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**Contaminants in
Sediment and Fish Tissue
from Estuarine and Coastal Sites
of the Northeastern United States:**

**Data Summary for the Baseline Phase of the
National Status and Trends Program
Benthic Surveillance Project, 1984-1986**

**U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
Northeast Fisheries Center
Woods Hole, Massachusetts**

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EXECUTIVE SUMMARY

Between 1984 and 1986, the baseline phase of the National Status and Trends Program was conducted at approximately 50 estuarine and coastal sites around the nation. Numerous histopathological observations of fish tissues and measurements of concentrations of chemical contaminants in sediments and fish tissues were made to quantify the status of United States coastal habitats with respect to environmental contamination. One of the products of this effort is a large data set containing information on concentrations of contaminants that possibly may threaten the health of the nation's coastal ecosystems. This body of data is useful to environmental scientists and managers. The purpose of this document is to make the chemical contaminant data available to the environmental community. Data summaries are presented in both graphical and tabular form.

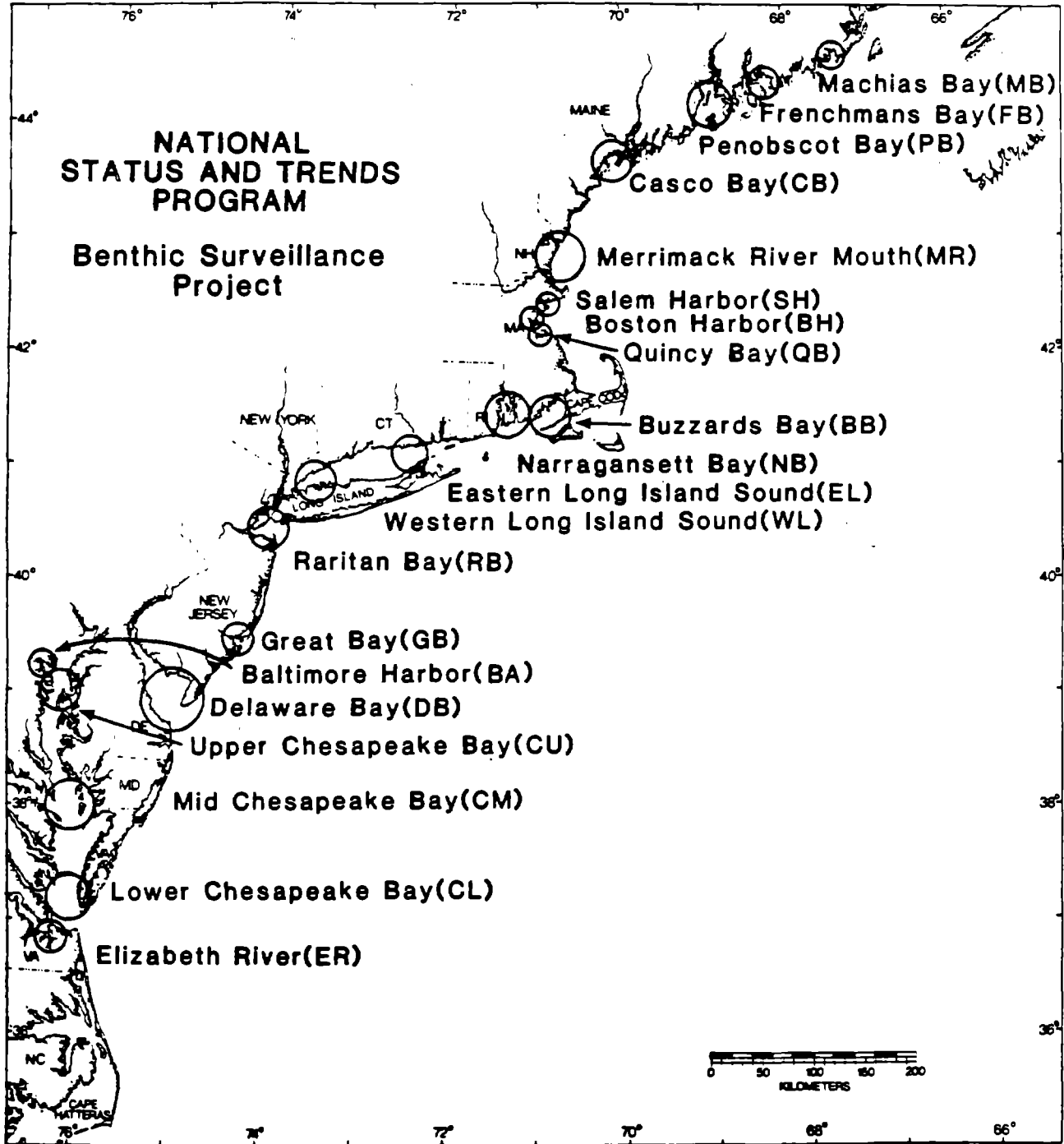


Figure 1. Sites sampled in the northeastern United States during 1984-86 as part of the National Status and Trends Program's Benthic Surveillance Project. Site codes in parentheses.

INTRODUCTION

The National Status and Trends (NS&T) Program is an ongoing federal program initiated in 1984 to establish and maintain an information base needed to quantify the status of, and temporal and spatial trends in, concentrations of selected chemical contaminants, as well as indicators of potential biological effects, in the nation's coastal and estuarine ecosystems (National Ocean Service 1989). A nationally uniform set of measurement techniques is used to obtain comprehensive, high quality data on environmental quality. A rigorous quality assurance program is an integral part of the NS&T Program.

One of the NS&T Program's major components is the Benthic Surveillance Project, the objectives of which include quantifying baseline levels of selected chemical compounds at approximately 50 sites in estuarine and coastal areas around the nation, and detecting trends in habitat contamination by monitoring levels of selected chemicals in sediments and fish tissues.

During 1984-86, personnel of the Northeast Fisheries Center (NEFC) participated in the baseline phase of the Benthic Surveillance Project, collecting and analyzing samples of sediments and fish tissues from 20 sites throughout the northeastern region.

The purpose of this document is to make available the large body of chemical data resulting from NEFC participation in the baseline phase of the NS&T Benthic Surveillance Project.

METHODS

Twenty sites were sampled in the northeastern region (Figure 1). A list of station locations, samples collected, and site codes used in the figures in the Analyte Summary section is given in Table 1. A list of variables measured, the matrices in which they were measured, and analyte codes used in the figures in the Site Summary section is given in Table 2.

Sites were selected to encompass a range of environmental conditions. Field methods and sample collection protocols are detailed in a report by Shigenaka and Lauenstein (1988).

All sediment and tissue samples were collected and stored individually. Depending on the matrix, however, samples were analyzed either individually or as composites. Sediments for both hydrocarbon and metal analyses were composites of the 0-3 cm layer of surface sediment from each of three bottom samples at each of 3-5 stations in each site; one composite per station was analyzed. Thirty specimens of each targeted fish species were collected at each site. Stomach content samples for both hydrocarbon and metal analyses were composites of 10 individual specimens; one composite per site was analyzed. Liver samples for hydrocarbon analyses were composites of 10 individual

specimens; three composites per site were analyzed. Liver samples for metal analyses were not composited; 10 individual specimens per site were analyzed.

Methods used for analyses of hydrocarbons in tissues and sediments are described by MacLeod *et al.* (1985) and Krahn *et al.* (1988). Hydrocarbon analyses were performed under the direction of D. Gadbois of the National Marine Fisheries Service (NMFS) Gloucester (Massachusetts) Laboratory.

Methods used for analyses of metals in tissues were developed at the NMFS Beaufort (North Carolina) Laboratory under the direction of P. Hanson, based on a procedure described by Okamoto and Fuwa (1984). Methods used for analyses of metals in sediments were developed at the NMFS Sandy Hook (New Jersey) Laboratory under the direction of V. Zdanowicz, based on a procedure described by Bernas (1968). Metal analyses were performed under the direction of V. Zdanowicz of the Sandy Hook Laboratory.

Sediment grain size determinations employed a modification of a U.S. Environmental Protection Agency procedure (Plumb 1981). Total organic carbon (TOC) determinations were performed using the method described by Hedges and Stern (1984). Grain size and TOC analyses were performed under the direction of P. Hanson of the Beaufort Laboratory.

DATA PRESENTATION

Data presented in the figures in the Site Summary and Analyte Summary sections are mean values for each analyte for each site over the 1984-86 period. When calculating means, "less than" values were used as best estimates of the actual concentrations. Since "less than" values estimate maximum concentrations, a positive bias is introduced into the calculated means.

The Site Summary section is a graphical summary of data from each site, presenting distributions of analytes in each sample matrix (Figures 2-21). Due to the wide range of concentrations observed, data are presented on a common log scale.

The Analyte Summary section is a graphical summary of data for each analyte by sample matrix, showing distributions of analytes at all sites (Figures 22-28).

No fish specimens were obtained at the Mid Chesapeake (CM) or Baltimore Harbor (BA) sites; therefore, no data appear at those sites in figures of hydrocarbons or metals in stomach contents and livers. In addition, metals were not measured in stomach contents in samples collected in 1986 (see Table 1); consequently, no data appear at the Quincy Bay (QB) or Elizabeth River (ER) sites in figures of metals in stomach contents. Also, stations sampled at the Casco Bay (CB) site in 1984 were located at the mouth of the bay rather than the interior, so those data were not included in the means shown in the figures. Finally, 1984 tissue data from the Lower Chesapeake (CL) site were not included in any figures, as a different species was collected in 1985 and

1986.

Analytical data are presented in the Analytical Data section (Tables 3-9).

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Table 1. Northeast sampling locations and sample types collected from 1984 through 1986. Site codes in parentheses.

Station	Sampling Locations		Sample Types ^(a)			Station	Sampling Locations		Sample Types ^(a)		
	N. Lat.	W. Long.	1984	1985	1986		N. Lat.	W. Long.	1984	1985	1986
Machias Bay (MB)						Boston Harbor (BH)					
MB1	44°38.0'	67°20.1'	S	S	S,LS	BH1	42°20.9'	70°58.0'	S,WF		S,WF
MB2	44°38.2'	67°19.1'		S,LS		BH2	42°19.8'	70°58.2'	S	S	S
MB3	44°40.7'	67°20.8'		S	S	BH3	42°19.7'	71°00.1'	S	S	S
MB4	44°38.8'	67°20.7'		S	S	BH4	42°20.7'	70°58.9'		S	
Frenchmans Bay (FB)						BH5	42°20.5'	71°00.2'		S	
						BH6	42°19.7'	70°57.8'		WF	
FB1	44°26.8'	68°13.3'		S	S	Quincy Bay (QB)					
FB2	44°26.5'	68°10.4'		S	S	QB1	42°17.5'	70°59.2'			S,WF
FB3	44°23.0'	68°09.9'		S,LS	S	QB2	42°17.2'	70°58.0'			S
FB4	44°19.0'	68°08.1'		S		QB3	42°18.4'	70°58.4'			S
Penobscot Bay (PB)						Buzzards Bay (BB)					
PB1	44°24.4'	68°53.3'		S	S	BB1	41°36.6'	70°45.2'	S	S	S,WF
PB2	44°19.2'	68°52.0'		S		BB2	41°33.3'	70°41.4'	S	S	
PB3	44°12.7'	69°00.7'		S	S	BB3	41°32.5'	70°47.8'	S	S	S
PB4	44°10.0'	68°46.6'		S	S	BB4	41°33.4'	70°52.6'	S	S	S
PB5	44°07.7'	68°58.4'		S	LS	BB7	41°35.1'	70°40.8'	WF		
PB6	44°09.4'	69°02.8'		LS		BB8	41°29.2'	70°70.3'		WF	
Casco Bay (CB)						BB80	41°29.5'	70°53.9'	S	S	S
CB1	43°47.1'	70°03.4'		S	S	Narragansett Bay (NB)					
CB2	43°43.9'	70°09.0'		S	S	NB1	41°39.5'	71°19.3'	S,WF	S	S
CB3	43°42.8'	70°05.9'		S		NB2	41°38.1'	71°23.3'	S	S	S,WF
CB4	43°40.6'	70°12.8'		S	S	NB3	41°33.5'	71°23.7'	S	S	S
CB5	43°39.6'	70°09.1'	S	S,LS	LS	NB4	41°32.6'	71°19.6'	S,WF	S,WF	S
CB12	43°40.0'	69°49.1'	WF			Eastern Long Island Sound (EL)					
CB14	43°38.0'	69°49.3'	S			ELI1	41°14.1'	72°10.6'	S	S	S
CB15	43°41.0'	69°56.7'	S			ELI2	41°15.5'	72°15.1'	S	S	S
Merrimack River (MR)						ELI3	41°10.1'	72°19.3'	S	S	S
MR1	42°50.9'	70°47.7'		S		ELI4	41°13.9'	72°13.4'	WF		
MR2	42°48.5'	70°47.5'	S	S		ELI5	41°07.9'	72°31.9'		S	
MR3	42°43.3'	70°44.0'	S	S,WF		ELI6	41°08.5'	72°24.2'		WF	WF
MR4	42°45.0'	70°42.0'	WF			Western Long Island Sound (WL)					
Salem Harbor (SH)						WLI1	41°00.7'	73°22.1'	S	S	
SH1	42°31.0'	70°52.4'	S	S	S	WLI2	40°55.9'	73°35.6'	S	S	S
SH2	42°31.5'	70°51.6'	S	S	S	WLI3	40°55.1'	73°41.0'		S	
SH3	42°32.3'	70°51.0'	S	S	S	WLI4	40°52.8'	73°44.8'		S	S
SH4	42°31.3'	70°52.0'	WF	S		WLI6	40°57.2'	73°31.2'	WF	WF	WF
SH5	42°32.2'	70°49.6'		WF	WF	WLI9	41°04.0'	73°21.0'			S

^(a) CR - Atlantic croaker (*Micropogonias undulatus*); LS - longhorn sculpin (*Myoxocephalus octodecemspinosus*); S - sediment; SP - spot (*Leiostomus xanthurus*); WF - winter flounder (*Pseudopleuronectes americanus*); WPF - windowpane (*Scophthalmus aquosus*).

Table 1. Continued.

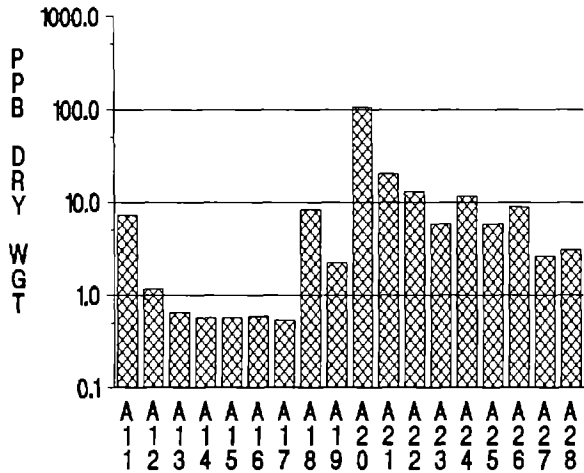
Sampling Locations			Sample Types ^(a)			Sampling Locations			Sample Types ^(a)		
Station	N. Lat.	W. Long.	1984	1985	1986	Station	N. Lat.	W. Long.	1984	1985	1986
Raritan Bay (RB)						Upper Chesapeake Bay (CU)					
RB1	40°27.2'	74°00.8'	S	S	S	CU11	38°51.6'	76°26.0'		S	S
RB2	40°29.5'	74°10.2'	S	S	S	CU22	38°55.7'	76°25.0'		S	S
RB3	40°29.0'	74°05.1'	S	S	S	CU33	39°01.4'	76°22.4'		S	S
RB4	40°32.1'	74°02.9'		S	S	CU44	39°05.8'	76°20.0'		S	S
RB5	40°35.6'	74°01.1'	S	S		CU55	39°12.2'	76°16.6'		S	S
RB7	40°29.2'	74°04.4'		WF	WF	CU4	38°57.7'	76°26.0'		SP	SP
Great Bay (GB)						Mid Chesapeake Bay (CM)					
GB1	39°31.7'	74°21.7'		S	S	CM1	37°47.3'	76°10.7'		S	S
GB2	39°31.6'	74°23.5'		S	S	CM2	37°52.2'	76°07.8'		S	S
GB3	39°30.7'	74°23.7'		S	S	CM3	37°58.5'	76°11.1'		S	S
GB4	39°32.7'	74°24.3'		S		CM4	38°05.1'	76°13.1'		S	S
GB5	39°31.1'	74°22.1'		WF							
GB30	39°26.1'	74°24.2'			WF						
Delaware Bay (DB)						Lower Chesapeake Bay (CL)					
DB1	39°03.9'	75°13.3'	S	S	S	CL1	37°09.1'	76°10.6'	S	S	S
DB2	39°19.6'	75°23.0'		S		CL2	37°14.3'	76°04.2'	S	S	S
DB4	39°04.2'	75°13.4'	WPF	WPF	WPF	CL3	37°19.0'	76°11.1'	S	S	S
DB9	38°57.6'	75°04.5'	S			CL4	37°11.1'	76°11.9'		SP	
DB11	38°50.9'	75°04.5'	S			CL6	37°10.1'	76°14.7'	CR		SP
DB15	38°52.8'	75°10.3'		S	S						
DB16	38°55.1'	75°02.0'		S	S						
Baltimore Harbor (BA)						Elizabeth River (ER)					
BAH1	39°13.6'	76°33.0'			S	ER1	36°52.8'	76°20.3'			S
BAH2	39°14.7'	76°33.8'			S	ER2	36°50.33'	76°15.1'			S
BAH3	39°15.5'	76°34.7'			S	ER3	36°48.6'	76°17.35'			S
						ER6	36°51.4'	76°20.4'			CR

Table 2. Variables measured, sample matrices, and key to analyte codes used in Site Summary section

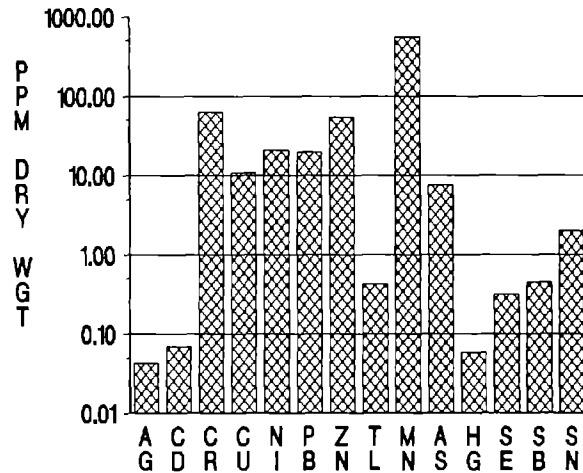
PAHs (S,ST) ^(a)		PCBs (S,ST,L)	
A11	Naphthalene	A44	Dichlorobiphenyl
A12	2-Methylnaphthalene	A45	Trichlorobiphenyl
A13	1-Methylnaphthalene	A46	Tetrachlorobiphenyl
A14	Biphenyl	A47	Pentachlorobiphenyl
A15	2,6-Dimethylnaphthalene	A48	Hexachlorobiphenyl
A16	Acenaphthene	A49	Heptachlorobiphenyl
A17	Fluorene	A50	Octachlorobiphenyl
A18	Phenanthrene	A51	Nonachlorobiphenyl
A19	Anthracene		
A20	1-Methylphenanthrene	Contaminant Metals (S,ST,L)	
A21	Fluoranthene		
A22	Pyrene	AG	Silver
A23	Benzo[a]anthracene	CD	Cadmium
A24	Chrysene	CR	Chromium
A25	Benzo[e]pyrene	CU	Copper
A26	Benzo[a]pyrene	NI	Nickel
A27	Perylene	PB	Lead
A28	Dibenzo[a,h]anthracene	ZN	Zinc
		TL	Thallium
		MN	Manganese
		AS	Arsenic
		HG	Mercury
		SE	Selenium
		SB	Antimony
		SN	Tin
		Sediment Texture (S, except FE)	
		AL	Aluminum
		FE	Iron (S,ST,L)
		SC	Silt/clay
		SI	Silicon
		OC	Total organic carbon
Pesticides (S,ST,L)			
A29	Hexachlorobenzene		
A30	Lindane		
A31	Heptachlor		
A32	Aldrin		
A33	Heptachlor epoxide		
A34	o,p'-DDE		
A35	α-Chlordane		
A36	trans-Nonachlor		
A37	Dieldrin		
A38	p,p'-DDE		
A39	o,p'-DDD		
A40	p,p'-DDD		
A41	o,p'-DDT		
A42	p,p'-DDT		
A43	Mirex		

^(a) Type of samples: S - sediment; ST - stomach contents; L - liver.

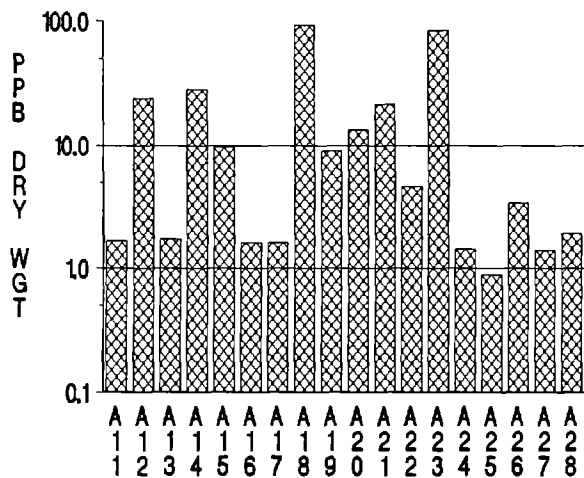
SEDIMENT PAHs



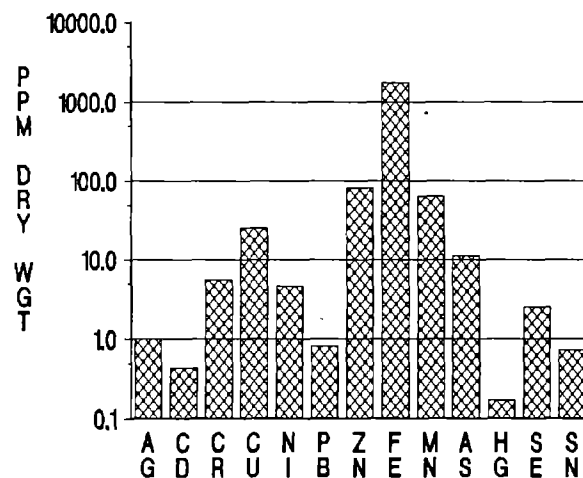
SEDIMENT METALS



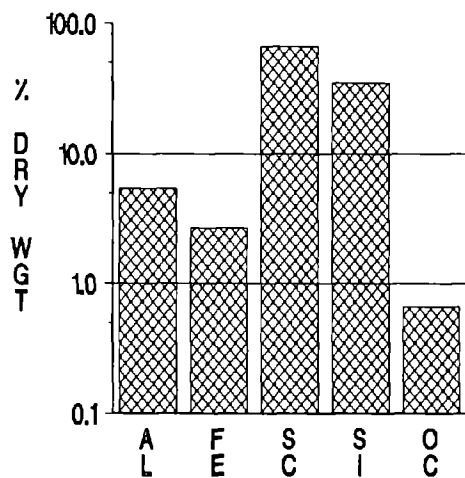
STOMACH PAHs



STOMACH METALS



SEDIMENT TEXTURE



LIVER METALS

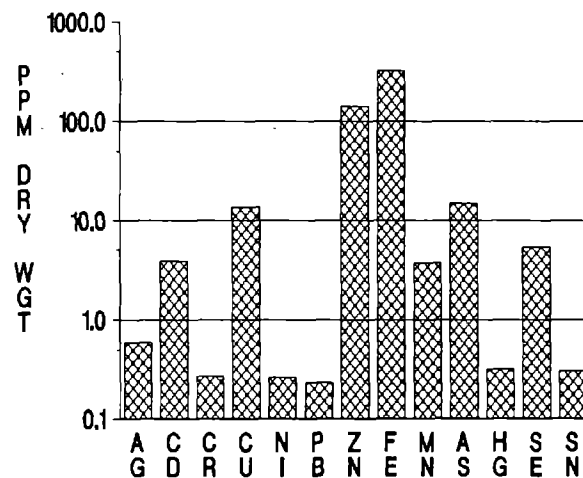
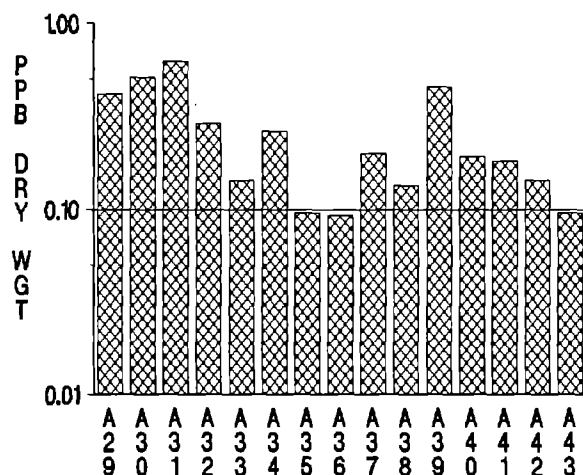
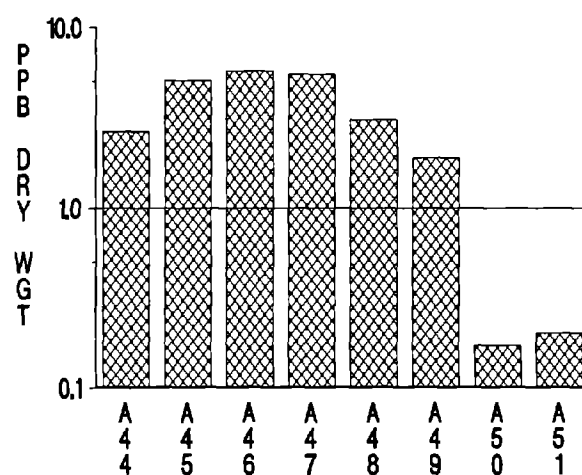


Figure 2a. Concentrations of analytes within sample matrices (sediment PAHs, sediment metals, stomach PAHs, stomach metals, sediment texture, liver metals) for Machias Bay.

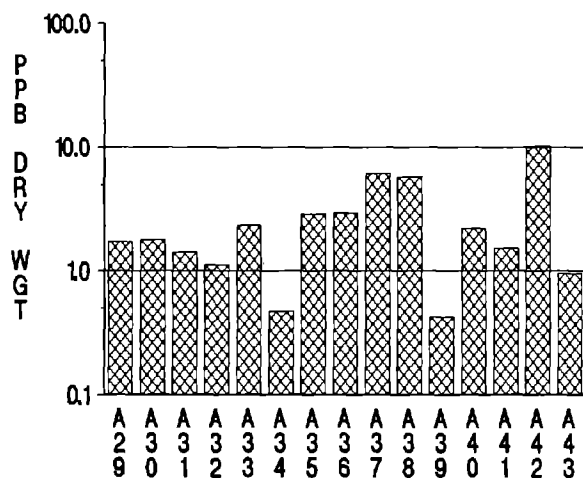
SEDIMENT PESTICIDES



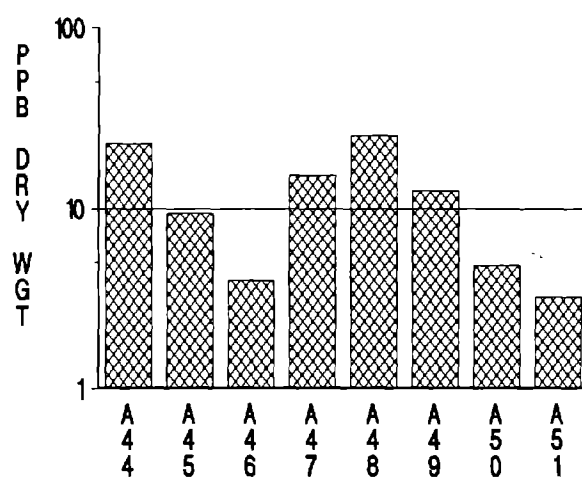
SEDIMENT PCBs



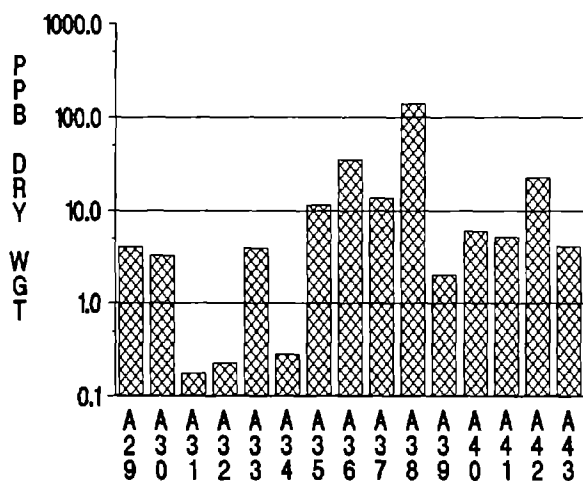
STOMACH PESTICIDES



STOMACH PCBs



LIVER PESTICIDES



LIVER PCBs

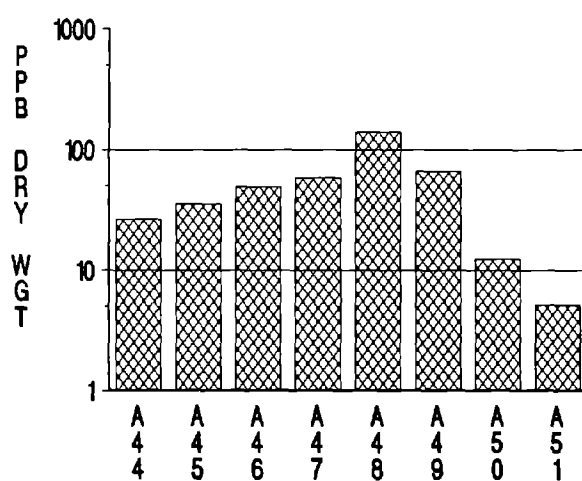
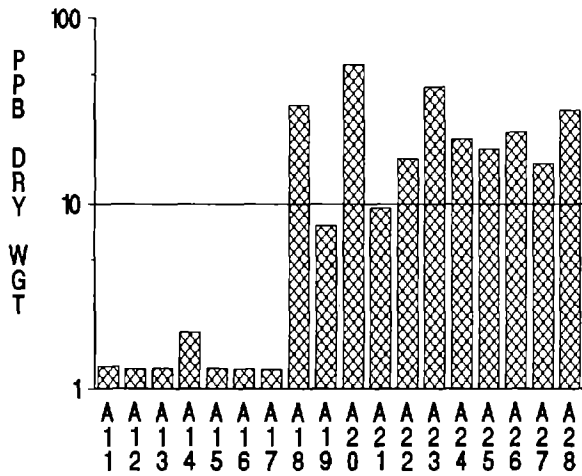
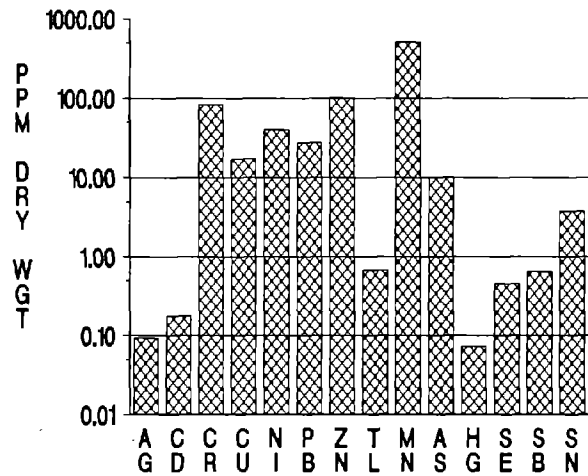


Figure 2b. Concentrations of analytes within sample matrices (sediment pesticides, sediment PCBs, stomach pesticides, stomach PCBs, liver pesticides, liver PCBs) for Machias Bay.

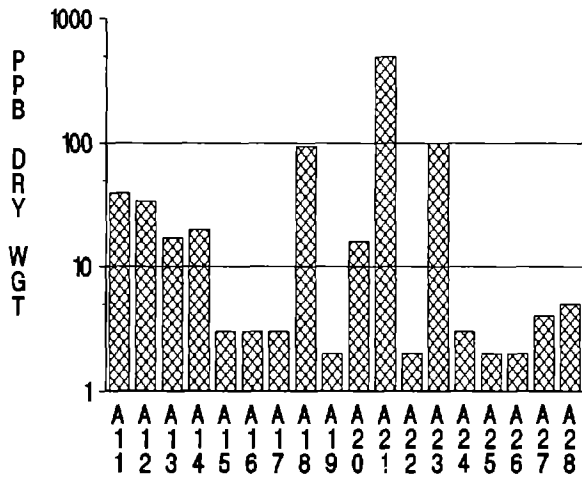
SEDIMENT PAHs



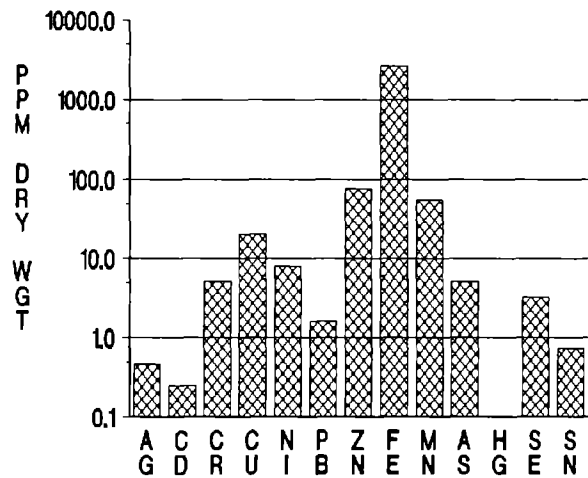
SEDIMENT METALS



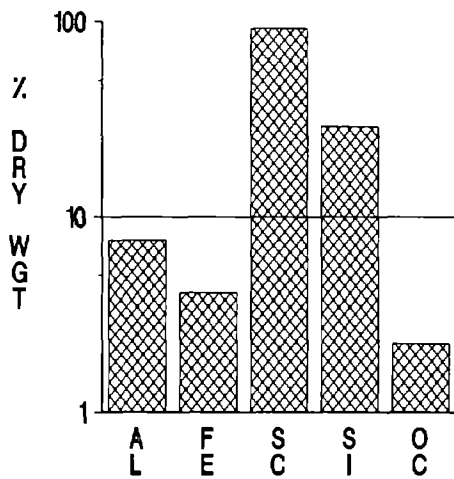
STOMACH PAHs



STOMACH METALS



SEDIMENT TEXTURE



LIVER METALS

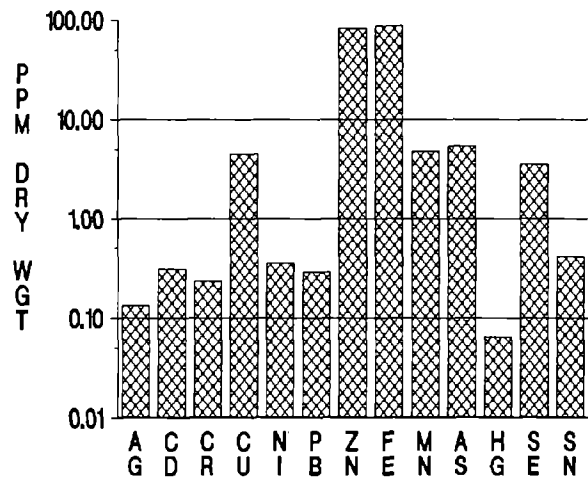
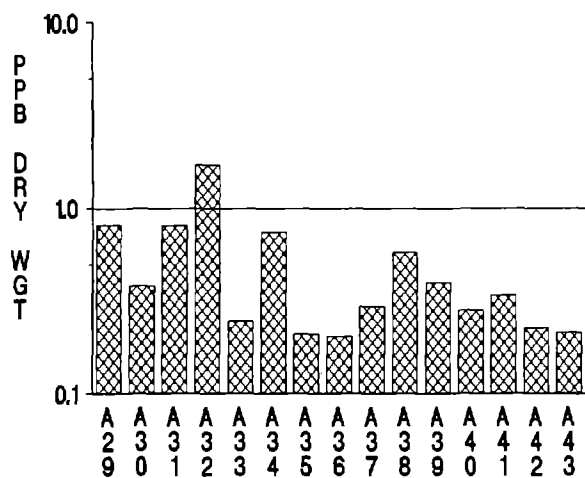
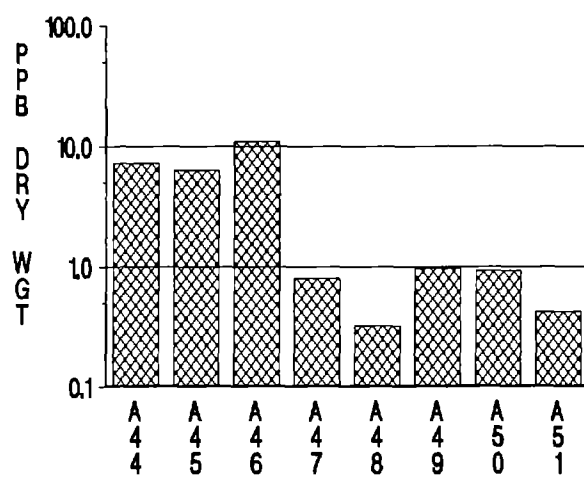


Figure 3a. Concentrations of analytes within sample matrices (sediment PAHs, sediment metals, stomach PAHs, stomach metals, sediment texture, liver metals) for Frenchmans Bay.

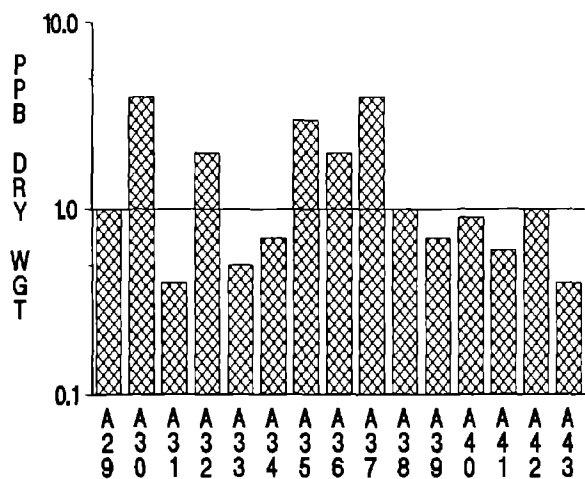
SEDIMENT PESTICIDES



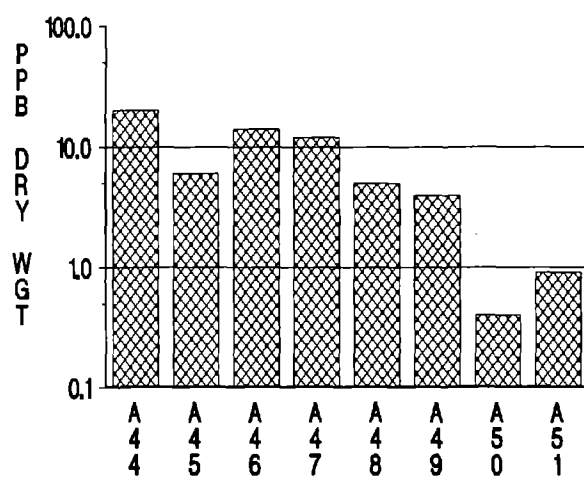
SEDIMENT PCBs



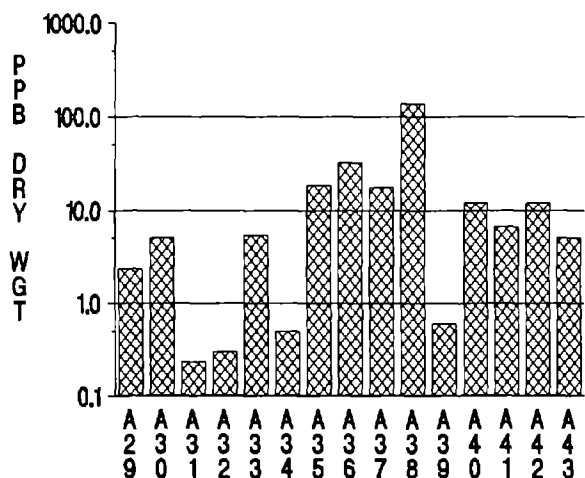
STOMACH PESTICIDES



STOMACH PCBs



LIVER PESTICIDES



LIVER PCBs

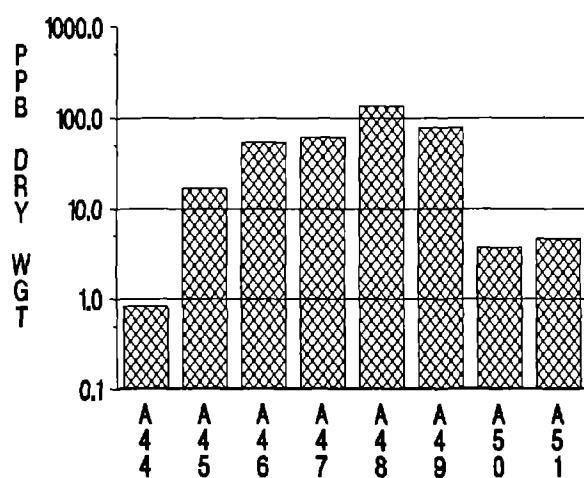
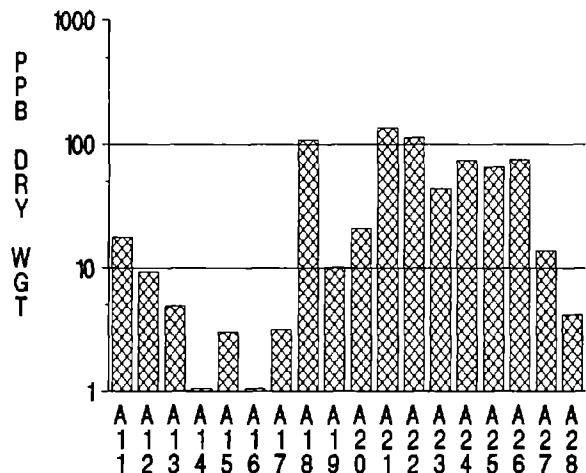
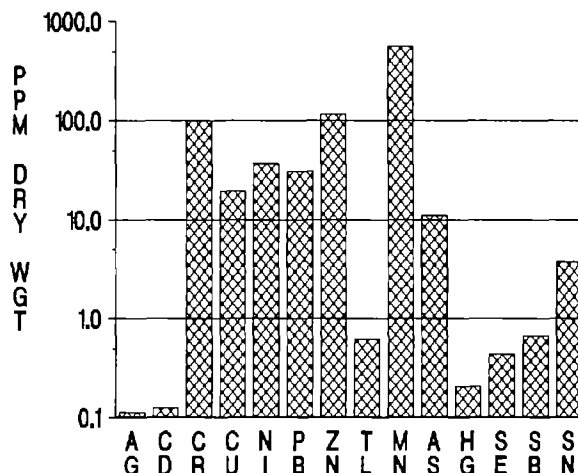


Figure 3b. Concentrations of analytes within sample matrices (sediment pesticides, sediment PCBs, stomach pesticides, stomach PCBs, liver pesticides, liver PCBs) for Frenchmans Bay.

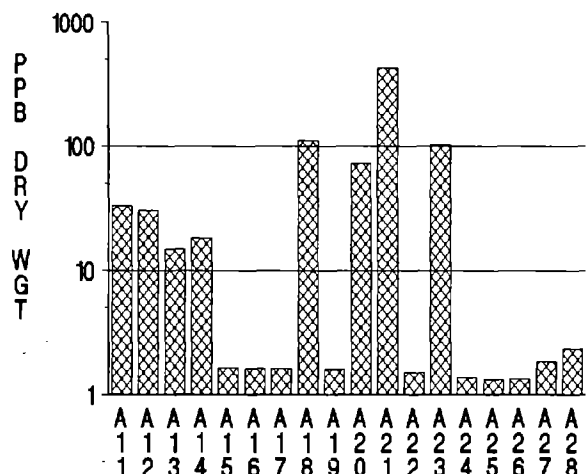
SEDIMENT PAHs



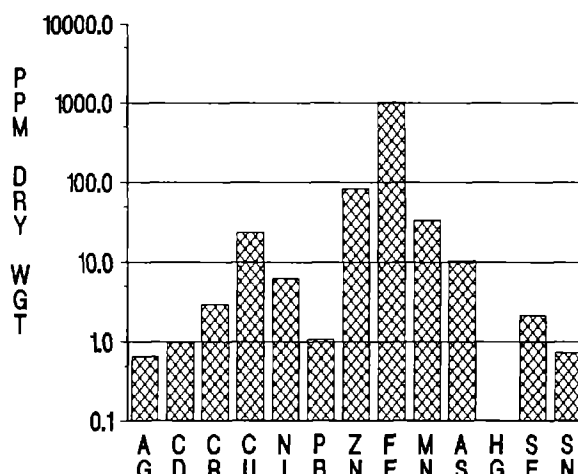
SEDIMENT METALS



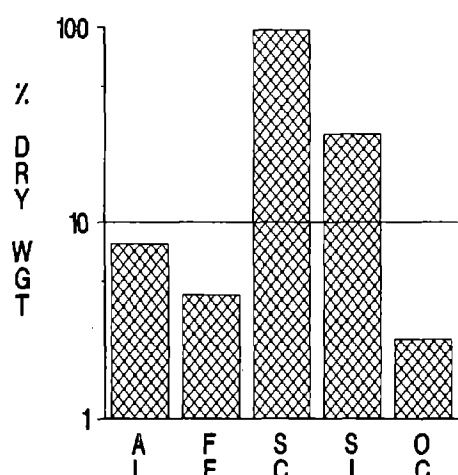
STOMACH PAHs



STOMACH METALS



SEDIMENT TEXTURE



LIVER METALS

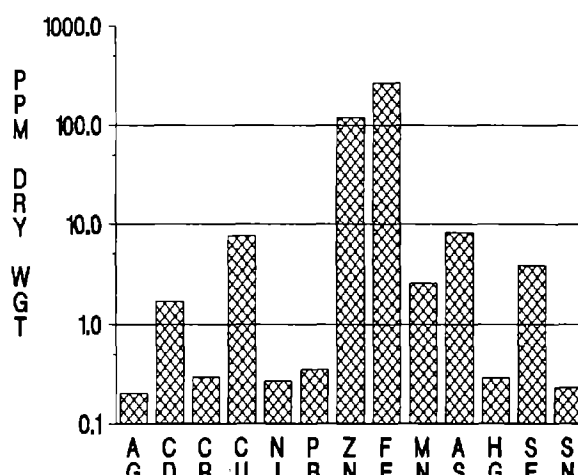
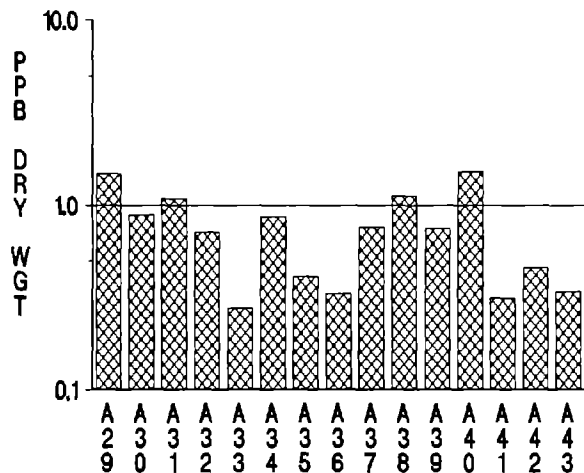
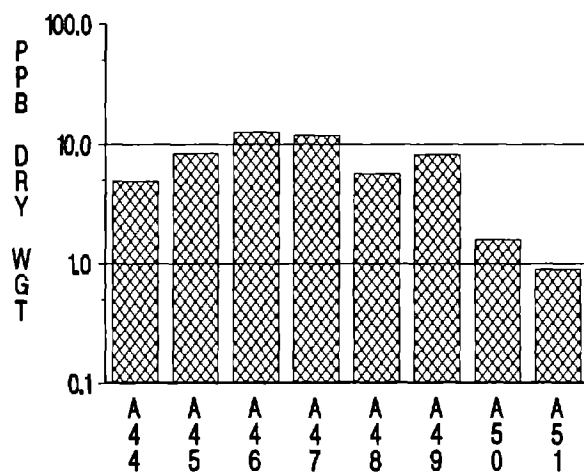


Figure 4a. Concentrations of analytes within sample matrices (sediment PAHs, sediment metals, stomach PAHs, stomach metals, sediment texture, liver metals) for Penobscot Bay.

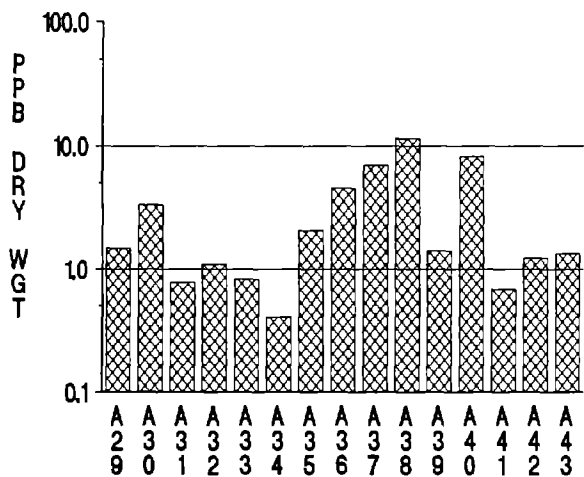
SEDIMENT PESTICIDES



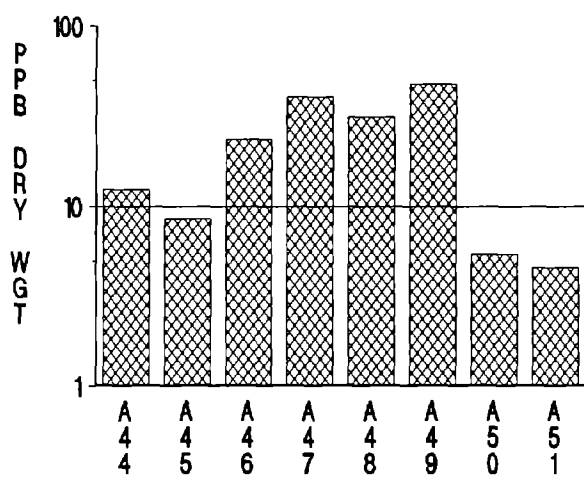
SEDIMENT PCBs



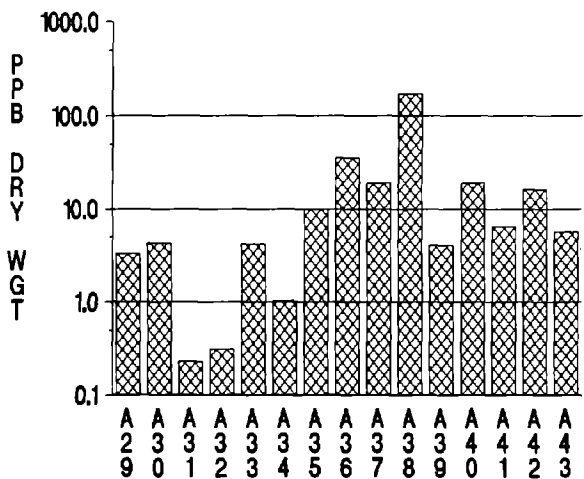
STOMACH PESTICIDES



STOMACH PCBs



LIVER PESTICIDES



LIVER PCBs

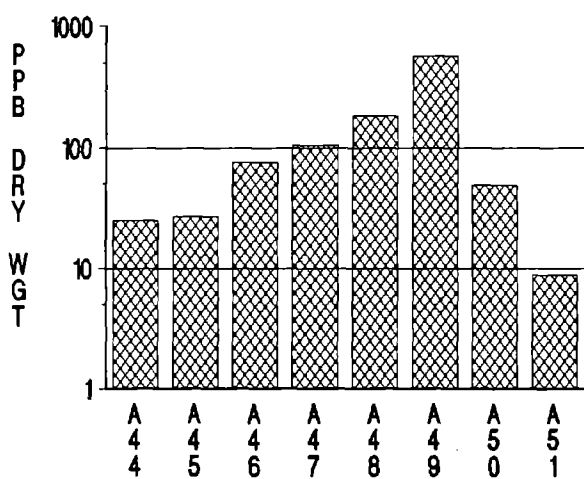
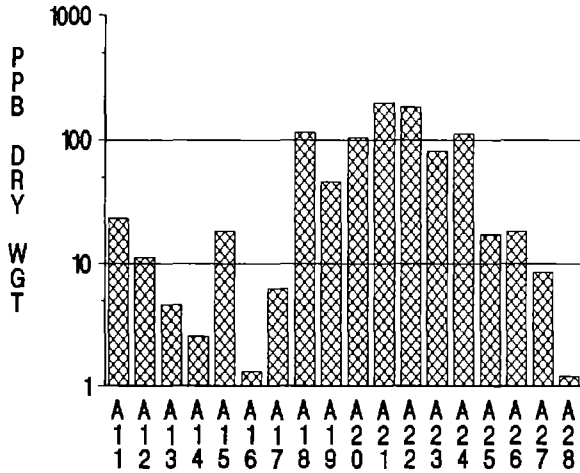
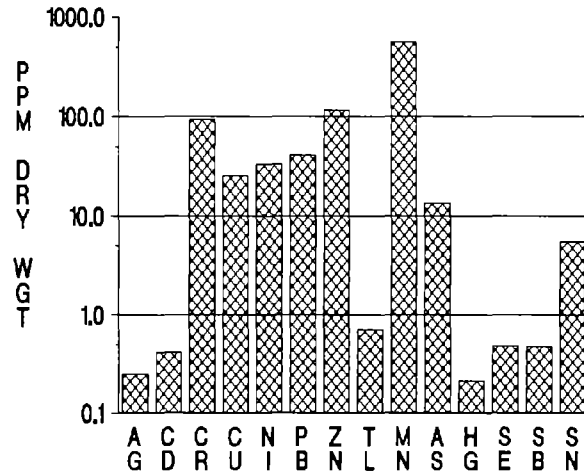


Figure 4b. Concentrations of analytes within sample matrices (sediment pesticides, sediment PCBs, stomach pesticides, stomach PCBs, liver pesticides, liver PCBs) for Penobscot Bay.

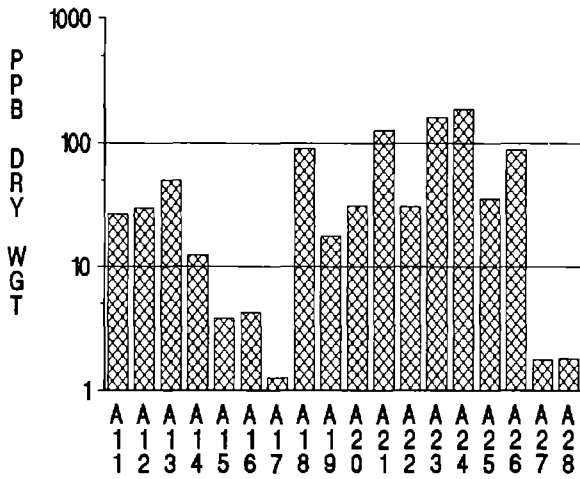
SEDIMENT PAHs



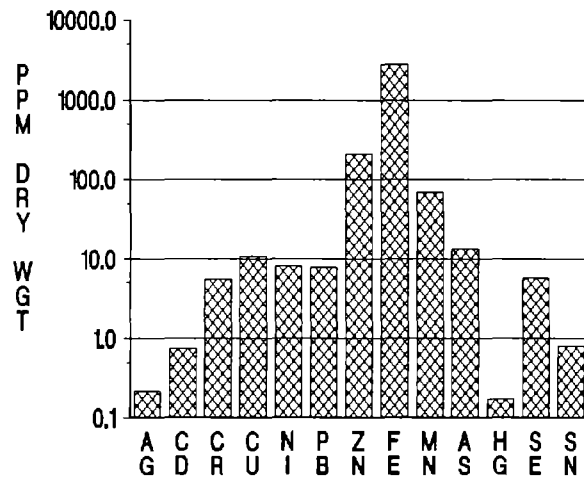
SEDIMENT METALS



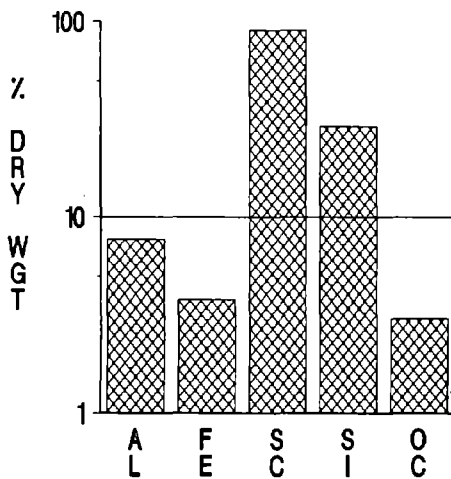
STOMACH PAHs



STOMACH METALS



SEDIMENT TEXTURE



LIVER METALS

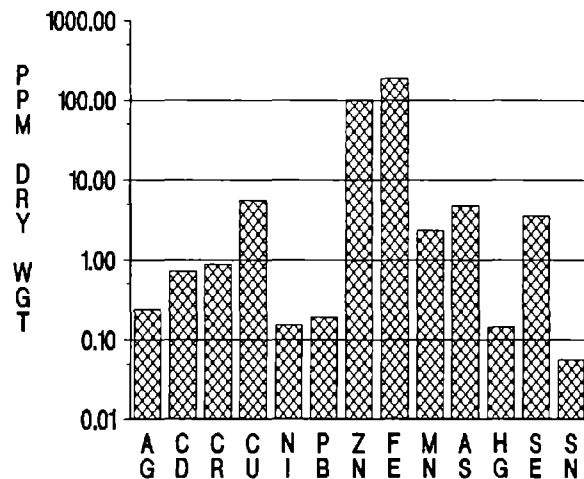
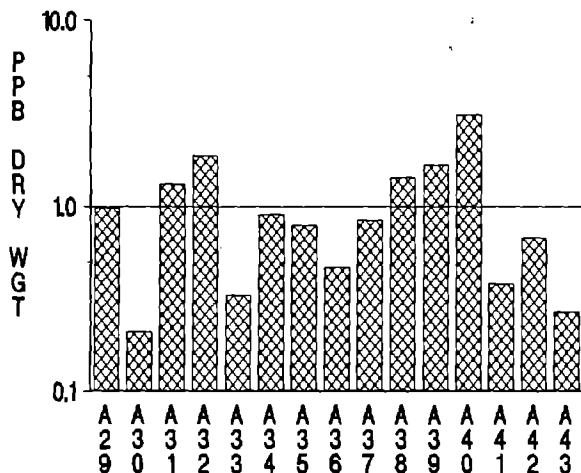
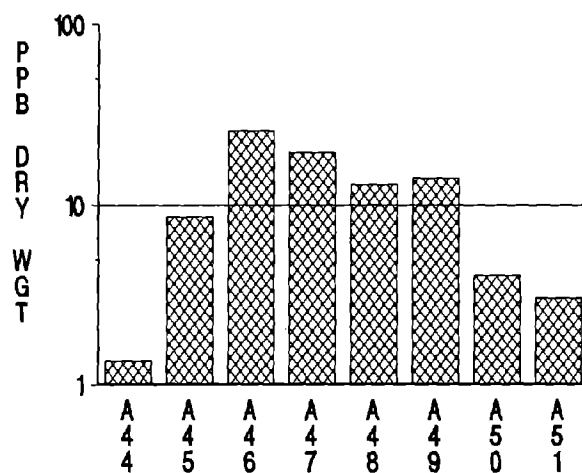


Figure 5a. Concentrations of analytes within sample matrices (sediment PAHs, sediment metals, stomach PAHs, stomach metals, sediment texture, liver metals) for Casco Bay.

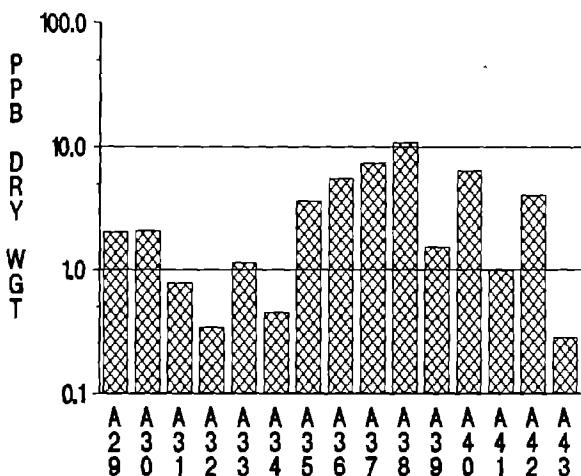
SEDIMENT PESTICIDES



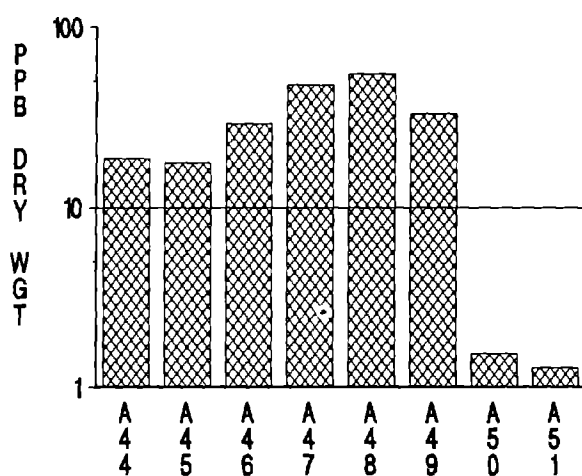
SEDIMENT PCBs



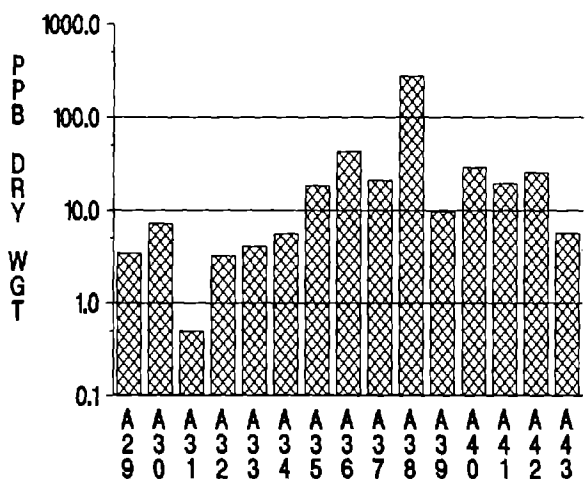
STOMACH PESTICIDES



STOMACH PCBs



LIVER PESTICIDES



LIVER PCBs

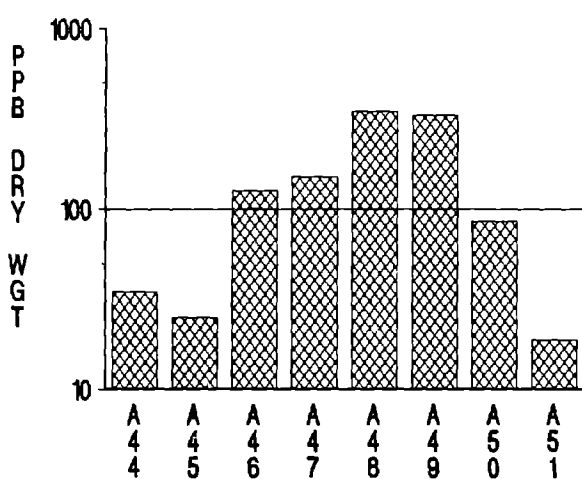
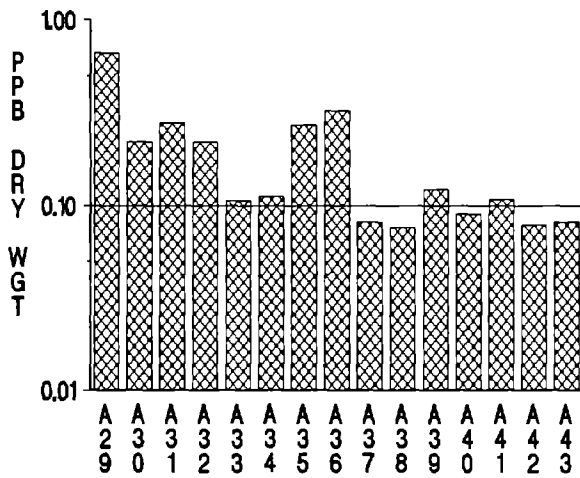
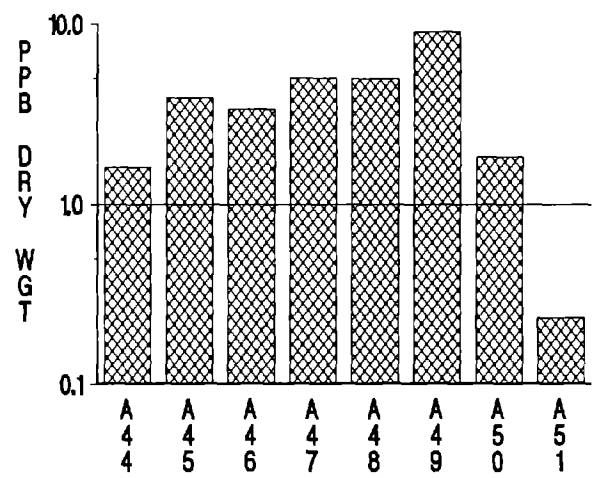


Figure 5b. Concentrations of analytes within sample matrices (sediment pesticides, sediment PCBs, stomach pesticides, stomach PCBs, liver pesticides, liver PCBs) for Casco Bay.

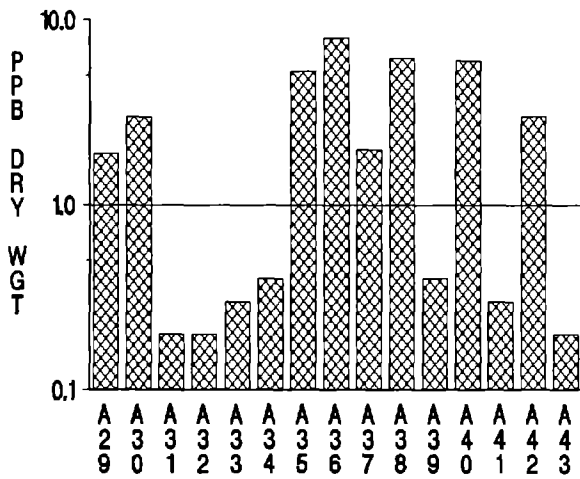
SEDIMENT PESTICIDES



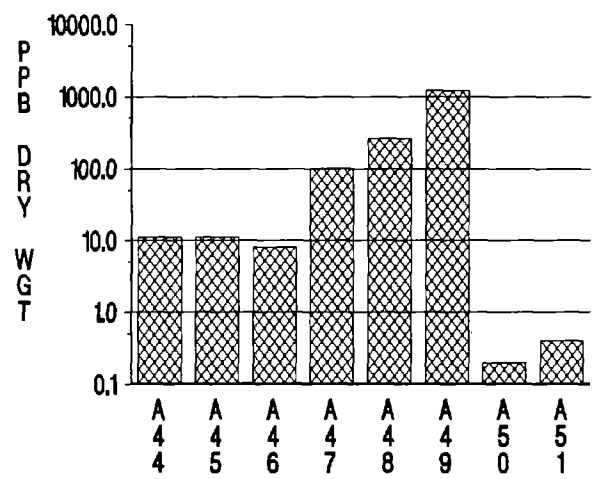
SEDIMENT PCBs



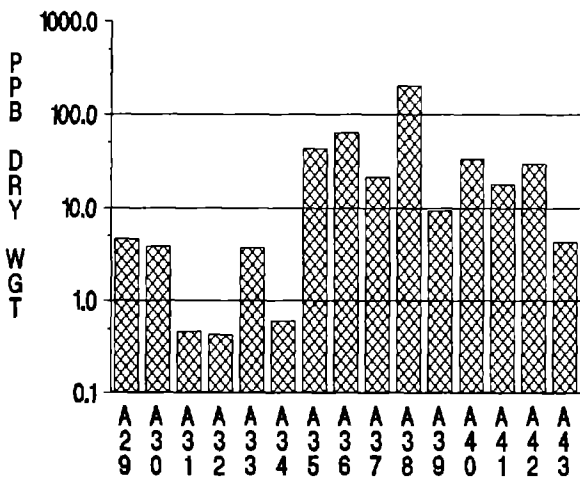
STOMACH PESTICIDES



STOMACH PCBs



LIVER PESTICIDES



LIVER PCBs

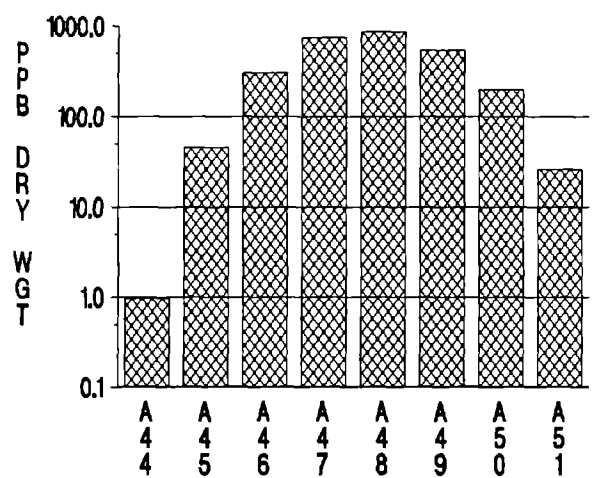
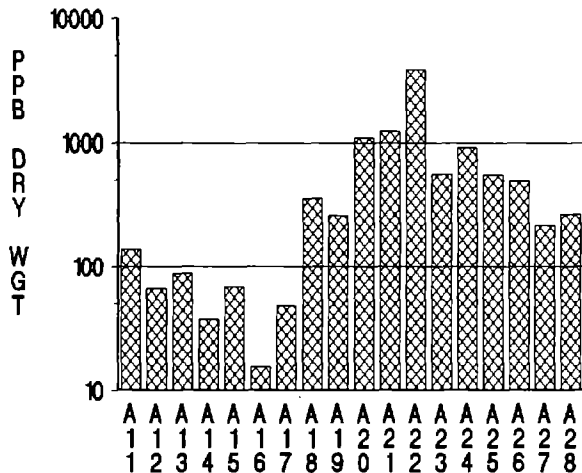
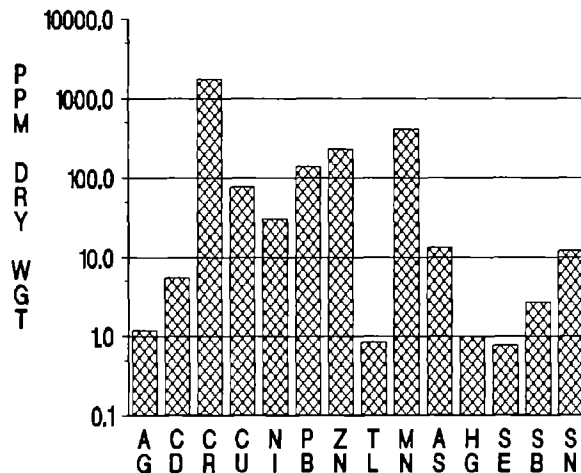


Figure 6b. Concentrations of analytes within sample matrices (sediment pesticides, sediment PCBs, stomach pesticides, stomach PCBs, liver pesticides, liver PCBs) for the Merrimack River mouth area.

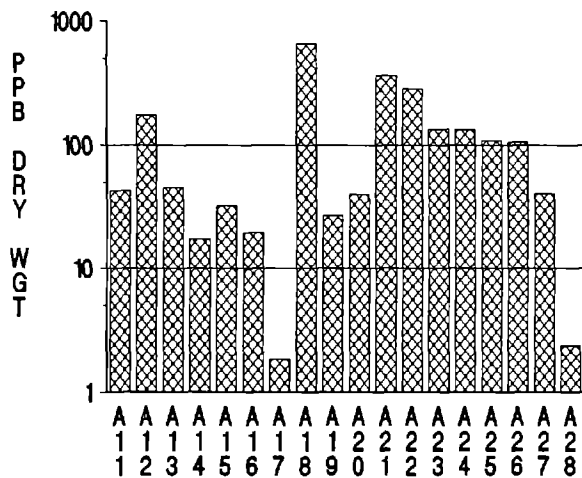
SEDIMENT PAHs



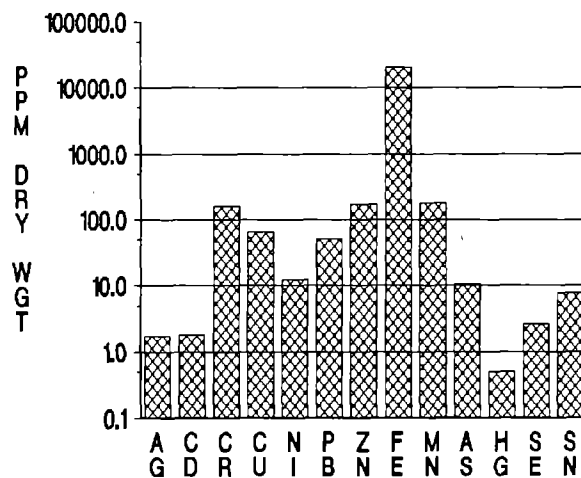
SEDIMENT METALS



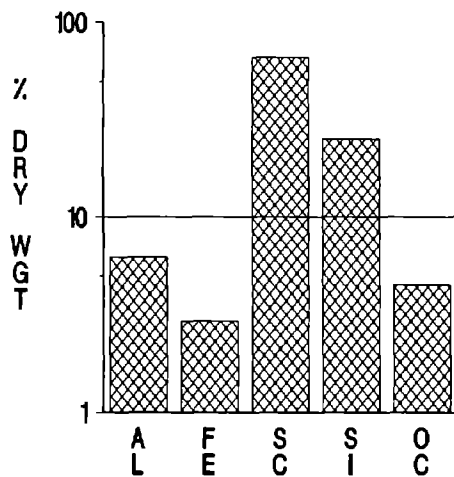
STOMACH PAHs



STOMACH METALS



SEDIMENT TEXTURE



LIVER METALS

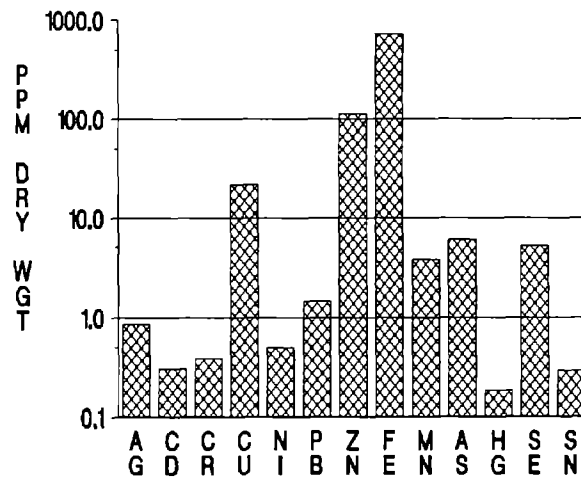
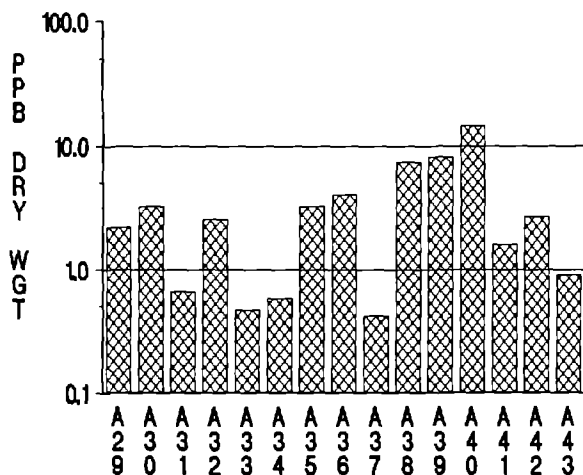
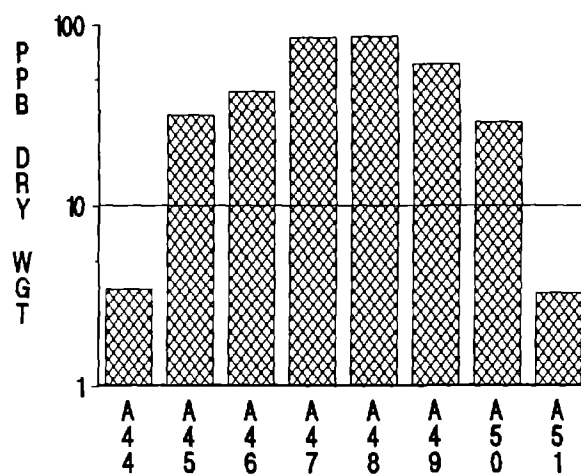


Figure 7a. Concentrations of analytes within sample matrices (sediment PAHs, sediment metals, stomach PAHs, stomach metals, sediment texture, liver metals) for Salem Harbor.

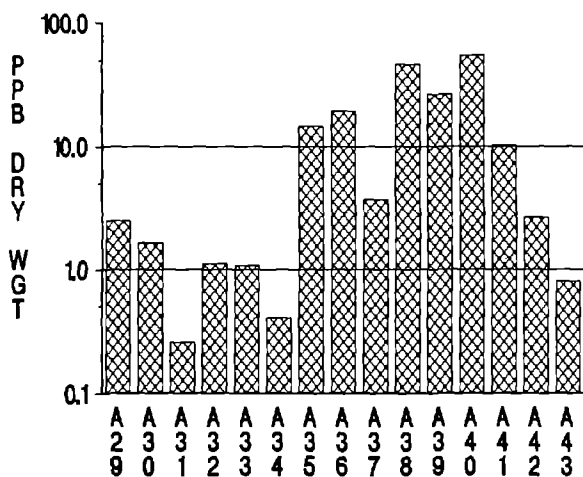
SEDIMENT PESTICIDES



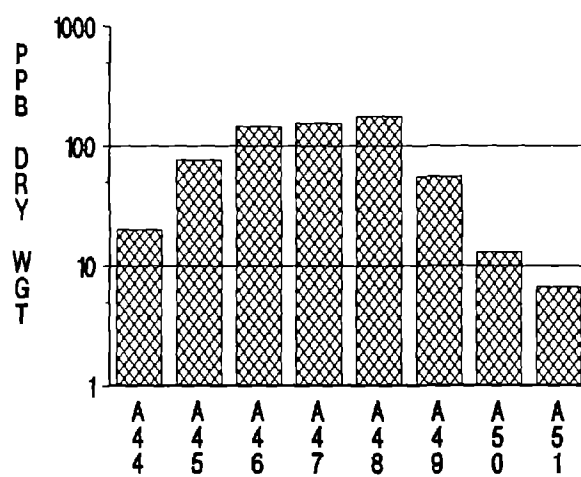
SEDIMENT PCBs



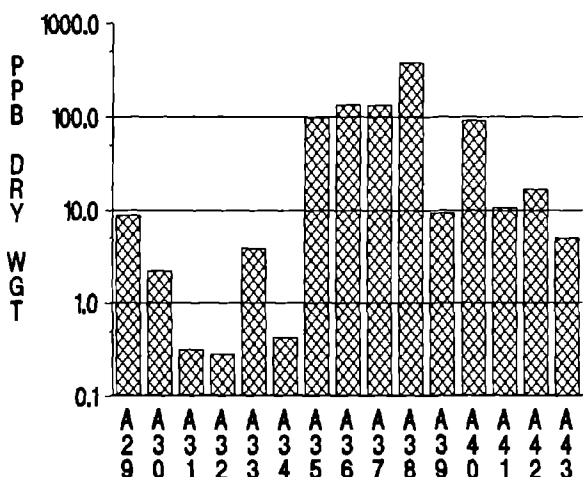
STOMACH PESTICIDES



STOMACH PCBs



LIVER PESTICIDES



LIVER PCBs

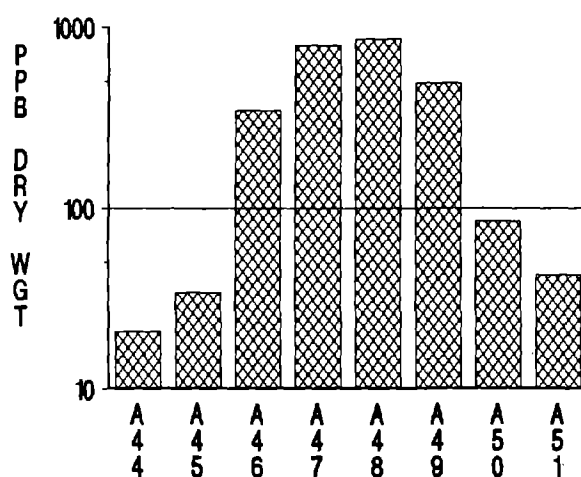
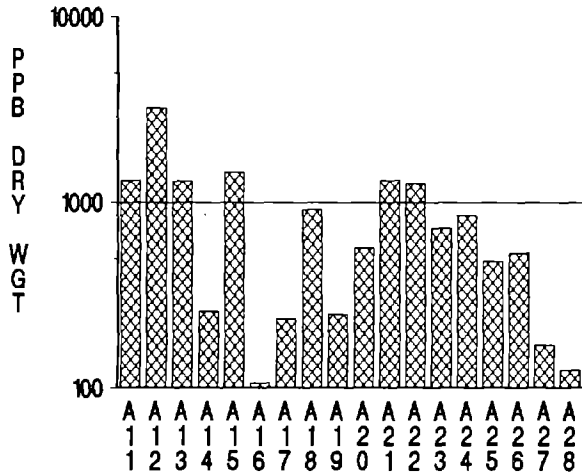
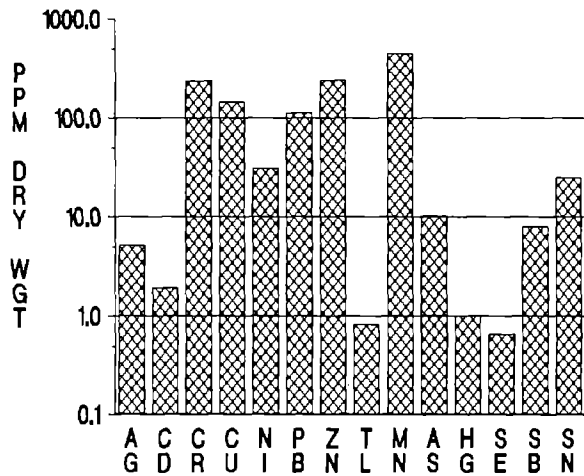


Figure 7b. Concentrations of analytes within sample matrices (sediment pesticides, sediment PCBs, stomach pesticides, stomach PCBs, liver pesticides, liver PCBs) for Salem Harbor.

