

# TOXIC CONTAMINANTS IN MARINE AND ANADROMOUS FISHES FROM PUGET SOUND, WASHINGTON

RESULTS OF THE  
PUGET SOUND AMBIENT MONITORING PROGRAM  
FISH COMPONENT, 1989-1999

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## Abstract

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This report is the first comprehensive data summary of the Puget Sound Ambient Monitoring Program's (PSAMP) Fish Component. Its primary purpose is to provide a brief background of the PSAMP Fish Component, an overview of its sampling methods, a comprehensive summary of contaminant exposure data collected by the PSAMP, and a summary of key findings.

In the period covering 1989 through 1999 we sampled tissues or other matrices from ten marine or anadromous fish species from over 100 stations. Our sampling covered the full geographic range of the Puget Sound and southern Georgia Basin, an area of marine and estuarine waters exceeding 2300 km<sup>2</sup>, and with a shoreline length exceeding 2100 km. Data for toxic contaminants from 2,123 composite or individual samples are summarized here, including 1,446 muscle samples, 290 liver samples, 88 whole-body samples, and 299 bile samples. Fifty-six of the 126 individual compounds or elements monitored by the PSAMP Fish Component were measured above the method detection limit in at least one sample during this period. This group of detected compounds includes all four of the metals for which we analyzed (copper, arsenic, mercury and lead), four of seven PCB Aroclors, 14 of 15 PCB congeners, 13 of 23 pesticides, biliary metabolites (as fluorescing aromatic compounds, or FACs) of benzo(a)pyrene, phenanthrene, and naphthalene, three of four organotins, and 15 Other Organic Compounds (including aromatic hydrocarbons, phthalates, phenols, halogens, ethers, etc.). Of these groups, the metals, PCBs, and FACs were the only compounds detected consistently.

Data are summarized by frequency of detection in each matrix for all contaminants, followed by species-specific summary statistics for the most commonly detected compounds, and finally, an appendix of species-location-specific summary statistics. Pertinent biological data for these samples (e.g., fish age, size, and tissue lipid concentrations, are presented. Key findings from previously published reports are also summarized for PCBs, pesticides, mercury, lead, arsenic, copper, and FACs.

## Acknowledgements

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This long-term monitoring study has been made possible only with the dedication and support of dozens of technical and professional staff in the Washington Department of Fish and Wildlife. In particular we thank Jim Beam, Paul Clarke, Sue Hoffmann, Eric Warner, and Warner Lew. We also thank Kurt Dobszinsky, the captain of the F/V *Chasina*, and his crew for providing excellent working conditions and valuable knowledge of Puget Sound fisheries and fish distributions. Many volunteers and collaborators from a wide variety of organizations also contributed valuable time and effort to our field sampling.

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Fritz Grothkopp of the King County Department of Natural Resources METRO labs and Gina Ylitalo of the National Marine Fisheries Service Environmental Conservation Division labs processed our samples and data with great attention to detail and a high degree of professionalism. Dr. David Kalman of the University of Washington's School of Public Health and Community Medicine provided quality assurance/quality control for most of our data.

Finally, we dedicate this report to Kit Hoeman, a member of our PSAMP team who died in 1997.

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## Scope and Purpose

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The primary purpose of this report is to provide a comprehensive overview of sampling methods and contaminant exposure data collected by the Fish Component of the Puget Sound Ambient Monitoring Program (PSAMP). Contaminant exposure in our indicator species is measured as concentrations of selected toxics in tissues, and exposure data are summarized here using mean, maximum, minimum, standard deviation, and sample size for selected Puget Sound sampling locations.

Subsets of these data have been analyzed and published for individual species (O'Neill et al. 1995, Puget Sound Water Quality Authority 1995, West and O'Neill 1995, O'Neill et al. 1998, Puget Sound Water Quality Action Team 1998, West and O'Neill 1998, Puget Sound Water Quality Action Team 2000 – see Table1). In these analyses, we paid considerable attention to the biological and environmental factors (such as fish age, habitat, and tissue lipid levels) that may strongly influence the concentration of contaminants in fish tissues. Monitoring tissue contaminant levels through time or comparing them geographically without accounting for such bioaccumulation factors can result in spurious conclusions. Findings from these reports are also summarized in this report. In-depth analyses continue, and will provide additional information on spatial and temporal trends in contaminant exposure in Puget Sound fishes.

Table 1. Summary of reports containing analyses of PSAMP Fish Component contaminant data.

Citation	Topics Covered
Puget Sound Water Quality Action Team 2000	Results of 1995 and 1999 study of contaminants in Pacific herring. Reviews lead in Sinclair Inlet English sole, Documents increasing trend in liver disease in English sole from Elliott Bay. Introduces Focus Studies of Elliott Bay and Sinclair Inlet. First data reported for polycyclic aromatic hydrocarbons (PAHs) in PSAMP species. Shows sediment-threshold concentration of PAHs that may impair reproduction in English sole.
Puget Sound Water Quality Action Team 1998	Comparison of liver disease and PCB concentration in English sole from 35 Puget Sound locations. Relationship between sediment-PCB concentration and PCBs in English sole muscle tissue. Characterization of location-contamination using sediment concentrations of PCBs and PAHs. Risk factors (sediment-PAHs, muscle-PCBs, and fish age) for developing liver disease in English sole. Mercury and PCBs in quillback rockfish. Location-comparison of PCBs in coho salmon. Correlation of PCBs with lipids in salmon.
O'Neill et al. 1998	PCBs in coho and chinook salmon. Highlights differences between the species, between river-caught and marine-caught coho salmon, and between hatchery and wild coho salmon. Lipids are an important covariate. Discusses reasons for observed differences and comments on health of Pacific salmon in Puget Sound
West and O'Neill 1998	Accumulation of PCBs and mercury in quillback rockfish. Highlights location-differences in age-specific mercury concentration, and the importance of gender on PCB accumulation
West 1997	Overview of anthropogenic stressors on marine organisms in Puget Sound/Georgia Basin. Contaminant-stressors in the context of other stressors.
PSAMP 1996	Results of Washington/BritishColumbia transboundary contaminant study.
Puget Sound Water Quality Authority 1995	Summary of PSAMP's English sole sampling locations in Puget Sound. Summary of arsenic in English sole.
O'Neill et al. 1995	Overview of fish contaminant data, 1989-93. Highlights English sole and salmon PCBs, relationship between lipids and PCBs in salmon, and lead and fish age in English sole.
West and O'Neill 1995	Summary of rockfish contaminant data on composite samples. Highlights important covariates (fish age, length, and growth rate) of mercury and PCBs in rockfish.
Puget Sound Water Quality Authority 1993	Location-specific concentrations of PCBs in English sole. Metals and organics in rockfish. Contaminants in Pacific cod.
Puget Sound Water Quality Authority 1992	Introduces PSAMP Fish Component plan to sample contaminants in fish tissues. First PSAMP summaries of lead, PCBs and of liver disease.

# Background

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To address concerns over declining water quality in Puget Sound and its potential consequences to fish, wildlife, and humans, the State of Washington formed the Puget Sound Ambient Monitoring Program (PSAMP -- see Monitoring Management Committee 1988a). PSAMP is a multi-agency consortium of scientists and natural resource managers working in an integrated fashion to assess and monitor the environmental health of the Puget Sound ecosystem and to identify environmental problems. The program was initiated in 1989 and coordinates the activities of four state agencies in conducting ambient monitoring of eight major ecosystem components, including quality of sediments, freshwater and saltwater, health of fishes, shellfish, birds, and mammals, and condition of habitats. In fulfilling its mandate, the PSAMP evaluates and monitors status and trends using five key indicators: chemical contamination, biological (e.g., fecal) contamination, condition of nearshore habitats, abundance of organisms, and water quality.

As a participating PSAMP agency, the Washington Department of Fish and Wildlife (WDFW) is charged with implementing the Fish Component, a study of contaminants in Puget Sound Marine fishes. WDFW designed (Stern 1989), implemented, and subsequently modified the PSAMP Fish Component to meet the overall PSAMP goals. PSAMP has also undergone external review of its goals, objectives, and sampling design (Shen 1995) and has developed a conceptual model for the Puget Sound (Newton et al. 1998) that is used to further refine goals and appropriate sampling plans. The current Fish Component goals have been modified from the original to reflect recommendations from these efforts, and are subject to further modifications as the conceptual model is created and procedures are further defined.

Current goals of the PSAMP Fish Monitoring Component are to:

- assess the status and spatial and temporal trends of chemical contamination in Puget Sound fishes and macroinvertebrates,
- assess the effects of contaminant exposure on the health of Puget Sound fishes and macroinvertebrates, and
- provide contaminant information to Public Health agencies for their assessments of the safety of consuming Puget Sound seafoods.

Researchers from the 1970s and 1980s used indicators of chemical exposure (e.g., contaminant levels in sediments and fish liver tissue) and biomarkers (e.g., prevalence of liver lesions and other diseases) to document environmental problems in marine fishes, especially English sole (*Pleuronectes vetulus* -- Malins et al. 1980b, Malins et al. 1982, Malins et al. 1984a, Malins et al. 1984b). Subsequent studies examined the degree of chemical contamination in urban bays (e.g. Remedial Investigation Feasibility Studies and the National Status and Trends studies) and the exposure of urban anglers to contamination through consumption of fish (Landolt et al. 1987). The PSAMP Fish Component integrated and used this information as a starting point for PSAMP efforts.

To provide a broad overview of contamination and associated adverse effects in the community of Puget Sound marine fishes, the PSAMP Fish Component has monitored contaminant concentrations in ten fish species representing different life history and feeding patterns: English sole (*Pleuronectes vetulus*), starry flounder (*Platichthys stellatus*) copper rockfish (*Sebastes caurinus*), quillback rockfish, (*S. maliger*), brown rockfish (*S. auriculatus*), yelloweye rockfish (*S. ruberrimus*), chinook salmon (*Oncorhynchus tshawytscha*), coho salmon (*O. kisutch*), Pacific cod (*Gadus macrocephalus*), and Pacific herring (*Clupea pallasii*). Particular emphasis is placed on English sole because they are abundant and widely distributed in Puget Sound, live in direct contact with sediments (the primary sink for contaminants in marine ecosystems), and the ecotoxicology of the species has been well studied in Puget Sound (Johnson and Landahl 1994).

# Materials and Methods

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## Sampling Surveys by Species

### Flatfish

English sole (*Pleuronectes vetulus*), and to a lesser extent starry flounder (*Platichthys stellatus*), have been sampled for contaminant exposure. Both species are bottom-dwelling flatfishes that are widely distributed throughout Puget Sound. Because of their close association with sediments and their consumption of benthic<sup>1</sup> invertebrates (Becker 1984), flatfishes are likely to reflect contamination patterns of bottom sediments. English sole and starry flounder also represent a food-web pathway through which contaminants can move from sediments to humans, because they are captured and consumed by anglers (McCallum 1985, Landolt et al. 1987). Previous studies showed that English sole had high concentrations of tissue contamination and disease in many urbanized areas of Puget Sound (e.g., Malins et al. 1980a, Malins et al. 1980b, Malins et al. 1982, Malins et al. 1984a, Malins et al. 1984b, Malins et al. 1985a, Malins et al. 1985b, Malins et al. 1987).

English sole were collected with a 400-mesh Eastern otter trawl (Puget Sound Estuary Program 1990, alternative method) in April and May at 54 locations and starry flounder from two locations throughout Puget Sound and the Georgia Basin from 1989 and 1991-1999 (Figure 1, Table 2). Eight locations were sampled regularly for English sole in this period: Thea Foss Waterway (Commencement Bay), Seattle Waterfront (Elliott Bay), Port Gardner (near Everett), Sinclair Inlet (near Bremerton), North Hood Canal, and the Strait of Georgia. All other locations were sampled at less regular intervals. For analysis, stations for all species were subjectively classified as "urban", "near-urban" or "non-urban" on the basis of their proximity to urban or industrialized areas (Tables 2-5).

On board the sampling vessel, fish were removed one-at-a-time from the live-tank, killed with a blow to the head, and assigned a specimen number. The body cavity of each was opened, and the sex and reproductive state determined. Fish were also examined for grossly visible internal abnormalities, and the liver and interopercle (eyed-side) of each specimen removed. Interopercles were labeled and stored for later age-estimation. Liver tissue was then prepared for later histological and chemical analyses. On some occasions liver tissue was retained to create composites for chemical analyses.

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<sup>1</sup>on the seafloor.

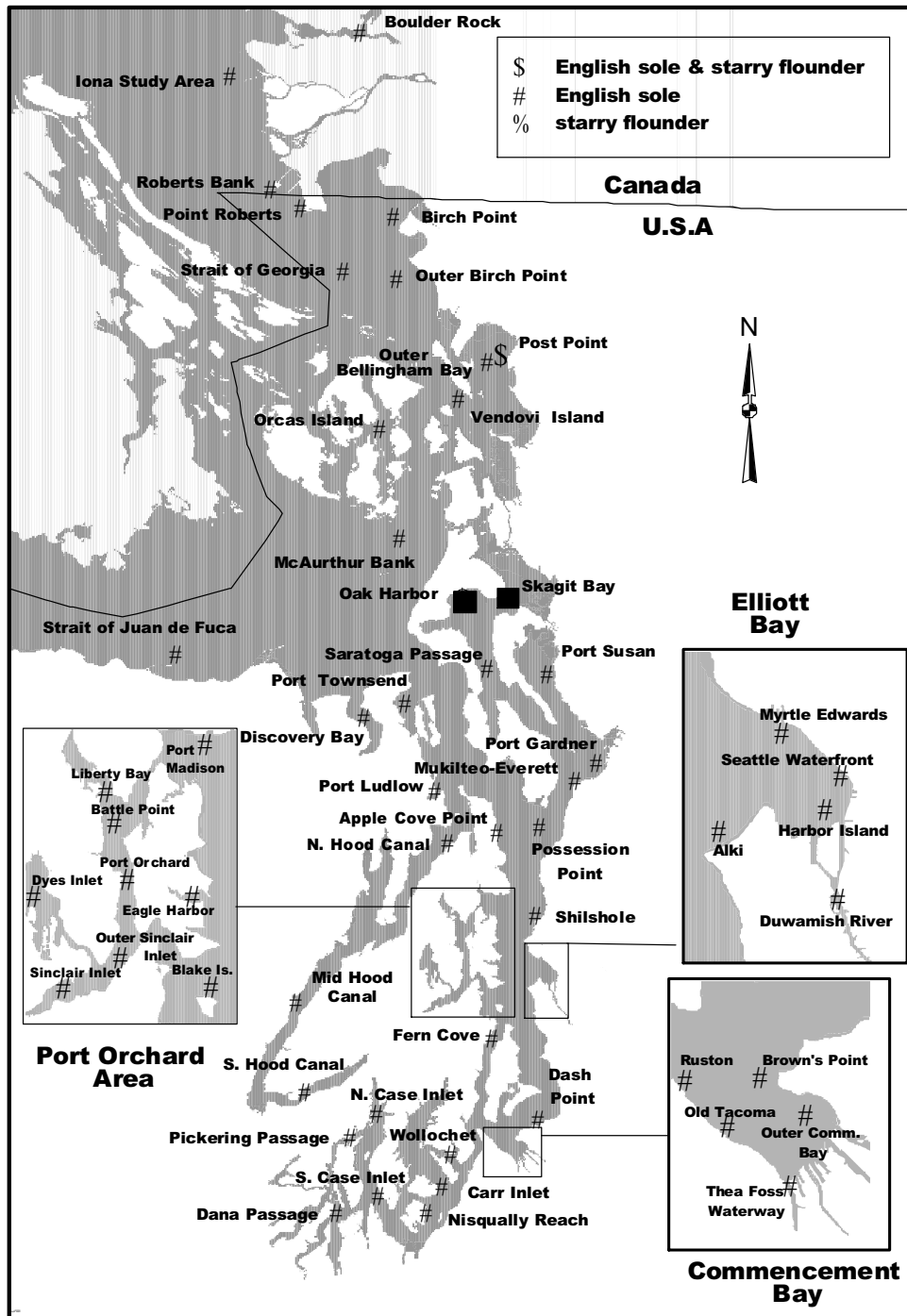


Figure 1. Locations where English sole and starry flounder were sampled for PSAMP contaminant analysis, 1989-1999. Not all locations were sampled in all years.

Table 2. Frequency of sampling English sole by the PSAMP Fish Component, 1989 through 1999. Bolded entries indicate baseline stations that are sampled annually. “●” indicates stations where English sole only were sampled, “■” indicates starry flounder only, and “▲” indicates English sole and starry flounder. See Fig. 1 for station locations.

Station	Type	'89	'90	'91	'92	'93	'94	'95	'96	'97	'98	'99
Alki	Near Urban									●		
Apple Cove Pt	Non Urban				●			●				
Battle Point	Near Urban										●	
Birch Point	Non Urban			●			●					
Blake Island	Non Urban										●	
Boulder Rock	Urban							●				
Brown's Point	Near Urban											●
Carr Inlet	Non Urban					●			●			
Dana Passage	Near Urban	●		●	●	●						
Dash Point	Near Urban					●		●				
Discovery Bay	Non Urban	●		●								
Duwamish River	Urban				●			●		●		
Dyes Inlet	Near Urban				●			●				
Eagle Harbor	Urban			●				●			●	●
Fern Cove	Non Urban					●						
Harbor Is.	Urban									●		
Iona Study Area	Near Urban							●				
Liberty Bay	Near Urban				●			●				
McArthur Bank	Non Urban			●								
Mid Hood Canal	Non Urban					●			●			
Mukilteo-Everett	Near Urban									●		
Myrtle Edwards	Urban									●		
N. Case Inlet	Non Urban					●						
<b>N. Hood Canal</b>	<b>Non Urban</b>	●		●	●	●	●	●	●	●	●	●
<b>Nisqually Reach</b>	<b>Non Urban</b>					●		●	●	●	●	●
Oak Harbor	Near Urban									■		
Old Tacoma	Near Urban											●
Orcas Island	Non Urban			●								
Outer Bellingham Bay	Near Urban	●		●	●	●						
Outer Birch Point	Non Urban			●								
Outer Commence. Bay	Near Urban					●		●			●	
Outer Sinclair Inlet	Near Urban										●	
Pickering Passage	Non Urban					●			●			

Table 2 (continued)

Station	Type	'89	'90	'91	'92	'93	'94	'95	'96	'97	'98	'99
Point Roberts	Non Urban						•					
<b>Port Gardner</b>	<b>Near Urban</b>	•		•	•	•	•	•	•	•	•	•
Port Ludlow	Non Urban				•							
Port Madison	Non Urban				•							
Port Orchard	Near Urban				•			•			•	•
Port Susan	Non Urban									•		
Port Townsend	Near Urban	•		•	•	•	•					
Possession Point	Non Urban				•			•				
Post Point	Near Urban									▲		
Roberts Bank	Non Urban							•				
Ruston	Near Urban											•
S. Case Inlet	Non Urban					•			•			
S. Hood Canal	Non Urban					•			•			
Saratoga Passage	Non Urban			•			•					
Seattle Waterfront	<b>Urban</b>	•		•	•	•	•	•	•	•	•	•
Shilshole	Non Urban			•				•				
<b>Sinclair Inlet</b>	<b>Urban</b>	•		•	•	•	•	•	•	•	•	•
Skagit Bay	Non Urban									■		
<b>Strait of Georgia</b>	<b>Non Urban</b>	•		•	•	•	•	•	•	•	•	•
Strait of Juan de Fuca	Non Urban				•		•					
<b>Thea Foss Waterway</b>	<b>Urban</b>	•		•	•	•	•	•	•	•	•	•
<b>Vendovi Island</b>	<b>Non Urban</b>						•	•	•	•	•	•
Wollochet	Non urban					•			•			



If bile was needed for analysis of Fluorescing Aromatic Compounds (FACs -- see chemical analysis section below), it was removed from the gall bladder using a tuberculin needle and syringe. Bile was placed into glass or polyethylene vials and frozen for later compositing.

### **Rockfish**

Quillback, copper and brown rockfish are demersal<sup>1</sup>, rocky-reef fishes that consume a wide variety of benthic, demersal, and pelagic fishes and invertebrates. These three species are widely distributed throughout Puget Sound and are predominantly non-migratory (Matthews 1990); hence, contaminants found in their tissues are likely to reflect local conditions. Rockfishes are some of the longest-lived fishes in Puget Sound (Chilton and Beamish 1982), with quillback and yelloweye rockfish attaining ages of 60 and 90 years (PSAMP Fish Component unpublished data). Thus they may bioaccumulate higher concentrations of contaminants than other species such as English sole. In addition, because rockfish occupy a relatively high position in the food web, their exposure to contaminants via prey may be greater because of biomagnification of contaminants. Finally, rockfish are targeted by recreational anglers (Landolt et al. 1987), and are some of the most commonly caught bottomfish; thus, they represent a food-web pathway through which contaminants can move from the Puget Sound ecosystem to humans.

Quillback rockfish, and less frequently, brown and copper rockfish, were sampled from 24 stations (Figure 2, Table 3) by SCUBA divers with spears, by hook-and-line from a boat, or by bottom trawling (see English sole method). Occasionally, rockfish were received as donations from sport or tribal fisheries.

Soon after capture, rockfish were tagged, individually wrapped (whole) in aluminum foil, and placed in individual Ziploc bags. Wrapped fish were placed on ice and transported to the laboratory for later tissue dissection and collection of biological data. In the laboratory, all fish were weighed (nearest gm, wet weight) and measured (nearest mm, total length), and otoliths were removed for later age estimation. The sex and reproductive condition of each rockfish were also determined. If liver tissue or bile were sampled, these were taken from the fish on board the vessel, as for English sole (prior to wrapping the fish in foil and transporting to the lab).

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<sup>1</sup> associated with the seafloor.

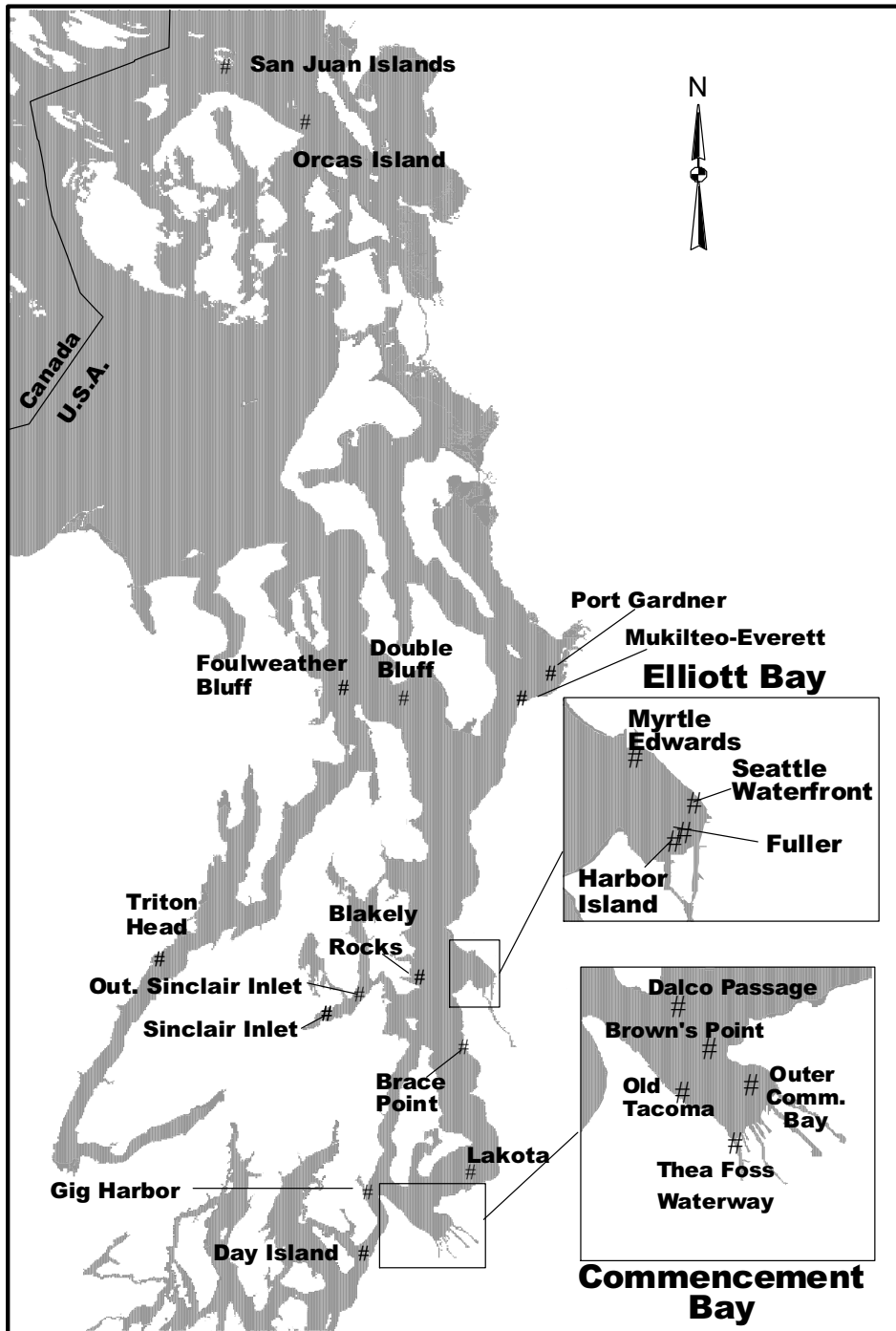


Figure 2. Locations where quillback, brown, copper, and yelloweye rockfish were sampled for PSAMP contaminant analysis, 1989-1999. Not all locations were sampled in all years.

Table 3. Frequency of sampling four species of rockfish by the PSAMP Fish Component, 1989 through 1999. See Figure 2 for station locations.

Species	Station	Type	'89	'90	'91	'92	'93	'94	'95	'96	'97	'98	'99
Quillback Rockfish	Blakely Rocks	Near Urban			•	•	•		•				
	Brown's Point	Near Urban								•			•
	Dalco Passage	Near Urban								•			
	Day Island	Near Urban	•										
	Double Bluff	Non Urban			•	•	•		•				
	Foulweather Bluff	Non Urban										•	
	Fuller (shipwreck)	Urban							•		•		
	Gig Harbor	Near Urban								•			
	Harbor Island	Urban									•		
	Lakota	Near Urban								•			
	Mukilteo-Everett	Near Urban										•	
	Myrtle Edwards	Urban										•	
	Old Tacoma	Near Urban											•
	Orcas Island	Non Urban											•
	Port Gardner	Near Urban											•
	Seattle Waterfront	Urban							•	•	•	•	•
	San Juan Islands	Non Urban			•	•	•		•				
	Sinclair Inlet	Urban							•				
	Triton Head	Non Urban			•	•							
	Brown Rockfish	Brown's Pt.	Near Urban										
Old Tacoma		Near Urban											•
Outer Commencement Bay		Near Urban											•
Seattle Waterfront		Urban										•	•
Sinclair Inlet		Urban							•			•	•
Thea Foss Waterway		Urban										•	•
Copper Rockfish	Day Island	Near Urban	•		•	•	•						
	Blakely Rocks	Near Urban	•		•								
	Mukilteo-Everett	Near Urban										•	
	Outer Sinclair Inlet	Near Urban											•
	Triton Head	Non Urban				•							
	Port Gardner	Near Urban											•
Yelloweye Rockfish	Brace Point	Non Urban									•		
	San Juan Islands	Non Urban									•		

### **Pacific Salmon**

Although the life history patterns of Pacific salmon species vary widely, all spawn in freshwater, live there for some period as embryos after emergence from gravel nests, and subsequently migrate to marine waters. The majority of their growth occurs at sea (Groot and Margolis 1991) before returning to their natal streams to spawn. Pacific salmon species feed relatively high in the food chain, consuming a wide variety of epipelagic crustaceans, fishes and cephalopods. Five species of Pacific salmon species are found in Puget Sound, yet none is well studied with respect to bioaccumulation of contaminants; coho salmon and chinook salmon were selected for monitoring because of their importance in recreational and commercial fisheries. As such, they present a pathway via which contaminants can move from the Puget Sound ecosystem to humans (Landolt et al. 1987).

Sampling locations for Pacific salmon included nearshore marine "terminal" areas (i.e. rivers and river mouths from which captured fish were presumed to originate) and offshore marine "mixed stock" areas where the origins of fish were unknown (Figure 3). Coho and chinook salmon were caught with a commercial purse seine (May 1990) or purchased from licensed fish buyers and treaty tribal fishermen in the late summer and early fall of 1992 through 1998 (Figure 3, Table 4). In 1990, salmon were collected only from a mixed stock area in central Puget Sound, and in 1992 the salmon sampling design was modified to sample salmon in fisheries from riverine and associated estuarine terminal areas and mixed stock areas throughout the Sound. Whole salmon were transported on ice to the laboratory where they were tagged, measured (fork length, nearest cm), weighed and had scales removed for later age estimation. The fish were then wrapped individually in aluminum foil, placed in plastic bags and stored on ice until tissues were removed for contaminant analyses.

### **Pacific Herring**

Pacific herring are an abundant, schooling planktivore and are widely distributed throughout Puget Sound. This species is an important component of the Puget Sound food web, because of its abundance and ubiquity in diets of Puget Sound birds, mammals, and fishes.

Pacific herring were sampled in the winters of 1995 and 1999 from predictable pre-spawning aggregations of reproductive adult herring (Figure 4, Table 5). These aggregations are a well-documented phenomenon (Lemberg et al. 1997) and correspond to nearby nearshore spawning events. In 1995 we conducted a pilot study on one such population, called the Fidalgo Bay Herring Stock. Individual whole-body samples and bile samples from individual fish were taken from 69 fish and analyzed to determine their level of exposure to contaminants. We concluded from the results of

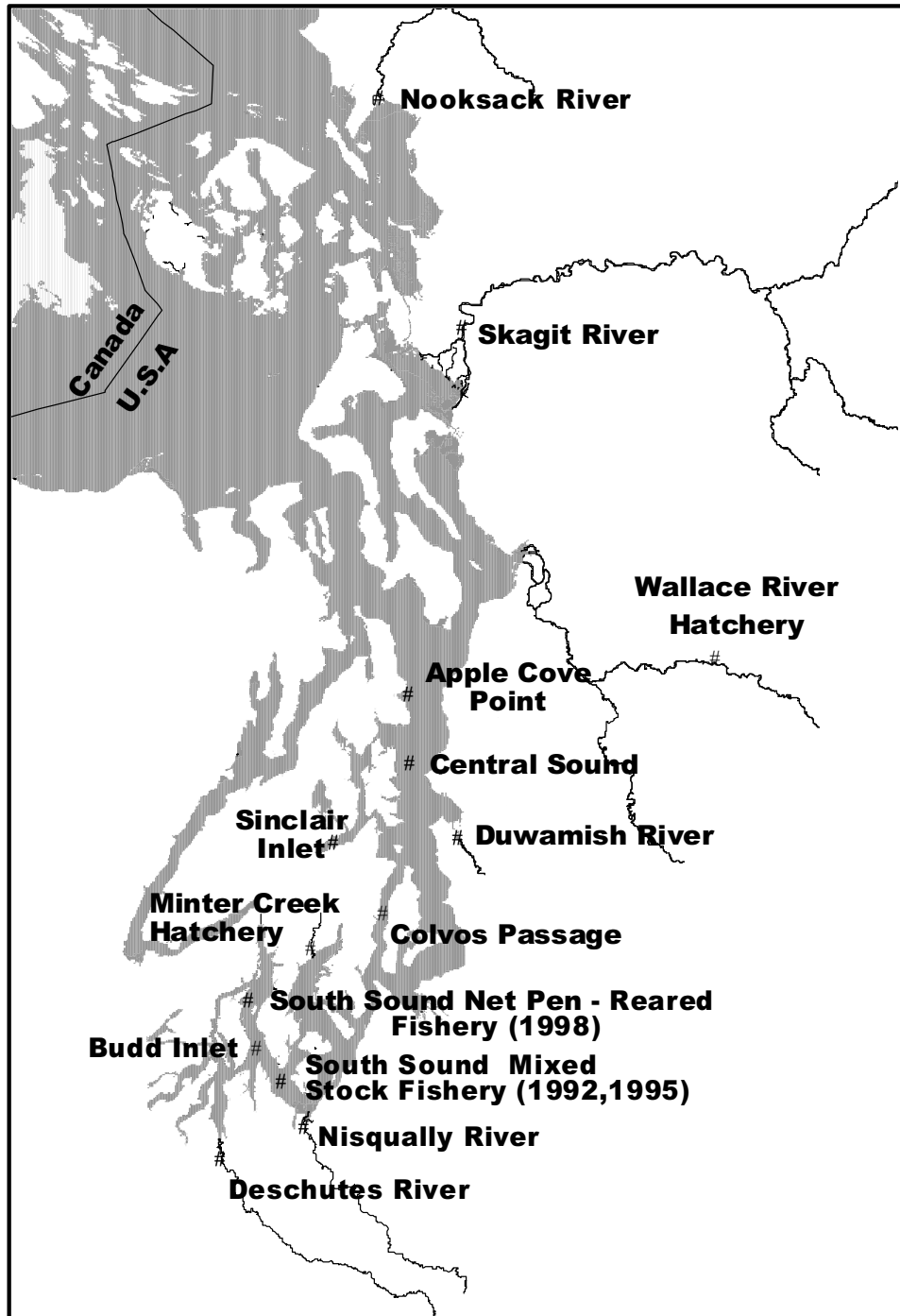


Figure 3. Locations where adult coho and chinook salmon were sampled for PSAMP contaminant analysis, 1989-1999. Not all locations were sampled in all years.

Table 4. Frequency of sampling chinook salmon and coho salmon by the PSAMP Fish Component, 1989 through 1999. Bolded entries indicate baseline stations that are sampled regularly. See Figure 3 for station locations. See Methods for definitions of Mix/Term.

	Station	Type	Mix/Term	'89	'90	'91	'92	'93	'94	'95	'96	'97	'98	'99	
Chinook Salmon	Apple Cove Point	Non Urban	mix				•		•						
	Budd Inlet	Non Urban	mix								•				
	Central Sound	Non Urban	mix	•											
	<b>Deschutes River</b>	<b>Near Urban</b>	<b>terminal</b>					•	•	•					
	<b>Duwamish River</b>	<b>Urban</b>	<b>terminal</b>				•	•	•	•	•				
	<b>Nisqually River</b>	<b>Non Urban</b>	<b>terminal</b>					•	•	•					
	<b>Nooksack River</b>	<b>Non Urban</b>	<b>terminal</b>				•	•	•	•					
	Sinclair Inlet	Urban	mix				•								
	<b>Skagit River</b>	<b>Non Urban</b>	<b>terminal</b>				•	•	•	•					
	South Sound	Non Urban	mix				•								
Coho Salmon	Apple Cove Point	Non Urban	mix				•		•						
	Central Sound	Non Urban	mix	•											
	Colvos Passage	Non Urban	mix				•								
	<b>Deschutes River</b>	<b>Near Urban</b>	<b>terminal</b>					•	•	•	•				
	<b>Duwamish River</b>	<b>Urban</b>	<b>terminal</b>				•	•	•	•	•		•		
	Minter Creek Hatchery	Non Urban	mix											•	
	S. Sound Net Pen-Reared Fishery	Non Urban	mix											•	
	<b>Nisqually River</b>	<b>Non Urban</b>	<b>terminal</b>					•	•	•	•				
	<b>Nooksack River</b>	<b>Non Urban</b>	<b>terminal</b>				•	•	•	•	•			•	
	Sinclair Inlet	Urban	mix				•								
	<b>Skagit River</b>	<b>Non Urban</b>	<b>terminal</b>				•	•	•	•	•				
	South Sound	Non Urban	mix				•			•					
Wallace River Hatchery	Non Urban	mix											•		

that study that herring were sufficiently exposed to polychlorinated biphenyls (PCBs) and polycyclic aromatic hydrocarbons (PAHs) to warrant monitoring. We began routine monitoring of Pacific herring in 1999 sampling fish from five locations in that year. In order to minimize variability associated with age of fish, and the maternal transfer of lipophilic contaminants to eggs<sup>1</sup> we sampled for contaminants only in male herring for whole bodies and for bile.

Whole bodies of herring were wrapped in foil in the field and held on ice for transport to the lab. In the lab, fish were measured for standard length (mm), sexed, and scales removed for later age analysis.

<sup>1</sup> This phenomenon is of particular concern when sampling whole bodies of spawning fish, because much of the body-mass can be composed of eggs.

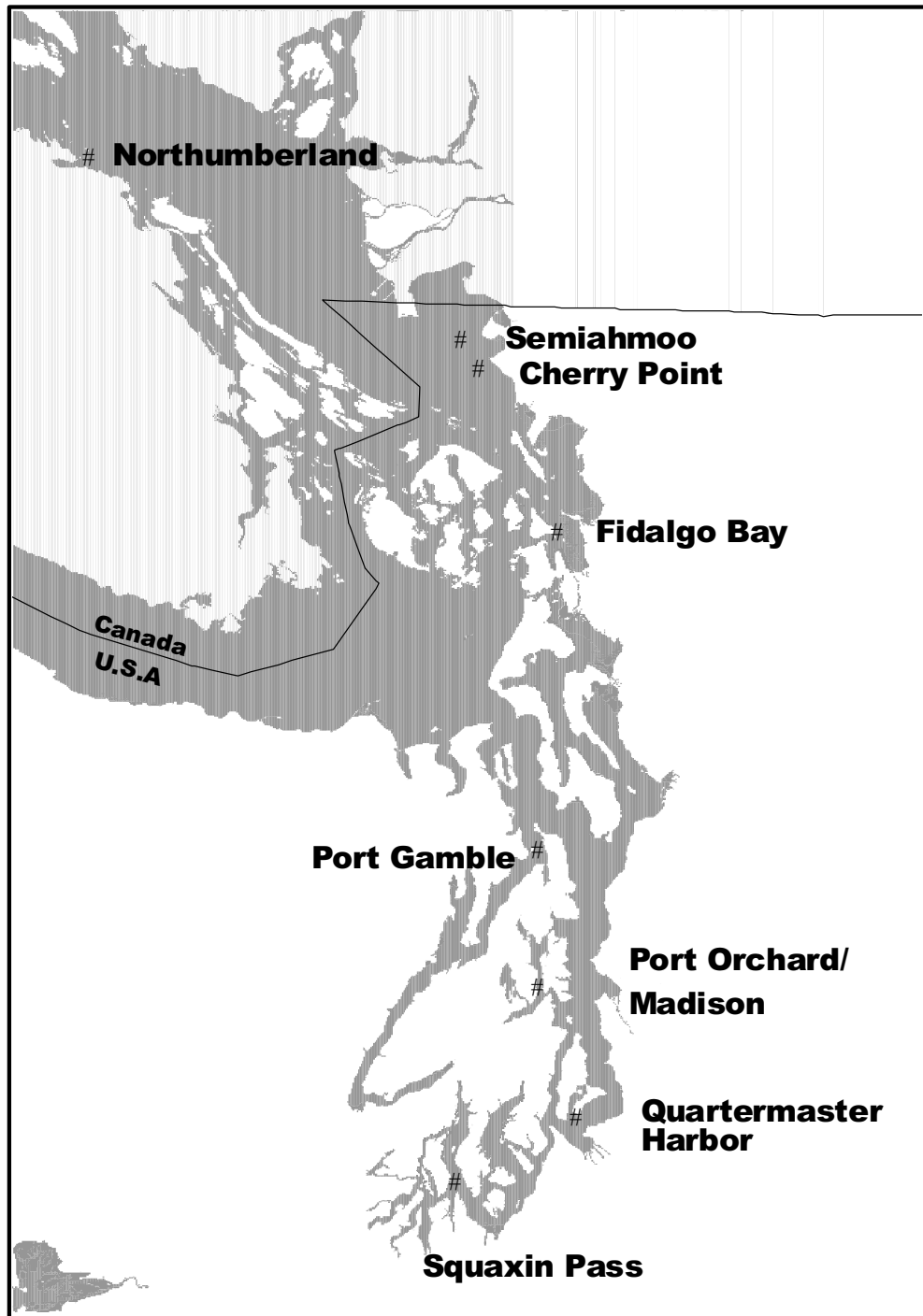


Figure 4. Locations where Pacific herring were sampled for PSAMP contaminant analysis, 1995-1999. Not all locations were sampled in all years.

Table 5. Frequency of sampling Pacific herring and Pacific cod by the PSAMP Fish Component, 1989 through 1999. See Figures 4 (herring) and 5 (cod) for station locations.

	Station	Type	'89	'90	'91	'92	'93	'94	'95	'96	'97	'98	'99
Pacific Herring	Cherry Point	Non Urban											•
	Fidalgo Bay	Non Urban							•				
	Northumberland	Non Urban											•
	Port Orchard	Near Urban											•
	Semiahmoo	Non Urban											•
	Squaxin Pass	Non Urban											•
Pacific Cod	Admiralty Inlet	Non Urban		•		•	•						
	Alden Bank	Non Urban				•	•						
	Port Townsend	Near Urban		•									

### Pacific Cod

Pacific cod are demersal carnivores, feeding on a wide variety of pelagic and demersal fishes and invertebrates including Pacific herring, Pacific sand lance, flatfishes, euphausiids and other crustaceans (Hart 1973). They migrate over large areas within Puget Sound but seldom migrate to the open ocean (Palsson 1990). Consequently, contaminants found in Pacific cod may reflect background contaminant concentrations over a broad area. Because Pacific cod were historically fished and consumed by many anglers (Landolt et al. 1987) and are also fished commercially, they represent a food-web pathway through which contaminants can move from the Puget Sound ecosystem to humans.

Pacific cod were sampled from commercial bottom trawlers fishing in two Pacific cod spawning areas. Samples were from the Admiralty Inlet area in March 1990, 1992 and 1993 (two locations) and from Allen Bank in 1992 and 1993 (Table 5, Figure 5). Fish between 42 and 65 cm (probably 2-4 year old fish) were sampled because they represent the predominant year classes present on the spawning grounds and analysis of larger fish provided a more realistic measure of contaminant exposure to humans. At each station, 30 cod were selected from the catch for tissue contaminant analyses. The fish were then transported on ice to the laboratory and examined for visible external abnormalities. The length (nearest cm, total length) and weight (nearest gm, wet weight) were recorded, and the sex and reproductive condition were determined. Age determination for Pacific cod was not conducted, as acceptable aging methods are not available for this species.



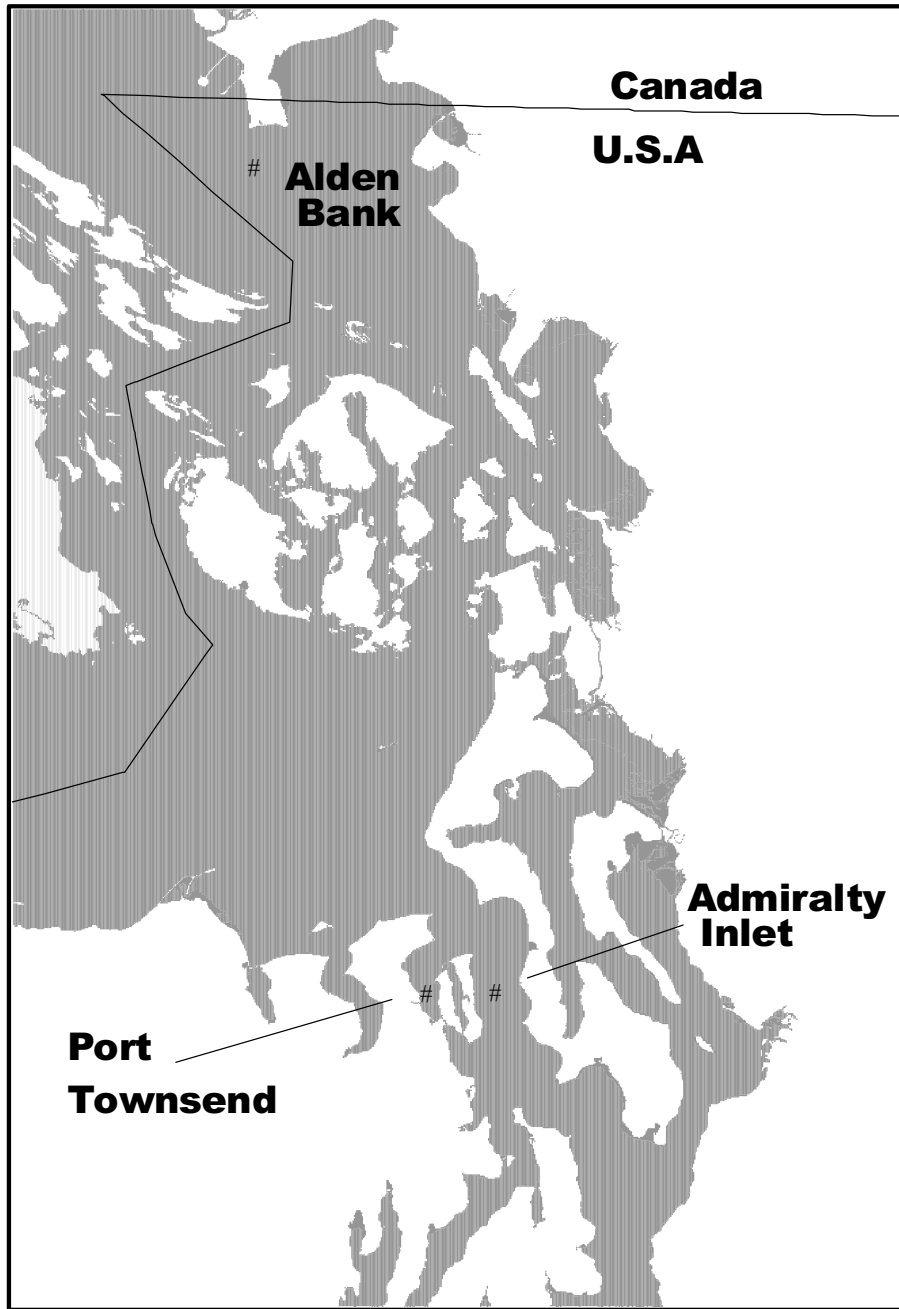


Figure 5. Locations where Pacific cod were sampled for PSAMP contaminant analysis, 1991-1993. Not all locations were sampled in all years.

## Chemical Analysis

### Sample Preparation

Four types of tissue or “matrix” were sampled, depending on species, year, and location: muscle, liver, whole body, or bile. Samples were taken primarily as composites, where the matrix was mixed from a number of individuals; however, a small number of samples from individuals were taken most species, and after 1995 rockfish were sampled as individuals only.

For English sole liver and muscle tissue, the number of fish composing a composite varied among years, ranging from 5 to 20 individuals. While on board the boat, the gut cavity of each English sole was opened to expose the liver, and a small section of liver was removed for histopathology studies. The remaining liver tissue was put in pre-cleaned jars and frozen for later analyses. Three composite muscle tissue samples and three composite liver tissue samples (when enough liver tissue was available) were collected per English sole station. For some stations, all liver tissue was combined into one composite sample to provide a sufficient weight of tissue for chemical analysis. The assemblage of liver composite samples took place within 4 hours of capturing specimens after which composites were frozen and stored at -20°C until analyzed.

In the laboratory (within 10 days of capture), muscle samples from English sole were combined to make three composite tissue samples per station by grouping each station’s fish corresponding to the liver tissue composite groups prepared on the boat. Equal amounts of skinned skeletal muscle tissue were collected from individual English sole. The tissue samples were taken from within an area bordered by two incisions: the first (outer incision) was used to detach skin. The second, inner incision was made parallel and inside the first incision to avoid introducing contamination with slime or other substances from the fish during removal of the skin. Two separate sets of stainless steel utensils were used; one to make the initial incision and to remove skin, and a second set for removal of the skinned muscle tissue. Utensils and work surfaces were cleaned and then rinsed with isopropyl alcohol between each sample. Muscle tissue composites were placed in pre-cleaned jars and frozen at -20°C until analyzed.

### Selection of Chemicals for Analyses

Contaminants targeted for analysis in PSAMP fish tissues are all found on the U.S. Environmental Protection Agency Priority Pollutant List or Hazardous Substance List, and include chlorinated pesticides, polychlorinated biphenyls (PCBs), Other Organic Compounds<sup>1</sup>, and selected metal-elements such as mercury, lead, copper and arsenic. (Tables 6-8). In addition, the PSAMP Fish Component began in 1995 measuring the concentration of Fluorescing Aromatic Compounds (FACs) in fishes’ bile, as an indicator

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<sup>1</sup> Other Organic Compounds include phenols and substituted phenols (14 compounds), aromatic hydrocarbons (17 compounds), chlorinated aromatic hydrocarbons (6 compounds), phthalates (6 compounds) and several other groups of organics.

of recent exposure to polycyclic aromatic hydrocarbons (PAHs -- Table 9). Biliary FACs measured were metabolites of benzo(a)pyrene, naphthalene, and phenanthrene. Organotins (mono-n-, di-n-, tri-n-, and tetra-n-butyltin) were also sampled from a small group of English sole livers in one year.

PCBs and pesticides were analyzed because these substances are known to bioaccumulate in fish and are a potential threat to public health. The Other Organic Compounds were analyzed because they include carcinogens and compounds known to bioaccumulate (e.g., chlorinated hydrocarbons and phenols). Analyses for mercury (Hg), lead (Pb), copper (Cu), and arsenic (As) were conducted because elevated concentrations of these elements have been found in more than one location in Puget Sound and they were identified as substances of concern in a seafood risk assessment (Tetra Tech 1988). In addition, because many contaminants are lipophilic, total extractable lipid content of tissue samples was measured to aid in the interpretation of the chemical data. Also, because biliary FAC concentrations typically correlate strongly with the relative diluteness of bile, biliary protein concentration was measured as an estimate of this diluteness.

### **Chemical Analyses**

Generally, chemistry analyses for organic and inorganic compounds followed the procedures of the PSEP protocols (Puget Sound Estuary Program 1989a (revised), 1989b (revised)) which reference U.S. EPA Contract Laboratory Program Procedures (U.S. Environmental Protection Agency 1986a, 1986b) and incorporate additional Quality Assurance/Quality Control (QA/QC) requirements. These methods are summarized briefly below.

All metals were analyzed for total elemental concentration. For copper, lead and arsenic analyses, homogenized muscle tissues were digested with nitric acid/hydrogen peroxide. Samples were diluted to 50 ml instead of 100 ml as stated in the PSEP protocols. Lead was analyzed by graphite furnace atomic absorption or inductively coupled argon plasma mass spectrophotometry, and arsenic and copper by inductively coupled argon plasma spectrophotometry. Separate digestates were prepared for mercury using the nitric acid/sulfuric digestion method, which were then analyzed by the cold vapor atomic absorption method. All metals data were reported as mg/kg wet weight (ppm).

Table 6. Contaminants analyzed in **muscle tissue** of eight species from 1989-1999 by the PSAMP Fish Component. A detected analyte had a measured concentration above the Method Detection Limit (MDL). A blank in the Median MDL column indicates that all concentrations were measured above the MDL.

		No. of Assay	No. of Samples Analyzed	No. of Samples Detected	Percent Detected	Median MDL	Units
POLYCHLORINATED BIPHENYLS (PCBs)	Aroclors	Aroclor 1260	1107	932	84.2	2.0	µg/kg
		Aroclor 1254	1107	840	75.9	2.0	µg/kg
		Aroclor 1248	1152	24	2.1	2.0	µg/kg
		Aroclor 1242	1152	1	0.1	10.0	µg/kg
		Aroclor 1232	1152	0	0.0	20.0	µg/kg
		Aroclor 1221	1152	0	0.0	20.0	µg/kg
		Aroclor 1016	1152	0	0.0	20.0	µg/kg
	PCB Congeners	PCB77	281	2	0.7	0.063	µg/kg
		PCB101	279	276	98.9	0.055	µg/kg
		PCB105	250	186	74.4	0.045	µg/kg
		PCB110	225	201	89.3	0.054	µg/kg
		PCB118	277	257	92.8	0.049	µg/kg
		PCB126	281	0	0.0	0.060	µg/kg
		PCB128	274	233	85.0	0.054	µg/kg
		PCB138	278	258	92.8	0.050	µg/kg
		PCB153	280	277	98.9	0.053	µg/kg
		PCB156	271	82	30.3	0.041	µg/kg
		PCB157	276	11	4.0	0.040	µg/kg
		PCB169	281	0	0.0	0.082	µg/kg
		PCB170	262	177	67.6	0.042	µg/kg
PCB180	270	231	85.6	0.043	µg/kg		
PCB189	280	1	0.4	0.042	µg/kg		
PESTICIDES	Pesticides	alpha hexachlorocyclohexane	931	67	7.2	0.50	µg/kg
		beta hexachlorocyclohexane	932	2	0.2	0.67	µg/kg
		delta hexachlorocyclohexane	932	0	0.0	0.50	µg/kg
		gamma hexachlorocyclohexane	932	13	1.4	0.50	µg/kg
		alpha chlordane	932	177	19.0	0.50	µg/kg
		gamma chlordane	932	84	9.0	0.50	µg/kg
		Aldrin	932	0	0.0	0.50	µg/kg
		Dieldrin	932	57	6.1	0.67	µg/kg
		Endrin	932	0	0.0	1.00	µg/kg
		endrin aldehyde	932	0	0.0	1.00	µg/kg
		alpha endosulfan	932	0	0.0	0.50	µg/kg
		beta endosulfan	932	1	0.1	1.00	µg/kg
		endosulfan sulfate	932	0	0.0	1.00	µg/kg
		(continued)					

Table 6 (continued)

		Assay	No. of Samples Analyzed	No. of Samples Detected	Percent Detected	Median MDL	Units	
		Heptachlor	932	0	0.0	0.50	µg/kg	
		heptachlor epoxide	932	0	0.0	0.50	µg/kg	
		Methoxychlor	932	0	0.0	5.30	µg/kg	
		Toxaphene	932	0	0.0	10.00	µg/kg	
		opDDD	267	4	1.5	0.11	µg/kg	
		opDDT	147	1	0.7	0.16	µg/kg	
		ppDDD	1212	494	40.8	0.50	µg/kg	
		ppDDE	1196	832	69.6	1.00	µg/kg	
		ppDDT	1181	170	14.4	1.30	µg/kg	
		METALS	Metals	arsenic	613	603	98.4	0.090
copper	607			607	100.0		mg/kg	
lead	708			67	9.5	0.030	mg/kg	
mercury	1011			1010	99.9		mg/kg	
OTHER ORGANIC COMPOUNDS	Chlorinated Aromatic Hydrocarbons	1,2,4-trichlorobenzene	561	0	0.0	5.4	µg/kg	
		1,2-dichlorobenzene	561	0	0.0	11.0	µg/kg	
		1,3-dichlorobenzene	561	0	0.0	11.0	µg/kg	
		1,4-dichlorobenzene	561	0	0.0	11.0	µg/kg	
		2-chloronaphthalene	561	0	0.0	10.0	µg/kg	
		hexachlorobenzene	834	35	4.2	18.0	µg/kg	
	Chlorinated Semivolatile Halogens	hexachlorobutadiene	561	0	0.0	25.8	µg/kg	
		hexachlorocyclopentadiene	561	0	0.0	200.0	µg/kg	
		hexachloroethane	561	0	0.0	30.0	µg/kg	
	Halogenated Ethers	4-bromophenylphenylether	561	0	0.0	40.0	µg/kg	
		4-chlorophenylphenylether	561	0	0.0	39.0	µg/kg	
		bis(2-chloroethoxy)methane	561	0	0.0	10.6	µg/kg	
		bis(2-chloroethyl)ether	561	0	0.0	10.0	µg/kg	
		bis(2-chloroisopropyl)ether	561	0	0.0	40.0	µg/kg	
	High Molecular Weight Aromatics	benzo(a)anthracene	561	0	0.0	11.0	µg/kg	
		benzo(a)pyrene	561	0	0.0	10.0	µg/kg	
		benzo(b)fluoranthene	561	0	0.0	11.0	µg/kg	
		benzo(g,h,i)perylene	561	0	0.0	25.4	µg/kg	
		benzo(k)fluoranthene	561	0	0.0	10.6	µg/kg	
	(continued)							

Table 6 (continued)

		Assay	No. of Samples Analyzed	No. of Samples Detected	Percent Detected	Median MDL	Units
	Low Molecular Weight Aromatics	chrysene	561	0	0.0	10.0	µg/kg
		dibenzo(a,h)anthracene	561	0	0.0	33.0	µg/kg
		fluoranthene	561	0	0.0	5.2	µg/kg
		indeno(1,2,3-c,d)pyrene	561	0	0.0	25.4	µg/kg
		pyrene	561	0	0.0	5.2	µg/kg
		2-methylnaphthalene	561	0	0.0	20.0	µg/kg
		acenaphthene	561	0	0.0	5.0	µg/kg
		acenaphthylene	561	0	0.0	5.2	µg/kg
		anthracene	561	0	0.0	10.0	µg/kg
		fluorene	561	0	0.0	5.2	µg/kg
	naphthalene	561	0	0.0	5.2	µg/kg	
	phenanthrene	561	6	1.1	5.2	µg/kg	
	Miscellaneous Organics	carbazole	504	0	0.0	10.4	µg/kg
		coprostanol	372	0	0.0	180.0	µg/kg
		benzoic acid	556	37	6.7	200.0	µg/kg
		benzyl alcohol	561	90	16.0	13.0	µg/kg
		dibenzofuran	561	0	0.0	11.0	µg/kg
		isophorone	561	1	0.2	5.2	µg/kg
	Organonitrogens	1,2-diphenylhydrazine	561	0	0.0	10.6	µg/kg
		2,4-dinitrotoluene	561	0	0.0	25.8	µg/kg
2,6-dinitrotoluene		561	0	0.0	18.0	µg/kg	
2-nitroaniline		561	0	0.0	30.0	µg/kg	
3,3-dichlorobenzidine		57	0	0.0	13.0	µg/kg	
3-nitroaniline		534	0	0.0	32.5	µg/kg	
4-chloroaniline		561	0	0.0	36.0	µg/kg	
4-nitroaniline		561	0	0.0	80.0	µg/kg	
aniline		561	0	0.0	45.0	µg/kg	
nitrobenzene		561	0	0.0	11.0	µg/kg	
N-nitrosodimethylamine		551	0	0.0	40.0	µg/kg	
N-nitroso-di-n-propylamine		561	0	0.0	10.6	µg/kg	
N-nitrosodiphenylamine		561	2	0.4	25.8	µg/kg	
Phenols	2,4-dimethylphenol	561	0	0.0	30.0	µg/kg	
	2-methylphenol	561	0	0.0	25.8	µg/kg	
	4-methylphenol	561	2	0.4	25.8	µg/kg	
	phenol	551	3	0.5	10.4	µg/kg	

(continued)

Table 6 (continued)

		Assay	No. of Samples Analyzed	No. of Samples Detected	Percent Detected	Median MDL	Units
Phthalates	benzylbutylphthalate		561	10	1.8	25.4	µg/kg
	bis(2-ethylhexyl)phthalate		561	121	21.6	37.5	µg/kg
	diethylphthalate		561	8	1.4	10.4	µg/kg
	dimethylphthalate		561	0	0.0	25.2	µg/kg
	di-n-butylphthalate		561	12	2.1	45.0	µg/kg
	di-n-octylphthalate		561	0	0.0	10.0	µg/kg
Substituted Phenols	2,4,5-trichlorophenol		561	0	0.0	20.0	µg/kg
	2,4,6-trichlorophenol		561	0	0.0	40.0	µg/kg
	2,4-dichlorophenol		561	0	0.0	25.8	µg/kg
	2,4-dinitrophenol		534	0	0.0	200.0	µg/kg
	2-chlorophenol		561	0	0.0	25.8	µg/kg
	2-nitrophenol		561	0	0.0	25.2	µg/kg
	4,6-dinitro-o-cresol		534	0	0.0	198.0	µg/kg
	4-chloro-3-methylphenol		552	0	0.0	26.0	µg/kg
	4-nitrophenol		542	0	0.0	36.0	µg/kg
	pentachlorophenol		556	0	0.0	160.0	µg/kg

Table 7. Contaminants analyzed in **liver tissue** of English sole and starry flounder from 1991-1999 by the PSAMP Fish Component. A detected analyte had a measured concentration above the Method Detection Limit (MDL). A blank in the Median MDL column indicates that all concentrations were measured above the MDL.

		No. of Assay	No. of Samples Analyzed	No. of Samples Detected	Percent Detected	Median MDL	Units
POLYCHLORINATED BIPHENYLS (PCBs)	Aroclors	Aroclor 1260	193	184	95.3	40.0	µg/kg
		Aroclor 1254	193	103	53.4	40.0	µg/kg
		Aroclor 1248	208	9	4.3	80.0	µg/kg
		Aroclor 1242	208	0	0.0	80.0	µg/kg
		Aroclor 1232	208	0	0.0	80.0	µg/kg
		Aroclor 1221	208	0	0.0	80.0	µg/kg
		Aroclor 1016	208	0	0.0	80.0	µg/kg
	PCB Congeners	PCB77	45	17	37.8	0.125	µg/kg
		PCB101	45	45	100.0		µg/kg
		PCB105	43	43	100.0		µg/kg
		PCB110	45	45	100.0		µg/kg
		PCB118	45	45	100.0		µg/kg
		PCB126	45	6	13.3	0.110	µg/kg
		PCB128	45	45	100.0		µg/kg
		PCB138	45	45	100.0		µg/kg
		PCB153	45	45	100.0		µg/kg
		PCB156	44	44	100.0		µg/kg
		PCB157	44	35	79.5	0.050	µg/kg
		PCB169	45	0	0.0	0.140	µg/kg
		PCB170	44	44	100.0		µg/kg
PCB180	45	43	95.6	0.049	µg/kg		
PCB189	44	35	79.5	0.084	µg/kg		
PESTICIDES	Pesticides	alpha hexachlorocyclohexane	170	0	0.0	6.30	µg/kg
		beta hexachlorocyclohexane	130	0	0.0	6.30	µg/kg
		delta hexachlorocyclohexane	170	0	0.0	6.30	µg/kg
		gamma hexachlorocyclohexane	130	0	0.0	6.30	µg/kg
		alpha chlordane	170	12	7.1	6.30	µg/kg
		gamma chlordane	170	26	15.3	6.30	µg/kg
		Aldrin	155	0	0.0	8.00	µg/kg
		Dieldrin	155	0	0.0	13.00	µg/kg
		Endrin	155	0	0.0	13.00	µg/kg
		endrin aldehyde	115	0	0.0	13.00	µg/kg
		alpha endosulfan	115	0	0.0	8.00	µg/kg
		beta endosulfan	155	0	0.0	13.00	µg/kg

(continued)



Table 7 (continued)

		Assay	No. of Samples Analyzed	No. of Samples Detected	Percent Detected	Median MDL	Units
		endosulfan sulfate	155	0	0.0	13.00	µg/kg
		Heptachlor	170	0	0.0	6.30	µg/kg
		heptachlor epoxide	155	0	0.0	6.30	µg/kg
		Methoxychlor	155	0	0.0	63.00	µg/kg
		Toxaphene	155	0	0.0	100.00	µg/kg
		opDDD	12	6	50.0	0.22	µg/kg
		opDDT	29	5	17.2	0.28	µg/kg
		ppDDD	215	68	31.6	13.00	µg/kg
		ppDDE	212	116	54.7	49.50	µg/kg
		ppDDT	202	14	6.9	13.00	µg/kg
		METALS	Metals	arsenic	121	121	100.0
copper	121			121	100.0		mg/kg
lead	141			141	100.0		mg/kg
mercury	166			166	100.0		mg/kg
ORGANO-TINS	Organo-Tins	di-n-butyltin	15	11	73.3	0.53	µg/kg
		mono-n-butyltin	15	4	26.7	3.30	µg/kg
		tetra-n-butyltin	15	0	0.0	0.80	µg/kg
		tri-n-butyltin	15	15	100.0		µg/kg
OTHER ORGANIC COMPOUNDS	Chlorinated Aromatic Hydrocarbons	1,2,4-trichlorobenzene	39	0	0.0	85.0	µg/kg
		1,2-dichlorobenzene	40	0	0.0	85.0	µg/kg
		1,3-dichlorobenzene	40	0	0.0	85.0	µg/kg
		1,4-dichlorobenzene	40	0	0.0	85.0	µg/kg
		2-chloronaphthalene	40	0	0.0	85.0	µg/kg
		hexachlorobenzene	71	45	63.4	85.0	µg/kg
	Chlorinated Semivolatile Halogens	hexachlorobutadiene	26	0	0.0	85.0	µg/kg
		hexachlorocyclopentadiene	40	0	0.0	510.0	µg/kg
		hexachloroethane	40	0	0.0	85.0	µg/kg
	Halogenated Ethers	4-bromophenylphenylether	26	0	0.0	85.0	µg/kg
		4-chlorophenylphenylether	40	0	0.0	85.0	µg/kg
		bis(2-chloroethoxy)methane	40	0	0.0	85.0	µg/kg
		bis(2-chloroethyl)ether	40	0	0.0	85.0	µg/kg
bis(2-chloroisopropyl)ether		40	0	0.0	85.0	µg/kg	

(continued)

Table 7 (continued)

Assay	No. of Samples Analyzed	No. of Samples Detected	Percent Detected	Median		
				MDL	Units	
High Molecular Weight Aromatics	benzo(a)anthracene	40	0	0.0	125.0	µg/kg
	benzo(a)pyrene	40	0	0.0	85.0	µg/kg
	benzo(b)fluoranthene	40	0	0.0	125.0	µg/kg
	benzo(g,h,i)perylene	40	0	0.0	85.0	µg/kg
	benzo(k)fluoranthene	40	0	0.0	85.0	µg/kg
	chrysene	40	0	0.0	260.0	µg/kg
	dibenzo(a,h)anthracene	40	0	0.0	85.0	µg/kg
	fluoranthene	40	0	0.0	85.0	µg/kg
	indeno(1,2,3-c,d)pyrene	40	0	0.0	85.0	µg/kg
	pyrene	40	0	0.0	125.0	µg/kg
Low Molecular Weight Aromatics	2-methylnaphthalene	40	0	0.0	85.0	µg/kg
	acenaphthene	40	3	7.5	85.0	µg/kg
	acenaphthylene	40	0	0.0	85.0	µg/kg
	anthracene	40	0	0.0	85.0	µg/kg
	fluorene	40	1	2.5	85.0	µg/kg
	naphthalene	40	2	5.0	85.0	µg/kg
	phenanthrene	40	2	5.0	85.0	µg/kg
Miscellaneous Organics	carbazole	40	0	0.0	260.0	µg/kg
	coprostanol	26	0	0.0	21000.0	µg/kg
	benzoic acid	40	9	22.5	256.0	µg/kg
	benzyl alcohol	40	40	100.0		µg/kg
	dibenzofuran	40	0	0.0	85.0	µg/kg
	isophorone	40	0	0.0	85.0	µg/kg
Organonitrogens	1,2-diphenylhydrazine	40	0	0.0	85.0	µg/kg
	2,4-dinitrotoluene	40	0	0.0	125.0	µg/kg
	2,6-dinitrotoluene	40	0	0.0	125.0	µg/kg
	2-nitroaniline	40	0	0.0	85.0	µg/kg
	3-nitroaniline	40	0	0.0	510.0	µg/kg
	4-chloroaniline	26	0	0.0	85.0	µg/kg
	4-nitroaniline	40	0	0.0	260.0	µg/kg
	aniline	40	0	0.0	85.0	µg/kg
	nitrobenzene	40	0	0.0	85.0	µg/kg
	N-nitrosodimethylamine	40	0	0.0	260.0	µg/kg
	N-nitroso-di-n-propylamine	40	0	0.0	85.0	µg/kg
	N-nitrosodiphenylamine	40	0	0.0	85.0	µg/kg

(continued)

Table 7 (continued)

Assay		Assay	No. of	No. of	Percent	Median	Units
			Samples	Samples	Detected	MDL	
Analyzed	Detected	Detected	MDL	Units			
Phenols	2,4-dimethylphenol	40	0	0.0	85.0	µg/kg	
	2-methylphenol	40	0	0.0	85.0	µg/kg	
	4-methylphenol	40	0	0.0	85.0	µg/kg	
	phenol	40	0	0.0	85.0	µg/kg	
Phthalates	benzylbutylphthalate	40	0	0.0	260.0	µg/kg	
	bis(2-ethylhexyl)phthalate	40	13	32.5	85.0	µg/kg	
	diethylphthalate	40	0	0.0	85.0	µg/kg	
	dimethylphthalate	40	0	0.0	85.0	µg/kg	
	di-n-butylphthalate	40	1	2.5	85.0	µg/kg	
	di-n-octylphthalate	40	0	0.0	85.0	µg/kg	
Substituted Phenols	2,4,5-trichlorophenol	26	0	0.0	85.0	µg/kg	
	2,4,6-trichlorophenol	26	0	0.0	125.0	µg/kg	
	2,4-dichlorophenol	40	0	0.0	85.0	µg/kg	
	2,4-dinitrophenol	31	0	0.0	510.0	µg/kg	
	2-chlorophenol	40	0	0.0	85.0	µg/kg	
	2-nitrophenol	40	0	0.0	85.0	µg/kg	
	4,6-dinitro-o-cresol	40	0	0.0	260.0	µg/kg	
	4-chloro-3-methylphenol	40	0	0.0	125.0	µg/kg	
	4-nitrophenol	40	0	0.0	510.0	µg/kg	
	pentachlorophenol	26	0	0.0	256.0	µg/kg	

Table 8. Contaminants analyzed in **whole-bodies** of Pacific herring from 1995-1999 by the PSAMP Fish Component. A detected analyte had a measured concentration above the Method Detection Limit (MDL). A blank in the Median MDL column indicates that all concentrations were measured above the MDL.

	Assay	No. of	No. of	Percent	Median	Units
		Samples	Samples			
		Analyzed	Detected	Detected	MDL	
POLYCHLORINATED BIPHENYLS (PCBs)	Aroclor 1260	19	19	100.0		µg/kg
	Aroclor 1254	19	19	100.0		µg/kg
	Aroclor 1248	19	0	0.0	26.7	µg/kg
	Aroclor 1242	19	0	0.0	26.7	µg/kg
	Aroclor 1232	19	0	0.0	53.3	µg/kg
	Aroclor 1221	19	0	0.0	53.3	µg/kg
	Aroclor 1016	19	0	0.0	26.7	µg/kg
	PCB77	50	0	0.0	0.098	µg/kg
	PCB101	50	50	100.0		µg/kg
	PCB105	4	4	100.0		µg/kg
	PCB110	49	49	100.0		µg/kg
	PCB118	50	50	100.0		µg/kg
	PCB126	50	0	0.0	0.087	µg/kg
	PCB128	50	50	100.0		µg/kg
	PCB138	50	50	100.0		µg/kg
	PCB153	49	49	100.0		µg/kg
	PCB156	50	34	68.0	0.047	µg/kg
	PCB157	50	2	4.0	0.052	µg/kg
	PCB169	50	0	0.0	0.110	µg/kg
	PCB170	36	35	97.2	0.075	µg/kg
PCB180	50	49	98.0	0.077	µg/kg	
PCB189	50	0	0.0	0.060	µg/kg	
Pesticides	alpha hexachlorocyclohexane	19	9	47.4	0.80	µg/kg
	beta hexachlorocyclohexane	19	0	0.0	0.50	µg/kg
	delta hexachlorocyclohexane	19	0	0.0	0.80	µg/kg
	gamma hexachlorocyclohexane	19	0	0.0	0.53	µg/kg
	alpha chlordane	19	4	21.1	0.80	µg/kg
	gamma chlordane	19	19	100.0		µg/kg
	Aldrin	19	0	0.0	1.10	µg/kg
	Dieldrin	19	0	0.0	1.70	µg/kg
	Endrin	19	0	0.0	1.10	µg/kg
	endrin aldehyde	19	0	0.0	4.20	µg/kg
	alpha endosulfan	19	0	0.0	0.50	µg/kg
	beta endosulfan	19	0	0.0	4.20	µg/kg
	endosulfan sulfate	19	0	0.0	1.70	µg/kg
(continued)						

Table 8 (continued)

		Assay	No. of Samples Analyzed	No. of Samples Detected	Percent Detected	Median MDL	Units
Chlorinated Aromatic Hydrocarbons		Heptachlor	19	0	0.0	0.80	µg/kg
		heptachlor epoxide	19	0	0.0	0.50	µg/kg
		Methoxychlor	19	0	0.0	2.70	µg/kg
		Toxaphene	19	0	0.0	213.00	µg/kg
		opDDD	30	0	0.0	0.19	µg/kg
		ppDDD	69	39	56.5	0.16	µg/kg
		ppDDE	69	69	100.0		µg/kg
		ppDDT	61	2	3.3	0.27	µg/kg
		Metals	arsenic	19	19	100.0	
	copper		19	19	100.0		mg/kg
	lead		19	0	0.0	0.020	mg/kg
	mercury		19	19	100.0		mg/kg
		hexachlorobenzene	50	47	94.0	0.1	µg/kg

Table 9. Metabolites of polycyclic aromatic hydrocarbons analyzed in **bile** of five species from 1995-1999 by the PSAMP Fish Component. All concentrations were measured above the MDL.

Assay	No. of Samples Analyzed	No. of Samples Detected	Percent Detected	Median MDL	Units
benzo(a)pyrene_FAC	219	219	100.0	--	ng/ml bile
naphthalene_FAC	219	219	100.0	--	ng/ml bile
phenanthrene_FAC	219	219	100.0	--	ng/ml bile

Organic compounds were extracted from tissue samples by soxhlet extraction (1989 and 1990) or sonication with a methylene chloride and acetone mix (1991, 1992 and 1993). Starting in 1991, all extracts were cleaned by gel permeation chromatography. The extracts were then divided into two separate extracts, one for pesticide and PCB analyses, and the other base/neutral/acid-extractable (BNA) compounds (i.e., Other Organic Compounds). BNA compounds were analyzed by gas chromatography/mass spectroscopy (GC/MS) with a DB5.625 column. Pesticides and PCBs were analyzed using gas chromatography-electron capture detection (GC/ECD) with Aroclor mixtures used as standards for quantifying PCB concentrations. In 1989 and 1990 a dual megabore column was used on the GC/ECD, but in 1991, 1992 and 1993, a dual narrow-bore column (0.25 mm) better suited to analyzing low concentrations was substituted. Starting with the 1992 rockfish samples (fall 1992), new chromatography software was used for quantification of the pesticides and PCBs, allowing laboratory chemists to more accurately quantify low concentrations of pesticides and PCBs. Consequently, pesticide and aroclor-PCB data from 1989 and 1990 (all species) and the 1991 rockfish samples were excluded from data analyses in this report.

In 1997 the PSAMP Fish Component adopted a congener-specific screening method and estimation of total PCBs and pesticides using a method developed by (Krahn et al. 1994) involving high performance liquid chromatography with photodiode array (HPLC/PDA).

This method provides measures of 15 PCB congeners<sup>1</sup>, DDT and its metabolites (opDDD, opDDT, ppDDD, ppDDE, and ppDDT), and hexachlorobenzene.

Estimates of total PCBs and total DDT/metabolites were made by two methods: (1) arithmetic summation of individual Aroclors (1248, 1254, and 1260) and DDT compounds (ppDDD, ppDDE, and ppDDT) from the GC/ECD method, resulting in "Sum of Aroclors" ( $\Sigma$ PCB) and "Sum of DDTs" ( $\Sigma$ DDT), and (2) analytical measurement of total PCBs and DDTs by the HPLC/PDA screening method (congener-

<sup>1</sup> congeners 77, 101, 105, 110, 118, 126, 128, 138, 153, 156, 157, 169, 170, 180, and 189

PCBs) providing estimates of total PCBs from measurements of total area under the congener curve and of total "DDTs" (total area under the curve represented by ppDDT, ppDDD, opDDT, opDDE, and opDDD). The HPLC/PDA method, avoids overestimation of PCB concentration inherent in the aroclor-summation procedure. Results from both methods are summarized in this report. In 1997 and 1998 a number of tissue samples were analyzed using both the aroclor-PCB (GC/ECD) method as well as the congener-PCB (HPLC/PDA) method, allowing a comparison of total PCB and DDT-pesticide estimates. This analysis is forthcoming in a separate report.

In 1989, 1990 and 1991, total extractable lipids were determined gravimetrically using a hexane extraction method for tissue samples mixed with sodium sulfate, followed by heating to evaporate the solvent. This method proved unreliable, so data for 1989-1991 were rejected. The method was replaced in 1992 with a modified crude fat determination by acid hydrolysis. The new method involves mixing the tissue sample with sodium sulfate, extracting with a sonic probe using a mixture of methylene chloride and acetone, filtering through a bed of sodium sulfate powder, and allowing the solvent to evaporate. Percent lipids are then determined gravimetrically. All conventional data (%solids and %lipids) were reported as percent of total wet weight. Beginning in 1997 total lipid and dry weight determinations were conducted according to (Sloan et al. 1993).

Matrix -based detection limits were determined for each fish species and matrix (liver and muscle) by adding standards to representative instrument-ready sample matrices. All chemistry data are reported as the concentration per wet weight of tissue. Organic contaminants are reported in  $\mu\text{g}/\text{kg}$  (ppb) and all metals data are reported as  $\text{mg}/\text{kg}$  (ppm). Aroclor-PCB data for the first set of English sole liver samples collected in 1991 were excluded from data analyses due to insufficient documentation of matrix-based detection limits. Method detection limits (MDL) for some organic compounds, especially Aroclors and BNA-extractable compounds sampled from English sole livers, were highly variable in the early years of the PSAMP analysis. In some few cases, extraordinarily high MDLs were reported. MDLs for the majority of samples, however, were acceptably consistent and low (Tables 6-8). In order to reduce the disproportionate effect of the few high MDLs when computing summary statistics of analytes with non-detected values, we used median MDLs (across all years) as a value for non-detected analytes in computations.

### **Quality Assurance and Quality Control (QA/QC)**

WDFW staff validated the 1989 and 1990 data. Starting in 1991, an independent QA/QC chemist, Dr. David Kalman (University of Washington), was hired to review tissue chemistry data; detailed findings are reported in internal QA/QC reports that are available upon request. In general, the QA/QC chemist reported that the chemical laboratory followed the PSEP protocols for chemical analyses of organic and inorganic contaminants in fish tissue (Puget Sound Estuary Program 1989a (revised), 1989b (revised)) and produced good quality data. Most values were unqualified except as noted

below:

- All benzidine and 3,3-dichlorobenzidine data were rejected because they could not be detected in any of the calibrants or showed no correlation between instrument response and calibrant level.
- All benzyl alcohol "hits" (values found above the detection limit) were qualified as estimated values due to poor matrix spike recoveries.
- PCB data for the first set of English sole liver samples collected in 1991 were qualified as estimates because matrix based detection limits were not adequately documented.
- PCB and pesticide data for 1989 and 1990 (all species) and 1991 rockfish samples were not included in analyses because of poor resolution of the method. In 1991 the method was modified to better quantify low concentrations of PCBs and pesticides.
- Di-n-butyl phthalate and bis(2-ethylhexyl) phthalate were sometimes detected as laboratory contaminants; hence, those samples were blank-corrected and all hits qualified as estimated values.

## Data Analysis

### Data Sources

An understanding of the effects of environmental and biological factors on uptake of contaminants is essential to the evaluation of spatial and temporal changes in organismal contaminant concentrations. We normally use several biotic parameters (e.g., fish age, fish size, sex, and tissue lipid content) and abiotic parameters (location of capture, degree of "urban-ness" of a station, and when available, location-specific sediment concentrations of contaminants), to help us account for variability observed in tissue-contaminant concentrations. Concentration of contaminants in fish tissue usually correlates strongly with one or more of these variables (see summaries of published findings in Results). We test the significance and strength of such associations and the relative importance of these cofactors in the process of contaminant accumulation using linear regression analysis. Mean age and mean length can be computed for the fish composing each composite sample, however because of space limitations, these computations are not presented in our data summary tables (appendix tables).

### Lipid and Protein Normalization

A number of contaminants detected in PSAMP fish samples are lipophilic; hence, when present in fish tissue, contaminants may be concentrated in fatty tissues or organs. Lipid content of an individual varies among tissues and organs, and in the total body



throughout the life of a fish. Lipid concentrations also vary considerably among species, and interspecific or intraspecific patterns may not be obvious or predictable. In addition, biliary FACs correlate strongly with protein concentration of the bile, which is related to stage of digestion. Because of relationships like these, researchers often seek to statistically “normalize” contaminant concentrations to a common condition in order to eliminate the effects of these unpredictable variables and reduce the number of variables for modeling contaminant uptake.

The most common method for normalization consists of simply dividing the tissue contaminant concentration by its lipid (or protein, in the case of biliary FACs) concentration, resulting in a ratio of contaminant weight to tissue lipid (or biliary protein) weight. However, several problems exist with this method, including (1) the ratio method often fails to fully normalize data (i.e., a correlation between the two persists), (2) an assumption that contaminants correlate linearly with covariates at a one-to-one ratio, with an intercept of zero (an unlikely situation), and (3) several types of spurious correlations can result from the ratio methods (Jackson et al. 1990). (Hebert and Keenleyside 1995) demonstrated an alternative approach to lipid normalization using Linear Regression models or Analysis of Covariance. Readers are advised to think carefully about whether to normalize data, as well as methods for normalizing.

## Results

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This chapter presents a summary of contaminant and life-history data collected by the PSAMP Fish Component for all species from all locations from 1989-1999, followed by a list of pertinent published findings. The intent here is to provide the reader with an overview of locations and concentrations of the most commonly detected contaminants in PSAMP fishes. Data summarized for each species are presented as means and ranges (Tables 6-9), with more detailed location-specific summary data presented in Appendix tables at the end of this report. Data for individual records (composite or individual samples) are not reproduced in this report.

For the six fish species and four matrices sampled by WDFW from 1989 through 1999, 2,123 composite or individual samples were processed, including 1,446 muscle samples, 290 liver samples, 88 whole-body samples, and 299 bile samples. Fifty-six of the 126 individual compounds or elements monitored by the PSAMP Fish Component were measured above the method detection limit (MDL – i.e., observed as a “hit”), in at least one sample from 1989-1999 (see “Percent Detected”, Tables 6-9). This group of detected compounds includes all four metals, four of the seven PCB Aroclor mixtures, 14 of 15 PCB congeners, 13 of 23 pesticides, all three bile FACs, three of four organotins, and 15 of 70 Other Organic Compounds.

A number of these detected contaminants had concentrations or frequencies of detection too low to warrant further summarization here. Of all the detected compounds listed above, PCBs, DDT (and its metabolites), and organotins (Table 10), and mercury, copper, arsenic and lead (Table 11), were observed in more than negligible frequencies or concentrations. Table 12 summarizes three common factors that can be associated with accumulation of contaminants -- fish age, fish length, and tissue-lipid concentration -- for the composites summarized in Tables 10 and 11. In addition, biliary metabolites of benzo(a)pyrene, naphthalene, and phenanthrene (bile FACs) were detected in all bile samples tested, and fish age, length and biliary protein concentration for those composites are presented with the bile FAC summary statistics in Table 13.

Table 10. Summary statistics of exposure data for the most commonly detected organic contaminants (PCBs DDT-pesticides, and organo-tins) for all PSAMP species and tissue matrices, 1989-1999. Mean, minimum, maximum, sample size (n) and standard deviation of concentrations measured for all samples in the period are shown.  $\Sigma$ Aroclors is the arithmetic sum of Aroclors 1248, 1254, and 1260, and  $\Sigma$ DDTs is the arithmetic sum of ppDDT, ppDDE, and ppDDD, as quantified by the GC/ECD method. Total PCBs and Total DDTs are measures of total congener-PCBs and total DDT and DDT-metabolites by the HPLC/PDA method. See Methods for further descriptions of these summing and totaling procedures. See Table 12 for associated lipid, age, and size data.

		Muscle Tissue								Liver Tissue		Whole Body
		English sole	Chinook salmon	Coho salmon	Quillback rockfish		Brown Rockfish		Pacific cod	English sole	Starry flounder	Pacific herring
$\Sigma$ Aroclors ( $\mu\text{g}/\text{kg}$ )	mean	39.7	54.4	32.6	51.1	13.0	213.9	34.3	6.4	814.3	--	129.1
	min	5.3	12.5	6.0	6.0	7.9	20.9	18.3	6.0	140.0	--	64.9
	max	462.2	223.5	126.8	430.2	24.5	615.0	50.2	12.7	7100.0	--	221.5
	n	443	217	233	159	18	11	2	24	193	--	19
	SD	56.6	32.5	18.4	72.3	4.9	196.3	22.5	1.5	1172.5	--	46.2
Total PCBs ( $\mu\text{g}/\text{kg}$ )	mean	22.0		19.3	27.8	12.0	27.3	--	--	1563.6	--	101.7
	min	0.5		7.0	1.7	10.0	3.6	--	--	170.0	--	11.6
	max	140.0		105.0	114.0	16.0	123.0	--	--	13000.0	--	344.0
	n	113	0	47	83	3	35	--	--	45	--	50
	SD	25.1		15.4	25.5	3.5	24.3	--	--	2603.0	--	84.8
$\Sigma$ DDTs ( $\mu\text{g}/\text{kg}$ )	mean	3.4	21.4	11.7	3.3	2.9	--	10.3	2.8	77.0	70.3	21.4
	min	2.2	4.3	3.0	2.3	2.5	--	2.4	2.8	36.0	39.2	6.7
	max	18.0	58.8	39.4	7.5	3.7	--	18.2	2.8	399.0	75.5	45.1
	n	346	228	266	49	17	--	2	24	163	7	19
	SD	1.7	10.8	4.9	1.2	0.3	--	11.2	0.0	44.4	13.7	9.3
Total DDTs ( $\mu\text{g}/\text{kg}$ )	mean	1.2		11.4	1.1	1.6	1.6	--	--	46.7	--	29.2
	min	0.2		4.3	0.2	1.0	0.3	--	--	2.6	--	9.5
	max	4.4		25.6	7.1	2.2	4.7	--	--	260.0	--	171.3
	n	65	0	47	55	2	26	--	--	45	--	50
	SD	0.8		4.3	1.4	0.9	1.1	--	--	53.2	--	29.3
mono-n-butyltin	mean	--	--	--	--	--	--	--	--	15.65	4.95	--
	min	--	--	--	--	--	--	--	--	3.30	3.30	--
	max	--	--	--	--	--	--	--	--	57.80	13.00	--
	n	--	--	--	--	--	--	--	--	8	7	--
	SD	--	--	--	--	--	--	--	--	23.03	3.62	--

Table 10 (continued)

		Muscle Tissue							Liver Tissue		Whole Body
		English sole	Chinook salmon	Coho salmon	Quillback rockfish	Brown Rockfish	Pacific cod	English sole	Starry flounder	Pacific herring	
di-n-butyltin	mean	--	--	--	--	--	--	3.06	8.91	--	
	min	--	--	--	--	--	--	0.53	5.23	--	
	max	--	--	--	--	--	--	7.50	14.90	--	
	n	--	--	--	--	--	--	8	7	--	
	SD	--	--	--	--	--	--	2.90	3.61	--	
tri-n-butyltin	mean	--	--	--	--	--	--	4.16	3.32	--	
	min	--	--	--	--	--	--	0.46	2.09	--	
	max	--	--	--	--	--	--	9.38	4.81	--	
	n	--	--	--	--	--	--	8	7	--	
	SD	--	--	--	--	--	--	3.06	0.98	--	

Table 11. Summary statistics of exposure data for the most commonly detected metals for all PSAMP species and tissue matrices, 1989-1999. Mean, minimum, maximum, sample size (n) and standard deviation of concentrations measured for all samples in the period are shown. See Table 12 for associated lipid, age, and size data.

		Muscle Tissue								Liver Tissue		Whole Body
		English sole	Chinook salmon	Coho salmon	Quillback rockfish	Copper rockfish	Brown Rockfish	Yelloweye rockfish	Pacific cod	English sole	Starry flounder	Pacific herring
Mercury (mg/kg)	mean	0.061	0.093	0.049	0.295	0.149	0.754	1.184	0.109	0.099	0.122	0.060
	min	0.017	0.051	0.025	0.004	0.040	0.110	0.928	0.064	0.027	0.074	0.023
	max	0.140	0.160	0.110	1.060	0.690	1.150	1.440	0.180	0.268	0.205	0.104
	n	492	106	108	226	36	12	2	29	161	5	19
	SD	0.024	0.025	0.016	0.173	0.133	0.339	0.362	0.028	0.045	0.057	0.025
Copper (mg/kg)	mean	0.30	0.57	0.57	0.25	0.23	--	--	0.24	7.67	15.28	0.60
	min	0.14	0.26	0.23	0.10	0.13	--	--	0.20	2.60	11.10	0.44
	max	3.60	1.20	1.01	1.10	0.30	--	--	0.33	25.40	18.50	0.97
	n	282	101	103	70	25	--	--	26	117	4	19
	SD	0.22	0.20	0.18	0.12	0.04	--	--	0.04	3.30	3.29	0.13
Arsenic (mg/kg)	mean	7.74	0.96	0.64	2.27	1.78	--	--	4.02	10.58	8.25	1.55
	min	1.80	0.09	0.09	0.30	0.29	--	--	1.30	1.60	4.21	0.93
	max	20.00	1.80	1.60	6.60	4.80	--	--	8.80	60.20	18.80	2.20
	n	282	101	103	70	28	--	--	29	117	4	19
	SD	2.89	0.33	0.27	1.18	0.93	--	--	1.88	8.63	7.05	0.37
Lead (mg/kg)	mean	0.032	0.030	0.030	0.030	0.030	0.030	--	0.030	0.606	0.144	0.020
	min	0.010	0.020	0.020	0.030	0.030	0.030	--	0.030	0.060	0.050	0.020
	max	0.110	0.040	0.040	0.030	0.030	0.030	--	0.030	4.710	0.251	0.020
	n	351	101	103	79	34	11	--	29	137	4	19
	SD	0.009	0.001	0.002	0.000	0.000	0.000	--	0.000	0.792	0.106	0.000

Table 12. Summary statistics of tissue total lipid content (%), fish age (Mean Composite Age in years), fish size (Mean Composite Length in mm) for PSAMP species and tissue matrices, 1989-1999. Mean, minimum, maximum, sample size (n) and standard deviation of values for the period are shown.

		Muscle								Liver		Whole Body
		English sole	Chinook salmon	Coho salmon	Quillback rockfish	Copper rockfish	Brown Rockfish	Yelloweye rockfish	Pacific cod	English sole	Starry flounder	Pacific herring
Lipids (%)	mean	0.3	3.4	3.3	0.5	0.4	0.4	1.0	0.2	4.9	3.8	5.4
	min	0.0	0.2	0.2	0.0	0.2	0.1	0.2	0.1	2.6	2.1	0.8
	max	2.7	22.2	15.0	15.8	0.8	0.7	1.8	0.5	18.4	6.7	19.9
	n	378	227	265	237	15	37	2	12	136	7	88
	SD	0.2	2.7	2.1	1.2	0.2	0.2	1.2	0.1	1.8	1.6	3.0
Mean Composite Age (yrs)	mean	6	4	3	14	6	22	73	--	6	5	3
	min	2	2	3	3	3	8	55	--	2	2	2
	max	16	5	3	60	19	35	90	--	13	9	6
	n	532	225	288	236	35	11	2	--	265	7	88
	SD	2.2	0.6	0.0	7.0	3.3	9.5	24.7	--	1.9	2.3	0.9
Mean Composite Length (mm)	mean	295	753	557	316	322	258	679	518	293	295	176
	min	214	391	375	164	234	118	607	450	225	232	147
	max	471	1010	723	437	405	416	750	628	413	370	226
	n	571	232	288	248	36	40	2	29	283	7	88
	SD	45	95	58	43	45	97	101	48	38	52	11

Table 13. Summary statistics of exposure data for polycyclic aromatic hydrocarbons (PAHs) for all PSAMP species, 1995-1999. Exposure is estimated by the concentration of Fluorescing Aromatic Compounds (FACs) in bile (see Methods). Mean, minimum, maximum, sample size (n) and standard deviation of concentrations measured for all samples in the period are shown. Concentration of biliary protein is also presented as a measure of diluteness. Mean Composite Age (years) and Mean Composite Length (mm) were computed for fish that contributed to bile composites.

