234/4	34,60	133.835	1.37 0 23456/245		34	0.000	0.00
236/236	34,60	0.000	0.00 0 23456/234		34	0.000	0.00
245/25	34,60	0.000	0.00 0 2345/2345		34	0.000	0.00

TOTAL CL1: 385.423
CL3: 677.137

CL2: 487.047
CL5: 211.764

CL3: 1630.890
CL7: 140.437

CL4: 3230.231
CL8: 0.000

TOTAL PCB: 6731.809

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/05/85

VIAL NUMBER: 9

DILUTION FACTOR: 10.214

SAMPLE NAME: 85-239

PCB SUBSTITUTION PATTERN	AROCOLOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCOLOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
1	21,16	289.674	3.88	245/24	94,60	32.236	1.15
2/2	21,16	288.748	3.36	245/23	94,60	67.829	0.85
3	21	0.000	0.00	234/25	94,60	183.528	1.30
4	21,16	61.631	0.77	P,P'-DDE	NA	0.000	—
5	21	0.000	0.00	234/24	94	120.886	1.64
6	21,16	11.637	0.15	234/23	94,60	190.191	2.30
7	21,16	11.347	0.14	235/25	94,60	23.350	0.42
8	21,16	26.530	0.33	235/23	94,60	0.000	0.00
9/3	21,16	132.305	1.91	236/245(234/236)	94,60	26.047	0.34
10/2	21,16	74.459	0.93	24/34	94,60	0.000	0.00
11/4	16	183.907	2.38	2345/26(21,38)	94,60	0.000	0.00
12/2	16	0.000	0.00	234/236(235/236)	94,60	16.303	0.21
13/2	16	72.363	—	235/236(245/34)	94,60	5.005	0.06
14/2	16	36.425	1.21	245/34(234/236)	94,60	169.300	2.13
15/4	16	221.992	2.70	234/236(235/245)	94,60	0.000	0.00
16/4	21,16	0.000	0.00	235/245(21,38)	94,60	47.775	0.60
17/2	16	46.191	0.58	234/34	94,60	0.000	0.00
18/2	16	112.125	1.40	245/245	94,60	73.548	0.92
19/2(25/2)	16	66.044	0.83	234/235(21,38)	94,60	24.630	0.31
20/3(21,34)	16	36.002	0.71	235/34(21,38)	94,60	17.050	0.22
21/26(21,38)	16	36.301	0.71	234/245	94,60	63.713	0.80
22/4(24/3)	16	312.170	3.31	235/235(234/24)	94,60	39.215	0.49
23/4(23/34/24/4)	16	446.044	5.39	234/24(235/245)	94	0.000	0.00
24/4	16	223.741	2.80	235/245(21,38)	94,60	26.356	0.33
25/25	16,34	230.632	0.99	234/234	94,60	0.000	0.00
26/25	16,34	337.204	6.72	234/245(235/236)	94,60	30.071	0.36
27/25	16,34	213.627	2.93	235/234(234/234)	94,60	22.494	0.41
28/24	16,34	200.305	2.76	234/234(245/245)	94,60	0.000	0.00
29/24(21,40)	16,34	182.030	2.29	2345/235/245(2345/236)	94,60	0.000	0.00
30/23/24/2(21,40)	16,34	342.047	3.04	HLRFX	NA	0.000	—
31/3(21,40)	16,34	377.285	4.72	2345/34	94,60	39.356	0.74
32/4(21,40)	16,34	403.673	6.85	2345/235	94,60	0.000	0.00
33/26(21,34)	94,60	70.386	0.88	2345/245	94,60	20.305	0.49
34/26(21,34)	NA	0.000	—	2345/234	94,60	0.000	0.00
35/23	94,60	187.736	1.35	2346/2356	94,60	0.000	0.00
36/24	94,60	435.679	5.45	21,7	94,60	0.000	0.00
37/24	94,60	286.400	3.39	2345/2346	94,60	0.000	0.00
38/4	94,60	195.363	2.45	23456/245	94,60	27.350	0.34
39/236	94,60	0.000	0.00	23456/234	94,60	0.000	0.00
40/25	94,60	0.000	0.00	2345/2345	94,60	0.000	0.00

TOTAL CL1: 289.674

CL2: 634.439

CL3: 1806.332

CL4: 3823.108

CL5: 332.812

CL6: 264.000

CL7: 172.049

CL8: 27.350

TOTAL PCB: 7930.171

GMM 002 0458

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/05/85

VIAL NUMBER: 18

DILUTION FACTOR: 19.230

SAMPLE NAME: 65-240

PCB SUBSTITUTION PATTERN	AROCOR NEX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCOR NEX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	235.933	5.04	245/24	34,60	25.979	0.77
2/2	21,16	140.417	3.17	245/23	34,60	29.325	0.84
3	21	0.000	0.00	234/23	34,60	66.247	1.42
25	21,16	40.960	0.90	P,P'-DDE	NA	0.000	—
4	21	0.000	0.00	234/24	34	71.705	1.53
25	21,16	5.307	0.11	234/23	34,60	146.417	3.13
24	21,16	7.305	0.16	2356/25	34,60	29.538	0.80
2/3	21,16	10.632	0.40	2356/23	34,60	0.000	0.00
25/2	21,16	101.477	2.17	236/245(234/236)	34,60	17.230	0.37
24	21,16	61.062	1.75	34/34	NA	0.000	0.00
25/2	16	100.573	2.15	2345/26(CL38)	34,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	34,60	2.461	0.07
1,2,4-CHLOROBENZENE	NA	41.075	—	2356/236(245/34)	34,60	0.000	0.00
23/2	16	47.056	1.01	245/34(2346/236)	34,60	37.130	2.00
25/4	16	123.918	2.06	2346/236(235/245)	34,60	0.000	0.00
24	21,16	0.000	0.00	235/245(CL3C)	34,60	20.019	0.60
246/2	16	24.018	0.51	234/34	34,60	0.000	0.00
25/3	16	30.402	1.25	245/245	34,60	20.131	0.65
236/2(33/2)	16	30.430	0.82	234/235(CL6A)	34,60	0.000	0.00
24/3(CL3A)	16	31.025	0.60	2356/34(CL6B)	34,60	0.000	0.00
24/26(CL3B)	16	32.045	0.70	234/245	34,60	120.031	2.95
25/4(24/3)	26	228.759	4.89	2356/235(2346/34)	34,60	0.000	0.00
24/4(23/34/24/4)	16	236.720	5.49	2346/34(2356/245)	34	0.000	0.00
23/4	16	120.322	2.65	2356/245(CL7A)	34	12.653	0.27
25/25	16,34	214.145	4.30	234/234	34,60	0.000	0.00
24/25	16,34	281.277	6.01	2346/245(2356/2356)	34,60	0.000	0.00
23/25	16,34	164.070	3.51	2356/234(2346/234)	34,60	0.000	0.00
24/24	16,34	175.370	3.75	2346/234(245/245)	34,60	0.000	0.00
23/24(CL4A)	16,34	95.430	2.04	2345/2356(245/245(23456/236)	34,60	0.000	0.00
23/234/24/2(CL4B)	16,34	118.341	2.53	NO DET	NA	0.000	—
236/3(CL4C)	16,34	200.336	5.57	2345/34	34,60	0.000	0.00
236/4(CL4D)	16,34	256.470	5.40	2345/235	34,60	0.000	0.00
235/26(CL3A)	34,60	29.922	0.70	2345/245	34,60	29.631	0.63
1,2,4,5-CHLOROBENZENE	NA	0.000	—	2345/234	34,60	0.000	0.00
236/23	34,60	94.535	2.02	2346/2356	34	0.000	0.00
23/24	34,60	257.682	5.51	CL7	34	0.000	0.00
24/24	34,60	151.705	3.24	2345/2346	34	0.000	0.00
234/4	34,60	100.225	2.21	23456/245	34	0.000	0.00
236/236	34,60	0.000	0.00	23456/234	34	0.000	0.00
246/25	34,60	0.000	0.00	2345/2345	34	0.000	0.00

TOTAL	CL1: 235.933	CL2: 202.003	CL3: 1092.031	CL4: 2178.432
	CL5: 205.304	CL6: 240.529	CL7: 42.344	CL8: 0.000
TOTAL PCB:	4677.227			

GMM 002 0459

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/25/85

VIAL NUMBER: 11

DILUTION FACTOR: 24.390

SAMPLE NAME: 85-241

PCB SUBSTITUTION PATTERN	ANALOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	ANALOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	270.078	5.02	245/24	34,60	37.053	0.60
2/2	21,16	174.251	3.15	245/23	34,60	43.435	0.70
3	21	0.000	0.00	234/25	34,60	89.053	1.62
25	21,16	44.463	0.80	P,P'-DDE	NA	0.000	—
4	21	0.000	0.00	234/24	34	71.735	1.30
25	21,16	11.700	0.21	234/23	34,60	107.053	1.95
24	21,16	11.439	0.21	2356/25	34,60	24.122	0.44
2/3	21,16	25.244	0.47	2356/23	34,60	0.000	0.00
26/2	21,16	122.056	2.20	236/245(234/236)	34,60	21.122	0.30
2/4	21,16	114.077	2.07	24/34	NA	0.000	0.00
25/2	16	125.633	2.29	2345/26(DL30)	34,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	34,60	7.073	0.13
HEXACHLOROCYCLOPENTADIENE	NA	30.575	—	2356/236(245/34)	34,60	0.000	0.00
23/2	16	71.194	1.29	245/34(2346/236)	34,60	95.353	1.72
26/4	16	175.359	3.17	2346/236(235/245)	34,60	0.000	0.00
4/4	21,16	140.633	2.54	235/245(DL3C)	34,60	35.536	0.64
246/2	16	22.707	0.41	234/34	34,60	80.650	1.24
25/3	16	83.609	1.51	245/245	34,60	49.650	0.90
236/2(35/2)	16	40.097	0.72	234/235(DL6A)	34,60	0.000	0.00
24/3(DL3A)	16	20.122	0.36	2356/34(DL6B)	34,60	0.000	0.00
24/26(DL3B)	16	32.505	0.59	234/245	34,60	114.995	2.08
25/4(24/3)	16	200.002	3.07	2356/235(2346/34)	34,60	0.000	0.00
24/4(23/3+24/4)	16	942.720	6.19	2346/34(2356/245)	NA	0.000	0.00
25/4	16	146.072	2.64	2356/245(DL7A)	34	19.244	0.35
25/25	16,34	947.046	4.46	234/234	34,60	0.000	0.00
24/25	16,34	223.631	5.04	2346/245(2356/2356)	34,60	0.000	0.00
23/25	16,34	139.535	2.00	2356/234(2346/234)	34,60	17.732	0.32
34/24	16,34	201.503	3.64	2346/234(245/245)	34,60	0.000	0.00
23/24(DL4A)	16,34	90.292	1.77	2345/2356+245/245(23456/236)	34,60	0.000	0.00
23/23+234/2(DL4B)	16,34	121.350	2.20	NA	NA	0.000	—
236/3(DL4C)	16,34	229.949	4.15	2345/34	34,60	0.000	0.00
236/4(DL4D)	16,34	271.460	6.70	2345/235	34,60	0.000	0.00
235/26(DL5A)	34,60	21.146	0.32	2345/245	34,60	15.000	0.27
HEPTACHLOROCYCLOPENTADIENE	NA	0.000	—	2345/234	34,60	0.000	0.00
236/23	34,60	64.735	1.17	2346/2356	NA	0.000	0.00
23/34	34,60	230.315	4.16	CL7	NA	0.000	0.00
24/34	34,60	229.022	4.21	2345/2346	NA	0.000	0.00
234/4	34,60	103.243	1.06	23456/245	NA	0.000	0.00
236/236	34,60	0.000	0.00	23456/234	NA	0.000	0.00
245/25	34,60	0.000	0.00	2345/2345	NA	0.000	0.00

TOTAL CL1: 270.078
CL5: 630.677

CL2: 923.726
CL6: 232.310

CL3: 1301.015
CL7: 21.575

CL4: 2421.015
CL8: 0.000

TOTAL PCB: 3540.100

GMM 002 0460

SAMPLE TYPE: DIFFERENTIAL

DATE ANALYZED: 10/06/85

VIAL NUMBER: 12

DILUTION FACTOR: 14.727

SAMPLE NAME: 00-242

PCB SUBSTITUTION PATTERN	AROCLO MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCLO MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
0	21,16	204.835	4.28	245/24	34,60	77.642	1.14
2/2	21,16	179.286	2.64	245/23	34,60	34.843	0.81
3	21	0.000	0.00	234/25	34,60	81.343	1.28
25	21,16	38.484	0.74	P,P'-DDE	NA	0.000	—
4	21	0.000	0.00	234/24	34	183.428	1.52
25	21,16	18.662	0.16	234/23	34,60	148.772	2.19
24	21,16	19.795	0.16	235/25	34,60	28.873	0.30
2/3	21,16	25.895	0.37	235/23	34,60	3.893	0.05
25/2	21,16	145.223	2.14	236/245(234/236)	34,60	22.061	0.33
24/4	21,16	123.265	1.82	34/34	48	0.000	0.00
25/2	16	168.133	2.48	2345/26(C138)	34,60	0.000	0.00
24/2	16	0.000	0.00	234/236(235/236)	34,60	11.575	0.17
NONCHLOROBENZENE	NA	88.245	—	235/236(245/24)	34,60	0.000	0.00
23/2	16	77.739	1.15	245/24(234/236)	34,60	85.624	1.28
25/4	16	238.238	3.81	2346/236(235/245)	34,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(C13C)	34,60	42.314	0.63
24/2	16	32.782	0.48	234/24	34,60	0.000	0.00
25/3	16	188.383	1.49	245/245	34,60	39.811	0.87
236/2(25/2)	16	33.817	0.78	234/235(C13A)	34,60	0.000	0.00
24/3(C13A)	16	47.333	0.78	235/24(C13B)	34,60	3.873	0.06
24/26(C13B)	16	46.611	0.69	234/245	34,60	39.333	0.79
23/4(24/3)	16	371.885	5.38	235/235(2346/24)	34,60	3.469	0.14
23/4(23/24/4)	16	475.977	7.82	2346/24(2356/245)	68	0.000	0.00
23/4	16	135.147	2.88	235/245(C17A)	34	13.748	0.20
23/25	16,34	289.373	3.81	234/234	34,60	0.000	0.00
24/25	16,34	448.887	6.63	2346/245(2356/2356)	34,60	37.171	0.55
23/25	16,34	231.464	3.71	2356/234(2346/234)	34,60	18.888	0.15
24/24	16,34	236.368	3.78	2346/234(245/245)	34,60	0.000	0.00
23/24(C14A)	16,34	134.899	2.88	2345/2356(245/245(23456/236)	34,60	0.000	0.00
23/23(234/2(C14B))	16,34	144.131	2.42	NI/EX	NA	0.000	—
236/3(C14C)	16,34	285.733	4.21	2345/24	34,60	0.000	0.00
236/4(C14D)	16,34	417.325	6.16	2345/235	34,60	0.000	0.00
235/26(C15A)	34,60	78.335	1.88	2345/245	34,60	14.384	0.22
NONCHLOROBENZENE	NA	0.000	—	2345/234	34,60	7.143	0.11
236/23	34,60	89.385	1.32	2346/2356	68	0.000	0.00
23/24	34,60	257.616	3.27	0.7	68	0.000	0.00
24/24	34,60	236.677	3.78	2345/2346	68	0.000	0.00
234/4	34,60	145.382	2.44	23456/245	68	0.000	0.00
236/236	34,60	0.000	0.00	23456/234	68	0.000	0.00
245/25	34,60	0.000	0.00	2345/2345	68	0.000	0.00

TOTAL CL1: 204.835
CL5: 713.311

CL2: 289.388
CL6: 216.133

CL3: 1841.818
CL7: 82.353

CL4: 2232.164
CL8: 0.000

TOTAL PCB: 6782.364

GM 002 0461

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/06/85

VIAL NUMBER: 15

DILUTION FACTOR: 19.007

SAMPLE NAME: 85-243

PCB SUBSTITUTION PATTERN	ANALYST RELX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	ANALYST RELX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21.16	419.005	4.45	245/24	34.60	109.700	1.16
2/2	21.16	236.185	2.74	245/23	34.60	89.209	0.96
3	21	0.000	0.00	234/25	34.60	125.112	1.30
25	21.16	68.258	0.72	P,P'-DDE	34	0.000	—
4	21	0.000	0.00	234/24	34	139.248	1.63
25	21.16	15.572	0.16	234/23	34.60	227.147	2.41
24	21.16	17.489	0.19	235/25	34.60	87.987	0.93
2/3	21.16	37.626	0.40	235/23	34.60	0.000	0.00
25/2	21.16	198.637	2.11	236/245(234/236)	34.60	47.939	0.51
24/4	21.16	185.894	1.98	24/24	34	0.000	0.00
25/2	16	197.384	2.09	2345/26(CL38)	34.60	0.000	0.00
24/2	16	0.000	0.00	234/236(235/236)	34.60	22.587	0.25
HEXACHLOROCYCLOPENTADIENE	34	87.937	—	235/236(245/24)	34.60	8.157	0.05
23/2	16	39.427	0.39	245/24(234/236)	34.60	175.484	1.86
25/4	16	233.245	2.47	234/236(235/245)	34.60	0.000	0.00
4/4	21.16	0.000	0.00	235/245(CL3C)	34.60	57.125	0.61
24/2	16	46.782	0.50	234/24	34.60	0.000	0.00
25/3	16	124.367	1.32	245/245	34.60	36.251	1.02
236/2(35/2)	16	75.134	0.80	234/235(CL6A)	34.60	0.000	0.00
24/2(CL3A)	16	75.663	0.79	235/24(CL6B)	34.60	0.000	0.00
24/26(CL3B)	16	72.338	0.77	234/245	34.60	79.379	0.75
25/4(24/3)	16	423.197	4.48	235/235(234/24)	34.60	25.960	0.28
24/4(23/24/4)	16	332.193	3.63	234/24(235/245)	34	0.000	0.00
23/4	16	332.783	3.64	235/245(CL7A)	34	34.329	0.37
25/25	16,34	465.878	4.93	234/234	34.60	0.000	0.00
24/25	16,34	623.383	6.61	234/245(235/235)	34.60	47.272	0.50
23/25	16,34	249.848	2.71	235/234(234/234)	34.60	13.431	0.14
24/24	16,34	389.168	4.13	234/234(245/245)	34.60	0.000	0.00
23/24(CL4A)	16,34	211.226	2.24	2345/235(245/245(2345/236)	34.60	0.000	0.00
23/23(234/2(CL4B)	16,34	229.331	2.44	HEX	34	0.000	—
236/2(CL4C)	16,34	334.868	3.55	2345/24	34.60	0.000	0.00
235/4(CL4D)	16,34	579.779	6.14	2345/235	34.60	0.000	0.00
235/26(CL5A)	34,60	88.829	0.96	2345/245	34.60	38.348	0.33
HEXACHLOROCYCLOPENTADIENE	34	0.000	—	2345/234	34.60	28.195	0.30
236/23	34,60	145.394	1.55	234/235	34	0.000	0.00
25/24	34,60	484.686	5.24	CL7	34	0.000	0.00
24/24	34,60	383.242	4.12	2345/234	34	0.000	0.00
234/4	34,60	225.873	2.39	2345/245	34	0.000	0.00
236/236	34,60	0.000	0.00	2345/234	34	0.000	0.00
245/25	34,60	0.000	0.00	2345/2345	34	0.000	0.00

TOTAL CL1: 419.005 CL2: 383.857 CL3: 2487.877 CL4: 4482.368
CL5: 1186.894 CL6: 381.868 CL7: 185.874 CL8: 0.000

TOTAL PCB: 9438.537

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/11/85

VIAL NUMBER: 4

DILUTION FACTOR: 0.051

SAMPLE NAME: 85-260 H20

PCB SUBSTITUTION PATTERN	AROCLOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCLOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	94,60	0.000	0.00
2/2	21,16	14.086	25.14	245/23	94,60	0.000	0.00
3	21	0.000	0.00	234/25	94,60	0.184	0.33
26	21,16	5.311	9.48	P,P'-DDE	NA	0.000	—
4	21	0.000	0.00	234/24	94	0.000	0.00
25	21,16	0.000	0.00	234/23	94,60	0.256	0.46
24	21,16	0.000	0.00	2356/25	94,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	94,60	0.000	0.00
26/2	21,16	5.343	9.54	226/245(234/236)	94,60	0.183	0.33
2/4	21,16	1.456	2.68	34/34	94	0.000	0.00
25/2	16	2.916	5.21	2345/26(CL5B)	94,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	94,60	0.000	0.00
HEXACHLOROBENZENE	NA	1.295	—	2356/236(245/34)	94,60	0.000	0.00
23/2	16	2.911	5.19	245/34(2346/236)	94,60	0.000	0.00
26/4	16	2.916	4.49	2346/236(235/245)	94,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	94,60	0.000	0.00
246/2	16	0.582	1.04	234/34	94,60	0.000	0.00
25/3	16	0.612	1.09	245/245	94,60	0.000	0.00
236/2(35/2)	16	0.781	1.39	234/235(CL6A)	94,60	0.000	0.00
24/3(CL3A)	16	0.258	0.46	2356/34(CL6B)	94,60	0.000	0.00
24/26(CL3B)	16	0.555	0.99	234/245	94,60	0.000	0.00
25/4(24/3)	16	1.056	3.31	2356/235(2346/34)	94,60	0.000	0.00
24/4(23/3+24/4)	16	2.388	4.62	2346/34(2356/245)	94	0.000	0.00
23/4	16	0.000	0.00	2356/245(CL7A)	94	0.000	0.00
25/25	16,54	2.295	4.18	234/234	94,60	0.000	0.00
24/25	16,54	1.938	3.44	2346/245(2356/2356)	94,60	0.000	0.00
23/25	16,54	1.614	2.88	2356/234(2346/234)	94,60	0.000	0.00
24/24	16,54	1.008	1.88	2346/234(245/245)	94,60	0.000	0.00
23/24(CL4A)	16,54	0.376	0.67	2345/2356+245/245(23456/236)	94,60	0.000	0.00
23/23+234/2(CL4B)	16,54	0.740	1.32	MIREX	NA	0.000	—
236/3(CL4C)	16,54	1.266	2.26	2345/34	94,60	0.000	0.00
236/4(CL4D)	16,54	1.984	3.48	2345/235	94,60	0.000	0.00
235/26(CL5A)	94,60	0.189	0.34	2345/245	94,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	—	2345/234	94,60	0.000	0.00
236/23	94,60	1.049	1.87	2346/2356	94	0.000	0.00
25/34	94,60	0.664	1.19	CL7	94	0.000	0.00
24/34	94,60	0.241	0.43	2345/2346	94	0.000	0.00
234/4	94,60	0.361	0.64	23456/245	94	0.000	0.00
236/236	94,60	0.000	0.00	23456/234	94	0.000	0.00
245/25	94,60	0.000	0.00	2345/2345	94	0.000	0.00

TOTAL CL1: 0.000
CL5: 1.678

CL2: 28.053
CL6: 0.183

CL3: 19.001
CL7: 0.000

CL4: 14.317
CL8: 0.000

TOTAL PCB: 96.031

GM 002 0463

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/11/85

VIAL NUMBER: 5

DILUTION FACTOR: 0.689

SAMPLE NAME: 05-261 N20

PCB SUBSTITUTION PATTERN	AROCLO MIX	MG PCB PER ML SAMPLE	PCT % TOTAL % PCB	PCB SUBSTITUTION PATTERN	AROCLO MIX	MG PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	0.031	0.04
2/2	21,16	13.731	19.32	245/23	54,60	0.104	0.15
3	21	0.000	0.00	234/25	54,60	0.239	0.34
26	21,16	0.250	11.61	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	54	0.307	0.43
25	21,16	0.000	0.00	234/23	54,60	0.631	0.89
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	6.309	0.99	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	2.921	4.11	34/34	48	0.000	0.00
25/2	16	3.301	4.93	2345/26(CL5B)	54,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	54,60	0.334	0.47
HEXACHLOROBENZENE	NA	2.085	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	3.747	5.27	245/34(2346/236)	54,60	0.077	0.11
26/4	16	2.401	3.49	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	0.708	1.00	234/34	54,60	0.000	0.00
25/3	16	0.792	1.11	245/245	54,60	0.111	0.16
236/2(35/2)	16	0.944	1.33	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	0.356	0.70	234/245	54,60	0.023	0.03
25/4(24/3)	16	1.076	2.64	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	2.613	3.68	2346/34(2356/245)	60	0.000	0.00
23/4	16	1.161	1.63	2356/245(CL7A)	54	0.000	0.00
25/25	16,54	2.963	4.10	234/234	54,60	0.000	0.00
24/25	16,54	2.421	3.41	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	2.034	2.86	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	1.290	1.80	2346/234(245/245)	54,60	0.000	0.00
23/24(CL4A)	16,54	0.060	1.21	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	1.617	2.20	HI REX	NA	0.000	---
236/3(CL4C)	16,54	1.000	2.66	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	2.675	3.76	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	0.696	0.90	2345/245	54,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	0.703	0.99	2346/2356	60	0.000	0.00
25/34	54,60	0.063	1.21	CL7	60	0.000	0.00
24/34	54,60	0.345	0.49	2345/2346	60	0.000	0.00
234/4	54,60	1.100	1.66	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.000	0.00	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000 CL2: 24.302 CL3: 22.561 CL4: 20.359
CL5: 2.700 CL6: 0.468 CL7: 0.000 CL8: 0.000

TOTAL PCB: 71.077

GMM 002 0464

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/11/85

VIAL NUMBER: 6

DILUTION FACTOR: 0.720

SAMPLE NAME: 85-262 H20

PCB SUBSTITUTION PATTERN	AROCOR MIX	MG PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCOR MIX	MG PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	34,60	0.000	0.00
2/2	21,16	16.964	23.99	245/23	34,60	0.000	0.00
3	21	0.000	0.00	234/25	34,60	0.000	0.13
26	21,16	6.764	9.36	P,P'-DDE	NA	0.041	—
4	21	0.000	0.00	234/24	34	0.000	0.00
25	21,16	0.000	0.00	234/23	34,60	0.000	0.00
24	21,16	0.000	0.00	2356/23	34,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	34,60	0.000	0.00
26/2	21,16	7.373	10.43	236/245(234/236)	34,60	0.000	0.00
2/4	21,16	3.488	4.93	34/34	48	0.000	0.00
25/2	16	3.226	4.36	2345/26(CL38)	34,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	34,60	0.000	0.00
NONACHLOROBENZENE	NA	1.157	—	2356/236(245/34)	34,60	0.000	0.00
23/2	16	2.635	3.61	245/34(2346/236)	34,60	0.000	0.00
26/4	16	2.036	2.86	2346/236(235/245)	34,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	34,60	0.000	0.00
246/2	16	0.578	0.81	234/34	34,60	0.000	0.00
23/3	16	0.639	0.90	245/245	34,60	0.000	0.00
236/2(35/2)	16	0.009	1.26	234/235(CL6A)	34,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	34,60	0.000	0.00
24/26(CL3B)	16	0.722	1.02	234/245	34,60	0.000	0.00
25/4(24/3)	16	2.141	3.03	2356/235(2346/34)	34,60	0.000	0.00
24/4(23/3+24/4)	16	3.174	4.49	2346/34(2356/245)	60	0.000	0.00
22/4	16	0.000	0.00	2356/245(CL7A)	34	0.000	0.00
25/25	16,34	2.781	3.93	234/234	34,60	0.000	0.00
24/25	16,34	2.344	3.60	2346/245(2356/2356)	34,60	0.000	0.00
23/25	16,34	2.169	3.07	2356/234(2346/234)	34,60	0.000	0.00
24/24	16,34	1.594	2.25	2346/234(245/245)	34,60	0.000	0.00
23/24(CL4A)	16,34	1.273	1.80	2345/2356+245/245(23456/236)	34,60	0.000	0.00
23/23+234/2(CL4B)	16,34	1.383	2.00	MIREX	NA	0.000	—
236/3(CL4C)	16,34	2.100	3.09	2345/34	34,60	0.000	0.00
236/4(CL4D)	16,34	2.584	3.65	2345/235	34,60	0.000	0.00
235/26(CL5A)	34,60	0.410	0.58	2345/245	34,60	0.000	0.00
NONACHLOROSTYRENE	NA	0.000	—	2345/234	34,60	0.000	0.00
236/23	34,60	0.734	1.07	2346/2356	60	0.000	0.00
25/34	34,60	0.352	0.50	CL7	60	0.000	0.00
24/34	34,60	0.356	0.50	2345/2346	60	0.000	0.00
234/4	34,60	0.600	0.85	23456/245	60	0.000	0.00
236/236	34,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	34,60	0.000	0.00	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000
CL5: 1.254

CL2: 27.216
CL6: 0.000

CL3: 21.344
CL7: 0.000

CL4: 20.302
CL8: 0.000

TOTAL PCB: 70.716

GMN 002 0465

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/11/85

VIAL NUMBER: 7

DILUTION FACTOR: 0.684

SAMPLE NAME: 85-263 H20

PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	0.000	0.00
2/2	21,16	12.478	21.04	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.129	0.22
26	21,16	6.120	10.32	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	1.153	1.94
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	5.835	9.04	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	2.761	4.66	34/34	48	0.000	0.00
25/2	16	2.531	4.27	2345/26(CL58)	54,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	1.445	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	3.459	5.90	245/34(2346/236)	54,60	0.000	0.00
26/4	16	1.000	3.17	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	0.445	0.75	234/34	54,60	0.000	0.00
25/3	16	0.647	1.09	245/245	54,60	0.000	0.00
236/2(35/2)	16	0.779	1.31	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	0.452	0.83	234/245	54,60	0.000	0.00
25/4(24/3)	16	1.547	2.61	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	1.900	2.66	2346/34(2356/245)	60	0.000	0.00
23/4	16	0.000	0.00	2356/245(CL7A)	54	0.000	0.00
25/25	16,54	1.032	3.19	234/234	54,60	0.000	0.00
24/25	16,54	1.990	3.36	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	1.399	2.70	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	1.205	2.03	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	0.829	1.40	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/234/234/2(CL4B)	16,54	1.330	2.24	HIREX	NA	0.000	---
236/3(CL4C)	16,54	1.312	3.22	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	3.007	5.07	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	0.306	0.52	2345/245	54,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	1.341	2.26	2346/2356	60	0.000	0.00
25/34	54,60	0.652	1.10	CL7	60	0.000	0.00
24/34	54,60	0.236	0.40	2345/2346	60	0.000	0.00
234/4	54,60	1.120	1.89	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.000	0.00	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000
CL5: 2.930

CL2: 21.360
CL6: 0.000

CL3: 17.318
CL7: 0.000

CL4: 17.406
CL8: 0.000

TOTAL PCB: 39.293

GMM 002 0466

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/11/05

VIAL NUMBER: 10

DILUTION FACTOR: 0.663

SAMPLE NAME: 05-264 120

PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	0.000	0.00
2/2	21,16	9.513	20.05	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	4.649	9.00	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	0.151	0.32
24	21,16	0.000	0.00	2356/25	54,60	0.083	0.17
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	4.720	9.95	236/245(234/236)	54,60	0.219	0.46
2/4	21,16	1.704	3.76	34/34	48	0.000	0.00
25/2	16	1.900	4.17	2345/26(CL58)	54,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	0.903	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	2.460	5.18	245/34(2346/236)	54,60	0.000	0.00
26/4	16	2.141	4.51	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	0.193	0.41	234/34	54,60	0.000	0.00
25/3	16	0.421	0.89	245/245	54,60	0.095	0.20
236/2(35/2)	16	0.520	1.11	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	0.381	0.80	234/245	54,60	0.000	0.00
25/4(24/3)	16	1.053	2.22	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/24/4)	16	1.456	3.07	2346/34(2356/245)	60	0.000	0.00
23/4	16	0.616	1.30	2356/245(CL7A)	54	0.000	0.00
25/25	16,54	1.695	3.57	234/234	54,60	0.000	0.00
24/25	16,54	1.829	3.85	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	1.453	3.06	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	1.172	2.47	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	0.727	1.53	2345/2356(245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	1.809	2.76	NIHDX	NA	0.000	---
236/3(CL4C)	16,54	1.624	3.42	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	2.240	4.72	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	0.317	0.67	2345/245	54,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	1.012	2.13	2346/2356	60	0.000	0.00
25/34	54,60	0.403	0.85	CL7	60	0.000	0.00
24/34	54,60	0.214	0.45	2345/2346	60	0.000	0.00
234/4	54,60	1.022	2.15	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.000	0.00	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000 CL2: 15.946 CL3: 14.046 CL4: 14.700
CL5: 1.479 CL6: 0.297 CL7: 0.000 CL8: 0.000