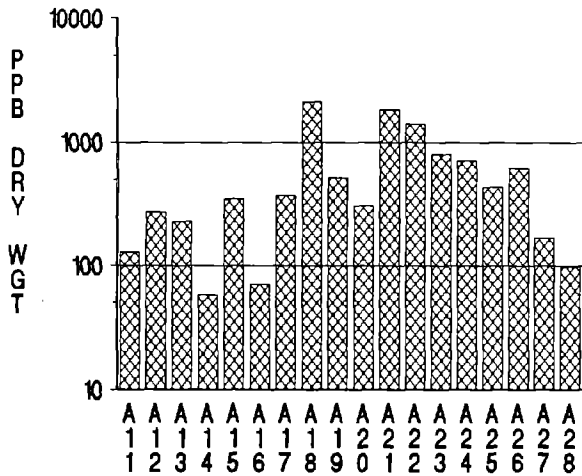
SEDIMENT PAHs



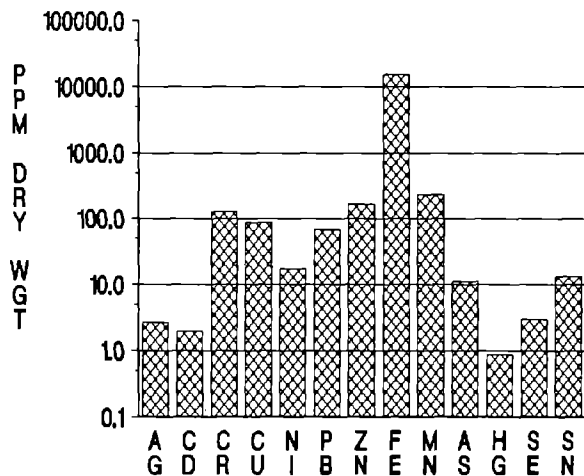
SEDIMENT METALS



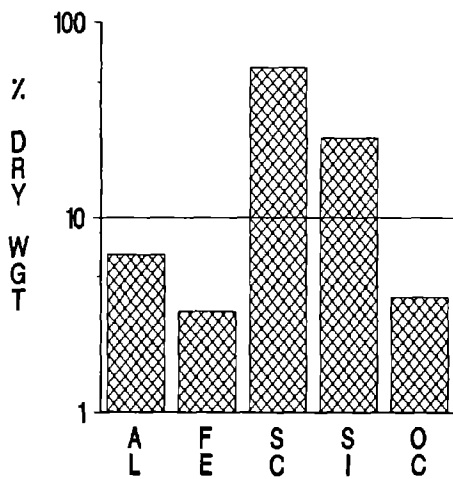
STOMACH PAHs



STOMACH METALS



SEDIMENT TEXTURE



LIVER METALS

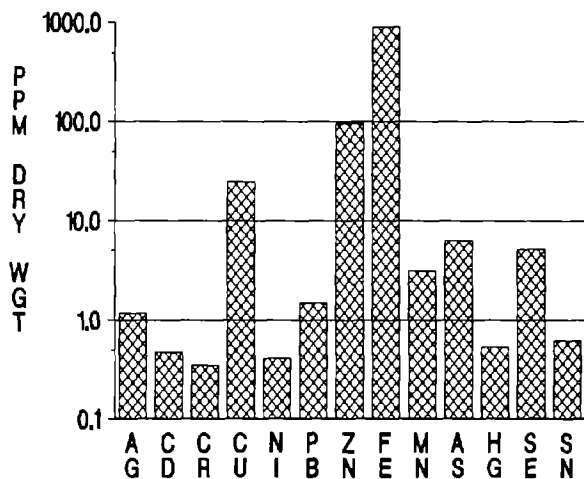
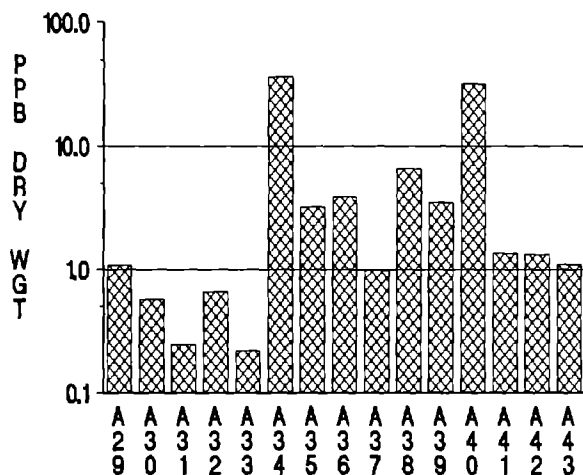
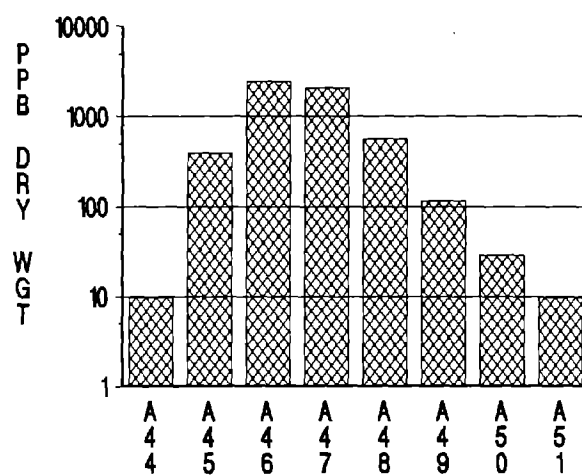


Figure 8a. Concentrations of analytes within sample matrices (sediment PAHs, sediment metals, stomach PAHs, stomach metals, sediment texture, liver metals) for Boston Harbor.

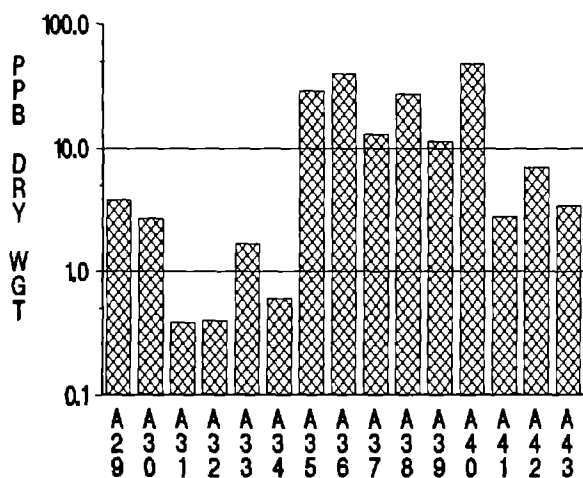
SEDIMENT PESTICIDES



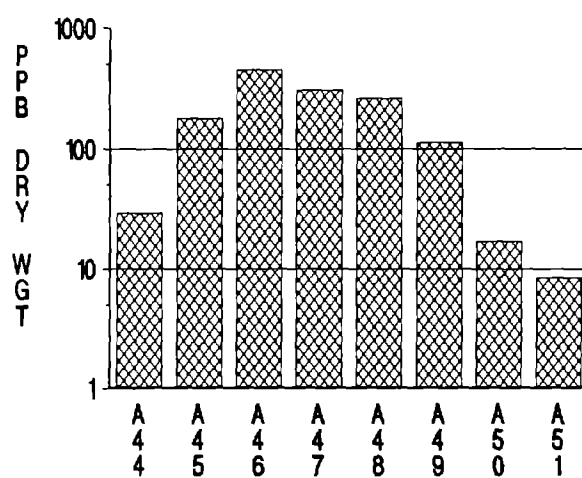
SEDIMENT PCBs



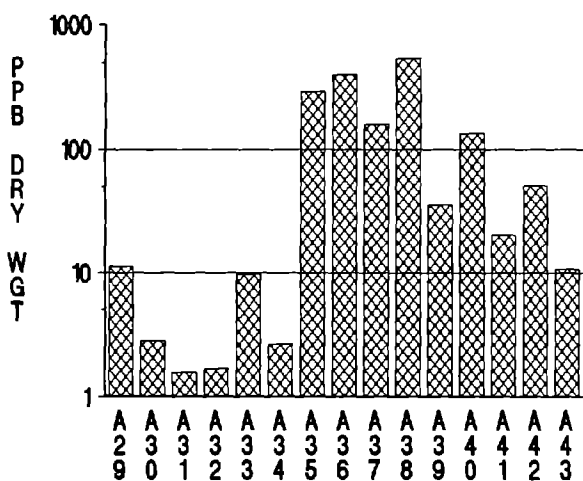
STOMACH PESTICIDES



STOMACH PCBs



LIVER PESTICIDES



LIVER PCBs

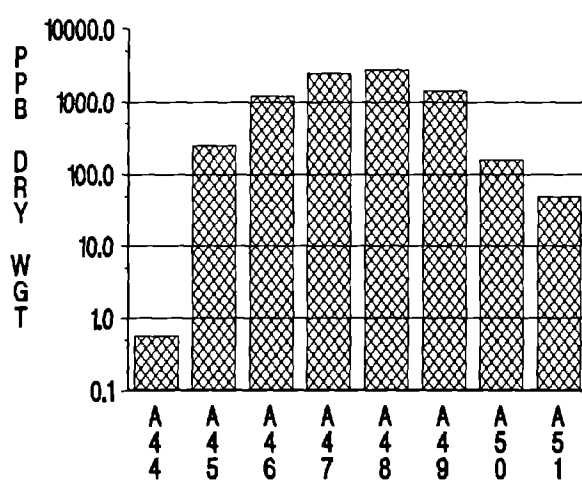
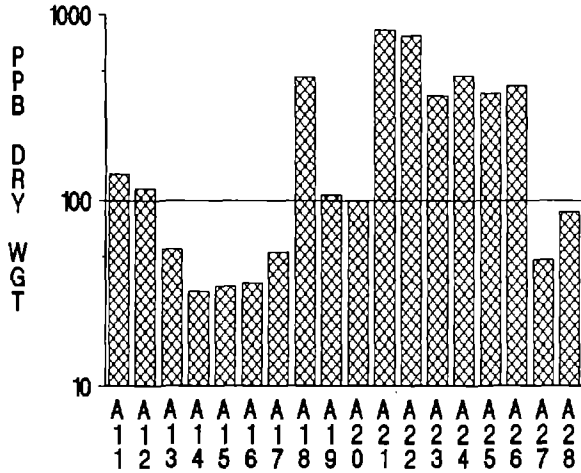
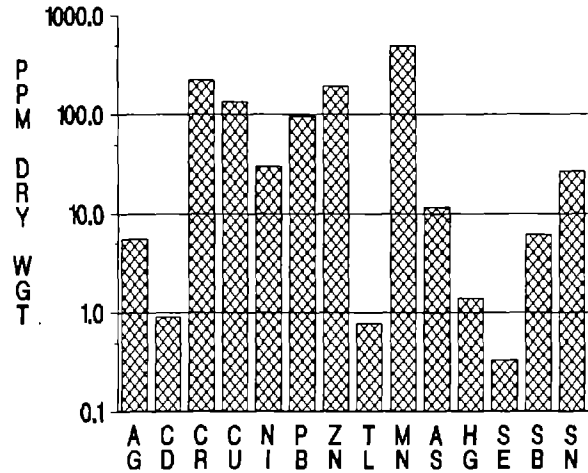


Figure 8b. Concentrations of analytes within sample matrices (sediment pesticides, sediment PCBs, stomach pesticides, stomach PCBs, liver pesticides, liver PCBs) for Boston Harbor.

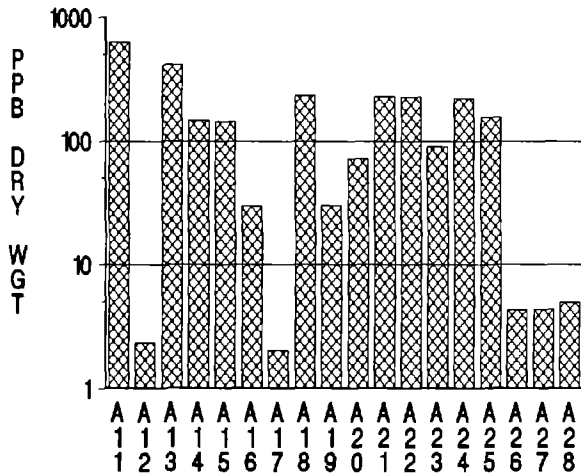
SEDIMENT PAHs



SEDIMENT METALS

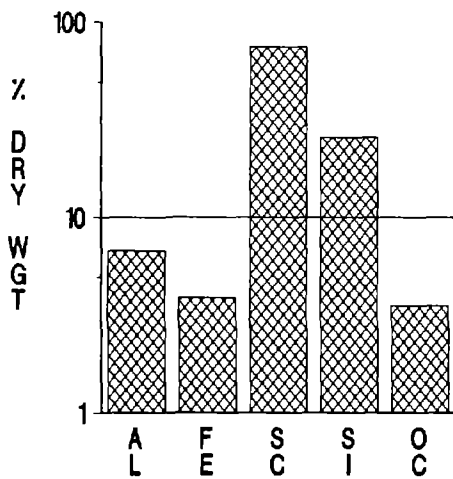


STOMACH PAHs



**Metals in stomach contents
not measured in
1986 specimens**

SEDIMENT TEXTURE



LIVER METALS

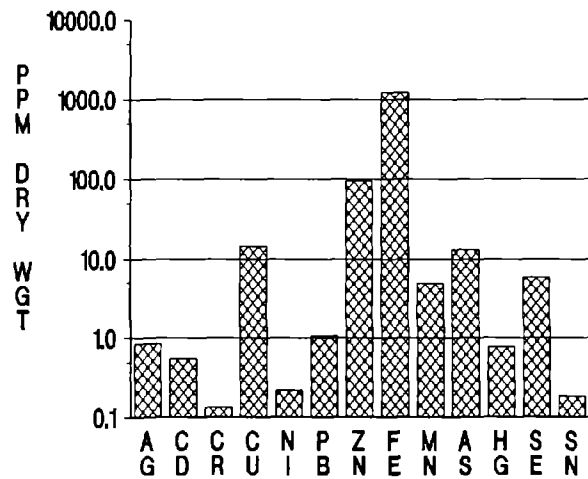
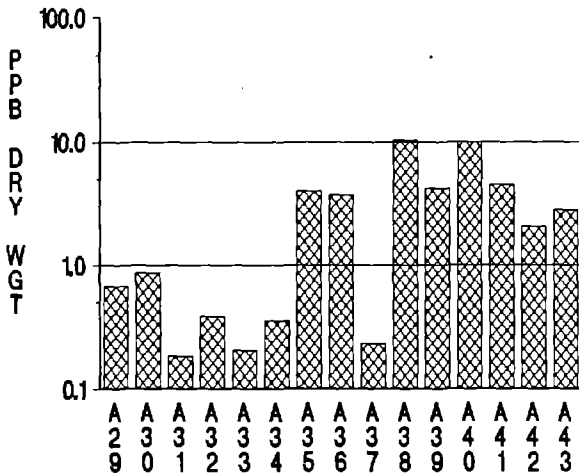
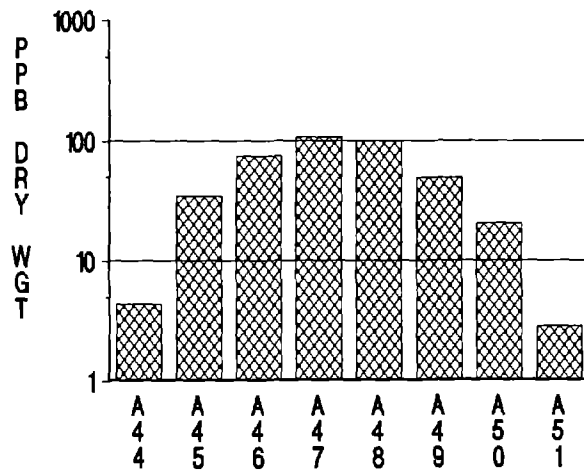


Figure 9a. Concentrations of analytes within sample matrices (sediment PAHs, sediment metals, stomach PAHs, sediment texture, liver metals) for Quincy Bay.

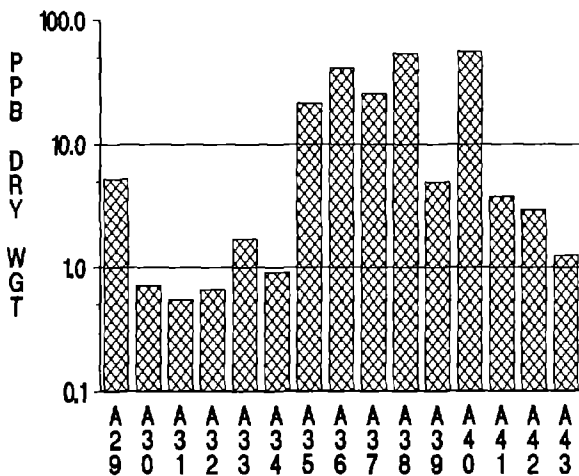
SEDIMENT PESTICIDES



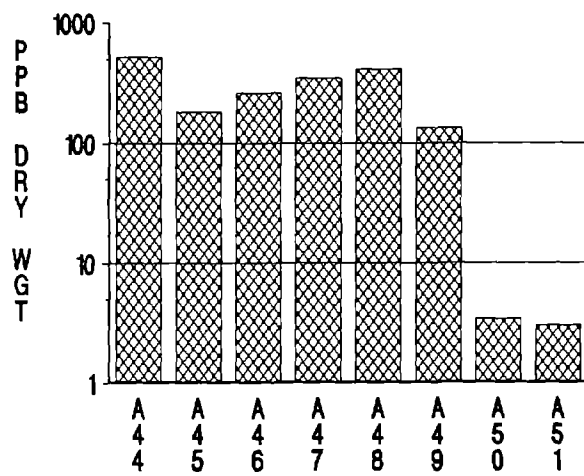
SEDIMENT PCBs



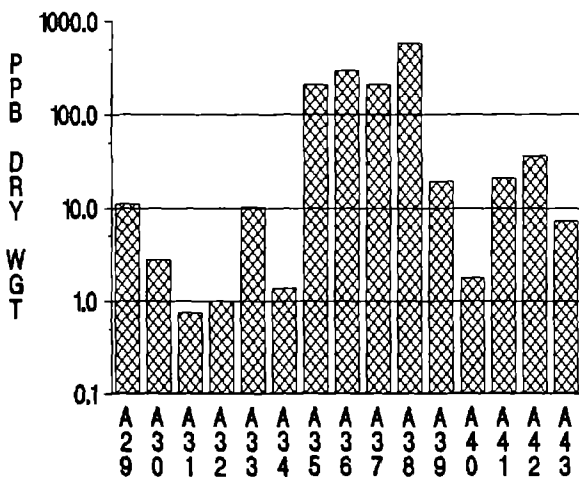
STOMACH PESTICIDES



STOMACH PCBs



LIVER PESTICIDES



LIVER PCBs

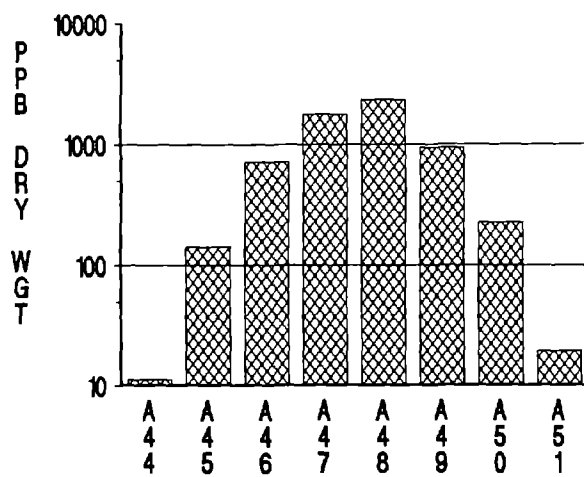
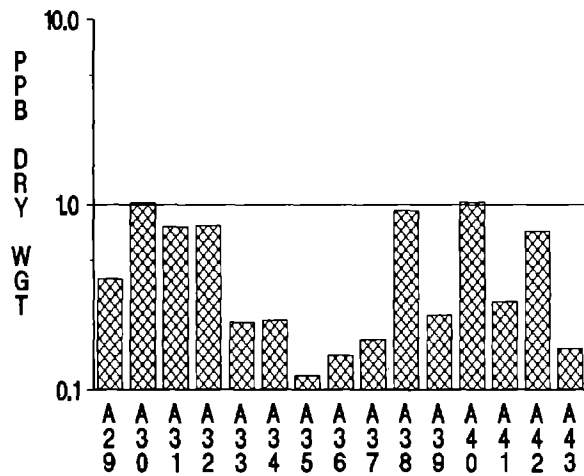
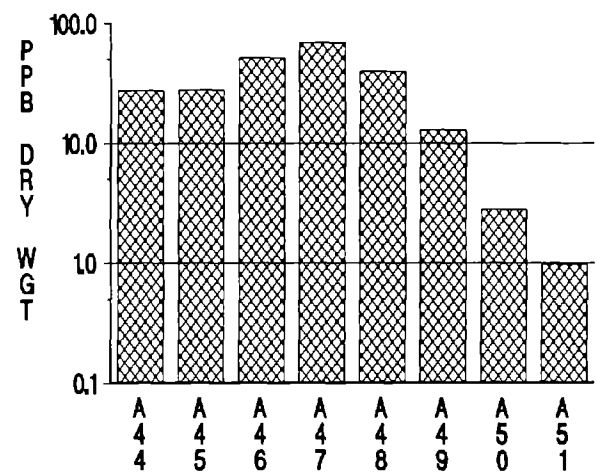


Figure 9b. Concentrations of analytes within sample matrices (sediment pesticides, sediment PCBs, stomach pesticides, stomach PCBs, liver pesticides, liver PCBs) for Quincy Bay.

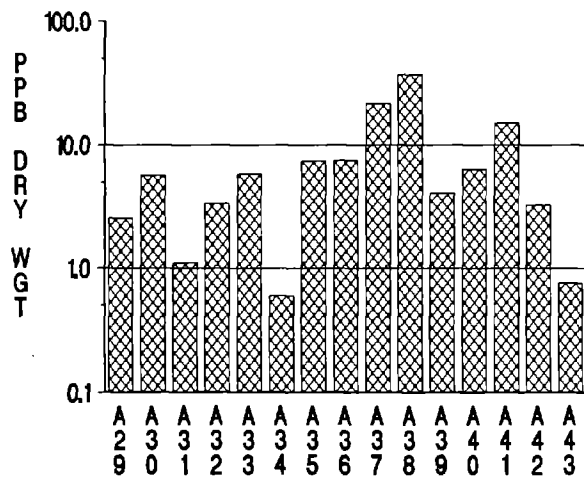
SEDIMENT PESTICIDES



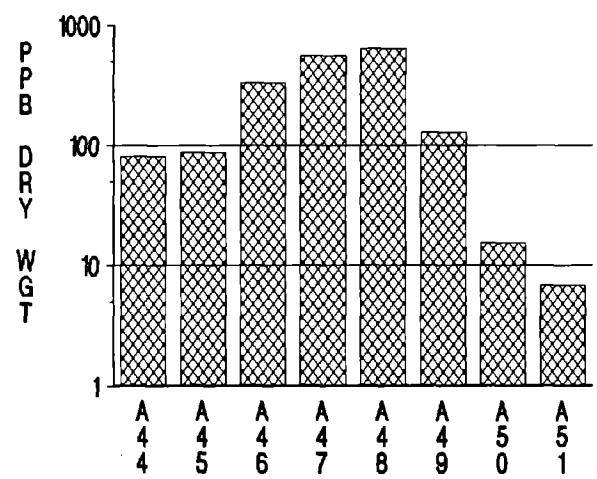
SEDIMENT PCBs



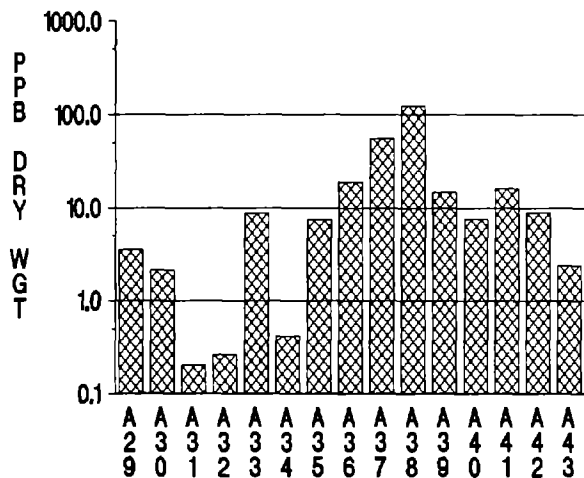
STOMACH PESTICIDES



STOMACH PCBs



LIVER PESTICIDES



LIVER PCBs

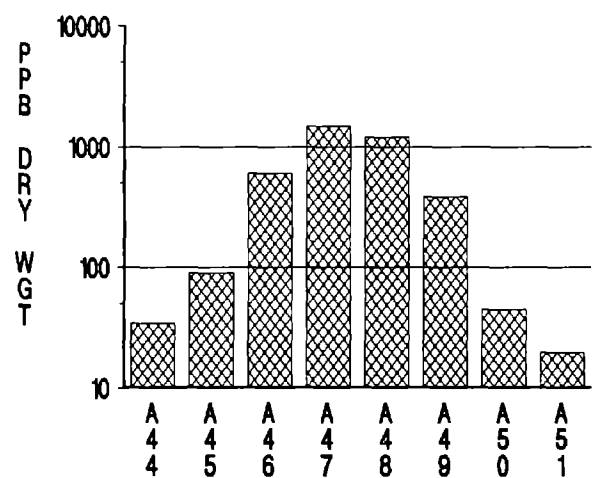
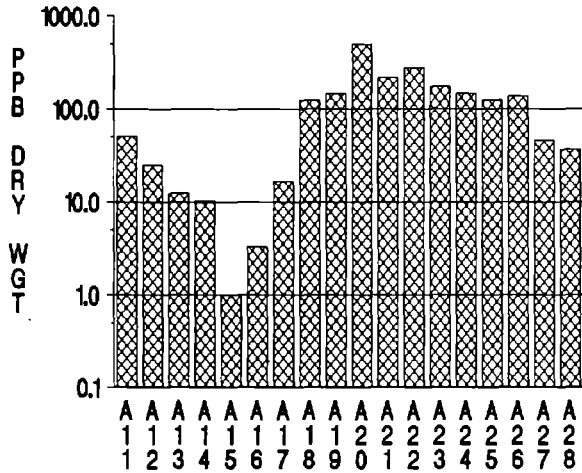
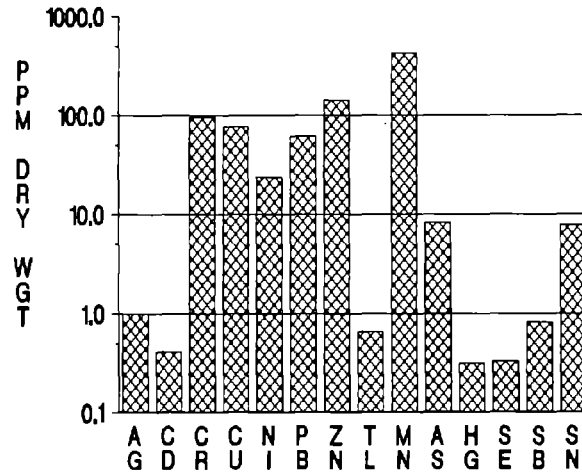


Figure 10b. Concentrations of analytes within sample matrices (sediment pesticides, sediment PCBs, stomach pesticides, stomach PCBs, liver pesticides, liver PCBs) for Buzzards Bay.

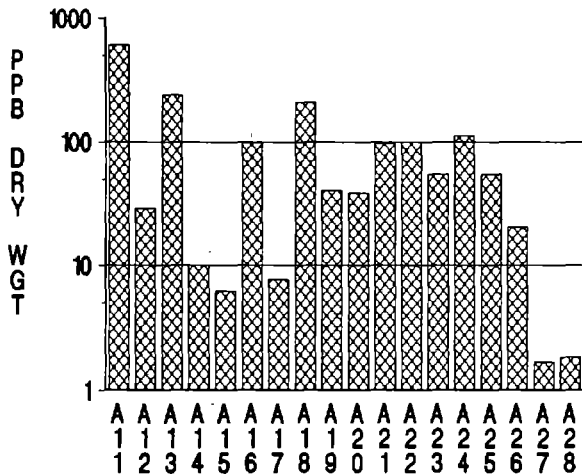
SEDIMENT PAHs



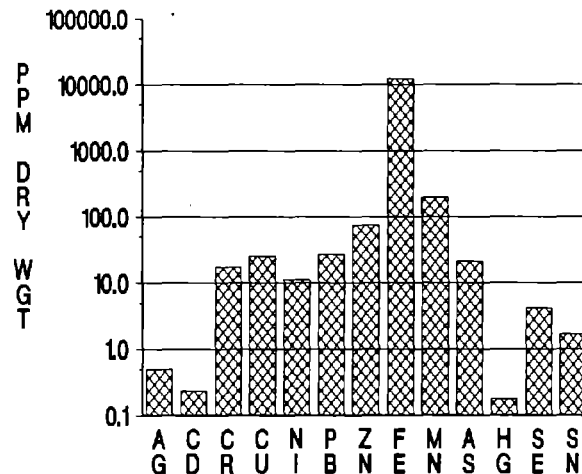
SEDIMENT METALS



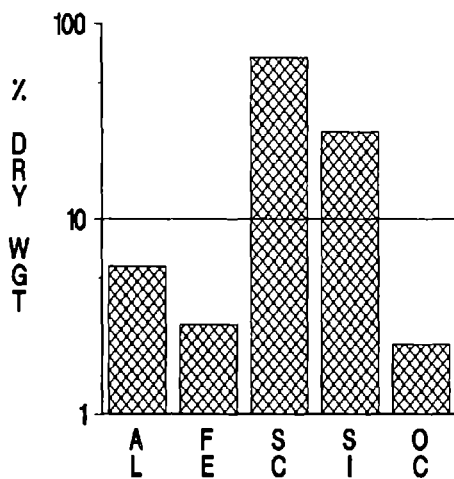
STOMACH PAHs



STOMACH METALS



SEDIMENT TEXTURE



LIVER METALS

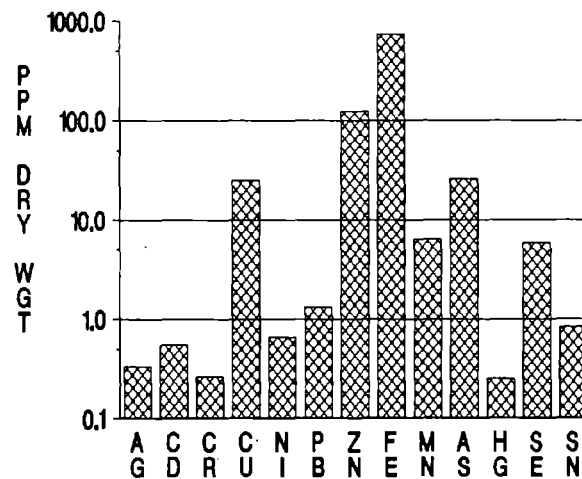
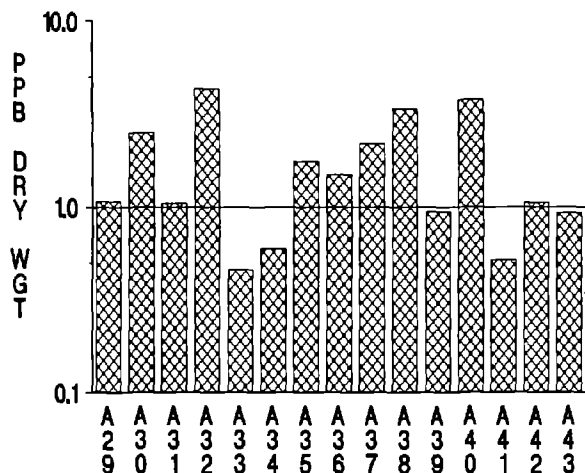
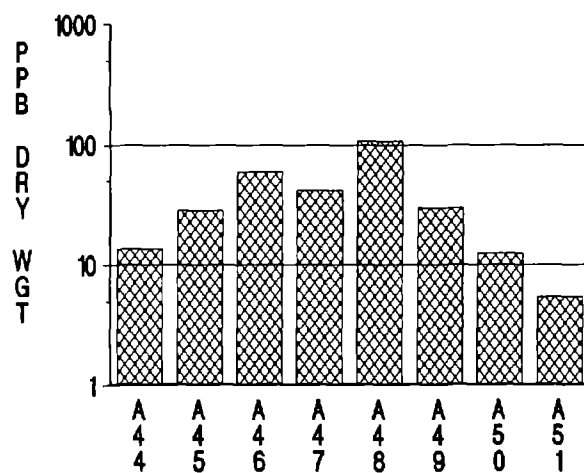


Figure 11a. Concentrations of analytes within sample matrices (sediment PAHs, sediment metals, stomach PAHs, stomach metals, sediment texture, liver metals) for Narragansett Bay.

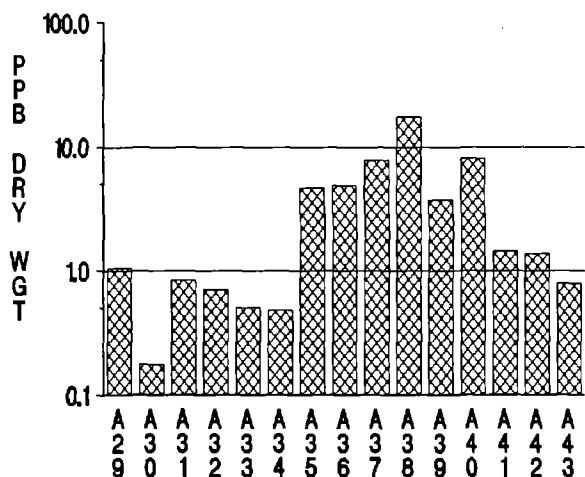
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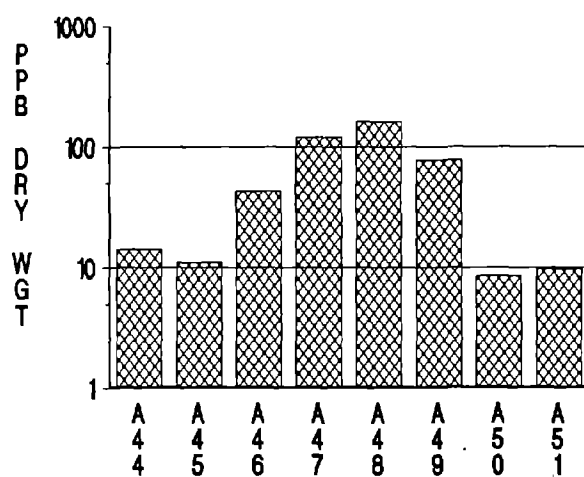
SEDIMENT PCBs



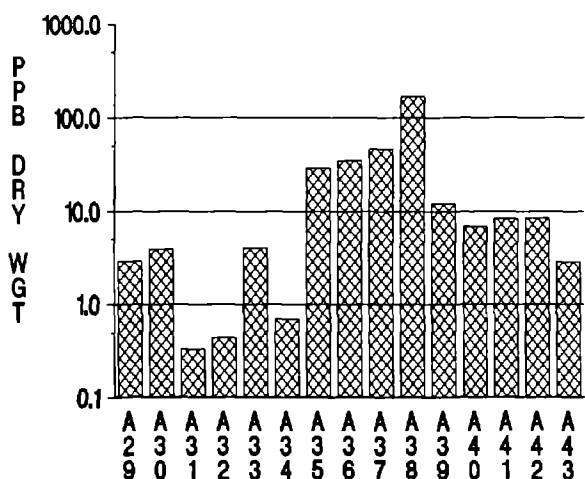
STOMACH PESTICIDES



STOMACH PCBs



LIVER PESTICIDES



LIVER PCBs

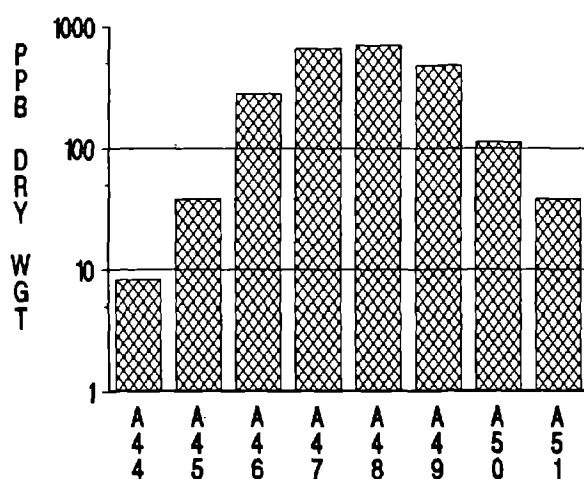
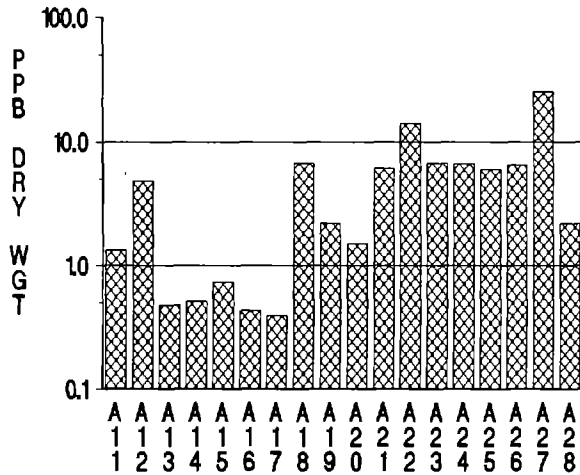
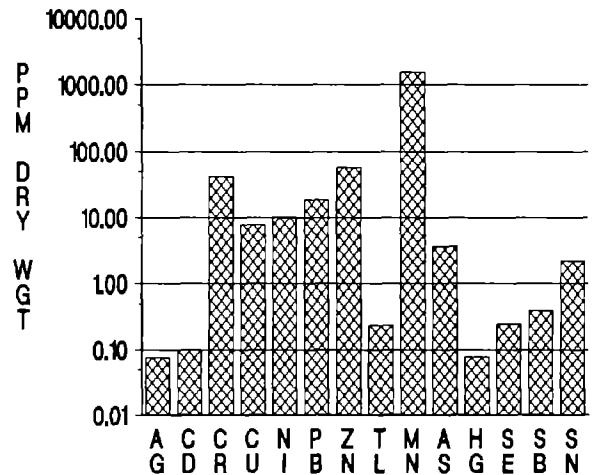


Figure 11b. Concentrations of analytes within sample matrices (sediment pesticides, sediment PCBs, stomach pesticides, stomach PCBs, liver pesticides, liver PCBs) for Narragansett Bay.

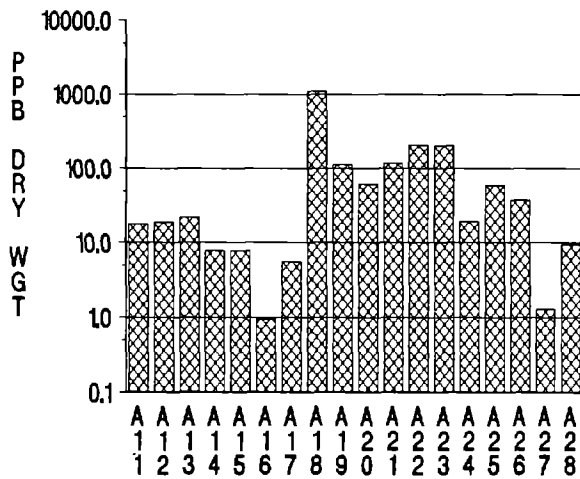
SEDIMENT PAHs



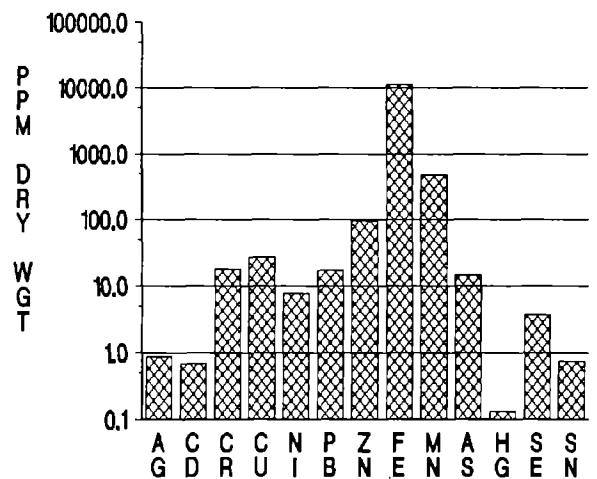
SEDIMENT METALS



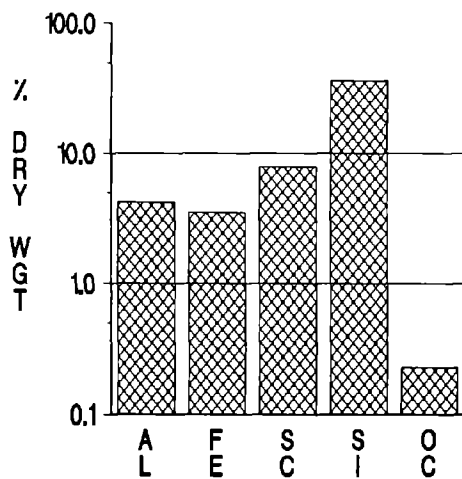
STOMACH PAHs



STOMACH METALS



SEDIMENT TEXTURE



LIVER METALS

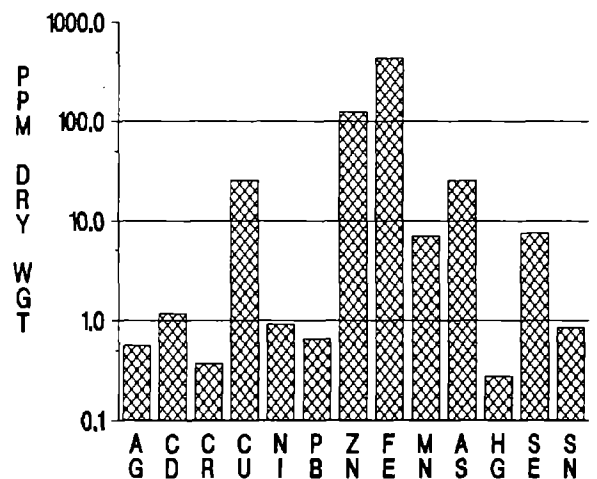
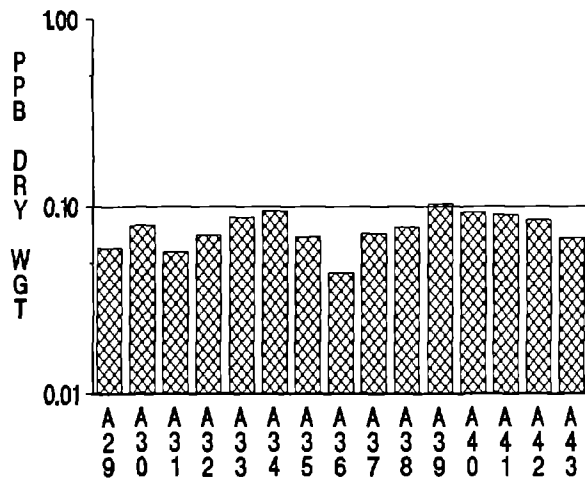
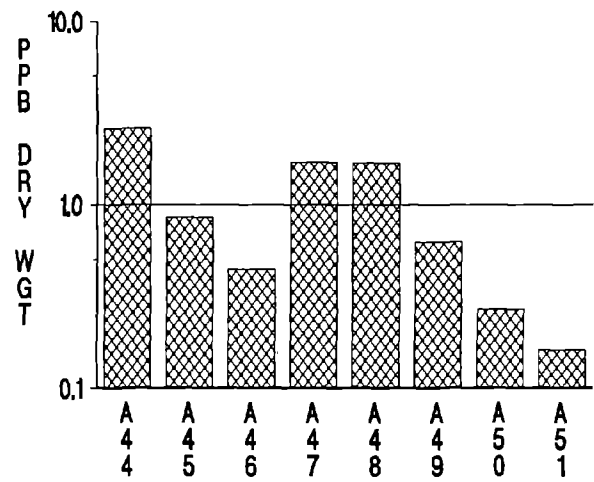


Figure 12a. Concentrations of analytes within sample matrices (sediment PAHs, sediment metals, stomach PAHs, stomach metals, sediment texture, liver metals) for eastern Long Island Sound.

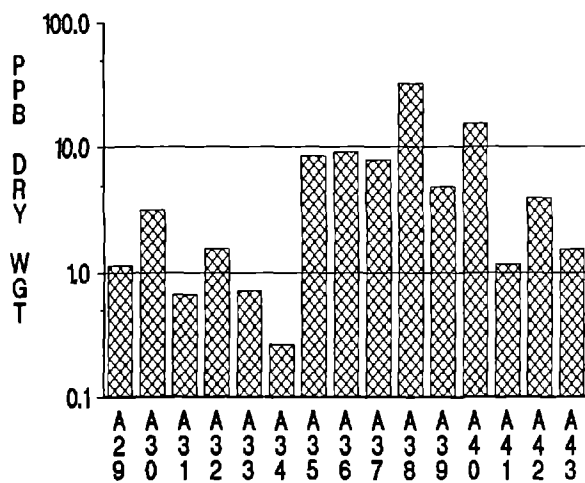
SEDIMENT PESTICIDES



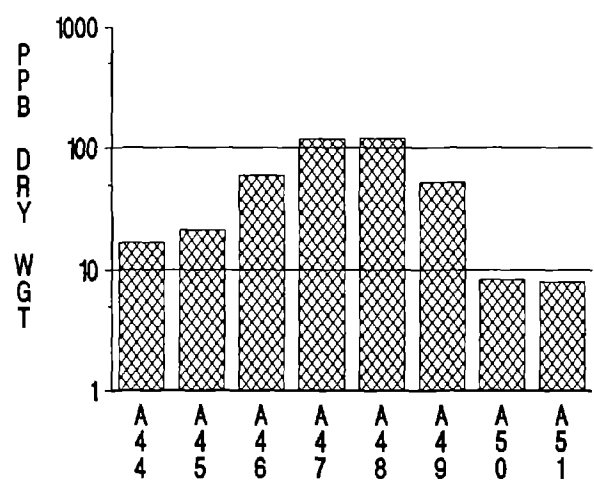
SEDIMENT PCBs



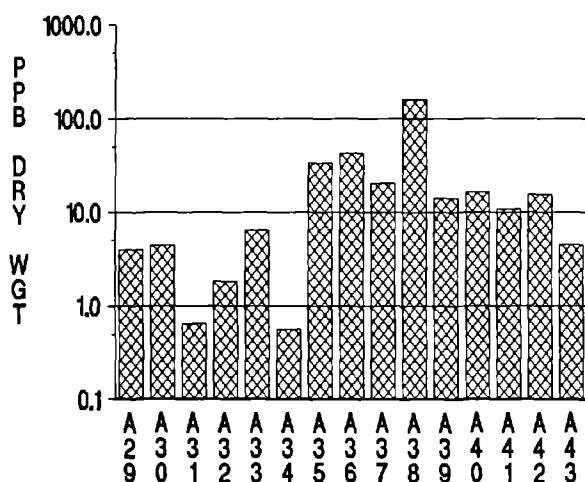
STOMACH PESTICIDES



STOMACH PCBs



LIVER PESTICIDES



LIVER PCBs

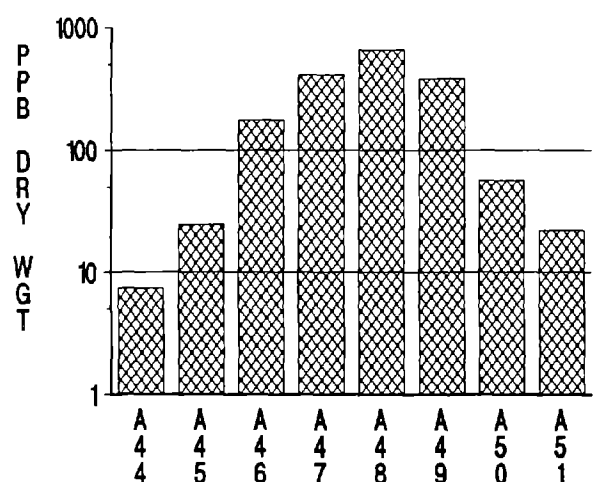
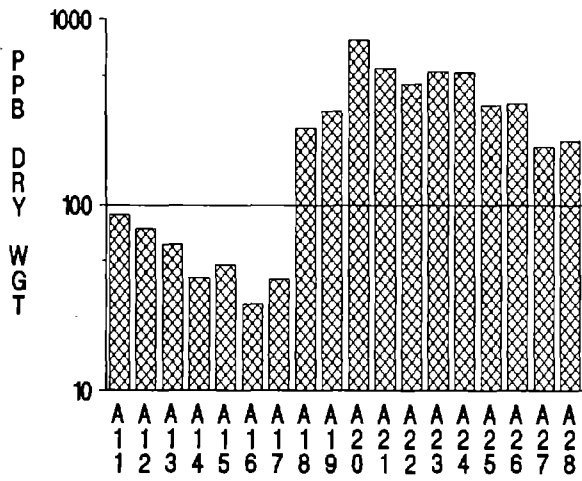
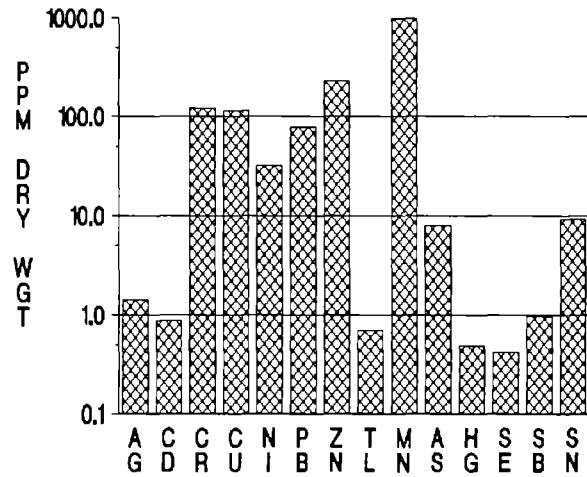


Figure 12b. Concentrations of analytes within sample matrices (sediment pesticides, sediment PCBs, stomach pesticides, stomach PCBs, liver pesticides, liver PCBs) for eastern Long Island Sound.

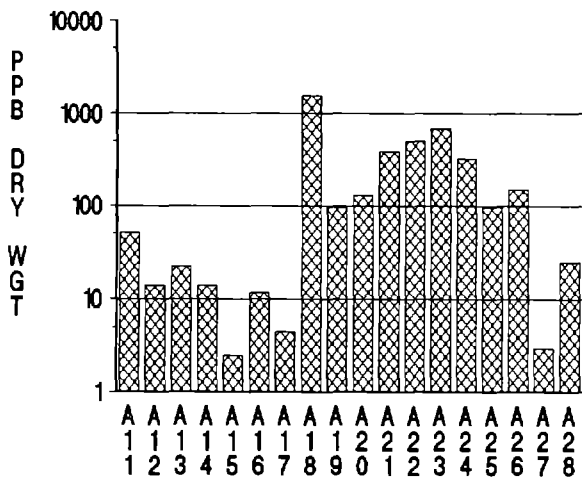
SEDIMENT PAHs



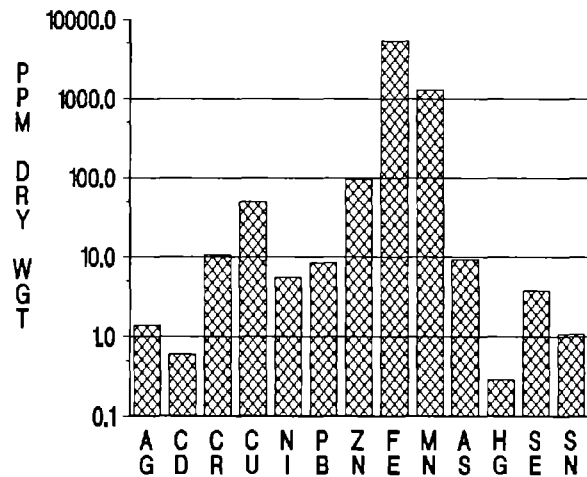
SEDIMENT METALS



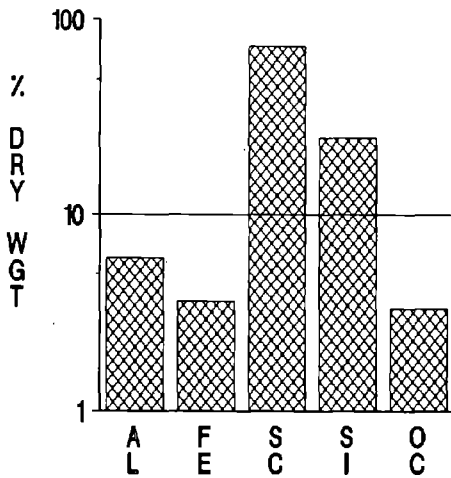
STOMACH PAHs



STOMACH METALS



SEDIMENT TEXTURE



LIVER METALS

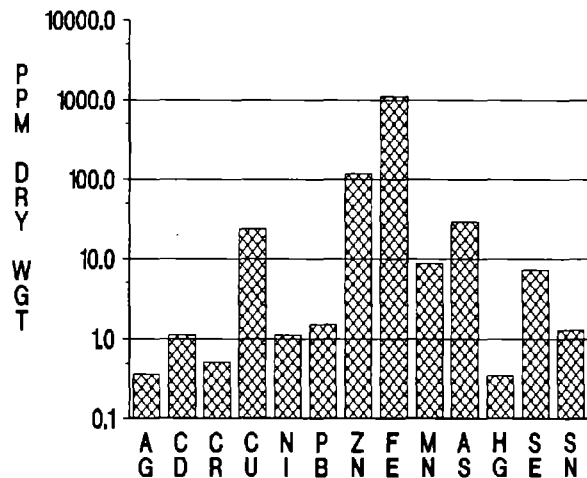
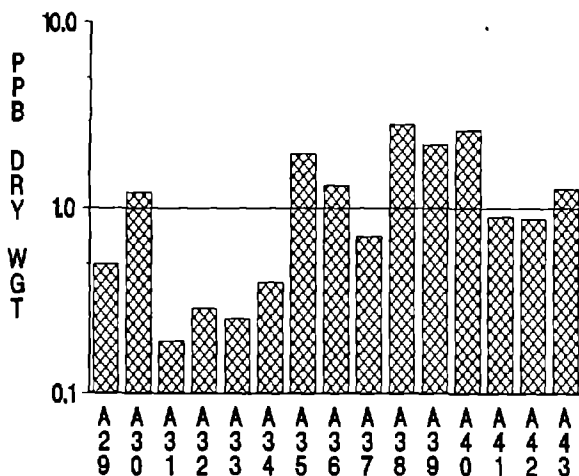
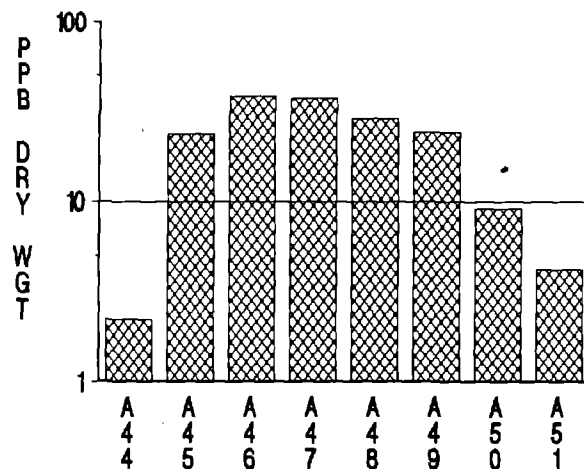


Figure 13a. Concentrations of analytes within sample matrices (sediment PAHs, sediment metals, stomach PAHs, stomach metals, sediment texture, liver metals) for western Long Island Sound.

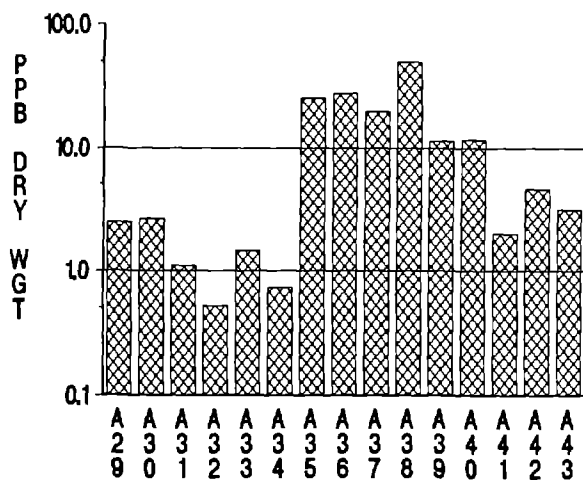
SEDIMENT PESTICIDES



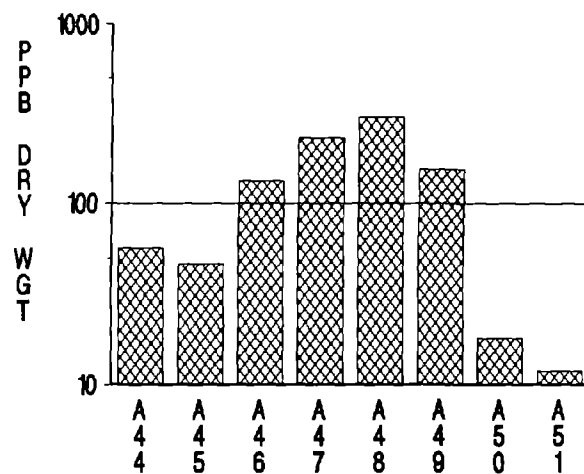
SEDIMENT PCBs



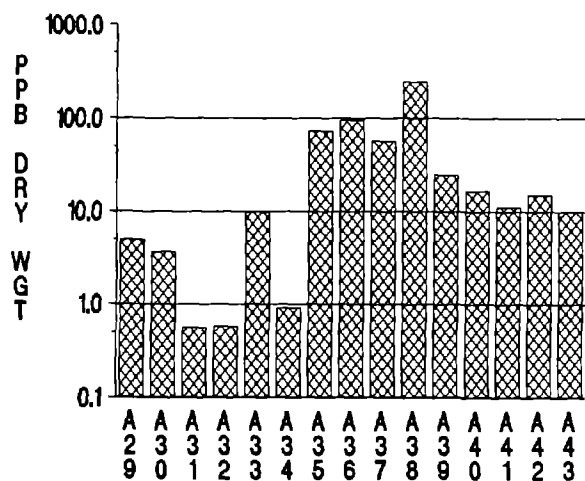
STOMACH PESTICIDES



STOMACH PCBs



LIVER PESTICIDES



LIVER PCBs

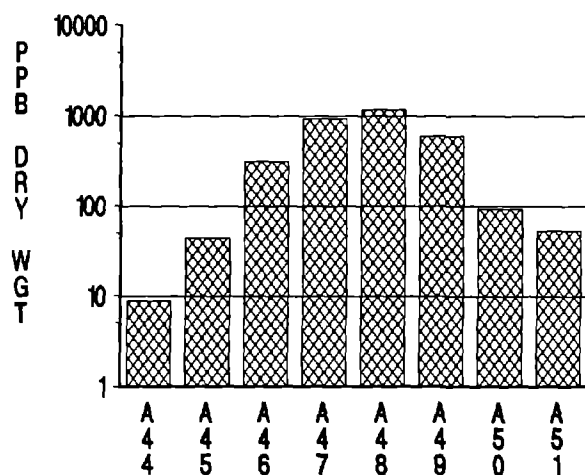
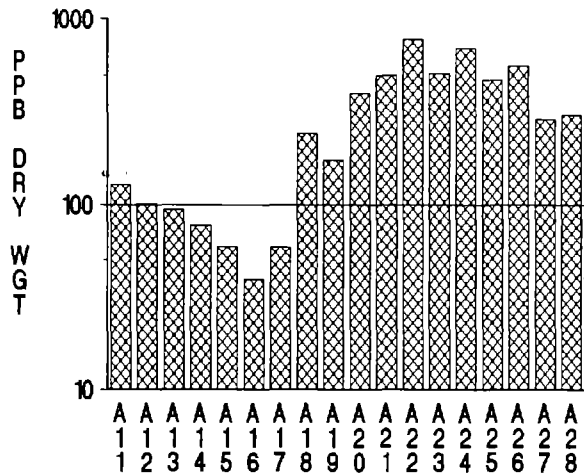
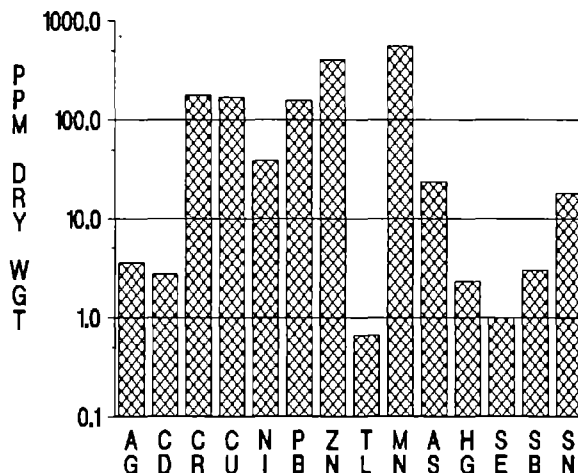


Figure 13b. Concentrations of analytes within sample matrices (sediment pesticides, sediment PCBs, stomach pesticides, stomach PCBs, liver pesticides, liver PCBs) for western Long Island Sound.

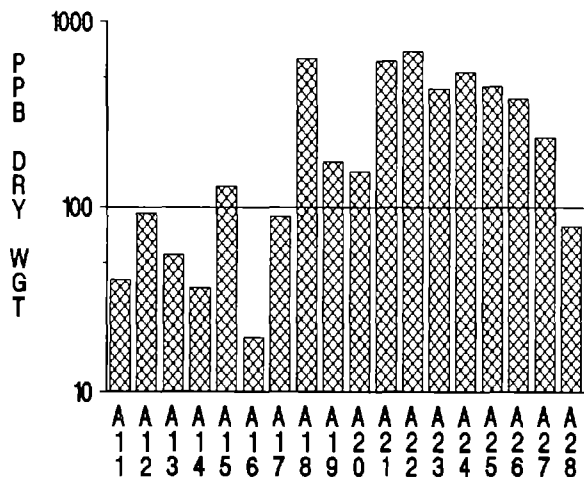
SEDIMENT PAHs



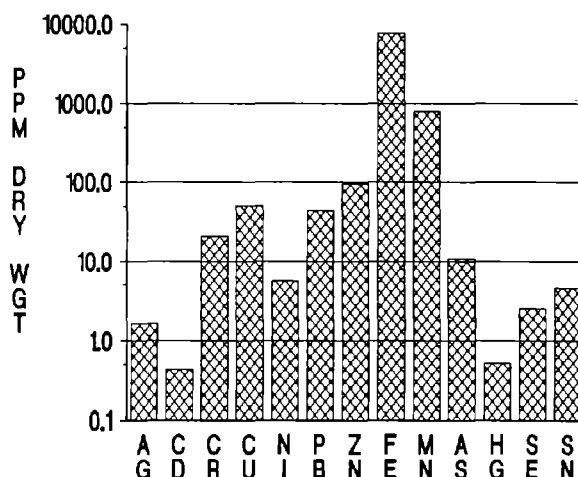
SEDIMENT METALS



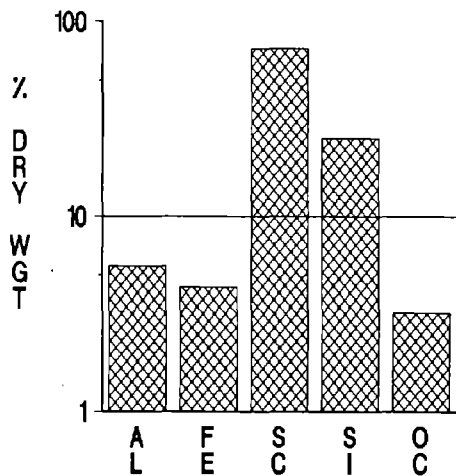
STOMACH PAHs



STOMACH METALS



SEDIMENT TEXTURE



LIVER METALS

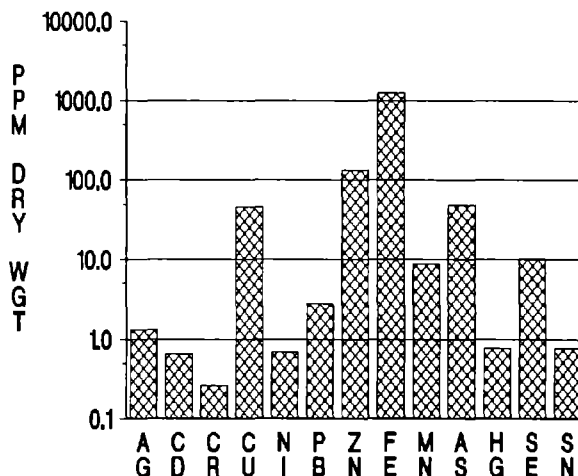
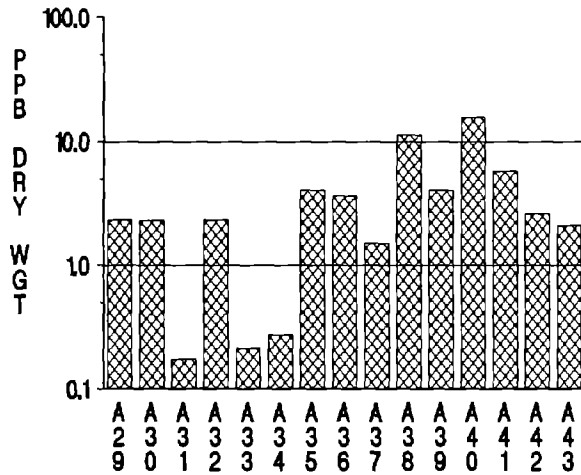
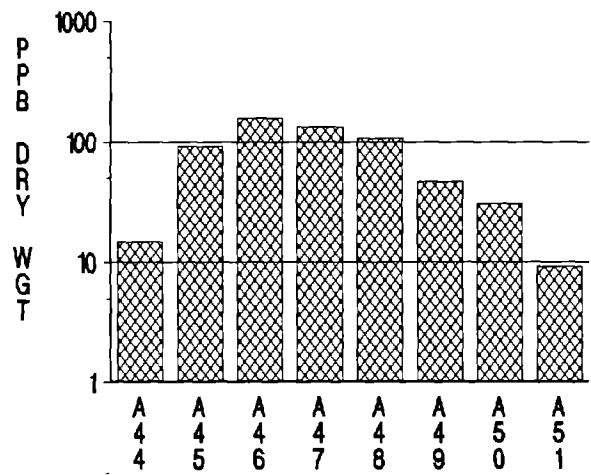


Figure 14a. Concentrations of analytes within sample matrices (sediment PAHs, sediment metals, stomach PAHs, stomach metals, sediment texture, liver metals) for Raritan Bay.

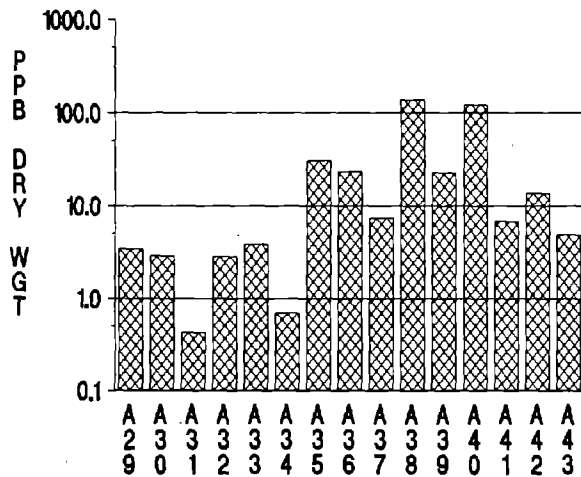
SEDIMENT PESTICIDES



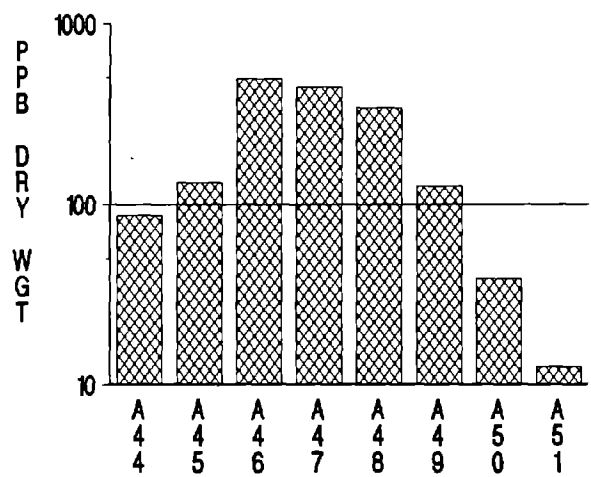
SEDIMENT PCBs



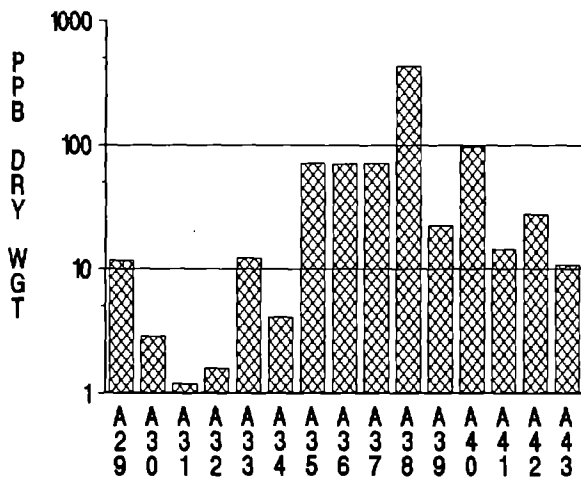
STOMACH PESTICIDES



STOMACH PCBs



LIVER PESTICIDES



LIVER PCBs

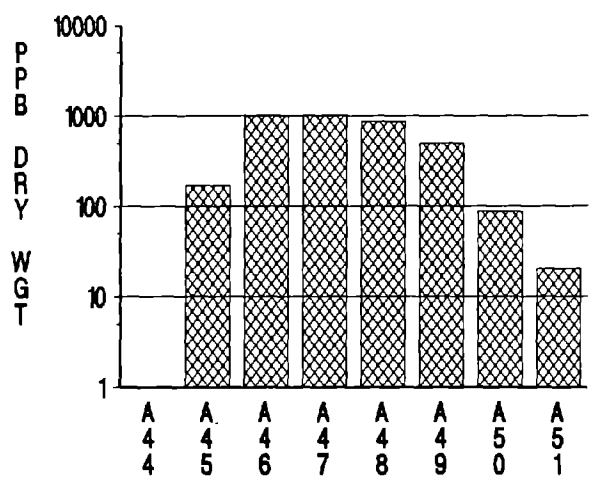
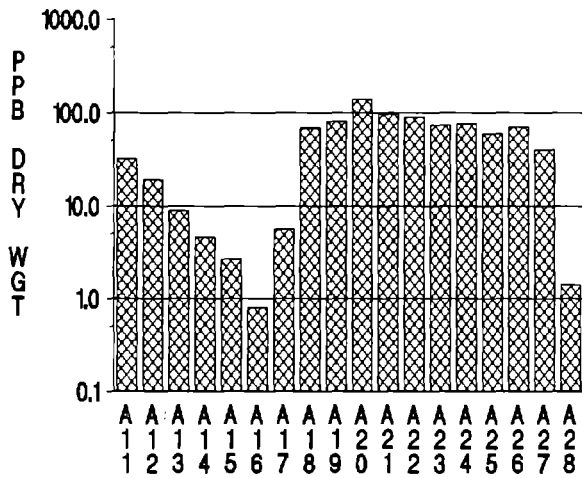
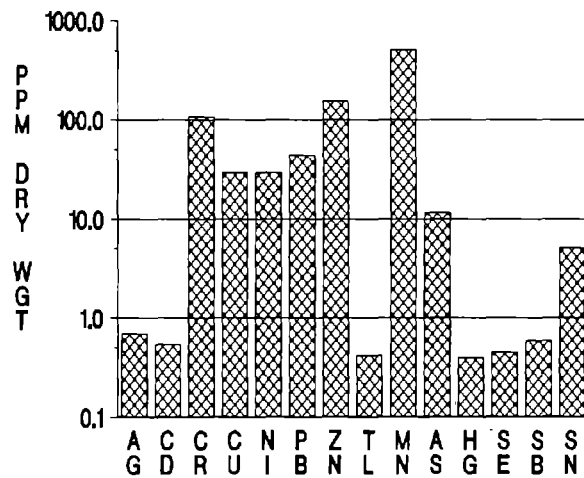


Figure 14b. Concentrations of analytes within sample matrices (sediment pesticides, sediment PCBs, stomach pesticides, stomach PCBs, liver pesticides, liver PCBs) for Raritan Bay.

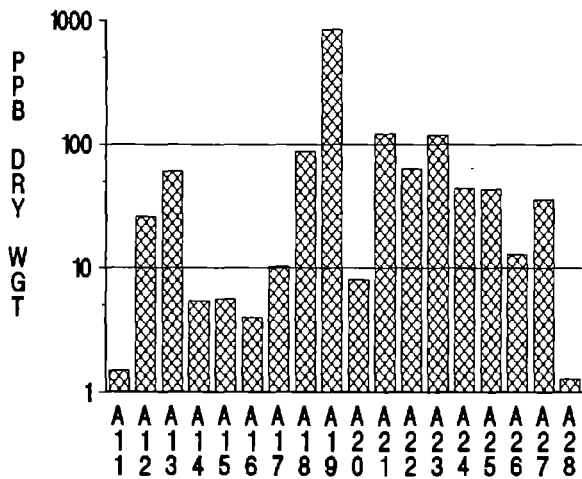
SEDIMENT PAHs



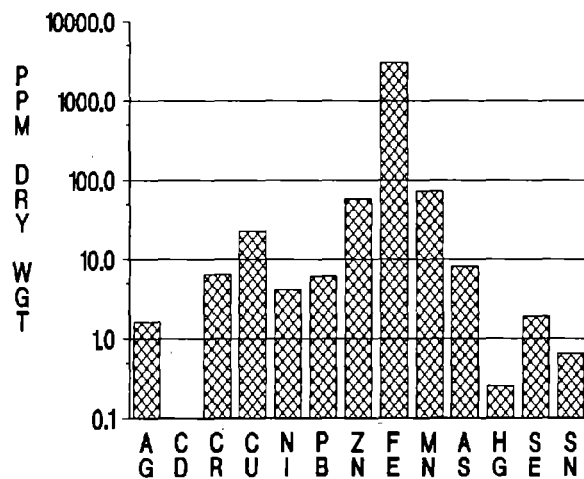
SEDIMENT METALS



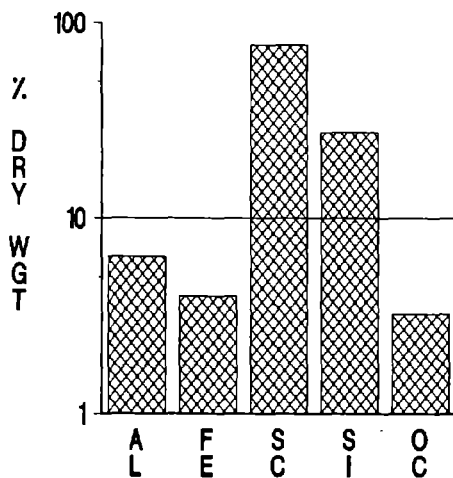
STOMACH PAHs



STOMACH METALS



SEDIMENT TEXTURE



LIVER METALS

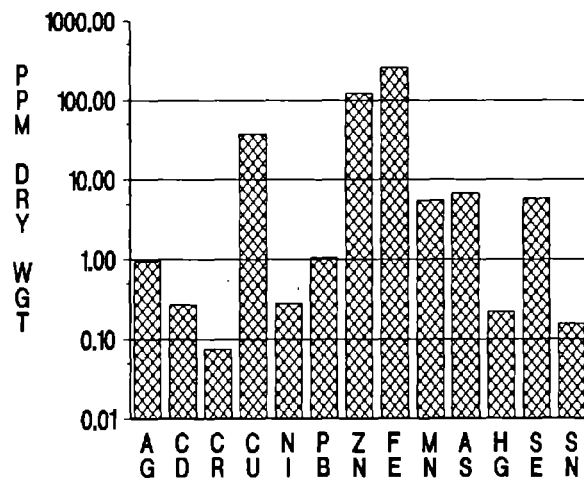
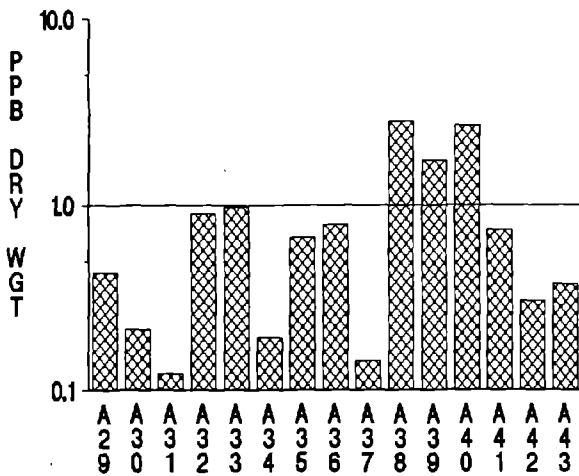
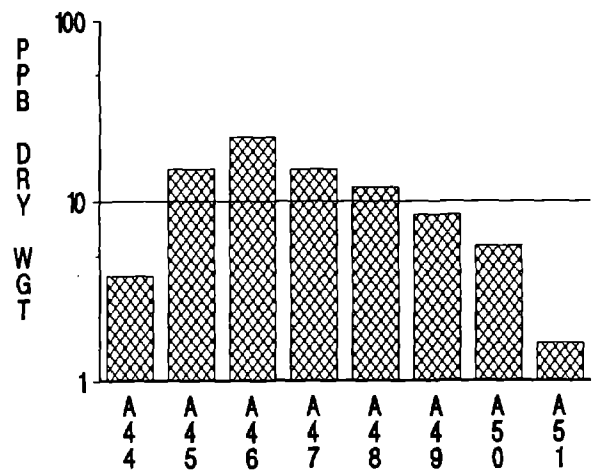


Figure 15a. Concentrations of analytes within sample matrices (sediment PAHs, sediment metals, stomach PAHs, stomach metals, sediment texture, liver metals) for Great Bay.