		English sole	Quillback rockfish	Copper rockfish	Brown Rockfish	Pacific herring
benzo (a) pyrene FAC (ng/ml bile)	mean	459	380	942	1,164	855
	min	43	33	222	192	53
	max	3,173	3,770	2,346	5,154	2,597
	n	81	94	3	10	31
	SD	479	442	1,216	1,492	702
naphthalene FAC (ng/ml bile)	mean	82,644	87,547	135,505	169,256	202,081
	min	15,557	7,364	55,328	40,803	6,853
	max	580,272	725,810	288,654	597,885	545,409
	n	81	94	3	10	31
	SD	82,886	98,406	132,680	166,198	139,343
phenanthrene FAC (ng/ml bile)	mean	30,709	21,468	37,436	52,290	54,951
	min	4,797	1,928	12,242	10,474	2,322
	max	190,954	185,866	84,701	222,079	210,995
	n	81	94	3	10	31
	SD	30,703	23,849	40,962	62,753	51,029
protein (mg/ml bile)	mean	2.89	4.16	4.90	2.95	17.95
	min	0.53	0.22	2.64	1.03	2.70
	max	12.30	25.30	6.74	6.51	72.30
	n	81	94	3	10	31
	SD	1.98	4.40	2.08	1.93	13.61
Mean Composite Age (yrs)	mean	6.7	10.7	10.5	6.8	3
	min	3.5	2.0	2.0	3.0	2
	max	10.9	39.0	19.0	14.0	5
	n	81	94	2	10	31
	SD	1.5	7.0	12.0	3.1	0.99
Mean Composite Length (mm)	mean	294	289	297	238	176
	min	218	115	178	143	143
	max	401	437	405	342	226
	n	81	94	3	10	31
	SD	46	63	114	55	15.8

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methods were used on different sets of samples here.

Again, the two PCB

### **Published PCB Findings**

- English sole from urban bays accumulated higher concentrations of PCBs than near- or non-urban areas (O'Neill et al. 1995; Puget Sound Water Quality Authority 1995, Puget Sound Water Quality Action Team, 1998). Exposure to PCBs in sediments is thought to be the primary factor responsible for PCBs in English sole, because PCBs in muscle tissue correlated well with PCB concentration in sediments (O'Neill et al. 1995; Puget Sound Water Quality Authority 1995, Puget Sound Water Quality Action Team 1998). No temporal trends in PCB exposure were observed in English sole from six baseline stations from 1991 through 1996 (Puget Sound Water Quality Action Team 1998).

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<sup>1</sup>sum of Aroclors 1248, 1254, and 1260, using the median method detection limit for non-detected Aroclors. Total PCBs represents the analytical total of congeners, from the HPLC screening method (see Methods).



- Urban rockfish had higher PCBs than non-urban fish (O'Neill et al. 1995; Puget Sound Water Quality Action Team 1998). In quillback rockfish, PCB concentration increased with fish age in males but not females from urban and near-urban areas. Non-urban rockfish showed virtually no accumulation of PCBs. PCBs in females are probably lost during reproduction, occurring with transfer of nutrients (lipids) to larvae. PCB concentrations in male rockfish from urban areas greatly exceeded a salmonid PCB effects-threshold (Meador 2000). Vitellogenin, an egg protein normally produced only by females was measure in two male rockfish from Elliott Bay. Induction of vitellogenin was not correlated with PCBs, suggesting that these fish were exposed to another exogenous hormone or hormone-mimic (West et al. in press).
- Adult Pacific salmon from all areas of Puget Sound accumulated PCBs. PCBs in adult chinook salmon were generally higher than coho salmon, and marine-caught salmon of both species were higher than in-river salmon. PCBs in adult coho salmon returning to spawn in Central and South Puget Sound watersheds had higher muscle PCBs than those returning to Northern Puget Sound watersheds. PCBs in chinook and coho salmon also correlated positively with tissue lipid concentration. (O'Neill et al. 1995; 1998 Puget Sound Water Quality Action Team 1998).
- Unlike English sole, PCB accumulation in adult Pacific salmon, a pelagic migratory species, was not correlated with contaminated sediments. The body burden of PCBs in chinook salmon smolts from the Duwamish estuary accounted for only approximately 1.1% of the body burden of returning adults. The majority of PCB body burden in salmon is thought to be taken on in the marine phase and total residence time in Puget Sound probably has a strong influence on PCB exposure in Pacific salmon (O'Neill et al. 1998). Future research will investigate further the role of residency time of salmon in Puget Sound with PCB exposure.
- PCB concentrations in Pacific herring, a wide-ranging pelagic species, are high enough to warrant use of the species a PSAMP indicator (Puget Sound Water Quality Action Team 2000). Total PCBs in whole herring bodies from the central and southern Puget Sound were significantly greater than the three northern locations, suggesting a Central Sound PCB "signal" (O'Neill and West in prep).
- PCBs were never detected in Pacific cod from Alden Bank and were only detected in two of twelve Admiralty Inlet samples (O'Neill et al. 1995).

## Pesticides

DDT (opDDT or ppDDT) or its derivatives (ppDDE, opDDD and ppDDD) were measured in muscle, liver, or whole body in all species (except Pacific cod). These

compounds were detected in 0.71 to 69.6% of all muscle samples (Table 6). These data are summarized here as  $\Sigma$ DDT, or the arithmetic sum of ppDDT, ppDDE, and ppDDD<sup>1</sup> and as Total DDTs (an estimate of the total concentration of opDDD, opDDT, ppDDD, ppDDE, and ppDDT -- see methods). The mean concentration of  $\Sigma$ DDT in muscle tissue was highest in chinook salmon (21.4  $\mu\text{g}/\text{kg}$ ), followed by coho salmon (11.3  $\mu\text{g}/\text{kg}$ ) and yelloweye rockfish (10.3  $\mu\text{g}/\text{kg}$ , with the remaining species less than 4.0  $\mu\text{g}/\text{kg}$  (Table 10). Similarly, the greatest mean Total DDT was 11.4  $\mu\text{g}/\text{kg}$  in coho salmon (this method was not applied to any chinook salmon samples), and four other species were less than 2  $\mu\text{g}/\text{kg}$ .

$\Sigma$ DDT and Total DDTs were also measured in livers of English sole and starry flounder, and whole bodies of Pacific herring (Table 10). Mean concentration of  $\Sigma$ DDT was 77.0 and 70.3  $\mu\text{g}/\text{kg}$  liver for English sole and starry flounder, and 21.4  $\mu\text{g}/\text{kg}$  whole body for Pacific herring. Mean concentration of Total DDTs was 46.7  $\mu\text{g}/\text{kg}$  liver for English sole, and 29.2  $\mu\text{g}/\text{kg}$  whole body for Pacific herring.

Five other pesticides were detected in more than 1% of all samples for any matrix: alpha and gamma chlordane (herring whole body), alpha and gamma hexachlorocyclohexane (English sole muscle), and dieldrin (English sole muscle) were detected in 21.1%, 100.0%, 7.1%, 1.4%, and 6.1% of all samples, respectively (Tables 6-8). Exposure to these compounds was low, with mean muscle tissue concentrations less than 5.0  $\mu\text{g}/\text{kg}$  in all species and matrices (not shown in Table 10 for brevity).

### **Published Pesticides Findings**

- Measured levels of total DDT in Puget Sound salmon tissue for the years 1989-1993 were higher in chinook salmon (mean = 22 ppb, range 6 - 59) than for coho salmon (mean = 10 ppb, range 4 - 19). Percent lipids explained 33% of the variability in chinook salmon DDT levels and percent lipids together with fish length explained 45 percent of the variability in coho salmon DDT levels. Fish age and site location ( Nisqually, Skagit or Duwamish Rivers) were not correlated with DDT levels (O'Neill et al. 1995).

## **Mercury**

All fish species sampled by PSAMP accumulated measurable mercury concentrations, but the highest levels were observed in long-lived carnivorous rockfish species. Mean mercury concentration in muscle tissue was highest in yelloweye rockfish (1.2 mg/kg), followed by brown rockfish (0.75 mg/kg), quillback rockfish (0.30 mg/kg), and copper rockfish (0.15). Intermediate concentrations were detected in Pacific cod (mean 0.11 mg/kg –Table 11). Chinook and coho salmon and English sole all had mean mercury of

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<sup>1</sup>4,4'-DDE composed the majority of detected DDT-compounds

less than 0.10 mg/kg muscle. Mercury concentration in liver tissue of English sole and starry flounder, and in whole-body herring was low (0.099, 0.122, and 0.060 mg/kg, respectively -- Table 11).

### **Published Mercury Findings**

- In rockfish, mercury concentration increased with age, even in rockfish from uncontaminated areas (West and O'Neill 1995, West and O'Neill 1998, Puget Sound Water Quality Action Team 1998). Urban rockfish, especially those from Sinclair Inlet and Elliott Bay, showed greater mercury concentrations than non-urban rockfish for a given age (West and O'Neill 1995, West and O'Neill 1998, Puget Sound Water Quality Action Team 1998). Unusually high Hg in rockfish from Foulweather Bluff, an area previously thought to be uncontaminated, suggests (a) there are other factors (e.g., trophic level) controlling Hg uptake and retention not measured by PSAMP (West and O'Neill 1998), (b) there is an undetected source of Hg nearby, or (c) contaminated rockfish immigrated from an urban or industrialized area.
- Mercury concentrations in English sole muscle tissue were slightly higher than liver tissue. Muscle tissue concentration of mercury was positively correlated with fish age and sediment mercury concentration, accounting for 66% and 14% percent of the site-to-site variation (O'Neill et al. 1995).
- Fish age or fish length (a proxy for age), was also correlated with mercury concentrations in muscle tissue of chinook salmon and Pacific cod (O'Neill et al. 1995).

### **Lead**

Lead was detected consistently in liver tissue of English sole and starry flounder (the only species from which liver was sampled). Mean concentration of lead in the liver of these two species was 0.61 and 0.14 mg/kg (Table 11). In muscle tissue, lead was detected consistently only in English sole and only from one location (Sinclair Inlet – see Figure 1), near the median method detection limit (MDL) of 0.030 mg/kg (see appendix Table "English Sole Liver"). In muscle tissue from all other locations, lead was detected sporadically, also near the median MDL in one sample of quillback rockfish, seven coho salmon, four chinook salmon, and two cod.

### **Published Lead Findings**

- English sole from Sinclair Inlet and the surrounding bays of Dyes Inlet, Port Orchard and Liberty Bay exhibited the greatest lead concentration (Puget Sound Water Quality Action Team 2000). Lead in English sole from most other locations exhibited lower overall concentrations and concentrations decreased as fish aged (Puget Sound Water Quality Action Team 2000).

## Arsenic and Copper

Arsenic and copper were detected in all species and tissues; highest arsenic concentrations were measured in livers of English sole and starry flounder (10.6 and 8.2 mg/kg liver), followed by muscle of English sole (7.7 mg/kg), Pacific cod (4.02 mg/kg) and the rest with less than 3 mg/kg. Highest mean copper concentration was detected in livers of English sole and starry flounder (7.7 and 15.3 mg/kg), followed by whole-body herring (0.60 mg/kg), muscle of chinook and coho salmon (0.57 mg/kg each), and the remaining species less than 0.30 mg/kg muscle.

### Published Arsenic and Copper Findings

- Based on locations sampled in 1992, greatest arsenic concentrations in English sole were from four stations all in the Port Orchard area: Sinclair Inlet, Dyes Inlet, Liberty Bay, and Port Orchard (Puget Sound Water Quality Authority 1995).
- In general, copper concentrations in muscle tissue did not vary greatly among fish species, nor among locations within a species (O'Neill et al. 1995). Copper concentrations in English sole were always higher in liver than muscle tissue and with the exception of Sinclair and Dyes Inlets; concentration in either tissue was generally not correlated with sediment copper (O'Neill et al. 1995; Puget Sound Water Quality Authority 1995).

## Organotins

Four organotin compounds (mono-n-, di-n-, tri-n-, and tetra-n-butyltin) were analyzed from eight English sole and 7 starry flounder liver composites. Tri-n-butyltin was detected in all 15 samples, while di-n- and mono-n-butyltin were detected in 11 and 4 samples, and tetra-n-butyltin was not detected in any sample (Table 7). Greatest concentrations of organotins were observed in English sole liver (mono-n-butyltin, 15.7 µg/kg) and starry flounder liver (di-n-butyltin, 8.9 µg/kg). Tri-n-butyltin was detected in both species (4.2 µg/kg and 3.3 µg/kg for English sole and starry flounder).

## Total Lipids

Of muscle tissue samples, chinook and coho salmon exhibited the greatest mean Composite Percent Lipids (CPL – 3.4 and 3.3%, Table 12). Muscle tissue for all other species exhibited 1.0% mean CPL or less. The greatest lipid concentrations were observed in English sole and starry flounder liver tissue (4.9% and 3.8%) and in whole-body Pacific herring (5.4%).

## Fish Age

Yelloweye, quillback, and brown rockfish were the oldest fish, with maximum ages of

90, 60, and 35 years, respectively for individual fish (Table 12). For fish contributing to muscle composites, Mean Composite Ages (MCA) ranged from 6 years for English sole and copper rockfish, to 3.7, 3.0, and 3.3 years for chinook salmon, coho salmon, and Pacific herring, respectively. A reliable method for aging adult Pacific cod does not exist, therefore, we lack age estimates for that species. However, using (Palsson 1990), the size range of our samples indicates that the Pacific cod we sampled were likely mature adults from 2 to 4 years old.

## **Fish Size**

Chinook and coho salmon, yelloweye rockfish, and Pacific cod were the largest species, with Mean Composite Length (MCL) of 753, 557, 679, and 518 mm, respectively (Table 12), followed by copper rockfish (322 mm), quillback rockfish (316 mm) and the remainder less than 300 mm (muscle or liver composites).

## **Biliary FACs and Protein**

Exposure to polycyclic aromatic compounds, as estimated by biliary concentrations of the metabolites of benzo(a)pyrene, naphthalene, and phenanthrene, were measured in English sole, quillback rockfish, copper rockfish, brown rockfish, and Pacific herring. Mean benzo(a)pyrene FAC concentrations in these species ranged from 380 to 1164 ng/ml bile (quillback and brown rockfish – Table 13). Mean naphthalene FAC concentrations ranged from 82,644 to 169,256 ng/ml bile (English sole and brown rockfish), and mean phenanthrene FACs ranged from 21,468 to 52,290 ng/ml bile for quillback and brown rockfish. Mean biliary protein concentration was highest in Pacific herring, at 13.2 mg/ml bile, followed by copper rockfish (4.90 mg/ml), quillback rockfish (4.16 mg/ml), brown rockfish (2.95 mg/ml) and English sole (2.89 mg/ml).

## **Published Bile FAC Findings**

- Concentrations of biliary FACs were greatest in English sole and rockfish from urban locations, followed by Pacific herring, English sole and rockfish from near-urban locations. The lowest levels of FACs were observed in English sole and rockfish from non-urban locations (Puget Sound Action Team 2000). Detailed spatial analysis of PAH metabolites in English sole showed that fish from urban locations were exposed to PAH levels comparable to those known to be associated with reproductive impairment and liver disease (Puget Sound Action Team 2000).
- Pacific herring from Central and Southern Puget Sound had higher FACs than those from the Northern Sound and Southern Georgia Basin (O'Neill and West in prep)

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## **Appendix: Data Summary by Species, Matrix, and Location**

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Following is an overview of PSAMP data from 1989-1999, summarized by species, matrix and location. The intent here is to provide the reader with the opportunity to evaluate spatial distribution of contaminants in Puget Sound fishes so as to allow the formation of specific questions regarding these data. Limitations of space preclude reproduction of all raw PSAMP data here, and careful analysis requires the evaluation of a number of covariates such as fish age, size, gender, and the like (see Introduction). However, the following tables will allow investigation of conditions at PSAMP locations on a general level.

## **English Sole Muscle**

Summary of contaminant data for all English sole muscle samples collected by the Puget Sound Ambient Monitoring Program's Fish Component, 1989-1999. "No. Detected" is the number of samples for which an analyte was measured above the Method Detection Limit (MDL). "No. Analyzed" is the total number of samples analyzed for a given analyte. Mean, minimum, maximum, and standard deviation (SD) were computed for analyte and station combination, pooling all years' data. See Figure 1 for station locations.

# Appendix: English Sole Muscle

Summary statistics for English sole muscle tissue samples, averaged across years from 1989-1999 by location and assay. A value of the median of the Method Detection Limit (MDL) was used in calculations when an analyte was undetected. Refer to Figure 1 for station locations. Shaded rows indicate location:assay combinations wherein at least one sample had a measured concentration above the MDL. Unshaded rows indicate combinations that had no measured concentrations above the MDL. All concentrations are based on wet weight. All organics in µg/kg, all elemental metals in mg/kg, all lipids and solids in %.

Location	Assay	No. Detected:				SD
		No. Analyzed	Mean	Min	Max	
Alki	Aldrin	0:3	0.50	0.50	0.50	0.00
Alki	alpha chlordane	0:3	0.50	0.50	0.50	0.00
Alki	alpha endosulfan	0:3	0.50	0.50	0.50	0.00
Alki	alpha hexachlorocyclohexane	0:3	0.50	0.50	0.50	0.00
Alki	Aroclor 1016	0:3	20.00	20.00	20.00	0.00
Alki	Aroclor 1221	0:3	20.00	20.00	20.00	0.00
Alki	Aroclor 1232	0:3	20.00	20.00	20.00	0.00
Alki	Aroclor 1242	0:3	10.00	10.00	10.00	0.00
Alki	Aroclor 1248	0:3	2.00	2.00	2.00	0.00
Alki	Aroclor 1254	3:3	7.89	5.97	10.20	2.14
Alki	Aroclor 1260	3:3	7.70	6.22	9.31	1.55
Alki	beta endosulfan	0:3	1.00	1.00	1.00	0.00
Alki	beta hexachlorocyclohexane	0:3	0.50	0.50	0.50	0.00
Alki	delta hexachlorocyclohexane	0:3	0.50	0.50	0.50	0.00
Alki	dieldrin	0:3	1.00	1.00	1.00	0.00
Alki	endosulfan sulfate	0:3	1.00	1.00	1.00	0.00
Alki	endrin	0:3	1.00	1.00	1.00	0.00
Alki	endrin aldehyde	0:3	1.00	1.00	1.00	0.00
Alki	gamma chlordane	0:3	0.50	0.50	0.50	0.00
Alki	gamma hexachlorocyclohexane	0:3	0.50	0.50	0.50	0.00
Alki	heptachlor	0:3	0.50	0.50	0.50	0.00
Alki	heptachlor epoxide	0:3	0.50	0.50	0.50	0.00
Alki	hexachlorobenzene	0:3	0.07	0.06	0.09	0.01
Alki	Lipids	6:6	0.22	0.14	0.45	0.12
Alki	Mercury	3:3	0.07	0.07	0.07	0.00
Alki	methoxychlor	0:3	10.00	10.00	10.00	0.00
Alki	opDDD	0:3	0.21	0.18	0.25	0.04
Alki	opDDT	0:2	0.28	0.25	0.31	0.04
Alki	PCB101	3:3	1.50	1.30	1.70	0.20
Alki	PCB105	2:2	0.23	0.20	0.26	0.04
Alki	PCB110	1:2	0.21	0.07	0.36	0.21
Alki	PCB118	3:3	0.87	0.53	1.10	0.30
Alki	PCB126	0:3	0.11	0.09	0.13	0.02
Alki	PCB128	2:3	0.20	0.09	0.29	0.10
Alki	PCB138	3:3	0.72	0.40	1.10	0.35
Alki	PCB153	3:3	1.31	0.93	1.50	0.33
Alki	PCB156	0:3	0.08	0.07	0.09	0.01
Alki	PCB157	0:3	0.07	0.06	0.09	0.01
Alki	PCB169	0:3	0.15	0.13	0.18	0.03
Alki	PCB170	1:2	0.12	0.08	0.15	0.05
Alki	PCB180	1:3	0.16	0.06	0.35	0.16
Alki	PCB189	0:3	0.08	0.07	0.09	0.01
Alki	PCB77	0:3	0.11	0.10	0.13	0.02
Alki	ppDDD	0:6	0.87	0.37	1.30	0.48
Alki	ppDDE	3:6	0.88	0.72	1.00	0.14
Alki	ppDDT	0:6	1.14	0.23	2.00	0.95
Alki	Solids	6:6	16.38	14.91	17.61	0.92
Alki	TotalDDT	3:3	0.76	0.72	0.81	0.05
Alki	TotalPCB	3:3	6.27	4.30	7.70	1.76

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Alki	toxaphene	0:3	10.00	10.00	10.00	0.00
Apple Cove Pt.	1,2,4-trichlorobenzene	0:3	3.60	3.60	3.60	0.00
Apple Cove Pt.	1,2-dichlorobenzene	0:3	10.70	10.70	10.70	0.00
Apple Cove Pt.	1,2-diphenylhydrazine	0:3	3.60	3.60	3.60	0.00
Apple Cove Pt.	1,3-dichlorobenzene	0:3	10.70	10.70	10.70	0.00
Apple Cove Pt.	1,4-dichlorobenzene	0:3	10.70	10.70	10.70	0.00
Apple Cove Pt.	2,4,5-trichlorophenol	0:3	18.00	18.00	18.00	0.00
Apple Cove Pt.	2,4,6-trichlorophenol	0:3	18.00	18.00	18.00	0.00
Apple Cove Pt.	2,4-dichlorophenol	0:3	3.60	3.60	3.60	0.00
Apple Cove Pt.	2,4-dimethylphenol	0:3	3.60	3.60	3.60	0.00
Apple Cove Pt.	2,4-dinitrophenol	0:3	72.00	72.00	72.00	0.00
Apple Cove Pt.	2,4-dinitrotoluene	0:3	18.00	18.00	18.00	0.00
Apple Cove Pt.	2,6-dinitrotoluene	0:3	18.00	18.00	18.00	0.00
Apple Cove Pt.	2-chloronaphthalene	0:3	10.70	10.70	10.70	0.00
Apple Cove Pt.	2-chlorophenol	0:3	3.60	3.60	3.60	0.00
Apple Cove Pt.	2-methylnaphthalene	0:3	3.60	3.60	3.60	0.00
Apple Cove Pt.	2-methylphenol	0:3	3.60	3.60	3.60	0.00
Apple Cove Pt.	2-nitroaniline	0:3	7.10	7.10	7.10	0.00
Apple Cove Pt.	2-nitrophenol	0:3	3.60	3.60	3.60	0.00
Apple Cove Pt.	3-nitroaniline	0:3	3.60	3.60	3.60	0.00
Apple Cove Pt.	4,6-dinitro-o-cresol	0:3	53.00	53.00	53.00	0.00
Apple Cove Pt.	4-bromophenylphenylether	0:3	18.00	18.00	18.00	0.00
Apple Cove Pt.	4-chloro-3-methylphenol	0:3	3.60	3.60	3.60	0.00
Apple Cove Pt.	4-chloroaniline	0:3	36.00	36.00	36.00	0.00
Apple Cove Pt.	4-chlorophenylphenylether	0:3	3.60	3.60	3.60	0.00
Apple Cove Pt.	4-methylphenol	0:3	3.60	3.60	3.60	0.00
Apple Cove Pt.	4-nitroaniline	0:3	18.00	18.00	18.00	0.00
Apple Cove Pt.	4-nitrophenol	0:3	36.00	36.00	36.00	0.00
Apple Cove Pt.	acenaphthene	0:3	3.60	3.60	3.60	0.00
Apple Cove Pt.	acenaphthylene	0:3	3.60	3.60	3.60	0.00
Apple Cove Pt.	Aldrin	0:6	0.50	0.50	0.50	0.00
Apple Cove Pt.	alpha chlordane	0:6	0.50	0.50	0.50	0.00
Apple Cove Pt.	alpha endosulfan	0:6	0.50	0.50	0.50	0.00
Apple Cove Pt.	alpha hexachlorocyclohexane	0:6	0.50	0.50	0.50	0.00
Apple Cove Pt.	aniline	0:3	53.30	53.30	53.30	0.00
Apple Cove Pt.	anthracene	0:3	3.60	3.60	3.60	0.00
Apple Cove Pt.	Aroclor 1016	0:6	20.00	20.00	20.00	0.00
Apple Cove Pt.	Aroclor 1221	0:6	20.00	20.00	20.00	0.00
Apple Cove Pt.	Aroclor 1232	0:6	20.00	20.00	20.00	0.00
Apple Cove Pt.	Aroclor 1242	0:6	10.00	10.00	10.00	0.00
Apple Cove Pt.	Aroclor 1248	0:6	2.00	2.00	2.00	0.00
Apple Cove Pt.	Aroclor 1254	0:6	2.00	2.00	2.00	0.00
Apple Cove Pt.	Aroclor 1260	6:6	7.87	3.00	17.30	5.03
Apple Cove Pt.	arsenic	6:6	6.75	5.18	8.10	1.05
Apple Cove Pt.	benzo(a)anthracene	0:3	10.70	10.70	10.70	0.00
Apple Cove Pt.	benzo(a)pyrene	0:3	3.60	3.60	3.60	0.00
Apple Cove Pt.	benzo(b)fluoranthene	0:3	10.70	10.70	10.70	0.00
Apple Cove Pt.	benzo(g,h,i)perylene	0:3	10.70	10.70	10.70	0.00
Apple Cove Pt.	benzo(k)fluoranthene	0:3	7.10	7.10	7.10	0.00
Apple Cove Pt.	benzoic acid	0:3	36.00	36.00	36.00	0.00
Apple Cove Pt.	benzyl alcohol	0:3	3.60	3.60	3.60	0.00
Apple Cove Pt.	benzylbutylphthalate	0:3	10.70	10.70	10.70	0.00
Apple Cove Pt.	beta endosulfan	0:6	1.00	1.00	1.00	0.00
Apple Cove Pt.	beta hexachlorocyclohexane	0:6	0.50	0.50	0.50	0.00
Apple Cove Pt.	bis(2-chloroethoxy)methane	0:3	3.60	3.60	3.60	0.00
Apple Cove Pt.	bis(2-chloroethyl)ether	0:3	3.60	3.60	3.60	0.00

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Apple Cove Pt.	bis(2-chloroisopropyl)ether	0:3	10.70	10.70	10.70	0.00
Apple Cove Pt.	bis(2-ethylhexyl)phthalate	2:3	214.53	3.60	610.00	342.74
Apple Cove Pt.	carbazole	0:3	3.60	3.60	3.60	0.00
Apple Cove Pt.	chrysene	0:3	3.60	3.60	3.60	0.00
Apple Cove Pt.	copper	6:6	0.28	0.19	0.51	0.12
Apple Cove Pt.	coprostanol	0:3	180.00	180.00	180.00	0.00
Apple Cove Pt.	delta hexachlorocyclohexane	0:6	0.50	0.50	0.50	0.00
Apple Cove Pt.	dibenzo(a,h)anthracene	0:3	10.70	10.70	10.70	0.00
Apple Cove Pt.	dibenzofuran	0:3	10.70	10.70	10.70	0.00
Apple Cove Pt.	Dieldrin	0:6	1.00	1.00	1.00	0.00
Apple Cove Pt.	diethylphthalate	0:3	3.60	3.60	3.60	0.00
Apple Cove Pt.	dimethylphthalate	0:3	3.60	3.60	3.60	0.00
Apple Cove Pt.	di-n-butylphthalate	2:3	37.87	3.60	60.00	30.09
Apple Cove Pt.	di-n-octylphthalate	0:3	3.60	3.60	3.60	0.00
Apple Cove Pt.	endosulfan sulfate	0:6	1.00	1.00	1.00	0.00
Apple Cove Pt.	Endrin	0:6	1.00	1.00	1.00	0.00
Apple Cove Pt.	endrin aldehyde	0:6	1.00	1.00	1.00	0.00
Apple Cove Pt.	fluoranthene	0:3	3.60	3.60	3.60	0.00
Apple Cove Pt.	fluorene	0:3	3.60	3.60	3.60	0.00
Apple Cove Pt.	gamma chlordane	2:6	0.52	0.50	0.60	0.04
Apple Cove Pt.	gamma hexachlorocyclohexane	0:6	0.50	0.50	0.50	0.00
Apple Cove Pt.	Heptachlor	0:6	0.50	0.50	0.50	0.00
Apple Cove Pt.	heptachlor epoxide	0:6	0.50	0.50	0.50	0.00
Apple Cove Pt.	hexachlorobenzene	0:3	18.00	18.00	18.00	0.00
Apple Cove Pt.	hexachlorobutadiene	0:3	10.70	10.70	10.70	0.00
Apple Cove Pt.	hexachlorocyclopentadiene	0:3	36.00	36.00	36.00	0.00
Apple Cove Pt.	hexachloroethane	0:3	10.70	10.70	10.70	0.00
Apple Cove Pt.	indeno(1,2,3-c,d)pyrene	0:3	18.00	18.00	18.00	0.00
Apple Cove Pt.	isophorone	0:3	3.60	3.60	3.60	0.00
Apple Cove Pt.	lead	0:6	0.03	0.02	0.03	0.01
Apple Cove Pt.	Lipids	6:6	0.49	0.19	0.87	0.32
Apple Cove Pt.	mercury	6:6	0.06	0.04	0.08	0.02
Apple Cove Pt.	Methoxychlor	0:6	10.00	10.00	10.00	0.00
Apple Cove Pt.	naphthalene	0:3	3.60	3.60	3.60	0.00
Apple Cove Pt.	nitrobenzene	0:3	10.70	10.70	10.70	0.00
Apple Cove Pt.	N-nitrosodimethylamine	0:3	3.60	3.60	3.60	0.00
Apple Cove Pt.	N-nitroso-di-n-propylamine	0:3	3.60	3.60	3.60	0.00
Apple Cove Pt.	N-nitrosodiphenylamine	0:3	3.60	3.60	3.60	0.00
Apple Cove Pt.	pentachlorophenol	0:3	36.00	36.00	36.00	0.00
Apple Cove Pt.	phenanthrene	0:3	3.60	3.60	3.60	0.00
Apple Cove Pt.	phenol	0:3	3.60	3.60	3.60	0.00
Apple Cove Pt.	ppDDD	0:6	1.00	1.00	1.00	0.00
Apple Cove Pt.	ppDDE	3:6	1.40	1.00	2.18	0.48
Apple Cove Pt.	ppDDT	0:6	2.00	2.00	2.00	0.00
Apple Cove Pt.	pyrene	0:3	3.60	3.60	3.60	0.00
Apple Cove Pt.	Solids	4:4	16.55	14.50	21.00	3.02
Apple Cove Pt.	Toxaphene	0:6	10.00	10.00	10.00	0.00
Battle Point	hexachlorobenzene	0:3	0.05	0.04	0.05	0.01
Battle Point	lead	3:3	0.02	0.01	0.02	0.00
Battle Point	Lipids	3:3	0.37	0.28	0.51	0.12
Battle Point	Mercury	3:3	0.06	0.05	0.07	0.01
Battle Point	opDDD	0:2	0.13	0.12	0.14	0.01
Battle Point	opDDT	0:1	0.15	0.15	0.15	
Battle Point	PCB101	3:3	2.63	1.80	4.20	1.36



Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Battle Point	PCB105	2:3	0.38	0.06	0.57	0.28
Battle Point	PCB110	3:3	0.58	0.36	1.00	0.36
Battle Point	PCB118	3:3	1.01	0.46	1.80	0.70
Battle Point	PCB126	0:3	0.07	0.07	0.08	0.01
Battle Point	PCB128	2:3	0.79	0.06	1.50	0.72
Battle Point	PCB138	3:3	1.03	0.64	1.50	0.43
Battle Point	PCB153	3:3	2.17	1.50	3.40	1.07
Battle Point	PCB156	0:3	0.04	0.04	0.05	0.01
Battle Point	PCB157	0:3	0.04	0.04	0.05	0.01
Battle Point	PCB169	0:3	0.10	0.09	0.11	0.01
Battle Point	PCB170	3:3	1.10	0.53	2.10	0.87
Battle Point	PCB180	3:3	0.76	0.51	1.20	0.38
Battle Point	PCB189	0:3	0.05	0.05	0.06	0.01
Battle Point	PCB77	0:3	0.08	0.07	0.09	0.01
Battle Point	ppDDD	0:3	0.16	0.14	0.18	0.02
Battle Point	ppDDE	0:3	0.15	0.13	0.17	0.02
Battle Point	ppDDT	0:3	0.07	0.06	0.08	0.01
Battle Point	Solids	6:6	19.06	17.80	20.88	1.03
Battle Point	TotalDDT	0:3				
Battle Point	TotalPCB	3:3	14.00	10.00	21.00	6.08
Birch Point	1,2,4-trichlorobenzene	0:6	3.80	3.60	4.00	0.22
Birch Point	1,2-dichlorobenzene	0:6	11.00	11.00	11.00	0.00
Birch Point	1,2-diphenylhydrazine	0:6	3.80	3.60	4.00	0.22
Birch Point	1,3-dichlorobenzene	0:6	11.00	11.00	11.00	0.00
Birch Point	1,4-dichlorobenzene	0:6	11.00	11.00	11.00	0.00
Birch Point	2,4,5-trichlorophenol	0:6	18.00	18.00	18.00	0.00
Birch Point	2,4,6-trichlorophenol	0:6	18.00	18.00	18.00	0.00
Birch Point	2,4-dichlorophenol	0:6	3.80	3.60	4.00	0.22
Birch Point	2,4-dimethylphenol	0:6	11.80	3.60	20.00	8.98
Birch Point	2,4-dinitrophenol	0:6	72.00	72.00	72.00	0.00
Birch Point	2,4-dinitrotoluene	0:6	18.00	18.00	18.00	0.00
Birch Point	2,6-dinitrotoluene	0:6	18.00	18.00	18.00	0.00
Birch Point	2-chloronaphthalene	0:6	11.00	11.00	11.00	0.00
Birch Point	2-chlorophenol	0:6	3.80	3.60	4.00	0.22
Birch Point	2-methylnaphthalene	0:6	3.80	3.60	4.00	0.22
Birch Point	2-methylphenol	0:6	3.80	3.60	4.00	0.22
Birch Point	2-nitroaniline	0:6	7.05	7.00	7.10	0.05
Birch Point	2-nitrophenol	0:6	3.80	3.60	4.00	0.22
Birch Point	3-nitroaniline	0:6	3.80	3.60	4.00	0.22
Birch Point	4,6-dinitro-o-cresol	0:6	51.50	50.00	53.00	1.64
Birch Point	4-bromophenylphenylether	0:6	19.00	18.00	20.00	1.10
Birch Point	4-chloro-3-methylphenol	0:6	3.80	3.60	4.00	0.22
Birch Point	4-chloroaniline	0:6	36.00	36.00	36.00	0.00
Birch Point	4-chlorophenylphenylether	0:6	3.80	3.60	4.00	0.22
Birch Point	4-methylphenol	0:6	3.80	3.60	4.00	0.22
Birch Point	4-nitroaniline	0:6	18.00	18.00	18.00	0.00
Birch Point	4-nitrophenol	0:6	36.00	36.00	36.00	0.00
Birch Point	acenaphthene	0:6	3.80	3.60	4.00	0.22
Birch Point	acenaphthylene	0:6	3.80	3.60	4.00	0.22
Birch Point	Aldrin	0:6	0.52	0.50	0.60	0.04
Birch Point	alpha chlordane	0:6	0.52	0.50	0.60	0.04
Birch Point	alpha endosulfan	0:6	0.52	0.50	0.60	0.04
Birch Point	alpha hexachlorocyclohexane	0:6	0.52	0.50	0.60	0.04
Birch Point	aniline	0:6	53.00	53.00	53.00	0.00
Birch Point	anthracene	0:6	3.80	3.60	4.00	0.22

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Birch Point	Aroclor 1016	0:6	19.33	18.00	20.00	1.03
Birch Point	Aroclor 1221	0:6	19.33	18.00	20.00	1.03
Birch Point	Aroclor 1232	0:6	19.33	18.00	20.00	1.03
Birch Point	Aroclor 1242	0:6	10.83	10.00	13.00	1.17
Birch Point	Aroclor 1248	0:6	2.18	2.00	2.50	0.21
Birch Point	Aroclor 1254	1:6	2.51	1.30	5.35	1.49
Birch Point	Aroclor 1260	3:6	3.08	1.30	7.50	2.21
Birch Point	arsenic	6:6	3.87	3.35	4.28	0.35
Birch Point	benzo(a)anthracene	0:6	11.00	11.00	11.00	0.00
Birch Point	benzo(a)pyrene	0:6	3.80	3.60	4.00	0.22
Birch Point	benzo(b)fluoranthene	0:6	11.00	11.00	11.00	0.00
Birch Point	benzo(g,h,i)perylene	0:6	11.00	11.00	11.00	0.00
Birch Point	benzo(k)fluoranthene	0:6	7.05	7.00	7.10	0.05
Birch Point	benzoic acid	2:6	100.33	36.00	254.00	100.91
Birch Point	benzyl alcohol	5:6	18.18	4.00	34.10	10.06
Birch Point	benzylbutylphthalate	1:6	18.95	11.00	58.70	19.47
Birch Point	beta endosulfan	0:6	1.02	1.00	1.10	0.04
Birch Point	beta hexachlorocyclohexane	0:6	0.52	0.50	0.60	0.04
Birch Point	bis(2-chloroethoxy)methane	0:6	3.80	3.60	4.00	0.22
Birch Point	bis(2-chloroethyl)ether	0:6	3.80	3.60	4.00	0.22
Birch Point	bis(2-chloroisopropyl)ether	0:6	11.00	11.00	11.00	0.00
Birch Point	bis(2-ethylhexyl)phthalate	2:6	50.80	3.60	177.00	71.68
Birch Point	carbazole	0:6	3.80	3.60	4.00	0.22
Birch Point	chrysene	0:6	3.80	3.60	4.00	0.22
Birch Point	copper	6:6	0.31	0.19	0.41	0.08
Birch Point	coprostanol	0:6	180.00	180.00	180.00	0.00
Birch Point	delta hexachlorocyclohexane	0:6	0.52	0.50	0.60	0.04
Birch Point	dibenzo(a,h)anthracene	0:6	11.00	11.00	11.00	0.00
Birch Point	dibenzofuran	0:6	11.00	11.00	11.00	0.00
Birch Point	Dieldrin	0:6	1.02	1.00	1.10	0.04
Birch Point	diethylphthalate	0:6	3.80	3.60	4.00	0.22
Birch Point	dimethylphthalate	0:6	3.80	3.60	4.00	0.22
Birch Point	di-n-butylphthalate	0:6	3.80	3.60	4.00	0.22
Birch Point	di-n-octylphthalate	0:6	3.80	3.60	4.00	0.22
Birch Point	endosulfan sulfate	0:6	1.02	1.00	1.10	0.04
Birch Point	Endrin	0:6	1.02	1.00	1.10	0.04
Birch Point	endrin aldehyde	0:6	1.02	1.00	1.10	0.04
Birch Point	fluoranthene	0:6	3.80	3.60	4.00	0.22
Birch Point	fluorene	0:6	3.80	3.60	4.00	0.22
Birch Point	gamma chlordane	0:6	0.52	0.50	0.60	0.04
Birch Point	gamma hexachlorocyclohexane	0:6	0.52	0.50	0.60	0.04
Birch Point	Heptachlor	0:6	0.52	0.50	0.60	0.04
Birch Point	heptachlor epoxide	0:6	0.52	0.50	0.60	0.04
Birch Point	hexachlorobenzene	0:6	18.00	18.00	18.00	0.00
Birch Point	hexachlorobutadiene	0:6	11.00	11.00	11.00	0.00
Birch Point	hexachlorocyclopentadiene	0:6	150.50	36.00	265.00	125.43
Birch Point	hexachloroethane	0:6	30.50	11.00	50.00	21.36
Birch Point	indeno(1,2,3-c,d)pyrene	0:6	18.00	18.00	18.00	0.00
Birch Point	isophorone	0:6	3.80	3.60	4.00	0.22
Birch Point	lead	0:6	0.03	0.03	0.03	0.00
Birch Point	Lipids	3:3	0.50	0.20	1.00	0.44
Birch Point	mercury	6:6	0.03	0.02	0.05	0.01
Birch Point	Methoxychlor	0:6	11.33	10.00	14.00	1.63
Birch Point	naphthalene	0:6	3.80	3.60	4.00	0.22
Birch Point	nitrobenzene	0:6	11.00	11.00	11.00	0.00

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Birch Point	N-nitrosodimethylamine	0:6	3.80	3.60	4.00	0.22
Birch Point	N-nitroso-di-n-propylamine	0:6	3.80	3.60	4.00	0.22
Birch Point	N-nitrosodiphenylamine	0:6	3.80	3.60	4.00	0.22
Birch Point	pentachlorophenol	0:6	150.50	36.00	265.00	125.43
Birch Point	phenanthrene	0:6	3.80	3.60	4.00	0.22
Birch Point	phenol	0:6	3.80	3.60	4.00	0.22
Birch Point	ppDDD	0:6	1.02	1.00	1.10	0.04
Birch Point	ppDDE	1:6	1.07	1.00	1.33	0.13
Birch Point	ppDDT	0:6	2.25	2.00	2.70	0.29
Birch Point	pyrene	0:6	3.80	3.60	4.00	0.22
Birch Point	Solids	4:4	18.15	17.30	19.00	0.70
Birch Point	Toxaphene	0:6	12.17	10.00	15.00	2.40
Blake Island	hexachlorobenzene	0:3	0.05	0.04	0.05	0.01
Blake Island	lead	0:3	0.01	0.01	0.01	0.00
Blake Island	Lipids	3:3	0.29	0.17	0.46	0.15
Blake Island	Mercury	3:3	0.09	0.07	0.12	0.03
Blake Island	opDDT	0:1	0.19	0.19	0.19	
Blake Island	PCB101	3:3	1.40	1.20	1.70	0.26
Blake Island	PCB105	1:1	0.28	0.28	0.28	
Blake Island	PCB110	3:3	0.72	0.28	1.60	0.76
Blake Island	PCB118	3:3	1.27	0.81	2.10	0.72
Blake Island	PCB126	0:3	0.07	0.06	0.08	0.01
Blake Island	PCB128	3:3	1.14	0.23	1.90	0.85
Blake Island	PCB138	3:3	0.36	0.27	0.45	0.09
Blake Island	PCB153	3:3	1.05	0.96	1.10	0.08
Blake Island	PCB156	2:2	1.17	0.93	1.40	0.33
Blake Island	PCB157	0:3	0.04	0.04	0.05	0.01
Blake Island	PCB169	0:3	0.09	0.08	0.10	0.01
Blake Island	PCB170	1:3	0.22	0.05	0.55	0.29
Blake Island	PCB180	3:3	0.29	0.23	0.36	0.07
Blake Island	PCB189	0:3	0.05	0.05	0.06	0.01
Blake Island	PCB77	0:3	0.08	0.07	0.09	0.01
Blake Island	ppDDD	0:3	0.15	0.13	0.17	0.02
Blake Island	ppDDE	0:3	0.15	0.12	0.17	0.03
Blake Island	ppDDT	2:3	0.55	0.08	0.81	0.41
Blake Island	Solids	6:6	17.19	15.70	18.68	1.25
Blake Island	TotalDDT	2:3	0.79	0.77	0.81	0.03
Blake Island	TotalPCB	3:3	10.30	10.00	10.90	0.52
Boulder Rock	Aldrin	0:3	0.50	0.50	0.50	0.00
Boulder Rock	alpha chlordane	0:3	0.50	0.50	0.50	0.00
Boulder Rock	alpha endosulfan	0:3	0.50	0.50	0.50	0.00
Boulder Rock	alpha hexachlorocyclohexane	0:3	0.50	0.50	0.50	0.00
Boulder Rock	Aroclor 1016	0:3	20.00	20.00	20.00	0.00
Boulder Rock	Aroclor 1221	0:3	20.00	20.00	20.00	0.00
Boulder Rock	Aroclor 1232	0:3	20.00	20.00	20.00	0.00
Boulder Rock	Aroclor 1242	0:3	10.00	10.00	10.00	0.00
Boulder Rock	Aroclor 1248	0:3	2.00	2.00	2.00	0.00
Boulder Rock	Aroclor 1254	3:3	17.00	15.00	18.90	1.95
Boulder Rock	Aroclor 1260	3:3	30.30	28.60	32.10	1.75
Boulder Rock	beta endosulfan	0:3	1.00	1.00	1.00	0.00
Boulder Rock	beta hexachlorocyclohexane	0:3	0.50	0.50	0.50	0.00
Boulder Rock	delta hexachlorocyclohexane	0:3	0.50	0.50	0.50	0.00
Boulder Rock	Dieldrin	0:3	1.00	1.00	1.00	0.00
Boulder Rock	endosulfan sulfate	0:3	1.00	1.00	1.00	0.00
Boulder Rock	Endrin	0:3	1.00	1.00	1.00	0.00

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Boulder Rock	endrin aldehyde	0:3	1.00	1.00	1.00	0.00
Boulder Rock	gamma chlordane	0:3	0.50	0.50	0.50	0.00
Boulder Rock	gamma hexachlorocyclohexane	0:3	0.50	0.50	0.50	0.00
Boulder Rock	Heptachlor	0:3	0.50	0.50	0.50	0.00
Boulder Rock	heptachlor epoxide	0:3	0.50	0.50	0.50	0.00
Boulder Rock	lead	0:3	0.02	0.02	0.02	0.00
Boulder Rock	Lipids	3:3	0.49	0.47	0.50	0.02
Boulder Rock	mercury	3:3	0.04	0.04	0.05	0.00
Boulder Rock	Methoxychlor	0:3	10.00	10.00	10.00	0.00
Boulder Rock	ppDDD	2:3	1.13	1.00	1.21	0.11
Boulder Rock	ppDDE	3:3	2.32	2.27	2.37	0.05
Boulder Rock	ppDDT	0:3	2.00	2.00	2.00	0.00
Boulder Rock	Solids	3:3	16.03	15.00	16.70	0.91
Boulder Rock	Toxaphene	0:3	10.00	10.00	10.00	0.00
Brown's Point	hexachlorobenzene	0:3	0.04	0.04	0.05	0.01
Brown's Point	Lipids	3:3	1.35	0.68	2.67	1.14
Brown's Point	opDDD	0:2	0.11	0.10	0.12	0.01
Brown's Point	opDDT	0:3	0.14	0.13	0.16	0.02
Brown's Point	PCB101	3:3	4.83	2.50	6.30	2.04
Brown's Point	PCB105	0:1	0.04	0.04	0.04	
Brown's Point	PCB110	3:3	0.83	0.51	1.20	0.35
Brown's Point	PCB118	3:3	4.73	2.50	6.70	2.11
Brown's Point	PCB126	0:3	0.06	0.05	0.07	0.01
Brown's Point	PCB128	3:3	1.12	0.37	1.70	0.68
Brown's Point	PCB138	3:3	1.38	0.65	1.90	0.65
Brown's Point	PCB153	3:3	3.57	1.80	4.90	1.59
Brown's Point	PCB156	0:3	0.04	0.04	0.05	0.00
Brown's Point	PCB157	0:3	0.04	0.04	0.05	0.01
Brown's Point	PCB169	0:3	0.08	0.07	0.09	0.01
Brown's Point	PCB170	3:3	0.66	0.37	1.00	0.32
Brown's Point	PCB180	3:3	1.06	0.58	1.60	0.51
Brown's Point	PCB189	0:3	0.04	0.04	0.05	0.01
Brown's Point	PCB77	0:3	0.06	0.06	0.07	0.01
Brown's Point	ppDDD	0:3	0.24	0.21	0.27	0.03
Brown's Point	ppDDE	1:3	0.65	0.12	1.70	0.91
Brown's Point	ppDDT	0:3	0.15	0.13	0.16	0.02
Brown's Point	Solids	3:3	17.06	15.77	18.15	1.20
Brown's Point	TotalDDT	1:3	1.70	1.70	1.70	
Brown's Point	TotalPCB	3:3	22.67	11.00	29.00	10.12
Carr Inlet	1,2,4-trichlorobenzene	0:3	3.60	3.60	3.60	0.00
Carr Inlet	1,2-dichlorobenzene	0:3	10.70	10.70	10.70	0.00
Carr Inlet	1,2-diphenylhydrazine	0:3	3.60	3.60	3.60	0.00
Carr Inlet	1,3-dichlorobenzene	0:3	10.70	10.70	10.70	0.00
Carr Inlet	1,4-dichlorobenzene	0:3	10.70	10.70	10.70	0.00
Carr Inlet	2,4,5-trichlorophenol	0:3	18.00	18.00	18.00	0.00
Carr Inlet	2,4,6-trichlorophenol	0:3	18.00	18.00	18.00	0.00
Carr Inlet	2,4-dichlorophenol	0:3	3.60	3.60	3.60	0.00
Carr Inlet	2,4-dimethylphenol	0:3	50.00	50.00	50.00	0.00
Carr Inlet	2,4-dinitrophenol	0:3	72.00	72.00	72.00	0.00
Carr Inlet	2,4-dinitrotoluene	0:3	18.00	18.00	18.00	0.00
Carr Inlet	2,6-dinitrotoluene	0:3	18.00	18.00	18.00	0.00
Carr Inlet	2-chloronaphthalene	0:3	10.70	10.70	10.70	0.00
Carr Inlet	2-chlorophenol	0:3	3.60	3.60	3.60	0.00
Carr Inlet	2-methylnaphthalene	0:3	3.60	3.60	3.60	0.00
Carr Inlet	2-methylphenol	0:3	3.60	3.60	3.60	0.00

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Carr Inlet	2-nitroaniline	0:3	7.10	7.10	7.10	0.00
Carr Inlet	2-nitrophenol	0:3	3.60	3.60	3.60	0.00
Carr Inlet	3-nitroaniline	0:3	3.60	3.60	3.60	0.00
Carr Inlet	4,6-dinitro-o-cresol	0:3	50.00	50.00	50.00	0.00
Carr Inlet	4-bromophenylphenylether	0:3	50.00	50.00	50.00	0.00
Carr Inlet	4-chloro-3-methylphenol	0:3	3.60	3.60	3.60	0.00
Carr Inlet	4-chloroaniline	0:3	36.00	36.00	36.00	0.00
Carr Inlet	4-chlorophenylphenylether	0:3	3.60	3.60	3.60	0.00
Carr Inlet	4-methylphenol	0:3	3.60	3.60	3.60	0.00
Carr Inlet	4-nitroaniline	0:3	18.00	18.00	18.00	0.00
Carr Inlet	4-nitrophenol	0:3	36.00	36.00	36.00	0.00
Carr Inlet	acenaphthene	0:3	3.60	3.60	3.60	0.00
Carr Inlet	acenaphthylene	0:3	3.60	3.60	3.60	0.00
Carr Inlet	Aldrin	0:6	0.50	0.50	0.50	0.00
Carr Inlet	alpha chlordane	0:6	0.50	0.50	0.50	0.00
Carr Inlet	alpha endosulfan	0:6	0.50	0.50	0.50	0.00
Carr Inlet	alpha hexachlorocyclohexane	0:6	0.50	0.50	0.50	0.00
Carr Inlet	aniline	0:3	53.00	53.00	53.00	0.00
Carr Inlet	anthracene	0:3	3.60	3.60	3.60	0.00
Carr Inlet	Aroclor 1016	0:6	20.00	20.00	20.00	0.00
Carr Inlet	Aroclor 1221	0:6	20.00	20.00	20.00	0.00
Carr Inlet	Aroclor 1232	0:6	20.00	20.00	20.00	0.00
Carr Inlet	Aroclor 1242	0:6	10.00	10.00	10.00	0.00
Carr Inlet	Aroclor 1248	0:6	2.00	2.00	2.00	0.00
Carr Inlet	Aroclor 1254	3:6	4.45	2.00	8.32	3.06
Carr Inlet	Aroclor 1260	6:6	9.16	5.06	11.00	2.23
Carr Inlet	arsenic	3:3	13.67	13.00	14.00	0.58
Carr Inlet	benzo(a)anthracene	0:3	10.70	10.70	10.70	0.00
Carr Inlet	benzo(a)pyrene	0:3	3.60	3.60	3.60	0.00
Carr Inlet	benzo(b)fluoranthene	0:3	10.70	10.70	10.70	0.00
Carr Inlet	benzo(g,h,i)perylene	0:3	10.70	10.70	10.70	0.00
Carr Inlet	benzo(k)fluoranthene	0:3	7.10	7.10	7.10	0.00
Carr Inlet	benzoic acid	0:3	36.00	36.00	36.00	0.00
Carr Inlet	benzyl alcohol	0:3	3.60	3.60	3.60	0.00
Carr Inlet	benzylbutylphthalate	0:3	10.70	10.70	10.70	0.00
Carr Inlet	beta endosulfan	0:6	1.00	1.00	1.00	0.00
Carr Inlet	beta hexachlorocyclohexane	0:6	0.50	0.50	0.50	0.00
Carr Inlet	bis(2-chloroethoxy)methane	0:3	3.60	3.60	3.60	0.00
Carr Inlet	bis(2-chloroethyl)ether	0:3	3.60	3.60	3.60	0.00
Carr Inlet	bis(2-chloroisopropyl)ether	0:3	10.70	10.70	10.70	0.00
Carr Inlet	bis(2-ethylhexyl)phthalate	1:3	127.67	100.00	183.00	47.92
Carr Inlet	carbazole	0:3	3.60	3.60	3.60	0.00
Carr Inlet	chrysene	0:3	3.60	3.60	3.60	0.00
Carr Inlet	copper	3:3	0.34	0.25	0.42	0.09
Carr Inlet	coprostanol	0:3	180.00	180.00	180.00	0.00
Carr Inlet	delta hexachlorocyclohexane	0:6	0.50	0.50	0.50	0.00
Carr Inlet	dibenzo(a,h)anthracene	0:3	10.70	10.70	10.70	0.00
Carr Inlet	dibenzofuran	0:3	10.70	10.70	10.70	0.00
Carr Inlet	Dieldrin	0:6	1.00	1.00	1.00	0.00
Carr Inlet	diethylphthalate	0:3	3.60	3.60	3.60	0.00
Carr Inlet	dimethylphthalate	0:3	3.60	3.60	3.60	0.00
Carr Inlet	di-n-butylphthalate	0:3	4.00	4.00	4.00	0.00
Carr Inlet	di-n-octylphthalate	0:3	3.60	3.60	3.60	0.00
Carr Inlet	endosulfan sulfate	0:6	1.00	1.00	1.00	0.00
Carr Inlet	Endrin	0:6	1.00	1.00	1.00	0.00

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Carr Inlet	endrin aldehyde	0:6	1.00	1.00	1.00	0.00
Carr Inlet	fluoranthene	0:3	3.60	3.60	3.60	0.00
Carr Inlet	fluorene	0:3	3.60	3.60	3.60	0.00
Carr Inlet	gamma chlordane	0:6	0.50	0.50	0.50	0.00
Carr Inlet	gamma hexachlorocyclohexane	0:6	0.50	0.50	0.50	0.00
Carr Inlet	Heptachlor	0:6	0.50	0.50	0.50	0.00
Carr Inlet	heptachlor epoxide	0:6	0.50	0.50	0.50	0.00
Carr Inlet	hexachlorobenzene	0:3	18.00	18.00	18.00	0.00
Carr Inlet	hexachlorobutadiene	0:3	10.70	10.70	10.70	0.00
Carr Inlet	hexachlorocyclopentadiene	0:3	265.00	265.00	265.00	0.00
Carr Inlet	hexachloroethane	0:3	10.70	10.70	10.70	0.00
Carr Inlet	indeno(1,2,3-c,d)pyrene	0:3	18.00	18.00	18.00	0.00
Carr Inlet	isophorone	0:3	3.60	3.60	3.60	0.00
Carr Inlet	lead	0:6	0.03	0.02	0.03	0.01
Carr Inlet	Lipids	6:6	0.22	0.14	0.43	0.11
Carr Inlet	mercury	6:6	0.05	0.04	0.07	0.01
Carr Inlet	Methoxychlor	0:6	10.00	10.00	10.00	0.00
Carr Inlet	naphthalene	0:3	3.60	3.60	3.60	0.00
Carr Inlet	nitrobenzene	0:3	10.70	10.70	10.70	0.00
Carr Inlet	N-nitrosodimethylamine	0:3	3.60	3.60	3.60	0.00
Carr Inlet	N-nitroso-di-n-propylamine	0:3	3.60	3.60	3.60	0.00
Carr Inlet	N-nitrosodiphenylamine	0:3	3.60	3.60	3.60	0.00
Carr Inlet	pentachlorophenol	0:3	265.00	265.00	265.00	0.00
Carr Inlet	phenanthrene	0:3	3.60	3.60	3.60	0.00
Carr Inlet	phenol	0:3	3.60	3.60	3.60	0.00
Carr Inlet	ppDDD	1:6	1.11	1.00	1.67	0.27
Carr Inlet	ppDDE	0:6	1.00	1.00	1.00	0.00
Carr Inlet	ppDDT	0:6	2.00	2.00	2.00	0.00
Carr Inlet	pyrene	0:3	3.60	3.60	3.60	0.00
Carr Inlet	Solids	6:6	18.08	17.00	19.20	0.75
Carr Inlet	Toxaphene	0:6	10.00	10.00	10.00	0.00
Dana Passage	1,2,4-trichlorobenzene	0:12	4.18	3.60	6.20	1.06
Dana Passage	1,2-dichlorobenzene	0:12	9.51	5.60	10.70	2.16
Dana Passage	1,2-diphenylhydrazine	0:12	8.62	3.60	25.00	9.10
Dana Passage	1,3-dichlorobenzene	0:12	9.51	5.60	10.70	2.16
Dana Passage	1,4-dichlorobenzene	0:12	10.98	10.70	12.40	0.58
Dana Passage	2,4,5-trichlorophenol	0:12	25.33	18.00	50.00	13.33
Dana Passage	2,4,6-trichlorophenol	0:12	25.33	18.00	50.00	13.33
Dana Passage	2,4-dichlorophenol	0:12	5.62	3.60	12.00	3.66
Dana Passage	2,4-dimethylphenol	0:12	17.22	3.60	50.00	20.07
Dana Passage	2,4-dinitrophenol	0:12	59.92	22.00	72.00	21.87
Dana Passage	2,4-dinitrotoluene	0:12	14.68	4.40	18.00	6.00
Dana Passage	2,6-dinitrotoluene	0:12	14.68	4.40	18.00	6.00
Dana Passage	2-chloronaphthalene	0:12	10.01	5.60	12.00	1.96
Dana Passage	2-chlorophenol	0:12	8.62	3.60	25.00	9.10
Dana Passage	2-methylnaphthalene	0:12	7.20	3.60	19.00	6.53
Dana Passage	2-methylphenol	0:12	5.62	3.60	12.00	3.66
Dana Passage	2-nitroaniline	0:12	14.16	7.10	37.00	12.80
Dana Passage	2-nitrophenol	0:12	5.62	3.60	12.00	3.66
Dana Passage	3,3-dichlorobenzidine	0:3	11.67	11.00	12.00	0.58
Dana Passage	3-nitroaniline	0:12	11.53	3.60	37.00	14.38
Dana Passage	4,6-dinitro-o-cresol	0:12	44.92	22.00	53.00	12.89
Dana Passage	4-bromophenylphenylether	0:12	22.38	3.30	50.00	17.76
Dana Passage	4-chloro-3-methylphenol	0:12	8.62	3.60	25.00	9.10
Dana Passage	4-chloroaniline	0:12	32.92	22.00	36.00	5.62

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Dana Passage	4-chlorophenylphenylether	0:12	4.18	3.60	6.20	1.06
Dana Passage	4-methylphenol	0:12	5.62	3.60	12.00	3.66
Dana Passage	4-nitroaniline	0:12	22.33	18.00	37.00	7.89
Dana Passage	4-nitrophenol	0:12	32.92	22.00	36.00	5.62
Dana Passage	acenaphthene	0:12	3.88	3.60	5.00	0.53
Dana Passage	acenaphthylene	0:12	4.68	3.60	12.00	2.47
Dana Passage	Aldrin	0:9	0.56	0.50	0.80	0.10
Dana Passage	alpha chlordane	0:9	0.56	0.50	0.80	0.10
Dana Passage	alpha endosulfan	0:9	0.56	0.50	0.80	0.10
Dana Passage	alpha hexachlorocyclohexane	0:9	0.56	0.50	0.80	0.10
Dana Passage	aniline	0:12	45.82	22.00	53.30	13.37
Dana Passage	anthracene	0:12	4.18	3.60	6.20	1.06
Dana Passage	Aroclor 1016	0:9	18.78	9.00	21.00	3.77
Dana Passage	Aroclor 1221	0:9	18.78	9.00	21.00	3.77
Dana Passage	Aroclor 1232	0:9	20.00	18.00	21.00	0.87
Dana Passage	Aroclor 1242	0:9	10.78	10.00	13.00	1.30
Dana Passage	Aroclor 1248	0:9	2.18	2.00	2.70	0.29
Dana Passage	Aroclor 1254	3:9	3.34	2.00	7.50	1.87
Dana Passage	Aroclor 1260	7:9	5.36	2.30	10.00	2.71
Dana Passage	arsenic	12:12	8.37	5.70	11.00	1.87
Dana Passage	benzo(a)anthracene	0:12	9.51	5.60	10.70	2.16
Dana Passage	benzo(a)pyrene	0:12	5.62	3.60	12.00	3.66
Dana Passage	benzo(b)fluoranthene	0:12	12.53	10.70	19.00	3.33
Dana Passage	benzo(g,h,i)perylene	0:12	10.94	10.70	12.00	0.50
Dana Passage	benzo(k)fluoranthene	0:12	9.83	7.10	19.00	4.95
Dana Passage	benzoic acid	1:12	162.67	36.00	500.00	206.65
Dana Passage	benzyl alcohol	6:12	31.08	3.60	124.36	40.41
Dana Passage	benzylbutylphthalate	0:12	10.86	6.20	16.80	2.28
Dana Passage	beta endosulfan	0:9	1.14	1.00	2.00	0.33
Dana Passage	beta hexachlorocyclohexane	0:9	0.56	0.50	0.80	0.10
Dana Passage	bis(2-chloroethoxy)methane	0:12	5.62	3.60	12.00	3.66
Dana Passage	bis(2-chloroethyl)ether	0:12	4.18	3.60	6.20	1.06
Dana Passage	bis(2-chloroisopropyl)ether	0:12	13.94	10.70	25.00	5.90
Dana Passage	bis(2-ethylhexyl)phthalate	1:12	65.17	3.60	430.00	122.27
Dana Passage	carbazole	0:9	3.60	3.60	3.60	0.00
Dana Passage	chrysene	0:12	4.18	3.60	6.20	1.06
Dana Passage	copper	12:12	0.30	0.21	0.56	0.11
Dana Passage	coprostanol	0:9	720.00	180.00	1800.00	810.00
Dana Passage	delta hexachlorocyclohexane	0:9	0.56	0.50	0.80	0.10
Dana Passage	dibenzo(a,h)anthracene	0:12	12.53	10.70	19.00	3.33
Dana Passage	dibenzofuran	0:12	10.94	10.70	12.00	0.50
Dana Passage	Dieldrin	0:9	1.14	1.00	2.00	0.33
Dana Passage	diethylphthalate	0:12	12.03	3.60	66.00	19.15
Dana Passage	dimethylphthalate	0:12	3.58	3.30	3.70	0.09
Dana Passage	di-n-butylphthalate	1:12	8.67	3.60	22.00	7.62
Dana Passage	di-n-octylphthalate	0:12	4.18	3.60	6.20	1.06
Dana Passage	endosulfan sulfate	0:9	1.14	1.00	2.00	0.33
Dana Passage	Endrin	0:9	1.14	1.00	2.00	0.33
Dana Passage	endrin aldehyde	0:9	1.14	1.00	2.00	0.33
Dana Passage	fluoranthene	0:12	4.48	3.60	7.50	1.59
Dana Passage	fluorene	0:12	4.18	3.60	6.20	1.06
Dana Passage	gamma chlordane	0:9	0.56	0.50	0.80	0.10
Dana Passage	gamma hexachlorocyclohexane	0:9	0.56	0.50	0.80	0.10
Dana Passage	Heptachlor	0:9	0.56	0.50	0.80	0.10
Dana Passage	heptachlor epoxide	0:9	0.56	0.50	0.80	0.10

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Dana Passage	hexachlorobenzene	0:12	14.98	5.60	18.00	5.46
Dana Passage	hexachlorobutadiene	0:12	10.94	10.70	12.00	0.50
Dana Passage	hexachlorocyclopentadiene	0:12	87.17	11.00	265.00	107.74
Dana Passage	hexachloroethane	0:12	10.94	10.70	12.00	0.50
Dana Passage	indeno(1,2,3-c,d)pyrene	0:12	16.42	11.00	18.00	2.87
Dana Passage	isophorone	0:12	5.62	3.60	12.00	3.66
Dana Passage	lead	2:12	0.03	0.03	0.05	0.01
Dana Passage	Lipids	1:1	0.64	0.64	0.64	
Dana Passage	mercury	9:9	0.04	0.03	0.04	0.01
Dana Passage	Methoxychlor	0:9	12.22	10.00	20.00	3.38
Dana Passage	naphthalene	0:12	7.20	3.60	19.00	6.53
Dana Passage	nitrobenzene	0:12	10.94	10.70	12.00	0.50
Dana Passage	N-nitrosodimethylamine	0:12	11.53	3.60	37.00	14.38
Dana Passage	N-nitroso-di-n-propylamine	0:12	5.62	3.60	12.00	3.66
Dana Passage	N-nitrosodiphenylamine	0:12	5.62	3.60	12.00	3.66
Dana Passage	pentachlorophenol	0:12	87.17	11.00	265.00	107.74
Dana Passage	phenanthrene	0:12	4.18	3.60	6.20	1.06
Dana Passage	phenol	0:12	20.37	3.60	74.00	30.38
Dana Passage	ppDDD	0:9	1.14	1.00	2.00	0.33
Dana Passage	ppDDE	0:9	1.14	1.00	2.00	0.33
Dana Passage	ppDDT	0:9	2.43	2.00	4.00	0.67
Dana Passage	pyrene	0:12	4.18	3.60	6.20	1.06
Dana Passage	Solids	5:5	16.25	15.26	18.00	1.03
Dana Passage	Toxaphene	0:9	12.89	10.00	20.00	3.76
Dash Point	1,2,4-trichlorobenzene	0:3	3.60	3.60	3.60	0.00
Dash Point	1,2-dichlorobenzene	0:3	10.70	10.70	10.70	0.00
Dash Point	1,2-diphenylhydrazine	0:3	3.60	3.60	3.60	0.00
Dash Point	1,3-dichlorobenzene	0:3	10.70	10.70	10.70	0.00
Dash Point	1,4-dichlorobenzene	0:3	10.70	10.70	10.70	0.00
Dash Point	2,4,5-trichlorophenol	0:3	18.00	18.00	18.00	0.00
Dash Point	2,4,6-trichlorophenol	0:3	18.00	18.00	18.00	0.00
Dash Point	2,4-dichlorophenol	0:3	3.60	3.60	3.60	0.00
Dash Point	2,4-dimethylphenol	0:3	50.00	50.00	50.00	0.00
Dash Point	2,4-dinitrophenol	0:3	72.00	72.00	72.00	0.00
Dash Point	2,4-dinitrotoluene	0:3	18.00	18.00	18.00	0.00
Dash Point	2,6-dinitrotoluene	0:3	18.00	18.00	18.00	0.00
Dash Point	2-chloronaphthalene	0:3	10.70	10.70	10.70	0.00
Dash Point	2-chlorophenol	0:3	3.60	3.60	3.60	0.00
Dash Point	2-methylnaphthalene	0:3	3.60	3.60	3.60	0.00
Dash Point	2-methylphenol	0:3	3.60	3.60	3.60	0.00
Dash Point	2-nitroaniline	0:3	7.10	7.10	7.10	0.00
Dash Point	2-nitrophenol	0:3	3.60	3.60	3.60	0.00
Dash Point	3-nitroaniline	0:3	3.60	3.60	3.60	0.00
Dash Point	4,6-dinitro-o-cresol	0:3	50.00	50.00	50.00	0.00
Dash Point	4-bromophenylphenylether	0:3	50.00	50.00	50.00	0.00
Dash Point	4-chloro-3-methylphenol	0:3	3.60	3.60	3.60	0.00
Dash Point	4-chloroaniline	0:3	36.00	36.00	36.00	0.00
Dash Point	4-chlorophenylphenylether	0:3	3.60	3.60	3.60	0.00
Dash Point	4-methylphenol	0:3	3.60	3.60	3.60	0.00
Dash Point	4-nitroaniline	0:3	18.00	18.00	18.00	0.00
Dash Point	4-nitrophenol	0:3	36.00	36.00	36.00	0.00
Dash Point	acenaphthene	0:3	3.60	3.60	3.60	0.00
Dash Point	acenaphthylene	0:3	3.60	3.60	3.60	0.00
Dash Point	Aldrin	0:6	0.50	0.50	0.50	0.00
Dash Point	alpha chlordane	0:6	0.50	0.50	0.50	0.00



Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Dash Point	alpha endosulfan	0:6	0.50	0.50	0.50	0.00
Dash Point	alpha hexachlorocyclohexane	0:6	0.50	0.50	0.50	0.00
Dash Point	aniline	0:3	53.00	53.00	53.00	0.00
Dash Point	anthracene	0:3	3.60	3.60	3.60	0.00
Dash Point	Aroclor 1016	0:6	20.00	20.00	20.00	0.00
Dash Point	Aroclor 1221	0:6	20.00	20.00	20.00	0.00
Dash Point	Aroclor 1232	0:6	20.00	20.00	20.00	0.00
Dash Point	Aroclor 1242	0:6	10.00	10.00	10.00	0.00
Dash Point	Aroclor 1248	0:6	2.00	2.00	2.00	0.00
Dash Point	Aroclor 1254	6:6	11.81	5.80	24.70	6.76
Dash Point	Aroclor 1260	6:6	15.48	11.00	24.00	4.51
Dash Point	arsenic	6:6	9.35	6.31	12.00	2.08
Dash Point	benzo(a)anthracene	0:3	10.70	10.70	10.70	0.00
Dash Point	benzo(a)pyrene	0:3	3.60	3.60	3.60	0.00
Dash Point	benzo(b)fluoranthene	0:3	10.70	10.70	10.70	0.00
Dash Point	benzo(g,h,i)perylene	0:3	10.70	10.70	10.70	0.00
Dash Point	benzo(k)fluoranthene	0:3	7.10	7.10	7.10	0.00
Dash Point	benzoic acid	0:3	36.00	36.00	36.00	0.00
Dash Point	benzyl alcohol	0:3	3.60	3.60	3.60	0.00
Dash Point	benzylbutylphthalate	0:3	10.70	10.70	10.70	0.00
Dash Point	beta endosulfan	0:6	1.00	1.00	1.00	0.00
Dash Point	beta hexachlorocyclohexane	0:6	0.50	0.50	0.50	0.00
Dash Point	bis(2-chloroethoxy)methane	0:3	3.60	3.60	3.60	0.00
Dash Point	bis(2-chloroethyl)ether	0:3	3.60	3.60	3.60	0.00
Dash Point	bis(2-chloroisopropyl)ether	0:3	10.70	10.70	10.70	0.00
Dash Point	bis(2-ethylhexyl)phthalate	0:3	100.00	100.00	100.00	0.00
Dash Point	carbazole	0:3	3.60	3.60	3.60	0.00
Dash Point	chrysene	0:3	3.60	3.60	3.60	0.00
Dash Point	copper	6:6	0.30	0.22	0.34	0.04
Dash Point	coprostanol	0:3	180.00	180.00	180.00	0.00
Dash Point	delta hexachlorocyclohexane	0:6	0.50	0.50	0.50	0.00
Dash Point	dibenzo(a,h)anthracene	0:3	10.70	10.70	10.70	0.00
Dash Point	dibenzofuran	0:3	10.70	10.70	10.70	0.00
Dash Point	Dieldrin	0:6	1.00	1.00	1.00	0.00
Dash Point	diethylphthalate	0:3	3.60	3.60	3.60	0.00
Dash Point	dimethylphthalate	0:3	3.60	3.60	3.60	0.00
Dash Point	di-n-butylphthalate	0:3	4.00	4.00	4.00	0.00
Dash Point	di-n-octylphthalate	0:3	3.60	3.60	3.60	0.00
Dash Point	endosulfan sulfate	0:6	1.00	1.00	1.00	0.00
Dash Point	Endrin	0:6	1.00	1.00	1.00	0.00
Dash Point	endrin aldehyde	0:6	1.00	1.00	1.00	0.00
Dash Point	fluoranthene	0:3	3.60	3.60	3.60	0.00
Dash Point	fluorene	0:3	3.60	3.60	3.60	0.00
Dash Point	gamma chlordanes	1:6	0.53	0.50	0.70	0.08
Dash Point	gamma hexachlorocyclohexane	0:6	0.50	0.50	0.50	0.00
Dash Point	Heptachlor	0:6	0.50	0.50	0.50	0.00
Dash Point	heptachlor epoxide	0:6	0.50	0.50	0.50	0.00
Dash Point	hexachlorobenzene	0:3	18.00	18.00	18.00	0.00
Dash Point	hexachlorobutadiene	0:3	10.70	10.70	10.70	0.00
Dash Point	hexachlorocyclopentadiene	0:3	265.00	265.00	265.00	0.00
Dash Point	hexachloroethane	0:3	10.70	10.70	10.70	0.00
Dash Point	indeno(1,2,3-c,d)pyrene	0:3	18.00	18.00	18.00	0.00
Dash Point	isophorone	0:3	3.60	3.60	3.60	0.00
Dash Point	lead	0:6	0.03	0.02	0.03	0.01
Dash Point	Lipids	6:6	0.17	0.04	0.42	0.13

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Dash Point	mercury	6:6	0.08	0.07	0.09	0.01
Dash Point	Methoxychlor	0:6	10.00	10.00	10.00	0.00
Dash Point	naphthalene	0:3	3.60	3.60	3.60	0.00
Dash Point	nitrobenzene	0:3	10.70	10.70	10.70	0.00
Dash Point	N-nitrosodimethylamine	0:3	3.60	3.60	3.60	0.00
Dash Point	N-nitroso-di-n-propylamine	0:3	3.60	3.60	3.60	0.00
Dash Point	N-nitrosodiphenylamine	0:3	3.60	3.60	3.60	0.00
Dash Point	pentachlorophenol	0:3	265.00	265.00	265.00	0.00
Dash Point	phenanthrene	0:3	3.60	3.60	3.60	0.00
Dash Point	phenol	0:3	3.60	3.60	3.60	0.00
Dash Point	ppDDD	1:6	1.00	1.00	1.02	0.01
Dash Point	ppDDE	5:6	1.56	1.00	2.32	0.44
Dash Point	ppDDT	0:6	2.00	2.00	2.00	0.00
Dash Point	pyrene	0:3	3.60	3.60	3.60	0.00
Dash Point	Solids	6:6	15.70	15.00	16.10	0.51
Dash Point	Toxaphene	0:6	10.00	10.00	10.00	0.00
Discovery Bay	1,2,4-trichlorobenzene	0:6	7.08	3.31	11.00	3.53
Discovery Bay	1,2-dichlorobenzene	0:6	10.91	9.80	12.41	1.24
Discovery Bay	1,2-diphenylhydrazine	0:6	22.78	3.31	44.00	20.75
Discovery Bay	1,3-dichlorobenzene	0:6	10.91	9.80	12.41	1.24
Discovery Bay	1,4-dichlorobenzene	0:6	16.04	9.84	22.00	5.07
Discovery Bay	2,4,5-trichlorophenol	0:6	51.39	16.56	89.00	35.20
Discovery Bay	2,4,6-trichlorophenol	0:6	51.39	16.56	89.00	35.20
Discovery Bay	2,4-dichlorophenol	0:6	12.45	3.31	22.00	9.40
Discovery Bay	2,4-dimethylphenol	0:6	12.45	3.31	22.00	9.40
Discovery Bay	2,4-dinitrophenol	0:6	59.71	39.00	83.52	20.81
Discovery Bay	2,4-dinitrotoluene	0:6	13.89	7.80	20.88	6.29
Discovery Bay	2,6-dinitrotoluene	0:6	13.89	7.80	20.88	6.29
Discovery Bay	2-chloronaphthalene	0:6	10.91	9.80	12.41	1.24
Discovery Bay	2-chlorophenol	0:6	22.78	3.31	44.00	20.75
Discovery Bay	2-methylnaphthalene	0:6	17.45	3.31	33.00	14.91
Discovery Bay	2-methylphenol	0:6	12.45	3.31	22.00	9.40
Discovery Bay	2-nitroaniline	0:6	35.34	6.53	67.00	30.42
Discovery Bay	2-nitrophenol	0:6	12.45	3.31	22.00	9.40
Discovery Bay	3,3-dichlorobenzidine	0:3	21.00	20.00	22.00	1.00
Discovery Bay	3-nitroaniline	0:6	33.45	3.31	67.00	32.48
Discovery Bay	4,6-dinitro-o-cresol	0:6	49.45	39.00	61.48	9.84
Discovery Bay	4-bromophenylphenylether	0:6	12.87	5.90	20.88	7.37
Discovery Bay	4-chloro-3-methylphenol	0:6	22.78	3.31	44.00	20.75
Discovery Bay	4-chloroaniline	0:6	40.27	33.12	44.00	3.85
Discovery Bay	4-chlorophenylphenylether	0:6	7.08	3.31	11.00	3.53
Discovery Bay	4-methylphenol	0:6	12.45	3.31	22.00	9.40
Discovery Bay	4-nitroaniline	0:6	41.22	16.56	67.00	24.04
Discovery Bay	4-nitrophenol	0:6	40.27	33.12	44.00	3.85
Discovery Bay	acenaphthene	0:6	6.11	3.31	8.90	2.48
Discovery Bay	acenaphthylene	0:6	7.08	3.31	11.00	3.53
Discovery Bay	Aldrin	0:3	0.57	0.50	0.60	0.06
Discovery Bay	alpha chlordane	0:3	0.57	0.50	0.60	0.06
Discovery Bay	alpha endosulfan	0:3	0.57	0.50	0.60	0.06
Discovery Bay	alpha hexachlorocyclohexane	0:3	0.57	0.50	0.60	0.06
Discovery Bay	aniline	0:6	49.62	39.00	61.83	10.01
Discovery Bay	anthracene	0:6	7.08	3.31	11.00	3.53
Discovery Bay	Aroclor 1016	0:3	19.67	17.00	21.00	2.31
Discovery Bay	Aroclor 1221	0:3	19.67	17.00	21.00	2.31
Discovery Bay	Aroclor 1232	0:3	19.67	17.00	21.00	2.31

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Discovery Bay	Aroclor 1242	0:3	12.00	10.00	13.00	1.73
Discovery Bay	Aroclor 1248	0:3	2.50	2.10	2.70	0.35
Discovery Bay	Aroclor 1254	0:3	2.50	2.10	2.70	0.35
Discovery Bay	Aroclor 1260	0:3	2.50	2.10	2.70	0.35
Discovery Bay	arsenic	6:6	7.07	4.90	9.20	1.90
Discovery Bay	benzo(a)anthracene	0:6	10.91	9.80	12.41	1.24
Discovery Bay	benzo(a)pyrene	0:6	12.45	3.31	22.00	9.40
Discovery Bay	benzo(b)fluoranthene	0:6	21.28	9.84	33.00	10.77
Discovery Bay	benzo(g,h,i)perylene	0:6	16.28	9.84	22.00	5.30
Discovery Bay	benzo(k)fluoranthene	0:6	19.34	6.53	33.00	12.86
Discovery Bay	benzoic acid	3:6	332.00	84.00	500.00	190.13
Discovery Bay	benzyl alcohol	4:6	28.24	9.30	47.16	15.11
Discovery Bay	benzylbutylphthalate	0:6	12.24	9.84	16.80	2.44
Discovery Bay	beta endosulfan	0:3	1.10	0.90	1.20	0.17
Discovery Bay	beta hexachlorocyclohexane	0:3	0.57	0.50	0.60	0.06
Discovery Bay	bis(2-chloroethoxy)methane	0:6	12.45	3.31	22.00	9.40
Discovery Bay	bis(2-chloroethyl)ether	0:6	7.08	3.31	11.00	3.53
Discovery Bay	bis(2-chloroisopropyl)ether	0:6	26.61	9.84	44.00	16.60
Discovery Bay	bis(2-ethylhexyl)phthalate	0:6	8.41	3.31	16.80	5.40
Discovery Bay	carbazole	0:3	3.89	3.31	4.18	0.50
Discovery Bay	chrysene	0:6	7.08	3.31	11.00	3.53
Discovery Bay	copper	6:6	0.21	0.17	0.25	0.03
Discovery Bay	coprostanol	0:3	194.40	165.60	208.80	24.94
Discovery Bay	delta hexachlorocyclohexane	0:3	0.57	0.50	0.60	0.06
Discovery Bay	dibenzo(a,h)anthracene	0:6	21.28	9.84	33.00	10.77
Discovery Bay	dibenzofuran	0:6	16.28	9.84	22.00	5.30
Discovery Bay	Dieldrin	0:3	1.10	0.90	1.20	0.17
Discovery Bay	diethylphthalate	0:6	22.28	3.31	66.00	24.75
Discovery Bay	dimethylphthalate	0:6	5.10	3.31	6.70	1.38
Discovery Bay	di-n-butylphthalate	0:6	12.61	3.31	22.00	9.59
Discovery Bay	di-n-octylphthalate	0:6	7.08	3.31	11.00	3.53
Discovery Bay	endosulfan sulfate	0:3	1.10	0.90	1.20	0.17
Discovery Bay	Endrin	0:3	1.10	0.90	1.20	0.17
Discovery Bay	endrin aldehyde	0:3	1.10	0.90	1.20	0.17
Discovery Bay	fluoranthene	0:6	8.28	3.31	13.00	4.83
Discovery Bay	fluorene	0:6	7.08	3.31	11.00	3.53
Discovery Bay	gamma chlordane	0:3	0.57	0.50	0.60	0.06
Discovery Bay	gamma hexachlorocyclohexane	0:3	0.57	0.50	0.60	0.06
Discovery Bay	Heptachlor	0:3	0.57	0.50	0.60	0.06
Discovery Bay	heptachlor epoxide	0:3	0.57	0.50	0.60	0.06
Discovery Bay	hexachlorobenzene	0:6	14.85	9.80	20.88	5.28
Discovery Bay	hexachlorobutadiene	0:6	16.28	9.84	22.00	5.30
Discovery Bay	hexachlorocyclopentadiene	0:6	29.94	20.00	41.76	10.31
Discovery Bay	hexachloroethane	0:6	16.28	9.84	22.00	5.30
Discovery Bay	indeno(1,2,3-c,d)pyrene	0:6	20.22	16.56	22.00	1.90
Discovery Bay	isophorone	0:6	12.45	3.31	22.00	9.40
Discovery Bay	lead	2:6	0.05	0.03	0.11	0.03
Discovery Bay	mercury	3:3	0.09	0.06	0.13	0.04
Discovery Bay	Methoxychlor	0:3	13.00	11.00	14.00	1.73
Discovery Bay	naphthalene	0:6	17.45	3.31	33.00	14.91
Discovery Bay	nitrobenzene	0:6	16.28	9.84	22.00	5.30
Discovery Bay	N-nitrosodimethylamine	0:6	33.45	3.31	67.00	32.48
Discovery Bay	N-nitroso-di-n-propylamine	0:6	12.45	3.31	22.00	9.40
Discovery Bay	N-nitrosodiphenylamine	0:6	12.45	3.31	22.00	9.40
Discovery Bay	pentachlorophenol	0:6	29.94	20.00	41.76	10.31

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Discovery Bay	phenanthrene	0:6	7.08	3.31	11.00	3.53
Discovery Bay	phenol	0:6	64.95	3.31	134.00	67.07
Discovery Bay	ppDDD	0:3	1.10	0.90	1.20	0.17
Discovery Bay	ppDDE	0:3	1.10	0.90	1.20	0.17
Discovery Bay	ppDDT	0:3	2.60	2.20	2.80	0.35
Discovery Bay	pyrene	0:6	7.08	3.31	11.00	3.53
Discovery Bay	Solids	6:6	17.79	17.00	18.68	0.87
Discovery Bay	Toxaphene	0:3	15.00	13.00	16.00	1.73
Duwamish River	1,2,4-trichlorobenzene	0:3	3.60	3.60	3.60	0.00
Duwamish River	1,2-dichlorobenzene	0:3	10.70	10.70	10.70	0.00
Duwamish River	1,2-diphenylhydrazine	0:3	3.60	3.60	3.60	0.00
Duwamish River	1,3-dichlorobenzene	0:3	10.70	10.70	10.70	0.00
Duwamish River	1,4-dichlorobenzene	0:3	10.70	10.70	10.70	0.00
Duwamish River	2,4,5-trichlorophenol	0:3	18.00	18.00	18.00	0.00
Duwamish River	2,4,6-trichlorophenol	0:3	18.00	18.00	18.00	0.00
Duwamish River	2,4-dichlorophenol	0:3	3.60	3.60	3.60	0.00
Duwamish River	2,4-dimethylphenol	0:3	3.60	3.60	3.60	0.00
Duwamish River	2,4-dinitrophenol	0:3	72.00	72.00	72.00	0.00
Duwamish River	2,4-dinitrotoluene	0:3	18.00	18.00	18.00	0.00
Duwamish River	2,6-dinitrotoluene	0:3	18.00	18.00	18.00	0.00
Duwamish River	2-chloronaphthalene	0:3	10.70	10.70	10.70	0.00
Duwamish River	2-chlorophenol	0:3	3.60	3.60	3.60	0.00
Duwamish River	2-methylnaphthalene	0:3	3.60	3.60	3.60	0.00
Duwamish River	2-methylphenol	0:3	3.60	3.60	3.60	0.00
Duwamish River	2-nitroaniline	0:3	7.10	7.10	7.10	0.00
Duwamish River	2-nitrophenol	0:3	3.60	3.60	3.60	0.00
Duwamish River	3-nitroaniline	0:3	3.60	3.60	3.60	0.00
Duwamish River	4,6-dinitro-o-cresol	0:3	53.00	53.00	53.00	0.00
Duwamish River	4-bromophenylphenylether	0:3	18.00	18.00	18.00	0.00
Duwamish River	4-chloro-3-methylphenol	0:3	3.60	3.60	3.60	0.00
Duwamish River	4-chloroaniline	0:3	36.00	36.00	36.00	0.00
Duwamish River	4-chlorophenylphenylether	0:3	3.60	3.60	3.60	0.00
Duwamish River	4-methylphenol	0:3	3.60	3.60	3.60	0.00
Duwamish River	4-nitroaniline	0:3	18.00	18.00	18.00	0.00
Duwamish River	4-nitrophenol	0:3	36.00	36.00	36.00	0.00
Duwamish River	acenaphthene	0:3	3.60	3.60	3.60	0.00
Duwamish River	acenaphthylene	0:3	3.60	3.60	3.60	0.00
Duwamish River	Aldrin	0:9	0.50	0.50	0.50	0.00
Duwamish River	alpha chlordane	3:9	0.91	0.50	2.00	0.63
Duwamish River	alpha endosulfan	0:9	0.50	0.50	0.50	0.00
Duwamish River	alpha hexachlorocyclohexane	0:9	0.50	0.50	0.50	0.00
Duwamish River	aniline	0:3	53.30	53.30	53.30	0.00
Duwamish River	anthracene	0:3	3.60	3.60	3.60	0.00
Duwamish River	Aroclor 1016	0:6	20.00	20.00	20.00	0.00
Duwamish River	Aroclor 1221	0:6	20.00	20.00	20.00	0.00
Duwamish River	Aroclor 1232	0:6	20.00	20.00	20.00	0.00
Duwamish River	Aroclor 1242	0:6	10.00	10.00	10.00	0.00
Duwamish River	Aroclor 1248	6:6	16.27	9.00	26.10	6.48
Duwamish River	Aroclor 1254	6:6	75.40	22.00	122.00	39.37
Duwamish River	Aroclor 1260	6:6	76.70	35.00	107.00	27.93
Duwamish River	arsenic	6:6	9.94	9.00	11.60	0.90
Duwamish River	benzo(a)anthracene	0:3	10.70	10.70	10.70	0.00
Duwamish River	benzo(a)pyrene	0:3	3.60	3.60	3.60	0.00
Duwamish River	benzo(b)fluoranthene	0:3	10.70	10.70	10.70	0.00
Duwamish River	benzo(g,h,i)perylene	0:3	10.70	10.70	10.70	0.00

Location	Assay	No. Detected:		Mean	Min	Max	SD
		lo.	Analyzed				
Duwamish River	benzo(k)fluoranthene	0	3	7.10	7.10	7.10	0.00
Duwamish River	benzoic acid	0	3	36.00	36.00	36.00	0.00
Duwamish River	benzyl alcohol	0	3	3.60	3.60	3.60	0.00
Duwamish River	benzylbutylphthalate	0	3	10.70	10.70	10.70	0.00
Duwamish River	beta endosulfan	0	9	1.00	1.00	1.00	0.00
Duwamish River	beta hexachlorocyclohexane	0	9	0.50	0.50	0.50	0.00
Duwamish River	bis(2-chloroethoxy)methane	0	3	3.60	3.60	3.60	0.00
Duwamish River	bis(2-chloroethyl)ether	0	3	3.60	3.60	3.60	0.00
Duwamish River	bis(2-chloroisopropyl)ether	0	3	10.70	10.70	10.70	0.00
Duwamish River	bis(2-ethylhexyl)phthalate	1	3	15.73	3.60	40.00	21.02
Duwamish River	carbazole	0	3	3.60	3.60	3.60	0.00
Duwamish River	chrysene	0	3	3.60	3.60	3.60	0.00
Duwamish River	copper	6	6	0.26	0.19	0.37	0.06
Duwamish River	coprostanol	0	3	180.00	180.00	180.00	0.00
Duwamish River	delta hexachlorocyclohexane	0	9	0.50	0.50	0.50	0.00
Duwamish River	dibenzo(a,h)anthracene	0	3	10.70	10.70	10.70	0.00
Duwamish River	dibenzofuran	0	3	10.70	10.70	10.70	0.00
Duwamish River	Dieldrin	0	9	1.00	1.00	1.00	0.00
Duwamish River	diethylphthalate	0	3	3.60	3.60	3.60	0.00
Duwamish River	dimethylphthalate	0	3	3.60	3.60	3.60	0.00
Duwamish River	di-n-butylphthalate	1	3	9.07	3.60	20.00	9.47
Duwamish River	di-n-octylphthalate	0	3	3.60	3.60	3.60	0.00
Duwamish River	endosulfan sulfate	0	9	1.00	1.00	1.00	0.00
Duwamish River	Endrin	0	9	1.00	1.00	1.00	0.00
Duwamish River	endrin aldehyde	0	9	1.00	1.00	1.00	0.00
Duwamish River	fluoranthene	0	3	3.60	3.60	3.60	0.00
Duwamish River	fluorene	0	3	3.60	3.60	3.60	0.00
Duwamish River	gamma chlordane	1	9	0.50	0.50	0.52	0.01
Duwamish River	gamma hexachlorocyclohexane	0	9	0.50	0.50	0.50	0.00
Duwamish River	Heptachlor	0	9	0.50	0.50	0.50	0.00
Duwamish River	heptachlor epoxide	0	9	0.50	0.50	0.50	0.00
Duwamish River	hexachlorobenzene	0	6	9.02	0.04	18.00	9.84
Duwamish River	hexachlorobutadiene	0	3	10.70	10.70	10.70	0.00
Duwamish River	hexachlorocyclopentadiene	0	3	36.00	36.00	36.00	0.00
Duwamish River	hexachloroethane	0	3	10.70	10.70	10.70	0.00
Duwamish River	indeno(1,2,3-c,d)pyrene	0	3	18.00	18.00	18.00	0.00
Duwamish River	isophorone	0	3	3.60	3.60	3.60	0.00
Duwamish River	lead	0	6	0.03	0.02	0.03	0.01
Duwamish River	Lipids	9	9	0.38	0.24	0.53	0.10
Duwamish River	mercury	9	9	0.06	0.04	0.08	0.01
Duwamish River	Methoxychlor	0	9	10.00	10.00	10.00	0.00
Duwamish River	naphthalene	0	3	3.60	3.60	3.60	0.00
Duwamish River	nitrobenzene	0	3	10.70	10.70	10.70	0.00
Duwamish River	N-nitrosodimethylamine	0	3	3.60	3.60	3.60	0.00
Duwamish River	N-nitroso-di-n-propylamine	0	3	3.60	3.60	3.60	0.00
Duwamish River	N-nitrosodiphenylamine	0	3	3.60	3.60	3.60	0.00
Duwamish River	opDDD	0	3	0.12	0.10	0.14	0.02
Duwamish River	PCB101	3	3	26.33	18.00	34.00	8.02
Duwamish River	PCB105	3	3	1.97	1.30	2.80	0.76
Duwamish River	PCB110	3	3	5.60	4.50	7.20	1.42
Duwamish River	PCB118	3	3	7.30	5.20	11.00	3.21
Duwamish River	PCB126	0	3	0.06	0.06	0.07	0.01
Duwamish River	PCB128	3	3	2.80	2.20	3.40	0.60
Duwamish River	PCB138	3	3	6.97	4.90	10.00	2.68
Duwamish River	PCB153	3	3	19.67	11.00	30.00	9.61