TOTAL PCB: 47.456

GMM 002 0467

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/11/85

VIAL NUMBER: 11

DILUTION FACTOR: 0.714

SAMPLE NAME: 85-263 H20

PCB SUBSTITUTION PATTERN	AROCLO MIX	MS PCB PER ML SAMPLE	PCT 0 TOTAL 0 PCB 0	PCB SUBSTITUTION PATTERN	AROCLO MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00 0 245/24		54,60	0.117	0.16
2/2	21,16	10.302	14.36 0 245/23		54,60	0.051	0.07
3	21	0.000	0.00 0 234/25		54,60	0.213	0.30
26	21,16	2.516	3.51 0 P,P'-DDE	NA		0.222	---
4	21	0.000	0.00 0 234/24	54	0.000	0.00	
25	21,16	0.000	0.00 0 234/23	54,60	0.590	0.82	
24	21,16	0.311	0.43 0 2356/25	54,60	0.529	0.74	
2/3	21,16	0.472	0.66 0 2356/23	54,60	0.000	0.00	
26/2	21,16	4.459	6.22 0 236/245(234/236)	54,60	0.214	0.30	
2/4	21,16	2.162	3.01 0 34/34	40	0.000	0.00	
25/2	16	0.027	4.22 0 2345/26(CL5B)	54,60	0.000	0.00	
24/2	16	0.000	0.00 0 234/236(2356/236)	54,60	0.027	0.04	
HEXACHLORODIBENZENE	NA	1.432	--- 0 2356/236(245/34)	54,60	0.106	0.15	
23/2	16	3.394	4.73 0 245/34(2346/236)	54,60	0.048	0.07	
26/4	16	2.130	2.97 0 2346/236(235/245)	54,60	0.122	0.17	
4/4	21,16	4.132	5.76 0 235/245(CL5C)	54,60	0.000	0.00	
246/2	16	0.425	0.59 0 234/34	54,60	0.000	0.00	
23/3	16	0.013	1.13 0 245/245	54,60	1.117	1.56	
236/2(35/2)	16	0.028	1.15 0 234/235(CL6A)	54,60	0.000	0.00	
24/3(CL3A)	16	0.449	0.63 0 2356/34(CL6B)	54,60	0.021	0.03	
24/26(CL3B)	16	0.446	0.62 0 234/245	54,60	0.795	1.11	
23/4(24/3)	16	2.033	2.03 0 2356/235(2346/34)	54,60	0.013	0.02	
24/4(23/3+24/4)	16	2.914	4.06 0 2346/34(2356/245)	60	0.000	0.00	
23/4	16	1.421	1.90 0 2356/245(CL7A)	54	0.404	0.67	
23/25	16,54	2.076	4.01 0 234/234	54,60	0.000	0.00	
24/25	16,54	2.166	3.02 0 2346/245(2356/2356)	54,60	1.354	1.89	
23/25	16,54	1.745	2.43 0 2356/234(2346/234)	54,60	0.000	0.00	
24/24	16,54	1.145	1.60 0 2346/234(245/345)	54,60	2.795	3.90	
23/24(CL4A)	16,54	0.030	1.16 0 2345/2356+245/345(23456/236)	54,60	0.000	0.00	
23/234/234/2(CL4B)	16,54	1.491	2.00 0 MIXED	NA	2.063	---	
236/3(CL4C)	16,54	1.739	2.45 0 2345/34	54,60	0.020	0.04	
236/4(CL4D)	16,54	3.732	5.23 0 2345/235	54,60	0.000	0.00	
235/26(CL5A)	54,60	0.605	0.04 0 2345/245	54,60	0.000	0.00	
OCTACHLORODISTYRENE	NA	0.000	--- 0 2345/234	54,60	0.000	0.00	
236/23	54,60	0.030	1.16 0 2346/2356	60	0.004	0.01	
23/34	54,60	0.961	1.94 0 CL7	60	0.049	0.07	
24/34	54,60	0.215	0.30 0 2345/2346	60	0.273	0.38	
234/4	54,60	1.374	1.91 0 23456/245	60	0.000	0.00	
236/236	54,60	0.000	0.00 0 23456/234	60	0.779	1.09	
245/25	54,60	0.000	0.00 0 2345/2345	60	0.020	0.04	

TOTAL CL1: 0.000
CL5: 2.455

CL2: 19.094
CL6: 2.721

CL3: 20.641
CL7: 4.323

CL4: 20.013
CL8: 1.065

TOTAL PCB: 71.741

GMM 002 0468

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/12/85

VIAL NUMBER: 12

DILUTION FACTOR: 0.704

SAMPLE NAME: 85-266 H2O

PCB SUBSTITUTION PATTERN	AROCLO MIX	MG PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCLO MIX	MG PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	34,60	0.024	0.05
2/2	21,16	10.761	20.60	245/23	34,60	0.159	0.31
3	21	0.000	0.00	234/25	34,60	0.376	0.72
26	21,16	4.062	9.34	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	34	0.000	0.00
25	21,16	0.000	0.00	234/23	34,60	0.036	1.61
24	21,16	0.000	0.00	2356/25	34,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	34,60	0.000	0.00
26/2	21,16	4.310	8.68	236/245(234/236)	34,60	0.914	1.76
2/4	21,16	2.132	4.10	34/34	40	0.000	0.00
25/2	16	2.106	4.20	2345/26(CL38)	34,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	34,60	0.000	0.00
HEXACHLOROBENZENE	NA	0.901	---	2356/236(245/34)	34,60	0.000	0.00
23/2	16	2.360	4.35	245/34(2346/236)	34,60	0.000	0.00
26/4	16	1.566	3.01	2346/236(235/245)	34,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL3C)	34,60	0.000	0.00
246/2	16	0.204	0.35	234/34	34,60	0.000	0.00
25/3	16	0.477	0.92	245/245	34,60	0.179	0.34
236/2(35/2)	16	0.592	1.14	234/235(CL6A)	34,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	34,60	0.000	0.00
24/26(CL3B)	16	0.390	0.77	234/245	34,60	0.000	0.00
25/4(24/3)	16	1.071	2.06	2356/235(2346/34)	34,60	0.000	0.00
24/4(23/3+24/4)	16	1.744	3.35	2346/34(2356/245)	60	0.000	0.00
23/4	16	0.000	0.00	2356/245(CL7A)	34	0.000	0.00
25/25	16,34	1.097	3.65	234/234	34,60	0.000	0.00
24/25	16,34	1.959	3.77	2346/245(2356/2356)	34,60	0.000	0.00
23/25	16,34	1.573	3.02	2356/234(2346/234)	34,60	0.000	0.00
24/24	16,34	1.006	1.93	2346/234(245/345)	34,60	0.000	0.00
23/24(CL4A)	16,34	0.705	1.35	2345/2356+245/345(23456/236)	34,60	0.000	0.00
23/23+234/2(CL4B)	16,34	1.280	2.42	NIHREX	NA	0.000	---
236/3(CL4C)	16,34	1.026	3.51	2345/34	34,60	0.000	0.00
236/4(CL4D)	16,34	2.281	4.30	2345/235	34,60	0.000	0.00
235/25(CL5A)	34,60	0.302	0.73	2345/245	34,60	0.104	0.35
OCTACHLOROSTYRENE	NA	0.000	---	2345/234	34,60	0.000	0.00
236/23	34,60	0.095	1.72	2346/2356	60	0.000	0.00
25/34	34,60	0.693	1.33	CL7	60	0.000	0.00
24/34	34,60	0.249	0.48	2345/2346	60	0.000	0.00
234/4	34,60	0.914	1.76	23456/245	60	0.000	0.00
236/236	34,60	0.000	0.00	23456/234	60	0.757	1.45
245/25	34,60	0.000	0.00	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000
CL5: 2.672

CL2: 17.755
CL6: 1.093

CL3: 19.900
CL7: 0.104

CL4: 15.630
CL8: 0.757

TOTAL PCB: 92.020

GM1
002
0469

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/12/85

VIAL NUMBER: 13

DILUTION FACTOR: 0.679

SAMPLE NAME: 85-267 H20

PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT 0 TOTAL 0 PCB 0	PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00 0 245/24		54,60	0.000	0.00
2/2	21,16	6.130	19.73 0 245/23		54,60	0.000	0.00
3	21	0.000	0.00 0 234/25		54,60	0.000	0.29
26	21,16	2.061	6.62 0 P,P'-DDE		NA	0.000	—
4	21	0.000	0.00 0 234/24		54	0.000	0.00
25	21,16	0.000	0.00 0 234/23		54,60	0.000	0.00
24	21,16	0.000	0.00 0 2356/25		54,60	0.000	0.00
2/3	21,16	0.000	0.00 0 2356/23		54,60	0.000	0.00
26/2	21,16	2.372	7.62 0 236/245(234/236)		54,60	0.223	0.72
2/4	21,16	1.371	4.41 0 34/34		48	0.000	0.00
25/2	16	1.403	4.31 0 2345/26(DL5B)		54,60	0.000	0.00
24/2	16	0.000	0.00 0 234/236(2356/236)		54,60	0.000	0.00
HEXACHLOROBENZENE	NA	0.633	— 0 2356/236(245/34)		54,60	0.000	0.00
23/2	16	1.054	5.96 0 245/34(2346/236)		54,60	0.000	0.00
26/4	16	1.478	4.75 0 2346/236(235/245)		54,60	0.000	0.00
4/4	21,16	0.000	0.00 0 235/245(DL5C)		54,60	0.000	0.00
246/2	16	0.280	0.64 0 234/34		54,60	0.000	0.00
25/3	16	0.317	1.02 0 245/245		54,60	0.245	0.00
236/2(35/2)	16	0.430	1.30 0 234/235(DL6A)		54,60	0.000	0.00
24/3(DL3A)	16	0.000	0.00 0 2356/34(DL6B)		54,60	0.000	0.00
24/26(DL3B)	16	0.248	0.80 0 234/245		54,60	0.000	0.00
25/4(24/3)	16	0.729	2.34 0 2356/235(2346/34)		54,60	0.000	0.00
24/4(23/3+24/4)	16	1.226	3.94 0 2346/34(2356/245)		60	0.000	0.00
23/4	16	0.000	0.00 0 2356/245(DL7A)		54	0.000	0.00
25/25	16,54	1.260	4.05 0 234/234		54,60	0.000	0.00
24/25	16,54	1.228	3.95 0 2346/245(2356/2356)		54,60	0.000	0.00
23/25	16,54	0.737	2.37 0 2356/234(2346/234)		54,60	0.000	0.00
24/24	16,54	0.682	1.94 0 2346/234(245/345)		54,60	0.000	0.00
23/24(DL4A)	16,54	0.539	1.73 0 2345/2356+245/345(23456/236)		54,60	0.000	0.00
23/23+234/2(DL4B)	16,54	0.957	3.07 0 HIREX		NA	0.000	—
236/3(DL4C)	16,54	1.373	4.41 0 2345/34		54,60	0.000	0.00
236/4(DL4D)	16,54	2.899	6.75 0 2345/235		54,60	0.000	0.00
235/26(DL5A)	54,60	0.044	0.14 0 2345/245		54,60	0.000	0.00
HEPTACHLOROSTYRENE	NA	0.000	— 0 2345/234		54,60	0.000	0.00
236/23	54,60	0.000	0.00 0 2346/2356		60	0.000	0.00
25/34	54,60	0.340	1.09 0 DL7		60	0.000	0.00
24/34	54,60	0.123	0.39 0 2345/2346		60	0.000	0.00
234/4	54,60	0.000	0.00 0 23456/245		60	0.000	0.00
236/236	54,60	0.000	0.00 0 23456/234		60	1.424	4.58
245/25	54,60	0.000	0.00 0 2345/2345		60	0.000	0.00

TOTAL CL1: 0.000
CL5: 0.134

CL2: 9.570
CL6: 0.471

CL3: 9.300
CL7: 0.000

CL4: 10.135
CL8: 1.424

TOTAL PCB: 21.114

GMM
002
0470

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/16/85

VIAL NUMBER: 4

DILUTION FACTOR: 0.649

SAMPLE NAME: H20 85-268

PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT 0 TOTAL 0 PCB 0	PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00 0 245/24		54,60	0.000	0.00
2/2	21,16	0.000	0.00 0 245/23		54,60	0.047	0.16
3	21	0.000	0.00 0 234/25		54,60	0.402	1.39
26	21,16	0.000	0.00 0 P,P'-DDE	NA		0.000	—
4	21	0.000	0.00 0 234/24	54		0.000	0.00
25	21,16	0.000	0.00 0 234/23	54,60		1.004	6.25
24	21,16	0.000	0.00 0 2356/25	54,60		0.290	1.00
2/3	21,16	0.000	0.00 0 2356/23	54,60		0.000	0.00
26/2	21,16	1.029	3.56 0 236/245(234/236)	54,60		0.000	0.00
2/4	21,16	1.785	6.10 0 34/34	48		0.195	0.67
25/2	16	0.998	3.46 0 2345/26(CL38)	54,60		0.000	0.00
24/2	16	0.000	0.00 0 234/236(2356/236)	54,60		0.000	0.00
HEXACHLOROBENZENE	NA	0.404	— 0 2356/236(245/34)	54,60		0.000	0.00
23/2	16	0.203	0.90 0 245/34(2346/236)	54,60		0.000	0.00
26/4	16	0.980	3.12 0 2346/236(235/245)	54,60		0.000	0.00
4/4	21,16	0.000	0.00 0 235/245(CL5C)	54,60		0.000	0.00
246/2	16	0.292	1.01 0 234/34	54,60		0.000	0.00
25/3	16	0.340	1.10 0 245/245	54,60		0.576	1.99
236/2(35/2)	16	0.355	1.23 0 234/235(CL6A)	54,60		0.000	0.00
24/3(CL3A)	16	0.143	0.50 0 2356/34(CL6B)	54,60		0.000	0.00
24/26(CL3B)	16	0.270	0.93 0 234/245	54,60		0.000	0.00
25/4(24/3)	16	1.397	4.04 0 2356/235(2346/34)	54,60		0.000	0.00
24/4(23/34/24/4)	16	2.479	0.90 0 2346/34(2356/245)	60		0.000	0.00
23/4	16	1.263	4.39 0 2356/245(CL7A)	54		0.000	0.00
25/25	16,54	1.630	5.64 0 234/234	54,60		0.000	0.00
24/25	16,54	1.632	5.06 0 2346/245(2356/2356)	54,60		0.000	0.00
23/25	16,54	1.214	4.95 0 2356/234(2346/234)	54,60		0.000	0.00
24/24	16,54	1.436	4.97 0 2346/234(245/345)	54,60		0.000	0.00
23/24(CL4A)	16,54	0.794	2.75 0 2345/2356(245/345(23456/236)	54,60		0.000	0.00
23/234/234/2(CL4B)	16,54	1.133	3.92 0 HIREX	NA		5.363	—
236/3(CL4C)	16,54	1.280	4.43 0 2345/34	54,60		0.000	0.00
236/4(CL4D)	16,54	2.477	0.90 0 2345/235	54,60		0.000	0.00
235/26(CL5A)	54,60	0.262	0.91 0 2345/245	54,60		0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	— 0 2345/234	54,60		0.000	0.00
236/23	54,60	1.212	4.20 0 2346/2356	60		0.000	0.00
25/34	54,60	0.496	1.72 0 CL7	60		0.000	0.00
24/34	54,60	0.223	0.77 0 2345/2346	60		0.000	0.00
234/4	54,60	0.000	0.00 0 23456/245	60		0.000	0.00
236/236	54,60	0.000	0.00 0 23456/234	60		0.000	0.28
245/25	54,60	0.000	0.00 0 2345/2345	60		0.000	0.00

TOTAL CL1: 0.000 CL2: 1.785 CL3: 0.030 CL4: 13.307
CL5: 3.726 CL6: 0.066 CL7: 0.000 CL8: 0.000

TOTAL PCB: 28.002

GMM
002
0471

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/17/85

VIAL NUMBER: 5

DILUTION FACTOR: 0.750

SAMPLE NAME: NED 85-269

PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT 0 TOTAL 0 PCB 0	PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00 0 245/24		54,60	0.000	0.00
2/2	21,16	0.000	0.00 0 245/23		54,60	0.000	0.00
3	21	0.000	0.00 0 234/25		54,60	0.000	0.00
26	21,16	0.000	0.00 0 P,P'-DDE	NA		0.000	---
4	21	0.000	0.00 0 234/24	54	0.000	0.00	
25	21,16	0.000	0.00 0 234/23	54,60	0.000	0.00	
24	21,16	0.000	0.00 0 2356/25	54,60	0.000	0.00	
2/3	21,16	0.000	0.00 0 2356/23	54,60	0.000	0.00	
26/2	21,16	0.000	0.00 0 236/245(234/236)	54,60	0.000	0.00	
2/4	21,16	0.000	0.00 0 34/34	48	0.000	0.00	
25/2	16	0.000	0.00 0 2345/26(CL38)	54,60	0.000	0.00	
24/2	16	0.000	0.00 0 234/236(2356/236)	54,60	0.000	0.00	
HEXACHLOROBENZENE	NA	0.000	0.00 0 2356/236(245/34)	54,60	0.000	0.00	
23/2	16	0.000	0.00 0 245/34(2346/236)	54,60	0.000	0.00	
26/4	16	0.000	0.00 0 2346/236(235/245)	54,60	0.000	0.00	
4/4	21,16	0.000	0.00 0 235/245(CL5C)	54,60	0.000	0.00	
246/2	16	0.000	0.00 0 234/34	54,60	0.000	0.00	
25/3	16	0.000	0.00 0 245/245	54,60	0.000	0.00	
236/2(35/2)	16	0.000	0.00 0 234/235(CL6A)	54,60	0.000	0.00	
24/3(CL3A)	16	0.000	0.00 0 2356/34(CL6B)	54,60	0.000	0.00	
24/26(CL3B)	16	0.000	0.00 0 234/245	54,60	0.000	0.00	
25/4(24/3)	16	0.000	0.00 0 2356/235(2346/34)	54,60	0.000	0.00	
24/4(23/34/24/4)	16	0.000	0.00 0 2346/34(2356/245)	60	0.000	0.00	
23/4	16	0.000	0.00 0 2356/245(CL7A)	54	0.000	0.00	
25/25	16,54	0.000	0.00 0 234/234	54,60	0.000	0.00	
24/25	16,54	0.000	0.00 0 2346/245(2356/2356)	54,60	0.000	0.00	
23/25	16,54	0.000	0.00 0 2356/234(2346/234)	54,60	0.000	0.00	
24/24	16,54	0.000	0.00 0 2346/234(245/345)	54,60	0.000	0.00	
23/24(CL4A)	16,54	0.000	0.00 0 2345/2356+245/345(23456/236)	54,60	0.000	0.00	
23/23+234/2(CL4B)	16,54	0.000	0.00 0 MIXED	NA	0.000	---	
236/3(CL4C)	16,54	0.000	0.00 0 2345/34	54,60	0.000	0.00	
236/4(CL4D)	16,54	0.000	0.00 0 2345/235	54,60	0.000	0.00	
235/26(CL5A)	54,60	0.000	0.00 0 2345/245	54,60	0.000	0.00	
HEPTACHLOROSTYRENE	NA	0.000	0.00 0 2345/234	54,60	0.000	0.00	
236/23	54,60	0.000	0.00 0 2346/2356	60	0.000	0.00	
25/34	54,60	0.000	0.00 0 CL7	60	0.000	0.00	
24/34	54,60	0.000	0.00 0 2345/2346	60	0.000	0.00	
234/4	54,60	0.000	0.00 0 23456/245	60	0.000	0.00	
236/236	54,60	0.000	0.00 0 23456/234	60	0.000	0.00	
245/25	54,60	0.000	0.00 0 2345/2345	60	0.000	0.00	

TOTAL CL1: 0.000 CL2: 0.000 CL3: 0.000 CL4: 0.000
CL5: 0.000 CL6: 0.000 CL7: 0.000 CL8: 0.000

TOTAL PCB: 0.001

GMM 002 0472

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/17/85

VIAL NUMBER: 6

DILUTION FACTOR: 0.600

SAMPLE NAME: M20 85-270

PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	0.000	0.00
2/2	21,16	0.000	0.00	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	0.000	0.00	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	0.000	0.00
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	0.000	0.00	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	0.297	3.63	34/34	48	0.000	0.00
25/2	16	0.676	6.18	2345/26(CL58)	54,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	0.054	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.180	1.65	245/34(2346/236)	54,60	0.000	0.00
26/4	16	1.077	9.06	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	0.282	1.04	234/34	54,60	0.000	0.00
25/3	16	0.000	0.00	245/245	54,60	0.000	0.00
236/2(35/2)	16	0.000	0.00	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	0.000	0.00	234/245	54,60	0.000	0.00
25/4(24/3)	16	0.097	0.89	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	1.419	12.98	2346/34(2356/245)	60	0.000	0.00
23/4	16	0.000	0.00	2356/245(CL7A)	54	0.000	0.00
25/25	16,54	1.004	9.92	234/234	54,60	0.000	0.00
24/25	16,54	1.116	10.21	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	0.810	7.42	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	0.599	5.40	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	0.411	3.76	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	0.000	0.00	MIREX	NA	0.000	---
236/3(CL4C)	16,54	0.361	3.31	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	1.829	16.74	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	0.288	1.91	2345/245	54,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	0.000	0.00	2346/2356	60	0.000	0.00
25/34	54,60	0.461	4.22	CL7	60	0.000	0.00
24/34	54,60	0.000	0.00	2345/2346	60	0.000	0.00
234/4	54,60	0.000	0.00	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.000	0.00	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000 CL2: 0.297 CL3: 3.449 CL4: 6.874
 CL5: 0.298 CL6: 0.000 CL7: 0.000 CL8: 0.000
 TOTAL PCB: 10.920

GMM 002 0473

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/17/85

VIAL NUMBER: 7

DILUTION FACTOR: 0.695

SAMPLE NAME: N20 85-271

PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	0.283	0.35
2/2	21,16	0.000	0.00	245/23	54,60	0.213	0.26
3	21	0.000	0.00	234/25	54,60	0.040	1.04
26	21,16	0.000	0.00	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	54	0.667	0.83
25	21,16	0.000	0.00	234/23	54,60	2.244	2.78
24	21,16	0.000	0.00	2356/25	54,60	0.528	0.65
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	0.000	0.00	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	0.002	0.99	34/34	48	0.275	0.34
25/2	16	6.824	0.45	2345/26(CL58)	54,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	0.190	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.758	0.94	245/34(2346/236)	54,60	0.000	0.00
26/4	16	2.893	3.98	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	0.938	1.16	234/34	54,60	0.000	0.00
25/3	16	1.191	1.48	245/245	54,60	0.000	0.00
236/2(35/2)	16	1.040	2.28	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	1.393	1.97	234/245	54,60	0.000	0.00
25/4(24/3)	16	5.990	7.42	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	0.660	10.73	2346/34(2356/245)	60	0.000	0.00
23/4	16	3.659	4.53	2356/245(CL7A)	54	0.000	0.00
25/25	16,54	6.343	7.06	234/234	54,60	0.000	0.00
24/25	16,54	5.032	6.23	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	5.003	6.28	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	2.177	2.78	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	1.000	2.34	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	3.009	3.83	NIHDX	NA	0.000	---
236/3(CL4C)	16,54	4.368	5.41	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	5.056	6.31	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	0.823	1.82	2345/245	54,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	2.229	2.76	2346/2356	60	0.000	0.00
25/34	54,60	2.396	2.97	CL7	60	0.000	0.00
24/34	54,60	1.061	1.31	2345/2346	60	0.000	0.00
234/4	54,60	0.000	0.00	23456/245	60	0.000	0.00
236/236	54,60	1.033	1.28	23456/234	60	0.000	0.00
245/25	54,60	0.000	0.00	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000
CL5: 7.229
TOTAL PCB: 80.796

CL2: 0.002
CL6: 1.560

CL3: 29.975
CL7: 0.000

CL4: 41.100
CL8: 0.000

GMN
002 0474

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/10/85

VIAL NUMBER: 4

DILUTION FACTOR: 0.677

SAMPLE NAME: NED 85-272

PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	34,60	0.000	0.00
2/2	21,16	7.415	19.66	245/23	34,60	0.000	0.00
3	21	0.000	0.00	234/25	34,60	0.000	0.00
26	21,16	1.529	4.05	P,P'-DDE	NA	0.000	—
4	21	0.000	0.00	234/24	34	0.000	0.00
25	21,16	0.000	0.00	234/23	34,60	0.000	0.00
24	21,16	0.000	0.00	2356/25	34,60	0.000	0.00
2/3	21,16	0.110	0.29	2356/23	34,60	1.017	2.70
26/2	21,16	4.209	11.37	236/245(234/236)	34,60	0.000	0.00
2/4	21,16	0.957	2.54	34/34	40	0.000	0.00
25/2	16	4.300	11.40	2345/26(CL38)	34,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	34,60	0.000	0.00
HEXACHLOROBENZENE	NA	0.000	—	2356/236(245/34)	34,60	0.000	0.00
23/2	16	1.314	3.40	245/34(2346/236)	34,60	0.000	0.00
26/4	16	3.177	8.42	2346/236(235/245)	34,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	34,60	0.000	0.00
246/2	16	0.286	0.76	234/34	34,60	0.000	0.00
25/3	16	0.344	0.91	245/245	34,60	0.000	0.00
236/2(35/2)	16	0.441	1.17	234/235(CL6A)	34,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	34,60	0.000	0.00
24/26(CL3B)	16	0.415	1.10	234/245	34,60	0.000	0.00
23/4(24/3)	16	1.022	2.71	2356/235(2346/34)	34,60	0.000	0.00
24/4(23/3+24/4)	16	2.013	5.34	2346/34(2356/245)	60	0.000	0.00
23/4	16	0.000	0.00	2356/245(CL7A)	34	0.000	0.00
25/25	16,34	1.306	4.21	234/234	34,60	0.000	0.00
24/25	16,34	1.074	2.85	2346/245(2356/2356)	34,60	0.000	0.00
23/25	16,34	1.000	2.65	2356/234(2346/234)	34,60	0.000	0.00
24/24	16,34	0.672	1.78	2346/234(245/345)	34,60	0.000	0.00
23/24(CL4A)	16,34	0.347	1.45	2345/2356+245/345(23456/236)	34,60	0.000	0.00
23/23+234/2(CL4B)	16,34	0.301	0.80	MIREX	NA	0.000	—
236/3(CL4C)	16,34	1.403	3.93	2345/34	34,60	0.000	0.00
236/4(CL4D)	16,34	1.403	3.93	2345/235	34,60	0.000	0.00
235/26(CL5A)	34,60	0.207	0.76	2345/245	34,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	—	2345/234	34,60	0.000	0.00
236/23	34,60	0.000	0.00	2346/2356	60	0.000	0.00
25/34	34,60	0.336	0.89	CL7	60	0.000	0.00
24/34	34,60	0.321	0.85	2345/2346	60	0.000	0.00
234/4	34,60	0.000	0.00	23456/245	60	0.000	0.00
236/236	34,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	34,60	0.000	0.00	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000
CL5: 0.207

CL2: 10.010
CL6: 1.017

CL3: 16.459
CL7: 0.000

CL4: 9.944
CL8: 0.000

TOTAL PCB: 27.717

GMM

002

0475

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/19/85

VIAL NUMBER: 5

DILUTION FACTOR: 0.718

SAMPLE NAME: B20 05-273

PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	0.000	0.00
2/2	21,16	6.302	17.47	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	2.209	6.12	P,P'-DDE	NA	0.000	—
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	0.000	0.00
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	3.051	8.46	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	0.016	2.26	34/34	48	0.000	0.00
25/2	16	5.394	14.95	2345/26(CL58)	54,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	0.000	—	2356/236(245/34)	54,60	0.000	0.00
23/2	16	1.003	3.00	245/34(2346/236)	54,60	0.000	0.00
26/4	16	2.271	6.29	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	0.214	0.59	234/34	54,60	0.000	0.00
25/3	16	0.332	0.92	245/245	54,60	0.000	0.00
236/2(35/2)	16	0.402	1.11	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.172	0.48	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	0.348	0.96	234/245	54,60	0.000	0.00
25/4(24/3)	16	1.009	3.02	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/34/24/4)	16	2.279	6.32	2346/34(2356/245)	60	0.000	0.00
23/4	16	0.000	0.00	2356/245(CL7A)	54	0.000	0.00
25/25	16,54	1.319	3.66	234/234	54,60	0.000	0.00
24/25	16,54	1.000	2.77	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	0.916	2.54	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	0.902	1.64	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	0.915	1.43	2345/2356/245/345(23456/236)	54,60	0.000	0.00
23/234/234/2(CL4B)	16,54	0.139	0.44	MIX	NA	0.000	—
236/3(CL4C)	16,54	2.729	7.56	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	1.617	4.40	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	0.194	0.54	2345/245	54,60	0.000	0.00
HEXACHLOROSTYRENE	NA	0.000	—	2345/234	54,60	0.000	0.00
236/23	54,60	0.000	0.00	2346/2356	60	0.000	0.00
25/34	54,60	0.292	1.09	CL7	60	0.000	0.00
24/34	54,60	0.004	1.09	2345/2346	60	0.000	0.00
234/4	54,60	0.000	0.00	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.000	0.00	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000
CL5: 0.194

CL2: 9.326
CL6: 0.000

CL3: 15.671
CL7: 0.000

CL4: 18.007
CL8: 0.000

TOTAL PCB: 35.078

GMM
002
0476

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/19/05

VIAL NUMBER: 6

DILUTION FACTOR: 0.013

SAMPLE NAME: M20 85-274

PCB SUBSTITUTION PATTERN	AROCLO MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCLO MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	0.000	0.00
2/2	21,16	6.632	19.87	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	2.742	0.22	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	0.000	0.00
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	2.936	0.90	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	0.774	2.32	34/34	48	0.000	0.00
25/2	16	5.121	15.34	2345/26(CL58)	54,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	0.000	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	1.167	3.50	245/34(2346/236)	54,60	0.000	0.00
26/4	16	3.408	10.45	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	0.174	0.52	234/34	54,60	0.000	0.00
23/3	16	0.093	0.28	245/245	54,60	0.000	0.00
236/2(35/2)	16	0.539	1.61	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	0.286	0.86	234/245	54,60	0.000	0.00
25/4(24/3)	16	0.680	2.04	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	1.262	3.78	2346/34(2356/245)	60	0.000	0.00
23/4	16	0.000	0.00	2356/245(CL7A)	54	0.000	0.00
25/25	16,54	1.252	3.75	234/234	54,60	0.000	0.00
24/25	16,54	1.259	3.77	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	0.045	2.53	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	0.577	1.73	2346/234(245/245)	54,60	0.000	0.00
23/24(CL4A)	16,54	0.953	2.85	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	0.090	0.27	HI-REX	NA	0.000	---
236/3(CL4C)	16,54	0.921	2.76	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	1.035	3.10	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	0.106	0.36	2345/245	54,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	0.000	0.00	2346/2356	60	0.000	0.00
25/34	54,60	0.121	0.36	CL7	60	0.000	0.00
24/34	54,60	0.102	0.33	2345/2346	60	0.000	0.00
234/4	54,60	0.000	0.00	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.000	0.00	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000 CL2: 10.149 CL3: 14.007 CL4: 0.294
CL5: 0.106 CL6: 0.000 CL7: 0.000 CL8: 0.000

TOTAL PCB: 20.376

GMM
002
0477

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/19/85

VIAL NUMBER: 7

DILUTION FACTOR: 0.698

SAMPLE NAME: H20 85-275

PCB SUBSTITUTION PATTERN	AROCOR MUX	MS PCB PER ML SAMPLE	PCT 0 TOTAL 0 PCB 0	PCB SUBSTITUTION PATTERN	AROCOR MUX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00 0 245/24		54,60	0.000	0.00
2/2	21,16	3.477	13.97 0 245/23		54,60	0.000	0.00
3	21	0.000	0.00 0 234/25		54,60	0.000	0.00
26	21,16	1.101	4.42 0 P,P'-DDE	NA		0.000	---
4	21	0.000	0.00 0 234/24		54	0.000	0.00
25	21,16	0.000	0.00 0 234/23		54,60	0.000	0.00
24	21,16	0.000	0.00 0 2356/25		54,60	0.000	0.00
2/3	21,16	0.000	0.00 0 2356/23		54,60	0.000	0.00
26/2	21,16	2.473	9.93 0 236/245(234/236)		54,60	0.000	0.00
2/4	21,16	0.752	3.06 0 34/34	48		0.000	0.00
25/2	16	2.696	10.80 0 2345/26(DL58)		54,60	0.000	0.00
24/2	16	0.000	0.00 0 234/236(2356/236)		54,60	0.000	0.00
HEXACHLOROBENZENE	NA	0.000	--- 0 2356/236(245/34)		54,60	0.000	0.00
23/2	16	0.016	3.20 0 245/34(2346/236)		54,60	0.000	0.00
26/4	16	2.266	9.10 0 2346/236(235/245)		54,60	0.000	0.00
4/4	21,16	0.000	0.00 0 235/245(DL5C)		54,60	0.000	0.00
246/2	16	0.200	0.80 0 234/34		54,60	0.000	0.00
25/3	16	0.218	0.87 0 245/245		54,60	0.000	0.00
236/2(35/2)	16	0.314	1.26 0 234/235(DL6A)		54,60	0.000	0.00
24/3(DL3A)	16	0.000	0.00 0 2356/34(DL6B)		54,60	0.000	0.00
24/26(DL3B)	16	0.200	0.80 0 234/245		54,60	0.000	0.00
25/4(24/3)	16	0.706	2.83 0 2356/235(2346/34)		54,60	0.000	0.00
24/4(23/3424/4)	16	1.618	6.50 0 2346/34(2356/245)		60	0.000	0.00
23/4	16	0.000	0.00 0 2356/245(DL7A)		54	0.000	0.00
25/25	16,54	0.064	3.47 0 234/234		54,60	0.000	0.00
24/25	16,54	1.052	4.22 0 2346/245(2356/2356)		54,60	0.000	0.00
23/25	16,54	0.979	3.93 0 2356/234(2346/234)		54,60	0.000	0.00
24/24	16,54	0.640	2.57 0 2346/234(245/345)		54,60	0.000	0.00
23/24(DL4A)	16,54	0.522	2.10 0 2345/2356+245/345(23456/236)		54,60	0.000	0.00
23/234234/2(DL4B)	16,54	0.077	0.31 0 NIREX	NA		0.000	---
236/3(DL4C)	16,54	1.634	6.56 0 2345/34		54,60	0.000	0.00
236/4(DL4D)	16,54	2.018	8.10 0 2345/235		54,60	0.000	0.00
235/26(DL5A)	54,60	0.100	0.40 0 2345/245		54,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	--- 0 2345/234		54,60	0.000	0.00
236/23	54,60	0.000	0.00 0 2346/2356		60	0.000	0.00
25/34	54,60	0.173	0.70 0 CL7		60	0.000	0.00
24/34	54,60	0.000	0.00 0 2345/2346		60	0.000	0.00
234/4	54,60	0.000	0.00 0 23456/245		60	0.000	0.00
236/236	54,60	0.000	0.00 0 23456/234		60	0.000	0.00
245/25	54,60	0.000	0.00 0 2345/2345		60	0.000	0.00