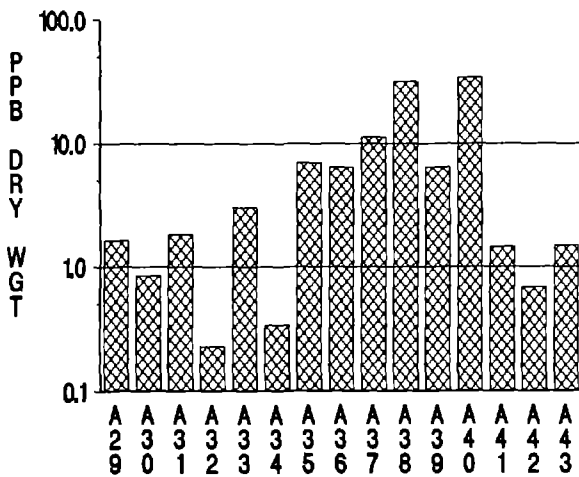
SEDIMENT PESTICIDES



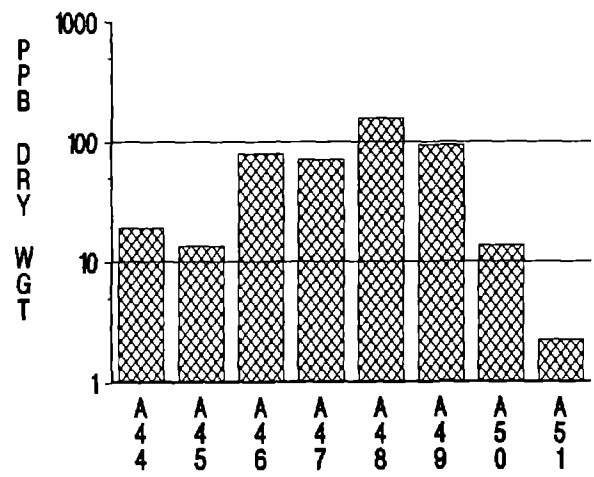
SEDIMENT PCBs



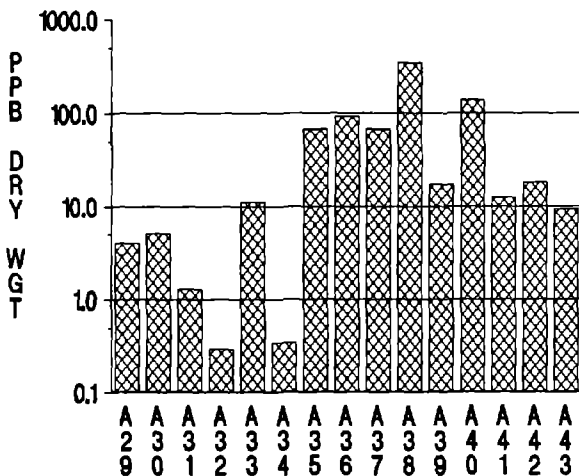
STOMACH PESTICIDES



STOMACH PCBs



LIVER PESTICIDES



LIVER PCBs

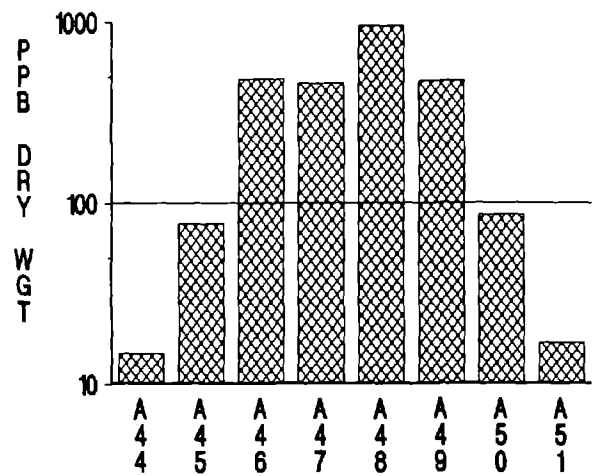
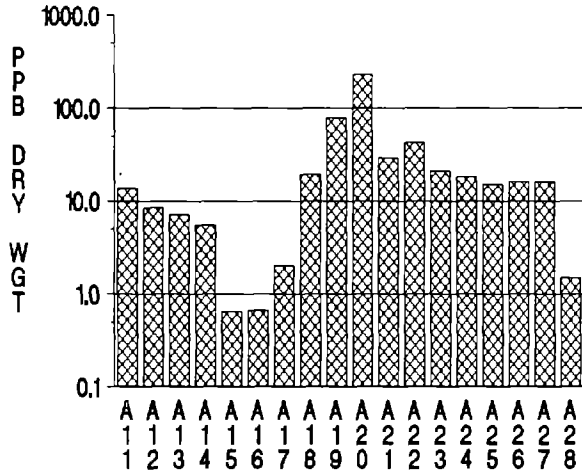
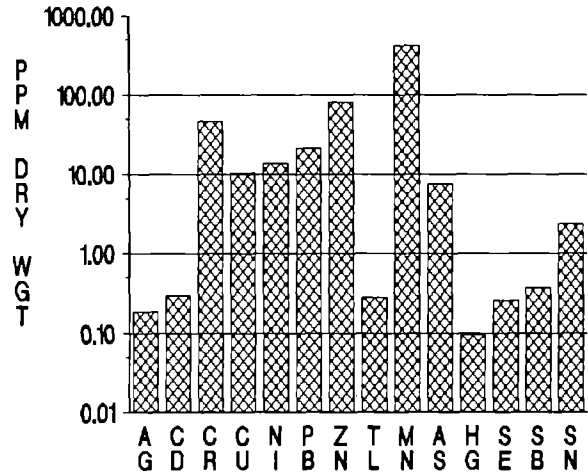


Figure 15b. Concentrations of analytes within sample matrices (sediment pesticides, sediment PCBs, stomach pesticides, stomach PCBs, liver pesticides, liver PCBs) for Great Bay.

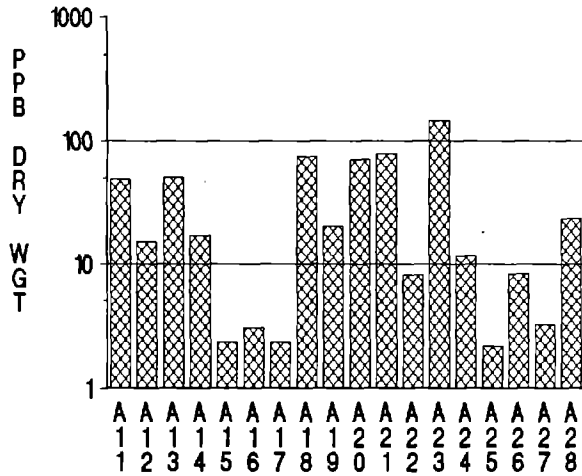
SEDIMENT PAHs



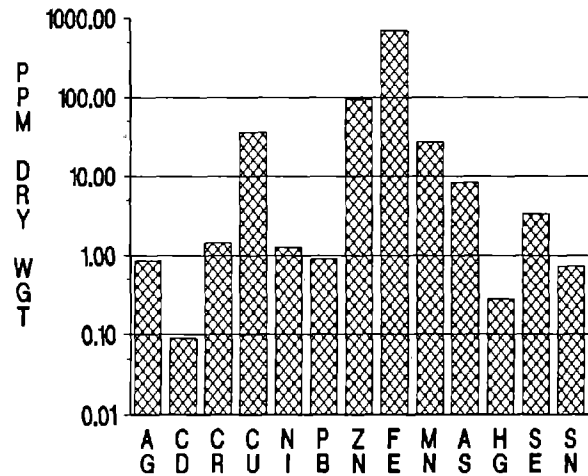
SEDIMENT METALS



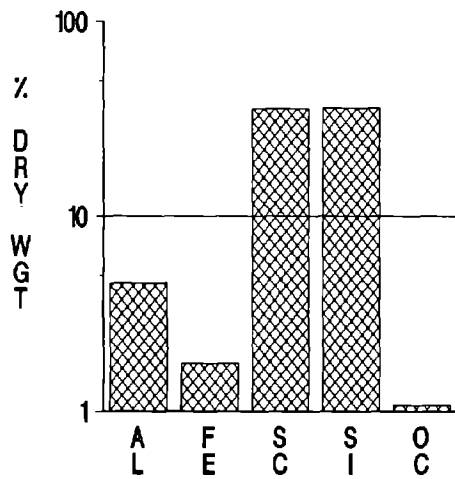
STOMACH PAHs



STOMACH METALS



SEDIMENT TEXTURE



LIVER METALS

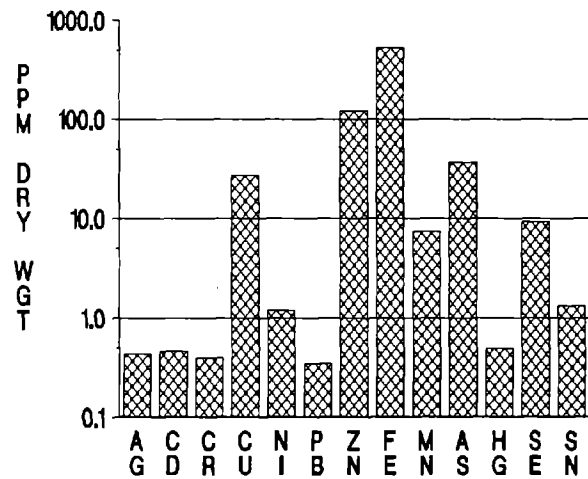
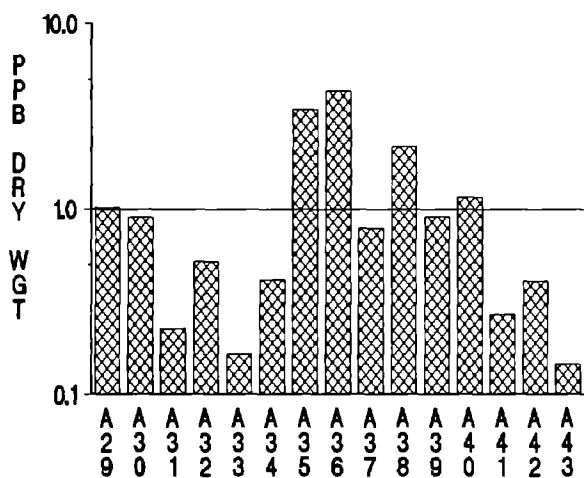
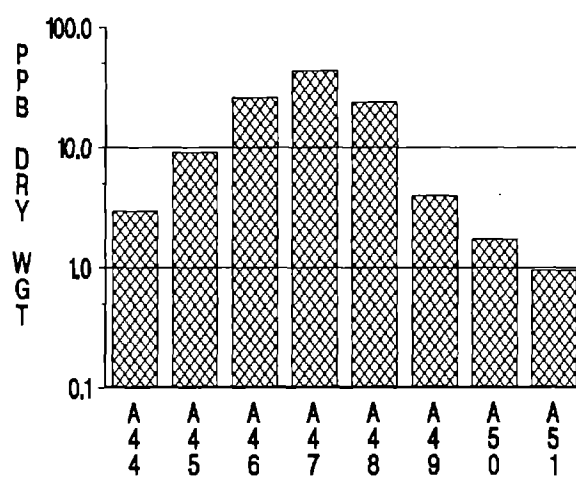


Figure 16a. Concentrations of analytes within sample matrices (sediment PAHs, sediment metals, stomach PAHs, stomach metals, sediment texture, liver metals) for Delaware Bay.

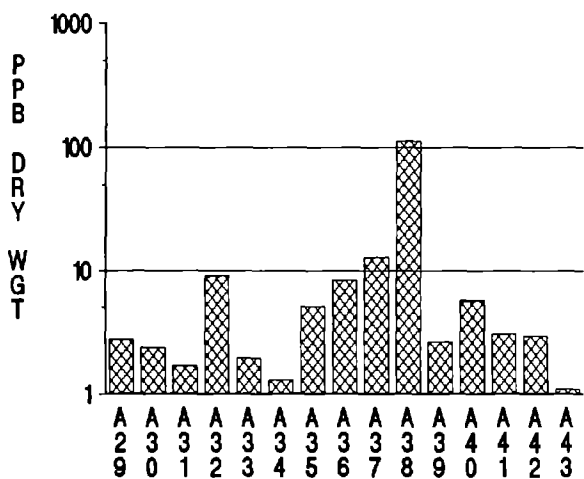
SEDIMENT PESTICIDES



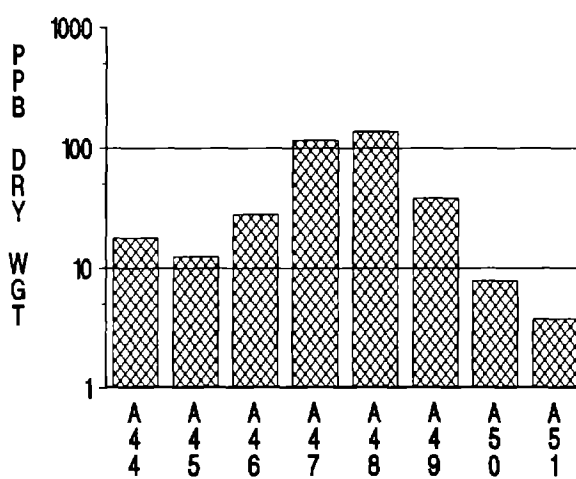
SEDIMENT PCBs



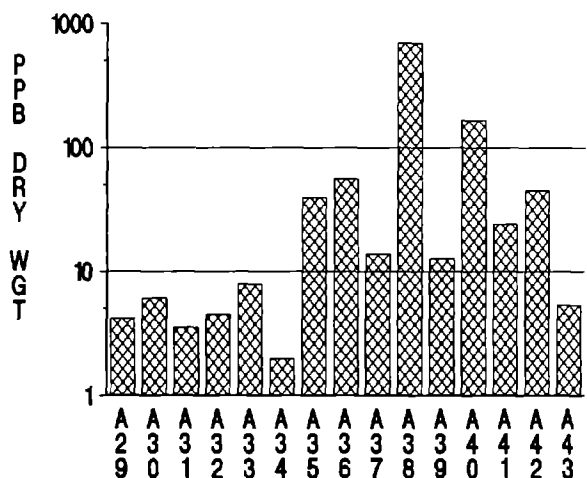
STOMACH PESTICIDES



STOMACH PCBs



LIVER PESTICIDES



LIVER PCBs

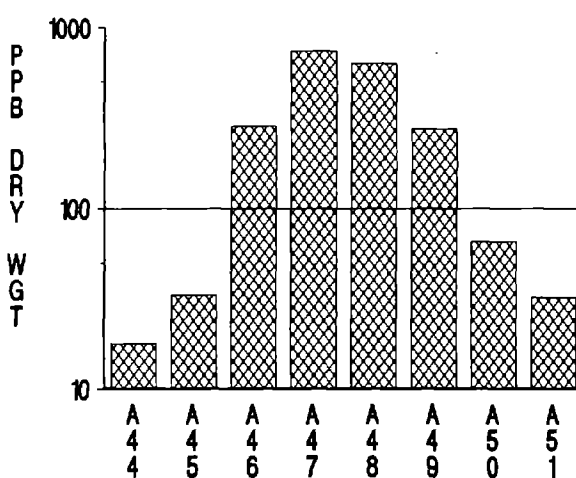
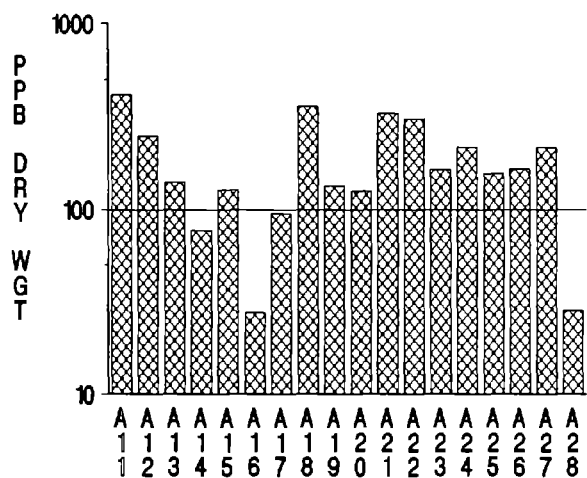
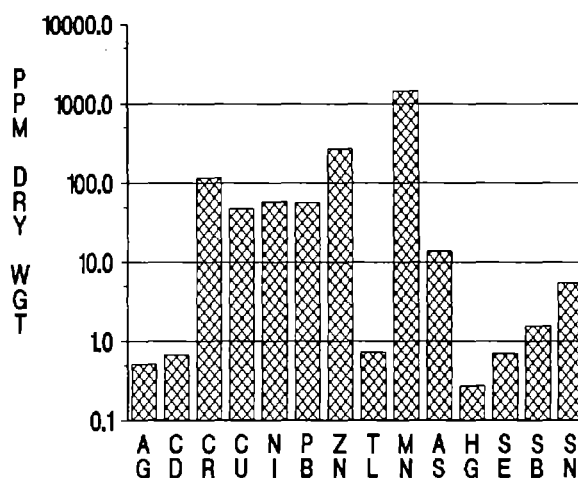


Figure 16b. Concentrations of analytes within sample matrices (sediment pesticides, sediment PCBs, stomach pesticides, stomach PCBs, liver pesticides, liver PCBs) for Delaware Bay.

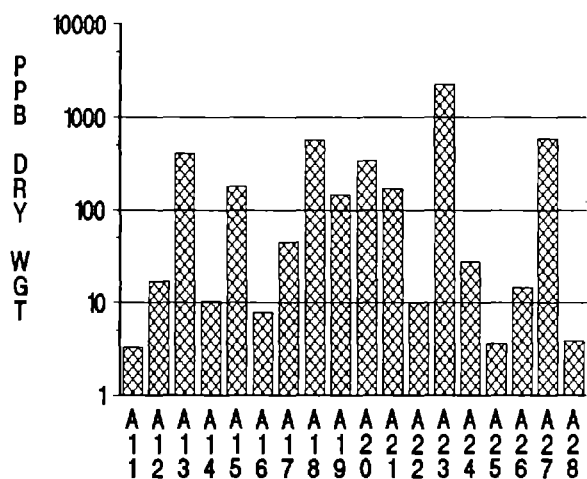
SEDIMENT PAHs



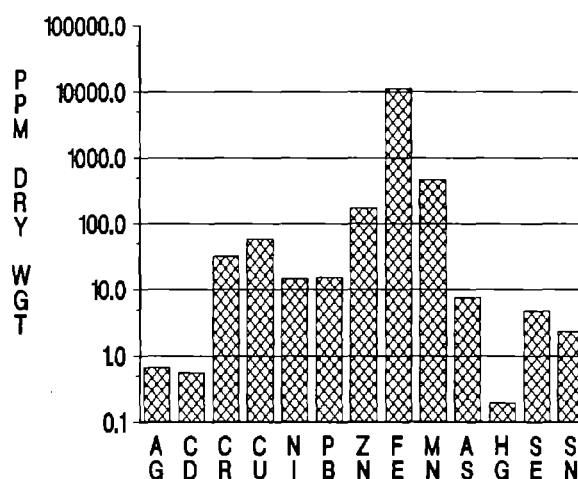
SEDIMENT METALS



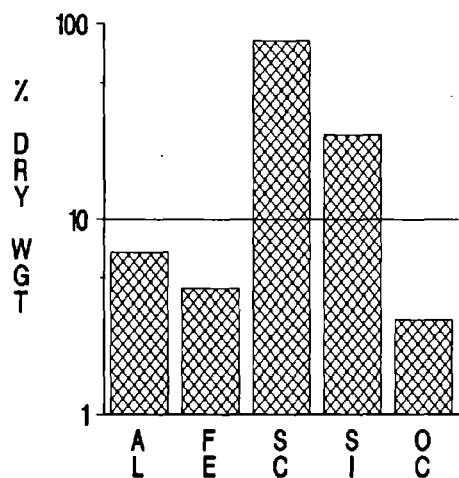
STOMACH PAHs



STOMACH METALS



SEDIMENT TEXTURE



LIVER METALS

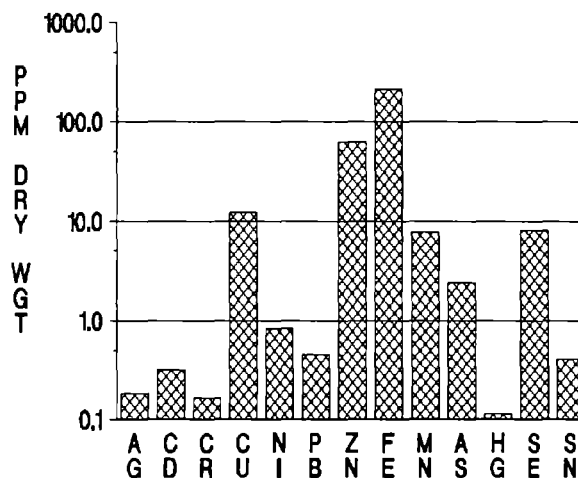
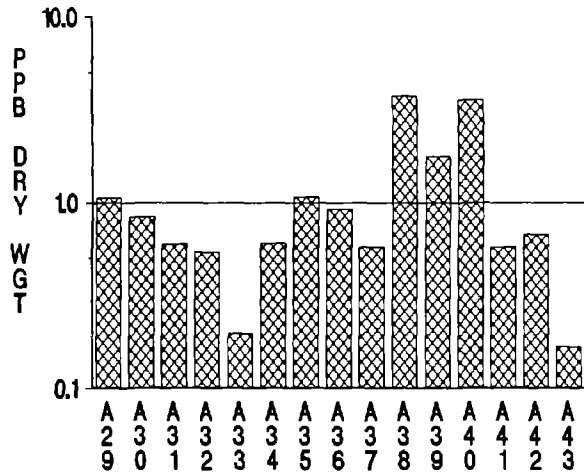
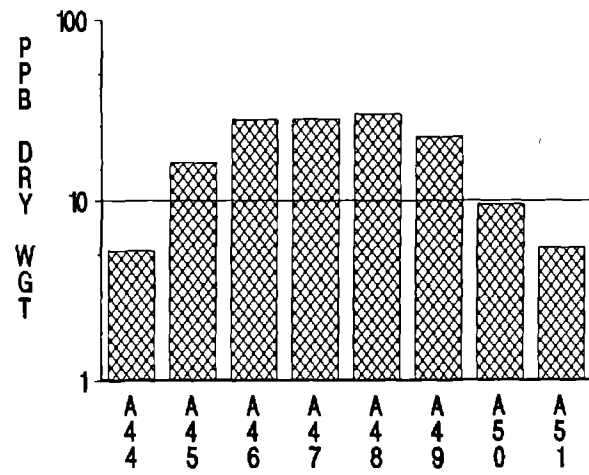


Figure 17a. Concentrations of analytes within sample matrices (sediment PAHs, sediment metals, stomach PAHs, stomach metals, sediment texture, liver metals) for Upper Chesapeake Bay.

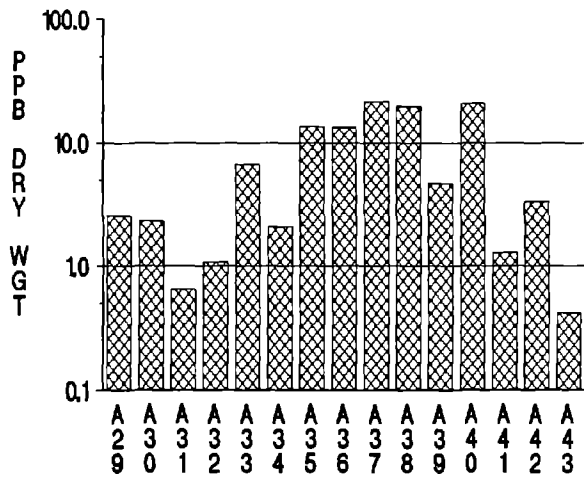
SEDIMENT PESTICIDES



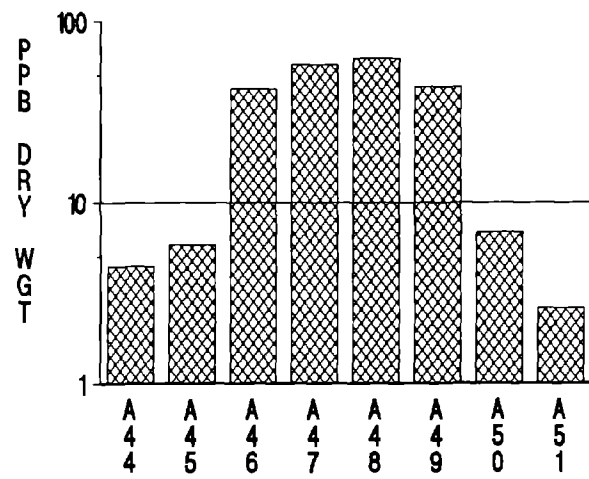
SEDIMENT PCBs



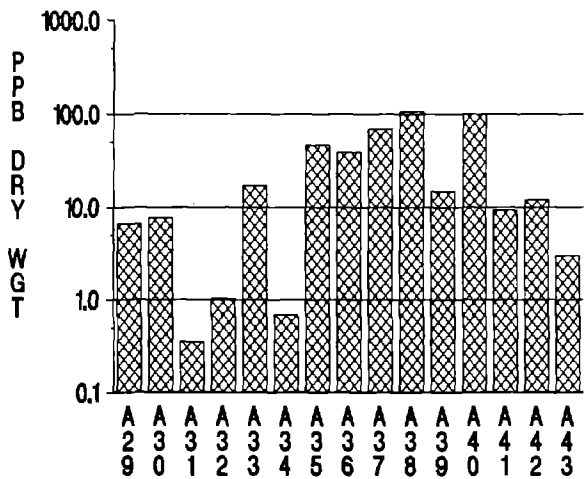
STOMACH PESTICIDES



STOMACH PCBs



LIVER PESTICIDES



LIVER PCBs

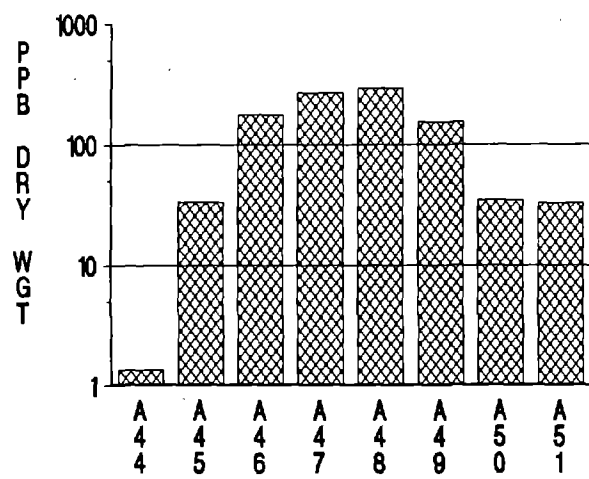
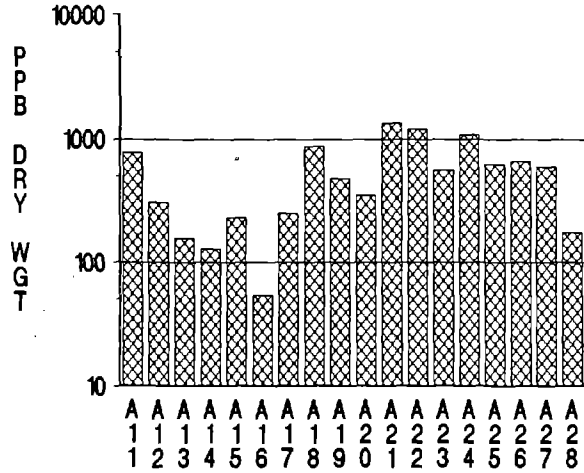
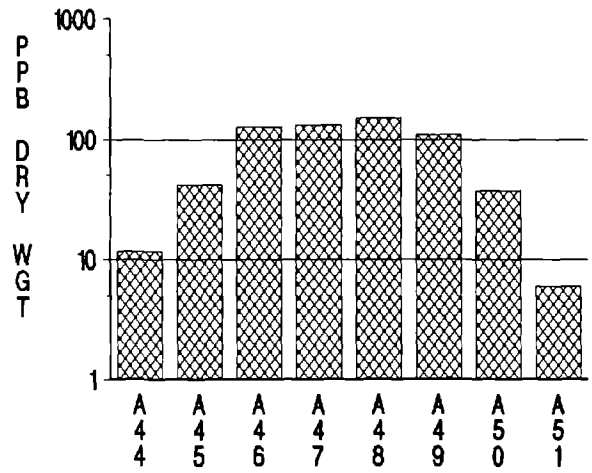


Figure 17b. Concentrations of analytes within sample matrices (sediment pesticides, sediment PCBs, stomach pesticides, stomach PCBs, liver pesticides, liver PCBs) for Upper Chesapeake Bay.

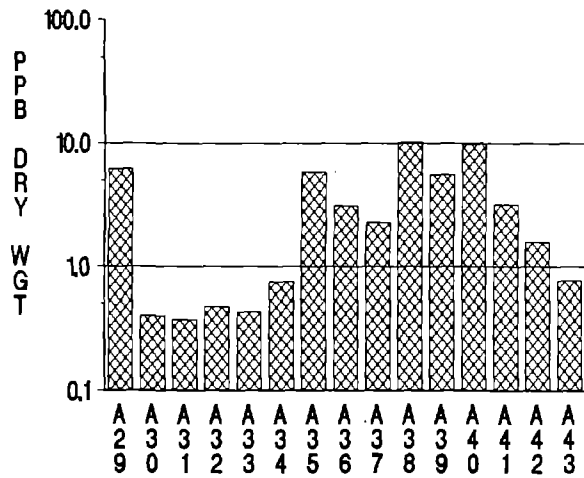
SEDIMENT PAHs



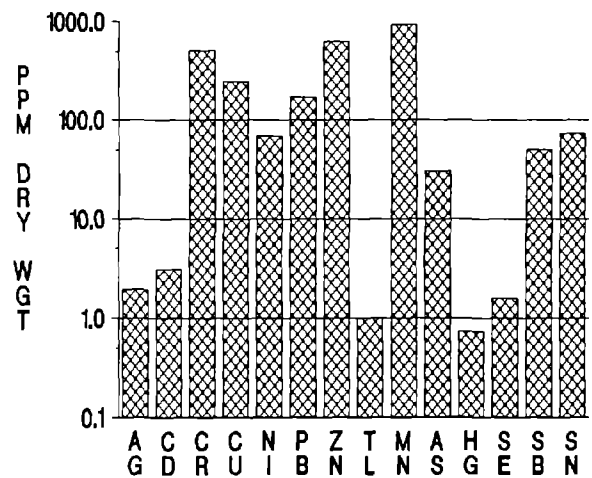
SEDIMENT PCBs



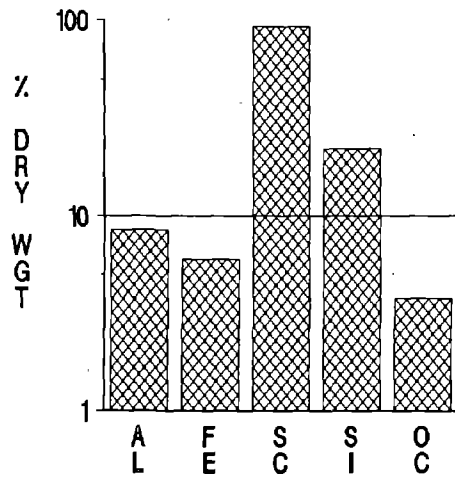
SEDIMENT PESTICIDES



SEDIMENT METALS



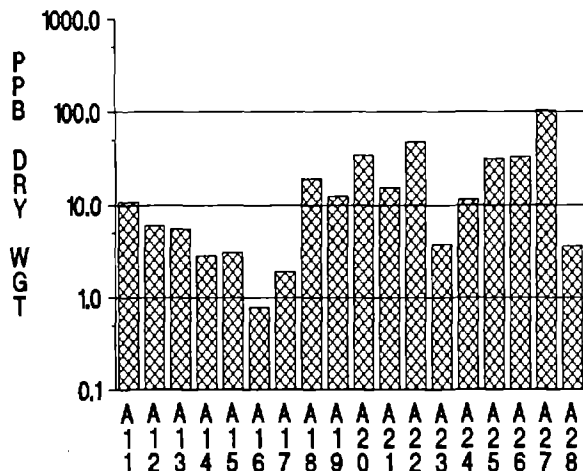
SEDIMENT TEXTURE



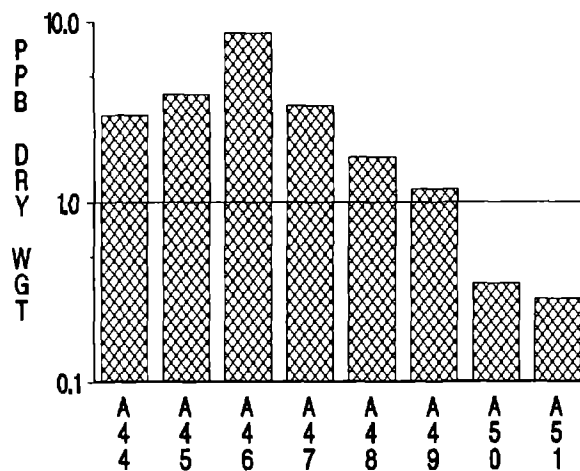
No fish specimens obtained

Figure 18. Concentrations of analytes within sample matrices (sediment PAHs, sediment metals, sediment texture, sediment pesticides, sediment PCBs) for Baltimore Harbor.

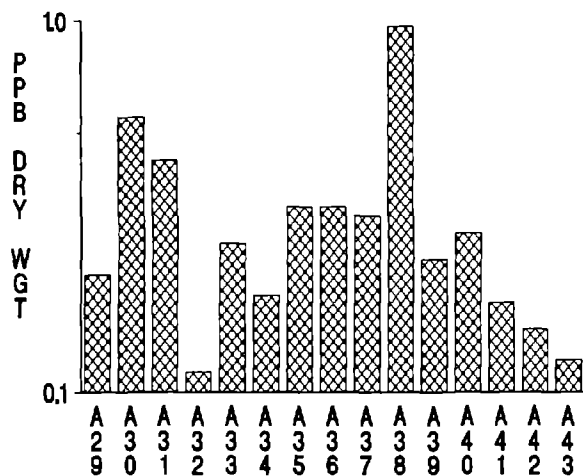
SEDIMENT PAHs



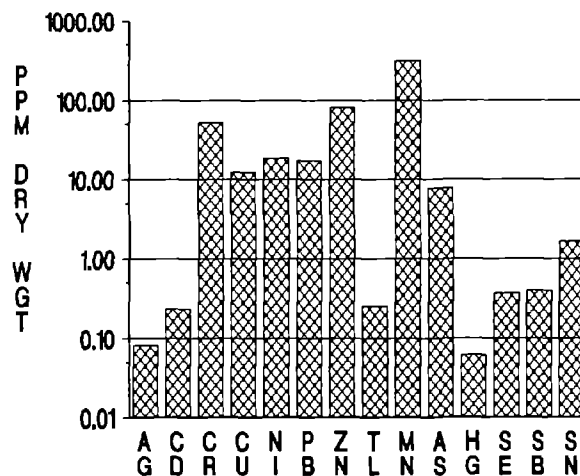
SEDIMENT PCBs



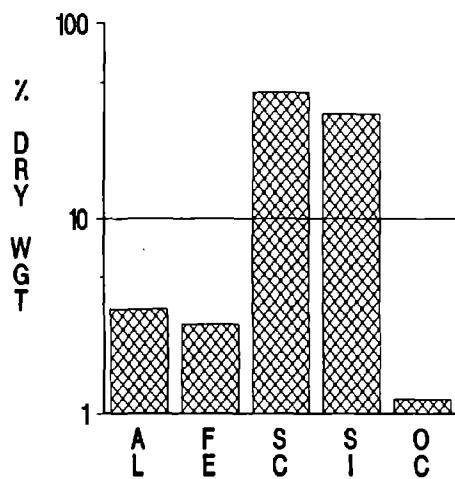
SEDIMENT PESTICIDES



SEDIMENT METALS



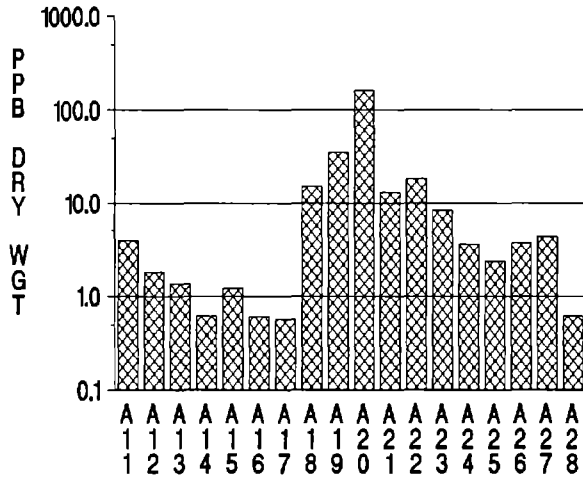
SEDIMENT TEXTURE



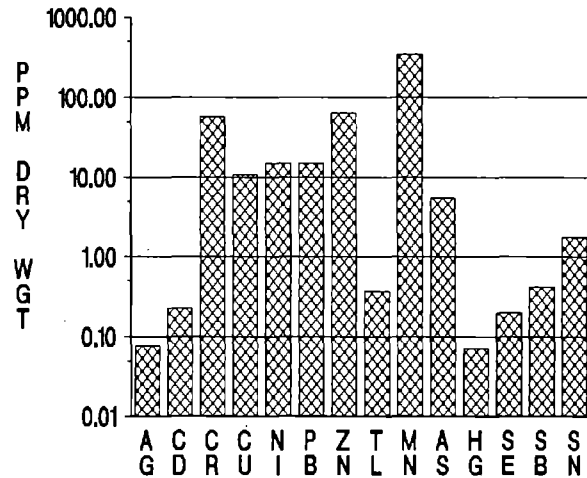
No fish specimens obtained

Figure 19. Concentrations of analytes within sample matrices (sediment PAHs, sediment metals, sediment texture, sediment pesticides, sediment PCBs) for Mid Chesapeake Bay.

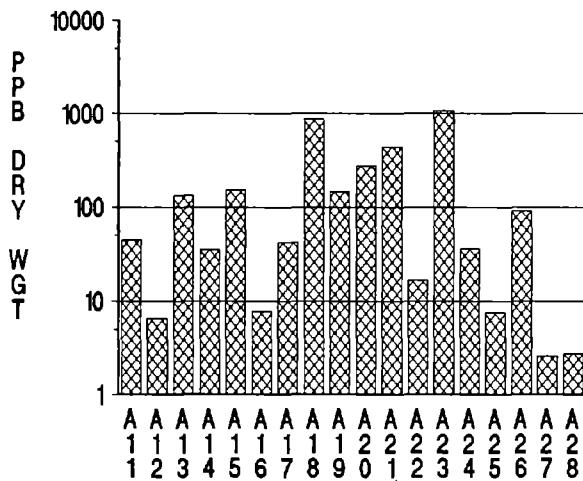
SEDIMENT PAHs



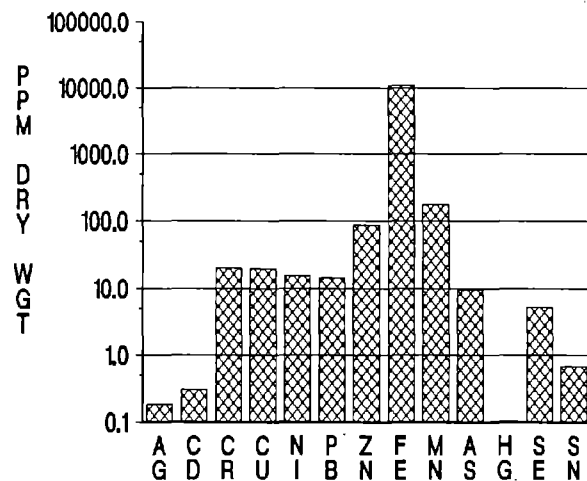
SEDIMENT METALS



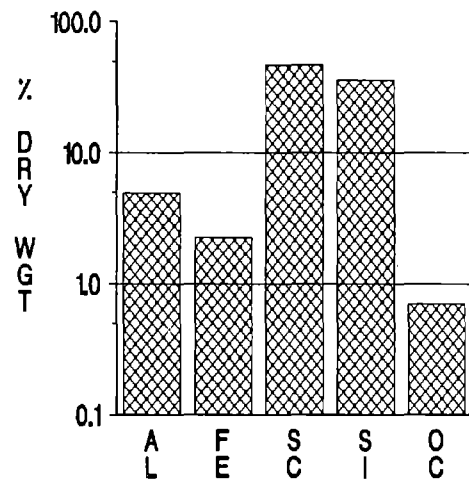
STOMACH PAHs



STOMACH METALS



SEDIMENT TEXTURE



LIVER METALS

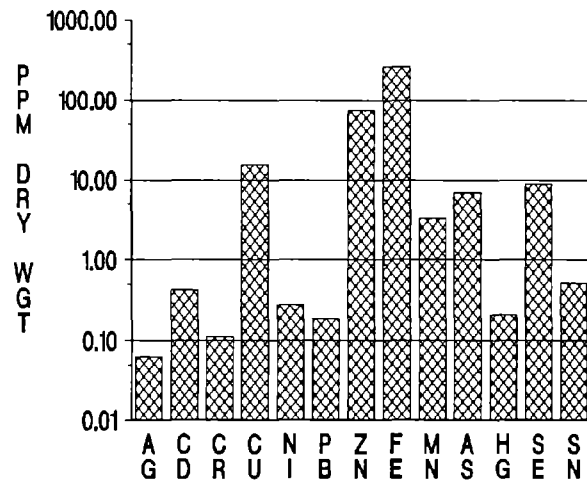
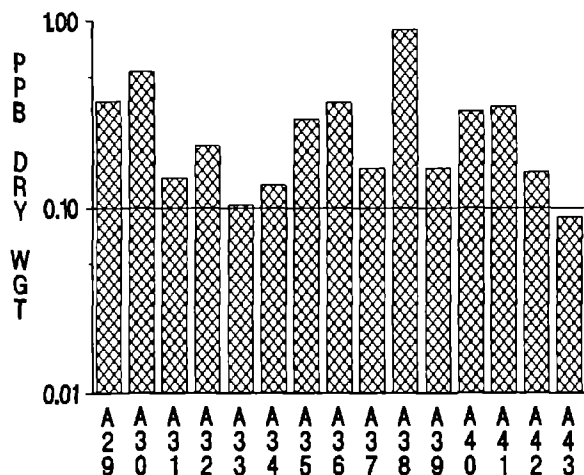
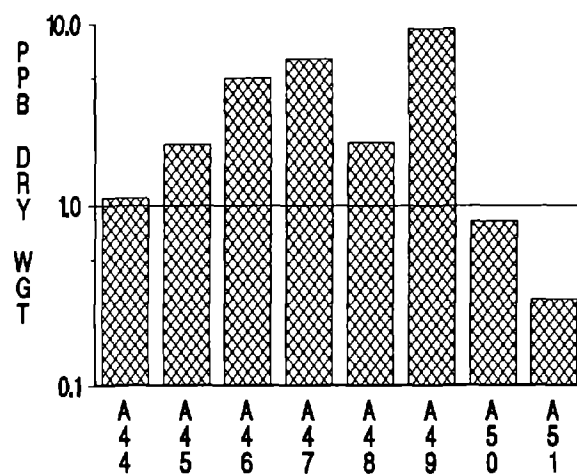


Figure 20a. Concentrations of analytes within sample matrices (sediment PAHs, sediment metals, stomach PAHs, stomach metals, sediment texture, liver metals) for Lower Chesapeake Bay.

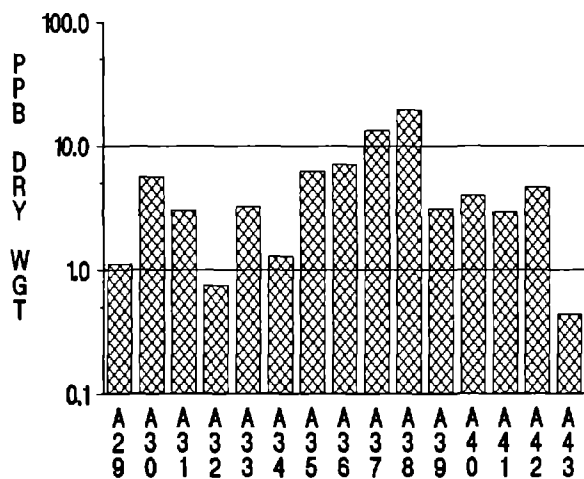
SEDIMENT PESTICIDES



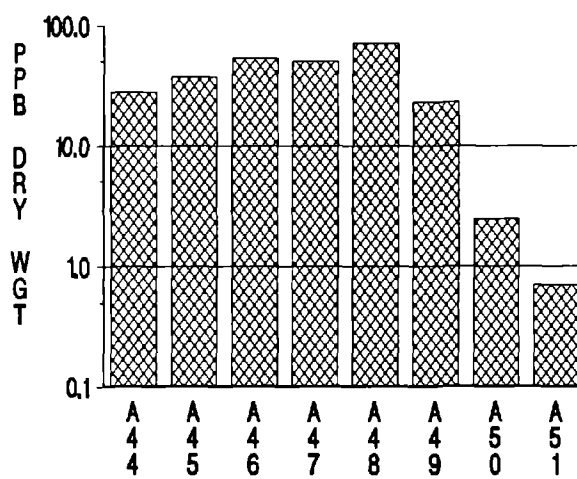
SEDIMENT PCBs



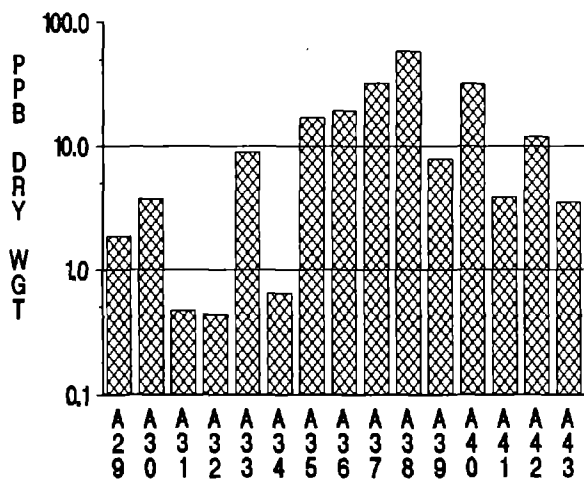
STOMACH PESTICIDES



STOMACH PCBs



LIVER PESTICIDES



LIVER PCBs

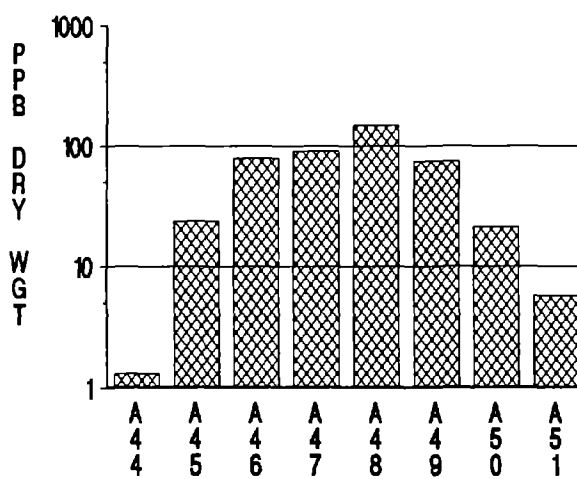
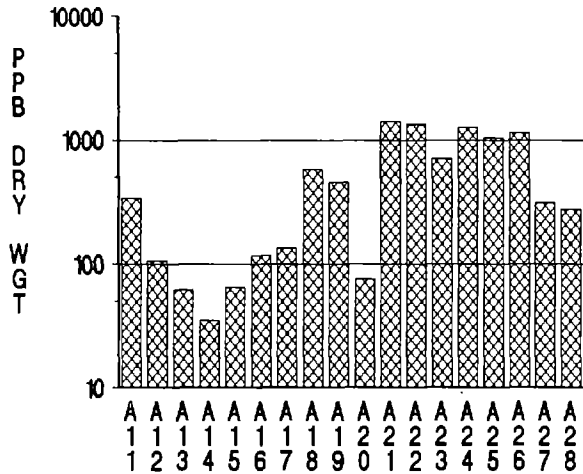
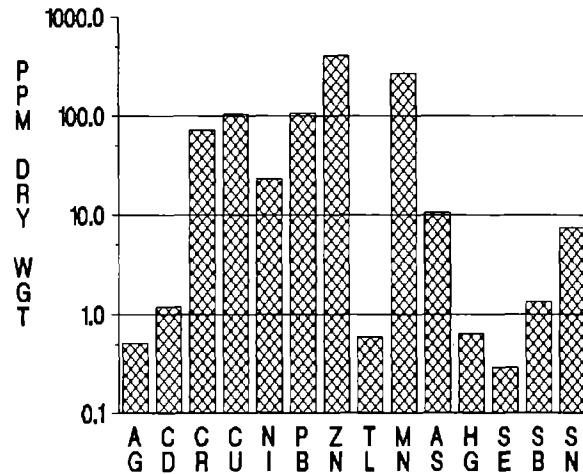


Figure 20b. Concentrations of analytes within sample matrices (sediment pesticides, sediment PCBs, stomach pesticides, stomach PCBs, liver pesticides, liver PCBs) for Lower Chesapeake Bay.

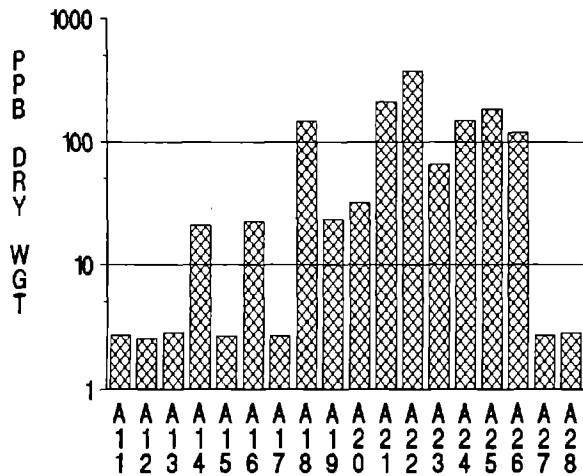
SEDIMENT PAHs



SEDIMENT METALS

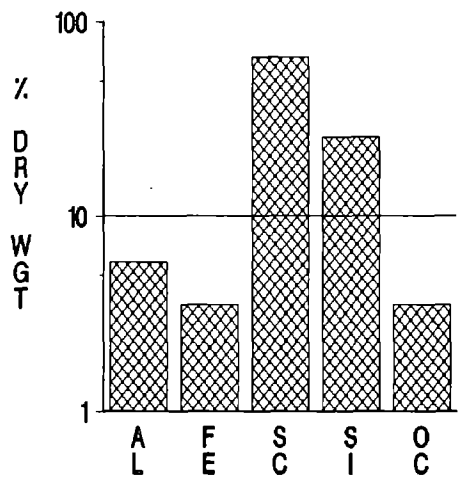


STOMACH PAHs



Metals in stomach contents
not measured in
1986 specimens

SEDIMENT TEXTURE



LIVER METALS

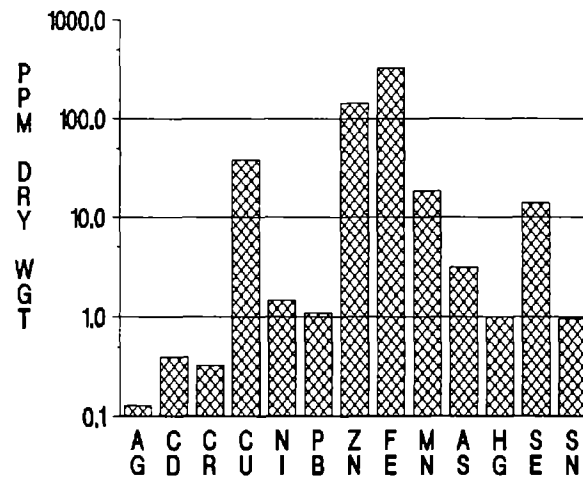
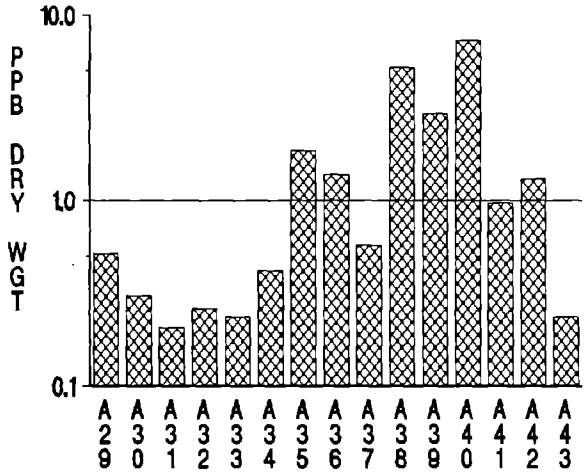
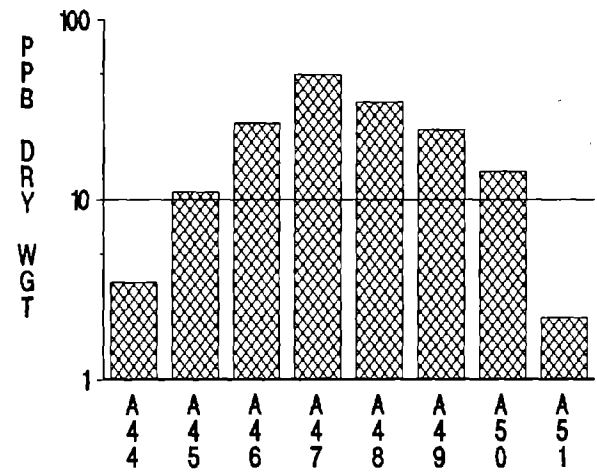


Figure 21a. Concentrations of analytes within sample matrices (sediment PAHs, sediment metals, stomach PAHs, stomach metals, sediment texture, liver metals) for the Elizabeth River.

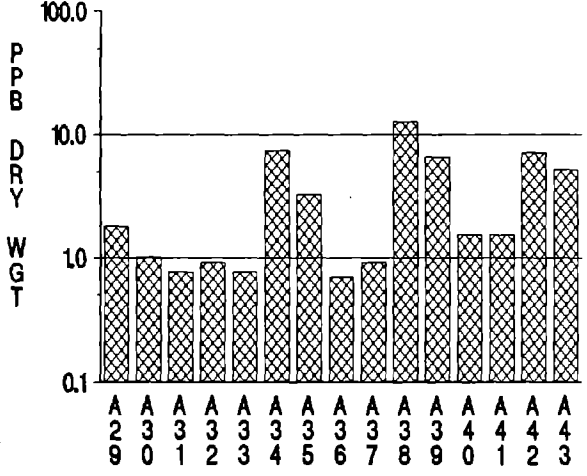
SEDIMENT PESTICIDES



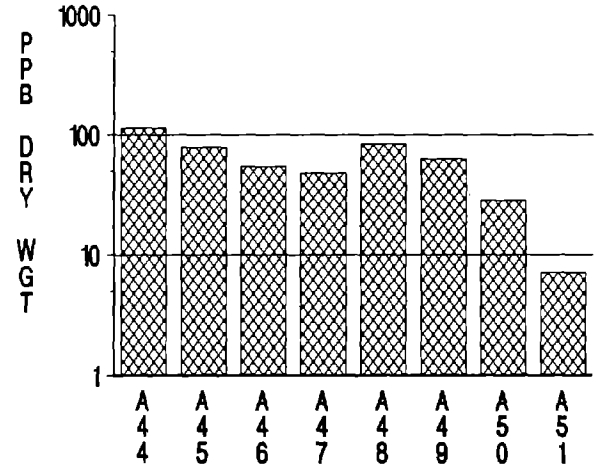
SEDIMENT PCBs



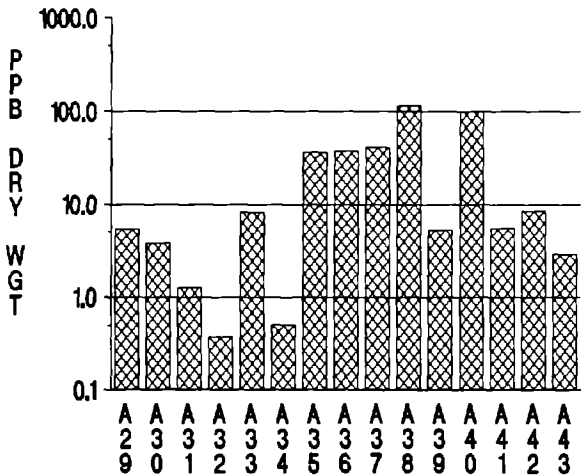
STOMACH PESTICIDES



STOMACH PCBs



LIVER PESTICIDES



LIVER PCBs

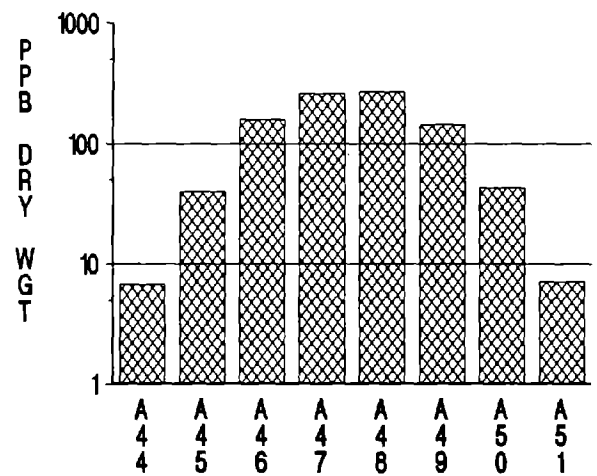
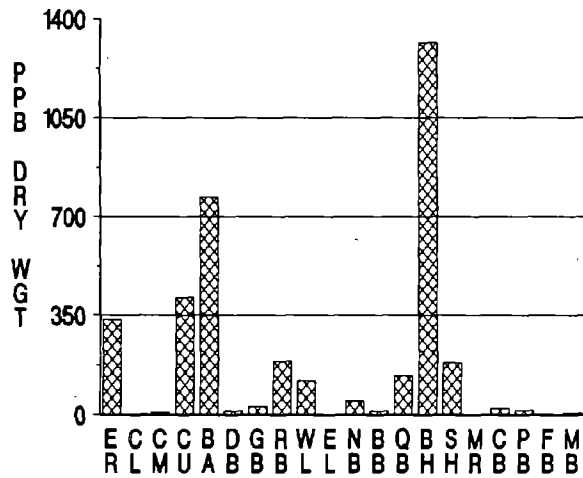
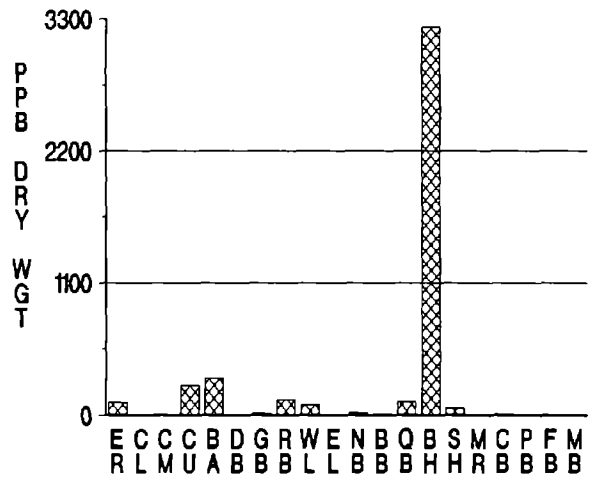


Figure 21b. Concentrations of analytes within sample matrices (sediment pesticides, sediment PCBs, stomach pesticides, stomach PCBs, liver pesticides, liver PCBs) for the Elizabeth River.

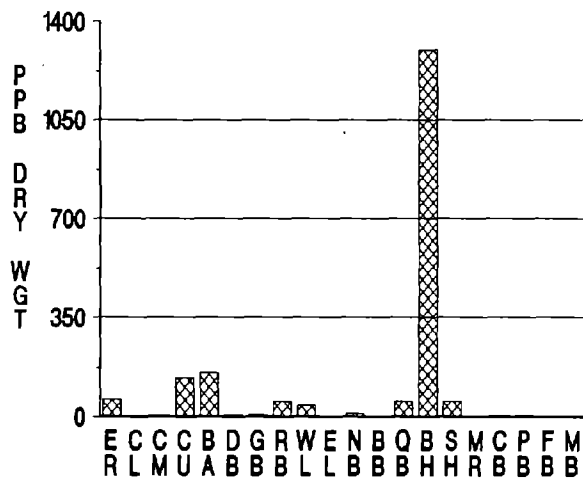
NAPHTHALENE



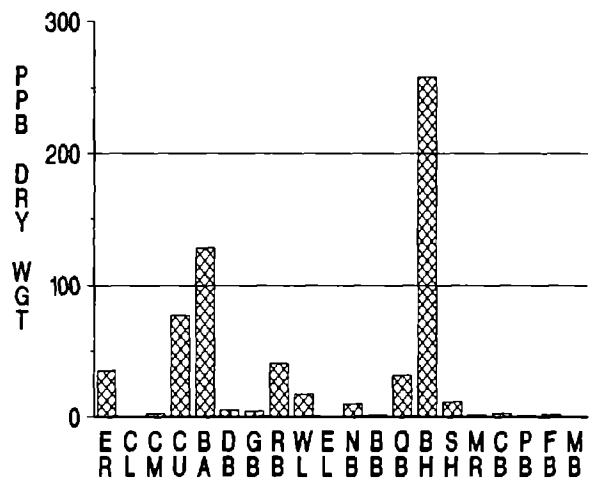
2 - METHYLNAPHTHALENE



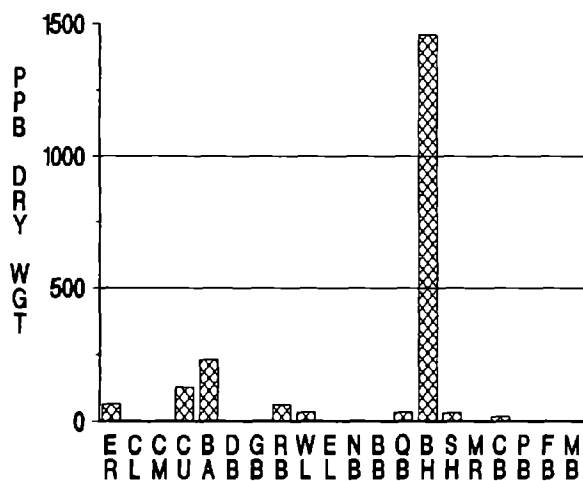
1 - METHYLNAPHTHALENE



BIPHENYL



2, 6 - DIMETHYLNAPHTHALENE



ACENAPHTHENE

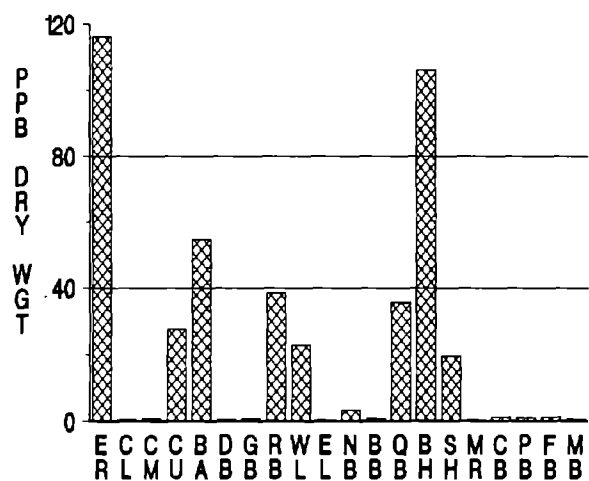
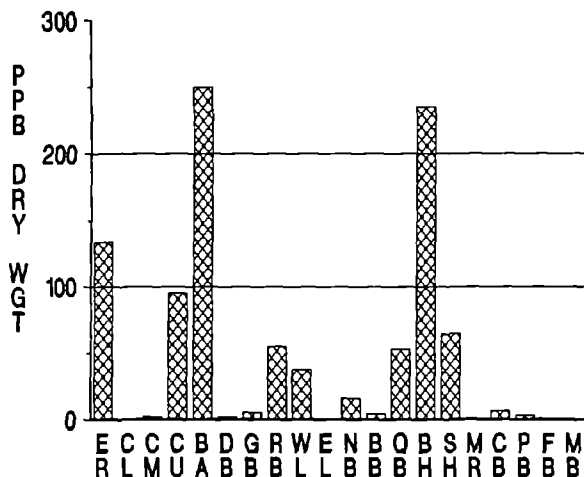
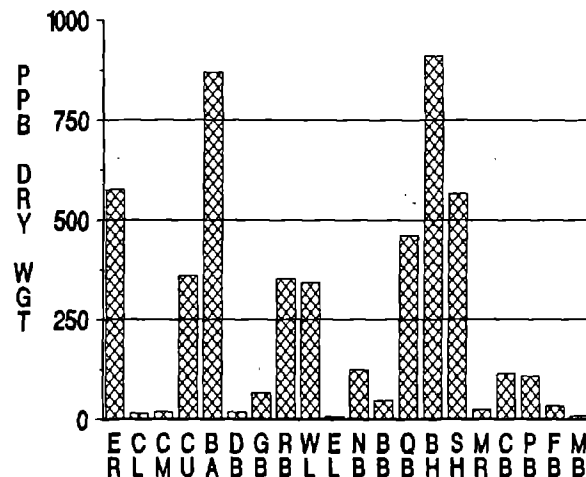


Figure 22a. Concentrations of hydrocarbons (naphthalene, 2-methylnaphthalene, 1-methylnaphthalene, biphenyl, 2,6-dimethylnaphthalene, acenaphthene) in sediments from all sites.

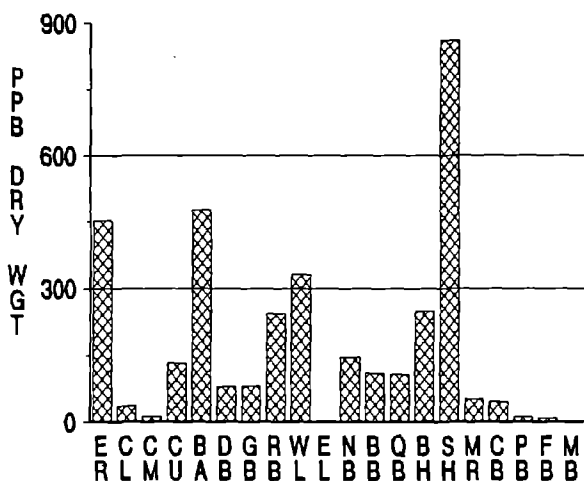
FLUORENE



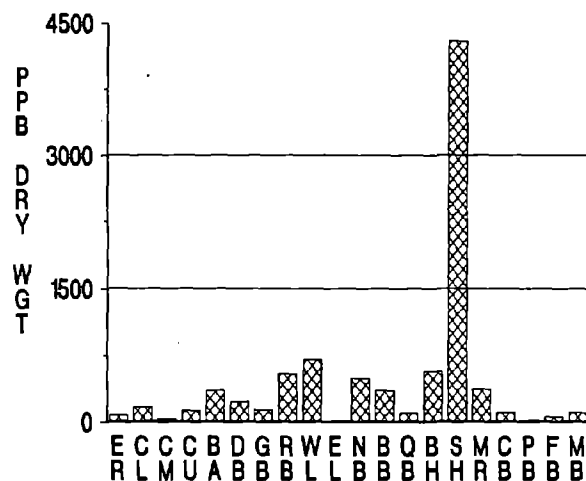
PHENANTHRENE



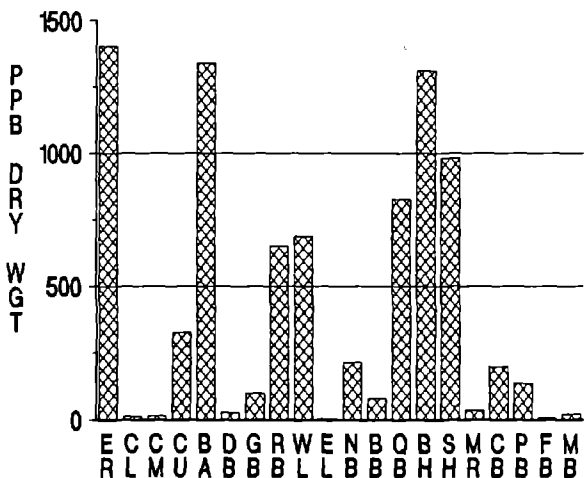
ANTHRACENE



1-METHYLPHENANTHRENE



FLUORANTHRENE



PYRENE

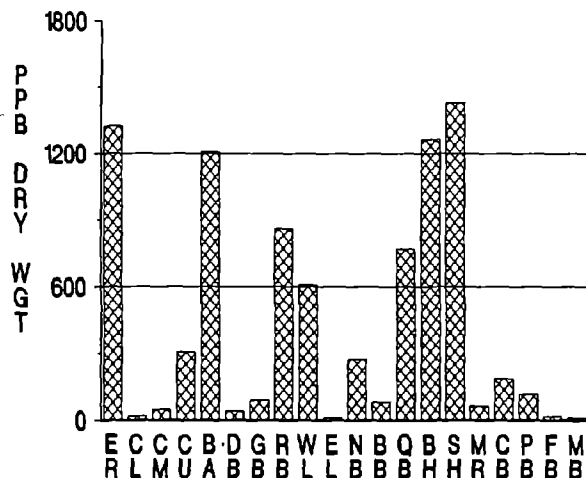
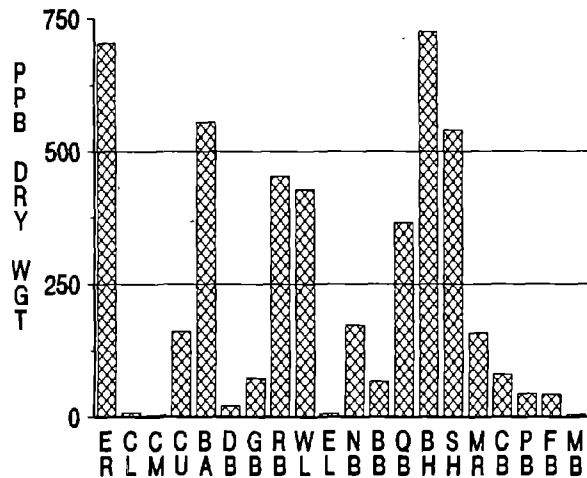
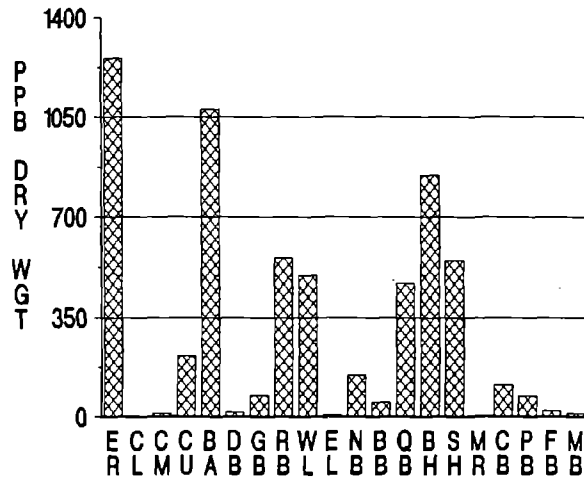


Figure 22b. Concentrations of hydrocarbons (fluorene, phenanthrene, anthracene, 1-methylphenanthrene, fluoranthene, pyrene) in sediments from all sites.

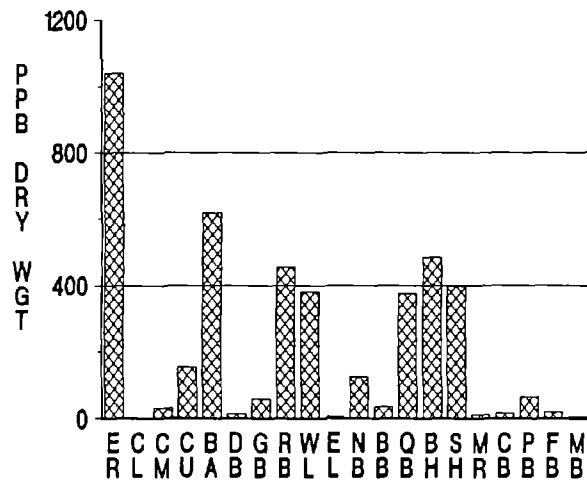
BENZO [a] ANTHRACENE



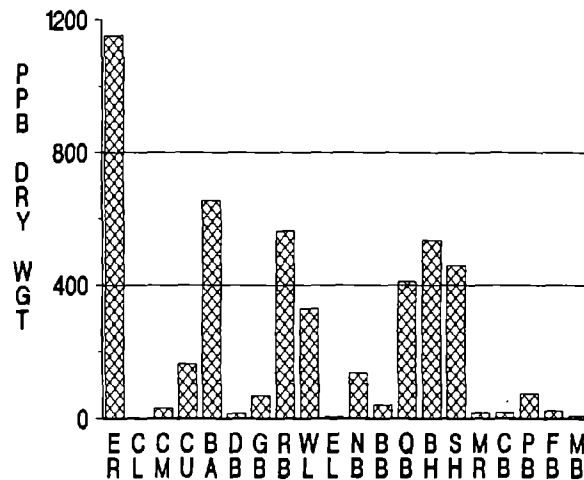
CHRYSENE



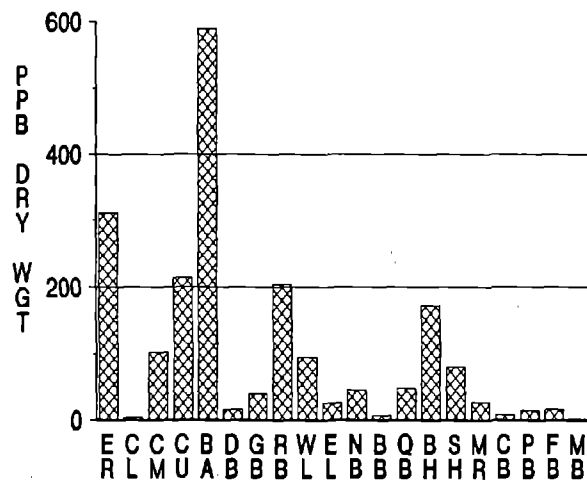
BENZO [e] PYRENE



BENZO [a] PYRENE



PERYLENE



DIBENZO [a, h] ANTHRACENE

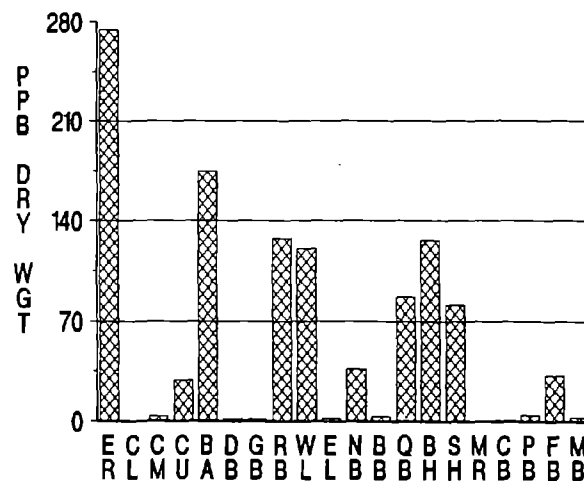
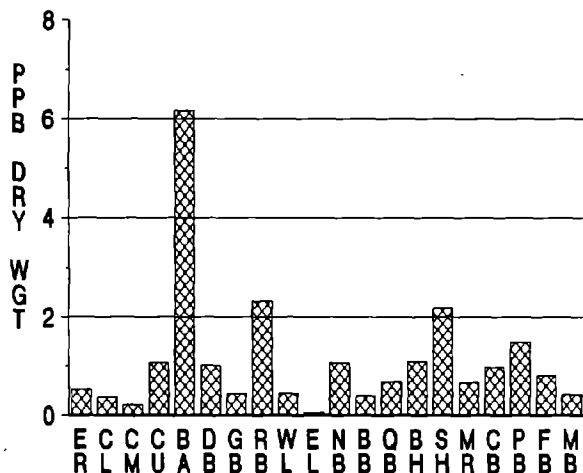
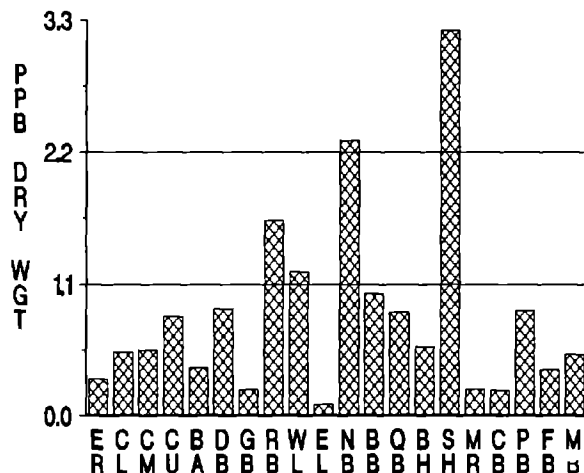


Figure 22c. Concentrations of hydrocarbons (benzo[a]anthracene, chrysene, benzo[e]pyrene, benzo[a]pyrene, perylene, dibenz[a,h]anthracene) in sediments from all sites.