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Duwamish River	PCB156	3:3	0.52	0.34	0.82	0.26
Duwamish River	PCB157	0:3	0.04	0.04	0.05	0.01
Duwamish River	PCB169	0:3	0.09	0.07	0.10	0.01
Duwamish River	PCB170	3:3	2.30	1.40	3.60	1.15
Duwamish River	PCB180	3:3	4.43	3.00	6.90	2.15
Duwamish River	PCB189	0:3	0.04	0.04	0.05	0.01
Duwamish River	PCB77	0:3	0.06	0.06	0.07	0.01
Duwamish River	pentachlorophenol	0:3	36.00	36.00	36.00	0.00
Duwamish River	phenanthrene	0:3	3.60	3.60	3.60	0.00
Duwamish River	phenol	0:3	3.60	3.60	3.60	0.00
Duwamish River	ppDDD	9:12	1.93	0.62	4.96	1.49
Duwamish River	ppDDE	7:9	2.75	1.00	5.94	1.84
Duwamish River	ppDDT	0:10	1.82	0.15	2.00	0.59
Duwamish River	pyrene	0:3	3.60	3.60	3.60	0.00
Duwamish River	Solids	10:10	16.00	14.31	17.00	0.85
Duwamish River	TotalDDT	3:3	0.70	0.62	0.86	0.14
Duwamish River	TotalPCB	3:3	99.33	72.00	140.00	35.91
Duwamish River	Toxaphene	0:9	10.00	10.00	10.00	0.00
Dyes Inlet	1,2,4-trichlorobenzene	0:3	3.60	3.60	3.60	0.00
Dyes Inlet	1,2-dichlorobenzene	0:3	10.70	10.70	10.70	0.00
Dyes Inlet	1,2-diphenylhydrazine	0:3	3.60	3.60	3.60	0.00
Dyes Inlet	1,3-dichlorobenzene	0:3	10.70	10.70	10.70	0.00
Dyes Inlet	1,4-dichlorobenzene	0:3	10.70	10.70	10.70	0.00
Dyes Inlet	2,4,5-trichlorophenol	0:3	18.00	18.00	18.00	0.00
Dyes Inlet	2,4,6-trichlorophenol	0:3	18.00	18.00	18.00	0.00
Dyes Inlet	2,4-dichlorophenol	0:3	3.60	3.60	3.60	0.00
Dyes Inlet	2,4-dimethylphenol	0:3	3.60	3.60	3.60	0.00
Dyes Inlet	2,4-dinitrophenol	0:3	72.00	72.00	72.00	0.00
Dyes Inlet	2,4-dinitrotoluene	0:3	18.00	18.00	18.00	0.00
Dyes Inlet	2,6-dinitrotoluene	0:3	18.00	18.00	18.00	0.00
Dyes Inlet	2-chloronaphthalene	0:3	10.70	10.70	10.70	0.00
Dyes Inlet	2-chlorophenol	0:3	3.60	3.60	3.60	0.00
Dyes Inlet	2-methylnaphthalene	0:3	3.60	3.60	3.60	0.00
Dyes Inlet	2-methylphenol	0:3	3.60	3.60	3.60	0.00
Dyes Inlet	2-nitroaniline	0:3	7.10	7.10	7.10	0.00
Dyes Inlet	2-nitrophenol	0:3	3.60	3.60	3.60	0.00
Dyes Inlet	3-nitroaniline	0:3	3.60	3.60	3.60	0.00
Dyes Inlet	4,6-dinitro-o-cresol	0:3	53.00	53.00	53.00	0.00
Dyes Inlet	4-bromophenylphenylether	0:3	18.00	18.00	18.00	0.00
Dyes Inlet	4-chloro-3-methylphenol	0:3	3.60	3.60	3.60	0.00
Dyes Inlet	4-chloroaniline	0:3	36.00	36.00	36.00	0.00
Dyes Inlet	4-chlorophenylphenylether	0:3	3.60	3.60	3.60	0.00
Dyes Inlet	4-methylphenol	0:3	3.60	3.60	3.60	0.00
Dyes Inlet	4-nitroaniline	0:3	18.00	18.00	18.00	0.00
Dyes Inlet	4-nitrophenol	0:3	36.00	36.00	36.00	0.00
Dyes Inlet	acenaphthene	0:3	3.60	3.60	3.60	0.00
Dyes Inlet	acenaphthylene	0:3	3.60	3.60	3.60	0.00
Dyes Inlet	Aldrin	0:6	0.50	0.50	0.50	0.00
Dyes Inlet	alpha chlordane	0:6	0.50	0.50	0.50	0.00
Dyes Inlet	alpha endosulfan	0:6	0.50	0.50	0.50	0.00
Dyes Inlet	alpha hexachlorocyclohexane	0:6	0.50	0.50	0.50	0.00
Dyes Inlet	aniline	0:3	53.30	53.30	53.30	0.00
Dyes Inlet	anthracene	0:3	3.60	3.60	3.60	0.00
Dyes Inlet	Aroclor 1016	0:6	20.00	20.00	20.00	0.00
Dyes Inlet	Aroclor 1221	0:6	20.00	20.00	20.00	0.00

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Dyes Inlet	Aroclor 1232	0:6	20.00	20.00	20.00	0.00
Dyes Inlet	Aroclor 1242	0:6	10.00	10.00	10.00	0.00
Dyes Inlet	Aroclor 1248	0:6	2.00	2.00	2.00	0.00
Dyes Inlet	Aroclor 1254	6:6	11.76	5.90	22.00	5.91
Dyes Inlet	Aroclor 1260	6:6	15.28	8.78	22.00	5.90
Dyes Inlet	arsenic	6:6	8.68	4.55	13.00	3.10
Dyes Inlet	benzo(a)anthracene	0:3	10.70	10.70	10.70	0.00
Dyes Inlet	benzo(a)pyrene	0:3	3.60	3.60	3.60	0.00
Dyes Inlet	benzo(b)fluoranthene	0:3	10.70	10.70	10.70	0.00
Dyes Inlet	benzo(g,h,i)perylene	0:3	10.70	10.70	10.70	0.00
Dyes Inlet	benzo(k)fluoranthene	0:3	7.10	7.10	7.10	0.00
Dyes Inlet	benzoic acid	1:3	90.67	36.00	200.00	94.69
Dyes Inlet	benzyl alcohol	0:3	3.60	3.60	3.60	0.00
Dyes Inlet	benzylbutylphthalate	0:3	10.70	10.70	10.70	0.00
Dyes Inlet	beta endosulfan	0:6	1.00	1.00	1.00	0.00
Dyes Inlet	beta hexachlorocyclohexane	0:6	0.50	0.50	0.50	0.00
Dyes Inlet	bis(2-chloroethoxy)methane	0:3	3.60	3.60	3.60	0.00
Dyes Inlet	bis(2-chloroethyl)ether	0:3	3.60	3.60	3.60	0.00
Dyes Inlet	bis(2-chloroisopropyl)ether	0:3	10.70	10.70	10.70	0.00
Dyes Inlet	bis(2-ethylhexyl)phthalate	2:3	114.53	3.60	320.00	178.13
Dyes Inlet	carbazole	0:3	3.60	3.60	3.60	0.00
Dyes Inlet	chrysene	0:3	3.60	3.60	3.60	0.00
Dyes Inlet	copper	6:6	0.30	0.23	0.41	0.07
Dyes Inlet	coprostanol	0:3	180.00	180.00	180.00	0.00
Dyes Inlet	delta hexachlorocyclohexane	0:6	0.50	0.50	0.50	0.00
Dyes Inlet	dibenzo(a,h)anthracene	0:3	10.70	10.70	10.70	0.00
Dyes Inlet	dibenzofuran	0:3	10.70	10.70	10.70	0.00
Dyes Inlet	Dieldrin	0:6	1.00	1.00	1.00	0.00
Dyes Inlet	diethylphthalate	0:3	3.60	3.60	3.60	0.00
Dyes Inlet	dimethylphthalate	0:3	3.60	3.60	3.60	0.00
Dyes Inlet	di-n-butylphthalate	0:3	3.60	3.60	3.60	0.00
Dyes Inlet	di-n-octylphthalate	0:3	3.60	3.60	3.60	0.00
Dyes Inlet	endosulfan sulfate	0:6	1.00	1.00	1.00	0.00
Dyes Inlet	Endrin	0:6	1.00	1.00	1.00	0.00
Dyes Inlet	endrin aldehyde	0:6	1.00	1.00	1.00	0.00
Dyes Inlet	fluoranthene	0:3	3.60	3.60	3.60	0.00
Dyes Inlet	fluorene	0:3	3.60	3.60	3.60	0.00
Dyes Inlet	gamma chlordane	0:6	0.50	0.50	0.50	0.00
Dyes Inlet	gamma hexachlorocyclohexane	0:6	0.50	0.50	0.50	0.00
Dyes Inlet	Heptachlor	0:6	0.50	0.50	0.50	0.00
Dyes Inlet	heptachlor epoxide	0:6	0.50	0.50	0.50	0.00
Dyes Inlet	hexachlorobenzene	0:3	18.00	18.00	18.00	0.00
Dyes Inlet	hexachlorobutadiene	0:3	10.70	10.70	10.70	0.00
Dyes Inlet	hexachlorocyclopentadiene	0:3	36.00	36.00	36.00	0.00
Dyes Inlet	hexachloroethane	0:3	10.70	10.70	10.70	0.00
Dyes Inlet	indeno(1,2,3-c,d)pyrene	0:3	18.00	18.00	18.00	0.00
Dyes Inlet	isophorone	0:3	3.60	3.60	3.60	0.00
Dyes Inlet	lead	2:6	0.04	0.02	0.06	0.02
Dyes Inlet	Lipids	6:6	0.46	0.37	0.62	0.08
Dyes Inlet	mercury	6:6	0.05	0.03	0.06	0.01
Dyes Inlet	Methoxychlor	0:6	10.00	10.00	10.00	0.00
Dyes Inlet	naphthalene	0:3	3.60	3.60	3.60	0.00
Dyes Inlet	nitrobenzene	0:3	10.70	10.70	10.70	0.00
Dyes Inlet	N-nitrosodimethylamine	0:3	3.60	3.60	3.60	0.00
Dyes Inlet	N-nitroso-di-n-propylamine	0:3	3.60	3.60	3.60	0.00

Appendix: English Sole Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Dyes Inlet	N-nitrosodiphenylamine	0:3	3.60	3.60	3.60	0.00
Dyes Inlet	pentachlorophenol	0:3	36.00	36.00	36.00	0.00
Dyes Inlet	phenanthrene	0:3	3.60	3.60	3.60	0.00
Dyes Inlet	phenol	0:3	3.60	3.60	3.60	0.00
Dyes Inlet	ppDDD	0:6	1.00	1.00	1.00	0.00
Dyes Inlet	ppDDE	1:6	1.08	1.00	1.48	0.20
Dyes Inlet	ppDDT	0:6	2.00	2.00	2.00	0.00
Dyes Inlet	pyrene	0:3	3.60	3.60	3.60	0.00
Dyes Inlet	Solids	4:4	19.33	17.70	20.30	1.24
Dyes Inlet	Toxaphene	0:6	10.00	10.00	10.00	0.00
Eagle Harbor	1,2,4-trichlorobenzene	0:3	3.60	3.60	3.60	0.00
Eagle Harbor	1,2-dichlorobenzene	0:3	11.00	11.00	11.00	0.00
Eagle Harbor	1,2-diphenylhydrazine	0:3	3.60	3.60	3.60	0.00
Eagle Harbor	1,3-dichlorobenzene	0:3	11.00	11.00	11.00	0.00
Eagle Harbor	1,4-dichlorobenzene	0:3	11.00	11.00	11.00	0.00
Eagle Harbor	2,4,5-trichlorophenol	0:3	18.00	18.00	18.00	0.00
Eagle Harbor	2,4,6-trichlorophenol	0:3	18.00	18.00	18.00	0.00
Eagle Harbor	2,4-dichlorophenol	0:3	3.60	3.60	3.60	0.00
Eagle Harbor	2,4-dimethylphenol	0:3	3.60	3.60	3.60	0.00
Eagle Harbor	2,4-dinitrophenol	0:3	72.00	72.00	72.00	0.00
Eagle Harbor	2,4-dinitrotoluene	0:3	18.00	18.00	18.00	0.00
Eagle Harbor	2,6-dinitrotoluene	0:3	18.00	18.00	18.00	0.00
Eagle Harbor	2-chloronaphthalene	0:3	11.00	11.00	11.00	0.00
Eagle Harbor	2-chlorophenol	0:3	3.60	3.60	3.60	0.00
Eagle Harbor	2-methylnaphthalene	0:3	3.60	3.60	3.60	0.00
Eagle Harbor	2-methylphenol	0:3	3.60	3.60	3.60	0.00
Eagle Harbor	2-nitroaniline	0:3	7.10	7.10	7.10	0.00
Eagle Harbor	2-nitrophenol	0:3	3.60	3.60	3.60	0.00
Eagle Harbor	3-nitroaniline	0:3	3.60	3.60	3.60	0.00
Eagle Harbor	4,6-dinitro-o-cresol	0:3	53.00	53.00	53.00	0.00
Eagle Harbor	4-bromophenylphenylether	0:3	18.00	18.00	18.00	0.00
Eagle Harbor	4-chloro-3-methylphenol	0:3	3.60	3.60	3.60	0.00
Eagle Harbor	4-chloroaniline	0:3	36.00	36.00	36.00	0.00
Eagle Harbor	4-chlorophenylphenylether	0:3	3.60	3.60	3.60	0.00
Eagle Harbor	4-methylphenol	0:3	3.60	3.60	3.60	0.00
Eagle Harbor	4-nitroaniline	0:3	18.00	18.00	18.00	0.00
Eagle Harbor	4-nitrophenol	0:3	36.00	36.00	36.00	0.00
Eagle Harbor	acenaphthene	0:3	3.60	3.60	3.60	0.00
Eagle Harbor	acenaphthylene	0:3	3.60	3.60	3.60	0.00
Eagle Harbor	Aldrin	0:6	0.50	0.50	0.50	0.00
Eagle Harbor	alpha chlordane	0:6	0.50	0.50	0.50	0.00
Eagle Harbor	alpha endosulfan	0:6	0.50	0.50	0.50	0.00
Eagle Harbor	alpha hexachlorocyclohexane	0:6	0.50	0.50	0.50	0.00
Eagle Harbor	aniline	0:3	53.00	53.00	53.00	0.00
Eagle Harbor	anthracene	0:3	3.60	3.60	3.60	0.00
Eagle Harbor	Aroclor 1016	0:6	19.00	18.00	20.00	1.10
Eagle Harbor	Aroclor 1221	0:6	19.00	18.00	20.00	1.10
Eagle Harbor	Aroclor 1232	0:6	19.00	18.00	20.00	1.10
Eagle Harbor	Aroclor 1242	0:6	10.50	10.00	11.00	0.55
Eagle Harbor	Aroclor 1248	0:6	2.15	2.00	2.30	0.16
Eagle Harbor	Aroclor 1254	6:6	23.00	14.00	33.60	7.83
Eagle Harbor	Aroclor 1260	6:6	18.53	12.00	26.00	6.53
Eagle Harbor	arsenic	6:6	7.33	5.00	9.17	1.36
Eagle Harbor	benzo(a)anthracene	0:3	11.00	11.00	11.00	0.00
Eagle Harbor	benzo(a)pyrene	0:3	3.60	3.60	3.60	0.00



## Appendix: English Sole Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Eagle Harbor	benzo(b)fluoranthene	0:3	11.00	11.00	11.00	0.00
Eagle Harbor	benzo(g,h,i)perylene	0:3	11.00	11.00	11.00	0.00
Eagle Harbor	benzo(k)fluoranthene	0:3	7.10	7.10	7.10	0.00
Eagle Harbor	benzoic acid	2:3	71.33	36.00	94.00	31.01
Eagle Harbor	benzyl alcohol	3:3	26.67	12.00	49.00	19.66
Eagle Harbor	benzylbutylphthalate	0:3	11.00	11.00	11.00	0.00
Eagle Harbor	beta endosulfan	0:6	1.00	1.00	1.00	0.00
Eagle Harbor	beta hexachlorocyclohexane	0:6	0.50	0.50	0.50	0.00
Eagle Harbor	bis(2-chloroethoxy)methane	0:3	3.60	3.60	3.60	0.00
Eagle Harbor	bis(2-chloroethyl)ether	0:3	3.60	3.60	3.60	0.00
Eagle Harbor	bis(2-chloroisopropyl)ether	0:3	11.00	11.00	11.00	0.00
Eagle Harbor	bis(2-ethylhexyl)phthalate	0:3	3.60	3.60	3.60	0.00
Eagle Harbor	carbazole	0:3	3.60	3.60	3.60	0.00
Eagle Harbor	chrysene	0:3	3.60	3.60	3.60	0.00
Eagle Harbor	copper	6:6	0.27	0.22	0.31	0.04
Eagle Harbor	coprostanol	0:3	180.00	180.00	180.00	0.00
Eagle Harbor	delta hexachlorocyclohexane	0:6	0.50	0.50	0.50	0.00
Eagle Harbor	dibenzo(a,h)anthracene	0:3	11.00	11.00	11.00	0.00
Eagle Harbor	dibenzofuran	0:3	11.00	11.00	11.00	0.00
Eagle Harbor	Dieldrin	0:6	1.00	1.00	1.00	0.00
Eagle Harbor	diethylphthalate	0:3	3.60	3.60	3.60	0.00
Eagle Harbor	dimethylphthalate	0:3	3.60	3.60	3.60	0.00
Eagle Harbor	di-n-butylphthalate	0:3	3.60	3.60	3.60	0.00
Eagle Harbor	di-n-octylphthalate	0:3	3.60	3.60	3.60	0.00
Eagle Harbor	endosulfan sulfate	0:6	1.00	1.00	1.00	0.00
Eagle Harbor	Endrin	0:6	1.00	1.00	1.00	0.00
Eagle Harbor	endrin aldehyde	0:6	1.00	1.00	1.00	0.00
Eagle Harbor	fluoranthene	0:3	3.60	3.60	3.60	0.00
Eagle Harbor	fluorene	0:3	3.60	3.60	3.60	0.00
Eagle Harbor	gamma chlordane	0:6	0.50	0.50	0.50	0.00
Eagle Harbor	gamma hexachlorocyclohexane	0:6	0.50	0.50	0.50	0.00
Eagle Harbor	Heptachlor	0:6	0.50	0.50	0.50	0.00
Eagle Harbor	heptachlor epoxide	0:6	0.50	0.50	0.50	0.00
Eagle Harbor	hexachlorobenzene	0:9	6.03	0.03	18.00	8.98
Eagle Harbor	hexachlorobutadiene	0:3	11.00	11.00	11.00	0.00
Eagle Harbor	hexachlorocyclopentadiene	0:3	36.00	36.00	36.00	0.00
Eagle Harbor	hexachloroethane	0:3	11.00	11.00	11.00	0.00
Eagle Harbor	indeno(1,2,3-c,d)pyrene	0:3	18.00	18.00	18.00	0.00
Eagle Harbor	isophorone	0:3	3.60	3.60	3.60	0.00
Eagle Harbor	lead	0:6	0.03	0.02	0.03	0.01
Eagle Harbor	Lipids	9:9	0.33	0.21	0.58	0.10
Eagle Harbor	mercury	9:9	0.11	0.08	0.14	0.02
Eagle Harbor	Methoxychlor	0:6	11.00	10.00	12.00	1.10
Eagle Harbor	naphthalene	0:3	3.60	3.60	3.60	0.00
Eagle Harbor	nitrobenzene	0:3	11.00	11.00	11.00	0.00
Eagle Harbor	N-nitrosodimethylamine	0:3	3.60	3.60	3.60	0.00
Eagle Harbor	N-nitroso-di-n-propylamine	0:3	3.60	3.60	3.60	0.00
Eagle Harbor	N-nitrosodiphenylamine	1:3	3.63	3.60	3.70	0.06
Eagle Harbor	opDDD	0:4	0.10	0.08	0.13	0.02
Eagle Harbor	opDDT	0:4	0.13	0.11	0.18	0.03
Eagle Harbor	PCB101	6:6	4.43	2.50	6.20	1.56
Eagle Harbor	PCB105	3:4	0.84	0.03	2.40	1.06
Eagle Harbor	PCB110	6:6	0.86	0.55	1.10	0.20
Eagle Harbor	PCB118	6:6	1.76	0.98	2.40	0.53
Eagle Harbor	PCB126	0:6	0.06	0.05	0.08	0.01

Appendix: English Sole Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Eagle Harbor	PCB128	6:6	0.54	0.23	0.82	0.22
Eagle Harbor	PCB138	6:6	1.14	0.63	1.70	0.42
Eagle Harbor	PCB153	6:6	2.83	1.60	3.90	0.91
Eagle Harbor	PCB156	1:5	0.05	0.04	0.09	0.02
Eagle Harbor	PCB157	0:5	0.04	0.03	0.04	0.01
Eagle Harbor	PCB169	0:6	0.08	0.06	0.10	0.02
Eagle Harbor	PCB170	3:5	0.36	0.03	0.76	0.31
Eagle Harbor	PCB180	6:6	1.12	0.31	2.80	0.92
Eagle Harbor	PCB189	0:6	0.04	0.03	0.06	0.01
Eagle Harbor	PCB77	0:6	0.07	0.05	0.09	0.02
Eagle Harbor	pentachlorophenol	0:3	36.00	36.00	36.00	0.00
Eagle Harbor	phenanthrene	0:3	3.60	3.60	3.60	0.00
Eagle Harbor	phenol	0:3	3.60	3.60	3.60	0.00
Eagle Harbor	ppDDD	0:12	0.59	0.16	1.00	0.43
Eagle Harbor	ppDDE	9:12	1.18	0.15	2.26	0.75
Eagle Harbor	ppDDT	0:12	1.14	0.07	2.40	1.11
Eagle Harbor	pyrene	0:3	3.60	3.60	3.60	0.00
Eagle Harbor	Solids	15:15	17.12	15.00	20.26	1.42
Eagle Harbor	TotalDDT	3:6	1.09	0.86	1.20	0.20
Eagle Harbor	TotalPCB	6:6	17.65	12.90	24.00	4.39
Eagle Harbor	Toxaphene	0:6	12.00	10.00	14.00	2.19
Fern Cove	1,2,4-trichlorobenzene	0:3	3.60	3.60	3.60	0.00
Fern Cove	1,2-dichlorobenzene	0:3	10.70	10.70	10.70	0.00
Fern Cove	1,2-diphenylhydrazine	0:3	3.60	3.60	3.60	0.00
Fern Cove	1,3-dichlorobenzene	0:3	10.70	10.70	10.70	0.00
Fern Cove	1,4-dichlorobenzene	0:3	10.70	10.70	10.70	0.00
Fern Cove	2,4,5-trichlorophenol	0:3	18.00	18.00	18.00	0.00
Fern Cove	2,4,6-trichlorophenol	0:3	18.00	18.00	18.00	0.00
Fern Cove	2,4-dichlorophenol	0:3	3.60	3.60	3.60	0.00
Fern Cove	2,4-dimethylphenol	0:3	50.00	50.00	50.00	0.00
Fern Cove	2,4-dinitrophenol	0:3	72.00	72.00	72.00	0.00
Fern Cove	2,4-dinitrotoluene	0:3	18.00	18.00	18.00	0.00
Fern Cove	2,6-dinitrotoluene	0:3	18.00	18.00	18.00	0.00
Fern Cove	2-chloronaphthalene	0:3	10.70	10.70	10.70	0.00
Fern Cove	2-chlorophenol	0:3	3.60	3.60	3.60	0.00
Fern Cove	2-methylnaphthalene	0:3	3.60	3.60	3.60	0.00
Fern Cove	2-methylphenol	0:3	3.60	3.60	3.60	0.00
Fern Cove	2-nitroaniline	0:3	7.10	7.10	7.10	0.00
Fern Cove	2-nitrophenol	0:3	3.60	3.60	3.60	0.00
Fern Cove	3-nitroaniline	0:3	3.60	3.60	3.60	0.00
Fern Cove	4,6-dinitro-o-cresol	0:3	50.00	50.00	50.00	0.00
Fern Cove	4-bromophenylphenylether	0:3	50.00	50.00	50.00	0.00
Fern Cove	4-chloro-3-methylphenol	0:3	3.60	3.60	3.60	0.00
Fern Cove	4-chloroaniline	0:3	36.00	36.00	36.00	0.00
Fern Cove	4-chlorophenylphenylether	0:3	3.60	3.60	3.60	0.00
Fern Cove	4-methylphenol	0:3	3.60	3.60	3.60	0.00
Fern Cove	4-nitroaniline	0:3	18.00	18.00	18.00	0.00
Fern Cove	4-nitrophenol	0:3	36.00	36.00	36.00	0.00
Fern Cove	acenaphthene	0:3	3.60	3.60	3.60	0.00
Fern Cove	acenaphthylene	0:3	3.60	3.60	3.60	0.00
Fern Cove	Aldrin	0:3	0.50	0.50	0.50	0.00
Fern Cove	alpha chlordane	0:3	0.50	0.50	0.50	0.00
Fern Cove	alpha endosulfan	0:3	0.50	0.50	0.50	0.00
Fern Cove	alpha hexachlorocyclohexane	0:3	0.50	0.50	0.50	0.00
Fern Cove	aniline	0:3	53.00	53.00	53.00	0.00

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Fern Cove	anthracene	0:3	3.60	3.60	3.60	0.00
Fern Cove	Aroclor 1016	0:3	20.00	20.00	20.00	0.00
Fern Cove	Aroclor 1221	0:3	20.00	20.00	20.00	0.00
Fern Cove	Aroclor 1232	0:3	20.00	20.00	20.00	0.00
Fern Cove	Aroclor 1242	0:3	10.00	10.00	10.00	0.00
Fern Cove	Aroclor 1248	0:3	2.00	2.00	2.00	0.00
Fern Cove	Aroclor 1254	3:3	5.67	4.30	6.80	1.27
Fern Cove	Aroclor 1260	3:3	12.67	8.00	18.00	5.03
Fern Cove	arsenic	3:3	17.67	16.00	20.00	2.08
Fern Cove	benzo(a)anthracene	0:3	10.70	10.70	10.70	0.00
Fern Cove	benzo(a)pyrene	0:3	3.60	3.60	3.60	0.00
Fern Cove	benzo(b)fluoranthene	0:3	10.70	10.70	10.70	0.00
Fern Cove	benzo(g,h,i)perylene	0:3	10.70	10.70	10.70	0.00
Fern Cove	benzo(k)fluoranthene	0:3	7.10	7.10	7.10	0.00
Fern Cove	benzoic acid	0:3	36.00	36.00	36.00	0.00
Fern Cove	benzyl alcohol	0:3	3.60	3.60	3.60	0.00
Fern Cove	benzylbutylphthalate	0:3	10.70	10.70	10.70	0.00
Fern Cove	beta endosulfan	0:3	1.00	1.00	1.00	0.00
Fern Cove	beta hexachlorocyclohexane	0:3	0.50	0.50	0.50	0.00
Fern Cove	bis(2-chloroethoxy)methane	0:3	3.60	3.60	3.60	0.00
Fern Cove	bis(2-chloroethyl)ether	0:3	3.60	3.60	3.60	0.00
Fern Cove	bis(2-chloroisopropyl)ether	0:3	10.70	10.70	10.70	0.00
Fern Cove	bis(2-ethylhexyl)phthalate	0:3	100.00	100.00	100.00	0.00
Fern Cove	carbazole	0:3	3.60	3.60	3.60	0.00
Fern Cove	chrysene	0:3	3.60	3.60	3.60	0.00
Fern Cove	copper	3:3	0.32	0.23	0.45	0.11
Fern Cove	coprostanol	0:3	180.00	180.00	180.00	0.00
Fern Cove	delta hexachlorocyclohexane	0:3	0.50	0.50	0.50	0.00
Fern Cove	dibenzo(a,h)anthracene	0:3	10.70	10.70	10.70	0.00
Fern Cove	dibenzofuran	0:3	10.70	10.70	10.70	0.00
Fern Cove	Dieldrin	0:3	1.00	1.00	1.00	0.00
Fern Cove	diethylphthalate	0:3	3.60	3.60	3.60	0.00
Fern Cove	dimethylphthalate	0:3	3.60	3.60	3.60	0.00
Fern Cove	di-n-butylphthalate	0:3	4.00	4.00	4.00	0.00
Fern Cove	di-n-octylphthalate	0:3	3.60	3.60	3.60	0.00
Fern Cove	endosulfan sulfate	0:3	1.00	1.00	1.00	0.00
Fern Cove	Endrin	0:3	1.00	1.00	1.00	0.00
Fern Cove	endrin aldehyde	0:3	1.00	1.00	1.00	0.00
Fern Cove	fluoranthene	0:3	3.60	3.60	3.60	0.00
Fern Cove	fluorene	0:3	3.60	3.60	3.60	0.00
Fern Cove	gamma chlordane	0:3	0.50	0.50	0.50	0.00
Fern Cove	gamma hexachlorocyclohexane	0:3	0.50	0.50	0.50	0.00
Fern Cove	Heptachlor	0:3	0.50	0.50	0.50	0.00
Fern Cove	heptachlor epoxide	0:3	0.50	0.50	0.50	0.00
Fern Cove	hexachlorobenzene	0:3	18.00	18.00	18.00	0.00
Fern Cove	hexachlorobutadiene	0:3	10.70	10.70	10.70	0.00
Fern Cove	hexachlorocyclopentadiene	0:3	265.00	265.00	265.00	0.00
Fern Cove	hexachloroethane	0:3	10.70	10.70	10.70	0.00
Fern Cove	indeno(1,2,3-c,d)pyrene	0:3	18.00	18.00	18.00	0.00
Fern Cove	isophorone	0:3	3.60	3.60	3.60	0.00
Fern Cove	lead	0:3	0.03	0.03	0.03	0.00
Fern Cove	Lipids	3:3	0.26	0.09	0.55	0.25
Fern Cove	mercury	3:3	0.07	0.07	0.08	0.01
Fern Cove	Methoxychlor	0:3	10.00	10.00	10.00	0.00
Fern Cove	naphthalene	0:3	3.60	3.60	3.60	0.00

## Appendix: English Sole Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Fern Cove	nitrobenzene	0:3	10.70	10.70	10.70	0.00
Fern Cove	N-nitrosodimethylamine	0:3	3.60	3.60	3.60	0.00
Fern Cove	N-nitroso-di-n-propylamine	0:3	3.60	3.60	3.60	0.00
Fern Cove	N-nitrosodiphenylamine	0:3	3.60	3.60	3.60	0.00
Fern Cove	pentachlorophenol	0:3	265.00	265.00	265.00	0.00
Fern Cove	phenanthrene	0:3	3.60	3.60	3.60	0.00
Fern Cove	phenol	0:3	3.60	3.60	3.60	0.00
Fern Cove	ppDDD	0:3	1.00	1.00	1.00	0.00
Fern Cove	ppDDE	1:3	1.10	1.00	1.30	0.17
Fern Cove	ppDDT	0:3	2.00	2.00	2.00	0.00
Fern Cove	pyrene	0:3	3.60	3.60	3.60	0.00
Fern Cove	Solids	3:3	16.00	16.00	16.00	0.00
Fern Cove	Toxaphene	0:3	10.00	10.00	10.00	0.00
Harbor Island	Aldrin	0:3	0.50	0.50	0.50	0.00
Harbor Island	alpha chlordane	0:3	0.50	0.50	0.50	0.00
Harbor Island	alpha endosulfan	0:3	0.50	0.50	0.50	0.00
Harbor Island	alpha hexachlorocyclohexane	0:3	0.50	0.50	0.50	0.00
Harbor Island	Aroclor 1016	0:2	20.00	20.00	20.00	0.00
Harbor Island	Aroclor 1221	0:2	20.00	20.00	20.00	0.00
Harbor Island	Aroclor 1232	0:2	20.00	20.00	20.00	0.00
Harbor Island	Aroclor 1242	0:2	10.00	10.00	10.00	0.00
Harbor Island	Aroclor 1248	0:2	2.00	2.00	2.00	0.00
Harbor Island	Aroclor 1254	2:2	12.54	7.68	17.40	6.87
Harbor Island	Aroclor 1260	2:2	13.10	9.20	17.00	5.52
Harbor Island	beta endosulfan	0:3	1.00	1.00	1.00	0.00
Harbor Island	beta hexachlorocyclohexane	0:3	0.50	0.50	0.50	0.00
Harbor Island	delta hexachlorocyclohexane	0:3	0.50	0.50	0.50	0.00
Harbor Island	dieldrin	0:3	1.00	1.00	1.00	0.00
Harbor Island	endosulfan sulfate	0:3	1.00	1.00	1.00	0.00
Harbor Island	endrin	0:3	1.00	1.00	1.00	0.00
Harbor Island	endrin aldehyde	0:3	1.00	1.00	1.00	0.00
Harbor Island	gamma chlordane	0:3	0.50	0.50	0.50	0.00
Harbor Island	gamma hexachlorocyclohexane	0:3	0.50	0.50	0.50	0.00
Harbor Island	heptachlor	0:3	0.50	0.50	0.50	0.00
Harbor Island	heptachlor epoxide	0:3	0.50	0.50	0.50	0.00
Harbor Island	hexachlorobenzene	0:3	0.08	0.07	0.09	0.01
Harbor Island	Lipids	6:6	0.29	0.11	0.62	0.19
Harbor Island	Mercury	3:3	0.10	0.09	0.10	0.01
Harbor Island	methoxychlor	0:3	10.00	10.00	10.00	0.00
Harbor Island	opDDD	0:3	0.21	0.18	0.24	0.03
Harbor Island	opDDT	0:3	0.27	0.23	0.31	0.04
Harbor Island	PCB101	3:3	10.53	4.60	14.00	5.16
Harbor Island	PCB105	3:3	0.65	0.29	1.00	0.36
Harbor Island	PCB110	3:3	1.54	0.61	2.20	0.83
Harbor Island	PCB118	3:3	4.03	1.70	6.70	2.52
Harbor Island	PCB126	0:3	0.11	0.10	0.13	0.02
Harbor Island	PCB128	3:3	1.35	0.45	2.30	0.93
Harbor Island	PCB138	3:3	2.90	1.30	4.10	1.44
Harbor Island	PCB153	3:3	7.33	3.70	10.00	3.26
Harbor Island	PCB156	1:3	0.10	0.08	0.14	0.03
Harbor Island	PCB157	0:3	0.08	0.07	0.09	0.01
Harbor Island	PCB169	0:3	0.15	0.13	0.17	0.02
Harbor Island	PCB170	3:3	1.26	0.99	1.60	0.31
Harbor Island	PCB180	3:3	1.60	1.20	1.90	0.36
Harbor Island	PCB189	0:3	0.08	0.07	0.09	0.01

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Harbor Island	PCB77	0:3	0.11	0.10	0.13	0.02
Harbor Island	ppDDD	0:6	0.87	0.38	1.30	0.47
Harbor Island	ppDDE	3:6	1.70	1.00	4.40	1.36
Harbor Island	ppDDT	0:5	1.31	0.24	2.00	0.95
Harbor Island	Solids	6:6	15.96	12.01	17.80	2.18
Harbor Island	TotalDDT	3:3	2.40	1.00	4.40	1.78
Harbor Island	TotalPCB	3:3	37.67	19.00	54.00	17.62
Harbor Island	toxaphene	0:3	10.00	10.00	10.00	0.00
Iona Study Area	Aldrin	0:3	0.50	0.50	0.50	0.00
Iona Study Area	alpha chlordane	0:3	0.50	0.50	0.50	0.00
Iona Study Area	alpha endosulfan	0:3	0.50	0.50	0.50	0.00
Iona Study Area	alpha hexachlorocyclohexane	0:3	0.50	0.50	0.50	0.00
Iona Study Area	Aroclor 1016	0:3	20.00	20.00	20.00	0.00
Iona Study Area	Aroclor 1221	0:3	20.00	20.00	20.00	0.00
Iona Study Area	Aroclor 1232	0:3	20.00	20.00	20.00	0.00
Iona Study Area	Aroclor 1242	0:3	10.00	10.00	10.00	0.00
Iona Study Area	Aroclor 1248	0:3	2.00	2.00	2.00	0.00
Iona Study Area	Aroclor 1254	1:3	2.97	2.00	4.90	1.67
Iona Study Area	Aroclor 1260	3:3	4.04	3.10	5.61	1.37
Iona Study Area	beta endosulfan	0:3	1.00	1.00	1.00	0.00
Iona Study Area	beta hexachlorocyclohexane	0:3	0.50	0.50	0.50	0.00
Iona Study Area	delta hexachlorocyclohexane	0:3	0.50	0.50	0.50	0.00
Iona Study Area	Dieldrin	0:3	1.00	1.00	1.00	0.00
Iona Study Area	endosulfan sulfate	0:3	1.00	1.00	1.00	0.00
Iona Study Area	Endrin	0:3	1.00	1.00	1.00	0.00
Iona Study Area	endrin aldehyde	0:3	1.00	1.00	1.00	0.00
Iona Study Area	gamma chlordane	0:3	0.50	0.50	0.50	0.00
Iona Study Area	gamma hexachlorocyclohexane	0:3	0.50	0.50	0.50	0.00
Iona Study Area	Heptachlor	0:3	0.50	0.50	0.50	0.00
Iona Study Area	heptachlor epoxide	0:3	0.50	0.50	0.50	0.00
Iona Study Area	lead	0:3	0.02	0.02	0.02	0.00
Iona Study Area	Lipids	3:3	0.44	0.40	0.53	0.08
Iona Study Area	mercury	3:3	0.04	0.04	0.05	0.01
Iona Study Area	Methoxychlor	0:3	10.00	10.00	10.00	0.00
Iona Study Area	ppDDD	0:3	1.00	1.00	1.00	0.00
Iona Study Area	ppDDE	3:3	1.74	1.01	2.24	0.65
Iona Study Area	ppDDT	0:3	2.00	2.00	2.00	0.00
Iona Study Area	Solids	3:3	17.57	17.20	18.10	0.47
Iona Study Area	Toxaphene	0:3	10.00	10.00	10.00	0.00
Liberty Bay	1,2,4-trichlorobenzene	0:3	3.60	3.60	3.60	0.00
Liberty Bay	1,2-dichlorobenzene	0:3	10.70	10.70	10.70	0.00
Liberty Bay	1,2-diphenylhydrazine	0:3	3.60	3.60	3.60	0.00
Liberty Bay	1,3-dichlorobenzene	0:3	10.70	10.70	10.70	0.00
Liberty Bay	1,4-dichlorobenzene	0:3	10.70	10.70	10.70	0.00
Liberty Bay	2,4,5-trichlorophenol	0:3	18.00	18.00	18.00	0.00
Liberty Bay	2,4,6-trichlorophenol	0:3	18.00	18.00	18.00	0.00
Liberty Bay	2,4-dichlorophenol	0:3	3.60	3.60	3.60	0.00
Liberty Bay	2,4-dimethylphenol	0:3	3.60	3.60	3.60	0.00
Liberty Bay	2,4-dinitrophenol	0:3	72.00	72.00	72.00	0.00
Liberty Bay	2,4-dinitrotoluene	0:3	18.00	18.00	18.00	0.00
Liberty Bay	2,6-dinitrotoluene	0:3	18.00	18.00	18.00	0.00
Liberty Bay	2-chloronaphthalene	0:3	10.70	10.70	10.70	0.00
Liberty Bay	2-chlorophenol	0:3	3.60	3.60	3.60	0.00
Liberty Bay	2-methylnaphthalene	0:3	3.60	3.60	3.60	0.00
Liberty Bay	2-methylphenol	0:3	3.60	3.60	3.60	0.00

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Liberty Bay	2-nitroaniline	0:3	7.10	7.10	7.10	0.00
Liberty Bay	2-nitrophenol	0:3	3.60	3.60	3.60	0.00
Liberty Bay	3-nitroaniline	0:3	3.60	3.60	3.60	0.00
Liberty Bay	4,6-dinitro-o-cresol	0:3	53.00	53.00	53.00	0.00
Liberty Bay	4-bromophenylphenylether	0:3	18.00	18.00	18.00	0.00
Liberty Bay	4-chloro-3-methylphenol	0:3	3.60	3.60	3.60	0.00
Liberty Bay	4-chloroaniline	0:3	36.00	36.00	36.00	0.00
Liberty Bay	4-chlorophenylphenylether	0:3	3.60	3.60	3.60	0.00
Liberty Bay	4-methylphenol	0:3	3.60	3.60	3.60	0.00
Liberty Bay	4-nitroaniline	0:3	18.00	18.00	18.00	0.00
Liberty Bay	4-nitrophenol	0:3	36.00	36.00	36.00	0.00
Liberty Bay	acenaphthene	0:3	3.60	3.60	3.60	0.00
Liberty Bay	acenaphthylene	0:3	3.60	3.60	3.60	0.00
Liberty Bay	Aldrin	0:6	0.50	0.50	0.50	0.00
Liberty Bay	alpha chlordane	0:6	0.50	0.50	0.50	0.00
Liberty Bay	alpha endosulfan	0:6	0.50	0.50	0.50	0.00
Liberty Bay	alpha hexachlorocyclohexane	0:6	0.50	0.50	0.50	0.00
Liberty Bay	aniline	0:3	53.30	53.30	53.30	0.00
Liberty Bay	anthracene	0:3	3.60	3.60	3.60	0.00
Liberty Bay	Aroclor 1016	0:6	20.00	20.00	20.00	0.00
Liberty Bay	Aroclor 1221	0:6	20.00	20.00	20.00	0.00
Liberty Bay	Aroclor 1232	0:6	20.00	20.00	20.00	0.00
Liberty Bay	Aroclor 1242	0:6	10.00	10.00	10.00	0.00
Liberty Bay	Aroclor 1248	0:6	2.00	2.00	2.00	0.00
Liberty Bay	Aroclor 1254	6:6	8.92	4.00	12.50	3.97
Liberty Bay	Aroclor 1260	6:6	13.58	3.00	21.70	7.48
Liberty Bay	arsenic	6:6	9.99	8.05	13.00	2.10
Liberty Bay	benzo(a)anthracene	0:3	10.70	10.70	10.70	0.00
Liberty Bay	benzo(a)pyrene	0:3	3.60	3.60	3.60	0.00
Liberty Bay	benzo(b)fluoranthene	0:3	10.70	10.70	10.70	0.00
Liberty Bay	benzo(g,h,i)perylene	0:3	10.70	10.70	10.70	0.00
Liberty Bay	benzo(k)fluoranthene	0:3	7.10	7.10	7.10	0.00
Liberty Bay	benzoic acid	0:3	36.00	36.00	36.00	0.00
Liberty Bay	benzyl alcohol	0:3	3.60	3.60	3.60	0.00
Liberty Bay	benzylbutylphthalate	1:3	80.47	10.70	220.00	120.84
Liberty Bay	beta endosulfan	0:6	1.00	1.00	1.00	0.00
Liberty Bay	beta hexachlorocyclohexane	0:6	0.50	0.50	0.50	0.00
Liberty Bay	bis(2-chloroethoxy)methane	0:3	3.60	3.60	3.60	0.00
Liberty Bay	bis(2-chloroethyl)ether	0:3	3.60	3.60	3.60	0.00
Liberty Bay	bis(2-chloroisopropyl)ether	0:3	10.70	10.70	10.70	0.00
Liberty Bay	bis(2-ethylhexyl)phthalate	1:3	22.40	3.60	60.00	32.56
Liberty Bay	carbazole	0:3	3.60	3.60	3.60	0.00
Liberty Bay	chrysene	0:3	3.60	3.60	3.60	0.00
Liberty Bay	copper	6:6	0.27	0.20	0.35	0.06
Liberty Bay	coprostanol	0:3	180.00	180.00	180.00	0.00
Liberty Bay	delta hexachlorocyclohexane	0:6	0.50	0.50	0.50	0.00
Liberty Bay	dibenzo(a,h)anthracene	0:3	10.70	10.70	10.70	0.00
Liberty Bay	dibenzofuran	0:3	10.70	10.70	10.70	0.00
Liberty Bay	Dieldrin	0:6	1.00	1.00	1.00	0.00
Liberty Bay	diethylphthalate	0:3	3.60	3.60	3.60	0.00
Liberty Bay	dimethylphthalate	0:3	3.60	3.60	3.60	0.00
Liberty Bay	di-n-butylphthalate	0:3	3.60	3.60	3.60	0.00
Liberty Bay	di-n-octylphthalate	0:3	3.60	3.60	3.60	0.00
Liberty Bay	endosulfan sulfate	0:6	1.00	1.00	1.00	0.00
Liberty Bay	Endrin	0:6	1.00	1.00	1.00	0.00

## Appendix: English Sole Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Liberty Bay	endrin aldehyde	0:6	1.00	1.00	1.00	0.00
Liberty Bay	fluoranthene	0:3	3.60	3.60	3.60	0.00
Liberty Bay	fluorene	0:3	3.60	3.60	3.60	0.00
Liberty Bay	gamma chlordane	0:6	0.50	0.50	0.50	0.00
Liberty Bay	gamma hexachlorocyclohexane	0:6	0.50	0.50	0.50	0.00
Liberty Bay	Heptachlor	0:6	0.50	0.50	0.50	0.00
Liberty Bay	heptachlor epoxide	0:6	0.50	0.50	0.50	0.00
Liberty Bay	hexachlorobenzene	0:3	18.00	18.00	18.00	0.00
Liberty Bay	hexachlorobutadiene	0:3	10.70	10.70	10.70	0.00
Liberty Bay	hexachlorocyclopentadiene	0:3	36.00	36.00	36.00	0.00
Liberty Bay	hexachloroethane	0:3	10.70	10.70	10.70	0.00
Liberty Bay	indeno(1,2,3-c,d)pyrene	0:3	18.00	18.00	18.00	0.00
Liberty Bay	isophorone	0:3	3.60	3.60	3.60	0.00
Liberty Bay	lead	2:6	0.03	0.02	0.05	0.01
Liberty Bay	Lipids	5:5	0.38	0.10	0.67	0.20
Liberty Bay	mercury	6:6	0.05	0.04	0.06	0.01
Liberty Bay	Methoxychlor	0:6	10.00	10.00	10.00	0.00
Liberty Bay	naphthalene	0:3	3.60	3.60	3.60	0.00
Liberty Bay	nitrobenzene	0:3	10.70	10.70	10.70	0.00
Liberty Bay	N-nitrosodimethylamine	0:3	3.60	3.60	3.60	0.00
Liberty Bay	N-nitroso-di-n-propylamine	0:3	3.60	3.60	3.60	0.00
Liberty Bay	N-nitrosodiphenylamine	0:3	3.60	3.60	3.60	0.00
Liberty Bay	pentachlorophenol	0:3	36.00	36.00	36.00	0.00
Liberty Bay	phenanthrene	0:3	3.60	3.60	3.60	0.00
Liberty Bay	phenol	0:3	3.60	3.60	3.60	0.00
Liberty Bay	ppDDD	0:6	1.00	1.00	1.00	0.00
Liberty Bay	ppDDE	2:6	1.10	1.00	1.34	0.15
Liberty Bay	ppDDT	0:6	2.00	2.00	2.00	0.00
Liberty Bay	pyrene	0:3	3.60	3.60	3.60	0.00
Liberty Bay	Solids	4:4	17.58	16.80	19.00	0.97
Liberty Bay	Toxaphene	0:6	10.00	10.00	10.00	0.00
McArthur Bank	1,2,4-trichlorobenzene	0:3	3.60	3.60	3.60	0.00
McArthur Bank	1,2-dichlorobenzene	0:3	11.00	11.00	11.00	0.00
McArthur Bank	1,2-diphenylhydrazine	0:3	3.60	3.60	3.60	0.00
McArthur Bank	1,3-dichlorobenzene	0:3	11.00	11.00	11.00	0.00
McArthur Bank	1,4-dichlorobenzene	0:3	11.00	11.00	11.00	0.00
McArthur Bank	2,4,5-trichlorophenol	0:3	18.00	18.00	18.00	0.00
McArthur Bank	2,4,6-trichlorophenol	0:3	18.00	18.00	18.00	0.00
McArthur Bank	2,4-dichlorophenol	0:3	3.60	3.60	3.60	0.00
McArthur Bank	2,4-dimethylphenol	0:3	3.60	3.60	3.60	0.00
McArthur Bank	2,4-dinitrophenol	0:3	72.00	72.00	72.00	0.00
McArthur Bank	2,4-dinitrotoluene	0:3	18.00	18.00	18.00	0.00
McArthur Bank	2,6-dinitrotoluene	0:3	18.00	18.00	18.00	0.00
McArthur Bank	2-chloronaphthalene	0:3	11.00	11.00	11.00	0.00
McArthur Bank	2-chlorophenol	0:3	3.60	3.60	3.60	0.00
McArthur Bank	2-methylnaphthalene	0:3	3.60	3.60	3.60	0.00
McArthur Bank	2-methylphenol	0:3	3.60	3.60	3.60	0.00
McArthur Bank	2-nitroaniline	0:3	7.10	7.10	7.10	0.00
McArthur Bank	2-nitrophenol	0:3	3.60	3.60	3.60	0.00
McArthur Bank	3-nitroaniline	0:3	3.60	3.60	3.60	0.00
McArthur Bank	4,6-dinitro-o-cresol	0:3	53.00	53.00	53.00	0.00
McArthur Bank	4-bromophenylphenylether	0:3	18.00	18.00	18.00	0.00
McArthur Bank	4-chloro-3-methylphenol	0:3	3.60	3.60	3.60	0.00
McArthur Bank	4-chloroaniline	0:3	36.00	36.00	36.00	0.00
McArthur Bank	4-chlorophenylphenylether	0:3	3.60	3.60	3.60	0.00

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
McArthur Bank	4-methylphenol	0:3	3.60	3.60	3.60	0.00
McArthur Bank	4-nitroaniline	0:3	18.00	18.00	18.00	0.00
McArthur Bank	4-nitrophenol	0:3	36.00	36.00	36.00	0.00
McArthur Bank	acenaphthene	0:3	3.60	3.60	3.60	0.00
McArthur Bank	acenaphthylene	0:3	3.60	3.60	3.60	0.00
McArthur Bank	Aldrin	0:3	0.50	0.50	0.50	0.00
McArthur Bank	alpha chlordane	0:3	0.50	0.50	0.50	0.00
McArthur Bank	alpha endosulfan	0:3	0.50	0.50	0.50	0.00
McArthur Bank	alpha hexachlorocyclohexane	0:3	0.50	0.50	0.50	0.00
McArthur Bank	aniline	0:3	53.00	53.00	53.00	0.00
McArthur Bank	anthracene	0:3	3.60	3.60	3.60	0.00
McArthur Bank	Aroclor 1016	0:3	18.00	18.00	18.00	0.00
McArthur Bank	Aroclor 1221	0:3	18.00	18.00	18.00	0.00
McArthur Bank	Aroclor 1232	0:3	18.00	18.00	18.00	0.00
McArthur Bank	Aroclor 1242	0:3	11.00	11.00	11.00	0.00
McArthur Bank	Aroclor 1248	0:3	2.30	2.30	2.30	0.00
McArthur Bank	Aroclor 1254	0:3	2.30	2.30	2.30	0.00
McArthur Bank	Aroclor 1260	0:3	2.30	2.30	2.30	0.00
McArthur Bank	arsenic	3:3	8.57	8.20	9.10	0.47
McArthur Bank	benzo(a)anthracene	0:3	11.00	11.00	11.00	0.00
McArthur Bank	benzo(a)pyrene	0:3	3.60	3.60	3.60	0.00
McArthur Bank	benzo(b)fluoranthene	0:3	11.00	11.00	11.00	0.00
McArthur Bank	benzo(g,h,i)perylene	0:3	11.00	11.00	11.00	0.00
McArthur Bank	benzo(k)fluoranthene	0:3	7.10	7.10	7.10	0.00
McArthur Bank	benzoic acid	3:3	127.33	94.00	164.00	35.12
McArthur Bank	benzyl alcohol	3:3	17.67	10.00	24.00	7.09
McArthur Bank	benzylbutylphthalate	0:3	11.00	11.00	11.00	0.00
McArthur Bank	beta endosulfan	0:3	1.00	1.00	1.00	0.00
McArthur Bank	beta hexachlorocyclohexane	0:3	0.50	0.50	0.50	0.00
McArthur Bank	bis(2-chloroethoxy)methane	0:3	3.60	3.60	3.60	0.00
McArthur Bank	bis(2-chloroethyl)ether	0:3	3.60	3.60	3.60	0.00
McArthur Bank	bis(2-chloroisopropyl)ether	0:3	11.00	11.00	11.00	0.00
McArthur Bank	bis(2-ethylhexyl)phthalate	1:3	34.07	3.60	95.00	52.77
McArthur Bank	carbazole	0:3	3.60	3.60	3.60	0.00
McArthur Bank	chrysene	0:3	3.60	3.60	3.60	0.00
McArthur Bank	copper	3:3	0.19	0.14	0.22	0.04
McArthur Bank	coprostanol	0:3	180.00	180.00	180.00	0.00
McArthur Bank	delta hexachlorocyclohexane	0:3	0.50	0.50	0.50	0.00
McArthur Bank	dibenzo(a,h)anthracene	0:3	11.00	11.00	11.00	0.00
McArthur Bank	dibenzofuran	0:3	11.00	11.00	11.00	0.00
McArthur Bank	Dieldrin	0:3	1.00	1.00	1.00	0.00
McArthur Bank	diethylphthalate	0:3	3.60	3.60	3.60	0.00
McArthur Bank	dimethylphthalate	0:3	3.60	3.60	3.60	0.00
McArthur Bank	di-n-butylphthalate	0:3	3.60	3.60	3.60	0.00
McArthur Bank	di-n-octylphthalate	0:3	3.60	3.60	3.60	0.00
McArthur Bank	endosulfan sulfate	0:3	1.00	1.00	1.00	0.00
McArthur Bank	Endrin	0:3	1.00	1.00	1.00	0.00
McArthur Bank	endrin aldehyde	0:3	1.00	1.00	1.00	0.00
McArthur Bank	fluoranthene	0:3	3.60	3.60	3.60	0.00
McArthur Bank	fluorene	0:3	3.60	3.60	3.60	0.00
McArthur Bank	gamma chlordane	0:3	0.50	0.50	0.50	0.00
McArthur Bank	gamma hexachlorocyclohexane	0:3	0.50	0.50	0.50	0.00
McArthur Bank	Heptachlor	0:3	0.50	0.50	0.50	0.00
McArthur Bank	heptachlor epoxide	0:3	0.50	0.50	0.50	0.00
McArthur Bank	hexachlorobenzene	0:3	18.00	18.00	18.00	0.00



Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
McArthur Bank	hexachlorobutadiene	0:3	11.00	11.00	11.00	0.00
McArthur Bank	hexachlorocyclopentadiene	0:3	36.00	36.00	36.00	0.00
McArthur Bank	hexachloroethane	0:3	11.00	11.00	11.00	0.00
McArthur Bank	indeno(1,2,3-c,d)pyrene	0:3	18.00	18.00	18.00	0.00
McArthur Bank	isophorone	0:3	3.60	3.60	3.60	0.00
McArthur Bank	lead	0:3	0.03	0.03	0.03	0.00
McArthur Bank	mercury	3:3	0.04	0.04	0.05	0.01
McArthur Bank	Methoxychlor	0:3	12.00	12.00	12.00	0.00
McArthur Bank	naphthalene	0:3	3.60	3.60	3.60	0.00
McArthur Bank	nitrobenzene	0:3	11.00	11.00	11.00	0.00
McArthur Bank	N-nitrosodimethylamine	0:3	3.60	3.60	3.60	0.00
McArthur Bank	N-nitroso-di-n-propylamine	0:3	3.60	3.60	3.60	0.00
McArthur Bank	N-nitrosodiphenylamine	0:3	3.60	3.60	3.60	0.00
McArthur Bank	pentachlorophenol	0:3	36.00	36.00	36.00	0.00
McArthur Bank	phenanthrene	0:3	3.60	3.60	3.60	0.00
McArthur Bank	phenol	1:3	12.07	3.60	29.00	14.66
McArthur Bank	ppDDD	0:3	1.00	1.00	1.00	0.00
McArthur Bank	ppDDE	0:3	1.00	1.00	1.00	0.00
McArthur Bank	ppDDT	0:3	2.40	2.40	2.40	0.00
McArthur Bank	pyrene	0:3	3.60	3.60	3.60	0.00
McArthur Bank	Solids	3:3	17.00	17.00	17.00	0.00
McArthur Bank	Toxaphene	0:3	14.00	14.00	14.00	0.00
Mid Hood Canal	1,2,4-trichlorobenzene	0:3	3.60	3.60	3.60	0.00
Mid Hood Canal	1,2-dichlorobenzene	0:3	10.70	10.70	10.70	0.00
Mid Hood Canal	1,2-diphenylhydrazine	0:3	3.60	3.60	3.60	0.00
Mid Hood Canal	1,3-dichlorobenzene	0:3	10.70	10.70	10.70	0.00
Mid Hood Canal	1,4-dichlorobenzene	0:3	10.70	10.70	10.70	0.00
Mid Hood Canal	2,4,5-trichlorophenol	0:3	18.00	18.00	18.00	0.00
Mid Hood Canal	2,4,6-trichlorophenol	0:3	18.00	18.00	18.00	0.00
Mid Hood Canal	2,4-dichlorophenol	0:3	3.60	3.60	3.60	0.00
Mid Hood Canal	2,4-dimethylphenol	0:3	50.00	50.00	50.00	0.00
Mid Hood Canal	2,4-dinitrophenol	0:3	72.00	72.00	72.00	0.00
Mid Hood Canal	2,4-dinitrotoluene	0:3	18.00	18.00	18.00	0.00
Mid Hood Canal	2,6-dinitrotoluene	0:3	18.00	18.00	18.00	0.00
Mid Hood Canal	2-chloronaphthalene	0:3	10.70	10.70	10.70	0.00
Mid Hood Canal	2-chlorophenol	0:3	3.60	3.60	3.60	0.00
Mid Hood Canal	2-methylnaphthalene	0:3	3.60	3.60	3.60	0.00
Mid Hood Canal	2-methylphenol	0:3	3.60	3.60	3.60	0.00
Mid Hood Canal	2-nitroaniline	0:3	7.10	7.10	7.10	0.00
Mid Hood Canal	2-nitrophenol	0:3	3.60	3.60	3.60	0.00
Mid Hood Canal	3-nitroaniline	0:3	3.60	3.60	3.60	0.00
Mid Hood Canal	4,6-dinitro-o-cresol	0:3	50.00	50.00	50.00	0.00
Mid Hood Canal	4-bromophenylphenylether	0:3	50.00	50.00	50.00	0.00
Mid Hood Canal	4-chloro-3-methylphenol	0:3	3.60	3.60	3.60	0.00
Mid Hood Canal	4-chloroaniline	0:3	36.00	36.00	36.00	0.00
Mid Hood Canal	4-chlorophenylphenylether	0:3	3.60	3.60	3.60	0.00
Mid Hood Canal	4-methylphenol	0:3	3.60	3.60	3.60	0.00
Mid Hood Canal	4-nitroaniline	0:3	18.00	18.00	18.00	0.00
Mid Hood Canal	4-nitrophenol	0:3	36.00	36.00	36.00	0.00
Mid Hood Canal	acenaphthene	0:3	3.60	3.60	3.60	0.00
Mid Hood Canal	acenaphthylene	0:3	3.60	3.60	3.60	0.00
Mid Hood Canal	Aldrin	0:6	0.50	0.50	0.50	0.00
Mid Hood Canal	alpha chlordane	0:6	0.50	0.50	0.50	0.00
Mid Hood Canal	alpha endosulfan	0:6	0.50	0.50	0.50	0.00
Mid Hood Canal	alpha hexachlorocyclohexane	0:6	0.50	0.50	0.50	0.00

Location	Assay	No. Detected:		Mean	Min	Max	SD
		lo.	Analyzed				
Mid Hood Canal	aniline	0	3	53.00	53.00	53.00	0.00
Mid Hood Canal	anthracene	0	3	3.60	3.60	3.60	0.00
Mid Hood Canal	Aroclor 1016	0	6	20.00	20.00	20.00	0.00
Mid Hood Canal	Aroclor 1221	0	6	20.00	20.00	20.00	0.00
Mid Hood Canal	Aroclor 1232	0	6	20.00	20.00	20.00	0.00
Mid Hood Canal	Aroclor 1242	0	6	10.00	10.00	10.00	0.00
Mid Hood Canal	Aroclor 1248	0	6	2.00	2.00	2.00	0.00
Mid Hood Canal	Aroclor 1254	0	6	2.00	2.00	2.00	0.00
Mid Hood Canal	Aroclor 1260	3	6	2.00	2.00	2.00	0.00
Mid Hood Canal	arsenic	3	3	5.50	4.50	6.40	0.95
Mid Hood Canal	benzo(a)anthracene	0	3	10.70	10.70	10.70	0.00
Mid Hood Canal	benzo(a)pyrene	0	3	3.60	3.60	3.60	0.00
Mid Hood Canal	benzo(b)fluoranthene	0	3	10.70	10.70	10.70	0.00
Mid Hood Canal	benzo(g,h,i)perylene	0	3	10.70	10.70	10.70	0.00
Mid Hood Canal	benzo(k)fluoranthene	0	3	7.10	7.10	7.10	0.00
Mid Hood Canal	benzoic acid	0	3	36.00	36.00	36.00	0.00
Mid Hood Canal	benzyl alcohol	0	3	3.60	3.60	3.60	0.00
Mid Hood Canal	benzylbutylphthalate	0	3	10.70	10.70	10.70	0.00
Mid Hood Canal	beta endosulfan	0	6	1.00	1.00	1.00	0.00
Mid Hood Canal	beta hexachlorocyclohexane	0	6	0.50	0.50	0.50	0.00
Mid Hood Canal	bis(2-chloroethoxy)methane	0	3	3.60	3.60	3.60	0.00
Mid Hood Canal	bis(2-chloroethyl)ether	0	3	3.60	3.60	3.60	0.00
Mid Hood Canal	bis(2-chloroisopropyl)ether	0	3	10.70	10.70	10.70	0.00
Mid Hood Canal	bis(2-ethylhexyl)phthalate	1	3	261.00	100.00	583.00	278.86
Mid Hood Canal	carbazole	0	3	3.60	3.60	3.60	0.00
Mid Hood Canal	chrysene	0	3	3.60	3.60	3.60	0.00
Mid Hood Canal	copper	3	3	0.51	0.34	0.78	0.23
Mid Hood Canal	coprostanol	0	3	180.00	180.00	180.00	0.00
Mid Hood Canal	delta hexachlorocyclohexane	0	6	0.50	0.50	0.50	0.00
Mid Hood Canal	dibenzo(a,h)anthracene	0	3	10.70	10.70	10.70	0.00
Mid Hood Canal	dibenzofuran	0	3	10.70	10.70	10.70	0.00
Mid Hood Canal	Dieldrin	0	6	1.00	1.00	1.00	0.00
Mid Hood Canal	diethylphthalate	0	3	3.60	3.60	3.60	0.00
Mid Hood Canal	dimethylphthalate	0	3	3.60	3.60	3.60	0.00
Mid Hood Canal	di-n-butylphthalate	0	3	4.00	4.00	4.00	0.00
Mid Hood Canal	di-n-octylphthalate	0	3	3.60	3.60	3.60	0.00
Mid Hood Canal	endosulfan sulfate	0	6	1.00	1.00	1.00	0.00
Mid Hood Canal	Endrin	0	6	1.00	1.00	1.00	0.00
Mid Hood Canal	endrin aldehyde	0	6	1.00	1.00	1.00	0.00
Mid Hood Canal	fluoranthene	0	3	3.60	3.60	3.60	0.00
Mid Hood Canal	fluorene	0	3	3.60	3.60	3.60	0.00
Mid Hood Canal	gamma chlordane	0	6	0.50	0.50	0.50	0.00
Mid Hood Canal	gamma hexachlorocyclohexane	0	6	0.50	0.50	0.50	0.00
Mid Hood Canal	Heptachlor	0	6	0.50	0.50	0.50	0.00
Mid Hood Canal	heptachlor epoxide	0	6	0.50	0.50	0.50	0.00
Mid Hood Canal	hexachlorobenzene	0	3	18.00	18.00	18.00	0.00
Mid Hood Canal	hexachlorobutadiene	0	3	10.70	10.70	10.70	0.00
Mid Hood Canal	hexachlorocyclopentadiene	0	3	265.00	265.00	265.00	0.00
Mid Hood Canal	hexachloroethane	0	3	10.70	10.70	10.70	0.00
Mid Hood Canal	indeno(1,2,3-c,d)pyrene	0	3	18.00	18.00	18.00	0.00
Mid Hood Canal	isophorone	0	3	3.60	3.60	3.60	0.00
Mid Hood Canal	lead	0	6	0.03	0.02	0.03	0.01
Mid Hood Canal	Lipids	6	6	0.20	0.14	0.29	0.06
Mid Hood Canal	mercury	6	6	0.04	0.03	0.05	0.01
Mid Hood Canal	Methoxychlor	0	6	10.00	10.00	10.00	0.00

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Mid Hood Canal	naphthalene	0:3	3.60	3.60	3.60	0.00
Mid Hood Canal	nitrobenzene	0:3	10.70	10.70	10.70	0.00
Mid Hood Canal	N-nitrosodimethylamine	0:3	3.60	3.60	3.60	0.00
Mid Hood Canal	N-nitroso-di-n-propylamine	0:3	3.60	3.60	3.60	0.00
Mid Hood Canal	N-nitrosodiphenylamine	0:3	3.60	3.60	3.60	0.00
Mid Hood Canal	pentachlorophenol	0:3	265.00	265.00	265.00	0.00
Mid Hood Canal	phenanthrene	0:3	3.60	3.60	3.60	0.00
Mid Hood Canal	phenol	0:3	3.60	3.60	3.60	0.00
Mid Hood Canal	ppDDD	0:6	1.00	1.00	1.00	0.00
Mid Hood Canal	ppDDE	0:6	1.00	1.00	1.00	0.00
Mid Hood Canal	ppDDT	0:6	2.00	2.00	2.00	0.00
Mid Hood Canal	pyrene	0:3	3.60	3.60	3.60	0.00
Mid Hood Canal	Solids	6:6	17.03	16.00	18.00	0.65
Mid Hood Canal	Toxaphene	0:6	10.00	10.00	10.00	0.00
Mukilteo-Everett	Aldrin	0:2	0.50	0.50	0.50	0.00
Mukilteo-Everett	alpha chlordane	0:2	0.50	0.50	0.50	0.00
Mukilteo-Everett	alpha endosulfan	0:2	0.50	0.50	0.50	0.00
Mukilteo-Everett	alpha hexachlorocyclohexane	0:2	0.50	0.50	0.50	0.00
Mukilteo-Everett	beta endosulfan	0:2	1.00	1.00	1.00	0.00
Mukilteo-Everett	beta hexachlorocyclohexane	0:2	0.50	0.50	0.50	0.00
Mukilteo-Everett	delta hexachlorocyclohexane	0:2	0.50	0.50	0.50	0.00
Mukilteo-Everett	dieldrin	0:2	1.00	1.00	1.00	0.00
Mukilteo-Everett	endosulfan sulfate	0:2	1.00	1.00	1.00	0.00
Mukilteo-Everett	endrin	0:2	1.00	1.00	1.00	0.00
Mukilteo-Everett	endrin aldehyde	0:2	1.00	1.00	1.00	0.00
Mukilteo-Everett	gamma chlordane	0:2	0.50	0.50	0.50	0.00
Mukilteo-Everett	gamma hexachlorocyclohexane	0:2	0.50	0.50	0.50	0.00
Mukilteo-Everett	heptachlor	0:2	0.50	0.50	0.50	0.00
Mukilteo-Everett	heptachlor epoxide	0:2	0.50	0.50	0.50	0.00
Mukilteo-Everett	Mercury	2:2	0.04	0.03	0.05	0.01
Mukilteo-Everett	methoxychlor	0:2	10.00	10.00	10.00	0.00
Mukilteo-Everett	ppDDD	0:2	1.30	1.30	1.30	0.00
Mukilteo-Everett	ppDDE	0:2	1.00	1.00	1.00	0.00
Mukilteo-Everett	ppDDT	0:2	2.00	2.00	2.00	0.00
Mukilteo-Everett	Solids	2:2	14.65	14.40	14.90	0.35
Mukilteo-Everett	toxaphene	0:2	10.00	10.00	10.00	0.00
Myrtle Edwards	Aldrin	0:3	0.50	0.50	0.50	0.00
Myrtle Edwards	alpha chlordane	0:3	0.50	0.50	0.50	0.00
Myrtle Edwards	alpha endosulfan	0:3	0.50	0.50	0.50	0.00
Myrtle Edwards	alpha hexachlorocyclohexane	0:3	0.50	0.50	0.50	0.00
Myrtle Edwards	beta endosulfan	0:3	1.00	1.00	1.00	0.00
Myrtle Edwards	beta hexachlorocyclohexane	0:3	0.50	0.50	0.50	0.00
Myrtle Edwards	delta hexachlorocyclohexane	0:3	0.50	0.50	0.50	0.00
Myrtle Edwards	dieldrin	0:3	1.00	1.00	1.00	0.00
Myrtle Edwards	endosulfan sulfate	0:3	1.00	1.00	1.00	0.00
Myrtle Edwards	endrin	0:3	1.00	1.00	1.00	0.00
Myrtle Edwards	endrin aldehyde	0:3	1.00	1.00	1.00	0.00
Myrtle Edwards	gamma chlordane	0:3	0.50	0.50	0.50	0.00
Myrtle Edwards	gamma hexachlorocyclohexane	0:3	0.50	0.50	0.50	0.00
Myrtle Edwards	heptachlor	0:3	0.50	0.50	0.50	0.00
Myrtle Edwards	heptachlor epoxide	0:3	0.50	0.50	0.50	0.00
Myrtle Edwards	hexachlorobenzene	0:3	0.07	0.06	0.08	0.01
Myrtle Edwards	Lipids	4:4	0.31	0.11	0.46	0.15
Myrtle Edwards	Mercury	3:3	0.08	0.06	0.09	0.02
Myrtle Edwards	methoxychlor	0:3	10.00	10.00	10.00	0.00

# Appendix: English Sole Muscle

Location	Assay	No. Detected:			Min	Max	SD
		lo. Analyzed	Mean				
Myrtle Edwards	opDDD	0:3	0.20	0.17	0.22	0.03	
Myrtle Edwards	opDDT	0:3	0.25	0.22	0.27	0.03	
Myrtle Edwards	PCB101	3:3	1.55	0.96	2.10	0.57	
Myrtle Edwards	PCB105	1:3	0.15	0.07	0.31	0.13	
Myrtle Edwards	PCB110	2:3	0.24	0.08	0.40	0.16	
Myrtle Edwards	PCB118	3:3	0.86	0.52	1.10	0.30	
Myrtle Edwards	PCB126	0:3	0.10	0.09	0.11	0.01	
Myrtle Edwards	PCB128	2:3	0.19	0.08	0.35	0.14	
Myrtle Edwards	PCB138	2:3	0.32	0.07	0.51	0.22	
Myrtle Edwards	PCB153	3:3	1.10	0.81	1.30	0.26	
Myrtle Edwards	PCB156	0:3	0.07	0.06	0.08	0.01	
Myrtle Edwards	PCB157	0:3	0.07	0.06	0.08	0.01	
Myrtle Edwards	PCB169	0:3	0.14	0.13	0.16	0.02	
Myrtle Edwards	PCB170	0:3	0.07	0.06	0.07	0.01	
Myrtle Edwards	PCB180	0:3	0.06	0.06	0.07	0.01	
Myrtle Edwards	PCB189	0:3	0.07	0.06	0.08	0.01	
Myrtle Edwards	PCB77	0:3	0.11	0.09	0.12	0.01	
Myrtle Edwards	ppDDD	0:6	0.86	0.36	1.30	0.49	
Myrtle Edwards	ppDDE	3:6	0.81	0.57	1.00	0.22	
Myrtle Edwards	ppDDT	0:6	1.13	0.22	2.00	0.96	
Myrtle Edwards	Solids	6:6	16.27	15.20	17.50	1.02	
Myrtle Edwards	TotalDDT	3:3	0.61	0.57	0.65	0.04	
Myrtle Edwards	TotalPCB	3:3	5.10	4.20	6.20	1.01	
Myrtle Edwards	toxaphene	0:3	10.00	10.00	10.00	0.00	
N. Case Inlet	1,2,4-trichlorobenzene	0:3	3.60	3.60	3.60	0.00	
N. Case Inlet	1,2-dichlorobenzene	0:3	10.70	10.70	10.70	0.00	
N. Case Inlet	1,2-diphenylhydrazine	0:3	3.60	3.60	3.60	0.00	
N. Case Inlet	1,3-dichlorobenzene	0:3	10.70	10.70	10.70	0.00	
N. Case Inlet	1,4-dichlorobenzene	0:3	10.70	10.70	10.70	0.00	
N. Case Inlet	2,4,5-trichlorophenol	0:3	18.00	18.00	18.00	0.00	
N. Case Inlet	2,4,6-trichlorophenol	0:3	18.00	18.00	18.00	0.00	
N. Case Inlet	2,4-dichlorophenol	0:3	3.60	3.60	3.60	0.00	
N. Case Inlet	2,4-dimethylphenol	0:3	50.00	50.00	50.00	0.00	
N. Case Inlet	2,4-dinitrophenol	0:3	72.00	72.00	72.00	0.00	
N. Case Inlet	2,4-dinitrotoluene	0:3	18.00	18.00	18.00	0.00	
N. Case Inlet	2,6-dinitrotoluene	0:3	18.00	18.00	18.00	0.00	
N. Case Inlet	2-chloronaphthalene	0:3	10.70	10.70	10.70	0.00	
N. Case Inlet	2-chlorophenol	0:3	3.60	3.60	3.60	0.00	
N. Case Inlet	2-methylnaphthalene	0:3	3.60	3.60	3.60	0.00	
N. Case Inlet	2-methylphenol	0:3	3.60	3.60	3.60	0.00	
N. Case Inlet	2-nitroaniline	0:3	7.10	7.10	7.10	0.00	
N. Case Inlet	2-nitrophenol	0:3	3.60	3.60	3.60	0.00	
N. Case Inlet	3-nitroaniline	0:3	3.60	3.60	3.60	0.00	
N. Case Inlet	4,6-dinitro-o-cresol	0:3	50.00	50.00	50.00	0.00	
N. Case Inlet	4-bromophenylphenylether	0:3	50.00	50.00	50.00	0.00	
N. Case Inlet	4-chloro-3-methylphenol	0:3	3.60	3.60	3.60	0.00	
N. Case Inlet	4-chloroaniline	0:3	36.00	36.00	36.00	0.00	
N. Case Inlet	4-chlorophenylphenylether	0:3	3.60	3.60	3.60	0.00	
N. Case Inlet	4-methylphenol	0:3	3.60	3.60	3.60	0.00	
N. Case Inlet	4-nitroaniline	0:3	18.00	18.00	18.00	0.00	
N. Case Inlet	4-nitrophenol	0:3	36.00	36.00	36.00	0.00	
N. Case Inlet	acenaphthene	0:3	3.60	3.60	3.60	0.00	
N. Case Inlet	acenaphthylene	0:3	3.60	3.60	3.60	0.00	
N. Case Inlet	Aldrin	0:3	0.50	0.50	0.50	0.00	
N. Case Inlet	alpha chlordane	0:3	0.50	0.50	0.50	0.00	

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
N. Case Inlet	alpha endosulfan	0:3	0.50	0.50	0.50	0.00
N. Case Inlet	alpha hexachlorocyclohexane	0:3	0.50	0.50	0.50	0.00
N. Case Inlet	aniline	0:3	53.00	53.00	53.00	0.00
N. Case Inlet	anthracene	0:3	3.60	3.60	3.60	0.00
N. Case Inlet	Aroclor 1016	0:3	20.00	20.00	20.00	0.00
N. Case Inlet	Aroclor 1221	0:3	20.00	20.00	20.00	0.00
N. Case Inlet	Aroclor 1232	0:3	20.00	20.00	20.00	0.00
N. Case Inlet	Aroclor 1242	0:3	10.00	10.00	10.00	0.00
N. Case Inlet	Aroclor 1248	0:3	2.00	2.00	2.00	0.00
N. Case Inlet	Aroclor 1254	0:3	2.00	2.00	2.00	0.00
N. Case Inlet	Aroclor 1260	3:3	6.50	3.90	8.20	2.29
N. Case Inlet	arsenic	3:3	11.10	9.30	12.00	1.56
N. Case Inlet	benzo(a)anthracene	0:3	10.70	10.70	10.70	0.00
N. Case Inlet	benzo(a)pyrene	0:3	3.60	3.60	3.60	0.00
N. Case Inlet	benzo(b)fluoranthene	0:3	10.70	10.70	10.70	0.00
N. Case Inlet	benzo(g,h,i)perylene	0:3	10.70	10.70	10.70	0.00
N. Case Inlet	benzo(k)fluoranthene	0:3	7.10	7.10	7.10	0.00
N. Case Inlet	benzoic acid	0:3	36.00	36.00	36.00	0.00
N. Case Inlet	benzyl alcohol	0:3	3.60	3.60	3.60	0.00
N. Case Inlet	benzylbutylphthalate	0:3	10.70	10.70	10.70	0.00
N. Case Inlet	beta endosulfan	0:3	1.00	1.00	1.00	0.00
N. Case Inlet	beta hexachlorocyclohexane	0:3	0.50	0.50	0.50	0.00
N. Case Inlet	bis(2-chloroethoxy)methane	0:3	3.60	3.60	3.60	0.00
N. Case Inlet	bis(2-chloroethyl)ether	0:3	3.60	3.60	3.60	0.00
N. Case Inlet	bis(2-chloroisopropyl)ether	0:3	10.70	10.70	10.70	0.00
N. Case Inlet	bis(2-ethylhexyl)phthalate	1:3	427.67	100.00	1083.00	567.54
N. Case Inlet	carbazole	0:3	3.60	3.60	3.60	0.00
N. Case Inlet	chrysene	0:3	3.60	3.60	3.60	0.00
N. Case Inlet	copper	3:3	0.49	0.31	0.75	0.23
N. Case Inlet	coprostanol	0:3	180.00	180.00	180.00	0.00
N. Case Inlet	delta hexachlorocyclohexane	0:3	0.50	0.50	0.50	0.00
N. Case Inlet	dibenzo(a,h)anthracene	0:3	10.70	10.70	10.70	0.00
N. Case Inlet	dibenzofuran	0:3	10.70	10.70	10.70	0.00
N. Case Inlet	Dieldrin	0:3	1.00	1.00	1.00	0.00
N. Case Inlet	diethylphthalate	0:3	3.60	3.60	3.60	0.00
N. Case Inlet	dimethylphthalate	0:3	3.60	3.60	3.60	0.00
N. Case Inlet	di-n-butylphthalate	0:3	4.00	4.00	4.00	0.00
N. Case Inlet	di-n-octylphthalate	0:3	3.60	3.60	3.60	0.00
N. Case Inlet	endosulfan sulfate	0:3	1.00	1.00	1.00	0.00
N. Case Inlet	Endrin	0:3	1.00	1.00	1.00	0.00
N. Case Inlet	endrin aldehyde	0:3	1.00	1.00	1.00	0.00
N. Case Inlet	fluoranthene	0:3	3.60	3.60	3.60	0.00
N. Case Inlet	fluorene	0:3	3.60	3.60	3.60	0.00
N. Case Inlet	gamma chlordane	0:3	0.50	0.50	0.50	0.00
N. Case Inlet	gamma hexachlorocyclohexane	0:3	0.50	0.50	0.50	0.00
N. Case Inlet	Heptachlor	0:3	0.50	0.50	0.50	0.00
N. Case Inlet	heptachlor epoxide	0:3	0.50	0.50	0.50	0.00
N. Case Inlet	hexachlorobenzene	0:3	18.00	18.00	18.00	0.00
N. Case Inlet	hexachlorobutadiene	0:3	10.70	10.70	10.70	0.00
N. Case Inlet	hexachlorocyclopentadiene	0:3	265.00	265.00	265.00	0.00
N. Case Inlet	hexachloroethane	0:3	10.70	10.70	10.70	0.00
N. Case Inlet	indeno(1,2,3-c,d)pyrene	0:3	18.00	18.00	18.00	0.00
N. Case Inlet	isophorone	0:3	3.60	3.60	3.60	0.00
N. Case Inlet	lead	0:3	0.03	0.03	0.03	0.00
N. Case Inlet	Lipids	3:3	0.26	0.24	0.29	0.03

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
N. Case Inlet	mercury	3:3	0.04	0.04	0.04	0.00
N. Case Inlet	Methoxychlor	0:3	10.00	10.00	10.00	0.00
N. Case Inlet	naphthalene	0:3	3.60	3.60	3.60	0.00
N. Case Inlet	nitrobenzene	0:3	10.70	10.70	10.70	0.00
N. Case Inlet	N-nitrosodimethylamine	0:3	3.60	3.60	3.60	0.00
N. Case Inlet	N-nitroso-di-n-propylamine	0:3	3.60	3.60	3.60	0.00
N. Case Inlet	N-nitrosodiphenylamine	0:3	3.60	3.60	3.60	0.00
N. Case Inlet	pentachlorophenol	0:3	265.00	265.00	265.00	0.00
N. Case Inlet	phenanthrene	0:3	3.60	3.60	3.60	0.00
N. Case Inlet	phenol	0:3	3.60	3.60	3.60	0.00
N. Case Inlet	ppDDD	0:3	1.00	1.00	1.00	0.00
N. Case Inlet	ppDDE	0:3	1.00	1.00	1.00	0.00
N. Case Inlet	ppDDT	0:3	2.00	2.00	2.00	0.00
N. Case Inlet	pyrene	0:3	3.60	3.60	3.60	0.00
N. Case Inlet	Solids	3:3	17.00	16.00	18.00	1.00
N. Case Inlet	Toxaphene	0:3	10.00	10.00	10.00	0.00
N. Hood Canal	1,2,4-trichlorobenzene	0:15	4.08	3.60	5.60	0.80
N. Hood Canal	1,2-dichlorobenzene	0:15	9.80	5.60	11.00	2.18
N. Hood Canal	1,2-diphenylhydrazine	0:15	7.36	3.60	22.00	7.58
N. Hood Canal	1,3-dichlorobenzene	0:15	9.80	5.60	11.00	2.18
N. Hood Canal	1,4-dichlorobenzene	0:15	10.88	10.70	11.00	0.15
N. Hood Canal	2,4,5-trichlorophenol	0:15	23.20	18.00	44.00	10.77
N. Hood Canal	2,4,6-trichlorophenol	0:15	23.20	18.00	44.00	10.77
N. Hood Canal	2,4-dichlorophenol	0:15	5.16	3.60	11.00	3.03
N. Hood Canal	2,4-dimethylphenol	0:15	17.64	3.60	50.00	17.87
N. Hood Canal	2,4-dinitrophenol	0:15	62.00	22.00	72.00	20.70
N. Hood Canal	2,4-dinitrotoluene	0:15	15.28	4.40	18.00	5.63
N. Hood Canal	2,6-dinitrotoluene	0:15	15.28	4.40	18.00	5.63
N. Hood Canal	2-chloronaphthalene	0:15	9.80	5.60	11.00	2.18
N. Hood Canal	2-chlorophenol	0:15	7.36	3.60	22.00	7.58
N. Hood Canal	2-methylnaphthalene	0:15	6.36	3.60	17.00	5.51
N. Hood Canal	2-methylphenol	0:15	5.16	3.60	11.00	3.03
N. Hood Canal	2-nitroaniline	0:15	12.26	7.00	33.00	10.73
N. Hood Canal	2-nitrophenol	0:15	5.16	3.60	11.00	3.03
N. Hood Canal	3,3-dichlorobenzidine	0:3	11.00	11.00	11.00	0.00
N. Hood Canal	3-nitroaniline	0:15	9.56	3.60	33.00	12.13
N. Hood Canal	4,6-dinitro-o-cresol	0:15	45.60	22.00	53.00	12.29
N. Hood Canal	4-bromophenylphenylether	0:15	21.86	3.30	50.00	15.83
N. Hood Canal	4-chloro-3-methylphenol	0:15	7.36	3.60	22.00	7.58
N. Hood Canal	4-chloroaniline	0:15	33.20	22.00	36.00	5.80
N. Hood Canal	4-chlorophenylphenylether	0:15	4.08	3.60	5.60	0.80
N. Hood Canal	4-methylphenol	0:15	5.16	3.60	11.00	3.03
N. Hood Canal	4-nitroaniline	0:15	21.00	18.00	33.00	6.21
N. Hood Canal	4-nitrophenol	0:15	33.20	22.00	36.00	5.80
N. Hood Canal	acenaphthene	0:15	3.84	3.60	4.40	0.33
N. Hood Canal	acenaphthylene	0:15	4.08	3.60	5.60	0.80
N. Hood Canal	Aldrin	0:21	0.50	0.50	0.56	0.01
N. Hood Canal	alpha chlordane	0:21	0.50	0.50	0.56	0.01
N. Hood Canal	alpha endosulfan	0:21	0.50	0.50	0.56	0.01
N. Hood Canal	alpha hexachlorocyclohexane	0:21	0.50	0.50	0.56	0.01
N. Hood Canal	aniline	0:15	46.86	22.00	53.30	12.87
N. Hood Canal	anthracene	0:15	4.08	3.60	5.60	0.80
N. Hood Canal	Aroclor 1016	0:21	19.81	18.00	22.00	0.87
N. Hood Canal	Aroclor 1221	0:21	19.81	18.00	22.00	0.87
N. Hood Canal	Aroclor 1232	0:21	19.81	18.00	22.00	0.87

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
N. Hood Canal	Aroclor 1242	0:21	10.19	10.00	11.00	0.40
N. Hood Canal	Aroclor 1248	0:21	2.05	2.00	2.30	0.11
N. Hood Canal	Aroclor 1254	6:21	2.82	2.00	6.49	1.38
N. Hood Canal	Aroclor 1260	10:21	3.88	2.00	9.31	2.37
N. Hood Canal	arsenic	18:18	5.65	3.42	8.70	1.40
N. Hood Canal	benzo(a)anthracene	0:15	9.80	5.60	11.00	2.18
N. Hood Canal	benzo(a)pyrene	0:15	5.16	3.60	11.00	3.03
N. Hood Canal	benzo(b)fluoranthene	0:15	12.08	10.70	17.00	2.55
N. Hood Canal	benzo(g,h,i)perylene	0:15	10.88	10.70	11.00	0.15
N. Hood Canal	benzo(k)fluoranthene	0:15	9.06	7.00	17.00	4.11
N. Hood Canal	benzoic acid	0:15	128.80	36.00	500.00	192.11
N. Hood Canal	benzyl alcohol	7:15	16.79	3.60	65.23	18.42
N. Hood Canal	benzylbutylphthalate	2:15	26.61	6.20	141.00	41.68
N. Hood Canal	beta endosulfan	0:21	1.00	1.00	1.10	0.02
N. Hood Canal	beta hexachlorocyclohexane	0:21	0.50	0.50	0.56	0.01
N. Hood Canal	bis(2-chloroethoxy)methane	0:15	5.16	3.60	11.00	3.03
N. Hood Canal	bis(2-chloroethyl)ether	0:15	4.08	3.60	5.60	0.80
N. Hood Canal	bis(2-chloroisopropyl)ether	0:15	13.08	10.70	22.00	4.62
N. Hood Canal	bis(2-ethylhexyl)phthalate	4:15	243.07	3.60	2083.00	559.95
N. Hood Canal	carbazole	0:12	3.70	3.60	4.00	0.18
N. Hood Canal	chrysene	0:15	4.08	3.60	5.60	0.80
N. Hood Canal	copper	18:18	0.43	0.18	3.60	0.79
N. Hood Canal	coprostanol	0:12	180.00	180.00	180.00	0.00
N. Hood Canal	delta hexachlorocyclohexane	0:21	0.50	0.50	0.56	0.01
N. Hood Canal	dibenzo(a,h)anthracene	0:15	12.08	10.70	17.00	2.55
N. Hood Canal	dibenzofuran	0:15	10.88	10.70	11.00	0.15
N. Hood Canal	Dieldrin	0:21	1.00	1.00	1.10	0.02
N. Hood Canal	diethylphthalate	0:15	10.43	3.60	66.00	17.30
N. Hood Canal	dimethylphthalate	0:15	3.62	3.30	4.00	0.23
N. Hood Canal	di-n-butylphthalate	1:15	7.73	3.60	22.00	7.03
N. Hood Canal	di-n-octylphthalate	0:15	4.08	3.60	5.60	0.80
N. Hood Canal	endosulfan sulfate	0:21	1.00	1.00	1.10	0.02
N. Hood Canal	Endrin	0:21	1.00	1.00	1.10	0.02
N. Hood Canal	endrin aldehyde	0:21	1.00	1.00	1.10	0.02
N. Hood Canal	fluoranthene	0:15	4.30	3.60	6.70	1.25
N. Hood Canal	fluorene	0:15	4.08	3.60	5.60	0.80
N. Hood Canal	gamma chlordane	3:21	0.53	0.50	0.82	0.08
N. Hood Canal	gamma hexachlorocyclohexane	0:21	0.50	0.50	0.56	0.01
N. Hood Canal	Heptachlor	0:21	0.50	0.50	0.56	0.01
N. Hood Canal	heptachlor epoxide	0:21	0.50	0.50	0.56	0.01
N. Hood Canal	hexachlorobenzene	0:24	9.72	0.04	18.00	8.64
N. Hood Canal	hexachlorobutadiene	0:15	10.88	10.70	11.00	0.15
N. Hood Canal	hexachlorocyclopentadiene	0:15	122.60	11.00	265.00	120.72
N. Hood Canal	hexachloroethane	0:15	18.68	10.70	50.00	16.21
N. Hood Canal	indeno(1,2,3-c,d)pyrene	0:15	16.60	11.00	18.00	2.90
N. Hood Canal	isophorone	0:15	5.16	3.60	11.00	3.03
N. Hood Canal	lead	0:21	0.03	0.02	0.04	0.01
N. Hood Canal	Lipids	22:22	0.31	0.11	0.80	0.16
N. Hood Canal	mercury	27:27	0.06	0.04	0.09	0.01
N. Hood Canal	Methoxychlor	0:21	10.33	10.00	12.00	0.73
N. Hood Canal	naphthalene	0:15	6.36	3.60	17.00	5.51
N. Hood Canal	nitrobenzene	0:15	10.88	10.70	11.00	0.15
N. Hood Canal	N-nitrosodimethylamine	0:15	11.76	3.60	66.00	18.17
N. Hood Canal	N-nitroso-di-n-propylamine	0:15	5.16	3.60	11.00	3.03
N. Hood Canal	N-nitrosodiphenylamine	0:15	5.16	3.60	11.00	3.03