TOTAL CL1: 0.000 CL2: 5.940 CL3: 10.707 CL4: 0.673
 CL5: 0.100 CL6: 0.000 CL7: 0.000 CL8: 0.000
 TOTAL PCB: 24.900

GMM
002
0478

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/19/85

VIAL NUMBER: 10

DILUTION FACTOR: 0.663

SAMPLE NAME: N20 85-276

PCB SUBSTITUTION PATTERN	AROCLO MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCLO MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
			0				
2	21,16	0.000	0.00	245/24	54,60	0.000	0.00
2/2	21,16	6.790	16.00	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	5.015	12.45	P,P'-DDE	NA	0.000	—
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	0.000	0.00
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	0.003	0.01	2356/23	54,60	0.000	0.00
26/2	21,16	3.787	9.21	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	0.536	1.33	34/34	60	0.010	0.02
25/2	16	4.790	11.89	2345/26(CL58)	54,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	2.227	—	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.032	2.21	245/34(2346/236)	54,60	0.000	0.00
26/4	16	2.049	5.09	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	0.251	0.62	234/34	54,60	0.000	0.00
25/3	16	0.303	0.75	245/245	54,60	0.000	0.00
236/2(35/2)	16	0.407	1.21	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	0.303	0.75	234/245	54,60	0.000	0.00
25/4(24/3)	16	0.033	2.07	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/34/24/4)	16	1.762	4.30	2346/34(2356/245)	60	0.000	0.00
23/4	16	0.000	0.00	2356/245(CL7A)	54	0.000	0.00
25/25	16,54	1.720	4.27	234/234	54,60	0.000	0.00
24/25	16,54	1.610	4.02	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	1.323	3.20	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	1.027	2.35	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	0.724	1.00	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	0.000	0.00	MIREX	NA	0.000	—
236/3(CL4C)	16,54	1.693	4.21	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	3.901	0.69	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	0.133	0.33	2345/245	54,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	—	2345/234	54,60	0.000	0.00
236/23	54,60	0.339	0.84	2346/2356	60	0.000	0.00
25/34	54,60	0.370	0.92	CL7	60	0.000	0.00
24/34	54,60	0.000	0.00	2345/2346	60	0.000	0.00
234/4	54,60	0.000	0.00	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.000	0.00	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000
CL5: 0.473

CL2: 12.352
CL6: 0.000

CL3: 14.336
CL7: 0.000

CL4: 13.106
CL8: 0.000

TOTAL PCB: 40.267

GMM 002 0479

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/31/85

VIAL NUMBER: 3

DILUTION FACTOR: 0.702

SAMPLE NAME: H20 65-304

PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	34,60	0.000	0.00
2/2	21,16	0.000	0.00	245/23	34,60	0.000	0.00
3	21	0.000	0.00	234/25	34,60	0.000	0.00
26	21,16	0.290	62.67	P,P'-DDE	NA	0.000	—
4	21	0.000	0.00	234/24	34	0.000	0.00
25	21,16	0.000	0.00	234/23	34,60	0.000	0.00
24	21,16	0.000	0.00	2356/25	34,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	34,60	0.000	0.00
26/2	21,16	0.146	31.36	236/245(234/236)	34,60	0.000	0.00
2/4	21,16	0.000	0.00	34/34	48	0.000	0.00
25/2	16	0.000	0.00	2345/26(CL5B)	34,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	34,60	0.000	0.00
HEXACHLOROBENZENE	NA	0.000	—	2356/236(245/34)	34,60	0.000	0.00
23/2	16	0.000	0.00	245/34(2346/236)	34,60	0.000	0.00
26/4	16	0.000	0.00	2346/236(235/245)	34,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	34,60	0.000	0.00
246/2	16	0.000	0.00	234/34	34,60	0.000	0.00
25/3	16	0.000	0.00	245/245	34,60	0.000	0.00
236/2(35/2)	16	0.000	0.00	234/235(CL6A)	34,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	34,60	0.000	0.00
24/26(CL3B)	16	0.000	0.00	234/245	34,60	0.000	0.00
25/4(24/3)	16	0.027	5.77	2356/235(2346/34)	34,60	0.000	0.00
24/4(23/3+24/4)	16	0.000	0.00	2346/34(2356/245)	60	0.000	0.00
23/4	16	0.000	0.00	2356/245(CL7A)	34	0.000	0.00
25/25	16,34	0.000	0.00	234/234	34,60	0.000	0.00
24/25	16,34	0.000	0.00	2346/245(2356/2356)	34,60	0.000	0.00
23/25	16,34	0.000	0.00	2356/234(2346/234)	34,60	0.000	0.00
24/24	16,34	0.000	0.00	2346/234(245/345)	34,60	0.000	0.00
23/24(CL4A)	16,34	0.000	0.00	2345/2356+245/345(23456/236)	34,60	0.000	0.00
23/23+234/2(CL4B)	16,34	0.000	0.00	NA	NA	0.000	—
236/3(CL4C)	16,34	0.000	0.00	2345/34	34,60	0.000	0.00
236/4(CL4D)	16,34	0.000	0.00	2345/235	34,60	0.000	0.00
235/26(CL5A)	34,60	0.000	0.00	2345/245	34,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	—	2345/234	34,60	0.000	0.00
236/23	34,60	0.000	0.00	2346/2356	60	0.000	0.00
25/34	34,60	0.000	0.00	CL7	60	0.000	0.00
24/34	34,60	0.000	0.00	2345/2346	60	0.000	0.00
234/4	34,60	0.000	0.00	23456/245	60	0.000	0.00
236/236	34,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	34,60	0.000	0.00	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000
CL5: 0.000
TOTAL PCB: 0.463

CL2: 0.290
CL6: 0.000

CL3: 0.173
CL7: 0.000
CL4: 0.000
CL9: 0.000

GMM 002 0480

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 11/01/85

VIAL NUMBER: 4

DILUTION FACTOR: 0.722

SAMPLE NAME: M20 85-305

PCB SUBSTITUTION PATTERN	AROCLO MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCLO MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	0.000	0.00
2/2	21,16	0.000	0.00	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	0.045	3.27	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	0.000	0.00
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	0.000	0.00	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	1.239	89.19	34/34	48	0.000	0.00
25/2	16	0.000	0.00	2345/26(CL58)	54,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	0.000	---	2356/236(245/34)	54,60	0.000	0.00
22/2	16	0.000	0.00	245/34(2346/236)	54,60	0.000	0.00
26/4	16	0.000	0.00	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	0.000	0.00	234/34	54,60	0.000	0.00
25/3	16	0.000	0.00	245/245	54,60	0.000	0.00
236/2(35/2)	16	0.000	0.00	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	0.000	0.00	234/245	54,60	0.000	0.00
25/4(24/3)	16	0.000	0.00	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	0.000	0.00	2346/34(2356/245)	60	0.000	0.00
23/4	16	0.000	0.00	2356/245(CL7A)	54	0.000	0.00
25/25	16,54	0.095	6.81	234/234	54,60	0.000	0.00
24/25	16,54	0.000	0.00	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	0.000	0.00	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	0.000	0.00	2346/234(245/245)	54,60	0.000	0.00
23/24(CL4A)	16,54	0.000	0.00	2345/2356+245/245(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	0.000	0.00	NIHREX	NA	0.000	---
236/3(CL4C)	16,54	0.000	0.00	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	0.000	0.00	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	0.010	0.73	2345/245	54,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	0.000	0.00	2346/2356	60	0.000	0.00
25/34	54,60	0.000	0.00	CL7	60	0.000	0.00
24/34	54,60	0.000	0.00	2345/2346	60	0.000	0.00
234/4	54,60	0.000	0.00	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.000	0.00	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000
CL5: 0.010

CL2: 1.294
CL6: 0.000

CL3: 0.000
CL7: 0.000

CL4: 0.095
CL8: 0.000

TOTAL PCB: 1.309

GMM 002 0481

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 11/01/85

VIAL NUMBER: 5

DILUTION FACTOR: 0.745

SAMPLE NAME: H20 85-306

PCB SUBSTITUTION PATTERN	AROCLO MIX	MG PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCLO MIX	MG PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	0.000	0.00
2/2	21,16	0.000	0.00	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	0.000	0.00	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	0.000	0.00
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	0.000	0.00	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	1.069	100%	34/34	48	0.000	0.00
25/2	16	0.000	0.00	2345/26(CL38)	54,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	0.000	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.000	0.00	245/34(2346/236)	54,60	0.000	0.00
26/4	16	0.000	0.00	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	0.000	0.00	234/34	54,60	0.000	0.00
25/3	16	0.000	0.00	245/245	54,60	0.000	0.00
236/2(35/2)	16	0.000	0.00	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	0.000	0.00	234/245	54,60	0.000	0.00
25/4(24/3)	16	0.000	0.00	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/34/24/4)	16	0.000	0.00	2346/34(2356/245)	60	0.000	0.00
23/4	16	0.000	0.00	2356/245(CL7A)	54	0.000	0.00
25/25	16,54	0.000	0.00	234/234	54,60	0.000	0.00
24/25	16,54	0.000	0.00	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	0.000	0.00	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	0.000	0.00	2346/234(245/245)	54,60	0.000	0.00
23/24(CL4A)	16,54	0.000	0.00	2345/2356+245/245(23456/236)	54,60	0.000	0.00
23/234/234/2(CL4B)	16,54	0.000	0.00	HI-REX	NA	0.000	---
236/3(CL4C)	16,54	0.000	0.00	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	0.000	0.00	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	0.000	0.00	2345/245	54,60	0.000	0.00
HEPTACHLOROTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	0.000	0.00	2346/2356	60	0.000	0.00
25/34	54,60	0.000	0.00	CL7	60	0.000	0.00
24/34	54,60	0.000	0.00	2345/2346	60	0.000	0.00
234/4	54,60	0.000	0.00	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.000	0.00	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000 CL2: 1.069 CL3: 0.000 CL4: 0.000
 CL5: 0.000 CL6: 0.000 CL7: 0.000 CL8: 0.000
 TOTAL PCB: 1.069

GMN 002 0482

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 11/01/85

VIAL NUMBER: 6

DILUTION FACTOR: 0.714

SAMPLE NAME: M20 85-307

PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	0.000	0.00
2/2	21,16	0.000	0.00	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	0.000	0.00	P,P'-DDE	NA	0.000	—
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	0.000	0.00
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	0.000	0.00	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	1.025	100.00	34/34	48	0.000	0.00
25/2	16	0.000	0.00	2345/26(CL38)	54,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	1.134	—	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.000	0.00	245/34(2346/236)	54,60	0.000	0.00
26/4	16	0.000	0.00	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	0.000	0.00	234/34	54,60	0.000	0.00
25/3	16	0.000	0.00	245/245	54,60	0.000	0.00
236/2(35/2)	16	0.000	0.00	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	0.000	0.00	234/245	54,60	0.000	0.00
25/4(24/3)	16	0.000	0.00	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	0.000	0.00	2346/34(2356/245)	60	0.000	0.00
23/4	16	0.000	0.00	2356/245(CL7A)	54	0.000	0.00
25/25	16,54	0.000	0.00	234/234	54,60	0.000	0.00
24/25	16,54	0.000	0.00	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	0.000	0.00	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	0.000	0.00	2346/234(245/245)	54,60	0.000	0.00
23/24(CL4A)	16,54	0.000	0.00	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	0.000	0.00	NI REX	NA	0.000	—
236/3(CL4C)	16,54	0.000	0.00	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	0.000	0.00	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	0.000	0.00	2345/245	54,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	—	2345/234	54,60	0.000	0.00
236/23	54,60	0.000	0.00	2346/2356	60	0.000	0.00
25/34	54,60	0.000	0.00	CL7	60	0.000	0.00
24/34	54,60	0.000	0.00	2345/2346	60	0.000	0.00
234/4	54,60	0.000	0.00	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.000	0.00	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000
CL5: 0.000

CL2: 1.025
CL6: 0.000

CL3: 0.000
CL7: 0.000

CL4: 0.000
CL8: 0.000

TOTAL PCB: 1.025

GMP 002 0483

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 11/02/85

VIAL NUMBER: 4

DILUTION FACTOR: 0.637

SAMPLE NAME: M20 85-308

PCB SUBSTITUTION PATTERN	AROCOR MIX	MG PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCOR MIX	MG PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	34,60	0.000	0.00
2/2	21,16	0.000	0.00	245/23	34,60	0.000	0.00
3	21	0.000	0.00	234/25	34,60	0.000	0.00
26	21,16	0.000	0.00	P,P'-DDE	NA	0.000	—
4	21	0.000	0.00	234/24	34	0.000	0.00
25	21,16	0.000	0.00	234/23	34,60	0.000	0.00
24	21,16	0.000	0.00	2356/25	34,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	34,60	0.000	0.00
26/2	21,16	0.000	0.00	236/245 (234/236)	34,60	0.000	0.00
2/4	21,16	1.130	57.00	34/34	40	0.000	0.00
25/2	16	0.162	0.25	2345/26 (CL5B)	34,60	0.000	0.00
24/2	16	0.000	0.00	234/236 (2356/236)	34,60	0.000	0.00
HEXACHLOROBENZENE	NA	0.401	—	2356/236 (245/34)	34,60	0.000	0.00
23/2	16	0.000	0.00	245/34 (2346/236)	34,60	0.000	0.00
26/4	16	0.000	0.00	2346/236 (235/245)	34,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245 (CL5C)	34,60	0.000	0.00
246/2	16	0.000	0.00	234/34	34,60	0.000	0.00
25/3	16	0.000	0.00	245/245	34,60	0.000	0.00
236/2 (35/2)	16	0.000	0.00	234/235 (CL6A)	34,60	0.000	0.00
24/3 (CL3A)	16	0.000	0.00	2356/34 (CL6B)	34,60	0.000	0.00
24/26 (CL3B)	16	0.000	0.00	234/245	34,60	0.000	0.00
25/4 (24/3)	16	0.144	7.31	2356/235 (2346/34)	34,60	0.000	0.00
24/4 (23/34/24/4)	16	0.000	0.00	2346/34 (2356/245)	60	0.000	0.00
23/4	16	0.000	0.00	2356/245 (CL7A)	34	0.000	0.00
25/25	16,34	0.000	0.00	234/234	34,60	0.000	0.00
24/25	16,34	0.000	0.00	2346/245 (2356/2356)	34,60	0.000	0.00
23/25	16,34	0.324	26.63	2356/234 (2346/234)	34,60	0.000	0.00
24/24	16,34	0.000	0.00	2346/234 (245/345)	34,60	0.000	0.00
23/24 (CL4A)	16,34	0.000	0.00	2345/2356+245/345 (23456/236)	34,60	0.000	0.00
23/23+234/2 (CL4B)	16,34	0.000	0.00	NI/REX	NA	0.000	—
236/3 (CL4C)	16,34	0.000	0.00	2345/34	34,60	0.000	0.00
236/4 (CL4D)	16,34	0.000	0.00	2345/235	34,60	0.000	0.00
235/26 (CL5A)	34,60	0.000	0.00	2345/245	34,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	—	2345/234	34,60	0.000	0.00
236/23	34,60	0.000	0.00	2346/2356	60	0.000	0.00
25/34	34,60	0.000	0.00	CL7	60	0.000	0.00
24/34	34,60	0.000	0.00	2345/2346	60	0.000	0.00
234/4	34,60	0.000	0.00	23456/245	60	0.000	0.00
236/236	34,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	34,60	0.000	0.00	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000 CL2: 1.130 CL3: 0.306 CL4: 0.324
 CL5: 0.000 CL6: 0.000 CL7: 0.000 CL8: 0.000
 TOTAL PCB: 1.968

GM 002 0484

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 11/02/85

VIAL NUMBER: 5

DILUTION FACTOR: 0.029

SAMPLE NAME: K20 85-309

PCB SUBSTITUTION PATTERN	AROCOR MIX	MG PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCOR MIX	MG PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	0.000	0.00
2/2	21,16	0.000	0.00	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	0.000	0.00	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	0.000	0.00
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	0.000	0.00	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	1.062	73.28	34/34	48	0.000	0.00
25/2	16	0.387	26.72	2345/26(CL58)	54,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	54,60	0.000	0.00
HEXACHLOROCYCLOPENTADIENE	NA	0.390	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.000	0.00	245/34(2346/236)	54,60	0.000	0.00
26/4	16	0.000	0.00	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	0.000	0.00	234/34	54,60	0.000	0.00
25/3	16	0.000	0.00	245/245	54,60	0.000	0.00
236/2(35/2)	16	0.000	0.00	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	0.000	0.00	234/245	54,60	0.000	0.00
25/4(24/3)	16	0.000	0.00	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	0.000	0.00	2346/34(2356/245)	60	0.000	0.00
23/4	16	0.000	0.00	2356/245(CL7A)	54	0.000	0.00
25/25	16,54	0.000	0.00	234/234	54,60	0.000	0.00
24/25	16,54	0.000	0.00	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	0.000	0.00	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	0.000	0.00	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	0.000	0.00	2345/2356+245/245(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	0.000	0.00	HIREX	NA	0.000	---
236/3(CL4C)	16,54	0.000	0.00	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	0.000	0.00	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	0.000	0.00	2345/245	54,60	0.000	0.00
HEXACHLOROCYCLOPENTADIENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	0.000	0.00	2346/2356	60	0.000	0.00
25/34	54,60	0.000	0.00	CL7	60	0.000	0.00
24/34	54,60	0.000	0.00	2345/2346	60	0.000	0.00
234/4	54,60	0.000	0.00	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.000	0.00	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000 CL2: 1.062 CL3: 0.387 CL4: 0.000
CL5: 0.000 CL6: 0.000 CL7: 0.000 CL8: 0.000

TOTAL PCB: 1.449

GMM
002
0485

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 11/02/85

VIAL NUMBER: 6

DILUTION FACTOR: 0.705

SAMPLE NAME: M20 05-310

PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	0.000	0.00
2/2	21,16	0.000	0.00	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	0.000	0.00	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	0.000	0.00
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	0.000	0.00	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	1.282	100.00	34/34	48	0.000	0.00
25/2	16	0.000	0.00	2345/26(CL5B)	54,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	54,60	0.000	0.00
NONACHLOROBENZENE	NA	0.000	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.000	0.00	245/34(2346/236)	54,60	0.000	0.00
26/4	16	0.000	0.00	2346/236(2356/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	0.000	0.00	234/34	54,60	0.000	0.00
25/3	16	0.000	0.00	245/245	54,60	0.000	0.00
236/2(35/2)	16	0.000	0.00	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	0.000	0.00	234/245	54,60	0.000	0.00
25/4(24/3)	16	0.000	0.00	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3/24/4)	16	0.000	0.00	2346/34(2356/245)	54,60	0.000	0.00
23/4	16	0.000	0.00	2356/245(CL7A)	60	0.000	0.00
25/25	16,54	0.000	0.00	234/234	54	0.000	0.00
24/25	16,54	0.000	0.00	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	0.000	0.00	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	0.000	0.00	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	0.000	0.00	2345/2356/245/245(23456/236)	54,60	0.000	0.00
23/234/234/2(CL4B)	16,54	0.000	0.00	HIREX	NA	0.000	---
236/3(CL4C)	16,54	0.000	0.00	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	0.000	0.00	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	0.000	0.00	2345/245	54,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	0.000	0.00	2346/2356	60	0.000	0.00
25/34	54,60	0.000	0.00	CL7	60	0.000	0.00
24/34	54,60	0.000	0.00	2345/2346	60	0.000	0.00
234/4	54,60	0.000	0.00	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.000	0.00	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000 CL2: 1.282 CL3: 0.000 CL4: 0.000
CL5: 0.000 CL6: 0.000 CL7: 0.000 CL8: 0.000

TOTAL PCB: 1.282

GMM
002 0486

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 11/02/85

VIAL NUMBER: 7

DILUTION FACTOR: 0.636

SAMPLE NAME: H20 85-311

PCB SUBSTITUTION PATTERN	AROCLOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCLOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	0.000	0.00
2/2	21,16	0.000	0.00	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	0.000	0.00	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	0.000	0.00
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	0.000	0.00	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	0.529	43.49	34/34	48	0.000	0.00
25/2	16	0.522	42.91	2345/26(CL58)	54,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	54,60	0.000	0.00
NONACHLOROBENZENE	NA	0.000	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.000	0.00	245/34(2346/236)	54,60	0.000	0.00
26/4	16	0.000	0.00	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	0.000	0.00	234/34	54,60	0.000	0.00
25/3	16	0.000	0.00	245/245	54,60	0.000	0.00
236/2(35/2)	16	0.000	0.00	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	0.000	0.00	234/245	54,60	0.000	0.00
25/4(24/3)	16	0.000	0.00	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/34/4)	16	0.000	0.00	2346/34(2356/245)	60	0.000	0.00
23/4	16	0.000	0.00	2356/245(CL7A)	54	0.000	0.00
25/25	16,54	0.000	0.00	234/234	54,60	0.000	0.00
24/25	16,54	0.000	0.00	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	0.000	0.00	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	0.165	13.61	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	0.000	0.00	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/234/234/2(CL4B)	16,54	0.000	0.00	NI REX	NA	0.000	---
236/3(CL4C)	16,54	0.000	0.00	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	0.000	0.00	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	0.000	0.00	2345/245	54,60	0.000	0.00
NONACHLOROSTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	0.000	0.00	2346/2356	60	0.000	0.00
25/34	54,60	0.000	0.00	CL7	60	0.000	0.00
24/34	54,60	0.000	0.00	2345/2346	60	0.000	0.00
234/4	54,60	0.000	0.00	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.000	0.00	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000
CL5: 0.000

CL2: 0.529
CL6: 0.000

CL3: 0.522
CL7: 0.000

CL4: 0.165
CL8: 0.000

TOTAL PCB: 1.215

GMM
002
0487

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 11/02/85

VIAL NUMBER: 10

DILUTION FACTOR: 0.682

SAMPLE NAME: K20 05-312

PCB SUBSTITUTION PATTERN	AROCOLOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCOLOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	0.000	0.00
2/2	21,16	0.000	0.00	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	0.000	0.00	P,P'-DDE	NA	0.000	—
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	0.000	0.00
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	0.000	0.00	236/245(234/236)	54,60	0.294	17.32
2/4	21,16	0.001	50.60	34/34	48	0.000	0.00
25/2	16	0.245	14.91	2345/26(CL38)	54,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	0.000	—	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.000	0.00	245/34(2346/236)	54,60	0.000	0.00
26/4	16	0.000	0.00	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	0.000	0.00	234/34	54,60	0.000	0.00
25/3	16	0.000	0.00	245/245	54,60	0.000	0.00
236/2(35/2)	16	0.000	0.00	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	0.000	0.00	234/245	54,60	0.000	0.00
25/4(24/3)	16	0.000	0.00	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	0.000	0.00	2346/34(2356/245)	60	0.000	0.00
23/4	16	0.000	0.00	2356/245(CL7A)	54	0.000	0.00
25/25	16,54	0.052	3.16	234/234	54,60	0.000	0.00
24/25	16,54	0.037	2.24	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	0.193	11.76	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	0.000	0.00	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	0.000	0.00	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	0.000	0.00	HI-REX	NA	0.000	—
236/3(CL4C)	16,54	0.000	0.00	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	0.000	0.00	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	0.000	0.00	2345/245	54,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	—	2345/234	54,60	0.000	0.00
236/23	54,60	0.000	0.00	2346/2356	60	0.000	0.00
25/34	54,60	0.000	0.00	CL7	60	0.000	0.00
24/34	54,60	0.000	0.00	2345/2346	60	0.000	0.00
234/4	54,60	0.000	0.00	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.000	0.00	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000 CL2: 0.001 CL3: 0.245 CL4: 0.292
CL5: 0.000 CL6: 0.284 CL7: 0.000 CL8: 0.000

TOTAL PCB: 1.642

GMM 002 0488

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 11/03/85

VIAL NUMBER: 11

DILUTION FACTOR: 0.696

SAMPLE NAME: H20 85-313

PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	0.000	0.00
2/2	21,16	0.000	0.00	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	0.000	0.00	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	0.000	0.00
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	0.000	0.00	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	1.006	55.13	34/34	48	0.000	0.00
25/2	16	0.198	10.07	2345/26(CL58)	54,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	0.000	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.000	0.00	245/34(2346/236)	54,60	0.000	0.00
26/4	16	0.000	0.00	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	0.000	0.00	234/34	54,60	0.000	0.00
25/3	16	0.000	0.00	245/245	54,60	0.000	0.00
236/2(35/2)	16	0.000	0.00	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	0.000	0.00	234/245	54,60	0.000	0.00
25/4(24/3)	16	0.000	0.00	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	0.000	0.00	2346/34(2356/245)	60	0.000	0.00
23/4	16	0.000	0.00	2356/245(CL7A)	54	0.000	0.00
25/25	16,54	0.239	13.12	234/234	54,60	0.000	0.00
24/25	16,54	0.000	0.00	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	0.022	1.18	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	0.000	0.00	2346/234(245/245)	54,60	0.000	0.00
23/24(CL4A)	16,54	0.000	0.00	2345/2356+245/245(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	0.000	0.00	HIRES	NA	0.000	---
236/3(CL4C)	16,54	0.000	0.00	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	0.359	19.63	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	0.000	0.00	2345/245	54,60	0.000	0.00
HEPTACHLOROSTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	0.000	0.00	2346/2356	60	0.000	0.00
25/34	54,60	0.000	0.00	CL7	60	0.000	0.00
24/34	54,60	0.000	0.00	2345/2346	60	0.000	0.00
234/4	54,60	0.000	0.00	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.000	0.00	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000 CL2: 1.006 CL3: 0.198 CL4: 0.629
CL5: 0.000 CL6: 0.000 CL7: 0.000 CL8: 0.000

TOTAL PCB: 1.824

GMN 002 0489

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 11/03/85

VIAL NUMBER: 12

DILUTION FACTOR: 0.710

SAMPLE NAME: N20 85-315

PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT % TOTAL % PCB	PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	34,60	0.020	0.03
2/2	21,16	17.475	30.25	245/23	34,60	0.000	0.00
3	21	0.000	0.00	234/25	34,60	0.000	0.00
26	21,16	5.440	9.43	P,P'-DDE	NA	0.000	—
4	21	0.000	0.00	234/24	34	0.000	0.00
25	21,16	0.000	0.00	234/23	34,60	0.000	0.00
24	21,16	0.000	0.00	2356/25	34,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	34,60	0.000	0.00
26/2	21,16	7.021	13.56	236/245(234/236)	34,60	0.000	0.00
2/4	21,16	1.563	2.71	34/34	40	0.000	0.00
25/2	16	2.052	3.56	2345/26(CL38)	34,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	34,60	0.000	0.00
HEXACHLOROBENZENE	NA	2.633	—	2356/236(245/34)	34,60	0.000	0.00
23/2	16	0.000	0.00	245/34(2346/236)	34,60	0.000	0.00
26/4	16	3.675	6.37	2346/236(235/245)	34,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	34,60	0.000	0.00
246/2	16	0.354	0.96	234/34	34,60	0.000	0.00
25/3	16	0.691	1.20	245/245	34,60	0.000	0.00
236/2(35/2)	16	0.398	1.04	234/235(CL6A)	34,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	34,60	0.000	0.00
24/26(CL3B)	16	0.570	1.00	234/245	34,60	0.000	0.00
25/4(24/3)	16	1.104	1.91	2356/235(2346/34)	34,60	0.000	0.00
24/4(23/3+24/4)	16	1.326	2.65	2346/34(2356/245)	60	0.000	0.00
23/4	16	0.399	0.69	2356/245(CL7A)	34	0.000	0.00
25/25	16,34	1.900	3.45	234/234	34,60	0.000	0.00
24/25	16,34	2.352	4.00	2346/245(2356/2356)	34,60	0.000	0.00
23/25	16,34	1.310	2.28	2356/234(2346/234)	34,60	0.000	0.00
24/24	16,34	1.440	2.51	2346/234(245/345)	34,60	0.000	0.00
23/24(CL4A)	16,34	1.350	2.35	2345/2356+245/345(23456/236)	34,60	0.000	0.00
23/23+234/2(CL4B)	16,34	0.000	0.00	MIREX	NA	0.000	—
236/3(CL4C)	16,34	1.666	2.89	2345/34	34,60	0.000	0.00
236/4(CL4D)	16,34	1.333	2.35	2345/235	34,60	0.000	0.00
235/26(CL5A)	34,60	0.027	0.05	2345/245	34,60	0.000	0.00
HEPTACHLOROSTYRENE	NA	0.000	—	2345/234	34,60	0.000	0.00
236/23	34,60	0.000	0.00	2346/2356	60	0.000	0.00
25/34	34,60	1.379	3.43	CL7	60	0.000	0.00
24/34	34,60	0.126	0.22	2345/2346	60	0.000	0.00
234/4	34,60	0.000	0.00	23456/245	60	0.000	0.00
236/236	34,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	34,60	0.000	0.00	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000
CL5: 0.047

CL2: 24.477
CL6: 0.000

CL3: 17.268
CL7: 0.000

CL4: 15.090
CL8: 0.000

TOTAL PCB: 57.690

GM 002 0490

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 11/03/85

VIAL NUMBER: 13

DILUTION FACTOR: 0.671

SAMPLE NAME: M20 85-316

PCB SUBSTITUTION PATTERN	AROCLO MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCLO MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	0.000	0.00
2/2	21,16	15.932	32.22	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	6.294	12.54	P,P'-DDE	NA	0.000	—
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	0.000	0.00
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	6.301	12.74	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	1.877	3.80	34/34	48	0.000	0.00
25/2	16	1.686	3.41	2345/26(CL5B)	54,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	1.908	—	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.000	0.00	245/34(2346/236)	54,60	0.000	0.00
26/4	16	2.442	4.94	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	0.396	0.80	234/34	54,60	0.000	0.00
25/3	16	0.448	0.91	245/245	54,60	0.000	0.00
236/2(35/2)	16	0.493	1.00	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	0.393	0.80	234/245	54,60	0.000	0.00
25/4(24/3)	16	0.072	1.76	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	1.742	3.52	2346/34(2356/245)	60	0.000	0.00
23/4	16	0.000	0.00	2356/245(CL7A)	54	0.000	0.00
25/25	16,54	1.423	2.88	234/234	54,60	0.000	0.00
24/25	16,54	1.402	3.00	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	1.019	2.06	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	1.102	2.23	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	1.285	2.60	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	0.000	0.00	NIHREX	NA	0.000	—
236/3(CL4C)	16,54	1.714	3.47	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	1.270	2.57	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	0.178	0.36	2345/245	54,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	—	2345/234	54,60	0.000	0.00
236/23	54,60	0.000	0.00	2346/2356	60	0.000	0.00
25/34	54,60	0.580	1.17	CL7	60	0.000	0.00
24/34	54,60	0.000	0.00	2345/2346	60	0.000	0.00
234/4	54,60	0.613	1.24	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.000	0.00	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000
CL5: 0.178
TOTAL PCB: 49.455

CL2: 24.014
CL6: 0.000

CL3: 13.490
CL7: 0.000

CL4: 11.773
CL8: 0.000

GM 002 0491

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 11/03/85

VIAL NUMBER: 16

DILUTION FACTOR: 0.688

SAMPLE NAME: N20 85-317

PCB SUBSTITUTION PATTERN	AROCLOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCLOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	0.054	0.13
2/2	21,16	11.258	26.16	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.275	0.64
26	21,16	3.288	7.64	P,P'-DDE	NA	0.000	—
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	0.992	2.31
24	21,16	0.000	0.00	2356/25	54,60	0.499	1.16
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	5.288	12.29	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	1.718	3.99	34/34	48	0.000	0.00
25/2	16	1.571	3.65	2345/26(CL58)	54,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	1.924	—	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.000	0.00	245/34(2346/236)	54,60	0.000	0.00
26/4	16	1.785	3.96	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	0.358	0.83	234/34	54,60	0.000	0.00
25/3	16	0.508	1.18	245/245	54,60	0.000	0.00
236/2(35/2)	16	0.451	1.05	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	0.480	1.12	234/245	54,60	0.000	0.00
25/4(24/3)	16	1.163	2.78	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	1.512	3.51	2346/34(2356/245)	60	0.000	0.00
23/4	16	0.376	0.87	2356/245(CL7A)	54	0.000	0.00
25/25	16,54	1.982	3.68	234/234	54,60	0.000	0.00
24/25	16,54	1.599	3.72	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	1.829	2.89	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	1.864	2.47	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	0.359	1.38	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	0.000	0.00	MIREX	NA	0.000	—
236/3(CL4C)	16,54	2.111	4.91	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	1.778	4.11	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	0.125	0.29	2345/245	54,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	—	2345/234	54,60	0.000	0.00
236/23	54,60	0.000	0.00	2346/2356	60	0.000	0.00
25/34	54,60	1.685	3.94	CL7	60	0.000	0.00
24/34	54,60	0.000	0.00	2345/2346	60	0.000	0.00
234/4	54,60	0.000	0.00	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.000	0.00	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000
CL5: 1.447
TOTAL PCB: 43.832