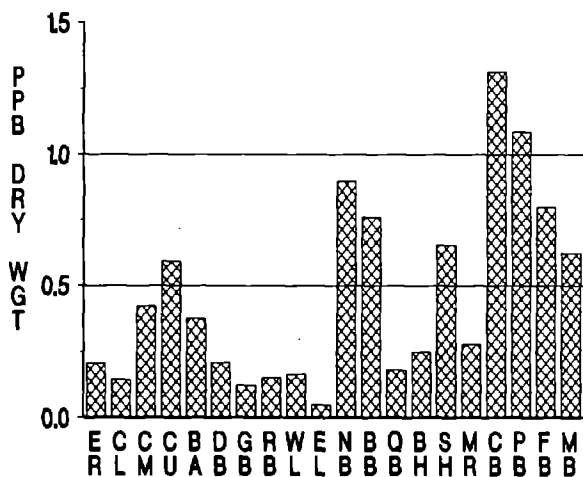
HEXACHLOROBENZENE



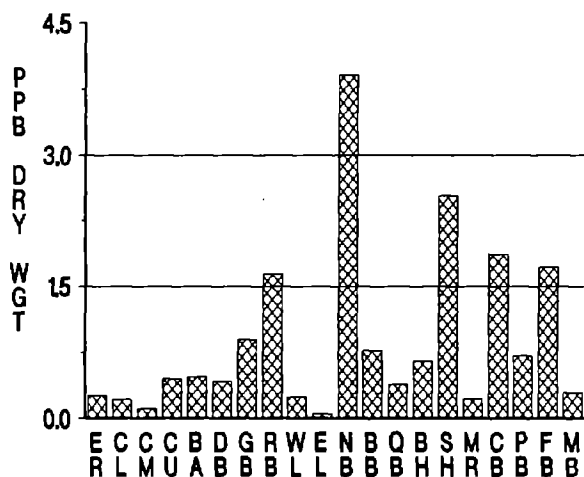
LINDANE



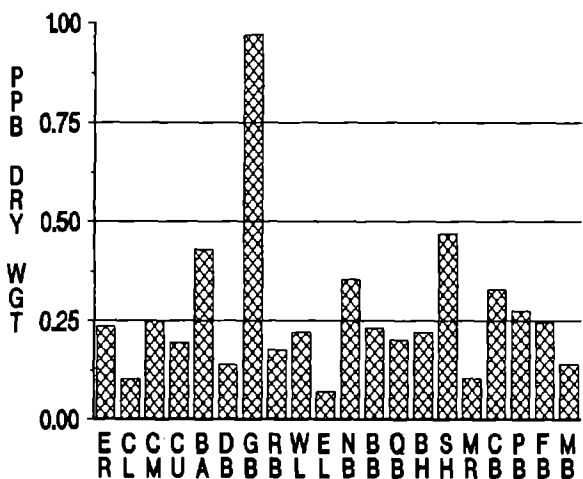
HEPTACHLOR



ALDRIN



HEPTACHLOR EPOXIDE



o,p'-DDE

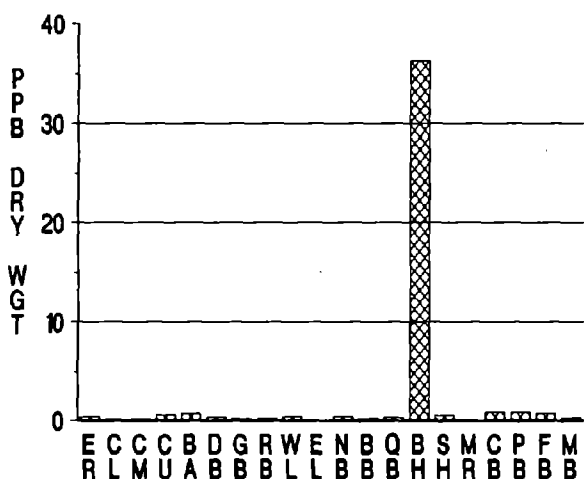
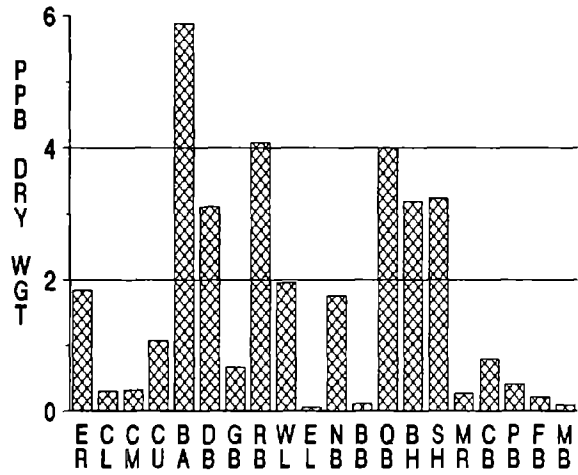
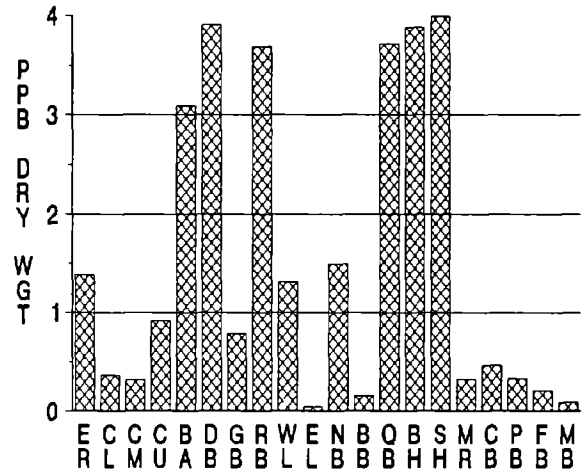


Figure 22d. Concentrations of hydrocarbons (hexachlorobenzene, lindane, heptachlor, aldrin, heptachlor epoxide, o,p'-DDE) in sediments from all sites.

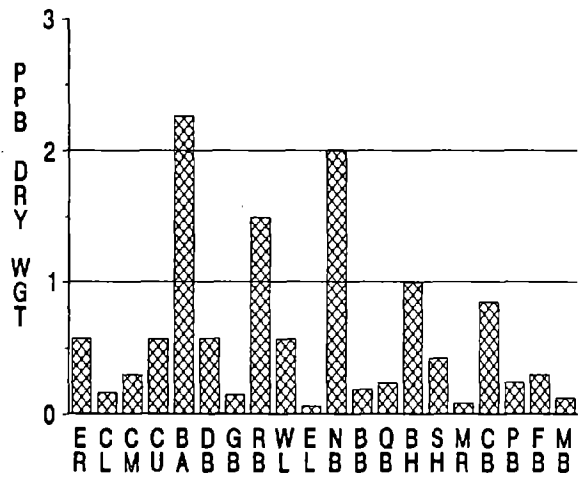
alpha - CHLORDANE



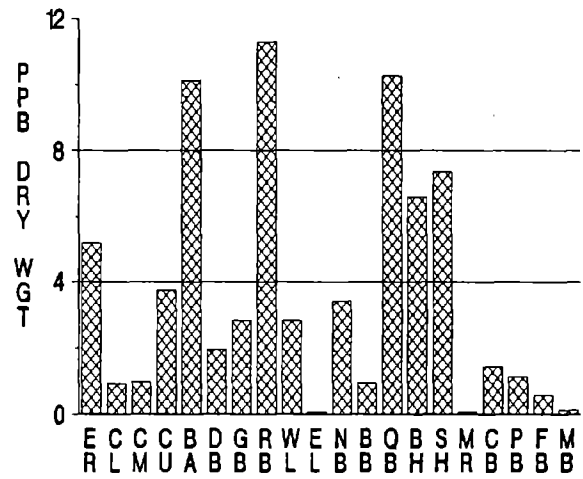
trans - NONACHLOR



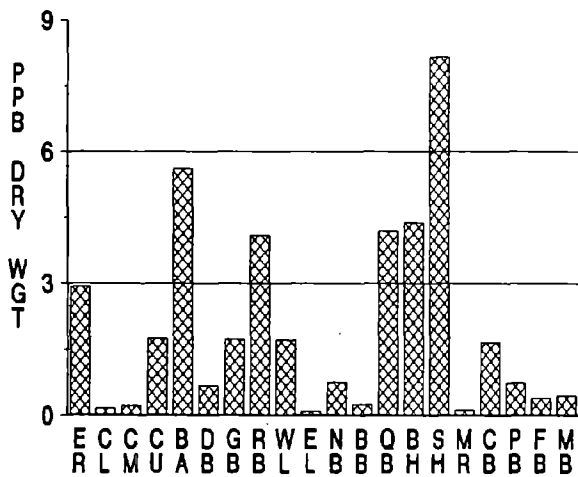
DIELDRIN



p, p' - DDE



o, p' - DDD



p, p' - DDD

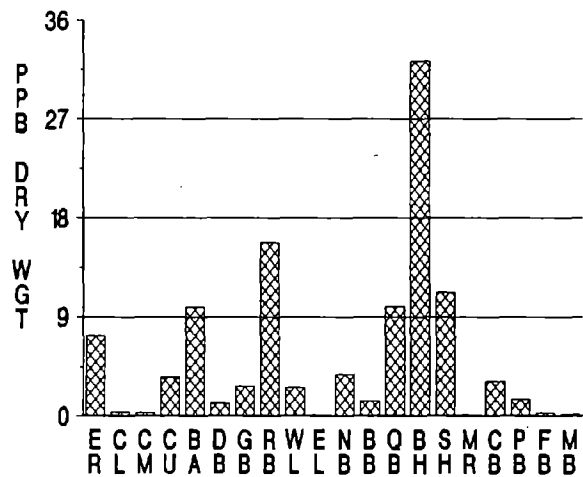


Figure 22e. Concentrations of hydrocarbons (α -chlordane, trans-nonachlor, dieldrin, p,p'-DDE, o,p'-DDD, p,p'-DDD) in sediments from all sites.

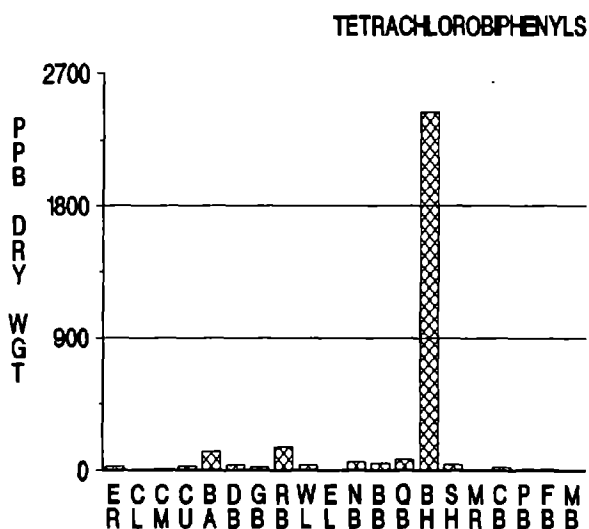
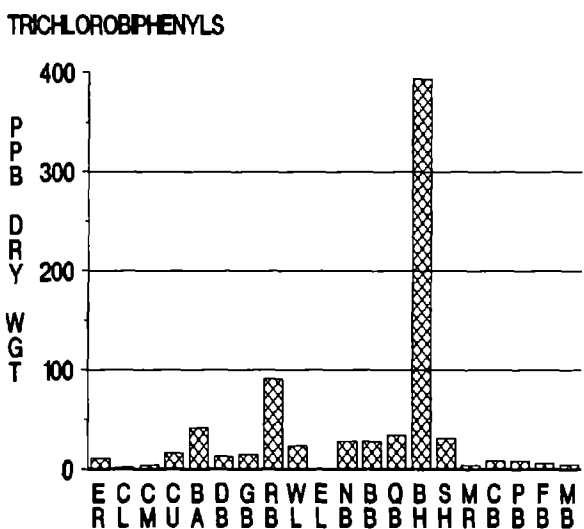
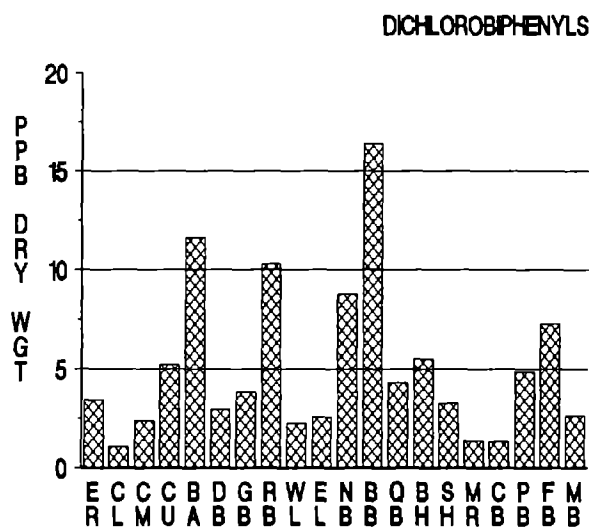
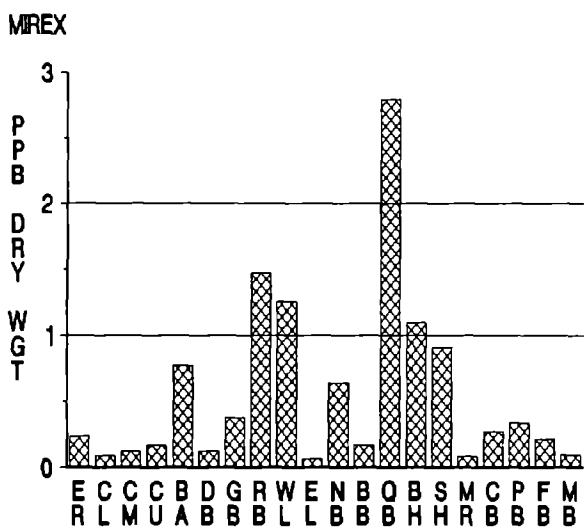
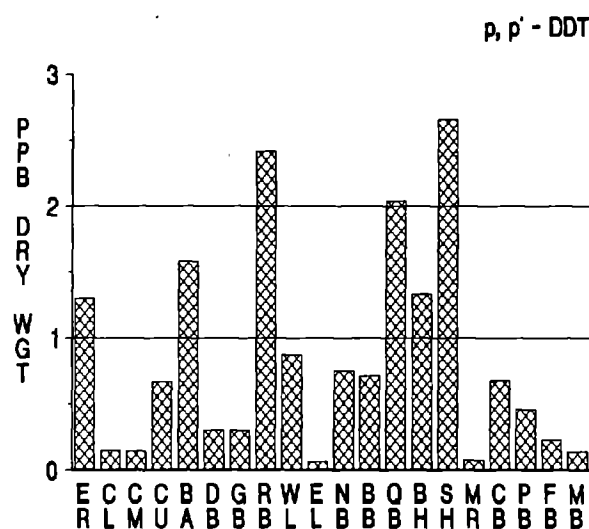
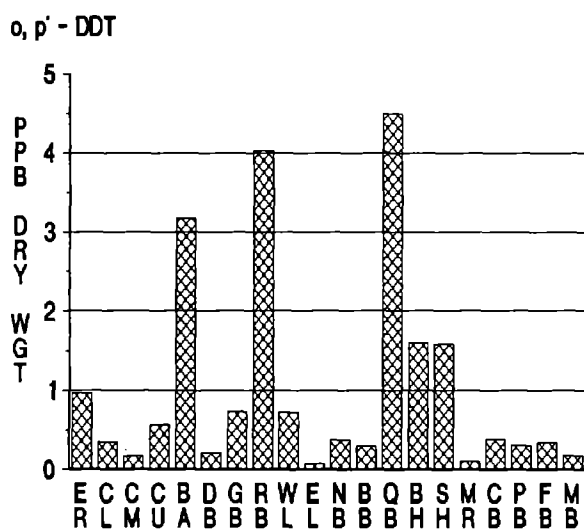
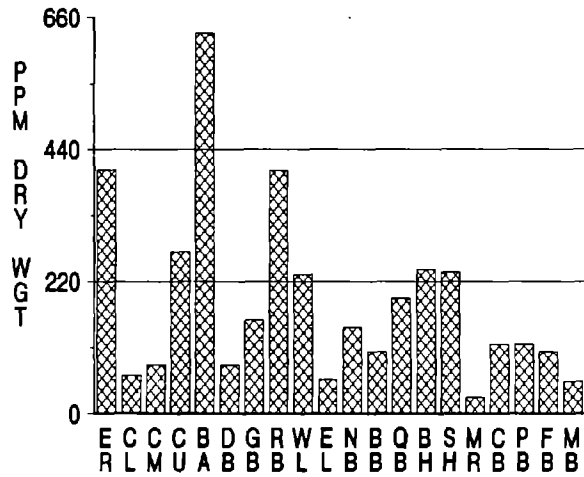
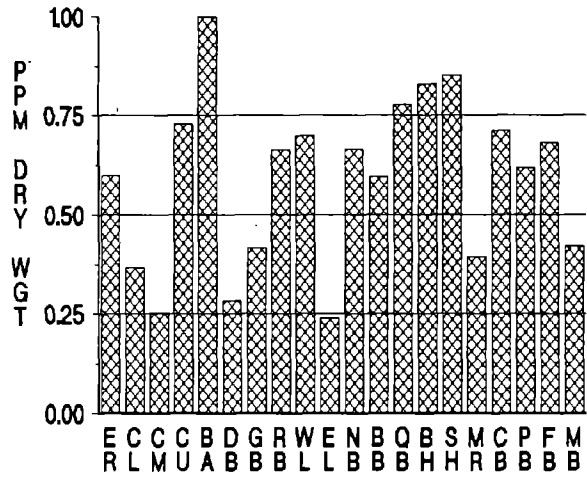


Figure 22f. Concentrations of hydrocarbons (o,p'-DDT, p,p'-DDT, mirex, dichlorobiphenyls, trichlorobiphenyls, tetrachlorobiphenyls) in sediments from all sites.

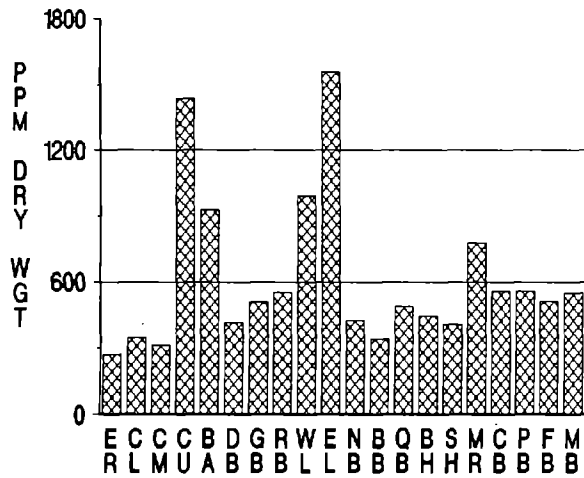
ZINC



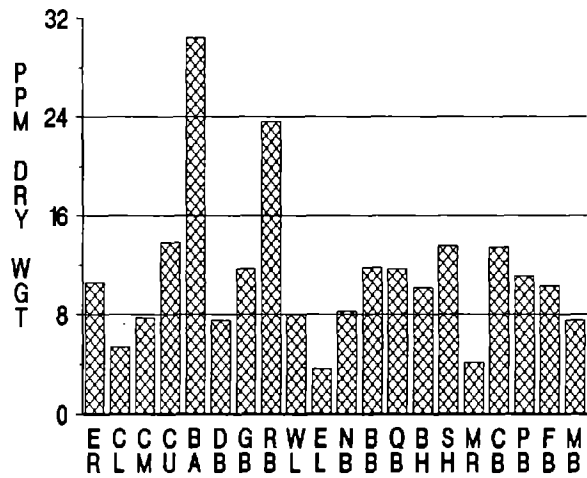
THALLIUM



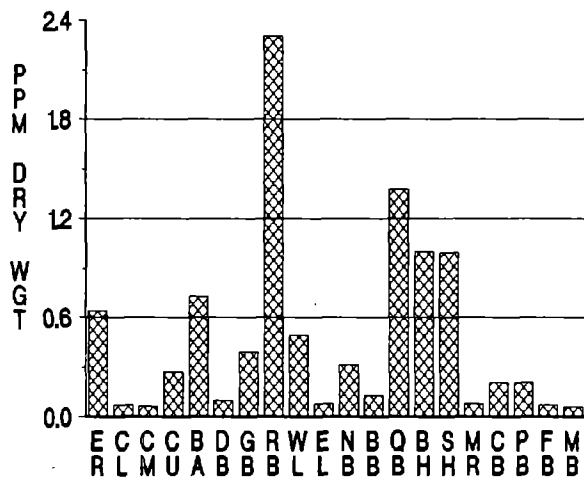
MANGANESE



ARSENIC



MERCURY



SELENIUM

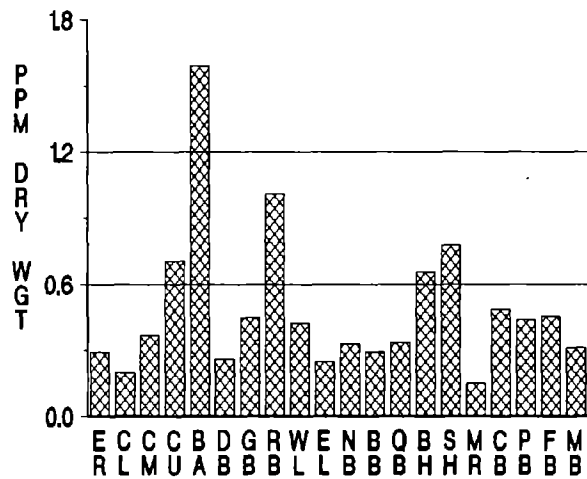
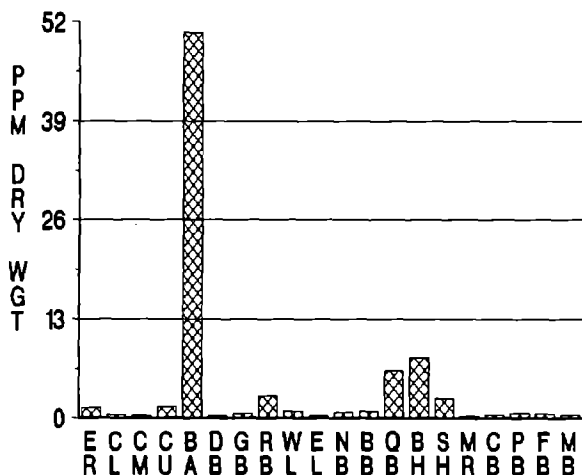
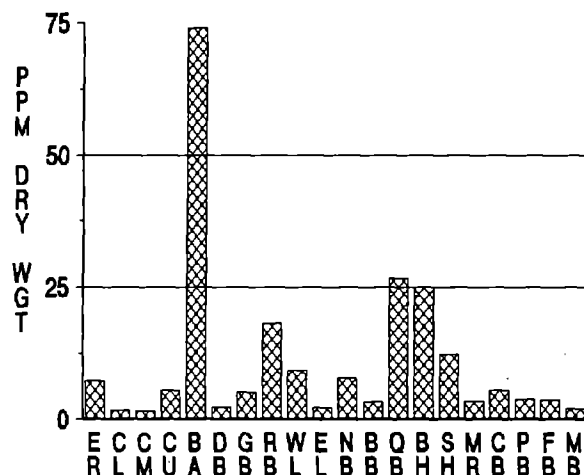


Figure 23b. Concentrations of metals (zinc, thallium, manganese, arsenic, mercury, selenium) in sediments from all sites.

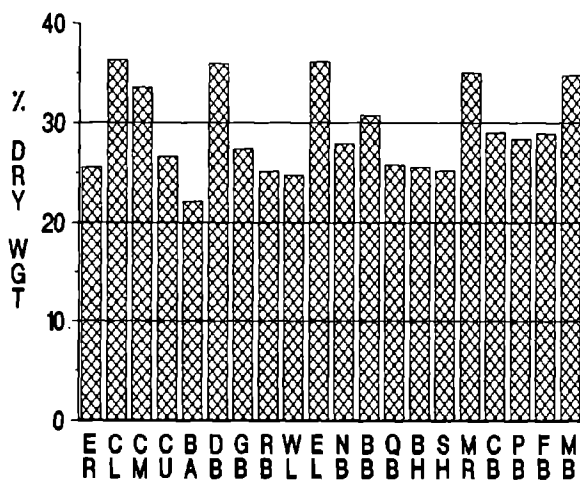
ANTIMONY



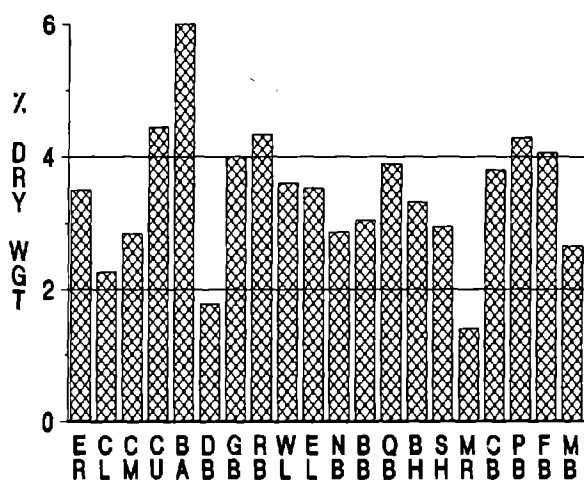
TN



SILICON



IRON



ALUMINUM

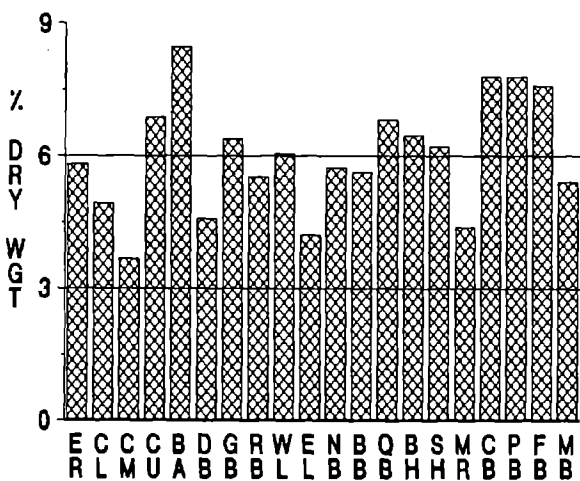
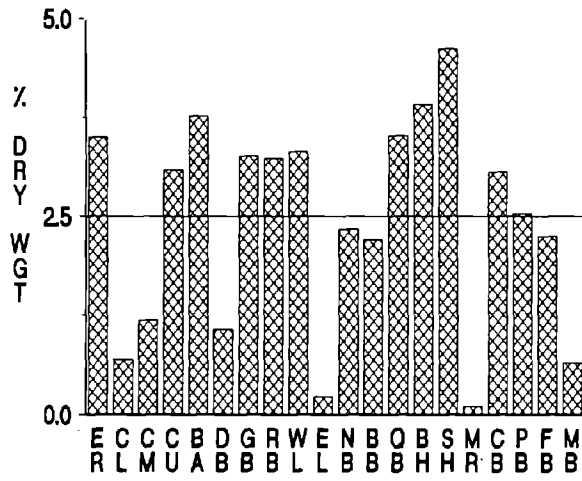


Figure 23c. Concentrations of metals (antimony, tin, silicon, iron, aluminum) in sediments from all sites.

TOTAL ORGANIC CARBON



SILT-CLAY

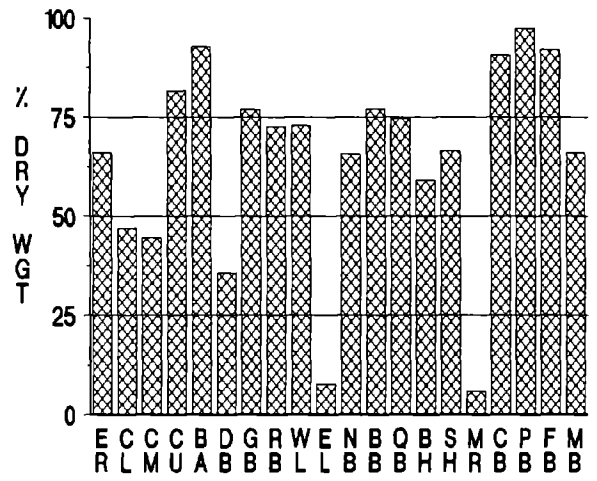
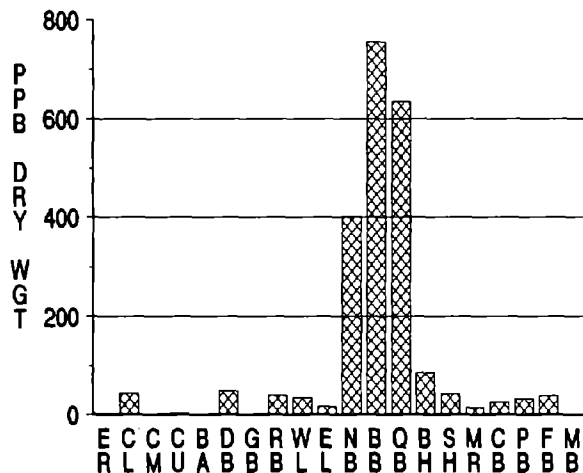
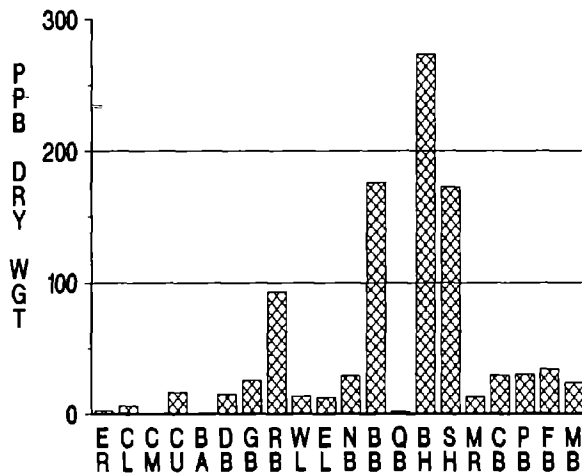


Figure 24. Concentrations of total organic carbon and silt-clay in sediments from all sites.

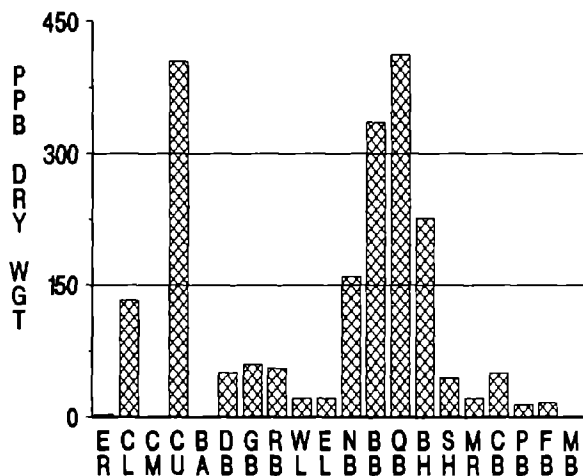
NAPHTHALENE



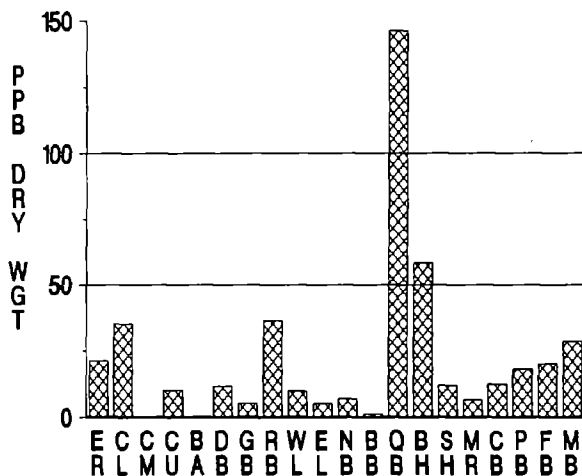
2 - METHYLNAPHTHALENE



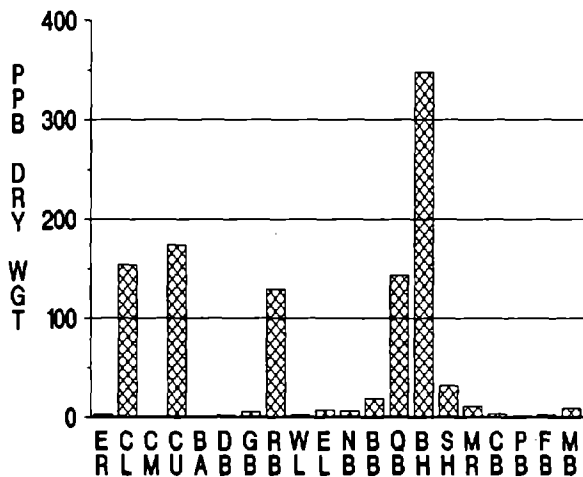
1 - METHYLNAPHTHALENE



BIPHENYL



2,6 - DIMETHYLNAPHTHALENE



ACENAPHTHENE

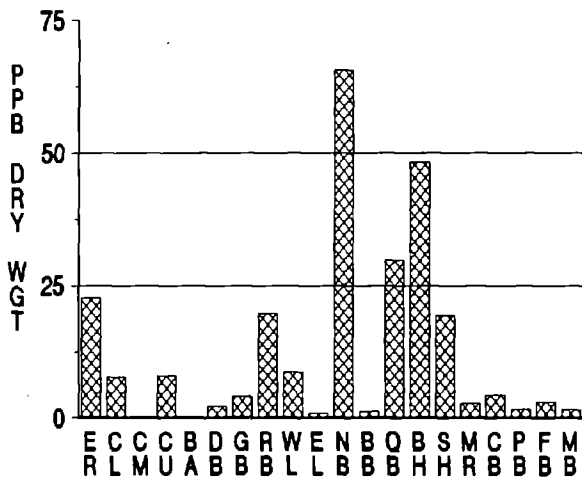
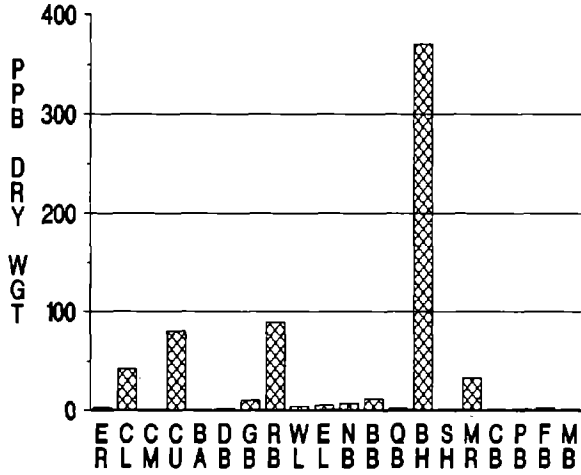
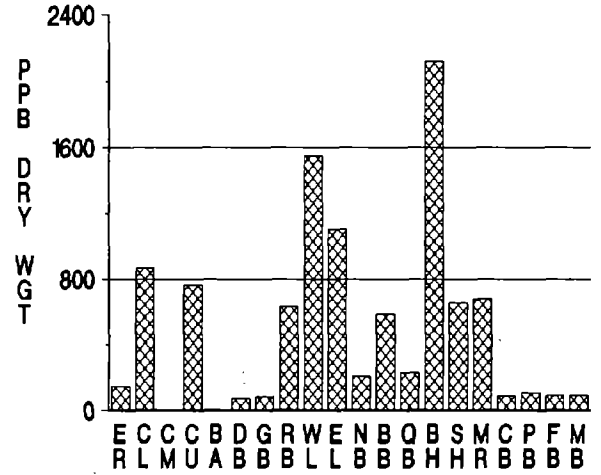


Figure 25a. Concentrations of hydrocarbons (naphthalene, 2-methylnaphthalene, 1-methylnaphthalene, biphenyl, 2,6-dimethylnaphthalene, acenaphthene) in stomach contents collected from all sites.

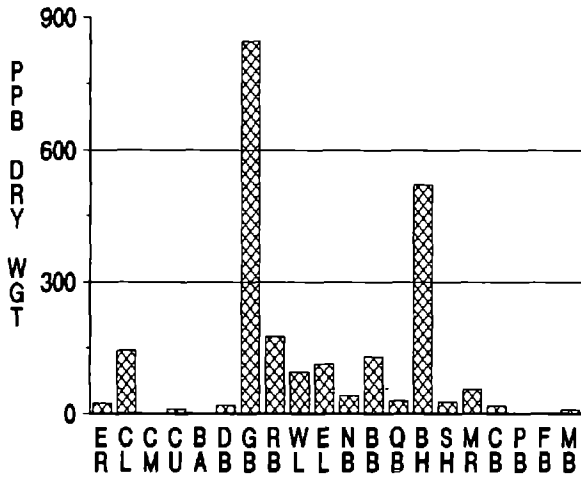
FLUORENE



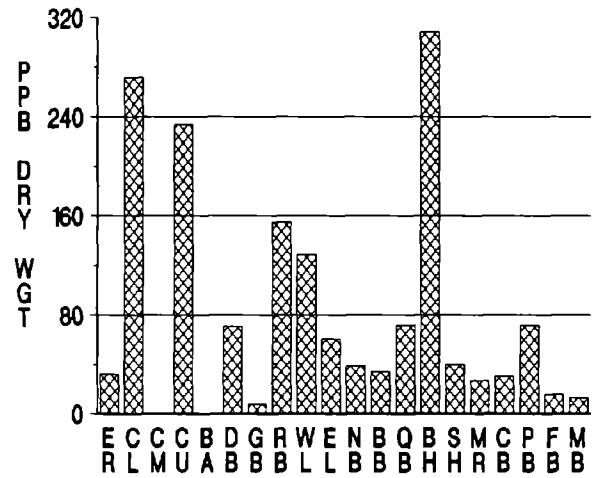
PHENANTHRENE



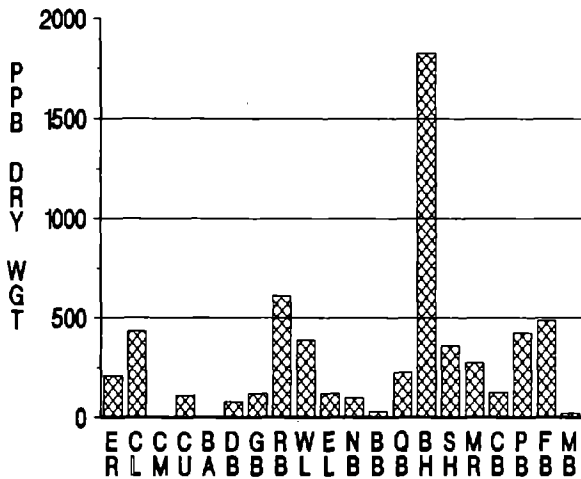
ANTHRACENE



1-METHYLPHENANTHRENE



FLUORANTHENE



PYRENE

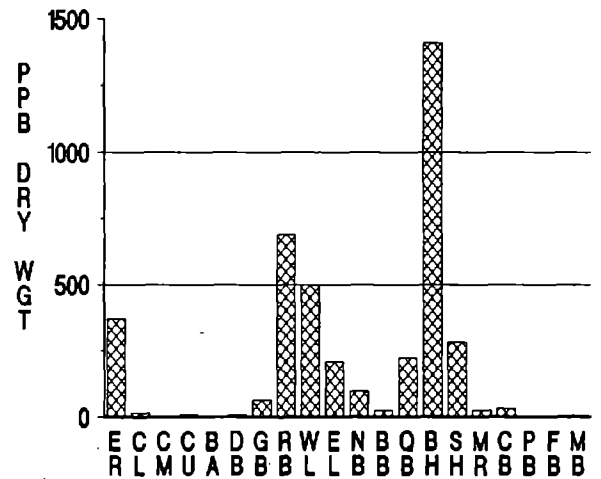
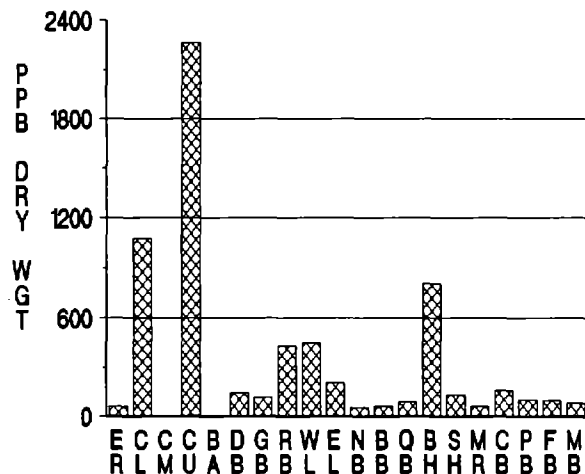
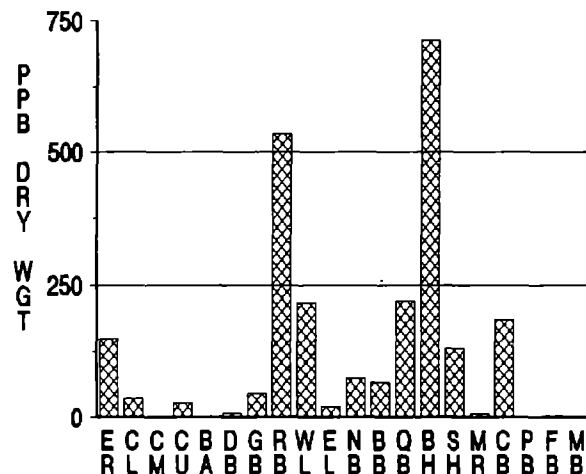


Figure 25b. Concentrations of hydrocarbons (fluorene, phenanthrene, anthracene, 1-methylphenanthrene, fluoranthene, pyrene) in stomach contents collected from all sites.

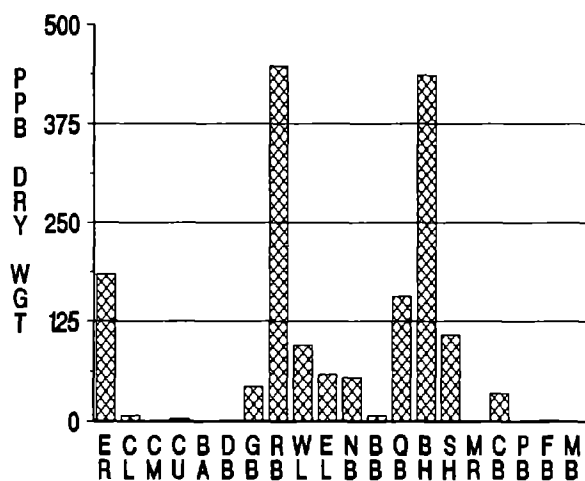
BENZO [a] ANTHRACENE



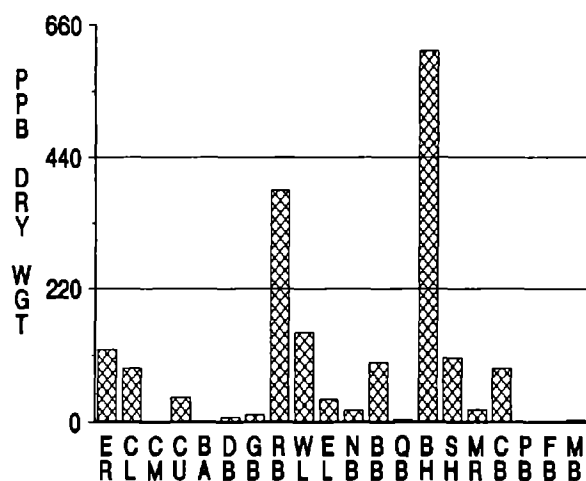
CHRYSENE



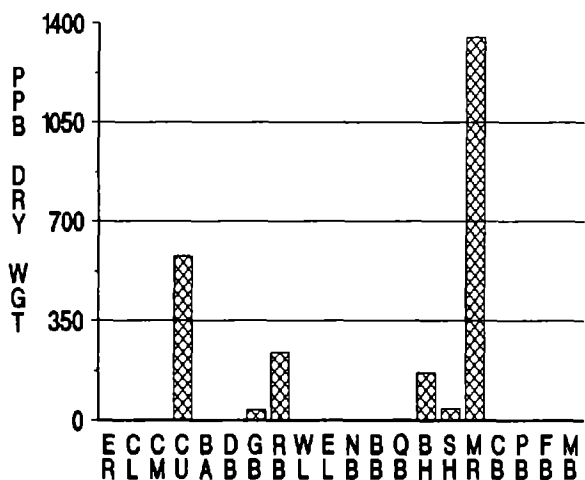
BENZO [e] PYRENE



BENZO [a] PYRENE



PERYLENE



DIBENZO [a, h] ANTHRACENE

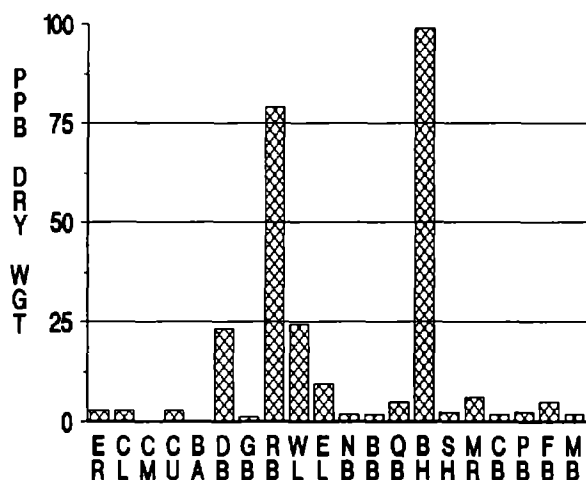
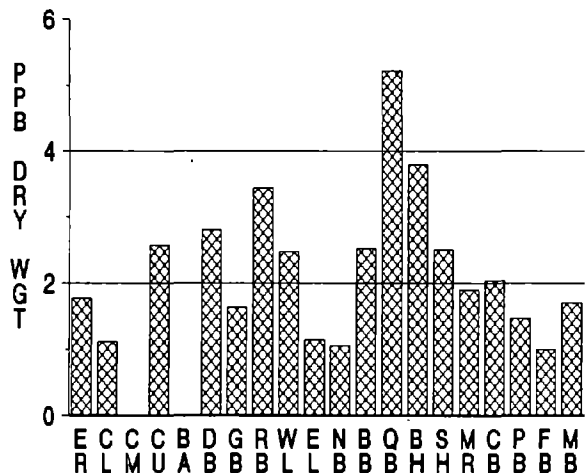
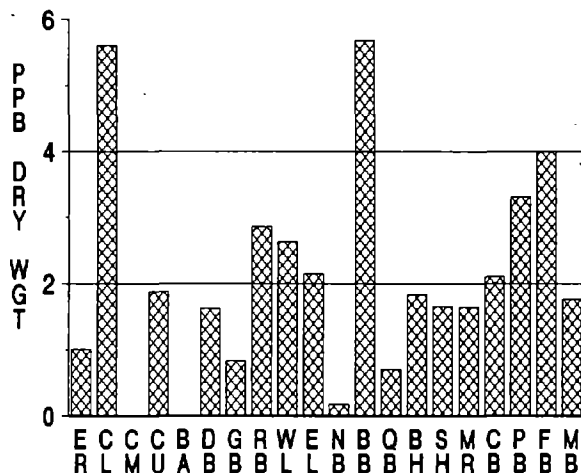


Figure 25c. Concentrations of hydrocarbons (benzo[a]anthracene, chrysene, benzo[e]pyrene, benzo[a]pyrene, perylene, dibenzo[a,h]anthracene) in stomach contents collected from all sites.

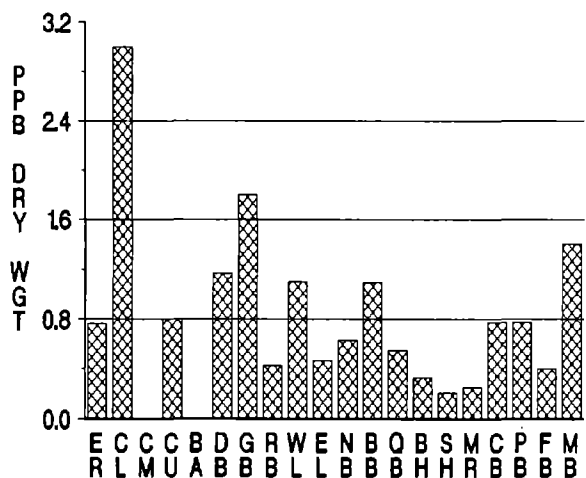
HEXACHLOROENZENE



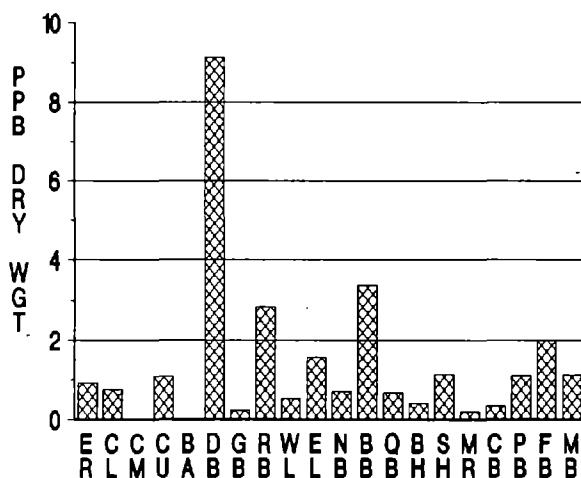
LINDANE



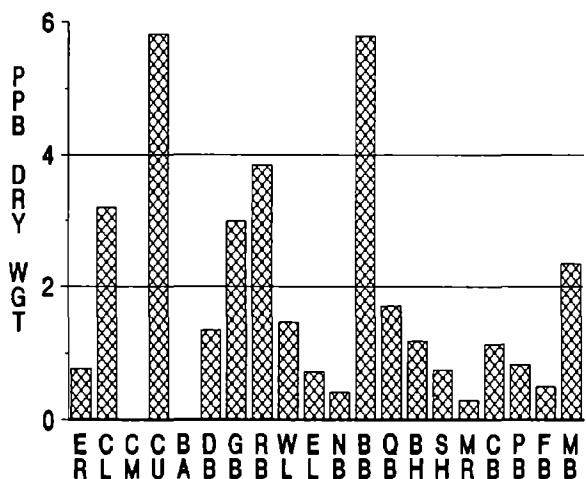
HEPTACHLOR



ALDRIN



HEPTACHLOR EPOXIDE



o, p' - DDE

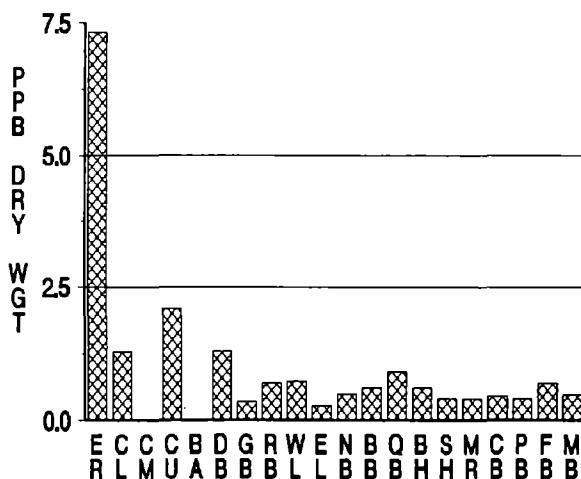
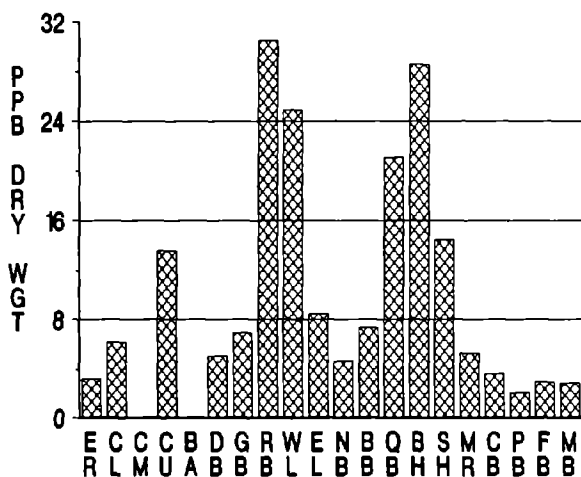
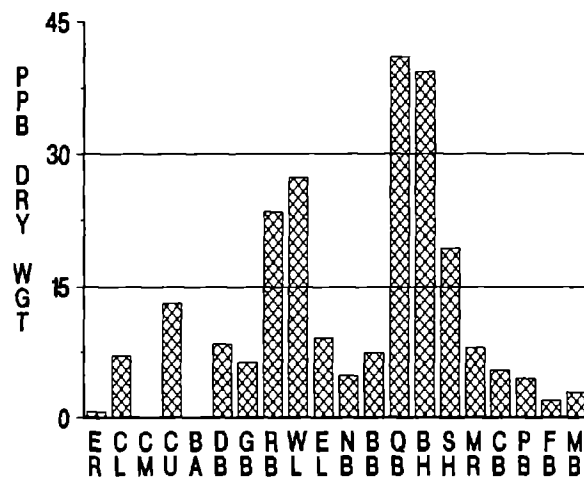


Figure 25d. Concentrations of hydrocarbons (hexachlorobenzene, lindane, heptachlor, aldrin, heptachlor epoxide, o,p'-DDE) in stomach contents collected from all sites.

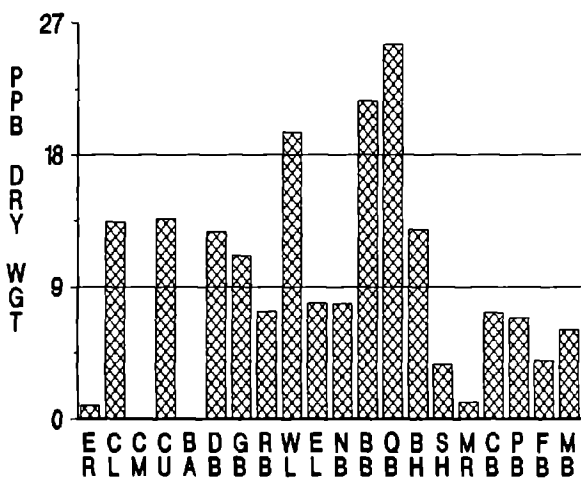
alpha - CHLORDANE



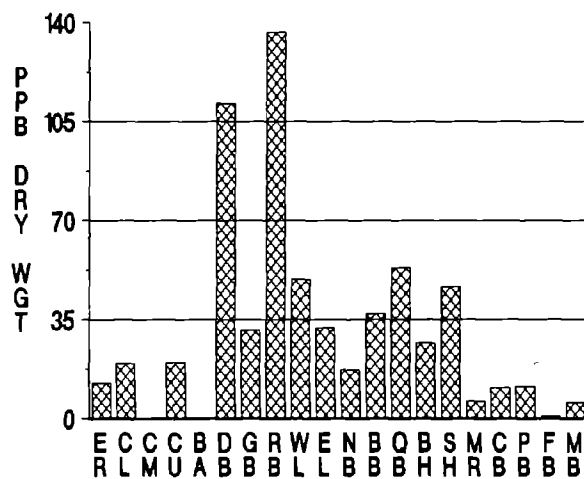
trans - NONACHLOR



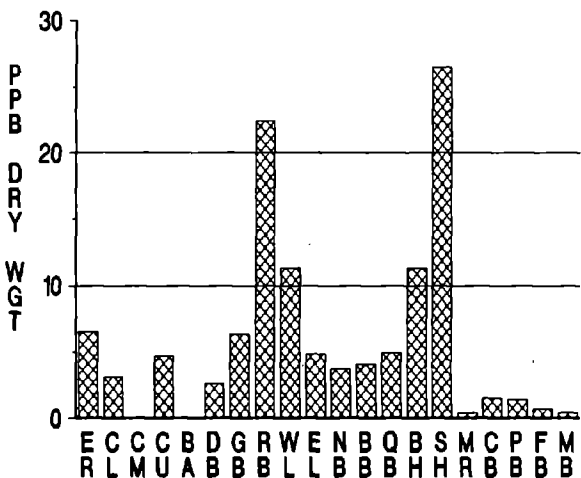
DIELDRIN



p, p' - DDE



o, p' - DDD



p, p' - DDD

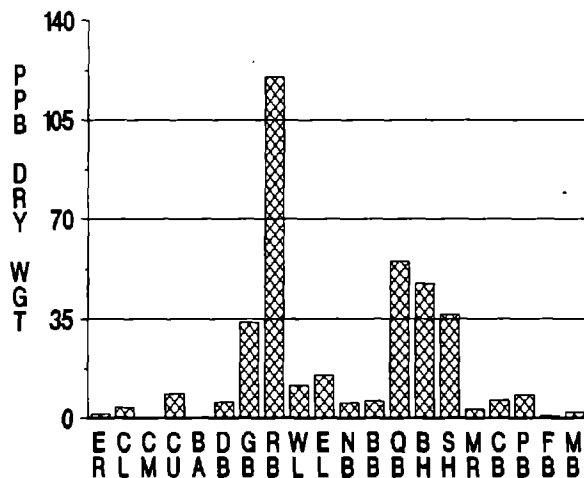
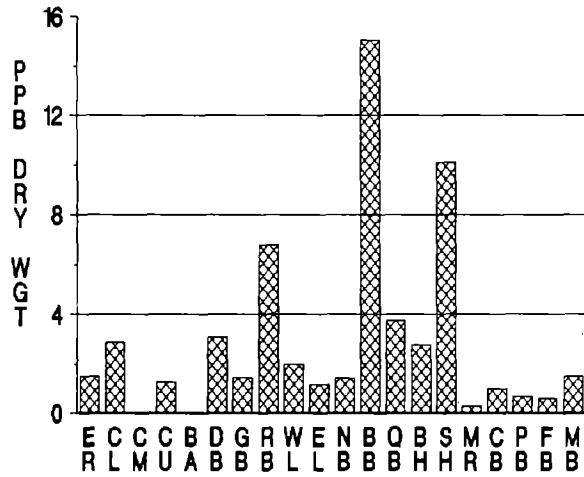
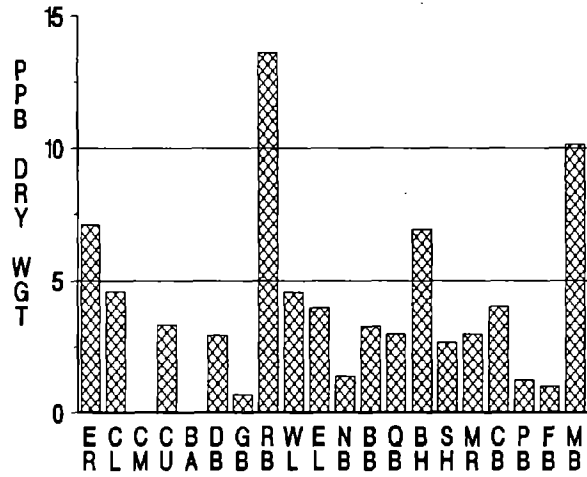


Figure 25e. Concentrations of hydrocarbons (α -chlordane, trans-nonachlor, dieldrin, p,p'-DDE, o,p'-DDD, p,p'-DDD) in stomach contents collected from all sites.

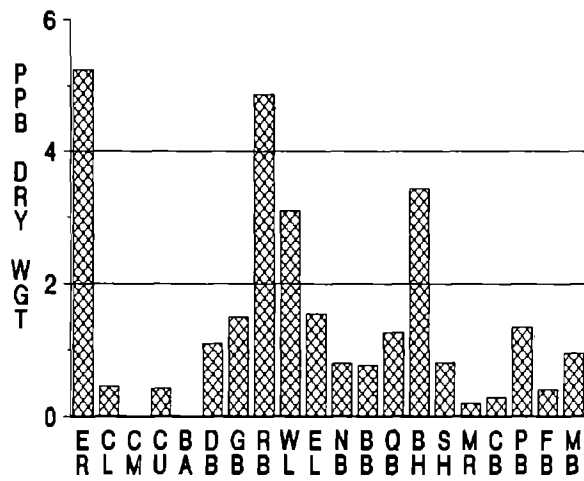
o, p' - DDT



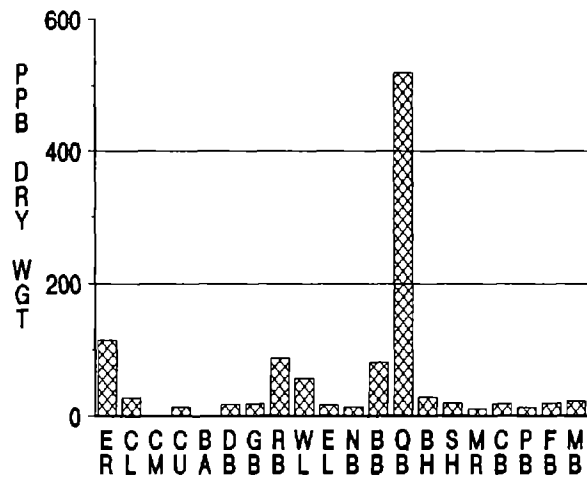
p, p' - DDT



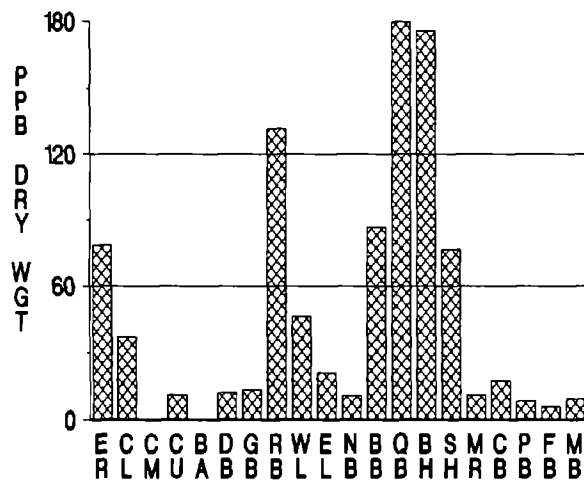
MIREX



DICHLOROBIPHENYLS



TRICHLOROBIPHENYLS



TETRACHLOROBIPHENYLS

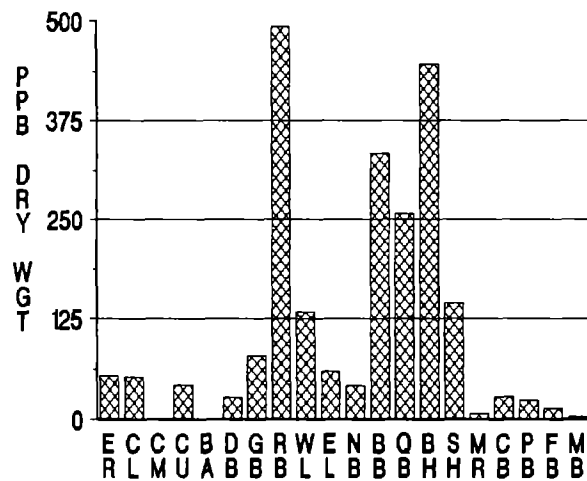
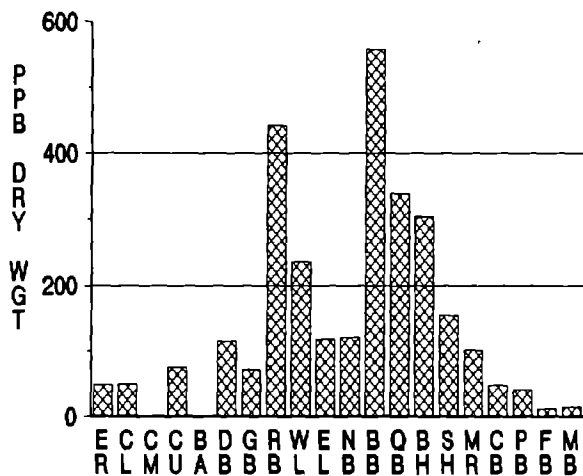
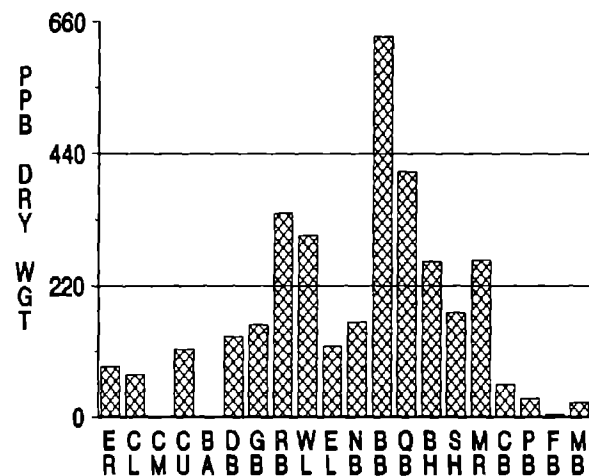


Figure 25f. Concentrations of hydrocarbons (o,p'-DDT, p,p'-DDT, mirex, dichlorobiphenyls, trichlorobiphenyls, tetrachlorobiphenyls) in stomach contents collected from all sites.

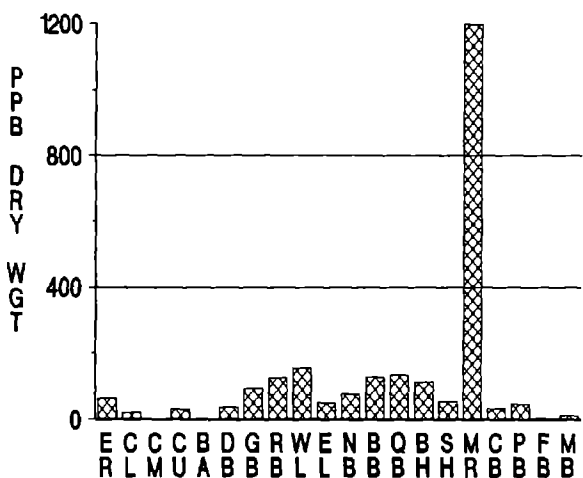
PENTACHLOROBIPHENYLS



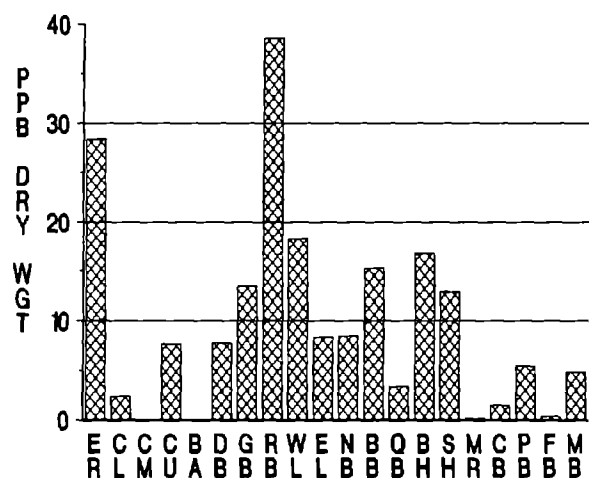
HEXACHLOROBIPHENYLS



HEPTACHLOROBIPHENYLS



OCTACHLOROBIPHENYLS



NONACHLOROBIPHENYLS

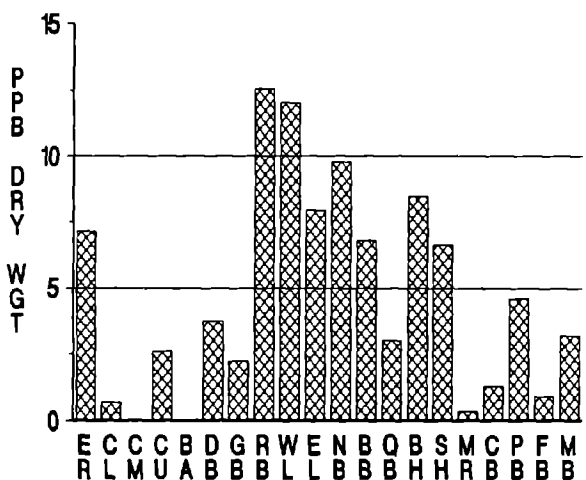
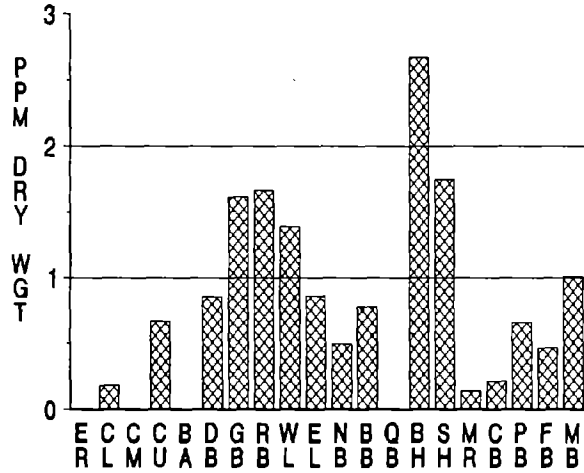
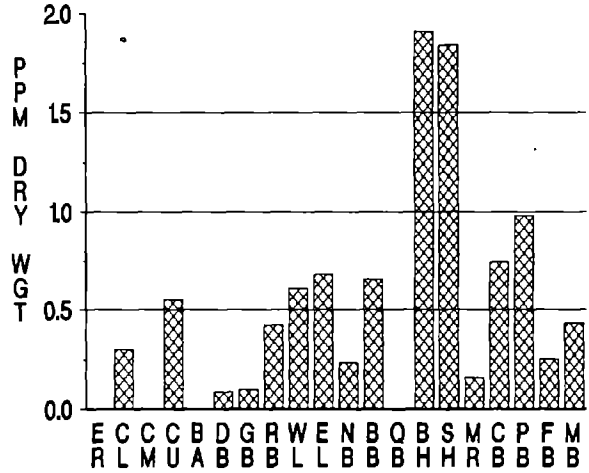


Figure 25g. Concentrations of hydrocarbons (pentachlorobiphenyls, hexachlorobiphenyls, heptachlorobiphenyls, octachlorobiphenyls, nonachlorobiphenyls) in stomach contents collected from all sites.

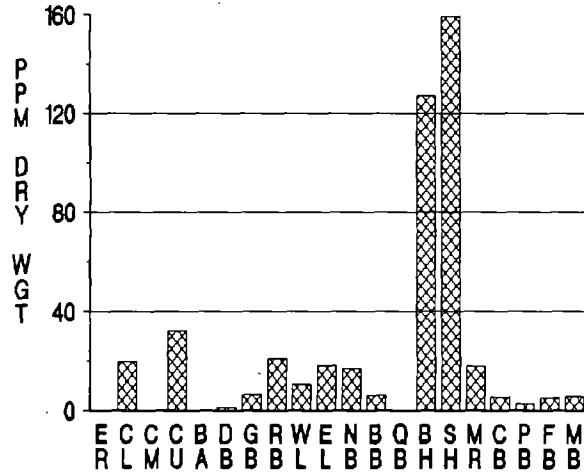
SILVER



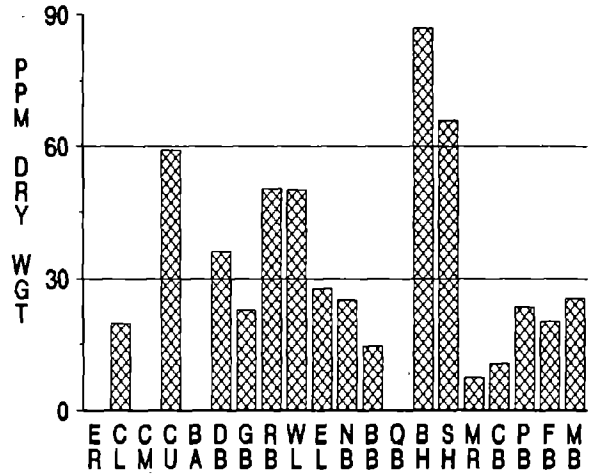
CADMIUM



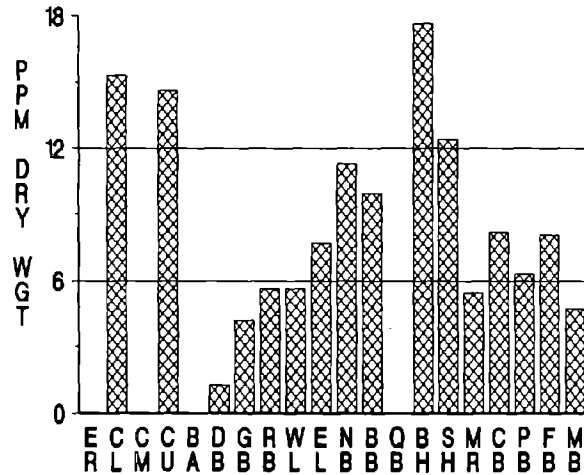
CHROMIUM



COPPER



NICKEL



LEAD

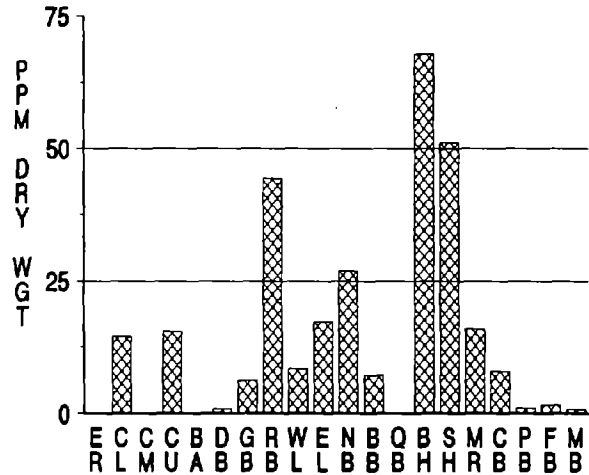
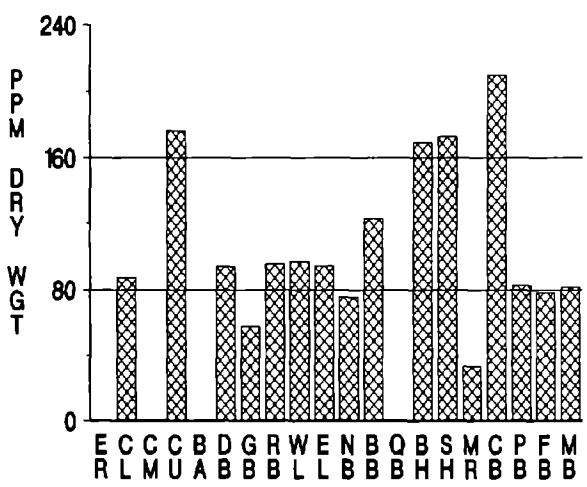
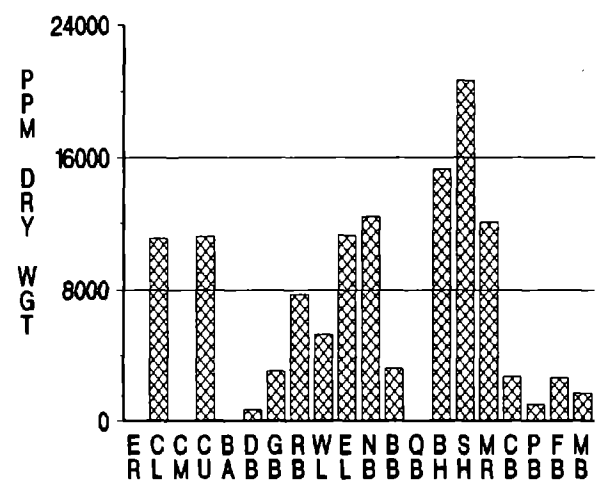


Figure 26a. Concentrations of metals (silver, cadmium, chromium, copper, nickel, lead) in stomach contents collected from all sites.

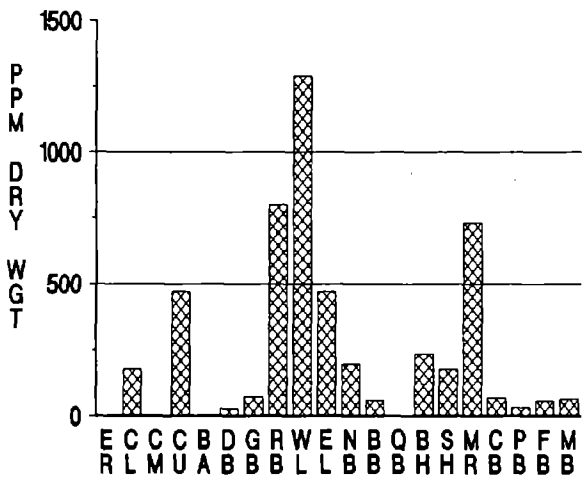
ZINC



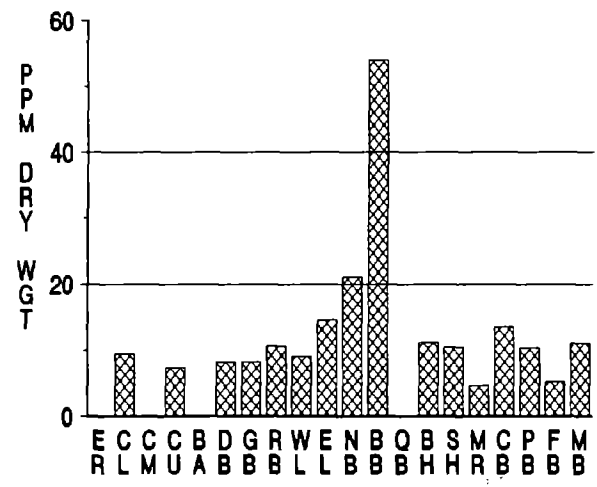
IRON



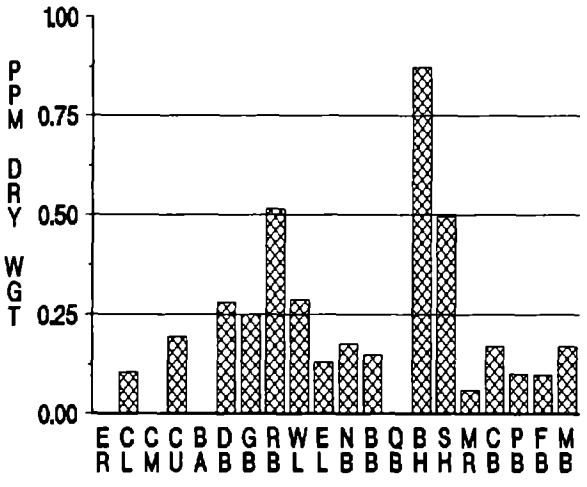
MANGANESE



ARSENIC



MERCURY



SELENIUM

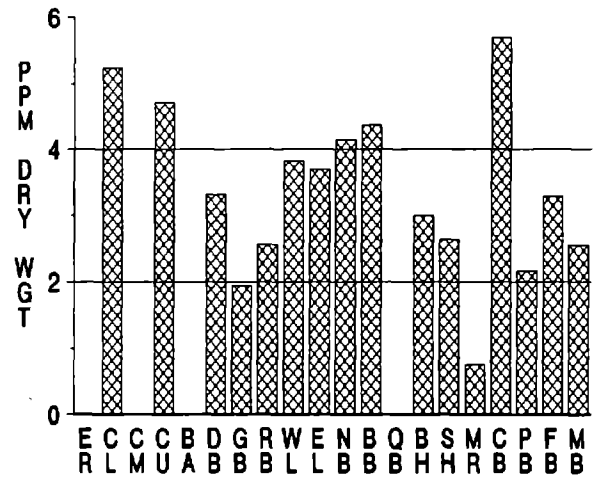


Figure 26b. Concentrations of metals (zinc, iron, manganese, arsenic, mercury, selenium) in stomach contents collected from all sites.