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
N. Hood Canal	opDDD	0:9	0.12	0.10	0.14	0.01
N. Hood Canal	opDDT	0:6	0.14	0.13	0.16	0.01
N. Hood Canal	PCB101	9:9	0.47	0.17	0.98	0.26
N. Hood Canal	PCB105	0:9	0.04	0.04	0.05	0.00
N. Hood Canal	PCB110	4:9	0.11	0.04	0.30	0.09
N. Hood Canal	PCB118	6:9	0.26	0.04	0.49	0.18
N. Hood Canal	PCB126	0:9	0.06	0.06	0.07	0.01
N. Hood Canal	PCB128	3:9	0.08	0.04	0.33	0.09
N. Hood Canal	PCB138	5:9	0.12	0.04	0.26	0.08
N. Hood Canal	PCB153	9:9	0.43	0.24	0.98	0.22
N. Hood Canal	PCB156	0:9	0.04	0.03	0.05	0.01
N. Hood Canal	PCB157	0:9	0.04	0.04	0.05	0.01
N. Hood Canal	PCB169	0:9	0.08	0.07	0.10	0.01
N. Hood Canal	PCB170	0:9	0.04	0.04	0.05	0.00
N. Hood Canal	PCB180	5:9	0.15	0.03	0.47	0.14
N. Hood Canal	PCB189	0:9	0.04	0.04	0.05	0.00
N. Hood Canal	PCB77	0:9	0.07	0.06	0.07	0.01
N. Hood Canal	pentachlorophenol	0:15	122.60	11.00	265.00	120.72
N. Hood Canal	phenanthrene	0:15	4.08	3.60	5.60	0.80
N. Hood Canal	phenol	0:15	13.96	3.60	66.00	22.43
N. Hood Canal	ppDDD	0:30	0.80	0.12	1.30	0.40
N. Hood Canal	ppDDE	7:30	0.81	0.11	1.50	0.39
N. Hood Canal	ppDDT	0:30	1.48	0.06	2.40	0.91
N. Hood Canal	pyrene	0:15	4.08	3.60	5.60	0.80
N. Hood Canal	Solids	32:32	17.51	15.51	20.27	1.36
N. Hood Canal	TotalDDT	4:9	0.46	0.31	0.58	0.11
N. Hood Canal	TotalPCB	9:9	2.20	0.48	4.22	1.24
N. Hood Canal	Toxaphene	0:21	10.62	10.00	14.00	1.43
Nisqually Reach	1,2,4-trichlorobenzene	0:3	3.60	3.60	3.60	0.00
Nisqually Reach	1,2-dichlorobenzene	0:3	10.70	10.70	10.70	0.00
Nisqually Reach	1,2-diphenylhydrazine	0:3	3.60	3.60	3.60	0.00
Nisqually Reach	1,3-dichlorobenzene	0:3	10.70	10.70	10.70	0.00
Nisqually Reach	1,4-dichlorobenzene	0:3	10.70	10.70	10.70	0.00
Nisqually Reach	2,4,5-trichlorophenol	0:3	18.00	18.00	18.00	0.00
Nisqually Reach	2,4,6-trichlorophenol	0:3	18.00	18.00	18.00	0.00
Nisqually Reach	2,4-dichlorophenol	0:3	3.60	3.60	3.60	0.00
Nisqually Reach	2,4-dimethylphenol	0:3	50.00	50.00	50.00	0.00
Nisqually Reach	2,4-dinitrophenol	0:3	72.00	72.00	72.00	0.00
Nisqually Reach	2,4-dinitrotoluene	0:3	18.00	18.00	18.00	0.00
Nisqually Reach	2,6-dinitrotoluene	0:3	18.00	18.00	18.00	0.00
Nisqually Reach	2-chloronaphthalene	0:3	10.70	10.70	10.70	0.00
Nisqually Reach	2-chlorophenol	0:3	3.60	3.60	3.60	0.00
Nisqually Reach	2-methylnaphthalene	0:3	3.60	3.60	3.60	0.00
Nisqually Reach	2-methylphenol	0:3	3.60	3.60	3.60	0.00
Nisqually Reach	2-nitroaniline	0:3	7.10	7.10	7.10	0.00
Nisqually Reach	2-nitrophenol	0:3	3.60	3.60	3.60	0.00
Nisqually Reach	3-nitroaniline	0:3	3.60	3.60	3.60	0.00
Nisqually Reach	4,6-dinitro-o-cresol	0:3	50.00	50.00	50.00	0.00
Nisqually Reach	4-bromophenylphenylether	0:3	50.00	50.00	50.00	0.00
Nisqually Reach	4-chloro-3-methylphenol	0:3	3.60	3.60	3.60	0.00
Nisqually Reach	4-chloroaniline	0:3	36.00	36.00	36.00	0.00
Nisqually Reach	4-chlorophenylphenylether	0:3	3.60	3.60	3.60	0.00
Nisqually Reach	4-methylphenol	0:3	3.60	3.60	3.60	0.00
Nisqually Reach	4-nitroaniline	0:3	18.00	18.00	18.00	0.00
Nisqually Reach	4-nitrophenol	0:3	36.00	36.00	36.00	0.00



Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Nisqually Reach	acenaphthene	0:3	3.60	3.60	3.60	0.00
Nisqually Reach	acenaphthylene	0:3	3.60	3.60	3.60	0.00
Nisqually Reach	Aldrin	0:12	0.50	0.50	0.50	0.00
Nisqually Reach	alpha chlordane	0:12	0.50	0.50	0.50	0.00
Nisqually Reach	alpha endosulfan	0:12	0.50	0.50	0.50	0.00
Nisqually Reach	alpha hexachlorocyclohexane	0:12	0.50	0.50	0.50	0.00
Nisqually Reach	aniline	0:3	53.00	53.00	53.00	0.00
Nisqually Reach	anthracene	0:3	3.60	3.60	3.60	0.00
Nisqually Reach	Aroclor 1016	0:12	20.00	20.00	20.00	0.00
Nisqually Reach	Aroclor 1221	0:12	20.00	20.00	20.00	0.00
Nisqually Reach	Aroclor 1232	0:12	20.00	20.00	20.00	0.00
Nisqually Reach	Aroclor 1242	0:12	10.00	10.00	10.00	0.00
Nisqually Reach	Aroclor 1248	0:12	2.00	2.00	2.00	0.00
Nisqually Reach	Aroclor 1254	9:12	8.02	2.00	25.20	6.30
Nisqually Reach	Aroclor 1260	12:12	12.90	7.01	19.30	3.75
Nisqually Reach	arsenic	5:5	12.12	11.00	13.00	0.78
Nisqually Reach	benzo(a)anthracene	0:3	10.70	10.70	10.70	0.00
Nisqually Reach	benzo(a)pyrene	0:3	3.60	3.60	3.60	0.00
Nisqually Reach	benzo(b)fluoranthene	0:3	10.70	10.70	10.70	0.00
Nisqually Reach	benzo(g,h,i)perylene	0:3	10.70	10.70	10.70	0.00
Nisqually Reach	benzo(k)fluoranthene	0:3	7.10	7.10	7.10	0.00
Nisqually Reach	benzoic acid	0:3	36.00	36.00	36.00	0.00
Nisqually Reach	benzyl alcohol	0:3	3.60	3.60	3.60	0.00
Nisqually Reach	benzylbutylphthalate	0:3	10.70	10.70	10.70	0.00
Nisqually Reach	beta endosulfan	0:12	1.00	1.00	1.00	0.00
Nisqually Reach	beta hexachlorocyclohexane	0:12	0.50	0.50	0.50	0.00
Nisqually Reach	bis(2-chloroethoxy)methane	0:3	3.60	3.60	3.60	0.00
Nisqually Reach	bis(2-chloroethyl)ether	0:3	3.60	3.60	3.60	0.00
Nisqually Reach	bis(2-chloroisopropyl)ether	0:3	10.70	10.70	10.70	0.00
Nisqually Reach	bis(2-ethylhexyl)phthalate	1:3	627.67	100.00	1683.00	913.95
Nisqually Reach	carbazole	0:3	3.60	3.60	3.60	0.00
Nisqually Reach	chrysene	0:3	3.60	3.60	3.60	0.00
Nisqually Reach	copper	5:5	0.32	0.25	0.45	0.07
Nisqually Reach	coprostanol	0:3	180.00	180.00	180.00	0.00
Nisqually Reach	delta hexachlorocyclohexane	0:12	0.50	0.50	0.50	0.00
Nisqually Reach	dibenzo(a,h)anthracene	0:3	10.70	10.70	10.70	0.00
Nisqually Reach	dibenzofuran	0:3	10.70	10.70	10.70	0.00
Nisqually Reach	Dieldrin	0:12	1.00	1.00	1.00	0.00
Nisqually Reach	diethylphthalate	0:3	3.60	3.60	3.60	0.00
Nisqually Reach	dimethylphthalate	0:3	3.60	3.60	3.60	0.00
Nisqually Reach	di-n-butylphthalate	0:3	4.00	4.00	4.00	0.00
Nisqually Reach	di-n-octylphthalate	0:3	3.60	3.60	3.60	0.00
Nisqually Reach	endosulfan sulfate	0:12	1.00	1.00	1.00	0.00
Nisqually Reach	Endrin	0:12	1.00	1.00	1.00	0.00
Nisqually Reach	endrin aldehyde	0:12	1.00	1.00	1.00	0.00
Nisqually Reach	fluoranthene	0:3	3.60	3.60	3.60	0.00
Nisqually Reach	fluorene	0:3	3.60	3.60	3.60	0.00
Nisqually Reach	gamma chlordane	0:12	0.50	0.50	0.50	0.00
Nisqually Reach	gamma hexachlorocyclohexane	0:12	0.50	0.50	0.50	0.00
Nisqually Reach	Heptachlor	0:12	0.50	0.50	0.50	0.00
Nisqually Reach	heptachlor epoxide	0:12	0.50	0.50	0.50	0.00
Nisqually Reach	hexachlorobenzene	0:12	4.54	0.04	18.00	8.12
Nisqually Reach	hexachlorobutadiene	0:3	10.70	10.70	10.70	0.00
Nisqually Reach	hexachlorocyclopentadiene	0:3	265.00	265.00	265.00	0.00
Nisqually Reach	hexachloroethane	0:3	10.70	10.70	10.70	0.00

## Appendix: English Sole Muscle

Location	Assay	No. Detected:		Mean	Min	Max	SD
		lo. Analyzed					
Nisqually Reach	indeno(1,2,3-c,d)pyrene	0:3		18.00	18.00	18.00	0.00
Nisqually Reach	isophorone	0:3		3.60	3.60	3.60	0.00
Nisqually Reach	lead	0:8		0.02	0.02	0.03	0.01
Nisqually Reach	Lipids	21:21		0.22	0.08	0.43	0.08
Nisqually Reach	mercury	15:15		0.07	0.04	0.09	0.02
Nisqually Reach	Methoxychlor	0:12		10.00	10.00	10.00	0.00
Nisqually Reach	naphthalene	0:3		3.60	3.60	3.60	0.00
Nisqually Reach	nitrobenzene	0:3		10.70	10.70	10.70	0.00
Nisqually Reach	N-nitrosodimethylamine	0:3		3.60	3.60	3.60	0.00
Nisqually Reach	N-nitroso-di-n-propylamine	0:3		3.60	3.60	3.60	0.00
Nisqually Reach	N-nitrosodiphenylamine	0:3		3.60	3.60	3.60	0.00
Nisqually Reach	opDDD	0:9		0.13	0.09	0.16	0.03
Nisqually Reach	opDDT	0:7		0.18	0.12	0.23	0.04
Nisqually Reach	PCB101	9:9		1.56	0.98	2.30	0.42
Nisqually Reach	PCB105	5:7		0.28	0.04	0.44	0.17
Nisqually Reach	PCB110	8:9		0.27	0.06	0.47	0.13
Nisqually Reach	PCB118	9:9		0.89	0.47	1.60	0.40
Nisqually Reach	PCB126	0:9		0.07	0.05	0.10	0.02
Nisqually Reach	PCB128	7:9		0.28	0.06	0.70	0.21
Nisqually Reach	PCB138	9:9		0.54	0.24	0.87	0.20
Nisqually Reach	PCB153	9:9		1.16	0.75	1.60	0.31
Nisqually Reach	PCB156	0:9		0.05	0.04	0.06	0.01
Nisqually Reach	PCB157	0:9		0.05	0.04	0.06	0.01
Nisqually Reach	PCB169	0:9		0.10	0.07	0.13	0.02
Nisqually Reach	PCB170	7:9		0.21	0.04	0.37	0.12
Nisqually Reach	PCB180	7:9		0.62	0.04	1.10	0.37
Nisqually Reach	PCB189	0:9		0.05	0.04	0.07	0.01
Nisqually Reach	PCB77	0:9		0.08	0.05	0.11	0.02
Nisqually Reach	pentachlorophenol	0:3		265.00	265.00	265.00	0.00
Nisqually Reach	phenanthrene	0:3		3.60	3.60	3.60	0.00
Nisqually Reach	phenol	0:3		3.60	3.60	3.60	0.00
Nisqually Reach	ppDDD	0:21		0.72	0.17	1.30	0.43
Nisqually Reach	ppDDE	12:21		0.88	0.12	1.69	0.44
Nisqually Reach	ppDDT	0:21		1.20	0.08	2.00	0.95
Nisqually Reach	pyrene	0:3		3.60	3.60	3.60	0.00
Nisqually Reach	Solids	24:24		17.57	15.43	20.62	1.38
Nisqually Reach	TotalDDT	6:9		0.64	0.38	0.95	0.19
Nisqually Reach	TotalPCB	9:9		6.82	4.20	9.80	2.01
Nisqually Reach	Toxaphene	0:12		10.00	10.00	10.00	0.00
Old Tacoma	hexachlorobenzene	0:3		0.03	0.03	0.04	0.00
Old Tacoma	Lipids	3:3		0.31	0.31	0.32	0.01
Old Tacoma	opDDD	0:3		0.10	0.08	0.11	0.01
Old Tacoma	opDDT	0:3		0.12	0.10	0.13	0.02
Old Tacoma	PCB101	3:3		3.27	1.90	4.60	1.35
Old Tacoma	PCB105	1:1		0.28	0.28	0.28	
Old Tacoma	PCB110	3:3		0.72	0.39	0.94	0.29
Old Tacoma	PCB118	3:3		3.13	2.00	4.20	1.10
Old Tacoma	PCB126	0:3		0.05	0.04	0.06	0.01
Old Tacoma	PCB128	3:3		0.52	0.33	0.77	0.23
Old Tacoma	PCB138	3:3		0.99	0.56	1.20	0.37
Old Tacoma	PCB153	3:3		2.37	1.50	3.00	0.78
Old Tacoma	PCB156	0:3		0.03	0.03	0.04	0.00
Old Tacoma	PCB157	0:3		0.03	0.03	0.04	0.00
Old Tacoma	PCB169	0:3		0.07	0.06	0.08	0.01
Old Tacoma	PCB170	3:3		0.42	0.34	0.55	0.12

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Old Tacoma	PCB180	3:3	0.59	0.43	0.79	0.18
Old Tacoma	PCB189	0:3	0.03	0.03	0.04	0.00
Old Tacoma	PCB77	0:3	0.05	0.05	0.06	0.01
Old Tacoma	ppDDD	0:3	0.19	0.17	0.22	0.03
Old Tacoma	ppDDE	3:3	1.02	0.66	1.20	0.31
Old Tacoma	ppDDT	0:3	0.12	0.11	0.13	0.01
Old Tacoma	Solids	3:3	15.84	14.84	16.56	0.89
Old Tacoma	TotalDDT	3:3	1.02	0.66	1.20	0.31
Old Tacoma	TotalPCB	3:3	14.13	9.40	17.00	4.13
Orcas Island	1,2,4-trichlorobenzene	0:3	3.80	3.60	4.21	0.35
Orcas Island	1,2-dichlorobenzene	0:3	11.31	10.70	12.52	1.05
Orcas Island	1,2-diphenylhydrazine	0:3	3.80	3.60	4.21	0.35
Orcas Island	1,3-dichlorobenzene	0:3	11.31	10.70	12.52	1.05
Orcas Island	1,4-dichlorobenzene	0:3	11.31	10.70	12.52	1.05
Orcas Island	2,4,5-trichlorophenol	0:3	19.02	18.00	21.06	1.77
Orcas Island	2,4,6-trichlorophenol	0:3	19.02	18.00	21.06	1.77
Orcas Island	2,4-dichlorophenol	0:3	3.80	3.60	4.21	0.35
Orcas Island	2,4-dimethylphenol	0:3	3.80	3.60	4.21	0.35
Orcas Island	2,4-dinitrophenol	0:3	76.08	72.00	84.24	7.07
Orcas Island	2,4-dinitrotoluene	0:3	19.02	18.00	21.06	1.77
Orcas Island	2,6-dinitrotoluene	0:3	19.02	18.00	21.06	1.77
Orcas Island	2-chloronaphthalene	0:3	11.31	10.70	12.52	1.05
Orcas Island	2-chlorophenol	0:3	3.80	3.60	4.21	0.35
Orcas Island	2-methylnaphthalene	0:3	3.80	3.60	4.21	0.35
Orcas Island	2-methylphenol	0:3	3.80	3.60	4.21	0.35
Orcas Island	2-nitroaniline	0:3	7.50	7.10	8.31	0.70
Orcas Island	2-nitrophenol	0:3	3.80	3.60	4.21	0.35
Orcas Island	3-nitroaniline	0:3	3.80	3.60	4.21	0.35
Orcas Island	4,6-dinitro-o-cresol	0:3	56.00	53.00	62.01	5.20
Orcas Island	4-bromophenylphenylether	0:3	19.02	18.00	21.06	1.77
Orcas Island	4-chloro-3-methylphenol	0:3	3.80	3.60	4.21	0.35
Orcas Island	4-chloroaniline	0:3	38.04	36.00	42.12	3.53
Orcas Island	4-chlorophenylphenylether	0:3	3.80	3.60	4.21	0.35
Orcas Island	4-methylphenol	0:3	3.80	3.60	4.21	0.35
Orcas Island	4-nitroaniline	0:3	19.02	18.00	21.06	1.77
Orcas Island	4-nitrophenol	0:3	38.04	36.00	42.12	3.53
Orcas Island	acenaphthene	0:3	3.80	3.60	4.21	0.35
Orcas Island	acenaphthylene	0:3	3.80	3.60	4.21	0.35
Orcas Island	Aldrin	0:3	0.57	0.50	0.70	0.12
Orcas Island	alpha chlordane	0:3	0.57	0.50	0.70	0.12
Orcas Island	alpha endosulfan	0:3	0.57	0.50	0.70	0.12
Orcas Island	alpha hexachlorocyclohexane	0:3	0.57	0.50	0.70	0.12
Orcas Island	aniline	0:3	56.32	53.30	62.36	5.23
Orcas Island	anthracene	0:3	3.80	3.60	4.21	0.35
Orcas Island	Aroclor 1016	0:3	20.33	17.00	26.00	4.93
Orcas Island	Aroclor 1221	0:3	20.33	17.00	26.00	4.93
Orcas Island	Aroclor 1232	0:3	20.33	17.00	26.00	4.93
Orcas Island	Aroclor 1242	0:3	12.67	11.00	16.00	2.89
Orcas Island	Aroclor 1248	0:3	2.57	2.20	3.20	0.55
Orcas Island	Aroclor 1254	0:3	2.57	2.20	3.20	0.55
Orcas Island	Aroclor 1260	0:3	2.57	2.20	3.20	0.55
Orcas Island	arsenic	3:3	5.13	5.00	5.20	0.12
Orcas Island	benzo(a)anthracene	0:3	11.31	10.70	12.52	1.05
Orcas Island	benzo(a)pyrene	0:3	3.80	3.60	4.21	0.35
Orcas Island	benzo(b)fluoranthene	0:3	11.31	10.70	12.52	1.05

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Orcas Island	benzo(g,h,i)perylene	0:3	11.31	10.70	12.52	1.05
Orcas Island	benzo(k)fluoranthene	0:3	7.50	7.10	8.31	0.70
Orcas Island	benzoic acid	3:3	100.67	74.00	134.00	30.55
Orcas Island	benzyl alcohol	2:3	9.53	3.60	14.00	5.35
Orcas Island	benzylbutylphthalate	0:3	11.31	10.70	12.52	1.05
Orcas Island	beta endosulfan	0:3	1.10	0.90	1.40	0.26
Orcas Island	beta hexachlorocyclohexane	0:3	0.57	0.50	0.70	0.12
Orcas Island	bis(2-chloroethoxy)methane	0:3	3.80	3.60	4.21	0.35
Orcas Island	bis(2-chloroethyl)ether	0:3	3.80	3.60	4.21	0.35
Orcas Island	bis(2-chloroisopropyl)ether	0:3	11.31	10.70	12.52	1.05
Orcas Island	bis(2-ethylhexyl)phthalate	0:3	3.80	3.60	4.21	0.35
Orcas Island	carbazole	0:3	3.80	3.60	4.21	0.35
Orcas Island	chrysene	0:3	3.80	3.60	4.21	0.35
Orcas Island	copper	3:3	0.25	0.17	0.34	0.09
Orcas Island	coprostanol	0:3	1270.20	210.60	1800.00	917.64
Orcas Island	delta hexachlorocyclohexane	0:3	0.57	0.50	0.70	0.12
Orcas Island	dibenzo(a,h)anthracene	0:3	11.31	10.70	12.52	1.05
Orcas Island	dibenzofuran	0:3	11.31	10.70	12.52	1.05
Orcas Island	Dieldrin	0:3	1.10	0.90	1.40	0.26
Orcas Island	diethylphthalate	0:3	3.80	3.60	4.21	0.35
Orcas Island	dimethylphthalate	0:3	3.80	3.60	4.21	0.35
Orcas Island	di-n-butylphthalate	0:3	3.80	3.60	4.21	0.35
Orcas Island	di-n-octylphthalate	0:3	3.80	3.60	4.21	0.35
Orcas Island	endosulfan sulfate	0:3	1.10	0.90	1.40	0.26
Orcas Island	Endrin	0:3	1.10	0.90	1.40	0.26
Orcas Island	endrin aldehyde	0:3	1.10	0.90	1.40	0.26
Orcas Island	fluoranthene	0:3	3.80	3.60	4.21	0.35
Orcas Island	fluorene	0:3	3.80	3.60	4.21	0.35
Orcas Island	gamma chlordane	0:3	0.57	0.50	0.70	0.12
Orcas Island	gamma hexachlorocyclohexane	0:3	0.57	0.50	0.70	0.12
Orcas Island	Heptachlor	0:3	0.57	0.50	0.70	0.12
Orcas Island	heptachlor epoxide	0:3	0.57	0.50	0.70	0.12
Orcas Island	hexachlorobenzene	0:3	19.02	18.00	21.06	1.77
Orcas Island	hexachlorobutadiene	0:3	11.31	10.70	12.52	1.05
Orcas Island	hexachlorocyclopentadiene	0:3	38.04	36.00	42.12	3.53
Orcas Island	hexachloroethane	0:3	11.31	10.70	12.52	1.05
Orcas Island	indeno(1,2,3-c,d)pyrene	0:3	19.02	18.00	21.06	1.77
Orcas Island	isophorone	0:3	3.80	3.60	4.21	0.35
Orcas Island	lead	0:3	0.03	0.03	0.03	0.00
Orcas Island	mercury	3:3	0.03	0.02	0.03	0.01
Orcas Island	Methoxychlor	0:3	13.67	12.00	17.00	2.89
Orcas Island	naphthalene	0:3	3.80	3.60	4.21	0.35
Orcas Island	nitrobenzene	0:3	11.31	10.70	12.52	1.05
Orcas Island	N-nitrosodimethylamine	0:3	3.80	3.60	4.21	0.35
Orcas Island	N-nitroso-di-n-propylamine	0:3	3.80	3.60	4.21	0.35
Orcas Island	N-nitrosodiphenylamine	0:3	3.80	3.60	4.21	0.35
Orcas Island	pentachlorophenol	0:3	38.04	36.00	42.12	3.53
Orcas Island	phenanthrene	0:3	3.80	3.60	4.21	0.35
Orcas Island	phenol	0:3	3.80	3.60	4.21	0.35
Orcas Island	ppDDD	0:3	1.10	0.90	1.40	0.26
Orcas Island	ppDDE	0:3	1.10	0.90	1.40	0.26
Orcas Island	ppDDT	0:3	2.70	2.30	3.40	0.61
Orcas Island	pyrene	0:3	3.80	3.60	4.21	0.35
Orcas Island	Solids	3:3	17.00	14.00	19.00	2.65
Orcas Island	Toxaphene	0:3	15.33	13.00	19.00	3.21

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Outer Bellingham Bay	1,2,4-trichlorobenzene	0:12	6.59	3.60	22.00	6.12
Outer Bellingham Bay	1,2-dichlorobenzene	0:12	13.60	8.30	33.00	6.83
Outer Bellingham Bay	1,2-diphenylhydrazine	0:12	11.55	3.60	44.00	14.57
Outer Bellingham Bay	1,3-dichlorobenzene	0:12	13.60	8.30	33.00	6.83
Outer Bellingham Bay	1,4-dichlorobenzene	0:12	14.28	10.70	33.00	6.66
Outer Bellingham Bay	2,4,5-trichlorophenol	0:12	52.08	18.00	267.00	75.67
Outer Bellingham Bay	2,4,6-trichlorophenol	0:12	52.08	18.00	267.00	75.67
Outer Bellingham Bay	2,4-dichlorophenol	0:12	10.47	3.60	44.00	13.81
Outer Bellingham Bay	2,4-dimethylphenol	0:12	22.07	3.60	50.00	21.39
Outer Bellingham Bay	2,4-dinitrophenol	0:12	74.83	28.00	132.00	22.89
Outer Bellingham Bay	2,4-dinitrotoluene	0:12	17.81	5.60	26.70	4.94
Outer Bellingham Bay	2,6-dinitrotoluene	0:12	17.81	5.60	26.70	4.94
Outer Bellingham Bay	2-chloronaphthalene	0:12	13.14	6.90	33.00	6.64
Outer Bellingham Bay	2-chlorophenol	0:12	23.55	3.60	132.00	41.60
Outer Bellingham Bay	2-methylnaphthalene	0:12	14.22	3.60	66.00	21.32
Outer Bellingham Bay	2-methylphenol	0:12	13.22	3.60	66.00	20.09
Outer Bellingham Bay	2-nitroaniline	0:12	34.11	7.10	201.00	59.31
Outer Bellingham Bay	2-nitrophenol	0:12	10.47	3.60	44.00	13.81
Outer Bellingham Bay	3,3-dichlorobenzidine	0:3	17.67	14.00	22.00	4.04
Outer Bellingham Bay	3-nitroaniline	0:12	31.38	3.60	201.00	60.66
Outer Bellingham Bay	4,6-dinitro-o-cresol	0:12	49.25	28.00	62.00	10.12
Outer Bellingham Bay	4-bromophenylphenylether	0:12	23.33	4.20	50.00	17.15
Outer Bellingham Bay	4-chloro-3-methylphenol	0:12	17.97	3.60	88.00	28.82
Outer Bellingham Bay	4-chloroaniline	0:12	43.17	28.00	88.00	16.85
Outer Bellingham Bay	4-chlorophenylphenylether	0:12	7.51	3.60	33.00	8.85
Outer Bellingham Bay	4-methylphenol	0:12	13.22	3.60	66.00	20.09
Outer Bellingham Bay	4-nitroaniline	0:12	42.58	18.00	201.00	55.23
Outer Bellingham Bay	4-nitrophenol	0:12	46.83	28.00	132.00	28.35
Outer Bellingham Bay	acenaphthene	0:12	6.61	3.60	26.70	6.91
Outer Bellingham Bay	acenaphthylene	0:12	7.51	3.60	33.00	8.85
Outer Bellingham Bay	Aldrin	0:9	0.52	0.50	0.60	0.04
Outer Bellingham Bay	alpha chlordane	0:9	0.52	0.50	0.60	0.04
Outer Bellingham Bay	alpha endosulfan	0:9	0.52	0.50	0.60	0.04
Outer Bellingham Bay	alpha hexachlorocyclohexane	0:9	0.52	0.50	0.60	0.04
Outer Bellingham Bay	aniline	0:12	62.08	33.00	132.00	24.82
Outer Bellingham Bay	anthracene	0:12	4.98	3.60	11.00	2.44
Outer Bellingham Bay	Aroclor 1016	0:9	20.00	18.00	21.00	0.87
Outer Bellingham Bay	Aroclor 1221	0:9	20.00	18.00	21.00	0.87
Outer Bellingham Bay	Aroclor 1232	0:9	20.00	18.00	21.00	0.87
Outer Bellingham Bay	Aroclor 1242	0:9	10.78	10.00	13.00	1.30
Outer Bellingham Bay	Aroclor 1248	0:9	2.19	2.00	2.70	0.31
Outer Bellingham Bay	Aroclor 1254	0:9	2.19	2.00	2.70	0.31
Outer Bellingham Bay	Aroclor 1260	3:9	2.29	2.00	2.90	0.38
Outer Bellingham Bay	arsenic	12:12	3.51	1.80	5.40	0.90
Outer Bellingham Bay	benzo(a)anthracene	0:12	10.62	6.90	13.00	1.68
Outer Bellingham Bay	benzo(a)pyrene	0:12	7.22	3.60	22.00	6.54
Outer Bellingham Bay	benzo(b)fluoranthene	0:12	15.02	10.70	33.00	7.35
Outer Bellingham Bay	benzo(g,h,i)perylene	0:12	12.85	10.70	22.00	3.48
Outer Bellingham Bay	benzo(k)fluoranthene	0:12	12.11	7.10	33.00	8.98
Outer Bellingham Bay	benzoic acid	2:12	159.75	36.00	500.00	206.36
Outer Bellingham Bay	benzyl alcohol	3:12	16.13	3.60	66.00	19.33
Outer Bellingham Bay	benzylbutylphthalate	0:12	11.67	10.70	16.80	1.83
Outer Bellingham Bay	beta endosulfan	0:9	1.04	1.00	1.20	0.09
Outer Bellingham Bay	beta hexachlorocyclohexane	0:9	0.52	0.50	0.60	0.04
Outer Bellingham Bay	bis(2-chloroethoxy)methane	0:12	10.47	3.60	44.00	13.81

Appendix: English Sole Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Outer Bellingham Bay	bis(2-chloroethyl)ether	0:12	7.97	3.60	33.00	9.30
Outer Bellingham Bay	bis(2-chloroisopropyl)ether	0:12	29.18	10.70	132.00	38.72
Outer Bellingham Bay	bis(2-ethylhexyl)phthalate	3:12	72.10	3.60	360.00	101.18
Outer Bellingham Bay	carbazole	0:9	3.73	3.60	4.20	0.26
Outer Bellingham Bay	chrysene	0:12	4.98	3.60	11.00	2.44
Outer Bellingham Bay	copper	12:12	0.31	0.17	0.67	0.14
Outer Bellingham Bay	coprostanol	0:9	186.89	180.00	211.00	13.67
Outer Bellingham Bay	delta hexachlorocyclohexane	0:9	0.52	0.50	0.60	0.04
Outer Bellingham Bay	dibenzo(a,h)anthracene	0:12	15.02	10.70	33.00	7.35
Outer Bellingham Bay	dibenzofuran	0:12	17.93	10.70	66.00	16.50
Outer Bellingham Bay	Dieldrin	0:9	1.04	1.00	1.20	0.09
Outer Bellingham Bay	diethylphthalate	0:12	12.97	3.60	66.00	19.32
Outer Bellingham Bay	dimethylphthalate	0:12	5.66	3.60	20.10	4.89
Outer Bellingham Bay	di-n-butylphthalate	2:12	20.97	3.60	90.00	28.92
Outer Bellingham Bay	di-n-octylphthalate	0:12	4.98	3.60	11.00	2.44
Outer Bellingham Bay	endosulfan sulfate	0:9	1.04	1.00	1.20	0.09
Outer Bellingham Bay	Endrin	0:9	1.04	1.00	1.20	0.09
Outer Bellingham Bay	endrin aldehyde	0:9	1.04	1.00	1.20	0.09
Outer Bellingham Bay	fluoranthene	0:12	5.41	3.60	13.00	3.20
Outer Bellingham Bay	fluorene	0:12	7.51	3.60	33.00	8.85
Outer Bellingham Bay	gamma chlordane	0:9	0.52	0.50	0.60	0.04
Outer Bellingham Bay	gamma hexachlorocyclohexane	0:9	0.52	0.50	0.60	0.04
Outer Bellingham Bay	Heptachlor	0:9	0.52	0.50	0.60	0.04
Outer Bellingham Bay	heptachlor epoxide	0:9	0.52	0.50	0.60	0.04
Outer Bellingham Bay	hexachlorobenzene	0:12	16.18	6.90	21.00	4.72
Outer Bellingham Bay	hexachlorobutadiene	0:12	16.10	10.70	44.00	10.97
Outer Bellingham Bay	hexachlorocyclopentadiene	0:12	94.75	14.00	265.00	103.29
Outer Bellingham Bay	hexachloroethane	0:12	18.85	10.70	66.00	17.30
Outer Bellingham Bay	indeno(1,2,3-c,d)pyrene	0:12	18.42	14.00	22.00	2.11
Outer Bellingham Bay	isophorone	0:12	10.47	3.60	44.00	13.81
Outer Bellingham Bay	lead	2:12	0.03	0.03	0.04	0.00
Outer Bellingham Bay	Lipids	6:6	0.41	0.29	0.62	0.12
Outer Bellingham Bay	mercury	9:9	0.03	0.02	0.04	0.01
Outer Bellingham Bay	Methoxychlor	0:9	11.11	10.00	14.00	1.76
Outer Bellingham Bay	naphthalene	0:12	14.22	3.60	66.00	21.32
Outer Bellingham Bay	nitrobenzene	0:12	16.10	10.70	44.00	10.97
Outer Bellingham Bay	N-nitrosodimethylamine	0:12	34.22	3.60	201.00	63.86
Outer Bellingham Bay	N-nitroso-di-n-propylamine	0:12	13.22	3.60	66.00	20.09
Outer Bellingham Bay	N-nitrosodiphenylamine	0:12	7.22	3.60	22.00	6.54
Outer Bellingham Bay	pentachlorophenol	0:12	89.67	14.00	265.00	106.12
Outer Bellingham Bay	phenanthrene	0:12	4.98	3.60	11.00	2.44
Outer Bellingham Bay	phenol	0:12	38.38	3.60	201.00	66.55
Outer Bellingham Bay	ppDDD	0:9	1.04	1.00	1.20	0.09
Outer Bellingham Bay	ppDDE	0:9	1.04	1.00	1.20	0.09
Outer Bellingham Bay	ppDDT	0:9	2.22	2.00	2.80	0.35
Outer Bellingham Bay	pyrene	0:12	4.98	3.60	11.00	2.44
Outer Bellingham Bay	Solids	10:10	18.01	17.00	20.00	0.91
Outer Bellingham Bay	Toxaphene	0:9	11.78	10.00	16.00	2.73
Outer Birch Point	1,2,4-trichlorobenzene	0:3	3.54	3.42	3.60	0.10
Outer Birch Point	1,2-dichlorobenzene	0:3	10.72	10.17	11.00	0.48
Outer Birch Point	1,2-diphenylhydrazine	0:3	3.54	3.42	3.60	0.10
Outer Birch Point	1,3-dichlorobenzene	0:3	10.72	10.17	11.00	0.48
Outer Birch Point	1,4-dichlorobenzene	0:3	10.72	10.17	11.00	0.48
Outer Birch Point	2,4,5-trichlorophenol	0:3	17.70	17.10	18.00	0.52
Outer Birch Point	2,4,6-trichlorophenol	0:3	17.70	17.10	18.00	0.52

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Outer Birch Point	2,4-dichlorophenol	0:3	3.54	3.42	3.60	0.10
Outer Birch Point	2,4-dimethylphenol	0:3	3.54	3.42	3.60	0.10
Outer Birch Point	2,4-dinitrophenol	0:3	70.80	68.40	72.00	2.08
Outer Birch Point	2,4-dinitrotoluene	0:3	17.70	17.10	18.00	0.52
Outer Birch Point	2,6-dinitrotoluene	0:3	17.70	17.10	18.00	0.52
Outer Birch Point	2-chloronaphthalene	0:3	10.72	10.17	11.00	0.48
Outer Birch Point	2-chlorophenol	0:3	3.54	3.42	3.60	0.10
Outer Birch Point	2-methylnaphthalene	0:3	3.54	3.42	3.60	0.10
Outer Birch Point	2-methylphenol	0:3	3.54	3.42	3.60	0.10
Outer Birch Point	2-nitroaniline	0:3	6.98	6.75	7.10	0.20
Outer Birch Point	2-nitrophenol	0:3	3.54	3.42	3.60	0.10
Outer Birch Point	3-nitroaniline	0:3	3.54	3.42	3.60	0.10
Outer Birch Point	4,6-dinitro-o-cresol	0:3	52.12	50.35	53.00	1.53
Outer Birch Point	4-bromophenylphenylether	0:3	17.70	17.10	18.00	0.52
Outer Birch Point	4-chloro-3-methylphenol	0:3	3.54	3.42	3.60	0.10
Outer Birch Point	4-chloroaniline	0:3	35.40	34.20	36.00	1.04
Outer Birch Point	4-chlorophenylphenylether	0:3	3.54	3.42	3.60	0.10
Outer Birch Point	4-methylphenol	0:3	3.54	3.42	3.60	0.10
Outer Birch Point	4-nitroaniline	0:3	17.70	17.10	18.00	0.52
Outer Birch Point	4-nitrophenol	0:3	35.40	34.20	36.00	1.04
Outer Birch Point	acenaphthene	0:3	3.54	3.42	3.60	0.10
Outer Birch Point	acenaphthylene	0:3	3.54	3.42	3.60	0.10
Outer Birch Point	Aldrin	0:3	0.50	0.50	0.50	0.00
Outer Birch Point	alpha chlordane	0:3	0.50	0.50	0.50	0.00
Outer Birch Point	alpha endosulfan	0:3	0.50	0.50	0.50	0.00
Outer Birch Point	alpha hexachlorocyclohexane	0:3	0.50	0.50	0.50	0.00
Outer Birch Point	aniline	0:3	52.21	50.64	53.00	1.36
Outer Birch Point	anthracene	0:3	3.54	3.42	3.60	0.10
Outer Birch Point	Aroclor 1016	0:3	18.00	18.00	18.00	0.00
Outer Birch Point	Aroclor 1221	0:3	18.00	18.00	18.00	0.00
Outer Birch Point	Aroclor 1232	0:3	18.00	18.00	18.00	0.00
Outer Birch Point	Aroclor 1242	0:3	11.00	11.00	11.00	0.00
Outer Birch Point	Aroclor 1248	0:3	2.23	2.20	2.30	0.06
Outer Birch Point	Aroclor 1254	0:3	2.23	2.20	2.30	0.06
Outer Birch Point	Aroclor 1260	0:3	2.23	2.20	2.30	0.06
Outer Birch Point	arsenic	3:3	5.97	4.70	6.80	1.12
Outer Birch Point	benzo(a)anthracene	0:3	10.72	10.17	11.00	0.48
Outer Birch Point	benzo(a)pyrene	0:3	3.54	3.42	3.60	0.10
Outer Birch Point	benzo(b)fluoranthene	0:3	10.72	10.17	11.00	0.48
Outer Birch Point	benzo(g,h,i)perylene	0:3	10.72	10.17	11.00	0.48
Outer Birch Point	benzo(k)fluoranthene	0:3	6.98	6.75	7.10	0.20
Outer Birch Point	benzoic acid	2:3	144.07	34.20	294.00	134.45
Outer Birch Point	benzyl alcohol	3:3	31.00	15.00	40.00	13.89
Outer Birch Point	benzylbutylphthalate	0:3	10.72	10.17	11.00	0.48
Outer Birch Point	beta endosulfan	0:3	1.00	1.00	1.00	0.00
Outer Birch Point	beta hexachlorocyclohexane	0:3	0.50	0.50	0.50	0.00
Outer Birch Point	bis(2-chloroethoxy)methane	0:3	3.54	3.42	3.60	0.10
Outer Birch Point	bis(2-chloroethyl)ether	0:3	3.54	3.42	3.60	0.10
Outer Birch Point	bis(2-chloroisopropyl)ether	0:3	10.72	10.17	11.00	0.48
Outer Birch Point	bis(2-ethylhexyl)phthalate	0:3	3.54	3.42	3.60	0.10
Outer Birch Point	carbazole	0:3	3.54	3.42	3.60	0.10
Outer Birch Point	chrysene	0:3	3.54	3.42	3.60	0.10
Outer Birch Point	copper	3:3	0.40	0.29	0.51	0.11
Outer Birch Point	coprostanol	0:3	690.00	180.00	1710.00	883.35
Outer Birch Point	delta hexachlorocyclohexane	0:3	0.50	0.50	0.50	0.00

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Outer Birch Point	dibenzo(a,h)anthracene	0:3	10.72	10.17	11.00	0.48
Outer Birch Point	dibenzofuran	0:3	10.62	10.17	11.00	0.42
Outer Birch Point	Dieldrin	0:3	1.00	1.00	1.00	0.00
Outer Birch Point	diethylphthalate	0:3	3.54	3.42	3.60	0.10
Outer Birch Point	dimethylphthalate	0:3	3.54	3.42	3.60	0.10
Outer Birch Point	di-n-butylphthalate	0:3	3.54	3.42	3.60	0.10
Outer Birch Point	di-n-octylphthalate	0:3	3.54	3.42	3.60	0.10
Outer Birch Point	endosulfan sulfate	0:3	1.00	1.00	1.00	0.00
Outer Birch Point	Endrin	0:3	1.00	1.00	1.00	0.00
Outer Birch Point	endrin aldehyde	0:3	1.00	1.00	1.00	0.00
Outer Birch Point	fluoranthene	0:3	3.54	3.42	3.60	0.10
Outer Birch Point	fluorene	0:3	3.54	3.42	3.60	0.10
Outer Birch Point	gamma chlordane	0:3	0.50	0.50	0.50	0.00
Outer Birch Point	gamma hexachlorocyclohexane	0:3	0.50	0.50	0.50	0.00
Outer Birch Point	Heptachlor	0:3	0.50	0.50	0.50	0.00
Outer Birch Point	heptachlor epoxide	0:3	0.50	0.50	0.50	0.00
Outer Birch Point	hexachlorobenzene	0:3	17.70	17.10	18.00	0.52
Outer Birch Point	hexachlorobutadiene	0:3	10.72	10.17	11.00	0.48
Outer Birch Point	hexachlorocyclopentadiene	0:3	35.40	34.20	36.00	1.04
Outer Birch Point	hexachloroethane	0:3	10.72	10.17	11.00	0.48
Outer Birch Point	indeno(1,2,3-c,d)pyrene	0:3	17.70	17.10	18.00	0.52
Outer Birch Point	isophorone	0:3	3.54	3.42	3.60	0.10
Outer Birch Point	lead	0:3	0.03	0.03	0.03	0.00
Outer Birch Point	mercury	3:3	0.05	0.03	0.06	0.02
Outer Birch Point	Methoxychlor	0:3	12.00	12.00	12.00	0.00
Outer Birch Point	naphthalene	0:3	3.54	3.42	3.60	0.10
Outer Birch Point	nitrobenzene	0:3	10.72	10.17	11.00	0.48
Outer Birch Point	N-nitrosodimethylamine	0:3	3.54	3.42	3.60	0.10
Outer Birch Point	N-nitroso-di-n-propylamine	0:3	3.54	3.42	3.60	0.10
Outer Birch Point	N-nitrosodiphenylamine	0:3	3.54	3.42	3.60	0.10
Outer Birch Point	pentachlorophenol	0:3	35.40	34.20	36.00	1.04
Outer Birch Point	phenanthrene	0:3	3.54	3.42	3.60	0.10
Outer Birch Point	phenol	0:3	3.54	3.42	3.60	0.10
Outer Birch Point	ppDDD	0:3	1.00	1.00	1.00	0.00
Outer Birch Point	ppDDE	0:3	1.00	1.00	1.00	0.00
Outer Birch Point	ppDDT	0:3	2.40	2.40	2.40	0.00
Outer Birch Point	pyrene	0:3	3.54	3.42	3.60	0.10
Outer Birch Point	Solids	2:2	18.00	18.00	18.00	0.00
Outer Birch Point	Toxaphene	0:3	13.33	13.00	14.00	0.58
Outer Comm. Bay	1,2,4-trichlorobenzene	0:3	3.60	3.60	3.60	0.00
Outer Comm. Bay	1,2-dichlorobenzene	0:3	10.70	10.70	10.70	0.00
Outer Comm. Bay	1,2-diphenylhydrazine	0:3	3.60	3.60	3.60	0.00
Outer Comm. Bay	1,3-dichlorobenzene	0:3	10.70	10.70	10.70	0.00
Outer Comm. Bay	1,4-dichlorobenzene	0:3	10.70	10.70	10.70	0.00
Outer Comm. Bay	2,4,5-trichlorophenol	0:3	18.00	18.00	18.00	0.00
Outer Comm. Bay	2,4,6-trichlorophenol	0:3	18.00	18.00	18.00	0.00
Outer Comm. Bay	2,4-dichlorophenol	0:3	3.60	3.60	3.60	0.00
Outer Comm. Bay	2,4-dimethylphenol	0:3	50.00	50.00	50.00	0.00
Outer Comm. Bay	2,4-dinitrophenol	0:3	72.00	72.00	72.00	0.00
Outer Comm. Bay	2,4-dinitrotoluene	0:3	18.00	18.00	18.00	0.00
Outer Comm. Bay	2,6-dinitrotoluene	0:3	18.00	18.00	18.00	0.00
Outer Comm. Bay	2-chloronaphthalene	0:3	10.70	10.70	10.70	0.00
Outer Comm. Bay	2-chlorophenol	0:3	3.60	3.60	3.60	0.00
Outer Comm. Bay	2-methylnaphthalene	0:3	3.60	3.60	3.60	0.00
Outer Comm. Bay	2-methylphenol	0:3	3.60	3.60	3.60	0.00



Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Outer Comm. Bay	2-nitroaniline	0:3	7.10	7.10	7.10	0.00
Outer Comm. Bay	2-nitrophenol	0:3	3.60	3.60	3.60	0.00
Outer Comm. Bay	3-nitroaniline	0:3	3.60	3.60	3.60	0.00
Outer Comm. Bay	4,6-dinitro-o-cresol	0:3	50.00	50.00	50.00	0.00
Outer Comm. Bay	4-bromophenylphenylether	0:3	50.00	50.00	50.00	0.00
Outer Comm. Bay	4-chloro-3-methylphenol	0:3	3.60	3.60	3.60	0.00
Outer Comm. Bay	4-chloroaniline	0:3	36.00	36.00	36.00	0.00
Outer Comm. Bay	4-chlorophenylphenylether	0:3	3.60	3.60	3.60	0.00
Outer Comm. Bay	4-methylphenol	0:3	3.60	3.60	3.60	0.00
Outer Comm. Bay	4-nitroaniline	0:3	18.00	18.00	18.00	0.00
Outer Comm. Bay	4-nitrophenol	0:3	36.00	36.00	36.00	0.00
Outer Comm. Bay	acenaphthene	0:3	3.60	3.60	3.60	0.00
Outer Comm. Bay	acenaphthylene	0:3	3.60	3.60	3.60	0.00
Outer Comm. Bay	Aldrin	0:6	0.50	0.50	0.51	0.01
Outer Comm. Bay	alpha chlordane	3:6	0.72	0.50	1.20	0.31
Outer Comm. Bay	alpha endosulfan	0:6	0.50	0.50	0.51	0.01
Outer Comm. Bay	alpha hexachlorocyclohexane	0:6	0.50	0.50	0.51	0.01
Outer Comm. Bay	aniline	0:3	53.00	53.00	53.00	0.00
Outer Comm. Bay	anthracene	0:3	3.60	3.60	3.60	0.00
Outer Comm. Bay	Aroclor 1016	0:6	20.00	20.00	20.00	0.00
Outer Comm. Bay	Aroclor 1221	0:6	20.00	20.00	20.00	0.00
Outer Comm. Bay	Aroclor 1232	0:6	20.00	20.00	20.00	0.00
Outer Comm. Bay	Aroclor 1242	0:6	10.00	10.00	10.00	0.00
Outer Comm. Bay	Aroclor 1248	0:6	2.00	2.00	2.00	0.00
Outer Comm. Bay	Aroclor 1254	4:6	20.83	2.00	49.80	20.27
Outer Comm. Bay	Aroclor 1260	6:6	20.35	4.00	31.40	10.58
Outer Comm. Bay	arsenic	6:6	8.57	7.51	9.50	0.78
Outer Comm. Bay	benzo(a)anthracene	0:3	10.70	10.70	10.70	0.00
Outer Comm. Bay	benzo(a)pyrene	0:3	3.60	3.60	3.60	0.00
Outer Comm. Bay	benzo(b)fluoranthene	0:3	10.70	10.70	10.70	0.00
Outer Comm. Bay	benzo(g,h,i)perylene	0:3	10.70	10.70	10.70	0.00
Outer Comm. Bay	benzo(k)fluoranthene	0:3	7.10	7.10	7.10	0.00
Outer Comm. Bay	benzoic acid	0:3	36.00	36.00	36.00	0.00
Outer Comm. Bay	benzyl alcohol	0:3	3.60	3.60	3.60	0.00
Outer Comm. Bay	benzylbutylphthalate	0:3	10.70	10.70	10.70	0.00
Outer Comm. Bay	beta endosulfan	0:6	1.00	1.00	1.00	0.00
Outer Comm. Bay	beta hexachlorocyclohexane	0:6	0.50	0.50	0.51	0.01
Outer Comm. Bay	bis(2-chloroethoxy)methane	0:3	3.60	3.60	3.60	0.00
Outer Comm. Bay	bis(2-chloroethyl)ether	0:3	3.60	3.60	3.60	0.00
Outer Comm. Bay	bis(2-chloroisopropyl)ether	0:3	10.70	10.70	10.70	0.00
Outer Comm. Bay	bis(2-ethylhexyl)phthalate	2:3	1422.00	100.00	3683.00	1967.43
Outer Comm. Bay	carbazole	0:3	3.60	3.60	3.60	0.00
Outer Comm. Bay	chrysene	0:3	3.60	3.60	3.60	0.00
Outer Comm. Bay	copper	6:6	0.35	0.26	0.53	0.10
Outer Comm. Bay	coprostanol	0:3	180.00	180.00	180.00	0.00
Outer Comm. Bay	delta hexachlorocyclohexane	0:6	0.50	0.50	0.51	0.01
Outer Comm. Bay	dibenzo(a,h)anthracene	0:3	10.70	10.70	10.70	0.00
Outer Comm. Bay	dibenzofuran	0:3	10.70	10.70	10.70	0.00
Outer Comm. Bay	Dieldrin	0:6	1.00	1.00	1.00	0.00
Outer Comm. Bay	diethylphthalate	0:3	3.60	3.60	3.60	0.00
Outer Comm. Bay	dimethylphthalate	0:3	3.60	3.60	3.60	0.00
Outer Comm. Bay	di-n-butylphthalate	0:3	4.00	4.00	4.00	0.00
Outer Comm. Bay	di-n-octylphthalate	0:3	3.60	3.60	3.60	0.00
Outer Comm. Bay	endosulfan sulfate	0:6	1.00	1.00	1.00	0.00
Outer Comm. Bay	Endrin	0:6	1.00	1.00	1.00	0.00

Appendix: English Sole Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Outer Comm. Bay	endrin aldehyde	0:6	1.00	1.00	1.00	0.00
Outer Comm. Bay	fluoranthene	0:3	3.60	3.60	3.60	0.00
Outer Comm. Bay	fluorene	0:3	3.60	3.60	3.60	0.00
Outer Comm. Bay	gamma chlordane	3:6	0.71	0.50	1.10	0.25
Outer Comm. Bay	gamma hexachlorocyclohexane	0:6	0.50	0.50	0.51	0.01
Outer Comm. Bay	Heptachlor	0:6	0.50	0.50	0.51	0.01
Outer Comm. Bay	heptachlor epoxide	0:6	0.50	0.50	0.51	0.01
Outer Comm. Bay	hexachlorobenzene	0:6	9.01	0.02	18.00	9.85
Outer Comm. Bay	hexachlorobutadiene	0:3	10.70	10.70	10.70	0.00
Outer Comm. Bay	hexachlorocyclopentadiene	0:3	265.00	265.00	265.00	0.00
Outer Comm. Bay	hexachloroethane	0:3	10.70	10.70	10.70	0.00
Outer Comm. Bay	indeno(1,2,3-c,d)pyrene	0:3	18.00	18.00	18.00	0.00
Outer Comm. Bay	isophorone	0:3	3.60	3.60	3.60	0.00
Outer Comm. Bay	lead	0:6	0.03	0.02	0.03	0.01
Outer Comm. Bay	Lipids	8:8	0.26	0.13	0.41	0.09
Outer Comm. Bay	mercury	6:6	0.08	0.05	0.09	0.02
Outer Comm. Bay	Methoxychlor	0:6	10.00	10.00	10.00	0.00
Outer Comm. Bay	naphthalene	0:3	3.60	3.60	3.60	0.00
Outer Comm. Bay	nitrobenzene	0:3	10.70	10.70	10.70	0.00
Outer Comm. Bay	N-nitrosodimethylamine	0:3	3.60	3.60	3.60	0.00
Outer Comm. Bay	N-nitroso-di-n-propylamine	0:3	3.60	3.60	3.60	0.00
Outer Comm. Bay	N-nitrosodiphenylamine	0:3	3.60	3.60	3.60	0.00
Outer Comm. Bay	opDDD	0:3	0.07	0.06	0.07	0.00
Outer Comm. Bay	opDDT	0:2	0.08	0.08	0.09	0.00
Outer Comm. Bay	PCB101	3:3	9.50	5.80	15.00	4.86
Outer Comm. Bay	PCB105	3:3	1.16	0.78	1.60	0.41
Outer Comm. Bay	PCB110	3:3	1.60	1.10	2.50	0.78
Outer Comm. Bay	PCB118	3:3	6.83	5.00	8.60	1.80
Outer Comm. Bay	PCB126	0:3	0.04	0.04	0.04	0.00
Outer Comm. Bay	PCB128	3:3	1.90	1.40	2.60	0.62
Outer Comm. Bay	PCB138	3:3	2.60	1.80	4.10	1.30
Outer Comm. Bay	PCB153	3:3	6.47	4.20	10.00	3.10
Outer Comm. Bay	PCB156	3:3	0.10	0.07	0.16	0.05
Outer Comm. Bay	PCB157	2:3	0.12	0.03	0.21	0.09
Outer Comm. Bay	PCB169	0:3	0.05	0.05	0.05	0.00
Outer Comm. Bay	PCB170	2:3	0.99	0.02	2.00	0.99
Outer Comm. Bay	PCB180	3:3	2.10	1.50	3.10	0.87
Outer Comm. Bay	PCB189	0:3	0.02	0.02	0.03	0.00
Outer Comm. Bay	PCB77	0:3	0.04	0.04	0.04	0.00
Outer Comm. Bay	pentachlorophenol	0:3	265.00	265.00	265.00	0.00
Outer Comm. Bay	phenanthrene	0:3	3.60	3.60	3.60	0.00
Outer Comm. Bay	phenol	0:3	3.60	3.60	3.60	0.00
Outer Comm. Bay	ppDDD	6:9	1.04	0.15	2.31	0.69
Outer Comm. Bay	ppDDE	8:9	2.65	1.00	5.06	1.59
Outer Comm. Bay	ppDDT	0:9	1.36	0.08	2.00	0.96
Outer Comm. Bay	pyrene	0:3	3.60	3.60	3.60	0.00
Outer Comm. Bay	Solids	9:9	16.05	14.01	18.00	1.23
Outer Comm. Bay	TotalDDT	3:3	2.13	1.70	2.60	0.45
Outer Comm. Bay	TotalPCB	3:3	40.67	27.00	60.00	17.21
Outer Comm. Bay	Toxaphene	0:6	10.00	10.00	10.00	0.00
Outer Sinclair Inlet	hexachlorobenzene	0:3	0.04	0.03	0.04	0.00
Outer Sinclair Inlet	lead	3:3	0.02	0.02	0.03	0.00
Outer Sinclair Inlet	Lipids	3:3	0.23	0.17	0.30	0.07
Outer Sinclair Inlet	Mercury	3:3	0.07	0.05	0.09	0.02
Outer Sinclair Inlet	opDDD	0:3	0.11	0.10	0.12	0.01

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Outer Sinclair Inlet	opDDT	0:3	0.14	0.12	0.16	0.02
Outer Sinclair Inlet	PCB101	3:3	1.73	1.10	2.30	0.60
Outer Sinclair Inlet	PCB105	1:3	0.18	0.04	0.47	0.25
Outer Sinclair Inlet	PCB110	3:3	0.36	0.27	0.49	0.12
Outer Sinclair Inlet	PCB118	3:3	0.78	0.44	1.10	0.33
Outer Sinclair Inlet	PCB126	0:3	0.06	0.05	0.07	0.01
Outer Sinclair Inlet	PCB128	3:3	0.50	0.38	0.61	0.12
Outer Sinclair Inlet	PCB138	3:3	0.56	0.29	0.85	0.28
Outer Sinclair Inlet	PCB153	3:3	1.28	0.84	1.60	0.39
Outer Sinclair Inlet	PCB156	0:3	0.04	0.03	0.04	0.00
Outer Sinclair Inlet	PCB157	0:3	0.04	0.03	0.04	0.00
Outer Sinclair Inlet	PCB169	0:3	0.08	0.07	0.09	0.01
Outer Sinclair Inlet	PCB170	1:3	0.18	0.04	0.47	0.25
Outer Sinclair Inlet	PCB180	3:3	0.38	0.16	0.71	0.29
Outer Sinclair Inlet	PCB189	0:3	0.04	0.04	0.05	0.00
Outer Sinclair Inlet	PCB77	0:3	0.06	0.06	0.07	0.01
Outer Sinclair Inlet	ppDDD	0:3	0.12	0.11	0.14	0.02
Outer Sinclair Inlet	ppDDE	2:3	0.31	0.11	0.47	0.18
Outer Sinclair Inlet	ppDDT	0:3	0.06	0.05	0.07	0.01
Outer Sinclair Inlet	Solids	6:6	18.14	16.90	19.10	0.75
Outer Sinclair Inlet	TotalDDT	2:3	0.42	0.36	0.47	0.08
Outer Sinclair Inlet	TotalPCB	3:3	6.97	4.75	10.20	2.86
Pickering Passage	1,2,4-trichlorobenzene	0:3	3.60	3.60	3.60	0.00
Pickering Passage	1,2-dichlorobenzene	0:3	10.70	10.70	10.70	0.00
Pickering Passage	1,2-diphenylhydrazine	0:3	3.60	3.60	3.60	0.00
Pickering Passage	1,3-dichlorobenzene	0:3	10.70	10.70	10.70	0.00
Pickering Passage	1,4-dichlorobenzene	0:3	10.70	10.70	10.70	0.00
Pickering Passage	2,4,5-trichlorophenol	0:3	18.00	18.00	18.00	0.00
Pickering Passage	2,4,6-trichlorophenol	0:3	18.00	18.00	18.00	0.00
Pickering Passage	2,4-dichlorophenol	0:3	3.60	3.60	3.60	0.00
Pickering Passage	2,4-dimethylphenol	0:3	50.00	50.00	50.00	0.00
Pickering Passage	2,4-dinitrophenol	0:3	72.00	72.00	72.00	0.00
Pickering Passage	2,4-dinitrotoluene	0:3	18.00	18.00	18.00	0.00
Pickering Passage	2,6-dinitrotoluene	0:3	18.00	18.00	18.00	0.00
Pickering Passage	2-chloronaphthalene	0:3	10.70	10.70	10.70	0.00
Pickering Passage	2-chlorophenol	0:3	3.60	3.60	3.60	0.00
Pickering Passage	2-methylnaphthalene	0:3	3.60	3.60	3.60	0.00
Pickering Passage	2-methylphenol	0:3	3.60	3.60	3.60	0.00
Pickering Passage	2-nitroaniline	0:3	7.10	7.10	7.10	0.00
Pickering Passage	2-nitrophenol	0:3	3.60	3.60	3.60	0.00
Pickering Passage	3-nitroaniline	0:3	3.60	3.60	3.60	0.00
Pickering Passage	4,6-dinitro-o-cresol	0:3	50.00	50.00	50.00	0.00
Pickering Passage	4-bromophenylphenylether	0:3	50.00	50.00	50.00	0.00
Pickering Passage	4-chloro-3-methylphenol	0:3	3.60	3.60	3.60	0.00
Pickering Passage	4-chloroaniline	0:3	36.00	36.00	36.00	0.00
Pickering Passage	4-chlorophenylphenylether	0:3	3.60	3.60	3.60	0.00
Pickering Passage	4-methylphenol	0:3	3.60	3.60	3.60	0.00
Pickering Passage	4-nitroaniline	0:3	18.00	18.00	18.00	0.00
Pickering Passage	4-nitrophenol	0:3	36.00	36.00	36.00	0.00
Pickering Passage	acenaphthene	0:3	3.60	3.60	3.60	0.00
Pickering Passage	acenaphthylene	0:3	3.60	3.60	3.60	0.00
Pickering Passage	Aldrin	0:6	0.50	0.50	0.50	0.00
Pickering Passage	alpha chlordane	0:6	0.50	0.50	0.50	0.00
Pickering Passage	alpha endosulfan	0:6	0.50	0.50	0.50	0.00
Pickering Passage	alpha hexachlorocyclohexane	0:6	0.50	0.50	0.50	0.00

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Pickering Passage	aniline	0:3	53.00	53.00	53.00	0.00
Pickering Passage	anthracene	0:3	3.60	3.60	3.60	0.00
Pickering Passage	Aroclor 1016	0:6	20.00	20.00	20.00	0.00
Pickering Passage	Aroclor 1221	0:6	20.00	20.00	20.00	0.00
Pickering Passage	Aroclor 1232	0:6	20.00	20.00	20.00	0.00
Pickering Passage	Aroclor 1242	0:6	10.00	10.00	10.00	0.00
Pickering Passage	Aroclor 1248	0:6	2.00	2.00	2.00	0.00
Pickering Passage	Aroclor 1254	3:6	3.84	2.00	6.56	2.07
Pickering Passage	Aroclor 1260	6:6	4.97	2.00	6.83	1.97
Pickering Passage	arsenic	3:3	9.63	9.00	10.00	0.55
Pickering Passage	benzo(a)anthracene	0:3	10.70	10.70	10.70	0.00
Pickering Passage	benzo(a)pyrene	0:3	3.60	3.60	3.60	0.00
Pickering Passage	benzo(b)fluoranthene	0:3	10.70	10.70	10.70	0.00
Pickering Passage	benzo(g,h,i)perylene	0:3	10.70	10.70	10.70	0.00
Pickering Passage	benzo(k)fluoranthene	0:3	7.10	7.10	7.10	0.00
Pickering Passage	benzoic acid	0:3	36.00	36.00	36.00	0.00
Pickering Passage	benzyl alcohol	0:3	3.60	3.60	3.60	0.00
Pickering Passage	benzylbutylphthalate	0:3	10.70	10.70	10.70	0.00
Pickering Passage	beta endosulfan	0:6	1.00	1.00	1.00	0.00
Pickering Passage	beta hexachlorocyclohexane	0:6	0.50	0.50	0.50	0.00
Pickering Passage	bis(2-chloroethoxy)methane	0:3	3.60	3.60	3.60	0.00
Pickering Passage	bis(2-chloroethyl)ether	0:3	3.60	3.60	3.60	0.00
Pickering Passage	bis(2-chloroisopropyl)ether	0:3	10.70	10.70	10.70	0.00
Pickering Passage	bis(2-ethylhexyl)phthalate	1:3	727.67	100.00	1983.00	1087.15
Pickering Passage	carbazole	0:3	3.60	3.60	3.60	0.00
Pickering Passage	chrysene	0:3	3.60	3.60	3.60	0.00
Pickering Passage	copper	3:3	0.32	0.28	0.35	0.04
Pickering Passage	coprostanol	0:3	180.00	180.00	180.00	0.00
Pickering Passage	delta hexachlorocyclohexane	0:6	0.50	0.50	0.50	0.00
Pickering Passage	dibenzo(a,h)anthracene	0:3	10.70	10.70	10.70	0.00
Pickering Passage	dibenzofuran	0:3	10.70	10.70	10.70	0.00
Pickering Passage	Dieldrin	0:6	1.00	1.00	1.00	0.00
Pickering Passage	diethylphthalate	0:3	3.60	3.60	3.60	0.00
Pickering Passage	dimethylphthalate	0:3	3.60	3.60	3.60	0.00
Pickering Passage	di-n-butylphthalate	0:3	4.00	4.00	4.00	0.00
Pickering Passage	di-n-octylphthalate	0:3	3.60	3.60	3.60	0.00
Pickering Passage	endosulfan sulfate	0:6	1.00	1.00	1.00	0.00
Pickering Passage	Endrin	0:6	1.00	1.00	1.00	0.00
Pickering Passage	endrin aldehyde	0:6	1.00	1.00	1.00	0.00
Pickering Passage	fluoranthene	0:3	3.60	3.60	3.60	0.00
Pickering Passage	fluorene	0:3	3.60	3.60	3.60	0.00
Pickering Passage	gamma chlordane	0:6	0.50	0.50	0.50	0.00
Pickering Passage	gamma hexachlorocyclohexane	0:6	0.50	0.50	0.50	0.00
Pickering Passage	Heptachlor	0:6	0.50	0.50	0.50	0.00
Pickering Passage	heptachlor epoxide	0:6	0.50	0.50	0.50	0.00
Pickering Passage	hexachlorobenzene	0:3	18.00	18.00	18.00	0.00
Pickering Passage	hexachlorobutadiene	0:3	10.70	10.70	10.70	0.00
Pickering Passage	hexachlorocyclopentadiene	0:3	265.00	265.00	265.00	0.00
Pickering Passage	hexachloroethane	0:3	10.70	10.70	10.70	0.00
Pickering Passage	indeno(1,2,3-c,d)pyrene	0:3	18.00	18.00	18.00	0.00
Pickering Passage	isophorone	0:3	3.60	3.60	3.60	0.00
Pickering Passage	lead	0:6	0.03	0.02	0.03	0.01
Pickering Passage	Lipids	6:6	0.29	0.19	0.36	0.07
Pickering Passage	mercury	6:6	0.03	0.02	0.05	0.01
Pickering Passage	Methoxychlor	0:6	10.00	10.00	10.00	0.00

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Pickering Passage	naphthalene	0:3	3.60	3.60	3.60	0.00
Pickering Passage	nitrobenzene	0:3	10.70	10.70	10.70	0.00
Pickering Passage	N-nitrosodimethylamine	0:3	3.60	3.60	3.60	0.00
Pickering Passage	N-nitroso-di-n-propylamine	0:3	3.60	3.60	3.60	0.00
Pickering Passage	N-nitrosodiphenylamine	0:3	3.60	3.60	3.60	0.00
Pickering Passage	pentachlorophenol	0:3	265.00	265.00	265.00	0.00
Pickering Passage	phenanthrene	0:3	3.60	3.60	3.60	0.00
Pickering Passage	phenol	0:3	3.60	3.60	3.60	0.00
Pickering Passage	ppDDD	0:6	1.00	1.00	1.00	0.00
Pickering Passage	ppDDE	0:6	1.00	1.00	1.00	0.00
Pickering Passage	ppDDT	0:6	2.00	2.00	2.00	0.00
Pickering Passage	pyrene	0:3	3.60	3.60	3.60	0.00
Pickering Passage	Solids	6:6	20.12	19.00	23.50	1.70
Pickering Passage	Toxaphene	0:6	10.00	10.00	10.00	0.00
Point Roberts	1,2,4-trichlorobenzene	0:3	4.00	4.00	4.00	0.00
Point Roberts	1,2-dichlorobenzene	0:3	11.00	11.00	11.00	0.00
Point Roberts	1,2-diphenylhydrazine	0:3	4.00	4.00	4.00	0.00
Point Roberts	1,3-dichlorobenzene	0:3	11.00	11.00	11.00	0.00
Point Roberts	1,4-dichlorobenzene	0:3	11.00	11.00	11.00	0.00
Point Roberts	2,4,5-trichlorophenol	0:3	18.00	18.00	18.00	0.00
Point Roberts	2,4,6-trichlorophenol	0:3	18.00	18.00	18.00	0.00
Point Roberts	2,4-dichlorophenol	0:3	4.00	4.00	4.00	0.00
Point Roberts	2,4-dimethylphenol	0:3	20.00	20.00	20.00	0.00
Point Roberts	2,4-dinitrophenol	0:3	72.00	72.00	72.00	0.00
Point Roberts	2,4-dinitrotoluene	0:3	18.00	18.00	18.00	0.00
Point Roberts	2,6-dinitrotoluene	0:3	18.00	18.00	18.00	0.00
Point Roberts	2-chloronaphthalene	0:3	11.00	11.00	11.00	0.00
Point Roberts	2-chlorophenol	0:3	4.00	4.00	4.00	0.00
Point Roberts	2-methylnaphthalene	0:3	4.00	4.00	4.00	0.00
Point Roberts	2-methylphenol	0:3	4.00	4.00	4.00	0.00
Point Roberts	2-nitroaniline	0:3	7.00	7.00	7.00	0.00
Point Roberts	2-nitrophenol	0:3	4.00	4.00	4.00	0.00
Point Roberts	3-nitroaniline	0:3	4.00	4.00	4.00	0.00
Point Roberts	4,6-dinitro-o-cresol	0:3	50.00	50.00	50.00	0.00
Point Roberts	4-bromophenylphenylether	0:3	20.00	20.00	20.00	0.00
Point Roberts	4-chloro-3-methylphenol	0:3	4.00	4.00	4.00	0.00
Point Roberts	4-chloroaniline	0:3	36.00	36.00	36.00	0.00
Point Roberts	4-chlorophenylphenylether	0:3	4.00	4.00	4.00	0.00
Point Roberts	4-methylphenol	0:3	4.00	4.00	4.00	0.00
Point Roberts	4-nitroaniline	0:3	18.00	18.00	18.00	0.00
Point Roberts	4-nitrophenol	0:3	36.00	36.00	36.00	0.00
Point Roberts	acenaphthene	0:3	4.00	4.00	4.00	0.00
Point Roberts	acenaphthylene	0:3	4.00	4.00	4.00	0.00
Point Roberts	Aldrin	0:3	0.50	0.50	0.50	0.00
Point Roberts	alpha chlordane	0:3	0.50	0.50	0.50	0.00
Point Roberts	alpha endosulfan	0:3	0.50	0.50	0.50	0.00
Point Roberts	alpha hexachlorocyclohexane	0:3	0.50	0.50	0.50	0.00
Point Roberts	aniline	0:3	53.00	53.00	53.00	0.00
Point Roberts	anthracene	0:3	4.00	4.00	4.00	0.00
Point Roberts	Aroclor 1016	0:3	20.00	20.00	20.00	0.00
Point Roberts	Aroclor 1221	0:3	20.00	20.00	20.00	0.00
Point Roberts	Aroclor 1232	0:3	20.00	20.00	20.00	0.00
Point Roberts	Aroclor 1242	0:3	10.00	10.00	10.00	0.00
Point Roberts	Aroclor 1248	0:3	2.00	2.00	2.00	0.00
Point Roberts	Aroclor 1254	1:3	1.77	1.30	2.70	0.81

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Point Roberts	Aroclor 1260	3:3	2.47	2.10	2.82	0.36
Point Roberts	arsenic	3:3	3.20	2.73	4.10	0.78
Point Roberts	benzo(a)anthracene	0:3	11.00	11.00	11.00	0.00
Point Roberts	benzo(a)pyrene	0:3	4.00	4.00	4.00	0.00
Point Roberts	benzo(b)fluoranthene	0:3	11.00	11.00	11.00	0.00
Point Roberts	benzo(g,h,i)perylene	0:3	11.00	11.00	11.00	0.00
Point Roberts	benzo(k)fluoranthene	0:3	7.00	7.00	7.00	0.00
Point Roberts	benzoic acid	0:3	36.00	36.00	36.00	0.00
Point Roberts	benzyl alcohol	3:3	44.07	34.30	58.60	12.83
Point Roberts	benzylbutylphthalate	0:3	11.00	11.00	11.00	0.00
Point Roberts	beta endosulfan	0:3	1.00	1.00	1.00	0.00
Point Roberts	beta hexachlorocyclohexane	0:3	0.50	0.50	0.50	0.00
Point Roberts	bis(2-chloroethoxy)methane	0:3	4.00	4.00	4.00	0.00
Point Roberts	bis(2-chloroethyl)ether	0:3	4.00	4.00	4.00	0.00
Point Roberts	bis(2-chloroisopropyl)ether	0:3	11.00	11.00	11.00	0.00
Point Roberts	bis(2-ethylhexyl)phthalate	1:3	39.00	20.00	77.00	32.91
Point Roberts	carbazole	0:3	4.00	4.00	4.00	0.00
Point Roberts	chrysene	0:3	4.00	4.00	4.00	0.00
Point Roberts	copper	3:3	0.22	0.22	0.23	0.01
Point Roberts	coprostanol	0:3	180.00	180.00	180.00	0.00
Point Roberts	delta hexachlorocyclohexane	0:3	0.50	0.50	0.50	0.00
Point Roberts	dibenzo(a,h)anthracene	0:3	11.00	11.00	11.00	0.00
Point Roberts	dibenzofuran	0:3	11.00	11.00	11.00	0.00
Point Roberts	Dieldrin	0:3	1.00	1.00	1.00	0.00
Point Roberts	diethylphthalate	0:3	4.00	4.00	4.00	0.00
Point Roberts	dimethylphthalate	0:3	4.00	4.00	4.00	0.00
Point Roberts	di-n-butylphthalate	0:3	4.00	4.00	4.00	0.00
Point Roberts	di-n-octylphthalate	0:3	4.00	4.00	4.00	0.00
Point Roberts	endosulfan sulfate	0:3	1.00	1.00	1.00	0.00
Point Roberts	Endrin	0:3	1.00	1.00	1.00	0.00
Point Roberts	endrin aldehyde	0:3	1.00	1.00	1.00	0.00
Point Roberts	fluoranthene	0:3	4.00	4.00	4.00	0.00
Point Roberts	fluorene	0:3	4.00	4.00	4.00	0.00
Point Roberts	gamma chlordane	0:3	0.50	0.50	0.50	0.00
Point Roberts	gamma hexachlorocyclohexane	0:3	0.50	0.50	0.50	0.00
Point Roberts	Heptachlor	0:3	0.50	0.50	0.50	0.00
Point Roberts	heptachlor epoxide	0:3	0.50	0.50	0.50	0.00
Point Roberts	hexachlorobenzene	0:3	18.00	18.00	18.00	0.00
Point Roberts	hexachlorobutadiene	0:3	11.00	11.00	11.00	0.00
Point Roberts	hexachlorocyclopentadiene	0:3	265.00	265.00	265.00	0.00
Point Roberts	hexachloroethane	0:3	50.00	50.00	50.00	0.00
Point Roberts	indeno(1,2,3-c,d)pyrene	0:3	18.00	18.00	18.00	0.00
Point Roberts	isophorone	0:3	4.00	4.00	4.00	0.00
Point Roberts	lead	0:3	0.03	0.03	0.03	0.00
Point Roberts	Lipids	3:3	0.27	0.10	0.50	0.21
Point Roberts	mercury	3:3	0.02	0.02	0.02	0.00
Point Roberts	Methoxychlor	0:3	10.00	10.00	10.00	0.00
Point Roberts	naphthalene	0:3	4.00	4.00	4.00	0.00
Point Roberts	nitrobenzene	0:3	11.00	11.00	11.00	0.00
Point Roberts	N-nitrosodimethylamine	0:3	4.00	4.00	4.00	0.00
Point Roberts	N-nitroso-di-n-propylamine	0:3	4.00	4.00	4.00	0.00
Point Roberts	N-nitrosodiphenylamine	0:3	4.00	4.00	4.00	0.00
Point Roberts	pentachlorophenol	0:3	265.00	265.00	265.00	0.00
Point Roberts	phenanthrene	0:3	4.00	4.00	4.00	0.00
Point Roberts	phenol	0:3	4.00	4.00	4.00	0.00

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Point Roberts	ppDDD	0:3	1.00	1.00	1.00	0.00
Point Roberts	ppDDE	0:3	1.00	1.00	1.00	0.00
Point Roberts	ppDDT	0:3	2.00	2.00	2.00	0.00
Point Roberts	pyrene	0:3	4.00	4.00	4.00	0.00
Point Roberts	Solids	3:3	18.17	18.00	18.30	0.15
Point Roberts	Toxaphene	0:3	10.00	10.00	10.00	0.00
Port Gardner	1,2,4-trichlorobenzene	0:15	4.20	3.60	5.60	0.76
Port Gardner	1,2-dichlorobenzene	0:15	11.21	5.60	22.40	3.73
Port Gardner	1,2-diphenylhydrazine	0:15	7.48	3.60	22.00	7.52
Port Gardner	1,3-dichlorobenzene	0:15	11.21	5.60	22.40	3.73
Port Gardner	1,4-dichlorobenzene	0:15	11.93	10.70	22.40	2.97
Port Gardner	2,4,5-trichlorophenol	0:15	23.79	18.00	44.00	10.53
Port Gardner	2,4,6-trichlorophenol	0:15	23.79	18.00	44.00	10.53
Port Gardner	2,4-dichlorophenol	0:15	5.28	3.60	11.00	2.97
Port Gardner	2,4-dimethylphenol	0:15	17.76	3.60	50.00	17.78
Port Gardner	2,4-dinitrophenol	0:15	64.35	22.00	84.24	22.42
Port Gardner	2,4-dinitrotoluene	0:15	15.87	4.40	21.06	6.05
Port Gardner	2,6-dinitrotoluene	0:15	15.87	4.40	21.06	6.05
Port Gardner	2-chloronaphthalene	0:15	10.09	5.60	12.52	2.42
Port Gardner	2-chlorophenol	0:15	11.88	3.60	88.00	22.00
Port Gardner	2-methylnaphthalene	0:15	6.48	3.60	17.00	5.45
Port Gardner	2-methylphenol	0:15	7.48	3.60	44.00	10.41
Port Gardner	2-nitroaniline	0:15	12.49	7.00	33.00	10.62
Port Gardner	2-nitrophenol	0:15	5.28	3.60	11.00	2.97
Port Gardner	3,3-dichlorobenzidine	0:3	11.00	11.00	11.00	0.00
Port Gardner	3-nitroaniline	0:15	9.68	3.60	33.00	12.07
Port Gardner	4,6-dinitro-o-cresol	0:15	47.33	22.00	62.01	13.84
Port Gardner	4-bromophenylphenylether	0:15	22.45	3.30	50.00	15.72
Port Gardner	4-chloro-3-methylphenol	0:15	7.48	3.60	22.00	7.52
Port Gardner	4-chloroaniline	0:15	34.38	22.00	42.12	6.83
Port Gardner	4-chlorophenylphenylether	0:15	4.20	3.60	5.60	0.76
Port Gardner	4-methylphenol	0:15	7.48	3.60	44.00	10.41
Port Gardner	4-nitroaniline	0:15	21.59	18.00	33.00	6.02
Port Gardner	4-nitrophenol	0:15	34.38	22.00	42.12	6.83
Port Gardner	acenaphthene	0:15	3.96	3.60	4.40	0.33
Port Gardner	acenaphthylene	0:15	4.20	3.60	5.60	0.76
Port Gardner	Aldrin	0:21	0.50	0.50	0.50	0.00
Port Gardner	alpha chlordane	0:21	0.50	0.50	0.50	0.00
Port Gardner	alpha endosulfan	0:21	0.50	0.50	0.50	0.00
Port Gardner	alpha hexachlorocyclohexane	0:21	0.50	0.50	0.50	0.00
Port Gardner	aniline	0:15	53.06	22.00	88.00	15.56
Port Gardner	anthracene	0:15	4.20	3.60	5.60	0.76
Port Gardner	Aroclor 1016	0:21	19.71	18.00	20.00	0.72
Port Gardner	Aroclor 1221	0:21	19.71	18.00	20.00	0.72
Port Gardner	Aroclor 1232	0:21	19.71	18.00	20.00	0.72
Port Gardner	Aroclor 1242	0:21	10.14	10.00	11.00	0.36
Port Gardner	Aroclor 1248	0:21	2.04	2.00	2.30	0.11
Port Gardner	Aroclor 1254	21:21	7.31	3.00	20.80	3.77
Port Gardner	Aroclor 1260	21:21	9.22	3.30	26.20	5.34
Port Gardner	arsenic	18:18	8.32	3.80	12.00	2.31
Port Gardner	benzo(a)anthracene	0:15	10.09	5.60	12.52	2.42
Port Gardner	benzo(a)pyrene	0:15	5.28	3.60	11.00	2.97
Port Gardner	benzo(b)fluoranthene	0:15	12.37	10.70	17.00	2.49
Port Gardner	benzo(g,h,i)perylene	0:15	11.17	10.70	12.52	0.68
Port Gardner	benzo(k)fluoranthene	0:15	9.29	7.00	17.00	4.02

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Port Gardner	benzoic acid	2:15	142.94	36.00	500.00	189.75
Port Gardner	benzyl alcohol	6:15	18.52	3.60	68.00	21.22
Port Gardner	benzylbutylphthalate	0:15	11.17	10.70	12.52	0.68
Port Gardner	beta endosulfan	0:21	1.00	1.00	1.00	0.00
Port Gardner	beta hexachlorocyclohexane	0:21	0.50	0.50	0.50	0.00
Port Gardner	bis(2-chloroethoxy)methane	0:15	5.28	3.60	11.00	2.97
Port Gardner	bis(2-chloroethyl)ether	0:15	5.32	3.60	22.40	4.77
Port Gardner	bis(2-chloroisopropyl)ether	0:15	17.77	10.70	88.00	19.80
Port Gardner	bis(2-ethylhexyl)phthalate	5:15	88.62	4.18	435.00	125.04
Port Gardner	carbazole	0:12	3.85	3.60	4.21	0.27
Port Gardner	chrysene	0:15	4.20	3.60	5.60	0.76
Port Gardner	copper	18:18	0.26	0.15	0.50	0.08
Port Gardner	coprostanol	0:12	187.35	180.00	210.60	13.30
Port Gardner	delta hexachlorocyclohexane	0:21	0.50	0.50	0.50	0.00
Port Gardner	dibenzo(a,h)anthracene	0:15	12.37	10.70	17.00	2.49
Port Gardner	dibenzofuran	0:15	11.17	10.70	12.52	0.68
Port Gardner	Dieldrin	0:21	1.00	1.00	1.00	0.00
Port Gardner	diethylphthalate	1:15	10.41	3.60	66.00	16.64
Port Gardner	dimethylphthalate	0:15	3.74	3.30	4.21	0.33
Port Gardner	di-n-butylphthalate	0:15	7.56	3.60	22.00	7.48
Port Gardner	di-n-octylphthalate	0:15	4.20	3.60	5.60	0.76
Port Gardner	endosulfan sulfate	0:21	1.00	1.00	1.00	0.00
Port Gardner	Endrin	0:21	1.00	1.00	1.00	0.00
Port Gardner	endrin aldehyde	0:21	1.00	1.00	1.00	0.00
Port Gardner	fluoranthene	0:15	4.42	3.60	6.70	1.20
Port Gardner	fluorene	0:15	4.20	3.60	5.60	0.76
Port Gardner	gamma chlordane	0:21	0.50	0.50	0.50	0.00
Port Gardner	gamma hexachlorocyclohexane	0:21	0.50	0.50	0.50	0.00
Port Gardner	Heptachlor	0:21	0.50	0.50	0.50	0.00
Port Gardner	heptachlor epoxide	0:21	0.50	0.50	0.50	0.00
Port Gardner	hexachlorobenzene	0:23	10.52	0.02	21.06	8.99
Port Gardner	hexachlorobutadiene	0:15	11.17	10.70	12.52	0.68
Port Gardner	hexachlorocyclopentadiene	0:15	123.78	11.00	265.00	119.84
Port Gardner	hexachloroethane	0:15	21.17	10.70	50.00	17.13
Port Gardner	indeno(1,2,3-c,d)pyrene	0:15	17.19	11.00	21.06	3.41
Port Gardner	isophorone	0:15	5.28	3.60	11.00	2.97
Port Gardner	lead	2:21	0.03	0.02	0.06	0.01
Port Gardner	Lipids	25:25	0.24	0.10	0.47	0.10
Port Gardner	mercury	25:25	0.05	0.02	0.09	0.01
Port Gardner	Methoxychlor	0:21	10.29	10.00	12.00	0.72
Port Gardner	naphthalene	0:15	6.48	3.60	17.00	5.45
Port Gardner	nitrobenzene	0:15	11.17	10.70	12.52	0.68
Port Gardner	N-nitrosodimethylamine	0:15	16.28	3.60	132.00	33.60
Port Gardner	N-nitroso-di-n-propylamine	0:15	7.48	3.60	44.00	10.41
Port Gardner	N-nitrosodiphenylamine	0:15	5.28	3.60	11.00	2.97
Port Gardner	opDDD	0:8	0.14	0.06	0.22	0.05
Port Gardner	opDDT	0:7	0.20	0.12	0.29	0.05
Port Gardner	PCB101	8:8	1.85	0.98	6.10	1.73
Port Gardner	PCB105	4:8	0.21	0.03	0.93	0.30
Port Gardner	PCB110	8:8	0.33	0.09	0.95	0.26
Port Gardner	PCB118	6:8	0.83	0.06	3.70	1.19
Port Gardner	PCB126	0:8	0.08	0.03	0.12	0.03
Port Gardner	PCB128	5:8	0.38	0.04	1.40	0.46
Port Gardner	PCB138	8:8	0.59	0.16	2.00	0.59
Port Gardner	PCB153	8:8	1.28	0.10	4.50	1.35



## Appendix: English Sole Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Port Gardner	PCB156	1:8	0.06	0.04	0.07	0.01
Port Gardner	PCB157	0:8	0.05	0.02	0.07	0.02
Port Gardner	PCB169	0:8	0.10	0.05	0.16	0.04
Port Gardner	PCB170	2:8	0.14	0.03	0.63	0.20
Port Gardner	PCB180	7:8	0.52	0.03	1.10	0.33
Port Gardner	PCB189	0:8	0.05	0.02	0.09	0.02
Port Gardner	PCB77	0:8	0.08	0.04	0.13	0.03
Port Gardner	pentachlorophenol	0:15	123.78	11.00	265.00	119.84
Port Gardner	phenanthrene	0:15	4.20	3.60	5.60	0.76
Port Gardner	phenol	1:15	20.68	3.60	132.00	37.70
Port Gardner	ppDDD	1:29	0.82	0.19	1.30	0.37
Port Gardner	ppDDE	10:29	0.92	0.10	2.30	0.46
Port Gardner	ppDDT	0:29	1.53	0.08	2.40	0.89
Port Gardner	pyrene	0:15	4.20	3.60	5.60	0.76
Port Gardner	Solids	29:29	16.26	14.00	18.00	1.19
Port Gardner	TotalDDT	3:8	1.32	0.69	2.50	1.02
Port Gardner	TotalPCB	8:8	25.71	2.30	54.15	24.27
Port Gardner	Toxaphene	0:21	10.57	10.00	14.00	1.43
Port Ludlow	1,2,4-trichlorobenzene	0:3	3.60	3.60	3.60	0.00
Port Ludlow	1,2-dichlorobenzene	0:3	10.70	10.70	10.70	0.00
Port Ludlow	1,2-diphenylhydrazine	0:3	3.60	3.60	3.60	0.00
Port Ludlow	1,3-dichlorobenzene	0:3	10.70	10.70	10.70	0.00
Port Ludlow	1,4-dichlorobenzene	0:3	10.70	10.70	10.70	0.00
Port Ludlow	2,4,5-trichlorophenol	0:3	18.00	18.00	18.00	0.00
Port Ludlow	2,4,6-trichlorophenol	0:3	18.00	18.00	18.00	0.00
Port Ludlow	2,4-dichlorophenol	0:3	3.60	3.60	3.60	0.00
Port Ludlow	2,4-dimethylphenol	0:3	3.60	3.60	3.60	0.00
Port Ludlow	2,4-dinitrophenol	0:3	72.00	72.00	72.00	0.00
Port Ludlow	2,4-dinitrotoluene	0:3	18.00	18.00	18.00	0.00
Port Ludlow	2,6-dinitrotoluene	0:3	18.00	18.00	18.00	0.00
Port Ludlow	2-chloronaphthalene	0:3	10.70	10.70	10.70	0.00
Port Ludlow	2-chlorophenol	0:3	3.60	3.60	3.60	0.00
Port Ludlow	2-methylnaphthalene	0:3	3.60	3.60	3.60	0.00
Port Ludlow	2-methylphenol	0:3	3.60	3.60	3.60	0.00
Port Ludlow	2-nitroaniline	0:3	7.10	7.10	7.10	0.00
Port Ludlow	2-nitrophenol	0:3	3.60	3.60	3.60	0.00
Port Ludlow	3-nitroaniline	0:3	3.60	3.60	3.60	0.00
Port Ludlow	4,6-dinitro-o-cresol	0:3	53.00	53.00	53.00	0.00
Port Ludlow	4-bromophenylphenylether	0:3	18.00	18.00	18.00	0.00
Port Ludlow	4-chloro-3-methylphenol	0:3	3.60	3.60	3.60	0.00
Port Ludlow	4-chloroaniline	0:3	36.00	36.00	36.00	0.00
Port Ludlow	4-chlorophenylphenylether	0:3	3.60	3.60	3.60	0.00
Port Ludlow	4-methylphenol	0:3	3.60	3.60	3.60	0.00
Port Ludlow	4-nitroaniline	0:3	18.00	18.00	18.00	0.00
Port Ludlow	4-nitrophenol	0:3	36.00	36.00	36.00	0.00
Port Ludlow	acenaphthene	0:3	3.60	3.60	3.60	0.00
Port Ludlow	acenaphthylene	0:3	3.60	3.60	3.60	0.00
Port Ludlow	Aldrin	0:3	0.50	0.50	0.50	0.00
Port Ludlow	alpha chlordane	0:3	0.50	0.50	0.50	0.00
Port Ludlow	alpha endosulfan	0:3	0.50	0.50	0.50	0.00
Port Ludlow	alpha hexachlorocyclohexane	0:3	0.50	0.50	0.50	0.00
Port Ludlow	aniline	0:3	53.30	53.30	53.30	0.00
Port Ludlow	anthracene	0:3	3.60	3.60	3.60	0.00
Port Ludlow	Aroclor 1016	0:3	20.00	20.00	20.00	0.00
Port Ludlow	Aroclor 1221	0:3	20.00	20.00	20.00	0.00