CL2: 16.264
CL6: 0.439

CL3: 12.123
CL7: 0.000

CL4: 12.780
CL8: 0.000

3MW
002
0492

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 11/06/85

VIAL NUMBER: 14

DILUTION FACTOR: 10.200

SAMPLE NAME: 140 05-214

PCB SUBSTITUTION PATTERN	ANALOR MLX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	ANALOR MLX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	94,60	35.031	0.16
2/2	21,16	4015.219	20.41	245/23	94,60	21.697	0.10
3	21	0.000	0.00	234/25	94,60	20.516	0.10
26	21,16	1805.250	6.95	P,P'-DDE	NA	0.000	—
4	21	0.000	0.00	234/24	94	47.725	0.22
25	21,16	35.103	0.25	234/23	94,60	120.721	0.65
24	21,16	10.792	0.05	235/25	94,60	45.432	0.21
2/3	21,16	376.222	1.74	235/23	94,60	2.356	0.01
26/2	21,16	2280.660	10.30	236/245(234/236)	94,60	20.127	0.15
24	21,16	1629.969	7.54	24/24	94	0.000	0.00
25/2	16	296.716	1.37	2345/26(CL38)	94,60	0.000	0.00
24/2	16	0.000	0.00	234/236(235/236)	94,60	25.946	0.17
DECHLORODIBENZO	NA	730.400	—	235/236(245/24)	94,60	0.000	0.00
22/2	16	87.170	0.40	245/24(234/236)	94,60	26.636	0.15
26/4	16	1030.316	4.89	234/236(235/245)	94,60	35.946	0.26
44	21,16	812.063	3.75	235/245(CL3C)	94,60	20.150	0.11
246/2	16	213.301	0.99	234/24	94,60	19.105	0.09
25/3	16	763.267	3.53	245/245	94,60	40.300	0.20
236/2(35/2)	16	224.155	1.04	234/235(CL6A)	94,60	1.440	0.01
24/3(CL3A)	16	424.020	1.96	235/234(CL6B)	94,60	0.000	0.00
24/26(CL3B)	16	222.330	1.03	234/245	94,60	0.000	0.00
25/4(24/2)	16	1220.040	5.70	235/235(234/24)	94,60	0.000	0.00
24/4(23/24/24/4)	16	900.301	2.30	234/24(235/245)	94	0.000	0.00
22/4	16	205.111	1.23	235/245(CL7A)	94	60.326	0.28
25/25	16,34	902.000	2.46	234/234	94,60	0.000	0.00
24/25	16,34	775.750	3.60	234/245(235/2356)	94,60	80.159	0.38
23/25	16,34	203.317	0.94	235/234(234/234)	94,60	21.000	0.10
24/24	16,34	803.196	2.79	234/234(245/245)	94,60	0.000	0.00
23/24(CL4A)	16,34	100.199	0.70	2345/2356(245/245(2345/236)	94,60	0.000	0.00
23/234/24/2(CL4B)	16,34	102.006	0.47	10/10X	NA	0.000	—
236/2(CL4C)	16,34	870.012	1.75	2345/24	94,60	0.000	0.00
236/4(CL4D)	16,34	627.475	2.90	2345/235	94,60	0.000	0.00
235/26(CL5A)	94,60	117.786	0.54	2345/245	94,60	401.010	2.04
DECHLORODIBENZO	NA	0.000	—	2345/234	94,60	27.440	0.13
236/23	94,60	47.675	0.22	234/2356	94	5.404	0.03
25/24	94,60	80.340	0.39	CL7	94	0.000	0.00
24/24	94,60	90.642	0.25	2345/2346	94	0.000	0.00
234/4	94,60	277.632	1.20	2345/245	94	0.000	0.00
236/236	94,60	0.000	0.00	2345/234	94	0.000	0.00
246/25	94,60	0.000	0.00	2345/2346	94	0.000	0.00

TOTAL	CL1: 0.000	CL2: 8004.625	CL3: 6976.010	CL4: 4409.673
	CL5: 400.804	CL6: 105.050	CL7: 600.356	CL8: 5.404
TOTAL PCB:	21631.005			

3MM

002

0493

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 11/04/85

VIAL NUMBER: 4

DILUTION FACTOR: 24.570

SAMPLE NAME: C.TENTHUS 05-341

PCB SUBSTITUTION PATTERN	ANALOR PEX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	ANALOR PEX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	34,60	0.000	0.00
2/2	21,16	0.000	0.00	245/23	34,60	0.000	0.00
3	21	0.000	0.00	234/25	34,60	0.000	0.00
25	21,16	0.000	0.00	P,P'-DDE	NA	0.000	0.00
4	21	0.000	0.00	234/24	34	0.000	0.00
25	21,16	0.000	0.00	234/23	34,60	0.000	0.00
24	21,16	0.000	0.00	235/25	34,60	0.000	0.00
2/3	21,16	0.000	0.00	235/23	34,60	0.000	0.00
25/2	21,16	0.000	0.00	235/245(234/235)	34,60	17.312	10.22
2/4	21,16	0.000	0.00	34/34	48	0.000	0.00
25/2	16	17.205	9.32	2345/26(1,3B)	34,60	0.000	0.00
24/2	16	0.000	0.00	234/236(235/236)	34,60	0.000	0.00
NONCHLOROBENZENE	NA	0.000	0.00	235/236(245/34)	34,60	0.000	0.00
23/2	16	0.000	0.00	245/34(234/236)	34,60	0.000	0.00
25/4	16	14.570	0.31	2346/236(235/245)	34,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(1,3C)	34,60	0.000	0.00
246/2	16	0.000	0.00	234/34	34,60	0.000	0.00
25/3	16	0.000	0.00	245/245	34,60	0.000	0.00
236/2(35/2)	16	0.000	0.00	234/235(1,6A)	34,60	0.000	0.00
24/3(1,3A)	16	0.000	0.00	235/34(1,6B)	34,60	0.000	0.00
24/26(1,3B)	16	0.000	0.00	234/245	34,60	0.000	0.00
25/4(24/3)	16	0.000	0.00	235/235(234/34)	34,60	0.000	0.00
24/4(23/24/4)	16	27.404	13.00	2346/34(235/245)	00	0.000	0.00
23/4	16	0.000	0.00	235/245(1,7A)	34	28.943	16.51
25/25	16,34	10.053	0.00	234/234	34,60	0.000	0.00
24/25	16,34	10.305	6.22	2346/245(235/235)	34,60	0.000	0.00
23/25	16,34	14.545	0.30	235/234(234/234)	34,60	0.000	0.00
24/24	16,34	16.858	9.30	2346/234(245/245)	34,60	0.000	0.00
23/24(1,4A)	16,34	0.000	0.00	2345/235+245/245(2345/235)	34,60	0.000	0.00
23/23+234/2(1,4B)	16,34	0.000	0.00	HEX	NA	0.000	0.00
235/3(1,4C)	16,34	0.000	0.00	2345/34	34,60	0.000	0.00
235/4(1,4D)	16,34	0.000	0.00	2345/235	34,60	0.000	0.00
235/26(1,5A)	34,60	0.452	4.02	2345/245	34,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	0.00	2345/234	34,60	0.000	0.00
235/23	34,60	0.000	0.00	2346/2356	00	0.000	0.00
25/34	34,60	7.764	4.43	0,7	00	0.000	0.00
24/34	34,60	0.000	0.00	2345/2346	00	0.000	0.00
234/4	34,60	0.000	0.00	23456/245	00	0.000	0.00
235/236	34,60	0.000	0.00	23456/234	00	0.000	0.00
245/25	34,60	0.000	0.00	2345/2345	00	0.000	0.00

TOTAL C1: 0.000 C2: 0.000 C3: 28.403 C4: 00.340
 C5: 0.402 C6: 17.312 C7: 28.943 C8: 0.000
 TOTAL PCB: 173.207

3MM 002 0494

SAMPLE TYPE: DIPHEROMAL

DATE ANALYZED: 11/15/85

VIAL NUMBER: 5

DILUTION FACTOR: 21.360

SAMPLE NAME: C.TERRANS 85-242

PCB SUBSTITUTION PATTERN	ABSCOR PEX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	ABSCOR PEX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	34,60	0.000	0.00
2/2	21,16	0.000	0.00	245/23	34,60	0.000	0.00
3	21	0.000	0.00	234/25	34,60	0.000	0.00
25	21,16	0.000	0.00	P,P'-DDE	NA	0.000	0.00
4	21	0.000	0.00	234/24	34	0.000	0.00
25	21,16	0.000	0.00	234/23	34,60	0.000	0.00
24	21,16	0.000	0.00	2356/25	34,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	34,60	0.000	0.00
25/2	21,16	0.000	0.00	236/245(234/236)	34,60	0.000	0.00
24/4	21,16	0.000	0.00	24/24	NA	0.000	0.00
25/2	16	12.111	12.27	2345/26(CL30)	34,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	34,60	0.000	0.00
NONCHLOROBENZENE	NA	0.000	0.00	2356/236(245/24)	34,60	0.000	0.00
25/2	16	0.000	0.00	245/24(2346/236)	34,60	0.000	0.00
25/4	16	10.466	10.60	2346/236(235/245)	34,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL3C)	34,60	0.000	0.00
246/2	16	0.000	0.00	234/24	34,60	0.000	0.00
25/3	16	0.000	0.00	245/245	34,60	12.303	12.46
236/2(25/2)	16	0.000	0.00	234/235(CL6A)	34,60	0.000	0.00
24/2(CL3A)	16	0.000	0.00	2356/24(CL6B)	34,60	0.000	0.00
24/25(CL3B)	16	0.000	0.00	234/245	34,60	0.000	0.00
25/4(24/3)	16	0.000	0.00	2356/235(2346/24)	34,60	0.000	0.00
24/4(23/24/4)	16	12.280	12.37	2346/24(2356/245)	34	0.000	0.00
25/4	16	0.000	0.00	2356/245(CL7A)	34	0.000	0.00
25/25	16,34	14.113	14.30	234/234	34,60	0.000	0.00
24/25	16,34	10.315	11.06	2346/245(2356/2356)	34,60	0.000	0.00
25/25	16,34	10.301	10.32	2356/234(2346/234)	34,60	0.000	0.00
24/24	16,34	11.012	11.37	2346/234(245/245)	34,60	0.000	0.00
23/24(CL4A)	16,34	0.000	0.00	2345/2356(245/245(23456/236)	34,60	0.000	0.00
23/234/24/2(CL4B)	16,34	0.000	0.00	NONCHLOROBENZENE	NA	0.000	0.00
236/3(CL4C)	16,34	0.000	0.00	2345/24	34,60	0.000	0.00
236/4(CL4D)	16,34	0.000	0.00	2345/235	34,60	0.000	0.00
235/25(CL3A)	34,60	2.336	2.44	2345/245	34,60	0.000	0.00
NONCHLOROBENZENE	NA	0.000	0.00	2345/234	34,60	0.000	0.00
236/23	34,60	0.000	0.00	2346/2356	34,60	0.000	0.00
25/24	34,60	0.000	0.00	CL7	34,60	0.000	0.00
24/24	34,60	0.000	0.00	2345/2346	34,60	0.000	0.00
234/4	34,60	0.000	0.00	23456/245	34,60	0.000	0.00
236/236	34,60	0.000	0.00	23456/234	34,60	0.000	0.00
245/25	34,60	0.000	0.00	2345/2345	34,60	0.000	0.00

TOTAL CL1: 0.000 CL2: 0.000 CL3: 25.778 CL4: 47.227
 CL5: 2.286 CL6: 12.303 CL7: 0.000 CL8: 0.000

TOTAL PCB: 28.705

3MM 002 0495

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 11/05/85

VEAL NUMBER: 6

DILUTION FACTOR: 19.379

SAMPLE NAME: C.T.B.T.H.S. 05-243

PCB SUBSTITUTION PATTERN	AROCLO RELX	MS PCB PER ML SAMPLE	PCT 0 TOTAL 0 PCT 0	PCB SUBSTITUTION PATTERN	AROCLO RELX	MS PCB PER ML SAMPLE	PCT TOTAL PCT
2	21,16	0.000	0.00 0 245/24		34,60	0.000	0.00
2/2	21,16	0.000	0.00 0 245/23		34,60	0.000	0.00
3	21	0.000	0.00 0 234/25		34,60	0.000	0.00
26	21,16	0.000	0.00 0 P,P'-DDE		34	0.000	0.00
4	21	0.000	0.00 0 234/24		34,60	0.000	0.00
25	21,16	0.000	0.00 0 234/23		34,60	0.000	0.00
24	21,16	0.000	0.00 0 235/25		34,60	0.000	0.00
2/3	21,16	0.000	0.00 0 235/23		34,60	0.000	0.00
26/2	21,16	0.000	0.00 0 236/245(234/236)		34,60	0.000	0.00
24	21,16	0.000	0.00 0 34/34		34	0.000	0.00
25/2	16	7.316	6.13 0 2345/26(0.38)		34,60	0.000	0.00
24/2	16	0.000	0.00 0 234/236(235/236)		34,60	0.000	0.00
DECHLORODIBENZO	34	0.000	0.00 0 2356/236(245/34)		34,60	0.000	0.00
23/2	16	0.000	0.00 0 245/34(2346/236)		34,60	0.000	0.00
26/4	16	0.000	0.00 0 2346/236(235/245)		34,60	0.000	0.00
44	21,16	0.000	0.00 0 235/245(0.50)		34,60	0.000	0.00
246/2	16	0.000	0.00 0 234/34		34,60	0.000	0.00
25/3	16	0.000	0.00 0 245/245		34,60	0.000	0.00
236/2(35/2)	16	0.000	0.00 0 234/235(0.60)		34,60	0.000	0.00
24/2(0.34)	16	0.000	0.00 0 2356/34(0.60)		34,60	0.000	0.00
24/25(0.38)	16	0.000	0.00 0 234/245		34,60	0.000	0.00
25/4(24/3)	16	4.283	3.43 0 2356/235(2346/34)		34,60	0.000	0.00
24/4(23/34/24/4)	16	0.000	0.00 0 2346/34(2356/245)		34	0.000	0.00
23/4	16	0.000	0.00 0 2356/245(0.70)		34,60	0.000	0.00
25/25	16,34	12.042	10.47 0 234/234		34,60	0.000	0.00
24/25	16,34	11.039	9.05 0 2346/245(2356/2356)		34,60	0.000	0.00
23/25	16,34	6.663	5.43 0 2356/234(2346/234)		34,60	0.000	0.00
24/24	16,34	74.362	61.13 0 2346/234(245/245)		34,60	0.000	0.00
23/24(0.40)	16,34	0.000	0.00 0 2345/2356(245/245(23456/236)		34,60	0.000	0.00
23/234/234/2(0.40)	16,34	0.000	0.00 0 INDEX		34	0.000	0.00
236/3(0.40)	16,34	0.000	0.00 0 2345/34		34,60	0.000	0.00
236/4(0.40)	16,34	0.000	0.00 0 2345/235		34,60	0.000	0.00
235/25(0.34)	34,60	1.666	1.26 0 2345/245		34,60	0.000	0.00
DECHLORODIBENZO	34	0.000	0.00 0 2345/234		34,60	0.000	0.00
236/23	34,60	0.000	0.00 0 2346/2356		34	0.000	0.00
25/34	34,60	0.000	0.00 0 0.7		34	0.000	0.00
24/34	34,60	0.000	0.00 0 2345/2346		34	0.000	0.00
234/4	34,60	0.000	0.00 0 23456/245		34	0.000	0.00
236/236	34,60	0.000	0.00 0 23456/234		34	0.000	0.00
245/25	34,60	0.000	0.00 0 2345/2345		34	0.000	0.00

TOTAL CL1: 0.000 CL2: 0.000 CL3: 11.719 CL4: 205.366
CL5: 1.666 CL6: 0.000 CL7: 2.600 CL8: 0.000

TOTAL PCB: 122.631

GM 002 0496

SAMPLE TYPE: SUPPLEMENTAL

DATE ANALYZED: 11/25/85

VIAL NUMBER: 7

DILUTION FACTOR: 0.143

SAMPLE NAME: BGS LIESSES

PCB SUBSTITUTION PATTERN	ANALOR MIX	MS PCB PER ML SUPPLE	PCT 0 TOTAL 0 PCB 0	PCB SUBSTITUTION PATTERN	ANALOR MIX	MS PCB PER ML SUPPLE	PCT TOTAL PCB
2	21,16	1.740	11.86 0 245/24		34,60	0.829	0.20
2/2	21,16	0.361	2.45 0 245/23		34,60	0.000	0.00
3	21	0.000	0.00 0 234/25		34,60	0.032	0.36
25	21,16	0.820	0.19 0 P,P'-DDE		NA	0.062	
4	21	0.000	0.00 0 234/24		34	0.112	0.76
25	21,16	0.825	0.17 0 234/23		34,60	0.579	4.60
24	21,16	0.007	0.05 0 2356/25		34,60	0.190	1.29
2/3	21,16	0.000	0.00 0 2356/23		34,60	0.000	0.00
25/2	21,16	0.000	0.00 0 236/245(234/236)		34,60	0.000	0.00
2/4	21,16	0.347	2.35 0 34/34		NA	0.000	0.00
25/2	16	0.303	3.41 0 2345/26(CL38)		34,60	0.000	0.00
24/2	16	0.000	0.00 0 234/236(2356/236)		34,60	0.000	0.00
HEXACHLOROBENZENE	NA	0.004	0.00 0 2356/236(245/24)		34,60	0.000	0.00
23/2	16	0.304	2.67 0 245/34(2346/236)		34,60	0.015	0.10
25/4	16	2.354	15.95 0 2346/236(235/245)		34,60	0.000	0.00
4/4	21,16	0.000	0.00 0 235/245(CL3C)		34,60	0.000	0.00
245/2	16	0.065	0.44 0 234/24		34,60	0.000	0.00
25/3	16	0.030	0.67 0 245/245		34,60	0.000	0.00
236/2(25/2)	16	0.000	0.00 0 234/235(CL6A)		34,60	0.000	0.00
24/2(CL3A)	16	0.000	0.00 0 2356/34(CL6B)		34,60	0.000	0.00
24/25(CL3B)	16	0.000	0.00 0 234/245		34,60	0.000	0.00
25/4(24/2)	16	0.451	3.05 0 2356/235(2346/24)		34,60	0.000	0.00
24/4(23/2)(24/4)	16	0.703	4.77 0 2346/34(2356/245)		NA	0.000	0.00
23/4	16	0.000	0.00 0 2356/245(CL7A)		34	0.000	0.00
25/25	16,34	1.109	7.82 0 234/234		34,60	0.000	0.00
24/25	16,34	1.536	10.41 0 2346/245(2356/2356)		34,60	0.000	0.00
23/25	16,34	0.000	0.00 0 2356/234(2346/234)		34,60	0.000	0.00
24/24	16,34	0.000	0.00 0 2346/234(245/245)		34,60	0.000	0.00
23/24(CL4A)	16,34	0.000	0.00 0 2345/2356(245/245(23456/236)		34,60	0.000	0.00
23/23(24/2)(CL4B)	16,34	0.000	0.00 0 INDEX		NA	0.000	
236/3(CL4C)	16,34	2.671	18.10 0 2345/24		34,60	0.000	0.00
236/4(CL4D)	16,34	0.000	0.00 0 2345/235		34,60	0.000	0.00
235/26(CL3A)	34,60	0.140	0.95 0 2345/245		34,60	0.000	0.00
HEXACHLOROCYCLOPENTADIENE	NA	0.000	0.00 0 2345/234		34,60	0.000	0.00
236/23	34,60	0.170	1.20 0 2346/2356		NA	0.000	0.00
25/24	34,60	0.130	1.07 0 CL7		NA	0.000	0.00
24/24	34,60	0.234	1.59 0 2345/2346		NA	0.000	0.00
234/4	34,60	0.477	3.24 0 23456/245		NA	0.000	0.00
236/236	34,60	0.000	0.00 0 23456/234		NA	0.000	0.00
245/25	34,60	0.000	0.00 0 2345/2345		NA	0.000	0.00

TOTAL CL1: 1.740 CL2: 0.700 CL3: 4.304 CL4: 6.250
CL5: 1.205 CL6: 0.277 CL7: 0.000 CL8: 0.000

TOTAL PCB: 14.755

GMM 002 0497

SMPL TYPE: SUPERFUNDAL

DATE ANALYZED: 11/05/85

VIAL NUMBER: 10

DILUTION FACTOR: 0.009

SMPL NAME: BRIS. BERRIS 05-044A

PCB SUBSTITUTION PATTERN	ANALOR RELX	MS PCB PER ML SMPL	PCT 0 TOTAL 0 PCB 0	PCB SUBSTITUTION PATTERN	ANALOR RELX	MS PCB PER ML SMPL	PCT TOTAL PCB
2	21,16	1.109	36.06 0 245/24		34,60	0.000	0.00
2/2	21,16	0.056	1.05 0 245/23		34,60	0.000	0.00
3	21	0.000	0.01 0 234/25		34,60	0.020	0.00
25	21,16	0.006	0.13 0 P,P'-DDE		34	0.000	0.00
4	21	0.000	0.00 0 234/24		34,60	0.220	7.50
25	21,16	0.000	0.00 0 234/23		34,60	0.000	0.00
24	21,16	0.000	0.00 0 235/25		34,60	0.000	0.00
2/3	21,16	0.000	0.00 0 235/23		34,60	0.000	0.00
25/2	21,16	0.000	0.00 0 235/245(234/236)		34,60	0.041	1.35
2/4	21,16	0.000	0.00 0 34/34		34,60	0.000	0.00
25/2	16	0.169	5.61 0 234/26(0.50)		34,60	0.000	0.00
24/2	16	0.000	0.00 0 234/236(235/236)		34,60	0.000	0.00
NONCHLOROBENZENE	34	0.000	0.00 0 235/236(245/34)		34,60	0.000	0.00
23/2	16	0.000	0.00 0 245/34(234/236)		34,60	0.000	0.00
25/4	16	0.000	0.00 0 234/236(235/245)		34,60	0.000	0.00
4/4	21,16	0.000	0.00 0 235/245(0.50)		34,60	0.000	0.00
245/2	16	0.000	0.00 0 234/34		34,60	0.000	0.00
25/3	16	0.000	0.00 0 245/245		34,60	0.000	0.27
235/2(35/2)	16	0.000	0.00 0 234/235(0.60)		34,60	0.000	0.00
24/2(0.34)	16	0.000	0.00 0 235/34(0.60)		34,60	0.000	0.00
24/25(0.38)	16	0.000	0.00 0 234/245		34,60	0.000	0.00
25/4(24/3)	16	0.201	6.69 0 235/235(234/34)		34,60	0.000	0.00
24/4(23/24/4)	16	0.201	6.69 0 234/34(235/245)		34	0.000	0.00
23/4	16	0.000	0.00 0 235/245(0.70)		34,60	0.000	0.00
25/25	26,34	0.062	2.05 0 234/234		34,60	0.000	0.00
24/25	26,34	0.140	4.65 0 234/245(235/235)		34,60	0.000	0.00
23/25	26,34	0.053	1.76 0 235/234(234/234)		34,60	0.000	0.00
24/24	26,34	0.000	0.00 0 234/234(245/245)		34,60	0.000	0.00
23/24(0.40)	26,34	0.000	0.00 0 234/235+245/245(2345/236)		34,60	0.000	0.00
23/23+234/2(0.40)	26,34	0.300	12.64 0 INDEX		34,60	0.000	0.00
235/3(0.40)	26,34	0.000	0.00 0 2345/34		34,60	0.000	0.00
235/4(0.40)	26,34	0.224	7.44 0 2345/235		34,60	0.000	0.00
235/25(0.34)	34,60	0.020	0.67 0 2345/245		34,60	0.000	0.00
NONCHLOROBENZENE	34	0.000	0.00 0 2345/234		34,60	0.000	0.00
235/23	34,60	0.000	0.00 0 2345/235		34	0.000	0.00
25/34	34,60	0.000	0.00 0 0.7		34	0.000	0.00
24/34	34,60	0.000	0.00 0 2345/234		34	0.000	0.00
234/4	34,60	0.000	0.00 0 2345/245		34	0.000	0.00
235/236	34,60	0.000	0.00 0 2345/234		34	0.000	0.00
245/25	34,60	0.000	0.00 0 2345/2345		34	0.000	0.00

TOTAL CL1: 1.109 CL2: 0.061 CL3: 0.061 CL4: 0.020
CL5: 0.200 CL6: 0.040 CL7: 0.000 CL8: 0.000

TOTAL PCB: 2.000

GMM

002

0498

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 11/05/85

VIAL NUMBER: 11

DILUTION FACTOR: 0.070

SAMPLE NAME: BRIG. DEBRIS 05-0440

PCB SUBSTITUTION PATTERN	ANALOR VOLX	MS PCB PER ML SAMPLE	PCT 0 TOTAL 0 PCB 0	PCB SUBSTITUTION PATTERN	ANALOR VOLX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	1.124	20.63 0 245/24		34,60	0.000	0.00
2/2	21,16	0.630	11.71 0 245/23		34,60	0.000	0.00
3	21	0.000	0.00 0 234/25		34,60	0.011	0.21
25	21,16	0.133	2.44 0 P,P'-DDE		34	0.000	0.00
4	21	0.000	0.00 0 234/24		34,60	0.000	0.00
25	21,16	0.000	0.00 0 234/23		34,60	0.000	1.65
24	21,16	0.000	0.00 0 2356/25		34,60	0.000	0.00
2/3	21,16	0.017	0.31 0 2356/23		34,60	0.000	0.00
26/2	21,16	0.242	4.43 0 236/245(234/236)		34,60	0.000	1.46
2/4	21,16	0.117	2.15 0 34/34		34	0.000	0.00
25/2	16	0.110	2.03 0 2345/26(CL30)		34,60	0.000	0.00
24/2	16	0.000	0.00 0 234/236(2356/236)		34,60	0.000	0.00
DETACHABLE TYPE	34	0.161	0.00 0 2356/236(245/34)		34,60	0.000	0.00
23/2	16	0.000	0.00 0 245/34(2346/236)		34,60	0.000	0.00
26/4	16	0.189	3.47 0 2346/236(235/245)		34,60	0.000	0.00
4/4	21,16	0.471	8.64 0 235/245(CL30)		34,60	0.000	0.00
246/2	16	0.023	0.42 0 234/34		34,60	0.000	0.00
25/3	16	0.230	5.40 0 245/245		34,60	0.074	1.36
236/2(35/2)	16	0.000	0.00 0 234/235(CL30)		34,60	0.000	0.00
24/2(CL30)	16	0.000	0.00 0 2356/34(CL30)		34,60	0.000	0.00
24/26(CL30)	16	0.000	0.00 0 234/245		34,60	0.000	0.00
25/4(24/3)	16	0.237	3.45 0 2356/235(2346/34)		34,60	0.000	0.00
24/4(23/34/24/4)	16	0.405	7.40 0 2346/34(2356/245)		34	0.000	0.00
23/4	16	0.000	0.00 0 2356/245(CL70)		34	0.000	0.00
25/25	16,34	0.079	1.45 0 234/234		34,60	0.000	0.00
24/25	16,34	0.173	3.17 0 2346/245(2356/2356)		34,60	0.000	0.00
25/25	16,34	0.052	0.96 0 2356/234(2346/234)		34,60	0.000	0.00
24/24	16,34	0.036	1.77 0 2346/234(245/245)		34,60	0.000	0.00
23/24(CL40)	16,34	0.000	0.00 0 2345/2356(245/245/2356)		34,60	0.000	0.00
23/234/234/2(CL40)	16,34	0.633	11.63 0 NREX		34	0.000	0.00
236/3(CL40)	16,34	0.000	0.00 0 2345/34		34,60	0.000	0.00
236/4(CL40)	16,34	0.005	1.35 0 2345/235		34,60	0.000	0.00
235/26(CL30)	34,60	0.011	0.19 0 2345/245		34,60	0.000	0.00
DETACHABLE TYPE	34	0.000	0.00 0 2345/234		34,60	0.000	0.00
236/23	34,60	0.000	0.00 0 2346/2356		34	0.000	0.00
25/34	34,60	0.000	0.00 0 CL7		34	0.000	0.00
24/34	34,60	0.000	0.00 0 2345/2346		34	0.000	0.00
234/4	34,60	0.000	0.00 0 23456/245		34	0.000	0.00
236/236	34,60	0.000	0.00 0 23456/234		34	0.000	0.00
245/25	34,60	0.000	0.00 0 2345/2345		34	0.000	0.00

TOTAL CL1: 1.124 CL2: 1.576 CL3: 1.301 CL4: 1.141
CL5: 0.112 CL6: 0.134 CL7: 0.000 CL8: 0.000

TOTAL PCB: 2.447

GMM 002 0499

SAMPLE TYPE: SUPERFUNDAL

DATE ANALYZED: 11/03/85

VIAL NUMBER: 12

DILUTION FACTOR: 0.074

SAMPLE NAME: 0016.DENRIS 05-044C

PCB SUBSTITUTION PATTERN	ANALOR RELX	MS PCB PER HL SUPPLE	PCT 0 TOTAL 0 PCB 0	PCB SUBSTITUTION PATTERN	ANALOR RELX	MS PCB PER HL SUPPLE	PCT TOTAL PCB
2	21,16	0.003	24.91 0 245/24		34,60	0.000	0.00
2/2	21,16	0.103	2.60 0 245/23		34,60	0.003	0.03
3	21	0.000	0.00 0 234/25		34,60	0.000	0.00
25	21,16	0.000	0.00 0 P,P'-DDE		NA	0.023	---
4	21	0.000	0.00 0 234/24		34	0.000	0.00
25	21,16	0.000	0.00 0 234/23		34,60	0.050	1.49
24	21,16	0.000	0.00 0 235/25		34,60	0.073	1.04
2/3	21,16	0.015	0.37 0 235/23		34,60	0.000	0.00
25/2	21,16	0.023	0.50 0 235/245(234/236)		34,60	0.010	0.24
24	21,16	0.100	4.05 0 34/24		34	0.000	0.00
25/2	16	0.118	2.99 0 234/25(0.50)		34,60	0.000	0.00
24/2	16	0.000	0.00 0 234/236(235/236)		34,60	0.000	0.00
DETACHLODSTYBE	NA	0.204	0 235/236(245/34)		34,60	0.000	0.00
22/2	16	0.147	3.74 0 245/24(234/236)		34,60	0.000	0.00
25/4	16	0.067	1.70 0 234/236(235/245)		34,60	0.000	0.00
24	21,16	0.433	10.90 0 235/245(0.50)		34,60	0.000	0.00
245/2	16	0.029	0.74 0 234/24		34,60	0.000	0.00
25/3	16	0.000	0.00 0 245/245		34,60	0.224	5.60
235/2(35/2)	16	0.000	0.00 0 234/235(0.50)		34,60	0.000	0.00
24/2(0.50)	16	0.000	0.00 0 235/24(0.50)		34,60	0.000	0.00
24/25(0.50)	16	0.000	0.00 0 234/245		34,60	0.000	0.00
25/4(24/3)	16	0.001	1.29 0 235/236(234/24)		34,60	0.000	0.00
24/4(23/24/4)	16	0.129	3.27 0 234/24(235/245)		34	0.000	0.00
24/4	16	0.000	0.00 0 235/245(0.70)		34	0.000	0.00
23/25	16,34	0.037	1.44 0 234/234		34,60	0.000	0.00
24/25	16,34	0.120	3.05 0 234/245(235/235)		34,60	0.000	0.00
23/25	16,34	0.171	4.34 0 235/234(234/234)		34,60	0.000	0.00
24/24	16,34	0.000	0.00 0 234/234(245/245)		34,60	0.000	0.00
23/24(0.50)	16,34	0.000	0.00 0 234/235+245/245(2345/236)		34,60	0.000	0.00
23/23+234/2(0.50)	16,34	0.014	13.04 0 HREX		NA	0.000	---
235/3(0.50)	16,34	0.000	0.00 0 234/24		34,60	0.000	0.00
235/4(0.50)	16,34	0.125	3.10 0 234/235		34,60	0.000	0.00
235/25(0.50)	34,60	0.041	1.03 0 234/245		34,60	0.000	0.00
DETACHLODSTYBE	NA	0.000	0 234/234		34,60	0.000	0.00
235/23	34,60	0.040	1.25 0 234/235		34	0.000	0.00
25/24	34,60	0.041	6.10 0 0.7		34	0.000	0.00
24/24	34,60	0.000	0.00 0 234/234		34	0.000	0.00
234/4	34,60	0.000	0.00 0 2345/245		34	0.000	0.00
235/236	34,60	0.000	0.00 0 2345/234		34	0.000	0.00
245/25	34,60	0.000	0.00 0 2345/235		34	0.000	0.00

TOTAL CL1: 0.003 CL2: 0.710 CL3: 0.006 CL4: 1.250
CL5: 0.132 CL6: 0.306 CL7: 0.000 CL8: 0.000

TOTAL PCB: 3.945

GMM 002 0500

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 11/06/85

VIAL NUMBER: 13

DILUTION FACTOR: 0.769

SAMPLE NAME: WATER COMPOSITE(PARTICLES)

PCB SUBSTITUTION PATTERN	AROCLO #BX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCLO #BX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	34,60	0.416	0.36
2/2	21,16	2.000	2.52	245/23	34,60	0.458	0.40
3	21	0.000	0.00	234/25	34,60	1.223	1.07
25	21,16	2.377	2.00	P,P'-DDE	NA	0.000	—
4	21	0.000	0.00	234/24	34	1.029	0.89
23	21,16	0.000	0.00	234/23	34,60	2.005	1.83
24	21,16	0.000	0.00	235/25	34,60	0.321	0.81
2/3	21,16	0.000	0.00	235/23	34,60	0.000	0.00
25/2	21,16	7.968	6.97	235/245(234/235)	34,60	0.567	0.50
24/4	21,16	1.151	1.01	34/34	NA	0.000	0.00
25/2	16	3.905	3.49	234/25(2,3B)	34,60	0.000	0.00
24/2	16	0.000	0.00	234/235(235/236)	34,60	1.293	1.13
NONCHLOROSYSTYRE	NA	3.643	—	235/236(245/34)	34,60	0.000	0.00
23/2	16	1.224	1.07	245/34(2346/236)	34,60	0.000	0.00
25/4	16	4.667	4.00	235/236(235/245)	34,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(2,3C)	34,60	0.000	0.00
24/2	16	2.151	1.88	234/34	34,60	0.000	0.00
25/3	16	0.388	0.34	245/245	34,60	0.405	0.43
235/2(35/2)	16	1.978	1.72	234/235(2,6A)	34,60	0.000	0.00
24/3(2,3A)	16	0.000	0.00	235/34(2,6B)	34,60	0.000	0.00
24/25(2,3B)	16	1.319	1.30	234/245	34,60	0.000	0.00
25/4(24/3)	16	2.672	2.34	235/235(2346/34)	34,60	0.000	0.00
24/4(23/34/24/4)	16	3.109	4.47	2346/34(2356/245)	34	0.000	0.00
23/4	16	0.323	0.31	235/245(2,7A)	34	0.000	0.00
23/25	16,34	9.775	8.35	234/234	34,60	0.000	0.00
24/25	16,34	0.451	7.39	2346/245(2356/2356)	34,60	0.000	0.00
23/25	16,34	7.076	6.19	2356/234(2346/234)	34,60	0.000	0.00
24/24	16,34	4.423	3.87	2346/234(245/345)	34,60	0.000	0.00
23/24(2,4A)	16,34	2.765	2.42	2345/2356(245/345)(23456/236)	34,60	0.000	0.00
23/234/2(2,4B)	16,34	0.007	7.70	NONEX	NA	0.000	—
235/3(2,4C)	16,34	6.230	5.30	2345/34	34,60	0.000	0.00
235/4(2,4D)	16,34	10.030	8.77	2345/235	34,60	0.000	0.00
235/25(2,3A)	34,60	1.821	1.39	2345/245	34,60	0.000	0.00
NONCHLOROSYSTYRE	NA	0.000	—	2345/234	34,60	0.000	0.00
235/23	34,60	0.940	0.82	2346/2356	34	0.000	0.00
23/34	34,60	1.398	1.75	2,7	34	0.000	0.00
24/34	34,60	1.032	0.95	2345/2346	34	0.000	0.00
234/4	34,60	3.405	2.98	23456/245	34	0.000	0.00
235/236	34,60	0.000	0.00	23456/234	34	0.000	0.00
245/25	34,60	0.000	0.00	2345/2345	34	0.000	0.00