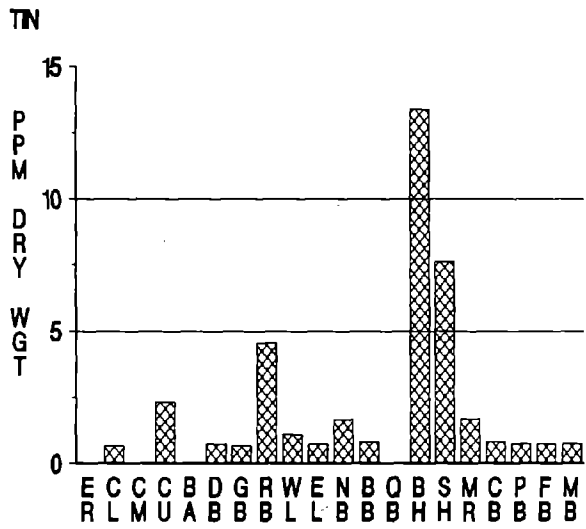
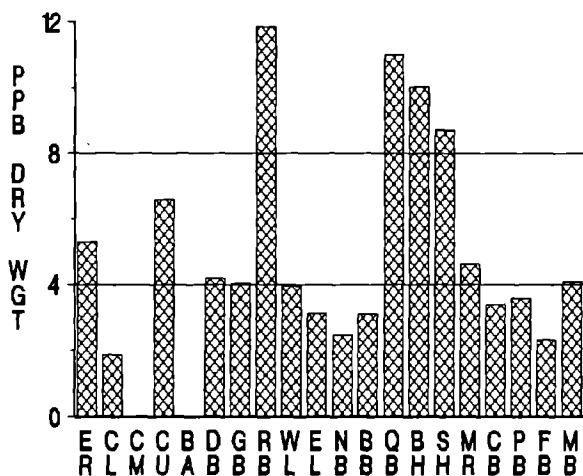
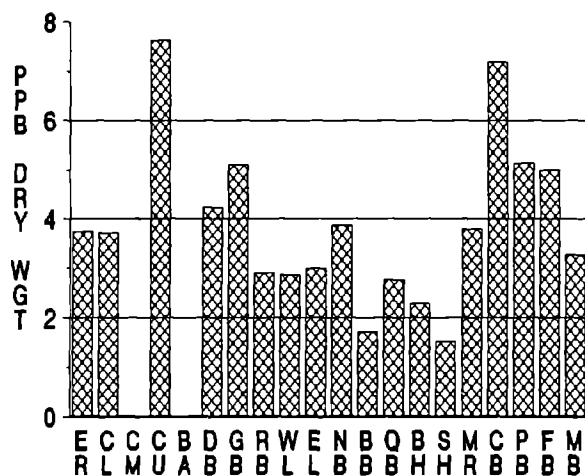


Figure 26c. Concentrations of metals (tin) in stomach contents collected from all sites.

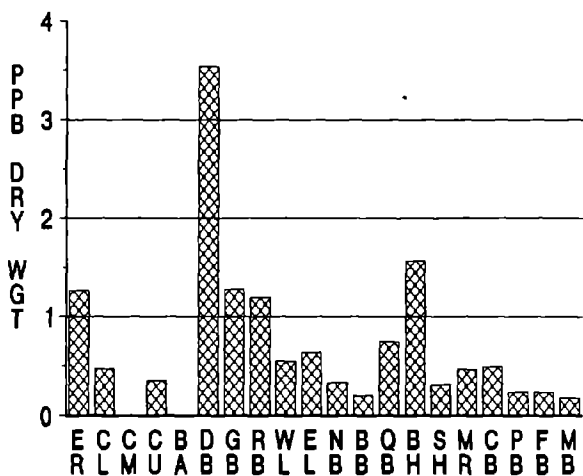
HEXACHLOROBENZENE



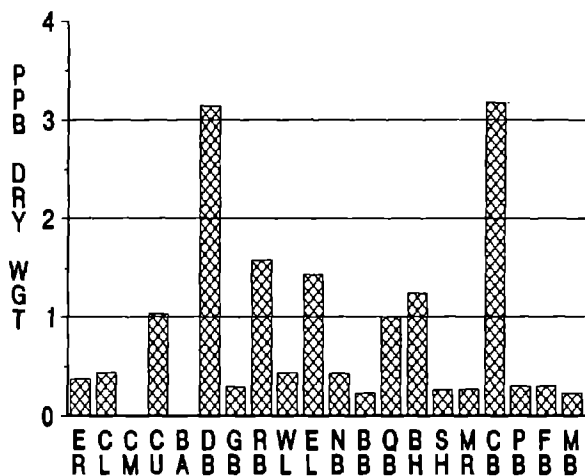
LINDANE



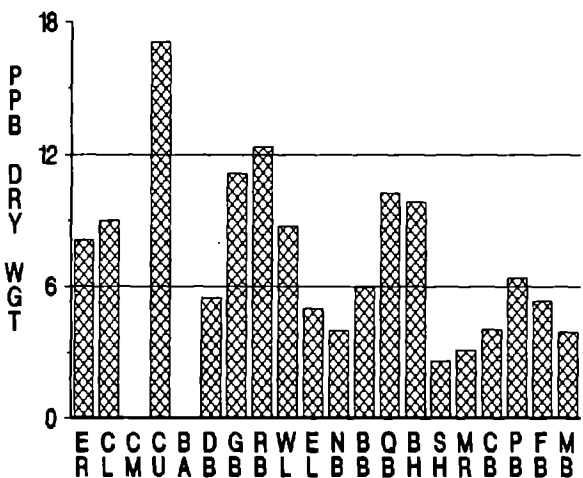
HEPTACHLOR



ALDRIN



HEPTACHLOR EPOXIDE



o,p'-DDE

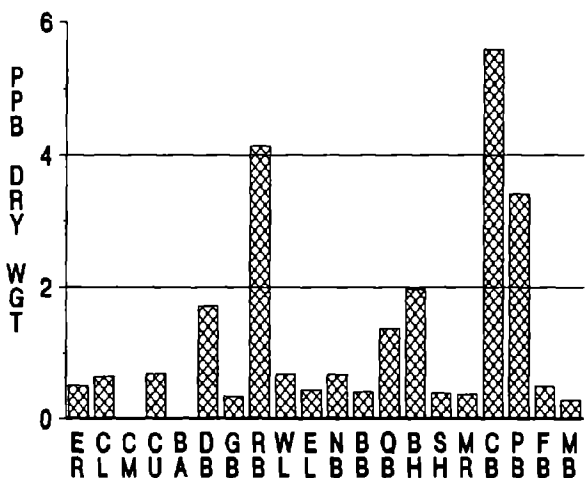
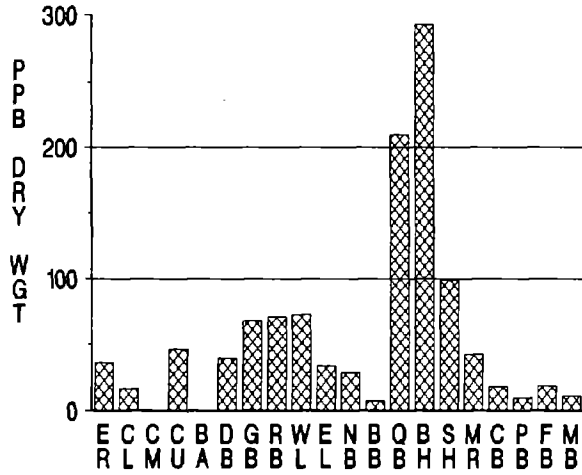
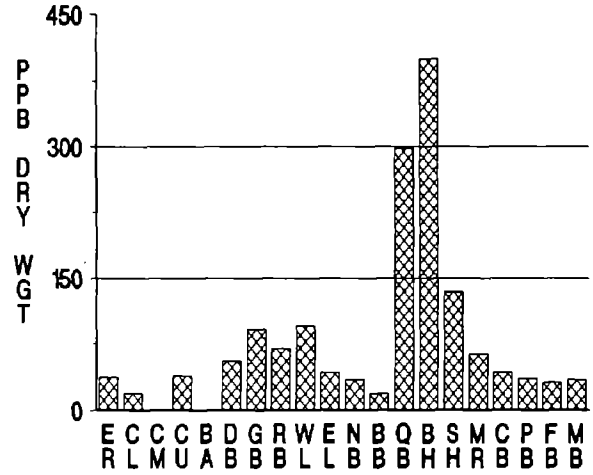


Figure 27a. Concentrations of hydrocarbons (hexachlorobenzene, lindane, heptachlor, aldrin, heptachlor epoxide, *o,p'*-DDE) in livers collected from all sites.

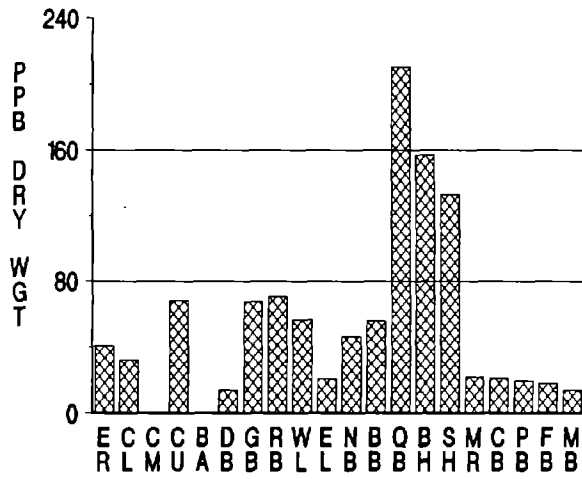
alpha - CHLORDANE



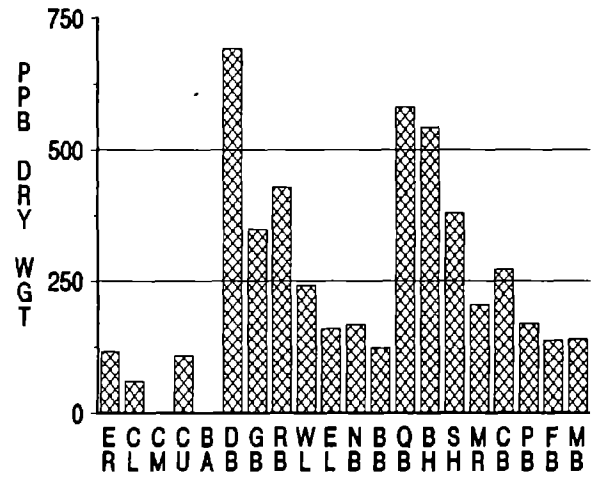
trans - NONACHLOR



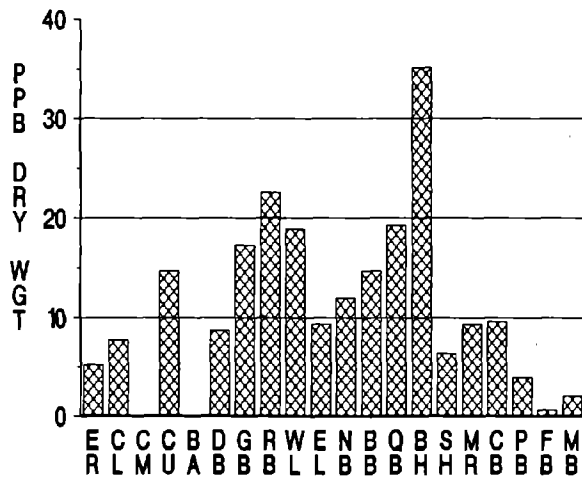
DIELDRIN



p, p' - DDE



o, p' - DDD



p, p' - DDD

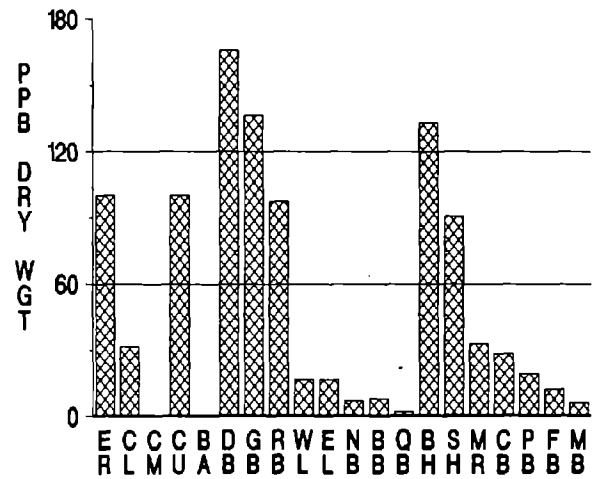


Figure 27b. Concentrations of hydrocarbons (α -chlordane, trans-nonachlor, dieldrin, p,p'-DDE, o,p'-DDD, p,p'-DDD) in livers collected from all sites.

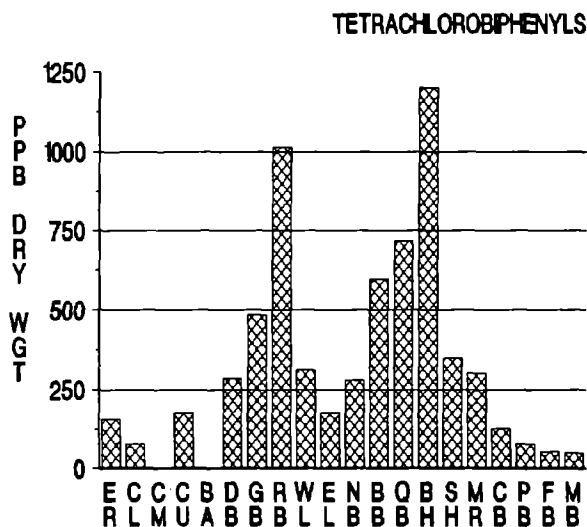
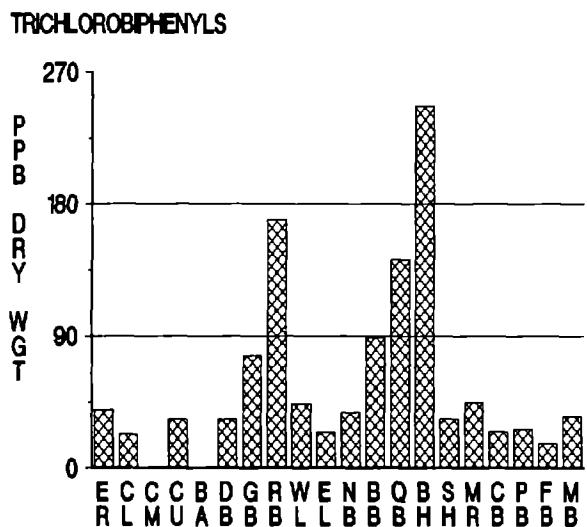
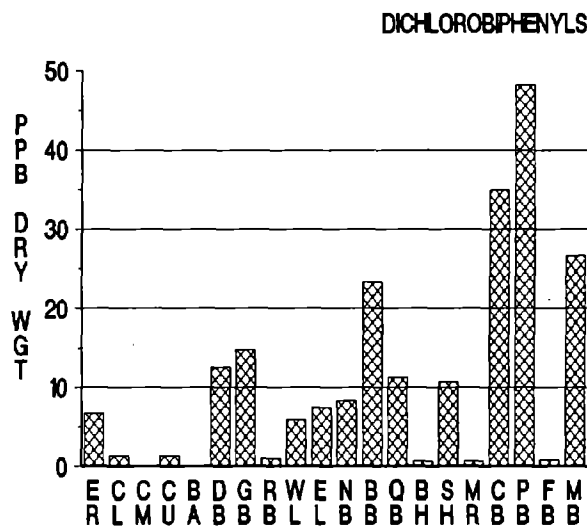
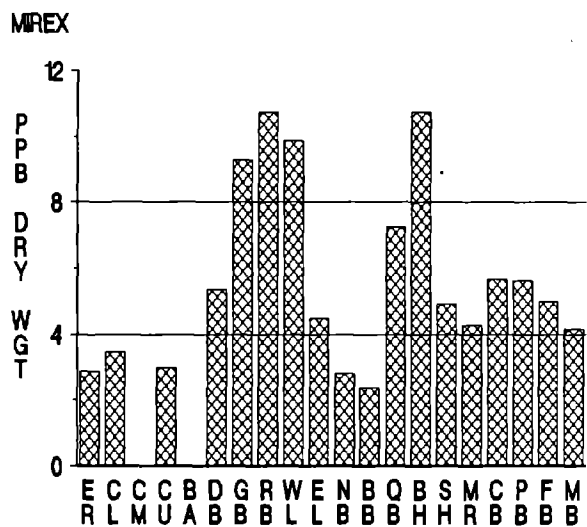
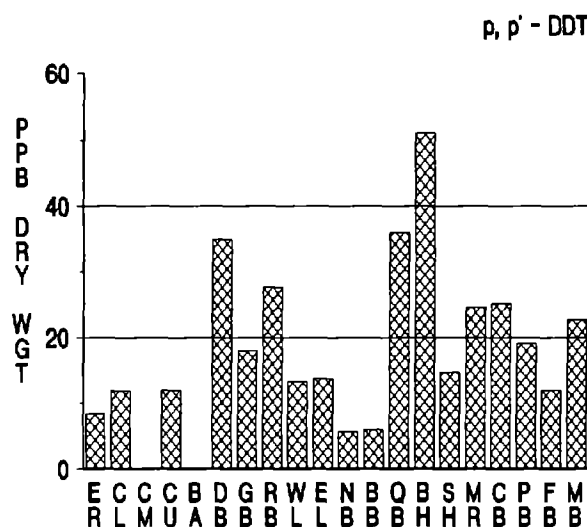
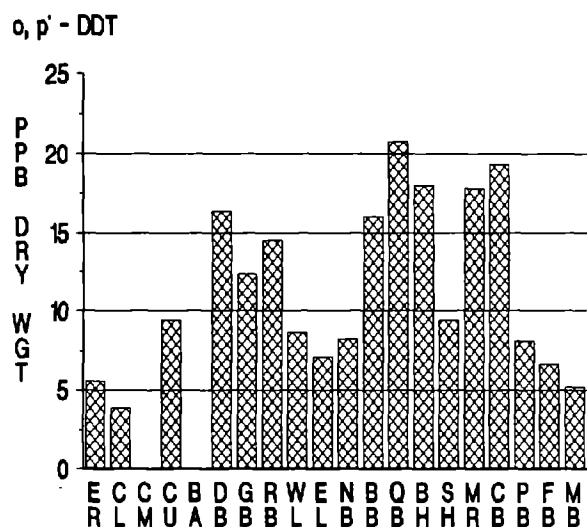
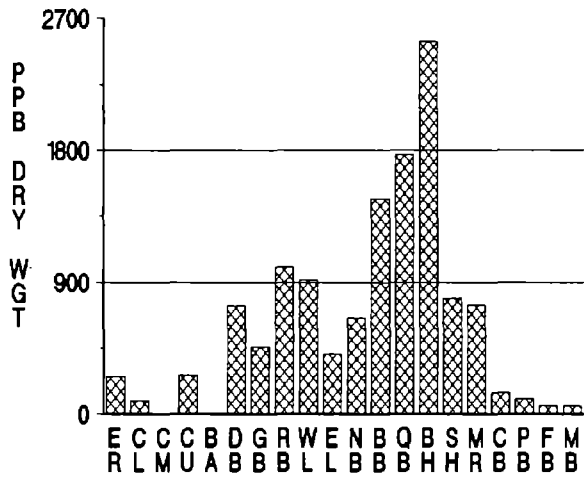
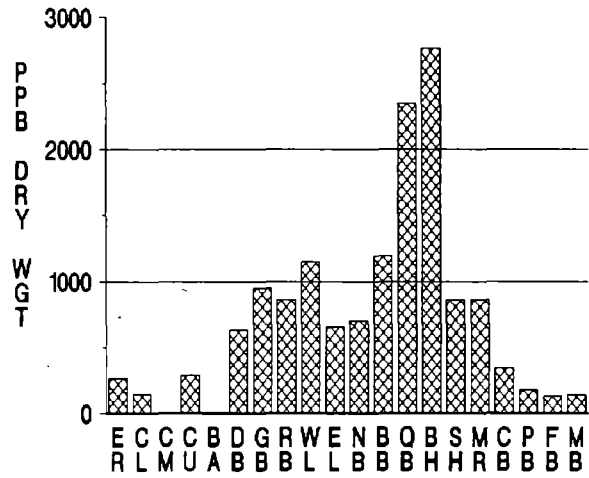


Figure 27c. Concentrations of hydrocarbons (o,p'-DDT, p,p'-DDT, mirex, dichlorobiphenyls, trichlorobiphenyls, tetrachlorobiphenyls) in livers collected from all sites.

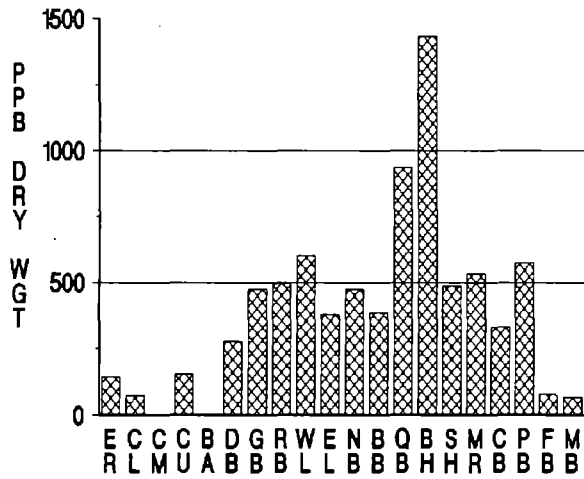
PENTACHLOROBIPHENYLS



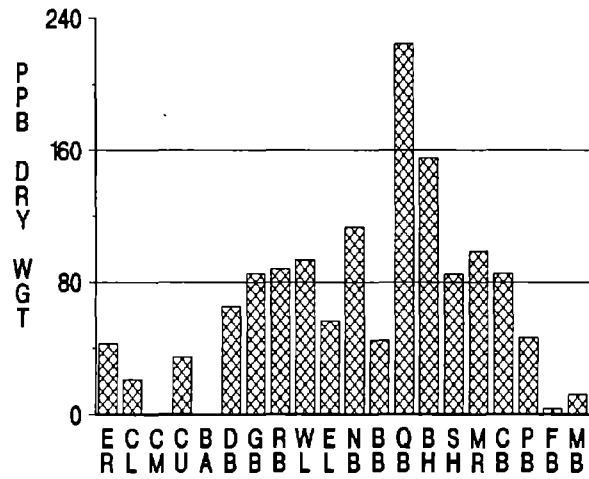
HEXACHLOROBIPHENYLS



HEPTACHLOROBIPHENYLS



OCTACHLOROBIPHENYLS



NONACHLOROBIPHENYLS

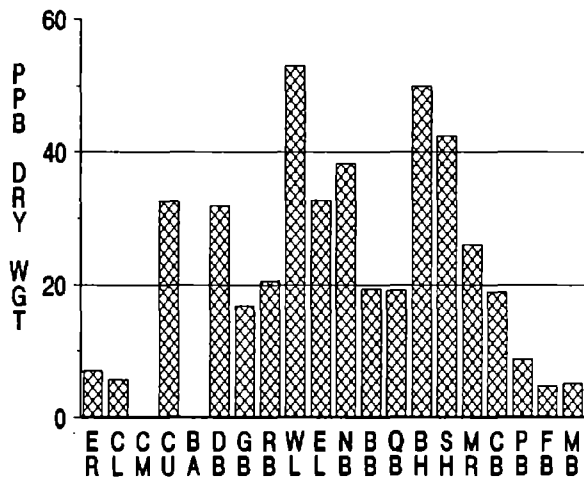
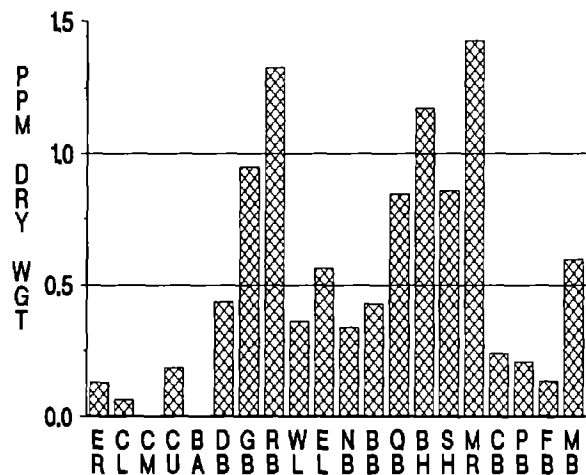
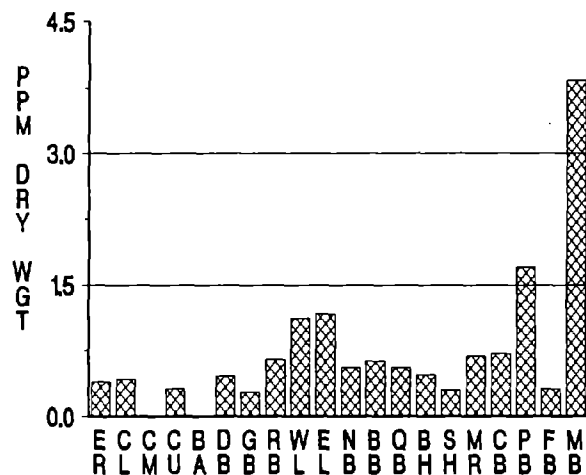


Figure 27d. Concentrations of hydrocarbons (pentachlorobiphenyls, hexachlorobiphenyls, heptachlorobiphenyls, octachlorobiphenyls, nonachlorobiphenyls) in livers collected from all sites.

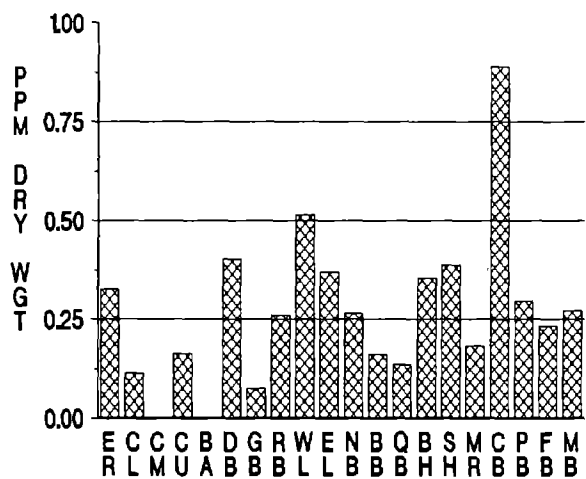
SILVER



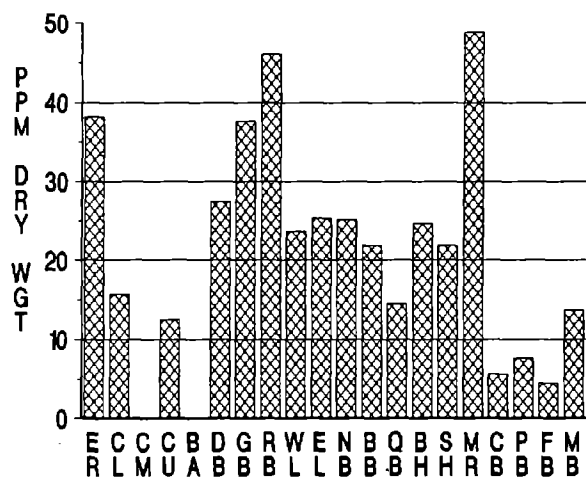
CADMIUM



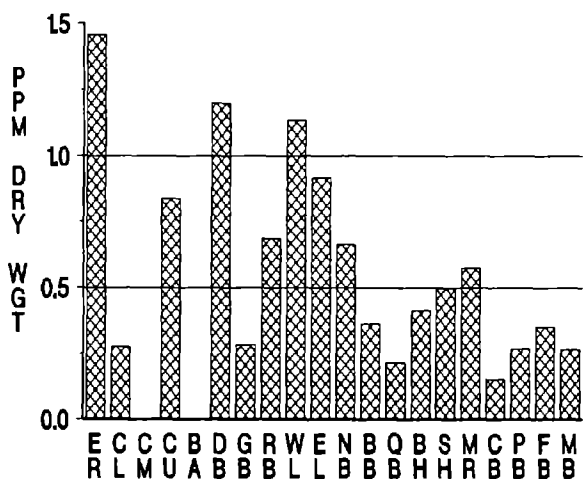
CHROMIUM



COPPER



NICKEL



LEAD

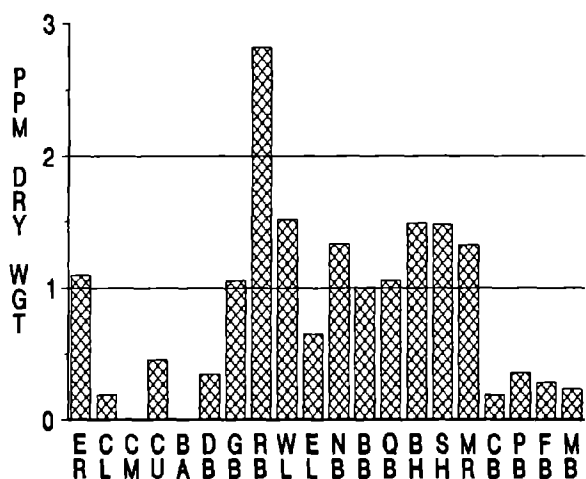
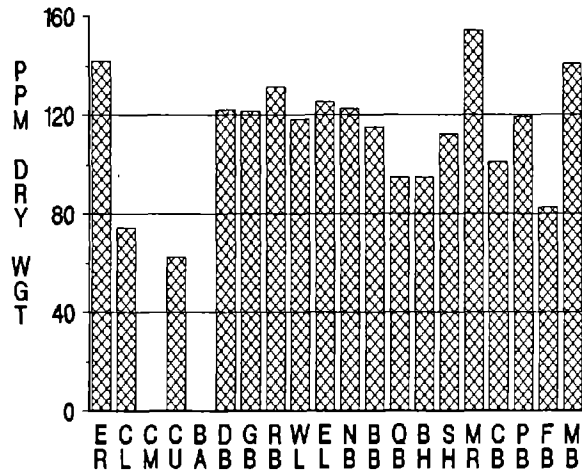
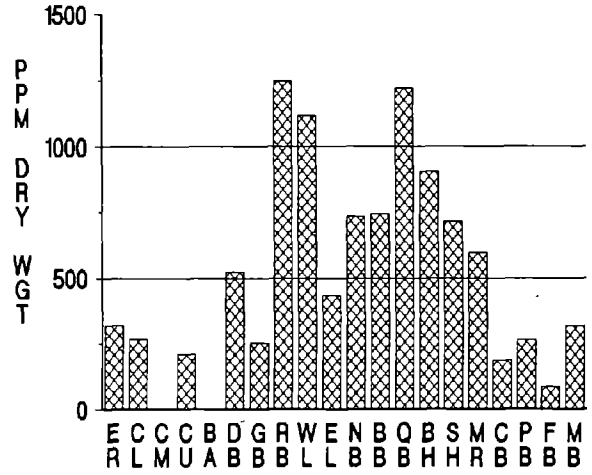


Figure 28a. Concentrations of metals (silver, cadmium, chromium, copper, nickel, lead) in livers collected from all sites.

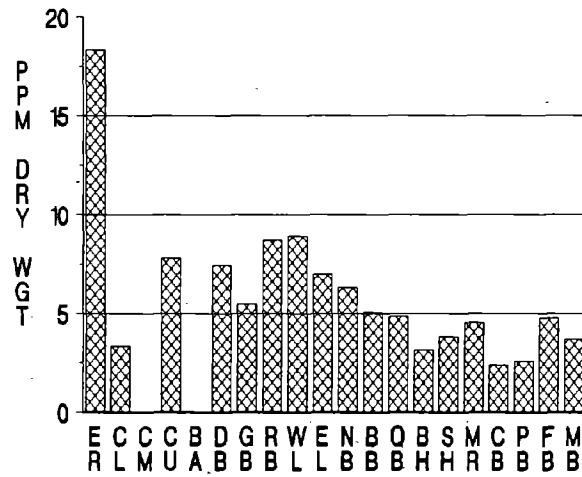
ZINC



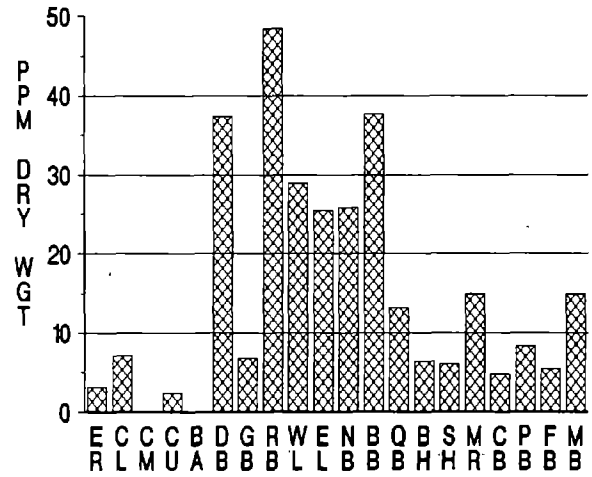
IRON



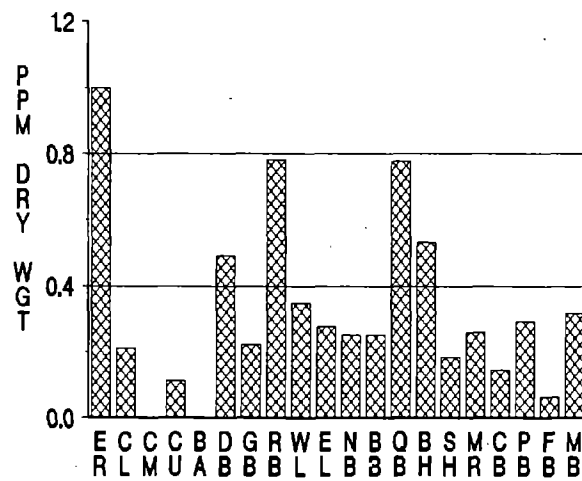
MANGANESE



ARSENIC



MERCURY



SELENIUM

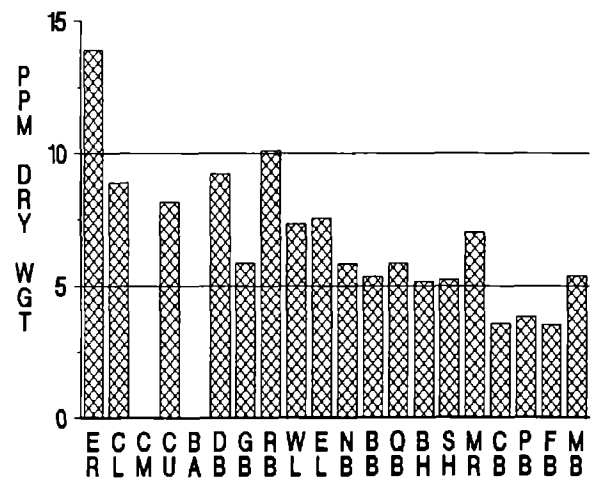


Figure 28b. Concentrations of metals (zinc, iron, manganese, arsenic, mercury, selenium) in livers collected from all sites.

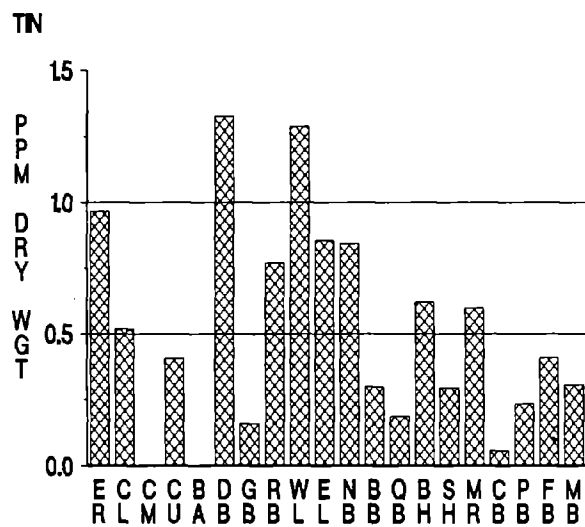


Figure 28c. Concentrations of metals (tin) in livers collected from all sites.

Table 3a. Concentrations of hydrocarbons (naphthalene, 2-methylnaphthalene, 1-methylnaphthalene, biphenyl, 2,6-dimethylnaphthalene, acenaphthene, fluorene, phenanthrene, anthracene) in sediment (ppb dry weight)

Year	Station	Naphthalene	2-Me-naphthalene	1-Me-naphthalene	Biphenyl	2,6-diMe-naphthalene	Acenaphthene	Fluorene	Phenanthrene	Anthracene
Machias Bay										
1985	MB1	< 0.60	< 0.60	< 0.60	< 0.50	< 0.50	< 0.50	< 0.40	< 0.40	< 0.40
1985	MB2	13.00	< 0.60	< 0.60	< 0.50	< 0.50	< 0.60	< 0.50	< 0.50	< 0.60
1985	MB3	< 0.70	< 0.70	< 0.70	< 0.60	< 0.60	< 0.60	< 0.50	17.60	< 0.50
1985	MB4	12.60	< 0.70	< 0.70	< 0.50	< 0.50	< 0.60	< 0.50	< 0.50	8.50
1986	MB1	5.83	< 0.52	< 0.62	< 0.59	< 0.60	< 0.58	< 0.57	3.89	< 0.51
1986	MB3	11.39	4.46	< 0.75	< 0.71	< 0.72	< 0.70	< 0.68	29.53	4.53
1986	MB4	6.50	< 0.53	< 0.64	< 0.61	< 0.62	< 0.60	< 0.59	6.20	< 0.53
Frenchmans Bay										
1985	FB1	< 1.40	< 1.50	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	42.90	< 1.00
1985	FB2	< 2.40	< 2.40	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	62.80	< 2.00
1985	FB3	< 0.90	< 0.90	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	46.10	< 1.00
1985	FB4	< 1.60	< 1.60	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	49.60	< 1.00
1986	FB1	< 0.96	< 0.83	< 1.00	6.22	< 1.02	< 1.00	< 0.98	17.96	30.74
1986	FB2	< 0.92	< 0.80	< 0.96	< 0.97	< 0.98	< 0.96	< 0.94	10.42	10.30
1986	FB3	< 1.05	< 0.91	< 1.09	< 1.02	< 1.04	< 1.02	< 0.99	7.18	7.15
Penobscot Bay										
1985	PB1	27.20	19.30	20.10	< 1.10	16.70	< 1.10	9.90	137.20	17.50
1985	PB2	12.50	9.10	< 1.20	< 1.10	< 1.10	< 1.10	< 1.00	73.40	< 0.90
1985	PB3	11.40	9.60	< 1.20	< 1.10	< 1.10	< 1.10	< 1.00	326.40	< 0.90
1985	PB4	< 0.90	< 1.00	< 0.90	< 0.80	< 0.80	< 0.90	< 0.80	37.10	< 0.70
1985	PB5	7.90	< 1.00	< 1.00	< 0.90	< 0.90	< 0.90	< 0.80	44.90	< 0.70
1986	PB1	36.80	17.27	12.79	< 1.16	< 1.18	< 1.15	9.61	116.80	34.48
1986	PB3	27.35	10.99	< 1.42	< 1.35	< 1.38	< 1.34	< 1.31	80.33	15.65
1986	PB4	17.75	6.17	< 1.03	< 0.96	< 0.98	< 0.95	< 0.93	52.46	10.77
Casco Bay										
1984	CB5	< 2.20	< 2.20	< 2.10	< 2.40	< 2.30	37.65	< 2.20	262.00	793.19
1985	CB1	12.90	< 1.70	< 1.60	< 1.50	< 1.50	< 1.50	< 1.30	60.40	< 1.20
1985	CB2	31.80	14.30	< 1.80	< 1.50	122.10	< 1.60	< 1.40	129.90	16.90
1985	CB3	< 2.10	< 2.20	< 2.10	< 1.80	< 1.80	< 1.90	< 1.70	100.90	12.90
1985	CB4	50.50	30.90	< 1.70	< 1.40	< 1.40	< 1.40	19.30	238.50	52.50
1985	CB5	38.70	18.30	16.70	< 1.00	< 1.00	< 1.00	12.70	133.60	38.10
1986	CB1	< 1.12	< 0.96	< 1.16	10.01	< 1.03	< 1.01	< 0.98	44.04	101.61
1986	CB2	26.70	10.75	7.91	< 0.95	< 0.97	< 0.95	7.04	100.71	97.10
Merrimack River										
1984	MR2	< 0.60	< 0.60	< 0.50	6.89	< 0.60	< 0.60	5.70	91.91	190.35
1984	MR3	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	16.24	21.25
1985	MR1	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	3.30	13.30
1985	MR2	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	7.20	19.80
1985	MR3	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	4.30	15.70
Salem Harbor										
1984	SH1	279.98	< 7.20	< 6.90	< 5.60	< 5.40	< 5.70	33.77	955.73	627.79
1984	SH2	438.11	< 6.80	< 6.60	< 4.70	< 4.60	< 4.80	34.84	581.02	356.95
1984	SH3	256.80	157.30	69.40	25.30	< 3.60	< 3.80	52.70	660.00	1464.60
1985	SH1	152.30	95.50	112.10	< 1.90	45.70	15.40	103.60	664.80	3777.70
1985	SH2	68.30	20.30	47.20	< 0.70	12.20	5.00	33.50	352.50	402.30

Table 3a. Continued.

Year	Station	Naphthalene	2-Me-naphthalene	1-Me-naphthalene	Biphenyl	2,6-diMethalene	Acenaphthene	Fluorene	Phenanthrene	Anthracene
Salem Harbor										
1985	SH3	135.30	41.10	96.00	< 0.80	45.80	43.80	66.40	601.20	557.20
1985	SH4	119.30	30.90	65.10	< 1.70	55.30	14.90	119.90	507.60	1073.20
1986	SH1	213.00	157.03	104.01	47.82	96.07	54.42	114.07	691.86	167.03
1986	SH2	63.32	31.92	19.50	8.86	20.90	17.39	22.27	231.86	64.67
1986	SH3	127.62	57.67	34.32	18.69	44.07	31.81	65.26	413.84	115.89
Boston Harbor										
1984	BH1	290.54	417.49	177.76	67.38	171.34	76.39	53.74	670.57	389.92
1984	BH2	6723.30	19125.00	6934.30	1323.80	7794.80	392.90	1017.30	2851.20	861.20
1984	BH3	90.21	115.67	41.99	35.25	51.47	17.32	28.27	355.32	166.91
1985	BH2	3073.40	7500.00	3120.70	490.30	3627.30	182.50	390.60	1353.60	19570
1985	BH3	213.00	325.20	226.80	72.30	246.60	11.80	114.70	741.00	149.30
1985	BH4	264.90	288.00	314.20	51.20	310.50	88.30	142.40	744.50	152.90
1985	BH5	241.50	443.30	288.70	51.20	262.50	151.10	118.60	560.10	97.10
1986	BH1	47.85	40.40	24.05	17.76	< 0.84	20.79	34.47	229.66	56.17
1986	BH2	1937.24	3747.03	1737.53	407.75	1907.29	80.64	340.54	946.81	198.25
1986	BH3	283.94	322.63	138.03	63.63	218.64	40.68	113.61	668.96	222.93
Quincy Bay										
1986	QB1	112.71	82.28	36.60	26.75	< 1.08	30.84	60.23	414.42	93.17
1986	QB2	122.68	103.77	53.56	36.36	< 1.39	31.75	43.00	413.06	87.02
1986	QB3	180.54	162.52	74.29	34.04	100.82	44.40	55.77	557.48	139.30
Buzzards Bay										
1984	BB1	< 1.10	17.02	< 1.10	< 1.20	< 1.20	< 1.20	< 1.10	59.79	137.90
1984	BB2	< 1.00	< 1.20	< 1.10	< 1.10	< 1.10	< 1.10	< 1.10	61.36	522.71
1984	BB3	< 1.00	14.16	< 1.10	< 1.10	< 1.00	< 1.10	< 1.00	55.36	278.68
1984	BB4	< 1.00	18.64	< 1.00	< 1.10	< 1.00	< 1.10	< 1.00	69.52	120.10
1984	BB80	< 1.00	< 1.10	< 1.00	< 1.10	< 1.00	< 1.10	< 1.00	30.98	140.19
1985	BB1	< 0.46	< 0.50	< 0.48	< 0.42	< 0.41	< 0.43	< 0.39	< 0.35	22.18
1985	BB2	< 0.31	1.62	< 0.32	< 0.29	< 0.28	< 0.30	< 0.27	9.37	10.44
1985	BB3	44.03	59.76	< 0.55	< 0.48	< 0.47	< 0.49	< 0.44	29.71	14.64
1985	BB4	< 1.05	< 1.12	< 1.08	< 0.82	< 0.80	< 0.85	< 0.76	67.20	43.87
1986	BB1	91.15	6.51	10.56	4.01	< 0.91	< 0.88	47.88	96.51	14.73
1986	BB3	40.22	4.23	8.02	8.36	< 0.87	< 0.84	< 0.83	45.21	6.54
1986	BB4	< 0.89	< 0.77	< 0.92	< 0.86	< 0.88	< 0.85	< 0.84	36.48	6.37
Narragansett Bay										
1984	NB1	119.52	50.19	24.58	27.74	< 1.10	7.37	26.09	233.93	326.78
1984	NB2	< 0.90	20.63	< 0.90	< 0.90	< 0.90	< 0.90	< 0.80	109.48	291.34
1984	NB3	< 0.80	21.12	14.50	< 0.80	< 0.80	6.55	9.91	65.16	99.02
1984	NB4	< 0.70	11.89	< 0.80	< 0.70	< 0.70	< 0.70	7.50	111.60	212.37
1985	NB1	69.50	48.40	35.60	12.80	< 1.70	4.40	28.40	191.00	225.30
1985	NB2	28.10	27.10	< 1.80	< 1.60	< 1.60	< 1.70	15.20	117.70	155.90
1985	NB3	10.40	8.40	< 0.90	< 0.80	< 0.80	< 0.90	6.60	63.00	111.90
1985	NB4	29.70	14.80	7.30	49.70	< 0.60	< 0.60	5.00	52.00	80.70
1986	NB1	133.88	35.55	22.35	10.46	< 1.11	7.75	31.23	187.77	54.51
1986	NB2	94.20	29.70	19.08	5.52	0.89	4.59	32.99	144.79	38.81
1986	NB3	68.22	6.16	7.96	< 0.73	< 0.75	< 0.72	16.32	85.15	17.01

Table 3a. Continued.

Year	Station	Naphthalene	2-Me-naphthalene	1-Me-naphthalene	Biphenyl	2,6-diMe-thalene	Acenaphthene	Fluorene	Phenanthrene	Anthracene
Eastern Long Island Sound										
1984	ELI1	< 0.30	16.65	< 0.30	< 0.30	3.42	< 0.30	< 0.30	6.03	< 0.20
1984	ELI2	< 0.40	13.91	< 0.40	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	8.28
1984	ELI3	7.20	13.91	< 0.30	1.30	< 0.30	< 0.30	< 0.20	15.90	7.30
1985	ELI1	< 0.50	< 0.50	< 0.50	< 0.40	< 0.40	< 0.50	< 0.40	7.00	< 0.40
1985	ELI2	< 0.60	< 0.60	< 0.60	< 0.50	< 0.50	< 0.60	< 0.50	20.70	3.60
1985	ELI3	< 0.50	< 0.50	< 0.50	< 0.40	< 0.40	< 0.40	< 0.40	4.70	< 0.30
1985	ELI5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.40	< 0.40	< 0.40
1986	ELI1	< 0.52	< 0.45	< 0.54	< 0.47	< 0.48	< 0.47	< 0.46	< 0.41	< 0.41
1986	ELI2	2.19	< 0.51	< 0.61	< 0.53	< 0.54	< 0.52	< 0.52	11.66	< 0.46
1986	ELI3	< 0.56	< 0.48	< 0.57	< 0.50	< 0.51	< 0.50	< 0.50	< 0.44	< 0.44
Western Long Island Sound										
1984	WLI1	102.00	45.52	15.23	7.39	26.61	< 0.80	17.47	272.70	1129.62
1984	WLI2	116.39	65.21	28.47	15.30	< 0.70	< 0.80	18.37	253.95	806.92
1985	WLI1	50.90	31.40	24.00	6.70	12.40	< 0.70	11.10	145.50	29.30
1985	WLI2	81.40	54.40	38.10	< 0.90	22.70	6.30	16.30	169.30	45.00
1985	WLI3	92.70	63.10	39.70	11.80	27.60	6.80	18.70	199.70	51.40
1985	WLI4	116.40	79.30	54.30	< 1.50	36.80	7.20	29.20	275.60	65.00
1986	WLI9	8.05	4.14	< 0.66	< 0.57	< 0.59	< 0.57	< 0.57	22.46	5.92
1986	WLI2	371.69	320.22	120.73	81.37	138.35	156.26	179.32	1420.62	737.72
1986	WLI4	154.74	96.64	44.63	33.89	59.25	26.70	44.39	326.03	113.12
Raritan Bay										
1984	RB1	150.07	89.58	33.04	22.67	51.67	17.29	38.21	255.91	276.66
1984	RB2	160.65	82.56	17.31	< 0.90	41.08	14.77	26.25	220.95	315.94
1984	RB3	205.30	132.38	52.76	33.71	65.83	18.81	39.62	257.69	174.50
1984	RB5	208.96	144.19	67.04	31.18	69.70	47.58	55.89	416.90	375.63
1985	RB1	165.90	145.60	73.40	36.80	80.30	46.60	71.70	392.10	300.10
1985	RB2	161.80	123.40	56.20	46.00	60.80	34.90	50.10	288.50	171.60
1985	RB3	211.50	161.60	76.60	69.90	90.70	16.10	66.00	321.10	246.10
1985	RB4	141.80	36.40	15.00	25.00	< 0.40	13.10	31.60	255.30	156.40
1985	RB5	149.20	130.60	84.00	24.90	99.80	87.00	63.20	385.10	322.80
1986	RB1	233.48	199.11	64.43	69.09	87.46	46.02	80.72	604.51	243.01
1986	RB2	270.69	190.87	65.28	64.24	< 0.91	54.22	67.95	339.85	187.94
1986	RB3	290.38	196.20	71.00	75.91	106.23	52.05	74.90	449.70	219.43
1986	RB4	132.00	67.00	30.00	30.99	39.79	52.83	45.41	392.45	169.79
Great Bay										
1985	GB1	21.70	16.00	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	58.30	83.00
1985	GB2	29.90	21.00	15.90	< 0.90	< 0.90	< 0.90	< 0.80	74.90	156.20
1985	GB3	37.90	26.10	16.50	< 1.00	13.90	< 1.00	10.20	100.40	185.70
1985	GB4	24.80	16.60	< 0.90	< 0.80	< 0.80	< 0.80	< 0.80	58.40	57.40
1986	GB1	26.02	12.54	< 0.74	7.84	< 0.68	< 0.67	10.12	71.87	37.55
1986	GB2	39.18	17.90	< 0.92	< 0.82	< 0.84	< 0.82	5.97	46.48	15.83
1986	GB3	43.34	22.71	26.28	19.86	< 0.79	< 0.78	10.63	58.61	27.07
Delaware Bay										
1984	DB1	< 0.60	< 0.80	< 0.70	< 0.70	< 0.70	< 0.70	< 0.70	< 0.60	< 0.60
1984	DB9	< 0.70	< 0.90	< 0.90	< 0.90	< 0.90	< 0.90	< 0.90	< 0.80	< 0.80
1984	DB11	< 0.60	< 0.80	< 0.80	< 0.80	< 0.70	< 0.80	< 0.70	< 0.70	15.77

Table 3a. Continued.

Year	Station	Naphthalene	2-Me-naphthalene	1-Me-naphthalene	Biphenyl	2,6-diMe-naphthalene	Acenaphthene	Fluorene	Phenanthrene	Anthracene
Delaware Bay										
1985	DB1	23.10	14.50	< 0.60	17.40	< 0.50	< 0.50	7.20	42.20	292.90
1985	DB2	16.00	14.00	6.60	< 0.60	< 0.60	< 0.60	< 0.50	28.40	70.40
1985	DB15	15.80	10.80	0.50	16.70	< 0.50	< 0.50	< 0.50	25.90	298.40
1985	DB16	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	< 0.50	5.00	93.20
1986	DB1	15.82	6.71	< 0.58	< 0.52	< 0.53	< 0.52	< 0.51	19.97	3.75
1986	DB15	30.11	14.91	< 0.93	< 0.81	< 0.83	< 0.82	< 0.81	27.67	7.35
1986	DB16	33.02	20.39	58.48	15.60	< 0.72	< 0.71	7.62	42.79	11.22
Baltimore Harbor										
1986	BAH1	1060.74	341.65	197.98	117.25	206.05	67.22	165.70	647.94	263.51
1986	BAH2	483.76	273.20	110.92	173.00	270.73	25.56	435.31	1377.78	932.46
1986	BAH3	769.46	304.25	162.74	95.38	212.98	71.22	149.11	583.86	227.63
Upper Chesapeake Bay										
1985	CU11	338.20	211.80	132.00	93.30	99.50	22.20	81.80	342.90	99.00
1985	CU22	570.30	398.40	212.90	152.30	170.20	45.40	141.60	537.80	153.30
1985	CU33	87.90	14.70	27.00	9.80	15.90	8.20	14.10	93.30	17.90
1985	CU44	540.70	327.90	179.80	79.20	151.30	33.50	117.30	471.30	116.20
1985	CU55	478.50	289.20	154.60	63.40	110.40	24.50	84.00	392.90	100.70
1986	CU11	450.17	272.46	140.29	79.34	144.46	35.78	124.54	386.32	256.75
1986	CU22	551.28	321.17	166.08	94.96	172.83	43.57	140.92	425.38	196.06
1986	CU33	77.37	65.34	103.97	37.12	137.11	< 0.58	42.89	162.61	58.51
1986	CU44	662.79	363.05	184.31	103.91	175.15	43.70	145.41	499.49	244.96
1986	CU55	379.07	199.85	101.59	51.36	92.08	21.41	59.22	284.96	86.83
Mid Chesapeake Bay										
1985	CM1	11.70	8.10	12.60	< 0.80	< 0.80	< 0.80	< 0.70	22.40	< 0.60
1985	CM2	< 0.50	< 0.50	< 0.50	< 0.40	< 0.40	< 0.50	< 0.40	3.30	< 0.40
1985	CM3	6.60	4.90	< 0.60	< 0.60	< 0.60	< 0.60	< 0.50	11.20	< 0.50
1985	CM4	14.90	8.00	< 1.10	< 1.00	< 1.00	< 1.10	< 1.00	31.00	< 0.90
1986	CM1	< 0.93	11.61	8.34	17.47	11.98	< 0.89	7.43	42.26	90.37
1986	CM2	10.41	2.61	< 0.71	< 0.68	< 0.69	< 0.67	< 0.66	5.74	< 0.59
1986	CM3	14.43	4.37	3.13	< 0.70	< 0.72	< 0.70	< 0.68	11.73	< 0.62
1986	CM4	26.30	7.97	17.11	< 1.06	8.25	< 1.05	3.92	26.03	4.76
Lower Chesapeake Bay										
1984	CL1	< 0.50	< 0.50	< 0.50	< 0.50	< 0.40	< 0.50	< 0.40	7.86	29.56
1984	CL3	< 0.50	< 0.50	< 0.50	< 0.50	< 0.40	< 0.50	< 0.40	34.34	173.39
1985	CL1	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.40	5.90	16.40
1985	CL2	< 0.50	< 0.60	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	19.30	19.50
1985	CL3	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	23.80	36.90
1986	CL1	12.82	2.81	2.95	< 0.75	< 0.76	< 0.74	< 0.73	8.25	< 0.66
1986	CL2	< 0.69	2.03	1.64	< 0.68	< 0.69	< 0.67	< 0.66	5.52	< 0.60
1986	CL3	15.36	6.96	3.69	< 0.89	5.98	< 0.88	< 0.86	18.24	4.28
Elizabeth River										
1986	ER1	134.38	58.62	37.67	17.33	40.47	30.98	41.93	142.47	70.14
1986	ER2	268.47	98.82	54.00	33.71	59.79	92.95	118.57	496.89	272.92
1986	ER3	604.82	160.09	93.99	55.09	94.41	224.88	240.90	1089.22	1012.04

Table 3b. Concentrations of hydrocarbons (1-methylphenanthrene, fluoranthene, pyrene, benzo[a]anthracene, chrysene, benzo[e]pyrene, benzo[a]pyrene, perylene, dibenzo[a,h]anthracene) in sediment (ppb dry weight)

Year	Station	1-Me-phenanthrene	Fluoranthene	Pyrene	Benzo[a]-anthracene	Chrysene	Benzo[e]-pyrene	Benzo[a]-pyrene	Perylene	Dibenzo[a,h]anthracene
Machias Bay										
1985	MB1	262.50	6.90	18.80	< 0.60	< 1.20	1.40	7.80	< 1.50	15.10
1985	MB2	295.00	13.40	19.40	< 0.60	16.90	1.20	< 0.60	< 1.50	< 2.00
1985	MB3	160.80	27.20	< 0.50	6.10	27.20	5.60	16.30	< 1.20	< 1.60
1985	MB4	313.00	15.70	11.50	< 0.50	25.70	11.60	18.80	< 1.40	< 1.80
1986	MB1	< 0.48	11.90	10.49	< 0.61	< 0.60	< 0.52	< 0.56	< 0.54	< 0.68
1986	MB3	< 0.57	50.27	41.15	15.11	24.23	19.96	16.75	11.06	< 0.84
1986	MB4	< 0.49	10.21	7.85	< 0.71	< 0.69	< 0.60	< 0.64	< 0.62	< 0.78
Frenchmans Bay										
1985	FB1	3.00	52.00	32.00	30.00	< 2.00	20.00	68.00	< 3.00	< 3.00
1985	FB2	< 2.00	81.00	23.00	49.00	103.00	53.00	77.00	< 6.00	32.00
1985	FB3	5.00	55.00	39.00	24.00	62.00	22.00	31.00	< 1.00	< 2.00
1985	FB4	< 1.00	79.00	50.00	29.00	< 2.00	18.00	45.00	< 2.00	< 3.00
1986	FB1	110.00	26.87	49.73	19.08	0.77	5.60	< 0.72	< 0.70	< 0.81
1986	FB2	8.00	23.12	40.99	12.13	10.29	< 0.67	< 0.70	< 0.68	< 0.78
1986	FB3	< 0.76	11.52	20.75	< 0.68	< 0.67	< 0.60	< 0.63	< 0.61	< 0.70
Penobscot Bay										
1985	PB1	33.00	264.80	239.20	92.10	122.90	122.80	146.50	6.50	11.10
1985	PB2	19.10	101.60	75.10	38.30	65.30	56.90	63.60	< 1.00	< 0.90
1985	PB3	21.00	114.20	82.00	31.90	59.60	32.30	69.10	< 0.90	16.20
1985	PB4	16.10	54.90	42.70	23.40	40.80	26.00	45.40	< 0.70	< 0.60
1985	PB5	15.60	64.90	43.80	17.30	39.50	36.90	47.20	< 0.80	< 0.70
1986	PB1	27.40	221.49	204.46	74.88	120.62	110.06	112.21	38.23	< 1.22
1986	PB3	17.88	158.69	139.82	48.04	87.46	89.33	72.79	39.68	< 1.55
1986	PB4	17.05	99.30	84.13	28.01	50.87	50.15	40.75	22.67	< 1.19
Casco Bay										
1984	CB5	3280.26	504.00	676.89	595.82	388.88	170.65	237.45	368.46	< 1.40
1985	CB1	< 1.10	101.10	60.20	39.80	59.60	< 1.30	< 1.30	2.30	< 1.50
1985	CB2	19.60	215.60	177.00	76.90	117.20	< 1.10	< 1.20	< 1.10	< 1.40
1985	CB3	18.20	171.40	127.80	61.00	104.20	< 1.50	< 1.50	1.70	< 1.70
1985	CB4	35.70	421.40	411.20	163.50	220.90	< 1.00	< 1.00	2.60	< 1.20
1985	CB5	16.90	222.20	224.10	111.30	146.20	< 0.90	< 0.90	< 0.80	< 1.00
1986	CB1	369.00	74.67	112.05	46.17	37.67	32.02	34.83	14.89	< 0.79
1986	CB2	225.00	178.76	177.99	68.73	96.90	83.28	89.01	36.49	< 0.90
Merrimack River										
1984	MR2	1598.97	154.01	260.83	693.41	< 0.40	61.86	76.43	128.76	< 0.30
1984	MR3	82.22	7.94	24.77	12.60	14.21	2.31	3.05	0.93	< 0.30
1985	MR1	37.40	3.00	1.80	15.40	4.50	< 0.30	2.00	< 0.30	1.50
1985	MR2	72.30	5.20	8.10	32.50	10.00	< 0.30	< 0.30	< 0.30	1.80
1985	MR3	53.20	6.40	9.80	45.00	< 0.30	2.90	9.60	< 0.30	< 0.30
Salem Harbor										
1984	SH1	2108.00	1737.00	3336.00	442.75	645.66	539.24	540.09	38.56	130.77
1984	SH2	1419.74	1110.20	1555.83	413.59	498.00	393.78	433.13	63.98	66.70
1984	SH3	8500.40	1193.70	1206.40	512.30	652.80	501.70	474.40	119.70	237.90
1985	SH1	19260.00	886.40	1582.20	665.30	530.60	455.00	725.70	82.90	56.30
1985	SH2	2596.00	482.80	1356.70	676.70	370.80	209.70	279.30	< 0.70	8.30

Table 3b. Continued.

Year	Station	1-Me-phenanthrene	Fluoranthene	Pyrene	Benzo[a]-anthracene	Chrysene	Benzo[e]-pyrene	Benzo[a]-pyrene	Perylene	Dibenzo[a,h]anthracene
Salem Harbor										
1985	SH3	3870.70	1009.20	1826.90	910.90	785.70	471.50	577.50	116.40	33.50
1985	SH4	4930.80	902.80	1279.50	829.70	675.00	494.90	506.70	110.00	88.70
1986	SH1	123.85	1307.15	1113.02	434.21	646.33	494.82	566.30	151.37	89.35
1986	SH2	52.98	442.64	380.31	178.26	243.94	155.10	179.53	40.66	28.68
1986	SH3	90.40	746.10	643.92	329.28	417.23	269.54	321.61	83.37	70.77
Boston Harbor										
1984	BH1	1816.00	1002.00	1161.00	718.53	878.07	558.46	629.23	142.77	105.62
1984	BH2	1465.80	5001.20	4631.60	2691.10	2161.80	1091.00	892.80	255.50	187.80
1984	BH3	802.95	586.41	670.93	365.07	428.90	303.73	367.28	94.46	60.82
1985	BH2	322.10	1290.70	1130.80	585.20	843.10	476.10	564.50	265.60	203.00
1985	BH3	194.80	962.60	987.70	512.60	781.00	379.70	513.20	184.80	109.50
1985	BH4	170.50	1087.40	911.20	563.60	825.50	435.30	552.00	270.60	257.00
1985	BH5	131.50	975.00	768.80	405.50	726.10	352.90	417.40	170.60	124.90
1986	BH1	69.88	317.00	282.10	142.00	179.36	131.15	136.59	38.27	27.60
1986	BH2	395.64	965.03	891.59	590.00	744.48	528.00	557.44	125.07	52.77
1986	BH3	326.04	1272.90	1207.19	704.50	891.62	590.32	736.12	175.72	129.77
Quincy Bay										
1986	QB1	81.33	695.47	641.04	360.00	429.50	346.51	365.69	69.04	96.26
1986	QB2	76.65	697.66	633.96	319.00	422.99	325.32	341.69	74.05	66.28
1986	QB3	139.34	1083.67	1036.10	438.33	554.19	454.79	529.59	125.00	97.62
Buzzards Bay										
1984	BB1	303.72	156.07	144.70	61.99	98.45	83.18	78.95	< 1.10	< 1.10
1984	BB2	2094.77	153.24	135.46	335.72	128.22	49.08	47.98	28.19	< 0.90
1984	BB3	885.63	113.70	103.89	123.90	83.09	53.03	53.37	< 0.90	< 0.90
1984	BB4	329.69	161.68	175.00	79.94	112.60	82.90	99.07	21.09	< 0.90
1984	BB80	325.06	81.43	56.88	54.11	42.83	39.21	35.57	< 0.90	< 0.90
1985	BB1	< 0.34	< 0.33	57.39	< 0.37	< 0.38	10.71	33.37	17.39	< 0.30
1985	BB2	< 0.23	14.05	9.56	< 0.29	< 0.30	< 0.27	< 0.29	< 0.25	< 0.24
1985	BB3	< 0.38	< 0.38	< 0.37	< 0.43	< 0.43	< 0.40	< 0.42	< 0.36	19.45
1985	BB4	216.92	< 0.64	< 0.64	< 0.68	< 0.69	< 0.63	< 0.67	< 0.58	< 0.55
1986	BB1	25.73	114.81	114.90	78.69	61.50	53.63	57.33	17.60	13.85
1986	BB3	6.70	79.99	74.43	33.72	47.14	36.44	42.73	< 0.57	< 0.59
1986	BB4	6.32	67.63	80.92	42.03	48.63	32.44	47.12	< 0.57	< 0.59
Narragansett Bay										
1984	NB1	815.54	424.28	362.82	296.53	341.21	262.81	285.93	75.02	70.55
1984	NB2	1057.00	204.27	321.86	110.65	154.09	135.93	118.54	51.52	< 0.70
1984	NB3	252.15	115.80	92.99	63.66	45.49	51.04	50.76	14.96	< 0.60
1984	NB4	654.76	178.76	259.85	269.29	142.93	91.22	106.65	40.03	79.43
1985	NB1	748.60	335.30	465.50	214.00	235.60	228.20	256.20	118.00	80.80
1985	NB2	921.60	203.20	461.80	144.70	146.50	128.00	146.10	42.40	58.30
1985	NB3	558.90	93.00	168.40	132.00	75.90	46.80	67.70	2.10	< 1.10
1985	NB4	335.50	86.80	169.30	348.50	79.50	53.80	62.60	1.80	17.60
1986	NB1	25.28	365.17	367.74	155.27	202.03	187.14	226.10	81.93	51.38
1986	NB2	25.53	240.23	241.41	107.75	136.32	132.90	135.11	48.85	39.53
1986	NB3	16.63	116.06	121.75	69.41	58.40	52.49	60.24	23.21	< 0.49

Table 3b. Continued.

Year	Station	1-Me-phenanthrene	Fluoranthene	Pyrene	Benzo[a]-anthracene	Chrysene	Benzo[e]-pyrene	Benzo[a]-pyrene	Perylene	Dibenzo[a,h]anthracene
Eastern Long Island Sound										
1984	ELI1	4.39	9.21	8.68	3.97	7.37	6.64	5.05	< 0.50	< 0.60
1984	ELI2	3.05	< 0.30	16.76	< 0.30	< 0.40	< 0.30	6.56	< 0.60	< 0.70
1984	ELI3	4.80	< 0.20	35.90	21.30	30.60	25.90	29.00	241.40	12.70
1985	ELI1	< 0.30	9.70	11.90	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	0.40
1985	ELI2	< 0.40	34.00	35.00	21.50	< 0.50	< 0.40	< 0.50	1.50	2.10
1985	ELI3	< 0.30	4.80	7.30	3.60	< 0.30	2.40	< 0.30	0.70	0.40
1985	ELI5	< 0.40	1.30	< 0.40	< 0.50	< 0.50	< 0.50	< 0.50	4.00	0.50
1986	ELI1	< 0.40	< 0.39	< 0.38	< 1.38	< 1.34	< 1.17	< 1.38	< 1.28	< 2.24
1986	ELI2	< 0.45	< 0.44	23.56	13.92	24.24	21.19	20.24	< 0.76	< 1.32
1986	ELI3	< 0.43	< 0.42	< 0.41	< 0.72	< 0.70	< 0.61	< 0.72	< 0.67	< 1.17
Western Long Island Sound										
1984	WLI1	3372.01	504.11	1845.84	498.09	399.00	305.94	783.13	95.57	80.90
1984	WLI2	2500.85	486.09	1321.23	346.28	342.55	373.75	505.31	103.95	76.94
1985	WLI1	24.00	300.40	316.40	128.10	255.00	161.30	225.50	< 0.90	69.10
1985	WLI2	28.20	328.40	344.60	136.20	291.00	251.40	260.10	< 1.10	51.20
1985	WLI3	40.10	384.00	403.70	166.50	364.90	281.90	314.30	< 1.30	63.00
1985	WLI4	27.80	479.60	516.80	203.00	443.40	289.40	368.40	< 1.90	88.60
1986	WLI9	< 0.49	3.06	42.89	12.40	25.09	27.18	26.01	7.63	< 1.00
1986	WLI2	285.90	3061.53	< 0.67	2084.78	1944.70	1381.81	< 0.66	532.24	556.49
1986	WLI4	43.15	646.14	695.59	267.13	392.39	361.35	471.55	116.64	96.63
Raritan Bay										
1984	RB1	472.83	508.10	687.23	304.00	437.47	333.52	377.19	99.20	104.96
1984	RB2	497.23	512.67	612.19	304.70	348.92	336.10	404.57	145.37	101.05
1984	RB3	130.10	576.23	672.84	347.58	491.40	400.00	454.02	190.59	106.31
1984	RB5	2030.90	762.10	837.20	472.06	554.50	402.24	523.90	184.36	109.87
1985	RB1	918.10	741.30	1335.70	568.00	631.50	461.30	544.00	247.60	115.00
1985	RB2	185.20	590.60	674.40	413.10	524.50	460.50	581.60	243.90	95.60
1985	RB3	381.80	547.30	757.60	409.60	551.00	465.40	584.50	243.40	115.90
1985	RB4	124.20	642.10	802.20	503.00	531.80	434.20	665.10	174.40	124.10
1985	RB5	1899.60	661.10	1009.90	534.10	606.80	382.00	531.00	214.50	129.70
1986	RB1	129.65	928.39	1267.41	628.56	776.84	680.05	734.89	232.19	216.36
1986	RB2	67.85	568.82	761.12	388.42	542.27	563.62	649.40	244.49	146.23
1986	RB3	113.38	721.46	975.93	503.57	664.95	556.76	664.85	264.61	176.44
1986	RB4	88.45	730.17	784.95	502.83	558.00	429.43	615.89	161.77	118.12
Great Bay										
1985	GB1	250.90	75.90	70.00	74.20	59.70	43.40	61.20	37.20	1.20
1985	GB2	287.10	94.90	114.50	135.40	71.60	43.20	83.80	< 1.40	< 1.40
1985	GB3	330.80	125.10	95.90	< 0.90	78.70	87.30	85.60	68.50	2.00
1985	GB4	80.90	80.70	54.50	180.40	36.60	27.40	57.50	< 1.50	< 1.60
1986	GB1	6.08	101.16	87.33	37.14	71.23	60.11	58.31	40.47	< 0.91
1986	GB2	5.84	90.19	87.95	28.38	85.83	77.55	58.89	65.66	< 1.79
1986	GB3	9.96	111.71	111.14	57.48	120.17	73.40	77.68	62.89	< 1.04
Delaware Bay										
1984	DB1	185.96	26.96	22.21	< 0.50	13.43	25.68	< 0.50	< 0.50	< 0.60
1984	DB9	533.75	< 0.70	28.18	< 0.70	26.89	15.51	14.73	21.37	< 0.70
1984	DB11	66.87	< 0.60	< 0.60	< 0.60	< 0.60	< 0.50	< 0.60	< 0.50	< 0.60
1985	DB1	640.90	62.90	120.40	30.70	24.20	25.50	38.40	20.50	8.50

Table 3b. Continued.

Year	Station	1-Me-phenanthrene	Fluoranthene	Pyrene	Benzo[a]-anthracene	Chrysene	Benzo[e]-pyrene	Benzo[a]-pyrene	Perylene	Dibenzo[a,h]anthracene
Delaware Bay										
1985	DB2	101.20	29.70	42.90	27.40	24.70	9.60	18.60	49.00	< 0.60
1985	DB15	648.10	33.40	56.10	39.20	23.30	15.50	30.20	< 0.50	0.90
1985	DB16	125.00	12.10	48.10	11.40	< 0.50	0.50	1.00	< 0.70	< 0.70
1986	DB1	< 0.43	29.81	24.86	24.18	17.74	13.58	15.89	< 0.45	< 0.59
1986	DB15	< 0.68	42.21	35.82	47.83	21.92	18.26	16.99	24.80	< 0.93
1986	DB16	< 0.59	54.20	44.79	27.06	27.74	24.32	21.40	41.05	< 0.79
Baltimore Harbor										
1986	BAH1	97.46	1145.28	1040.96	511.43	786.97	618.82	670.76	597.06	129.23
1986	BAH2	869.21	1857.11	1675.61	653.25	1671.97	660.41	661.31	706.96	266.06
1986	BAH3	84.72	1013.03	907.07	499.47	775.93	575.78	631.40	465.54	129.01
Upper Chesapeake Bay										
1985	CU11	96.50	325.30	258.50	160.30	197.50	174.40	152.20	177.40	15.90
1985	CU22	139.80	449.90	435.40	230.80	233.20	161.80	200.40	313.10	21.00
1985	CU33	9.30	90.60	76.40	47.50	66.40	41.80	44.80	< 0.60	9.70
1985	CU44	70.80	427.50	435.80	233.40	280.10	186.40	217.50	349.90	24.90
1985	CU55	56.80	342.80	314.50	185.20	204.40	169.90	185.10	429.40	36.00
1986	CU11	446.14	369.86	335.26	129.71	186.17	127.63	135.95	157.10	22.55
1986	CU22	261.79	406.11	371.22	156.79	227.11	167.45	156.07	166.30	27.93
1986	CU33	43.88	111.11	112.81	194.82	344.22	226.73	219.07	88.64	65.13
1986	CU44	68.18	468.03	439.35	171.60	241.00	181.65	196.98	261.99	35.25
1986	CU55	60.18	291.15	287.62	114.48	160.01	113.59	131.00	196.92	26.74
Mid Chesapeake Bay										
1985	CM1	< 0.60	17.10	< 0.60	< 0.80	18.50	106.10	123.40	234.60	< 0.80
1985	CM2	< 0.30	3.80	27.30	< 0.30	< 0.40	13.40	14.40	12.10	< 0.40
1985	CM3	< 0.50	9.40	64.10	< 0.50	2.60	47.90	46.50	156.50	1.10
1985	CM4	< 0.80	29.00	212.60	< 0.80	20.90	72.00	74.80	365.70	< 0.90
1986	CM1	271.58	31.93	33.16	21.16	28.67	12.80	1.69	34.46	22.60
1986	CM2	< 0.56	6.19	8.72	< 0.72	< 0.72	< 0.68	< 0.69	< 0.69	< 0.71
1986	CM3	< 0.58	8.42	7.52	< 0.95	6.35	< 0.90	< 0.91	< 0.91	< 0.94
1986	CM4	2.29	18.70	24.52	5.03	13.86	6.70	< 0.99	20.88	< 1.02
Lower Chesapeake Bay										
1984	CL1	110.05	3.04	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.40	< 0.50
1984	CL3	816.34	15.31	53.22	14.72	< 0.30	7.11	< 0.30	3.50	< 0.50
1985	CL1	111.10	4.30	8.00	4.70	< 0.50	1.20	9.60	< 0.50	< 0.50
1985	CL2	115.40	22.20	22.80	11.50	< 0.50	3.80	16.70	< 0.50	< 0.50
1985	CL3	162.20	21.90	24.70	24.20	< 0.60	4.70	< 0.60	< 0.70	< 0.70
1986	CL1	< 0.62	7.03	11.81	< 0.71	9.45	< 0.67	< 0.69	8.56	< 0.70
1986	CL2	< 0.56	5.88	3.79	< 0.76	< 0.76	< 0.72	< 0.73	8.90	< 0.75
1986	CL3	1.76	25.56	23.17	9.64	16.38	< 0.76	< 0.77	19.81	< 0.79
Elizabeth River										
1986	ER1	23.26	278.26	249.93	132.87	227.91	139.26	127.63	79.98	26.13
1986	ER2	56.39	1114.29	906.80	488.54	746.94	480.65	512.19	158.32	103.70
1986	ER3	150.15	2819.79	2820.84	1489.95	2796.33	499.02	2814.59	693.36	693.90

Table 3c. Concentrations of hydrocarbons (hexachlorobenzene, lindane, heptachlor, aldrin, heptachlor epoxide, o,p'-DDE, α -chlordane, trans-nonachlor, dieldrin) in sediment (ppb dry weight)

Year	Station	Hexachloro- benzene	Lindane	Heptachlor	Aldrin	Heptachlor epoxide	o,p'- DDE	α -Chlordane	trans- Nonachlor	Dieldrin
Machias Bay										
1985	MB1	0.40	0.20	< 0.10	0.40	< 0.10	< 0.20	< 0.10	< 0.10	< 0.10
1985	MB2	0.50	0.20	< 0.10	0.30	< 0.20	< 0.20	< 0.10	< 0.10	< 0.20
1985	MB3	0.80	0.60	< 0.10	< 0.10	< 0.20	< 0.20	< 0.10	< 0.10	< 0.10
1985	MB4	1.00	1.00	0.40	< 0.10	< 0.20	< 0.20	< 0.10	< 0.10	< 0.10
1986	MB1	< 0.05	0.86	3.30	< 0.09	< 0.08	0.71	< 0.07	< 0.07	< 0.10
1986	MB3	0.11	0.51	0.29	0.69	< 0.12	< 0.19	< 0.11	< 0.10	< 0.13
1986	MB4	< 0.06	0.21	< 0.09	0.35	< 0.10	< 0.15	< 0.09	< 0.08	< 0.11
Frenchmans Bay										
1985	FB1	1.00	1.00	< 0.30	< 0.30	< 0.40	< 0.40	0.40	< 0.20	< 0.30
1985	FB2	1.00	< 0.30	< 0.40	< 0.40	< 0.50	< 0.60	< 0.30	< 0.30	< 0.40
1985	FB3	1.00	0.50	0.40	< 0.20	< 0.20	< 0.30	0.20	< 0.10	< 0.20
1985	FB4	0.80	0.50	< 0.20	< 0.20	< 0.20	< 0.30	< 0.20	< 0.20	< 0.20
1986	FB1	< 0.10	< 0.15	4.05	6.47	< 0.16	1.62	< 0.14	< 0.14	< 0.18
1986	FB2	< 0.08	< 0.12	< 0.12	3.34	< 0.13	1.35	< 0.12	0.37	0.64
1986	FB3	1.69	< 0.12	< 0.13	1.13	< 0.14	0.61	< 0.12	< 0.12	< 0.16
Penobscot Bay										
1985	PB1	2.00	< 0.20	< 0.30	< 0.30	< 0.40	< 0.40	0.30	< 0.20	< 0.30
1985	PB2	2.00	< 0.20	< 0.20	< 0.20	< 0.30	< 0.30	0.40	< 0.20	< 0.20
1985	PB3	2.00	< 0.30	< 0.30	< 0.30	< 0.40	< 0.50	0.40	< 0.20	< 0.30
1985	PB4	1.00	< 0.20	< 0.20	< 0.20	< 0.30	< 0.40	0.50	< 0.20	< 0.30
1985	PB5	1.00	< 0.20	< 0.20	< 0.20	< 0.30	< 0.30	0.30	< 0.20	< 0.20
1986	PB1	1.87	2.39	4.55	4.20	< 0.19	1.47	< 0.17	< 0.16	< 0.20
1986	PB3	1.19	1.75	1.26	0.14	< 0.18	1.05	< 0.16	< 0.15	< 0.20
1986	PB4	0.89	1.81	1.67	< 0.16	< 0.15	2.46	1.04	1.33	< 0.20
Casco Bay										
1984	CB5	1.50	< 0.20	1.40	3.20	< 0.30	< 4.40	2.50	0.20	< 0.30
1985	CB1	0.40	< 0.20	< 0.20	< 0.20	< 0.30	< 0.40	0.30	< 0.20	< 0.30
1985	CB2	3.00	< 0.30	< 0.30	< 0.30	< 0.50	< 0.60	1.00	< 0.30	< 0.40
1985	CB3	1.00	< 0.30	< 0.30	< 0.30	< 0.50	< 0.50	1.00	< 0.30	< 0.40
1985	CB4	1.00	< 0.20	< 0.30	< 0.30	< 0.40	< 0.50	0.50	< 0.30	< 0.40
1985	CB5	0.40	< 0.20	< 0.20	< 0.20	< 0.30	< 0.30	< 0.20	< 0.20	< 0.30
1986	CB1	< 0.10	< 0.15	5.82	7.69	< 0.17	2.11	1.08	1.51	1.97
1986	CB2	0.96	< 0.12	2.08	4.06	< 0.14	1.92	1.46	0.46	2.13
Merrimack River										
1984	MR2	1.40	< 0.06	0.60	< 0.07	< 0.08	< 0.10	0.60	1.00	< 0.07
1984	MR3	0.53	0.45	0.50	< 0.04	< 0.05	< 0.06	0.46	0.32	< 0.04
1985	MR1	0.40	0.10	< 0.10	0.40	< 0.20	< 0.20	< 0.10	< 0.10	< 0.10
1985	MR2	0.90	0.30	< 0.10	0.30	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
1985	MR3	< 0.10	0.20	< 0.10	0.30	< 0.10	< 0.10	0.10	< 0.10	< 0.10
Salem Harbor										
1984	SH1	6.10	< 0.70	< 0.80	< 0.80	< 1.00	< 1.10	12.10	11.00	< 0.80
1984	SH2	5.40	14.60	< 0.60	< 0.50	< 0.70	< 0.80	6.20	4.10	< 0.60
1984	SH3	2.30	4.30	< 0.50	< 0.50	< 0.70	< 0.80	6.50	7.20	< 0.60
1985	SH1	2.00	2.00	< 0.40	10.00	< 0.40	< 0.50	2.00	3.00	< 0.40

Table 3c. Continued.