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Port Ludlow	Aroclor 1232	0:3	20.00	20.00	20.00	0.00
Port Ludlow	Aroclor 1242	0:3	10.00	10.00	10.00	0.00
Port Ludlow	Aroclor 1248	0:3	2.00	2.00	2.00	0.00
Port Ludlow	Aroclor 1254	0:3	2.00	2.00	2.00	0.00
Port Ludlow	Aroclor 1260	3:3	4.73	2.00	9.20	3.90
Port Ludlow	arsenic	3:3	5.93	5.00	7.10	1.07
Port Ludlow	benzo(a)anthracene	0:3	10.70	10.70	10.70	0.00
Port Ludlow	benzo(a)pyrene	0:3	3.60	3.60	3.60	0.00
Port Ludlow	benzo(b)fluoranthene	0:3	10.70	10.70	10.70	0.00
Port Ludlow	benzo(g,h,i)perylene	0:3	10.70	10.70	10.70	0.00
Port Ludlow	benzo(k)fluoranthene	0:3	7.10	7.10	7.10	0.00
Port Ludlow	benzoic acid	1:3	124.00	36.00	300.00	152.42
Port Ludlow	benzyl alcohol	0:3	3.60	3.60	3.60	0.00
Port Ludlow	benzylbutylphthalate	0:3	10.70	10.70	10.70	0.00
Port Ludlow	beta endosulfan	0:3	1.00	1.00	1.00	0.00
Port Ludlow	beta hexachlorocyclohexane	0:3	0.50	0.50	0.50	0.00
Port Ludlow	bis(2-chloroethoxy)methane	0:3	3.60	3.60	3.60	0.00
Port Ludlow	bis(2-chloroethyl)ether	0:3	3.60	3.60	3.60	0.00
Port Ludlow	bis(2-chloroisopropyl)ether	0:3	10.70	10.70	10.70	0.00
Port Ludlow	bis(2-ethylhexyl)phthalate	1:3	29.07	3.60	80.00	44.11
Port Ludlow	carbazole	0:3	3.60	3.60	3.60	0.00
Port Ludlow	chrysene	0:3	3.60	3.60	3.60	0.00
Port Ludlow	copper	3:3	0.28	0.25	0.32	0.04
Port Ludlow	coprostanol	0:3	180.00	180.00	180.00	0.00
Port Ludlow	delta hexachlorocyclohexane	0:3	0.50	0.50	0.50	0.00
Port Ludlow	dibenzo(a,h)anthracene	0:3	10.70	10.70	10.70	0.00
Port Ludlow	dibenzofuran	0:3	10.70	10.70	10.70	0.00
Port Ludlow	Dieldrin	0:3	1.00	1.00	1.00	0.00
Port Ludlow	diethylphthalate	0:3	3.60	3.60	3.60	0.00
Port Ludlow	dimethylphthalate	0:3	3.60	3.60	3.60	0.00
Port Ludlow	di-n-butylphthalate	2:3	14.53	3.60	20.00	9.47
Port Ludlow	di-n-octylphthalate	0:3	3.60	3.60	3.60	0.00
Port Ludlow	endosulfan sulfate	0:3	1.00	1.00	1.00	0.00
Port Ludlow	Endrin	0:3	1.00	1.00	1.00	0.00
Port Ludlow	endrin aldehyde	0:3	1.00	1.00	1.00	0.00
Port Ludlow	fluoranthene	0:3	3.60	3.60	3.60	0.00
Port Ludlow	fluorene	0:3	3.60	3.60	3.60	0.00
Port Ludlow	gamma chlordane	0:3	0.50	0.50	0.50	0.00
Port Ludlow	gamma hexachlorocyclohexane	0:3	0.50	0.50	0.50	0.00
Port Ludlow	Heptachlor	0:3	0.50	0.50	0.50	0.00
Port Ludlow	heptachlor epoxide	0:3	0.50	0.50	0.50	0.00
Port Ludlow	hexachlorobenzene	0:3	18.00	18.00	18.00	0.00
Port Ludlow	hexachlorobutadiene	0:3	10.70	10.70	10.70	0.00
Port Ludlow	hexachlorocyclopentadiene	0:3	36.00	36.00	36.00	0.00
Port Ludlow	hexachloroethane	0:3	10.70	10.70	10.70	0.00
Port Ludlow	indeno(1,2,3-c,d)pyrene	0:3	18.00	18.00	18.00	0.00
Port Ludlow	isophorone	0:3	3.60	3.60	3.60	0.00
Port Ludlow	lead	0:3	0.03	0.03	0.03	0.00
Port Ludlow	Lipids	2:2	0.48	0.25	0.71	0.33
Port Ludlow	mercury	3:3	0.07	0.06	0.08	0.01
Port Ludlow	Methoxychlor	0:3	10.00	10.00	10.00	0.00
Port Ludlow	naphthalene	0:3	3.60	3.60	3.60	0.00
Port Ludlow	nitrobenzene	0:3	10.70	10.70	10.70	0.00
Port Ludlow	N-nitrosodimethylamine	0:3	3.60	3.60	3.60	0.00
Port Ludlow	N-nitroso-di-n-propylamine	0:3	3.60	3.60	3.60	0.00

## Appendix: English Sole Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Port Ludlow	N-nitrosodiphenylamine	0:3	3.60	3.60	3.60	0.00
Port Ludlow	pentachlorophenol	0:3	36.00	36.00	36.00	0.00
Port Ludlow	phenanthrene	0:3	3.60	3.60	3.60	0.00
Port Ludlow	phenol	0:3	3.60	3.60	3.60	0.00
Port Ludlow	ppDDD	0:3	1.00	1.00	1.00	0.00
Port Ludlow	ppDDE	0:3	1.00	1.00	1.00	0.00
Port Ludlow	ppDDT	0:3	2.00	2.00	2.00	0.00
Port Ludlow	pyrene	0:3	3.60	3.60	3.60	0.00
Port Ludlow	Solids	1:1	17.00	17.00	17.00	
Port Ludlow	Toxaphene	0:3	10.00	10.00	10.00	0.00
Port Madison	1,2,4-trichlorobenzene	0:3	3.60	3.60	3.60	0.00
Port Madison	1,2-dichlorobenzene	0:3	10.70	10.70	10.70	0.00
Port Madison	1,2-diphenylhydrazine	0:3	3.60	3.60	3.60	0.00
Port Madison	1,3-dichlorobenzene	0:3	10.70	10.70	10.70	0.00
Port Madison	1,4-dichlorobenzene	0:3	10.70	10.70	10.70	0.00
Port Madison	2,4,5-trichlorophenol	0:3	18.00	18.00	18.00	0.00
Port Madison	2,4,6-trichlorophenol	0:3	18.00	18.00	18.00	0.00
Port Madison	2,4-dichlorophenol	0:3	3.60	3.60	3.60	0.00
Port Madison	2,4-dimethylphenol	0:3	3.60	3.60	3.60	0.00
Port Madison	2,4-dinitrophenol	0:3	72.00	72.00	72.00	0.00
Port Madison	2,4-dinitrotoluene	0:3	18.00	18.00	18.00	0.00
Port Madison	2,6-dinitrotoluene	0:3	18.00	18.00	18.00	0.00
Port Madison	2-chloronaphthalene	0:3	10.70	10.70	10.70	0.00
Port Madison	2-chlorophenol	0:3	3.60	3.60	3.60	0.00
Port Madison	2-methylnaphthalene	0:3	3.60	3.60	3.60	0.00
Port Madison	2-methylphenol	0:3	3.60	3.60	3.60	0.00
Port Madison	2-nitroaniline	0:3	7.10	7.10	7.10	0.00
Port Madison	2-nitrophenol	0:3	3.60	3.60	3.60	0.00
Port Madison	3-nitroaniline	0:3	3.60	3.60	3.60	0.00
Port Madison	4,6-dinitro-o-cresol	0:3	53.00	53.00	53.00	0.00
Port Madison	4-bromophenylphenylether	0:3	18.00	18.00	18.00	0.00
Port Madison	4-chloro-3-methylphenol	0:3	3.60	3.60	3.60	0.00
Port Madison	4-chloroaniline	0:3	36.00	36.00	36.00	0.00
Port Madison	4-chlorophenylphenylether	0:3	3.60	3.60	3.60	0.00
Port Madison	4-methylphenol	0:3	3.60	3.60	3.60	0.00
Port Madison	4-nitroaniline	0:3	18.00	18.00	18.00	0.00
Port Madison	4-nitrophenol	0:3	36.00	36.00	36.00	0.00
Port Madison	acenaphthene	0:3	3.60	3.60	3.60	0.00
Port Madison	acenaphthylene	0:3	3.60	3.60	3.60	0.00
Port Madison	Aldrin	0:3	0.50	0.50	0.50	0.00
Port Madison	alpha chlordane	0:3	0.50	0.50	0.50	0.00
Port Madison	alpha endosulfan	0:3	0.50	0.50	0.50	0.00
Port Madison	alpha hexachlorocyclohexane	0:3	0.50	0.50	0.50	0.00
Port Madison	aniline	0:3	53.30	53.30	53.30	0.00
Port Madison	anthracene	0:3	3.60	3.60	3.60	0.00
Port Madison	Aroclor 1016	0:3	20.00	20.00	20.00	0.00
Port Madison	Aroclor 1221	0:3	20.00	20.00	20.00	0.00
Port Madison	Aroclor 1232	0:3	20.00	20.00	20.00	0.00
Port Madison	Aroclor 1242	0:3	10.00	10.00	10.00	0.00
Port Madison	Aroclor 1248	0:3	2.00	2.00	2.00	0.00
Port Madison	Aroclor 1254	2:3	4.97	2.00	6.70	2.58
Port Madison	Aroclor 1260	3:3	7.77	5.70	11.00	2.84
Port Madison	arsenic	3:3	8.10	6.20	9.10	1.65
Port Madison	benzo(a)anthracene	0:3	10.70	10.70	10.70	0.00
Port Madison	benzo(a)pyrene	0:3	3.60	3.60	3.60	0.00

# Appendix: English Sole Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Port Madison	benzo(b)fluoranthene	0:3	10.70	10.70	10.70	0.00
Port Madison	benzo(g,h,i)perylene	0:3	10.70	10.70	10.70	0.00
Port Madison	benzo(k)fluoranthene	0:3	7.10	7.10	7.10	0.00
Port Madison	benzoic acid	0:3	36.00	36.00	36.00	0.00
Port Madison	benzyl alcohol	0:3	3.60	3.60	3.60	0.00
Port Madison	benzylbutylphthalate	0:3	10.70	10.70	10.70	0.00
Port Madison	beta endosulfan	0:3	1.00	1.00	1.00	0.00
Port Madison	beta hexachlorocyclohexane	0:3	0.50	0.50	0.50	0.00
Port Madison	bis(2-chloroethoxy)methane	0:3	3.60	3.60	3.60	0.00
Port Madison	bis(2-chloroethyl)ether	0:3	3.60	3.60	3.60	0.00
Port Madison	bis(2-chloroisopropyl)ether	0:3	10.70	10.70	10.70	0.00
Port Madison	bis(2-ethylhexyl)phthalate	3:3	50.00	30.00	60.00	17.32
Port Madison	carbazole	0:3	3.60	3.60	3.60	0.00
Port Madison	chrysene	0:3	3.60	3.60	3.60	0.00
Port Madison	copper	3:3	0.30	0.22	0.38	0.08
Port Madison	coprostanol	0:3	180.00	180.00	180.00	0.00
Port Madison	delta hexachlorocyclohexane	0:3	0.50	0.50	0.50	0.00
Port Madison	dibenzo(a,h)anthracene	0:3	10.70	10.70	10.70	0.00
Port Madison	dibenzofuran	0:3	10.70	10.70	10.70	0.00
Port Madison	Dieldrin	0:3	1.00	1.00	1.00	0.00
Port Madison	diethylphthalate	0:3	3.60	3.60	3.60	0.00
Port Madison	dimethylphthalate	0:3	3.60	3.60	3.60	0.00
Port Madison	di-n-butylphthalate	0:3	3.60	3.60	3.60	0.00
Port Madison	di-n-octylphthalate	0:3	3.60	3.60	3.60	0.00
Port Madison	endosulfan sulfate	0:3	1.00	1.00	1.00	0.00
Port Madison	Endrin	0:3	1.00	1.00	1.00	0.00
Port Madison	endrin aldehyde	0:3	1.00	1.00	1.00	0.00
Port Madison	fluoranthene	0:3	3.60	3.60	3.60	0.00
Port Madison	fluorene	0:3	3.60	3.60	3.60	0.00
Port Madison	gamma chlordane	0:3	0.50	0.50	0.50	0.00
Port Madison	gamma hexachlorocyclohexane	0:3	0.50	0.50	0.50	0.00
Port Madison	Heptachlor	0:3	0.50	0.50	0.50	0.00
Port Madison	heptachlor epoxide	0:3	0.50	0.50	0.50	0.00
Port Madison	hexachlorobenzene	0:3	18.00	18.00	18.00	0.00
Port Madison	hexachlorobutadiene	0:3	10.70	10.70	10.70	0.00
Port Madison	hexachlorocyclopentadiene	0:3	36.00	36.00	36.00	0.00
Port Madison	hexachloroethane	0:3	10.70	10.70	10.70	0.00
Port Madison	indeno(1,2,3-c,d)pyrene	0:3	18.00	18.00	18.00	0.00
Port Madison	isophorone	0:3	3.60	3.60	3.60	0.00
Port Madison	lead	0:3	0.03	0.03	0.03	0.00
Port Madison	Lipids	2:2	0.43	0.29	0.57	0.20
Port Madison	mercury	3:3	0.05	0.04	0.06	0.01
Port Madison	Methoxychlor	0:3	10.00	10.00	10.00	0.00
Port Madison	naphthalene	0:3	3.60	3.60	3.60	0.00
Port Madison	nitrobenzene	0:3	10.70	10.70	10.70	0.00
Port Madison	N-nitrosodimethylamine	0:3	3.60	3.60	3.60	0.00
Port Madison	N-nitroso-di-n-propylamine	0:3	3.60	3.60	3.60	0.00
Port Madison	N-nitrosodiphenylamine	0:3	3.60	3.60	3.60	0.00
Port Madison	pentachlorophenol	0:3	36.00	36.00	36.00	0.00
Port Madison	phenanthrene	0:3	3.60	3.60	3.60	0.00
Port Madison	phenol	0:3	3.60	3.60	3.60	0.00
Port Madison	ppDDD	0:3	1.00	1.00	1.00	0.00
Port Madison	ppDDE	0:3	1.00	1.00	1.00	0.00
Port Madison	ppDDT	0:3	2.00	2.00	2.00	0.00
Port Madison	pyrene	0:3	3.60	3.60	3.60	0.00

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Port Madison	Solids	1:1	18.00	18.00	18.00	
Port Madison	Toxaphene	0:3	10.00	10.00	10.00	0.00
Port Orchard	1,2,4-trichlorobenzene	0:3	3.60	3.60	3.60	0.00
Port Orchard	1,2-dichlorobenzene	0:3	10.70	10.70	10.70	0.00
Port Orchard	1,2-diphenylhydrazine	0:3	3.60	3.60	3.60	0.00
Port Orchard	1,3-dichlorobenzene	0:3	10.70	10.70	10.70	0.00
Port Orchard	1,4-dichlorobenzene	0:3	10.70	10.70	10.70	0.00
Port Orchard	2,4,5-trichlorophenol	0:3	18.00	18.00	18.00	0.00
Port Orchard	2,4,6-trichlorophenol	0:3	18.00	18.00	18.00	0.00
Port Orchard	2,4-dichlorophenol	0:3	3.60	3.60	3.60	0.00
Port Orchard	2,4-dimethylphenol	0:3	3.60	3.60	3.60	0.00
Port Orchard	2,4-dinitrophenol	0:3	72.00	72.00	72.00	0.00
Port Orchard	2,4-dinitrotoluene	0:3	18.00	18.00	18.00	0.00
Port Orchard	2,6-dinitrotoluene	0:3	18.00	18.00	18.00	0.00
Port Orchard	2-chloronaphthalene	0:3	10.70	10.70	10.70	0.00
Port Orchard	2-chlorophenol	0:3	3.60	3.60	3.60	0.00
Port Orchard	2-methylnaphthalene	0:3	3.60	3.60	3.60	0.00
Port Orchard	2-methylphenol	0:3	3.60	3.60	3.60	0.00
Port Orchard	2-nitroaniline	0:3	7.10	7.10	7.10	0.00
Port Orchard	2-nitrophenol	0:3	3.60	3.60	3.60	0.00
Port Orchard	3-nitroaniline	0:3	3.60	3.60	3.60	0.00
Port Orchard	4,6-dinitro-o-cresol	0:3	53.00	53.00	53.00	0.00
Port Orchard	4-bromophenylphenylether	0:3	18.00	18.00	18.00	0.00
Port Orchard	4-chloro-3-methylphenol	0:3	3.60	3.60	3.60	0.00
Port Orchard	4-chloroaniline	0:3	36.00	36.00	36.00	0.00
Port Orchard	4-chlorophenylphenylether	0:3	3.60	3.60	3.60	0.00
Port Orchard	4-methylphenol	0:3	3.60	3.60	3.60	0.00
Port Orchard	4-nitroaniline	0:3	18.00	18.00	18.00	0.00
Port Orchard	4-nitrophenol	0:3	36.00	36.00	36.00	0.00
Port Orchard	acenaphthene	0:3	3.60	3.60	3.60	0.00
Port Orchard	acenaphthylene	0:3	3.60	3.60	3.60	0.00
Port Orchard	Aldrin	0:6	0.50	0.50	0.50	0.00
Port Orchard	alpha chlordane	0:6	0.50	0.50	0.50	0.00
Port Orchard	alpha endosulfan	0:6	0.50	0.50	0.50	0.00
Port Orchard	alpha hexachlorocyclohexane	0:6	0.50	0.50	0.50	0.00
Port Orchard	aniline	0:3	53.30	53.30	53.30	0.00
Port Orchard	anthracene	0:3	3.60	3.60	3.60	0.00
Port Orchard	Aroclor 1016	0:6	20.00	20.00	20.00	0.00
Port Orchard	Aroclor 1221	0:6	20.00	20.00	20.00	0.00
Port Orchard	Aroclor 1232	0:6	20.00	20.00	20.00	0.00
Port Orchard	Aroclor 1242	0:6	10.00	10.00	10.00	0.00
Port Orchard	Aroclor 1248	0:6	2.00	2.00	2.00	0.00
Port Orchard	Aroclor 1254	6:6	12.50	6.90	23.90	6.13
Port Orchard	Aroclor 1260	6:6	23.40	14.00	51.50	14.30
Port Orchard	arsenic	6:6	8.80	6.91	11.00	1.53
Port Orchard	benzo(a)anthracene	0:3	10.70	10.70	10.70	0.00
Port Orchard	benzo(a)pyrene	0:3	3.60	3.60	3.60	0.00
Port Orchard	benzo(b)fluoranthene	0:3	10.70	10.70	10.70	0.00
Port Orchard	benzo(g,h,i)perylene	0:3	10.70	10.70	10.70	0.00
Port Orchard	benzo(k)fluoranthene	0:3	7.10	7.10	7.10	0.00
Port Orchard	benzoic acid	0:3	36.00	36.00	36.00	0.00
Port Orchard	benzyl alcohol	0:3	3.60	3.60	3.60	0.00
Port Orchard	benzylbutylphthalate	0:3	10.70	10.70	10.70	0.00
Port Orchard	beta endosulfan	0:6	1.00	1.00	1.00	0.00
Port Orchard	beta hexachlorocyclohexane	0:6	0.50	0.50	0.50	0.00

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Port Orchard	bis(2-chloroethoxy)methane	0:3	3.60	3.60	3.60	0.00
Port Orchard	bis(2-chloroethyl)ether	0:3	3.60	3.60	3.60	0.00
Port Orchard	bis(2-chloroisopropyl)ether	0:3	10.70	10.70	10.70	0.00
Port Orchard	bis(2-ethylhexyl)phthalate	2:3	274.53	3.60	760.00	421.37
Port Orchard	carbazole	0:3	3.60	3.60	3.60	0.00
Port Orchard	chrysene	0:3	3.60	3.60	3.60	0.00
Port Orchard	copper	6:6	0.24	0.20	0.29	0.03
Port Orchard	coprostanol	0:3	180.00	180.00	180.00	0.00
Port Orchard	delta hexachlorocyclohexane	0:6	0.50	0.50	0.50	0.00
Port Orchard	dibenzo(a,h)anthracene	0:3	10.70	10.70	10.70	0.00
Port Orchard	dibenzofuran	0:3	10.70	10.70	10.70	0.00
Port Orchard	Dieldrin	0:6	1.00	1.00	1.00	0.00
Port Orchard	diethylphthalate	0:3	3.60	3.60	3.60	0.00
Port Orchard	dimethylphthalate	0:3	3.60	3.60	3.60	0.00
Port Orchard	di-n-butylphthalate	0:3	3.60	3.60	3.60	0.00
Port Orchard	di-n-octylphthalate	0:3	3.60	3.60	3.60	0.00
Port Orchard	endosulfan sulfate	0:6	1.00	1.00	1.00	0.00
Port Orchard	Endrin	0:6	1.00	1.00	1.00	0.00
Port Orchard	endrin aldehyde	0:6	1.00	1.00	1.00	0.00
Port Orchard	fluoranthene	0:3	3.60	3.60	3.60	0.00
Port Orchard	fluorene	0:3	3.60	3.60	3.60	0.00
Port Orchard	gamma chlordane	1:6	0.54	0.50	0.73	0.09
Port Orchard	gamma hexachlorocyclohexane	0:6	0.50	0.50	0.50	0.00
Port Orchard	Heptachlor	0:6	0.50	0.50	0.50	0.00
Port Orchard	heptachlor epoxide	0:6	0.50	0.50	0.50	0.00
Port Orchard	hexachlorobenzene	0:6	9.02	0.03	18.00	9.84
Port Orchard	hexachlorobutadiene	0:3	10.70	10.70	10.70	0.00
Port Orchard	hexachlorocyclopentadiene	0:3	36.00	36.00	36.00	0.00
Port Orchard	hexachloroethane	0:3	10.70	10.70	10.70	0.00
Port Orchard	indeno(1,2,3-c,d)pyrene	0:3	18.00	18.00	18.00	0.00
Port Orchard	isophorone	0:3	3.60	3.60	3.60	0.00
Port Orchard	lead	4:9	0.02	0.01	0.03	0.01
Port Orchard	Lipids	8:8	0.36	0.17	0.67	0.17
Port Orchard	mercury	9:9	0.07	0.05	0.07	0.01
Port Orchard	Methoxychlor	0:6	10.00	10.00	10.00	0.00
Port Orchard	naphthalene	0:3	3.60	3.60	3.60	0.00
Port Orchard	nitrobenzene	0:3	10.70	10.70	10.70	0.00
Port Orchard	N-nitrosodimethylamine	0:3	3.60	3.60	3.60	0.00
Port Orchard	N-nitroso-di-n-propylamine	0:3	3.60	3.60	3.60	0.00
Port Orchard	N-nitrosodiphenylamine	0:3	3.60	3.60	3.60	0.00
Port Orchard	opDDD	0:3	0.10	0.09	0.11	0.01
Port Orchard	opDDT	0:3	0.13	0.11	0.15	0.02
Port Orchard	PCB101	3:3	6.77	4.00	11.00	3.72
Port Orchard	PCB105	3:3	0.78	0.56	1.20	0.37
Port Orchard	PCB110	3:3	1.05	0.70	1.50	0.41
Port Orchard	PCB118	3:3	2.10	1.30	3.30	1.06
Port Orchard	PCB126	0:3	0.05	0.05	0.06	0.01
Port Orchard	PCB128	3:3	1.32	0.96	2.00	0.59
Port Orchard	PCB138	3:3	2.17	1.40	3.40	1.08
Port Orchard	PCB153	3:3	4.90	2.30	8.20	3.01
Port Orchard	PCB156	1:3	0.09	0.03	0.19	0.09
Port Orchard	PCB157	0:3	0.03	0.03	0.04	0.00
Port Orchard	PCB169	0:3	0.07	0.06	0.08	0.01
Port Orchard	PCB170	3:3	1.29	0.77	2.10	0.71
Port Orchard	PCB180	3:3	1.80	1.20	2.90	0.95

Appendix: English Sole Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Port Orchard	PCB189	0:3	0.04	0.04	0.04	0.00
Port Orchard	PCB77	0:3	0.06	0.05	0.07	0.01
Port Orchard	pentachlorophenol	0:3	36.00	36.00	36.00	0.00
Port Orchard	phenanthrene	0:3	3.60	3.60	3.60	0.00
Port Orchard	phenol	0:3	3.60	3.60	3.60	0.00
Port Orchard	ppDDD	0:9	0.70	0.10	1.00	0.44
Port Orchard	ppDDE	5:9	1.23	0.66	2.71	0.62
Port Orchard	ppDDT	0:9	1.35	0.05	2.00	0.97
Port Orchard	pyrene	0:3	3.60	3.60	3.60	0.00
Port Orchard	Solids	10:10	18.49	17.34	20.56	0.99
Port Orchard	TotalDDT	3:3	1.12	0.66	1.70	0.53
Port Orchard	TotalPCB	3:3	27.23	15.10	45.20	15.88
Port Orchard	Toxaphene	0:6	10.00	10.00	10.00	0.00
Port Susan	Aldrin	0:3	0.50	0.50	0.50	0.00
Port Susan	alpha chlordane	0:3	0.50	0.50	0.50	0.00
Port Susan	alpha endosulfan	0:3	0.50	0.50	0.50	0.00
Port Susan	alpha hexachlorocyclohexane	0:3	0.50	0.50	0.50	0.00
Port Susan	beta endosulfan	0:3	1.00	1.00	1.00	0.00
Port Susan	beta hexachlorocyclohexane	0:3	0.50	0.50	0.50	0.00
Port Susan	delta hexachlorocyclohexane	0:3	0.50	0.50	0.50	0.00
Port Susan	dieldrin	0:3	1.00	1.00	1.00	0.00
Port Susan	endosulfan sulfate	0:3	1.00	1.00	1.00	0.00
Port Susan	endrin	0:3	1.00	1.00	1.00	0.00
Port Susan	endrin aldehyde	0:3	1.00	1.00	1.00	0.00
Port Susan	gamma chlordane	0:3	0.50	0.50	0.50	0.00
Port Susan	gamma hexachlorocyclohexane	0:3	0.50	0.50	0.50	0.00
Port Susan	heptachlor	0:3	0.50	0.50	0.50	0.00
Port Susan	heptachlor epoxide	0:3	0.50	0.50	0.50	0.00
Port Susan	hexachlorobenzene	0:1	0.05	0.05	0.05	
Port Susan	Lipids	1:1	0.25	0.25	0.25	
Port Susan	Mercury	3:3	0.07	0.06	0.07	0.01
Port Susan	methoxychlor	0:3	10.00	10.00	10.00	0.00
Port Susan	opDDD	0:1	0.12	0.12	0.12	
Port Susan	opDDT	0:1	0.15	0.15	0.15	
Port Susan	PCB101	1:1	0.44	0.44	0.44	
Port Susan	PCB105	0:1	0.05	0.05	0.05	
Port Susan	PCB110	0:1	0.05	0.05	0.05	
Port Susan	PCB118	1:1	0.20	0.20	0.20	
Port Susan	PCB126	0:1	0.06	0.06	0.06	
Port Susan	PCB128	1:1	0.08	0.08	0.08	
Port Susan	PCB138	0:1	0.05	0.05	0.05	
Port Susan	PCB153	1:1	0.34	0.34	0.34	
Port Susan	PCB156	0:1	0.04	0.04	0.04	
Port Susan	PCB157	0:1	0.04	0.04	0.04	
Port Susan	PCB169	0:1	0.08	0.08	0.08	
Port Susan	PCB170	0:1	0.04	0.04	0.04	
Port Susan	PCB180	0:1	0.04	0.04	0.04	
Port Susan	PCB189	0:1	0.04	0.04	0.04	
Port Susan	PCB77	0:1	0.07	0.07	0.07	
Port Susan	ppDDD	0:4	1.03	0.23	1.30	0.54
Port Susan	ppDDE	0:4	0.78	0.12	1.00	0.44
Port Susan	ppDDT	0:4	1.54	0.15	2.00	0.93
Port Susan	Solids	4:4	15.83	15.00	16.63	0.67
Port Susan	TotalDDT	0:1				
Port Susan	TotalPCB	1:1	1.10	1.10	1.10	

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Port Susan	toxaphene	0:3	10.00	10.00	10.00	0.00
Port Townsend	1,2,4-trichlorobenzene	0:15	4.53	3.60	9.80	1.86
Port Townsend	1,2-dichlorobenzene	0:15	10.19	6.20	11.00	1.39
Port Townsend	1,2-diphenylhydrazine	0:15	9.29	3.60	39.00	11.88
Port Townsend	1,3-dichlorobenzene	0:15	10.19	6.20	11.00	1.39
Port Townsend	1,4-dichlorobenzene	0:15	11.77	10.70	19.60	2.47
Port Townsend	2,4,5-trichlorophenol	0:15	26.93	18.00	78.00	19.30
Port Townsend	2,4,6-trichlorophenol	0:15	26.93	18.00	78.00	19.30
Port Townsend	2,4-dichlorophenol	0:15	6.09	3.60	20.00	5.19
Port Townsend	2,4-dimethylphenol	0:15	18.57	3.60	50.00	17.67
Port Townsend	2,4-dinitrophenol	0:15	63.93	25.00	72.00	16.91
Port Townsend	2,4-dinitrotoluene	0:15	15.65	4.90	18.00	4.89
Port Townsend	2,6-dinitrotoluene	0:15	15.65	4.90	18.00	4.89
Port Townsend	2-chloronaphthalene	0:15	10.19	6.20	11.00	1.39
Port Townsend	2-chlorophenol	0:15	9.29	3.60	39.00	11.88
Port Townsend	2-methylnaphthalene	0:15	7.69	3.60	29.00	8.48
Port Townsend	2-methylphenol	0:15	6.09	3.60	20.00	5.19
Port Townsend	2-nitroaniline	0:15	15.13	7.00	59.00	17.18
Port Townsend	2-nitrophenol	0:15	6.09	3.60	20.00	5.19
Port Townsend	3,3-dichlorobenzidine	0:3	15.67	12.00	20.00	4.04
Port Townsend	3-nitroaniline	0:15	12.43	3.60	59.00	18.54
Port Townsend	4,6-dinitro-o-cresol	0:15	47.53	25.00	53.00	8.74
Port Townsend	4-bromophenylphenylether	0:15	22.15	3.70	50.00	15.48
Port Townsend	4-chloro-3-methylphenol	0:15	9.29	3.60	39.00	11.88
Port Townsend	4-chloroaniline	0:15	35.13	25.00	39.00	3.20
Port Townsend	4-chlorophenylphenylether	0:15	4.53	3.60	9.80	1.86
Port Townsend	4-methylphenol	0:15	6.09	3.60	20.00	5.19
Port Townsend	4-nitroaniline	0:15	23.87	18.00	59.00	12.84
Port Townsend	4-nitrophenol	0:15	35.13	25.00	39.00	3.20
Port Townsend	acenaphthene	0:15	4.21	3.60	7.80	1.21
Port Townsend	acenaphthylene	0:15	4.53	3.60	9.80	1.86
Port Townsend	Aldrin	0:12	0.51	0.50	0.60	0.03
Port Townsend	alpha chlordane	0:12	0.51	0.50	0.60	0.03
Port Townsend	alpha endosulfan	0:12	0.51	0.50	0.60	0.03
Port Townsend	alpha hexachlorocyclohexane	0:12	0.51	0.50	0.60	0.03
Port Townsend	aniline	0:15	48.85	25.00	53.30	9.28
Port Townsend	anthracene	0:15	4.53	3.60	9.80	1.86
Port Townsend	Aroclor 1016	0:12	19.75	18.00	21.00	0.87
Port Townsend	Aroclor 1221	0:12	19.75	18.00	21.00	0.87
Port Townsend	Aroclor 1232	0:12	19.75	18.00	21.00	0.87
Port Townsend	Aroclor 1242	0:12	10.42	10.00	13.00	0.90
Port Townsend	Aroclor 1248	0:12	2.11	2.00	2.70	0.22
Port Townsend	Aroclor 1254	3:12	4.32	2.00	13.30	4.18
Port Townsend	Aroclor 1260	10:12	5.39	2.00	13.00	3.59
Port Townsend	arsenic	15:15	7.36	4.10	11.00	2.01
Port Townsend	benzo(a)anthracene	0:15	10.19	6.20	11.00	1.39
Port Townsend	benzo(a)pyrene	0:15	6.09	3.60	20.00	5.19
Port Townsend	benzo(b)fluoranthene	0:15	13.35	10.70	29.00	5.67
Port Townsend	benzo(g,h,i)perylene	0:15	11.75	10.70	20.00	2.54
Port Townsend	benzo(k)fluoranthene	0:15	10.39	7.00	29.00	7.13
Port Townsend	benzoic acid	3:15	141.73	36.00	500.00	187.58
Port Townsend	benzyl alcohol	6:15	15.79	3.60	57.58	16.87
Port Townsend	benzylbutylphthalate	0:15	11.21	10.70	16.80	1.55
Port Townsend	beta endosulfan	0:12	1.02	1.00	1.20	0.06
Port Townsend	beta hexachlorocyclohexane	0:12	0.51	0.50	0.60	0.03



Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Port Townsend	bis(2-chloroethoxy)methane	0:15	6.09	3.60	20.00	5.19
Port Townsend	bis(2-chloroethyl)ether	0:15	4.53	3.60	9.80	1.86
Port Townsend	bis(2-chloroisopropyl)ether	0:15	14.95	10.70	39.00	9.05
Port Townsend	bis(2-ethylhexyl)phthalate	3:15	257.96	3.60	1983.00	571.67
Port Townsend	carbazole	0:12	3.70	3.60	4.00	0.18
Port Townsend	chrysene	0:15	4.53	3.60	9.80	1.86
Port Townsend	copper	15:15	0.28	0.18	0.51	0.09
Port Townsend	coprostanol	0:12	585.00	180.00	1800.00	732.67
Port Townsend	delta hexachlorocyclohexane	0:12	0.51	0.50	0.60	0.03
Port Townsend	dibenzo(a,h)anthracene	0:15	13.35	10.70	29.00	5.67
Port Townsend	dibenzofuran	0:15	11.75	10.70	20.00	2.54
Port Townsend	Dieldrin	0:12	1.02	1.00	1.20	0.06
Port Townsend	diethylphthalate	0:15	11.09	3.60	66.00	17.56
Port Townsend	dimethylphthalate	0:15	3.91	3.60	5.90	0.62
Port Townsend	di-n-butylphthalate	0:15	7.31	3.60	22.00	7.27
Port Townsend	di-n-octylphthalate	0:15	4.53	3.60	9.80	1.86
Port Townsend	endosulfan sulfate	0:12	1.02	1.00	1.20	0.06
Port Townsend	Endrin	0:12	1.02	1.00	1.20	0.06
Port Townsend	endrin aldehyde	0:12	1.02	1.00	1.20	0.06
Port Townsend	fluoranthene	0:15	4.87	3.60	12.00	2.57
Port Townsend	fluorene	0:15	4.53	3.60	9.80	1.86
Port Townsend	gamma chlordane	0:12	0.51	0.50	0.60	0.03
Port Townsend	gamma hexachlorocyclohexane	0:12	0.51	0.50	0.60	0.03
Port Townsend	Heptachlor	0:12	0.51	0.50	0.60	0.03
Port Townsend	heptachlor epoxide	0:12	0.51	0.50	0.60	0.03
Port Townsend	hexachlorobenzene	0:15	15.97	6.20	18.00	4.25
Port Townsend	hexachlorobutadiene	0:15	11.75	10.70	20.00	2.54
Port Townsend	hexachlorocyclopentadiene	0:15	123.53	12.00	265.00	119.82
Port Townsend	hexachloroethane	0:15	19.55	10.70	50.00	15.96
Port Townsend	indeno(1,2,3-c,d)pyrene	0:15	17.53	12.00	20.00	1.81
Port Townsend	isophorone	0:15	6.09	3.60	20.00	5.19
Port Townsend	lead	2:15	0.04	0.03	0.10	0.02
Port Townsend	Lipids	5:5	0.28	0.19	0.42	0.09
Port Townsend	mercury	12:12	0.05	0.03	0.08	0.01
Port Townsend	Methoxychlor	0:12	10.67	10.00	14.00	1.30
Port Townsend	naphthalene	0:15	7.69	3.60	29.00	8.48
Port Townsend	nitrobenzene	0:15	11.75	10.70	20.00	2.54
Port Townsend	N-nitrosodimethylamine	0:15	12.43	3.60	59.00	18.54
Port Townsend	N-nitroso-di-n-propylamine	0:15	6.09	3.60	20.00	5.19
Port Townsend	N-nitrosodiphenylamine	0:15	6.09	3.60	20.00	5.19
Port Townsend	pentachlorophenol	0:15	123.53	12.00	265.00	119.82
Port Townsend	phenanthrene	0:15	4.53	3.60	9.80	1.86
Port Townsend	phenol	0:15	21.89	3.60	118.00	38.58
Port Townsend	ppDDD	0:12	1.02	1.00	1.20	0.06
Port Townsend	ppDDE	3:12	1.17	1.00	1.81	0.30
Port Townsend	ppDDT	0:12	2.13	2.00	2.80	0.26
Port Townsend	pyrene	0:15	4.53	3.60	9.80	1.86
Port Townsend	Solids	11:11	17.88	16.60	19.14	1.04
Port Townsend	Toxaphene	0:12	11.17	10.00	16.00	2.17
Possession Point	1,2,4-trichlorobenzene	0:3	3.60	3.60	3.60	0.00
Possession Point	1,2-dichlorobenzene	0:3	10.70	10.70	10.70	0.00
Possession Point	1,2-diphenylhydrazine	0:3	3.60	3.60	3.60	0.00
Possession Point	1,3-dichlorobenzene	0:3	10.70	10.70	10.70	0.00
Possession Point	1,4-dichlorobenzene	0:3	10.70	10.70	10.70	0.00
Possession Point	2,4,5-trichlorophenol	0:3	18.00	18.00	18.00	0.00

Location	Assay	No. Detected:		Mean	Min	Max	SD
		lo. Analyzed					
Possession Point	2,4,6-trichlorophenol	0:3		18.00	18.00	18.00	0.00
Possession Point	2,4-dichlorophenol	0:3		3.60	3.60	3.60	0.00
Possession Point	2,4-dimethylphenol	0:3		3.60	3.60	3.60	0.00
Possession Point	2,4-dinitrophenol	0:3		72.00	72.00	72.00	0.00
Possession Point	2,4-dinitrotoluene	0:3		18.00	18.00	18.00	0.00
Possession Point	2,6-dinitrotoluene	0:3		18.00	18.00	18.00	0.00
Possession Point	2-chloronaphthalene	0:3		10.70	10.70	10.70	0.00
Possession Point	2-chlorophenol	0:3		3.60	3.60	3.60	0.00
Possession Point	2-methylnaphthalene	0:3		3.60	3.60	3.60	0.00
Possession Point	2-methylphenol	0:3		3.60	3.60	3.60	0.00
Possession Point	2-nitroaniline	0:3		7.10	7.10	7.10	0.00
Possession Point	2-nitrophenol	0:3		3.60	3.60	3.60	0.00
Possession Point	3-nitroaniline	0:3		3.60	3.60	3.60	0.00
Possession Point	4,6-dinitro-o-cresol	0:3		53.00	53.00	53.00	0.00
Possession Point	4-bromophenylphenylether	0:3		18.00	18.00	18.00	0.00
Possession Point	4-chloro-3-methylphenol	0:3		3.60	3.60	3.60	0.00
Possession Point	4-chloroaniline	0:3		36.00	36.00	36.00	0.00
Possession Point	4-chlorophenylphenylether	0:3		3.60	3.60	3.60	0.00
Possession Point	4-methylphenol	0:3		3.60	3.60	3.60	0.00
Possession Point	4-nitroaniline	0:3		18.00	18.00	18.00	0.00
Possession Point	4-nitrophenol	0:3		36.00	36.00	36.00	0.00
Possession Point	acenaphthene	0:3		3.60	3.60	3.60	0.00
Possession Point	acenaphthylene	0:3		3.60	3.60	3.60	0.00
Possession Point	Aldrin	0:6		0.51	0.50	0.55	0.02
Possession Point	alpha chlordane	0:6		0.51	0.50	0.55	0.02
Possession Point	alpha endosulfan	0:6		0.51	0.50	0.55	0.02
Possession Point	alpha hexachlorocyclohexane	0:6		0.51	0.50	0.55	0.02
Possession Point	aniline	0:3		53.30	53.30	53.30	0.00
Possession Point	anthracene	0:3		3.60	3.60	3.60	0.00
Possession Point	Aroclor 1016	0:6		20.33	20.00	22.00	0.82
Possession Point	Aroclor 1221	0:6		20.33	20.00	22.00	0.82
Possession Point	Aroclor 1232	0:6		20.33	20.00	22.00	0.82
Possession Point	Aroclor 1242	0:6		10.17	10.00	11.00	0.41
Possession Point	Aroclor 1248	0:6		2.03	2.00	2.20	0.08
Possession Point	Aroclor 1254	6:6		4.26	3.00	6.76	1.55
Possession Point	Aroclor 1260	6:6		6.41	2.00	10.80	3.05
Possession Point	arsenic	5:5		7.14	5.07	8.35	1.42
Possession Point	benzo(a)anthracene	0:3		10.70	10.70	10.70	0.00
Possession Point	benzo(a)pyrene	0:3		3.60	3.60	3.60	0.00
Possession Point	benzo(b)fluoranthene	0:3		10.70	10.70	10.70	0.00
Possession Point	benzo(g,h,i)perylene	0:3		10.70	10.70	10.70	0.00
Possession Point	benzo(k)fluoranthene	0:3		7.10	7.10	7.10	0.00
Possession Point	benzoic acid	0:3		36.00	36.00	36.00	0.00
Possession Point	benzyl alcohol	0:3		3.60	3.60	3.60	0.00
Possession Point	benzylbutylphthalate	0:3		10.70	10.70	10.70	0.00
Possession Point	beta endosulfan	0:6		1.02	1.00	1.10	0.04
Possession Point	beta hexachlorocyclohexane	0:6		0.51	0.50	0.55	0.02
Possession Point	bis(2-chloroethoxy)methane	0:3		3.60	3.60	3.60	0.00
Possession Point	bis(2-chloroethyl)ether	0:3		3.60	3.60	3.60	0.00
Possession Point	bis(2-chloroisopropyl)ether	0:3		10.70	10.70	10.70	0.00
Possession Point	bis(2-ethylhexyl)phthalate	2:3		111.20	3.60	280.00	148.01
Possession Point	carbazole	0:3		3.60	3.60	3.60	0.00
Possession Point	chrysene	0:3		3.60	3.60	3.60	0.00
Possession Point	copper	5:5		0.28	0.20	0.37	0.07
Possession Point	coprostanol	0:3		180.00	180.00	180.00	0.00

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Possession Point	delta hexachlorocyclohexane	0:6	0.51	0.50	0.55	0.02
Possession Point	dibenzo(a,h)anthracene	0:3	10.70	10.70	10.70	0.00
Possession Point	dibenzofuran	0:3	10.70	10.70	10.70	0.00
Possession Point	Dieldrin	0:6	1.02	1.00	1.10	0.04
Possession Point	diethylphthalate	0:3	3.60	3.60	3.60	0.00
Possession Point	dimethylphthalate	0:3	3.60	3.60	3.60	0.00
Possession Point	di-n-butylphthalate	0:3	3.60	3.60	3.60	0.00
Possession Point	di-n-octylphthalate	0:3	3.60	3.60	3.60	0.00
Possession Point	endosulfan sulfate	0:6	1.02	1.00	1.10	0.04
Possession Point	Endrin	0:6	1.02	1.00	1.10	0.04
Possession Point	endrin aldehyde	0:6	1.02	1.00	1.10	0.04
Possession Point	fluoranthene	0:3	3.60	3.60	3.60	0.00
Possession Point	fluorene	0:3	3.60	3.60	3.60	0.00
Possession Point	gamma chlordane	1:6	0.52	0.50	0.55	0.03
Possession Point	gamma hexachlorocyclohexane	0:6	0.51	0.50	0.55	0.02
Possession Point	Heptachlor	0:6	0.51	0.50	0.55	0.02
Possession Point	heptachlor epoxide	0:6	0.51	0.50	0.55	0.02
Possession Point	hexachlorobenzene	0:3	18.00	18.00	18.00	0.00
Possession Point	hexachlorobutadiene	0:3	10.70	10.70	10.70	0.00
Possession Point	hexachlorocyclopentadiene	0:3	36.00	36.00	36.00	0.00
Possession Point	hexachloroethane	0:3	10.70	10.70	10.70	0.00
Possession Point	indeno(1,2,3-c,d)pyrene	0:3	18.00	18.00	18.00	0.00
Possession Point	isophorone	0:3	3.60	3.60	3.60	0.00
Possession Point	lead	0:5	0.03	0.02	0.03	0.01
Possession Point	Lipids	6:6	0.43	0.16	0.71	0.21
Possession Point	mercury	6:6	0.06	0.04	0.07	0.01
Possession Point	Methoxychlor	0:6	10.17	10.00	11.00	0.41
Possession Point	naphthalene	0:3	3.60	3.60	3.60	0.00
Possession Point	nitrobenzene	0:3	10.70	10.70	10.70	0.00
Possession Point	N-nitrosodimethylamine	0:3	3.60	3.60	3.60	0.00
Possession Point	N-nitroso-di-n-propylamine	0:3	3.60	3.60	3.60	0.00
Possession Point	N-nitrosodiphenylamine	0:3	3.60	3.60	3.60	0.00
Possession Point	pentachlorophenol	0:3	36.00	36.00	36.00	0.00
Possession Point	phenanthrene	0:3	3.60	3.60	3.60	0.00
Possession Point	phenol	0:3	3.60	3.60	3.60	0.00
Possession Point	ppDDD	0:6	1.02	1.00	1.10	0.04
Possession Point	ppDDE	2:6	1.06	1.00	1.25	0.10
Possession Point	ppDDT	0:6	2.03	2.00	2.20	0.08
Possession Point	pyrene	0:3	3.60	3.60	3.60	0.00
Possession Point	Solids	4:4	18.00	17.20	20.00	1.34
Possession Point	Toxaphene	0:6	10.17	10.00	11.00	0.41
Roberts Bank	Aldrin	0:3	0.50	0.50	0.50	0.00
Roberts Bank	alpha chlordane	0:3	0.50	0.50	0.50	0.00
Roberts Bank	alpha endosulfan	0:3	0.50	0.50	0.50	0.00
Roberts Bank	alpha hexachlorocyclohexane	0:3	0.50	0.50	0.50	0.00
Roberts Bank	Aroclor 1016	0:3	20.00	20.00	20.00	0.00
Roberts Bank	Aroclor 1221	0:3	20.00	20.00	20.00	0.00
Roberts Bank	Aroclor 1232	0:3	20.00	20.00	20.00	0.00
Roberts Bank	Aroclor 1242	0:3	10.00	10.00	10.00	0.00
Roberts Bank	Aroclor 1248	0:3	2.00	2.00	2.00	0.00
Roberts Bank	Aroclor 1254	0:3	2.00	2.00	2.00	0.00
Roberts Bank	Aroclor 1260	0:3	2.00	2.00	2.00	0.00
Roberts Bank	beta endosulfan	0:3	1.00	1.00	1.00	0.00
Roberts Bank	beta hexachlorocyclohexane	0:3	0.50	0.50	0.50	0.00
Roberts Bank	delta hexachlorocyclohexane	0:3	0.50	0.50	0.50	0.00

Location	Assay	No. Detected:		Mean	Min	Max	SD
		lo.	Analyzed				
Roberts Bank	Dieldrin	0	3	1.00	1.00	1.00	0.00
Roberts Bank	endosulfan sulfate	0	3	1.00	1.00	1.00	0.00
Roberts Bank	Endrin	0	3	1.00	1.00	1.00	0.00
Roberts Bank	endrin aldehyde	0	3	1.00	1.00	1.00	0.00
Roberts Bank	gamma chlordane	0	3	0.50	0.50	0.50	0.00
Roberts Bank	gamma hexachlorocyclohexane	0	3	0.50	0.50	0.50	0.00
Roberts Bank	Heptachlor	0	3	0.50	0.50	0.50	0.00
Roberts Bank	heptachlor epoxide	0	3	0.50	0.50	0.50	0.00
Roberts Bank	lead	0	3	0.02	0.02	0.02	0.00
Roberts Bank	Lipids	3	3	0.34	0.32	0.38	0.03
Roberts Bank	mercury	3	3	0.02	0.02	0.02	0.00
Roberts Bank	Methoxychlor	0	3	10.00	10.00	10.00	0.00
Roberts Bank	ppDDD	0	3	1.00	1.00	1.00	0.00
Roberts Bank	ppDDE	0	3	1.00	1.00	1.00	0.00
Roberts Bank	ppDDT	0	3	2.00	2.00	2.00	0.00
Roberts Bank	Solids	3	3	17.07	16.80	17.40	0.31
Roberts Bank	Toxaphene	0	3	10.00	10.00	10.00	0.00
Ruston	hexachlorobenzene	0	3	0.03	0.03	0.04	0.00
Ruston	Lipids	3	3	0.33	0.24	0.39	0.08
Ruston	opDDD	0	3	0.10	0.09	0.11	0.01
Ruston	opDDT	0	3	0.12	0.11	0.13	0.01
Ruston	PCB101	3	3	2.43	1.70	3.60	1.02
Ruston	PCB110	3	3	0.39	0.25	0.66	0.23
Ruston	PCB118	3	3	1.80	1.30	2.60	0.70
Ruston	PCB126	0	3	0.05	0.05	0.06	0.00
Ruston	PCB128	3	3	0.44	0.24	0.62	0.19
Ruston	PCB138	3	3	0.79	0.52	0.96	0.24
Ruston	PCB153	3	3	1.87	1.30	2.60	0.67
Ruston	PCB156	0	3	0.03	0.03	0.04	0.00
Ruston	PCB157	0	3	0.03	0.03	0.04	0.00
Ruston	PCB169	0	3	0.07	0.06	0.08	0.01
Ruston	PCB170	3	3	0.26	0.21	0.30	0.05
Ruston	PCB180	3	3	0.40	0.35	0.45	0.05
Ruston	PCB189	0	3	0.04	0.03	0.04	0.00
Ruston	PCB77	0	3	0.05	0.05	0.06	0.01
Ruston	ppDDD	0	3	0.20	0.18	0.22	0.02
Ruston	ppDDE	1	3	0.30	0.09	0.70	0.35
Ruston	ppDDT	0	3	0.12	0.11	0.13	0.01
Ruston	Solids	3	3	15.35	14.86	15.71	0.44
Ruston	TotalDDT	1	3	0.70	0.70	0.70	0.00
Ruston	TotalPCB	3	3	10.17	7.60	14.00	3.38
S. Case Inlet	1,2,4-trichlorobenzene	0	3	3.60	3.60	3.60	0.00
S. Case Inlet	1,2-dichlorobenzene	0	3	10.70	10.70	10.70	0.00
S. Case Inlet	1,2-diphenylhydrazine	0	3	3.60	3.60	3.60	0.00
S. Case Inlet	1,3-dichlorobenzene	0	3	10.70	10.70	10.70	0.00
S. Case Inlet	1,4-dichlorobenzene	0	3	10.70	10.70	10.70	0.00
S. Case Inlet	2,4,5-trichlorophenol	0	3	18.00	18.00	18.00	0.00
S. Case Inlet	2,4,6-trichlorophenol	0	3	18.00	18.00	18.00	0.00
S. Case Inlet	2,4-dichlorophenol	0	3	3.60	3.60	3.60	0.00
S. Case Inlet	2,4-dimethylphenol	0	3	50.00	50.00	50.00	0.00
S. Case Inlet	2,4-dinitrophenol	0	3	72.00	72.00	72.00	0.00
S. Case Inlet	2,4-dinitrotoluene	0	3	18.00	18.00	18.00	0.00
S. Case Inlet	2,6-dinitrotoluene	0	3	18.00	18.00	18.00	0.00
S. Case Inlet	2-chloronaphthalene	0	3	10.70	10.70	10.70	0.00
S. Case Inlet	2-chlorophenol	0	3	3.60	3.60	3.60	0.00

Location	Assay	No. Detected:				SD
		lo. Analyzed	Mean	Min	Max	
S. Case Inlet	2-methylnaphthalene	0:3	3.60	3.60	3.60	0.00
S. Case Inlet	2-methylphenol	0:3	3.60	3.60	3.60	0.00
S. Case Inlet	2-nitroaniline	0:3	7.10	7.10	7.10	0.00
S. Case Inlet	2-nitrophenol	0:3	3.60	3.60	3.60	0.00
S. Case Inlet	3-nitroaniline	0:3	3.60	3.60	3.60	0.00
S. Case Inlet	4,6-dinitro-o-cresol	0:3	50.00	50.00	50.00	0.00
S. Case Inlet	4-bromophenylphenylether	0:3	50.00	50.00	50.00	0.00
S. Case Inlet	4-chloro-3-methylphenol	0:3	3.60	3.60	3.60	0.00
S. Case Inlet	4-chloroaniline	0:3	36.00	36.00	36.00	0.00
S. Case Inlet	4-chlorophenylphenylether	0:3	3.60	3.60	3.60	0.00
S. Case Inlet	4-methylphenol	0:3	3.60	3.60	3.60	0.00
S. Case Inlet	4-nitroaniline	0:3	18.00	18.00	18.00	0.00
S. Case Inlet	4-nitrophenol	0:3	36.00	36.00	36.00	0.00
S. Case Inlet	acenaphthene	0:3	3.60	3.60	3.60	0.00
S. Case Inlet	acenaphthylene	0:3	3.60	3.60	3.60	0.00
S. Case Inlet	Aldrin	0:6	0.50	0.50	0.50	0.00
S. Case Inlet	alpha chlordane	0:6	0.50	0.50	0.50	0.00
S. Case Inlet	alpha endosulfan	0:6	0.50	0.50	0.50	0.00
S. Case Inlet	alpha hexachlorocyclohexane	0:6	0.50	0.50	0.50	0.00
S. Case Inlet	aniline	0:3	53.00	53.00	53.00	0.00
S. Case Inlet	anthracene	0:3	3.60	3.60	3.60	0.00
S. Case Inlet	Aroclor 1016	0:6	20.00	20.00	20.00	0.00
S. Case Inlet	Aroclor 1221	0:6	20.00	20.00	20.00	0.00
S. Case Inlet	Aroclor 1232	0:6	20.00	20.00	20.00	0.00
S. Case Inlet	Aroclor 1242	0:6	10.00	10.00	10.00	0.00
S. Case Inlet	Aroclor 1248	0:6	2.00	2.00	2.00	0.00
S. Case Inlet	Aroclor 1254	4:6	5.64	2.00	9.60	3.06
S. Case Inlet	Aroclor 1260	6:6	9.64	7.50	12.30	1.63
S. Case Inlet	arsenic	3:3	10.67	10.00	11.00	0.58
S. Case Inlet	benzo(a)anthracene	0:3	10.70	10.70	10.70	0.00
S. Case Inlet	benzo(a)pyrene	0:3	3.60	3.60	3.60	0.00
S. Case Inlet	benzo(b)fluoranthene	0:3	10.70	10.70	10.70	0.00
S. Case Inlet	benzo(g,h,i)perylene	0:3	10.70	10.70	10.70	0.00
S. Case Inlet	benzo(k)fluoranthene	0:3	7.10	7.10	7.10	0.00
S. Case Inlet	benzoic acid	0:3	36.00	36.00	36.00	0.00
S. Case Inlet	benzyl alcohol	0:3	3.60	3.60	3.60	0.00
S. Case Inlet	benzylbutylphthalate	0:3	10.70	10.70	10.70	0.00
S. Case Inlet	beta endosulfan	1:6	1.01	1.00	1.07	0.03
S. Case Inlet	beta hexachlorocyclohexane	0:6	0.50	0.50	0.50	0.00
S. Case Inlet	bis(2-chloroethoxy)methane	0:3	3.60	3.60	3.60	0.00
S. Case Inlet	bis(2-chloroethyl)ether	0:3	3.60	3.60	3.60	0.00
S. Case Inlet	bis(2-chloroisopropyl)ether	0:3	10.70	10.70	10.70	0.00
S. Case Inlet	bis(2-ethylhexyl)phthalate	2:3	622.00	100.00	1383.00	674.06
S. Case Inlet	carbazole	0:3	3.60	3.60	3.60	0.00
S. Case Inlet	chrysene	0:3	3.60	3.60	3.60	0.00
S. Case Inlet	copper	3:3	0.29	0.26	0.33	0.04
S. Case Inlet	coprostanol	0:3	180.00	180.00	180.00	0.00
S. Case Inlet	delta hexachlorocyclohexane	0:6	0.50	0.50	0.50	0.00
S. Case Inlet	dibenzo(a,h)anthracene	0:3	10.70	10.70	10.70	0.00
S. Case Inlet	dibenzofuran	0:3	10.70	10.70	10.70	0.00
S. Case Inlet	Dieldrin	0:6	1.00	1.00	1.00	0.00
S. Case Inlet	diethylphthalate	0:3	3.60	3.60	3.60	0.00
S. Case Inlet	dimethylphthalate	0:3	3.60	3.60	3.60	0.00
S. Case Inlet	di-n-butylphthalate	0:3	4.00	4.00	4.00	0.00
S. Case Inlet	di-n-octylphthalate	0:3	3.60	3.60	3.60	0.00

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
S. Case Inlet	endosulfan sulfate	0:6	1.00	1.00	1.00	0.00
S. Case Inlet	Endrin	0:6	1.00	1.00	1.00	0.00
S. Case Inlet	endrin aldehyde	0:6	1.00	1.00	1.00	0.00
S. Case Inlet	fluoranthene	0:3	3.60	3.60	3.60	0.00
S. Case Inlet	fluorene	0:3	3.60	3.60	3.60	0.00
S. Case Inlet	gamma chlordane	0:6	0.50	0.50	0.50	0.00
S. Case Inlet	gamma hexachlorocyclohexane	0:6	0.50	0.50	0.50	0.00
S. Case Inlet	Heptachlor	0:6	0.50	0.50	0.50	0.00
S. Case Inlet	heptachlor epoxide	0:6	0.50	0.50	0.50	0.00
S. Case Inlet	hexachlorobenzene	0:3	18.00	18.00	18.00	0.00
S. Case Inlet	hexachlorobutadiene	0:3	10.70	10.70	10.70	0.00
S. Case Inlet	hexachlorocyclopentadiene	0:3	265.00	265.00	265.00	0.00
S. Case Inlet	hexachloroethane	0:3	10.70	10.70	10.70	0.00
S. Case Inlet	indeno(1,2,3-c,d)pyrene	0:3	18.00	18.00	18.00	0.00
S. Case Inlet	isophorone	0:3	3.60	3.60	3.60	0.00
S. Case Inlet	lead	0:6	0.03	0.02	0.03	0.01
S. Case Inlet	Lipids	6:6	0.24	0.13	0.46	0.14
S. Case Inlet	mercury	6:6	0.04	0.03	0.05	0.01
S. Case Inlet	Methoxychlor	0:6	10.00	10.00	10.00	0.00
S. Case Inlet	naphthalene	0:3	3.60	3.60	3.60	0.00
S. Case Inlet	nitrobenzene	0:3	10.70	10.70	10.70	0.00
S. Case Inlet	N-nitrosodimethylamine	0:3	3.60	3.60	3.60	0.00
S. Case Inlet	N-nitroso-di-n-propylamine	0:3	3.60	3.60	3.60	0.00
S. Case Inlet	N-nitrosodiphenylamine	0:3	3.60	3.60	3.60	0.00
S. Case Inlet	pentachlorophenol	0:3	265.00	265.00	265.00	0.00
S. Case Inlet	phenanthrene	0:3	3.60	3.60	3.60	0.00
S. Case Inlet	phenol	0:3	3.60	3.60	3.60	0.00
S. Case Inlet	ppDDD	0:6	1.00	1.00	1.00	0.00
S. Case Inlet	ppDDE	1:6	1.07	1.00	1.39	0.16
S. Case Inlet	ppDDT	0:6	2.00	2.00	2.00	0.00
S. Case Inlet	pyrene	0:3	3.60	3.60	3.60	0.00
S. Case Inlet	Solids	6:6	18.25	17.00	19.40	0.80
S. Case Inlet	Toxaphene	0:6	10.00	10.00	10.00	0.00
S. Hood Canal	1,2,4-trichlorobenzene	0:3	3.60	3.60	3.60	0.00
S. Hood Canal	1,2-dichlorobenzene	0:3	10.70	10.70	10.70	0.00
S. Hood Canal	1,2-diphenylhydrazine	0:3	3.60	3.60	3.60	0.00
S. Hood Canal	1,3-dichlorobenzene	0:3	10.70	10.70	10.70	0.00
S. Hood Canal	1,4-dichlorobenzene	0:3	10.70	10.70	10.70	0.00
S. Hood Canal	2,4,5-trichlorophenol	0:3	18.00	18.00	18.00	0.00
S. Hood Canal	2,4,6-trichlorophenol	0:3	18.00	18.00	18.00	0.00
S. Hood Canal	2,4-dichlorophenol	0:3	3.60	3.60	3.60	0.00
S. Hood Canal	2,4-dimethylphenol	0:3	50.00	50.00	50.00	0.00
S. Hood Canal	2,4-dinitrophenol	0:3	72.00	72.00	72.00	0.00
S. Hood Canal	2,4-dinitrotoluene	0:3	18.00	18.00	18.00	0.00
S. Hood Canal	2,6-dinitrotoluene	0:3	18.00	18.00	18.00	0.00
S. Hood Canal	2-chloronaphthalene	0:3	10.70	10.70	10.70	0.00
S. Hood Canal	2-chlorophenol	0:3	3.60	3.60	3.60	0.00
S. Hood Canal	2-methylnaphthalene	0:3	3.60	3.60	3.60	0.00
S. Hood Canal	2-methylphenol	0:3	3.60	3.60	3.60	0.00
S. Hood Canal	2-nitroaniline	0:3	7.10	7.10	7.10	0.00
S. Hood Canal	2-nitrophenol	0:3	3.60	3.60	3.60	0.00
S. Hood Canal	3-nitroaniline	0:3	3.60	3.60	3.60	0.00
S. Hood Canal	4,6-dinitro-o-cresol	0:3	50.00	50.00	50.00	0.00
S. Hood Canal	4-bromophenylphenylether	0:3	50.00	50.00	50.00	0.00
S. Hood Canal	4-chloro-3-methylphenol	0:3	3.60	3.60	3.60	0.00

Location	Assay	No. Detected:			SD	
		lo. Analyzed	Mean	Min		Max
S. Hood Canal	4-chloroaniline	0:3	36.00	36.00	36.00	0.00
S. Hood Canal	4-chlorophenylphenylether	0:3	3.60	3.60	3.60	0.00
S. Hood Canal	4-methylphenol	0:3	3.60	3.60	3.60	0.00
S. Hood Canal	4-nitroaniline	0:3	18.00	18.00	18.00	0.00
S. Hood Canal	4-nitrophenol	0:3	36.00	36.00	36.00	0.00
S. Hood Canal	acenaphthene	0:3	3.60	3.60	3.60	0.00
S. Hood Canal	acenaphthylene	0:3	3.60	3.60	3.60	0.00
S. Hood Canal	Aldrin	0:6	0.50	0.50	0.50	0.00
S. Hood Canal	alpha chlordane	0:6	0.50	0.50	0.50	0.00
S. Hood Canal	alpha endosulfan	0:6	0.50	0.50	0.50	0.00
S. Hood Canal	alpha hexachlorocyclohexane	0:6	0.50	0.50	0.50	0.00
S. Hood Canal	aniline	0:3	53.00	53.00	53.00	0.00
S. Hood Canal	anthracene	0:3	3.60	3.60	3.60	0.00
S. Hood Canal	Aroclor 1016	0:6	20.00	20.00	20.00	0.00
S. Hood Canal	Aroclor 1221	0:6	20.00	20.00	20.00	0.00
S. Hood Canal	Aroclor 1232	0:6	20.00	20.00	20.00	0.00
S. Hood Canal	Aroclor 1242	0:6	10.00	10.00	10.00	0.00
S. Hood Canal	Aroclor 1248	0:6	2.00	2.00	2.00	0.00
S. Hood Canal	Aroclor 1254	1:6	2.20	2.00	3.20	0.49
S. Hood Canal	Aroclor 1260	5:6	2.58	2.00	4.00	0.79
S. Hood Canal	arsenic	3:3	7.13	6.30	8.70	1.36
S. Hood Canal	benzo(a)anthracene	0:3	10.70	10.70	10.70	0.00
S. Hood Canal	benzo(a)pyrene	0:3	3.60	3.60	3.60	0.00
S. Hood Canal	benzo(b)fluoranthene	0:3	10.70	10.70	10.70	0.00
S. Hood Canal	benzo(g,h,i)perylene	0:3	10.70	10.70	10.70	0.00
S. Hood Canal	benzo(k)fluoranthene	0:3	7.10	7.10	7.10	0.00
S. Hood Canal	benzoic acid	0:3	36.00	36.00	36.00	0.00
S. Hood Canal	benzyl alcohol	0:3	3.60	3.60	3.60	0.00
S. Hood Canal	benzylbutylphthalate	0:3	10.70	10.70	10.70	0.00
S. Hood Canal	beta endosulfan	0:6	1.00	1.00	1.00	0.00
S. Hood Canal	beta hexachlorocyclohexane	0:6	0.50	0.50	0.50	0.00
S. Hood Canal	bis(2-chloroethoxy)methane	0:3	3.60	3.60	3.60	0.00
S. Hood Canal	bis(2-chloroethyl)ether	0:3	3.60	3.60	3.60	0.00
S. Hood Canal	bis(2-chloroisopropyl)ether	0:3	10.70	10.70	10.70	0.00
S. Hood Canal	bis(2-ethylhexyl)phthalate	1:3	127.67	100.00	183.00	47.92
S. Hood Canal	carbazole	0:3	3.60	3.60	3.60	0.00
S. Hood Canal	chrysene	0:3	3.60	3.60	3.60	0.00
S. Hood Canal	copper	3:3	0.34	0.27	0.44	0.09
S. Hood Canal	coprostanol	0:3	180.00	180.00	180.00	0.00
S. Hood Canal	delta hexachlorocyclohexane	0:6	0.50	0.50	0.50	0.00
S. Hood Canal	dibenzo(a,h)anthracene	0:3	10.70	10.70	10.70	0.00
S. Hood Canal	dibenzofuran	0:3	10.70	10.70	10.70	0.00
S. Hood Canal	Dieldrin	0:6	1.00	1.00	1.00	0.00
S. Hood Canal	diethylphthalate	0:3	3.60	3.60	3.60	0.00
S. Hood Canal	dimethylphthalate	0:3	3.60	3.60	3.60	0.00
S. Hood Canal	di-n-butylphthalate	0:3	4.00	4.00	4.00	0.00
S. Hood Canal	di-n-octylphthalate	0:3	3.60	3.60	3.60	0.00
S. Hood Canal	endosulfan sulfate	0:6	1.00	1.00	1.00	0.00
S. Hood Canal	Endrin	0:6	1.00	1.00	1.00	0.00
S. Hood Canal	endrin aldehyde	0:6	1.00	1.00	1.00	0.00
S. Hood Canal	fluoranthene	0:3	3.60	3.60	3.60	0.00
S. Hood Canal	fluorene	0:3	3.60	3.60	3.60	0.00
S. Hood Canal	gamma chlordane	0:6	0.50	0.50	0.50	0.00
S. Hood Canal	gamma hexachlorocyclohexane	0:6	0.50	0.50	0.50	0.00
S. Hood Canal	Heptachlor	0:6	0.50	0.50	0.50	0.00

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
S. Hood Canal	heptachlor epoxide	0:6	0.50	0.50	0.50	0.00
S. Hood Canal	hexachlorobenzene	0:3	18.00	18.00	18.00	0.00
S. Hood Canal	hexachlorobutadiene	0:3	10.70	10.70	10.70	0.00
S. Hood Canal	hexachlorocyclopentadiene	0:3	265.00	265.00	265.00	0.00
S. Hood Canal	hexachloroethane	0:3	10.70	10.70	10.70	0.00
S. Hood Canal	indeno(1,2,3-c,d)pyrene	0:3	18.00	18.00	18.00	0.00
S. Hood Canal	isophorone	0:3	3.60	3.60	3.60	0.00
S. Hood Canal	lead	0:6	0.03	0.02	0.03	0.01
S. Hood Canal	Lipids	6:6	0.24	0.16	0.32	0.06
S. Hood Canal	mercury	6:6	0.03	0.02	0.04	0.01
S. Hood Canal	Methoxychlor	0:6	10.00	10.00	10.00	0.00
S. Hood Canal	naphthalene	0:3	3.60	3.60	3.60	0.00
S. Hood Canal	nitrobenzene	0:3	10.70	10.70	10.70	0.00
S. Hood Canal	N-nitrosodimethylamine	0:3	3.60	3.60	3.60	0.00
S. Hood Canal	N-nitroso-di-n-propylamine	0:3	3.60	3.60	3.60	0.00
S. Hood Canal	N-nitrosodiphenylamine	0:3	3.60	3.60	3.60	0.00
S. Hood Canal	pentachlorophenol	0:3	265.00	265.00	265.00	0.00
S. Hood Canal	phenanthrene	0:3	3.60	3.60	3.60	0.00
S. Hood Canal	phenol	0:3	3.60	3.60	3.60	0.00
S. Hood Canal	ppDDD	0:6	1.00	1.00	1.00	0.00
S. Hood Canal	ppDDE	0:6	1.00	1.00	1.00	0.00
S. Hood Canal	ppDDT	0:6	2.00	2.00	2.00	0.00
S. Hood Canal	pyrene	0:3	3.60	3.60	3.60	0.00
S. Hood Canal	Solids	6:6	16.80	16.00	17.60	0.57
S. Hood Canal	Toxaphene	0:6	10.00	10.00	10.00	0.00
Saratoga Passage	1,2,4-trichlorobenzene	0:6	4.10	3.60	4.90	0.43
Saratoga Passage	1,2-dichlorobenzene	0:6	11.67	11.00	14.00	1.21
Saratoga Passage	1,2-diphenylhydrazine	0:6	4.10	3.60	4.90	0.43
Saratoga Passage	1,3-dichlorobenzene	0:6	11.67	11.00	14.00	1.21
Saratoga Passage	1,4-dichlorobenzene	0:6	11.67	11.00	14.00	1.21
Saratoga Passage	2,4,5-trichlorophenol	0:6	19.33	18.00	24.00	2.42
Saratoga Passage	2,4,6-trichlorophenol	0:6	19.33	18.00	24.00	2.42
Saratoga Passage	2,4-dichlorophenol	0:6	4.10	3.60	4.90	0.43
Saratoga Passage	2,4-dimethylphenol	0:6	12.10	3.60	20.00	8.66
Saratoga Passage	2,4-dinitrophenol	0:6	77.67	72.00	97.00	10.13
Saratoga Passage	2,4-dinitrotoluene	0:6	19.33	18.00	24.00	2.42
Saratoga Passage	2,6-dinitrotoluene	0:6	19.33	18.00	24.00	2.42
Saratoga Passage	2-chloronaphthalene	0:6	11.67	11.00	14.00	1.21
Saratoga Passage	2-chlorophenol	0:6	4.10	3.60	4.90	0.43
Saratoga Passage	2-methylnaphthalene	0:6	4.10	3.60	4.90	0.43
Saratoga Passage	2-methylphenol	0:6	4.10	3.60	4.90	0.43
Saratoga Passage	2-nitroaniline	0:6	7.62	7.00	9.60	1.05
Saratoga Passage	2-nitrophenol	0:6	4.10	3.60	4.90	0.43
Saratoga Passage	3-nitroaniline	0:6	4.10	3.60	4.90	0.43
Saratoga Passage	4,6-dinitro-o-cresol	0:6	55.83	50.00	72.00	8.82
Saratoga Passage	4-bromophenylphenylether	0:6	20.33	18.00	24.00	1.97
Saratoga Passage	4-chloro-3-methylphenol	0:6	4.10	3.60	4.90	0.43
Saratoga Passage	4-chloroaniline	0:6	39.00	36.00	49.00	5.29
Saratoga Passage	4-chlorophenylphenylether	0:6	4.10	3.60	4.90	0.43
Saratoga Passage	4-methylphenol	0:6	4.10	3.60	4.90	0.43
Saratoga Passage	4-nitroaniline	0:6	19.33	18.00	24.00	2.42
Saratoga Passage	4-nitrophenol	0:6	39.00	36.00	49.00	5.29
Saratoga Passage	acenaphthene	0:6	4.10	3.60	4.90	0.43
Saratoga Passage	acenaphthylene	0:6	4.10	3.60	4.90	0.43
Saratoga Passage	Aldrin	0:6	0.57	0.50	0.70	0.08



Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Saratoga Passage	alpha chlordane	0:6	0.57	0.50	0.70	0.08
Saratoga Passage	alpha endosulfan	0:6	0.57	0.50	0.70	0.08
Saratoga Passage	alpha hexachlorocyclohexane	0:5	0.56	0.50	0.70	0.09
Saratoga Passage	aniline	0:6	57.33	53.00	72.00	7.71
Saratoga Passage	anthracene	0:6	4.10	3.60	4.90	0.43
Saratoga Passage	Aroclor 1016	0:6	20.83	20.00	24.00	1.60
Saratoga Passage	Aroclor 1221	0:6	20.83	20.00	24.00	1.60
Saratoga Passage	Aroclor 1232	0:6	20.83	20.00	24.00	1.60
Saratoga Passage	Aroclor 1242	0:6	11.83	10.00	15.00	2.14
Saratoga Passage	Aroclor 1248	0:6	2.40	2.00	3.10	0.47
Saratoga Passage	Aroclor 1254	3:6	10.62	2.60	25.00	9.35
Saratoga Passage	Aroclor 1260	3:6	9.75	2.60	25.80	9.14
Saratoga Passage	arsenic	6:6	11.22	10.00	12.60	1.11
Saratoga Passage	benzo(a)anthracene	0:6	11.67	11.00	14.00	1.21
Saratoga Passage	benzo(a)pyrene	0:6	4.10	3.60	4.90	0.43
Saratoga Passage	benzo(b)fluoranthene	0:6	11.67	11.00	14.00	1.21
Saratoga Passage	benzo(g,h,i)perylene	0:6	11.67	11.00	14.00	1.21
Saratoga Passage	benzo(k)fluoranthene	0:6	7.62	7.00	9.60	1.05
Saratoga Passage	benzoic acid	1:6	77.00	36.00	264.00	91.75
Saratoga Passage	benzyl alcohol	2:6	7.00	4.00	15.00	4.82
Saratoga Passage	benzylbutylphthalate	0:6	11.67	11.00	14.00	1.21
Saratoga Passage	beta endosulfan	0:6	1.10	1.00	1.30	0.13
Saratoga Passage	beta hexachlorocyclohexane	0:6	0.57	0.50	0.70	0.08
Saratoga Passage	bis(2-chloroethoxy)methane	0:6	4.10	3.60	4.90	0.43
Saratoga Passage	bis(2-chloroethyl)ether	0:6	4.10	3.60	4.90	0.43
Saratoga Passage	bis(2-chloroisopropyl)ether	0:6	11.67	11.00	14.00	1.21
Saratoga Passage	bis(2-ethylhexyl)phthalate	1:6	12.77	3.60	24.00	9.51
Saratoga Passage	carbazole	0:6	4.10	3.60	4.90	0.43
Saratoga Passage	chrysene	0:6	4.10	3.60	4.90	0.43
Saratoga Passage	copper	6:6	0.24	0.14	0.37	0.09
Saratoga Passage	coprostanol	0:6	194.33	180.00	243.00	25.56
Saratoga Passage	delta hexachlorocyclohexane	0:6	0.57	0.50	0.70	0.08
Saratoga Passage	dibenzo(a,h)anthracene	0:6	11.67	11.00	14.00	1.21
Saratoga Passage	dibenzofuran	0:6	11.67	11.00	14.00	1.21
Saratoga Passage	Dieldrin	0:6	1.10	1.00	1.30	0.13
Saratoga Passage	diethylphthalate	0:6	4.10	3.60	4.90	0.43
Saratoga Passage	dimethylphthalate	0:6	4.10	3.60	4.90	0.43
Saratoga Passage	di-n-butylphthalate	0:6	4.10	3.60	4.90	0.43
Saratoga Passage	di-n-octylphthalate	0:6	4.10	3.60	4.90	0.43
Saratoga Passage	endosulfan sulfate	0:6	1.10	1.00	1.30	0.13
Saratoga Passage	Endrin	0:6	1.10	1.00	1.30	0.13
Saratoga Passage	endrin aldehyde	0:6	1.10	1.00	1.30	0.13
Saratoga Passage	fluoranthene	0:6	4.10	3.60	4.90	0.43
Saratoga Passage	fluorene	0:6	4.10	3.60	4.90	0.43
Saratoga Passage	gamma chlordane	0:6	0.57	0.50	0.70	0.08
Saratoga Passage	gamma hexachlorocyclohexane	0:6	0.57	0.50	0.70	0.08
Saratoga Passage	Heptachlor	0:6	0.57	0.50	0.70	0.08
Saratoga Passage	heptachlor epoxide	0:6	0.57	0.50	0.70	0.08
Saratoga Passage	hexachlorobenzene	0:6	19.33	18.00	24.00	2.42
Saratoga Passage	hexachlorobutadiene	0:6	11.67	11.00	14.00	1.21
Saratoga Passage	hexachlorocyclopentadiene	0:6	153.50	36.00	265.00	122.21
Saratoga Passage	hexachloroethane	0:6	31.17	11.00	50.00	20.65
Saratoga Passage	indeno(1,2,3-c,d)pyrene	0:6	19.33	18.00	24.00	2.42
Saratoga Passage	isophorone	0:6	4.10	3.60	4.90	0.43
Saratoga Passage	lead	0:6	0.03	0.03	0.03	0.00

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Saratoga Passage	Lipids	3:3	0.23	0.20	0.30	0.06
Saratoga Passage	mercury	6:6	0.07	0.04	0.10	0.02
Saratoga Passage	Methoxychlor	0:6	12.33	10.00	16.00	2.66
Saratoga Passage	naphthalene	0:6	4.10	3.60	4.90	0.43
Saratoga Passage	nitrobenzene	0:6	11.67	11.00	14.00	1.21
Saratoga Passage	N-nitrosodimethylamine	0:6	4.10	3.60	4.90	0.43
Saratoga Passage	N-nitroso-di-n-propylamine	0:6	4.10	3.60	4.90	0.43
Saratoga Passage	N-nitrosodiphenylamine	0:6	4.10	3.60	4.90	0.43
Saratoga Passage	pentachlorophenol	0:6	153.50	36.00	265.00	122.21
Saratoga Passage	phenanthrene	0:6	4.10	3.60	4.90	0.43
Saratoga Passage	phenol	1:6	5.12	3.60	11.00	2.89
Saratoga Passage	ppDDD	0:6	1.10	1.00	1.30	0.13
Saratoga Passage	ppDDE	2:6	1.29	1.00	1.90	0.32
Saratoga Passage	ppDDT	0:6	2.45	2.00	3.20	0.52
Saratoga Passage	pyrene	0:6	4.10	3.60	4.90	0.43
Saratoga Passage	Solids	6:6	16.77	15.90	17.00	0.44
Saratoga Passage	Toxaphene	0:6	13.17	10.00	18.00	3.60
Seattle Waterfront	1,2,4-trichlorobenzene	0:15	4.22	3.60	6.70	0.94
Seattle Waterfront	1,2-dichlorobenzene	0:15	11.93	5.60	32.40	5.98
Seattle Waterfront	1,2-diphenylhydrazine	0:15	7.77	3.60	27.00	8.30
Seattle Waterfront	1,3-dichlorobenzene	0:15	11.93	5.60	32.40	5.98
Seattle Waterfront	1,4-dichlorobenzene	0:15	12.74	10.70	32.40	5.52
Seattle Waterfront	2,4,5-trichlorophenol	0:15	24.20	18.00	53.00	12.01
Seattle Waterfront	2,4,6-trichlorophenol	0:15	24.20	18.00	53.00	12.01
Seattle Waterfront	2,4-dichlorophenol	0:15	5.37	3.60	13.00	3.29
Seattle Waterfront	2,4-dimethylphenol	0:15	17.85	3.60	50.00	17.76
Seattle Waterfront	2,4-dinitrophenol	0:15	63.93	22.00	84.00	21.28
Seattle Waterfront	2,4-dinitrotoluene	0:15	15.74	4.40	21.00	5.81
Seattle Waterfront	2,6-dinitrotoluene	0:15	15.74	4.40	21.00	5.81
Seattle Waterfront	2-chloronaphthalene	0:15	10.13	5.40	13.00	2.33
Seattle Waterfront	2-chlorophenol	0:15	15.11	3.60	132.00	33.15
Seattle Waterfront	2-methylnaphthalene	0:15	6.57	3.60	20.00	5.80
Seattle Waterfront	2-methylphenol	0:15	9.04	3.60	66.00	16.02
Seattle Waterfront	2-nitroaniline	0:15	12.89	7.00	40.00	11.72
Seattle Waterfront	2-nitrophenol	0:15	5.37	3.60	13.00	3.29
Seattle Waterfront	3,3-dichlorobenzidine	0:3	15.33	11.00	22.00	5.86
Seattle Waterfront	3-nitroaniline	0:15	10.11	3.60	40.00	13.15
Seattle Waterfront	4,6-dinitro-o-cresol	0:15	47.13	22.00	62.00	12.81
Seattle Waterfront	4-bromophenylphenylether	0:15	22.31	3.30	50.00	15.70
Seattle Waterfront	4-chloro-3-methylphenol	0:15	7.77	3.60	27.00	8.30
Seattle Waterfront	4-chloroaniline	0:15	34.33	22.00	42.00	6.00
Seattle Waterfront	4-chlorophenylphenylether	0:15	4.22	3.60	6.70	0.94
Seattle Waterfront	4-methylphenol	0:15	9.04	3.60	66.00	16.02
Seattle Waterfront	4-nitroaniline	0:15	21.87	18.00	40.00	7.21
Seattle Waterfront	4-nitrophenol	0:15	34.33	22.00	42.00	6.00
Seattle Waterfront	acenaphthene	0:15	3.98	3.60	5.30	0.48
Seattle Waterfront	acenaphthylene	0:15	4.22	3.60	6.70	0.94
Seattle Waterfront	Aldrin	0:21	0.50	0.50	0.60	0.02
Seattle Waterfront	alpha chlordane	2:21	0.58	0.50	1.40	0.24
Seattle Waterfront	alpha endosulfan	0:21	0.50	0.50	0.60	0.02
Seattle Waterfront	alpha hexachlorocyclohexane	0:21	0.50	0.50	0.60	0.02
Seattle Waterfront	aniline	0:15	55.73	22.00	132.00	23.80
Seattle Waterfront	anthracene	0:15	4.22	3.60	6.70	0.94
Seattle Waterfront	Aroclor 1016	0:50	20.34	18.00	29.00	1.79
Seattle Waterfront	Aroclor 1221	0:50	20.34	18.00	29.00	1.79

# Appendix: English Sole Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Seattle Waterfront	Aroclor 1232	0:50	20.34	18.00	29.00	1.79
Seattle Waterfront	Aroclor 1242	1:50	10.30	10.00	14.00	0.93
Seattle Waterfront	Aroclor 1248	3:50	2.95	2.00	39.20	5.30
Seattle Waterfront	Aroclor 1254	50:50	27.40	2.50	149.00	30.90
Seattle Waterfront	Aroclor 1260	50:50	35.05	2.80	174.00	37.60
Seattle Waterfront	arsenic	18:18	7.52	4.30	11.00	1.72
Seattle Waterfront	benzo(a)anthracene	0:15	10.49	5.60	13.00	1.93
Seattle Waterfront	benzo(a)pyrene	0:15	5.37	3.60	13.00	3.29
Seattle Waterfront	benzo(b)fluoranthene	0:15	12.48	10.70	20.00	2.90
Seattle Waterfront	benzo(g,h,i)perylene	0:15	11.28	10.70	13.00	0.90
Seattle Waterfront	benzo(k)fluoranthene	0:15	9.35	7.00	20.00	4.39
Seattle Waterfront	benzoic acid	1:15	132.80	36.00	500.00	190.43
Seattle Waterfront	benzyl alcohol	8:15	19.28	3.60	63.65	19.31
Seattle Waterfront	benzylbutylphthalate	0:15	11.15	10.70	13.00	0.77
Seattle Waterfront	beta endosulfan	0:21	1.01	1.00	1.20	0.04
Seattle Waterfront	beta hexachlorocyclohexane	0:21	0.50	0.50	0.60	0.02
Seattle Waterfront	bis(2-chloroethoxy)methane	0:15	5.37	3.60	13.00	3.29
Seattle Waterfront	bis(2-chloroethyl)ether	0:15	6.02	3.60	32.40	7.35
Seattle Waterfront	bis(2-chloroisopropyl)ether	0:15	21.01	10.70	132.00	31.08
Seattle Waterfront	bis(2-ethylhexyl)phthalate	4:15	51.05	3.60	225.00	60.66
Seattle Waterfront	carbazole	0:12	3.80	3.60	4.20	0.26
Seattle Waterfront	chrysene	0:15	4.58	3.60	10.80	1.93
Seattle Waterfront	copper	18:18	0.28	0.17	0.49	0.08
Seattle Waterfront	coprostanol	0:12	185.17	180.00	211.00	12.07
Seattle Waterfront	delta hexachlorocyclohexane	0:21	0.50	0.50	0.60	0.02
Seattle Waterfront	dibenzo(a,h)anthracene	0:15	12.48	10.70	20.00	2.90
Seattle Waterfront	dibenzofuran	0:15	11.28	10.70	13.00	0.90
Seattle Waterfront	Dieldrin	0:21	1.01	1.00	1.20	0.04
Seattle Waterfront	diethylphthalate	2:15	7.44	3.60	22.00	7.54
Seattle Waterfront	dimethylphthalate	0:15	3.75	3.30	4.20	0.29
Seattle Waterfront	di-n-butylphthalate	0:15	7.52	3.60	22.00	7.50
Seattle Waterfront	di-n-octylphthalate	0:15	4.22	3.60	6.70	0.94
Seattle Waterfront	endosulfan sulfate	0:21	1.01	1.00	1.20	0.04
Seattle Waterfront	Endrin	0:21	1.01	1.00	1.20	0.04
Seattle Waterfront	endrin aldehyde	0:21	1.01	1.00	1.20	0.04
Seattle Waterfront	fluoranthene	0:15	4.45	3.60	8.00	1.41
Seattle Waterfront	fluorene	0:15	4.22	3.60	6.70	0.94
Seattle Waterfront	gamma chlordane	4:21	0.55	0.50	0.89	0.10
Seattle Waterfront	gamma hexachlorocyclohexane	0:21	0.50	0.50	0.60	0.02
Seattle Waterfront	Heptachlor	0:21	0.50	0.50	0.60	0.02
Seattle Waterfront	heptachlor epoxide	0:21	0.50	0.50	0.60	0.02
Seattle Waterfront	hexachlorobenzene	0:24	10.01	0.04	21.00	8.90
Seattle Waterfront	hexachlorobutadiene	0:15	11.28	10.70	13.00	0.90
Seattle Waterfront	hexachlorocyclopentadiene	0:15	123.53	11.00	265.00	119.99
Seattle Waterfront	hexachloroethane	0:15	22.75	10.70	66.00	19.88
Seattle Waterfront	indeno(1,2,3-c,d)pyrene	0:15	17.13	11.00	21.00	3.04
Seattle Waterfront	isophorone	0:15	5.37	3.60	13.00	3.29
Seattle Waterfront	lead	2:21	0.03	0.02	0.06	0.01
Seattle Waterfront	Lipids	27:27	0.38	0.12	0.98	0.21
Seattle Waterfront	mercury	54:54	0.08	0.04	0.13	0.03
Seattle Waterfront	Methoxychlor	0:21	10.38	10.00	14.00	1.02
Seattle Waterfront	naphthalene	0:15	6.57	3.60	20.00	5.80
Seattle Waterfront	nitrobenzene	0:15	11.28	10.70	13.00	0.90
Seattle Waterfront	N-nitrosodimethylamine	0:15	21.11	3.60	198.00	50.27
Seattle Waterfront	N-nitroso-di-n-propylamine	0:15	9.04	3.60	66.00	16.02