TOTAL CL1: 0.000
CL5: 7.968

CL2: 6.400
CL6: 2.277

CL3: 25.938
CL7: 0.000

CL4: 89.734
CL8: 0.000

TOTAL PCB: 114.344

GML 002 0501

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/19/85

VIAL NUMBER: 11

DILUTION FACTOR: 0.671

SAMPLE NAME: N20 85-277

PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	0.542	1.25
2/2	21,16	6.358	14.53	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	3.629	8.29	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	0.217	0.50
24	21,16	0.000	0.00	2356/25	54,60	0.431	0.98
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	3.613	8.26	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	0.765	1.75	34/34	48	0.000	0.00
25/2	16	4.804	10.98	2345/26(CL58)	54,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	54,60	0.000	0.00
NONACHLOROBENZENE	NA	2.765	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	1.623	2.94	245/34(2346/236)	54,60	0.000	0.00
26/4	16	2.881	4.76	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	0.350	0.80	234/34	54,60	0.000	0.00
25/3	16	0.442	1.01	245/245	54,60	0.000	0.00
236/2(35/2)	16	0.454	1.04	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	0.372	0.85	234/245	54,60	0.000	0.00
25/4(24/3)	16	1.202	2.75	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	2.718	6.21	2346/34(2356/245)	60	0.000	0.00
23/4	16	0.000	0.00	2356/245(CL7A)	54	0.000	0.00
25/25	16,54	1.791	4.09	234/234	54,60	0.000	0.00
24/25	16,54	1.876	4.29	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	1.747	3.99	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	1.117	2.55	2346/234(245/245)	54,60	0.000	0.00
23/24(CL4A)	16,54	0.940	2.15	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	0.448	1.02	MIREX	NA	0.000	---
236/3(CL4C)	16,54	1.923	4.30	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	2.421	5.53	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	0.312	0.71	2345/245	54,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	0.000	0.00	2346/2356	60	0.000	0.00
25/34	54,60	0.374	0.86	CL7	60	0.000	0.00
24/34	54,60	0.000	0.00	2345/2346	60	0.000	0.00
234/4	54,60	0.000	0.00	23456/245	60	0.000	0.00
236/236	54,60	1.884	4.12	23456/234	60	0.000	0.00
245/25	54,60	0.000	0.00	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000 CL2: 10.751 CL3: 15.004 CL4: 13.812
CL5: 1.877 CL6: 2.225 CL7: 0.000 CL8: 0.000

TOTAL PCB: 43.759

GMM 002 0502

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/19/85

VIAL NUMBER: 12

DILUTION FACTOR: 0.696

SAMPLE NAME: M20 85-278

PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	0.000	0.00
2/2	21,16	0.009	21.41	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	3.329	0.09	P,P'-DDE	NA	0.000	----
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	1.280	3.11
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	3.008	9.45	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	0.411	1.00	34/34	48	0.000	0.00
25/2	16	3.091	0.75	2345/26(CL5B)	54,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	54,60	0.000	0.00
NONACHLOROBENZENE	NA	2.137	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.009	1.97	245/34(2346/236)	54,60	0.000	0.00
26/4	16	1.941	4.72	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	0.365	0.89	234/34	54,60	0.000	0.00
25/3	16	0.383	0.93	245/245	54,60	0.000	0.00
236/2(35/2)	16	0.303	1.22	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	0.400	0.97	234/245	54,60	0.000	0.00
25/4(24/3)	16	1.079	2.62	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	1.634	3.97	2346/34(2356/245)	60	0.000	0.00
23/4	16	0.333	0.81	2356/245(CL7A)	54	0.000	0.00
25/25	16,54	1.701	4.13	234/234	54,60	0.000	0.00
24/25	16,54	1.606	3.90	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	1.378	3.33	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	1.011	2.46	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	0.623	1.31	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	0.155	0.38	NIHREX	NA	0.000	----
236/3(CL4C)	16,54	2.704	6.57	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	2.540	6.19	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	0.290	0.31	2345/245	54,60	0.000	0.00
SEPTACHLOROSTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	0.000	0.00	2346/2356	60	0.000	0.00
25/34	54,60	0.300	0.34	CL7	60	0.000	0.00
24/34	54,60	0.050	0.14	2345/2346	60	0.000	0.00
234/4	54,60	0.000	0.00	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.000	0.00	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000
CL5: 1.000
TOTAL PCB: 41.130

CL2: 12.550
CL6: 0.000

CL3: 13.669
CL7: 0.000

CL4: 13.431
CL8: 0.000

GMM 002 0503

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/20/85

VIAL NUMBER: 13

DILUTION FACTOR: 0.708

SAMPLE NAME: K20 85-279

PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT % TOTAL % PCB %	PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	0.000	0.00
2/2	21,16	7.469	19.92	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	3.565	9.51	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	0.462	1.25
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	4.412	11.76	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	0.334	1.42	34/34	48	0.000	0.00
25/2	16	4.132	11.07	2345/26(CL58)	54,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	54,60	0.000	0.00
NONACHLOROBENZENE	NA	2.229	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.093	2.38	245/34(2346/236)	54,60	0.000	0.00
26/4	16	1.092	5.05	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	0.228	0.61	234/34	54,60	0.000	0.00
25/3	16	0.312	0.83	245/245	54,60	0.000	0.00
236/2(35/2)	16	0.488	1.30	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	0.319	0.85	234/245	54,60	0.000	0.00
25/4(24/3)	16	0.054	2.28	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	1.689	4.30	2346/34(2356/245)	68	0.000	0.00
23/4	16	0.000	0.00	2356/245(CL7A)	54	0.000	0.00
25/25	16,54	1.342	3.98	234/234	54,60	0.000	0.00
24/25	16,54	1.493	3.98	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	1.289	3.22	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	0.054	2.28	2346/234(245/245)	54,60	0.000	0.00
23/24(CL4A)	16,54	0.634	1.74	2345/2356+245/245(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	0.079	0.21	NIHREX	NA	0.000	---
236/3(CL4C)	16,54	1.752	4.67	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	1.982	5.28	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	0.335	0.89	2345/245	54,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	0.000	0.00	2346/2356	68	0.000	0.00
25/34	54,60	0.389	1.04	CL7	68	0.000	0.00
24/34	54,60	0.138	0.37	2345/2346	68	0.000	0.00
234/4	54,60	0.000	0.00	23456/245	68	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	68	0.000	0.00
245/25	54,60	0.000	0.00	2345/2345	68	0.000	0.00

TOTAL CL1: 0.000 CL2: 11.569 CL3: 14.293 CL4: 10.924
CL5: 0.003 CL6: 0.000 CL7: 0.000 CL8: 0.000

TOTAL PCB: 27.499

GMM

002

0504

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/20/85

VIAL NUMBER: 16

DILUTION FACTOR: 0.668

SAMPLE NAME: M20 85-280

PCB SUBSTITUTION PATTERN	AROCLO MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCLO MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	0.000	0.00
2/2	21,16	6.399	10.41	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	4.383	12.61	P,P'-DDE	NA	0.000	—
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	0.198	0.57
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	3.526	10.15	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	0.444	1.28	34/34	48	0.000	0.00
25/2	16	3.058	0.92	2345/26(CL58)	54,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	1.637	—	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.683	1.96	245/34(2346/236)	54,60	0.000	0.00
26/4	16	1.065	5.37	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	0.243	0.70	234/34	54,60	0.000	0.00
25/3	16	0.216	0.62	245/245	54,60	0.000	0.00
236/2(35/2)	16	0.326	0.94	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	0.333	0.96	234/245	54,60	0.000	0.00
25/4(24/3)	16	0.776	2.23	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	1.643	4.73	2346/34(2356/245)	60	0.000	0.00
23/4	16	0.000	0.00	2356/245(CL7A)	54	0.000	0.00
25/25	16,54	1.255	3.61	234/234	54,60	0.000	0.00
24/25	16,54	1.291	3.72	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	1.118	3.22	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	0.970	2.75	2346/234(245/345)	54,60	0.000	0.00
23/24(CL6A)	16,54	0.622	1.75	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	0.000	0.00	MIREX	NA	0.000	—
236/3(CL4C)	16,54	1.721	4.95	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	3.024	8.70	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	0.224	0.65	2345/245	54,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	—	2345/234	54,60	0.000	0.00
236/23	54,60	0.000	0.00	2346/2356	60	0.000	0.00
25/34	54,60	0.106	0.54	CL7	60	0.000	0.00
24/34	54,60	0.289	0.80	2345/2346	60	0.000	0.00
234/4	54,60	0.000	0.00	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.000	0.00	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000 CL2: 11.225 CL3: 11.007 CL4: 11.296
CL5: 0.422 CL6: 0.000 CL7: 0.000 CL8: 0.000

TOTAL PCB: 24.732

GMM

002

0505

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/28/85

VIAL NUMBER: 17

DILUTION FACTOR: 0.784

SAMPLE NAME: M20 B5-281

PCB SUBSTITUTION PATTERN	AROCLOR MIX	MS PCB PER HL SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCLOR MIX	MS PCB PER HL SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	0.000	0.00
2/2	21,16	6.516	23.61	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	2.737	9.92	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	0.000	0.00
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	3.000	13.77	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	0.524	1.90	34/34	48	0.000	0.00
25/2	16	2.335	8.46	2345/26(CL58)	54,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	1.472	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.474	1.72	245/34(2346/236)	54,60	0.000	0.00
26/4	16	1.131	4.10	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	0.227	0.82	234/34	54,60	0.000	0.00
25/3	16	0.213	0.77	245/245	54,60	0.000	0.00
236/2(35/2)	16	0.317	1.15	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	0.212	0.77	234/245	54,60	0.000	0.00
25/4(24/3)	16	0.474	1.72	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	1.075	3.90	2346/34(2356/245)	60	0.000	0.00
23/4	16	0.000	0.00	2356/245(CL7A)	54	0.000	0.00
25/25	16,54	0.917	3.32	234/234	54,60	0.000	0.00
24/25	16,54	1.729	6.27	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	1.060	3.87	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	0.044	0.06	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	0.960	3.51	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/234234/2(CL4B)	16,54	0.000	0.00	MIKEX	NA	0.000	---
236/3(CL4C)	16,54	1.073	3.89	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	0.710	2.60	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	0.166	0.60	2345/245	54,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	0.000	0.00	2346/2356	60	0.000	0.00
25/34	54,60	0.079	0.29	CL7	60	0.000	0.00
24/34	54,60	0.000	0.00	2345/2346	60	0.000	0.00
234/4	54,60	0.000	0.00	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.000	0.00	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000 CL2: 9.777 CL3: 9.903 CL4: 0.151
CL5: 0.166 CL6: 0.000 CL7: 0.000 CL8: 0.000

TOTAL PCB: 27.390

GM 002 0506

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/20/85

VIAL NUMBER: 18

DILUTION FACTOR: 0.694

SAMPLE NAME: H20 85-282

PCB SUBSTITUTION PATTERN	AROCLO MIX	MS PCB PER ML SAMPLE	PCT 0 TOTAL 0 PCB 0	PCB SUBSTITUTION PATTERN	AROCLO MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00 0 245/24		34,60	0.000	0.00
2/2	21,16	5.468	22.36 0 245/23		34,60	0.000	0.00
3	21	0.000	0.00 0 234/25		34,60	0.000	0.00
26	21,16	3.109	12.71 0 P,P'-DDE	NA		0.000	---
4	21	0.000	0.00 0 234/24		34	0.000	0.00
25	21,16	0.000	0.00 0 234/23		34,60	0.069	0.28
24	21,16	0.000	0.00 0 2356/25		34,60	0.000	0.00
2/3	21,16	0.000	0.00 0 2356/23		34,60	0.000	0.00
26/2	21,16	2.034	11.59 0 236/245(234/236)		34,60	0.000	0.00
2/4	21,16	0.560	2.29 0 34/34	48		0.000	0.00
25/2	16	1.775	7.26 0 2345/26(CL38)		34,60	0.000	0.00
24/2	16	0.000	0.00 0 234/236(2356/236)		34,60	0.000	0.00
NONACHLOROBENZENE	NA	0.000	--- 0 2356/236(245/34)		34,60	0.000	0.00
23/2	16	0.387	1.58 0 245/34(2346/236)		34,60	0.000	0.00
26/4	16	1.113	4.35 0 2346/236(235/245)		34,60	0.000	0.00
4/4	21,16	0.000	0.00 0 235/245(CL5C)		34,60	0.000	0.00
246/2	16	0.151	0.62 0 234/34		34,60	0.000	0.00
25/3	16	0.256	1.05 0 245/245		34,60	0.000	0.00
236/2(35/2)	16	0.281	1.15 0 234/235(CL6A)		34,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00 0 2356/34(CL6B)		34,60	0.000	0.00
24/26(CL3B)	16	0.251	1.03 0 234/245		34,60	0.000	0.00
25/4(24/3)	16	0.485	1.98 0 2356/235(2346/34)		34,60	0.000	0.00
24/4(23/3+24/4)	16	0.759	3.10 0 2346/34(2356/245)		60	0.000	0.00
23/4	16	0.000	0.00 0 2356/245(CL7A)		34	0.000	0.00
25/25	16,34	1.017	4.16 0 234/234		34,60	0.000	0.00
24/25	16,34	1.124	4.60 0 2346/245(2356/2356)		34,60	0.000	0.00
23/25	16,34	0.962	3.93 0 2356/234(2346/234)		34,60	0.000	0.00
24/24	16,34	0.025	0.10 0 2346/234(245/345)		34,60	0.000	0.00
23/24(CL4A)	16,34	0.000	0.00 0 2345/2356(245/345)(23456/236)		34,60	0.000	0.00
23/23+234/2(CL4B)	16,34	0.000	0.00 0 NIREX	NA		0.000	---
236/3(CL4C)	16,34	0.678	2.77 0 2345/34		34,60	0.000	0.00
236/4(CL4D)	16,34	0.938	3.84 0 2345/235		34,60	0.000	0.00
235/26(CL5A)	34,60	0.119	0.49 0 2345/245		34,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	--- 0 2345/234		34,60	0.000	0.00
236/23	34,60	0.631	2.66 0 2346/2356		60	0.000	0.00
25/34	34,60	0.039	0.16 0 CL7		60	0.000	0.00
24/34	34,60	0.000	0.00 0 2345/2346		60	0.000	0.00
234/4	34,60	0.000	0.00 0 23456/245		60	0.000	0.00
236/236	34,60	0.000	0.00 0 23456/234		60	0.000	0.00
245/25	34,60	0.000	0.00 0 2345/2345		60	0.000	0.00

TOTAL CL1: 0.000 CL2: 9.137 CL3: 7.630 CL4: 6.074
CL5: 0.000 CL6: 0.000 CL7: 0.000 CL8: 0.000

TOTAL PCB: 24.439

GMM 002 0507

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/20/85

VIAL NUMBER: 19

DILUTION FACTOR: 0.715

SAMPLE NAME: M20 85-283

PCB SUBSTITUTION PATTERN	ANALOR MIX	MG PCB PER ML SAMPLE	PCT 0 TOTAL 0 PCB 0	PCB SUBSTITUTION PATTERN	ANALOR MIX	MG PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00 0 245/24		54,60	0.000	0.00
2/2	21,16	5.769	20.63 0 245/23		54,60	0.000	0.00
3	21	0.000	0.00 0 234/25		54,60	0.000	0.00
26	21,16	1.516	5.44 0 P,P'-DDC	NA		0.000	---
4	21	0.000	0.00 0 234/24		54	0.000	0.00
25	21,16	0.000	0.00 0 234/23		54,60	0.000	0.00
24	21,16	0.000	0.00 0 2356/25		54,60	0.000	0.00
2/3	21,16	0.000	0.00 0 2356/23		54,60	0.000	0.00
26/2	21,16	3.522	12.63 0 236/245(234/236)		54,60	0.000	0.00
2/4	21,16	0.420	1.51 0 34/34	48		0.000	0.00
25/2	16	2.004	7.40 0 2345/26(CL5B)		54,60	0.000	0.00
24/2	16	0.000	0.00 0 234/236(2356/236)		54,60	0.000	0.00
HEXACHLOROBENZENE	NA	1.478	--- 0 2356/236(245/34)		54,60	0.000	0.00
23/2	16	0.445	1.60 0 245/34(2346/236)		54,60	0.000	0.00
26/4	16	1.258	4.51 0 2346/236(235/245)		54,60	0.000	0.00
4/4	21,16	0.000	0.00 0 235/245(CL5C)		54,60	0.000	0.00
246/2	16	0.240	0.06 0 234/34		54,60	0.000	0.00
25/3	16	0.308	1.11 0 245/245		54,60	0.000	0.00
236/2(35/2)	16	0.423	1.52 0 234/235(CL6A)		54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00 0 2356/34(CL6B)		54,60	0.000	0.00
24/26(CL3B)	16	0.297	1.07 0 234/245		54,60	0.000	0.00
25/4(24/3)	16	0.644	2.31 0 2356/235(2346/34)		54,60	0.000	0.00
24/4(23/3+24/4)	16	1.369	4.91 0 2346/34(2356/245)		60	0.000	0.00
23/4	16	0.000	0.00 0 2356/245(CL7A)		54	0.000	0.00
25/25	16,54	1.250	4.40 0 234/234		54,60	0.000	0.00
24/25	16,54	1.211	4.34 0 2346/245(2356/2356)		54,60	0.000	0.00
23/25	16,54	1.040	3.73 0 2356/234(2346/234)		54,60	0.000	0.00
24/24	16,54	1.003	3.00 0 2346/234(245/345)		54,60	0.000	3.23
23/24(CL4A)	16,54	0.766	2.75 0 2345/2356+245/345(23456/236)		54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	0.079	0.28 0 MIXED	NA		0.000	---
236/3(CL4C)	16,54	1.335	4.79 0 2345/34		54,60	0.000	0.00
236/4(CL4D)	16,54	1.518	5.44 0 2345/235		54,60	0.000	0.00
235/26(CL5A)	34,60	0.164	0.59 0 2345/245		54,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	--- 0 2345/234		54,60	0.000	0.00
236/23	34,60	0.000	0.00 0 2346/2356		60	0.000	0.00
25/34	34,60	0.240	0.06 0 CL7		60	0.000	0.00
24/34	34,60	0.000	0.00 0 2345/2346		60	0.000	0.00
234/4	34,60	0.000	0.00 0 23456/245		60	0.000	0.00
236/236	34,60	0.000	0.00 0 23456/234		60	0.000	0.00
245/25	34,60	0.000	0.00 0 2345/2345		60	0.000	0.00

TOTAL CL1: 0.000 CL2: 7.705 CL3: 9.630 CL4: 9.402
CL5: 0.164 CL6: 0.000 CL7: 0.000 CL8: 0.000

TOTAL PCB: 27.000

GMM 002 0508

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/23/85

VIAL NUMBER: 4

DILUTION FACTOR: 0.632

SAMPLE NAME: BS-284 H20

PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	0.030	0.09
2/2	21,16	0.768	25.04	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	3.027	0.92	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	0.000	0.00
24	21,16	0.048	0.14	2356/25	54,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	4.675	13.78	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	0.752	2.22	34/34	48	0.000	0.00
25/2	16	1.961	5.78	2345/26(CL58)	54,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	54,60	0.000	0.00
NONACHLOROBENZENE	NA	1.682	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.479	1.41	245/34(2346/236)	54,60	0.000	0.00
26/4	16	1.247	3.68	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	0.344	1.01	234/34	54,60	0.000	0.00
25/3	16	0.334	0.98	245/245	54,60	0.000	0.00
236/2(35/2)	16	0.391	1.15	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	0.286	1.14	234/245	54,60	0.000	0.00
25/4(24/3)	16	0.055	2.52	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	1.384	4.43	2346/34(2356/245)	60	0.000	0.00
23/4	16	0.396	1.17	2356/245(CL7A)	54	0.000	0.00
25/25	16,54	0.975	2.87	234/234	54,60	0.000	0.00
24/25	16,54	0.994	2.93	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	0.962	2.84	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	0.733	2.16	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	0.439	1.29	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	0.489	1.44	NIHDX	NA	0.000	---
236/3(CL4C)	16,54	0.876	2.58	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	1.481	4.13	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	0.289	0.85	2345/245	54,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	0.000	0.00	2346/2356	60	0.000	0.00
25/34	54,60	0.304	1.49	CL7	60	0.000	0.00
24/34	54,60	0.000	0.00	2345/2346	60	0.000	0.00
234/4	54,60	1.877	3.17	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.000	0.00	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000
CL5: 0.319

CL2: 12.395
CL6: 0.000

CL3: 11.431
CL7: 0.000

CL4: 9.571
CL8: 0.000

TOTAL PCB: 28.937

GMM 002 0509

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/24/85

VIAL NUMBER: 5

DILUTION FACTOR: 0.738

SAMPLE NAME: 05-285 H20

PCB SUBSTITUTION PATTERN	AROCOR MIX	MG PCB PER ML SAMPLE	PCT % TOTAL % PCB	PCB SUBSTITUTION PATTERN	AROCOR MIX	MG PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	0.000	0.00
2/2	21,16	10.303	25.21	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	3.429	8.32	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	0.135	0.33
24	21,16	0.000	0.00	2356/25	54,60	0.409	0.99
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	4.353	10.39	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	1.103	2.68	34/34	48	0.000	0.00
25/2	16	2.287	5.36	2345/26(CL38)	54,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	1.049	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.532	1.29	245/34(2346/236)	54,60	0.000	0.00
26/4	16	1.620	3.93	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL50)	54,60	0.000	0.00
246/2	16	0.393	0.95	234/34	54,60	0.000	0.00
25/3	16	0.330	0.80	245/245	54,60	0.000	0.00
236/2(35/2)	16	0.367	0.89	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	0.238	0.58	234/245	54,60	0.000	0.00
25/4(24/3)	16	0.060	0.15	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	1.686	3.90	2346/34(2356/245)	60	0.000	0.00
23/4	16	0.503	1.22	2356/245(CL7A)	54	0.000	0.00
25/25	16,54	1.745	4.24	234/234	54,60	0.000	0.00
24/25	16,54	1.948	3.27	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	1.159	2.81	2386/234(2346/234)	54,60	0.000	0.00
24/24	16,54	0.928	2.25	2346/234(245/245)	54,60	0.000	0.00
23/24(CL4A)	16,54	0.641	1.56	2345/2356+245/245(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	1.045	4.00	MIRED	NA	0.000	---
236/3(CL4C)	16,54	1.458	3.54	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	2.674	6.49	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	0.388	0.75	2345/245	54,60	0.000	0.00
DECHLOROSTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	0.000	0.00	2346/2356	60	0.000	0.00
25/34	54,60	0.495	1.20	CL7	60	0.000	0.00
24/34	54,60	0.111	0.27	2345/2346	60	0.000	0.00
234/4	54,60	0.000	0.00	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.000	0.00	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000
CL5: 0.443

CL2: 14.915
CL6: 0.409

CL3: 12.021
CL7: 0.000

CL4: 13.403
CL8: 0.000

TOTAL PCB: 41.190

GM 002 0510

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/24/85

VIAL NUMBER: 6

DILUTION FACTOR: 0.709

SAMPLE NAME: 05-286 H20

PCB SUBSTITUTION PATTERN	AROCLO MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCLO MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	34,60	0.000	0.00
2/2	21,16	10.032	25.03	245/23	34,60	0.000	0.00
3	21	0.000	0.00	234/25	34,60	0.000	0.15
26	21,16	3.013	9.51	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	34	0.000	0.00
25	21,16	0.000	0.00	234/23	34,60	0.000	0.00
24	21,16	0.031	0.08	2356/25	34,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	34,60	0.000	0.00
26/2	21,16	4.643	11.38	236/245(234/236)	34,60	0.000	0.00
2/4	21,16	1.272	3.17	34/34	48	0.000	0.00
25/2	16	2.333	5.82	2345/26(CL58)	34,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	34,60	0.000	0.00
HEXACHLOROBENZENE	NA	1.735	---	2356/236(245/34)	34,60	0.000	0.00
23/2	16	0.353	1.38	245/34(2346/236)	34,60	0.000	0.00
26/4	16	1.331	3.02	2346/236(235/245)	34,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	34,60	0.000	0.00
246/2	16	0.374	0.93	234/34	34,60	0.000	0.00
25/3	16	0.420	1.05	245/245	34,60	0.000	0.00
236/2(35/2)	16	0.473	1.10	234/235(CL6A)	34,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	34,60	0.000	0.00
24/26(CL3B)	16	0.406	1.01	234/245	34,60	0.000	0.00
25/4(24/3)	16	1.044	2.61	2356/235(2346/34)	34,60	0.000	0.00
24/4(23/34/24/4)	16	2.329	5.81	2346/34(2356/245)	60	0.000	0.00
23/4	16	0.000	0.00	2356/245(CL7A)	34	0.000	0.00
25/25	16,34	1.730	4.32	234/234	34,60	0.000	0.00
24/25	16,34	1.197	2.99	2346/245(2356/2356)	34,60	0.000	0.00
23/25	16,34	1.067	2.66	2356/234(2346/234)	34,60	0.000	0.00
24/24	16,34	0.000	2.10	2346/234(245/345)	34,60	0.000	0.00
23/24(CL4A)	16,34	0.406	1.21	2345/2356+245/345(23456/236)	34,60	0.000	0.00
23/23+234/2(CL4B)	16,34	0.006	2.21	MIREX	NA	0.000	---
236/3(CL4C)	16,34	0.312	2.20	2345/34	34,60	0.000	0.00
236/4(CL4D)	16,34	1.308	4.04	2345/235	34,60	0.000	0.00
235/26(CL5A)	34,60	0.271	0.60	2345/245	34,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	---	2345/234	34,60	0.000	0.00
236/23	34,60	0.010	2.02	2346/2356	60	0.000	0.00
25/34	34,60	0.301	0.95	CL7	60	0.000	0.00
24/34	34,60	0.242	0.61	2345/2346	60	0.000	0.00
234/4	34,60	0.000	0.00	23456/245	60	0.000	0.00
236/236	34,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	34,60	0.000	0.00	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000
CL5: 1.141

CL2: 15.140
CL6: 0.000

CL3: 12.053
CL7: 0.000

CL4: 10.932
CL8: 0.000

TOTAL PCB: 40.074

GMM 002 0511

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/24/85

VIAL NUMBER: 7

DILUTION FACTOR: 0.714

SAMPLE NAME: 05-287 H20

PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT 0 TOTAL 0 PCB 0	PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00 0 245/24		54,60	0.000	0.00
2/2	21,16	5.601	16.76 0 245/23		54,60	0.000	0.00
3	21	0.000	0.00 0 234/25		54,60	0.000	0.00
26	21,16	3.048	11.51 0 P,P'-DDE	NA		0.000	—
4	21	0.000	0.00 0 234/24	54		0.000	0.00
25	21,16	0.000	0.00 0 234/23	54,60		0.000	0.00
24	21,16	0.000	0.00 0 2356/25	54,60		0.000	0.00
2/3	21,16	0.000	0.00 0 2356/23	54,60		0.000	0.00
26/2	21,16	6.014	20.39 0 236/245(234/236)	54,60		0.000	0.00
2/4	21,16	1.916	5.73 0 34/34	48		0.000	0.00
25/2	16	1.737	5.20 0 2345/26(CL5B)	54,60		0.000	0.00
24/2	16	0.000	0.00 0 234/236(2356/236)	54,60		0.000	0.00
HEXACHLOROBENZENE	NA	1.799	— 0 2356/236(245/34)	54,60		0.000	0.00
23/2	16	0.442	1.32 0 245/34(2346/236)	54,60		0.000	0.00
26/4	16	1.501	4.49 0 2346/236(235/245)	54,60		0.000	0.00
4/4	21,16	0.000	0.00 0 235/245(CL5C)	54,60		0.000	0.00
246/2	16	0.338	1.01 0 234/34	54,60		0.000	0.00
25/3	16	0.256	0.77 0 245/245	54,60		0.000	0.00
236/2(35/2)	16	0.436	1.30 0 234/235(CL6A)	54,60		0.000	0.00
24/3(CL3A)	16	0.000	0.00 0 2356/34(CL6B)	54,60		0.000	0.00
24/26(CL3B)	16	0.391	1.17 0 234/245	54,60		0.000	0.00
25/4(24/3)	16	0.457	1.37 0 2356/235(2346/34)	54,60		0.000	0.00
24/4(23/3+24/4)	16	1.161	3.47 0 2346/34(2356/245)	60		0.000	0.00
23/4	16	0.000	0.00 0 2356/245(CL7A)	54		0.000	0.00
25/25	16,54	1.050	3.14 0 234/234	54,60		0.000	0.00
24/25	16,54	1.333	3.99 0 2346/245(2356/2356)	54,60		0.000	0.00
23/25	16,54	0.910	2.72 0 2356/234(2346/234)	54,60		0.000	0.00
24/24	16,54	0.025	2.47 0 2346/234(245/345)	54,60		0.000	0.00
23/24(CL4A)	16,54	0.507	1.52 0 2345/2356+245/345(23456/236)	54,60		0.000	0.00
23/234/234/2(CL4B)	16,54	0.357	1.07 0 NIREX	NA		0.000	—
236/3(CL4C)	16,54	0.036	2.30 0 2345/34	54,60		0.000	0.00
236/4(CL4D)	16,54	1.952	5.04 0 2345/235	54,60		0.000	0.00
235/26(CL5A)	54,60	0.122	0.37 0 2345/245	54,60		0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	— 0 2345/234	54,60		0.000	0.00
236/23	54,60	0.000	0.00 0 2346/2356	60		0.000	0.00
25/34	54,60	0.508	1.52 0 CL7	60		0.000	0.00
24/34	54,60	0.128	0.38 0 2345/2346	60		0.000	0.00
234/4	54,60	0.000	0.00 0 23456/245	60		0.000	0.00
236/236	54,60	0.000	0.00 0 23456/234	60		0.000	0.00
245/25	54,60	0.000	0.00 0 2345/2345	60		0.000	0.00

TOTAL CL1: 0.000
CL5: 0.122

CL2: 11.365
CL6: 0.000

CL3: 12.368
CL7: 0.000

CL4: 9.570
CL8: 0.000

TOTAL PCB: 23.624

GMM 002 0512

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/26/85

VIAL NUMBER: 5

DILUTION FACTOR: 0.646

SAMPLE NAME: 85-288 H2O

PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	0.000	0.00
2/2	21,16	4.406	13.61	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	3.470	10.72	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	0.000	0.00
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	4.996	15.43	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	1.632	5.04	34/34	48	0.232	0.72
25/2	16	1.506	4.65	2345/26(DL58)	54,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	1.156	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.406	1.26	245/34(2346/236)	54,60	0.000	0.00
26/4	16	1.632	5.04	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(DL5C)	54,60	0.000	0.00
246/2	16	0.424	1.31	234/34	54,60	0.000	0.00
25/3	16	0.232	0.72	245/245	54,60	0.000	0.00
236/2(35/2)	16	0.437	1.35	234/235(DL6A)	54,60	0.000	0.00
24/3(DL3A)	16	0.000	0.00	2356/34(DL6B)	54,60	0.000	0.00
24/26(DL3B)	16	0.396	1.22	234/245	54,60	0.000	0.00
25/4(24/3)	16	0.424	1.31	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	1.002	3.10	2346/34(2356/245)	60	0.000	0.00
23/4	16	0.000	0.00	2356/245(DL7A)	54	0.000	0.00
25/25	16,54	1.356	4.01	234/234	54,60	0.000	0.00
24/25	16,54	1.649	5.09	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	1.227	3.79	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	0.977	3.02	2346/234(245/345)	54,60	0.000	0.00
23/24(DL4A)	16,54	0.574	1.77	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(DL4B)	16,54	0.588	1.57	MIEX	NA	0.000	---
236/3(DL4C)	16,54	1.178	3.64	2345/34	54,60	0.000	0.00
236/4(DL4D)	16,54	2.632	8.13	2345/235	54,60	0.000	0.00
235/26(DL5A)	54,60	0.180	0.55	2345/245	54,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	0.000	0.00	2346/2356	60	0.000	0.00
25/34	54,60	0.310	0.96	DL7	60	0.000	0.00
24/34	54,60	0.301	1.10	2345/2346	60	0.000	0.00
234/4	54,60	0.000	0.00	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.000	0.00	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000 CL2: 9.980 CL3: 10.199 CL4: 12.463
CL5: 0.180 CL6: 0.000 CL7: 0.000 CL8: 0.000