Year	Station	Hexachloro- benzene	Lindane	Heptachlor	Aldrin	Heptachlor epoxide	o,p'- DDE	α -Chlordane	trans- Nonachlor	Dieldrin
Salem Harbor										
1985	SH2	< 0.20	0.90	< 0.20	3.00	< 0.30	< 0.30	1.00	2.00	< 0.20
1985	SH3	1.00	2.00	< 0.30	6.00	< 0.30	< 0.40	2.00	3.00	< 0.30
1985	SH4	2.00	4.00	< 0.50	4.00	< 0.60	< 0.70	2.00	3.00	< 0.50
1986	SH1	1.16	0.90	2.34	0.43	< 0.24	< 0.42	< 0.22	2.79	< 0.27
1986	SH2	0.48	0.74	0.43	0.02	< 0.13	< 0.23	< 0.12	1.32	< 0.15
1986	SH3	1.21	1.97	0.51	0.10	< 0.33	< 0.57	< 0.29	2.49	< 0.37
Boston Harbor										
1984	BH1	1.98	< 0.30	< 0.40	< 0.30	< 0.40	< 0.50	5.57	5.03	1.31
1984	BH2	2.54	< 0.07	< 0.07	< 0.07	< 0.10	357.72	< 0.07	6.64	< 0.08
1984	BH3	0.31	0.43	0.76	1.98	< 0.09	< 0.10	3.34	3.01	0.93
1985	BH2	1.00	< 0.10	< 0.20	3.00	< 0.20	< 0.30	5.00	4.00	4.00
1985	BH3	0.40	< 0.20	< 0.20	< 0.20	< 0.30	< 0.30	3.00	3.00	1.00
1985	BH4	1.00	< 0.20	< 0.20	< 0.20	< 0.30	< 0.40	3.00	3.00	1.00
1985	BH5	0.80	< 0.20	< 0.20	< 0.20	< 0.30	< 0.40	4.00	3.00	1.00
1986	BH1	0.24	0.31	< 0.10	< 0.12	< 0.11	< 0.20	0.92	0.74	< 0.13
1986	BH2	1.74	1.79	< 0.23	< 0.28	< 0.25	< 0.44	6.88	5.09	< 0.29
1986	BH3	0.87	2.17	< 0.15	0.25	< 0.17	< 0.29	< 0.15	5.29	< 0.19
Quincy Bay										
1986	QB1	0.33	0.40	< 0.16	< 0.20	< 0.18	< 0.31	2.95	2.70	< 0.20
1986	QB2	0.50	1.02	< 0.20	0.56	< 0.22	< 0.39	3.66	3.18	< 0.25
1986	QB3	1.20	1.19	< 0.19	0.40	< 0.21	< 0.36	5.40	5.26	< 0.24
Buzzards Bay										
1984	BB1	< 0.40	< 0.40	< 0.70	< 0.50	< 0.60	< 0.70	< 0.40	< 0.40	< 0.50
1984	BB2	< 0.10	< 0.20	< 0.20	< 0.20	< 0.20	< 0.30	< 0.10	< 0.10	< 0.20
1984	BB3	1.69	< 0.07	< 0.07	< 0.07	< 0.10	0.48	< 0.07	0.58	< 0.08
1984	BB4	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
1984	BB80	< 0.10	< 0.10	< 0.20	< 0.10	< 0.20	< 0.20	< 0.20	< 0.10	< 0.10
1985	BB1	< 0.03	5.00	< 0.05	< 0.04	< 0.05	< 0.06	< 0.03	< 0.03	0.40
1985	BB2	< 0.02	< 0.02	< 0.03	< 0.02	< 0.03	< 0.03	< 0.02	< 0.02	0.20
1985	BB3	< 0.03	0.90	< 0.05	< 0.04	< 0.05	< 0.06	< 0.04	< 0.03	< 0.04
1985	BB4	< 0.04	5.00	< 0.06	< 0.05	< 0.07	< 0.08	< 0.05	< 0.05	< 0.06
1986	BB1	1.69	< 0.19	4.82	6.85	1.10	< 0.34	< 0.17	0.19	< 0.22
1986	BB3	0.43	< 0.11	1.49	1.10	< 0.11	< 0.19	< 0.10	< 0.09	< 0.13
1986	BB4	< 0.13	< 0.18	1.37	< 0.20	< 0.18	< 0.32	< 0.17	< 0.16	< 0.21
Narragansett Bay										
1984	NB1	1.46	1.52	< 0.40	4.13	< 0.30	< 0.40	2.73	1.97	1.94
1984	NB2	0.80	0.23	1.27	1.25	< 0.10	< 0.10	1.52	1.13	2.00
1984	NB3	0.45	1.14	< 0.10	1.26	< 0.10	< 0.10	0.82	0.61	1.03
1984	NB4	1.39	< 0.10	1.16	< 0.10	< 0.20	< 0.20	1.17	0.86	< 0.20
1985	NB1	2.00	< 0.50	< 0.60	4.00	< 0.90	< 1.00	3.00	3.00	4.00
1985	NB2	3.00	< 0.50	< 0.60	6.00	< 0.90	< 1.00	4.00	3.00	4.00
1985	NB3	< 0.20	< 0.20	< 0.20	4.00	< 0.30	< 0.30	0.60	0.50	0.50
1985	NB4	< 0.20	< 0.20	< 0.20	3.00	< 0.30	0.80	0.80	< 0.20	< 0.30
1986	NB1	< 0.17	3.31	5.01	8.72	< 0.25	< 0.43	1.55	1.21	2.02
1986	NB2	< 0.11	10.21	< 0.15	7.50	0.36	< 0.28	1.36	1.14	2.00
1986	NB3	2.01	7.38	< 0.19	3.13	< 0.20	< 0.34	1.73	2.77	4.11

Table 3c. Continued.

Year	Station	Hexachloro- benzene	Lindane	Heptachlor	Aldrin	Heptachlor epoxide	o,p'- DDE	α -Chlordane	trans- Nonachlor	Dieldrin
Eastern Long Island Sound										
1984	ELI1	< 0.02	< 0.02	< 0.03	< 0.03	< 0.04	< 0.02	< 0.02	< 0.03	< 0.02
1984	ELI2	< 0.02	< 0.03	< 0.03	< 0.03	< 0.04	< 0.05	< 0.03	< 0.03	< 0.04
1984	ELI3	0.10	0.30	< 0.02	< 0.02	< 0.03	0.40	< 0.02	< 0.02	< 0.03
1985	ELI1	< 0.05	< 0.04	< 0.05	0.06	< 0.07	< 0.08	0.10	< 0.04	< 0.05
1985	ELI2	0.10	0.10	< 0.10	0.10	0.20	< 0.10	< 0.05	< 0.04	< 0.10
1985	ELI3	0.10	0.20	< 0.05	0.10	< 0.10	< 0.10	0.10	< 0.04	< 0.10
1985	ELI5	< 0.05	< 0.04	< 0.05	< 0.05	< 0.07	< 0.08	< 0.04	< 0.04	< 0.05
1986	ELI1	< 0.04	< 0.06	< 0.05	< 0.06	< 0.06	< 0.10	< 0.05	< 0.05	< 0.07
1986	ELI2	< 0.04	< 0.05	< 0.05	< 0.06	< 0.05	< 0.10	0.09	< 0.05	< 0.06
1986	ELI3	< 0.04	< 0.06	< 0.05	< 0.06	< 0.06	< 0.10	< 0.05	< 0.05	< 0.07
Western Long Island Sound										
1984	WLI1	0.70	1.55	< 0.08	< 0.06	< 0.10	0.64	1.18	0.82	< 0.09
1984	WLI2	< 0.06	3.18	< 0.07	< 0.06	< 0.10	0.64	1.81	1.24	< 0.08
1985	WLI1	0.10	0.20	< 0.20	< 0.20	< 0.20	< 0.30	0.90	0.60	< 0.20
1985	WLI2	0.20	0.20	< 0.20	< 0.20	< 0.30	< 0.30	2.00	1.00	0.90
1985	WLI3	0.30	0.60	< 0.30	< 0.30	< 0.40	< 0.40	2.00	1.00	< 0.30
1985	WLI4	0.70	1.00	< 0.30	0.90	< 0.50	< 0.60	4.00	3.00	< 0.40
1986	WLI9	0.16	0.24	< 0.06	< 0.07	< 0.06	< 0.11	0.37	0.49	< 0.07
1986	WLI2	0.36	0.75	< 0.12	< 0.15	< 0.14	< 0.24	1.49	0.91	0.90
1986	WLI4	1.43	3.14	< 0.17	< 0.21	< 0.19	< 0.34	3.89	2.76	2.15
Raritan Bay										
1984	RB1	0.92	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	2.87	2.68	1.85
1984	RB2	1.13	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	3.36	3.55	2.22
1984	RB3	1.13	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	3.73	3.44	2.00
1984	RB5	1.06	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	3.01	2.62	1.42
1985	RB1	9.00	7.00	< 0.10	8.00	< 0.20	< 0.20	7.00	5.00	4.00
1985	RB2	2.00	2.00	< 0.10	4.00	< 0.20	< 0.20	3.00	3.00	2.00
1985	RB3	2.00	2.00	< 0.20	4.00	< 0.30	< 0.30	7.00	5.00	2.00
1985	RB4	0.60	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	2.00	2.00	< 0.10
1985	RB5	2.00	1.00	< 0.20	4.00	< 0.20	< 0.30	4.00	3.00	< 0.20
1986	RB1	3.11	2.46	< 0.27	< 0.28	< 0.29	< 0.43	5.03	4.49	3.02
1986	RB2	2.44	2.24	< 0.24	< 0.25	< 0.25	< 0.37	6.49	8.20	< 0.24
1986	RB3	4.64	3.58	< 0.22	< 0.22	< 0.23	< 0.34	3.95	3.41	< 0.22
1986	RB4	0.20	0.39	< 0.15	< 0.16	< 0.16	< 0.24	1.63	1.52	< 0.15
Great Bay										
1985	GB1	0.40	0.30	< 0.10	1.00	2.00	< 0.20	0.70	0.60	< 0.10
1985	GB2	0.80	0.30	< 0.20	2.00	2.00	< 0.20	0.80	0.60	< 0.20
1985	GB3	0.80	0.60	< 0.20	2.00	2.00	< 0.30	< 0.20	1.00	< 0.20
1985	GB4	0.30	0.04	< 0.10	1.00	0.50	< 0.20	0.30	0.40	< 0.20
1986	GB1	0.31	< 0.07	< 0.07	< 0.08	< 0.08	< 0.12	0.88	1.07	< 0.08
1986	GB2	0.25	< 0.10	< 0.10	< 0.11	< 0.11	< 0.17	0.93	0.97	< 0.12
1986	GB3	0.16	< 0.09	< 0.09	< 0.11	< 0.10	< 0.16	0.86	0.86	< 0.11
Delaware Bay										
1984	DB1	0.57	1.44	0.55	< 0.06	< 0.08	0.69	0.44	0.64	< 0.07
1984	DB9	4.16	1.91	0.37	0.78	< 0.10	0.72	0.69	1.19	< 0.10
1984	DB11	0.42	0.32	< 0.06	< 0.06	< 0.07	< 0.09	< 0.05	< 0.05	< 0.06

Table 3c. Continued.

Year	Station	Hexachloro- benzene	Lindane	Heptachlor	Aldrin	Heptachloro,p'-DDE epoxide	α -Chlordane	trans- Nonachlor	Dieldrin	
Delaware Bay										
1985	DB1	1.00	1.00	< 0.20	< 0.10	< 0.20	< 0.20	17.00	21.00	3.00
1985	DB2	1.00	1.00	< 0.20	1.00	< 0.20	< 0.30	4.00	6.00	1.00
1985	DB15	1.00	1.00	< 0.20	1.00	< 0.20	< 0.20	6.00	8.00	1.00
1985	DB16	< 0.20	< 0.20	< 0.20	1.00	< 0.30	< 0.30	1.00	0.30	< 0.20
1986	DB1	0.17	0.32	0.13	< 0.06	< 0.06	0.98	0.40	0.47	< 0.07
1986	DB15	1.18	0.94	< 0.09	< 0.11	< 0.10	< 0.16	0.96	1.04	< 0.11
1986	DB16	0.49	0.86	< 0.09	< 0.10	< 0.10	< 0.15	0.62	0.40	< 0.11
Baltimore Harbor										
1986	BAH1	12.40	< 0.20	< 0.19	< 0.24	< 0.22	< 0.38	7.05	4.11	< 0.25
1986	BAH2	2.34	< 0.46	< 0.43	< 0.54	< 0.49	< 0.86	4.66	1.45	3.89
1986	BAH3	3.81	< 0.55	< 0.51	< 0.64	< 0.58	< 1.02	5.92	3.72	2.66
Upper Chesapeake Bay										
1985	CU11	1.00	< 0.20	< 0.20	0.20	< 0.30	< 0.30	0.70	0.80	< 0.20
1985	CU22	1.00	< 0.10	< 0.20	0.90	< 0.20	< 0.30	1.00	1.00	< 0.20
1985	CU33	0.70	< 0.10	< 0.10	0.40	< 0.10	< 0.10	0.20	0.40	< 0.10
1985	CU44	1.00	0.60	< 0.10	1.00	< 0.20	< 0.20	1.00	0.70	< 0.10
1985	CU55	2.00	< 0.10	< 0.10	1.00	< 0.20	< 0.20	0.90	0.70	< 0.10
1986	CU11	1.28	2.29	2.16	< 0.18	< 0.16	1.25	1.81	1.72	1.60
1986	CU22	1.33	1.63	1.83	< 0.29	< 0.27	1.44	1.80	1.42	< 0.30
1986	CU33	0.53	0.47	0.93	< 0.21	< 0.19	< 0.34	< 0.17	< 0.16	< 0.22
1986	CU44	1.37	2.61	< 0.19	< 0.23	< 0.21	1.62	2.00	1.46	1.92
1986	CU55	0.42	0.27	< 0.12	< 0.15	< 0.13	< 0.23	1.13	0.81	0.94
Mid Chesapeake Bay										
1985	CM1	< 0.10	< 0.09	< 0.10	< 0.10	< 0.20	< 0.20	0.50	< 0.10	< 0.10
1985	CM2	< 0.05	< 0.05	< 0.07	< 0.06	< 0.09	< 0.10	< 0.05	< 0.05	< 0.07
1985	CM3	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.20	< 0.10	< 0.10
1985	CM4	< 0.10	< 0.10	< 0.20	< 0.10	< 0.20	< 0.20	0.40	0.20	< 0.20
1986	CM1	1.08	3.58	2.61	< 0.19	1.09	< 0.30	1.09	1.79	1.54
1986	CM2	< 0.06	< 0.08	< 0.08	< 0.10	< 0.09	< 0.15	< 0.08	< 0.08	< 0.10
1986	CM3	< 0.07	0.15	< 0.08	< 0.10	< 0.09	< 0.16	< 0.08	< 0.08	< 0.11
1986	CM4	< 0.10	0.26	< 0.13	< 0.16	< 0.15	< 0.25	< 0.13	< 0.13	< 0.17
Lower Chesapeake Bay										
1984	CL1	0.74	1.05	< 0.04	< 0.04	< 0.05	< 0.06	0.35	0.27	< 0.04
1984	CL3	0.51	0.64	0.55	< 0.06	< 0.08	< 0.09	0.64	0.58	0.62
1985	CL1	0.50	0.60	< 0.10	0.20	< 0.10	< 0.10	0.20	0.40	< 0.10
1985	CL2	0.40	0.50	< 0.10	0.20	< 0.10	< 0.10	0.20	0.50	< 0.10
1985	CL3	0.60	0.60	< 0.10	0.90	< 0.20	< 0.20	0.60	0.90	< 0.10
1986	CL1	< 0.07	0.15	< 0.09	< 0.11	< 0.10	< 0.17	< 0.09	< 0.09	< 0.11
1986	CL2	< 0.06	0.15	< 0.08	< 0.09	< 0.09	< 0.15	< 0.08	< 0.07	< 0.10
1986	CL3	< 0.08	0.59	< 0.10	< 0.12	< 0.11	< 0.19	0.22	< 0.10	< 0.13
Elizabeth River										
1986	ER1	0.36	< 0.21	< 0.19	< 0.24	< 0.22	< 0.38	1.41	1.60	1.15
1986	ER2	0.52	0.42	< 0.16	< 0.20	< 0.18	< 0.32	2.06	1.38	< 0.21
1986	ER3	0.66	< 0.29	< 0.27	< 0.34	< 0.31	< 0.55	2.06	1.16	< 0.36

Table 3d. Concentrations of hydrocarbons (p,p'-DDE, o,p'-DDD, p,p'-DDD, o,p'-DDT, p,p'-DDT, mirex, dichlorobiphenyl, trichlorobiphenyl, tetrachlorobiphenyl) in sediment (ppb dry weight)

Year	Station	p,p'-DDE	o,p'-DDD	p,p'-DDD	o,p'-DDT	p,p'-DDT	Mirex	2-Cl-PCB	3-Cl-PCB	4-Cl-PCB
Machias Bay										
1985	MB1	< 0.10	< 0.20	< 0.20	0.20	0.10	< 0.10	1.00	1.00	2.00
1985	MB2	< 0.10	< 0.30	< 0.20	< 0.20	< 0.10	< 0.10	1.00	2.00	< 0.30
1985	MB3	< 0.10	< 0.20	< 0.20	< 0.20	0.20	< 0.10	2.00	2.00	< 0.20
1985	MB4	< 0.10	2.00	< 0.20	< 0.20	0.20	< 0.10	2.00	3.00	1.00
1986	MB1	< 0.08	< 0.14	< 0.15	< 0.13	< 0.11	< 0.07	9.46	20.82	29.32
1986	MB3	0.36	< 0.20	< 0.22	< 0.19	< 0.16	< 0.11	0.60	5.11	6.50
1986	MB4	< 0.10	< 0.16	< 0.18	< 0.15	< 0.13	< 0.09	2.41	1.65	0.75
Frenchmans Bay										
1985	FB1	< 0.20	< 0.50	< 0.30	< 0.50	< 0.30	< 0.30	< 1.00	5.00	4.00
1985	FB2	< 0.30	< 0.80	< 0.50	< 0.60	< 0.40	< 0.40	< 2.00	0.90	2.00
1985	FB3	< 0.10	< 0.30	< 0.20	< 0.30	< 0.10	< 0.20	2.00	6.00	2.00
1985	FB4	< 0.10	< 0.40	< 0.20	< 0.30	< 0.20	< 0.20	< 1.00	3.00	5.00
1986	FB1	1.46	< 0.30	< 0.29	< 0.26	< 0.22	< 0.15	15.90	15.00	42.33
1986	FB2	1.76	< 0.24	< 0.24	< 0.21	< 0.18	< 0.12	16.24	9.39	16.23
1986	FB3	< 0.15	< 0.25	< 0.25	< 0.22	< 0.19	< 0.13	12.79	5.25	5.38
Penobscot Bay										
1985	PB1	0.50	< 0.50	0.70	< 0.40	0.30	< 0.30	< 1.00	< 0.60	6.00
1985	PB2	< 0.10	< 0.40	0.30	< 0.30	0.20	< 0.20	< 1.00	2.00	9.00
1985	PB3	< 0.20	< 0.50	< 0.40	< 0.40	< 0.30	< 0.30	< 2.00	< 0.70	10.00
1985	PB4	< 0.20	2.00	< 0.30	< 0.30	< 0.20	< 0.20	< 1.00	< 0.50	10.00
1985	PB5	< 0.20	< 0.40	< 0.30	< 0.30	< 0.20	< 0.20	< 1.00	1.00	8.00
1986	PB1	2.20	1.64	6.69	< 0.30	1.82	1.21	18.05	24.36	43.26
1986	PB3	2.63	< 0.30	2.18	< 0.28	0.45	< 0.16	9.76	15.73	7.55
1986	PB4	2.92	< 0.25	1.36	< 0.23	< 0.20	< 0.13	5.45	22.22	6.70
Casco Bay										
1984	CB5	< 0.20	< 0.50	< 0.40	< 0.30	< 0.20	< 0.30	< 1.20	24.42	15.46
1985	CB1	< 0.20	< 0.50	0.40	< 0.40	0.50	< 0.30	< 1.00	4.00	6.00
1985	CB2	2.00	5.00	< 0.50	< 0.50	0.40	< 0.40	3.00	7.00	8.00
1985	CB3	< 0.30	< 0.70	0.50	< 0.50	< 0.30	< 0.40	< 2.00	7.00	12.00
1985	CB4	0.70	3.00	2.00	< 0.50	0.50	< 0.30	< 1.00	2.00	13.00
1985	CB5	< 0.20	< 0.40	0.60	< 0.30	0.30	< 0.20	< 1.00	4.00	6.00
1986	CB1	2.69	< 0.30	6.18	< 0.26	0.51	< 0.15	< 0.78	19.16	75.68
1986	CB2	3.87	1.81	11.63	< 0.22	2.24	< 0.13	< 0.64	17.35	61.01
Merrimack River										
1984	MR2	< 0.05	< 0.13	< 0.09	< 0.09	< 0.06	< 0.07	< 0.30	4.79	4.32
1984	MR3	< 0.03	< 0.08	< 0.06	< 0.05	< 0.03	< 0.04	2.89	0.61	0.42
1985	MR1	< 0.10	< 0.20	< 0.10	< 0.20	< 0.10	< 0.10	< 0.60	4.00	6.00
1985	MR2	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	2.00	5.00	4.00
1985	MR3	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	1.00	5.00	2.00
Salem Harbor										
1984	SH1	16.30	25.70	27.20	< 1.00	8.20	< 0.90	< 3.70	55.93	57.62
1984	SH2	9.30	12.80	23.80	< 0.70	< 0.50	< 0.60	< 2.50	56.03	35.00
1984	SH3	7.30	10.70	13.20	< 0.70	< 0.50	< 0.60	< 2.50	70.20	99.80
1985	SH1	5.00	5.00	10.00	< 0.40	5.00	< 0.40	2.00	78.00	74.00
1985	SH2	2.00	2.00	5.00	< 0.20	1.00	< 0.20	< 0.90	11.00	16.00

Table 3d. Continued.

Year	Station	p,p'-DDE	o,p'-DDD	p,p'-DDD	o,p'-DDT	p,p'-DDT	Mirex	2-Cl-PCB	3-Cl-PCB	4-Cl-PCB
Salem Harbor										
1985	SH3	4.00	5.00	9.00	< 0.30	2.00	< 0.30	< 1.00	17.00	34.00
1985	SH4	6.00	4.00	9.00	< 0.50	2.00	< 0.50	5.00	27.00	37.00
1986	SH1	10.60	7.01	21.86	3.53	2.61	2.33	< 1.11	15.24	89.58
1986	SH2	4.41	3.70	5.90	0.43	0.78	1.22	1.47	0.74	< 0.32
1986	SH3	8.87	5.66	17.89	8.10	4.00	2.04	12.60	17.52	15.60
Boston Harbor										
1984	BH1	4.83	3.95	5.33	< 0.40	< 0.30	< 0.30	< 1.60	29.77	72.75
1984	BH2	11.81	< 0.10	234.86	< 0.10	< 0.07	0.59	6.88	3447.80	23222.00
1984	BH3	3.11	2.37	4.91	< 0.10	< 0.05	1.83	< 0.40	17.89	48.94
1985	BH2	6.00	4.00	9.00	< 0.30	2.00	0.70	2.00	86.00	78.00
1985	BH3	4.00	3.00	6.00	< 0.30	2.00	< 0.20	< 0.80	26.00	34.00
1985	BH4	4.00	3.00	7.00	< 0.30	2.00	< 0.20	< 0.90	26.00	33.00
1985	BH5	4.00	3.00	9.00	< 0.30	2.00	0.70	< 0.90	27.00	38.00
1986	BH1	3.14	2.36	4.08	3.05	1.27	1.58	0.81	8.38	18.96
1986	BH2	12.98	7.45	17.15	5.46	2.06	2.66	32.49	102.77	170.78
1986	BH3	12.15	5.59	20.00	3.46	1.58	2.19	8.65	56.54	127.19
Quincy Bay										
1986	QB1	8.26	3.94	7.68	3.10	0.70	2.28	2.15	25.97	62.08
1986	QB2	9.02	3.41	7.36	3.56	3.15	1.68	5.21	35.75	74.80
1986	QB3	13.58	5.24	14.79	6.83	2.27	4.43	5.68	41.35	86.28
Buzzards Bay										
1984	BB1	2.85	< 0.90	< 0.70	< 0.60	< 0.50	< 0.50	< 2.40	46.09	87.69
1984	BB2	3.15	< 0.30	< 0.30	< 0.20	< 0.20	< 0.20	< 0.80	< 0.40	10.86
1984	BB3	0.50	< 0.10	3.66	< 0.10	5.91	< 0.08	< 0.40	27.85	43.51
1984	BB4	3.18	< 0.20	< 0.20	< 0.10	0.88	0.49	< 0.40	60.88	136.42
1984	BB80	0.74	< 0.30	< 0.30	< 0.20	< 0.20	< 0.10	< 0.70	13.47	31.05
1985	BB1	< 0.03	< 0.08	0.50	< 0.06	< 0.04	< 0.04	< 0.20	< 0.08	< 0.08
1985	BB2	< 0.02	< 0.04	< 0.03	< 0.03	< 0.02	< 0.02	28.00	< 0.05	< 0.05
1985	BB3	< 0.03	< 0.08	0.50	0.60	< 0.04	< 0.03	27.00	< 0.09	2.00
1985	BB4	< 0.04	< 0.10	1.00	0.90	< 0.05	< 0.06	83.00	< 0.10	< 11.00
1986	BB1	< 0.23	< 0.36	3.29	< 0.32	< 0.30	< 0.20	26.51	72.83	153.85
1986	BB3	< 0.13	< 0.21	1.49	< 0.18	< 0.17	< 0.11	10.78	33.98	55.87
1986	BB4	< 0.22	< 0.35	< 0.36	< 0.30	< 0.28	< 0.19	16.44	51.71	85.72
Narragansett Bay										
1984	NB1	3.19	2.73	< 0.40	< 0.30	< 0.30	< 0.30	< 1.30	12.72	66.29
1984	NB2	3.35	1.24	1.55	< 0.10	< 0.10	< 0.10	< 0.50	7.63	43.53
1984	NB3	1.21	< 0.10	0.59	< 0.09	< 0.08	< 0.07	< 0.30	4.99	18.43
1984	NB4	1.06	< 0.30	< 0.20	< 0.20	< 0.10	< 0.10	< 0.70	7.41	1.82
1985	NB1	6.00	< 1.00	6.00	< 0.90	< 0.70	< 0.70	12.00	50.00	54.00
1985	NB2	4.00	< 1.00	5.00	< 0.90	< 0.60	< 0.70	12.00	50.00	80.00
1985	NB3	1.00	0.40	0.90	< 0.30	< 0.20	< 0.20	20.00	66.00	93.00
1985	NB4	1.00	< 0.40	1.00	< 0.30	0.50	< 0.20	4.00	19.00	24.00
1986	NB1	3.72	< 0.47	7.32	< 0.41	2.97	2.00	22.66	27.48	79.78
1986	NB2	4.84	< 0.30	5.90	< 0.27	2.37	1.02	6.78	40.36	119.54
1986	NB3	8.09	< 0.37	6.43	< 0.33	0.35	1.69	16.55	24.04	72.04

Table 3d. Continued.

Year	Station	p,p'-DDE	o,p'-DDD	p,p'-DDD	o,p'-DDT	p,p'-DDT	Mirex	2-Cl-PCB	3-Cl-PCB	4-Cl-PCB
Eastern Long Island Sound										
1984	ELI1	< 0.02	< 0.06	< 0.05	< 0.05	< 0.03	< 0.03	3.00	< 0.06	< 0.06
1984	ELI2	< 0.03	< 0.07	< 0.05	< 0.05	< 0.03	< 0.04	2.74	1.04	< 0.07
1984	ELI3	< 0.02	< 0.05	< 0.04	< 0.04	< 0.03	< 0.03	16.50	3.80	< 0.05
1985	ELI1	< 0.04	< 0.10	< 0.06	< 0.08	< 0.05	< 0.05	< 0.30	< 0.10	0.60
1985	ELI2	< 0.04	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.30	< 0.10	1.00
1985	ELI3	< 0.04	< 0.10	0.10	< 0.10	0.10	< 0.10	< 0.30	0.60	0.50
1985	ELI5	< 0.04	< 0.10	< 0.07	< 0.08	< 0.05	< 0.10	< 0.30	< 0.10	0.20
1986	ELI1	< 0.07	< 0.11	< 0.11	< 0.09	< 0.09	< 0.06	< 0.30	0.74	0.09
1986	ELI2	0.24	< 0.10	< 0.10	< 0.09	0.11	< 0.06	1.72	1.77	1.73
1986	ELI3	< 0.07	< 0.11	< 0.11	< 0.09	< 0.09	< 0.06	< 0.30	0.21	< 0.14
Western Long Island Sound										
1984	WLI1	0.16	< 0.20	1.42	< 0.10	0.30	1.68	3.42	83.06	46.41
1984	WLI2	0.21	< 0.20	2.25	< 0.10	0.28	0.80	2.75	48.35	70.62
1985	WLI1	1.80	1.30	1.20	< 0.20	0.30	< 0.20	< 0.80	9.00	14.00
1985	WLI2	3.00	2.00	2.00	< 0.30	0.40	0.50	< 0.90	7.00	17.00
1985	WLI3	3.00	2.00	3.00	< 0.40	0.60	< 0.30	< 1.00	6.00	18.00
1985	WLI4	5.00	3.00	4.00	< 0.50	1.00	0.40	< 2.00	11.00	41.00
1986	WLI9	1.12	< 0.11	0.21	< 0.10	0.18	< 0.06	2.18	3.54	9.12
1986	WLI2	2.79	2.51	2.86	< 0.22	1.10	2.57	1.53	9.77	41.72
1986	WLI4	8.32	4.28	6.48	4.55	3.74	4.82	5.67	34.98	88.21
Raritan Bay										
1984	RB1	8.98	5.70	13.99	< 0.10	0.12	< 0.10	< 0.30	17.12	112.45
1984	RB2	8.83	7.38	13.97	< 0.10	< 0.10	< 0.10	< 0.40	39.69	112.01
1984	RB3	10.90	7.80	18.94	< 0.10	< 0.10	< 0.10	< 0.40	53.51	124.16
1984	RB5	7.50	5.46	12.98	< 0.10	0.09	< 0.10	< 0.30	48.19	102.70
1985	RB1	14.00	10.00	20.00	19.00	3.00	3.00	13.00	152.00	243.00
1985	RB2	9.00	6.00	12.00	14.00	0.50	0.60	5.00	82.00	148.00
1985	RB3	11.00	6.00	18.00	13.00	2.00	0.80	6.00	87.00	164.00
1985	RB4	0.40	< 0.20	0.30	0.50	0.40	< 0.10	1.00	8.00	22.00
1985	RB5	7.00	4.00	11.00	4.00	15.00	2.00	5.00	63.00	116.00
1986	RB1	23.97	< 0.22	20.78	< 0.45	4.79	2.10	27.81	166.91	414.26
1986	RB2	26.05	< 0.19	36.48	< 0.39	2.07	2.65	25.89	155.53	319.41
1986	RB3	14.56	< 0.17	19.83	< 0.36	1.50	6.04	45.32	259.34	82.42
1986	RB4	4.68	< 0.12	7.27	< 0.25	1.76	1.51	3.45	52.56	95.28
Great Bay										
1985	GB1	1.00	0.70	1.30	0.90	0.10	< 0.10	2.00	13.00	12.00
1985	GB2	2.00	2.00	2.00	1.00	0.20	< 0.20	3.00	20.00	13.00
1985	GB3	3.00	2.00	3.00	2.00	0.30	< 0.20	3.00	20.00	23.00
1985	GB4	3.00	2.00	2.00	0.80	0.05	< 0.20	2.00	8.00	15.00
1986	GB1	3.65	2.52	4.68	< 0.12	1.04	1.76	7.31	20.16	37.17
1986	GB2	3.58	1.45	2.97	< 0.16	0.15	< 0.09	6.69	11.14	27.91
1986	GB3	3.58	1.48	2.77	< 0.16	0.30	< 0.09	2.99	12.81	30.64
Delaware Bay										
1984	DB1	1.20	< 0.10	0.41	< 0.08	< 0.06	< 0.06	< 0.30	< 0.10	< 0.10
1984	DB9	1.71	< 0.20	< 0.10	< 0.10	< 0.08	< 0.08	< 0.40	< 0.20	< 0.20
1984	DB11	< 0.04	< 0.10	< 0.08	< 0.08	< 0.05	< 0.05	1.46	< 0.10	< 0.10
1985	DB1	3.00	1.00	< 0.20	< 0.20	0.30	< 0.20	4.00	21.00	81.00

Table 3d. Continued.

Year	Station	p,p'-DDE	o,p'-DDD	p,p'-DDD	o,p'-DDT	p,p'-DDT	Mirex	2-CI-PCB	3-CI-PCB	4-CI-PCB
Delaware Bay										
1985	DB2	2.00	1.00	1.00	< 0.20	0.20	< 0.20	2.00	13.00	52.00
1985	DB15	2.00	< 0.30	1.00	< 0.20	1.00	< 0.20	3.00	9.00	38.00
1985	DB16	0.40	< 0.40	< 0.30	< 0.30	< 0.20	< 0.20	< 1.00	10.00	23.00
1986	DB1	2.18	0.80	1.02	< 0.09	0.13	< 0.05	3.56	2.27	12.43
1986	DB15	3.51	1.57	1.14	< 0.16	0.16	< 0.09	7.37	19.75	11.58
1986	DB16	3.53	1.28	4.20	0.73	0.85	< 0.08	6.40	15.20	41.89
Baltimore Harbor										
1986	BAH1	11.51	4.97	9.96	1.92	1.64	1.25	10.55	40.81	142.27
1986	BAH2	9.40	7.28	7.75	4.05	< 0.70	< 0.49	7.26	41.90	119.78
1986	BAH3	9.48	4.57	11.89	3.56	2.41	< 0.59	17.13	42.54	118.10
Upper Chesapeake Bay										
1985	CU11	2.00	0.70	2.00	< 0.30	0.30	< 0.20	< 1.00	18.00	14.00
1985	CU22	3.00	2.00	2.00	< 0.30	0.50	< 0.20	< 0.90	14.00	24.00
1985	CU33	0.30	0.10	0.40	0.10	0.40	< 0.10	< 0.40	2.00	6.00
1985	CU44	3.00	2.00	2.00	< 0.20	0.50	< 0.10	< 0.70	6.00	9.00
1985	CU55	3.00	2.00	2.00	< 0.20	0.40	< 0.10	< 0.60	17.00	16.00
1986	CU11	5.65	2.32	6.34	< 0.26	0.86	< 0.17	9.01	3.06	49.80
1986	CU22	6.93	3.04	6.49	< 0.42	0.76	< 0.27	14.35	25.82	27.07
1986	CU33	2.92	1.22	3.15	3.26	1.45	< 0.19	7.84	23.33	38.53
1986	CU44	6.74	1.89	7.07	< 0.33	0.72	< 0.21	12.60	38.45	66.50
1986	CU55	3.82	2.27	4.03	0.36	0.83	< 0.13	5.16	14.23	27.67
Mid Chesapeake Bay										
1985	CM1	1.00	< 0.20	< 0.20	< 0.20	< 0.10	< 0.10	< 0.50	< 0.20	0.60
1985	CM2	0.60	< 0.10	< 0.08	< 0.10	< 0.07	< 0.07	< 0.30	< 0.10	< 0.10
1985	CM3	0.20	< 0.20	< 0.10	< 0.10	< 0.10	< 0.10	< 0.40	< 0.20	0.20
1985	CM4	0.50	< 0.30	0.20	< 0.20	< 0.20	< 0.20	< 0.60	< 0.30	1.40
1986	CM1	4.07	< 0.34	0.94	< 0.27	< 0.24	< 0.17	15.72	19.82	47.06
1986	CM2	0.30	< 0.18	< 0.17	< 0.14	< 0.13	< 0.09	< 0.42	0.52	1.69
1986	CM3	0.40	< 0.20	< 0.18	< 0.15	< 0.14	< 0.10	< 0.44	0.81	1.50
1986	CM4	0.68	< 0.30	< 0.27	< 0.24	< 0.21	< 0.15	0.70	2.29	1.63
Lower Chesapeake Bay										
1984	CL1	0.23	< 0.08	< 0.06	< 0.05	< 0.04	< 0.04	< 0.20	1.22	1.12
1984	CL3	1.80	< 0.10	1.20	1.84	< 0.05	< 0.06	4.20	1.86	8.67
1985	CL1	1.00	< 0.10	< 0.10	< 0.10	0.30	< 0.10	< 0.40	5.00	6.00
1985	CL2	0.40	< 0.20	< 0.10	< 0.10	0.10	< 0.10	2.00	4.00	6.00
1985	CL3	2.00	< 0.20	0.50	< 0.20	0.30	< 0.10	< 0.60	2.00	15.00
1986	CL1	0.33	< 0.21	< 0.19	< 0.16	< 0.15	< 0.10	< 0.47	0.16	1.10
1986	CL2	0.24	< 0.18	< 0.16	< 0.14	< 0.13	< 0.09	< 0.40	0.15	0.23
1986	CL3	1.21	< 0.23	0.31	< 0.18	< 0.17	< 0.12	< 0.53	2.93	2.23
Elizabeth River										
1986	ER1	3.94	< 0.40	1.87	< 0.35	0.74	< 0.22	< 1.04	6.38	26.40
1986	ER2	7.22	4.76	8.51	2.05	1.26	< 0.18	1.63	10.33	28.47
1986	ER3	4.45	3.59	11.44	< 0.50	1.90	< 0.31	7.69	16.31	23.94

Table 3e. Concentrations of hydrocarbons (pentachlorobiphenyl, hexachlorobiphenyl, heptachlorobiphenyl, octachlorobiphenyl, nonachlorobiphenyl) in sediment (ppb dry weight)

Year	Station	5-Cl-PCB	6-Cl-PCB	7-Cl-PCB	8-Cl-PCB	9-Cl-PCB	Year	Station	5-Cl-PCB	6-Cl-PCB	7-Cl-PCB	8-Cl-PCB	9-Cl-PCB
Machias Bay													
1985	MB1	3.00	2.00	0.40	0.30	< 0.30	1985	SH3	64.00	86.00	62.00	22.00	4.00
1985	MB2	5.00	2.00	1.00	< 0.10	< 0.30	1985	SH4	80.00	85.00	57.00	25.00	4.00
1985	MB3	< 0.20	2.00	4.00	0.50	< 0.30	1986	SH1	70.50	67.38	20.00	16.32	2.37
1985	MB4	13.00	6.00	3.00	< 0.10	< 0.30	1986	SH2	24.66	20.74	6.48	5.76	0.50
1986	MB1	6.16	0.84	0.37	< 0.06	< 0.06	1986	SH3	72.07	62.33	15.25	27.97	1.15
1986	MB3	8.05	5.14	3.63	< 0.08	< 0.09	Boston Harbor						
1986	MB4	2.86	3.49	0.84	< 0.07	< 0.07	1984	BH1	128.96	110.75	98.38	30.67	11.54
Frenchmans Bay													
1985	FB1	< 0.60	< 0.50	< 0.50	2.00	< 0.70	1984	BH2	18998.00	4440.40	395.94	18.13	20.01
1985	FB2	< 0.90	< 0.70	< 0.60	2.00	< 1.00	1984	BH3	73.01	72.79	47.73	18.92	3.32
1985	FB3	0.20	< 0.30	1.00	< 0.20	< 0.40	1985	BH2	107.00	90.00	66.00	27.00	9.00
1985	FB4	< 0.40	< 0.30	2.00	2.00	< 0.50	1985	BH3	76.00	65.00	52.00	19.00	4.00
1986	FB1	< 0.24	< 0.16	2.50	< 0.11	< 0.12	1985	BH4	81.00	71.00	68.00	24.00	3.00
1986	FB2	3.07	< 0.13	< 0.10	< 0.09	< 0.10	1985	BH5	93.00	80.00	76.00	25.00	6.00
1986	FB3	< 0.20	< 0.14	< 0.11	< 0.09	< 0.10	1986	BH1	32.07	41.74	23.13	9.14	1.16
Penobscot Bay													
1985	PB1	6.00	7.00	17.00	2.00	1.00	1986	BH2	127.22	115.53	52.57	23.54	3.70
1985	PB2	7.00	4.00	9.00	1.00	2.00	1986	BH3	135.58	128.46	52.27	21.38	3.11
1985	PB3	13.00	0.50	7.00	1.00	1.00	Quincy Bay						
1985	PB4	13.00	< 0.40	5.00	1.00	< 0.50	1986	QB1	86.82	79.86	31.95	16.44	2.69
1985	PB5	7.00	3.00	6.00	0.80	< 0.40	1986	QB2	78.27	72.87	34.56	11.95	1.48
1986	PB1	18.20	12.36	8.48	4.50	1.27	1986	QB3	158.29	146.01	79.27	32.21	4.40
1986	PB3	15.26	6.62	5.88	0.81	0.49	Buzzards Bay						
1986	PB4	17.96	6.33	6.99	1.50	< 0.11	1984	BB1	139.71	75.36	15.14	< 0.40	< 0.70
Casco Bay													
1984	CB5	22.58	8.06	15.10	9.66	< 0.30	1984	BB2	78.40	33.52	7.20	0.75	< 0.20
1985	CB1	12.00	11.00	2.00	2.00	< 0.70	1984	BB3	111.75	68.52	38.89	3.03	2.47
1985	CB2	31.00	18.00	24.00	7.00	7.00	1984	BB4	251.57	132.35	31.02	4.98	2.48
1985	CB3	31.00	9.00	22.00	3.00	4.00	1984	BB80	49.75	26.99	9.44	0.46	0.71
1985	CB4	25.00	18.00	24.00	7.00	4.00	1985	BB1	4.14	4.98	< 0.04	0.40	0.30
1985	CB5	10.00	9.00	10.00	5.00	3.00	1985	BB2	0.90	0.90	< 0.03	0.10	< 0.03
1986	CB1	13.93	3.52	8.23	1.21	1.89	1985	BB3	5.00	6.00	< 0.05	1.00	0.70
1986	CB2	15.19	22.19	7.82	3.35	0.64	1985	BB4	10.00	11.00	< 0.06	0.70	0.90
Merrimack River													
1984	MR2	13.60	17.85	33.69	8.10	< 0.10	1986	BB1	89.69	71.09	22.08	8.98	0.90
1984	MR3	6.59	3.10	9.75	0.23	< 0.05	1986	BB3	34.00	3.50	20.39	8.57	0.69
1985	MR1	4.00	0.90	0.20	< 0.10	< 0.30	1986	BB4	46.53	43.13	10.19	1.59	0.51
1985	MR2	0.40	2.00	0.40	0.60	< 0.20	Narragansett Bay						
1985	MR3	0.50	1.00	1.00	0.20	< 0.20	1984	NB1	63.72	51.94	42.40	22.19	12.57
Salem Harbor													
1984	SH1	173.04	269.81	148.29	100.38	< 1.00	1984	NB2	46.94	36.61	33.53	16.43	7.86
1984	SH2	130.55	71.34	113.50	37.26	< 0.70	1984	NB3	15.94	16.54	15.05	4.79	2.43
1984	SH3	119.10	110.60	261.90	44.00	< 0.70	1984	NB4	11.81	27.25	34.42	10.09	4.49
1985	SH1	98.00	92.00	80.00	25.00	9.00	1985	NB1	102.00	112.00	67.00	22.00	13.00
1985	SH2	35.00	49.00	31.00	10.00	2.00	1985	NB2	71.00	64.00	51.00	12.00	7.00
							1985	NB3	20.00	15.00	13.00	4.00	2.00
							1985	NB4	14.00	17.00	27.00	5.00	3.00
							1986	NB1	38.30	743.26	15.43	15.99	2.34
							1986	NB2	31.66	60.74	11.77	11.39	1.47
							1986	NB3	44.97	39.98	16.85	12.15	2.86

Table 3e. Continued.

Year	Station	5-Cl-PCB	6-Cl-PCB	7-Cl-PCB	8-Cl-PCB	9-Cl-PCB	Year	Station	5-Cl-PCB	6-Cl-PCB	7-Cl-PCB	8-Cl-PCB	9-Cl-PCB
Eastern Long Island Sound							Delaware Bay						
1984	ELI1	0.20	0.26	< 0.03	< 0.03	< 0.05	1985	DB15	88.00	36.00	9.00	2.00	1.00
1984	ELI2	< 0.07	< 0.07	< 0.05	< 0.03	< 0.06	1985	DB16	22.00	43.00	5.00	0.30	1.00
1984	ELI3	1.40	1.70	0.20	0.50	0.80	1986	DB1	5.68	2.56	1.91	1.70	0.42
1985	ELI1	5.00	1.00	0.70	0.40	< 0.10	1986	DB15	15.10	8.15	5.54	3.27	0.60
1985	ELI2	< 0.40	1.00	1.00	1.00	< 0.20	1986	DB16	13.00	14.90	4.02	2.36	0.68
1985	ELI3	3.00	2.00	2.00	0.20	< 0.10	Baltimore Harbor						
1985	ELI5	0.50	8.00	1.00	0.10	< 0.10	1986	BAH1	126.98	126.42	127.80	34.85	6.65
1986	ELI1	2.43	0.61	0.45	< 0.05	< 0.05	1986	BAH2	157.50	217.18	158.08	54.90	7.08
1986	ELI2	3.70	2.11	0.73	0.34	0.11	1986	BAH3	111.28	106.70	46.21	22.22	4.08
1986	ELI3	0.21	< 0.07	< 0.06	< 0.05	< 0.05	Upper Chesapeake Bay						
Western Long Island Sound							Upper Chesapeake Bay						
1984	WLI1	47.26	24.76	15.08	3.94	7.72	1985	CU11	16.00	10.00	17.00	4.00	6.00
1984	WLI2	57.62	32.69	16.02	2.65	6.50	1985	CU22	34.00	11.00	21.00	9.00	9.00
1985	WLI1	21.00	18.00	24.00	11.00	4.00	1985	CU33	12.00	6.00	9.00	1.00	0.70
1985	WLI2	30.00	23.00	26.00	12.00	5.00	1985	CU44	25.00	15.00	31.00	9.00	10.00
1985	WLI3	34.00	28.00	32.00	12.00	4.00	1985	CU55	23.00	9.00	23.00	7.00	9.00
1985	WLI4	66.00	37.00	48.00	14.00	5.00	1986	CU11	18.14	15.85	7.52	4.43	2.55
1986	WLI9	9.20	3.10	1.50	1.20	0.28	1986	CU22	39.04	24.97	9.98	6.73	3.97
1986	WLI2	10.49	19.82	12.77	5.14	1.49	1986	CU33	69.92	177.74	89.85	38.54	3.94
1986	WLI4	60.06	71.81	42.93	19.84	3.80	1986	CU44	24.73	16.73	9.33	10.22	6.42
Raritan Bay							1986	CU55	18.88	13.42	7.97	4.61	2.93
1984	RB1	126.47	86.99	37.20	29.92	9.67	Mid Chesapeake Bay						
1984	RB2	139.92	100.44	44.96	29.99	13.96	1985	CM1	5.00	4.00	< 0.20	< 0.10	< 0.30
1984	RB3	144.29	91.62	41.93	21.09	7.39	1985	CM2	2.00	3.00	< 0.10	< 0.06	< 0.20
1984	RB5	105.76	72.63	34.14	21.24	6.12	1985	CM3	0.40	0.60	< 0.10	< 0.10	< 0.20
1985	RB1	185.00	220.00	140.00	70.00	27.00	1985	CM4	2.30	0.70	< 0.20	< 0.10	< 0.40
1985	RB2	119.00	139.00	54.00	31.00	8.00	1986	CM1	10.82	1.54	2.45	1.67	0.72
1985	RB3	170.00	171.00	80.00	42.00	13.00	1986	CM2	0.50	< 0.10	< 0.09	< 0.08	< 0.07
1985	RB4	23.00	42.00	7.00	14.00	2.00	1986	CM3	0.69	0.54	0.55	< 0.08	0.23
1985	RB5	105.00	91.00	60.00	46.00	14.00	1986	CM4	1.70	1.52	3.75	< 0.13	0.23
1986	RB1	204.02	105.14	31.75	22.75	4.23	Lower Chesapeake Bay						
1986	RB2	238.04	145.66	35.50	26.44	4.28	1984	CL1	3.68	0.20	< 0.05	0.19	0.37
1986	RB3	134.90	87.83	28.29	36.64	8.79	1984	CL3	10.90	9.29	59.62	1.09	0.39
1986	RB4	51.26	36.13	8.52	8.64	1.04	1985	CL1	9.00	2.00	4.00	1.00	0.40
Great Bay							1985	CL2	3.00	0.60	3.00	2.00	0.30
1985	GB1	13.00	11.00	6.00	4.00	1.00	1985	CL3	19.00	3.00	6.00	2.00	0.60
1985	GB2	10.00	10.00	8.00	5.00	1.00	1986	CL1	1.70	2.50	2.61	< 0.09	< 0.08
1985	GB3	23.00	20.00	21.00	12.00	5.00	1986	CL2	0.91	0.14	0.13	< 0.08	< 0.07
1985	GB4	8.00	5.00	8.00	7.00	3.00	1986	CL3	3.11	0.50	0.71	< 0.10	0.20
1986	GB1	19.03	20.72	9.06	5.69	0.61	Elizabeth River						
1986	GB2	15.14	7.04	3.39	3.02	0.31	1986	ER1	30.84	14.09	7.79	3.74	0.46
1986	GB3	17.02	9.23	3.11	3.10	0.48	1986	ER2	54.86	41.02	19.85	8.90	1.21
Delaware Bay							1986	ER3	62.61	49.21	45.36	30.17	4.99
1984	DB1	1.18	1.32	0.33	< 0.04	0.50							
1984	DB9	1.23	0.90	< 0.10	1.66	1.23							
1984	DB11	0.80	< 0.08	< 0.07	< 0.04	< 0.07							
1985	DB1	223.00	96.00	7.00	3.00	2.00							
1985	DB2	63.00	38.00	7.00	3.00	2.00							

Table 4a. Concentrations of metals (silver, cadmium, chromium, copper, nickel, lead, zinc, iron, manganese) in sediment (ppm dry weight, except where noted)

Year	Station	Ag	Cd	Cr	Cu	Ni	Pb	Zn	Fe(%)	Mn
Machias Bay										
1984	MB1	0.040	0.060	80.40	11.30	20.60	17.70	54.00	2.680	605.0
1985	MB1	0.037	0.056	73.80	10.50	18.70	19.40	49.90	2.510	576.0
1985	MB3	0.053	0.075	67.00	10.70	22.00	21.70	62.10	2.820	486.0
1985	MB4	0.047	0.074	69.80	10.50	20.80	21.70	59.30	2.780	583.0
1986	MB1	0.034	0.087	53.80	12.20	19.90	18.50	46.30	2.570	592.0
1986	MB3	0.061	0.091	51.60	11.70	24.70	21.30	63.30	2.940	498.0
1986	MB4	0.025	0.043	44.90	8.48	18.10	16.70	43.40	2.360	505.0
Frenchmans Bay										
1985	FB1	0.090	0.132	97.60	17.70	30.20	23.00	110.00	3.980	521.0
1985	FB2	0.097	0.175	95.40	18.00	38.20	28.90	112.00	4.440	550.0
1985	FB3	0.094	0.174	77.30	14.00	27.30	26.40	86.70	3.450	504.0
1986	FB1	0.094	0.258	86.00	18.60	73.10	29.60	116.00	4.480	538.0
1986	FB2	0.110	0.228	81.20	19.00	40.30	28.80	108.00	4.380	513.0
1986	FB3	0.072	0.113	60.30	15.50	32.30	30.70	82.00	3.700	455.0
Penobscot Bay										
1985	PB1	0.112	0.115	118.00	21.40	38.90	34.30	114.00	4.280	518.0
1985	PB3	0.105	0.078	108.00	21.10	25.30	23.00	118.00	4.250	594.0
1985	PB4	0.097	0.132	92.20	15.20	33.60	28.30	109.00	3.710	528.0
1986	PB1	0.134	0.130	102.00	22.40	44.20	35.10	123.00	4.450	581.0
1986	PB3	0.112	0.112	96.30	21.20	42.90	33.20	122.00	4.870	601.0
1986	PB4	0.112	0.176	85.50	15.80	35.20	32.60	109.00	4.180	520.0
Casco Bay										
1984	CB14	0.060	0.100	87.70	15.10	23.60	25.30	73.20	3.230	1010.0
1984	CB15	0.090	0.110	107.00	16.90	22.80	33.10	76.50	2.890	579.0
1984	CB5	0.110	0.230	81.60	18.90	23.30	29.00	79.10	2.650	595.0
1985	CB1	0.116	0.268	96.70	21.70	30.30	25.90	105.00	3.970	618.0
1985	CB2	0.200	0.354	102.00	22.30	36.70	38.00	117.00	3.920	563.0
1985	CB4	0.316	0.374	80.40	29.10	26.90	38.60	108.00	2.990	541.0
1986	CB1	0.127	0.341	92.00	19.10	32.60	34.00	108.00	4.110	573.0
1986	CB2	0.229	0.487	97.10	27.80	37.40	54.60	128.00	4.190	518.0
1986	CB4	0.493	0.673	85.30	32.70	37.10	56.10	128.00	3.670	528.0
Merrimack River										
1984	MR2	0.050	0.110	38.40	7.82	6.82	23.20	34.80	1.980	1070.0
1984	MR3	0.050	< 0.030	43.90	5.12	6.26	23.30	36.70	2.050	1420.0
1985	MR1	< 0.020	< 0.052	12.89	3.54	4.74	21.60	21.50	1.150	502.0
1985	MR2	0.011	< 0.053	9.16	3.59	2.28	19.00	17.90	0.530	89.4
1985	MR3	0.016	< 0.053	20.70	3.57	3.45	18.40	24.50	1.290	805.0
Salem Harbor										
1984	SH1	1.510	4.020	1830.00	109.00	31.80	201.00	216.00	3.470	454.0
1984	SH2	1.580	4.140	2110.00	69.20	28.50	166.00	203.00	2.520	464.0
1984	SH3	2.410	9.440	2950.00	107.00	30.80	192.00	295.00	2.900	417.0
1985	SH1	1.280	5.380	1710.00	109.00	41.90	123.00	219.00	3.620	411.0
1985	SH2	0.970	2.830	968.00	39.90	22.80	93.90	128.00	2.390	368.0
1985	SH3	2.110	8.730	2570.00	74.40	26.50	173.00	239.00	2.780	369.0
1985	SH4	2.150	7.960	2260.00	94.00	39.30	177.00	230.00	3.520	411.0

Table 4a. Continued.

Year	Station	Ag	Cd	Cr	Cu	Ni	Pb	Zn	Fe(%)	Mn
Salem Harbor										
1986	SH1	1.290	4.480	1500.00	101.00	43.50	145.00	210.00	3.700	407.0
1986	SH2	0.368	2.890	406.00	25.40	14.70	58.50	84.00	2.360	432.0
1986	SH3	0.975	6.060	1430.00	55.00	23.10	81.20	168.00	2.300	347.0
Boston Harbor										
1984	BH1	5.820	1.020	279.00	143.00	33.50	128.00	190.00	3.600	512.0
1984	BH2	6.940	2.220	170.00	163.00	27.30	144.00	516.00	2.740	455.0
1984	BH3	5.850	1.590	222.00	138.00	28.50	99.90	169.00	2.920	415.0
1985	BH2	9.120	2.310	295.00	183.00	44.30	158.00	279.00	3.440	440.0
1985	BH3	8.600	2.880	258.00	131.00	31.60	116.00	193.00	3.570	453.0
1985	BH4	6.230	1.150	311.00	161.00	38.00	116.00	254.00	3.670	440.0
1985	BH5	7.690	2.920	308.00	181.00	30.40	127.00	260.00	3.820	492.0
1986	BH1	1.200	0.510	72.20	43.30	14.80	46.80	77.20	2.380	363.0
1986	BH2	6.560	3.080	244.00	179.00	31.60	109.00	270.00	3.580	447.0
1986	BH3	4.950	1.390	222.00	136.00	28.60	76.80	188.00	3.510	448.0
Quincy Bay										
1986	QB1	6.040	1.130	219.00	141.00	30.00	105.00	202.00	3.960	490.0
1986	QB2	5.340	0.771	195.00	122.00	28.20	78.80	182.00	3.740	482.0
1986	QB3	5.430	0.793	259.00	138.00	31.50	103.00	192.00	3.990	501.0
Buzzards Bay										
1984	BB1	0.410	0.210	86.60	28.40	22.40	34.80	115.00	3.230	331.0
1984	BB2	0.250	0.370	36.80	21.90	20.40	30.10	91.20	2.940	341.0
1984	BB3	0.320	0.170	84.70	23.10	21.30	26.40	95.80	2.940	325.0
1984	BB4	0.660	0.200	83.10	32.30	18.90	32.90	96.50	2.980	271.0
1984	BB80	0.220	0.220	77.10	19.40	20.90	29.40	90.10	2.990	325.0
1985	BB1	1.260	0.228	93.70	24.10	25.10	35.40	102.00	3.040	315.0
1985	BB3	0.395	0.208	91.10	24.40	25.40	32.60	91.80	2.830	331.0
1985	BB4	2.840	0.260	131.00	32.80	42.10	36.80	103.00	2.870	356.0
1986	BB1	0.462	0.219	80.50	25.50	28.20	50.00	120.00	3.460	391.0
1986	BB3	0.432	0.226	74.60	21.40	27.70	42.30	108.00	3.300	396.0
1986	BB4	0.917	0.234	76.10	33.20	26.10	47.20	114.00	3.060	385.0
Narragansett Bay										
1984	NB1	2.240	0.500	140.00	131.00	30.00	85.40	195.00	3.370	456.0
1984	NB2	1.250	0.650	124.00	33.50	29.80	75.10	92.70	3.400	417.0
1984	NB3	0.580	0.200	47.10	29.30	22.20	34.80	101.00	1.950	292.0
1984	NB4	0.320	0.060	63.30	122.00	19.50	45.70	189.00	2.490	649.0
1985	NB1	2.440	0.637	152.00	132.00	30.90	79.70	193.00	3.550	407.0
1985	NB2	2.180	0.855	135.00	125.00	26.50	79.60	197.00	3.170	384.0
1985	NB3	0.588	0.256	92.40	35.90	30.40	38.20	93.10	2.370	306.0
1985	NB4	0.226	0.091	59.30	24.50	16.20	41.50	86.70	2.390	622.0
1986	NB1	1.950	0.593	131.00	120.00	28.50	97.60	195.00	3.860	416.0
1986	NB2	1.610	0.677	94.50	98.60	23.30	76.10	174.00	2.950	341.0
1986	NB3	0.539	0.255	61.60	40.10	14.10	42.10	110.00	2.580	298.0
1986	NB4	0.243	0.113	46.80	22.70	14.70	45.40	91.00	2.420	516.0
Eastern Long Island Sound										
1984	ELI1	0.080	0.100	43.60	9.80	10.50	23.60	60.00	4.120	1870.0
1984	ELI2	0.320	0.180	35.80	15.80	10.50	23.10	65.40	1.890	529.0

Table 4a. Continued.

Year	Station	Ag	Cd	Cr	Cu	Ni	Pb	Zn	Fe(%)	Mn
Eastern Long Island Sound										
1984	ELI3	0.060	0.060	33.50	8.19	11.30	19.70	51.10	2.510	1160.0
1985	ELI1	0.038	0.131	48.50	7.24	8.30	19.50	49.50	4.520	2760.0
1985	ELI2	0.042	0.064	24.00	6.96	5.82	19.80	53.20	2.010	674.0
1985	ELI5	0.010	0.074	43.20	3.50	12.20	15.40	41.20	2.830	1930.0
1986	ELI1	0.028	0.142	82.30	5.58	20.60	13.30	75.20	4.290	2180.0
1986	ELI2	0.063	0.079	40.00	8.78	8.84	20.20	77.90	2.980	1510.0
1986	ELI3	0.048	0.059	29.90	5.41	4.26	11.90	37.30	2.300	1410.0
Western Long Island Sound										
1984	WLI1	1.060	0.540	140.00	113.00	33.50	64.90	230.00	3.890	1310.0
1984	WLI2	1.590	0.920	123.00	109.00	32.80	74.60	256.00	3.580	974.0
1985	WLI1	1.870	0.574	123.00	93.00	30.10	52.40	193.00	3.580	1000.0
1985	WLI2	1.420	0.968	128.00	102.00	34.90	74.80	237.00	3.740	924.0
1985	WLI4	2.260	1.080	157.00	129.00	35.00	88.60	255.00	3.870	1100.0
1986	WLI2	1.590	1.050	108.00	180.00	32.80	117.00	268.00	3.510	899.0
1986	WLI4	2.790	1.790	154.00	168.00	46.90	123.00	321.00	4.480	1130.0
1986	WLI9	0.304	0.140	42.90	26.00	14.70	29.00	87.70	2.180	614.0
Raritan Bay										
1984	RB1	5.420	3.450	196.00	215.00	44.50	193.00	550.00	5.690	512.0
1984	RB2	4.180	2.390	170.00	185.00	35.70	178.00	451.00	4.240	487.0
1984	RB3	6.180	2.870	217.00	203.00	43.90	220.00	472.00	5.010	654.0
1984	RB5	3.440	2.260	141.00	121.00	31.10	133.00	262.00	3.150	600.0
1985	RB1	6.500	4.000	237.00	234.00	49.40	223.00	617.00	5.770	586.0
1985	RB2	4.300	2.610	181.00	183.00	40.90	178.00	398.00	4.250	454.0
1985	RB3	4.500	2.950	219.00	175.00	40.00	198.00	401.00	4.260	512.0
1985	RB5	2.930	2.160	150.00	108.00	29.00	135.00	221.00	2.950	543.0
1986	RB1	5.140	4.830	208.00	214.00	50.60	137.00	593.00	5.710	485.0
1986	RB2	4.690	2.510	179.00	219.00	43.50	137.00	443.00	4.760	517.0
1986	RB3	4.210	1.560	166.00	150.00	37.70	124.00	336.00	4.250	851.0
1986	RB4	1.580	0.694	71.70	49.80	18.50	54.50	123.00	2.050	445.0
Great Bay										
1985	GB1	0.416	0.376	102.00	22.20	24.10	33.20	115.00	3.250	555.0
1985	GB2	0.682	0.494	120.00	31.70	27.90	37.60	174.00	4.700	496.0
1985	GB3	0.694	0.667	124.00	40.10	25.40	38.90	188.00	4.150	515.0
1986	GB1	0.489	0.331	87.90	19.00	27.70	38.00	111.00	3.340	541.0
1986	GB2	0.981	0.705	108.00	32.50	36.10	64.60	185.00	4.540	469.0
1986	GB3	0.876	0.624	104.00	32.20	36.00	51.30	163.00	4.060	474.0
Delaware Bay										
1984	DB1	0.150	0.610	52.80	12.20	15.40	21.30	85.30	1.930	445.0
1984	DB11	< 0.060	< 0.030	5.59	3.85	0.83	5.03	9.79	0.190	53.1
1984	DB9	0.110	0.070	24.90	8.98	6.49	18.80	53.90	1.410	240.0
1985	DB1	0.199	0.282	57.50	14.70	17.50	22.80	102.00	2.160	580.0
1985	DB15	0.208	0.389	56.80	10.90	13.50	20.70	100.00	1.820	515.0
1985	DB16	0.070	0.180	40.50	7.21	10.20	17.10	56.10	1.480	404.0
1986	DB1	0.159	0.192	42.70	5.35	12.80	19.50	77.10	1.690	392.0
1986	DB15	0.297	0.267	62.00	11.90	21.30	29.90	103.00	2.400	496.0
1986	DB16	0.429	0.717	71.20	19.00	27.00	37.00	144.00	2.940	616.0

Table 4a. Continued.

Year	Station	Ag	Cd	Cr	Cu	Ni	Pb	Zn	Fe(%)	Mn
Baltimore Harbor										
1986	BAH1	3.060	3.880	541.00	272.00	80.30	171.00	789.00	7.030	968.0
1986	BAH2	1.550	3.660	537.00	266.00	61.50	217.00	650.00	5.430	831.0
1986	BAH3	1.200	1.800	469.00	201.00	67.60	128.00	464.00	5.540	994.0
Upper Chesapeake Bay										
1985	CU22	0.589	0.962	152.00	53.70	74.70	55.20	281.00	4.610	933.0
1985	CU33	0.125	0.249	74.50	21.10	25.00	18.40	93.30	1.570	224.0
1985	CU44	0.884	0.855	149.00	56.40	87.00	79.60	348.00	5.400	3430.0
1986	CU22	0.642	0.919	117.00	66.20	59.00	78.50	383.00	5.410	969.0
1986	CU33	0.118	0.343	89.60	32.80	39.40	42.00	146.00	4.260	542.0
1986	CU44	0.683	0.746	108.00	55.30	65.90	73.10	368.00	5.420	2540.0
Mid Chesapeake Bay										
1985	CM1	0.115	0.394	76.80	21.90	28.80	21.80	115.00	3.140	356.0
1985	CM2	0.027	0.126	36.80	7.26	8.62	8.48	57.50	3.210	436.0
1985	CM3	0.071	0.293	33.10	11.00	14.70	12.10	70.80	2.060	229.0
1986	CM1	0.144	0.335	76.10	19.40	32.60	26.60	110.00	3.160	366.0
1986	CM2	0.049	0.089	46.70	5.43	9.13	8.56	57.00	3.050	272.0
1986	CM3	0.081	0.189	44.00	8.94	16.20	25.60	76.70	2.490	220.0
Lower Chesapeake Bay										
1984	CL1	0.040	0.100	43.70	9.47	11.60	14.60	51.90	2.030	308.0
1984	CL2	0.060	0.600	59.10	10.10	14.90	14.10	62.00	2.370	407.0
1984	CL3	0.140	0.430	72.70	14.40	20.90	18.40	84.80	2.870	372.0
1985	CL1	0.079	0.143	48.70	9.81	11.60	12.40	55.40	2.100	328.0
1985	CL2	0.113	0.172	59.20	13.40	13.90	11.20	62.70	2.440	373.0
1985	CL3	0.074	0.256	70.80	17.30	19.50	17.80	80.10	2.720	354.0
1986	CL1	0.055	0.089	49.40	5.36	12.80	12.10	56.30	1.700	313.0
1986	CL2	0.042	0.088	44.10	5.52	8.78	11.70	41.50	1.550	303.0
1986	CL3	0.085	0.160	68.30	11.80	23.10	22.90	86.20	2.580	353.0
Elizabeth River										
1986	ER1	0.492	1.350	75.30	46.40	24.20	59.60	368.00	3.980	357.0
1986	ER2	0.685	1.380	97.60	170.00	30.50	177.00	577.00	4.670	321.0
1986	ER3	0.357	0.881	43.00	97.40	13.90	82.10	275.00	1.860	136.0

Table 4b. Concentrations of metals (thallium, aluminum, silicon, arsenic, mercury, selenium, tin, antimony) in sediment (ppm dry weight, except where noted)

Year	Station	Tl	Al(%)	Si(%)	As	Hg	Se	Sn	Sb
Machias Bay									
1984	MB1	0.390	5.470	34.30	8.56	< 0.090	0.120	2.580	0.430
1985	MB1	0.373	4.940	35.10	6.47	< 0.075	< 0.219	2.060	0.382
1985	MB3	0.463	6.090	33.00	8.34	< 0.076	< 0.222	2.450	0.294
1985	MB4	0.455	5.630	33.40	9.09	< 0.075	< 0.219	2.270	0.426
1986	MB1	0.378	4.680	35.00	5.76	0.029	< 0.486	1.490	0.481
1986	MB3	0.430	5.870	35.60	8.29	0.040	< 0.467	1.770	0.807
1986	MB4	0.462	5.200	36.80	6.42	0.027	< 0.465	1.290	0.345
Frenchmans Bay									
1985	FB1	0.754	8.560	28.60	9.80	0.021	0.554	4.300	0.663
1985	FB2	0.682	7.750	26.60	10.70	< 0.077	0.414	4.160	0.533
1985	FB3	0.744	7.140	31.60	9.51	< 0.075	0.305	3.600	0.471
1986	FB1	0.651	7.910	27.50	11.80	0.125	< 0.479	3.570	0.710
1986	FB2	0.666	7.500	27.40	11.60	0.100	< 0.490	3.570	0.726
1986	FB3	0.589	6.580	32.10	8.62	0.041	< 0.485	3.310	0.840
Penobscot Bay									
1985	PB1	0.674	7.240	34.00	14.50	0.340	0.508	4.320	0.387
1985	PB3	0.541	9.330	27.60	8.55	0.115	0.453	3.980	0.474
1985	PB4	0.628	7.100	26.30	10.80	0.043	< 0.237	3.300	0.561
1986	PB1	0.633	7.830	26.80	12.10	0.390	< 0.493	3.850	0.852
1986	PB3	0.563	8.040	28.00	11.50	0.204	< 0.465	3.890	0.919
1986	PB4	0.673	7.200	27.70	9.29	0.149	< 0.496	3.380	0.857
Casco Bay									
1984	CB14	0.350	6.120	31.20	9.22	0.090	0.300	2.680	0.630
1984	CB15	0.370	6.410	30.80	7.59	0.140	< 0.040	3.380	0.700
1984	CB5	< 0.280	6.740	30.60	9.76	0.140	0.040	3.200	0.550
1985	CB1	0.664	7.690	28.40	14.30	0.059	0.548	4.120	0.198
1985	CB2	0.746	7.690	35.40	16.60	0.160	0.682	6.080	0.404
1985	CB4	0.817	9.310	29.50	8.53	0.264	< 0.227	7.130	0.348
1986	CB1	0.634	7.410	27.60	12.70	0.177	< 0.494	4.000	0.488
1986	CB2	0.705	7.370	26.20	15.30	0.226	< 0.469	5.260	0.811
1986	CB4	0.708	7.240	27.00	13.20	0.366	< 0.495	6.600	0.611
Merrimack River									
1984	MR2	0.400	4.570	37.90	6.83	0.060	0.040	4.400	< 0.060
1984	MR3	0.390	5.150	35.30	2.41	< 0.100	0.040	7.580	< 0.060
1985	MR1	0.419	4.330	37.00	3.56	< 0.076	< 0.221	< 1.650	< 0.458
1985	MR2	0.552	3.820	34.20	5.56	< 0.077	< 0.224	1.600	< 0.464
1985	MR3	0.211	4.070	30.60	2.54	< 0.076	< 0.223	2.160	< 0.461
Salem Harbor									
1984	SH1	0.890	6.480	20.80	20.20	0.890	1.330	4.840	2.700
1984	SH2	0.820	6.240	22.40	11.60	1.210	0.990	10.600	2.230
1984	SH3	1.140	5.730	18.80	15.90	1.470	1.350	14.400	5.770
1985	SH1	0.870	6.430	24.10	21.20	1.140	0.637	15.600	2.690
1985	SH2	0.686	6.090	29.70	8.11	0.666	0.516	8.530	1.560
1985	SH3	1.060	6.440	30.50	9.58	1.140	0.650	15.700	3.640
1985	SH4	0.853	6.650	22.90	12.10	1.110	1.080	16.900	3.380

Table 4b. Continued.

Year	Station	Tl	Al(%)	Si(%)	As	Hg	Se	Sn	Sb
Salem Harbor									
1986	SH1	0.893	6.380	24.60	20.00	1.100	0.480	13.800	2.380
1986	SH2	0.603	5.800	30.20	7.57	0.396	0.219	6.820	0.710
1986	SH3	0.717	5.820	28.00	8.95	0.847	0.544	16.000	1.470
Boston Harbor									
1984	BH1	0.960	6.740	23.40	13.00	0.960	0.800	25.800	6.570
1984	BH2	0.790	6.000	25.30	11.00	1.360	0.810	30.800	14.100
1984	BH3	0.760	5.860	24.70	9.57	0.830	0.790	22.600	4.210
1985	BH2	0.710	6.900	21.60	11.30	1.300	0.656	32.700	17.000
1985	BH3	0.808	6.820	29.10	8.76	0.905	0.766	21.900	4.040
1985	BH4	0.887	6.870	25.70	8.81	0.943	0.859	23.900	3.570
1985	BH5	1.050	7.190	24.30	10.90	1.020	0.882	25.100	4.630
1986	BH1	0.682	5.050	31.90	5.61	0.280	0.225	8.260	0.994
1986	BH2	0.811	6.450	24.90	11.20	1.490	0.501	33.300	20.000
1986	BH3	0.842	6.650	24.80	11.90	0.981	0.286	25.300	4.650
Quincy Bay									
1986	QB1	0.811	6.800	25.70	12.00	1.490	0.433	26.800	5.290
1986	QB2	0.744	6.610	26.90	11.50	1.220	0.226	24.100	7.860
1986	QB3	0.780	7.000	24.70	11.50	1.430	0.350	29.100	5.640
Buzzards Bay									
1984	BB1	0.640	5.390	28.70	13.30	0.210	0.200	2.100	0.680
1984	BB2	0.590	5.340	32.60	12.30	0.090	0.080	1.420	1.010
1984	BB3	0.570	4.760	29.60	14.20	0.080	< 0.040	1.820	0.860
1984	BB4	0.470	4.530	31.30	13.00	0.150	< 0.040	2.180	0.960
1984	BB80	0.730	5.060	29.60	11.40	0.080	0.490	1.320	0.710
1985	BB1	0.618	5.840	33.80	10.60	0.109	0.293	4.280	0.710
1985	BB3	0.762	5.860	31.10	9.92	0.097	0.401	4.470	1.330
1985	BB4	0.739	6.240	30.00	8.87	0.118	0.197	5.470	0.490
1986	BB1	0.518	6.340	29.20	12.50	0.185	< 0.485	4.430	2.280
1986	BB3	0.502	6.460	31.10	13.00	0.142	< 0.470	4.020	1.040
1986	BB4	0.426	6.010	31.00	10.40	0.191	< 0.502	4.800	0.496
Narragansett Bay									
1984	NB1	0.800	6.170	27.10	11.40	0.600	0.600	8.660	0.800
1984	NB2	0.810	6.030	22.40	8.67	0.310	0.660	6.080	0.810
1984	NB3	0.670	4.730	28.50	4.79	< 0.050	0.250	3.160	< 1.340
1984	NB4	0.790	5.270	27.30	9.90	0.280	0.390	5.000	0.700
1985	NB1	0.747	6.510	25.50	11.00	0.539	0.443	10.100	0.930
1985	NB2	0.659	6.080	24.50	8.12	0.391	0.496	10.500	0.560
1985	NB3	0.679	5.990	31.50	6.37	0.154	< 0.116		
4.530	0.480								
1985	NB4	0.489	5.190	31.10	7.29	0.110	0.192	3.510	0.480
1986	NB1	0.671	6.280	25.70	9.85	0.654	0.222	18.900	0.876
1986	NB2	0.604	5.730	28.90	8.65	0.355	0.285	10.500	1.730
1986	NB3	0.564	5.700	30.60	6.00	0.196	0.158	6.200	0.473
1986	NB4	0.500	5.060	31.80	7.42	0.136	0.157	5.790	0.679
Eastern Long Island Sound									
1984	ELI1	0.320	4.960	39.60	2.25	< 0.090	0.040	5.120	0.530
1984	ELI2	0.310	4.030	39.00	6.00	0.080	0.040	3.080	0.510
1984	ELI3	0.350	4.390	37.90	3.06	< 0.100	< 0.040	2.680	0.410

Table 4b. Continued.

Year	Station	Tl	Al(%)	Si(%)	As	Hg	Se	Sn	Sb
Eastern Long Island Sound									
1985	ELI1	< 0.193	5.100	31.10	2.58	< 0.076	< 0.226	1.610	< 0.468
1985	ELI2	0.164	4.210	34.00	3.79	< 0.075	< 0.217	1.480	< 0.450
1985	ELI5	< 0.186	3.960	35.90	1.47	< 0.075	< 0.219	< 1.630	< 0.453
1986	ELI1	0.132	4.780	31.40	3.92	< 0.070	< 0.497	1.880	0.245
1986	ELI2	0.268	4.440	36.70	5.70	< 0.068	< 0.482	1.250	0.356
1986	ELI3	0.233	2.130	39.50	3.80	< 0.068	< 0.481	1.070	0.119
Western Long Island Sound									
1984	WLI1	0.930	7.000	20.60	7.09	0.430	0.600	7.780	1.010
1984	WLI2	0.750	6.160	23.00	8.25	0.520	0.490	9.600	0.660
1985	WLI1	0.643	6.130	26.80	7.37	0.345	0.357	7.450	0.740
1985	WLI2	0.629	6.130	25.10	7.99	0.426	0.508	9.370	0.860
1985	WLI4	0.663	6.210	22.70	7.85	0.519	0.551	12.500	0.890
1986	WLI2	0.683	5.780	25.40	10.40	1.010	0.361	13.400	1.630
1986	WLI4	0.855	7.100	24.40	11.40	0.637	0.223	11.200	1.400
1986	WLI9	0.437	3.900	30.20	4.11	0.060	< 0.295	3.080	0.623
Raritan Bay									
1984	RB1	0.770	5.760	20.80	39.60	2.450	1.960	14.600	6.320
1984	RB2	0.770	5.410	24.40	24.50	2.180	1.720	20.600	3.800
1984	RB3	0.800	6.380	21.70	27.20	3.210	1.550	12.300	3.670
1984	RB5	0.570	4.880	28.10	15.20	1.500	0.790	12.600	1.590
1985	RB1	0.752	6.420	24.60	31.80	2.620	1.890	23.800	3.330
1985	RB2	0.750	5.820	27.60	21.50	2.370	0.909	21.600	2.650
1985	RB3	0.670	5.500	22.90	21.80	2.530	0.714	21.500	2.660
1985	RB5	0.483	4.810	30.80	12.50	1.380	0.449	13.900	1.230
1986	RB1	0.752	5.980	20.60	30.90	2.900	0.503	22.800	3.440
1986	RB2	0.723	6.080	24.00	29.70	2.990	0.878	23.000	4.180
1986	RB3	0.610	5.570	23.50	20.60	2.490	0.486	21.800	2.150
1986	RB4	0.319	3.690	32.40	8.12	1.040	< 0.295	9.790	0.728
Great Bay									
1985	GB1	0.350	6.390	30.00	8.07	0.255	< 0.231	4.490	0.161
1985	GB2	0.542	7.110	25.20	13.10	0.401	0.502	5.630	0.475
1985	GB3	0.431	7.010	24.30	11.80	0.607	0.620	6.040	0.729
1986	GB1	0.380	5.490	31.00	9.67	0.282	< 0.490	4.060	0.484
1986	GB2	0.381	6.220	26.10	14.50	0.448	0.351	5.690	0.849
1986	GB3	0.413	6.070	27.90	13.00	0.378	< 0.487	4.790	0.841
Delaware Bay									
1984	DB1	0.340	5.370	39.30	7.99	0.090	< 0.040	2.620	0.780
1984	DB11	< 0.290	0.180	47.30	1.14	< 0.090	< 0.040	< 0.680	< 0.060
1984	DB9	< 0.310	1.990	43.40	8.43	0.100	0.120	2.140	< 0.060
1985	DB1	0.175	5.140	28.10	7.10	0.074	< 0.230	2.910	0.208
1985	DB15	0.345	8.170	29.50	6.41	0.081	< 0.228	3.320	< 0.471
1985	DB16	0.213	4.880	36.00	5.28	0.016	< 0.225	1.820	< 0.466
1986	DB1	0.265	4.860	35.60	6.11	0.065	< 0.476	1.360	0.118
1986	DB15	0.298	5.160	33.10	10.70	0.124	< 0.473	2.740	0.584
1986	DB16	0.310	5.500	31.00	15.00	0.235	< 0.491	3.800	0.607

Table 4b. Continued.