Appendix: English Sole Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Seattle Waterfront	N-nitrosodiphenylamine	0:15	5.37	3.60	13.00	3.29
Seattle Waterfront	opDDD	0:7	0.16	0.10	0.25	0.05
Seattle Waterfront	opDDT	0:4	0.25	0.22	0.31	0.04
Seattle Waterfront	PCB101	9:9	9.48	0.83	27.00	8.48
Seattle Waterfront	PCB105	9:9	0.88	0.17	2.30	0.62
Seattle Waterfront	PCB110	9:9	2.15	0.39	4.70	1.44
Seattle Waterfront	PCB118	9:9	3.81	1.40	7.40	2.06
Seattle Waterfront	PCB126	0:9	0.09	0.06	0.13	0.02
Seattle Waterfront	PCB128	9:9	1.66	0.31	3.10	0.93
Seattle Waterfront	PCB138	9:9	3.08	0.95	6.80	1.73
Seattle Waterfront	PCB153	9:9	7.98	2.30	18.00	4.82
Seattle Waterfront	PCB156	2:9	0.14	0.04	0.53	0.17
Seattle Waterfront	PCB157	0:9	0.06	0.04	0.09	0.01
Seattle Waterfront	PCB169	0:9	0.12	0.08	0.18	0.03
Seattle Waterfront	PCB170	7:9	1.18	0.06	2.90	0.89
Seattle Waterfront	PCB180	9:9	2.27	0.80	5.10	1.41
Seattle Waterfront	PCB189	0:9	0.06	0.04	0.09	0.01
Seattle Waterfront	PCB77	1:9	0.11	0.06	0.30	0.07
Seattle Waterfront	pentachlorophenol	0:15	123.53	11.00	265.00	119.99
Seattle Waterfront	phenanthrene	0:15	4.22	3.60	6.70	0.94
Seattle Waterfront	phenol	0:15	25.97	3.60	198.00	53.46
Seattle Waterfront	ppDDD	6:30	1.00	0.17	2.68	0.60
Seattle Waterfront	ppDDE	23:30	2.01	0.16	5.20	1.30
Seattle Waterfront	ppDDT	0:29	1.55	0.07	2.80	0.89
Seattle Waterfront	pyrene	0:15	4.58	3.60	10.80	1.93
Seattle Waterfront	Solids	40:40	16.97	14.40	20.00	1.27
Seattle Waterfront	TotalDDT	6:9	1.96	0.76	3.20	0.89
Seattle Waterfront	TotalPCB	9:9	40.76	11.00	91.00	23.68
Seattle Waterfront	Toxaphene	0:21	10.67	10.00	16.00	1.71
Shilshole	1,2,4-trichlorobenzene	0:3	3.60	3.60	3.60	0.00
Shilshole	1,2-dichlorobenzene	0:3	10.70	10.70	10.70	0.00
Shilshole	1,2-diphenylhydrazine	0:3	3.60	3.60	3.60	0.00
Shilshole	1,3-dichlorobenzene	0:3	10.70	10.70	10.70	0.00
Shilshole	1,4-dichlorobenzene	0:3	10.70	10.70	10.70	0.00
Shilshole	2,4,5-trichlorophenol	0:3	18.00	18.00	18.00	0.00
Shilshole	2,4,6-trichlorophenol	0:3	18.00	18.00	18.00	0.00
Shilshole	2,4-dichlorophenol	0:3	3.60	3.60	3.60	0.00
Shilshole	2,4-dimethylphenol	0:3	3.60	3.60	3.60	0.00
Shilshole	2,4-dinitrophenol	0:3	72.00	72.00	72.00	0.00
Shilshole	2,4-dinitrotoluene	0:3	18.00	18.00	18.00	0.00
Shilshole	2,6-dinitrotoluene	0:3	18.00	18.00	18.00	0.00
Shilshole	2-chloronaphthalene	0:3	10.70	10.70	10.70	0.00
Shilshole	2-chlorophenol	0:3	3.60	3.60	3.60	0.00
Shilshole	2-methylnaphthalene	0:3	3.60	3.60	3.60	0.00
Shilshole	2-methylphenol	0:3	3.60	3.60	3.60	0.00
Shilshole	2-nitroaniline	0:3	7.10	7.10	7.10	0.00
Shilshole	2-nitrophenol	0:3	3.60	3.60	3.60	0.00
Shilshole	3-nitroaniline	0:3	3.60	3.60	3.60	0.00
Shilshole	4,6-dinitro-o-cresol	0:3	53.00	53.00	53.00	0.00
Shilshole	4-bromophenylphenylether	0:3	18.00	18.00	18.00	0.00
Shilshole	4-chloro-3-methylphenol	0:3	3.60	3.60	3.60	0.00
Shilshole	4-chloroaniline	0:3	36.00	36.00	36.00	0.00
Shilshole	4-chlorophenylphenylether	0:3	3.60	3.60	3.60	0.00
Shilshole	4-methylphenol	1:3	4.63	3.60	6.70	1.79
Shilshole	4-nitroaniline	0:3	18.00	18.00	18.00	0.00

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Shilshole	4-nitrophenol	0:3	36.00	36.00	36.00	0.00
Shilshole	acenaphthene	0:3	3.60	3.60	3.60	0.00
Shilshole	acenaphthylene	0:3	3.60	3.60	3.60	0.00
Shilshole	Aldrin	0:5	0.50	0.50	0.50	0.00
Shilshole	alpha chlordane	0:5	0.50	0.50	0.50	0.00
Shilshole	alpha endosulfan	0:5	0.50	0.50	0.50	0.00
Shilshole	alpha hexachlorocyclohexane	0:5	0.50	0.50	0.50	0.00
Shilshole	aniline	0:3	53.30	53.30	53.30	0.00
Shilshole	anthracene	0:3	3.60	3.60	3.60	0.00
Shilshole	Aroclor 1016	0:5	19.20	18.00	20.00	1.10
Shilshole	Aroclor 1221	0:5	19.20	18.00	20.00	1.10
Shilshole	Aroclor 1232	0:5	19.20	18.00	20.00	1.10
Shilshole	Aroclor 1242	0:5	10.40	10.00	11.00	0.55
Shilshole	Aroclor 1248	0:5	2.12	2.00	2.30	0.16
Shilshole	Aroclor 1254	3:5	8.52	2.00	20.80	7.72
Shilshole	Aroclor 1260	5:5	13.56	7.00	20.50	5.23
Shilshole	arsenic	6:6	5.98	5.30	6.40	0.44
Shilshole	benzo(a)anthracene	0:3	10.70	10.70	10.70	0.00
Shilshole	benzo(a)pyrene	0:3	3.60	3.60	3.60	0.00
Shilshole	benzo(b)fluoranthene	0:3	10.70	10.70	10.70	0.00
Shilshole	benzo(g,h,i)perylene	0:3	10.70	10.70	10.70	0.00
Shilshole	benzo(k)fluoranthene	0:3	7.10	7.10	7.10	0.00
Shilshole	benzoic acid	2:3	74.67	36.00	134.00	52.17
Shilshole	benzyl alcohol	3:3	23.00	20.00	28.00	4.36
Shilshole	benzylbutylphthalate	0:3	10.70	10.70	10.70	0.00
Shilshole	beta endosulfan	0:5	1.00	1.00	1.00	0.00
Shilshole	beta hexachlorocyclohexane	0:5	0.50	0.50	0.50	0.00
Shilshole	bis(2-chloroethoxy)methane	0:3	3.60	3.60	3.60	0.00
Shilshole	bis(2-chloroethyl)ether	0:3	3.60	3.60	3.60	0.00
Shilshole	bis(2-chloroisopropyl)ether	0:3	10.70	10.70	10.70	0.00
Shilshole	bis(2-ethylhexyl)phthalate	0:3	3.60	3.60	3.60	0.00
Shilshole	carbazole	0:3	3.60	3.60	3.60	0.00
Shilshole	chrysene	0:3	3.60	3.60	3.60	0.00
Shilshole	copper	6:6	0.23	0.17	0.30	0.06
Shilshole	coprostanol	0:3	1800.00	1800.00	1800.00	0.00
Shilshole	delta hexachlorocyclohexane	0:5	0.50	0.50	0.50	0.00
Shilshole	dibenzo(a,h)anthracene	0:3	10.70	10.70	10.70	0.00
Shilshole	dibenzofuran	0:3	10.70	10.70	10.70	0.00
Shilshole	Dieldrin	0:5	1.00	1.00	1.00	0.00
Shilshole	diethylphthalate	0:3	3.60	3.60	3.60	0.00
Shilshole	dimethylphthalate	0:3	3.60	3.60	3.60	0.00
Shilshole	di-n-butylphthalate	0:3	3.60	3.60	3.60	0.00
Shilshole	di-n-octylphthalate	0:3	3.60	3.60	3.60	0.00
Shilshole	endosulfan sulfate	0:5	1.00	1.00	1.00	0.00
Shilshole	Endrin	0:5	1.00	1.00	1.00	0.00
Shilshole	endrin aldehyde	0:5	1.00	1.00	1.00	0.00
Shilshole	fluoranthene	0:3	3.60	3.60	3.60	0.00
Shilshole	fluorene	0:3	3.60	3.60	3.60	0.00
Shilshole	gamma chlordane	0:5	0.50	0.50	0.50	0.00
Shilshole	gamma hexachlorocyclohexane	0:5	0.50	0.50	0.50	0.00
Shilshole	Heptachlor	0:5	0.50	0.50	0.50	0.00
Shilshole	heptachlor epoxide	0:5	0.50	0.50	0.50	0.00
Shilshole	hexachlorobenzene	0:3	18.00	18.00	18.00	0.00
Shilshole	hexachlorobutadiene	0:3	10.70	10.70	10.70	0.00
Shilshole	hexachlorocyclopentadiene	0:3	36.00	36.00	36.00	0.00

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Shilshole	hexachloroethane	0:3	10.70	10.70	10.70	0.00
Shilshole	indeno(1,2,3-c,d)pyrene	0:3	18.00	18.00	18.00	0.00
Shilshole	isophorone	1:3	9.40	3.60	21.00	10.05
Shilshole	lead	1:6	0.03	0.02	0.04	0.01
Shilshole	Lipids	3:3	0.29	0.15	0.44	0.15
Shilshole	mercury	6:6	0.06	0.03	0.08	0.02
Shilshole	Methoxychlor	0:5	10.80	10.00	12.00	1.10
Shilshole	naphthalene	0:3	3.60	3.60	3.60	0.00
Shilshole	nitrobenzene	0:3	10.70	10.70	10.70	0.00
Shilshole	N-nitrosodimethylamine	0:3	3.60	3.60	3.60	0.00
Shilshole	N-nitroso-di-n-propylamine	0:3	3.60	3.60	3.60	0.00
Shilshole	N-nitrosodiphenylamine	0:3	3.60	3.60	3.60	0.00
Shilshole	pentachlorophenol	0:3	36.00	36.00	36.00	0.00
Shilshole	phenanthrene	0:3	3.60	3.60	3.60	0.00
Shilshole	phenol	0:3	3.60	3.60	3.60	0.00
Shilshole	ppDDD	0:5	1.00	1.00	1.00	0.00
Shilshole	ppDDE	5:5	1.83	0.90	2.80	0.78
Shilshole	ppDDT	0:5	2.16	2.00	2.40	0.22
Shilshole	pyrene	0:3	3.60	3.60	3.60	0.00
Shilshole	Solids	5:5	16.10	13.00	17.20	1.79
Shilshole	Toxaphene	0:5	11.60	10.00	14.00	2.19
Sinclair Inlet	1,2,4-trichlorobenzene	0:15	4.16	3.60	5.60	0.78
Sinclair Inlet	1,2-dichlorobenzene	0:15	10.00	5.60	13.00	2.36
Sinclair Inlet	1,2-diphenylhydrazine	0:15	7.44	3.60	22.00	7.54
Sinclair Inlet	1,3-dichlorobenzene	0:15	10.00	5.60	13.00	2.36
Sinclair Inlet	1,4-dichlorobenzene	0:15	11.08	10.70	13.00	0.62
Sinclair Inlet	2,4,5-trichlorophenol	0:15	23.60	18.00	44.00	10.61
Sinclair Inlet	2,4,6-trichlorophenol	0:15	23.60	18.00	44.00	10.61
Sinclair Inlet	2,4-dichlorophenol	0:15	5.24	3.60	11.00	2.99
Sinclair Inlet	2,4-dimethylphenol	0:15	17.72	3.60	50.00	17.81
Sinclair Inlet	2,4-dinitrophenol	0:15	63.60	22.00	84.00	21.92
Sinclair Inlet	2,4-dinitrotoluene	0:15	15.68	4.40	21.00	5.93
Sinclair Inlet	2,6-dinitrotoluene	0:15	15.68	4.40	21.00	5.93
Sinclair Inlet	2-chloronaphthalene	0:15	10.00	5.60	13.00	2.36
Sinclair Inlet	2-chlorophenol	0:15	7.44	3.60	22.00	7.54
Sinclair Inlet	2-methylnaphthalene	0:15	6.44	3.60	17.00	5.47
Sinclair Inlet	2-methylphenol	0:15	5.24	3.60	11.00	2.99
Sinclair Inlet	2-nitroaniline	0:15	12.41	7.00	33.00	10.66
Sinclair Inlet	2-nitrophenol	0:15	5.24	3.60	11.00	2.99
Sinclair Inlet	3,3-dichlorobenzidine	0:3	11.00	11.00	11.00	0.00
Sinclair Inlet	3-nitroaniline	0:15	9.64	3.60	33.00	12.09
Sinclair Inlet	4,6-dinitro-o-cresol	0:15	46.73	22.00	62.00	13.34
Sinclair Inlet	4-bromophenylphenylether	0:15	22.26	3.30	50.00	15.76
Sinclair Inlet	4-chloro-3-methylphenol	0:15	7.44	3.60	22.00	7.54
Sinclair Inlet	4-chloroaniline	0:15	34.00	22.00	42.00	6.55
Sinclair Inlet	4-chlorophenylphenylether	0:15	4.16	3.60	5.60	0.78
Sinclair Inlet	4-methylphenol	0:15	5.24	3.60	11.00	2.99
Sinclair Inlet	4-nitroaniline	0:15	21.40	18.00	33.00	6.09
Sinclair Inlet	4-nitrophenol	0:15	34.00	22.00	42.00	6.55
Sinclair Inlet	acenaphthene	0:15	3.92	3.60	4.40	0.34
Sinclair Inlet	acenaphthylene	0:15	4.16	3.60	5.60	0.78
Sinclair Inlet	Aldrin	0:21	0.50	0.50	0.60	0.02
Sinclair Inlet	alpha chlordane	4:21	0.60	0.50	1.70	0.27
Sinclair Inlet	alpha endosulfan	0:21	0.50	0.50	0.60	0.02
Sinclair Inlet	alpha hexachlorocyclohexane	0:21	0.50	0.50	0.60	0.02

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Sinclair Inlet	aniline	0:15	48.06	22.00	62.00	13.83
Sinclair Inlet	anthracene	0:15	4.16	3.60	5.60	0.78
Sinclair Inlet	Aroclor 1016	0:45	21.71	18.00	100.00	11.94
Sinclair Inlet	Aroclor 1221	0:45	21.71	18.00	100.00	11.94
Sinclair Inlet	Aroclor 1232	0:45	21.71	18.00	100.00	11.94
Sinclair Inlet	Aroclor 1242	0:45	11.00	10.00	50.00	5.97
Sinclair Inlet	Aroclor 1248	11:45	2.69	2.00	10.00	1.70
Sinclair Inlet	Aroclor 1254	45:45	50.21	3.90	201.00	43.59
Sinclair Inlet	Aroclor 1260	45:45	68.82	6.97	270.00	59.22
Sinclair Inlet	arsenic	17:17	10.86	6.50	14.00	2.18
Sinclair Inlet	benzo(a)anthracene	0:15	10.00	5.60	13.00	2.36
Sinclair Inlet	benzo(a)pyrene	0:15	5.24	3.60	11.00	2.99
Sinclair Inlet	benzo(b)fluoranthene	0:15	13.45	10.70	34.56	6.23
Sinclair Inlet	benzo(g,h,i)perylene	0:15	11.08	10.70	13.00	0.62
Sinclair Inlet	benzo(k)fluoranthene	0:15	9.21	7.00	17.00	4.05
Sinclair Inlet	benzoic acid	0:15	129.60	36.00	500.00	191.71
Sinclair Inlet	benzyl alcohol	8:15	20.91	3.60	82.31	22.39
Sinclair Inlet	benzylbutylphthalate	0:15	10.83	6.20	16.80	2.46
Sinclair Inlet	beta endosulfan	0:21	1.01	1.00	1.20	0.04
Sinclair Inlet	beta hexachlorocyclohexane	0:21	0.50	0.50	0.60	0.02
Sinclair Inlet	bis(2-chloroethoxy)methane	0:15	5.24	3.60	11.00	2.99
Sinclair Inlet	bis(2-chloroethyl)ether	0:15	4.16	3.60	5.60	0.78
Sinclair Inlet	bis(2-chloroisopropyl)ether	0:15	13.28	10.70	22.00	4.56
Sinclair Inlet	bis(2-ethylhexyl)phthalate	6:15	122.61	3.60	1183.00	297.68
Sinclair Inlet	carbazole	0:12	3.80	3.60	4.20	0.26
Sinclair Inlet	chrysene	0:15	4.16	3.60	5.60	0.78
Sinclair Inlet	copper	17:17	0.34	0.25	0.69	0.10
Sinclair Inlet	coprostanol	0:12	185.00	180.00	211.00	11.69
Sinclair Inlet	delta hexachlorocyclohexane	0:21	0.50	0.50	0.60	0.02
Sinclair Inlet	dibenzo(a,h)anthracene	0:15	12.28	10.70	17.00	2.52
Sinclair Inlet	dibenzofuran	0:15	11.08	10.70	13.00	0.62
Sinclair Inlet	Dieldrin	0:21	1.01	1.00	1.20	0.04
Sinclair Inlet	diethylphthalate	0:15	6.91	3.60	34.00	8.03
Sinclair Inlet	dimethylphthalate	0:15	3.70	3.30	4.20	0.31
Sinclair Inlet	di-n-butylphthalate	0:15	6.05	3.60	20.00	4.79
Sinclair Inlet	di-n-octylphthalate	0:15	4.16	3.60	5.60	0.78
Sinclair Inlet	endosulfan sulfate	0:21	1.01	1.00	1.20	0.04
Sinclair Inlet	Endrin	0:21	1.01	1.00	1.20	0.04
Sinclair Inlet	endrin aldehyde	0:21	1.01	1.00	1.20	0.04
Sinclair Inlet	fluoranthene	0:15	4.38	3.60	6.70	1.22
Sinclair Inlet	fluorene	0:15	4.16	3.60	5.60	0.78
Sinclair Inlet	gamma chlordane	3:21	0.54	0.50	1.00	0.12
Sinclair Inlet	gamma hexachlorocyclohexane	0:21	0.50	0.50	0.60	0.02
Sinclair Inlet	Heptachlor	0:21	0.50	0.50	0.60	0.02
Sinclair Inlet	heptachlor epoxide	0:21	0.50	0.50	0.60	0.02
Sinclair Inlet	hexachlorobenzene	0:24	9.96	0.03	21.00	8.93
Sinclair Inlet	hexachlorobutadiene	0:15	11.08	10.70	13.00	0.62
Sinclair Inlet	hexachlorocyclopentadiene	0:15	123.40	11.00	265.00	120.12
Sinclair Inlet	hexachloroethane	0:15	18.88	10.70	50.00	16.12
Sinclair Inlet	indeno(1,2,3-c,d)pyrene	0:15	17.00	11.00	21.00	3.27
Sinclair Inlet	isophorone	0:15	5.24	3.60	11.00	2.99
Sinclair Inlet	lead	23:26	0.04	0.02	0.07	0.01
Sinclair Inlet	Lipids	30:30	0.35	0.15	0.88	0.17
Sinclair Inlet	mercury	49:49	0.08	0.03	0.14	0.02
Sinclair Inlet	Methoxychlor	0:21	10.38	10.00	14.00	1.02

## Appendix: English Sole Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Sinclair Inlet	naphthalene	0:15	6.44	3.60	17.00	5.47
Sinclair Inlet	nitrobenzene	0:15	11.08	10.70	13.00	0.62
Sinclair Inlet	N-nitrosodimethylamine	0:15	9.64	3.60	33.00	12.09
Sinclair Inlet	N-nitroso-di-n-propylamine	0:15	5.24	3.60	11.00	2.99
Sinclair Inlet	N-nitrosodiphenylamine	0:15	5.24	3.60	11.00	2.99
Sinclair Inlet	opDDD	0:9	0.11	0.08	0.13	0.02
Sinclair Inlet	opDDT	0:4	0.13	0.12	0.15	0.01
Sinclair Inlet	PCB101	9:9	13.49	4.60	22.00	5.12
Sinclair Inlet	PCB105	9:9	1.23	0.52	2.30	0.53
Sinclair Inlet	PCB110	9:9	2.27	0.77	4.10	0.99
Sinclair Inlet	PCB118	9:9	3.89	1.20	6.10	1.37
Sinclair Inlet	PCB126	0:9	0.06	0.04	0.07	0.01
Sinclair Inlet	PCB128	9:9	1.73	0.56	3.00	0.76
Sinclair Inlet	PCB138	9:9	3.99	1.20	6.80	1.59
Sinclair Inlet	PCB153	9:9	9.57	3.30	17.00	4.08
Sinclair Inlet	PCB156	8:9	0.26	0.03	0.64	0.19
Sinclair Inlet	PCB157	2:9	0.07	0.03	0.26	0.08
Sinclair Inlet	PCB169	0:9	0.07	0.06	0.09	0.01
Sinclair Inlet	PCB170	9:9	2.23	0.63	4.00	1.08
Sinclair Inlet	PCB180	9:9	3.31	0.63	5.80	1.70
Sinclair Inlet	PCB189	0:9	0.04	0.03	0.05	0.01
Sinclair Inlet	PCB77	0:9	0.06	0.04	0.07	0.01
Sinclair Inlet	pentachlorophenol	0:15	123.40	11.00	265.00	120.12
Sinclair Inlet	phenanthrene	0:15	4.16	3.60	5.60	0.78
Sinclair Inlet	phenol	0:15	16.24	3.60	66.00	25.75
Sinclair Inlet	ppDDD	4:30	0.93	0.11	3.72	0.72
Sinclair Inlet	ppDDE	20:27	1.65	0.19	5.90	1.18
Sinclair Inlet	ppDDT	1:29	1.75	0.05	8.41	1.57
Sinclair Inlet	pyrene	0:15	4.16	3.60	5.60	0.78
Sinclair Inlet	Solids	46:46	17.30	12.40	20.40	1.47
Sinclair Inlet	TotalDDT	6:9	1.25	0.19	1.60	0.55
Sinclair Inlet	TotalPCB	9:9	54.46	15.90	113.00	27.04
Sinclair Inlet	Toxaphene	0:21	10.62	10.00	16.00	1.63
Strait of Georgia	1,2,4-trichlorobenzene	0:15	4.83	3.60	12.80	2.64
Strait of Georgia	1,2-dichlorobenzene	0:15	10.55	6.40	12.80	1.38
Strait of Georgia	1,2-diphenylhydrazine	0:15	8.76	3.60	35.00	10.66
Strait of Georgia	1,3-dichlorobenzene	0:15	10.55	6.40	12.80	1.38
Strait of Georgia	1,4-dichlorobenzene	0:15	11.56	10.70	17.60	1.81
Strait of Georgia	2,4,5-trichlorophenol	0:15	36.07	18.00	204.00	48.91
Strait of Georgia	2,4,6-trichlorophenol	0:15	36.07	18.00	204.00	48.91
Strait of Georgia	2,4-dichlorophenol	0:15	6.76	3.60	26.00	6.80
Strait of Georgia	2,4-dimethylphenol	0:15	19.24	3.60	50.00	17.72
Strait of Georgia	2,4-dinitrophenol	0:15	68.60	26.00	104.00	17.60
Strait of Georgia	2,4-dinitrotoluene	0:15	16.57	5.10	20.40	4.33
Strait of Georgia	2,6-dinitrotoluene	0:15	16.57	5.10	20.40	4.33
Strait of Georgia	2-chloronaphthalene	0:15	11.40	6.40	25.60	4.12
Strait of Georgia	2-chlorophenol	0:15	10.49	3.60	52.00	14.92
Strait of Georgia	2-methylnaphthalene	0:15	8.49	3.60	38.00	10.57
Strait of Georgia	2-methylphenol	0:15	6.76	3.60	26.00	6.80
Strait of Georgia	2-nitroaniline	0:15	21.86	7.00	152.00	38.54
Strait of Georgia	2-nitrophenol	0:15	6.76	3.60	26.00	6.80
Strait of Georgia	3,3-dichlorobenzidine	0:3	14.67	13.00	18.00	2.89
Strait of Georgia	3-nitroaniline	0:15	19.16	3.60	152.00	39.65
Strait of Georgia	4,6-dinitro-o-cresol	0:15	47.00	26.00	53.00	9.62
Strait of Georgia	4-bromophenylphenylether	0:15	22.06	3.80	50.00	15.59



Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Strait of Georgia	4-chloro-3-methylphenol	0:15	10.49	3.60	52.00	14.92
Strait of Georgia	4-chloroaniline	0:15	36.33	26.00	52.00	5.04
Strait of Georgia	4-chlorophenylphenylether	0:15	5.68	3.60	25.60	5.70
Strait of Georgia	4-methylphenol	1:15	6.79	3.60	26.00	6.79
Strait of Georgia	4-nitroaniline	0:15	30.60	18.00	152.00	35.05
Strait of Georgia	4-nitrophenol	0:15	39.80	26.00	104.00	17.95
Strait of Georgia	acenaphthene	0:15	5.13	3.60	20.40	4.32
Strait of Georgia	acenaphthylene	0:15	5.68	3.60	25.60	5.70
Strait of Georgia	Aldrin	0:21	0.50	0.50	0.50	0.00
Strait of Georgia	alpha chlordane	0:21	0.50	0.50	0.50	0.00
Strait of Georgia	alpha endosulfan	0:21	0.50	0.50	0.50	0.00
Strait of Georgia	alpha hexachlorocyclohexane	0:21	0.50	0.50	0.50	0.00
Strait of Georgia	aniline	0:15	49.99	26.00	53.30	8.10
Strait of Georgia	anthracene	0:15	4.40	3.60	8.80	1.55
Strait of Georgia	Aroclor 1016	0:21	19.71	18.00	20.00	0.72
Strait of Georgia	Aroclor 1221	0:21	19.71	18.00	20.00	0.72
Strait of Georgia	Aroclor 1232	0:21	19.71	18.00	20.00	0.72
Strait of Georgia	Aroclor 1242	0:21	10.14	10.00	11.00	0.36
Strait of Georgia	Aroclor 1248	1:21	2.26	2.00	6.52	0.98
Strait of Georgia	Aroclor 1254	7:21	3.06	2.00	8.08	1.77
Strait of Georgia	Aroclor 1260	10:21	2.77	1.80	6.42	1.15
Strait of Georgia	arsenic	18:18	4.87	3.30	8.62	1.42
Strait of Georgia	benzo(a)anthracene	0:15	10.12	6.40	11.00	1.61
Strait of Georgia	benzo(a)pyrene	0:15	5.89	3.60	18.00	4.67
Strait of Georgia	benzo(b)fluoranthene	0:15	12.95	10.70	26.00	4.60
Strait of Georgia	benzo(g,h,i)perylene	0:15	11.61	10.70	18.00	1.93
Strait of Georgia	benzo(k)fluoranthene	0:15	9.93	7.00	26.00	6.10
Strait of Georgia	benzoic acid	3:15	158.13	36.00	500.00	191.64
Strait of Georgia	benzyl alcohol	6:15	17.13	3.60	41.50	14.12
Strait of Georgia	benzylbutylphthalate	3:15	15.93	10.70	42.90	10.15
Strait of Georgia	beta endosulfan	0:21	1.00	1.00	1.00	0.00
Strait of Georgia	beta hexachlorocyclohexane	0:21	0.50	0.50	0.50	0.00
Strait of Georgia	bis(2-chloroethoxy)methane	0:15	6.76	3.60	26.00	6.80
Strait of Georgia	bis(2-chloroethyl)ether	0:15	4.83	3.60	12.80	2.64
Strait of Georgia	bis(2-chloroisopropyl)ether	0:15	16.21	10.70	52.00	12.17
Strait of Georgia	bis(2-ethylhexyl)phthalate	6:15	55.71	3.60	180.00	57.82
Strait of Georgia	carbazole	0:12	3.70	3.60	4.00	0.18
Strait of Georgia	chrysene	0:15	4.40	3.60	8.80	1.55
Strait of Georgia	copper	18:18	0.31	0.20	1.10	0.21
Strait of Georgia	coprostanol	0:12	180.00	180.00	180.00	0.00
Strait of Georgia	delta hexachlorocyclohexane	0:21	0.50	0.50	0.50	0.00
Strait of Georgia	dibenzo(a,h)anthracene	0:15	12.95	10.70	26.00	4.60
Strait of Georgia	dibenzofuran	0:15	14.21	10.70	52.00	10.62
Strait of Georgia	Dieldrin	0:21	1.00	1.00	1.00	0.00
Strait of Georgia	diethylphthalate	0:15	11.09	3.60	66.00	17.56
Strait of Georgia	dimethylphthalate	0:15	4.58	3.60	15.20	2.97
Strait of Georgia	di-n-butylphthalate	0:15	7.31	3.60	22.00	7.27
Strait of Georgia	di-n-octylphthalate	0:15	4.40	3.60	8.80	1.55
Strait of Georgia	endosulfan sulfate	0:21	1.00	1.00	1.00	0.00
Strait of Georgia	Endrin	0:21	1.00	1.00	1.00	0.00
Strait of Georgia	endrin aldehyde	0:21	1.00	1.00	1.00	0.00
Strait of Georgia	fluoranthene	0:15	4.72	3.60	11.00	2.24
Strait of Georgia	fluorene	0:15	5.68	3.60	25.60	5.70
Strait of Georgia	gamma chlordane	2:21	0.52	0.50	0.90	0.09
Strait of Georgia	gamma hexachlorocyclohexane	0:21	0.50	0.50	0.50	0.00

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Strait of Georgia	Heptachlor	0:21	0.50	0.50	0.50	0.00
Strait of Georgia	heptachlor epoxide	0:21	0.50	0.50	0.50	0.00
Strait of Georgia	hexachlorobenzene	0:24	9.92	0.04	18.00	8.56
Strait of Georgia	hexachlorobutadiene	0:15	12.48	10.70	26.00	4.19
Strait of Georgia	hexachlorocyclopentadiene	0:15	125.93	13.00	265.00	117.85
Strait of Georgia	hexachloroethane	0:15	20.28	10.70	50.00	15.92
Strait of Georgia	indeno(1,2,3-c,d)pyrene	0:15	17.33	13.00	18.00	1.76
Strait of Georgia	isophorone	0:15	6.76	3.60	26.00	6.80
Strait of Georgia	lead	2:21	0.03	0.02	0.08	0.01
Strait of Georgia	Lipids	24:24	0.28	0.14	0.70	0.13
Strait of Georgia	mercury	26:26	0.05	0.03	0.09	0.02
Strait of Georgia	Methoxychlor	0:21	10.29	10.00	12.00	0.72
Strait of Georgia	naphthalene	0:15	8.49	3.60	38.00	10.57
Strait of Georgia	nitrobenzene	0:15	12.48	10.70	26.00	4.19
Strait of Georgia	N-nitrosodimethylamine	0:15	14.09	3.60	76.00	22.70
Strait of Georgia	N-nitroso-di-n-propylamine	0:15	6.76	3.60	26.00	6.80
Strait of Georgia	N-nitrosodiphenylamine	0:15	5.89	3.60	18.00	4.67
Strait of Georgia	opDDD	0:9	0.13	0.10	0.17	0.02
Strait of Georgia	opDDT	0:5	0.17	0.13	0.21	0.03
Strait of Georgia	PCB101	9:9	0.45	0.25	0.68	0.14
Strait of Georgia	PCB105	0:9	0.05	0.04	0.06	0.01
Strait of Georgia	PCB110	5:9	0.10	0.04	0.27	0.07
Strait of Georgia	PCB118	7:9	0.37	0.06	0.61	0.20
Strait of Georgia	PCB126	0:9	0.07	0.06	0.09	0.01
Strait of Georgia	PCB128	4:9	0.15	0.05	0.72	0.22
Strait of Georgia	PCB138	4:9	0.15	0.04	0.49	0.16
Strait of Georgia	PCB153	8:9	0.29	0.05	0.48	0.12
Strait of Georgia	PCB156	0:9	0.05	0.03	0.06	0.01
Strait of Georgia	PCB157	0:9	0.05	0.03	0.06	0.01
Strait of Georgia	PCB169	0:9	0.10	0.07	0.12	0.02
Strait of Georgia	PCB170	0:9	0.05	0.04	0.06	0.01
Strait of Georgia	PCB180	1:9	0.05	0.04	0.09	0.02
Strait of Georgia	PCB189	0:9	0.05	0.04	0.07	0.01
Strait of Georgia	PCB77	0:9	0.07	0.06	0.10	0.01
Strait of Georgia	pentachlorophenol	0:15	123.33	13.00	265.00	120.01
Strait of Georgia	phenanthrene	0:15	4.40	3.60	8.80	1.55
Strait of Georgia	phenol	0:15	20.16	3.60	106.00	34.70
Strait of Georgia	ppDDD	0:30	0.80	0.12	1.30	0.39
Strait of Georgia	ppDDE	9:30	0.87	0.11	2.14	0.45
Strait of Georgia	ppDDT	0:30	1.48	0.06	2.40	0.90
Strait of Georgia	pyrene	0:15	4.40	3.60	8.80	1.55
Strait of Georgia	Solids	34:34	17.17	14.45	19.53	1.19
Strait of Georgia	TotalDDT	4:9	0.56	0.42	0.87	0.21
Strait of Georgia	TotalPCB	9:9	6.55	0.68	42.64	13.56
Strait of Georgia	Toxaphene	0:21	10.57	10.00	14.00	1.43
Strait of Juan de Fuca	1,2,4-trichlorobenzene	0:6	3.80	3.60	4.00	0.22
Strait of Juan de Fuca	1,2-dichlorobenzene	0:6	10.85	10.70	11.00	0.16
Strait of Juan de Fuca	1,2-diphenylhydrazine	0:6	3.80	3.60	4.00	0.22
Strait of Juan de Fuca	1,3-dichlorobenzene	0:6	10.85	10.70	11.00	0.16
Strait of Juan de Fuca	1,4-dichlorobenzene	0:6	10.85	10.70	11.00	0.16
Strait of Juan de Fuca	2,4,5-trichlorophenol	0:6	18.00	18.00	18.00	0.00
Strait of Juan de Fuca	2,4,6-trichlorophenol	0:6	18.00	18.00	18.00	0.00
Strait of Juan de Fuca	2,4-dichlorophenol	0:6	3.80	3.60	4.00	0.22
Strait of Juan de Fuca	2,4-dimethylphenol	0:6	11.80	3.60	20.00	8.98
Strait of Juan de Fuca	2,4-dinitrophenol	0:6	72.00	72.00	72.00	0.00

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Strait of Juan de Fuca	2,4-dinitrotoluene	0:6	18.00	18.00	18.00	0.00
Strait of Juan de Fuca	2,6-dinitrotoluene	0:6	18.00	18.00	18.00	0.00
Strait of Juan de Fuca	2-chloronaphthalene	0:6	10.85	10.70	11.00	0.16
Strait of Juan de Fuca	2-chlorophenol	0:6	3.80	3.60	4.00	0.22
Strait of Juan de Fuca	2-methylnaphthalene	0:6	3.80	3.60	4.00	0.22
Strait of Juan de Fuca	2-methylphenol	0:6	3.80	3.60	4.00	0.22
Strait of Juan de Fuca	2-nitroaniline	0:6	7.05	7.00	7.10	0.05
Strait of Juan de Fuca	2-nitrophenol	0:6	3.80	3.60	4.00	0.22
Strait of Juan de Fuca	3-nitroaniline	0:6	3.80	3.60	4.00	0.22
Strait of Juan de Fuca	4,6-dinitro-o-cresol	0:6	51.50	50.00	53.00	1.64
Strait of Juan de Fuca	4-bromophenylphenylether	0:6	19.00	18.00	20.00	1.10
Strait of Juan de Fuca	4-chloro-3-methylphenol	0:6	3.80	3.60	4.00	0.22
Strait of Juan de Fuca	4-chloroaniline	0:6	36.00	36.00	36.00	0.00
Strait of Juan de Fuca	4-chlorophenylphenylether	0:6	3.80	3.60	4.00	0.22
Strait of Juan de Fuca	4-methylphenol	0:6	3.80	3.60	4.00	0.22
Strait of Juan de Fuca	4-nitroaniline	0:6	18.00	18.00	18.00	0.00
Strait of Juan de Fuca	4-nitrophenol	0:6	36.00	36.00	36.00	0.00
Strait of Juan de Fuca	acenaphthene	0:6	3.80	3.60	4.00	0.22
Strait of Juan de Fuca	acenaphthylene	0:6	3.80	3.60	4.00	0.22
Strait of Juan de Fuca	Aldrin	0:6	0.50	0.50	0.50	0.00
Strait of Juan de Fuca	alpha chlordane	0:6	0.50	0.50	0.50	0.00
Strait of Juan de Fuca	alpha endosulfan	0:6	0.50	0.50	0.50	0.00
Strait of Juan de Fuca	alpha hexachlorocyclohexane	0:6	0.50	0.50	0.50	0.00
Strait of Juan de Fuca	aniline	0:6	53.15	53.00	53.30	0.16
Strait of Juan de Fuca	anthracene	0:6	3.80	3.60	4.00	0.22
Strait of Juan de Fuca	Aroclor 1016	0:6	20.00	20.00	20.00	0.00
Strait of Juan de Fuca	Aroclor 1221	0:6	20.00	20.00	20.00	0.00
Strait of Juan de Fuca	Aroclor 1232	0:6	20.00	20.00	20.00	0.00
Strait of Juan de Fuca	Aroclor 1242	0:6	10.00	10.00	10.00	0.00
Strait of Juan de Fuca	Aroclor 1248	0:6	2.00	2.00	2.00	0.00
Strait of Juan de Fuca	Aroclor 1254	3:6	3.63	2.00	6.66	1.97
Strait of Juan de Fuca	Aroclor 1260	4:6	3.29	2.00	5.44	1.32
Strait of Juan de Fuca	arsenic	6:6	9.64	6.90	12.30	2.04
Strait of Juan de Fuca	benzo(a)anthracene	0:6	10.85	10.70	11.00	0.16
Strait of Juan de Fuca	benzo(a)pyrene	0:6	3.80	3.60	4.00	0.22
Strait of Juan de Fuca	benzo(b)fluoranthene	0:6	10.85	10.70	11.00	0.16
Strait of Juan de Fuca	benzo(g,h,i)perylene	0:6	10.85	10.70	11.00	0.16
Strait of Juan de Fuca	benzo(k)fluoranthene	0:6	7.05	7.00	7.10	0.05
Strait of Juan de Fuca	benzoic acid	1:6	45.00	36.00	90.00	22.05
Strait of Juan de Fuca	benzyl alcohol	1:6	8.08	3.60	29.70	10.59
Strait of Juan de Fuca	benzylbutylphthalate	0:6	10.85	10.70	11.00	0.16
Strait of Juan de Fuca	beta endosulfan	0:6	1.00	1.00	1.00	0.00
Strait of Juan de Fuca	beta hexachlorocyclohexane	0:6	0.50	0.50	0.50	0.00
Strait of Juan de Fuca	bis(2-chloroethoxy)methane	0:6	3.80	3.60	4.00	0.22
Strait of Juan de Fuca	bis(2-chloroethyl)ether	0:6	3.80	3.60	4.00	0.22
Strait of Juan de Fuca	bis(2-chloroisopropyl)ether	0:6	10.85	10.70	11.00	0.16
Strait of Juan de Fuca	bis(2-ethylhexyl)phthalate	3:6	55.10	3.60	180.00	66.52
Strait of Juan de Fuca	carbazole	0:6	3.80	3.60	4.00	0.22
Strait of Juan de Fuca	chrysene	0:6	3.80	3.60	4.00	0.22
Strait of Juan de Fuca	copper	6:6	0.37	0.29	0.46	0.08
Strait of Juan de Fuca	coprostanol	0:6	180.00	180.00	180.00	0.00
Strait of Juan de Fuca	delta hexachlorocyclohexane	0:6	0.50	0.50	0.50	0.00
Strait of Juan de Fuca	dibenzo(a,h)anthracene	0:6	10.85	10.70	11.00	0.16
Strait of Juan de Fuca	dibenzofuran	0:6	10.85	10.70	11.00	0.16
Strait of Juan de Fuca	Dieldrin	0:6	1.00	1.00	1.00	0.00

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Strait of Juan de Fuca	diethylphthalate	0:6	3.80	3.60	4.00	0.22
Strait of Juan de Fuca	dimethylphthalate	0:6	3.80	3.60	4.00	0.22
Strait of Juan de Fuca	di-n-butylphthalate	1:6	6.53	3.60	20.00	6.60
Strait of Juan de Fuca	di-n-octylphthalate	0:6	3.80	3.60	4.00	0.22
Strait of Juan de Fuca	endosulfan sulfate	0:6	1.00	1.00	1.00	0.00
Strait of Juan de Fuca	Endrin	0:6	1.00	1.00	1.00	0.00
Strait of Juan de Fuca	endrin aldehyde	0:6	1.00	1.00	1.00	0.00
Strait of Juan de Fuca	fluoranthene	0:6	3.80	3.60	4.00	0.22
Strait of Juan de Fuca	fluorene	0:6	3.80	3.60	4.00	0.22
Strait of Juan de Fuca	gamma chlordane	0:6	0.50	0.50	0.50	0.00
Strait of Juan de Fuca	gamma hexachlorocyclohexane	0:6	0.50	0.50	0.50	0.00
Strait of Juan de Fuca	Heptachlor	0:6	0.50	0.50	0.50	0.00
Strait of Juan de Fuca	heptachlor epoxide	0:6	0.50	0.50	0.50	0.00
Strait of Juan de Fuca	hexachlorobenzene	0:6	18.00	18.00	18.00	0.00
Strait of Juan de Fuca	hexachlorobutadiene	0:6	10.85	10.70	11.00	0.16
Strait of Juan de Fuca	hexachlorocyclopentadiene	0:6	150.50	36.00	265.00	125.43
Strait of Juan de Fuca	hexachloroethane	0:6	30.35	10.70	50.00	21.53
Strait of Juan de Fuca	indeno(1,2,3-c,d)pyrene	0:6	18.00	18.00	18.00	0.00
Strait of Juan de Fuca	isophorone	0:6	3.80	3.60	4.00	0.22
Strait of Juan de Fuca	lead	0:6	0.03	0.03	0.03	0.00
Strait of Juan de Fuca	Lipids	6:6	0.30	0.26	0.35	0.03
Strait of Juan de Fuca	mercury	6:6	0.05	0.04	0.06	0.01
Strait of Juan de Fuca	Methoxychlor	0:6	10.00	10.00	10.00	0.00
Strait of Juan de Fuca	naphthalene	0:6	3.80	3.60	4.00	0.22
Strait of Juan de Fuca	nitrobenzene	0:6	10.85	10.70	11.00	0.16
Strait of Juan de Fuca	N-nitrosodimethylamine	0:6	3.80	3.60	4.00	0.22
Strait of Juan de Fuca	N-nitroso-di-n-propylamine	0:6	3.80	3.60	4.00	0.22
Strait of Juan de Fuca	N-nitrosodiphenylamine	0:6	3.80	3.60	4.00	0.22
Strait of Juan de Fuca	pentachlorophenol	0:6	150.50	36.00	265.00	125.43
Strait of Juan de Fuca	phenanthrene	0:6	3.80	3.60	4.00	0.22
Strait of Juan de Fuca	phenol	0:6	3.80	3.60	4.00	0.22
Strait of Juan de Fuca	ppDDD	0:6	1.00	1.00	1.00	0.00
Strait of Juan de Fuca	ppDDE	2:6	1.13	1.00	1.47	0.20
Strait of Juan de Fuca	ppDDT	0:6	2.00	2.00	2.00	0.00
Strait of Juan de Fuca	pyrene	0:6	3.80	3.60	4.00	0.22
Strait of Juan de Fuca	Solids	4:4	17.58	16.50	19.00	1.04
Strait of Juan de Fuca	Toxaphene	0:6	10.00	10.00	10.00	0.00
Thea Foss Waterway	1,2,4-trichlorobenzene	0:15	4.15	3.60	5.60	0.75
Thea Foss Waterway	1,2-dichlorobenzene	0:15	9.97	5.40	12.52	2.38
Thea Foss Waterway	1,2-diphenylhydrazine	0:15	7.44	3.60	22.00	7.54
Thea Foss Waterway	1,3-dichlorobenzene	0:15	9.97	5.40	12.52	2.38
Thea Foss Waterway	1,4-dichlorobenzene	0:15	11.06	10.70	12.52	0.61
Thea Foss Waterway	2,4,5-trichlorophenol	0:15	29.41	18.00	132.00	29.72
Thea Foss Waterway	2,4,6-trichlorophenol	0:15	26.47	18.00	88.00	19.17
Thea Foss Waterway	2,4-dichlorophenol	0:15	5.24	3.60	11.00	2.99
Thea Foss Waterway	2,4-dimethylphenol	0:15	17.72	3.60	50.00	17.81
Thea Foss Waterway	2,4-dinitrophenol	0:15	65.10	22.00	84.24	19.58
Thea Foss Waterway	2,4-dinitrotoluene	0:15	15.97	4.30	21.06	5.44
Thea Foss Waterway	2,6-dinitrotoluene	0:15	15.97	4.30	21.06	5.44
Thea Foss Waterway	2-chloronaphthalene	0:15	10.34	5.40	12.52	2.06
Thea Foss Waterway	2-chlorophenol	0:15	7.44	3.60	22.00	7.54
Thea Foss Waterway	2-methylnaphthalene	0:15	6.37	3.60	17.00	5.34
Thea Foss Waterway	2-methylphenol	0:15	5.24	3.60	11.00	2.99
Thea Foss Waterway	2-nitroaniline	0:15	16.82	7.00	99.00	24.45
Thea Foss Waterway	2-nitrophenol	0:15	5.24	3.60	11.00	2.99

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Thea Foss Waterway	3,3-dichlorobenzidine	0:3	18.33	11.00	33.00	12.70
Thea Foss Waterway	3-nitroaniline	0:15	14.04	3.60	99.00	25.63
Thea Foss Waterway	4,6-dinitro-o-cresol	0:15	46.80	22.00	62.01	13.42
Thea Foss Waterway	4-bromophenylphenylether	0:15	22.27	3.30	50.00	15.76
Thea Foss Waterway	4-chloro-3-methylphenol	0:15	7.44	3.60	22.00	7.54
Thea Foss Waterway	4-chloroaniline	0:15	34.02	22.00	42.12	6.57
Thea Foss Waterway	4-chlorophenylphenylether	0:15	4.52	3.60	11.20	1.95
Thea Foss Waterway	4-methylphenol	0:15	5.24	3.60	11.00	2.99
Thea Foss Waterway	4-nitroaniline	0:15	25.81	18.00	99.00	20.90
Thea Foss Waterway	4-nitrophenol	0:15	35.48	22.00	44.00	6.13
Thea Foss Waterway	acenaphthene	0:15	4.21	3.60	8.80	1.31
Thea Foss Waterway	acenaphthylene	0:15	4.52	3.60	11.20	1.95
Thea Foss Waterway	Aldrin	0:21	0.50	0.50	0.50	0.00
Thea Foss Waterway	alpha chlordane	3:21	0.65	0.50	1.90	0.40
Thea Foss Waterway	alpha endosulfan	0:21	0.50	0.50	0.50	0.00
Thea Foss Waterway	alpha hexachlorocyclohexane	0:21	0.50	0.50	0.50	0.00
Thea Foss Waterway	aniline	0:15	48.13	22.00	62.36	13.89
Thea Foss Waterway	anthracene	0:15	4.15	3.60	5.60	0.75
Thea Foss Waterway	Aroclor 1016	0:55	20.55	18.00	35.00	2.58
Thea Foss Waterway	Aroclor 1221	0:55	20.55	18.00	35.00	2.58
Thea Foss Waterway	Aroclor 1232	0:55	20.55	18.00	35.00	2.58
Thea Foss Waterway	Aroclor 1242	0:55	10.38	10.00	17.00	1.22
Thea Foss Waterway	Aroclor 1248	2:55	2.22	2.00	7.13	0.78
Thea Foss Waterway	Aroclor 1254	55:55	31.58	5.40	118.00	21.99
Thea Foss Waterway	Aroclor 1260	55:55	30.25	6.00	109.00	20.18
Thea Foss Waterway	arsenic	18:18	6.70	3.83	9.90	1.46
Thea Foss Waterway	benzo(a)anthracene	0:15	10.72	5.40	16.80	2.65
Thea Foss Waterway	benzo(a)pyrene	0:15	5.24	3.60	11.00	2.99
Thea Foss Waterway	benzo(b)fluoranthene	0:15	12.20	10.70	17.00	2.40
Thea Foss Waterway	benzo(g,h,i)perylene	0:15	11.06	10.70	12.52	0.61
Thea Foss Waterway	benzo(k)fluoranthene	0:15	9.15	7.00	17.00	3.92
Thea Foss Waterway	benzoic acid	2:15	160.27	36.00	500.00	198.08
Thea Foss Waterway	benzyl alcohol	7:15	21.82	3.60	71.98	23.98
Thea Foss Waterway	benzylbutylphthalate	0:15	11.13	6.20	16.80	2.10
Thea Foss Waterway	beta endosulfan	0:21	1.00	1.00	1.00	0.00
Thea Foss Waterway	beta hexachlorocyclohexane	0:21	0.50	0.50	0.50	0.00
Thea Foss Waterway	bis(2-chloroethoxy)methane	0:15	5.24	3.60	11.00	2.99
Thea Foss Waterway	bis(2-chloroethyl)ether	0:15	4.15	3.60	5.60	0.75
Thea Foss Waterway	bis(2-chloroisopropyl)ether	0:15	13.26	10.70	22.00	4.56
Thea Foss Waterway	bis(2-ethylhexyl)phthalate	1:15	39.84	3.60	185.00	54.86
Thea Foss Waterway	carbazole	0:12	3.80	3.60	4.21	0.26
Thea Foss Waterway	chrysene	0:15	4.89	3.60	16.80	3.35
Thea Foss Waterway	copper	18:18	0.30	0.18	0.55	0.10
Thea Foss Waterway	coprostanol	0:12	320.10	180.00	1800.00	466.20
Thea Foss Waterway	delta hexachlorocyclohexane	0:21	0.50	0.50	0.50	0.00
Thea Foss Waterway	dibenzo(a,h)anthracene	0:15	12.20	10.70	17.00	2.40
Thea Foss Waterway	dibenzofuran	0:15	12.53	10.70	33.00	5.70
Thea Foss Waterway	Dieldrin	0:21	1.00	1.00	1.00	0.00
Thea Foss Waterway	diethylphthalate	0:15	10.51	3.60	66.00	17.27
Thea Foss Waterway	dimethylphthalate	0:15	3.92	3.30	6.60	0.80
Thea Foss Waterway	di-n-butylphthalate	2:15	9.57	3.60	30.00	8.91
Thea Foss Waterway	di-n-octylphthalate	0:15	4.15	3.60	5.60	0.75
Thea Foss Waterway	endosulfan sulfate	0:21	1.00	1.00	1.00	0.00
Thea Foss Waterway	Endrin	0:21	1.00	1.00	1.00	0.00
Thea Foss Waterway	endrin aldehyde	0:21	1.00	1.00	1.00	0.00

Appendix: English Sole Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Thea Foss Waterway	fluoranthene	0:15	4.37	3.60	6.70	1.20
Thea Foss Waterway	fluorene	0:15	4.52	3.60	11.20	1.95
Thea Foss Waterway	gamma chlordane	4:21	0.60	0.50	1.50	0.27
Thea Foss Waterway	gamma hexachlorocyclohexane	0:21	0.50	0.50	0.50	0.00
Thea Foss Waterway	Heptachlor	0:21	0.50	0.50	0.50	0.00
Thea Foss Waterway	heptachlor epoxide	0:21	0.50	0.50	0.50	0.00
Thea Foss Waterway	hexachlorobenzene	1:24	9.98	0.03	21.06	8.92
Thea Foss Waterway	hexachlorobutadiene	0:15	11.06	10.70	12.52	0.61
Thea Foss Waterway	hexachlorocyclopentadiene	0:15	124.15	11.00	265.00	119.41
Thea Foss Waterway	hexachloroethane	0:15	18.86	10.70	50.00	16.13
Thea Foss Waterway	indeno(1,2,3-c,d)pyrene	0:15	17.01	11.00	21.06	3.28
Thea Foss Waterway	isophorone	0:15	5.24	3.60	11.00	2.99
Thea Foss Waterway	lead	1:21	0.03	0.02	0.04	0.01
Thea Foss Waterway	Lipids	27:27	0.28	0.14	0.50	0.11
Thea Foss Waterway	mercury	49:49	0.07	0.03	0.12	0.02
Thea Foss Waterway	Methoxychlor	0:21	10.29	10.00	12.00	0.72
Thea Foss Waterway	naphthalene	0:15	6.37	3.60	17.00	5.34
Thea Foss Waterway	nitrobenzene	0:15	11.06	10.70	12.52	0.61
Thea Foss Waterway	N-nitrosodimethylamine	0:15	9.64	3.60	33.00	12.09
Thea Foss Waterway	N-nitroso-di-n-propylamine	0:15	5.24	3.60	11.00	2.99
Thea Foss Waterway	N-nitrosodiphenylamine	0:15	5.24	3.60	11.00	2.99
Thea Foss Waterway	opDDD	0:9	0.16	0.07	0.29	0.08
Thea Foss Waterway	opDDT	0:6	0.21	0.09	0.34	0.09
Thea Foss Waterway	PCB101	9:9	6.73	1.30	15.00	4.16
Thea Foss Waterway	PCB105	6:8	0.82	0.04	1.60	0.57
Thea Foss Waterway	PCB110	9:9	1.45	0.35	3.10	0.81
Thea Foss Waterway	PCB118	9:9	3.16	0.96	6.30	1.91
Thea Foss Waterway	PCB126	0:9	0.09	0.04	0.15	0.04
Thea Foss Waterway	PCB128	9:9	0.87	0.26	2.30	0.72
Thea Foss Waterway	PCB138	9:9	2.20	0.66	5.10	1.35
Thea Foss Waterway	PCB153	9:9	4.77	1.20	11.00	2.96
Thea Foss Waterway	PCB156	2:9	0.10	0.04	0.28	0.08
Thea Foss Waterway	PCB157	1:9	0.08	0.03	0.27	0.07
Thea Foss Waterway	PCB169	0:9	0.12	0.05	0.21	0.05
Thea Foss Waterway	PCB170	5:9	0.59	0.03	2.40	0.78
Thea Foss Waterway	PCB180	9:9	1.85	0.51	5.00	1.34
Thea Foss Waterway	PCB189	0:9	0.06	0.03	0.11	0.03
Thea Foss Waterway	PCB77	0:9	0.09	0.04	0.16	0.04
Thea Foss Waterway	pentachlorophenol	0:15	123.42	11.00	265.00	120.11
Thea Foss Waterway	phenanthrene	0:15	4.15	3.60	5.60	0.75
Thea Foss Waterway	phenol	0:15	16.24	3.60	66.00	25.75
Thea Foss Waterway	ppDDD	12:30	1.27	0.18	4.77	1.06
Thea Foss Waterway	ppDDE	23:30	2.51	0.11	8.53	2.04
Thea Foss Waterway	ppDDT	0:30	1.49	0.08	2.40	0.89
Thea Foss Waterway	pyrene	0:15	4.89	3.60	16.80	3.35
Thea Foss Waterway	Solids	39:39	16.06	11.70	19.08	1.69
Thea Foss Waterway	TotalDDT	5:9	1.91	0.85	3.00	1.00
Thea Foss Waterway	TotalPCB	9:9	27.79	7.40	63.00	16.85
Thea Foss Waterway	Toxaphene	0:21	10.57	10.00	14.00	1.43
Vendovi Island	1,2,4-trichlorobenzene	0:3	4.00	4.00	4.00	0.00
Vendovi Island	1,2-dichlorobenzene	0:3	11.00	11.00	11.00	0.00
Vendovi Island	1,2-diphenylhydrazine	0:3	4.00	4.00	4.00	0.00
Vendovi Island	1,3-dichlorobenzene	0:3	11.00	11.00	11.00	0.00
Vendovi Island	1,4-dichlorobenzene	0:3	11.00	11.00	11.00	0.00
Vendovi Island	2,4,5-trichlorophenol	0:3	18.00	18.00	18.00	0.00

## Appendix: English Sole Muscle

Location	Assay	No. Detected:		Mean	Min	Max	SD
		lo. Analyzed					
Vendovi Island	2,4,6-trichlorophenol	0:3		18.00	18.00	18.00	0.00
Vendovi Island	2,4-dichlorophenol	0:3		4.00	4.00	4.00	0.00
Vendovi Island	2,4-dimethylphenol	0:3		20.00	20.00	20.00	0.00
Vendovi Island	2,4-dinitrophenol	0:3		72.00	72.00	72.00	0.00
Vendovi Island	2,4-dinitrotoluene	0:3		18.00	18.00	18.00	0.00
Vendovi Island	2,6-dinitrotoluene	0:3		18.00	18.00	18.00	0.00
Vendovi Island	2-chloronaphthalene	0:3		11.00	11.00	11.00	0.00
Vendovi Island	2-chlorophenol	0:3		4.00	4.00	4.00	0.00
Vendovi Island	2-methylnaphthalene	0:3		4.00	4.00	4.00	0.00
Vendovi Island	2-methylphenol	0:3		4.00	4.00	4.00	0.00
Vendovi Island	2-nitroaniline	0:3		7.00	7.00	7.00	0.00
Vendovi Island	2-nitrophenol	0:3		4.00	4.00	4.00	0.00
Vendovi Island	3-nitroaniline	0:3		4.00	4.00	4.00	0.00
Vendovi Island	4,6-dinitro-o-cresol	0:3		50.00	50.00	50.00	0.00
Vendovi Island	4-bromophenylphenylether	0:3		20.00	20.00	20.00	0.00
Vendovi Island	4-chloro-3-methylphenol	0:3		4.00	4.00	4.00	0.00
Vendovi Island	4-chloroaniline	0:3		36.00	36.00	36.00	0.00
Vendovi Island	4-chlorophenylphenylether	0:3		4.00	4.00	4.00	0.00
Vendovi Island	4-methylphenol	0:3		4.00	4.00	4.00	0.00
Vendovi Island	4-nitroaniline	0:3		18.00	18.00	18.00	0.00
Vendovi Island	4-nitrophenol	0:3		36.00	36.00	36.00	0.00
Vendovi Island	acenaphthene	0:3		4.00	4.00	4.00	0.00
Vendovi Island	acenaphthylene	0:3		4.00	4.00	4.00	0.00
Vendovi Island	Aldrin	0:12		0.50	0.50	0.50	0.00
Vendovi Island	alpha chlordane	0:12		0.50	0.50	0.50	0.00
Vendovi Island	alpha endosulfan	0:12		0.50	0.50	0.50	0.00
Vendovi Island	alpha hexachlorocyclohexane	0:12		0.50	0.50	0.50	0.00
Vendovi Island	aniline	0:3		53.00	53.00	53.00	0.00
Vendovi Island	anthracene	0:3		4.00	4.00	4.00	0.00
Vendovi Island	Aroclor 1016	0:34		20.29	20.00	27.00	1.24
Vendovi Island	Aroclor 1221	0:34		20.29	20.00	27.00	1.24
Vendovi Island	Aroclor 1232	0:34		20.29	20.00	27.00	1.24
Vendovi Island	Aroclor 1242	0:34		10.15	10.00	14.00	0.70
Vendovi Island	Aroclor 1248	0:34		2.03	2.00	2.70	0.12
Vendovi Island	Aroclor 1254	5:34		2.48	1.30	11.50	1.83
Vendovi Island	Aroclor 1260	4:34		2.04	1.30	2.70	0.23
Vendovi Island	arsenic	6:6		6.44	4.84	8.08	1.35
Vendovi Island	benzo(a)anthracene	0:3		11.00	11.00	11.00	0.00
Vendovi Island	benzo(a)pyrene	0:3		4.00	4.00	4.00	0.00
Vendovi Island	benzo(b)fluoranthene	0:3		11.00	11.00	11.00	0.00
Vendovi Island	benzo(g,h,i)perylene	0:3		11.00	11.00	11.00	0.00
Vendovi Island	benzo(k)fluoranthene	0:3		7.00	7.00	7.00	0.00
Vendovi Island	benzoic acid	0:3		36.00	36.00	36.00	0.00
Vendovi Island	benzyl alcohol	3:3		85.63	77.80	96.40	9.64
Vendovi Island	benzylbutylphthalate	0:3		11.00	11.00	11.00	0.00
Vendovi Island	beta endosulfan	0:12		1.00	1.00	1.00	0.00
Vendovi Island	beta hexachlorocyclohexane	0:12		0.50	0.50	0.50	0.00
Vendovi Island	bis(2-chloroethoxy)methane	0:3		4.00	4.00	4.00	0.00
Vendovi Island	bis(2-chloroethyl)ether	0:3		4.00	4.00	4.00	0.00
Vendovi Island	bis(2-chloroisopropyl)ether	0:3		11.00	11.00	11.00	0.00
Vendovi Island	bis(2-ethylhexyl)phthalate	3:3		93.67	87.00	97.00	5.77
Vendovi Island	carbazole	0:3		4.00	4.00	4.00	0.00
Vendovi Island	chrysene	0:3		4.00	4.00	4.00	0.00
Vendovi Island	copper	6:6		0.21	0.16	0.29	0.04
Vendovi Island	coprostanol	0:3		180.00	180.00	180.00	0.00

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Vendovi Island	delta hexachlorocyclohexane	0:12	0.50	0.50	0.50	0.00
Vendovi Island	dibenzo(a,h)anthracene	0:3	11.00	11.00	11.00	0.00
Vendovi Island	dibenzofuran	0:3	11.00	11.00	11.00	0.00
Vendovi Island	Dieldrin	0:12	1.00	1.00	1.00	0.00
Vendovi Island	diethylphthalate	0:3	4.00	4.00	4.00	0.00
Vendovi Island	dimethylphthalate	0:3	4.00	4.00	4.00	0.00
Vendovi Island	di-n-butylphthalate	0:3	4.00	4.00	4.00	0.00
Vendovi Island	di-n-octylphthalate	0:3	4.00	4.00	4.00	0.00
Vendovi Island	endosulfan sulfate	0:12	1.00	1.00	1.00	0.00
Vendovi Island	Endrin	0:12	1.00	1.00	1.00	0.00
Vendovi Island	endrin aldehyde	0:12	1.00	1.00	1.00	0.00
Vendovi Island	fluoranthene	0:3	4.00	4.00	4.00	0.00
Vendovi Island	fluorene	0:3	4.00	4.00	4.00	0.00
Vendovi Island	gamma chlordane	0:12	0.50	0.50	0.50	0.00
Vendovi Island	gamma hexachlorocyclohexane	0:12	0.50	0.50	0.50	0.00
Vendovi Island	Heptachlor	0:12	0.50	0.50	0.50	0.00
Vendovi Island	heptachlor epoxide	0:12	0.50	0.50	0.50	0.00
Vendovi Island	hexachlorobenzene	0:11	4.94	0.03	18.00	8.39
Vendovi Island	hexachlorobutadiene	0:3	11.00	11.00	11.00	0.00
Vendovi Island	hexachlorocyclopentadiene	0:3	265.00	265.00	265.00	0.00
Vendovi Island	hexachloroethane	0:3	50.00	50.00	50.00	0.00
Vendovi Island	indeno(1,2,3-c,d)pyrene	0:3	18.00	18.00	18.00	0.00
Vendovi Island	isophorone	0:3	4.00	4.00	4.00	0.00
Vendovi Island	lead	0:9	0.02	0.02	0.03	0.01
Vendovi Island	Lipids	19:19	0.24	0.10	0.44	0.10
Vendovi Island	mercury	35:35	0.04	0.02	0.08	0.01
Vendovi Island	Methoxychlor	0:12	10.00	10.00	10.00	0.00
Vendovi Island	naphthalene	0:3	4.00	4.00	4.00	0.00
Vendovi Island	nitrobenzene	0:3	11.00	11.00	11.00	0.00
Vendovi Island	N-nitrosodimethylamine	0:3	4.00	4.00	4.00	0.00
Vendovi Island	N-nitroso-di-n-propylamine	0:3	4.00	4.00	4.00	0.00
Vendovi Island	N-nitrosodiphenylamine	0:3	4.00	4.00	4.00	0.00
Vendovi Island	opDDD	0:8	0.11	0.09	0.16	0.02
Vendovi Island	opDDT	0:6	0.14	0.11	0.21	0.04
Vendovi Island	PCB101	6:6	0.28	0.14	0.44	0.12
Vendovi Island	PCB105	1:8	0.05	0.03	0.09	0.02
Vendovi Island	PCB110	3:7	0.40	0.03	1.40	0.56
Vendovi Island	PCB118	4:6	0.32	0.04	1.10	0.40
Vendovi Island	PCB126	0:8	0.06	0.04	0.09	0.02
Vendovi Island	PCB128	3:8	0.15	0.03	0.78	0.26
Vendovi Island	PCB138	4:8	0.23	0.04	0.52	0.20
Vendovi Island	PCB153	5:7	0.25	0.04	0.41	0.14
Vendovi Island	PCB156	0:8	0.04	0.03	0.05	0.01
Vendovi Island	PCB157	0:8	0.04	0.03	0.05	0.01
Vendovi Island	PCB169	0:8	0.08	0.06	0.12	0.02
Vendovi Island	PCB170	0:8	0.04	0.03	0.06	0.01
Vendovi Island	PCB180	3:6	0.10	0.03	0.18	0.07
Vendovi Island	PCB189	0:8	0.04	0.03	0.07	0.01
Vendovi Island	PCB77	0:8	0.07	0.05	0.10	0.02
Vendovi Island	pentachlorophenol	0:3	265.00	265.00	265.00	0.00
Vendovi Island	phenanthrene	0:3	4.00	4.00	4.00	0.00
Vendovi Island	phenol	0:3	4.00	4.00	4.00	0.00
Vendovi Island	ppDDD	0:20	0.72	0.11	1.30	0.46
Vendovi Island	ppDDE	3:20	0.77	0.10	2.47	0.64
Vendovi Island	ppDDT	0:20	1.26	0.08	2.00	0.94



## Appendix: English Sole Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Vendovi Island	pyrene	0:3	4.00	4.00	4.00	0.00
Vendovi Island	Solids	25:25	18.05	13.80	20.00	1.39
Vendovi Island	TotalDDT	1:8	0.23	0.23	0.23	
Vendovi Island	TotalPCB	8:8	5.93	0.49	32.72	10.92
Vendovi Island	Toxaphene	0:12	10.00	10.00	10.00	0.00
Wollochet	1,2,4-trichlorobenzene	0:3	3.60	3.60	3.60	0.00
Wollochet	1,2-dichlorobenzene	0:3	10.70	10.70	10.70	0.00
Wollochet	1,2-diphenylhydrazine	0:3	3.60	3.60	3.60	0.00
Wollochet	1,3-dichlorobenzene	0:3	10.70	10.70	10.70	0.00
Wollochet	1,4-dichlorobenzene	0:3	10.70	10.70	10.70	0.00
Wollochet	2,4,5-trichlorophenol	0:3	18.00	18.00	18.00	0.00
Wollochet	2,4,6-trichlorophenol	0:3	18.00	18.00	18.00	0.00
Wollochet	2,4-dichlorophenol	0:3	3.60	3.60	3.60	0.00
Wollochet	2,4-dimethylphenol	0:3	50.00	50.00	50.00	0.00
Wollochet	2,4-dinitrophenol	0:3	72.00	72.00	72.00	0.00
Wollochet	2,4-dinitrotoluene	0:3	18.00	18.00	18.00	0.00
Wollochet	2,6-dinitrotoluene	0:3	18.00	18.00	18.00	0.00
Wollochet	2-chloronaphthalene	0:3	10.70	10.70	10.70	0.00
Wollochet	2-chlorophenol	0:3	3.60	3.60	3.60	0.00
Wollochet	2-methylnaphthalene	0:3	3.60	3.60	3.60	0.00
Wollochet	2-methylphenol	0:3	3.60	3.60	3.60	0.00
Wollochet	2-nitroaniline	0:3	7.10	7.10	7.10	0.00
Wollochet	2-nitrophenol	0:3	3.60	3.60	3.60	0.00
Wollochet	3-nitroaniline	0:3	3.60	3.60	3.60	0.00
Wollochet	4,6-dinitro-o-cresol	0:3	50.00	50.00	50.00	0.00
Wollochet	4-bromophenylphenylether	0:3	50.00	50.00	50.00	0.00
Wollochet	4-chloro-3-methylphenol	0:3	3.60	3.60	3.60	0.00
Wollochet	4-chloroaniline	0:3	36.00	36.00	36.00	0.00
Wollochet	4-chlorophenylphenylether	0:3	3.60	3.60	3.60	0.00
Wollochet	4-methylphenol	0:3	3.60	3.60	3.60	0.00
Wollochet	4-nitroaniline	0:3	18.00	18.00	18.00	0.00
Wollochet	4-nitrophenol	0:3	36.00	36.00	36.00	0.00
Wollochet	acenaphthene	0:3	3.60	3.60	3.60	0.00
Wollochet	acenaphthylene	0:3	3.60	3.60	3.60	0.00
Wollochet	Aldrin	0:6	0.50	0.50	0.50	0.00
Wollochet	alpha chlordane	0:6	0.50	0.50	0.50	0.00
Wollochet	alpha endosulfan	0:6	0.50	0.50	0.50	0.00
Wollochet	alpha hexachlorocyclohexane	0:6	0.50	0.50	0.50	0.00
Wollochet	aniline	0:3	53.00	53.00	53.00	0.00
Wollochet	anthracene	0:3	3.60	3.60	3.60	0.00
Wollochet	Aroclor 1016	0:6	20.00	20.00	20.00	0.00
Wollochet	Aroclor 1221	0:6	20.00	20.00	20.00	0.00
Wollochet	Aroclor 1232	0:6	20.00	20.00	20.00	0.00
Wollochet	Aroclor 1242	0:6	10.00	10.00	10.00	0.00
Wollochet	Aroclor 1248	0:6	2.00	2.00	2.00	0.00
Wollochet	Aroclor 1254	6:6	10.93	5.90	21.80	5.60
Wollochet	Aroclor 1260	6:6	14.47	8.50	22.00	4.70
Wollochet	arsenic	3:3	12.00	12.00	12.00	0.00
Wollochet	benzo(a)anthracene	0:3	10.70	10.70	10.70	0.00
Wollochet	benzo(a)pyrene	0:3	3.60	3.60	3.60	0.00
Wollochet	benzo(b)fluoranthene	0:3	10.70	10.70	10.70	0.00
Wollochet	benzo(g,h,i)perylene	0:3	10.70	10.70	10.70	0.00
Wollochet	benzo(k)fluoranthene	0:3	7.10	7.10	7.10	0.00
Wollochet	benzoic acid	0:3	36.00	36.00	36.00	0.00
Wollochet	benzyl alcohol	0:3	3.60	3.60	3.60	0.00

Appendix: English Sole Muscle

Location	Assay	No. Detected:			SD	
		lo. Analyzed	Mean	Min		Max
Wollochet	benzylbutylphthalate	0:3	10.70	10.70	10.70	0.00
Wollochet	beta endosulfan	0:6	1.00	1.00	1.00	0.00
Wollochet	beta hexachlorocyclohexane	0:6	0.50	0.50	0.50	0.00
Wollochet	bis(2-chloroethoxy)methane	0:3	3.60	3.60	3.60	0.00
Wollochet	bis(2-chloroethyl)ether	0:3	3.60	3.60	3.60	0.00
Wollochet	bis(2-chloroisopropyl)ether	0:3	10.70	10.70	10.70	0.00
Wollochet	bis(2-ethylhexyl)phthalate	0:3	100.00	100.00	100.00	0.00
Wollochet	carbazole	0:3	3.60	3.60	3.60	0.00
Wollochet	chrysene	0:3	3.60	3.60	3.60	0.00
Wollochet	copper	3:3	0.35	0.34	0.36	0.01
Wollochet	coprostanol	0:3	180.00	180.00	180.00	0.00
Wollochet	delta hexachlorocyclohexane	0:6	0.50	0.50	0.50	0.00
Wollochet	dibenzo(a,h)anthracene	0:3	10.70	10.70	10.70	0.00
Wollochet	dibenzofuran	0:3	10.70	10.70	10.70	0.00
Wollochet	Dieldrin	0:6	1.00	1.00	1.00	0.00
Wollochet	diethylphthalate	0:3	3.60	3.60	3.60	0.00
Wollochet	dimethylphthalate	0:3	3.60	3.60	3.60	0.00
Wollochet	di-n-butylphthalate	0:3	4.00	4.00	4.00	0.00
Wollochet	di-n-octylphthalate	0:3	3.60	3.60	3.60	0.00
Wollochet	endosulfan sulfate	0:6	1.00	1.00	1.00	0.00
Wollochet	Endrin	0:6	1.00	1.00	1.00	0.00
Wollochet	endrin aldehyde	0:6	1.00	1.00	1.00	0.00
Wollochet	fluoranthene	0:3	3.60	3.60	3.60	0.00
Wollochet	fluorene	0:3	3.60	3.60	3.60	0.00
Wollochet	gamma chlordane	1:6	0.51	0.50	0.53	0.01
Wollochet	gamma hexachlorocyclohexane	0:6	0.50	0.50	0.50	0.00
Wollochet	Heptachlor	0:6	0.50	0.50	0.50	0.00
Wollochet	heptachlor epoxide	0:6	0.50	0.50	0.50	0.00
Wollochet	hexachlorobenzene	0:3	18.00	18.00	18.00	0.00
Wollochet	hexachlorobutadiene	0:3	10.70	10.70	10.70	0.00
Wollochet	hexachlorocyclopentadiene	0:3	265.00	265.00	265.00	0.00
Wollochet	hexachloroethane	0:3	10.70	10.70	10.70	0.00
Wollochet	indeno(1,2,3-c,d)pyrene	0:3	18.00	18.00	18.00	0.00
Wollochet	isophorone	0:3	3.60	3.60	3.60	0.00
Wollochet	lead	0:6	0.03	0.02	0.03	0.01
Wollochet	Lipids	6:6	0.20	0.12	0.27	0.06
Wollochet	mercury	6:6	0.05	0.05	0.06	0.01
Wollochet	Methoxychlor	0:6	10.00	10.00	10.00	0.00
Wollochet	naphthalene	0:3	3.60	3.60	3.60	0.00
Wollochet	nitrobenzene	0:3	10.70	10.70	10.70	0.00
Wollochet	N-nitrosodimethylamine	0:3	3.60	3.60	3.60	0.00
Wollochet	N-nitroso-di-n-propylamine	0:3	3.60	3.60	3.60	0.00
Wollochet	N-nitrosodiphenylamine	0:3	3.60	3.60	3.60	0.00
Wollochet	pentachlorophenol	0:3	265.00	265.00	265.00	0.00
Wollochet	phenanthrene	0:3	3.60	3.60	3.60	0.00
Wollochet	phenol	0:3	3.60	3.60	3.60	0.00
Wollochet	ppDDD	0:6	1.00	1.00	1.00	0.00
Wollochet	ppDDE	4:6	1.52	1.00	2.20	0.49
Wollochet	ppDDT	0:6	2.00	2.00	2.00	0.00
Wollochet	pyrene	0:3	3.60	3.60	3.60	0.00
Wollochet	Solids	6:6	16.53	15.00	17.60	0.99
Wollochet	Toxaphene	0:6	10.00	10.00	10.00	0.00

## **English Sole Liver**

Summary of contaminant data for all English sole liver samples collected by the Puget Sound Ambient Monitoring Program's Fish Component, 1989-1999. "No. Detected" is the number of samples for which an analyte was measured above the Method Detection Limit (MDL). "No. Analyzed" is the total number of samples analyzed for a given analyte. Mean, minimum, maximum, and standard deviation (SD) were computed for analyte and station combination, pooling all years' data. See Figure 1 for station locations.

# Appendix: English Sole Liver

Summary statistics for English sole liver tissue samples, averaged across years from 1989-1999 by location and assay. A value of the median of the Method Detection Limit (MDL) was used in calculations when an analyte was undetected. Refer to Figure 1 for station locations. Shaded rows indicate location:assay combinations wherein at least one sample had a measured concentration above the MDL. Unshaded rows indicate combinations that had no measured concentrations above the MDL. All concentrations are based on wet weight. All organics in µg/kg, all elemental metals in mg/kg, all lipids and solids in %.

Location	Assay	No. Detected:		Mean	Min	Max	SD
		No. Analyzed					
Apple Cove Pt.	1,2,4-trichlorobenzene	0:1		300.00	300.00	300.00	
Apple Cove Pt.	1,2-dichlorobenzene	0:1		300.00	300.00	300.00	
Apple Cove Pt.	1,2-diphenylhydrazine	0:1		300.00	300.00	300.00	
Apple Cove Pt.	1,3-dichlorobenzene	0:1		1000.00	1000.00	1000.00	
Apple Cove Pt.	1,4-dichlorobenzene	0:1		1000.00	1000.00	1000.00	
Apple Cove Pt.	2,4-dichlorophenol	0:1		300.00	300.00	300.00	
Apple Cove Pt.	2,4-dimethylphenol	0:1		300.00	300.00	300.00	
Apple Cove Pt.	2,4-dinitrotoluene	0:1		1000.00	1000.00	1000.00	
Apple Cove Pt.	2,6-dinitrotoluene	0:1		1000.00	1000.00	1000.00	
Apple Cove Pt.	2-chloronaphthalene	0:1		300.00	300.00	300.00	
Apple Cove Pt.	2-chlorophenol	0:1		300.00	300.00	300.00	
Apple Cove Pt.	2-methylnaphthalene	0:1		300.00	300.00	300.00	
Apple Cove Pt.	2-methylphenol	0:1		300.00	300.00	300.00	
Apple Cove Pt.	2-nitroaniline	0:1		700.00	700.00	700.00	
Apple Cove Pt.	2-nitrophenol	0:1		300.00	300.00	300.00	
Apple Cove Pt.	3-nitroaniline	0:1		300.00	300.00	300.00	
Apple Cove Pt.	4,6-dinitro-o-cresol	0:1		5000.00	5000.00	5000.00	
Apple Cove Pt.	4-chloro-3-methylphenol	0:1		1000.00	1000.00	1000.00	
Apple Cove Pt.	4-chlorophenylphenylether	0:1		300.00	300.00	300.00	
Apple Cove Pt.	4-methylphenol	0:1		300.00	300.00	300.00	
Apple Cove Pt.	4-nitroaniline	0:1		2000.00	2000.00	2000.00	
Apple Cove Pt.	4-nitrophenol	0:1		3000.00	3000.00	3000.00	
Apple Cove Pt.	acenaphthene	0:1		300.00	300.00	300.00	
Apple Cove Pt.	acenaphthylene	0:1		300.00	300.00	300.00	
Apple Cove Pt.	Aldrin	0:6		164.00	8.00	320.00	170.89
Apple Cove Pt.	alpha chlordane	0:6		34.40	6.30	62.50	30.78
Apple Cove Pt.	alpha endosulfan	0:3		8.00	8.00	8.00	0.00
Apple Cove Pt.	alpha hexachlorocyclohexane	0:6		19.15	6.30	32.00	14.08
Apple Cove Pt.	aniline	0:1		1700.00	1700.00	1700.00	
Apple Cove Pt.	anthracene	0:1		300.00	300.00	300.00	
Apple Cove Pt.	Aroclor 1016	0:6		50.00	20.00	80.00	32.86
Apple Cove Pt.	Aroclor 1221	0:6		50.00	20.00	80.00	32.86
Apple Cove Pt.	Aroclor 1232	0:6		50.00	20.00	80.00	32.86
Apple Cove Pt.	Aroclor 1242	0:6		50.00	20.00	80.00	32.86
Apple Cove Pt.	Aroclor 1248	0:6		50.00	20.00	80.00	32.86
Apple Cove Pt.	Aroclor 1254	0:6		30.00	20.00	40.00	10.95
Apple Cove Pt.	Aroclor 1260	6:6		72.92	40.00	107.00	32.96
Apple Cove Pt.	arsenic	6:6		11.38	4.30	20.10	7.26
Apple Cove Pt.	benzo(a)anthracene	0:1		1000.00	1000.00	1000.00	
Apple Cove Pt.	benzo(a)pyrene	0:1		300.00	300.00	300.00	
Apple Cove Pt.	benzo(b)fluoranthene	0:1		1000.00	1000.00	1000.00	
Apple Cove Pt.	benzo(g,h,i)perylene	0:1		1000.00	1000.00	1000.00	
Apple Cove Pt.	benzo(k)fluoranthene	0:1		700.00	700.00	700.00	
Apple Cove Pt.	benzoic acid	0:1		3000.00	3000.00	3000.00	
Apple Cove Pt.	benzyl alcohol	1:1		6900.00	6900.00	6900.00	
Apple Cove Pt.	benzylbutylphthalate	0:1		1000.00	1000.00	1000.00	

# Appendix: English Sole Liver

Location	Assay	No. Detected:				SD
		lo. Analyzed	Mean	Min	Max	
Apple Cove Pt.	beta endosulfan	0:6	166.50	13.00	320.00	168.15
Apple Cove Pt.	beta hexachlorocyclohexane	0:3	6.30	6.30	6.30	0.00
Apple Cove Pt.	bis(2-chloroethoxy)methane	0:1	300.00	300.00	300.00	
Apple Cove Pt.	bis(2-chloroethyl)ether	0:1	300.00	300.00	300.00	
Apple Cove Pt.	bis(2-chloroisopropyl)ether	0:1	1000.00	1000.00	1000.00	
Apple Cove Pt.	bis(2-ethylhexyl)phthalate	1:1	1800.00	1800.00	1800.00	
Apple Cove Pt.	carbazole	0:1	300.00	300.00	300.00	
Apple Cove Pt.	chrysene	0:1	1000.00	1000.00	1000.00	
Apple Cove Pt.	copper	6:6	9.89	8.60	12.00	1.15
Apple Cove Pt.	delta hexachlorocyclohexane	0:6	19.15	6.30	32.00	14.08
Apple Cove Pt.	dibenzo(a,h)anthracene	0:1	300.00	300.00	300.00	
Apple Cove Pt.	dibenzofuran	0:1	300.00	300.00	300.00	
Apple Cove Pt.	Dieldrin	0:6	166.50	13.00	320.00	168.15
Apple Cove Pt.	diethylphthalate	0:1	300.00	300.00	300.00	
Apple Cove Pt.	dimethylphthalate	0:1	300.00	300.00	300.00	
Apple Cove Pt.	di-n-butylphthalate	0:1	300.00	300.00	300.00	
Apple Cove Pt.	di-n-octylphthalate	0:1	300.00	300.00	300.00	
Apple Cove Pt.	endosulfan sulfate	0:6	206.50	13.00	400.00	211.97
Apple Cove Pt.	Endrin	0:6	166.50	13.00	320.00	168.15
Apple Cove Pt.	endrin aldehyde	0:3	13.00	13.00	13.00	0.00
Apple Cove Pt.	fluoranthene	0:1	1000.00	1000.00	1000.00	
Apple Cove Pt.	fluorene	0:1	300.00	300.00	300.00	
Apple Cove Pt.	gamma chlordane	2:6	34.86	6.30	62.50	30.29
Apple Cove Pt.	gamma hexachlorocyclohexane	0:3	6.30	6.30	6.30	0.00
Apple Cove Pt.	Heptachlor	0:6	163.15	6.30	320.00	171.82
Apple Cove Pt.	heptachlor epoxide	0:6	19.15	6.30	32.00	14.08
Apple Cove Pt.	hexachlorocyclopentadiene	0:1	1700.00	1700.00	1700.00	
Apple Cove Pt.	hexachloroethane	0:1	300.00	300.00	300.00	
Apple Cove Pt.	indeno(1,2,3-c,d)pyrene	0:1	800.00	800.00	800.00	
Apple Cove Pt.	isophorone	0:1	300.00	300.00	300.00	
Apple Cove Pt.	lead	6:6	0.17	0.12	0.23	0.04
Apple Cove Pt.	Lipids	3:3	3.50	3.11	3.92	0.41
Apple Cove Pt.	mercury	6:6	0.12	0.07	0.19	0.05
Apple Cove Pt.	Methoxychlor	0:6	47.50	32.00	63.00	16.98
Apple Cove Pt.	naphthalene	0:1	300.00	300.00	300.00	
Apple Cove Pt.	nitrobenzene	0:1	300.00	300.00	300.00	
Apple Cove Pt.	N-nitrosodimethylamine	0:1	300.00	300.00	300.00	
Apple Cove Pt.	N-nitroso-di-n-propylamine	0:1	300.00	300.00	300.00	
Apple Cove Pt.	N-nitrosodiphenylamine	0:1	300.00	300.00	300.00	
Apple Cove Pt.	phenanthrene	0:1	300.00	300.00	300.00	
Apple Cove Pt.	phenol	0:1	300.00	300.00	300.00	
Apple Cove Pt.	ppDDD	0:6	22.50	13.00	32.00	10.41
Apple Cove Pt.	ppDDE	3:6	168.73	13.00	320.00	165.73
Apple Cove Pt.	ppDDT	0:6	86.50	13.00	160.00	80.52
Apple Cove Pt.	pyrene	0:1	300.00	300.00	300.00	
Apple Cove Pt.	Solids	4:4	23.43	21.80	25.00	1.31
Apple Cove Pt.	Toxaphene	0:6	550.00	100.00	1000.00	492.95
Battle Point	hexachlorobenzene	3:3	0.94	0.82	1.10	0.15
Battle Point	Lipids	3:3	7.06	6.54	7.47	0.47
Battle Point	opDDT	0:3	0.24	0.18	0.33	0.08
Battle Point	PCB101	3:3	113.00	89.00	130.00	21.38
Battle Point	PCB105	3:3	8.30	3.00	16.00	6.82
Battle Point	PCB110	3:3	18.67	13.00	22.00	4.93

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Battle Point	PCB118	3:3	46.00	39.00	50.00	6.08
Battle Point	PCB126	0:3	0.10	0.07	0.14	0.03
Battle Point	PCB128	3:3	20.33	14.00	28.00	7.09
Battle Point	PCB138	3:3	38.00	30.00	45.00	7.55
Battle Point	PCB153	3:3	83.67	68.00	94.00	13.80
Battle Point	PCB156	3:3	2.50	2.00	2.80	0.44
Battle Point	PCB157	3:3	5.40	4.70	6.80	1.21
Battle Point	PCB169	0:3	0.13	0.10	0.18	0.04
Battle Point	PCB170	3:3	26.33	23.00	29.00	3.06
Battle Point	PCB180	3:3	30.67	25.00	34.00	4.93
Battle Point	PCB189	2:3	0.26	0.09	0.38	0.15
Battle Point	PCB77	3:3	0.27	0.23	0.32	0.05
Battle Point	ppDDD	3:3	3.37	2.90	3.90	0.50
Battle Point	ppDDE	3:3	22.33	20.00	27.00	4.04
Battle Point	ppDDT	0:3	0.24	0.17	0.33	0.08
Battle Point	Solids	3:3	24.26	22.12	26.61	2.25
Battle Point	TotalDDT	3:3	25.67	23.00	30.00	3.79
Battle Point	TotalPCB	3:3	496.67	390.00	570.00	94.52
Birch Point	Aldrin	0:3	8.00	8.00	8.00	0.00
Birch Point	alpha chlordane	0:3	6.30	6.30	6.30	0.00
Birch Point	alpha endosulfan	0:3	8.00	8.00	8.00	0.00
Birch Point	alpha hexachlorocyclohexane	0:3	6.30	6.30	6.30	0.00
Birch Point	Aroclor 1016	0:6	120.00	80.00	160.00	43.82
Birch Point	Aroclor 1221	0:6	120.00	80.00	160.00	43.82
Birch Point	Aroclor 1232	0:6	120.00	80.00	160.00	43.82
Birch Point	Aroclor 1242	0:6	120.00	80.00	160.00	43.82
Birch Point	Aroclor 1248	0:6	120.00	80.00	160.00	43.82
Birch Point	Aroclor 1254	3:6	121.70	75.80	160.00	42.61
Birch Point	Aroclor 1260	6:6	76.27	36.00	148.00	45.79
Birch Point	arsenic	1:1	9.62	9.62	9.62	
Birch Point	beta endosulfan	0:3	13.00	13.00	13.00	0.00
Birch Point	beta hexachlorocyclohexane	0:3	6.30	6.30	6.30	0.00
Birch Point	copper	1:1	3.60	3.60	3.60	
Birch Point	delta hexachlorocyclohexane	0:3	6.30	6.30	6.30	0.00
Birch Point	Dieldrin	0:3	13.00	13.00	13.00	0.00
Birch Point	endosulfan sulfate	0:3	13.00	13.00	13.00	0.00
Birch Point	Endrin	0:3	13.00	13.00	13.00	0.00
Birch Point	endrin aldehyde	0:3	13.00	13.00	13.00	0.00
Birch Point	gamma chlordane	0:3	6.30	6.30	6.30	0.00
Birch Point	gamma hexachlorocyclohexane	0:3	6.30	6.30	6.30	0.00
Birch Point	Heptachlor	0:3	6.30	6.30	6.30	0.00
Birch Point	heptachlor epoxide	0:3	6.30	6.30	6.30	0.00
Birch Point	lead	1:1	0.38	0.38	0.38	
Birch Point	Lipids	1:1	5.40	5.40	5.40	
Birch Point	mercury	2:2	0.06	0.04	0.09	0.04
Birch Point	Methoxychlor	0:3	63.00	63.00	63.00	0.00
Birch Point	ppDDD	0:3	13.00	13.00	13.00	0.00
Birch Point	ppDDE	1:3	13.00	13.00	13.00	0.00
Birch Point	ppDDT	0:3	13.00	13.00	13.00	0.00
Birch Point	Solids	3:3	23.17	21.00	25.00	2.02
Birch Point	Toxaphene	0:3	100.00	100.00	100.00	0.00
Blake Island	hexachlorobenzene	3:3	0.58	0.53	0.65	0.06
Blake Island	Lipids	3:3	3.36	3.18	3.60	0.22

## Appendix: English Sole Liver

Location	Assay	No. Detected:				SD
		lo. Analyzed	Mean	Min	Max	
Blake Island	opDDD	0:1	0.46	0.46	0.46	
Blake Island	opDDT	2:2	23.00	21.00	25.00	2.83
Blake Island	PCB101	3:3	45.00	42.00	48.00	3.00
Blake Island	PCB105	3:3	1.40	1.20	1.60	0.20
Blake Island	PCB110	3:3	6.47	5.80	6.90	0.59
Blake Island	PCB118	3:3	29.67	26.00	34.00	4.04
Blake Island	PCB126	0:3	0.17	0.12	0.25	0.07
Blake Island	PCB128	3:3	10.53	9.60	11.00	0.81
Blake Island	PCB138	3:3	16.33	15.00	18.00	1.53
Blake Island	PCB153	3:3	35.67	34.00	39.00	2.89
Blake Island	PCB156	3:3	0.84	0.60	1.00	0.21
Blake Island	PCB157	3:3	1.53	1.20	1.80	0.31
Blake Island	PCB169	0:3	0.22	0.15	0.33	0.10
Blake Island	PCB170	3:3	7.80	7.00	9.20	1.22
Blake Island	PCB180	3:3	11.33	10.00	12.00	1.15
Blake Island	PCB189	0:3	0.11	0.08	0.17	0.05
Blake Island	PCB77	0:3	0.17	0.12	0.27	0.08
Blake Island	ppDDD	3:3	1.73	1.60	1.90	0.15
Blake Island	ppDDE	3:3	4.90	4.10	5.40	0.70
Blake Island	ppDDT	0:3	0.38	0.27	0.58	0.17
Blake Island	Solids	3:3	22.62	20.52	24.35	1.94
Blake Island	TotalDDT	3:3	21.93	5.80	32.00	14.11
Blake Island	TotalPCB	3:3	206.67	190.00	230.00	20.82
Boulder Rock	Aldrin	0:3	9.00	8.00	11.00	1.73
Boulder Rock	alpha chlordane	0:3	7.17	6.30	8.90	1.50
Boulder Rock	alpha endosulfan	0:3	9.00	8.00	11.00	1.73
Boulder Rock	alpha hexachlorocyclohexane	0:3	7.17	6.30	8.90	1.50
Boulder Rock	Aroclor 1016	0:3	90.00	80.00	110.00	17.32
Boulder Rock	Aroclor 1221	0:3	90.00	80.00	110.00	17.32
Boulder Rock	Aroclor 1232	0:3	90.00	80.00	110.00	17.32
Boulder Rock	Aroclor 1242	0:3	90.00	80.00	110.00	17.32
Boulder Rock	Aroclor 1248	0:3	90.00	80.00	110.00	17.32
Boulder Rock	Aroclor 1254	3:3	579.33	448.00	722.00	137.35
Boulder Rock	Aroclor 1260	3:3	1116.00	808.00	1300.00	268.42
Boulder Rock	beta endosulfan	0:3	14.67	13.00	18.00	2.89
Boulder Rock	beta hexachlorocyclohexane	0:3	7.17	6.30	8.90	1.50
Boulder Rock	delta hexachlorocyclohexane	0:3	7.17	6.30	8.90	1.50
Boulder Rock	Dieldrin	0:3	14.67	13.00	18.00	2.89
Boulder Rock	endosulfan sulfate	0:3	14.67	13.00	18.00	2.89
Boulder Rock	Endrin	0:3	14.67	13.00	18.00	2.89
Boulder Rock	endrin aldehyde	0:3	14.67	13.00	18.00	2.89
Boulder Rock	gamma chlordane	0:3	7.17	6.30	8.90	1.50
Boulder Rock	gamma hexachlorocyclohexane	0:3	7.17	6.30	8.90	1.50
Boulder Rock	Heptachlor	0:3	7.17	6.30	8.90	1.50
Boulder Rock	heptachlor epoxide	0:3	7.17	6.30	8.90	1.50
Boulder Rock	Lipids	2:2	5.24	4.93	5.54	0.43
Boulder Rock	mercury	1:1	0.05	0.05	0.05	
Boulder Rock	Methoxychlor	0:3	71.67	63.00	89.00	15.01
Boulder Rock	ppDDD	2:3	18.97	13.00	24.90	5.95
Boulder Rock	ppDDE	3:3	76.43	54.70	93.80	19.91
Boulder Rock	ppDDT	0:3	14.67	13.00	18.00	2.89
Boulder Rock	Toxaphene	0:3	113.33	100.00	140.00	23.09
Brown's Point	hexachlorobenzene	3:3	0.83	0.69	1.10	0.23