TOTAL PCB: 22.370

GMM 002 0513

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/26/85

VIAL NUMBER: 6

DILUTION FACTOR: 0.694

SAMPLE NAME: 85-289 H2O

PCB SUBSTITUTION PATTERN	AROCOR MIX	MG PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCOR MIX	MG PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	0.000	0.00
2/2	21,16	4.605	14.33	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	2.042	0.04	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	0.077	0.24
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	4.594	14.29	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	1.305	4.06	34/34	48	0.132	0.41
25/2	16	1.435	4.47	2345/26(CL58)	54,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	1.108	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.347	1.00	245/34(2346/236)	54,60	0.000	0.00
26/4	16	1.096	5.90	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	0.519	1.62	234/34	54,60	0.000	0.00
25/3	16	0.000	0.00	245/245	54,60	0.000	0.00
236/2(35/2)	16	0.119	0.37	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	0.371	1.15	234/245	54,60	0.000	0.00
25/4(24/3)	16	0.623	1.94	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3424/4)	16	1.982	4.92	2346/34(2356/245)	60	0.000	0.00
23/4	16	0.000	0.00	2356/245(CL7A)	54	0.000	0.00
25/25	16,54	1.232	4.02	234/234	54,60	0.000	0.00
24/25	16,54	1.909	4.69	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	1.244	3.07	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	1.216	3.70	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	0.714	2.22	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/234234/2(CL4B)	16,54	0.000	0.00	NIRES	NA	0.000	---
236/3(CL4C)	16,54	2.121	6.60	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	3.005	9.60	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	0.330	1.05	2345/245	54,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	0.000	0.00	2346/2356	60	0.000	0.00
25/34	54,60	0.172	0.54	CL7	60	0.000	0.00
24/34	54,60	0.000	0.00	2345/2346	60	0.000	0.00
234/4	54,60	0.000	0.00	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.000	0.00	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000 CL2: 0.752 CL3: 10.476 CL4: 12.493
CL5: 0.415 CL6: 0.000 CL7: 0.000 CL8: 0.000

TOTAL PCB: 22.136

GMM
002
0514

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/06/85

VIAL NUMBER: 16

DILUTION FACTOR: 22.271

SAMPLE NAME: 85-245

PCB SUBSTITUTION PATTERN	ANALOR MIX	MS PCB PER ML SAMPLE	PCT 0 TOTAL 0 PCB 0	PCB SUBSTITUTION PATTERN	ANALOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	237.354	3.05 0 245/24		84,60	79.717	0.95
2/2	21,16	225.026	2.89 0 245/23		84,60	87.659	1.12
3	21	0.000	0.00 0 234/25		84,60	131.688	1.95
25	21,16	69.354	0.77 0 P,P'-DDE		84,60	0.000	—
4	21	0.000	0.00 0 234/24		84,60	135.875	1.74
23	21,16	12.761	0.16 0 234/23		84,60	196.675	2.52
34	21,16	14.488	0.19 0 235/25		84,60	89.139	0.43
2/3	21,16	32.293	0.41 0 235/23		84,60	2.494	0.03
26/2	21,16	149.327	1.92 0 235/245(234/235)		84,60	37.239	0.48
3/4	21,16	149.862	1.92 0 34/34		84,60	0.000	0.00
23/2	16	177.344	2.28 0 234/25(2,3B)		84,60	0.000	0.00
24/2	16	0.000	0.00 0 234/235(235/236)		84,60	0.000	0.00
DECHLORODIBENZ	84	63.631	— 0 235/236(245/24)		84,60	— 0.000	0.00
23/2	16	71.988	0.92 0 245/34(234/236)		84,60	168.346	2.16
26/4	16	197.389	2.54 0 234/236(235/245)		84,60	0.000	0.00
4/4	21,16	0.000	0.00 0 235/245(2,3C)		84,60	19.198	0.25
245/2	16	38.199	0.39 0 234/34		84,60	0.000	0.00
23/3	16	93.317	1.21 0 245/245		84,60	38.083	0.49
235/2(23/2)	16	95.388	0.71 0 234/235(2,6A)		84,60	0.000	0.00
24/2(2,3A)	16	94.475	0.78 0 235/34(2,6B)		84,60	0.000	0.00
24/25(2,3B)	16	32.337	0.67 0 234/245		84,60	65.038	0.84
23/4(24/2)	16	332.172	4.13 0 235/235(234/34)		84,60	0.000	0.00
24/4(23/3+24/4)	16	439.885	5.89 0 234/34(235/245)		84,60	0.000	0.00
23/4	16	481.811	5.39 0 235/245(2,7A)		84,60	69.353	0.90
23/23	16,34	387.895	3.94 0 234/234		84,60	0.000	0.00
24/23	16,34	487.312	6.38 0 234/245(235/2356)		84,60	95.186	1.22
23/25	16,34	289.389	3.71 0 235/234(234/234)		84,60	21.179	0.48
34/24	16,34	332.172	4.13 0 234/234(245/245)		84,60	0.000	0.00
23/24(2,4A)	16,34	178.391	2.29 0 234/235+245/245(2345/236)		84,60	0.000	0.00
23/23+24/2(2,4B)	16,34	247.698	2.18 0 MIX		84,60	0.000	—
235/2(2,4C)	16,34	349.953	4.48 0 2345/34		84,60	0.000	0.00
235/4(2,4D)	16,34	483.868	6.21 0 2345/235		84,60	0.000	0.00
235/25(2,5A)	84,60	62.788	0.81 0 2345/245		84,60	27.482	0.35
DECHLORODIBENZIDE	84	0.000	— 0 2345/234		84,60	0.000	0.00
236/23	84,60	119.573	1.33 0 2346/2356		84,60	0.000	0.00
23/24	84,60	483.215	5.36 0 2,7		84,60	0.000	0.00
24/24	84,60	253.621	3.25 0 2345/2346		84,60	0.000	0.00
234/4	84,60	189.148	2.43 0 23456/245		84,60	0.000	0.00
236/236	84,60	0.000	0.00 0 23456/234		84,60	0.000	0.00
245/25	84,60	0.000	0.00 0 2345/2345		84,60	0.000	0.00

TOTAL CL1: 237.354 CL2: 484.795 CL3: 1957.828 CL4: 3688.888
 CL5: 986.293 CL6: 195.272 CL7: 223.881 CL8: 0.000
 TOTAL PCB: 7793.425

GMM 002 0515

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 22/06/85

VIAL NUMBER: 17

DILUTION FACTOR: 29.863

SAMPLE NAME: 85-246

PCB SUBSTITUTION PATTERN	ANALOR TEX	MS PCB PER ML SAMPLE	PCT 0 TOTAL 0 PCB 0	PCB SUBSTITUTION PATTERN	ANALOR TEX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	221.997	4.34 0 245/24		34,60	97.730	1.20
2/2	21,16	226.120	2.79 0 245/23		34,60	76.975	0.95
3	21	0.000	0.00 0 234/25		34,60	113.282	1.48
25	21,16	20.000	0.79 0 P,P'-DDE		NA	0.000	—
4	21	0.000	0.00 0 234/24		34	130.955	1.06
25	21,16	13.023	0.16 0 234/23		34,60	194.050	2.40
24	21,16	15.311	0.30 0 235/23		34,60	29.352	0.49
2/3	21,16	25.250	0.43 0 235/23		34,60	0.000	0.00
25/2	21,16	144.153	1.70 0 235/245(234/236)		34,60	29.730	0.37
24	21,16	163.310	2.01 0 34/34		NA	0.000	0.00
25/2	16	126.344	1.36 0 234/26(235)		34,60	0.000	0.00
24/2	16	0.000	0.00 0 234/236(235/236)		34,60	14.106	0.17
NONCHLOROBENZENE	NA	0.000	0.00 0 235/236(245/34)		34,60	0.000	0.00
23/2	16	34.243	0.67 0 245/34(234/236)		34,60	170.199	2.10
25/4	16	193.309	2.30 0 234/236(235/245)		34,60	0.000	0.00
24	21,16	0.000	0.00 0 235/245(236)		34,60	40.574	0.60
24/2	16	21.311	0.30 0 234/34		34,60	209.527	3.02
25/3	16	30.137	1.15 0 245/245		34,60	30.328	1.12
235/2(23/2)	16	37.130	0.70 0 234/235(236)		34,60	0.000	0.00
24/3(23/3)	16	25.347	0.60 0 235/34(236)		34,60	0.000	0.00
24/25(23/3)	16	33.632	0.65 0 234/245		34,60	69.330	0.85
25/4(24/3)	16	212.143	3.05 0 235/236(234/34)		34,60	0.000	0.00
24/4(23/34/24/4)	16	420.330	5.42 0 234/34(235/245)		NA	0.000	0.00
23/4	16	422.310	5.33 0 235/245(236)		34	20.156	0.48
25/25	16,34	343.479	4.23 0 234/234		34,60	0.000	0.00
24/25	16,34	402.316	5.35 0 234/245(235/236)		34,60	0.000	0.00
23/25	16,34	271.243	3.34 0 235/234(234/234)		34,60	0.000	0.00
24/24	16,34	285.310	4.00 0 234/234(245/245)		34,60	0.000	0.00
23/24(24/4)	16,34	182.001	2.24 0 234/235+245/345(2345/236)		34,60	0.000	0.00
23/23+234/2(24/4)	16,34	220.310	2.82 0 MIX		NA	0.000	—
236/3(24/4)	16,34	347.665	4.29 0 234/34		34,60	0.000	0.00
235/4(24/4)	16,34	402.034	5.35 0 234/235		34,60	0.000	0.00
235/25(23/3)	34,60	64.024	0.80 0 234/245		34,60	40.522	0.50
NONCHLOROBENZENE	NA	0.000	0.00 0 234/234		34,60	0.000	0.00
234/23	34,60	176.363	2.10 0 234/235		60	0.000	0.00
25/24	34,60	406.036	5.00 0 237		60	0.000	0.00
24/24	34,60	263.423	3.25 0 234/234		60	0.000	0.00
234/4	34,60	131.943	2.37 0 2345/245		60	0.000	0.00
235/236	34,60	0.000	0.00 0 2345/234		60	0.000	0.00
245/25	34,60	0.000	0.00 0 2345/2345		60	0.000	0.00

TOTAL CL1: 221.997 CL2: 213.229 CL3: 1821.724 CL4: 2029.322
CL5: 1264.306 CL6: 232.347 CL7: 79.678 CL8: 0.000

TOTAL PCB: 0113.204

GMM 002 0516

SAMPLE TYPE: DEPENDENTIAL

DATE ANALYZED: 10/06/85

VIAL NUMBER: 18

DILUTION FACTOR: 25.641

SAMPLE NAME: 85-247

PCB SUBSTITUTION PATTERN	AROCOR REL	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCOR REL	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	413.974	4.32	245/24	34,60	189.154	1.14
2/2	21,16	270.718	2.91	245/23	34,60	84.333	0.80
3	21	0.000	0.00	234/25	34,60	123.718	1.25
36	21,16	60.046	0.72	P,P'-DDE	NA	0.000	—
4	21	0.000	0.00	234/24	34	161.949	1.63
25	21,16	19.718	0.21	234/23	34,60	212.538	2.22
24	21,16	21.795	0.23	235/25	34,60	29.744	0.31
2/3	21,16	46.590	0.49	235/23	34,60	15.667	0.16
26/2	21,16	204.538	2.14	235/245(234/236)	34,60	30.820	0.35
2/4	21,16	211.359	2.21	34/34	60	0.000	0.00
25/2	16	204.590	2.14	234/26(235)	34,60	0.000	0.00
24/2	16	0.000	0.00	234/236(235/236)	34,60	80.390	0.84
DECHLORODIBEN	NA	82.513	—	235/236(245/34)	34,60	0.000	0.00
22/2	16	98.615	1.03	245/34(234/236)	34,60	141.304	1.48
26/4	16	224.513	2.35	234/236(235/245)	34,60	0.000	0.00
4/4	21,16	135.418	1.41	235/245(235)	34,60	36.887	0.59
246/2	16	46.385	0.48	234/34	34,60	0.000	0.00
25/3	16	115.851	1.20	245/245	34,60	132.304	1.38
236/2(25/2)	16	78.897	0.74	234/235(236)	34,60	0.000	0.00
24/3(234)	16	64.851	0.67	235/34(236)	34,60	0.000	0.00
24/26(238)	16	68.826	0.71	234/245	34,60	62.487	0.65
25/4(24/3)	16	382.487	4.00	235/236(234/24)	34,60	0.000	0.00
24/4(23/24/4)	16	337.598	3.51	234/34(235/245)	60	0.000	0.00
23/4	16	494.748	5.17	235/245(237)	34	43.877	0.45
25/25	16,34	422.828	4.42	234/234	34,60	0.000	0.00
24/25	16,34	380.828	6.07	234/245(235/236)	34,60	134.820	1.41
23/25	16,34	380.857	3.46	235/234(234/234)	34,60	18.128	0.11
24/24	16,34	381.769	4.00	234/234(245/245)	34,60	0.000	0.00
23/24(234)	16,34	229.182	2.38	234/235(245/245(2345/236))	34,60	0.000	0.00
23/234/2(234)	16,34	236.872	3.00	NI/EX	NA	0.000	—
236/3(234)	16,34	432.303	4.32	234/34	34,60	0.000	0.00
236/4(234)	16,34	381.825	6.07	234/235	34,60	0.000	0.00
235/26(234)	34,60	73.795	0.77	234/245	34,60	23.000	0.24
DECHLORODIBEN	NA	0.000	—	234/234	34,60	0.000	0.00
236/23	34,60	121.851	1.35	234/235	60	0.000	0.00
25/24	34,60	462.682	4.88	237	60	0.000	0.00
24/24	34,60	286.295	2.99	234/234	60	0.000	0.00
234/4	34,60	213.418	2.23	234/245	60	0.000	0.00
236/236	34,60	0.000	0.00	234/234	60	0.000	0.00
245/25	34,60	0.000	0.00	234/234	60	0.000	0.00

TOTAL CL1: 413.974
CL5: 1827.322

CL2: 782.435
CL6: 411.389

CL3: 226.126
CL7: 211.825

CL4: 400.233
CL8: 0.000

TOTAL PCB: 9873.825

GMM 002 0517

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 22/07/85

VIAL NUMBER: 4

DILUTION FACTOR: 25.000

SAMPLE NAME: 65-240

PCB SUBSTITUTION PATTERN	ANALOR RELX	MS PCB PER ML SAMPLE	PCT 0 TOTAL 0 PCB 0	PCB SUBSTITUTION PATTERN	ANALOR RELX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	734.900	0.99 0 245/24		34,60	41.439	0.51
2/2	21,16	222.617	4.87 0 245/23		34,60	13.432	0.16
3	21	0.000	0.00 0 234/25		34,60	35.276	0.60
25	21,16	01.001	1.00 0 P,P'-DDE		34	0.000	—
4	21	0.000	0.00 0 234/24		34	121.230	1.40
25	21,16	16.457	0.20 0 234/23		34,60	190.725	2.37
24	21,16	22.231	0.27 0 2356/25		34,60	44.575	0.35
2/3	21,16	31.549	0.63 0 2356/23		34,60	0.000	0.00
26/2	21,16	260.046	3.19 0 236/245(234/236)		34,60	7.712	0.09
2/4	21,16	220.227	2.79 0 34/34		34	0.000	0.00
25/2	16	224.034	2.74 0 2345/26(0.30)		34,60	0.000	0.00
24/2	16	0.000	0.00 0 234/236(2356/236)		34,60	0.000	0.00
NONCHLOROBENZENE	100	34.200	— 0 2356/236(245/34)		34,60	0.000	0.00
22/2	16	127.379	1.60 0 245/34(2346/236)		34,60	34.133	0.42
26/4	16	416.712	5.10 0 2346/236(235/245)		34,60	0.000	0.00
2/4	21,16	0.000	0.00 0 235/245(0.30)		34,60	12.767	0.16
246/2	16	30.221	0.61 0 234/34		34,60	0.000	0.00
25/3	16	136.419	1.67 0 245/245		34,60	116.309	1.42
236/2(35/2)	16	01.955	1.00 0 234/235(0.60)		34,60	0.000	0.00
24/2(0.34)	16	0.000	0.00 0 2356/34(0.60)		34,60	0.000	0.00
24/26(0.30)	16	74.530	0.91 0 234/245		34,60	22.359	0.40
25/4(24/3)	16	374.736	4.60 0 2356/235(2346/34)		34,60	0.000	0.00
23/4(23/34/24/4)	16	437.397	5.60 0 2346/34(2356/245)		34	0.000	0.00
23/4	16	229.297	2.80 0 2356/245(0.70)		34	0.000	0.00
23/25	16,34	432.400	5.29 0 234/234		34,60	0.000	0.00
24/25	16,34	316.305	6.31 0 2346/245(2356/2356)		34,60	0.000	0.00
23/25	16,34	299.296	3.66 0 2356/234(2346/234)		34,60	0.000	0.00
24/24	16,34	311.252	3.81 0 2346/234(245/245)		34,60	0.000	0.00
23/24(0.40)	16,34	183.762	2.25 0 2345/2356(245/345(23456/236)		34,60	0.000	0.00
23/24/234/2(0.40)	16,34	220.351	2.82 0 NIREX		100	0.000	—
236/3(0.40)	16,34	347.430	4.25 0 2345/34		34,60	0.000	0.00
236/4(0.40)	16,34	322.304	6.30 0 2345/235		34,60	0.000	0.00
235/26(0.34)	34,60	34.575	0.67 0 2345/245		34,60	20.350	0.41
NONCHLOROBENZENE	100	0.000	— 0 2345/234		34,60	0.000	0.00
236/23	34,60	114.640	1.40 0 2346/2356		34	0.000	0.00
25/34	34,60	220.203	2.85 0 0.7		34	0.000	0.00
24/34	34,60	135.275	1.65 0 2345/2346		34	0.000	0.00
234/4	34,60	177.452	2.17 0 23456/245		34	0.000	0.00
236/236	34,60	0.000	0.00 0 23456/234		34	0.000	0.00
245/25	34,60	0.000	0.00 0 2345/2345		34	0.000	0.00

TOTAL CL1: 734.900
CL5: 620.510

CL2: 732.902
CL6: 213.762

CL3: 227.100
CL7: 35.300

CL4: 2206.422
CL8: 0.000

TOTAL PCB: 2177.941

GMM 002 0518

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/28/85

VIAL NUMBER: 5

DILUTION FACTOR: 37.870

SAMPLE NAME: 85-249

PCB SUBSTITUTION PATTERN	ANALYST MLX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	ANALYST MLX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	789.114	7.25	245/24	34,60	88.370	0.70
2/2	21,16	414.136	4.24	245/23	34,60	49.507	0.51
3	21	0.000	0.00	234/25	34,60	95.036	0.97
26	21,16	106.361	1.00	P,P'-DDE	34,60	0.000	0.00
4	21	0.000	0.00	234/24	34,60	134.634	1.38
25	21,16	17.392	0.18	234/23	34,60	263.258	2.71
24	21,16	23.977	0.25	2356/25	34,60	38.446	0.39
2/3	21,16	30.009	0.61	2356/23	34,60	0.000	0.00
26/2	21,16	211.347	3.19	236/245(234/236)	34,60	22.954	0.34
2/4	21,16	268.176	2.74	34/24	34,60	0.000	0.00
25/2	16	272.267	2.78	2345/26(CL38)	34,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	34,60	2.306	0.02
DECHLORODIBENZODIENE	34,60	100.104	0.00	2356/236(245/24)	34,60	0.000	0.00
23/2	16	133.860	1.57	245/24(2346/236)	34,60	124.216	1.27
26/4	16	415.322	4.25	2346/236(235/245)	34,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL3C)	34,60	65.382	0.67
246/2	16	38.787	0.68	234/24	34,60	0.000	0.00
25/3	16	141.399	1.45	245/245	34,60	57.347	0.59
236/2(25/2)	16	66.741	0.68	234/235(CL6A)	34,60	0.000	0.00
24/3(CL3A)	16	28.740	0.29	2356/24(CL6B)	34,60	0.000	0.00
24/25(CL3B)	16	34.638	0.36	234/245	34,60	47.688	0.49
25/4(24/3)	16	420.635	4.38	2356/235(2346/24)	34,60	0.000	0.00
24/4(23/24/4)	16	213.628	3.25	2346/24(2356/245)	34,60	0.000	0.00
23/4	16	245.440	2.51	2356/245(CL7A)	34,60	34.128	0.35
25/25	16,34	800.130	8.30	234/234	34,60	0.000	0.00
24/25	16,34	620.663	6.35	2346/245(2356/2356)	34,60	0.000	0.00
23/25	16,34	253.258	3.61	2356/234(2346/234)	34,60	0.000	0.00
24/24	16,34	378.818	3.87	2346/234(245/245)	34,60	0.000	0.00
23/24(CL4A)	16,34	217.879	2.22	2345/2356(245/245(23456/236)	34,60	0.000	0.00
23/23(234/2(CL4B)	16,34	287.115	2.94	INDEX	34,60	0.000	0.00
236/2(CL4C)	16,34	415.219	4.25	2345/24	34,60	0.000	0.00
236/4(CL4D)	16,34	612.715	6.27	2345/235	34,60	0.000	0.00
235/26(CL3A)	34,60	65.653	0.68	2345/245	34,60	15.227	0.16
DECHLORODIBENZODIENE	34,60	0.000	0.00	2345/234	34,60	0.000	0.00
236/23	34,60	100.634	1.11	2346/2356	34,60	12.045	0.12
25/24	34,60	362.655	3.71	CL7	34,60	0.000	0.00
24/24	34,60	277.131	2.84	2345/2346	34,60	0.000	0.00
234/4	34,60	223.356	2.29	23456/245	34,60	0.000	0.00
236/236	34,60	0.000	0.00	23456/234	34,60	0.000	0.00
245/25	34,60	0.000	0.00	2345/2345	34,60	0.000	0.00

TOTAL CL1: 789.114 CL2: 889.312 CL3: 2382.448 CL4: 4435.385
CL5: 912.319 CL6: 344.124 CL7: 69.335 CL8: 12.045

TOTAL PCB: 9776.301

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/08/85

VIAL NUMBER: 6

DILUTION FACTOR: 31.152

SAMPLE NAME: 05-250

PCB SUBSTITUTION PATTERN	AROCLO MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCLO MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	785.210	7.79	245/24	34,60	91.992	0.94
2/2	21,16	218.438	2.24	245/23	34,60	90.285	0.93
3	21	0.000	0.00	234/25	34,60	92.023	0.94
25	21,16	88.248	0.82	P,P'-DDE	NA	0.000	—
4	21	0.000	0.00	234/24	34	139.966	1.63
25	21,16	14.112	0.14	234/23	34,60	197.753	2.01
24	21,16	21.246	0.22	2356/25	34,60	31.089	0.32
2/3	21,16	30.982	0.32	2356/23	34,60	0.000	0.00
25/2	21,16	240.961	2.45	235/245(234/236)	34,60	18.909	0.19
2/4	21,16	241.740	2.46	24/24	NA	0.000	0.00
25/2	16	275.290	2.80	2345/26(1,38)	34,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	34,60	16.232	0.17
NONACHLORODIBENZ	NA	89.188	—	2356/236(245/24)	34,60	0.000	0.00
23/2	16	138.776	1.53	245/24(2346/236)	34,60	127.972	1.30
25/4	16	425.754	4.33	2346/236(235/245)	34,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(1,38)	34,60	42.616	0.43
246/2	16	36.310	0.37	234/24	34,60	0.000	0.00
23/3	16	152.053	1.55	245/245	34,60	64.090	0.66
236/2(35/2)	16	82.646	0.84	234/235(1,38)	34,60	0.000	0.00
24/2(1,38)	16	36.448	0.37	2356/24(1,38)	34,60	0.000	0.00
24/26(1,38)	16	82.366	0.83	234/245	34,60	29.229	0.40
23/4(24/3)	16	418.363	4.26	2356/235(2346/24)	34,60	0.000	0.00
24/4(23/24/4)	16	487.963	5.07	2346/24(2356/245)	34	0.000	0.00
23/4	16	248.718	2.53	2356/245(1,38)	34	40.934	0.42
23/25	16,34	321.089	3.21	234/234	34,60	0.000	0.00
24/25	16,34	646.089	6.58	2346/245(2356/2356)	34,60	0.000	0.00
23/25	16,34	347.376	3.53	2356/234(2346/234)	34,60	0.000	0.00
24/24	16,34	412.118	4.13	2346/234(245/245)	34,60	0.000	0.00
23/24(1,40)	16,34	238.095	2.42	2345/2356(245/245(23456/236)	34,60	0.000	0.00
23/234/24/2(1,40)	16,34	280.355	2.85	NONEX	NA	0.000	—
236/3(1,40)	16,34	481.317	4.78	2345/24	34,60	0.000	0.00
236/4(1,40)	16,34	687.433	6.18	2345/235	34,60	0.000	0.00
235/26(1,54)	34,60	73.629	0.74	2345/245	34,60	18.473	0.19
NONACHLORODIBENZ	NA	0.000	—	2345/234	34,60	0.000	0.00
236/23	34,60	138.068	1.32	2346/2356	34	0.000	0.00
25/24	34,60	424.228	4.32	1,7	34	0.000	0.00
24/24	34,60	394.311	3.10	2345/2346	34	11.152	0.11
234/4	34,60	218.718	2.23	23456/245	34	0.000	0.00
236/236	34,60	0.000	0.00	23456/234	34	0.000	0.00
245/25	34,60	0.000	0.00	2345/2345	34	0.000	0.00

TOTAL CL1: 785.210

CL2: 785.745

CL3: 2446.927

CL4: 4854.483

CL5: 981.871

CL6: 232.817

CL7: 29.467

CL8: 11.152

TOTAL PCB: 9829.021

GMM 002 0520

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/08/75

VIAL NUMBER: 7

DILUTION FACTOR: 20.243

SAMPLE NAME: 85-251

PCB SUBSTITUTION PATTERN	AROCOR HEX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCOR HEX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	289.577	18.87	245/24	34,60	3.421	0.16
2/2	21,16	145.881	6.89	245/23	34,60	0.000	0.00
3	21	0.000	0.00	234/25	34,60	0.000	0.00
26	21,16	25.405	1.67	P,P'-DDE	NA	12.522	---
4	21	0.000	0.00	234/24	34	23.441	1.11
25	21,16	19.628	0.98	234/23	34,60	29.000	1.04
24	21,16	21.822	1.03	235/25	34,60	19.041	0.47
2/3	21,16	20.575	1.07	235/23	34,60	0.000	0.00
26/2	21,16	88.527	3.00	236/245(234/236)	34,60	0.046	0.42
24/4	21,16	185.487	0.76	34/34	88	0.000	0.00
25/2	16	63.826	3.01	2345/26(CL38)	34,60	0.000	0.00
24/2	16	0.000	0.00	234/236(235/236)	34,60	0.000	0.00
NONACHLOROBENZENE	NA	21.832	---	235/236(245/34)	34,60	0.000	0.00
22/2	16	49.757	2.35	245/34(234/236)	34,60	9.899	0.47
26/4	16	123.877	5.81	234/236(235/245)	34,60	0.000	0.00
44	21,16	0.000	0.00	235/245(CL3C)	34,60	0.000	0.00
246/2	16	2.672	0.13	234/34	34,60	0.000	0.00
25/3	16	20.324	0.96	245/245	34,60	87.187	4.12
236/2(35/2)	16	12.318	0.59	234/235(CL3A)	34,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	235/34(CL3B)	34,60	0.000	0.00
24/26(CL3B)	16	11.215	0.53	234/245	34,60	20.332	1.06
25/4(24/3)	16	46.944	2.22	235/235(234/34)	34,60	0.000	0.00
24/4(23/34/24/4)	16	33.421	2.32	234/34(235/245)	88	0.000	0.00
23/4	16	13.279	0.63	235/245(CL7A)	34	22.996	1.09
25/25	16,34	47.824	2.22	234/234	34,60	0.000	0.00
24/25	16,34	57.409	2.71	234/245(235/235)	34,60	72.166	3.41
23/25	16,34	48.199	2.28	235/234(234/234)	34,60	11.275	0.53
24/24	16,34	25.344	1.67	234/234(245/245)	34,60	0.000	0.00
23/24(CL4A)	16,34	19.008	0.90	2345/235/245/245(2345/236)	34,60	26.174	1.71
23/234/234/2(CL4B)	16,34	0.000	0.00	HEX	NA	0.000	---
236/3(CL4C)	16,34	39.361	2.32	2345/34	34,60	0.000	0.00
236/4(CL4D)	16,34	47.571	2.25	2345/235	34,60	0.000	0.00
235/26(CL5A)	34,60	7.753	0.37	2345/245	34,60	18.786	0.89
NONACHLOROBISTYRENE	NA	0.000	---	2345/234	34,60	27.045	1.28
236/23	34,60	0.000	0.00	234/235	88	0.000	0.00
25/34	34,60	34.232	2.37	CL7	88	0.000	0.00
24/34	34,60	13.816	0.61	2345/234	88	0.000	0.00
234/4	34,60	0.000	0.00	2345/245	88	0.000	0.00
236/236	34,60	0.000	0.00	2345/234	88	0.000	0.00
245/25	34,60	0.000	0.00	2345/2345	88	0.000	0.00

TOTAL CL1: 289.577 CL2: 447.288 CL3: 481.136 CL4: 481.882
CL5: 88.522 CL6: 145.485 CL7: 152.288 CL8: 26.174

TOTAL PCB: 2116.973

GMM
002
0521

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/19/85

VIAL NUMBER: 4

DILUTION FACTOR: 20.010

SAMPLE NAME: TEN 05-232

PCB SUBSTITUTION PATTERN	AROCOR RELX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCOR RELX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	886.990	12.00	245/24	94,60	2.730	0.11
2/2	21,16	222.216	0.94	245/23	94,60	0.000	0.00
3	21	0.000	0.00	234/25	94,60	1.066	0.04
25	21,16	46.620	1.00	P,P'-DDE	NA	9.401	—
4	21	0.000	0.00	234/24	94	0.000	0.00
25	21,16	17.810	0.72	234/23	94,60	37.687	1.51
24	21,16	30.230	1.22	235/25	94,60	22.276	0.90
2/3	21,16	48.301	1.95	235/23	94,60	0.000	0.00
25/2	21,16	81.065	3.26	236/245(234/236)	94,60	23.573	0.95
2/4	21,16	195.934	7.89	24/34	40	0.000	0.00
25/2	16	65.676	2.64	2345/26(1,5B)	94,60	0.000	0.00
24/2	16	0.000	0.00	234/236(235/236)	94,60	0.000	0.00
HEXACHLOROBENZENE	NA	19.135	—	235/236(245/34)	94,60	0.000	0.00
23/2	16	42.247	1.70	245/34(234/236)	94,60	0.000	0.00
25/4	16	67.895	2.73	234/236(235/245)	94,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(1,5C)	94,60	0.000	0.00
246/2	16	6.006	0.27	234/34	94,60	0.000	0.00
25/3	16	19.193	0.77	245/245	94,60	44.435	1.75
236/2(35/2)	16	9.423	0.38	234/235(1,6A)	94,60	0.000	0.00
24/3(1,3A)	16	0.000	0.00	235/34(1,6B)	94,60	0.000	0.00
24/26(1,3B)	16	12.853	0.52	234/245	94,60	0.000	0.00
25/4(24/3)	16	37.831	2.30	235/235(234/34)	94,60	0.000	0.00
24/4(23/24/4)	16	64.890	2.61	234/34(235/245)	94	0.000	0.00
23/4	16	0.000	0.00	235/245(1,7A)	94	49.942	2.01
23/25	16,34	35.503	2.29	234/234	94,60	0.000	0.00
24/25	16,34	70.892	2.85	234/245(235/235)	94,60	0.000	0.00
23/25	16,34	43.947	1.77	235/234(234/234)	94,60	0.000	0.00
24/24	16,34	47.860	1.89	234/234(245/245)	94,60	0.000	0.00
23/24(1,4A)	16,34	21.706	1.20	2345/235/245/245(2345/236)	94,60	0.000	0.00
23/234/2(1,4B)	16,34	0.000	0.00	NIREX	NA	0.000	—
236/3(1,4C)	16,34	34.956	1.41	2345/34	94,60	0.000	0.00
236/4(1,4D)	16,34	42.906	1.73	2345/235	94,60	0.000	0.00
235/26(1,5A)	94,60	16.211	0.66	2345/245	94,60	0.000	0.00
HEXACHLOROCYCLOPENTADIENE	NA	0.000	—	2345/234	94,60	0.000	0.00
236/23	94,60	42.651	1.72	234/235	94	0.000	0.00
25/24	94,60	72.393	2.92	1,7	94	0.000	0.00
24/24	94,60	0.000	0.00	2345/234	94	0.000	0.00
234/4	94,60	48.810	1.96	2345/245	94	0.000	0.00
236/236	94,60	0.000	0.00	2345/234	94	0.000	0.00
245/25	94,60	0.000	0.00	2345/2345	94	0.000	0.00