Year	Station	Tl	Al(%)	Si(%)	As	Hg	Se	Sn	Sb
Baltimore Harbor									
1986	BAH1	0.957	9.100	20.50	31.10	0.729	1.400	64.600	22.000
1986	BAH2	1.180	7.700	23.50	37.80	0.802	1.800	137.000	123.000
1986	BAH3	0.862	8.600	22.50	22.40	0.664	1.580	20.900	6.850
Upper Chesapeake Bay									
1985	CU22	0.808	7.240	22.90	15.40	0.278	1.130	6.820	1.190
1985	CU33	0.166	1.910	41.00	5.54	0.085	0.195	2.430	0.340
1985	CU44	0.973	8.910	24.50	19.80	0.273	1.060	7.110	4.660
1986	CU22	0.967	8.770	20.70	17.80	0.381	0.821	6.570	1.340
1986	CU33	0.618	5.990	29.50	10.30	0.088	0.224	2.600	0.728
1986	CU44	0.836	8.380	21.10	13.90	0.520	0.809	7.180	1.220
Mid Chesapeake Bay									
1985	CM1	0.432	6.010	28.70	9.49	0.062	0.420	2.660	0.254
1985	CM2	< 0.193	2.180	38.00	5.17	< 0.078	< 0.227	1.320	< 0.469
1985	CM3	0.173	3.060	33.10	6.88	< 0.078	< 0.228	1.260	0.301
1986	CM1	0.389	5.900	24.40	9.40	0.082	0.358	2.730	0.371
1986	CM2	0.094	1.950	38.90	8.11	0.029	< 0.483	0.858	0.358
1986	CM3	0.238	2.930	38.10	7.74	0.042	< 0.490	1.050	0.605
Lower Chesapeake Bay									
1984	CL1	0.260	3.760	34.40	5.15	< 0.090	< 0.040	1.780	0.380
1984	CL2	0.480	5.200	35.90	6.53	< 0.100	< 0.040	1.210	0.670
1984	CL3	0.480	5.690	34.10	9.81	0.120	0.040	1.120	0.510
1985	CL1	0.352	4.690	41.60	3.49	0.042	< 0.115	1.850	0.530
1985	CL2	0.442	6.460	39.30	4.13	0.059	0.192	1.840	0.480
1985	CL3	0.494	5.800	34.70	6.53	0.091	0.141	2.890	0.580
1986	CL1	0.266	4.310	32.90	4.24	0.028	< 0.478	1.720	0.118
1986	CL2	0.202	3.670	41.70	3.39	< 0.069	0.281	1.230	0.121
1986	CL3	0.331	4.800	31.80	5.57	0.040	< 0.471	2.000	0.349
Elizabeth River									
1986	ER1	0.677	6.550	25.20	11.00	0.257	0.291	4.430	1.200
1986	ER2	0.743	7.440	22.50	13.00	0.836	0.294	7.900	1.520
1986	ER3	0.379	3.430	28.80	7.75	0.829	< 0.295	9.790	1.350

Table 5. Total organic carbon (TOC) and silt-clay in sediment (% dry weight)

Year	Station	TOC (%)	Silt-Clay (%)	Year	Station	TOC (%)	Silt-Clay (%)	Year	Station	TOC (%)	Silt-Clay (%)
Machias Bay				Salem Harbor				Narragansett Bay			
1984	MB1	0.505	56.41	1984	SH1	7.120	84.89	1984	NB1	3.420	87.90
1985	MB1	0.650	58.29	1984	SH2	4.040	54.23	1984	NB2	3.140	73.86
1985	MB3	1.120	90.18	1984	SH3	6.610	74.34	1984	NB3	1.290	45.50
1985	MB4	0.761	68.68	1985	SH1	6.920	89.93	1984	NB4	1.820	60.85
1986	MB1	0.306	48.14	1985	SH2	2.130	45.79	1985	NB1	3.560	59.28
1986	MB3	0.916	93.13	1985	SH3	3.610	63.84	1985	NB2	2.970	75.59
1986	MB4	0.378	47.57	1986	SH1	6.390	95.71	1985	NB4	1.540	78.29
				1986	SH2	1.520	31.64	1986	NB1	2.740	82.14
				1986	SH3	3.190	58.58	1986	NB2	2.400	58.60
Frenchmans Bay				Boston Harbor				1986	NB3	1.460	58.54
1985	FB1	2.610	98.48					1986	NB4	1.450	42.66
1985	FB2	2.470	98.36					Eastern Long Island Sound			
1985	FB3	1.580	83.14	1984	BH1	3.420	75.36	1984	ELI1	0.376	6.95
1986	FB1	3.160	98.43	1984	BH2	5.330	47.74	1984	ELI2	0.464	12.90
1986	FB2	2.230	98.09	1984	BH3	2.610	55.17	1984	ELI3	0.286	6.17
1986	FB3	1.420	75.85	1985	BH2	5.990	61.14	1985	ELI1	0.230	8.87
				1985	BH3	3.980	67.02	1985	ELI2	0.207	9.04
				1985	BH4	4.180	62.13	1985	ELI5	0.164	6.66
				1985	BH5	4.200	70.23	1986	ELI1	0.066	5.91
Penobscot Bay				1986	BH1	0.887	26.63	1986	ELI2	0.230	9.70
1985	PB1	3.400	98.56	1986	BH2	5.280	62.42	1986	ELI3	0.020	4.52
1985	PB3	2.430	98.76	1986	BH3	3.300	63.89	Western Long Island Sound			
1985	PB4	1.980	93.40					1984	WLI1	2.670	82.04
1986	PB1	3.030	98.93					1984	WLI2	2.960	70.19
1986	PB3	2.190	97.54					1985	WLI1	2.460	77.65
1986	PB4	2.200	96.46					1985	WLI2	3.090	79.53
				Quincy Bay				1985	WLI4	4.190	93.00
				1986	QB1	3.270	74.79	1986	WLI2	4.910	69.52
				1986	QB2	3.330	70.38	1986	WLI4	5.920	98.18
				1986	QB3	3.960	79.26	1986	WLI9	0.394	13.83
				Buzzards Bay				Raritan Bay			
1984	CB14	1.270	38.07	1984	BB1	2.530	75.16	1984	RB1	3.760	56.41
1984	CB15	1.740	64.64	1984	BB2	2.120	74.08	1984	RB2	2.810	79.28
1984	CB5	2.050	79.17	1984	BB3	2.220	78.90	1984	RB3	4.400	80.40
1985	CB1	2.810	88.15	1984	BB4	2.000	77.17	1984	RB5	2.680	68.27
1985	CB2	3.470	93.84	1984	BB80	1.730	79.13	1985	RB1	3.980	86.58
1985	CB4	2.830	76.30	1985	BB1	2.340	45.03	1985	RB2	2.840	80.42
1986	CB1	2.800	94.34	1985	BB3	2.270	76.77	1985	RB3	3.290	69.27
1986	CB2	3.230	98.31	1985	BB4	2.130	78.61	1985	RB5	3.490	96.81
1986	CB4	3.240	92.41	1986	BB1	2.570	92.60	1986	RB1	3.630	79.87
				1986	BB3	2.130	78.68	1986	RB2	2.810	74.18
				1986	BB4	2.210	91.62	1986	RB3	3.470	81.14
Merrimack River								1986	RB4	1.690	20.37
1984	MR2	0.134	6.15								
1984	MR3	0.104	6.70								
1985	MR1	0.078	5.20								
1985	MR2	0.138	5.67								
1985	MR3	0.072	6.06								

Table 5. Continued.

Year	Station	TOC (%)	Silt-Clay (%)	Year	Station	TOC (%)	Silt-Clay (%)	Year	Station	TOC (%)	Silt-Clay (%)
Great Bay				Baltimore Harbor				Lower Chesapeake Bay			
1985	GB1	1.670	55.77	1986	BAH1	4.460	99.08	1984	CL1	0.481	31.55
1985	GB2	4.190	79.77	1986	BAH2	3.440	81.67	1984	CL2	0.646	40.83
1985	GB3	4.090	78.59	1986	BAH3	3.410	97.63	1984	CL3	1.100	78.91
1986	GB1	1.730	57.70					1985	CL1	0.664	33.50
1986	GB2	4.260	95.85	Upper Chesapeake Bay				1985	CL2	0.736	45.78
1986	GB3	3.620	93.85	1985	CU22	3.780	96.50	1985	CL3	1.000	67.80
Delaware Bay				1985	CU33	1.420	26.68	1986	CL1	0.432	30.25
1984	DB1	0.644	28.35	1985	CU44	3.790	95.88	1986	CL2	0.220	18.56
1984	DB11	0.089	3.62	1986	CU11	3.550	98.94	1986	CL3	1.010	75.83
1984	DB9	0.823	19.09	1986	CU22	3.340	99.49	Elizabeth River			
1985	DB1	1.410	68.17	1986	CU33	1.990	55.41	1986	ER1	2.530	69.26
1985	DB15	1.070	42.49	1986	CU44	3.730	99.20	1986	ER2	4.230	95.84
1985	DB16	0.314	12.40	Mid Chesapeake Bay				1986	ER3	3.760	33.02
1986	DB1	0.988	36.23	1985	CM1	1.330	69.58				
1986	DB15	1.600	46.86	1985	CM2	1.100	9.69				
1986	DB16	2.750	64.60	1985	CM3	1.040	26.53				
				1986	CM1	2.490	98.36				
				1986	CM2	0.166	7.22				
				1986	CM3	0.977	20.57				
				1986	CM4	1.250	79.90				

Table 6a. Concentrations of hydrocarbons (naphthalene, 2-methylnaphthalene, 1-methylnaphthalene, biphenyl, 2,6-dimethylnaphthalene, acenaphthene, fluorene, phenanthrene, anthracene) in stomach contents (ppb dry weight)

Year	Naphthalene	2-Me-naphthalene	1-Me-naphthalene	Biphenyl	2,6-di-Me-naphthalene	Ace-naphthene	Fluorene	Phenanthrene	Anthracene
Machias Bay									
1985	< 2.00	45.00	< 2.00	54.00	< 2.00	< 2.00	< 2.00	109.00	17.00
1986	< 1.36	2.99	< 1.44	2.71	17.31	< 1.23	< 1.23	77.91	< 1.18
Frenchmans Bay									
1985	40.00	34.00	17.00	20.00	< 3.00	< 3.00	< 3.00	94.00	< 2.00
Penobscot Bay									
1985	54.00	59.00	28.00	35.00	< 2.00	< 2.00	< 2.00	220.00	< 2.00
1986	11.72	< 1.47	< 1.56	< 1.28	< 1.29	< 1.28	< 1.28	< 1.19	< 1.22
Casco Bay									
1984	< 1.90	180.82	103.25	< 1.80	56.61	< 1.70	< 1.60	257.11	144.88
1985	52.00	52.00	76.00	< 2.00	< 2.00	< 2.00	< 2.00	160.00	35.00
1986	1.39	7.38	24.01	22.83	5.68	6.58	< 0.56	20.68	< 0.55
Merrimack River									
1984	< 5.20	< 5.90	< 5.40	< 4.50	< 4.30	< 4.40	< 4.20	722.43	68.67
1985	25.00	21.00	39.00	9.00	11.00	< 1.00	33.00	631.00	45.00
Salem Harbor									
1984	84.23	475.86	71.29	< 1.30	50.82	14.18	< 1.60	1232.00	< 1.00
1985	42.00	41.00	62.00	< 2.00	30.00	< 2.00	< 2.00	504.00	41.00
1986	< 1.98	< 1.86	< 2.09	32.58	15.13	42.06	< 1.74	238.00	11.89
Boston Harbor									
1984	< 4.10	85.02	136.25	18.82	288.72	< 2.50	154.91	861.67	159.00
1985	253.00	733.00	385.00	48.00	433.00	< 3.00	89.00	616.00	43.00
1986	< 2.06	< 1.94	160.03	108.56	322.28	139.41	868.47	4900.50	1358.37
Quincy Bay									
1986	635.88	< 2.34	412.93	146.19	143.78	29.81	< 2.04	233.09	29.90
Buzzards Bay									
1984	< 2.00	15.69	70.45	< 2.00	< 2.00	< 2.00	< 2.00	926.57	168.61
1985	160.00	511.00	421.00	< 1.00	36.00	< 1.00	23.00	796.00	221.00
1986	1350.45	< 1.67	515.25	< 1.60	< 1.66	< 1.63	< 1.65	44.78	< 1.62
Narragansett Bay									
1984	< 1.20	35.23	< 1.20	< 1.20	< 1.10	< 1.10	< 1.10	238.37	51.13
1985	25.00	51.00	36.00	9.00	11.00	< 2.00	14.00	341.00	53.00
1986	1179.13	< 1.44	441.49	11.07	< 1.45	193.84	< 1.44	49.53	18.97

Table 6a. Continued.

Year	Naphthalene	2-Me-naphthalene	1-Me-naphthalene	Biphenyl	2,6-di-Me-naphthalene	Ace-naphthene	Fluorene	Phenanthrene	Anthracene
Eastern Long Island Sound									
1984	31.90	< 0.90	19.24	< 0.70	15.44	< 0.70	8.16	1605.00	202.51
1985	20.00	21.00	35.00	10.00	< 1.00	< 1.00	< 1.00	1621.00	112.00
1986	< 1.02	15.90	11.33	5.59	6.65	< 0.89	7.54	87.50	27.83
Western Long Island Sound									
1984	2.60	36.64	60.53	< 2.50	< 2.40	< 2.40	< 2.40	627.67	270.76
1985	100.00	3.00	< 3.00	7.00	< 3.00	< 3.00	< 2.00	3630.00	< 2.00
1986	< 2.07	< 1.95	< 2.18	20.82	< 1.93	20.61	6.89	393.99	15.85
Raritan Bay									
1985	79.00	184.00	109.00	15.00	121.00	11.00	23.00	876.00	208.00
1986	< 1.78	< 1.67	< 1.87	58.03	137.71	28.62	155.06	392.99	144.19
Great Bay									
1985	< 2.00	33.00	94.00	10.00	< 2.00	< 2.00	< 2.00	< 1.00	1678.00
1986	< 0.99	18.97	26.40	< 0.89	9.22	5.89	18.56	172.90	17.06
Delaware Bay									
1984	126.73	15.14	82.05	< 0.70	< 0.60	< 0.70	< 0.60	142.56	56.10
1985	9.00	27.00	7.00	17.00	< 2.00	< 3.00	< 2.00	55.00	< 2.00
1986	10.40	3.68	61.87	17.20	< 2.64	< 3.06	< 2.64	28.00	< 2.59
Upper Chesapeake Bay									
1985	< 6.00	< 6.00	794.70	< 3.70	352.80	< 3.90	< 3.60	1095.70	273.70
1986	< 0.55	27.58	16.83	16.94	12.22	11.79	86.07	44.97	18.35
Lower Chesapeake Bay									
1984	< 1.40	< 1.60	< 1.40	< 1.50	< 1.50	< 1.50	< 1.40	3060.00	< 1.40
1985	87.00	4.00	243.00	< 2.00	305.00	12.00	82.0	1405.00	286.00
1986	< 3.03	8.95	22.17	68.63	< 2.87	< 3.32	< 2.86	333.84	< 2.81
Elizabeth River									
1986	< 2.72	< 2.55	< 2.86	21.18	< 2.70	22.69	< 2.68	146.59	23.74

Table 6b. Concentrations of hydrocarbons (1-methylphenanthrene, fluoranthene, pyrene, benzo[a]anthracene, chrysene, benzo[e]pyrene, benzo[a]pyrene, perylene, dibenzo[a,h]anthracene) in stomach contents (ppb dry weight)

Year	1-Me-phen- anthrene	Fluoran- thene	Pyrene	Benzo-a- anthracene	Chrysene	Benzo-e- pyrene	Benzo-a- pyrene	Perylene	Dibenzo- a,h- anthracene
Machias Bay									
1985	< 2.00	< 2.00	< 2.00	71.00	< 2.00	< 1.00	6.00	< 2.00	< 3.00
1986	24.75	40.95	7.24	97.34	< 0.86	< 0.78	< 0.80	< 0.80	< 0.84
Frenchmans Bay									
1985	16.00	491.00	< 2.00	99.00	< 3.00	< 2.00	< 2.00	< 4.00	< 5.00
Penobscot Bay									
1985	132.00	814.00	< 2.00	179.00	< 2.00	< 2.00	< 2.00	< 3.00	< 4.00
1986	12.10	38.86	< 1.04	25.63	< 0.74	< 0.67	< 0.69	0.69	0.72
Casco Bay									
1984	< 1.40	< 1.40	< 1.30	85.72	< 1.50	< 1.30	< 1.40	< 1.40	< 1.50
1985	25.00	204.00	50.00	93.00	357.00	15.00	114.00	< 3.00	< 3.00
1986	37.01	50.27	11.29	224.30	14.43	55.38	63.95	< 0.58	0.68
Merrimack River									
1984	< 3.60	< 3.40	48.45	< 3.80	< 4.10	< 3.50	< 3.70	2700.00	< 5.60
1985	27.00	274.00	3.00	125.00	9.00	< 1.00	21.00	< 2.00	6.00
Salem Harbor									
1984	< 1.00	744.42	515.99	218.42	223.55	182.61	169.94	115.79	< 1.20
1985	< 1.00	97.00	119.00	102.00	62.00	44.00	83.00	< 3.00	< 3.00
1986	79.15	245.50	211.94	80.84	109.20	98.22	64.14	< 1.69	< 1.77
Boston Harbor									
1984	246.77	1091.00	745.20	358.42	553.33	344.25	410.93	115.66	81.40
1985	152.00	< 2.00	251.00	463.00	118.00	72.00	59.00	< 5.00	< 5.00
1986	528.17	4391.33	3229.21	1595.80	1469.55	891.94	1385.54	383.57	210.38
Quincy Bay									
1986	71.91	228.73	224.16	91.03	221.08	155.95	< 4.34	< 4.38	< 4.97
Buzzards Bay									
1984	< 1.00	< 1.00	< 1.00	117.75	96.78	20.54	291.74	< 1.00	< 2.00
1985	< 0.90	< 0.90	9.00	66.00	100.00	< 0.80	< 0.90	< 0.80	< 0.70
1986	68.63	61.88	39.77	< 2.44	< 2.38	2.44	2.58	2.60	2.96
Narragansett Bay									
1984	< 0.90	96.59	< 0.80	33.46	< 1.10	< 0.90	17.85	< 0.90	< 1.20
1985	38.00	122.00	115.00	110.00	140.00	53.00	41.00	< 1.00	< 1.00
1986	39.76	73.32	84.81	21.48	83.64	56.59	< 2.32	< 2.34	< 2.66

Table 6b. Continued.

Year	1-Me-phen- anthrene	Fluoran- thene	Pyrene	Benzo-a- anthracene	Chrysene	Benzo-e- pyrene	Benzo-a- pyrene	Perylene	Dibenzo- a,h- anthracene
Eastern Long Island Sound									
1984	< 0.60	< 0.50	< 0.50	48.44	21.25	< 0.50	64.11	< 0.50	10.88
1985	40.00	117.00	249.00	409.00	< 2.00	40.00	< 1.00	< 2.00	< 2.00
1986	81.49	120.53	169.38	159.52	34.21	77.45	47.25	< 0.57	15.37
Western Long Island Sound									
1984	< 1.90	< 1.80	< 1.70	< 2.40	< 2.60	2.20	147.86	< 2.20	< 2.60
1985	153.00	< 2.00	474.00	1281.00	419.00	74.00	231.00	< 4.00	47.00
1986	105.59	774.73	526.10	72.07	229.45	117.77	67.98	< 1.91	< 2.01
Raritan Bay									
1985	72.00	535.00	535.00	558.00	582.00	328.00	299.00	269.00	80.00
1986	238.06	690.48	846.78	312.07	488.88	568.02	470.00	211.17	78.07
Great Bay									
1985	15.00	51.00	< 1.00	146.00	< 2.00	27.00	< 1.00	24.00	< 2.00
1986	1.20	191.87	125.64	92.36	86.78	59.98	24.63	47.21	< 0.57
Delaware Bay									
1984	39.10	134.12	8.19	72.68	< 0.60	< 0.60	20.69	< 0.60	< 1.90
1985	29.00	39.00	14.00	107.00	< 3.00	< 2.00	< 2.00	< 4.00	44.00
1986	144.52	62.36	< 2.45	254.21	20.41	< 2.32	< 2.42	< 2.42	< 2.81
Upper Chesapeake Bay									
1985	586.70	286.60	< 3.00	3958.00	< 5.20	< 2.40	26.80	< 7.50	< 7.10
1986	89.33	53.03	16.92	569.18	49.73	4.81	2.20	1154.63	< 0.61
Lower Chesapeake Bay									
1984	< 1.30	< 1.20	< 1.20	< 1.40	< 1.50	< 1.30	< 1.40	< 1.50	< 1.70
1985	403.00	866.00	31.00	1818.00	< 2.00	13.00	177.00	< 3.00	< 3.00
1986	140.54	< 2.68	< 2.65	332.72	69.46	< 2.06	< 2.15	< 2.15	< 2.50
Elizabeth River									
1986	32.25	209.91	371.84	64.55	149.20	184.26	119.73	< 2.71	< 2.85

Table 6c. Concentrations of hydrocarbons (hexachlorobenzene, lindane, heptachlor, aldrin, heptachlor epoxide, o,p'-DDE, α -chlordane, trans-nonachlor, dieldrin) in stomach contents (ppb dry weight)

Year	Hexachloro- benzene	Lindane	Heptachlor	Aldrin	Heptachlor epoxide	o,p'-DDE	α -Chlordane	trans- Nonachlor	Dieldrin
Machias Bay									
1985	2.00	2.00	< 0.40	2.00	3.00	< 0.70	3.00	2.00	4.00
1986	1.42	1.54	2.41	< 0.22	1.70	< 0.25	2.75	3.91	8.18
Frenchmans Bay									
1985	1.00	4.00	< 0.40	2.00	< 0.50	< 0.70	3.00	2.00	4.00
Penobscot Bay									
1985	2.00	3.00	< 0.30	2.00	< 0.40	< 0.60	2.00	5.00	6.00
1986	0.96	3.64	1.26	< 0.20	1.26	< 0.22	2.12	4.08	7.81
Casco Bay									
1984	< 0.10	0.54	< 0.10	< 0.10	< 0.20	< 0.20	2.49	2.75	< 0.10
1985	2.00	4.00	< 0.50	< 0.50	< 0.50	< 0.70	3.00	6.00	6.00
1986	< 2.07	< 0.21	1.06	< 0.19	< 1.77	< 0.21	4.28	5.02	8.54
Merrimack River									
1984	2.80	< 0.30	< 0.30	< 0.20	< 0.30	< 0.30	7.60	12.00	< 0.30
1985	1.00	3.00	< 0.20	< 0.20	< 0.30	< 0.40	3.00	4.00	2.00
Salem Harbor									
1984	1.71	0.71	< 0.10	< 0.10	< 0.10	< 0.10	13.32	15.13	4.85
1985	2.00	4.00	< 0.30	2.00	< 0.40	< 0.50	14.00	21.00	6.00
1986	3.78	< 0.27	< 0.22	< 0.24	1.74	< 0.32	16.17	21.95	< 0.24
Boston Harbor									
1984	3.99	< 0.20	< 0.20	< 0.20	< 0.20	< 0.30	35.01	32.81	24.45
1985	< 0.30	5.00	< 0.50	< 0.50	< 0.60	< 0.80	28.00	39.00	14.00
1986	7.10	< 0.35	< 0.28	< 0.31	2.77	< 0.41	22.88	46.26	< 0.31
Quincy Bay									
1986	5.22	< 0.71	< 0.55	< 0.66	1.71	< 0.91	21.15	41.09	25.57
Buzzards Bay									
1984	1.63	1.07	< 0.10	9.19	2.54	< 0.10	5.64	6.40	8.23
1985	4.00	12.00	< 0.20	< 0.20	9.00	< 0.20	8.00	8.00	< 0.20
1986	1.94	3.99	1.99	< 0.73	5.83	< 1.01	8.44	8.01	56.66
Narragansett Bay									
1984	1.41	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	8.49	8.54	10.64
1985	1.00	< 0.30	< 0.30	1.00	< 0.40	< 0.40	3.00	4.00	5.00
1986	0.75	< 0.05	1.40	< 0.42	0.62	< 0.58	2.51	2.18	7.91

Table 6c. Continued.

Year	Hexachloro- benzene	Lindane	Heptachlor	Aldrin	Heptachlor epoxide	o,p'-DDE	α -Chlordane	trans- Nonachlor	Dieldrin
Eastern Long Island Sound									
1984	0.76	< 0.07	< 0.07	< 0.05	0.69	< 0.09	3.53	5.40	2.89
1985	< 0.20	5.00	< 0.30	3.00	< 0.30	< 0.40	15.00	16.00	10.00
1986	2.47	1.36	1.03	< 0.13	1.18	< 0.14	6.94	5.96	10.86
Western Long Island Sound									
1984	1.41	0.50	2.28	< 0.10	1.56	< 0.10	17.53	17.67	11.40
1985	4.00	7.00	< 0.70	< 0.70	< 0.80	< 1.00	41.00	50.00	23.00
1986	2.01	< 0.39	< 0.32	< 0.35	2.04	< 0.46	16.10	14.45	24.23
Raritan Bay									
1985	5.00	5.00	< 0.30	5.00	< 0.40	< 0.50	25.00	20.00	14.00
1986	1.88	< 0.72	< 0.55	< 0.65	7.30	< 0.89	36.12	26.92	< 0.65
Great Bay									
1985	2.00	< 0.30	2.00	< 0.30	4.00	< 0.50	4.00	5.00	5.00
1986	1.28	1.39	1.61	< 0.16	1.98	< 0.18	9.92	7.76	17.30
Delaware Bay									
1984	1.64	< 0.10	< 0.10	26.26	< 0.10	2.43	2.49	2.89	3.58
1985	2.00	3.00	< 0.60	< 0.50	< 0.60	< 0.80	2.00	4.00	3.00
1986	4.75	1.81	2.81	< 0.60	3.35	< 0.70	10.82	18.37	31.75
Upper Chesapeake Bay									
1985	6.20	3.10	< 0.70	1.30	9.20	< 1.10	11.90	11.40	15.30
1986	< 1.13	0.66	0.91	< 0.17	< 2.45	< 0.20	6.23	7.28	12.02
Lower Chesapeake Bay									
1984	< 0.10	2.71	1.72	< 0.10	< 0.10	< 0.20	5.57	7.10	7.00
1985	2.00	4.00	< 0.70	1.00	6.00	2.00	7.00	7.00	10.00
1986	< 0.24	7.21	5.30	< 0.51	< 0.41	< 0.58	5.30	7.16	16.84
Elizabeth River									
1986	1.78	< 1.01	< 0.77	< 0.92	< 0.77	7.33	3.24	< 0.70	< 0.92

Table 6d. Concentrations of hydrocarbons (p,p'-DDE, o,p'-DDD, p,p'-DDD, o,p'-DDT, p,p'-DDT, mirex, dichlorobiphenyl, trichlorobiphenyl, tetrachlorobiphenyl) in stomach contents (ppb dry weight)

Year	p,p'-DDE	o,p'-DDD	p,p'-DDD	o,p'-DDT	p,p'-DDT	Mirex	2-Cl-PCB	3-Cl-PCB	4-Cl-PCB
Machias Bay									
1985	2.00	< 0.60	4.00	< 0.90	18.00	< 0.50	14.00	6.00	5.00
1986	9.53	< 0.25	< 0.35	2.12	2.31	1.41	31.67	12.89	2.94
Frenchmans Bay									
1985	1.00	< 0.70	< 0.90	< 0.60	1.00	< 0.40	20.00	6.00	14.00
Penobscot Bay									
1985	6.00	< 0.60	8.00	< 0.50	2.00	< 0.30	15.00	10.00	26.00
1986	16.91	2.23	8.37	0.87	0.50	2.39	9.94	7.09	21.32
Casco Bay									
1984	1.47	< 0.20	< 0.20	< 0.20	< 0.20	< 0.10	< 0.50	< 0.20	3.23
1985	8.00	< 0.80	< 1.00	< 0.60	5.00	< 0.40	8.00	13.00	13.00
1986	13.75	2.28	< 11.74	1.38	3.05	< 0.17	29.42	22.33	45.12
Merrimack River									
1984	7.40	< 0.40	< 0.40	< 0.40	< 0.30	< 0.20	< 0.90	< 0.30	9.02
1985	5.00	< 0.40	6.00	< 0.30	3.00	< 0.20	11.00	11.00	7.00
Salem Harbor									
1984	27.24	54.19	< 0.10	19.47	< 0.10	0.44	< 0.30	2.90	6.80
1985	55.00	15.00	41.00	< 0.50	3.00	< 0.30	20.00	15.00	46.00
1986	57.93	10.24	69.12	10.38	2.33	1.70	< 0.10	210.27	379.76
Boston Harbor									
1984	20.03	11.15	60.14	< 0.30	2.40	2.89	2.85	35.50	251.89
1985	34.00	14.00	28.00	< 0.70	11.00	4.00	18.00	86.00	178.00
1986	26.59	8.96	54.38	4.85	7.38	3.44	65.95	405.71	911.44
Quincy Bay									
1986	53.34	4.96	55.28	3.76	2.98	1.26	519.12	179.72	258.06
Buzzards Bay									
1984	11.87	< 0.10	7.51	3.64	1.05	1.64	6.56	19.41	116.21
1985	8.00	< 0.30	10.00	24.00	6.00	< 0.10	231.00	117.00	238.00
1986	91.30	7.90	< 1.41	17.51	2.85	< 0.56	6.83	123.77	649.17
Narragansett Bay									
1984	20.52	4.21	< 0.40	2.85	1.51	0.78	1.36	3.86	45.90
1985	20.00	6.00	9.00	< 0.40	1.00	1.00	9.00	3.00	31.00
1986	11.43	1.04	7.16	1.09	1.65	0.62	32.08	25.89	51.17

Table 6d. Continued.

Year	p,p'-DDE	o,p'-DDD	p,p'-DDD	o,p'-DDT	p,p'-DDT	Mirex	2-Cl-PCB	3-Cl-PCB	4-Cl-PCB
Eastern Long Island Sound									
1984	18.09	2.08	2.95	1.47	1.92	1.08	< 0.20	8.29	22.11
1985	55.00	10.00	24.00	< 0.40	4.00	3.00	17.00	39.00	93.00
1986	23.80	2.60	18.98	1.65	6.05	0.55	16.25	15.91	64.80
Western Long Island Sound									
1984	13.29	6.96	4.14	1.91	1.81	1.31	< 0.30	25.28	21.73
1985	82.00	20.00	30.00	< 0.90	8.00	3.00	15.00	36.00	105.00
1986	52.38	7.07	< 0.59	3.18	3.84	5.00	98.73	77.66	274.49
Raritan Bay									
1985	115.00	22.00	82.00	< 0.50	6.00	4.00	37.00	44.00	269.00
1986	158.60	22.86	158.65	13.11	21.20	5.75	137.15	219.20	717.96
Great Bay									
1985	19.00	7.00	17.00	< 0.50	< 0.50	2.00	15.00	2.00	41.00
1986	43.38	5.77	51.20	2.40	0.87	0.98	22.45	24.68	117.66
Delaware Bay									
1984	29.87	3.62	7.92	0.87	0.77	0.33	20.86	10.80	19.31
1985	33.00	< 0.90	8.00	< 0.80	1.00	< 0.50	7.00	5.00	20.00
1986	271.87	3.47	< 1.05	7.60	7.07	2.46	25.33	21.31	44.11
Upper Chesapeake Bay									
1985	21.40	1.40	17.30	< 1.10	2.50	< 0.60	0.50	2.50	61.20
1986	12.89	2.43	< 0.30	1.96	4.65	< 0.54	8.41	9.16	23.84
Lower Chesapeake Bay									
1984	16.23	3.39	9.39	< 0.10	1.61	< 0.10	42.95	5.63	2.54
1985	21.00	< 1.00	7.00	< 1.00	3.00	< 0.60	2.00	6.00	23.00
1986	18.15	5.18	< 0.88	4.78	6.16	< 0.29	52.73	68.02	83.70
Elizabeth River									
1986	12.52	6.58	1.52	1.52	7.11	5.24	114.46	78.40	54.37

Table 6e. Concentrations of hydrocarbons (pentachlorobiphenyl, hexachlorobiphenyl, heptachlorobiphenyl, octachlorobiphenyl, nonachlorobiphenyl) in stomach contents (ppb dry weight)

Year	5-Cl-PCB	6-Cl-PCB	7-Cl-PCB	8-Cl-PCB	9-Cl-PCB	Year	5-Cl-PCB	6-Cl-PCB	7-Cl-PCB	8-Cl-PCB	9-Cl-PCB
Machias Bay						Narragansett Bay					
1985	15.00	35.00	15.00	2.00	5.00	1984	181.09	210.52	105.79	4.41	13.06
1986	15.32	15.83	9.97	7.57	1.41	1985	105.00	181.00	89.00	6.00	13.00
Frenchmans Bay						Eastern Long Island Sound					
1985	12.00	5.00	4.00	< 0.40	< 0.90	1984	104.10	119.00	59.12	3.96	6.39
Penobscot Bay						Western Long Island Sound					
1985	70.00	42.00	37.00	3.00	8.00	1984	168.40	192.69	108.26	7.21	9.26
1986	10.98	21.20	58.39	7.91	1.21	1985	421.00	578.00	284.00	18.00	23.00
Casco Bay						Raritan Bay					
1984	18.17	49.09	30.79	< 0.10	< 0.20	1985	469.00	308.00	55.00	12.00	18.00
1985	68.00	80.00	49.00	3.00	2.00	1986	414.34	375.64	196.14	65.23	7.12
1986	27.87	29.44	17.20	< 0.08	0.57	Great Bay					
Merrimack River						Delaware Bay					
1984	145.84	436.94	2358.00	< 0.20	< 0.30	1985	87.00	95.00	63.00	3.00	3.00
1985	57.00	87.00	39.00	< 0.20	< 0.40	1986	55.03	215.31	124.10	24.03	1.48
Salem Harbor						Boston Harbor					
1984	14.40	42.80	< 0.10	5.28	9.31	1984	417.31	221.80	153.18	8.55	6.05
1985	193.00	225.00	51.00	6.00	8.00	1985	283.00	298.00	79.00	12.00	16.00
1986	159.88	181.40	68.33	27.41	2.64	1986	212.42	259.15	107.46	29.83	3.36
Quincy Bay						Upper Chesapeake Bay					
1986	339.90	409.99	134.29	3.41	3.02	1985	80.60	74.50	64.80	4.40	< 1.30
Buzzards Bay						Lower Chesapeake Bay					
1984	295.64	295.27	103.77	4.59	4.02	1984	25.78	28.17	105.20	1.61	4.09
1985	515.00	562.00	99.00	7.00	13.00	1985	45.00	57.00	22.00	4.00	< 1.00
1986	861.97	1051.47	184.06	34.19	3.40	1986	55.13	85.66	23.56	0.84	0.40
Elizabeth River						Elizabeth River					
						1986	48.52	84.28	63.55	28.41	7.14

Table 7. Concentrations of metals in stomach contents (ppm dry weight)

Year	Ag	Cd	Cr	Cu	Ni	Pb	Zn	Fe	Mn	As	Hg	Se	Sn
Machias Bay													
1985	1.01	0.43	5.64	25.4	< 4.71	0.81	81.9	1730	64.5	11.10	0.17	2.55	< 0.74
Frenchmans Bay													
1985	0.47	< 0.25	5.22	20.1	8.07	1.59	78.5	2660	55.5	5.27	0.10	3.30	< 0.73
Penobscot Bay													
1985	0.65	0.98	< 2.94	23.5	6.31	1.08	83.1	1020	33.5	10.40	-	2.16	< 0.73
Casco Bay													
1984	0.09	0.18	< 25.90	8.1	12.20	23.20	63.3	16100	2850.0	14.86	0.06	< 2.33	0.63
1985	0.22	0.75	5.55	10.7	8.19	7.87	210.0	2750	69.1	13.50	0.17	5.70	< 0.80
Merrimack River													
1984	0.11	< 0.16	8.68	6.0	< 2.88	9.77	25.6	4620	281.0	4.39	0.06	< 0.81	0.48
1985	0.17	0.16	26.90	8.9	8.01	22.10	42.0	19500	1180.0	4.97	0.07	< 0.70	2.88
Salem Harbor													
1984	2.28	2.62	135.00	86.5	18.60	77.10	187.0	16900	256.0	10.40	0.81	2.23	13.40
1985	1.22	1.06	184.00	45.0	6.20	25.00	158.0	24500	102.0	10.60	0.19	3.05	1.80
Boston Harbor													
1984	2.16	1.76	141.00	109.0	23.60	77.50	178.0	20500	305.0	9.85	1.29	2.59	16.10
1984	1.94	3.23	198.00	91.0	20.30	100.00	214.0	18000	288.0	14.20	0.92	3.20	17.50
1985	3.90	0.74	43.30	60.7	9.10	26.00	115.0	7420	115.0	9.49	0.42	3.21	6.57
Buzzards Bay													
1984	0.65	0.54	< 3.47	9.5	< 5.50	4.94	148.0	1530	33.0	83.20	0.11	4.76	< 0.86
1985	0.90	0.77	8.99	19.9	14.40	9.61	97.9	4980	84.8	24.80	0.19	3.98	< 0.79
Narragansett Bay													
1985	0.50	< 0.24	17.10	25.2	11.30	26.90	75.4	12400	198.0	21.10	0.18	4.15	1.66
Eastern Long Island Sound													
1984	0.86	1.03	21.80	30.5	8.29	18.90	105.0	10800	518.0	7.73	0.12	3.64	0.83
1985	0.86	0.33	14.60	25.1	7.14	15.70	83.9	11800	424.0	21.50	0.15	3.77	0.66
Western Long Island Sound													
1984	1.38	0.59	15.50	69.9	6.00	9.21	102.0	8680	2430.0	7.48	0.21	3.50	1.35
1985	1.40	0.63	5.73	30.5	< 5.29	7.63	92.9	1920	146.0	10.90	0.37	4.15	< 0.83
Raritan Bay													
1985	1.67	0.42	21.10	50.5	5.64	44.30	95.9	7700	801.0	10.70	0.52	2.56	4.55

Table 7. Continued.

Year	Ag	Cd	Cr	Cu	Ni	Pb	Zn	Fe	Mn	As	Hg	Se	Sn
Great Bay													
1985	1.62	-	6.47	22.8	< 4.21	6.21	58.0	3070	73.6	8.25	0.25	1.94	< 0.66
Delaware Bay													
1984	0.86	0.09	1.45	36.0	1.26	0.91	94.3	700	27.3	8.31	0.28	3.33	< 0.74
Upper Chesapeake Bay													
1985	0.67	< 0.56	< 32.20	59.1	14.60	15.40	176.0	11200	470.0	7.45	0.20	4.72	2.34
Lower Chesapeake Bay													
1984	0.15	0.30	9.18	13.5	3.28	6.62	99.1	5450	98.1	5.24	0.13	6.24	0.24
1985	0.18	< 0.30	19.80	19.7	15.30	14.50	87.6	11100	178.0	9.50	0.11	5.24	0.67

Table 8a. Concentrations of hydrocarbons (hexachlorobenzene, lindane, heptachlor, aldrin, heptachlor epoxide, o,p'-DDE, α -chlordane, trans-nonachlor) in fish liver (ppb dry weight)

Year	Hexachloro- benzene	Lindane	Heptachlor	Aldrin	Heptachlor epoxide	o,p'-DDE	α -Chlor- dane	trans- Nonachlor
Machias Bay								
1985	4.00	4.00	< 0.20	< 0.30	4.00	< 0.40	12.00	25.00
1985	3.00	4.00	< 0.20	< 0.20	4.00	< 0.30	20.00	36.00
1985	3.00	5.00	< 0.20	< 0.20	4.00	< 0.30	22.00	38.00
1986	7.34	3.51	< 0.19	< 0.27	6.21	< 0.28	9.08	49.05
1986	3.92	0.87	< 0.09	< 0.13	2.83	< 0.15	4.67	28.63
1986	3.16	2.21	< 0.19	< 0.27	2.47	< 0.28	< 0.20	30.20
Frenchmans Bay								
1985	3.00	5.00	< 0.20	< 0.30	5.00	< 0.50	18.00	30.00
1985	2.00	6.00	< 0.30	< 0.40	5.00	< 0.60	20.00	36.00
1985	2.00	4.00	< 0.20	< 0.20	6.00	< 0.40	17.00	30.00
Penobscot Bay								
1985	2.00	7.00	< 0.20	< 0.20	5.00	< 0.30	15.00	41.00
1985	2.00	6.00	< 0.20	< 0.30	< 0.30	< 0.40	15.00	36.00
1985	2.00	6.00	< 0.20	< 0.30	5.00	< 0.40	13.00	35.00
1986	5.62	1.97	< 0.34	< 0.47	5.34	3.75	5.50	33.35
1986	5.70	8.50	< 1.71	< 2.37	18.10	15.30	6.50	37.40
1986	4.28	1.34	< 0.22	< 0.30	4.61	< 0.33	6.37	35.80
Casco Bay								
1984	39.15	< 1.70	< 1.80	< 1.40	< 2.00	< 2.30	< 1.50	69.18
1984	5.38	2.31	< 0.10	< 0.10	< 0.10	< 0.10	8.43	8.65
1984	5.28	1.68	< 0.20	< 0.20	< 0.20	36.08	17.71	16.15
1985	1.00	5.00	0.20	8.00	< 0.30	18.00	26.00	61.00

Table 8a. Continued.

Year	Hexachloro- benzene	Lindane	Heptachlor	Aldrin	Heptachlor epoxide	o,p'-DDE	α -Chloro- dane	trans- Nonachlor
Casco Bay								
1985	1.00	5.00	< 1.00	< 6.00	4.00	11.00	17.00	40.00
1985	1.00	5.00	< 1.00	< 4.00	6.00	< 3.00	17.00	40.00
1986	6.45	10.26	< 0.31	< 0.41	6.49	< 0.61	19.74	47.80
1986	5.41	5.88	< 0.24	< 0.38	4.60	< 0.48	15.26	32.08
1986	5.61	11.99	< 0.21	< 0.28	2.91	< 0.42	14.21	35.31
Merrimack River								
1984	9.29	3.61	0.70	< 0.10	4.71	< 0.20	23.83	36.87
1984	8.12	3.01	0.84	< 0.10	5.20	< 0.10	28.70	41.56
1984	5.36	2.20	0.37	< 0.10	< 0.10	< 0.10	19.10	27.14
1985	3.00	5.00	< 0.30	< 0.40	< 0.30	< 0.50	84.00	108.00
1985	1.00	2.00	< 0.30	< 0.50	< 0.40	< 0.70	62.00	105.00
1985	1.00	7.00	< 0.30	< 0.40	8.00	< 0.60	38.00	62.00
Salem Harbor								
1984	16.05	< 0.30	< 0.30	< 0.30	< 0.30	< 0.40	167.39	205.05
1984	13.27	< 0.05	< 0.10	< 0.01	< 0.10	< 0.10	< 0.04	< 0.04
1984	17.48	< 0.40	< 0.40	< 0.30	< 0.40	< 0.50	277.05	318.80
1985	8.00	2.00	< 0.30	< 0.30	6.00	< 0.40	63.00	88.00
1985	6.00	2.00	< 0.30	< 0.30	5.00	< 0.40	49.00	67.00
1985	7.00	2.00	< 0.20	< 0.20	< 0.30	< 0.30	85.00	109.00
1986	4.34	3.57	0.35	< 0.27	3.22	< 0.43	45.26	76.01
1986	3.36	1.11	0.45	< 0.25	3.70	< 0.40	48.33	78.97
1986	2.87	2.36	< 0.28	< 0.38	4.55	< 0.62	56.80	129.88
Boston Harbor								
1984	< 0.40	< 0.60	< 0.60	< 0.50	15.48	< 0.80	497.56	565.13
1984	17.78	3.89	2.56	< 0.30	15.94	< 0.50	401.00	432.39
1984	20.92	< 0.30	2.55	< 0.20	13.09	< 0.40	373.22	413.29
1985	4.00	2.00	< 0.30	< 0.40	< 0.40	< 0.60	177.00	286.00
1985	3.00	2.00	< 0.30	< 0.40	< 0.40	< 0.60	202.00	283.00
1985	2.00	2.00	< 0.20	< 0.30	< 0.30	< 0.50	224.00	364.00
1986	12.03	< 3.14	< 2.11	< 2.87	10.04	< 4.53	306.59	518.97
1986	13.90	< 3.12	< 2.09	< 2.85	13.93	< 4.50	221.29	352.22
1986	16.34	< 3.65	< 2.45	< 3.34	19.00	< 5.26	234.58	387.49
Quincy Bay								
1986	10.73	4.61	< 0.47	< 0.63	9.71	< 0.86	202.72	312.76
1986	11.60	2.31	< 0.87	< 1.15	9.92	< 1.58	245.21	348.78
1986	10.66	< 1.35	< 0.91	< 1.22	11.14	< 1.67	182.38	233.36
Buzzards Bay								
1984	2.76	0.78	< 0.20	< 0.10	< 0.30	< 0.30	11.81	16.41
1984	2.99	< 0.30	< 0.30	< 0.20	< 0.40	< 0.50	< 0.30	11.36
1984	3.39	< 0.30	< 0.30	< 0.20	< 0.30	< 0.40	< 0.20	12.92
1985	5.00	1.00	< 0.10	< 0.10	11.00	< 0.20	16.00	19.00
1985	4.00	2.00	< 0.10	< 0.10	10.00	< 0.20	14.00	16.00
1985	3.00	0.50	< 0.09	< 0.09	7.00	< 0.10	9.00	10.00
1986	2.10	3.44	< 0.41	< 0.56	7.31	< 0.88	< 0.45	24.14

Table 8a. Continued.

Year	Hexachloro- benzene	Lindane	Heptachlor	Aldrin	Heptachlor epoxide	o,p'-DDE	α -Chlor- dane	trans- Nonachlor
Buzzards Bay								
1986	3.40	5.10	< 0.23	< 0.31	10.41	< 0.49	< 0.25	27.37
1986	1.50	< 2.10	< 0.31	< 0.42	6.98	< 0.65	< 0.33	32.97
Narragansett Bay								
1984	3.04	2.83	< 0.40	< 0.30	2.63	< 0.50	27.05	31.68
1984	2.84	2.15	< 0.60	< 0.50	3.59	< 0.60	45.28	49.96
1984	3.34	2.93	< 0.50	< 0.40	2.86	< 0.80	26.54	25.20
1985	3.00	6.00	< 0.40	< 0.50	8.00	< 0.80	26.00	41.00
1985	2.00	6.00	< 0.40	< 0.60	4.00	< 0.90	17.00	23.00
1985	3.00	6.00	< 0.40	< 0.50	4.00	< 0.80	24.00	30.00
1986	1.30	2.66	< 0.24	< 0.33	4.00	< 0.52	34.57	42.93
1986	2.20	3.66	< 0.30	< 0.41	3.63	< 0.65	32.55	37.33
1986	1.70	2.67	< 0.26	< 0.35	3.13	< 0.56	26.40	31.26
Eastern Long Island Sound								
1984	5.11	< 0.20	< 0.20	10.72	< 0.40	< 0.20	43.36	43.28
1984	2.44	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	26.86	29.68
1984	4.32	< 0.20	3.01	< 0.10	9.32	< 0.20	32.93	35.27
1985	4.00	7.00	< 0.30	< 0.40	9.00	< 0.70	44.00	60.00
1985	4.00	4.00	< 0.40	< 0.50	5.00	< 0.80	20.00	23.00
1985	4.00	4.00	< 0.20	< 0.30	7.00	< 0.50	33.00	38.00
1986	1.10	4.70	< 0.19	< 0.25	4.23	< 0.42	48.67	74.93
1986	2.60	2.84	< 0.19	< 0.25	4.35	< 0.42	22.06	35.78
1986	0.70	3.85	< 0.22	< 0.29	5.38	< 0.49	29.64	44.59
Western Long Island Sound								
1984	3.73	2.54	< 0.10	< 0.10	6.36	< 0.20	87.92	97.61
1984	7.51	< 0.20	< 0.30	< 0.20	< 0.30	< 0.30	110.26	131.55
1984	4.26	< 0.20	< 0.20	< 0.20	8.04	< 0.20	91.92	99.57
1985	5.00	9.00	< 0.70	< 0.90	15.00	< 1.00	< 0.80	106.00
1985	6.00	3.00	< 1.00	< 1.00	23.00	< 2.00	110.00	148.00
1985	3.00	1.00	< 0.40	< 0.60	9.00	< 0.90	30.00	32.00
1986	1.70	4.97	< 0.22	< 0.30	6.47	< 0.48	65.61	77.73
1986	2.60	2.89	< 0.23	< 0.31	5.00	< 0.51	39.11	36.81
1986	1.90	1.92	0.79	< 0.35	5.60	< 0.56	120.24	133.19
Raritan Bay								
1985	10.00	3.00	< 0.30	< 0.40	19.00	< 0.50	122.00	131.00
1985	13.00	3.00	< 0.40	< 0.50	14.00	< 0.70	63.00	64.00
1985	12.00	2.00	< 0.20	< 0.30	21.00	12.00	107.00	97.00
1986	11.80	< 2.90	< 1.99	< 2.64	8.14	< 3.68	50.42	43.33
1986	10.40	< 2.99	< 2.05	< 2.72	5.42	< 3.80	32.38	26.11
1986	14.00	3.47	< 2.23	< 2.95	6.51	< 4.12	50.87	52.73

Table 8a. Continued.

Year	Hexachloro- benzene	Lindane	Heptachlor	Aldrin	Heptachlor epoxide	o,p'-DDE	α -Chlor- dane	trans- Nonachlor
Great Bay								
1985	1.00	5.00	< 0.20	< 0.30	12.00	< 0.40	76.00	105.00
1985	2.00	6.00	< 0.20	< 0.30	12.00	< 0.40	72.00	92.00
1985	2.00	5.00	< 0.10	< 0.20	11.00	< 0.30	76.00	104.00
1986	6.09	4.98	2.82	< 0.35	11.84	< 0.36	64.14	81.72
1986	7.47	4.66	2.10	< 0.32	11.16	< 0.33	60.60	77.23
1986	5.68	5.03	2.22	< 0.29	8.77	< 0.29	57.86	89.37
Delaware Bay								
1984	4.53	< 0.30	9.15	< 0.30	< 0.40	< 0.50	17.36	12.73
1984	5.81	< 0.60	10.77	< 0.50	< 0.70	9.92	20.83	17.69
1984	4.66	< 0.80	7.78	< 0.70	< 0.90	< 1.10	9.69	8.34
1985	2.00	4.00	< 0.30	6.00	7.00	< 0.70	14.00	19.00
1985	3.00	5.00	< 0.30	< 0.50	< 0.60	< 0.70	16.00	25.00
1985	3.00	5.00	< 0.20	5.00	8.00	< 0.50	27.00	29.00
1986	4.25	7.92	1.09	4.68	9.31	< 0.64	68.91	105.87
1986	5.22	8.15	1.31	5.34	11.32	< 0.70	93.28	136.56
1986	5.16	6.38	0.93	5.28	10.82	< 0.61	89.56	146.18
Upper Chesapeake Bay								
1985	6.00	7.00	< 0.40	< 0.50	18.00	< 0.80	53.00	48.00
1985	3.00	7.00	< 0.30	< 0.40	19.00	< 0.60	49.00	50.00
1985	5.00	9.00	< 0.50	< 0.70	23.00	< 1.00	57.00	55.00
1986	13.59	9.07	< 0.30	1.24	16.55	< 0.56	46.62	34.51
1986	7.44	7.02	< 0.28	1.50	12.48	< 0.53	35.44	13.49
1986	4.53	6.73	< 0.35	1.86	13.53	< 0.67	35.63	32.72
Lower Chesapeake Bay								
1984	15.39	156.40	10.77	3.90	40.35	14.73	23.47	24.23
1984	1.69	4.50	2.83	2.11	7.61	< 0.20	< 0.10	28.16
1984	1.70	2.73	< 0.40	< 0.20	10.30	< 0.20	17.88	36.96
1985	1.00	8.00	0.70	0.40	8.00	0.60	15.00	17.00
1985	2.00	5.00	< 0.20	< 0.30	9.00	< 0.50	16.00	20.00
1985	2.00	8.00	1.00	< 0.60	12.00	< 1.00	16.00	25.00
1986	1.79	< 0.32	< 0.22	< 0.31	7.32	< 0.42	18.46	16.54
1986	2.14	< 0.48	< 0.34	< 0.48	8.63	< 0.64	17.02	19.64
1986	2.27	< 0.53	< 0.37	< 0.52	9.04	< 0.70	19.10	17.36
Elizabeth River								
1986	4.60	< 0.50	< 0.34	< 0.46	8.74	< 0.62	31.45	32.71
1986	4.87	4.58	1.78	< 0.34	7.27	< 0.46	39.73	41.51
1986	6.42	6.18	1.66	< 0.32	8.45	< 0.44	37.19	38.62

Table 8b. Concentrations of hydrocarbons (dieldrin, p,p'-DDE, o,p'-DDD, p,p'-DDD, o,p'-DDT, p,p'-DDT, mirex, dichlorobiphenyl) in fish liver (ppb dry weight)

Year	Dieldrin	p,p'-DDE	o,p'-DDD	p,p'-DDD	o,p'-DDT	p,p'-DDT	Mirex	2-Cl-PCB
Machias Bay								
1985	8.00	101.00	< 0.50	6.00	4.00	11.00	5.00	< 0.80
1985	16.00	145.00	4.00	15.00	8.00	23.00	6.00	< 0.60
1985	15.00	127.00	< 0.40	14.00	9.00	21.00	4.00	< 0.60
1986	19.91	165.89	3.42	< 0.45	5.07	31.93	3.40	84.98
1986	11.19	148.38	0.99	< 0.23	2.38	23.43	2.50	17.44
1986	11.94	152.82	2.78	< 0.45	2.64	25.91	4.11	55.40
Frenchmans Bay								
1985	17.00	129.00	< 0.60	12.00	5.00	11.00	4.00	< 0.90
1985	18.00	160.00	< 0.70	11.00	7.00	13.00	6.00	< 1.00
1985	18.00	121.00	< 0.50	13.00	8.00	12.00	5.00	< 0.60
Penobscot Bay								
1985	23.00	181.00	4.00	22.00	8.00	14.00	4.00	< 0.60
1985	17.00	173.00	3.00	20.00	9.00	15.00	4.00	< 0.70
1985	18.00	164.00	5.00	14.00	6.00	13.00	4.00	< 0.70
1986	20.71	164.10	5.58	32.83	6.67	22.14	8.79	50.31
1986	57.50	81.70	< 2.50	< 3.60	14.60	36.00	4.20	212.10
1986	18.09	174.48	3.47	< 0.45	4.53	14.34	5.60	24.70
Casco Bay								
1984	41.78	65.23	< 2.90	< 2.90	< 2.50	< 2.20	< 1.50	6.20
1984	< 0.10	11.24	< 0.20	< 0.20	< 0.10	< 0.10	1.31	< 0.30
1984	< 0.20	15.69	< 0.40	6.06	5.07	< 0.30	< 0.20	< 0.80
1985	26.00	402.00	21.00	79.00	54.00	16.00	9.00	166.00
1985	18.00	231.00	9.00	56.00	27.00	20.00	6.00	< 4.00
1985	15.00	258.00	7.00	33.00	14.00	22.00	4.00	< 15.00
1986	27.11	317.51	9.40	< 0.85	9.49	45.99	8.54	10.07
1986	17.70	201.89	5.56	< 0.67	5.80	23.58	2.35	4.39
1986	20.51	218.79	5.90	< 0.59	5.65	23.48	4.14	9.90
Merrimack River								
1984	14.26	36.15	4.43	18.08	5.76	9.78	3.20	< 0.50
1984	17.03	41.26	6.08	31.19	8.04	19.08	< 0.10	< 0.30
1984	11.13	29.72	3.84	15.48	4.78	< 0.10	2.21	< 0.40
1985	33.00	340.00	11.00	59.00	45.00	37.00	5.00	< 0.90
1985	26.00	365.00	17.00	29.00	13.00	31.00	5.00	< 1.00
1985	27.00	420.00	14.00	44.00	30.00	50.00	6.00	< 1.00
Salem Harbor								
1984	36.33	401.23	< 0.50	199.48	13.84	15.73	4.93	< 1.10
1984	< 0.10	< 0.04	< 0.10	222.34	< 0.10	< 0.10	< 0.04	< 0.20
1984	794.38	547.45	< 0.60	297.22	26.28	28.19	11.42	< 1.20
1985	24.00	274.00	11.00	42.00	11.00	20.00	5.00	19.00
1985	15.00	208.00	5.00	18.00	4.00	7.00	3.00	20.00
1985	< 0.30	322.00	9.00	37.00	8.00	9.00	4.00	23.00
1986	55.68	379.27	7.68	< 0.50	4.83	11.92	2.93	< 0.80
1986	61.07	370.95	10.25	< 0.46	8.28	21.51	3.90	< 0.70
1986	78.93	543.62	12.85	< 0.72	8.32	19.79	4.18	< 1.20

Table 8b. Continued.

Year	Dieldrin	p,p'-DDE	o,p'-DDD	p,p'-DDD	o,p'-DDT	p,p'-DDT	Mirex	2-Cl-PCB
Boston Harbor								
1984	150.21	563.56	36.01	331.81	< 0.70	31.88	12.53	< 0.20
1984	140.48	286.18	33.10	323.64	19.43	29.93	10.65	< 1.20
1984	133.24	473.53	29.92	270.85	17.41	34.44	10.76	< 0.90
1985	70.00	340.00	28.00	63.00	11.00	46.00	10.00	< 0.60
1985	98.00	502.00	36.00	107.00	18.00	52.00	10.00	< 0.60
1985	78.00	466.00	36.00	82.00	25.00	63.00	12.00	< 0.50
1986	291.71	982.63	48.27	< 6.05	23.23	67.26	13.97	< 9.04
1986	208.90	600.61	34.20	< 6.00	18.70	48.62	7.13	< 8.97
1986	243.72	666.03	34.88	< 7.02	28.36	86.08	9.55	< 10.49
Quincy Bay								
1986	251.83	724.16	24.85	< 1.10	20.01	39.30	12.15	6.76
1986	209.07	580.14	17.22	< 2.02	21.35	27.07	4.75	< 3.65
1986	169.72	440.16	15.98	< 2.14	20.92	41.78	4.83	15.75
Buzzards Bay								
1984	19.07	35.81	14.10	< 0.40	8.50	< 0.30	2.25	< 0.90
1984	16.95	27.70	16.29	< 0.50	7.99	< 0.40	< 0.30	< 1.20
1984	16.77	33.34	16.47	< 0.40	8.38	< 0.30	1.85	< 1.00
1985	30.00	32.00	< 0.30	16.00	22.00	4.00	2.00	48.00
1985	26.00	24.00	< 0.30	16.00	16.00	4.00	2.00	54.00
1985	18.00	18.00	< 0.20	11.00	12.00	2.00	1.00	31.00
1986	110.15	256.42	25.90	< 1.13	20.09	12.60	3.40	15.25
1986	143.77	308.31	28.02	< 0.63	25.06	17.70	2.57	28.28
1986	123.95	371.79	30.65	< 0.84	24.36	13.06	3.91	30.49
Narragansett Bay								
1984	39.15	69.87	15.63	< 0.80	11.25	< 0.50	2.07	< 1.20
1984	50.21	109.58	18.02	< 0.90	7.11	< 0.60	1.94	< 1.80
1984	31.19	65.57	12.28	< 0.70	5.02	< 0.50	< 0.30	< 1.50
1985	31.00	229.00	10.00	17.00	10.00	8.00	4.00	< 2.00
1985	22.00	114.00	7.00	12.00	7.00	5.00	4.00	< 2.00
1985	33.00	170.00	7.00	10.00	8.00	7.00	3.00	< 1.00
1986	79.87	304.55	15.25	< 0.66	8.83	10.39	1.87	25.98
1986	66.28	241.24	12.26	< 0.83	8.90	8.94	3.21	26.22
1986	66.25	200.42	10.49	< 0.71	8.27	11.32	2.42	12.76
Eastern Long Island Sound								
1984	16.34	46.48	< 0.30	< 0.30	< 0.20	< 0.20	1.97	< 0.60
1984	20.33	30.00	< 0.20	< 0.20	< 0.20	17.08	< 0.10	< 0.50
1984	17.88	37.98	< 0.30	< 0.30	< 0.20	14.00	< 0.10	< 0.60
1985	26.00	237.00	16.00	15.00	11.00	14.00	6.00	17.00
1985	17.00	130.00	10.00	9.00	7.00	10.00	4.00	14.00
1985	25.00	159.00	11.00	15.00	10.00	18.00	4.00	17.00
1986	20.30	334.88	14.10	23.82	14.90	23.90	5.43	< 0.79
1986	16.63	171.51	14.90	11.18	6.44	5.80	4.62	2.06
1986	23.36	297.88	18.00	24.81	14.38	21.64	5.44	< 0.90

Table 8b. Continued.

Year	Dieldrin	p,p'-DDE	o,p'-DDD	p,p'-DDD	o,p'-DDT	p,p'-DDT	Mirex	2-Cl-PCB
Western Long Island Sound								
1984	50.12	71.90	22.10	28.69	6.94	7.43	6.48	< 0.40
1984	68.89	88.65	< 0.40	< 0.40	< 0.30	10.16	9.42	< 1.00
1984	54.67	79.20	< 0.30	< 0.30	< 0.20	< 0.20	5.72	< 0.70
1985	75.00	269.00	47.00	34.00	17.00	20.00	18.00	17.00
1985	< 2.00	266.00	32.00	30.00	14.00	25.00	20.00	11.00
1985	31.00	99.00	21.00	21.00	13.00	11.00	6.00	10.00
1986	74.37	443.62	18.01	< 0.56	10.21	14.61	10.00	< 0.90
1986	50.75	257.20	9.62	< 0.59	5.62	8.05	5.08	4.39
1986	105.11	598.53	20.13	< 0.65	10.72	23.66	8.19	2.35
Raritan Bay								
1985	50.00	740.00	38.00	98.00	12.00	30.00	12.00	< 1.00
1985	27.00	312.00	19.00	43.00	7.00	10.00	8.00	< 1.00
1985	54.00	532.00	32.00	122.00	12.00	28.00	8.00	< 1.00
1986	93.45	298.92	15.37	107.64	15.20	23.78	9.71	< 8.21
1986	82.18	277.84	12.32	88.53	16.64	35.30	14.94	< 8.47
1986	116.84	413.84	18.53	125.36	24.30	38.35	11.75	< 9.19
Great Bay								
1985	43.00	399.00	19.00	70.00	11.00	17.00	11.00	< 0.70
1985	45.00	365.00	20.00	71.00	11.00	18.00	11.00	< 0.80
1985	39.00	387.00	19.00	63.00	10.00	17.00	10.00	< 0.60
1986	103.73	349.14	17.94	227.63	18.28	23.07	7.48	21.18
1986	94.99	306.82	14.91	201.19	11.49	17.53	8.50	21.73
1986	78.60	283.05	12.98	187.63	12.43	16.02	7.74	43.63
Delaware Bay								
1984	< 0.40	131.36	< 0.50	41.48	< 0.40	56.41	< 0.30	< 1.10
1984	15.46	211.81	< 1.00	67.71	< 0.70	< 0.70	< 0.50	< 2.10
1984	12.06	192.66	< 1.30	53.51	< 1.00	< 0.90	< 0.60	< 2.70
1985	17.00	199.00	9.00	39.00	7.00	3.00	2.00	26.00
1985	26.00	399.00	11.00	86.00	22.00	13.00	4.00	19.00
1985	39.00	394.00	9.00	171.00	14.00	10.00	3.00	36.00
1986	< 0.44	1085.65	11.69	391.17	28.96	60.54	7.48	8.04
1986	< 0.48	1768.38	14.68	192.40	34.02	73.02	6.46	10.66
1986	< 0.42	1844.52	20.88	450.37	39.10	97.46	9.20	7.44
Upper Chesapeake Bay								
1985	70.00	129.00	12.00	98.00	6.00	5.00	2.00	< 1.00
1985	78.00	134.00	12.00	96.00	15.00	13.00	4.00	< 1.00
1985	76.00	142.00	40.00	90.00	12.00	13.00	5.00	< 2.00
1986	69.45	90.35	8.12	131.33	8.08	15.19	2.20	< 1.27
1986	57.90	68.63	6.74	93.45	6.73	11.37	2.14	< 1.20
1986	59.33	78.12	9.36	91.43	8.52	14.17	2.63	< 1.52
Lower Chesapeake Bay								
1984	25.15	33.77	3.74	65.12	12.51	7.04	4.03	69.26
1984	34.58	55.76	7.46	50.39	9.24	4.63	2.89	126.23
1984	46.93	66.88	7.76	66.55	9.75	4.81	3.80	108.49

Table 8b. Continued.

Year	Dieldrin	p,p'-DDE	o,p'-DDD	p,p'-DDD	o,p'-DDT	p,p'-DDT	Mirex	2-Cl-PCB
Lower Chesapeake Bay								
1985	30.00	44.00	9.00	20.00	3.00	5.00	3.00	1.00
1985	34.00	41.00	17.00	20.00	5.00	5.00	3.00	< 0.90
1985	32.00	39.00	< 1.00	28.00	< 1.00	14.00	9.00	< 2.00
1986	30.98	73.53	4.54	41.16	2.46	12.22	1.82	< 0.96
1986	28.91	82.02	7.92	39.99	6.05	19.56	2.31	< 1.46
1986	37.29	70.89	7.41	41.22	5.61	15.47	1.74	< 1.59
Elizabeth River								
1986	39.26	86.23	6.03	82.67	8.28	10.06	4.21	4.60
1986	41.67	136.83	4.44	112.50	3.89	8.00	2.45	6.66
1986	42.32	122.90	5.21	104.90	4.46	7.28	2.00	8.87

Table 8c. Concentrations of hydrocarbons (trichlorobiphenyl, tetrachlorobiphenyl, pentachlorobiphenyl, hexachlorobiphenyl, heptachlorobiphenyl, octachlorobiphenyl, nonachlorobiphenyl) in fish liver (ppb dry weight)

Year	3-Cl-PCB	4-Cl-PCB	5-Cl-PCB	6-Cl-PCB	7-Cl-PCB	8-Cl-PCB	9-Cl-PCB
Machias Bay							
1985	8.00	37.00	44.00	113.00	68.00	3.00	5.00
1985	8.00	49.00	87.00	213.00	119.00	5.00	7.00
1985	8.00	56.00	61.00	145.00	82.00	3.00	4.00
1986	18.72	72.32	54.36	121.03	59.93	27.02	6.62
1986	153.69	27.98	43.75	117.14	0.98	15.86	2.52
1986	18.07	51.73	60.26	135.45	65.23	20.14	5.55
Frenchmans Bay							
1985	21.00	53.00	53.00	124.00	69.00	3.00	4.00
1985	18.00	54.00	63.00	145.00	79.00	4.00	5.00
1985	11.00	55.00	66.00	136.00	86.00	4.00	5.00
Penobscot Bay							
1985	27.00	78.00	108.00	197.00	667.00	52.00	11.00
1985	29.00	80.00	96.00	196.00	580.00	53.00	12.00
1985	27.00	79.00	110.00	189.00	561.00	45.00	10.00
1986	33.56	89.98	129.21	180.97	601.93	57.49	7.61
1986	22.70	280.10	222.60	84.40	319.90	34.00	5.60
1986	13.79	46.16	99.97	174.46	499.09	35.51	5.09
Casco Bay							
1984	32.90	54.60	381.87	822.37	350.00	< 1.30	< 2.30
1984	4.69	11.97	49.44	128.15	82.85	< 0.07	< 0.10
1984	16.06	92.12	238.17	499.94	284.95	< 0.20	< 0.30
1985	22.00	288.00	106.00	547.00	428.00	115.00	33.00
1985	24.00	92.00	172.00	308.00	261.00	89.00	23.00
1985	27.00	71.00	159.00	343.00	231.00	52.00	18.00
1986	29.40	143.17	220.19	434.56	552.18	116.13	3.85
1986	21.63	94.00	117.20	195.24	197.13	49.68	14.01
1986	26.86	70.20	137.53	260.95	314.94	89.33	21.50

Table 8c. Continued.

Year	3-Cl-PCB	4-Cl-PCB	5-Cl-PCB	6-Cl-PCB	7-Cl-PCB	8-Cl-PCB	9-Cl-PCB
Merrimack River							
1984	1.53	58.02	420.72	740.66	449.28	< 0.10	< 0.20
1984	1.84	62.75	496.82	553.32	73.88	< 0.10	< 0.10
1984	1.49	50.15	326.37	548.61	328.20	< 0.10	< 0.10
1985	89.00	549.00	1295.00	1013.00	577.00	139.00	17.00
1985	83.00	506.00	983.00	1158.00	796.00	206.00	27.00
1985	93.00	583.00	937.00	1157.00	974.00	247.00	34.00
Salem Harbor							
1984	< 0.50	39.20	125.70	598.80	35.70	54.05	58.36
1984	< 0.10	71.50	< 0.10	< 0.10	< 0.05	49.03	68.36
1984	< 0.60	77.40	194.50	871.00	31.20	85.72	145.79
1985	52.00	193.00	615.00	1066.00	477.00	28.00	24.00
1985	27.00	100.00	323.00	618.00	286.00	19.00	20.00
1985	50.00	241.00	822.00	1055.00	507.00	29.00	24.00
1986	26.71	227.75	556.12	720.04	371.27	112.72	7.94
1986	36.25	278.01	574.18	791.88	437.92	142.05	12.01
1986	34.30	296.91	883.59	1323.38	753.90	243.64	21.66
Boston Harbor							
1984	426.06	1196.00	4430.00	3977.00	2163.00	110.68	94.14
1984	318.68	952.95	3641.00	3124.00	1656.00	87.99	79.13
1984	310.26	918.74	3347.00	2955.00	1525.00	78.06	70.05
1985	110.00	644.00	1226.00	1411.00	981.00	36.00	28.00
1985	190.00	1006.00	1666.00	1583.00	1199.00	34.00	26.00
1985	122.00	1757.00	1564.00	1690.00	1003.00	47.00	34.00
1986	236.34	1481.18	2867.44	4449.24	2030.13	486.49	48.76
1986	255.12	1236.28	1781.56	2292.59	894.53	225.95	28.28
1986	251.59	1628.48	2337.55	3394.47	1461.34	293.12	41.66
Quincy Bay							
1986	139.81	753.34	2198.41	3218.59	1340.43	359.49	29.13
1986	137.38	724.80	1665.53	1959.54	706.75	143.02	11.98
1986	149.09	671.17	1446.81	1868.89	763.07	171.18	16.47
Buzzards Bay							
1984	31.52	249.47	796.08	1025.00	330.41	15.83	21.86
1984	47.98	342.24	958.07	1041.00	352.08	17.18	32.27
1984	35.57	273.89	1008.00	1243.00	457.05	17.93	29.03
1985	12.00	402.00	1453.00	1418.00	297.00	18.00	26.00
1985	132.00	409.00	1032.00	1155.00	280.00	16.00	20.00
1985	60.00	270.00	962.00	764.00	210.00	12.00	15.00
1986	156.36	1037.50	2068.16	1208.67	443.02	88.43	8.71
1986	192.15	1352.47	2615.97	1515.22	554.73	104.95	10.77
1986	133.05	1043.43	2317.90	1404.19	542.40	110.95	11.25
Narragansett Bay							
1984	5.98	197.93	609.64	861.84	456.15	25.36	62.07
1984	7.94	298.27	936.65	967.39	442.96	19.16	62.68

Table 8c. Continued.

Year	3-Cl-PCB	4-Cl-PCB	5-Cl-PCB	6-Cl-PCB	7-Cl-PCB	8-Cl-PCB	9-Cl-PCB
Narragansett Bay							
1984	5.47	166.06	517.45	617.71	302.69	12.95	56.07
1985	69.00	354.00	591.00	851.00	550.00	172.00	26.00
1985	56.00	227.00	419.00	534.00	326.00	86.00	13.00
1985	65.00	196.00	501.00	738.00	525.00	148.00	28.00
1986	38.52	410.11	978.31	751.25	852.82	280.03	46.16
1986	53.29	344.04	697.09	471.41	402.38	135.08	25.76
1986	44.84	323.25	649.47	489.94	418.44	139.75	24.54
Eastern Long Island Sound							
1984	15.31	87.12	693.65	705.53	317.70	< 0.10	< 0.20
1984	11.50	97.65	406.47	448.22	292.97	< 0.08	< 0.10
1984	7.95	104.65	602.39	609.30	330.75	< 0.10	< 0.20
1985	36.00	207.00	618.00	926.00	622.00	46.00	55.00
1985	25.00	114.00	329.00	513.00	270.00	18.00	21.00
1985	35.00	150.00	433.00	631.00	400.00	33.00	42.00
1986	33.74	328.05	120.70	844.13	474.31	158.80	29.17
1986	20.52	225.26	222.16	490.03	294.29	114.93	19.15
1986	35.63	271.03	288.24	721.26	422.65	135.87	30.43
Western Long Island Sound							
1984	8.84	231.54	1171.00	946.79	549.85	47.29	57.87
1984	52.94	302.70	1020.00	1222.00	778.74	63.45	85.08
1984	38.42	172.16	1301.00	1014.00	513.20	40.85	49.12
1985	39.00	323.00	1120.00	1859.00	849.00	81.00	110.00
1985	89.00	474.00	1233.00	1937.00	835.00	70.00	86.00
1985	14.00	175.00	510.00	837.00	380.00	29.00	33.00
1986	39.25	344.39	623.05	920.79	573.87	214.74	25.01
1986	56.17	267.86	390.21	485.11	301.73	103.77	10.31
1986	61.79	516.63	871.72	1196.71	624.35	190.74	20.07
Raritan Bay							
1985	197.00	1439.00	1570.00	1217.00	752.00	38.00	36.00
1985	142.00	919.00	797.00	535.00	292.00	12.00	9.00
1985	189.00	1252.00	1316.00	778.00	467.00	21.00	17.00
1986	176.66	788.47	689.93	714.11	376.54	105.94	13.45
1986	147.85	741.36	676.43	817.86	530.61	172.85	19.73
1986	162.65	932.86	1004.67	1106.50	572.19	179.52	28.22
Great Bay							
1985	59.00	444.00	546.00	801.00	368.00	17.00	16.00
1985	54.00	403.00	514.00	750.00	352.00	19.00	18.00
1985	44.00	373.00	464.00	718.00	337.00	18.00	19.00
1986	102.06	600.12	467.26	1308.11	705.09	178.63	16.07
1986	113.37	598.09	405.80	1067.26	568.57	146.04	18.59
1986	89.16	492.14	363.34	1050.19	521.92	134.24	13.37
Delaware Bay							
1984	< 0.20	105.79	182.67	244.20	269.11	3.37	10.13
1984	< 0.40	145.56	278.84	303.43	466.22	5.47	17.11

Table 8c. Continued.

Year	3-Cl-PCB	4-Cl-PCB	5-Cl-PCB	6-Cl-PCB	7-Cl-PCB	8-Cl-PCB	9-Cl-PCB
Delaware Bay							
1984	< 0.60	93.52	197.74	289.45	136.55	49.60	137.97
1985	11.00	107.00	259.00	349.00	166.00	9.00	12.00
1985	16.00	141.00	386.00	566.00	261.00	16.00	21.00
1985	19.00	176.00	376.00	452.00	239.00	9.00	20.00
1986	47.71	524.59	1472.26	1234.87	260.24	151.32	17.51
1986	64.90	667.58	1856.59	1067.23	310.20	143.20	25.44
1986	40.86	602.88	1644.77	1169.65	376.81	201.42	27.24
Upper Chesapeake Bay							
1985	42.00	193.00	256.00	325.00	193.00	23.00	49.00
1985	19.00	163.00	245.00	358.00	184.00	27.00	53.00
1985	40.00	234.00	327.00	426.00	217.00	25.00	46.00
1986	33.80	160.36	232.56	256.15	128.99	48.47	19.86
1986	31.29	157.08	234.66	182.59	90.89	28.64	11.27
1986	34.45	157.80	320.84	206.34	108.24	55.87	16.96
Lower Chesapeake Bay							
1984	10.25	82.52	236.63	308.25	158.09	6.24	16.17
1984	5.99	50.16	174.50	408.14	169.93	8.49	21.17
1984	6.89	74.59	234.43	645.22	372.30	9.59	20.56
1985	17.00	63.00	67.00	137.00	44.00	4.00	3.00
1985	14.00	58.00	72.00	146.00	58.00	5.00	6.00
1985	22.00	74.00	106.00	192.00	113.00	13.00	10.00
1986	26.95	84.22	86.10	124.24	65.90	29.70	5.39
1986	24.08	90.48	113.63	158.02	94.70	40.68	4.80
1986	36.36	102.84	99.21	137.19	73.04	33.85	4.80
Elizabeth River							
1986	31.03	167.24	249.46	259.17	151.18	48.83	10.12
1986	41.66	148.20	260.88	277.17	145.42	43.53	5.16
1986	47.30	155.65	268.62	266.69	135.04	35.60	5.90

Table 9a. Concentrations of metals (silver, cadmium, chromium, copper, nickel, lead, zinc, iron) in fish liver (ppm dry weight)

Year	Sample#	Ag	Cd	Cr	Cu	Ni	Pb	Zn	Fe
Machias Bay									
1985	28907	0.079	2.340	0.366	5.71	< 0.432	0.293	120.0	227.0
1985	28917	0.100	2.500	< 0.222	8.73	< 0.279	0.331	110.0	212.0
1985	28942	2.470	12.400	< 0.406	36.30	< 0.512	0.347	235.0	433.0
1985	28962	0.049	0.563	< 0.158	4.78	< 0.199	0.337	66.4	49.4
1985	28967	0.444	5.840	0.282	15.00	0.210	0.872	199.0	198.0
1985	28982	0.731	1.770	< 0.247	5.25	< 0.312	0.370	104.0	144.0
1985	28997	0.651	0.791	0.261	9.61	< 0.400	0.203	106.0	90.7
1985	29017	0.091	0.929	0.166	6.91	< 0.287	0.146	84.4	77.4
1985	29027	0.088	1.050	0.058	6.31	< 0.119	< 0.121	76.4	101.0
1985	29032	0.391	2.010	< 0.420	12.70	< 0.530	0.180	116.0	97.8
1986	31200	0.512	2.928	0.096	8.43	0.124	0.065	106.8	225.6
1986	31205	2.070	5.581	< 0.420	25.49	0.355	< 0.181	196.4	853.9
1986	31215	0.164	2.149	< 0.276	8.61	0.105	0.168	157.7	258.1
1986	31220	0.971	5.428	< 0.259	27.24	< 0.209	0.253	187.5	601.1
1986	31225	0.395	8.020	< 0.132	16.45	0.165	< 0.057	135.7	357.1
1986	31240	0.117	0.805	< 0.078	5.12	< 0.063	< 0.034	58.6	5.3
1986	31245	0.688	4.966	< 0.374	15.33	0.185	< 0.161	212.7	534.5
1986	31265	0.525	3.491	< 0.151	19.63	0.137	< 0.065	150.6	297.3
1986	31280	0.570	7.082	< 0.731	19.20	0.319	< 0.315	243.7	760.8
1986	31285	0.796	6.020	< 0.331	16.85	0.376	< 0.143	154.5	861.8
Frenchmans Bay									
1985	29047	0.040	0.197	0.319	< 1.61	0.751	0.284	60.2	35.0
1985	29057	0.070	0.254	0.107	4.13	< 0.313	0.318	63.8	64.3
1985	29077	0.348	0.375	0.202	3.12	0.257	0.200	73.3	73.6
1985	29097	0.059	0.296	< 0.344	12.00	< 0.433	0.440	132.0	61.5
1985	29122	0.442	0.347	0.097	3.56	< 0.269	0.045	73.4	113.0
1985	29132	0.130	0.290	< 0.137	4.15	< 0.172	0.234	75.7	68.5
1985	29162	0.021	0.203	< 0.521	< 2.52	< 0.657	< 0.667	63.7	55.0
1985	29167	0.115	0.347	0.252	4.20	< 0.317	0.269	94.8	153.0
1985	29172	0.028	0.370	< 0.258	4.30	0.136	0.110	89.0	122.0
1985	29182	0.081	0.429	< 0.096	5.10	0.226	0.288	102.0	131.0
Penobscot Bay									
1985	28752	0.171	0.883	< 0.397	8.42	< 0.500	0.593	93.4	199.0
1985	28757	0.120	0.976	< 0.109	3.32	< 0.138	0.514	68.7	149.0
1985	28762	0.130	0.566	0.071	4.43	< 0.115	0.390	65.4	60.5
1985	28767	0.121	2.030	< 0.217	6.57	0.105	0.741	109.0	277.0
1985	28772	0.122	0.372	0.083	4.21	< 0.206	0.629	59.8	46.8
1985	28777	0.043	0.455	< 0.128	3.87	< 0.161	1.200	57.7	70.7
1985	28792	0.154	0.510	0.117	5.00	< 0.297	0.352	69.4	67.4
1985	28822	0.246	0.191	0.264	3.82	< 0.289	0.440	64.4	65.5
1985	28847	0.129	0.586	0.079	4.44	< 0.185	0.313	85.7	168.0
1985	28882	0.060	0.597	< 0.120	3.08	< 0.151	0.409	94.8	98.4
1986	31396	0.389	3.888	< 0.211	11.80	0.376	0.107	126.5	587.7
1986	31426	0.432	3.015	< 0.230	17.40	0.168	0.116	222.6	517.8
1986	31446	0.432	1.847	< 0.358	5.87	< 0.289	< 0.154	112.6	220.0
1986	31451	0.265	3.259	< 0.369	15.13	0.913	0.244	176.7	828.4
1986	31461	0.151	0.847	0.260	5.74	0.165	< 0.116	100.9	156.0
1986	31471	0.157	3.062	< 0.719	11.79	0.481	< 0.310	266.3	288.9
1986	31486	0.512	3.603	< 0.342	19.08	0.289	< 0.147	195.2	792.5
1986	31496	0.089	0.756	0.086	3.96	0.057	< 0.065	81.7	124.7
1986	31506	0.184	4.620	< 0.347	7.42	0.395	< 0.150	181.5	287.7
1986	31516	0.198	2.066	1.397	6.78	0.139	< 0.137	154.9	285.4

Table 9a. Continued.