Location	Assay	No. Detected:				SD
		lo. Analyzed	Mean	Min	Max	
Brown's Point	Lipids	3:3	3.72	3.39	3.90	0.29
Brown's Point	opDDT	1:3	12.55	0.32	37.00	21.17
Brown's Point	PCB101	3:3	134.00	92.00	180.00	44.14
Brown's Point	PCB105	3:3	1.00	0.41	1.40	0.52
Brown's Point	PCB110	3:3	18.00	11.00	25.00	7.00
Brown's Point	PCB118	3:3	109.67	69.00	150.00	40.50
Brown's Point	PCB126	0:3	0.14	0.13	0.14	0.01
Brown's Point	PCB128	3:3	37.00	25.00	50.00	12.53
Brown's Point	PCB138	3:3	45.33	31.00	64.00	16.92
Brown's Point	PCB153	3:3	112.33	79.00	160.00	42.36
Brown's Point	PCB156	3:3	3.23	2.20	4.70	1.31
Brown's Point	PCB157	3:3	4.87	3.50	6.50	1.52
Brown's Point	PCB169	0:3	0.18	0.17	0.18	0.01
Brown's Point	PCB170	3:3	28.00	20.00	42.00	12.17
Brown's Point	PCB180	3:3	40.00	29.00	61.00	18.19
Brown's Point	PCB189	3:3	0.44	0.32	0.64	0.18
Brown's Point	PCB77	0:3	0.14	0.14	0.15	0.01
Brown's Point	ppDDD	3:3	4.20	3.20	5.40	1.11
Brown's Point	ppDDE	3:3	11.80	8.40	15.00	3.30
Brown's Point	ppDDT	1:2	1.06	0.31	1.80	1.05
Brown's Point	Solids	3:3	20.34	19.22	21.58	1.18
Brown's Point	TotalDDT	3:3	29.00	19.00	49.00	17.32
Brown's Point	TotalPCB	3:3	663.33	460.00	940.00	248.26
Carr Inlet	1,2,4-trichlorobenzene	0:1	85.00	85.00	85.00	
Carr Inlet	1,2-dichlorobenzene	0:1	85.00	85.00	85.00	
Carr Inlet	1,2-diphenylhydrazine	0:1	85.00	85.00	85.00	
Carr Inlet	1,3-dichlorobenzene	0:1	85.00	85.00	85.00	
Carr Inlet	1,4-dichlorobenzene	0:1	85.00	85.00	85.00	
Carr Inlet	2,4,5-trichlorophenol	0:1	85.00	85.00	85.00	
Carr Inlet	2,4,6-trichlorophenol	0:1	125.00	125.00	125.00	
Carr Inlet	2,4-dichlorophenol	0:1	85.00	85.00	85.00	
Carr Inlet	2,4-dimethylphenol	0:1	85.00	85.00	85.00	
Carr Inlet	2,4-dinitrophenol	0:1	510.00	510.00	510.00	
Carr Inlet	2,4-dinitrotoluene	0:1	125.00	125.00	125.00	
Carr Inlet	2,6-dinitrotoluene	0:1	125.00	125.00	125.00	
Carr Inlet	2-chloronaphthalene	0:1	85.00	85.00	85.00	
Carr Inlet	2-chlorophenol	0:1	85.00	85.00	85.00	
Carr Inlet	2-methylnaphthalene	0:1	85.00	85.00	85.00	
Carr Inlet	2-methylphenol	0:1	85.00	85.00	85.00	
Carr Inlet	2-nitroaniline	0:1	85.00	85.00	85.00	
Carr Inlet	2-nitrophenol	0:1	85.00	85.00	85.00	
Carr Inlet	3-nitroaniline	0:1	510.00	510.00	510.00	
Carr Inlet	4,6-dinitro-o-cresol	0:1	260.00	260.00	260.00	
Carr Inlet	4-bromophenylphenylether	0:1	85.00	85.00	85.00	
Carr Inlet	4-chloro-3-methylphenol	0:1	125.00	125.00	125.00	
Carr Inlet	4-chloroaniline	0:1	85.00	85.00	85.00	
Carr Inlet	4-chlorophenylphenylether	0:1	85.00	85.00	85.00	
Carr Inlet	4-methylphenol	0:1	85.00	85.00	85.00	
Carr Inlet	4-nitroaniline	0:1	100.00	100.00	100.00	
Carr Inlet	4-nitrophenol	0:1	300.00	300.00	300.00	
Carr Inlet	acenaphthene	0:1	85.00	85.00	85.00	
Carr Inlet	acenaphthylene	0:1	85.00	85.00	85.00	
Carr Inlet	Aldrin	0:1	13.00	13.00	13.00	



Location	Assay	No. Detected:			SD
		lo. Analyzed	Mean	Min	
Carr Inlet	alpha chlordane	0:1	6.30	6.30	6.30
Carr Inlet	alpha endosulfan	0:1	13.00	13.00	13.00
Carr Inlet	alpha hexachlorocyclohexane	0:1	6.30	6.30	6.30
Carr Inlet	aniline	0:1	85.00	85.00	85.00
Carr Inlet	anthracene	0:1	85.00	85.00	85.00
Carr Inlet	Aroclor 1016	0:1	80.00	80.00	80.00
Carr Inlet	Aroclor 1221	0:1	80.00	80.00	80.00
Carr Inlet	Aroclor 1232	0:1	50.00	50.00	50.00
Carr Inlet	Aroclor 1242	0:1	50.00	50.00	50.00
Carr Inlet	Aroclor 1248	0:1	50.00	50.00	50.00
Carr Inlet	Aroclor 1254	1:1	97.00	97.00	97.00
Carr Inlet	Aroclor 1260	1:1	240.00	240.00	240.00
Carr Inlet	arsenic	1:1	9.20	9.20	9.20
Carr Inlet	benzo(a)anthracene	0:1	125.00	125.00	125.00
Carr Inlet	benzo(a)pyrene	0:1	85.00	85.00	85.00
Carr Inlet	benzo(b)fluoranthene	0:1	125.00	125.00	125.00
Carr Inlet	benzo(g,h,i)perylene	0:1	85.00	85.00	85.00
Carr Inlet	benzo(k)fluoranthene	0:1	85.00	85.00	85.00
Carr Inlet	benzoic acid	0:1	256.00	256.00	256.00
Carr Inlet	benzyl alcohol	1:1	1000.00	1000.00	1000.00
Carr Inlet	benzylbutylphthalate	0:1	260.00	260.00	260.00
Carr Inlet	beta endosulfan	0:1	13.00	13.00	13.00
Carr Inlet	beta hexachlorocyclohexane	0:1	6.30	6.30	6.30
Carr Inlet	bis(2-chloroethoxy)methane	0:1	85.00	85.00	85.00
Carr Inlet	bis(2-chloroethyl)ether	0:1	85.00	85.00	85.00
Carr Inlet	bis(2-chloroisopropyl)ether	0:1	85.00	85.00	85.00
Carr Inlet	bis(2-ethylhexyl)phthalate	1:1	1850.00	1850.00	1850.00
Carr Inlet	carbazole	0:1	260.00	260.00	260.00
Carr Inlet	chrysene	0:1	260.00	260.00	260.00
Carr Inlet	copper	1:1	8.80	8.80	8.80
Carr Inlet	coprostanol	0:1	21000.00	21000.00	21000.00
Carr Inlet	delta hexachlorocyclohexane	0:1	6.30	6.30	6.30
Carr Inlet	dibenzo(a,h)anthracene	0:1	85.00	85.00	85.00
Carr Inlet	dibenzofuran	0:1	85.00	85.00	85.00
Carr Inlet	Dieldrin	0:1	13.00	13.00	13.00
Carr Inlet	diethylphthalate	0:1	85.00	85.00	85.00
Carr Inlet	dimethylphthalate	0:1	85.00	85.00	85.00
Carr Inlet	di-n-butylphthalate	0:1	85.00	85.00	85.00
Carr Inlet	di-n-octylphthalate	0:1	85.00	85.00	85.00
Carr Inlet	endosulfan sulfate	0:1	13.00	13.00	13.00
Carr Inlet	Endrin	0:1	13.00	13.00	13.00
Carr Inlet	endrin aldehyde	0:1	13.00	13.00	13.00
Carr Inlet	fluoranthene	0:1	85.00	85.00	85.00
Carr Inlet	fluorene	0:1	85.00	85.00	85.00
Carr Inlet	gamma chlordane	0:1	6.30	6.30	6.30
Carr Inlet	gamma hexachlorocyclohexane	0:1	6.30	6.30	6.30
Carr Inlet	Heptachlor	0:1	6.30	6.30	6.30
Carr Inlet	heptachlor epoxide	0:1	6.30	6.30	6.30
Carr Inlet	hexachlorobenzene	0:1	85.00	85.00	85.00
Carr Inlet	hexachlorobutadiene	0:1	85.00	85.00	85.00
Carr Inlet	hexachlorocyclopentadiene	0:1	510.00	510.00	510.00
Carr Inlet	hexachloroethane	0:1	85.00	85.00	85.00
Carr Inlet	indeno(1,2,3-c,d)pyrene	0:1	85.00	85.00	85.00

Location	Assay	No. Detected:			SD	
		lo. Analyzed	Mean	Min		Max
Carr Inlet	isophorone	0:1	85.00	85.00	85.00	
Carr Inlet	lead	1:1	0.37	0.37	0.37	
Carr Inlet	mercury	1:1	0.08	0.08	0.08	
Carr Inlet	Methoxychlor	0:1	63.00	63.00	63.00	
Carr Inlet	naphthalene	0:1	85.00	85.00	85.00	
Carr Inlet	nitrobenzene	0:1	85.00	85.00	85.00	
Carr Inlet	N-nitrosodimethylamine	0:1	260.00	260.00	260.00	
Carr Inlet	N-nitroso-di-n-propylamine	0:1	85.00	85.00	85.00	
Carr Inlet	N-nitrosodiphenylamine	0:1	85.00	85.00	85.00	
Carr Inlet	pentachlorophenol	0:1	260.00	260.00	260.00	
Carr Inlet	phenanthrene	0:1	85.00	85.00	85.00	
Carr Inlet	phenol	0:1	85.00	85.00	85.00	
Carr Inlet	ppDDD	0:1	13.00	13.00	13.00	
Carr Inlet	ppDDE	0:1	13.00	13.00	13.00	
Carr Inlet	ppDDT	0:1	13.00	13.00	13.00	
Carr Inlet	pyrene	0:1	125.00	125.00	125.00	
Carr Inlet	Toxaphene	0:1	100.00	100.00	100.00	
Dana Passage	1,2,4-trichlorobenzene	0:1	160.00	160.00	160.00	
Dana Passage	1,2-dichlorobenzene	0:1	300.00	300.00	300.00	
Dana Passage	1,2-diphenylhydrazine	0:1	160.00	160.00	160.00	
Dana Passage	1,3-dichlorobenzene	0:1	300.00	300.00	300.00	
Dana Passage	1,4-dichlorobenzene	0:1	470.00	470.00	470.00	
Dana Passage	2,4-dichlorophenol	0:1	160.00	160.00	160.00	
Dana Passage	2,4-dimethylphenol	0:1	160.00	160.00	160.00	
Dana Passage	2,4-dinitrotoluene	0:1	1000.00	1000.00	1000.00	
Dana Passage	2,6-dinitrotoluene	0:1	1000.00	1000.00	1000.00	
Dana Passage	2-chloronaphthalene	0:1	300.00	300.00	300.00	
Dana Passage	2-chlorophenol	0:1	160.00	160.00	160.00	
Dana Passage	2-methylnaphthalene	0:1	160.00	160.00	160.00	
Dana Passage	2-methylphenol	0:1	160.00	160.00	160.00	
Dana Passage	2-nitroaniline	0:1	310.00	310.00	310.00	
Dana Passage	2-nitrophenol	0:1	160.00	160.00	160.00	
Dana Passage	3-nitroaniline	0:1	160.00	160.00	160.00	
Dana Passage	4,6-dinitro-o-cresol	0:1	2300.00	2300.00	2300.00	
Dana Passage	4-chloro-3-methylphenol	0:1	1000.00	1000.00	1000.00	
Dana Passage	4-chlorophenylphenylether	0:1	160.00	160.00	160.00	
Dana Passage	4-methylphenol	0:1	160.00	160.00	160.00	
Dana Passage	4-nitroaniline	0:1	800.00	800.00	800.00	
Dana Passage	4-nitrophenol	0:1	1600.00	1600.00	1600.00	
Dana Passage	acenaphthene	0:1	160.00	160.00	160.00	
Dana Passage	acenaphthylene	0:1	160.00	160.00	160.00	
Dana Passage	Aldrin	0:1	320.00	320.00	320.00	
Dana Passage	alpha chlordane	0:1	62.50	62.50	62.50	
Dana Passage	alpha hexachlorocyclohexane	0:1	32.00	32.00	32.00	
Dana Passage	aniline	0:1	1700.00	1700.00	1700.00	
Dana Passage	anthracene	0:1	160.00	160.00	160.00	
Dana Passage	Aroclor 1016	0:2	90.00	20.00	160.00	98.99
Dana Passage	Aroclor 1221	0:2	90.00	20.00	160.00	98.99
Dana Passage	Aroclor 1232	0:2	90.00	20.00	160.00	98.99
Dana Passage	Aroclor 1242	0:2	90.00	20.00	160.00	98.99
Dana Passage	Aroclor 1248	0:2	90.00	20.00	160.00	98.99
Dana Passage	Aroclor 1254	1:2	113.00	66.00	160.00	66.47
Dana Passage	Aroclor 1260	2:2	96.00	62.00	130.00	48.08

Appendix: English Sole Liver

Location	Assay	No. Detected:				SD
		lo. Analyzed	Mean	Min	Max	
Dana Passage	arsenic	3:3	8.67	7.40	11.00	2.02
Dana Passage	benzo(a)anthracene	0:1	470.00	470.00	470.00	
Dana Passage	benzo(a)pyrene	0:1	160.00	160.00	160.00	
Dana Passage	benzo(b)fluoranthene	0:1	470.00	470.00	470.00	
Dana Passage	benzo(g,h,i)perylene	0:1	470.00	470.00	470.00	
Dana Passage	benzo(k)fluoranthene	0:1	310.00	310.00	310.00	
Dana Passage	benzoic acid	1:1	4200.00	4200.00	4200.00	
Dana Passage	benzyl alcohol	1:1	880.00	880.00	880.00	
Dana Passage	benzylbutylphthalate	0:1	470.00	470.00	470.00	
Dana Passage	beta endosulfan	0:1	320.00	320.00	320.00	
Dana Passage	bis(2-chloroethoxy)methane	0:1	160.00	160.00	160.00	
Dana Passage	bis(2-chloroethyl)ether	0:1	160.00	160.00	160.00	
Dana Passage	bis(2-chloroisopropyl)ether	0:1	470.00	470.00	470.00	
Dana Passage	bis(2-ethylhexyl)phthalate	0:1	160.00	160.00	160.00	
Dana Passage	carbazole	0:1	160.00	160.00	160.00	
Dana Passage	chrysene	0:1	1000.00	1000.00	1000.00	
Dana Passage	copper	3:3	9.43	7.70	11.00	1.66
Dana Passage	delta hexachlorocyclohexane	0:1	32.00	32.00	32.00	
Dana Passage	dibenzo(a,h)anthracene	0:1	300.00	300.00	300.00	
Dana Passage	dibenzofuran	0:1	300.00	300.00	300.00	
Dana Passage	Dieldrin	0:1	320.00	320.00	320.00	
Dana Passage	diethylphthalate	0:1	160.00	160.00	160.00	
Dana Passage	dimethylphthalate	0:1	160.00	160.00	160.00	
Dana Passage	di-n-butylphthalate	0:1	160.00	160.00	160.00	
Dana Passage	di-n-octylphthalate	0:1	160.00	160.00	160.00	
Dana Passage	endosulfan sulfate	0:1	400.00	400.00	400.00	
Dana Passage	Endrin	0:1	320.00	320.00	320.00	
Dana Passage	fluoranthene	0:1	1000.00	1000.00	1000.00	
Dana Passage	fluorene	0:1	160.00	160.00	160.00	
Dana Passage	gamma chlordane	0:1	62.50	62.50	62.50	
Dana Passage	Heptachlor	0:1	320.00	320.00	320.00	
Dana Passage	heptachlor epoxide	0:1	32.00	32.00	32.00	
Dana Passage	hexachlorocyclopentadiene	0:1	1700.00	1700.00	1700.00	
Dana Passage	hexachloroethane	0:1	300.00	300.00	300.00	
Dana Passage	indeno(1,2,3-c,d)pyrene	0:1	400.00	400.00	400.00	
Dana Passage	isophorone	0:1	160.00	160.00	160.00	
Dana Passage	lead	3:3	0.63	0.60	0.70	0.06
Dana Passage	Lipids	1:1	5.20	5.20	5.20	
Dana Passage	mercury	3:3	0.04	0.04	0.04	0.00
Dana Passage	Methoxychlor	0:1	32.00	32.00	32.00	
Dana Passage	naphthalene	0:1	160.00	160.00	160.00	
Dana Passage	nitrobenzene	0:1	300.00	300.00	300.00	
Dana Passage	N-nitrosodimethylamine	0:1	160.00	160.00	160.00	
Dana Passage	N-nitroso-di-n-propylamine	0:1	160.00	160.00	160.00	
Dana Passage	N-nitrosodiphenylamine	0:1	160.00	160.00	160.00	
Dana Passage	phenanthrene	0:1	160.00	160.00	160.00	
Dana Passage	phenol	0:1	160.00	160.00	160.00	
Dana Passage	ppDDD	0:1	32.00	32.00	32.00	
Dana Passage	ppDDE	0:1	320.00	320.00	320.00	
Dana Passage	ppDDT	0:1	160.00	160.00	160.00	
Dana Passage	pyrene	0:1	160.00	160.00	160.00	
Dana Passage	Solids	2:2	22.00	19.00	25.00	4.24
Dana Passage	Toxaphene	0:1	1000.00	1000.00	1000.00	

Location	Assay	No. Detected:				SD
		lo. Analyzed	Mean	Min	Max	
Dash Point	1,2,4-trichlorobenzene	0:3	85.00	85.00	85.00	0.00
Dash Point	1,2-dichlorobenzene	0:3	85.00	85.00	85.00	0.00
Dash Point	1,2-diphenylhydrazine	0:3	85.00	85.00	85.00	0.00
Dash Point	1,3-dichlorobenzene	0:3	85.00	85.00	85.00	0.00
Dash Point	1,4-dichlorobenzene	0:3	85.00	85.00	85.00	0.00
Dash Point	2,4,5-trichlorophenol	0:3	85.00	85.00	85.00	0.00
Dash Point	2,4,6-trichlorophenol	0:3	125.00	125.00	125.00	0.00
Dash Point	2,4-dichlorophenol	0:3	85.00	85.00	85.00	0.00
Dash Point	2,4-dimethylphenol	0:3	85.00	85.00	85.00	0.00
Dash Point	2,4-dinitrophenol	0:3	510.00	510.00	510.00	0.00
Dash Point	2,4-dinitrotoluene	0:3	125.00	125.00	125.00	0.00
Dash Point	2,6-dinitrotoluene	0:3	125.00	125.00	125.00	0.00
Dash Point	2-chloronaphthalene	0:3	85.00	85.00	85.00	0.00
Dash Point	2-chlorophenol	0:3	85.00	85.00	85.00	0.00
Dash Point	2-methylnaphthalene	0:3	85.00	85.00	85.00	0.00
Dash Point	2-methylphenol	0:3	85.00	85.00	85.00	0.00
Dash Point	2-nitroaniline	0:3	85.00	85.00	85.00	0.00
Dash Point	2-nitrophenol	0:3	85.00	85.00	85.00	0.00
Dash Point	3-nitroaniline	0:3	510.00	510.00	510.00	0.00
Dash Point	4,6-dinitro-o-cresol	0:3	260.00	260.00	260.00	0.00
Dash Point	4-bromophenylphenylether	0:3	85.00	85.00	85.00	0.00
Dash Point	4-chloro-3-methylphenol	0:3	125.00	125.00	125.00	0.00
Dash Point	4-chloroaniline	0:3	85.00	85.00	85.00	0.00
Dash Point	4-chlorophenylphenylether	0:3	85.00	85.00	85.00	0.00
Dash Point	4-methylphenol	0:3	85.00	85.00	85.00	0.00
Dash Point	4-nitroaniline	0:3	260.00	260.00	260.00	0.00
Dash Point	4-nitrophenol	0:3	510.00	510.00	510.00	0.00
Dash Point	acenaphthene	0:3	85.00	85.00	85.00	0.00
Dash Point	acenaphthylene	0:3	85.00	85.00	85.00	0.00
Dash Point	Aldrin	0:3	13.00	13.00	13.00	0.00
Dash Point	alpha chlordane	0:3	6.30	6.30	6.30	0.00
Dash Point	alpha endosulfan	0:3	13.00	13.00	13.00	0.00
Dash Point	alpha hexachlorocyclohexane	0:3	6.30	6.30	6.30	0.00
Dash Point	aniline	0:3	85.00	85.00	85.00	0.00
Dash Point	anthracene	0:3	85.00	85.00	85.00	0.00
Dash Point	Aroclor 1016	0:3	80.00	80.00	80.00	0.00
Dash Point	Aroclor 1221	0:3	80.00	80.00	80.00	0.00
Dash Point	Aroclor 1232	0:3	50.00	50.00	50.00	0.00
Dash Point	Aroclor 1242	0:3	50.00	50.00	50.00	0.00
Dash Point	Aroclor 1248	0:3	50.00	50.00	50.00	0.00
Dash Point	Aroclor 1254	2:3	74.67	50.00	110.00	31.39
Dash Point	Aroclor 1260	3:3	260.00	190.00	300.00	60.83
Dash Point	arsenic	3:3	12.00	11.00	13.00	1.00
Dash Point	benzo(a)anthracene	0:3	125.00	125.00	125.00	0.00
Dash Point	benzo(a)pyrene	0:3	85.00	85.00	85.00	0.00
Dash Point	benzo(b)fluoranthene	0:3	125.00	125.00	125.00	0.00
Dash Point	benzo(g,h,i)perylene	0:3	85.00	85.00	85.00	0.00
Dash Point	benzo(k)fluoranthene	0:3	85.00	85.00	85.00	0.00
Dash Point	benzoic acid	1:3	257.33	256.00	260.00	2.31
Dash Point	benzyl alcohol	3:3	543.33	300.00	730.00	220.53
Dash Point	benzylbutylphthalate	0:3	260.00	260.00	260.00	0.00
Dash Point	beta endosulfan	0:3	13.00	13.00	13.00	0.00
Dash Point	beta hexachlorocyclohexane	0:3	6.30	6.30	6.30	0.00

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Dash Point	bis(2-chloroethoxy)methane	0:3	85.00	85.00	85.00	0.00
Dash Point	bis(2-chloroethyl)ether	0:3	85.00	85.00	85.00	0.00
Dash Point	bis(2-chloroisopropyl)ether	0:3	85.00	85.00	85.00	0.00
Dash Point	bis(2-ethylhexyl)phthalate	0:3	85.00	85.00	85.00	0.00
Dash Point	carbazole	0:3	260.00	260.00	260.00	0.00
Dash Point	chrysene	0:3	260.00	260.00	260.00	0.00
Dash Point	copper	3:3	6.27	4.30	7.70	1.76
Dash Point	coprostanol	0:3	21000.00	21000.00	21000.00	0.00
Dash Point	delta hexachlorocyclohexane	0:3	6.30	6.30	6.30	0.00
Dash Point	dibenzo(a,h)anthracene	0:3	85.00	85.00	85.00	0.00
Dash Point	dibenzofuran	0:3	85.00	85.00	85.00	0.00
Dash Point	Dieldrin	0:3	13.00	13.00	13.00	0.00
Dash Point	diethylphthalate	0:3	85.00	85.00	85.00	0.00
Dash Point	dimethylphthalate	0:3	85.00	85.00	85.00	0.00
Dash Point	di-n-butylphthalate	0:3	85.00	85.00	85.00	0.00
Dash Point	di-n-octylphthalate	0:3	85.00	85.00	85.00	0.00
Dash Point	endosulfan sulfate	0:3	13.00	13.00	13.00	0.00
Dash Point	Endrin	0:3	13.00	13.00	13.00	0.00
Dash Point	endrin aldehyde	0:3	13.00	13.00	13.00	0.00
Dash Point	fluoranthene	0:3	85.00	85.00	85.00	0.00
Dash Point	fluorene	0:3	85.00	85.00	85.00	0.00
Dash Point	gamma chlordane	0:3	6.30	6.30	6.30	0.00
Dash Point	gamma hexachlorocyclohexane	0:3	6.30	6.30	6.30	0.00
Dash Point	Heptachlor	0:3	6.30	6.30	6.30	0.00
Dash Point	heptachlor epoxide	0:3	6.30	6.30	6.30	0.00
Dash Point	hexachlorobenzene	0:3	85.00	85.00	85.00	0.00
Dash Point	hexachlorobutadiene	0:3	85.00	85.00	85.00	0.00
Dash Point	hexachlorocyclopentadiene	0:3	510.00	510.00	510.00	0.00
Dash Point	hexachloroethane	0:3	85.00	85.00	85.00	0.00
Dash Point	indeno(1,2,3-c,d)pyrene	0:3	85.00	85.00	85.00	0.00
Dash Point	isophorone	0:3	85.00	85.00	85.00	0.00
Dash Point	lead	3:3	0.12	0.09	0.16	0.04
Dash Point	Lipids	3:3	4.13	3.40	4.60	0.64
Dash Point	mercury	3:3	0.12	0.11	0.13	0.01
Dash Point	Methoxychlor	0:3	63.00	63.00	63.00	0.00
Dash Point	naphthalene	0:3	85.00	85.00	85.00	0.00
Dash Point	nitrobenzene	0:3	85.00	85.00	85.00	0.00
Dash Point	N-nitrosodimethylamine	0:3	260.00	260.00	260.00	0.00
Dash Point	N-nitroso-di-n-propylamine	0:3	85.00	85.00	85.00	0.00
Dash Point	N-nitrosodiphenylamine	0:3	85.00	85.00	85.00	0.00
Dash Point	pentachlorophenol	0:3	256.00	256.00	256.00	0.00
Dash Point	phenanthrene	0:3	85.00	85.00	85.00	0.00
Dash Point	phenol	0:3	85.00	85.00	85.00	0.00
Dash Point	ppDDD	0:3	13.00	13.00	13.00	0.00
Dash Point	ppDDE	1:3	13.67	13.00	15.00	1.15
Dash Point	ppDDT	0:3	13.00	13.00	13.00	0.00
Dash Point	pyrene	0:3	125.00	125.00	125.00	0.00
Dash Point	Toxaphene	0:3	100.00	100.00	100.00	0.00
Discovery Bay	Aroclor 1016	0:1	160.00	160.00	160.00	
Discovery Bay	Aroclor 1221	0:1	160.00	160.00	160.00	
Discovery Bay	Aroclor 1232	0:1	160.00	160.00	160.00	
Discovery Bay	Aroclor 1242	0:1	160.00	160.00	160.00	
Discovery Bay	Aroclor 1248	0:1	160.00	160.00	160.00	

Appendix: English Sole Liver

Location	Assay	No. Detected:				SD
		lo. Analyzed	Mean	Min	Max	
Discovery Bay	Aroclor 1254	0:1	160.00	160.00	160.00	
Discovery Bay	Aroclor 1260	1:1	80.00	80.00	80.00	
Discovery Bay	Solids	1:1	23.00	23.00	23.00	
Duwamish River	1,2,4-trichlorobenzene	0:1	300.00	300.00	300.00	
Duwamish River	1,2-dichlorobenzene	0:1	300.00	300.00	300.00	
Duwamish River	1,2-diphenylhydrazine	0:1	300.00	300.00	300.00	
Duwamish River	1,3-dichlorobenzene	0:1	1000.00	1000.00	1000.00	
Duwamish River	1,4-dichlorobenzene	0:1	1000.00	1000.00	1000.00	
Duwamish River	2,4-dichlorophenol	0:1	300.00	300.00	300.00	
Duwamish River	2,4-dimethylphenol	0:1	300.00	300.00	300.00	
Duwamish River	2,4-dinitrotoluene	0:1	1000.00	1000.00	1000.00	
Duwamish River	2,6-dinitrotoluene	0:1	1000.00	1000.00	1000.00	
Duwamish River	2-chloronaphthalene	0:1	300.00	300.00	300.00	
Duwamish River	2-chlorophenol	0:1	300.00	300.00	300.00	
Duwamish River	2-methylnaphthalene	0:1	300.00	300.00	300.00	
Duwamish River	2-methylphenol	0:1	300.00	300.00	300.00	
Duwamish River	2-nitroaniline	0:1	700.00	700.00	700.00	
Duwamish River	2-nitrophenol	0:1	300.00	300.00	300.00	
Duwamish River	3-nitroaniline	0:1	300.00	300.00	300.00	
Duwamish River	4,6-dinitro-o-cresol	0:1	5000.00	5000.00	5000.00	
Duwamish River	4-chloro-3-methylphenol	0:1	1000.00	1000.00	1000.00	
Duwamish River	4-chlorophenylphenylether	0:1	300.00	300.00	300.00	
Duwamish River	4-methylphenol	0:1	300.00	300.00	300.00	
Duwamish River	4-nitroaniline	0:1	2000.00	2000.00	2000.00	
Duwamish River	4-nitrophenol	0:1	3000.00	3000.00	3000.00	
Duwamish River	acenaphthene	0:1	300.00	300.00	300.00	
Duwamish River	acenaphthylene	0:1	300.00	300.00	300.00	
Duwamish River	Aldrin	0:6	164.00	8.00	320.00	170.89
Duwamish River	alpha chlordane	3:6	62.45	46.10	79.70	10.64
Duwamish River	alpha endosulfan	0:3	8.00	8.00	8.00	0.00
Duwamish River	alpha hexachlorocyclohexane	0:6	19.15	6.30	32.00	14.08
Duwamish River	aniline	0:1	1700.00	1700.00	1700.00	
Duwamish River	anthracene	0:1	300.00	300.00	300.00	
Duwamish River	Aroclor 1016	0:6	90.00	80.00	100.00	10.95
Duwamish River	Aroclor 1221	0:6	90.00	80.00	100.00	10.95
Duwamish River	Aroclor 1232	0:6	90.00	80.00	100.00	10.95
Duwamish River	Aroclor 1242	0:6	90.00	80.00	100.00	10.95
Duwamish River	Aroclor 1248	6:6	626.00	295.00	1000.00	302.77
Duwamish River	Aroclor 1254	6:6	2456.67	1400.00	3080.00	566.20
Duwamish River	Aroclor 1260	6:6	2745.00	1200.00	3400.00	791.14
Duwamish River	arsenic	4:4	9.15	6.80	11.00	1.92
Duwamish River	benzo(a)anthracene	0:1	1000.00	1000.00	1000.00	
Duwamish River	benzo(a)pyrene	0:1	300.00	300.00	300.00	
Duwamish River	benzo(b)fluoranthene	0:1	1000.00	1000.00	1000.00	
Duwamish River	benzo(g,h,i)perylene	0:1	1000.00	1000.00	1000.00	
Duwamish River	benzo(k)fluoranthene	0:1	700.00	700.00	700.00	
Duwamish River	benzoic acid	0:1	3000.00	3000.00	3000.00	
Duwamish River	benzyl alcohol	1:1	6700.00	6700.00	6700.00	
Duwamish River	benzylbutylphthalate	0:1	1000.00	1000.00	1000.00	
Duwamish River	beta endosulfan	0:6	166.50	13.00	320.00	168.15
Duwamish River	beta hexachlorocyclohexane	0:3	6.30	6.30	6.30	0.00
Duwamish River	bis(2-chloroethoxy)methane	0:1	300.00	300.00	300.00	
Duwamish River	bis(2-chloroethyl)ether	0:1	300.00	300.00	300.00	

Appendix: English Sole Liver

Location	Assay	No. Detected:				SD
		lo. Analyzed	Mean	Min	Max	
Duwamish River	bis(2-chloroisopropyl)ether	0:1	1000.00	1000.00	1000.00	
Duwamish River	bis(2-ethylhexyl)phthalate	1:1	1800.00	1800.00	1800.00	
Duwamish River	carbazole	0:1	300.00	300.00	300.00	
Duwamish River	chrysene	0:1	1000.00	1000.00	1000.00	
Duwamish River	copper	4:4	6.16	5.70	6.70	0.47
Duwamish River	delta hexachlorocyclohexane	0:6	19.15	6.30	32.00	14.08
Duwamish River	dibenzo(a,h)anthracene	0:1	300.00	300.00	300.00	
Duwamish River	dibenzofuran	0:1	300.00	300.00	300.00	
Duwamish River	Dieldrin	0:6	166.50	13.00	320.00	168.15
Duwamish River	diethylphthalate	0:1	300.00	300.00	300.00	
Duwamish River	dimethylphthalate	0:1	300.00	300.00	300.00	
Duwamish River	di-n-butylphthalate	0:1	300.00	300.00	300.00	
Duwamish River	di-n-octylphthalate	0:1	300.00	300.00	300.00	
Duwamish River	endosulfan sulfate	0:6	206.50	13.00	400.00	211.97
Duwamish River	Endrin	0:6	166.50	13.00	320.00	168.15
Duwamish River	endrin aldehyde	0:3	13.00	13.00	13.00	0.00
Duwamish River	fluoranthene	0:1	1000.00	1000.00	1000.00	
Duwamish River	fluorene	0:1	300.00	300.00	300.00	
Duwamish River	gamma chlordane	3:6	39.07	11.40	62.50	25.88
Duwamish River	gamma hexachlorocyclohexane	0:3	6.30	6.30	6.30	0.00
Duwamish River	Heptachlor	0:6	163.15	6.30	320.00	171.82
Duwamish River	heptachlor epoxide	0:6	19.15	6.30	32.00	14.08
Duwamish River	hexachlorobenzene	3:3	2.90	2.80	3.00	0.10
Duwamish River	hexachlorocyclopentadiene	0:1	1700.00	1700.00	1700.00	
Duwamish River	hexachloroethane	0:1	300.00	300.00	300.00	
Duwamish River	indeno(1,2,3-c,d)pyrene	0:1	800.00	800.00	800.00	
Duwamish River	isophorone	0:1	300.00	300.00	300.00	
Duwamish River	lead	4:4	0.41	0.24	0.51	0.12
Duwamish River	Lipids	6:6	7.44	6.75	8.37	0.73
Duwamish River	mercury	6:6	0.10	0.06	0.12	0.02
Duwamish River	Methoxychlor	0:6	47.50	32.00	63.00	16.98
Duwamish River	naphthalene	0:1	300.00	300.00	300.00	
Duwamish River	nitrobenzene	0:1	300.00	300.00	300.00	
Duwamish River	N-nitrosodimethylamine	0:1	300.00	300.00	300.00	
Duwamish River	N-nitroso-di-n-propylamine	0:1	300.00	300.00	300.00	
Duwamish River	N-nitrosodiphenylamine	0:1	300.00	300.00	300.00	
Duwamish River	opDDD	2:3	5.75	0.14	9.80	5.01
Duwamish River	opDDT	0:1	0.27	0.27	0.27	
Duwamish River	PCB101	3:3	2700.00	2000.00	4000.00	1126.94
Duwamish River	PCB105	3:3	210.00	150.00	280.00	65.57
Duwamish River	PCB110	3:3	496.67	380.00	560.00	101.16
Duwamish River	PCB118	3:3	756.67	580.00	970.00	197.57
Duwamish River	PCB126	3:3	0.60	0.48	0.67	0.10
Duwamish River	PCB128	3:3	293.33	190.00	400.00	105.04
Duwamish River	PCB138	3:3	740.00	560.00	960.00	202.98
Duwamish River	PCB153	3:3	2233.33	1600.00	3000.00	709.46
Duwamish River	PCB156	3:3	66.33	47.00	91.00	22.48
Duwamish River	PCB157	0:3	0.06	0.04	0.08	0.02
Duwamish River	PCB169	0:3	0.11	0.08	0.15	0.04
Duwamish River	PCB170	3:3	280.00	210.00	380.00	88.88
Duwamish River	PCB180	3:3	440.00	340.00	540.00	100.00
Duwamish River	PCB189	3:3	5.90	4.70	7.60	1.51
Duwamish River	PCB77	3:3	0.88	0.78	0.99	0.11

Location	Assay	No. Detected:				SD
		lo. Analyzed	Mean	Min	Max	
Duwamish River	phenanthrene	0:1	300.00	300.00	300.00	
Duwamish River	phenol	0:1	300.00	300.00	300.00	
Duwamish River	ppDDD	6:9	77.62	32.00	157.00	43.06
Duwamish River	ppDDE	6:8	220.25	140.00	320.00	71.33
Duwamish River	ppDDT	3:9	63.41	6.70	160.00	72.61
Duwamish River	pyrene	0:1	300.00	300.00	300.00	
Duwamish River	Solids	5:5	23.56	22.27	25.00	0.98
Duwamish River	TotalDDT	3:3	213.33	150.00	260.00	56.86
Duwamish River	TotalPCB	3:3	9933.33	7300.00	13000.00	2874.60
Duwamish River	Toxaphene	0:6	550.00	100.00	1000.00	492.95
Dyes Inlet	1,2,4-trichlorobenzene	0:1	300.00	300.00	300.00	
Dyes Inlet	1,2-dichlorobenzene	0:1	300.00	300.00	300.00	
Dyes Inlet	1,2-diphenylhydrazine	0:1	300.00	300.00	300.00	
Dyes Inlet	1,3-dichlorobenzene	0:1	1000.00	1000.00	1000.00	
Dyes Inlet	1,4-dichlorobenzene	0:1	1000.00	1000.00	1000.00	
Dyes Inlet	2,4-dichlorophenol	0:1	300.00	300.00	300.00	
Dyes Inlet	2,4-dimethylphenol	0:1	300.00	300.00	300.00	
Dyes Inlet	2,4-dinitrotoluene	0:1	1000.00	1000.00	1000.00	
Dyes Inlet	2,6-dinitrotoluene	0:1	1000.00	1000.00	1000.00	
Dyes Inlet	2-chloronaphthalene	0:1	300.00	300.00	300.00	
Dyes Inlet	2-chlorophenol	0:1	300.00	300.00	300.00	
Dyes Inlet	2-methylnaphthalene	0:1	300.00	300.00	300.00	
Dyes Inlet	2-methylphenol	0:1	300.00	300.00	300.00	
Dyes Inlet	2-nitroaniline	0:1	700.00	700.00	700.00	
Dyes Inlet	2-nitrophenol	0:1	300.00	300.00	300.00	
Dyes Inlet	3-nitroaniline	0:1	300.00	300.00	300.00	
Dyes Inlet	4,6-dinitro-o-cresol	0:1	5000.00	5000.00	5000.00	
Dyes Inlet	4-chloro-3-methylphenol	0:1	1000.00	1000.00	1000.00	
Dyes Inlet	4-chlorophenylphenylether	0:1	300.00	300.00	300.00	
Dyes Inlet	4-methylphenol	0:1	300.00	300.00	300.00	
Dyes Inlet	4-nitroaniline	0:1	2000.00	2000.00	2000.00	
Dyes Inlet	4-nitrophenol	0:1	3000.00	3000.00	3000.00	
Dyes Inlet	acenaphthene	0:1	300.00	300.00	300.00	
Dyes Inlet	acenaphthylene	0:1	300.00	300.00	300.00	
Dyes Inlet	Aldrin	0:3	320.00	320.00	320.00	0.00
Dyes Inlet	alpha chlordane	0:3	62.50	62.50	62.50	0.00
Dyes Inlet	alpha hexachlorocyclohexane	0:3	32.00	32.00	32.00	0.00
Dyes Inlet	aniline	0:1	1700.00	1700.00	1700.00	
Dyes Inlet	anthracene	0:1	300.00	300.00	300.00	
Dyes Inlet	Aroclor 1016	0:3	20.00	20.00	20.00	0.00
Dyes Inlet	Aroclor 1221	0:3	20.00	20.00	20.00	0.00
Dyes Inlet	Aroclor 1232	0:3	20.00	20.00	20.00	0.00
Dyes Inlet	Aroclor 1242	0:3	20.00	20.00	20.00	0.00
Dyes Inlet	Aroclor 1248	0:3	20.00	20.00	20.00	0.00
Dyes Inlet	Aroclor 1254	3:3	143.33	130.00	150.00	11.55
Dyes Inlet	Aroclor 1260	3:3	273.33	230.00	350.00	66.58
Dyes Inlet	arsenic	3:3	4.77	4.00	6.10	1.16
Dyes Inlet	benzo(a)anthracene	0:1	1000.00	1000.00	1000.00	
Dyes Inlet	benzo(a)pyrene	0:1	300.00	300.00	300.00	
Dyes Inlet	benzo(b)fluoranthene	0:1	1000.00	1000.00	1000.00	
Dyes Inlet	benzo(g,h,i)perylene	0:1	1000.00	1000.00	1000.00	
Dyes Inlet	benzo(k)fluoranthene	0:1	700.00	700.00	700.00	
Dyes Inlet	benzoic acid	0:1	3000.00	3000.00	3000.00	



Appendix: English Sole Liver

Location	Assay	No. Detected:				SD
		lo. Analyzed	Mean	Min	Max	
Dyes Inlet	benzyl alcohol	1:1	7300.00	7300.00	7300.00	
Dyes Inlet	benzylbutylphthalate	0:1	1000.00	1000.00	1000.00	
Dyes Inlet	beta endosulfan	0:3	320.00	320.00	320.00	0.00
Dyes Inlet	bis(2-chloroethoxy)methane	0:1	300.00	300.00	300.00	
Dyes Inlet	bis(2-chloroethyl)ether	0:1	300.00	300.00	300.00	
Dyes Inlet	bis(2-chloroisopropyl)ether	0:1	1000.00	1000.00	1000.00	
Dyes Inlet	bis(2-ethylhexyl)phthalate	0:1	300.00	300.00	300.00	
Dyes Inlet	carbazole	0:1	300.00	300.00	300.00	
Dyes Inlet	chrysene	0:1	1000.00	1000.00	1000.00	
Dyes Inlet	copper	3:3	6.37	5.30	7.70	1.22
Dyes Inlet	delta hexachlorocyclohexane	0:3	32.00	32.00	32.00	0.00
Dyes Inlet	dibenzo(a,h)anthracene	0:1	300.00	300.00	300.00	
Dyes Inlet	dibenzofuran	0:1	300.00	300.00	300.00	
Dyes Inlet	Dieldrin	0:3	320.00	320.00	320.00	0.00
Dyes Inlet	diethylphthalate	0:1	300.00	300.00	300.00	
Dyes Inlet	dimethylphthalate	0:1	300.00	300.00	300.00	
Dyes Inlet	di-n-butylphthalate	0:1	300.00	300.00	300.00	
Dyes Inlet	di-n-octylphthalate	0:1	300.00	300.00	300.00	
Dyes Inlet	endosulfan sulfate	0:3	400.00	400.00	400.00	0.00
Dyes Inlet	Endrin	0:3	320.00	320.00	320.00	0.00
Dyes Inlet	fluoranthene	0:1	1000.00	1000.00	1000.00	
Dyes Inlet	fluorene	0:1	300.00	300.00	300.00	
Dyes Inlet	gamma chlordane	0:3	62.50	62.50	62.50	0.00
Dyes Inlet	Heptachlor	0:3	320.00	320.00	320.00	0.00
Dyes Inlet	heptachlor epoxide	0:3	32.00	32.00	32.00	0.00
Dyes Inlet	hexachlorocyclopentadiene	0:1	1700.00	1700.00	1700.00	
Dyes Inlet	hexachloroethane	0:1	300.00	300.00	300.00	
Dyes Inlet	indeno(1,2,3-c,d)pyrene	0:1	800.00	800.00	800.00	
Dyes Inlet	isophorone	0:1	300.00	300.00	300.00	
Dyes Inlet	lead	3:3	1.00	1.00	1.00	0.00
Dyes Inlet	mercury	3:3	0.07	0.06	0.08	0.01
Dyes Inlet	Methoxychlor	0:3	32.00	32.00	32.00	0.00
Dyes Inlet	naphthalene	0:1	300.00	300.00	300.00	
Dyes Inlet	nitrobenzene	0:1	300.00	300.00	300.00	
Dyes Inlet	N-nitrosodimethylamine	0:1	300.00	300.00	300.00	
Dyes Inlet	N-nitroso-di-n-propylamine	0:1	300.00	300.00	300.00	
Dyes Inlet	N-nitrosodiphenylamine	0:1	300.00	300.00	300.00	
Dyes Inlet	phenanthrene	0:1	300.00	300.00	300.00	
Dyes Inlet	phenol	0:1	300.00	300.00	300.00	
Dyes Inlet	ppDDD	0:3	32.00	32.00	32.00	0.00
Dyes Inlet	ppDDE	0:3	320.00	320.00	320.00	0.00
Dyes Inlet	ppDDT	0:3	160.00	160.00	160.00	0.00
Dyes Inlet	pyrene	0:1	300.00	300.00	300.00	
Dyes Inlet	Solids	1:1	28.00	28.00	28.00	
Dyes Inlet	Toxaphene	0:3	1000.00	1000.00	1000.00	0.00
Eagle Harbor	Aldrin	0:3	8.00	8.00	8.00	0.00
Eagle Harbor	alpha chlordane	1:3	6.83	6.30	7.90	0.92
Eagle Harbor	alpha endosulfan	0:3	8.00	8.00	8.00	0.00
Eagle Harbor	alpha hexachlorocyclohexane	0:3	6.30	6.30	6.30	0.00
Eagle Harbor	Aroclor 1016	0:6	130.00	80.00	190.00	55.14
Eagle Harbor	Aroclor 1221	0:6	130.00	80.00	190.00	55.14
Eagle Harbor	Aroclor 1232	0:6	130.00	80.00	190.00	55.14
Eagle Harbor	Aroclor 1242	0:6	130.00	80.00	190.00	55.14

# Appendix: English Sole Liver

Location	Assay	No. Detected:				SD
		lo. Analyzed	Mean	Min	Max	
Eagle Harbor	Aroclor 1248	0:6	130.00	80.00	190.00	55.14
Eagle Harbor	Aroclor 1254	3:6	228.50	168.00	437.00	104.30
Eagle Harbor	Aroclor 1260	6:6	392.67	260.00	627.00	146.28
Eagle Harbor	arsenic	3:3	7.16	5.00	8.40	1.88
Eagle Harbor	beta endosulfan	0:3	13.00	13.00	13.00	0.00
Eagle Harbor	beta hexachlorocyclohexane	0:3	6.30	6.30	6.30	0.00
Eagle Harbor	copper	3:3	5.40	4.19	6.34	1.10
Eagle Harbor	delta hexachlorocyclohexane	0:3	6.30	6.30	6.30	0.00
Eagle Harbor	Dieldrin	0:3	13.00	13.00	13.00	0.00
Eagle Harbor	endosulfan sulfate	0:3	13.00	13.00	13.00	0.00
Eagle Harbor	Endrin	0:3	13.00	13.00	13.00	0.00
Eagle Harbor	endrin aldehyde	0:3	13.00	13.00	13.00	0.00
Eagle Harbor	gamma chlordane	2:3	8.18	6.30	10.20	1.95
Eagle Harbor	gamma hexachlorocyclohexane	0:3	6.30	6.30	6.30	0.00
Eagle Harbor	Heptachlor	0:3	6.30	6.30	6.30	0.00
Eagle Harbor	heptachlor epoxide	0:3	6.30	6.30	6.30	0.00
Eagle Harbor	hexachlorobenzene	3:3	0.97	0.70	1.40	0.38
Eagle Harbor	lead	3:3	0.25	0.23	0.27	0.02
Eagle Harbor	Lipids	6:6	4.21	3.69	4.79	0.36
Eagle Harbor	mercury	3:3	0.14	0.12	0.15	0.02
Eagle Harbor	Methoxychlor	0:3	63.00	63.00	63.00	0.00
Eagle Harbor	opDDT	0:2	0.26	0.24	0.28	0.03
Eagle Harbor	PCB101	3:3	194.33	83.00	350.00	138.91
Eagle Harbor	PCB105	3:3	17.33	11.00	28.00	9.29
Eagle Harbor	PCB110	3:3	41.00	27.00	67.00	22.54
Eagle Harbor	PCB118	3:3	75.67	56.00	110.00	29.84
Eagle Harbor	PCB126	0:3	0.11	0.10	0.11	0.01
Eagle Harbor	PCB128	3:3	21.33	16.00	29.00	6.81
Eagle Harbor	PCB138	3:3	57.00	45.00	79.00	19.08
Eagle Harbor	PCB153	3:3	133.33	100.00	190.00	49.33
Eagle Harbor	PCB156	3:3	4.93	3.80	7.20	1.96
Eagle Harbor	PCB157	2:3	0.42	0.07	0.72	0.33
Eagle Harbor	PCB169	0:3	0.14	0.13	0.15	0.01
Eagle Harbor	PCB170	3:3	26.67	19.00	37.00	9.29
Eagle Harbor	PCB180	3:3	37.67	27.00	53.00	13.61
Eagle Harbor	PCB189	3:3	0.42	0.36	0.50	0.07
Eagle Harbor	PCB77	1:3	0.18	0.11	0.30	0.11
Eagle Harbor	ppDDD	4:6	15.00	5.50	27.30	9.24
Eagle Harbor	ppDDE	6:6	26.12	17.20	41.60	8.93
Eagle Harbor	ppDDT	1:6	6.80	0.24	13.00	6.80
Eagle Harbor	Solids	6:6	22.97	21.87	24.00	0.83
Eagle Harbor	TotalDDT	3:3	36.33	26.00	56.00	17.04
Eagle Harbor	TotalPCB	3:3	773.33	560.00	1200.00	369.50
Eagle Harbor	Toxaphene	0:3	100.00	100.00	100.00	0.00
Harbor Island	hexachlorobenzene	3:3	1.44	0.93	2.30	0.75
Harbor Island	Lipids	3:3	5.49	3.64	8.15	2.36
Harbor Island	opDDD	1:1	3.30	3.30	3.30	
Harbor Island	opDDT	0:1	0.18	0.18	0.18	
Harbor Island	PCB101	3:3	374.67	46.00	1000.00	541.79
Harbor Island	PCB105	3:3	27.03	1.00	79.00	45.00
Harbor Island	PCB110	3:3	70.03	7.10	190.00	103.94
Harbor Island	PCB118	3:3	108.67	27.00	260.00	131.20
Harbor Island	PCB126	1:3	0.12	0.07	0.22	0.09

Location	Assay	No. Detected:				SD
		lo. Analyzed	Mean	Min	Max	
Harbor Island	PCB128	3:3	46.33	13.00	110.00	55.16
Harbor Island	PCB138	3:3	101.00	17.00	260.00	137.77
Harbor Island	PCB153	3:3	278.00	37.00	740.00	400.23
Harbor Island	PCB156	3:3	7.63	1.20	20.00	10.71
Harbor Island	PCB157	2:3	1.11	0.04	2.00	0.99
Harbor Island	PCB169	0:3	0.09	0.09	0.10	0.00
Harbor Island	PCB170	3:3	37.37	7.10	95.00	49.93
Harbor Island	PCB180	3:3	61.33	11.00	160.00	85.45
Harbor Island	PCB189	3:3	0.80	0.18	2.00	1.04
Harbor Island	PCB77	1:3	0.21	0.07	0.47	0.23
Harbor Island	ppDDD	3:3	14.20	2.30	37.00	19.75
Harbor Island	ppDDE	3:3	40.67	16.00	84.00	37.65
Harbor Island	ppDDT	1:1	3.70	3.70	3.70	
Harbor Island	Solids	3:3	22.23	18.84	25.78	3.47
Harbor Island	TotalDDT	3:3	57.67	18.00	130.00	62.74
Harbor Island	TotalPCB	3:3	1306.67	210.00	3400.00	1813.57
Iona Study Area	Aldrin	0:3	8.00	8.00	8.00	0.00
Iona Study Area	alpha chlordane	0:3	6.30	6.30	6.30	0.00
Iona Study Area	alpha endosulfan	0:3	8.00	8.00	8.00	0.00
Iona Study Area	alpha hexachlorocyclohexane	0:3	6.30	6.30	6.30	0.00
Iona Study Area	Aroclor 1016	0:3	79.67	79.00	80.00	0.58
Iona Study Area	Aroclor 1221	0:3	79.67	79.00	80.00	0.58
Iona Study Area	Aroclor 1232	0:3	79.67	79.00	80.00	0.58
Iona Study Area	Aroclor 1242	0:3	79.67	79.00	80.00	0.58
Iona Study Area	Aroclor 1248	0:3	79.67	79.00	80.00	0.58
Iona Study Area	Aroclor 1254	1:3	52.00	40.00	76.00	20.78
Iona Study Area	Aroclor 1260	3:3	93.23	71.50	118.00	23.40
Iona Study Area	beta endosulfan	0:3	13.00	13.00	13.00	0.00
Iona Study Area	beta hexachlorocyclohexane	0:3	6.30	6.30	6.30	0.00
Iona Study Area	delta hexachlorocyclohexane	0:3	6.30	6.30	6.30	0.00
Iona Study Area	Dieldrin	0:3	13.00	13.00	13.00	0.00
Iona Study Area	endosulfan sulfate	0:3	13.00	13.00	13.00	0.00
Iona Study Area	Endrin	0:3	13.00	13.00	13.00	0.00
Iona Study Area	endrin aldehyde	0:3	13.00	13.00	13.00	0.00
Iona Study Area	gamma chlordane	0:3	6.30	6.30	6.30	0.00
Iona Study Area	gamma hexachlorocyclohexane	0:3	6.30	6.30	6.30	0.00
Iona Study Area	Heptachlor	0:3	6.30	6.30	6.30	0.00
Iona Study Area	heptachlor epoxide	0:3	6.30	6.30	6.30	0.00
Iona Study Area	lead	2:2	0.42	0.34	0.49	0.11
Iona Study Area	Lipids	3:3	5.51	4.97	6.25	0.66
Iona Study Area	mercury	3:3	0.07	0.07	0.08	0.01
Iona Study Area	Methoxychlor	0:3	63.00	63.00	63.00	0.00
Iona Study Area	ppDDD	0:3	13.00	13.00	13.00	0.00
Iona Study Area	ppDDE	3:3	21.10	17.40	25.30	3.97
Iona Study Area	ppDDT	0:3	13.00	13.00	13.00	0.00
Iona Study Area	Solids	2:2	23.95	23.70	24.20	0.35
Iona Study Area	Toxaphene	0:3	100.00	100.00	100.00	0.00
Liberty Bay	Aldrin	0:3	320.00	320.00	320.00	0.00
Liberty Bay	alpha chlordane	0:3	62.50	62.50	62.50	0.00
Liberty Bay	alpha hexachlorocyclohexane	0:3	32.00	32.00	32.00	0.00
Liberty Bay	Aroclor 1016	0:3	20.00	20.00	20.00	0.00
Liberty Bay	Aroclor 1221	0:3	20.00	20.00	20.00	0.00
Liberty Bay	Aroclor 1232	0:3	20.00	20.00	20.00	0.00

# Appendix: English Sole Liver

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Liberty Bay	Aroclor 1242	0:3	20.00	20.00	20.00	0.00
Liberty Bay	Aroclor 1248	0:3	20.00	20.00	20.00	0.00
Liberty Bay	Aroclor 1254	0:3	20.00	20.00	20.00	0.00
Liberty Bay	Aroclor 1260	3:3	296.67	260.00	330.00	35.12
Liberty Bay	arsenic	3:3	8.20	6.50	11.00	2.44
Liberty Bay	beta endosulfan	0:3	320.00	320.00	320.00	0.00
Liberty Bay	copper	3:3	4.20	3.10	5.90	1.49
Liberty Bay	delta hexachlorocyclohexane	0:3	32.00	32.00	32.00	0.00
Liberty Bay	Dieldrin	0:3	320.00	320.00	320.00	0.00
Liberty Bay	endosulfan sulfate	0:3	400.00	400.00	400.00	0.00
Liberty Bay	Endrin	0:3	320.00	320.00	320.00	0.00
Liberty Bay	gamma chlordane	0:3	62.50	62.50	62.50	0.00
Liberty Bay	Heptachlor	0:3	320.00	320.00	320.00	0.00
Liberty Bay	heptachlor epoxide	0:3	32.00	32.00	32.00	0.00
Liberty Bay	lead	3:3	0.90	0.70	1.00	0.17
Liberty Bay	mercury	3:3	0.06	0.05	0.08	0.02
Liberty Bay	Methoxychlor	0:3	32.00	32.00	32.00	0.00
Liberty Bay	ppDDD	0:3	32.00	32.00	32.00	0.00
Liberty Bay	ppDDE	0:3	320.00	320.00	320.00	0.00
Liberty Bay	ppDDT	0:3	160.00	160.00	160.00	0.00
Liberty Bay	Toxaphene	0:3	1000.00	1000.00	1000.00	0.00
McArthur Bank	Solids	1:1	25.00	25.00	25.00	
Mid Hood Canal	Lipids	3:3	3.90	3.80	4.00	0.10
Mid Hood Canal	Solids	3:3	24.00	24.00	24.00	0.00
Mukilteo-Everett	alpha chlordane	0:3	25.67	25.00	26.00	0.58
Mukilteo-Everett	alpha hexachlorocyclohexane	0:3	0.42	0.40	0.43	0.02
Mukilteo-Everett	Aroclor 1016	0:3	53.00	50.00	55.00	2.65
Mukilteo-Everett	Aroclor 1221	0:3	53.00	50.00	55.00	2.65
Mukilteo-Everett	Aroclor 1232	0:3	53.00	50.00	55.00	2.65
Mukilteo-Everett	Aroclor 1242	0:3	53.00	50.00	55.00	2.65
Mukilteo-Everett	Aroclor 1248	0:3	10.67	10.00	11.00	0.58
Mukilteo-Everett	arsenic	1:1	17.20	17.20	17.20	
Mukilteo-Everett	beta hexachlorocyclohexane	0:3	0.42	0.40	0.43	0.02
Mukilteo-Everett	copper	1:1	8.12	8.12	8.12	
Mukilteo-Everett	delta hexachlorocyclohexane	0:3	0.42	0.40	0.43	0.02
Mukilteo-Everett	di-n-butyltin	1:3	2.81	0.39	7.50	4.06
Mukilteo-Everett	gamma chlordane	0:3	25.67	25.00	26.00	0.58
Mukilteo-Everett	gamma hexachlorocyclohexane	0:3	0.42	0.40	0.43	0.02
Mukilteo-Everett	heptachlor	0:3	0.42	0.40	0.43	0.02
Mukilteo-Everett	lead	1:1	0.21	0.21	0.21	
Mukilteo-Everett	Lipids	3:3	3.67	3.26	4.39	0.63
Mukilteo-Everett	Mercury	2:2	0.11	0.07	0.14	0.05
Mukilteo-Everett	mono-n-butyltin	0:3	9.83	1.90	25.00	13.14
Mukilteo-Everett	ppDDD	0:3	51.33	49.00	53.00	2.08
Mukilteo-Everett	ppDDE	0:3	51.33	49.00	53.00	2.08
Mukilteo-Everett	ppDDT	0:3	51.33	49.00	53.00	2.08
Mukilteo-Everett	Solids	1:1	20.80	20.80	20.80	
Mukilteo-Everett	tetra-n-butyltin	0:3	2.32	0.45	5.90	3.10
Mukilteo-Everett	tri-n-butyltin	3:3	2.58	0.46	6.37	3.29
Myrtle Edwards	hexachlorobenzene	3:3	1.19	0.97	1.40	0.22
Myrtle Edwards	Lipids	3:3	4.95	4.40	5.92	0.84
Myrtle Edwards	opDDD	1:3	0.35	0.14	0.71	0.31
Myrtle Edwards	opDDT	0:2	0.22	0.18	0.25	0.05

Location	Assay	No. Detected:				SD
		lo. Analyzed	Mean	Min	Max	
Myrtle Edwards	PCB101	3:3	93.67	51.00	150.00	50.90
Myrtle Edwards	PCB105	3:3	5.63	2.30	9.90	3.89
Myrtle Edwards	PCB110	3:3	15.13	8.40	24.00	8.02
Myrtle Edwards	PCB118	3:3	38.33	24.00	50.00	13.20
Myrtle Edwards	PCB126	0:3	0.09	0.08	0.11	0.02
Myrtle Edwards	PCB128	3:3	16.27	9.80	21.00	5.80
Myrtle Edwards	PCB138	3:3	27.33	15.00	40.00	12.50
Myrtle Edwards	PCB153	3:3	63.00	36.00	100.00	33.15
Myrtle Edwards	PCB156	3:3	1.70	1.00	3.00	1.13
Myrtle Edwards	PCB157	1:3	0.60	0.05	1.70	0.95
Myrtle Edwards	PCB169	0:3	0.11	0.10	0.14	0.02
Myrtle Edwards	PCB170	3:3	11.43	6.30	19.00	6.69
Myrtle Edwards	PCB180	3:3	18.77	9.30	34.00	13.32
Myrtle Edwards	PCB189	1:3	0.17	0.05	0.38	0.19
Myrtle Edwards	PCB77	2:3	0.19	0.11	0.26	0.08
Myrtle Edwards	ppDDD	3:3	4.23	2.80	5.50	1.36
Myrtle Edwards	ppDDE	3:3	17.33	11.00	25.00	7.09
Myrtle Edwards	Solids	3:3	20.01	19.23	20.94	0.87
Myrtle Edwards	TotalDDT	3:3	21.67	14.00	29.00	7.51
Myrtle Edwards	TotalPCB	3:3	353.33	210.00	510.00	150.44
N. Case Inlet	Lipids	3:3	4.60	4.40	5.00	0.35
N. Case Inlet	Solids	3:3	24.67	24.00	25.00	0.58
N. Hood Canal	1,2,4-trichlorobenzene	0:3	104.00	85.00	142.00	32.91
N. Hood Canal	1,2-dichlorobenzene	0:3	104.00	85.00	142.00	32.91
N. Hood Canal	1,2-diphenylhydrazine	0:3	104.00	85.00	142.00	32.91
N. Hood Canal	1,3-dichlorobenzene	0:3	104.00	85.00	142.00	32.91
N. Hood Canal	1,4-dichlorobenzene	0:3	104.00	85.00	142.00	32.91
N. Hood Canal	2,4,5-trichlorophenol	0:3	104.00	85.00	142.00	32.91
N. Hood Canal	2,4,6-trichlorophenol	0:3	152.67	125.00	208.00	47.92
N. Hood Canal	2,4-dichlorophenol	0:3	104.00	85.00	142.00	32.91
N. Hood Canal	2,4-dimethylphenol	0:3	104.00	85.00	142.00	32.91
N. Hood Canal	2,4-dinitrophenol	0:3	623.33	510.00	850.00	196.30
N. Hood Canal	2,4-dinitrotoluene	0:3	152.67	125.00	208.00	47.92
N. Hood Canal	2,6-dinitrotoluene	0:3	152.67	125.00	208.00	47.92
N. Hood Canal	2-chloronaphthalene	0:3	104.00	85.00	142.00	32.91
N. Hood Canal	2-chlorophenol	0:3	104.00	85.00	142.00	32.91
N. Hood Canal	2-methylnaphthalene	0:3	104.00	85.00	142.00	32.91
N. Hood Canal	2-methylphenol	0:3	104.00	85.00	142.00	32.91
N. Hood Canal	2-nitroaniline	0:3	104.00	85.00	142.00	32.91
N. Hood Canal	2-nitrophenol	0:3	104.00	85.00	142.00	32.91
N. Hood Canal	3-nitroaniline	0:3	623.33	510.00	850.00	196.30
N. Hood Canal	4,6-dinitro-o-cresol	0:3	317.67	260.00	433.00	99.88
N. Hood Canal	4-bromophenylphenylether	0:3	104.00	85.00	142.00	32.91
N. Hood Canal	4-chloro-3-methylphenol	0:3	152.67	125.00	208.00	47.92
N. Hood Canal	4-chloroaniline	0:3	104.00	85.00	142.00	32.91
N. Hood Canal	4-chlorophenylphenylether	0:3	104.00	85.00	142.00	32.91
N. Hood Canal	4-methylphenol	0:3	104.00	85.00	142.00	32.91
N. Hood Canal	4-nitroaniline	0:3	317.67	260.00	433.00	99.88
N. Hood Canal	4-nitrophenol	0:3	623.33	510.00	850.00	196.30
N. Hood Canal	acenaphthene	0:3	104.00	85.00	142.00	32.91
N. Hood Canal	acenaphthylene	0:3	104.00	85.00	142.00	32.91
N. Hood Canal	Aldrin	0:14	75.57	8.00	320.00	132.48
N. Hood Canal	alpha chlordane	0:14	18.34	6.30	62.50	23.93

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
N. Hood Canal	alpha endosulfan	0:11	8.91	8.00	13.00	2.02
N. Hood Canal	alpha hexachlorocyclohexane	0:14	11.81	6.30	32.00	10.94
N. Hood Canal	aniline	0:3	104.00	85.00	142.00	32.91
N. Hood Canal	anthracene	0:3	104.00	85.00	142.00	32.91
N. Hood Canal	Aroclor 1016	0:17	86.47	20.00	210.00	49.87
N. Hood Canal	Aroclor 1221	0:17	86.47	20.00	210.00	49.87
N. Hood Canal	Aroclor 1232	0:17	82.94	20.00	210.00	51.33
N. Hood Canal	Aroclor 1242	0:17	82.94	20.00	210.00	51.33
N. Hood Canal	Aroclor 1248	0:17	82.94	20.00	210.00	51.33
N. Hood Canal	Aroclor 1254	6:17	67.12	20.00	210.00	55.12
N. Hood Canal	Aroclor 1260	16:17	58.03	20.00	99.30	24.85
N. Hood Canal	arsenic	10:10	7.80	4.82	10.00	2.01
N. Hood Canal	benzo(a)anthracene	0:3	152.67	125.00	208.00	47.92
N. Hood Canal	benzo(a)pyrene	0:3	104.00	85.00	142.00	32.91
N. Hood Canal	benzo(b)fluoranthene	0:3	152.67	125.00	208.00	47.92
N. Hood Canal	benzo(g,h,i)perylene	0:3	104.00	85.00	142.00	32.91
N. Hood Canal	benzo(k)fluoranthene	0:3	104.00	85.00	142.00	32.91
N. Hood Canal	benzoic acid	0:3	312.67	256.00	426.00	98.15
N. Hood Canal	benzyl alcohol	3:3	576.67	300.00	1000.00	372.33
N. Hood Canal	benzylbutylphthalate	0:3	317.67	260.00	433.00	99.88
N. Hood Canal	beta endosulfan	0:14	78.79	13.00	320.00	130.73
N. Hood Canal	beta hexachlorocyclohexane	0:11	6.30	6.30	6.30	0.00
N. Hood Canal	bis(2-chloroethoxy)methane	0:3	104.00	85.00	142.00	32.91
N. Hood Canal	bis(2-chloroethyl)ether	0:3	104.00	85.00	142.00	32.91
N. Hood Canal	bis(2-chloroisopropyl)ether	0:3	104.00	85.00	142.00	32.91
N. Hood Canal	bis(2-ethylhexyl)phthalate	1:3	136.67	85.00	240.00	89.49
N. Hood Canal	carbazole	0:3	317.67	260.00	433.00	99.88
N. Hood Canal	chrysene	0:3	317.67	260.00	433.00	99.88
N. Hood Canal	copper	10:10	10.62	8.30	12.00	1.26
N. Hood Canal	coprostanol	0:3	25666.67	21000.00	35000.00	8082.90
N. Hood Canal	delta hexachlorocyclohexane	0:14	11.81	6.30	32.00	10.94
N. Hood Canal	dibenzo(a,h)anthracene	0:3	104.00	85.00	142.00	32.91
N. Hood Canal	dibenzofuran	0:3	104.00	85.00	142.00	32.91
N. Hood Canal	Dieldrin	0:14	78.79	13.00	320.00	130.73
N. Hood Canal	diethylphthalate	0:3	104.00	85.00	142.00	32.91
N. Hood Canal	dimethylphthalate	0:3	104.00	85.00	142.00	32.91
N. Hood Canal	di-n-butylphthalate	0:3	85.00	85.00	85.00	0.00
N. Hood Canal	di-n-octylphthalate	0:3	104.00	85.00	142.00	32.91
N. Hood Canal	endosulfan sulfate	0:14	95.93	13.00	400.00	164.79
N. Hood Canal	Endrin	0:14	78.79	13.00	320.00	130.73
N. Hood Canal	endrin aldehyde	0:11	13.00	13.00	13.00	0.00
N. Hood Canal	fluoranthene	0:3	104.00	85.00	142.00	32.91
N. Hood Canal	fluorene	0:3	104.00	85.00	142.00	32.91
N. Hood Canal	gamma chlordane	1:14	19.00	6.30	62.50	23.70
N. Hood Canal	gamma hexachlorocyclohexane	0:11	6.30	6.30	6.30	0.00
N. Hood Canal	Heptachlor	0:14	73.52	6.30	320.00	133.58
N. Hood Canal	heptachlor epoxide	0:14	11.81	6.30	32.00	10.94
N. Hood Canal	hexachlorobenzene	0:3	104.00	85.00	142.00	32.91
N. Hood Canal	hexachlorobutadiene	0:3	104.00	85.00	142.00	32.91
N. Hood Canal	hexachlorocyclopentadiene	0:3	623.33	510.00	850.00	196.30
N. Hood Canal	hexachloroethane	0:3	104.00	85.00	142.00	32.91
N. Hood Canal	indeno(1,2,3-c,d)pyrene	0:3	104.00	85.00	142.00	32.91
N. Hood Canal	isophorone	0:3	104.00	85.00	142.00	32.91

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
N. Hood Canal	lead	12:12	0.32	0.12	0.51	0.11
N. Hood Canal	Lipids	6:6	4.01	3.10	5.50	0.89
N. Hood Canal	mercury	15:15	0.12	0.07	0.17	0.03
N. Hood Canal	Methoxychlor	0:14	56.36	32.00	63.00	13.20
N. Hood Canal	naphthalene	0:3	104.00	85.00	142.00	32.91
N. Hood Canal	nitrobenzene	0:3	104.00	85.00	142.00	32.91
N. Hood Canal	N-nitrosodimethylamine	0:3	317.67	260.00	433.00	99.88
N. Hood Canal	N-nitroso-di-n-propylamine	0:3	104.00	85.00	142.00	32.91
N. Hood Canal	N-nitrosodiphenylamine	0:3	104.00	85.00	142.00	32.91
N. Hood Canal	pentachlorophenol	0:3	312.67	256.00	426.00	98.15
N. Hood Canal	phenanthrene	0:3	104.00	85.00	142.00	32.91
N. Hood Canal	phenol	0:3	104.00	85.00	142.00	32.91
N. Hood Canal	ppDDD	0:14	17.07	13.00	32.00	8.09
N. Hood Canal	ppDDE	1:14	80.09	13.00	320.00	130.11
N. Hood Canal	ppDDT	0:14	44.50	13.00	160.00	62.59
N. Hood Canal	pyrene	0:3	152.67	125.00	208.00	47.92
N. Hood Canal	Solids	5:5	21.96	20.60	24.10	1.30
N. Hood Canal	Toxaphene	0:14	292.86	100.00	1000.00	383.23
Nisqually Reach	1,2,4-trichlorobenzene	0:1	85.00	85.00	85.00	
Nisqually Reach	1,2-dichlorobenzene	0:1	85.00	85.00	85.00	
Nisqually Reach	1,2-diphenylhydrazine	0:1	85.00	85.00	85.00	
Nisqually Reach	1,3-dichlorobenzene	0:1	85.00	85.00	85.00	
Nisqually Reach	1,4-dichlorobenzene	0:1	85.00	85.00	85.00	
Nisqually Reach	2,4,5-trichlorophenol	0:1	85.00	85.00	85.00	
Nisqually Reach	2,4,6-trichlorophenol	0:1	125.00	125.00	125.00	
Nisqually Reach	2,4-dichlorophenol	0:1	85.00	85.00	85.00	
Nisqually Reach	2,4-dimethylphenol	0:1	85.00	85.00	85.00	
Nisqually Reach	2,4-dinitrophenol	0:1	510.00	510.00	510.00	
Nisqually Reach	2,4-dinitrotoluene	0:1	125.00	125.00	125.00	
Nisqually Reach	2,6-dinitrotoluene	0:1	125.00	125.00	125.00	
Nisqually Reach	2-chloronaphthalene	0:1	85.00	85.00	85.00	
Nisqually Reach	2-chlorophenol	0:1	85.00	85.00	85.00	
Nisqually Reach	2-methylnaphthalene	0:1	85.00	85.00	85.00	
Nisqually Reach	2-methylphenol	0:1	85.00	85.00	85.00	
Nisqually Reach	2-nitroaniline	0:1	85.00	85.00	85.00	
Nisqually Reach	2-nitrophenol	0:1	85.00	85.00	85.00	
Nisqually Reach	3-nitroaniline	0:1	510.00	510.00	510.00	
Nisqually Reach	4,6-dinitro-o-cresol	0:1	260.00	260.00	260.00	
Nisqually Reach	4-bromophenylphenylether	0:1	85.00	85.00	85.00	
Nisqually Reach	4-chloro-3-methylphenol	0:1	125.00	125.00	125.00	
Nisqually Reach	4-chloroaniline	0:1	85.00	85.00	85.00	
Nisqually Reach	4-chlorophenylphenylether	0:1	85.00	85.00	85.00	
Nisqually Reach	4-methylphenol	0:1	85.00	85.00	85.00	
Nisqually Reach	4-nitroaniline	0:1	260.00	260.00	260.00	
Nisqually Reach	4-nitrophenol	0:1	510.00	510.00	510.00	
Nisqually Reach	acenaphthene	0:1	85.00	85.00	85.00	
Nisqually Reach	acenaphthylene	0:1	85.00	85.00	85.00	
Nisqually Reach	Aldrin	0:7	8.71	8.00	13.00	1.89
Nisqually Reach	alpha chlordane	0:7	6.30	6.30	6.30	0.00
Nisqually Reach	alpha endosulfan	0:7	8.71	8.00	13.00	1.89
Nisqually Reach	alpha hexachlorocyclohexane	0:7	6.30	6.30	6.30	0.00
Nisqually Reach	aniline	0:1	85.00	85.00	85.00	
Nisqually Reach	anthracene	0:1	85.00	85.00	85.00	

Appendix: English Sole Liver

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Nisqually Reach	Aroclor 1016	0:7	80.00	80.00	80.00	0.00
Nisqually Reach	Aroclor 1221	0:7	80.00	80.00	80.00	0.00
Nisqually Reach	Aroclor 1232	0:7	75.71	50.00	80.00	11.34
Nisqually Reach	Aroclor 1242	0:7	75.71	50.00	80.00	11.34
Nisqually Reach	Aroclor 1248	0:7	75.71	50.00	80.00	11.34
Nisqually Reach	Aroclor 1254	5:7	170.71	40.00	626.00	206.38
Nisqually Reach	Aroclor 1260	7:7	208.00	143.00	298.00	65.95
Nisqually Reach	arsenic	2:2	10.00	9.00	11.00	1.41
Nisqually Reach	benzo(a)anthracene	0:1	125.00	125.00	125.00	
Nisqually Reach	benzo(a)pyrene	0:1	85.00	85.00	85.00	
Nisqually Reach	benzo(b)fluoranthene	0:1	125.00	125.00	125.00	
Nisqually Reach	benzo(g,h,i)perylene	0:1	85.00	85.00	85.00	
Nisqually Reach	benzo(k)fluoranthene	0:1	85.00	85.00	85.00	
Nisqually Reach	benzoic acid	0:1	256.00	256.00	256.00	
Nisqually Reach	benzyl alcohol	1:1	610.00	610.00	610.00	
Nisqually Reach	benzylbutylphthalate	0:1	260.00	260.00	260.00	
Nisqually Reach	beta endosulfan	0:7	13.00	13.00	13.00	0.00
Nisqually Reach	beta hexachlorocyclohexane	0:7	6.30	6.30	6.30	0.00
Nisqually Reach	bis(2-chloroethoxy)methane	0:1	85.00	85.00	85.00	
Nisqually Reach	bis(2-chloroethyl)ether	0:1	85.00	85.00	85.00	
Nisqually Reach	bis(2-chloroisopropyl)ether	0:1	85.00	85.00	85.00	
Nisqually Reach	bis(2-ethylhexyl)phthalate	0:1	85.00	85.00	85.00	
Nisqually Reach	carbazole	0:1	260.00	260.00	260.00	
Nisqually Reach	chrysene	0:1	260.00	260.00	260.00	
Nisqually Reach	copper	2:2	10.00	8.30	11.70	2.40
Nisqually Reach	coprostanol	0:1	21000.00	21000.00	21000.00	
Nisqually Reach	delta hexachlorocyclohexane	0:7	6.30	6.30	6.30	0.00
Nisqually Reach	dibenzo(a,h)anthracene	0:1	85.00	85.00	85.00	
Nisqually Reach	dibenzofuran	0:1	85.00	85.00	85.00	
Nisqually Reach	Dieldrin	0:7	13.00	13.00	13.00	0.00
Nisqually Reach	diethylphthalate	0:1	85.00	85.00	85.00	
Nisqually Reach	dimethylphthalate	0:1	85.00	85.00	85.00	
Nisqually Reach	di-n-butylphthalate	0:1	85.00	85.00	85.00	
Nisqually Reach	di-n-octylphthalate	0:1	85.00	85.00	85.00	
Nisqually Reach	endosulfan sulfate	0:7	13.00	13.00	13.00	0.00
Nisqually Reach	Endrin	0:7	13.00	13.00	13.00	0.00
Nisqually Reach	endrin aldehyde	0:7	13.00	13.00	13.00	0.00
Nisqually Reach	fluoranthene	0:1	85.00	85.00	85.00	
Nisqually Reach	fluorene	0:1	85.00	85.00	85.00	
Nisqually Reach	gamma chlordane	4:7	8.68	6.30	12.10	2.41
Nisqually Reach	gamma hexachlorocyclohexane	0:7	6.30	6.30	6.30	0.00
Nisqually Reach	Heptachlor	0:7	6.30	6.30	6.30	0.00
Nisqually Reach	heptachlor epoxide	0:7	6.30	6.30	6.30	0.00
Nisqually Reach	hexachlorobenzene	0:1	85.00	85.00	85.00	
Nisqually Reach	hexachlorobutadiene	0:1	85.00	85.00	85.00	
Nisqually Reach	hexachlorocyclopentadiene	0:1	510.00	510.00	510.00	
Nisqually Reach	hexachloroethane	0:1	85.00	85.00	85.00	
Nisqually Reach	indeno(1,2,3-c,d)pyrene	0:1	85.00	85.00	85.00	
Nisqually Reach	isophorone	0:1	85.00	85.00	85.00	
Nisqually Reach	lead	4:4	0.28	0.24	0.34	0.05
Nisqually Reach	Lipids	4:4	5.50	4.14	6.94	1.43
Nisqually Reach	mercury	6:6	0.09	0.05	0.13	0.03
Nisqually Reach	Methoxychlor	0:7	63.00	63.00	63.00	0.00



# Appendix: English Sole Liver

Location	Assay	No. Detected:				SD
		lo. Analyzed	Mean	Min	Max	
Nisqually Reach	naphthalene	0:1	85.00	85.00	85.00	
Nisqually Reach	nitrobenzene	0:1	85.00	85.00	85.00	
Nisqually Reach	N-nitrosodimethylamine	0:1	260.00	260.00	260.00	
Nisqually Reach	N-nitroso-di-n-propylamine	0:1	85.00	85.00	85.00	
Nisqually Reach	N-nitrosodiphenylamine	0:1	85.00	85.00	85.00	
Nisqually Reach	pentachlorophenol	0:1	256.00	256.00	256.00	
Nisqually Reach	phenanthrene	0:1	85.00	85.00	85.00	
Nisqually Reach	phenol	0:1	85.00	85.00	85.00	
Nisqually Reach	ppDDD	0:7	13.00	13.00	13.00	0.00
Nisqually Reach	ppDDE	6:7	19.59	13.00	34.70	8.74
Nisqually Reach	ppDDT	0:7	13.00	13.00	13.00	0.00
Nisqually Reach	pyrene	0:1	125.00	125.00	125.00	
Nisqually Reach	Solids	2:2	23.25	22.90	23.60	0.49
Nisqually Reach	Toxaphene	0:7	100.00	100.00	100.00	0.00
Old Tacoma	hexachlorobenzene	3:3	1.52	0.67	2.40	0.87
Old Tacoma	Lipids	3:3	4.10	3.25	5.07	0.92
Old Tacoma	opDDT	1:2	16.65	0.30	33.00	23.12
Old Tacoma	PCB101	3:3	158.00	84.00	250.00	84.45
Old Tacoma	PCB105	3:3	2.59	0.78	6.10	3.04
Old Tacoma	PCB110	3:3	25.67	11.00	42.00	15.57
Old Tacoma	PCB118	3:3	114.33	63.00	150.00	45.57
Old Tacoma	PCB126	0:3	0.13	0.12	0.16	0.02
Old Tacoma	PCB128	3:3	33.67	21.00	41.00	11.02
Old Tacoma	PCB138	3:3	49.67	28.00	67.00	19.86
Old Tacoma	PCB153	3:3	116.33	69.00	170.00	50.80
Old Tacoma	PCB156	3:3	3.83	2.00	4.90	1.59
Old Tacoma	PCB157	3:3	3.87	3.40	4.50	0.57
Old Tacoma	PCB169	0:3	0.17	0.16	0.20	0.02
Old Tacoma	PCB170	3:3	25.67	18.00	37.00	10.02
Old Tacoma	PCB180	3:3	37.00	27.00	54.00	14.80
Old Tacoma	PCB189	2:3	0.32	0.10	0.53	0.22
Old Tacoma	PCB77	0:3	0.14	0.13	0.16	0.02
Old Tacoma	ppDDD	3:3	7.43	1.90	14.00	6.12
Old Tacoma	ppDDE	3:3	11.63	7.90	15.00	3.56
Old Tacoma	ppDDT	2:2	3.60	3.00	4.20	0.85
Old Tacoma	Solids	3:3	20.77	19.08	22.34	1.64
Old Tacoma	TotalDDT	3:3	32.33	21.00	43.00	11.02
Old Tacoma	TotalPCB	3:3	693.33	410.00	1000.00	295.69
Orcas Island	Aroclor 1016	0:3	160.00	160.00	160.00	0.00
Orcas Island	Aroclor 1221	0:3	160.00	160.00	160.00	0.00
Orcas Island	Aroclor 1232	0:3	160.00	160.00	160.00	0.00
Orcas Island	Aroclor 1242	0:3	160.00	160.00	160.00	0.00
Orcas Island	Aroclor 1248	0:3	160.00	160.00	160.00	0.00
Orcas Island	Aroclor 1254	0:3	160.00	160.00	160.00	0.00
Orcas Island	Aroclor 1260	0:3	160.00	160.00	160.00	0.00
Orcas Island	Solids	1:1	23.00	23.00	23.00	
Outer Bellingham Bay	lead	4:4	0.85	0.70	1.20	0.24
Outer Bellingham Bay	Lipids	1:1	2.60	2.60	2.60	
Outer Bellingham Bay	mercury	4:4	0.05	0.04	0.06	0.01
Outer Bellingham Bay	Methoxychlor	0:1	63.00	63.00	63.00	
Outer Bellingham Bay	naphthalene	0:2	162.50	85.00	240.00	109.60
Outer Bellingham Bay	nitrobenzene	0:2	192.50	85.00	300.00	152.03
Outer Bellingham Bay	N-nitrosodimethylamine	0:2	250.00	240.00	260.00	14.14

Location	Assay	No. Detected:			Min	Max	SD
		lo. Analyzed	Mean				
Outer Bellingham Bay	N-nitroso-di-n-propylamine	0:2	162.50	85.00	240.00	109.60	
Outer Bellingham Bay	N-nitrosodiphenylamine	0:2	162.50	85.00	240.00	109.60	
Outer Bellingham Bay	pentachlorophenol	0:1	256.00	256.00	256.00		
Outer Bellingham Bay	phenanthrene	0:2	162.50	85.00	240.00	109.60	
Outer Bellingham Bay	phenol	0:2	162.50	85.00	240.00	109.60	
Outer Bellingham Bay	ppDDD	0:1	13.00	13.00	13.00		
Outer Bellingham Bay	ppDDE	1:1	10.00	10.00	10.00		
Outer Bellingham Bay	ppDDT	0:1	13.00	13.00	13.00		
Outer Bellingham Bay	pyrene	0:2	182.50	125.00	240.00	81.32	
Outer Bellingham Bay	Solids	1:1	28.00	28.00	28.00		
Outer Bellingham Bay	Toxaphene	0:1	100.00	100.00	100.00		
Outer Birch Point	Aroclor 1016	0:1	160.00	160.00	160.00		
Outer Birch Point	Aroclor 1221	0:1	160.00	160.00	160.00		
Outer Birch Point	Aroclor 1232	0:1	160.00	160.00	160.00		
Outer Birch Point	Aroclor 1242	0:1	160.00	160.00	160.00		
Outer Birch Point	Aroclor 1248	0:1	160.00	160.00	160.00		
Outer Birch Point	Aroclor 1254	0:1	160.00	160.00	160.00		
Outer Birch Point	Aroclor 1260	0:1	160.00	160.00	160.00		
Outer Birch Point	Solids	1:1	25.00	25.00	25.00		
Outer Comm. Bay	1,2,4-trichlorobenzene	0:3	85.00	85.00	85.00	0.00	
Outer Comm. Bay	1,2-dichlorobenzene	0:3	85.00	85.00	85.00	0.00	
Outer Comm. Bay	1,2-diphenylhydrazine	0:3	85.00	85.00	85.00	0.00	
Outer Comm. Bay	1,3-dichlorobenzene	0:3	85.00	85.00	85.00	0.00	
Outer Comm. Bay	1,4-dichlorobenzene	0:3	85.00	85.00	85.00	0.00	
Outer Comm. Bay	2,4,5-trichlorophenol	0:3	85.00	85.00	85.00	0.00	
Outer Comm. Bay	2,4,6-trichlorophenol	0:3	125.00	125.00	125.00	0.00	
Outer Comm. Bay	2,4-dichlorophenol	0:3	85.00	85.00	85.00	0.00	
Outer Comm. Bay	2,4-dimethylphenol	0:3	85.00	85.00	85.00	0.00	
Outer Comm. Bay	2,4-dinitrophenol	0:3	510.00	510.00	510.00	0.00	
Outer Comm. Bay	2,4-dinitrotoluene	0:3	125.00	125.00	125.00	0.00	
Outer Comm. Bay	2,6-dinitrotoluene	0:3	125.00	125.00	125.00	0.00	
Outer Comm. Bay	2-chloronaphthalene	0:3	85.00	85.00	85.00	0.00	
Outer Comm. Bay	2-chlorophenol	0:3	85.00	85.00	85.00	0.00	
Outer Comm. Bay	2-methylnaphthalene	0:3	85.00	85.00	85.00	0.00	
Outer Comm. Bay	2-methylphenol	0:3	85.00	85.00	85.00	0.00	
Outer Comm. Bay	2-nitroaniline	0:3	85.00	85.00	85.00	0.00	
Outer Comm. Bay	2-nitrophenol	0:3	85.00	85.00	85.00	0.00	
Outer Comm. Bay	3-nitroaniline	0:3	510.00	510.00	510.00	0.00	
Outer Comm. Bay	4,6-dinitro-o-cresol	0:3	260.00	260.00	260.00	0.00	
Outer Comm. Bay	4-bromophenylphenylether	0:3	85.00	85.00	85.00	0.00	
Outer Comm. Bay	4-chloro-3-methylphenol	0:3	125.00	125.00	125.00	0.00	
Outer Comm. Bay	4-chloroaniline	0:3	85.00	85.00	85.00	0.00	
Outer Comm. Bay	4-chlorophenylphenylether	0:3	85.00	85.00	85.00	0.00	
Outer Comm. Bay	4-methylphenol	0:3	85.00	85.00	85.00	0.00	
Outer Comm. Bay	4-nitroaniline	0:3	260.00	260.00	260.00	0.00	
Outer Comm. Bay	4-nitrophenol	0:3	510.00	510.00	510.00	0.00	
Outer Comm. Bay	acenaphthene	0:3	85.00	85.00	85.00	0.00	
Outer Comm. Bay	acenaphthylene	0:3	85.00	85.00	85.00	0.00	
Outer Comm. Bay	Aldrin	0:3	13.00	13.00	13.00	0.00	
Outer Comm. Bay	alpha chlordane	0:3	6.30	6.30	6.30	0.00	
Outer Comm. Bay	alpha endosulfan	0:3	13.00	13.00	13.00	0.00	
Outer Comm. Bay	alpha hexachlorocyclohexane	0:3	6.30	6.30	6.30	0.00	
Outer Comm. Bay	aniline	0:3	85.00	85.00	85.00	0.00	