TOTAL CL1: 886.990 CL2: 351.217 CL3: 380.005 CL4: 477.214
CL5: 180.377 CL6: 51.344 CL7: 49.942 CL8: 0.000

TOTAL PCB: 2404.006

GMM 002 0522

--- SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 11/19/75

VIAL NUMBER: 5

DILUTION FACTOR: 24.752

--- SAMPLE NAME: TBN 85-233

PCB SUBSTITUTION PATTERN	AROCOR MLX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCOR MLX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	876.044	35.35	245/24	34,60	1.139	0.05
2/2	21,16	185.046	7.59	245/23	34,60	0.000	0.00
3	21	0.000	0.00	234/23	34,60	0.000	0.00
26	21,16	42.329	1.76	P,P'-DDE	NA	9.728	---
4	21	0.000	0.00	234/24	34	0.000	0.00
25	21,16	26.821	1.10	234/23	34,60	45.004	1.91
24	21,16	35.632	1.46	235/25	34,60	0.000	0.00
2/3	21,16	38.821	2.41	235/23	34,60	0.000	0.00
26/2	21,16	36.667	3.72	236/245(234/236)	34,60	11.336	0.47
2/4	21,16	213.000	8.77	34/34	48	0.000	0.00
25/2	16	35.508	2.28	2345/26(CL38)	34,60	0.000	0.00
24/2	16	0.000	0.00	234/236(235/236)	34,60	0.000	0.00
HEXACHLOROBENZENE	NA	15.569	---	235/236(245/34)	34,60	0.000	0.00
23/2	16	8.257	0.34	245/34(234/236)	34,60	0.000	0.00
26/4	16	29.217	1.26	234/236(235/245)	34,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL3C)	34,60	0.000	0.00
24/2	16	7.475	0.31	234/34	34,60	0.000	0.00
25/3	16	21.782	0.89	245/245	34,60	15.979	0.62
236/2(35/2)	16	12.325	0.51	234/235(CL6A)	34,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	235/34(CL6B)	34,60	0.000	0.00
24/26(CL3B)	16	0.000	0.00	234/245	34,60	12.257	0.54
25/4(24/3)	16	76.211	3.13	235/235(234/34)	34,60	0.000	0.00
24/4(23/24/4)	16	49.826	2.04	234/34(235/245)	60	0.000	0.00
22/4	16	29.236	0.84	235/245(CL7A)	34	89.172	2.47
25/25	16,34	29.683	2.45	234/234	34,60	0.000	0.00
24/25	16,34	49.434	2.03	234/245(235/235)	34,60	0.000	0.00
23/25	16,34	29.618	1.26	235/234(234/234)	34,60	0.000	0.00
24/24	16,34	22.945	1.35	234/234(245/245)	34,60	0.000	0.00
23/24(CL4A)	16,34	29.100	1.19	2345/235/245/245(2345/236)	34,60	0.000	0.00
23/23+234/2(CL4B)	16,34	0.000	0.00	HEX	NA	0.000	---
236/3(CL4C)	16,34	22.722	0.93	2345/34	34,60	0.000	0.00
236/4(CL4D)	16,34	62.879	2.58	2345/235	34,60	0.000	0.00
235/26(CL5A)	34,60	19.866	0.43	2345/245	34,60	15.346	0.63
HEXACHLOROCYCLOPENTADIENE	NA	0.000	---	2345/234	34,60	0.000	0.00
236/23	34,60	74.236	3.05	234/235	60	0.000	0.00
25/34	34,60	21.814	0.86	CL7	60	0.000	0.00
24/34	34,60	12.360	0.57	2345/234	60	0.000	0.00
234/4	34,60	21.000	2.13	2345/245	60	0.000	0.00
236/236	34,60	0.000	0.00	2345/234	60	0.000	0.00
245/25	34,60	0.000	0.00	2345/235	60	0.000	0.00

TOTAL CL1: 876.044 CL2: 953.100 CL3: 255.304 CL4: 224.176
 CL5: 132.745 CL6: 29.782 CL7: 75.218 CL8: 0.000
 TOTAL PCB: 2437.627

GMM

002

0523

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/13/85

VIAL NUMBER: 6

DILUTION FACTOR: 24.213

SAMPLE NAME: YEN 85-254

PCB SUBSTITUTION PATTERN	ANALYST RELX	MS PCB PER HL SAMPLE	PCT 0 TOTAL 0 PCB 0	PCB SUBSTITUTION PATTERN	ANALYST RELX	MS PCB PER HL SAMPLE	PCT TOTAL PCB
2	21,16	974.331	46.87 0 245/24		34,60	0.000	0.00
2/2	21,16	242.130	11.65 0 245/23		34,60	0.000	0.00
3	21	0.000	0.00 0 234/25		34,60	0.000	0.00
25	21,16	37.622	2.74 0 P,P'-DDE		34	0.000	0.00
4	21	0.000	0.00 0 234/24		34,60	0.725	0.03
25	21,16	0.396	0.41 0 234/23		34,60	0.000	0.00
24	21,16	21.671	1.04 0 2356/25		34,60	0.000	0.00
2/3	21,16	41.063	1.98 0 2356/23		34,60	0.000	0.00
25/2	21,16	78.799	3.41 0 236/245(234/236)		34,60	0.000	0.00
24	21,16	129.152	6.69 0 34/34		34,60	0.000	0.00
25/2	16	35.980	1.73 0 2345/26(0.38)		34,60	0.000	0.00
24/2	16	0.000	0.00 0 234/236(2356/236)		34,60	0.000	0.00
HEXACHLOROCYCLOPENTADIENE	16	11.090	0.00 0 2356/236(245/34)		34,60	0.000	0.00
23/2	16	28.357	0.39 0 245/34(2346/236)		34,60	0.000	0.00
25/4	16	21.719	1.33 0 2346/236(235/245)		34,60	0.000	0.00
4/4	21,16	0.000	0.00 0 235/245(0.50)		34,60	0.000	0.00
246/2	16	4.625	0.22 0 234/34		34,60	0.000	0.00
25/3	16	21.574	1.04 0 245/245		34,60	3.825	0.18
236/2(35/2)	16	11.130	0.34 0 234/235(0.80)		34,60	0.000	0.00
24/3(0.34)	16	0.000	0.00 0 2356/34(0.68)		34,60	0.000	0.00
24/26(0.38)	16	11.792	0.57 0 234/245		34,60	0.000	0.00
25/4(24/3)	16	43.438	2.09 0 2356/235(2346/34)		34,60	0.000	0.00
24/4(23/24/4)	16	71.063	3.42 0 2346/34(2356/245)		34	23.140	1.11
23/4	16	0.000	0.00 0 2356/245(0.70)		34,60	0.000	0.00
25/25	16,34	45.472	2.19 0 234/234		34,60	0.000	0.00
24/25	16,34	45.085	2.17 0 2346/245(2356/2356)		34,60	0.000	0.00
23/25	16,34	27.631	1.33 0 2356/234(2346/234)		34,60	0.000	0.00
24/24	16,34	28.194	0.97 0 2346/234(245/245)		34,60	0.000	0.00
23/24(0.40)	16,34	11.574	0.56 0 2345/2356(245/245(23456/236)		34,60	0.000	0.00
23/23(234/2(0.40)	16,34	0.000	0.00 0 HEDX		34,60	0.000	0.00
236/3(0.40)	16,34	0.000	0.00 0 2345/34		34,60	0.000	0.00
236/4(0.40)	16,34	88.381	3.88 0 2345/235		34,60	0.000	0.00
235/26(0.50)	34,60	0.000	0.00 0 2345/245		34,60	0.000	0.00
OCTACHLOROCYCLOPENTADIENE	16	0.000	0.00 0 2345/234		34	0.000	0.00
236/23	34,60	0.000	0.00 0 2346/2356		34	0.000	0.00
25/34	34,60	0.000	0.00 0 0.7		34	0.000	0.00
24/34	34,60	0.000	0.00 0 2345/2346		34	0.000	0.00
234/4	34,60	12.000	0.57 0 23456/245		34	0.000	0.00
236/236	34,60	0.000	0.00 0 23456/234		34	0.000	0.00
245/25	34,60	0.000	0.00 0 2345/2345		34	0.000	0.00

TOTAL CL1: 974.331 CL2: 989.635 CL3: 295.000 CL4: 272.000
CL5: 0.725 CL6: 3.825 CL7: 23.140 CL8: 0.000

TOTAL PCB: 2878.774

GMW

002

0524

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 08/09/85

VIAL NUMBER: 7

DILUTION FACTOR: 22.573

SAMPLE NAME: TBN 05-235

PCB SUBSTITUTION PATTERN	ANALOR MIX	MS PCB PER ML SAMPLE	PCT 0 TOTAL 0 PCB 0	PCB SUBSTITUTION PATTERN	ANALOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
			0				
2	21,16	1135.003	94.00 0 245/24		94,60	2.483	0.12
2/2	21,16	195.685	9.31 0 245/23		94,60	0.000	0.00
3	21	0.000	0.00 0 234/25		94,60	0.000	0.00
26	21,16	49.457	2.35 0 P,P'-DDE		94	0.000	0.00
4	21	0.000	0.00 0 234/24		94,60	29.406	0.97
25	21,16	9.394	0.46 0 234/23		94,60	9.540	0.45
24	21,16	16.287	0.77 0 235/25		94,60	0.000	0.00
2/3	21,16	29.367	1.40 0 235/23		94,60	0.000	0.00
26/2	21,16	49.419	2.30 0 236/245(234/236)		94,60	0.000	0.00
24	21,16	103.746	4.94 0 34/34		94,60	0.000	0.00
25/2	16	26.997	1.28 0 234/26(0.38)		94,60	0.000	0.00
24/2	16	0.000	0.00 0 234/236(235/236)		94,60	0.000	0.00
NONCHLOROBENZENE	16	11.715	0.57 0 235/236(245/24)		94,60	0.000	0.00
23/2	16	16.320	0.78 0 245/34(234/236)		94,60	0.000	0.00
26/4	16	28.858	1.41 0 234/236(235/245)		94,60	0.000	0.00
44	21,16	0.000	0.00 0 235/245(0.50)		94,60	0.000	0.00
246/2	16	5.147	0.24 0 234/34		94,60	0.000	0.00
25/3	16	18.374	0.87 0 245/245		94,60	0.000	0.00
236/2(35/2)	16	10.451	0.50 0 234/235(0.60)		94,60	0.000	0.00
24/3(0.34)	16	0.000	0.00 0 235/34(0.60)		94,60	0.000	0.00
24/26(0.38)	16	7.404	0.35 0 234/245		94,60	0.000	0.00
25/4(24/3)	16	26.478	1.34 0 235/235(234/34)		94,60	0.000	0.00
24/4(23/34/4)	16	28.622	1.34 0 234/34(235/245)		94	0.000	0.00
23/4	16	0.000	0.00 0 235/245(0.70)		94,60	0.000	0.00
25/25	16,34	42.324	2.01 0 234/234		94,60	0.000	0.00
24/25	16,34	28.611	1.35 0 234/245(235/235)		94,60	0.000	0.00
23/25	16,34	21.186	1.00 0 235/234(234/234)		94,60	0.000	0.00
24/24	16,34	26.726	1.25 0 234/234(245/245)		94,60	0.000	0.00
23/24(0.40)	16,34	23.944	1.12 0 234/235(245/245(2345/236))		94,60	0.000	0.00
23/23(234/2(0.40))	16,34	0.000	0.00 0 MIX		94,60	0.000	0.00
235/3(0.40)	16,34	15.779	0.75 0 2345/34		94,60	0.000	0.00
235/4(0.40)	16,34	28.000	1.35 0 2345/235		94,60	0.000	0.00
235/26(0.34)	94,60	4.673	0.22 0 2345/245		94,60	0.000	0.00
NONCHLOROBENZENE	16	0.000	0.00 0 2345/234		94,60	0.000	0.00
236/23	94,60	0.000	0.00 0 2346/2356		94	0.000	0.00
23/24	94,60	17.946	0.85 0 0.7		94	0.000	0.00
24/24	94,60	19.731	0.94 0 2345/2346		94	0.000	0.00
234/4	94,60	0.000	0.00 0 23456/245		94	0.000	0.00
236/236	94,60	0.000	0.00 0 23456/234		94	0.000	0.00
245/25	94,60	0.000	0.00 0 2345/2345		94	0.000	0.00

TOTAL Q1: 1135.003
Q5: 27.362

Q2: 494.857
Q6: 9.340

Q3: 222.279
Q7: 0.000

Q4: 222.636
Q8: 0.000

TOTAL PCB: 2102.135

GMM
002
0525

SAMPLE TYPE: SUPERFUNDAL

DATE ANALYZED: 10/18/85

VIAL NUMBER: 4

DILUTION FACTOR: 24.830

SAMPLE NAME: 85-236 C.TERTANS

PCB SUBSTITUTION PATTERN	AROCLO -MX	MS PCB PER ML SUPPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCLO -MX	MS PCB PER ML SUPPLE	PCT TOTAL PCB
1	21,16	587.853	45.35	245/24	34,60	0.000	0.00
2/2	21,16	82.139	6.37	245/23	34,60	0.000	0.00
3	21	0.000	0.00	234/25	34,60	0.000	0.00
25	21,16	28.185	4.38	P,P'-DDE	34	4.446	0.00
4	21	0.000	0.00	234/24	34,60	2.427	0.19
25	21,16	1.778	0.14	234/23	34,60	0.000	0.00
24	21,16	17.942	1.36	235/25	34,60	0.000	0.00
2/3	21,16	22.224	2.98	235/23	34,60	0.000	0.00
25/2	21,16	18.311	1.42	236/245(234/236)	34,60	15.832	1.22
24	21,16	107.414	8.39	34/34	34	0.000	0.00
25/2	16	28.388	2.21	234/26(2,38)	34,60	0.000	0.00
24/2	16	0.000	0.00	234/236(235/236)	34,60	16.124	1.25
NONCHLOROBENZENE	100	0.771	0.00	235/236(245/34)	34,60	0.000	0.00
23/2	16	15.932	1.24	245/34(2346/236)	34,60	0.000	0.00
25/4	16	18.647	1.45	2346/236(235/245)	34,60	0.000	0.00
24/4	21,16	0.000	0.00	235/245(2,38)	34,60	0.000	0.00
246/2	16	0.000	0.00	234/34	34,60	0.000	0.00
25/3	16	0.000	0.00	245/245	34,60	24.459	2.67
236/2(35/2)	16	0.000	0.00	234/235(2,38)	34,60	0.000	0.00
24/3(2,38)	16	0.000	0.00	235/34(2,38)	34,60	0.000	0.00
24/25(2,38)	16	0.000	0.00	234/245	34,60	19.832	1.48
25/4(24/3)	16	0.000	0.00	235/235(2346/34)	34,60	0.000	0.00
24/4(23/3+24/4)	16	0.000	0.00	2346/34(2356/245)	34	0.000	0.00
22/4	16	0.000	0.00	2356/245(2,38)	34	25.241	2.94
25/25	16,34	25.444	2.75	234/234	34,60	0.000	0.00
24/25	16,34	22.811	1.71	2346/245(2356/2356)	34,60	0.000	0.00
23/25	16,34	21.435	1.66	2356/234(2346/234)	34,60	0.000	0.00
24/24	16,34	24.778	1.95	2346/234(245/245)	34,60	87.782	6.81
23/24(2,38)	16,34	0.000	0.00	2345/2356+245/245(23456/236)	34,60	0.000	0.00
23/23+234/2(2,38)	16,34	0.000	0.00	NONCHLOROBENZENE	34	0.000	0.00
235/3(2,38)	16,34	0.000	0.00	2345/34	34,60	0.000	0.00
235/4(2,38)	16,34	0.000	0.00	2345/235	34,60	0.000	0.00
235/25(2,38)	34,60	0.000	0.00	2345/245	34,60	0.000	0.00
NONCHLOROBENZENE	100	0.000	0.00	2345/234	34,60	0.000	0.00
236/23	34,60	0.000	0.00	2346/2356	34	0.000	0.00
25/24	34,60	0.000	0.00	2,7	34	0.000	0.00
24/34	34,60	25.213	2.94	2345/2346	34	0.000	0.00
234/4	34,60	0.000	0.00	23456/245	34	0.000	0.00
236/236	34,60	0.000	0.00	23456/234	34	0.000	0.00
245/25	34,60	0.000	0.00	2345/2345	34	0.000	0.00

TOTAL CL1: 587.853
CL5: 2.427

CL2: 239.222
CL6: 85.387

CL3: 81.290
CL7: 114.822

CL4: 119.982
CL8: 0.000

TOTAL PCB: 1289.482

GMM 002 0526

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 08/18/85

VIAL NUMBER: 5

SOLUTION FACTOR: 22.980

SAMPLE NAME: 65-257 C.TENTANS

PCB SUBSTITUTION PATTERN	AROCOR INDEX	MS PCB PER ML SAMPLE	PCT 0 TOTAL 0 PCB 0	PCB SUBSTITUTION PATTERN	AROCOR INDEX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
21,16	21,16	96834.394	37.64 0 245/24	94,68	94,68	286.412	0.21
21,16	21,16	19278.473	12.77 0 245/23	94,68	94,68	282.890	0.13
21	21	0.000	0.00 0 234/25	94,68	94,68	235.453	0.16
21,16	21,16	7715.857	5.11 0 P,P'-DDE	94,68	94,68	301.735	—
21	21	0.000	0.00 0 234/24	94,68	94,68	285.335	0.26
21,16	21,16	327.225	0.22 0 234/23	94,68	94,68	1148.471	0.76
21,16	21,16	182.927	0.87 0 2356/25	94,68	94,68	384.968	0.29
21,16	21,16	1877.785	0.71 0 2356/23	94,68	94,68	28.318	0.82
21,16	21,16	4711.838	3.12 0 236/245(234/236)	94,68	94,68	248.368	0.16
21,16	21,16	5422.487	2.39 0 34/24	94,68	94,68	17.787	0.01
16	16	953.319	0.64 0 2345/26(1,38)	94,68	94,68	72.436	0.05
16	16	0.000	0.00 0 2356/236(2356/236)	94,68	94,68	179.887	0.12
16	16	1283.847	— 0 2356/236(245/24)	94,68	94,68	62.945	0.04
16	16	561.732	0.37 0 245/24(2346/236)	94,68	94,68	268.533	0.17
16	16	9476.847	2.38 0 2346/236(235/245)	94,68	94,68	45.946	0.03
21,16	21,16	1485.395	0.30 0 235/245(1,5C)	94,68	94,68	175.337	0.12
16	16	1131.395	0.75 0 234/24	94,68	94,68	0.000	0.00
16	16	4224.574	2.88 0 245/245	94,68	94,68	439.945	0.30
16	16	722.491	0.48 0 234/235(1,6A)	94,68	94,68	91.713	0.06
16	16	1382.847	0.86 0 2356/24(1,6B)	94,68	94,68	79.978	0.05
16	16	642.368	0.43 0 234/245	94,68	94,68	322.381	0.21
16	16	9426.186	3.39 0 2356/235(2346/24)	94,68	94,68	64.398	0.04
16	16	1393.878	1.86 0 2346/24(2356/245)	94,68	94,68	23.218	0.02
16	16	948.316	0.63 0 2356/245(1,7A)	94,68	94,68	273.876	0.18
16,34	16,34	2646.632	1.75 0 234/234	94,68	94,68	0.000	0.00
16,34	16,34	6142.853	4.87 0 2346/245(2356/2356)	94,68	94,68	153.782	0.10
16,34	16,34	1193.673	0.79 0 2356/234(2346/234)	94,68	94,68	188.537	0.07
16,34	16,34	3849.327	3.94 0 2346/234(245/245)	94,68	94,68	88.611	0.06
16,34	16,34	982.385	0.68 0 2345/2356(245/245(23456/236)	94,68	94,68	62.386	0.04
16,34	16,34	833.347	0.35 0 INDEX	94,68	94,68	0.000	—
16,34	16,34	2119.446	1.48 0 2345/24	94,68	94,68	72.226	0.05
16,34	16,34	4848.854	2.74 0 2345/235	94,68	94,68	29.351	0.02
94,68	94,68	854.898	0.57 0 2345/245	94,68	94,68	235.488	0.17
94,68	94,68	0.000	— 0 2345/234	94,68	94,68	194.778	0.09
94,68	94,68	1888.435	0.78 0 2346/2356	94,68	94,68	89.254	0.06
94,68	94,68	688.637	0.48 0 1,7	94,68	94,68	39.939	0.03
94,68	94,68	265.488	0.18 0 2345/2346	94,68	94,68	45.348	0.03
94,68	94,68	1842.347	0.69 0 23456/245	94,68	94,68	67.745	0.04
94,68	94,68	0.000	0.00 0 23456/234	94,68	94,68	42.812	0.03
94,68	94,68	0.000	0.00 0 2345/2345	94,68	94,68	31.847	0.06

TOTAL CL1: 96834.394
CL3: 4473.387

CL2: 38338.277
CL6: 2839.188

CL3: 23287.789
CL7: 1248.395

CL4: 27431.785
CL8: 288.783

TOTAL PCB: 131884.578

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/10/85

VIAL NUMBER: 6

DILUTION FACTOR: 17.570

SAMPLE NAME: 85-230 C.TENTAMS

PCB SUBSTITUTION PATTERN	AROCLO RELX	MS PCB PER ML SAMPLE	PCT 0 TOTAL 0 PCB 0	PCB SUBSTITUTION PATTERN	AROCLO RELX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	2495.389	25.00 0 245/24		24,60	276.745	0.30
2/2	21,16	10013.667	11.64 0 245/23		24,60	185.285	0.20
3	21	0.000	0.00 0 234/25		24,60	221.751	0.24
35	21,16	4714.004	5.00 0 P,P'-DDE		24	95.566	—
4	21	0.000	0.00 0 234/24		24,60	240.300	0.30
25	21,16	289.926	0.23 0 234/23		24,60	1041.233	1.12
24	21,16	85.636	0.67 0 2356/25		24,60	204.142	0.31
2/3	21,16	789.195	0.76 0 2356/23		24,60	28.118	0.02
26/2	21,16	3085.829	3.32 0 236/245(234/236)		24,60	222.998	0.24
24/4	21,16	8725.947	4.01 0 34/34		24	11.363	0.01
23/2	16	729.647	0.79 0 2345/25(0.50)		24,60	37.135	0.06
24/2	16	0.000	0.00 0 234/236(2356/236)		24,60	171.378	0.18
NONCHLOROSUBST	NA	936.089	— 0 2356/236(245/34)		24,60	39.230	0.06
22/2	16	0.000	0.00 0 245/34(2346/236)		24,60	249.635	0.27
26/4	16	2660.625	2.86 0 2346/236(235/245)		24,60	26.352	0.04
4/4	21,16	1437.138	1.35 0 235/245(0.50)		24,60	135.738	0.17
246/2	16	891.115	0.36 0 234/34		24,60	0.000	0.00
25/3	16	2158.235	3.48 0 245/245		24,60	434.895	0.47
236/2(35/2)	16	573.389	0.62 0 234/235(0.60)		24,60	87.789	0.09
24/3(0.30)	16	939.257	1.01 0 2356/34(0.60)		24,60	75.744	0.08
24/25(0.30)	16	487.776	0.34 0 234/245		24,60	219.774	0.34
25/4(24/3)	16	4880.135	4.42 0 2356/235(2346/34)		24,60	34.683	0.04
24/4(23/24/4)	16	1283.123	1.38 0 2346/34(2356/245)		24	6.393	0.01
22/4	16	714.677	0.77 0 2356/245(0.70)		24	242.013	0.26
23/5	16,34	2633.685	2.86 0 234/234		24,60	0.000	0.00
24/5	16,34	4815.137	5.29 0 2346/245(2356/2356)		24,60	149.968	0.16
22/5	16,34	1038.194	1.12 0 2356/234(2346/234)		24,60	88.348	0.09
24/24	16,34	8874.736	4.28 0 2346/234(245/245)		24,60	38.982	0.06
23/24(0.40)	16,34	730.678	0.79 0 2345/2356+245/245(23456/236)		24,60	38.971	0.05
23/23/234/2(0.40)	16,34	727.829	0.78 0 MIXED		24,60	10.832	—
236/3(0.40)	16,34	2854.373	2.80 0 2345/34		24,60	81.138	0.09
236/4(0.40)	16,34	3335.306	3.39 0 2345/235		24,60	24.580	0.03
235/25(0.50)	24,60	671.473	0.72 0 2345/245		24,60	16.279	0.02
NONCHLOROSUBST	NA	0.000	— 0 2345/234		24,60	182.626	0.11
236/23	24,60	849.167	0.31 0 2346/2356		24	79.831	0.09
25/24	24,60	211.867	0.35 0 0.7		24	27.628	0.03
24/24	24,60	223.772	0.24 0 2345/2346		24	12.746	0.04
234/4	24,60	886.486	0.35 0 23456/245		24	48.187	0.05
236/236	24,60	0.000	0.00 0 23456/234		24	2.487	0.04
245/25	24,60	0.000	0.00 0 2345/2345		24	0.000	0.00

TOTAL Q1: 2495.389
Q5: 2897.316

Q2: 21676.654
Q6: 1367.713

Q3: 16398.789
Q7: 827.125

Q4: 28828.361
Q8: 282.121

TOTAL PCB: 28865.839

GMW

002

0528

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 20/10/85

VIAL NUMBER: 7

DILUTION FACTOR: 10.970

SAMPLE NAME: 45-230 C.TETRANS

PCB SUBSTITUTION PATTERN	AROCOLOR HEX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCOLOR HEX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	7879.727	30.33	245/24	94,60	287.219	0.17
2/2	21,16	2570.746	13.98	245/23	94,60	197.402	0.11
3	21	0.000	0.00	234/25	94,60	230.277	0.12
25	21,16	1120.006	6.14	P,P'-DDE	NA	94.014	—
4	21	0.000	0.00	234/24	94	285.357	0.21
25	21,16	449.627	0.24	234/23	94,60	1004.010	0.59
24	21,16	124.306	0.07	235/25	94,60	230.227	0.16
2/3	21,16	1419.753	0.77	235/23	94,60	17.107	0.01
25/2	21,16	6233.219	3.30	236/245(234/236)	94,60	227.105	0.12
24	21,16	1066.000	2.70	34/34	—	13.029	0.01
25/2	16	1211.395	0.66	2345/26(CL30)	94,60	94.901	0.03
24/2	16	0.000	0.00	234/236(235/236)	94,60	160.432	0.09
NONACHLOROBIPHE	NA	1679.014	—	235/236(245/34)	94,60	36.436	0.03
23/2	16	703.214	0.42	245/34(234/236)	94,60	230.030	0.13
25/4	16	4940.222	2.35	234/236(235/245)	94,60	30.296	0.02
4/4	21,16	1630.032	0.00	235/245(CL3C)	94,60	132.310	0.08
246/2	16	1340.006	0.73	234/34	94,60	0.000	0.00
25/3	16	4045.400	2.63	245/245	94,60	415.917	0.23
236/2(35/2)	16	104.090	0.44	234/235(CL3A)	94,60	35.000	0.03
24/3(CL3A)	16	1474.720	0.00	235/34(CL3B)	94,60	69.961	0.04
24/26(CL3B)	16	729.326	0.39	234/245	94,60	203.032	0.15
25/4(24/3)	16	1062.432	3.29	235/235(234/34)	94,60	60.197	0.04
24/4(23/34/24/4)	16	1009.035	1.01	234/34(235/245)	—	30.630	0.01
23/4	16	1230.375	0.00	235/245(CL7A)	94	230.466	0.14
25/25	16,34	3310.232	1.01	234/234	94,60	0.000	0.00
24/25	16,34	6309.747	3.36	234/245(235/235)	94,60	130.703	0.07
23/25	16,34	1379.001	0.75	235/234(234/234)	94,60	06.370	0.05
24/24	16,34	3007.063	2.00	234/234(245/245)	94,60	107.040	0.06
23/24(CL4A)	16,34	904.033	0.32	2345/2356(245/245(23436/236)	94,60	42.602	0.02
23/24(234/2(CL4B)	16,34	903.001	0.31	NONEX	NA	0.000	—
236/3(CL4C)	16,34	2440.710	1.32	2345/34	94,60	31.162	0.03
236/4(CL4D)	16,34	4454.334	2.42	2345/235	94,60	20.109	0.02
235/26(CL5A)	94,60	839.379	0.47	2345/245	94,60	217.904	0.12
NONACHLOROBIPHE	NA	0.000	—	2345/234	94,60	35.400	0.05
236/23	94,60	1032.499	0.36	2346/2356	—	79.352	0.04
25/34	94,60	644.620	0.35	CL7	—	29.005	0.02
24/34	94,60	200.471	0.15	2343/2346	—	41.104	0.02
234/4	94,60	1037.014	0.36	23456/245	—	46.430	0.03
236/236	94,60	0.000	0.00	23456/234	—	16.064	0.01
246/25	94,60	0.000	0.00	2346/2346	—	36.392	0.02

TOTAL CL1: 7879.727 CL2: 47003.012 CL3: 20079.109 CL4: 20422.475
CL5: 4336.700 CL6: 10403.713 CL7: 1116.005 CL8: 253.512

TOTAL PCB: 104434.201

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/26/85

VIAL NUMBER: 7

DILUTION FACTOR: 0.668

SAMPLE NAME: 05-290 H20

PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT 0 TOTAL 0 PCB 0	PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00 0 245/24		54,60	0.000	0.00
2/2	21,16	0.951	24.27 0 245/23		54,60	0.000	0.00
3	21	0.000	0.00 0 234/25		54,60	0.000	0.00
26	21,16	6.310	17.11 0 P,P'-DDE	NA		0.000	---
4	21	0.000	0.00 0 234/24		54	0.000	0.00
25	21,16	0.000	0.00 0 234/23		54,60	0.000	0.00
24	21,16	0.000	0.00 0 2356/25		54,60	0.000	0.00
2/3	21,16	0.000	0.00 0 2356/23		54,60	0.000	0.00
26/2	21,16	0.776	10.24 0 236/245(234/236)		54,60	0.000	0.00
2/4	21,16	0.293	0.93 0 34/34	40		0.000	0.00
25/2	16	2.275	6.17 0 2345/26(CL38)		54,60	0.000	0.00
24/2	16	0.000	0.00 0 234/236(2356/236)		54,60	0.000	0.00
HEXACHLOROBENZENE	NA	2.117	--- 0 2356/236(245/34)		54,60	0.000	0.00
23/2	16	0.404	1.31 0 245/34(2346/236)		54,60	0.000	0.00
26/4	16	1.055	2.06 0 2346/236(235/245)		54,60	0.000	0.00
4/4	21,16	0.000	0.00 0 235/245(CL3C)		54,60	0.000	0.00
246/2	16	0.409	1.33 0 234/34		54,60	0.000	0.00
25/3	16	0.051	0.14 0 245/245		54,60	0.000	0.00
236/2(35/2)	16	0.203	0.77 0 234/235(CL6A)		54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00 0 2356/34(CL6B)		54,60	0.000	0.00
24/26(CL3B)	16	0.299	0.01 0 234/245		54,60	0.000	0.00
25/4(24/3)	16	0.005	1.64 0 2356/235(2346/34)		54,60	0.000	0.00
24/4(23/3+24/4)	16	1.504	4.29 0 2346/34(2356/245)		60	0.000	0.00
23/4	16	0.000	0.00 0 2356/245(CL7A)		54	0.000	0.00
25/25	16,54	1.469	3.90 0 234/234		54,60	0.000	0.00
24/25	16,54	0.903	2.66 0 2346/245(2356/2356)		54,60	0.000	0.00
23/25	16,54	0.905	2.67 0 2356/234(2346/234)		54,60	0.000	0.00
24/24	16,54	0.731	1.90 0 2346/234(245/245)		54,60	0.000	0.00
23/24(CL4A)	16,54	0.094	2.43 0 2345/2356+245/345(23456/236)		54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	0.000	0.00 0 MIXEX	NA		0.000	---
236/3(CL4C)	16,54	1.002	2.72 0 2345/34		54,60	0.000	0.00
236/4(CL4D)	16,54	1.363	3.69 0 2345/235		54,60	0.000	0.00
235/26(CL5A)	54,60	0.000	0.00 0 2345/245		54,60	0.000	0.00
HEXACHLOROSTYRENE	NA	0.000	--- 0 2345/234		54,60	0.000	0.00
236/23	54,60	0.000	0.00 0 2346/2356		60	0.000	0.00
25/34	54,60	0.000	0.00 0 CL7		60	0.000	0.00
24/34	54,60	0.000	0.00 0 2345/2346		60	0.000	0.00
234/4	54,60	0.000	0.00 0 23456/245		60	0.000	0.00
236/236	54,60	0.000	0.00 0 23456/234		60	0.000	0.00
245/25	54,60	0.000	0.00 0 2345/2345		60	0.000	0.00

TOTAL CL1: 0.000
CL5: 0.000

CL2: 10.354
CL6: 0.000

CL3: 9.000
CL7: 0.000

CL4: 0.490
CL8: 0.000

TOTAL PCB: 26.002

3MM 002 0530

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/26/85

VIAL NUMBER: 10

DILUTION FACTOR: 0.699

SAMPLE NAME: 85-291 H20

PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	0.000	0.00
2/2	21,16	7.768	22.77	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	3.073	9.01	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	0.000	0.00
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	3.706	10.87	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	3.334	9.78	34/34	48	0.000	0.00
25/2	16	2.140	6.27	2345/26(CL58)	54,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	1.583	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.491	1.44	245/34(2346/236)	54,60	0.000	0.00
26/4	16	1.174	3.44	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	0.187	0.55	234/34	54,60	0.000	0.00
25/3	16	0.000	0.00	245/245	54,60	0.000	0.00
236/2(35/2)	16	0.659	1.93	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	0.338	0.99	234/245	54,60	0.000	0.00
25/4(24/3)	16	0.525	1.54	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	0.895	2.63	2346/34(2356/245)	60	0.000	0.00
23/4	16	0.253	0.74	2356/245(CL7A)	54	0.000	0.00
25/25	16,54	1.323	3.88	234/234	54,60	0.000	0.00
24/25	16,54	1.320	3.87	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	1.246	3.65	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	0.763	2.24	2346/234(245/245)	54,60	0.000	0.00
23/24(CL4A)	16,54	0.619	1.82	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	0.000	0.00	NIRES	NA	0.000	---
236/3(CL4C)	16,54	1.299	3.81	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	2.741	8.04	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	0.253	0.74	2345/245	54,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	0.000	0.00	2346/2356	60	0.000	0.00
25/34	54,60	0.000	0.00	CL7	60	0.000	0.00
24/34	54,60	0.000	0.00	2345/2346	60	0.000	0.00
234/4	54,60	0.000	0.00	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.000	0.00	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000 CL2: 14.175 CL3: 9.183 CL4: 18.496
CL5: 0.253 CL6: 0.000 CL7: 0.000 CL8: 0.000

TOTAL PCB: 34.188

002 0531

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/26/85

VIAL NUMBER: 11

DILUTION FACTOR: 0.655

SAMPLE NAME: 85-232 H20

PCB SUBSTITUTION PATTERN	ANALOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	ANALOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	0.000	0.00
2/2	21,16	4.172	18.85	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	1.008	0.53	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	0.000	0.00
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	1.619	7.31	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	1.387	6.27	34/34	48	0.000	0.00
25/2	16	2.373	10.72	2345/26(CL58)	54,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	0.936	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.242	1.09	245/34(2346/236)	54,60	0.000	0.00
26/4	16	0.956	4.32	2346/236(2356/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	0.004	0.38	234/34	54,60	0.000	0.00
25/3	16	0.000	0.00	245/245	54,60	0.000	0.00
236/2(35/2)	16	0.351	2.49	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	0.000	0.00	234/245	54,60	0.000	0.00
25/4(24/3)	16	0.396	1.79	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	1.664	7.32	2346/34(2356/245)	68	0.000	0.00
23/4	16	0.000	0.00	2356/245(CL7A)	54	0.000	0.00
25/25	16,54	0.688	3.11	234/234	54,60	0.000	0.00
24/25	16,54	1.277	5.77	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	1.409	6.36	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	0.000	0.00	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	0.399	2.71	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	0.000	0.00	NIHDX	NA	0.000	---
236/3(CL4C)	16,54	0.000	0.00	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	2.032	12.79	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	0.000	0.00	2345/245	54,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	0.000	0.00	2346/2356	68	0.000	0.00
25/34	54,60	0.000	0.00	CL7	68	0.000	0.00
24/34	54,60	0.000	0.00	2345/2346	68	0.000	0.00
234/4	54,60	0.000	0.00	23456/245	68	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	68	0.000	0.00
245/25	54,60	0.000	0.00	2345/2345	68	0.000	0.00