Year	Sample#	Ag	Cd	Cr	Cu	Ni	Pb	Zn	Fe
Casco Bay									
1984	21993	2.430	1.490	0.454	102.00	< 3.040	2.000	226.0	262.0
1984	22023	0.529	0.859	0.176	29.70	< 2.220	1.670	146.0	290.0
1984	22028	1.390	0.715	0.964	48.00	< 2.460	1.040	168.0	745.0
1984	22043	3.090	1.610	< 1.340	121.00	0.818	5.140	207.0	255.0
1984	22053	0.637	1.180	0.125	30.10	< 3.980	< 1.560	155.0	361.0
1984	22058	2.260	0.793	< 1.670	108.00	< 3.020	1.130	192.0	176.0
1984	22088	1.060	0.556	< 1.950	39.40	< 3.530	2.780	155.0	276.0
1984	22093	1.420	1.540	0.103	65.70	1.970	1.720	206.0	153.0
1984	22098	2.310	1.690	0.080	103.00	< 3.540	1.890	220.0	106.0
1984	22113	0.724	0.923	0.478	42.90	< 4.330	56.600	166.0	313.0
1985	28607	0.757	0.200	1.310	2.63	< 0.263	< 0.316	48.5	104.0
1985	28632	0.264	0.592	0.520	7.24	0.132	0.398	166.0	336.0
1985	28652	0.201	0.477	0.902	5.95	0.286	0.289	99.8	129.0
1985	28662	0.243	0.592	2.990	5.73	0.551	0.428	99.7	153.0
1985	28667	0.377	0.758	3.270	5.86	0.179	0.206	143.0	178.0
1985	28672	0.106	0.178	1.550	2.21	0.075	0.122	80.3	49.0
1985	28682	0.235	2.051	3.465	8.71	0.438	0.226	192.4	420.5
1985	28692	0.153	0.154	2.005	2.29	0.019	< 0.075	61.8	84.6
1985	28697	0.250	0.643	0.459	4.83	0.148	0.270	99.4	67.5
1985	28737	0.770	1.460	0.152	20.50	0.135	0.697	163.0	168.0
1986	31587	0.089	0.426	0.112	6.85	0.116	< 0.082	98.0	237.8
1986	31592	0.090	0.322	0.054	2.73	< 0.071	0.044	64.3	66.3
1986	31597	0.079	0.687	0.094	4.31	0.040	< 0.045	87.4	169.0
1986	31602	0.295	0.888	< 0.115	5.29	0.091	0.136	79.3	328.4
1986	31607	0.034	0.299	< 0.121	3.19	0.103	0.093	96.5	169.5
1986	31612	0.092	1.375	< 0.140	5.74	0.126	0.063	96.0	210.2
1986	31642	0.044	0.721	< 0.088	2.30	0.069	0.072	41.7	230.8
1986	31647	0.067	0.336	< 0.107	2.80	< 0.086	< 0.046	65.1	118.7
1986	31652	0.190	0.812	< 0.124	4.48	0.076	0.095	46.7	287.8
1986	31672	0.436	1.338	< 0.211	7.64	0.080	0.129	197.7	257.6
Merrimack River									
1984	21827	1.270	0.515	0.150	39.50	< 0.750	0.337	104.0	200.0
1984	21862	2.090	0.383	< 0.267	74.80	0.522	0.331	297.0	395.0
1984	21882	0.580	1.550	0.093	131.00	< 0.714	0.347	111.0	258.0
1984	21892	2.330	1.130	0.139	36.50	< 1.220	0.889	130.0	786.0
1984	21897	0.755	0.216	0.062	38.80	< 0.345	0.620	194.0	163.0
1984	21903	1.540	0.395	0.069	79.60	< 0.697	0.296	126.0	276.0
1984	21912	1.360	0.578	< 0.634	57.50	0.645	1.230	197.0	546.0
1984	21917	1.000	0.254	0.056	43.80	1.430	0.483	205.0	166.0
1984	21922	< 0.054	0.639	< 0.665	17.70	0.541	0.840	154.0	349.0
1984	21927	1.620	1.190	0.040	41.00	0.420	0.296	95.3	516.0
1985	28422	0.226	0.286	< 0.145	17.20	0.275	1.300	150.0	752.0
1985	28432	0.171	0.603	0.329	9.96	0.912	3.110	117.0	2090.0
1985	28442	2.360	0.529	< 0.074	85.60	0.333	0.234	238.0	637.0
1985	28447	0.325	0.257	< 0.051	26.20	0.063	0.441	143.0	197.0
1985	28457	3.000	0.234	< 0.222	61.50	0.140	3.150	124.0	578.0
1985	28462	2.730	0.556	< 0.167	43.90	0.424	8.080	156.0	1000.0
1985	28492	0.321	0.176	0.115	20.60	0.558	2.380	129.0	392.0
1985	28512	5.350	2.390	0.135	77.30	0.554	1.070	153.0	1960.0
1985	28522	0.997	1.530	< 0.098	44.40	0.686	0.267	113.0	534.0
1985	28527	0.514	0.347	0.161	29.20	0.241	0.730	148.0	112.0

Table 9a. Continued.

Year	Sample#	Ag	Cd	Cr	Cu	Ni	Pb	Zn	Fe
Salem Harbor									
1984	33284	1.730	0.107	0.322	23.60	0.942	0.941	122.0	496.0
1984	33290	0.821	0.097	0.237	19.60	0.306	0.656	91.3	204.0
1984	33292	0.145	0.116	0.276	2.78	0.251	0.548	56.3	13.7
1984	33294	0.326	0.056	0.427	7.69	0.311	0.389	94.3	365.0
1984	33296	0.061	0.079	0.842	2.25	0.241	0.340	72.7	320.0
1984	33298	1.020	0.071	1.310	22.60	0.471	0.464	89.6	302.0
1984	33300	0.265	0.047	0.801	4.83	0.299	0.390	68.6	231.0
1984	33302	0.323	0.117	1.000	10.70	0.377	0.662	61.7	225.0
1984	33306	0.409	0.074	1.480	6.78	0.350	0.437	99.4	269.0
1984	33328	0.018	0.061	0.770	3.16	0.234	0.470	62.0	220.0
1985	27335	0.776	0.318	0.382	15.60	0.246	0.263	114.0	545.0
1985	27346	0.249	0.066	0.115	19.10	0.279	0.933	108.0	338.0
1985	27355	1.650	0.554	0.527	34.60	1.500	0.520	123.0	546.0
1985	27370	0.830	0.280	0.110	36.90	0.276	0.288	176.0	543.0
1985	27385	4.090	0.805	0.117	83.70	0.458	9.450	123.0	927.0
1985	27390	3.510	0.242	0.185	75.30	0.119	1.220	129.0	828.0
1985	27395	0.949	0.179	0.062	27.30	< 0.295	1.410	137.0	500.0
1985	27420	0.696	0.489	0.574	19.70	1.420	2.540	98.0	1750.0
1985	27435	0.223	0.152	0.195	7.77	0.232	0.528	115.0	388.0
1985	27460	0.018	0.547	0.425	11.00	0.918	0.398	110.0	1130.0
1986	31009	2.383	0.226	< 0.073	57.72	0.148	1.345	156.9	1020.9
1986	31014	1.522	0.133	0.168	34.10	0.223	3.927	132.7	749.2
1986	31019	0.546	0.186	0.097	13.77	0.314	0.674	123.7	812.4
1986	31024	0.309	0.765	0.253	11.00	1.221	3.553	116.6	2150.7
1986	31029	0.094	0.263	0.070	6.54	< 0.213	1.478	137.1	862.1
1986	31034	0.190	0.430	0.146	8.53	0.531	3.615	112.9	839.0
1986	31039	0.504	0.318	< 0.093	17.27	0.419	1.884	120.4	1068.8
1986	31044	0.974	0.258	0.093	34.99	0.145	0.595	151.7	702.1
1986	31049	0.241	0.269	0.153	14.55	0.213	1.023	145.2	943.0
1986	31074	0.933	1.777	0.338	22.43	1.982	3.378	127.4	2178.5
Boston Harbor									
1984	33340	0.585	0.113	0.254	4.68	0.188	0.592	51.1	23.1
1984	33342	0.895	0.267	0.274	22.70	0.295	0.921	139.0	323.0
1984	33346	0.415	0.129	0.385	13.50	0.324	0.710	73.1	333.0
1984	33348	0.752	0.208	0.354	22.30	0.276	0.843	138.0	641.0
1984	33350	1.230	0.079	0.712	20.60	0.480	0.848	83.2	321.0
1984	33356	1.250	0.322	0.237	18.70	0.220	0.618	66.1	258.0
1984	33358	0.545	0.094	< 0.159	15.10	0.237	0.342	89.8	319.0
1984	33360	0.878	0.114	< 0.216	19.50	0.260	0.893	80.7	282.0
1984	33362	0.079	0.067	0.431	0.44	0.377	0.180	65.3	5.0
1984	33396	0.405	0.056	< 0.160	13.50	0.226	0.343	74.5	129.0
1985	27175	0.279	1.330	0.293	15.30	0.984	1.730	102.0	1630.0
1985	27185	3.150	1.250	2.600	60.10	0.316	1.810	128.0	583.0
1985	27200	1.280	0.882	0.307	10.60	< 0.569	0.861	77.0	733.0
1985	27205	0.262	0.670	0.293	13.30	0.682	2.250	114.0	1810.0
1985	27210	1.610	0.947	0.570	21.60	0.564	3.300	96.4	1610.0
1985	27220	0.281	0.738	0.412	13.80	0.606	1.960	97.9	1590.0
1985	27230	0.745	0.444	0.156	20.90	0.180	1.180	97.2	1080.0
1985	27275	1.520	0.635	0.266	34.60	0.454	2.410	105.0	772.0
1985	27295	4.350	0.889	0.429	47.90	0.501	4.200	114.0	820.0
1985	27320	0.360	0.250	0.143	8.81	< 0.262	0.778	73.3	335.0
1986	30637	0.991	0.366	0.271	7.05	0.444	0.508	90.5	1193.0
1986	30647	0.732	0.506	0.100	13.21	0.178	0.896	78.4	1138.4
1986	30657	0.809	0.599	0.150	26.22	0.149	2.478	104.4	1144.4

Table 9a. Continued.

Year	Sample#	Ag	Cd	Cr	Cu	Ni	Pb	Zn	Fe
Boston Harbor									
1986	30682	0.126	0.352	0.227	6.31	0.273	0.508	81.9	1363.5
1986	30687	0.985	0.257	0.164	60.92	0.204	5.740	125.8	994.6
1986	30692	2.813	0.508	0.194	40.24	0.681	2.642	67.4	1741.0
1986	30707	1.693	0.524	0.322	17.28	0.397	1.189	104.5	1866.5
1986	30712	2.314	0.787	0.225	23.47	1.258	0.917	99.6	2219.6
1986	30722	3.471	0.389	0.132	55.46	0.620	0.992	111.7	1106.2
1986	30762	0.450	0.549	0.171	93.91	0.273	1.919	121.0	809.0
Quincy Bay									
1986	30823	0.699	0.545	0.054	11.74	0.211	0.029	95.6	974.3
1986	30828	1.160	0.590	0.089	28.37	0.272	1.855	75.7	750.2
1986	30833	0.806	0.148	0.042	8.02	0.161	0.482	101.7	415.8
1986	30838	0.532	0.765	0.291	12.06	0.193	0.647	93.5	2049.3
1986	30843	0.224	0.664	0.295	10.19	0.352	1.959	95.2	1777.0
1986	30848	0.572	0.285	0.036	9.82	0.217	0.922	86.8	1421.5
1986	30878	0.529	1.277	0.255	18.81	0.398	1.684	103.6	2075.8
1986	30928	0.969	0.273	0.084	12.74	0.084	1.319	85.7	692.5
1986	30938	2.455	0.753	< 0.128	18.92	< 0.183	0.985	119.3	1160.9
1986	30958	0.545	0.247	0.088	13.91	< 0.102	0.688	94.3	893.5
Buzzards Bay									
1984	20642	0.933	0.143	0.921	19.80	< 0.421	1.240	162.0	155.0
1984	20651	0.221	0.076	0.051	10.00	0.080	0.125	176.0	284.0
1984	20666	0.190	0.187	0.155	8.47	0.195	3.210	128.0	436.0
1984	20676	0.104	0.872	0.058	10.30	0.310	0.573	75.8	501.0
1984	20681	0.812	0.146	0.245	42.20	< 0.398	< 0.087	194.0	264.0
1984	20706	0.135	0.611	0.151	19.20	1.180	0.730	153.0	883.0
1984	20711	0.403	0.443	0.069	10.90	0.489	1.550	82.9	1130.0
1984	20726	0.210	0.110	< 0.039	10.80	< 0.078	0.149	145.0	183.0
1984	20737	0.042	0.805	< 0.090	7.18	0.460	0.566	101.0	1390.0
1984	20767	0.494	0.518	< 0.062	18.10	0.247	3.430	120.0	456.0
1985	26950	0.765	0.519	0.103	48.20	0.269	0.813	156.0	483.0
1985	26955	0.581	0.466	< 0.158	3.90	0.094	1.210	96.8	432.0
1985	26965	1.520	0.349	0.072	54.90	0.130	0.849	155.0	279.0
1985	26975	1.480	2.060	0.021	43.60	0.696	0.594	119.0	1090.0
1985	27005	0.243	0.982	0.087	17.00	0.638	0.754	107.0	950.0
1985	27010	0.454	0.305	< 0.117	15.40	0.143	0.640	146.0	467.0
1985	27015	0.569	0.574	0.037	37.40	0.372	2.960	109.0	376.0
1985	27040	1.640	0.540	< 0.173	50.70	0.272	1.140	127.0	526.0
1985	27045	0.206	0.601	0.128	12.20	1.380	1.060	126.0	472.0
1985	27070	0.296	0.373	< 0.123	9.85	0.184	2.170	94.8	541.0
1986	30416	0.095	1.060	< 0.123	14.78	0.318	0.381	100.3	1549.1
1986	30431	0.161	1.180	< 0.202	14.62	< 0.290	0.539	110.1	1964.6
1986	30436	0.615	1.054	0.662	27.87	0.377	2.912	105.0	2735.2
1986	30446	0.725	1.784	0.018	45.44	0.226	0.386	77.2	994.3
1986	30461	0.155	0.664	0.006	23.16	0.054	0.954	95.4	196.9
1986	30476	0.139	1.319	0.055	9.69	0.733	1.108	93.6	2666.7
1986	30481	0.081	0.055	0.036	7.93	< 0.279	< 0.189	95.2	348.8
1986	30491	0.054	0.717	< 0.196	8.66	0.669	0.262	89.0	1128.9
1986	30511	0.154	0.232	0.015	22.36	< 0.151	0.381	97.5	342.4
1986	30516	0.190	0.756	0.022	12.40	< 0.170	0.253	69.9	573.0
1986	30521	0.571	0.401	0.003	29.82	< 0.212	0.777	102.5	374.0
1986	30526	0.102	0.331	0.023	16.09	0.081	0.249	97.5	320.0
1986	30531	0.086	0.457	0.017	22.36	< 0.203	0.659	91.8	441.6
1986	30536	0.242	0.672	1.276	38.00	0.615	1.301	126.2	376.4

Table 9a. Continued.

Year	Sample#	Ag	Cd	Cr	Cu	Ni	Pb	Zn	Fe
Narragansett Bay									
1984	22203	0.542	0.435	0.068	25.50	< 1.520	< 0.598	133.0	611.0
1984	22208	0.057	0.215	< 0.471	14.50	< 0.851	0.759	105.0	604.0
1984	22218	0.552	0.464	< 0.359	19.80	0.380	0.453	130.0	332.0
1984	22233	0.899	0.181	< 0.312	29.60	< 0.564	1.050	164.0	365.0
1984	22248	0.028	0.798	0.409	5.49	0.586	1.340	128.0	620.0
1984	22253	0.100	0.325	< 0.194	18.50	0.355	1.560	145.0	147.0
1984	22273	0.047	0.218	0.252	5.16	< 1.710	1.670	111.0	357.0
1984	22278	0.397	0.340	0.170	53.40	< 1.680	0.774	137.0	361.0
1984	22288	0.185	1.860	0.165	11.70	1.130	1.630	91.8	1240.0
1984	22293	0.755	0.199	< 0.177	59.20	< 0.345	0.914	152.0	579.0
1984	22298	0.142	0.471	< 0.262	9.68	0.433	0.601	92.7	1570.0
1984	22308	0.045	0.831	< 0.401	11.20	< 0.784	0.910	145.0	1470.0
1984	22313	0.301	0.669	< 0.222	28.30	< 0.433	1.610	156.0	446.0
1985	26260	0.038	0.889	0.677	< 10.80	0.778	2.670	116.0	1490.0
1985	26300	0.127	0.951	0.087	12.90	0.895	2.550	105.0	507.0
1985	26325	0.187	0.172	0.411	25.70	1.360	2.190	151.0	196.0
1985	26330	0.183	0.105	0.025	13.80	0.136	0.967	97.5	496.0
1985	26335	0.568	0.916	< 0.313	24.50	0.781	1.240	120.0	809.0
1985	26360	0.372	0.250	< 0.186	39.70	0.211	0.409	84.5	190.0
1985	26385	0.157	0.496	< 0.195	38.70	0.175	0.268	107.0	507.0
1985	26390	0.252	0.192	< 0.133	31.00	0.062	3.250	104.0	208.0
1985	26395	0.735	0.370	0.029	51.40	0.291	1.810	141.0	399.0
1985	26405	0.139	0.674	< 0.350	14.00	0.637	0.869	115.0	786.0
1986	30209	0.055	0.856	< 0.212	13.32	1.160	3.548	123.1	1601.0
1986	30214	0.177	0.196	< 0.199	12.49	< 0.337	2.102	90.5	502.2
1986	30219	0.948	0.842	0.088	37.02	0.552	0.975	136.4	2089.2
1986	30224	0.445	1.337	< 0.501	16.89	0.759	0.352	111.6	801.4
1986	30229	0.867	0.260	< 0.119	50.12	0.242	2.783	141.7	638.6
1986	30239	0.385	0.265	0.033	15.40	0.179	0.237	77.8	321.6
1986	30249	0.606	0.650	< 0.617	38.68	0.686	0.651	137.6	900.8
1986	30264	0.252	0.875	< 0.672	29.18	1.156	1.714	131.7	2738.7
1986	30279	0.129	0.072	< 0.120	14.48	< 0.203	0.633	131.0	31.1
1986	30314	0.429	0.900	< 0.311	49.43	< 0.525	0.983	136.0	299.9
Eastern Long Island Sound									
1984	20828	0.145	1.080	< 0.322	24.60	< 0.637	0.284	171.0	615.0
1984	20843	0.349	0.754	0.610	47.00	2.630	0.720	245.0	651.0
1984	20864	0.025	9.820	0.504	10.00	1.580	0.415	161.0	664.0
1984	20874	0.834	0.693	< 0.402	58.30	0.863	0.722	177.0	207.0
1984	20884	1.010	1.450	< 1.850	36.00	< 3.340	1.170	165.0	441.0
1984	20889	0.977	0.878	< 1.310	27.90	< 2.370	0.551	147.0	422.0
1984	20894	1.100	1.810	< 1.530	47.30	< 2.760	0.964	166.0	594.0
1984	20898	0.164	1.040	< 0.364	13.40	1.420	0.262	193.0	417.0
1984	20943	0.045	0.565	< 0.218	8.33	0.540	0.301	105.0	601.0
1984	20964	2.760	2.200	< 0.677	66.20	1.820	0.711	178.0	518.0
1985	26645	0.888	0.903	0.042	58.60	0.209	0.873	146.0	592.0
1985	26690	0.126	1.190	< 0.343	11.20	0.625	1.880	128.0	555.0
1985	26700	1.010	1.060	0.096	45.40	1.490	< 1.240	134.0	990.0
1985	26715	0.242	0.777	0.073	18.20	0.330	< 1.270	150.0	628.0
1985	26720	0.191	1.410	< 0.370	25.60	< 0.115	0.589	106.0	129.0
1985	26725	1.780	0.909	< 0.212	48.10	0.683	1.260	111.0	139.0
1985	26740	0.174	0.527	< 0.328	15.70	0.450	< 1.450	141.0	166.0
1985	26760	0.073	1.160	< 0.197	12.40	0.448	1.080	139.0	666.0
1985	26765	0.287	0.411	0.895	15.90	3.620	< 0.479	110.0	175.0
1985	26780	0.235	0.648	0.077	13.30	0.152	< 0.422	128.0	295.0

Table 9a. Continued.

Year	Sample#	Ag	Cd	Cr	Cu	Ni	Pb	Zn	Fe
Eastern Long Island Sound									
1986	30008	0.515	1.423	0.018	10.43	< 0.248	< 0.169	103.8	304.8
1986	30013	1.903	2.381	< 0.613	21.27	< 0.881	< 0.252	83.3	839.7
1986	30018	0.652	0.926	< 0.060	64.49	< 0.417	0.437	135.3	152.9
1986	30028	0.292	1.195	< 0.558	< 9.13	< 0.802	< 0.230	94.7	749.7
1986	30033	0.217	0.151	0.002	9.82	< 0.157	0.103	83.3	111.7
1986	30038	0.588	1.777	< 0.423	22.66	0.740	2.478	119.2	1244.3
1986	30048	0.293	0.402	< 0.253	23.15	< 0.364	0.260	118.4	283.7
1986	30058	0.250	0.328	0.026	11.60	< 0.464	0.441	88.7	400.1
1986	30063	0.173	0.284	0.013	8.58	< 0.130	0.057	51.9	131.9
1986	30073	0.226	0.230	0.012	6.01	0.091	< 0.097	72.3	160.1
1986	30098	0.480	0.272	0.017	15.40	0.043	0.065	71.5	163.7
1986	30108	0.266	0.311	< 0.045	10.99	< 0.312	< 0.212	57.8	168.1
1986	30118	0.699	0.804	0.009	34.39	0.287	0.555	111.1	403.4
1986	30148	0.174	0.146	0.118	10.60	0.172	0.127	72.5	163.5
Western Long Island Sound									
1984	21383	0.449	1.820	0.742	25.50	4.740	2.170	85.6	2940.0
1984	21388	0.240	0.805	< 0.256	20.40	3.010	0.480	132.0	869.0
1984	21393	0.209	0.118	0.139	20.60	0.319	0.232	117.0	265.0
1984	21404	0.488	1.140	< 0.386	49.00	1.080	0.469	264.0	312.0
1984	21414	0.027	0.578	< 0.237	12.20	1.050	0.249	112.0	309.0
1984	21419	0.022	0.719	< 0.159	6.20	0.988	0.458	73.3	1220.0
1984	21428	0.038	0.857	< 0.411	8.24	2.360	0.397	75.8	1550.0
1984	21453	0.065	0.735	< 0.697	8.01	< 1.260	0.635	116.0	1110.0
1984	21468	0.070	0.296	< 0.787	19.60	< 1.420	0.534	141.0	179.0
1984	21509	< 0.167	0.726	< 2.070	12.60	< 3.740	1.690	103.0	504.0
1985	26515	0.265	2.430	< 0.548	26.20	0.383	2.720	141.0	561.0
1985	26535	0.374	0.744	0.242	19.10	1.220	< 1.530	121.0	1190.0
1985	26540	1.630	2.830	0.394	69.50	1.130	3.910	153.0	1200.0
1985	26555	0.268	1.360	< 0.734	20.20	0.438	2.430	83.0	1240.0
1985	26590	0.086	1.300	0.050	8.87	0.936	1.480	124.0	825.0
1985	26595	0.436	0.950	1.980	21.90	0.391	0.435	99.6	869.0
1985	26600	0.182	2.380	< 0.814	< 16.30	2.400	9.130	101.0	3620.0
1985	26605	0.599	0.432	0.020	23.30	0.121	0.677	105.0	353.0
1985	26610	0.370	1.050	1.760	64.40	0.406	0.927	131.0	1070.0
1985	26625	0.691	0.614	1.930	17.70	0.507	12.000	119.0	934.0
1986	29827	0.294	0.677	0.050	26.05	0.224	0.462	119.6	551.1
1986	29837	0.413	1.509	0.015	28.22	< 0.540	0.460	117.2	442.1
1986	29842	0.549	0.588	< 0.084	12.75	< 0.590	0.331	100.5	1043.5
1986	29847	0.525	0.835	0.033	16.63	< 0.585	0.499	111.9	1538.7
1986	29852	0.759	1.792	0.065	28.51	< 1.140	0.639	109.5	2555.5
1986	29857	0.243	1.045	0.005	27.62	< 0.347	0.178	117.4	261.8
1986	29867	0.198	1.183	< 0.294	18.55	0.759	0.484	116.9	2116.8
1986	29886	0.175	1.648	0.088	29.13	< 1.025	1.599	120.1	795.5
1986	29891	0.597	0.964	< 0.101	42.02	< 0.711	< 0.483	143.0	352.5
1986	29901	0.661	0.683	< 0.375	27.22	0.554	0.772	124.9	1374.9
1986	29931	0.147	0.474	0.066	8.35	0.175	< 0.312	82.3	425.6
1986	29961	0.415	1.038	< 0.139	24.31	< 0.972	< 0.660	135.3	1089.9
1986	29966	0.272	2.703	< 1.319	< 21.60	< 1.896	0.543	108.8	3187.5
Raritan Bay									
1985	27607	1.260	0.720	0.185	92.60	< 1.440	5.580	160.0	3380.0
1985	27632	1.160	0.532	< 0.194	20.00	< 0.518	1.500	116.0	800.0
1985	27642	1.080	0.190	0.296	36.10	0.302	1.510	134.0	777.0

Table 9a. Continued.

Year	Sample#	Ag	Cd	Cr	Cu	Ni	Pb	Zn	Fe
Raritan Bay									
1985	27667	1.680	1.080	0.153	51.00	< 1.520	1.540	112.0	1710.0
1985	27672	1.210	0.311	< 0.288	37.10	0.346	1.510	107.0	1540.0
1985	27677	0.787	0.664	0.187	65.60	< 0.690	2.800	135.0	1070.0
1985	27702	0.248	0.986	< 0.760	68.20	< 2.030	4.430	160.0	1870.0
1985	27707	2.750	1.400	< 0.751	72.10	< 2.010	2.810	200.0	626.0
1985	27712	0.148	0.511	< 0.734	65.90	< 1.960	1.980	148.0	902.0
1985	27727	8.800	1.150	< 0.571	35.40	0.399	13.800	123.0	2570.0
1986	29245	2.694	0.679	0.188	65.47	0.128	4.081	129.9	627.9
1986	29250	0.516	0.311	0.058	18.42	0.085	0.710	91.2	818.9
1986	29265	0.339	0.486	0.084	54.94	0.277	0.529	129.7	926.2
1986	29270	0.819	0.262	0.062	34.52	0.055	3.188	141.2	430.3
1986	29280	0.251	0.832	0.066	14.05	0.673	2.032	114.6	1626.3
1986	29305	0.868	0.279	0.094	62.71	0.108	1.362	156.8	230.2
1986	29335	1.087	0.366	0.066	69.84	0.080	4.409	123.4	1064.1
1986	29340	0.120	1.236	0.256	11.07	0.619	0.936	115.5	1667.3
1986	29370	0.537	0.589	0.092	34.29	0.246	1.071	120.9	889.1
1986	29375	0.213	0.420	0.124	10.35	0.246	0.640	112.0	1412.4
Great Bay									
1985	27812	0.329	0.206	0.186	16.10	0.176	0.792	106.0	229.0
1985	27822	0.749	0.186	0.017	37.90	< 0.227	0.835	117.0	128.0
1985	27837	0.436	0.077	0.055	25.00	< 0.168	0.414	70.9	57.3
1985	27842	0.465	0.223	0.051	27.40	0.269	2.070	155.0	268.0
1985	27862	0.358	0.123	< 0.095	25.80	< 0.183	0.553	82.8	43.2
1985	27867	0.647	0.160	< 0.205	43.60	< 0.064	1.180	139.0	147.0
1985	27887	2.660	0.258	< 0.288	58.70	< 0.090	0.675	162.0	111.0
1985	27897	0.407	0.270	0.041	16.90	< 0.347	0.360	138.0	232.0
1985	27907	1.110	0.135	< 0.051	47.30	< 0.136	0.226	113.0	42.0
1985	27912	0.453	0.085	< 0.069	27.50	< 0.185	1.160	111.0	98.8
1986	29645	1.548	0.114	0.061	27.70	< 0.230	2.010	130.4	159.5
1986	29650	2.688	0.553	0.075	62.14	0.717	2.391	177.5	207.3
1986	29665	1.448	0.546	0.075	62.14	0.239	1.638	137.3	941.3
1986	29680	1.183	0.829	0.013	50.64	0.173	1.662	121.5	156.9
1986	29690	0.253	0.345	0.047	15.32	1.308	0.325	92.9	479.3
1986	29700	0.193	0.338	0.031	15.39	0.269	0.797	102.8	464.4
1986	29715	1.242	0.198	0.019	47.28	0.225	0.124	92.8	251.1
1986	29720	2.195	0.544	0.034	112.46	0.149	0.322	151.3	549.7
1986	29735	0.246	0.228	0.037	11.70	0.349	0.712	103.9	319.0
1986	29745	0.407	0.113	0.044	21.96	0.190	2.877	126.6	188.5
Delaware Bay									
1984	21564	0.084	0.212	< 0.336	8.48	3.470	0.297	84.8	489.0
1984	21574	0.627	0.241	< 1.180	22.40	< 2.130	0.744	150.0	286.0
1984	21585	0.123	0.053	< 0.311	12.90	0.838	< 0.145	85.7	211.0
1984	21589	0.171	0.050	< 0.263	11.90	< 0.520	0.189	75.7	209.0
1984	21595	0.187	0.143	< 0.489	18.00	< 0.968	0.634	94.9	282.0
1984	21600	0.258	0.318	< 0.565	21.40	< 1.020	< 0.223	132.0	365.0
1984	21639	0.126	0.117	< 1.700	20.30	< 3.080	< 0.672	141.0	139.0
1984	21655	0.287	0.091	< 0.449	22.70	0.914	< 0.209	93.0	200.0
1984	21660	0.157	0.227	0.581	17.70	4.550	< 0.250	97.2	247.0
1984	21680	0.188	0.060	< 0.594	22.30	1.210	< 0.277	108.0	231.0
1985	24769	0.448	0.074	< 1.550	40.00	< 1.960	< 1.990	143.0	278.0
1985	24789	0.084	0.059	< 0.145	10.90	0.149	0.128	90.9	199.0
1985	24794	0.250	0.107	< 0.416	35.90	0.113	< 1.530	182.0	342.0

Table 9a. Continued.

Year	Sample#	Ag	Cd	Cr	Cu	Ni	Pb	Zn	Fe
Delaware Bay									
1985	24814	0.071	0.050	< 0.678	29.30	< 0.487	0.772	197.0	380.0
1985	24839	0.249	0.562	< 0.577	31.20	0.845	0.364	172.0	742.0
1985	24849	< 0.494	0.654	3.840	21.90	1.160	< 1.950	166.0	201.0
1985	24864	< 0.195	0.094	< 0.597	10.50	0.376	< 0.769	94.5	149.0
1985	24869	0.414	0.453	< 0.398	43.00	< 0.286	< 1.470	179.0	501.0
1985	24879	< 0.167	0.081	< 0.511	14.10	< 0.159	< 0.659	98.9	190.0
1985	24894	0.151	0.051	< 0.434	28.10	0.165	1.150	136.0	250.0
1986	29449	0.581	1.084	0.293	46.19	< 0.914	< 0.484	162.7	1509.8
1986	29469	0.497	0.416	0.072	31.88	0.112	0.348	97.0	708.8
1986	29474	0.710	1.584	< 0.224	29.40	< 0.582	< 0.308	153.6	452.1
1986	29479	0.867	0.989	0.182	59.95	0.197	0.399	148.6	1357.2
1986	29489	0.767	1.021	0.209	35.39	< 0.792	< 0.419	146.3	1670.0
1986	29494	0.181	0.426	0.097	15.15	< 0.390	0.087	91.4	562.6
1986	29509	0.665	0.116	0.151	30.28	< 1.113	< 0.589	169.7	239.0
1986	29524	1.011	0.694	0.021	34.65	< 0.177	< 0.093	123.9	269.5
1986	29544	0.692	0.824	0.174	50.42	< 0.519	0.331	146.1	813.7
1986	29579	0.557	0.554	0.163	38.73	< 0.486	< 0.257	142.7	236.1
Upper Chesapeake Bay									
1985	22767	0.021	0.838	< 0.391	15.10	0.915	< 0.726	65.2	223.0
1985	22772	0.006	0.163	< 0.295	13.50	< 1.140	< 0.546	69.6	206.0
1985	22777	< 1.350	0.237	0.081	< 10.60	1.260	< 0.868	56.2	157.0
1985	22782	< 0.025	0.384	< 0.878	< 19.90	3.530	< 1.630	64.6	200.0
1985	22787	0.015	0.132	0.065	10.60	0.373	< 0.628	52.4	197.0
1985	22792	0.034	0.304	< 0.486	< 11.00	< 1.880	< 0.902	81.0	282.0
1985	22797	0.016	0.232	0.371	9.83	0.759	0.584	59.4	248.0
1985	22802	1.590	0.172	0.060	11.80	0.714	0.297	66.6	215.0
1985	22807	0.069	0.109	0.107	22.10	< 1.410	0.656	69.4	232.0
1985	22817	0.048	0.236	0.132	21.60	< 2.650	< 1.270	66.4	259.0
1986	31818	0.056	0.255	0.026	11.07	0.130	< 0.136	52.1	99.0
1986	31828	0.044	0.317	0.133	8.42	0.373	0.098	50.4	281.9
1986	31833	0.026	0.616	< 0.037	9.52	0.381	0.085	87.5	249.6
1986	31848	0.059	0.276	< 0.032	12.43	0.117	< 0.102	53.2	134.4
1986	31878	0.052	0.320	0.015	10.70	0.175	0.053	53.3	191.0
1986	31888	0.044	0.308	< 0.034	11.05	0.212	< 0.109	58.9	240.5
1986	31908	0.023	0.341	< 0.038	9.80	0.187	< 0.121	59.8	249.4
1986	31918	0.033	0.560	< 0.041	9.18	0.200	< 0.129	58.3	182.4
1986	31943	0.029	0.233	< 0.021	8.68	0.194	0.035	47.6	183.8
1986	31953	0.143	0.321	< 0.052	11.70	0.189	< 0.165	77.2	214.2
Lower Chesapeake Bay									
1984	33218	0.260	0.667	0.076	40.60	< 1.310	0.509	146.0	419.0
1984	33220	0.121	0.428	< 0.818	13.90	< 5.010	< 1.970	153.0	343.0
1984	33222	0.222	0.359	0.327	22.90	2.460	< 0.788	153.0	555.0
1984	33238	0.385	0.562	0.165	35.30	< 1.630	< 0.638	169.0	502.0
1984	33248	0.066	0.640	1.530	12.00	2.570	1.620	194.0	325.0
1984	33252	0.208	0.649	0.184	21.70	< 1.490	< 0.584	118.0	588.0
1984	33256	0.157	0.414	0.329	19.60	< 1.480	< 0.582	119.0	339.0
1984	33258	0.207	0.119	0.781	18.10	< 1.060	< 0.415	136.0	230.0
1984	33260	0.097	0.490	0.195	10.30	< 2.380	< 0.934	117.0	461.0
1984	33266	0.167	0.628	5.450	27.90	3.520	< 0.598	148.0	639.0
1985	22438	0.034	0.210	0.122	13.30	0.350	0.091	69.9	262.0
1985	22468	0.014	0.241	0.052	13.30	0.384	0.272	74.3	414.0

Table 9a. Continued.

Year	Sample#	Ag	Cd	Cr	Cu	Ni	Pb	Zn	Fe
Lower Chesapeake Bay									
1985	22473	0.024	0.216	< 0.081	12.20	0.205	0.560	73.1	232.0
1985	22478	0.012	0.238	< 0.126	10.90	0.376	0.239	74.9	326.0
1985	22498	0.152	0.304	< 0.084	30.10	0.371	0.075	83.6	230.0
1985	22503	0.037	2.630	< 0.125	14.80	0.250	< 0.461	69.7	271.0
1985	22508	0.031	0.208	< 0.116	13.80	0.448	0.191	74.8	251.0
1985	22517	0.137	0.242	0.341	20.30	0.186	0.098	80.7	265.0
1985	22538	0.048	0.393	< 0.104	15.80	0.369	0.251	81.8	218.0
1985	22568	0.044	0.369	< 0.128	16.50	0.325	0.081	80.1	258.0
1986	32064	0.035	0.224	< 0.023	10.25	0.206	0.033	54.7	268.2
1986	32069	0.065	0.149	< 0.041	14.68	0.059	< 0.132	63.2	233.9
1986	32109	0.195	0.393	< 0.044	21.14	0.271	< 0.139	78.8	255.9
1986	32114	0.029	0.285	0.557	14.69	0.442	< 0.145	75.5	218.3
1986	32129	0.090	0.259	< 0.050	19.55	0.088	< 0.161	87.8	262.5
1986	32134	0.101	0.979	0.071	23.54	0.452	0.350	84.6	360.8
1986	32159	0.040	0.237	< 0.025	10.33	0.286	0.026	58.0	218.5
1986	32164	0.096	0.227	0.054	16.25	0.098	< 0.178	68.0	308.0
1986	32179	0.044	0.278	< 0.052	10.14	0.108	< 0.167	71.4	283.0
1986	32194	0.040	0.429	< 0.063	12.26	0.272	0.159	83.4	242.6
Elizabeth River									
1986	32352	< 0.288	0.419	1.054	< 97.34	< 6.992	< 5.544	208.4	469.0
1986	32372	< 0.034	0.126	0.227	13.42	< 0.835	0.347	116.8	290.1
1986	32377	< 0.089	0.231	< 0.535	< 29.95	< 2.151	0.895	128.3	530.1
1986	32382	< 0.027	0.287	< 0.162	15.68	< 0.650	0.271	113.4	406.9
1986	32387	0.064	0.784	0.052	31.97	0.049	0.401	126.0	155.5
1986	32392	0.228	0.441	0.051	47.21	0.233	0.509	187.9	273.9
1986	32402	0.349	0.886	0.329	62.25	0.216	1.074	138.1	197.6
1986	32406	< 0.085	0.235	< 0.515	< 28.84	< 2.072	0.647	114.0	248.7
1986	32436	0.091	0.268	< 0.136	35.26	< 0.548	0.456	133.3	169.8
1986	32442	0.033	0.306	< 0.204	19.84	< 0.823	0.813	152.8	483.4

Table 9b. Concentrations of metals (manganese, thallium, arsenic, mercury, selenium, tin, antimony) in fish liver (ppm dry weight)

Year	Sample #	Mn	Tl	As	Hg	Se	Sn	Sb
Machias Bay								
1985	28907	3.490	< 0.019	17.400	0.155	6.330	< 0.664	< 0.052
1985	28917	3.220	< 0.012	13.200	0.197	8.190	< 0.429	< 0.034
1985	28942	3.220	< 0.022	25.900	0.295	8.530	< 0.787	< 0.062
1985	28962	3.100	< 0.009	7.790	0.097	2.130	< 0.306	< 0.024
1985	28967	5.800	< 0.032	28.500	0.296	9.500	< 1.130	< 0.089
1985	28982	3.030	< 0.014	12.100	0.153	5.400	0.027	< 0.038
1985	28997	4.610	< 0.017	14.200	0.265	4.600	0.751	< 0.048
1985	29017	2.790	< 0.013	24.000	0.165	4.070	0.049	< 0.035
1985	29027	2.000	< 0.005	9.930	0.172	3.380	< 0.183	< 0.014
1985	29032	6.120	< 0.023	21.900	0.191	5.580	< 0.815	0.038
1986	31200	3.252		4.110	0.253	2.351	< 0.034	
1986	31205	< 4.287		7.144	0.523	8.787	< 0.145	
1986	31215	< 2.820		56.765	0.482	4.993	< 0.095	
1986	31220	< 2.648		11.408	0.485	4.794	< 0.089	
1986	31225	2.993		2.975	0.247	2.653	< 0.045	
1986	31240	1.770		2.793	0.151	1.378	< 0.027	
1986	31245	< 3.814		7.167	0.629	6.144	< 0.129	
1986	31265	3.951		6.917	0.406	5.969	< 0.052	
1986	31280	< 7.465		12.969	0.638	7.254	< 0.252	
1986	31285	< 3.382		11.142	0.578	5.448	< 0.114	
Frenchmans Bay								
1985	29047	4.830	< 0.018	4.430	0.080	3.850	< 0.643	0.010
1985	29057	5.250	< 0.014	4.540	0.045	4.900	< 0.480	< 0.038
1985	29077	3.530	< 0.010	6.370	0.034	2.870	< 0.362	< 0.028
1985	29097	5.000	< 0.019	10.300	< 0.082	3.200	0.315	< 0.052
1985	29122	4.520	< 0.012	4.000	0.050	3.320	< 0.413	< 0.032
1985	29132	4.120	< 0.008	4.170	0.032	3.520	< 0.265	< 0.021
1985	29162	6.380	< 0.029	3.950	< 0.125	3.660	0.449	0.016
1985	29167	5.910	< 0.014	8.460	< 0.060	3.390	< 0.488	0.088
1985	29172	5.460	< 0.014	4.260	0.061	3.480	< 0.499	0.031
1985	29182	2.900	< 0.005	3.060	0.070	3.080	< 0.186	< 0.015
Penobscot Bay								
1985	28752	2.230	< 0.021	8.330	0.223	4.440	< 0.768	0.012
1985	28757	1.090	< 0.006	5.400	0.288	2.070	< 0.212	< 0.016
1985	28762	1.540	< 0.005	4.630	0.169	2.960	< 0.177	< 0.014
1985	28767	1.710	< 0.012	17.900	0.370	5.230	< 0.420	< 0.033
1985	28772	1.290	< 0.009	7.040	0.163	3.400	< 0.317	< 0.025
1985	28777	1.860	< 0.007	6.700	0.204	3.080	< 0.247	< 0.019
1985	28792	3.430	< 0.013	6.640	0.132	4.060	< 0.456	< 0.036
1985	28822	< 1.810	< 0.013	4.800	0.104	2.560	< 0.443	< 0.035
1985	28847	1.160	< 0.008	22.900	0.170	2.550	< 0.283	< 0.220
1985	28882	1.740	< 0.007	7.520	0.217	4.670	< 0.232	0.018
1986	31396	< 2.159		5.687	0.580	4.082	< 0.073	
1986	31426	< 2.353		7.862	0.359	3.602	< 0.079	
1986	31446	< 3.654		4.280	0.245	4.416	< 0.123	
1986	31451	< 3.765		4.055	0.643	4.711	< 0.127	
1986	31461	< 2.749		3.739	0.285	3.366	< 0.093	
1986	31471	< 7.338		25.903	0.537	6.525	< 0.248	
1986	31486	< 3.491		6.396	0.426	4.369	< 0.118	
1986	31496	< 1.538		3.797	0.113	1.924	< 0.052	
1986	31506	< 3.549		8.425	0.411	4.573	0.079	
1986	31516	< 3.243		2.881	0.218	4.231	< 0.109	

Table 9b. Continued.

Year	Sample #	Mn	Tl	As	Hg	Se	Sn	Sb
Casco Bay								
1984	21993	5.120	< 0.063	8.740	0.385	7.560	< 0.873	< 0.115
1984	22023	18.200	< 0.046	7.890	0.312	6.770	2.470	< 0.084
1984	22028	17.400	< 0.051	5.120	0.449	7.380	< 0.706	< 0.093
1984	22043	4.770	< 0.132	9.600	0.249	7.850	< 4.590	< 0.058
1984	22053	6.190	< 0.083	4.450	< 0.352	7.880	3.290	< 0.151
1984	22058	3.810	< 0.165	5.570	0.299	8.650	< 5.720	< 0.072
1984	22088	< 5.560	< 0.192	6.210	0.279	6.100	< 6.680	< 0.084
1984	22093	4.360	< 0.074	9.990	0.647	7.670	1.020	< 0.135
1984	22098	7.110	< 0.074	9.180	< 0.314	10.800	1.400	< 0.135
1984	22113	6.180	< 0.090	8.540	< 0.384	6.580	< 1.246	< 0.165
1985	28607	< 1.050	< 0.016	2.930	0.136	1.890	< 0.176	< 0.050
1985	28632	3.370	0.019	9.510	0.154	6.020	0.049	< 0.015
1985	28652	3.150	< 0.020	5.210	0.082	4.380	0.061	< 0.023
1985	28662	3.080	< 0.017	5.220	0.059	5.190	0.052	< 0.019
1985	28667	2.600	0.012	6.480	0.073	4.630	0.038	< 0.014
1985	28672	1.170	< 0.008	4.140	0.091	2.020	0.106	< 0.008
1985	28682	4.606		16.058	0.331	8.040	0.055	
1985	28692	1.513		3.048	0.073	3.773	0.024	
1985	28697	2.310	< 0.012	5.780	0.074	3.210	0.055	< 0.014
1985	28737	3.380	< 0.026	13.000	0.164	7.380	0.095	< 0.029
1986	31587	< 1.937		2.543	0.201	2.501	< 0.065	
1986	31592	1.690		1.765	0.109	1.512	< 0.030	
1986	31597	3.457		2.801	0.124	3.057	0.024	
1986	31602	< 1.176		1.933	0.179	2.412	0.046	
1986	31607	2.343		2.009	0.114	2.295	0.048	
1986	31612	< 1.429		2.584	0.218	2.644	0.044	
1986	31642	< 0.894		1.131	0.093	1.475	0.020	
1986	31647	< 1.091		2.023	0.153	1.757	0.024	
1986	31652	2.395		2.741	0.209	3.713	0.039	
1986	31672	4.798		4.312	0.290	3.478	0.066	
Merrimack River								
1984	21827	2.140	< 0.016	10.800	0.272	6.820	0.539	< 0.029
1984	21862	4.830	< 0.026	12.700	0.243	5.230	< 0.915	< 0.012
1984	21882	2.730	< 0.015	13.400	0.291	8.850	< 0.205	< 0.027
1984	21892	< 1.020	< 0.025	11.600	0.394	9.810	0.395	< 0.046
1984	21897	5.600	< 0.007	5.040	0.204	3.780	0.360	< 0.013
1984	21903	2.030	< 0.014	5.680	0.245	6.920	0.751	< 0.026
1984	21912	3.970	< 0.063	9.140	0.195	8.890	3.920	< 0.027
1984	21917	4.200	< 0.010	15.400	0.223	4.590	0.143	< 0.019
1984	21922	3.500	< 0.066	9.380	0.195	5.760	< 2.280	< 0.029
1984	21927	2.090	< 0.010	7.990	0.399	6.720	< 0.143	< 0.019
1985	28422	5.800	< 0.037	12.100	0.216	8.270	0.354	< 0.042
1985	28432	7.770	0.018	24.500	0.275	9.070	0.362	< 0.021
1985	28442	6.250	0.027	16.900	0.132	9.300	0.156	< 0.021
1985	28447	4.580	0.018	13.000	0.067	5.660	0.090	< 0.015
1985	28457	4.130	< 0.237	12.100	< 0.322	4.940	0.090	0.027
1985	28462	5.370	< 0.178	31.800	< 0.242	5.780	0.095	0.020
1985	28492	6.760	< 0.008	6.910	0.352	5.900	< 0.438	< 0.036
1985	28512	8.050	< 0.025	41.100	0.355	14.100	0.424	< 0.028
1985	28522	3.920	< 0.104	8.580	0.344	5.900	< 0.058	< 0.011
1985	28527	6.850	< 0.009	30.000	0.246	4.410	< 0.250	< 0.037

Table 9b. Continued.

Year	Sample #	Mn	Tl	As	Hg	Se	Sn	Sb
Salem Harbor								
1984	33284	2.320	< 0.010	1.330	0.166	4.750	< 0.280	< 0.018
1984	33290	1.040	< 0.008	1.640	0.158	1.440	0.215	0.023
1984	33292	0.710	< 0.008	1.590	0.051	1.860	< 0.223	0.032
1984	33294	1.380	< 0.001	1.840	0.108	3.570	< 0.282	< 0.018
1984	33296	0.880	< 0.008	1.290	0.056	2.760	< 0.218	< 0.014
1984	33298	1.560	< 0.009	1.410	0.157	2.890	0.351	< 0.016
1984	33300	0.702	< 0.008	1.560	0.049	2.460	0.267	< 0.014
1984	33302	0.887	< 0.008	1.700	0.080	2.060	< 0.214	< 0.014
1984	33306	1.350	< 0.009	1.990	0.060	3.610	< 0.265	< 0.017
1984	33328	0.831	< 0.010	2.030	0.034	2.600	0.392	< 0.017
1985	27335	2.570	< 0.007	9.830	0.119	5.190	0.116	< 0.031
1985	27346	3.330	< 0.007	3.320	0.096	4.840	0.135	< 0.030
1985	27355	5.070	< 0.026	14.200	0.221	2.760	0.895	< 0.011
1985	27370	4.690	< 0.015	3.030	0.149	7.320	0.237	< 0.063
1985	27385	5.240	< 0.009	11.300	0.324	5.430	0.113	< 0.038
1985	27390	5.020	< 0.020	5.260	0.486	3.670	0.690	< 0.009
1985	27395	5.610	< 0.009	6.350	0.095	5.090	< 0.273	< 0.040
1985	27420	3.430	0.014	23.600	0.292	9.110	0.557	< 0.061
1985	27435	3.470	< 0.024	4.350	0.108	3.970	0.850	< 0.011
1985	27460	3.720	< 0.010	9.450			0.569	< 0.044
1986	31009	6.330		7.314	0.182	5.198	0.155	
1986	31014	4.882		7.135	0.143	5.422	0.089	
1986	31019	5.234		1.280	0.110	6.809	0.223	
1986	31024	6.234		11.285	0.357	8.248	0.192	
1986	31029	6.576		3.316	0.119	6.658	0.155	
1986	31034	4.513		8.902	0.308	8.193	0.135	
1986	31039	5.809		13.163	0.243	7.838	0.125	
1986	31044	6.816		4.119	0.170	6.216	0.126	
1986	31049	6.402		1.278	0.151	7.667	0.165	
1986	31074	7.703		16.047	0.768	13.790	0.284	
Boston Harbor								
1984	33340	1.270	< 0.008	2.450	0.067	1.040	< 0.217	< 0.014
1984	33342	2.140	< 0.007	1.440	0.188	3.250	0.232	< 0.013
1984	33346	1.430	< 0.009	1.760	0.153	4.090	0.319	< 0.017
1984	33348	1.490	< 0.013	3.370	0.210	4.800	< 0.370	< 0.024
1984	33350	2.050	< 0.013	1.910	0.128	3.790	< 0.358	< 0.023
1984	33356	0.694	< 0.009	3.790	0.055	2.800	< 0.242	< 0.015
1984	33358	0.968	< 0.007	0.944	0.123	2.830	< 0.207	< 0.013
1984	33360	1.070	< 0.001	2.390	0.108	3.470	0.295	< 0.018
1984	33362	1.310	< 0.006	1.190	0.063	2.150	< 0.177	< 0.011
1984	33396	0.995	< 0.007	0.742	0.086	1.970	< 0.208	< 0.013
1985	27175	2.520	< 0.011	27.000	1.390	9.400	0.578	< 0.045
1985	27185	5.110	< 0.028	6.310	0.158	3.970	< 0.968	< 0.012
1985	27200	1.750	< 0.031	15.200	0.551	3.260	< 1.080	< 0.014
1985	27205	3.000	< 0.013	31.900	1.370	8.920	0.851	< 0.054
1985	27210	2.340	0.008	8.420	1.460	9.670	0.506	< 0.028
1985	27220	4.150	< 0.013	8.210	0.697	8.060	0.756	< 0.056
1985	27230	4.680	< 0.008	5.900	0.672	5.210	0.607	< 0.033
1985	27275	5.950	< 0.031	7.010	0.655	4.480	< 1.060	< 0.013
1985	27295	4.720	< 0.012	13.500	1.130	6.080	0.383	< 0.051
1985	27320	1.990	< 0.008	3.810	0.169	4.910	< 0.242	< 0.036
1986	30637	2.583		4.168	0.721	6.101	0.802	
1986	30647	3.102		5.706	0.469	3.550	0.764	

Table 9b. Continued.

Year	Sample #	Mn	Tl	As	Hg	Se	Sn	Sb
Boston Harbor								
1986	30657	4.386		9.761	0.899	5.426	1.028	
1986	30682	3.399		3.146	0.521	5.364	0.837	
1986	30687	4.958		3.336	0.413	5.031	0.935	
1986	30692	5.387		4.476	0.453	7.539	1.058	
1986	30707	4.419		1.579	0.536	5.682	0.881	
1986	30712	5.048		2.911	0.990	7.477	1.450	
1986	30722	6.454		4.906	1.099	8.861	0.823	
1986	30762	4.667		1.860	0.455	5.744	0.361	
Quincy Bay								
1986	30823	3.238		7.232	0.828	5.402	0.116	
1986	30828	5.960		13.419	1.116	4.330	0.261	
1986	30833	2.566		3.126	0.169	3.572	0.083	
1986	30838	4.606		5.545	0.705	6.221	0.192	
1986	30843	3.705		6.316	0.928	6.682	0.171	
1986	30848	4.294		23.125	1.052	7.415	0.221	
1986	30878	6.405		11.249	1.144	8.421	0.270	
1986	30928	2.872		21.602	0.341	3.776	0.071	
1986	30938	6.443		30.910	0.804	9.100	0.234	
1986	30958	8.760		9.472	0.684	3.666	0.235	
Buzzards Bay								
1984	20642	6.070	< 0.023	12.200	0.085	1.740	< 0.797	< 0.010
1984	20651	5.590	< 0.015	18.100	0.062	3.230	0.130	< 0.012
1984	20666	7.050	< 0.024	9.260	0.192	2.970	< 0.843	< 0.011
1984	20676	3.190	< 0.015	37.400	0.306	4.530	< 0.237	< 0.058
1984	20681	6.810	< 0.022	22.900	0.047	2.980	< 0.754	< 0.009
1984	20706	4.140	< 0.055	11.800	0.478	7.680	0.800	0.051
1984	20711	2.660	< 0.025	49.000	0.233	5.430	0.276	0.046
1984	20726	6.000	< 0.016	13.600	0.098	3.520	< 0.127	< 0.013
1984	20737	3.450	< 0.037	15.400	0.383	6.310	0.475	< 0.029
1984	20767	3.180	< 0.025	14.800	0.186	6.190	0.433	< 0.020
1985	26950	4.200	< 0.010	46.100	0.244	3.720	< 0.422	< 0.041
1985	26955	4.220	< 0.169	87.300	< 0.230	3.440	< 0.094	< 0.017
1985	26965	5.590	< 0.006	10.100	0.190	4.180	< 0.251	< 0.025
1985	26975	5.910	< 0.007	26.600	0.181	7.650	< 0.308	< 0.030
1985	27005	4.630	< 0.016	20.500	0.225	8.720	< 0.670	< 0.065
1985	27010	1.940	< 0.009	17.600	0.081	6.200	< 0.362	< 0.035
1985	27015	4.650	< 0.005	15.400	0.101	4.540	< 0.225	< 0.022
1985	27040	5.730	< 0.185	20.100	< 0.252	4.740	0.098	< 0.019
1985	27045	< 3.610	< 0.023	6.270	0.184	5.650	< 0.943	< 0.092
1985	27070	5.090	< 0.131	18.400	< 0.171	3.490	0.060	< 0.014
1986	30416	< 5.326		48.734	0.352	8.182	0.105	
1986	30431	< 8.704		37.731	0.381	7.736	0.132	
1986	30436	< 9.307		85.164	0.538	9.690	0.205	
1986	30446	5.440		141.497	0.358	4.049	0.365	
1986	30461	3.855		71.878	0.520	5.455	< 0.027	
1986	30476	4.911		96.122	1.130	9.195	0.246	
1986	30481	3.382		8.632	0.127	5.457	< 0.053	
1986	30491	< 8.468		78.509	0.205	6.882	0.109	
1986	30511	4.440		16.912	0.200	4.382	0.090	
1986	30516	4.349		90.819	0.225	4.325	0.102	
1986	30521	4.994		23.933	0.214	4.612	0.110	

Table 9b. Continued.

Year	Sample #	Mn	Tl	As	Hg	Se	Sn	Sb
Buzzards Bay								
1986	30526	4.588		24.998	0.163	4.641	0.121	
1986	30531	5.176		41.985	0.117	4.694	0.121	
1986	30536	6.249		39.511	0.158	5.596	0.095	
Narragansett Bay								
1984	22203	3.260	< 0.032	5.840	0.322	0.394	0.440	< 0.058
1984	22208	4.220	< 0.046	25.400	0.209	2.800	< 1.610	< 0.020
1984	22218	4.810	< 0.035	8.820	0.295	2.680	< 1.230	< 0.016
1984	22233	4.840	< 0.031	16.800	0.136	2.280	< 1.070	< 0.014
1984	22248	3.600	< 0.036	16.700	0.342	5.530	1.030	< 0.066
1984	22253	3.660	< 0.031	76.500	0.197	3.230	< 0.863	< 0.055
1984	22273	7.520	< 0.036	33.900	0.504	3.260	1.170	< 0.065
1984	22278	6.200	< 0.035	34.800	0.425	2.930	2.830	< 0.064
1984	22288	4.270	< 0.043	9.420	0.342	5.490	< 1.220	< 0.078
1984	22293	5.750	< 0.028	57.800	0.241	5.810	< 0.785	< 0.050
1984	22298	3.710	< 0.403	20.100	0.297	5.520	< 1.170	< 0.075
1984	22308	4.920	< 0.063	7.060	0.314	7.460	< 1.790	< 0.114
1984	22313	4.710	< 0.035	22.200	0.251	7.960	< 0.986	< 0.063
1985	26260	8.930	< 0.040	27.200	0.232	11.300	< 1.660	< 0.162
1985	26300	5.320	< 0.024	87.500	0.166	8.990	< 0.990	< 0.096
1985	26325	3.910	< 0.018	13.000	0.122	7.550	< 0.728	< 0.071
1985	26330	9.810	< 0.006	11.100	0.175	1.890	0.843	< 0.024
1985	26335	6.680	< 0.024	61.500	0.217	8.050	< 0.968	< 0.094
1985	26360	4.700	< 0.199	13.600	< 0.271	3.940	0.076	0.031
1985	26385	5.730	< 0.208	9.420	< 0.283	3.580	0.158	< 0.022
1985	26390	7.440	< 0.142	57.000	< 0.193	2.660	0.130	0.018
1985	26395	7.940	< 0.008	15.300	0.132	5.690	0.198	< 0.031
1985	26405	7.460	< 0.026	11.800	0.212	6.760	0.283	< 0.105
1986	30209	6.003		37.773	0.277	9.434	0.862	
1986	30214	5.631		8.356	0.122	11.340	0.626	
1986	30219	6.628		31.781	0.223	11.069	0.693	
1986	30224	< 10.952		52.058	< 0.411	11.045	0.307	
1986	30229	5.274		7.926	0.252	4.892	0.805	
1986	30239	2.429		5.448	0.064	2.481	0.267	
1986	30249	< 13.502		11.133	0.308	9.187	0.520	
1986	30264	< 14.711		28.542	< 0.552	8.401	0.721	
1986	30279	7.848		9.562	0.101	3.705	0.377	
1986	30314	< 6.798		16.980	0.155	5.369	0.404	
Eastern Long Island Sound								
1984	20828	6.180	< 0.132	< 9.490	0.450	7.780	< 1.040	< 0.102
1984	20843	8.940	< 0.191	< 13.700	0.525	8.090	2.610	< 0.147
1984	20864	7.960	< 0.176	< 12.600	0.426	9.280	1.500	< 0.136
1984	20874	4.080	< 0.165	16.100	0.672	7.510	1.410	< 0.127
1984	20884	8.420	< 0.182	40.400	0.211	9.560	< 0.080	
1984	20889	5.040	< 0.129	9.950	0.197	7.330	2.650	< 0.057
1984	20894	8.040	< 0.151	15.100	0.284	11.800	< 5.230	< 0.066
1984	20898	6.290	< 0.150	< 10.700	0.460	7.260	< 1.180	< 0.115
1984	20943	4.760	< 0.090	26.200	0.542	7.680	1.150	< 0.069
1984	20964	5.560	< 0.278	< 20.000	0.398	11.500	< 2.190	< 0.215
1985	26645	6.020	< 0.015	13.800	0.304	7.030	< 0.604	< 0.059
1985	26690	< 4.070	< 0.026	374.000	0.208	9.370	< 1.060	< 0.103
1985	26700	< 3.310	< 0.021	26.200	0.169	14.800	< 0.864	< 0.084

Table 9b. Continued.

Year	Sample #	Mn	Tl	As	Hg	Se	Sn	Sb
Eastern Long Island Sound								
1985	26715	4.770	< 0.022	5.480	0.124	13.400	< 0.890	< 0.087
1985	26720	5.450	< 0.396	17.800	< 0.537	4.280	< 0.219	< 0.041
1985	26725	4.830	< 0.227	15.600	< 0.308	4.960	< 0.125	< 0.023
1985	26740	< 3.880	< 0.025	2.460	0.085	6.070	< 1.010	< 0.099
1985	26760	4.210	< 0.015	74.500	0.205	8.570	< 0.610	< 0.059
1985	26765	4.700	< 0.397	14.400	< 0.540	10.800	0.211	< 0.041
1985	26780	2.940	< 0.007	7.760	0.066	4.290	< 0.295	< 0.029
1986	30008	8.230		10.006	0.328	3.964	0.537	
1986	30013	< 26.479		16.966	0.419	10.153	0.522	
1986	30018	6.653		14.585	0.241	5.387	0.311	
1986	30028	< 24.103		40.057	0.247	9.977	0.475	
1986	30033	3.106		1.166	0.039	3.283	0.141	
1986	30038	< 18.252		18.822	0.442	16.223	0.526	
1986	30048	< 10.930		5.143	0.173	6.384	0.191	
1986	30058	4.736		4.439	0.326	6.928	0.415	
1986	30063	2.076		1.979	0.048	2.371	0.078	
1986	30073	2.551		2.018	0.171	4.072	0.394	
1986	30098	4.655		1.864	0.086	3.913	0.100	
1986	30108	2.587		2.691	0.064	3.609	< 0.119	
1986	30118	6.765		15.757	0.103	5.402	0.163	
1986	30148	7.191		3.102	0.063	3.949	0.178	
Western Long Island Sound								
1984	21383	8.180	< 0.294	< 21.100	0.613	11.800	3.260	< 0.227
1984	21388	8.390	< 0.105	< 7.540	0.427	4.880	0.984	< 0.081
1984	21393	2.510	< 0.049	4.040	0.134	4.370	0.414	< 0.038
1984	21404	9.420	< 0.159	17.000	0.436	6.390	1.350	< 0.122
1984	21414	5.320	< 0.097	< 6.980	0.331	6.330	0.828	< 0.075
1984	21419	4.300	< 0.065	< 4.700	0.266	7.510	0.727	< 0.051
1984	21428	4.700	< 0.169	< 12.100	0.464	9.410	3.030	< 0.130
1984	21453	6.850	< 0.069	5.470	0.144	7.340	< 2.380	< 0.030
1984	21468	9.190	< 0.078	5.880	0.090	6.220	< 2.690	< 0.034
1984	21509	< 5.880	< 0.204	4.950	0.148	8.220	< 7.070	< 0.090
1985	26515	9.100	< 0.041	60.200	0.284	10.600	< 1.690	< 0.165
1985	26535	< 4.100	< 0.026	13.500	0.299	6.680	0.773	< 0.104
1985	26540	< 11.700	< 0.074	102.000	0.595	10.400	< 3.040	< 0.296
1985	26555	7.610	< 0.784	125.000	< 1.070	9.320	< 0.434	< 0.081
1985	26590	3.960	< 0.014	39.300	0.321	8.650	0.221	< 0.056
1985	26595	7.110	< 0.483	34.000	< 0.656	5.480	< 0.267	< 0.050
1985	26600	< 9.650	< 0.061	8.620	0.493	10.600	< 2.520	< 0.245
1985	26605	5.560	< 0.006	103.000	0.131	3.770	0.155	< 0.023
1985	26610	10.700	< 0.351	182.000	< 0.477	6.390	0.160	< 0.036
1985	26625	7.330	< 0.033	40.700	0.191	6.790	0.695	< 0.133
1986	29827	5.343		2.917	0.273	7.042	0.986	
1986	29837	11.707		6.974	0.312	6.004	1.490	
1986	29842	8.285		50.413	0.195	6.963	0.440	
1986	29847	7.092		2.538	0.145	4.412	0.436	
1986	29852	7.273		5.556	0.565	6.553	1.105	
1986	29857	5.536		4.298	0.086	4.871	0.440	
1986	29867	< 12.703		37.898	0.343	18.064	0.453	
1986	29886	6.540		19.433	0.254	5.892	0.459	
1986	29891	5.896		3.942	0.235	5.042	1.061	
1986	29901	< 16.207		3.278	0.257	4.033	0.541	
1986	29931	2.929		1.437	0.095	4.490	0.411	

Table 9b. Continued.

Year	Sample #	Mn	Tl	As	Hg	Se	Sn	Sb
Western Long Island Sound								
1986	29961	6.203		6.043	0.121	6.025	0.725	
1986	29966	< 56.970		10.324	1.062	12.008	1.253	
Raritan Bay								
1985	27607	13.100	< 0.046	61.100	0.507	15.900	< 1.330	< 0.196
1985	27632	6.560	< 0.016	138.000	0.319	10.700	< 0.478	< 0.070
1985	27642	11.300	< 0.225	100.000	< 0.305	6.110	0.564	< 0.023
1985	27667	13.800	0.048	17.600	1.650	12.700	< 1.400	< 0.206
1985	27672	6.670	< 0.307	53.400	< 0.418	7.380	0.584	< 0.032
1985	27677	6.990	< 0.022	5.750	0.870	7.290	< 0.850	< 0.094
1985	27702	18.500	< 0.064	34.700	1.430	14.100	< 1.870	< 0.276
1985	27707	18.300	< 0.064	32.700	0.823	15.400	< 1.850	< 0.273
1985	27712	17.900	< 0.062	51.700	0.460	14.100	< 1.810	< 0.266
1985	27727	6.630	< 0.610	117.000	0.907	9.830	0.650	< 0.063
1986	29245	8.068		57.245	0.863	9.038	0.483	
1986	29250	6.020		41.300	0.526	5.991	0.446	
1986	29265	4.845		6.215	0.720	6.266	0.357	
1986	29270	6.236		34.960	0.667	6.012	0.373	
1986	29280	3.316		31.490	1.263	10.280	0.344	
1986	29305	5.993		17.774	0.858	7.114	0.345	
1986	29335	7.610		53.253	0.398	6.337	0.357	
1986	29340	3.294		42.813	1.497	12.622	0.607	
1986	29370	5.770		43.901	0.423	12.948	0.373	
1986	29375	3.404		26.998	0.712	11.881	0.365	
Great Bay								
1985	27812	3.590	< 0.201	3.880	< 0.274	5.150	< 0.111	< 0.021
1985	27822	6.040	< 0.007	6.070	0.187	5.570	< 0.210	< 0.031
1985	27837	4.890	< 0.005	3.140	0.098	2.820	< 0.155	< 0.023
1985	27842	4.660	< 0.012	8.750	0.205	6.530	< 0.340	< 0.050
1985	27862	3.240	< 0.006	4.430	0.112	4.210	< 0.169	< 0.025
1985	27867	4.120	< 0.219	5.130	< 0.298	5.040	< 0.121	< 0.023
1985	27887	4.720	< 0.308	5.250	< 0.419	5.940	< 0.171	< 0.032
1985	27897	3.950	< 0.011	3.510	0.173	3.810	< 0.320	< 0.047
1985	27907	5.700	< 0.004	4.130	0.164	4.710	< 0.125	< 0.019
1985	27912	4.920	< 0.006	5.210	0.206	4.950	< 0.171	< 0.025
1986	29645	4.587		8.661	0.107	7.178	< 0.196	
1986	29650	5.961		21.352	0.249	10.736	< 0.255	
1986	29665	6.954		16.718	0.380	8.624	< 0.255	
1986	29680	5.451		4.827	0.192	4.777	0.027	
1986	29690	5.017		5.294	0.250	6.173	0.075	
1986	29700	4.471		4.800	0.212	6.292	0.067	
1986	29715	5.181		6.618	0.148	4.794	0.039	
1986	29720	17.980		6.740	0.450	6.052	0.169	
1986	29735	4.802		7.401	0.206	6.026	0.038	
1986	29745	4.220		3.234	0.134	8.037	0.124	
Delaware Bay								
1984	21564	5.800	< 0.138	< 9.900	0.561	7.690	1.650	< 0.106
1984	21574	7.050	< 0.116	16.400	0.329	5.290	< 4.030	< 0.051
1984	21585	4.570	< 0.128	< 9.180	0.436	7.130	< 1.000	< 0.099
1984	21589	6.580	< 0.108	< 7.740	0.368	8.360	< 0.847	< 0.083

Table 9b. Continued.

Year	Sample #	Mn	Tl	As	Hg	Se	Sn	Sb
Delaware Bay								
1984	21595	6.220	0.201	< 14.400	0.618	8.710	< 1.580	< 0.155
1984	21600	6.670	< 0.056	7.850	0.497	4.410	0.927	< 0.024
1984	21639	6.310	< 0.168	7.020	0.439	8.820	< 5.830	< 0.074
1984	21655	6.010	< 0.184	< 13.200	0.446	6.670	1.890	< 0.142
1984	21660	6.830	< 0.220	5.920	0.533	6.370	< 1.730	< 0.170
1984	21680	6.410	< 0.244	25.800	0.349	8.820	< 1.920	< 0.188
1985	24769	9.520	< 0.085	11.100	< 0.372	4.710	< 3.010	0.047
1985	24789	3.970	< 0.037	12.100	0.151	2.720	< 0.384	< 0.042
1985	24794	6.140	< 0.107	39.500	0.247	6.410	< 1.100	< 0.120
1985	24814	10.000	< 0.175	24.400	0.101	8.160	< 1.800	< 0.197
1985	24839	8.520	< 0.149	34.500	0.429	9.550	0.545	< 0.167
1985	24849	10.100	< 1.620	8.030	< 2.200	4.270	< 0.895	< 0.167
1985	24864	4.710	< 0.638	9.950	< 0.866	2.860	< 0.353	< 0.066
1985	24869	5.880	< 0.103	46.400	0.415	4.800	0.775	< 0.116
1985	24879	5.090	< 0.546	23.500	< 0.742	3.030	< 0.302	< 0.056
1985	24894	9.160	< 0.112	7.460	0.065	5.230	< 1.150	< 0.126
1986	29449	< 12.158		30.385	0.716	18.847	< 0.781	
1986	29469	3.718		17.965	0.392	9.167	< 0.319	
1986	29474	5.803		261.678	0.270	11.737	< 0.497	
1986	29479	6.547		10.362	0.835	15.561	< 0.561	
1986	29489	7.897		34.206	0.717	17.371	< 0.677	
1986	29494	3.888		31.310	0.496	9.414	< 0.333	
1986	29509	14.801		35.757	0.191	7.703	< 0.951	
1986	29524	17.021		147.663	0.160	3.172	< 0.151	
1986	29544	6.901		29.317	1.079	12.072	< 0.443	
1986	29579	8.080		30.423	0.440	7.443	< 0.415	
Upper Chesapeake Bay								
1985	22767	13.700	< 0.091	5.000	0.141	8.920	0.517	< 0.287
1985	22772	7.500	< 0.068	3.210	0.059	11.200	0.348	< 0.216
1985	22777	< 7.240	< 0.108	2.320	0.093	9.660	0.684	< 0.344
1985	22782	< 13.600	< 0.203	3.950	0.175	13.100	0.795	< 0.645
1985	22787	10.100	< 0.078	3.360	0.068	7.230	0.353	< 0.248
1985	22792	14.500	< 0.112	5.290	0.097	7.590	0.507	< 0.357
1985	22797	7.970	< 0.072	3.700	0.063	8.720	0.414	< 0.230
1985	22802	6.540	< 0.059	3.040	0.174	7.150	0.268	< 0.189
1985	22807	< 5.660	< 0.085	3.280	0.161	8.330	0.381	< 0.268
1985	22817	< 10.600	< 0.159	4.860	0.219	8.230	0.334	< 0.504
1986	31818	4.571		1.190	0.115	7.294	0.694	
1986	31828	16.692		0.983	0.140	7.491	0.422	
1986	31833	4.716		0.938	0.113	5.586	0.653	
1986	31848	4.108		1.050	0.098	5.548	0.438	
1986	31878	3.265		0.851	0.078	6.377	0.181	
1986	31888	5.110		0.973	0.105	8.009	< 0.035	
1986	31908	5.667		0.878	0.073	7.671	0.250	
1986	31918	4.331		1.074	< 0.108	8.639	0.329	
1986	31943	3.532		0.882	0.063	6.054	0.199	
1986	31953	6.627		1.352	< 0.138	10.465	0.341	
Lower Chesapeake Bay								
1984	33218	3.910	< 0.027	8.890	0.480	18.200	2.170	< 0.050
1984	33220	5.190	< 0.104	10.700	0.493	11.300	1.450	< 0.190
1984	33222	4.560	< 0.042	9.290	0.396	11.500	< 0.577	< 0.076

Table 9b. Continued.

Year	Sample #	Mn	Tl	As	Hg	Se	Sn	Sb
Lower Chesapeake Bay								
1984	33238	4.640	< 0.034	13.600	0.618	15.900	0.937	< 0.062
1984	33248	5.260	< 0.085	7.540	< 1.110	12.600	2.630	< 0.154
1984	33252	4.340	< 0.031	8.240	0.570	12.000	< 0.428	< 0.057
1984	33256	4.710	< 0.031	10.400	0.397	13.600	1.170	< 0.056
1984	33258	2.810	< 0.022	6.920	0.366	11.300	< 0.304	< 0.040
1984	33260	3.700	< 0.050	7.800	0.652	15.900	< 0.684	< 0.090
1984	33266	5.430	< 0.032	11.000	0.584	16.700	< 0.438	< 0.058
1985	22438	3.450	< 0.026	9.460	0.183	10.300	0.301	< 0.030
1985	22468	3.460	< 0.026	8.720	0.244	12.900	0.798	0.030
1985	22473	3.230	< 0.021	7.760	0.192	8.480	0.761	< 0.023
1985	22478	3.450	< 0.033	8.490	0.281	9.850	0.854	< 0.036
1985	22498	3.380	< 0.022	8.130	0.239	7.930	1.110	< 0.024
1985	22503	2.630	< 0.032	8.250	0.278	10.000	0.866	< 0.036
1985	22508	2.460	< 0.030	9.020	0.277	9.630	0.848	< 0.034
1985	22517	2.330	< 0.029	9.940	0.181	9.140	1.170	< 0.032
1985	22538	2.860	< 0.027	10.300	0.187	9.350	1.320	< 0.030
1985	22568	2.690	< 0.033	7.000	0.171	10.600	1.400	< 0.037
1986	32064	1.936		6.972	0.191	7.963	0.092	
1986	32069	2.645		1.871	0.111	7.035	0.063	
1986	32109	2.794		7.071	0.285	10.450	0.155	
1986	32114	3.884		7.221	0.331	8.958	0.115	
1986	32129	4.306		7.505	< 0.134	6.979	0.051	
1986	32134	4.667		3.013	0.140	6.400	0.074	
1986	32159	3.150		5.449	0.160	8.115	0.062	
1986	32164	4.773		2.514	< 0.149	8.182	0.113	
1986	32179	3.351		9.518	0.261	7.520	0.106	
1986	32194	5.402		2.720	0.243	8.082	0.128	
Elizabeth River								
1986	32352	< 64.328		< 9.507	< 4.624	14.816	2.643	
1986	32372	8.869		2.267	< 0.552	14.374	0.736	
1986	32377	22.855		< 2.925	< 1.423	21.655	1.084	
1986	32382	10.365		2.195	< 0.430	11.198	0.738	
1986	32387	7.923		2.762	0.308	9.054	0.626	
1986	32392	8.914		2.440	0.187	12.038	0.634	
1986	32402	10.666		2.384	< 0.190	7.788	0.506	
1986	32406	22.009		< 2.817	< 1.370	11.524	1.305	
1986	32436	14.565		2.031	< 0.363	17.431	0.553	
1986	32442	13.108		2.098	< 0.544	19.065	0.829	