TOTAL CL1: 0.000 CL2: 7.447 CL3: 7.249 CL4: 7.440
CL5: 0.000 CL6: 0.000 CL7: 0.000 CL8: 0.000

TOTAL PCB: 22.126

3MM

002

0532

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/27/85

VIAL NUMBER: 12

DILUTION FACTOR: 0.741

SAMPLE NAME: 85-293 H20

PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT 0 TOTAL 0 PCB 0	PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00 0 245/24		54,60	0.000	0.00
2/2	21,16	9.420	10.20 0 245/23		54,60	0.000	0.00
3	21	0.000	0.00 0 234/25		54,60	0.000	0.00
26	21,16	2.606	5.21 0 P,P'-DDE	NA		0.000	—
4	21	0.000	0.00 0 234/24		54	0.000	0.00
25	21,16	0.000	0.00 0 234/23		54,60	0.000	0.00
24	21,16	0.000	0.00 0 2356/25		54,60	0.000	0.00
2/3	21,16	0.000	0.00 0 2356/23		54,60	0.000	0.00
26/2	21,16	4.726	9.17 0 236/245(234/236)		54,60	0.000	0.00
2/4	21,16	4.214	0.18 0 34/34	48		0.000	0.00
25/2	16	3.054	5.93 0 2345/26(CL38)		54,60	0.000	0.00
24/2	16	0.000	0.00 0 234/236(2356/236)		54,60	0.000	0.00
NONACHLORODIBENZ	NA	2.390	— 0 2356/236(245/34)		54,60	0.000	0.00
23/2	16	0.677	1.21 0 245/34(2346/236)		54,60	0.000	0.00
26/4	16	1.787	3.47 0 2346/236(235/245)		54,60	0.000	0.00
4/4	21,16	0.000	0.00 0 235/245(CL5C)		54,60	0.000	0.00
246/2	16	0.527	1.02 0 234/34		54,60	0.000	0.00
25/3	16	0.302	0.97 0 245/245		54,60	0.000	0.00
236/2(35/2)	16	0.627	1.22 0 234/235(CL6A)		54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00 0 2356/34(CL6B)		54,60	0.000	0.00
24/26(CL3B)	16	0.467	0.91 0 234/245		54,60	0.000	0.00
25/4(24/3)	16	0.925	1.00 0 2356/235(2346/34)		54,60	0.000	0.00
24/4(23/34/24/4)	16	1.055	3.60 0 2346/34(2356/245)		60	0.000	0.00
23/4	16	0.000	0.00 0 2356/245(CL7A)		54	0.000	0.00
25/25	16,54	1.856	3.60 0 234/234		54,60	0.000	0.00
24/25	16,54	1.923	3.73 0 2346/245(2356/2356)		54,60	0.000	0.00
23/25	16,54	1.615	3.14 0 2356/234(2346/234)		54,60	0.000	0.00
24/24	16,54	1.249	2.43 0 2346/234(245/345)		54,60	0.000	0.00
23/24(CL4A)	16,54	1.000	1.94 0 2345/2356+245/345(23456/236)		54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	5.007	9.72 0 MIXED	NA		0.000	—
236/3(CL4C)	16,54	2.448	4.75 0 2345/34		54,60	0.000	0.00
236/4(CL4D)	16,54	3.082	6.76 0 2345/235		54,60	0.000	0.00
235/26(CL5A)	54,60	0.057	0.11 0 2345/245		54,60	0.000	0.00
6,8,10,12-DIBENZ	NA	0.000	— 0 2345/234		54,60	0.000	0.00
236/23	54,60	0.000	0.00 0 2346/2356		60	0.000	0.00
25/34	54,60	1.266	2.46 0 CL7		60	0.000	0.00
24/34	54,60	0.147	0.20 0 2345/2346		60	0.000	0.00
234/4	54,60	0.000	0.00 0 23456/245		60	0.000	0.00
236/236	54,60	0.000	0.00 0 23456/234		60	0.000	0.00
245/25	54,60	0.000	0.00 0 2345/2345		60	0.000	0.00

TOTAL CL1: 0.000
CL5: 0.057

CL2: 16.320
CL6: 0.000

CL3: 13.526
CL7: 0.000

CL4: 21.613
CL8: 0.000

TOTAL PCB: 31.516

GMM 002 0533

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/27/85

VIAL NUMBER: 13

DILUTION FACTOR: 0.747

SAMPLE NAME: 85-294 H20

PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	0.000	0.00
2/2	21,16	10.619	21.08	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	5.530	10.98	P,P'-DDE	NA	0.000	—
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	0.000	0.00
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	4.750	9.43	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	4.957	9.04	34/34	48	0.000	0.00
25/2	16	3.135	6.22	2345/26(CL58)	54,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	2.422	—	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.661	1.31	245/34(2346/236)	54,60	0.000	0.00
26/4	16	1.900	3.77	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	0.395	0.78	234/34	54,60	0.000	0.00
25/3	16	0.541	1.07	245/245	54,60	0.000	0.00
236/2(35/2)	16	0.609	1.21	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	0.472	0.94	234/245	54,60	0.000	0.00
25/4(24/3)	16	1.173	2.33	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	1.622	3.22	2346/34(2356/245)	60	0.000	0.00
23/4	16	0.000	0.00	2356/245(CL7A)	54	0.000	0.00
25/25	16,54	1.901	3.93	234/234	54,60	0.000	0.00
24/25	16,54	1.355	2.69	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	1.174	2.33	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	0.940	1.87	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	0.681	1.19	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	2.763	5.48	HIREX	NA	0.000	—
236/3(CL4C)	16,54	1.243	2.47	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	2.282	4.53	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	0.000	0.00	2345/245	54,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	—	2345/234	54,60	0.000	0.00
236/23	54,60	0.000	0.00	2346/2356	60	0.000	0.00
25/34	54,60	1.478	2.93	CL7	60	0.000	0.00
24/34	54,60	0.193	0.38	2345/2346	60	0.000	0.00
234/4	54,60	0.000	0.00	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.000	0.00	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000 CL2: 21.106 CL3: 13.783 CL4: 15.465
CL5: 0.000 CL6: 0.000 CL7: 0.000 CL8: 0.000

TOTAL PCB: 90.373

GMM 002 0534

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/27/85

VIAL NUMBER: 16

DILUTION FACTOR: 0.712

SAMPLE NAME: 85-295 K20

PCB SUBSTITUTION PATTERN	AROCLOR MIX	MG PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCLOR MIX	MG PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	0.000	0.00
2/2	21,16	10.961	24.20	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	4.624	10.24	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	0.000	0.00
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	5.153	11.41	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	1.506	3.51	34/34	48	0.000	0.00
25/2	16	2.627	5.82	2345/26(CL58)	54,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	2.027	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.406	0.90	245/34(2346/236)	54,60	0.000	0.00
26/4	16	1.321	2.93	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	0.304	0.65	234/34	54,60	0.000	0.00
25/3	16	0.000	0.00	245/245	54,60	0.000	0.00
236/2(35/2)	16	0.726	1.61	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	0.366	0.81	234/245	54,60	0.000	0.00
25/4(24/3)	16	1.031	2.28	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	2.016	4.47	2346/34(2356/245)	54,60	0.000	0.00
23/4	16	0.000	0.00	2356/245(CL7A)	60	0.000	0.00
25/25	16,54	1.616	3.58	234/234	54	0.000	0.00
24/25	16,54	1.710	3.79	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	1.273	2.82	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	1.189	2.63	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	0.664	1.47	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(CL4B)	16,54	2.905	6.44	MIREX	NA	0.000	---
236/3(CL4C)	16,54	1.640	3.65	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	2.338	5.18	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	0.131	0.29	2345/245	54,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	0.000	0.00	2346/2356	60	0.000	0.00
25/34	54,60	0.000	0.00	CL7	60	0.000	0.00
24/34	54,60	0.465	1.03	2345/2346	60	0.000	0.00
234/4	54,60	0.000	0.00	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.000	0.00	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000 CL2: 17.171 CL3: 12.554 CL4: 15.285
 CL5: 0.131 CL6: 0.000 CL7: 0.000 CL8: 0.000
 TOTAL PCB: 45.141

GMM 002 0535

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/27/85

VIAL NUMBER: 17

DILUTION FACTOR: 0.676

SAMPLE NAME: 05-296 H20

PCB SUBSTITUTION PATTERN	AROCLOP MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCLOP MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	0.000	0.00
2/2	21,16	6.048	17.77	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	5.774	14.98	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	0.608	1.58
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	7.504	19.47	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	1.505	3.91	34/34	48	0.000	0.00
25/2	16	1.593	4.13	2345/26(DL58)	54,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	54,60	0.000	0.00
NONACHLOROBENZENE	NA	1.337	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.381	0.99	245/34(2346/236)	54,60	0.000	0.00
26/4	16	1.075	2.79	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(DL5C)	54,60	0.000	0.00
246/2	16	0.615	1.60	234/34	54,60	0.000	0.00
25/3	16	0.000	0.00	245/245	54,60	0.000	0.00
236/2(35/2)	16	0.346	0.90	234/235(DL6A)	54,60	0.000	0.00
24/3(DL3A)	16	0.003	0.01	2356/34(DL6B)	54,60	0.000	0.00
24/26(DL3B)	16	0.354	0.92	234/245	54,60	0.000	0.00
25/4(24/3)	16	0.311	0.81	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	1.265	3.28	2346/34(2356/245)	60	0.000	0.00
23/4	16	0.000	0.00	2356/245(DL7A)	54	0.000	0.00
25/25	16,54	1.702	4.42	234/234	54,60	0.000	0.00
24/25	16,54	1.614	4.19	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	1.324	3.43	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	1.345	3.49	2346/234(245/345)	54,60	0.000	0.00
23/24(DL4A)	16,54	1.033	2.68	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/23+234/2(DL4B)	16,54	0.000	0.00	MIREX	NA	0.000	---
236/3(DL4C)	16,54	1.149	2.98	2345/34	54,60	0.000	0.00
236/4(DL4D)	16,54	1.565	4.06	2345/235	54,60	0.000	0.00
235/26(DL5A)	54,60	0.148	0.38	2345/245	54,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	0.000	0.00	2346/2356	60	0.000	0.00
25/34	54,60	0.000	0.00	CL7	60	0.000	0.00
24/34	54,60	0.000	0.00	2345/2346	60	0.000	0.00
234/4	54,60	0.000	1.25	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.000	0.00	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000 CL2: 14.127 CL3: 12.132 CL4: 11.527
 CL5: 0.756 CL6: 0.000 CL7: 0.000 CL8: 0.000
 TOTAL PCB: 20.542

GM 002 0536

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/27/85

VIAL NUMBER: 18

DILUTION FACTOR: 0.662

SAMPLE NAME: 85-297 H20

PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT 0 TOTAL 0 PCB 0	PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00 0 245/24		54,60	0.000	0.00
2/2	21,16	5.919	14.77 0 245/23		54,60	0.000	0.00
3	21	0.000	0.00 0 234/25		54,60	0.000	0.00
26	21,16	4.710	11.75 0 P,P'-DDE	NA		0.000	----
4	21	0.000	0.00 0 234/24		54	0.000	0.00
25	21,16	0.000	0.00 0 234/23		54,60	0.000	0.00
24	21,16	0.000	0.00 0 2356/25		54,60	0.000	0.00
2/3	21,16	0.000	0.00 0 2356/23		54,60	0.000	0.00
26/2	21,16	6.466	16.13 0 236/245(234/236)		54,60	0.000	0.00
2/4	21,16	2.445	6.10 0 34/34	48		0.000	0.00
25/2	16	1.393	3.40 0 2345/26(C158)		54,60	0.000	0.00
24/2	16	0.000	0.00 0 234/236(2356/236)		54,60	0.000	0.00
HEXACHLOROBENZENE	NA	1.077	— 0 2356/236(245/34)		54,60	0.000	0.00
23/2	16	0.122	0.31 0 245/34(2346/236)		54,60	0.000	0.00
26/4	16	2.957	6.90 0 2346/236(235/245)		54,60	0.000	0.00
4/4	21,16	0.000	0.00 0 235/245(C15C)		54,60	0.000	0.00
246/2	16	0.409	1.22 0 234/34		54,60	0.000	0.00
25/3	16	0.000	0.00 0 245/245		54,60	0.000	0.00
236/2(35/2)	16	0.569	1.42 0 234/235(C16A)		54,60	0.000	0.00
24/3(C13A)	16	0.000	0.00 0 2356/34(C16B)		54,60	0.000	0.00
24/26(C13B)	16	0.721	1.00 0 234/245		54,60	0.000	0.00
25/4(24/3)	16	0.000	0.00 0 2356/235(2346/34)		54,60	0.000	0.00
24/4(23/3+24/4)	16	1.257	3.14 0 2346/34(2356/245)		60	0.000	0.00
23/4	16	0.000	0.00 0 2356/245(C17A)		54	0.000	0.00
25/25	16,54	1.611	4.02 0 234/234		54,60	0.000	0.00
24/25	16,54	1.544	3.05 0 2346/245(2356/2356)		54,60	0.000	0.00
23/25	16,54	1.206	3.26 0 2356/234(2346/234)		54,60	0.000	0.00
24/24	16,54	1.513	3.77 0 2346/234(245/345)		54,60	0.000	0.00
23/24(C14A)	16,54	0.731	1.02 0 2345/2356+245/345(23456/236)		54,60	0.000	0.00
23/23+234/2(C14B)	16,54	0.000	0.00 0 HIREX	NA		0.000	----
236/3(C14C)	16,54	0.031	7.56 0 2345/34		54,60	0.000	0.00
236/4(C14D)	16,54	2.706	6.95 0 2345/235		54,60	0.000	0.00
235/26(C15A)	54,60	0.015	0.04 0 2345/245		54,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	— 0 2345/234		54,60	0.000	0.00
236/23	54,60	0.000	0.00 0 2346/2356		60	0.000	0.00
25/34	54,60	0.710	1.77 0 C17		60	0.000	0.00
24/34	54,60	0.106	0.46 0 2345/2346		60	0.000	0.00
234/4	54,60	0.000	0.00 0 23456/245		60	0.000	0.00
236/236	54,60	0.000	0.00 0 23456/234		60	0.000	0.00
245/25	54,60	0.000	0.00 0 2345/2345		60	0.000	0.00

TOTAL CL1: 0.000 CL2: 13.074 CL3: 11.796 CL4: 15.196
 CL5: 0.015 CL6: 0.000 CL7: 0.000 CL8: 0.000
 TOTAL PCB: 40.079

GMW 002 0537

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/20/85

VIAL NUMBER: 19

DILUTION FACTOR: 0.645

SAMPLE NAME: 85-298 H20

PCB SUBSTITUTION PATTERN	AROCLOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCLOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	0.000	0.00
2/2	21,16	10.272	23.29	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	4.731	10.73	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.007	0.00	234/23	54,60	0.295	0.67
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	0.015	10.17	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	1.291	2.93	34/34	48	0.000	0.00
25/2	16	1.961	4.45	2345/26(CL5B)	54,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	1.746	---	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.493	1.12	245/34(2346/236)	54,60	0.000	0.00
26/4	16	2.244	5.09	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	0.642	1.46	234/34	54,60	0.000	0.00
23/3	16	0.250	0.57	245/245	54,60	0.000	0.00
236/2(35/2)	16	0.497	1.13	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	0.277	0.63	234/245	54,60	0.000	0.00
25/4(24/3)	16	0.406	1.10	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/34/24/4)	16	1.746	3.96	2346/34(2356/245)	60	0.000	0.00
23/4	16	0.000	0.00	2356/245(CL7A)	54	0.000	0.00
25/25	16,54	2.066	4.60	234/234	54,60	0.000	0.00
24/25	16,54	1.522	3.45	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	1.140	2.60	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	1.070	2.43	2346/234(245/345)	54,60	0.000	0.00
23/24(CL4A)	16,54	0.966	1.20	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/234/234/2(CL4B)	16,54	0.000	1.02	HIREX	NA	0.000	---
236/3(CL4C)	16,54	1.147	2.60	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	1.065	4.23	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	0.164	0.37	2345/245	54,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	0.000	0.00	2346/2356	60	0.000	0.00
25/34	54,60	0.000	0.00	CL7	60	0.000	0.00
24/34	54,60	0.164	0.37	2345/2346	60	0.000	0.00
234/4	54,60	0.000	0.00	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.000	0.00	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000
CL5: 0.460

CL2: 16.681
CL6: 0.000

CL3: 15.195
CL7: 0.000

CL4: 11.764
CL8: 0.000

TOTAL PCB: 44.100

GMM 002 0538

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/28/85

VIAL NUMBER: 20

DILUTION FACTOR: 0.671

SAMPLE NAME: 85-299 H20

PCB SUBSTITUTION PATTERN	AROCLOR MIX	MS PCB PER ML SAMPLE	PCT % TOTAL % PCB	PCB SUBSTITUTION PATTERN	AROCLOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	0.000	0.00
2/2	21,16	4.535	15.78	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	4.419	15.38	P,P'-DDE	NA	0.000	—
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	0.000	0.00
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	4.727	16.45	236/245 (234/236)	54,60	0.000	0.00
2/4	21,16	1.557	5.42	34/34	48	0.000	0.00
25/2	16	1.233	4.29	2345/26 (CL58)	54,60	0.000	0.00
24/2	16	0.000	0.00	234/236 (2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	1.060	—	2356/236 (245/34)	54,60	0.000	0.00
23/2	16	0.280	0.98	245/34 (2346/236)	54,60	0.000	0.00
26/4	16	2.088	6.99	2346/236 (235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245 (CL5C)	54,60	0.000	0.00
246/2	16	0.312	1.09	234/34	54,60	0.000	0.00
25/3	16	0.149	0.52	245/245	54,60	0.000	0.00
236/2 (35/2)	16	0.378	1.31	234/235 (CL6A)	54,60	0.000	0.00
24/3 (CL3A)	16	0.000	0.00	2356/34 (CL6B)	54,60	0.000	0.00
24/26 (CL3B)	16	0.306	1.06	234/245	54,60	0.000	0.00
25/4 (24/3)	16	0.260	0.90	2356/235 (2346/34)	54,60	0.000	0.00
24/4 (23/3+24/4)	16	0.725	2.52	2346/34 (2356/245)	60	0.000	0.00
23/4	16	0.000	0.00	2356/245 (CL7A)	54	0.000	0.00
25/25	16,54	1.248	4.34	234/234	54,60	0.000	0.00
24/25	16,54	1.308	4.35	2346/245 (2356/2356)	54,60	0.000	0.00
23/25	16,54	1.229	4.27	2356/234 (2346/234)	54,60	0.000	0.00
24/24	16,54	1.008	3.51	2346/234 (245/345)	54,60	0.000	0.00
23/24 (CL4A)	16,54	1.076	3.74	2345/2356+245/345 (23456/236)	54,60	0.000	0.00
23/234/234/2 (CL4B)	16,54	0.000	0.00	MIREX	NA	0.000	—
236/3 (CL4C)	16,54	0.833	2.90	2345/34	54,60	0.000	0.00
236/4 (CL4D)	16,54	0.854	2.97	2345/235	54,60	0.000	0.00
235/26 (CL5A)	54,60	0.142	0.49	2345/245	54,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	—	2345/234	54,60	0.000	0.00
236/23	54,60	0.000	0.00	2346/2356	60	0.000	0.00
25/34	54,60	0.000	0.00	CL7	60	0.000	0.00
24/34	54,60	0.155	0.54	2345/2346	60	0.000	0.00
234/4	54,60	0.000	0.00	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.000	0.00	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000 CL2: 10.511 CL3: 9.383 CL4: 0.786
CL5: 0.142 CL6: 0.000 CL7: 0.000 CL8: 0.000

TOTAL PCB: 20.741

GMM 002 0539

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/25/85

VIAL NUMBER: 4

DILUTION FACTOR: 0.649

SAMPLE NAME: N20 85-300

PCB SUBSTITUTION PATTERN	AROCOR MUX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCOR MUX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	0.000	0.00
2/2	21,16	3.642	11.33	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	3.793	12.01	P,P'-DDE	NA	0.000	—
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	0.000	0.00
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	0.282	0.89	2356/23	54,60	0.000	0.00
26/2	21,16	5.286	16.74	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	1.730	5.48	34/34	48	0.000	0.00
25/2	16	1.203	3.81	2345/26(CL58)	54,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	54,60	0.000	0.00
HEXACHLOROBENZENE	NA	1.022	—	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.291	0.92	245/34(2346/236)	54,60	0.000	0.00
26/4	16	1.676	5.31	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	0.354	1.12	234/34	54,60	0.000	0.00
25/3	16	0.000	0.00	245/245	54,60	0.000	0.00
236/2(35/2)	16	0.487	1.54	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	0.269	1.17	234/245	54,60	0.000	0.00
25/4(24/3)	16	0.241	0.76	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/34/24/4)	16	0.959	3.04	2346/34(2356/245)	60	0.000	0.00
23/4	16	0.000	0.00	2356/245(CL7A)	54	0.000	0.00
25/25	16,54	1.525	4.83	234/234	54,60	0.000	0.00
24/25	16,54	1.479	4.68	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,54	1.120	3.57	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,54	0.362	1.05	2346/234(245/245)	54,60	0.000	0.00
23/24(CL4A)	16,54	0.667	2.11	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/234/234/2(CL4B)	16,54	0.313	0.99	MIKEX	NA	0.000	—
236/3(CL4C)	16,54	1.312	4.15	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	1.757	5.56	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	0.160	0.51	2345/245	54,60	0.000	0.00
HEXACHLOROCYCLOPENTADIENE	NA	0.000	—	2345/234	54,60	0.000	0.00
236/23	54,60	0.794	2.32	2346/2356	60	0.000	0.00
25/34	54,60	0.271	0.86	CL7	60	0.000	0.00
24/34	54,60	0.352	1.12	2345/2346	60	0.000	0.00
234/4	54,60	0.000	0.00	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.000	0.00	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000 CL2: 9.446 CL3: 9.637 CL4: 11.576
 CL5: 0.004 CL6: 0.000 CL7: 0.000 CL8: 0.000
 TOTAL PCB: 21.573

GMM 002 0540

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/29/85

VIAL NUMBER: 5

DILUTION FACTOR: 0.736

SAMPLE NAME: M20 85-301

PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCB
2	21,16	0.000	0.00	245/24	54,60	0.000	0.00
2/2	21,16	4.304	12.40	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	4.292	12.14	P,P'-DDE	NA	0.000	—
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	0.000	0.00
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	5.270	14.91	236/245(234/236)	54,60	0.000	0.00
2/4	21,16	0.715	2.02	34/34	48	0.000	0.00
25/2	16	1.314	3.72	2345/26(CL58)	54,60	0.000	0.00
24/2	16	0.000	0.00	234/236(2356/236)	54,60	0.000	0.00
NONACHLOROBENZENE	NA	1.187	—	2356/236(245/34)	54,60	0.000	0.00
23/2	16	0.256	0.04	245/34(2346/236)	54,60	0.000	0.00
26/4	16	2.432	6.08	2346/236(235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245(CL5C)	54,60	0.000	0.00
246/2	16	0.358	1.01	234/34	54,60	0.000	0.00
25/3	16	0.000	0.00	245/245	54,60	0.000	0.00
236/2(35/2)	16	0.563	1.59	234/235(CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34(CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	0.306	1.09	234/245	54,60	0.000	0.00
25/4(24/3)	16	0.324	0.92	2356/235(2346/34)	54,60	0.000	0.00
24/4(23/34/24/4)	16	1.040	2.94	2346/34(2356/245)	60	0.000	0.00
23/4	16	0.000	0.00	2356/245(CL7A)	54	0.000	0.00
25/25	16,34	1.454	4.11	234/234	54,60	0.000	0.00
24/25	16,34	2.402	6.00	2346/245(2356/2356)	54,60	0.000	0.00
23/25	16,34	1.341	3.79	2356/234(2346/234)	54,60	0.000	0.00
24/24	16,34	1.029	2.91	2346/234(245/245)	54,60	0.000	0.00
23/24(CL4A)	16,34	0.729	2.06	2345/2356+245/345(23456/236)	54,60	0.000	0.00
23/234/234/2(CL4B)	16,34	3.651	10.33	HIRES	NA	0.000	—
236/3(CL4C)	16,34	1.680	4.53	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,34	1.772	5.01	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	0.000	0.00	2345/245	54,60	0.000	0.00
NONACHLOROSTYRENE	NA	0.000	—	2345/234	54,60	0.000	0.00
236/23	54,60	0.000	0.00	2346/2356	60	0.000	0.00
25/34	54,60	0.000	0.00	CL7	60	0.000	0.00
24/34	54,60	0.000	0.00	2345/2346	60	0.000	0.00
234/4	54,60	0.000	0.00	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.000	0.00	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000
CL5: 0.000

CL2: 9.391
CL6: 0.000

CL3: 10.676
CL7: 0.000

CL4: 15.285
CL8: 0.000

TOTAL PCB: 35.352

GMM 002 0541

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/29/85

VIAL NUMBER: 6

DILUTION FACTOR: 0.674

SAMPLE NAME: N20 85-302

PCB SUBSTITUTION PATTERN	AROCOR MIX	MG PCB PER ML SAMPLE	PCT TOTAL PCB	PCB SUBSTITUTION PATTERN	AROCOR MIX	MG PCB PER ML SAMPLE	PCT TOTAL PCE
2	21,16	0.000	0.00	245/24	54,60	0.000	0.00
2/2	21,16	0.000	0.00	245/23	54,60	0.000	0.00
3	21	0.000	0.00	234/25	54,60	0.000	0.00
26	21,16	0.000	0.00	P,P'-DDE	NA	0.000	---
4	21	0.000	0.00	234/24	54	0.000	0.00
25	21,16	0.000	0.00	234/23	54,60	0.000	0.00
24	21,16	0.000	0.00	2356/25	54,60	0.000	0.00
2/3	21,16	0.000	0.00	2356/23	54,60	0.000	0.00
26/2	21,16	0.000	0.00	236/245 (234/236)	54,60	0.000	0.00
2/4	21,16	0.505	0.00	34/34	48	0.000	0.00
25/2	16	0.000	0.00	2345/26 (CL5B)	54,60	0.000	0.00
24/2	16	0.000	0.00	234/236 (2356/236)	54,60	0.000	0.00
NONACHLOROBENZENE	NA	0.000	---	2356/236 (245/34)	54,60	0.000	0.00
23/2	16	0.000	0.00	245/34 (2346/236)	54,60	0.000	0.00
26/4	16	0.000	0.00	2346/236 (235/245)	54,60	0.000	0.00
4/4	21,16	0.000	0.00	235/245 (CL5C)	54,60	0.000	0.00
246/2	16	0.000	0.00	234/34	54,60	0.000	0.00
25/3	16	0.000	0.00	245/245	54,60	0.000	0.00
236/2(35/2)	16	0.000	0.00	234/235 (CL6A)	54,60	0.000	0.00
24/3(CL3A)	16	0.000	0.00	2356/34 (CL6B)	54,60	0.000	0.00
24/26(CL3B)	16	0.000	0.00	234/245	54,60	0.000	0.00
25/4(24/3)	16	0.000	0.00	2356/235 (2346/34)	54,60	0.000	0.00
24/4(23/3+24/4)	16	0.000	0.00	2346/34 (2356/245)	60	0.000	0.00
23/4	16	0.000	0.00	2356/245 (CL7A)	54	0.000	0.00
25/25	16,54	0.000	0.00	234/234	54,60	0.000	0.00
24/25	16,54	0.000	0.00	2346/245 (2356/2356)	54,60	0.000	0.00
23/25	16,54	0.000	0.00	2356/234 (2346/234)	54,60	0.000	0.00
24/24	16,54	0.000	0.00	2346/234 (245/245)	54,60	0.000	0.00
23/24(CL4A)	16,54	0.000	0.00	2345/2356+245/245 (23456/236)	54,60	0.000	0.00
23/23+234/2 (CL4B)	16,54	0.000	0.00	HI REX	NA	0.000	---
236/3(CL4C)	16,54	0.000	0.00	2345/34	54,60	0.000	0.00
236/4(CL4D)	16,54	0.000	0.00	2345/235	54,60	0.000	0.00
235/26(CL5A)	54,60	0.000	0.00	2345/245	54,60	0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	---	2345/234	54,60	0.000	0.00
236/23	54,60	0.000	0.00	2346/2356	60	0.000	0.00
25/34	54,60	0.000	0.00	CL7	60	0.000	0.00
24/34	54,60	0.000	0.00	2345/2346	60	0.000	0.00
234/4	54,60	0.000	0.00	23456/245	60	0.000	0.00
236/236	54,60	0.000	0.00	23456/234	60	0.000	0.00
245/25	54,60	0.000	0.00	2345/2345	60	0.000	0.00

TOTAL CL1: 0.000 CL2: 0.505 CL3: 0.000 CL4: 0.000
CL5: 0.000 CL6: 0.000 CL7: 0.000 CL8: 0.000

TOTAL PCB: 0.505

GMM
002
0542

SAMPLE TYPE: EXPERIMENTAL

DATE ANALYZED: 10/29/85

VIAL NUMBER: 7

DILUTION FACTOR: 0.691

SAMPLE NAME: H20 85-303

PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT 0 TOTAL 0 PCB 0	PCB SUBSTITUTION PATTERN	AROCOR MIX	MS PCB PER ML SAMPLE	PCT TOTAL PCE
2	21,16	0.000	0.00 0 245/24		54,60	0.000	0.00
2/2	21,16	0.000	0.00 0 245/23		54,60	0.000	0.00
3	21	0.000	0.00 0 234/25		54,60	0.000	0.00
26	21,16	0.000	0.00 0 P,P'-DDE	NA		0.000	---
4	21	0.000	0.00 0 234/24	54		0.000	0.00
25	21,16	0.000	0.00 0 234/23	54,60		0.000	0.00
24	21,16	0.000	0.00 0 2356/25	54,60		0.000	0.00
2/3	21,16	0.000	0.00 0 2356/23	54,60		0.000	0.00
26/2	21,16	0.000	0.00 0 236/245 (234/236)	54,60		0.000	0.00
2/4	21,16	0.000	0.00 0 34/34	48		0.000	0.00
25/2	16	0.000	0.00 0 2345/26 (CL58)	54,60		0.000	0.00
24/2	16	0.000	0.00 0 234/236 (2356/236)	54,60		0.000	0.00
HEXACHLOROBENZENE	NA	0.000	---	54,60		0.000	0.00
23/2	16	0.000	0.00 0 245/34 (2346/236)	54,60		0.000	0.00
26/4	16	0.000	0.00 0 2346/236 (235/245)	54,60		0.000	0.00
4/4	21,16	0.000	0.00 0 235/245 (CL5C)	54,60		0.000	0.00
246/2	16	0.000	0.00 0 234/34	54,60		0.000	0.00
25/3	16	0.000	0.00 0 245/245	54,60		0.000	0.00
236/2 (35/2)	16	0.000	0.00 0 234/235 (CL6A)	54,60		0.000	0.00
24/3 (CL3A)	16	0.000	0.00 0 2356/34 (CL6B)	54,60		0.000	0.00
24/26 (CL3B)	16	0.000	0.00 0 234/245	54,60		0.000	0.00
25/4 (24/3)	16	0.000	0.00 0 2356/235 (2346/34)	54,60		0.000	0.00
24/4 (23/3+24/4)	16	0.000	0.00 0 2346/34 (2356/245)	60		0.000	0.00
23/4	16	0.000	0.00 0 2356/245 (CL7A)	54		0.000	0.00
25/25	16,54	0.000	0.00 0 234/234	54,60		0.000	0.00
24/25	16,54	0.000	0.00 0 2346/245 (2356/2356)	54,60		0.000	0.00
23/25	16,54	0.210	45.78 0 2356/234 (2346/234)	54,60		0.000	0.00
24/24	16,54	0.250	54.22 0 2346/234 (245/345)	54,60		0.000	0.00
23/24 (CL4A)	16,54	0.000	0.00 0 2345/2356+245/345 (23456/236)	54,60		0.000	0.00
23/23+234/2 (CL4B)	16,54	0.000	0.00 0 NIREX	NA		0.000	---
236/3 (CL4C)	16,54	0.000	0.00 0 2345/34	54,60		0.000	0.00
236/4 (CL4D)	16,54	0.000	0.00 0 2345/235	54,60		0.000	0.00
235/26 (CL5A)	54,60	0.000	0.00 0 2345/245	54,60		0.000	0.00
OCTACHLOROSTYRENE	NA	0.000	---	54,60		0.000	0.00
236/23	54,60	0.000	0.00 0 2346/2356	60		0.000	0.00
25/34	54,60	0.000	0.00 0 CL7	60		0.000	0.00
24/34	54,60	0.000	0.00 0 2345/2346	60		0.000	0.00
234/4	54,60	0.000	0.00 0 23456/245	60		0.000	0.00
236/236	54,60	0.000	0.00 0 23456/234	60		0.000	0.00
245/25	54,60	0.000	0.00 0 2345/2345	60		0.000	0.00

TOTAL CL1: 0.000 CL2: 0.000 CL3: 0.000 CL4: 0.475
 CL5: 0.000 CL6: 0.000 CL7: 0.000 CL8: 0.000
 TOTAL PCB: 0.475

GMI 002 0543