Location	Assay	No. Detected:				SD
		lo. Analyzed	Mean	Min	Max	
Outer Comm. Bay	anthracene	0:3	85.00	85.00	85.00	0.00
Outer Comm. Bay	Aroclor 1016	0:3	80.00	80.00	80.00	0.00
Outer Comm. Bay	Aroclor 1221	0:3	80.00	80.00	80.00	0.00
Outer Comm. Bay	Aroclor 1232	0:3	50.00	50.00	50.00	0.00
Outer Comm. Bay	Aroclor 1242	0:3	50.00	50.00	50.00	0.00
Outer Comm. Bay	Aroclor 1248	0:3	50.00	50.00	50.00	0.00
Outer Comm. Bay	Aroclor 1254	3:3	200.00	170.00	260.00	51.96
Outer Comm. Bay	Aroclor 1260	3:3	286.67	270.00	310.00	20.82
Outer Comm. Bay	arsenic	3:3	5.13	4.60	5.90	0.68
Outer Comm. Bay	benzo(a)anthracene	0:3	125.00	125.00	125.00	0.00
Outer Comm. Bay	benzo(a)pyrene	0:3	85.00	85.00	85.00	0.00
Outer Comm. Bay	benzo(b)fluoranthene	0:3	125.00	125.00	125.00	0.00
Outer Comm. Bay	benzo(g,h,i)perylene	0:3	85.00	85.00	85.00	0.00
Outer Comm. Bay	benzo(k)fluoranthene	0:3	85.00	85.00	85.00	0.00
Outer Comm. Bay	benzoic acid	1:3	673.67	256.00	1500.00	715.64
Outer Comm. Bay	benzyl alcohol	3:3	840.00	630.00	970.00	183.58
Outer Comm. Bay	benzylbutylphthalate	0:3	260.00	260.00	260.00	0.00
Outer Comm. Bay	beta endosulfan	0:3	13.00	13.00	13.00	0.00
Outer Comm. Bay	beta hexachlorocyclohexane	0:3	6.30	6.30	6.30	0.00
Outer Comm. Bay	bis(2-chloroethoxy)methane	0:3	85.00	85.00	85.00	0.00
Outer Comm. Bay	bis(2-chloroethyl)ether	0:3	85.00	85.00	85.00	0.00
Outer Comm. Bay	bis(2-chloroisopropyl)ether	0:3	85.00	85.00	85.00	0.00
Outer Comm. Bay	bis(2-ethylhexyl)phthalate	2:3	371.67	85.00	540.00	249.52
Outer Comm. Bay	carbazole	0:3	260.00	260.00	260.00	0.00
Outer Comm. Bay	chrysene	0:3	260.00	260.00	260.00	0.00
Outer Comm. Bay	copper	3:3	3.70	3.20	4.10	0.46
Outer Comm. Bay	coprostanol	0:3	21000.00	21000.00	21000.00	0.00
Outer Comm. Bay	delta hexachlorocyclohexane	0:3	6.30	6.30	6.30	0.00
Outer Comm. Bay	dibenzo(a,h)anthracene	0:3	85.00	85.00	85.00	0.00
Outer Comm. Bay	dibenzofuran	0:3	85.00	85.00	85.00	0.00
Outer Comm. Bay	Dieldrin	0:3	13.00	13.00	13.00	0.00
Outer Comm. Bay	diethylphthalate	0:3	85.00	85.00	85.00	0.00
Outer Comm. Bay	dimethylphthalate	0:3	85.00	85.00	85.00	0.00
Outer Comm. Bay	di-n-butylphthalate	1:3	113.33	85.00	170.00	49.07
Outer Comm. Bay	di-n-octylphthalate	0:3	85.00	85.00	85.00	0.00
Outer Comm. Bay	endosulfan sulfate	0:3	13.00	13.00	13.00	0.00
Outer Comm. Bay	Endrin	0:3	13.00	13.00	13.00	0.00
Outer Comm. Bay	endrin aldehyde	0:3	13.00	13.00	13.00	0.00
Outer Comm. Bay	fluoranthene	0:3	85.00	85.00	85.00	0.00
Outer Comm. Bay	fluorene	0:3	85.00	85.00	85.00	0.00
Outer Comm. Bay	gamma chlordane	0:3	6.30	6.30	6.30	0.00
Outer Comm. Bay	gamma hexachlorocyclohexane	0:3	6.30	6.30	6.30	0.00
Outer Comm. Bay	Heptachlor	0:3	6.30	6.30	6.30	0.00
Outer Comm. Bay	heptachlor epoxide	0:3	6.30	6.30	6.30	0.00
Outer Comm. Bay	hexachlorobenzene	3:6	43.50	1.20	85.00	45.46
Outer Comm. Bay	hexachlorobutadiene	0:3	85.00	85.00	85.00	0.00
Outer Comm. Bay	hexachlorocyclopentadiene	0:3	510.00	510.00	510.00	0.00
Outer Comm. Bay	hexachloroethane	0:3	85.00	85.00	85.00	0.00
Outer Comm. Bay	indeno(1,2,3-c,d)pyrene	0:3	85.00	85.00	85.00	0.00
Outer Comm. Bay	isophorone	0:3	85.00	85.00	85.00	0.00
Outer Comm. Bay	lead	3:3	0.09	0.08	0.10	0.01
Outer Comm. Bay	Lipids	3:3	4.19	3.83	4.63	0.41
Outer Comm. Bay	mercury	3:3	0.13	0.13	0.14	0.01

Location	Assay	No. Detected:				SD
		lo. Analyzed	Mean	Min	Max	
Outer Comm. Bay	Methoxychlor	0:3	63.00	63.00	63.00	0.00
Outer Comm. Bay	naphthalene	0:3	85.00	85.00	85.00	0.00
Outer Comm. Bay	nitrobenzene	0:3	85.00	85.00	85.00	0.00
Outer Comm. Bay	N-nitrosodimethylamine	0:3	260.00	260.00	260.00	0.00
Outer Comm. Bay	N-nitroso-di-n-propylamine	0:3	85.00	85.00	85.00	0.00
Outer Comm. Bay	N-nitrosodiphenylamine	0:3	85.00	85.00	85.00	0.00
Outer Comm. Bay	opDDD	1:1	4.10	4.10	4.10	
Outer Comm. Bay	opDDT	0:2	0.26	0.18	0.34	0.11
Outer Comm. Bay	PCB101	3:3	356.67	200.00	580.00	198.58
Outer Comm. Bay	PCB105	2:2	13.75	3.50	24.00	14.50
Outer Comm. Bay	PCB110	3:3	69.33	33.00	130.00	52.88
Outer Comm. Bay	PCB118	3:3	233.33	180.00	330.00	83.86
Outer Comm. Bay	PCB126	0:3	0.10	0.08	0.14	0.03
Outer Comm. Bay	PCB128	3:3	82.33	54.00	120.00	33.98
Outer Comm. Bay	PCB138	3:3	124.67	61.00	220.00	84.10
Outer Comm. Bay	PCB153	3:3	316.67	160.00	560.00	213.62
Outer Comm. Bay	PCB156	3:3	9.77	5.00	17.00	6.37
Outer Comm. Bay	PCB157	3:3	5.83	1.00	9.20	4.29
Outer Comm. Bay	PCB169	0:3	0.13	0.10	0.18	0.04
Outer Comm. Bay	PCB170	3:3	64.67	37.00	99.00	31.53
Outer Comm. Bay	PCB180	3:3	101.00	49.00	170.00	62.27
Outer Comm. Bay	PCB189	3:3	1.29	0.71	2.20	0.80
Outer Comm. Bay	PCB77	0:3	0.11	0.08	0.15	0.04
Outer Comm. Bay	pentachlorophenol	0:3	256.00	256.00	256.00	0.00
Outer Comm. Bay	phenanthrene	0:3	85.00	85.00	85.00	0.00
Outer Comm. Bay	phenol	0:3	85.00	85.00	85.00	0.00
Outer Comm. Bay	ppDDD	3:6	13.57	6.40	23.00	5.32
Outer Comm. Bay	ppDDE	6:6	30.67	14.00	78.00	25.30
Outer Comm. Bay	ppDDT	3:6	9.70	2.50	13.00	4.79
Outer Comm. Bay	pyrene	0:3	125.00	125.00	125.00	0.00
Outer Comm. Bay	Solids	4:4	22.15	20.63	24.00	1.39
Outer Comm. Bay	TotalDDT	3:3	67.33	29.00	110.00	40.67
Outer Comm. Bay	TotalPCB	3:3	1733.33	1000.00	2900.00	1021.44
Outer Comm. Bay	Toxaphene	0:3	100.00	100.00	100.00	0.00
Outer Outer Bellingham	1,2,4-trichlorobenzene	0:2	162.50	85.00	240.00	109.60
Outer Outer Bellingham	1,2-dichlorobenzene	0:2	192.50	85.00	300.00	152.03
Outer Outer Bellingham	1,2-diphenylhydrazine	0:2	162.50	85.00	240.00	109.60
Outer Outer Bellingham	1,3-dichlorobenzene	0:2	192.50	85.00	300.00	152.03
Outer Outer Bellingham	1,4-dichlorobenzene	0:2	407.50	85.00	730.00	456.08
Outer Outer Bellingham	2,4,5-trichlorophenol	0:1	85.00	85.00	85.00	
Outer Outer Bellingham	2,4,6-trichlorophenol	0:1	125.00	125.00	125.00	
Outer Outer Bellingham	2,4-dichlorophenol	0:2	162.50	85.00	240.00	109.60
Outer Outer Bellingham	2,4-dimethylphenol	0:2	162.50	85.00	240.00	109.60
Outer Outer Bellingham	2,4-dinitrophenol	0:1	510.00	510.00	510.00	
Outer Outer Bellingham	2,4-dinitrotoluene	0:2	562.50	125.00	1000.00	618.72
Outer Outer Bellingham	2,6-dinitrotoluene	0:2	562.50	125.00	1000.00	618.72
Outer Outer Bellingham	2-chloronaphthalene	0:2	192.50	85.00	300.00	152.03
Outer Outer Bellingham	2-chlorophenol	0:2	162.50	85.00	240.00	109.60
Outer Outer Bellingham	2-methylnaphthalene	0:2	162.50	85.00	240.00	109.60
Outer Outer Bellingham	2-methylphenol	0:2	162.50	85.00	240.00	109.60
Outer Outer Bellingham	2-nitroaniline	0:2	282.50	85.00	480.00	279.31
Outer Outer Bellingham	2-nitrophenol	0:2	162.50	85.00	240.00	109.60
Outer Outer Bellingham	3-nitroaniline	0:2	375.00	240.00	510.00	190.92

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Outer Outer Bellingham	4,6-dinitro-o-cresol	0:2	1930.00	260.00	3600.00	2361.74
Outer Outer Bellingham	4-bromophenylphenylether	0:1	85.00	85.00	85.00	
Outer Outer Bellingham	4-chloro-3-methylphenol	0:2	562.50	125.00	1000.00	618.72
Outer Outer Bellingham	4-chloroaniline	0:1	85.00	85.00	85.00	
Outer Outer Bellingham	4-chlorophenylphenylether	0:2	162.50	85.00	240.00	109.60
Outer Outer Bellingham	4-methylphenol	0:2	162.50	85.00	240.00	109.60
Outer Outer Bellingham	4-nitroaniline	0:2	730.00	260.00	1200.00	664.68
Outer Outer Bellingham	4-nitrophenol	0:2	1455.00	510.00	2400.00	1336.43
Outer Outer Bellingham	acenaphthene	0:2	162.50	85.00	240.00	109.60
Outer Outer Bellingham	acenaphthylene	0:2	162.50	85.00	240.00	109.60
Outer Outer Bellingham	Aldrin	0:1	13.00	13.00	13.00	
Outer Outer Bellingham	alpha chlordane	0:1	6.30	6.30	6.30	
Outer Outer Bellingham	alpha endosulfan	0:1	13.00	13.00	13.00	
Outer Outer Bellingham	alpha hexachlorocyclohexane	0:1	6.30	6.30	6.30	
Outer Outer Bellingham	aniline	0:2	892.50	85.00	1700.00	1141.98
Outer Outer Bellingham	anthracene	0:2	162.50	85.00	240.00	109.60
Outer Outer Bellingham	Aroclor 1016	0:3	86.67	20.00	160.00	70.24
Outer Outer Bellingham	Aroclor 1221	0:3	86.67	20.00	160.00	70.24
Outer Outer Bellingham	Aroclor 1232	0:3	76.67	20.00	160.00	73.71
Outer Outer Bellingham	Aroclor 1242	0:3	76.67	20.00	160.00	73.71
Outer Outer Bellingham	Aroclor 1248	0:3	76.67	20.00	160.00	73.71
Outer Outer Bellingham	Aroclor 1254	0:3	76.67	20.00	160.00	73.71
Outer Outer Bellingham	Aroclor 1260	3:3	65.00	46.00	78.00	16.82
Outer Outer Bellingham	arsenic	4:4	2.83	2.00	4.30	1.09
Outer Outer Bellingham	benzo(a)anthracene	0:2	427.50	125.00	730.00	427.80
Outer Outer Bellingham	benzo(a)pyrene	0:2	162.50	85.00	240.00	109.60
Outer Outer Bellingham	benzo(b)fluoranthene	0:2	427.50	125.00	730.00	427.80
Outer Outer Bellingham	benzo(g,h,i)perylene	0:2	407.50	85.00	730.00	456.08
Outer Outer Bellingham	benzo(k)fluoranthene	0:2	282.50	85.00	480.00	279.31
Outer Outer Bellingham	benzoic acid	2:2	4000.00	2500.00	5500.00	2121.32
Outer Outer Bellingham	benzyl alcohol	2:2	560.00	290.00	830.00	381.84
Outer Outer Bellingham	benzylbutylphthalate	0:2	495.00	260.00	730.00	332.34
Outer Outer Bellingham	beta endosulfan	0:1	13.00	13.00	13.00	
Outer Outer Bellingham	beta hexachlorocyclohexane	0:1	6.30	6.30	6.30	
Outer Outer Bellingham	bis(2-chloroethoxy)methane	0:2	162.50	85.00	240.00	109.60
Outer Outer Bellingham	bis(2-chloroethyl)ether	0:2	162.50	85.00	240.00	109.60
Outer Outer Bellingham	bis(2-chloroisopropyl)ether	0:2	407.50	85.00	730.00	456.08
Outer Outer Bellingham	bis(2-ethylhexyl)phthalate	0:2	162.50	85.00	240.00	109.60
Outer Outer Bellingham	carbazole	0:2	250.00	240.00	260.00	14.14
Outer Outer Bellingham	chrysene	0:2	630.00	260.00	1000.00	523.26
Outer Outer Bellingham	copper	4:4	3.20	2.60	4.30	0.75
Outer Outer Bellingham	coprostanol	0:1	21000.00	21000.00	21000.00	
Outer Outer Bellingham	delta hexachlorocyclohexane	0:1	6.30	6.30	6.30	
Outer Outer Bellingham	dibenzo(a,h)anthracene	0:2	192.50	85.00	300.00	152.03
Outer Outer Bellingham	dibenzofuran	0:2	192.50	85.00	300.00	152.03
Outer Outer Bellingham	Dieldrin	0:1	13.00	13.00	13.00	
Outer Outer Bellingham	diethylphthalate	0:2	162.50	85.00	240.00	109.60
Outer Outer Bellingham	dimethylphthalate	0:2	162.50	85.00	240.00	109.60
Outer Outer Bellingham	di-n-butylphthalate	0:2	162.50	85.00	240.00	109.60
Outer Outer Bellingham	di-n-octylphthalate	0:2	162.50	85.00	240.00	109.60
Outer Outer Bellingham	endosulfan sulfate	0:1	13.00	13.00	13.00	
Outer Outer Bellingham	Endrin	0:1	13.00	13.00	13.00	
Outer Outer Bellingham	endrin aldehyde	0:1	13.00	13.00	13.00	

Location	Assay	No. Detected:				SD
		lo. Analyzed	Mean	Min	Max	
Outer Outer Bellingham	fluoranthene	0:2	542.50	85.00	1000.00	647.00
Outer Outer Bellingham	fluorene	0:2	162.50	85.00	240.00	109.60
Outer Outer Bellingham	gamma chlordane	0:1	6.30	6.30	6.30	
Outer Outer Bellingham	gamma hexachlorocyclohexane	0:1	6.30	6.30	6.30	
Outer Outer Bellingham	Heptachlor	0:1	6.30	6.30	6.30	
Outer Outer Bellingham	heptachlor epoxide	0:1	6.30	6.30	6.30	
Outer Outer Bellingham	hexachlorobenzene	0:1	85.00	85.00	85.00	
Outer Outer Bellingham	hexachlorobutadiene	0:1	85.00	85.00	85.00	
Outer Outer Bellingham	hexachlorocyclopentadiene	0:2	1105.00	510.00	1700.00	841.46
Outer Outer Bellingham	hexachloroethane	0:2	192.50	85.00	300.00	152.03
Outer Outer Bellingham	indeno(1,2,3-c,d)pyrene	0:2	347.50	85.00	610.00	371.23
Outer Outer Bellingham	isophorone	0:2	162.50	85.00	240.00	109.60
Outer Sinclair Inlet	hexachlorobenzene	3:3	1.01	0.93	1.10	0.09
Outer Sinclair Inlet	Lipids	3:3	4.03	3.44	4.63	0.60
Outer Sinclair Inlet	opDDT	0:2	0.16	0.15	0.16	0.01
Outer Sinclair Inlet	PCB101	3:3	81.33	42.00	110.00	35.23
Outer Sinclair Inlet	PCB105	3:3	9.10	5.30	12.00	3.44
Outer Sinclair Inlet	PCB110	3:3	11.97	5.90	16.00	5.35
Outer Sinclair Inlet	PCB118	3:3	35.67	16.00	50.00	17.62
Outer Sinclair Inlet	PCB126	0:3	0.08	0.06	0.10	0.02
Outer Sinclair Inlet	PCB128	3:3	14.23	7.70	18.00	5.68
Outer Sinclair Inlet	PCB138	3:3	29.00	14.00	39.00	13.23
Outer Sinclair Inlet	PCB153	3:3	64.00	29.00	87.00	30.81
Outer Sinclair Inlet	PCB156	3:3	2.10	1.10	2.90	0.92
Outer Sinclair Inlet	PCB157	3:3	1.58	0.34	2.40	1.09
Outer Sinclair Inlet	PCB169	0:3	0.10	0.08	0.13	0.03
Outer Sinclair Inlet	PCB170	3:3	14.70	7.10	20.00	6.75
Outer Sinclair Inlet	PCB180	2:3	19.35	0.04	32.00	16.99
Outer Sinclair Inlet	PCB189	3:3	0.28	0.12	0.39	0.14
Outer Sinclair Inlet	PCB77	1:3	0.09	0.07	0.11	0.02
Outer Sinclair Inlet	ppDDD	3:3	2.03	1.60	2.40	0.40
Outer Sinclair Inlet	ppDDE	3:3	14.87	7.60	19.00	6.31
Outer Sinclair Inlet	ppDDT	0:3	0.18	0.15	0.24	0.05
Outer Sinclair Inlet	Solids	3:3	21.40	20.80	22.19	0.71
Outer Sinclair Inlet	TotalDDT	3:3	16.73	9.20	21.00	6.54
Outer Sinclair Inlet	TotalPCB	3:3	346.67	170.00	470.00	156.95
Pickering Passage	Lipids	3:3	3.83	3.50	4.10	0.31
Pickering Passage	Solids	3:3	25.33	25.00	26.00	0.58
Point Roberts	Aldrin	0:3	8.00	8.00	8.00	0.00
Point Roberts	alpha chlordane	0:3	6.30	6.30	6.30	0.00
Point Roberts	alpha endosulfan	0:3	8.00	8.00	8.00	0.00
Point Roberts	alpha hexachlorocyclohexane	0:3	6.30	6.30	6.30	0.00
Point Roberts	Aroclor 1016	0:3	80.00	80.00	80.00	0.00
Point Roberts	Aroclor 1221	0:3	80.00	80.00	80.00	0.00
Point Roberts	Aroclor 1232	0:3	80.00	80.00	80.00	0.00
Point Roberts	Aroclor 1242	0:3	80.00	80.00	80.00	0.00
Point Roberts	Aroclor 1248	0:3	80.00	80.00	80.00	0.00
Point Roberts	Aroclor 1254	3:3	61.13	54.00	68.20	7.10
Point Roberts	Aroclor 1260	3:3	52.47	48.70	56.40	3.85
Point Roberts	arsenic	1:1	1.60	1.60	1.60	
Point Roberts	beta endosulfan	0:3	13.00	13.00	13.00	0.00
Point Roberts	beta hexachlorocyclohexane	0:3	6.30	6.30	6.30	0.00
Point Roberts	copper	1:1	4.42	4.42	4.42	

Location	Assay	No. Detected:				SD
		lo. Analyzed	Mean	Min	Max	
Point Roberts	delta hexachlorocyclohexane	0:3	6.30	6.30	6.30	0.00
Point Roberts	Dieldrin	0:3	13.00	13.00	13.00	0.00
Point Roberts	endosulfan sulfate	0:3	13.00	13.00	13.00	0.00
Point Roberts	Endrin	0:3	13.00	13.00	13.00	0.00
Point Roberts	endrin aldehyde	0:3	13.00	13.00	13.00	0.00
Point Roberts	gamma chlordane	0:3	6.30	6.30	6.30	0.00
Point Roberts	gamma hexachlorocyclohexane	0:3	6.30	6.30	6.30	0.00
Point Roberts	Heptachlor	0:3	6.30	6.30	6.30	0.00
Point Roberts	heptachlor epoxide	0:3	6.30	6.30	6.30	0.00
Point Roberts	lead	1:1	0.12	0.12	0.12	
Point Roberts	Lipids	2:2	3.85	3.80	3.90	0.07
Point Roberts	mercury	3:3	0.03	0.03	0.05	0.01
Point Roberts	Methoxychlor	0:3	63.00	63.00	63.00	0.00
Point Roberts	ppDDD	0:3	13.00	13.00	13.00	0.00
Point Roberts	ppDDE	0:3	13.00	13.00	13.00	0.00
Point Roberts	ppDDT	0:3	13.00	13.00	13.00	0.00
Point Roberts	Solids	1:1	21.20	21.20	21.20	
Point Roberts	Toxaphene	0:3	100.00	100.00	100.00	0.00
Port Gardner	1,2-dichlorobenzene	0:1	118.00	118.00	118.00	
Port Gardner	1,2-diphenylhydrazine	0:1	118.00	118.00	118.00	
Port Gardner	1,3-dichlorobenzene	0:1	118.00	118.00	118.00	
Port Gardner	1,4-dichlorobenzene	0:1	118.00	118.00	118.00	
Port Gardner	2,4,5-trichlorophenol	0:1	118.00	118.00	118.00	
Port Gardner	2,4,6-trichlorophenol	0:1	174.00	174.00	174.00	
Port Gardner	2,4-dichlorophenol	0:1	118.00	118.00	118.00	
Port Gardner	2,4-dimethylphenol	0:1	118.00	118.00	118.00	
Port Gardner	2,4-dinitrophenol	0:1	708.00	708.00	708.00	
Port Gardner	2,4-dinitrotoluene	0:1	174.00	174.00	174.00	
Port Gardner	2,6-dinitrotoluene	0:1	174.00	174.00	174.00	
Port Gardner	2-chloronaphthalene	0:1	118.00	118.00	118.00	
Port Gardner	2-chlorophenol	0:1	118.00	118.00	118.00	
Port Gardner	2-methylnaphthalene	0:1	118.00	118.00	118.00	
Port Gardner	2-methylphenol	0:1	118.00	118.00	118.00	
Port Gardner	2-nitroaniline	0:1	118.00	118.00	118.00	
Port Gardner	2-nitrophenol	0:1	118.00	118.00	118.00	
Port Gardner	3-nitroaniline	0:1	708.00	708.00	708.00	
Port Gardner	4,6-dinitro-o-cresol	0:1	361.00	361.00	361.00	
Port Gardner	4-bromophenylphenylether	0:1	118.00	118.00	118.00	
Port Gardner	4-chloro-3-methylphenol	0:1	174.00	174.00	174.00	
Port Gardner	4-chloroaniline	0:1	118.00	118.00	118.00	
Port Gardner	4-chlorophenylphenylether	0:1	118.00	118.00	118.00	
Port Gardner	4-methylphenol	0:1	118.00	118.00	118.00	
Port Gardner	4-nitroaniline	0:1	316.00	316.00	316.00	
Port Gardner	4-nitrophenol	0:1	708.00	708.00	708.00	
Port Gardner	acenaphthene	0:1	118.00	118.00	118.00	
Port Gardner	acenaphthylene	0:1	118.00	118.00	118.00	
Port Gardner	Aldrin	0:11	92.95	6.50	320.00	145.82
Port Gardner	alpha chlordane	2:11	22.06	5.10	62.50	26.03
Port Gardner	alpha endosulfan	0:8	7.81	6.50	8.00	0.53
Port Gardner	alpha hexachlorocyclohexane	0:11	13.20	5.10	32.00	12.08
Port Gardner	aniline	0:1	118.00	118.00	118.00	
Port Gardner	anthracene	0:1	118.00	118.00	118.00	
Port Gardner	Aroclor 1016	0:14	86.07	20.00	200.00	54.00

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Port Gardner	Aroclor 1221	0:14	86.07	20.00	200.00	54.00
Port Gardner	Aroclor 1232	0:14	86.07	20.00	200.00	54.00
Port Gardner	Aroclor 1242	0:14	86.07	20.00	200.00	54.00
Port Gardner	Aroclor 1248	1:14	91.79	20.00	200.00	50.60
Port Gardner	Aroclor 1254	6:14	169.91	20.00	598.00	178.71
Port Gardner	Aroclor 1260	14:14	282.79	79.00	896.00	247.07
Port Gardner	arsenic	8:8	11.59	3.00	24.60	7.89
Port Gardner	benzo(a)anthracene	0:1	174.00	174.00	174.00	
Port Gardner	benzo(a)pyrene	0:1	118.00	118.00	118.00	
Port Gardner	benzo(b)fluoranthene	0:1	174.00	174.00	174.00	
Port Gardner	benzo(g,h,i)perylene	0:1	118.00	118.00	118.00	
Port Gardner	benzo(k)fluoranthene	0:1	118.00	118.00	118.00	
Port Gardner	benzoic acid	1:1	12000.00	12000.00	12000.00	
Port Gardner	benzyl alcohol	1:1	1300.00	1300.00	1300.00	
Port Gardner	benzylbutylphthalate	0:1	361.00	361.00	361.00	
Port Gardner	beta endosulfan	0:11	96.45	10.00	320.00	143.58
Port Gardner	beta hexachlorocyclohexane	0:8	6.15	5.10	6.30	0.42
Port Gardner	bis(2-chloroethoxy)methane	0:1	118.00	118.00	118.00	
Port Gardner	bis(2-chloroethyl)ether	0:1	118.00	118.00	118.00	
Port Gardner	bis(2-chloroisopropyl)ether	0:1	118.00	118.00	118.00	
Port Gardner	bis(2-ethylhexyl)phthalate	0:1	85.00	85.00	85.00	
Port Gardner	carbazole	0:1	361.00	361.00	361.00	
Port Gardner	chrysene	0:1	361.00	361.00	361.00	
Port Gardner	copper	8:8	7.83	5.90	11.00	1.73
Port Gardner	coprostanol	0:1	29200.00	29200.00	29200.00	
Port Gardner	delta hexachlorocyclohexane	0:11	13.20	5.10	32.00	12.08
Port Gardner	dibenzo(a,h)anthracene	0:1	118.00	118.00	118.00	
Port Gardner	dibenzofuran	0:1	118.00	118.00	118.00	
Port Gardner	Dieldrin	0:11	96.45	10.00	320.00	143.58
Port Gardner	diethylphthalate	0:1	118.00	118.00	118.00	
Port Gardner	dimethylphthalate	0:1	118.00	118.00	118.00	
Port Gardner	di-n-butylphthalate	0:1	85.00	85.00	85.00	
Port Gardner	di-n-octylphthalate	0:1	118.00	118.00	118.00	
Port Gardner	endosulfan sulfate	0:11	118.27	10.00	400.00	180.94
Port Gardner	Endrin	0:11	96.45	10.00	320.00	143.58
Port Gardner	endrin aldehyde	0:8	12.63	10.00	13.00	1.06
Port Gardner	fluoranthene	0:1	118.00	118.00	118.00	
Port Gardner	fluorene	0:1	118.00	118.00	118.00	
Port Gardner	gamma chlordane	2:11	22.20	5.10	62.50	25.94
Port Gardner	gamma hexachlorocyclohexane	0:8	6.15	5.10	6.30	0.42
Port Gardner	Heptachlor	0:11	91.75	5.10	320.00	146.60
Port Gardner	heptachlor epoxide	0:11	13.20	5.10	32.00	12.08
Port Gardner	hexachlorobenzene	0:1	118.00	118.00	118.00	
Port Gardner	hexachlorobutadiene	0:1	118.00	118.00	118.00	
Port Gardner	hexachlorocyclopentadiene	0:1	708.00	708.00	708.00	
Port Gardner	hexachloroethane	0:1	118.00	118.00	118.00	
Port Gardner	indeno(1,2,3-c,d)pyrene	0:1	118.00	118.00	118.00	
Port Gardner	isophorone	0:1	118.00	118.00	118.00	
Port Gardner	lead	10:10	0.10	0.07	0.15	0.03
Port Gardner	Lipids	5:5	4.80	4.20	6.21	0.85
Port Gardner	mercury	11:11	0.09	0.06	0.13	0.02
Port Gardner	Methoxychlor	0:11	53.45	32.00	63.00	14.23
Port Gardner	naphthalene	0:1	118.00	118.00	118.00	



Location	Assay	No. Detected:			SD	
		lo. Analyzed	Mean	Min		Max
Port Gardner	nitrobenzene	0:1	118.00	118.00	118.00	
Port Gardner	N-nitrosodimethylamine	0:1	361.00	361.00	361.00	
Port Gardner	N-nitroso-di-n-propylamine	0:1	118.00	118.00	118.00	
Port Gardner	N-nitrosodiphenylamine	0:1	118.00	118.00	118.00	
Port Gardner	pentachlorophenol	0:1	355.00	355.00	355.00	
Port Gardner	phenanthrene	0:1	118.00	118.00	118.00	
Port Gardner	phenol	0:1	118.00	118.00	118.00	
Port Gardner	ppDDD	1:11	18.72	10.00	32.00	9.01
Port Gardner	ppDDE	4:11	101.22	10.00	320.00	140.73
Port Gardner	ppDDT	0:11	52.82	10.00	160.00	68.84
Port Gardner	pyrene	0:1	174.00	174.00	174.00	
Port Gardner	Solids	4:4	21.40	17.00	23.60	3.02
Port Gardner	Toxaphene	0:11	343.73	81.00	1000.00	421.54
Port Ludlow	Aldrin	0:3	320.00	320.00	320.00	0.00
Port Ludlow	alpha chlordane	0:3	62.50	62.50	62.50	0.00
Port Ludlow	alpha hexachlorocyclohexane	0:3	32.00	32.00	32.00	0.00
Port Ludlow	Aroclor 1016	0:3	20.00	20.00	20.00	0.00
Port Ludlow	Aroclor 1221	0:3	20.00	20.00	20.00	0.00
Port Ludlow	Aroclor 1232	0:3	20.00	20.00	20.00	0.00
Port Ludlow	Aroclor 1242	0:3	20.00	20.00	20.00	0.00
Port Ludlow	Aroclor 1248	0:3	20.00	20.00	20.00	0.00
Port Ludlow	Aroclor 1254	0:3	20.00	20.00	20.00	0.00
Port Ludlow	Aroclor 1260	3:3	84.33	67.00	94.00	15.04
Port Ludlow	arsenic	3:3	4.20	4.00	4.50	0.26
Port Ludlow	beta endosulfan	0:3	320.00	320.00	320.00	0.00
Port Ludlow	copper	3:3	5.00	4.70	5.20	0.26
Port Ludlow	delta hexachlorocyclohexane	0:3	32.00	32.00	32.00	0.00
Port Ludlow	Dieldrin	0:3	320.00	320.00	320.00	0.00
Port Ludlow	endosulfan sulfate	0:3	400.00	400.00	400.00	0.00
Port Ludlow	Endrin	0:3	320.00	320.00	320.00	0.00
Port Ludlow	gamma chlordane	0:3	62.50	62.50	62.50	0.00
Port Ludlow	Heptachlor	0:3	320.00	320.00	320.00	0.00
Port Ludlow	heptachlor epoxide	0:3	32.00	32.00	32.00	0.00
Port Ludlow	lead	3:3	0.48	0.39	0.60	0.11
Port Ludlow	mercury	3:3	0.12	0.11	0.14	0.02
Port Ludlow	Methoxychlor	0:3	32.00	32.00	32.00	0.00
Port Ludlow	ppDDD	0:3	32.00	32.00	32.00	0.00
Port Ludlow	ppDDE	2:3	122.33	23.00	320.00	171.19
Port Ludlow	ppDDT	0:3	160.00	160.00	160.00	0.00
Port Ludlow	Toxaphene	0:3	1000.00	1000.00	1000.00	0.00
Port Madison	1,2,4-trichlorobenzene	0:2	300.00	300.00	300.00	0.00
Port Madison	1,2-dichlorobenzene	0:2	300.00	300.00	300.00	0.00
Port Madison	1,2-diphenylhydrazine	0:2	300.00	300.00	300.00	0.00
Port Madison	1,3-dichlorobenzene	0:2	1000.00	1000.00	1000.00	0.00
Port Madison	1,4-dichlorobenzene	0:2	1000.00	1000.00	1000.00	0.00
Port Madison	2,4-dichlorophenol	0:2	300.00	300.00	300.00	0.00
Port Madison	2,4-dimethylphenol	0:2	300.00	300.00	300.00	0.00
Port Madison	2,4-dinitrophenol	0:2	7000.00	7000.00	7000.00	0.00
Port Madison	2,4-dinitrotoluene	0:2	1000.00	1000.00	1000.00	0.00
Port Madison	2,6-dinitrotoluene	0:2	1000.00	1000.00	1000.00	0.00
Port Madison	2-chloronaphthalene	0:2	300.00	300.00	300.00	0.00
Port Madison	2-chlorophenol	0:2	300.00	300.00	300.00	0.00
Port Madison	2-methylnaphthalene	0:2	300.00	300.00	300.00	0.00

Location	Assay	No. Detected:			Min	Max	SD
		lo. Analyzed	Mean				
Port Madison	2-methylphenol	0:2	300.00	300.00	300.00	0.00	
Port Madison	2-nitroaniline	0:2	700.00	700.00	700.00	0.00	
Port Madison	2-nitrophenol	0:2	300.00	300.00	300.00	0.00	
Port Madison	3-nitroaniline	0:2	300.00	300.00	300.00	0.00	
Port Madison	4,6-dinitro-o-cresol	0:2	5000.00	5000.00	5000.00	0.00	
Port Madison	4-chloro-3-methylphenol	0:2	1000.00	1000.00	1000.00	0.00	
Port Madison	4-chlorophenylphenylether	0:2	300.00	300.00	300.00	0.00	
Port Madison	4-methylphenol	0:2	300.00	300.00	300.00	0.00	
Port Madison	4-nitroaniline	0:2	2000.00	2000.00	2000.00	0.00	
Port Madison	4-nitrophenol	0:2	3000.00	3000.00	3000.00	0.00	
Port Madison	acenaphthene	0:2	300.00	300.00	300.00	0.00	
Port Madison	acenaphthylene	0:2	300.00	300.00	300.00	0.00	
Port Madison	Aldrin	0:2	320.00	320.00	320.00	0.00	
Port Madison	alpha chlordane	0:2	62.50	62.50	62.50	0.00	
Port Madison	alpha hexachlorocyclohexane	0:2	32.00	32.00	32.00	0.00	
Port Madison	aniline	0:2	1700.00	1700.00	1700.00	0.00	
Port Madison	anthracene	0:2	300.00	300.00	300.00	0.00	
Port Madison	Aroclor 1016	0:3	20.00	20.00	20.00	0.00	
Port Madison	Aroclor 1221	0:3	20.00	20.00	20.00	0.00	
Port Madison	Aroclor 1232	0:3	20.00	20.00	20.00	0.00	
Port Madison	Aroclor 1242	0:3	20.00	20.00	20.00	0.00	
Port Madison	Aroclor 1248	0:3	20.00	20.00	20.00	0.00	
Port Madison	Aroclor 1254	0:3	20.00	20.00	20.00	0.00	
Port Madison	Aroclor 1260	3:3	53.00	30.00	65.00	19.92	
Port Madison	arsenic	3:3	11.03	9.30	14.00	2.58	
Port Madison	benzo(a)anthracene	0:2	1000.00	1000.00	1000.00	0.00	
Port Madison	benzo(a)pyrene	0:2	300.00	300.00	300.00	0.00	
Port Madison	benzo(b)fluoranthene	0:2	1000.00	1000.00	1000.00	0.00	
Port Madison	benzo(g,h,i)perylene	0:2	1000.00	1000.00	1000.00	0.00	
Port Madison	benzo(k)fluoranthene	0:2	700.00	700.00	700.00	0.00	
Port Madison	benzoic acid	0:2	3000.00	3000.00	3000.00	0.00	
Port Madison	benzyl alcohol	2:2	850.00	700.00	1000.00	212.13	
Port Madison	benzylbutylphthalate	0:2	1000.00	1000.00	1000.00	0.00	
Port Madison	beta endosulfan	0:2	320.00	320.00	320.00	0.00	
Port Madison	bis(2-chloroethoxy)methane	0:2	300.00	300.00	300.00	0.00	
Port Madison	bis(2-chloroethyl)ether	0:2	300.00	300.00	300.00	0.00	
Port Madison	bis(2-chloroisopropyl)ether	0:2	1000.00	1000.00	1000.00	0.00	
Port Madison	bis(2-ethylhexyl)phthalate	1:2	500.00	300.00	700.00	282.84	
Port Madison	carbazole	0:2	300.00	300.00	300.00	0.00	
Port Madison	chrysene	0:2	1000.00	1000.00	1000.00	0.00	
Port Madison	copper	3:3	6.63	5.80	7.10	0.72	
Port Madison	delta hexachlorocyclohexane	0:2	32.00	32.00	32.00	0.00	
Port Madison	dibenzo(a,h)anthracene	0:2	300.00	300.00	300.00	0.00	
Port Madison	dibenzofuran	0:2	300.00	300.00	300.00	0.00	
Port Madison	Dieldrin	0:2	320.00	320.00	320.00	0.00	
Port Madison	diethylphthalate	0:2	300.00	300.00	300.00	0.00	
Port Madison	dimethylphthalate	0:2	300.00	300.00	300.00	0.00	
Port Madison	di-n-butylphthalate	0:2	300.00	300.00	300.00	0.00	
Port Madison	di-n-octylphthalate	0:2	300.00	300.00	300.00	0.00	
Port Madison	endosulfan sulfate	0:2	400.00	400.00	400.00	0.00	
Port Madison	Endrin	0:2	320.00	320.00	320.00	0.00	
Port Madison	fluoranthene	0:2	1000.00	1000.00	1000.00	0.00	
Port Madison	fluorene	0:2	300.00	300.00	300.00	0.00	

Location	Assay	No. Detected:				SD
		lo. Analyzed	Mean	Min	Max	
Port Madison	gamma chlordane	0:2	62.50	62.50	62.50	0.00
Port Madison	Heptachlor	0:2	320.00	320.00	320.00	0.00
Port Madison	heptachlor epoxide	0:2	32.00	32.00	32.00	0.00
Port Madison	hexachlorocyclopentadiene	0:2	1700.00	1700.00	1700.00	0.00
Port Madison	hexachloroethane	0:2	300.00	300.00	300.00	0.00
Port Madison	indeno(1,2,3-c,d)pyrene	0:2	800.00	800.00	800.00	0.00
Port Madison	isophorone	0:2	300.00	300.00	300.00	0.00
Port Madison	lead	3:3	0.41	0.39	0.45	0.03
Port Madison	mercury	3:3	0.07	0.07	0.08	0.01
Port Madison	Methoxychlor	0:2	32.00	32.00	32.00	0.00
Port Madison	naphthalene	0:2	300.00	300.00	300.00	0.00
Port Madison	nitrobenzene	0:2	300.00	300.00	300.00	0.00
Port Madison	N-nitrosodimethylamine	0:2	300.00	300.00	300.00	0.00
Port Madison	N-nitroso-di-n-propylamine	0:2	300.00	300.00	300.00	0.00
Port Madison	N-nitrosodiphenylamine	0:2	300.00	300.00	300.00	0.00
Port Madison	phenanthrene	0:2	300.00	300.00	300.00	0.00
Port Madison	phenol	0:2	300.00	300.00	300.00	0.00
Port Madison	ppDDD	0:2	32.00	32.00	32.00	0.00
Port Madison	ppDDE	1:2	193.00	66.00	320.00	179.61
Port Madison	ppDDT	0:2	160.00	160.00	160.00	0.00
Port Madison	pyrene	0:2	300.00	300.00	300.00	0.00
Port Madison	Toxaphene	0:2	1000.00	1000.00	1000.00	0.00
Port Orchard	1,2,4-trichlorobenzene	0:1	300.00	300.00	300.00	
Port Orchard	1,2-dichlorobenzene	0:1	300.00	300.00	300.00	
Port Orchard	1,2-diphenylhydrazine	0:1	300.00	300.00	300.00	
Port Orchard	1,3-dichlorobenzene	0:1	1000.00	1000.00	1000.00	
Port Orchard	1,4-dichlorobenzene	0:1	1000.00	1000.00	1000.00	
Port Orchard	2,4-dichlorophenol	0:1	300.00	300.00	300.00	
Port Orchard	2,4-dimethylphenol	0:1	300.00	300.00	300.00	
Port Orchard	2,4-dinitrophenol	0:1	7000.00	7000.00	7000.00	
Port Orchard	2,4-dinitrotoluene	0:1	1000.00	1000.00	1000.00	
Port Orchard	2,6-dinitrotoluene	0:1	1000.00	1000.00	1000.00	
Port Orchard	2-chloronaphthalene	0:1	300.00	300.00	300.00	
Port Orchard	2-chlorophenol	0:1	300.00	300.00	300.00	
Port Orchard	2-methylnaphthalene	0:1	300.00	300.00	300.00	
Port Orchard	2-methylphenol	0:1	300.00	300.00	300.00	
Port Orchard	2-nitroaniline	0:1	700.00	700.00	700.00	
Port Orchard	2-nitrophenol	0:1	300.00	300.00	300.00	
Port Orchard	3-nitroaniline	0:1	300.00	300.00	300.00	
Port Orchard	4,6-dinitro-o-cresol	0:1	5000.00	5000.00	5000.00	
Port Orchard	4-chloro-3-methylphenol	0:1	1000.00	1000.00	1000.00	
Port Orchard	4-chlorophenylphenylether	0:1	300.00	300.00	300.00	
Port Orchard	4-methylphenol	0:1	300.00	300.00	300.00	
Port Orchard	4-nitroaniline	0:1	2000.00	2000.00	2000.00	
Port Orchard	4-nitrophenol	0:1	3000.00	3000.00	3000.00	
Port Orchard	acenaphthene	0:1	300.00	300.00	300.00	
Port Orchard	acenaphthylene	0:1	300.00	300.00	300.00	
Port Orchard	Aldrin	0:2	320.00	320.00	320.00	0.00
Port Orchard	alpha chlordane	0:2	62.50	62.50	62.50	0.00
Port Orchard	alpha hexachlorocyclohexane	0:2	32.00	32.00	32.00	0.00
Port Orchard	aniline	0:1	1700.00	1700.00	1700.00	
Port Orchard	anthracene	0:1	300.00	300.00	300.00	
Port Orchard	Aroclor 1016	0:3	20.00	20.00	20.00	0.00

Location	Assay	No. Detected:			Min	Max	SD
		lo. Analyzed	Mean				
Port Orchard	Aroclor 1221	0:3	20.00	20.00	20.00	0.00	
Port Orchard	Aroclor 1232	0:3	20.00	20.00	20.00	0.00	
Port Orchard	Aroclor 1242	0:3	20.00	20.00	20.00	0.00	
Port Orchard	Aroclor 1248	0:3	20.00	20.00	20.00	0.00	
Port Orchard	Aroclor 1254	0:3	20.00	20.00	20.00	0.00	
Port Orchard	Aroclor 1260	3:3	520.00	430.00	580.00	79.37	
Port Orchard	arsenic	3:3	6.53	5.70	7.50	0.91	
Port Orchard	benzo(a)anthracene	0:1	1000.00	1000.00	1000.00		
Port Orchard	benzo(a)pyrene	0:1	300.00	300.00	300.00		
Port Orchard	benzo(b)fluoranthene	0:1	1000.00	1000.00	1000.00		
Port Orchard	benzo(g,h,i)perylene	0:1	1000.00	1000.00	1000.00		
Port Orchard	benzo(k)fluoranthene	0:1	700.00	700.00	700.00		
Port Orchard	benzoic acid	0:1	3000.00	3000.00	3000.00		
Port Orchard	benzyl alcohol	1:1	9700.00	9700.00	9700.00		
Port Orchard	benzylbutylphthalate	0:1	1000.00	1000.00	1000.00		
Port Orchard	beta endosulfan	0:2	320.00	320.00	320.00	0.00	
Port Orchard	bis(2-chloroethoxy)methane	0:1	300.00	300.00	300.00		
Port Orchard	bis(2-chloroethyl)ether	0:1	300.00	300.00	300.00		
Port Orchard	bis(2-chloroisopropyl)ether	0:1	1000.00	1000.00	1000.00		
Port Orchard	bis(2-ethylhexyl)phthalate	0:1	300.00	300.00	300.00		
Port Orchard	carbazole	0:1	300.00	300.00	300.00		
Port Orchard	chrysene	0:1	1000.00	1000.00	1000.00		
Port Orchard	copper	3:3	5.50	3.70	7.80	2.10	
Port Orchard	delta hexachlorocyclohexane	0:2	32.00	32.00	32.00	0.00	
Port Orchard	dibenzo(a,h)anthracene	0:1	300.00	300.00	300.00		
Port Orchard	dibenzofuran	0:1	300.00	300.00	300.00		
Port Orchard	Dieldrin	0:2	320.00	320.00	320.00	0.00	
Port Orchard	diethylphthalate	0:1	300.00	300.00	300.00		
Port Orchard	dimethylphthalate	0:1	300.00	300.00	300.00		
Port Orchard	di-n-butylphthalate	0:1	300.00	300.00	300.00		
Port Orchard	di-n-octylphthalate	0:1	300.00	300.00	300.00		
Port Orchard	endosulfan sulfate	0:2	400.00	400.00	400.00	0.00	
Port Orchard	Endrin	0:2	320.00	320.00	320.00	0.00	
Port Orchard	fluoranthene	0:1	1000.00	1000.00	1000.00		
Port Orchard	fluorene	0:1	300.00	300.00	300.00		
Port Orchard	gamma chlordane	0:2	62.50	62.50	62.50	0.00	
Port Orchard	Heptachlor	0:2	320.00	320.00	320.00	0.00	
Port Orchard	heptachlor epoxide	0:2	32.00	32.00	32.00	0.00	
Port Orchard	hexachlorobenzene	3:3	1.55	0.96	2.10	0.57	
Port Orchard	hexachlorocyclopentadiene	0:1	1700.00	1700.00	1700.00		
Port Orchard	hexachloroethane	0:1	300.00	300.00	300.00		
Port Orchard	indeno(1,2,3-c,d)pyrene	0:1	800.00	800.00	800.00		
Port Orchard	isophorone	0:1	300.00	300.00	300.00		
Port Orchard	lead	3:3	0.67	0.61	0.70	0.05	
Port Orchard	Lipids	3:3	5.77	4.12	7.32	1.60	
Port Orchard	mercury	3:3	0.11	0.09	0.12	0.02	
Port Orchard	Methoxychlor	0:2	32.00	32.00	32.00	0.00	
Port Orchard	naphthalene	0:1	300.00	300.00	300.00		
Port Orchard	nitrobenzene	0:1	300.00	300.00	300.00		
Port Orchard	N-nitrosodimethylamine	0:1	300.00	300.00	300.00		
Port Orchard	N-nitroso-di-n-propylamine	0:1	300.00	300.00	300.00		
Port Orchard	N-nitrosodiphenylamine	0:1	300.00	300.00	300.00		
Port Orchard	opDDT	0:2	0.26	0.23	0.28	0.04	

Location	Assay	No. Detected:				SD
		lo. Analyzed	Mean	Min	Max	
Port Orchard	PCB101	3:3	163.33	140.00	210.00	40.41
Port Orchard	PCB105	2:2	13.40	9.80	17.00	5.09
Port Orchard	PCB110	3:3	36.00	20.00	53.00	16.52
Port Orchard	PCB118	3:3	58.33	49.00	67.00	9.02
Port Orchard	PCB126	0:3	0.10	0.08	0.12	0.02
Port Orchard	PCB128	3:3	25.33	22.00	32.00	5.77
Port Orchard	PCB138	3:3	47.33	33.00	65.00	16.26
Port Orchard	PCB153	3:3	116.67	100.00	140.00	20.82
Port Orchard	PCB156	2:2	3.45	3.10	3.80	0.49
Port Orchard	PCB157	2:2	7.30	6.80	7.80	0.71
Port Orchard	PCB169	0:3	0.12	0.10	0.15	0.03
Port Orchard	PCB170	2:2	37.50	37.00	38.00	0.71
Port Orchard	PCB180	2:3	32.69	0.06	49.00	28.26
Port Orchard	PCB189	2:2	0.61	0.60	0.62	0.01
Port Orchard	PCB77	1:3	0.17	0.10	0.29	0.10
Port Orchard	phenanthrene	0:1	300.00	300.00	300.00	
Port Orchard	phenol	0:1	300.00	300.00	300.00	
Port Orchard	ppDDD	3:5	15.02	2.60	32.00	15.53
Port Orchard	ppDDE	2:5	137.84	0.18	320.00	166.61
Port Orchard	ppDDT	0:4	80.12	0.18	160.00	92.24
Port Orchard	pyrene	0:1	300.00	300.00	300.00	
Port Orchard	Solids	4:4	23.45	21.43	25.00	1.59
Port Orchard	TotalDDT	3:3	19.87	2.60	33.00	15.62
Port Orchard	TotalPCB	3:3	663.33	520.00	830.00	156.31
Port Orchard	Toxaphene	0:2	1000.00	1000.00	1000.00	0.00
Port Susan	alpha chlordane	0:3	27.00	26.00	29.00	1.73
Port Susan	alpha hexachlorocyclohexane	0:3	0.44	0.43	0.47	0.03
Port Susan	Aroclor 1016	0:3	55.33	53.00	59.00	3.21
Port Susan	Aroclor 1221	0:3	55.33	53.00	59.00	3.21
Port Susan	Aroclor 1232	0:3	55.33	53.00	59.00	3.21
Port Susan	Aroclor 1242	0:3	55.33	53.00	59.00	3.21
Port Susan	Aroclor 1248	0:3	11.33	11.00	12.00	0.58
Port Susan	beta hexachlorocyclohexane	0:3	0.44	0.43	0.47	0.03
Port Susan	delta hexachlorocyclohexane	0:3	0.44	0.43	0.47	0.03
Port Susan	di-n-butyltin	1:3	3.37	0.51	6.00	2.75
Port Susan	gamma chlordane	0:3	27.00	26.00	29.00	1.73
Port Susan	gamma hexachlorocyclohexane	0:3	0.44	0.43	0.47	0.03
Port Susan	heptachlor	0:3	0.44	0.43	0.47	0.03
Port Susan	Lipids	3:3	3.43	3.29	3.60	0.16
Port Susan	Mercury	1:1	0.15	0.15	0.15	
Port Susan	mono-n-butyltin	0:3	12.80	2.40	19.00	9.06
Port Susan	ppDDD	0:3	54.00	52.00	58.00	3.46
Port Susan	ppDDE	0:3	54.00	52.00	58.00	3.46
Port Susan	ppDDT	0:3	54.00	52.00	58.00	3.46
Port Susan	tetra-n-butyltin	0:3	3.09	0.58	4.60	2.19
Port Susan	tri-n-butyltin	3:3	4.05	1.68	5.67	2.10
Port Townsend	1,2,4-trichlorobenzene	0:4	138.75	85.00	300.00	107.50
Port Townsend	1,2-dichlorobenzene	0:4	138.75	85.00	300.00	107.50
Port Townsend	1,2-diphenylhydrazine	0:4	138.75	85.00	300.00	107.50
Port Townsend	1,3-dichlorobenzene	0:4	313.75	85.00	1000.00	457.50
Port Townsend	1,4-dichlorobenzene	0:4	313.75	85.00	1000.00	457.50
Port Townsend	2,4,5-trichlorophenol	0:3	85.00	85.00	85.00	0.00
Port Townsend	2,4,6-trichlorophenol	0:3	125.00	125.00	125.00	0.00

Location	Assay	No. Detected:			Min	Max	SD
		lo. Analyzed	Mean				
Port Townsend	2,4-dichlorophenol	0:4	138.75	85.00	300.00	107.50	
Port Townsend	2,4-dimethylphenol	0:4	138.75	85.00	300.00	107.50	
Port Townsend	2,4-dinitrophenol	0:4	2132.50	510.00	7000.00	3245.00	
Port Townsend	2,4-dinitrotoluene	0:4	343.75	125.00	1000.00	437.50	
Port Townsend	2,6-dinitrotoluene	0:4	343.75	125.00	1000.00	437.50	
Port Townsend	2-chloronaphthalene	0:4	138.75	85.00	300.00	107.50	
Port Townsend	2-chlorophenol	0:4	138.75	85.00	300.00	107.50	
Port Townsend	2-methylnaphthalene	0:4	138.75	85.00	300.00	107.50	
Port Townsend	2-methylphenol	0:4	138.75	85.00	300.00	107.50	
Port Townsend	2-nitroaniline	0:4	238.75	85.00	700.00	307.50	
Port Townsend	2-nitrophenol	0:4	138.75	85.00	300.00	107.50	
Port Townsend	3-nitroaniline	0:4	457.50	300.00	510.00	105.00	
Port Townsend	4,6-dinitro-o-cresol	0:4	1445.00	260.00	5000.00	2370.00	
Port Townsend	4-bromophenylphenylether	0:3	85.00	85.00	85.00	0.00	
Port Townsend	4-chloro-3-methylphenol	0:4	343.75	125.00	1000.00	437.50	
Port Townsend	4-chloroaniline	0:3	98.33	85.00	125.00	23.09	
Port Townsend	4-chlorophenylphenylether	0:4	138.75	85.00	300.00	107.50	
Port Townsend	4-methylphenol	0:4	138.75	85.00	300.00	107.50	
Port Townsend	4-nitroaniline	0:4	695.00	260.00	2000.00	870.00	
Port Townsend	4-nitrophenol	0:4	1132.50	510.00	3000.00	1245.00	
Port Townsend	acenaphthene	0:4	138.75	85.00	300.00	107.50	
Port Townsend	acenaphthylene	0:4	138.75	85.00	300.00	107.50	
Port Townsend	Aldrin	0:6	166.50	13.00	320.00	168.15	
Port Townsend	alpha chlordane	0:6	34.40	6.30	62.50	30.78	
Port Townsend	alpha endosulfan	0:3	13.00	13.00	13.00	0.00	
Port Townsend	alpha hexachlorocyclohexane	0:6	19.15	6.30	32.00	14.08	
Port Townsend	aniline	0:4	488.75	85.00	1700.00	807.50	
Port Townsend	anthracene	0:4	138.75	85.00	300.00	107.50	
Port Townsend	Aroclor 1016	0:9	86.67	20.00	160.00	60.83	
Port Townsend	Aroclor 1221	0:9	86.67	20.00	160.00	60.83	
Port Townsend	Aroclor 1232	0:9	76.67	20.00	160.00	63.84	
Port Townsend	Aroclor 1242	0:9	76.67	20.00	160.00	63.84	
Port Townsend	Aroclor 1248	0:9	76.67	20.00	160.00	63.84	
Port Townsend	Aroclor 1254	3:9	84.44	20.00	160.00	62.41	
Port Townsend	Aroclor 1260	9:9	81.00	39.00	140.00	36.38	
Port Townsend	arsenic	6:6	6.07	4.30	7.90	1.37	
Port Townsend	benzo(a)anthracene	0:4	343.75	125.00	1000.00	437.50	
Port Townsend	benzo(a)pyrene	0:4	138.75	85.00	300.00	107.50	
Port Townsend	benzo(b)fluoranthene	0:4	343.75	125.00	1000.00	437.50	
Port Townsend	benzo(g,h,i)perylene	0:4	313.75	85.00	1000.00	457.50	
Port Townsend	benzo(k)fluoranthene	0:4	238.75	85.00	700.00	307.50	
Port Townsend	benzoic acid	0:4	942.00	256.00	3000.00	1372.00	
Port Townsend	benzyl alcohol	4:4	2712.50	950.00	7100.00	2933.82	
Port Townsend	benzylbutylphthalate	0:4	445.00	260.00	1000.00	370.00	
Port Townsend	beta endosulfan	0:6	166.50	13.00	320.00	168.15	
Port Townsend	beta hexachlorocyclohexane	0:3	6.30	6.30	6.30	0.00	
Port Townsend	bis(2-chloroethoxy)methane	0:4	138.75	85.00	300.00	107.50	
Port Townsend	bis(2-chloroethyl)ether	0:4	138.75	85.00	300.00	107.50	
Port Townsend	bis(2-chloroisopropyl)ether	0:4	313.75	85.00	1000.00	457.50	
Port Townsend	bis(2-ethylhexyl)phthalate	2:4	828.75	85.00	2750.00	1283.85	
Port Townsend	carbazole	0:4	270.00	260.00	300.00	20.00	
Port Townsend	chrysene	0:4	445.00	260.00	1000.00	370.00	
Port Townsend	copper	6:6	4.87	3.00	6.60	1.45	

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Port Townsend	coprostanol	0:3	21000.00	21000.00	21000.00	0.00
Port Townsend	delta hexachlorocyclohexane	0:6	19.15	6.30	32.00	14.08
Port Townsend	dibenzo(a,h)anthracene	0:4	138.75	85.00	300.00	107.50
Port Townsend	dibenzofuran	0:4	138.75	85.00	300.00	107.50
Port Townsend	Dieldrin	0:6	166.50	13.00	320.00	168.15
Port Townsend	diethylphthalate	0:4	138.75	85.00	300.00	107.50
Port Townsend	dimethylphthalate	0:4	138.75	85.00	300.00	107.50
Port Townsend	di-n-butylphthalate	0:4	138.75	85.00	300.00	107.50
Port Townsend	di-n-octylphthalate	0:4	138.75	85.00	300.00	107.50
Port Townsend	endosulfan sulfate	0:6	206.50	13.00	400.00	211.97
Port Townsend	Endrin	0:6	166.50	13.00	320.00	168.15
Port Townsend	endrin aldehyde	0:3	13.00	13.00	13.00	0.00
Port Townsend	fluoranthene	0:4	313.75	85.00	1000.00	457.50
Port Townsend	fluorene	0:4	138.75	85.00	300.00	107.50
Port Townsend	gamma chlordane	0:6	34.40	6.30	62.50	30.78
Port Townsend	gamma hexachlorocyclohexane	0:3	6.30	6.30	6.30	0.00
Port Townsend	Heptachlor	0:6	163.15	6.30	320.00	171.82
Port Townsend	heptachlor epoxide	0:6	19.15	6.30	32.00	14.08
Port Townsend	hexachlorobenzene	0:3	85.00	85.00	85.00	0.00
Port Townsend	hexachlorobutadiene	0:3	85.00	85.00	85.00	0.00
Port Townsend	hexachlorocyclopentadiene	0:4	807.50	510.00	1700.00	595.00
Port Townsend	hexachloroethane	0:4	138.75	85.00	300.00	107.50
Port Townsend	indeno(1,2,3-c,d)pyrene	0:4	263.75	85.00	800.00	357.50
Port Townsend	isophorone	0:4	138.75	85.00	300.00	107.50
Port Townsend	lead	6:6	0.35	0.24	0.70	0.17
Port Townsend	Lipids	2:2	4.55	4.50	4.60	0.07
Port Townsend	mercury	6:6	0.06	0.04	0.09	0.02
Port Townsend	Methoxychlor	0:6	47.50	32.00	63.00	16.98
Port Townsend	naphthalene	0:4	138.75	85.00	300.00	107.50
Port Townsend	nitrobenzene	0:4	138.75	85.00	300.00	107.50
Port Townsend	N-nitrosodimethylamine	0:4	270.00	260.00	300.00	20.00
Port Townsend	N-nitroso-di-n-propylamine	0:4	138.75	85.00	300.00	107.50
Port Townsend	N-nitrosodiphenylamine	0:4	138.75	85.00	300.00	107.50
Port Townsend	pentachlorophenol	0:3	256.00	256.00	256.00	0.00
Port Townsend	phenanthrene	0:4	138.75	85.00	300.00	107.50
Port Townsend	phenol	0:4	138.75	85.00	300.00	107.50
Port Townsend	ppDDD	0:6	22.50	13.00	32.00	10.41
Port Townsend	ppDDE	0:6	166.50	13.00	320.00	168.15
Port Townsend	ppDDT	0:6	86.50	13.00	160.00	80.52
Port Townsend	pyrene	0:4	168.75	125.00	300.00	87.50
Port Townsend	Solids	5:5	23.60	22.00	25.00	1.14
Port Townsend	Toxaphene	0:6	550.00	100.00	1000.00	492.95
Possession Point	1,2,4-trichlorobenzene	0:3	300.00	300.00	300.00	0.00
Possession Point	1,2-dichlorobenzene	0:3	300.00	300.00	300.00	0.00
Possession Point	1,2-diphenylhydrazine	0:3	300.00	300.00	300.00	0.00
Possession Point	1,3-dichlorobenzene	0:3	1000.00	1000.00	1000.00	0.00
Possession Point	1,4-dichlorobenzene	0:3	1000.00	1000.00	1000.00	0.00
Possession Point	2,4-dichlorophenol	0:3	300.00	300.00	300.00	0.00
Possession Point	2,4-dimethylphenol	0:3	300.00	300.00	300.00	0.00
Possession Point	2,4-dinitrotoluene	0:3	1000.00	1000.00	1000.00	0.00
Possession Point	2,6-dinitrotoluene	0:3	1000.00	1000.00	1000.00	0.00
Possession Point	2-chloronaphthalene	0:3	300.00	300.00	300.00	0.00
Possession Point	2-chlorophenol	0:3	300.00	300.00	300.00	0.00

# Appendix: English Sole Liver

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Possession Point	2-methylnaphthalene	0:3	300.00	300.00	300.00	0.00
Possession Point	2-methylphenol	0:3	300.00	300.00	300.00	0.00
Possession Point	2-nitroaniline	0:3	700.00	700.00	700.00	0.00
Possession Point	2-nitrophenol	0:3	300.00	300.00	300.00	0.00
Possession Point	3-nitroaniline	0:3	300.00	300.00	300.00	0.00
Possession Point	4,6-dinitro-o-cresol	0:3	5000.00	5000.00	5000.00	0.00
Possession Point	4-chloro-3-methylphenol	0:3	1000.00	1000.00	1000.00	0.00
Possession Point	4-chlorophenylphenylether	0:3	300.00	300.00	300.00	0.00
Possession Point	4-methylphenol	0:3	300.00	300.00	300.00	0.00
Possession Point	4-nitroaniline	0:3	2000.00	2000.00	2000.00	0.00
Possession Point	4-nitrophenol	0:3	3000.00	3000.00	3000.00	0.00
Possession Point	acenaphthene	0:3	300.00	300.00	300.00	0.00
Possession Point	acenaphthylene	0:3	300.00	300.00	300.00	0.00
Possession Point	Aldrin	0:2	320.00	320.00	320.00	0.00
Possession Point	alpha chlordane	0:2	62.50	62.50	62.50	0.00
Possession Point	alpha hexachlorocyclohexane	0:2	32.00	32.00	32.00	0.00
Possession Point	aniline	0:3	1700.00	1700.00	1700.00	0.00
Possession Point	anthracene	0:3	300.00	300.00	300.00	0.00
Possession Point	Aroclor 1016	0:3	20.00	20.00	20.00	0.00
Possession Point	Aroclor 1221	0:3	20.00	20.00	20.00	0.00
Possession Point	Aroclor 1232	0:3	20.00	20.00	20.00	0.00
Possession Point	Aroclor 1242	0:3	20.00	20.00	20.00	0.00
Possession Point	Aroclor 1248	0:3	20.00	20.00	20.00	0.00
Possession Point	Aroclor 1254	0:3	20.00	20.00	20.00	0.00
Possession Point	Aroclor 1260	3:3	43.00	30.00	50.00	11.27
Possession Point	arsenic	3:3	5.17	5.00	5.40	0.21
Possession Point	benzo(a)anthracene	0:3	1000.00	1000.00	1000.00	0.00
Possession Point	benzo(a)pyrene	0:3	300.00	300.00	300.00	0.00
Possession Point	benzo(b)fluoranthene	0:3	1000.00	1000.00	1000.00	0.00
Possession Point	benzo(g,h,i)perylene	0:3	1000.00	1000.00	1000.00	0.00
Possession Point	benzo(k)fluoranthene	0:3	700.00	700.00	700.00	0.00
Possession Point	benzoic acid	0:3	3000.00	3000.00	3000.00	0.00
Possession Point	benzyl alcohol	3:3	5766.67	2000.00	10000.00	4020.36
Possession Point	benzylbutylphthalate	0:3	1000.00	1000.00	1000.00	0.00
Possession Point	beta endosulfan	0:2	320.00	320.00	320.00	0.00
Possession Point	bis(2-chloroethoxy)methane	0:3	300.00	300.00	300.00	0.00
Possession Point	bis(2-chloroethyl)ether	0:3	300.00	300.00	300.00	0.00
Possession Point	bis(2-chloroisopropyl)ether	0:3	1000.00	1000.00	1000.00	0.00
Possession Point	bis(2-ethylhexyl)phthalate	2:3	866.67	300.00	1800.00	814.45
Possession Point	carbazole	0:3	300.00	300.00	300.00	0.00
Possession Point	chrysene	0:3	1000.00	1000.00	1000.00	0.00
Possession Point	copper	3:3	7.50	6.90	7.80	0.52
Possession Point	delta hexachlorocyclohexane	0:2	32.00	32.00	32.00	0.00
Possession Point	dibenzo(a,h)anthracene	0:3	300.00	300.00	300.00	0.00
Possession Point	dibenzofuran	0:3	300.00	300.00	300.00	0.00
Possession Point	Dieldrin	0:2	320.00	320.00	320.00	0.00
Possession Point	diethylphthalate	0:3	300.00	300.00	300.00	0.00
Possession Point	dimethylphthalate	0:3	300.00	300.00	300.00	0.00
Possession Point	di-n-butylphthalate	0:3	300.00	300.00	300.00	0.00
Possession Point	di-n-octylphthalate	0:3	300.00	300.00	300.00	0.00
Possession Point	endosulfan sulfate	0:2	400.00	400.00	400.00	0.00
Possession Point	Endrin	0:2	320.00	320.00	320.00	0.00
Possession Point	fluoranthene	0:3	1000.00	1000.00	1000.00	0.00



# Appendix: English Sole Liver

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Possession Point	fluorene	0:3	300.00	300.00	300.00	0.00
Possession Point	gamma chlordane	0:2	62.50	62.50	62.50	0.00
Possession Point	Heptachlor	0:2	320.00	320.00	320.00	0.00
Possession Point	heptachlor epoxide	0:2	32.00	32.00	32.00	0.00
Possession Point	hexachlorocyclopentadiene	0:3	1700.00	1700.00	1700.00	0.00
Possession Point	hexachloroethane	0:3	300.00	300.00	300.00	0.00
Possession Point	indeno(1,2,3-c,d)pyrene	0:3	800.00	800.00	800.00	0.00
Possession Point	isophorone	0:3	300.00	300.00	300.00	0.00
Possession Point	lead	3:3	0.10	0.10	0.10	0.00
Possession Point	Lipids	1:1	18.40	18.40	18.40	
Possession Point	mercury	3:3	0.08	0.08	0.09	0.01
Possession Point	Methoxychlor	0:2	32.00	32.00	32.00	0.00
Possession Point	naphthalene	0:3	300.00	300.00	300.00	0.00
Possession Point	nitrobenzene	0:3	300.00	300.00	300.00	0.00
Possession Point	N-nitrosodimethylamine	0:3	300.00	300.00	300.00	0.00
Possession Point	N-nitroso-di-n-propylamine	0:3	300.00	300.00	300.00	0.00
Possession Point	N-nitrosodiphenylamine	0:3	300.00	300.00	300.00	0.00
Possession Point	phenanthrene	0:3	300.00	300.00	300.00	0.00
Possession Point	phenol	0:3	300.00	300.00	300.00	0.00
Possession Point	ppDDD	0:2	32.00	32.00	32.00	0.00
Possession Point	ppDDE	0:2	320.00	320.00	320.00	0.00
Possession Point	ppDDT	0:2	160.00	160.00	160.00	0.00
Possession Point	pyrene	0:3	300.00	300.00	300.00	0.00
Possession Point	Solids	1:1	27.00	27.00	27.00	
Possession Point	Toxaphene	0:2	1000.00	1000.00	1000.00	0.00
Post Point	alpha chlordane	0:2	55.50	45.00	66.00	14.85
Post Point	alpha hexachlorocyclohexane	0:2	0.91	0.73	1.08	0.25
Post Point	Aroclor 1016	0:2	110.50	91.00	130.00	27.58
Post Point	Aroclor 1221	0:2	110.50	91.00	130.00	27.58
Post Point	Aroclor 1232	0:2	110.50	91.00	130.00	27.58
Post Point	Aroclor 1242	0:2	110.50	91.00	130.00	27.58
Post Point	Aroclor 1248	0:2	22.50	18.00	27.00	6.36
Post Point	beta hexachlorocyclohexane	0:2	0.91	0.73	1.08	0.25
Post Point	delta hexachlorocyclohexane	0:2	0.91	0.73	1.08	0.25
Post Point	di-n-butyltin	2:2	4.45	3.70	5.20	1.06
Post Point	gamma chlordane	0:2	55.50	45.00	66.00	14.85
Post Point	gamma hexachlorocyclohexane	0:2	0.91	0.73	1.08	0.25
Post Point	heptachlor	0:2	0.91	0.73	1.08	0.25
Post Point	Lipids	1:1	4.01	4.01	4.01	
Post Point	mono-n-butyltin	2:2	52.70	47.60	57.80	7.21
Post Point	ppDDD	0:2	110.00	89.00	131.00	29.70
Post Point	ppDDE	0:2	110.00	89.00	131.00	29.70
Post Point	ppDDT	0:2	110.00	89.00	131.00	29.70
Post Point	tetra-n-butyltin	0:2	4.35	3.10	5.60	1.77
Post Point	tri-n-butyltin	2:2	6.69	4.00	9.38	3.80
Roberts Bank	Aldrin	0:3	8.00	8.00	8.00	0.00
Roberts Bank	alpha chlordane	0:3	6.30	6.30	6.30	0.00
Roberts Bank	alpha endosulfan	0:3	8.00	8.00	8.00	0.00
Roberts Bank	alpha hexachlorocyclohexane	0:3	6.30	6.30	6.30	0.00
Roberts Bank	Aroclor 1016	0:3	79.33	78.00	80.00	1.15
Roberts Bank	Aroclor 1221	0:3	79.33	78.00	80.00	1.15
Roberts Bank	Aroclor 1232	0:3	79.33	78.00	80.00	1.15
Roberts Bank	Aroclor 1242	0:3	79.33	78.00	80.00	1.15

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Roberts Bank	Aroclor 1248	0:3	79.33	78.00	80.00	1.15
Roberts Bank	Aroclor 1254	0:3	39.67	39.00	40.00	0.58
Roberts Bank	Aroclor 1260	1:3	21.67	19.00	26.00	3.79
Roberts Bank	beta endosulfan	0:3	13.00	13.00	13.00	0.00
Roberts Bank	beta hexachlorocyclohexane	0:3	6.30	6.30	6.30	0.00
Roberts Bank	delta hexachlorocyclohexane	0:3	6.30	6.30	6.30	0.00
Roberts Bank	Dieldrin	0:3	13.00	13.00	13.00	0.00
Roberts Bank	endosulfan sulfate	0:3	13.00	13.00	13.00	0.00
Roberts Bank	Endrin	0:3	13.00	13.00	13.00	0.00
Roberts Bank	endrin aldehyde	0:3	13.00	13.00	13.00	0.00
Roberts Bank	gamma chlordane	1:3	6.87	6.30	8.02	0.99
Roberts Bank	gamma hexachlorocyclohexane	0:3	6.30	6.30	6.30	0.00
Roberts Bank	Heptachlor	0:3	6.30	6.30	6.30	0.00
Roberts Bank	heptachlor epoxide	0:3	6.30	6.30	6.30	0.00
Roberts Bank	Lipids	3:3	4.75	4.02	6.19	1.25
Roberts Bank	mercury	2:2	0.05	0.04	0.05	0.01
Roberts Bank	Methoxychlor	0:3	63.00	63.00	63.00	0.00
Roberts Bank	ppDDD	0:3	13.00	13.00	13.00	0.00
Roberts Bank	ppDDE	0:3	13.00	13.00	13.00	0.00
Roberts Bank	ppDDT	0:3	13.00	13.00	13.00	0.00
Roberts Bank	Toxaphene	0:3	100.00	100.00	100.00	0.00
Ruston	hexachlorobenzene	3:3	0.89	0.75	1.00	0.13
Ruston	Lipids	3:3	3.99	3.90	4.10	0.10
Ruston	opDDT	0:2	0.45	0.36	0.54	0.13
Ruston	PCB101	3:3	150.00	140.00	160.00	10.00
Ruston	PCB105	3:3	6.80	2.20	14.00	6.32
Ruston	PCB110	3:3	30.67	22.00	43.00	10.97
Ruston	PCB118	3:3	120.00	120.00	120.00	0.00
Ruston	PCB126	0:3	0.13	0.03	0.22	0.10
Ruston	PCB128	3:3	37.33	36.00	39.00	1.53
Ruston	PCB138	3:3	61.33	56.00	69.00	6.81
Ruston	PCB153	3:3	133.33	120.00	140.00	11.55
Ruston	PCB156	3:3	3.90	3.30	4.70	0.72
Ruston	PCB157	3:3	3.70	2.60	5.40	1.49
Ruston	PCB169	0:3	0.17	0.04	0.29	0.13
Ruston	PCB170	3:3	24.33	18.00	32.00	7.09
Ruston	PCB180	3:3	43.00	33.00	56.00	11.79
Ruston	PCB189	2:3	0.42	0.02	0.68	0.35
Ruston	PCB77	0:3	0.14	0.03	0.23	0.10
Ruston	ppDDD	3:3	3.70	2.80	4.30	0.79
Ruston	ppDDE	3:3	15.67	13.00	17.00	2.31
Ruston	ppDDT	3:3	2.63	1.20	4.70	1.83
Ruston	Solids	3:3	20.24	20.00	20.38	0.21
Ruston	TotalDDT	3:3	22.00	17.00	26.00	4.58
Ruston	TotalPCB	3:3	760.00	710.00	790.00	43.59
S. Case Inlet	Lipids	3:3	3.17	2.90	3.50	0.31
S. Case Inlet	Solids	3:3	23.67	23.00	25.00	1.15
S. Hood Canal	Lipids	3:3	3.77	3.60	3.90	0.15
S. Hood Canal	Solids	3:3	23.00	22.00	24.00	1.00
Saratoga Passage	Aldrin	0:3	8.00	8.00	8.00	0.00
Saratoga Passage	alpha chlordane	0:3	6.30	6.30	6.30	0.00
Saratoga Passage	alpha endosulfan	0:3	8.00	8.00	8.00	0.00
Saratoga Passage	alpha hexachlorocyclohexane	0:3	6.30	6.30	6.30	0.00

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Saratoga Passage	Aroclor 1016	0:3	80.00	80.00	80.00	0.00
Saratoga Passage	Aroclor 1221	0:3	80.00	80.00	80.00	0.00
Saratoga Passage	Aroclor 1232	0:3	80.00	80.00	80.00	0.00
Saratoga Passage	Aroclor 1242	0:3	80.00	80.00	80.00	0.00
Saratoga Passage	Aroclor 1248	0:3	80.00	80.00	80.00	0.00
Saratoga Passage	Aroclor 1254	3:3	306.00	253.00	334.00	45.92
Saratoga Passage	Aroclor 1260	3:3	288.67	270.00	313.00	22.05
Saratoga Passage	arsenic	1:1	33.60	33.60	33.60	
Saratoga Passage	beta endosulfan	0:3	13.00	13.00	13.00	0.00
Saratoga Passage	beta hexachlorocyclohexane	0:3	6.30	6.30	6.30	0.00
Saratoga Passage	copper	1:1	11.40	11.40	11.40	
Saratoga Passage	delta hexachlorocyclohexane	0:3	6.30	6.30	6.30	0.00
Saratoga Passage	Dieldrin	0:3	13.00	13.00	13.00	0.00
Saratoga Passage	endosulfan sulfate	0:3	13.00	13.00	13.00	0.00
Saratoga Passage	Endrin	0:3	13.00	13.00	13.00	0.00
Saratoga Passage	endrin aldehyde	0:3	13.00	13.00	13.00	0.00
Saratoga Passage	gamma chlordane	0:3	6.30	6.30	6.30	0.00
Saratoga Passage	gamma hexachlorocyclohexane	0:3	6.30	6.30	6.30	0.00
Saratoga Passage	Heptachlor	0:3	6.30	6.30	6.30	0.00
Saratoga Passage	heptachlor epoxide	0:3	6.30	6.30	6.30	0.00
Saratoga Passage	lead	1:1	0.18	0.18	0.18	
Saratoga Passage	Lipids	1:1	4.90	4.90	4.90	
Saratoga Passage	mercury	1:1	0.13	0.13	0.13	
Saratoga Passage	Methoxychlor	0:3	63.00	63.00	63.00	0.00
Saratoga Passage	ppDDD	0:3	13.00	13.00	13.00	0.00
Saratoga Passage	ppDDE	3:3	29.73	25.20	32.10	3.93
Saratoga Passage	ppDDT	0:3	13.00	13.00	13.00	0.00
Saratoga Passage	Solids	1:1	21.80	21.80	21.80	
Saratoga Passage	Toxaphene	0:3	100.00	100.00	100.00	0.00
Seattle Waterfront	1,2,4-trichlorobenzene	0:3	85.00	85.00	85.00	0.00
Seattle Waterfront	1,2-dichlorobenzene	0:3	85.00	85.00	85.00	0.00
Seattle Waterfront	1,2-diphenylhydrazine	0:3	85.00	85.00	85.00	0.00
Seattle Waterfront	1,3-dichlorobenzene	0:3	85.00	85.00	85.00	0.00
Seattle Waterfront	1,4-dichlorobenzene	0:3	85.00	85.00	85.00	0.00
Seattle Waterfront	2,4,5-trichlorophenol	0:3	85.00	85.00	85.00	0.00
Seattle Waterfront	2,4,6-trichlorophenol	0:3	125.00	125.00	125.00	0.00
Seattle Waterfront	2,4-dichlorophenol	0:3	85.00	85.00	85.00	0.00
Seattle Waterfront	2,4-dimethylphenol	0:3	85.00	85.00	85.00	0.00
Seattle Waterfront	2,4-dinitrophenol	0:3	510.00	510.00	510.00	0.00
Seattle Waterfront	2,4-dinitrotoluene	0:3	125.00	125.00	125.00	0.00
Seattle Waterfront	2,6-dinitrotoluene	0:3	125.00	125.00	125.00	0.00
Seattle Waterfront	2-chloronaphthalene	0:3	85.00	85.00	85.00	0.00
Seattle Waterfront	2-chlorophenol	0:3	85.00	85.00	85.00	0.00
Seattle Waterfront	2-methylnaphthalene	0:3	85.00	85.00	85.00	0.00
Seattle Waterfront	2-methylphenol	0:3	85.00	85.00	85.00	0.00
Seattle Waterfront	2-nitroaniline	0:3	85.00	85.00	85.00	0.00
Seattle Waterfront	2-nitrophenol	0:3	85.00	85.00	85.00	0.00
Seattle Waterfront	3-nitroaniline	0:3	510.00	510.00	510.00	0.00
Seattle Waterfront	4,6-dinitro-o-cresol	0:3	260.00	260.00	260.00	0.00
Seattle Waterfront	4-bromophenylphenylether	0:3	85.00	85.00	85.00	0.00
Seattle Waterfront	4-chloro-3-methylphenol	0:3	125.00	125.00	125.00	0.00
Seattle Waterfront	4-chloroaniline	0:3	85.00	85.00	85.00	0.00
Seattle Waterfront	4-chlorophenylphenylether	0:3	85.00	85.00	85.00	0.00

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Seattle Waterfront	4-methylphenol	0:3	85.00	85.00	85.00	0.00
Seattle Waterfront	4-nitroaniline	0:3	206.67	100.00	260.00	92.38
Seattle Waterfront	4-nitrophenol	0:3	440.00	300.00	510.00	121.24
Seattle Waterfront	acenaphthene	3:3	120.00	60.00	160.00	52.92
Seattle Waterfront	acenaphthylene	0:3	85.00	85.00	85.00	0.00
Seattle Waterfront	Aldrin	0:11	66.45	8.00	320.00	125.39
Seattle Waterfront	alpha chlordane	1:11	16.88	6.30	62.50	22.57
Seattle Waterfront	alpha endosulfan	0:9	10.11	8.00	17.00	3.37
Seattle Waterfront	alpha hexachlorocyclohexane	0:11	11.19	6.30	32.00	10.31
Seattle Waterfront	aniline	0:3	85.00	85.00	85.00	0.00
Seattle Waterfront	anthracene	0:3	85.00	85.00	85.00	0.00
Seattle Waterfront	Aroclor 1016	0:12	80.83	20.00	160.00	32.04
Seattle Waterfront	Aroclor 1221	0:12	80.83	20.00	160.00	32.04
Seattle Waterfront	Aroclor 1232	0:12	73.75	20.00	160.00	33.38
Seattle Waterfront	Aroclor 1242	0:12	73.75	20.00	160.00	33.38
Seattle Waterfront	Aroclor 1248	1:12	75.42	20.00	160.00	34.21
Seattle Waterfront	Aroclor 1254	11:12	636.75	125.00	1460.00	514.91
Seattle Waterfront	Aroclor 1260	12:12	808.50	194.00	1340.00	424.63
Seattle Waterfront	arsenic	7:7	33.89	16.00	60.20	16.08
Seattle Waterfront	benzo(a)anthracene	0:3	125.00	125.00	125.00	0.00
Seattle Waterfront	benzo(a)pyrene	0:3	85.00	85.00	85.00	0.00
Seattle Waterfront	benzo(b)fluoranthene	0:3	125.00	125.00	125.00	0.00
Seattle Waterfront	benzo(g,h,i)perylene	0:3	85.00	85.00	85.00	0.00
Seattle Waterfront	benzo(k)fluoranthene	0:3	85.00	85.00	85.00	0.00
Seattle Waterfront	benzoic acid	2:3	1408.67	256.00	3100.00	1496.56
Seattle Waterfront	benzyl alcohol	3:3	606.67	580.00	640.00	30.55
Seattle Waterfront	benzylbutylphthalate	0:3	260.00	260.00	260.00	0.00
Seattle Waterfront	beta endosulfan	0:11	69.18	13.00	320.00	124.01
Seattle Waterfront	beta hexachlorocyclohexane	0:9	6.57	6.30	8.70	0.80
Seattle Waterfront	bis(2-chloroethoxy)methane	0:3	85.00	85.00	85.00	0.00
Seattle Waterfront	bis(2-chloroethyl)ether	0:3	85.00	85.00	85.00	0.00
Seattle Waterfront	bis(2-chloroisopropyl)ether	0:3	85.00	85.00	85.00	0.00
Seattle Waterfront	bis(2-ethylhexyl)phthalate	0:3	85.00	85.00	85.00	0.00
Seattle Waterfront	carbazole	0:3	260.00	260.00	260.00	0.00
Seattle Waterfront	chrysene	0:3	260.00	260.00	260.00	0.00
Seattle Waterfront	copper	7:7	9.34	5.50	13.00	3.21
Seattle Waterfront	coprostanol	0:3	21000.00	21000.00	21000.00	0.00
Seattle Waterfront	delta hexachlorocyclohexane	0:11	11.19	6.30	32.00	10.31
Seattle Waterfront	dibenzo(a,h)anthracene	0:3	85.00	85.00	85.00	0.00
Seattle Waterfront	dibenzofuran	0:3	85.00	85.00	85.00	0.00
Seattle Waterfront	Dieldrin	0:11	69.18	13.00	320.00	124.01
Seattle Waterfront	diethylphthalate	0:3	85.00	85.00	85.00	0.00
Seattle Waterfront	dimethylphthalate	0:3	85.00	85.00	85.00	0.00
Seattle Waterfront	di-n-butylphthalate	0:3	85.00	85.00	85.00	0.00
Seattle Waterfront	di-n-octylphthalate	0:3	85.00	85.00	85.00	0.00
Seattle Waterfront	endosulfan sulfate	0:11	83.73	13.00	400.00	156.37
Seattle Waterfront	Endrin	0:11	69.18	13.00	320.00	124.01
Seattle Waterfront	endrin aldehyde	0:9	13.44	13.00	17.00	1.33
Seattle Waterfront	fluoranthene	0:3	85.00	85.00	85.00	0.00
Seattle Waterfront	fluorene	1:3	100.00	85.00	130.00	25.98
Seattle Waterfront	gamma chlordane	0:11	16.74	6.30	62.50	22.64
Seattle Waterfront	gamma hexachlorocyclohexane	0:9	6.57	6.30	8.70	0.80
Seattle Waterfront	Heptachlor	0:11	63.55	6.30	320.00	126.79

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Seattle Waterfront	heptachlor epoxide	0:11	11.19	6.30	32.00	10.31
Seattle Waterfront	hexachlorobenzene	3:6	43.32	0.74	85.00	45.66
Seattle Waterfront	hexachlorobutadiene	0:3	85.00	85.00	85.00	0.00
Seattle Waterfront	hexachlorocyclopentadiene	0:3	510.00	510.00	510.00	0.00
Seattle Waterfront	hexachloroethane	0:3	85.00	85.00	85.00	0.00
Seattle Waterfront	indeno(1,2,3-c,d)pyrene	0:3	85.00	85.00	85.00	0.00
Seattle Waterfront	isophorone	0:3	85.00	85.00	85.00	0.00
Seattle Waterfront	lead	9:9	0.28	0.06	0.56	0.18
Seattle Waterfront	Lipids	4:4	5.52	3.81	9.24	2.51
Seattle Waterfront	mercury	9:9	0.18	0.12	0.27	0.05
Seattle Waterfront	Methoxychlor	0:11	59.55	32.00	87.00	15.38
Seattle Waterfront	naphthalene	2:3	97.67	85.00	120.00	19.40
Seattle Waterfront	nitrobenzene	0:3	85.00	85.00	85.00	0.00
Seattle Waterfront	N-nitrosodimethylamine	0:3	260.00	260.00	260.00	0.00
Seattle Waterfront	N-nitroso-di-n-propylamine	0:3	85.00	85.00	85.00	0.00
Seattle Waterfront	N-nitrosodiphenylamine	0:3	85.00	85.00	85.00	0.00
Seattle Waterfront	opDDD	1:2	3.32	0.23	6.40	4.36
Seattle Waterfront	opDDT	0:2	0.26	0.21	0.30	0.06
Seattle Waterfront	PCB101	3:3	747.33	92.00	2000.00	1085.23
Seattle Waterfront	PCB105	3:3	50.33	10.00	130.00	69.00
Seattle Waterfront	PCB110	3:3	128.67	13.00	350.00	191.75
Seattle Waterfront	PCB118	3:3	176.00	36.00	420.00	212.08
Seattle Waterfront	PCB126	1:3	0.21	0.09	0.42	0.18
Seattle Waterfront	PCB128	3:3	96.67	12.00	250.00	133.03
Seattle Waterfront	PCB138	3:3	208.33	29.00	550.00	296.01
Seattle Waterfront	PCB153	3:3	595.67	77.00	1600.00	869.93
Seattle Waterfront	PCB156	3:3	16.23	2.20	43.00	23.19
Seattle Waterfront	PCB157	2:3	1.38	0.05	2.80	1.38
Seattle Waterfront	PCB169	0:3	0.13	0.10	0.16	0.03
Seattle Waterfront	PCB170	3:3	97.33	13.00	260.00	140.91
Seattle Waterfront	PCB180	3:3	174.33	25.00	470.00	256.06
Seattle Waterfront	PCB189	3:3	2.07	0.31	5.50	2.97
Seattle Waterfront	PCB77	1:3	0.41	0.09	1.00	0.51
Seattle Waterfront	pentachlorophenol	0:3	256.00	256.00	256.00	0.00
Seattle Waterfront	phenanthrene	2:3	151.67	85.00	250.00	86.94
Seattle Waterfront	phenol	0:3	85.00	85.00	85.00	0.00
Seattle Waterfront	ppDDD	7:14	19.06	1.80	59.00	14.32
Seattle Waterfront	ppDDE	9:13	74.66	13.00	320.00	109.67
Seattle Waterfront	ppDDT	0:12	36.77	0.28	160.00	57.69
Seattle Waterfront	pyrene	0:3	125.00	125.00	125.00	0.00
Seattle Waterfront	Solids	7:7	20.90	18.94	23.00	1.70
Seattle Waterfront	TotalDDT	3:3	39.00	16.00	65.00	24.64
Seattle Waterfront	TotalPCB	3:3	2640.00	360.00	7000.00	3777.19
Seattle Waterfront	Toxaphene	0:11	267.27	100.00	1000.00	362.47
Shilshole	Aroclor 1016	0:2	210.00	210.00	210.00	0.00
Shilshole	Aroclor 1221	0:2	210.00	210.00	210.00	0.00
Shilshole	Aroclor 1232	0:2	210.00	210.00	210.00	0.00
Shilshole	Aroclor 1242	0:2	210.00	210.00	210.00	0.00
Shilshole	Aroclor 1248	0:2	210.00	210.00	210.00	0.00
Shilshole	Aroclor 1254	0:2	210.00	210.00	210.00	0.00
Shilshole	Aroclor 1260	2:2	490.00	430.00	550.00	84.85
Sinclair Inlet	1,2,4-trichlorobenzene	0:4	138.75	85.00	300.00	107.50
Sinclair Inlet	1,2-dichlorobenzene	0:4	138.75	85.00	300.00	107.50

Location	Assay	No. Detected:				SD
		lo. Analyzed	Mean	Min	Max	
Sinclair Inlet	1,2-diphenylhydrazine	0:4	138.75	85.00	300.00	107.50
Sinclair Inlet	1,3-dichlorobenzene	0:4	313.75	85.00	1000.00	457.50
Sinclair Inlet	1,4-dichlorobenzene	0:4	313.75	85.00	1000.00	457.50
Sinclair Inlet	2,4,5-trichlorophenol	0:3	85.00	85.00	85.00	0.00
Sinclair Inlet	2,4,6-trichlorophenol	0:3	125.00	125.00	125.00	0.00
Sinclair Inlet	2,4-dichlorophenol	0:4	138.75	85.00	300.00	107.50
Sinclair Inlet	2,4-dimethylphenol	0:4	138.75	85.00	300.00	107.50
Sinclair Inlet	2,4-dinitrophenol	0:3	510.00	510.00	510.00	0.00
Sinclair Inlet	2,4-dinitrotoluene	0:4	343.75	125.00	1000.00	437.50
Sinclair Inlet	2,6-dinitrotoluene	0:4	343.75	125.00	1000.00	437.50
Sinclair Inlet	2-chloronaphthalene	0:4	138.75	85.00	300.00	107.50
Sinclair Inlet	2-chlorophenol	0:4	138.75	85.00	300.00	107.50
Sinclair Inlet	2-methylnaphthalene	0:4	138.75	85.00	300.00	107.50
Sinclair Inlet	2-methylphenol	0:4	138.75	85.00	300.00	107.50
Sinclair Inlet	2-nitroaniline	0:4	238.75	85.00	700.00	307.50
Sinclair Inlet	2-nitrophenol	0:4	138.75	85.00	300.00	107.50
Sinclair Inlet	3-nitroaniline	0:4	457.50	300.00	510.00	105.00
Sinclair Inlet	4,6-dinitro-o-cresol	0:4	1445.00	260.00	5000.00	2370.00
Sinclair Inlet	4-bromophenylphenylether	0:3	85.00	85.00	85.00	0.00
Sinclair Inlet	4-chloro-3-methylphenol	0:4	343.75	125.00	1000.00	437.50
Sinclair Inlet	4-chloroaniline	0:3	85.00	85.00	85.00	0.00
Sinclair Inlet	4-chlorophenylphenylether	0:4	138.75	85.00	300.00	107.50
Sinclair Inlet	4-methylphenol	0:4	138.75	85.00	300.00	107.50
Sinclair Inlet	4-nitroaniline	0:4	695.00	260.00	2000.00	870.00
Sinclair Inlet	4-nitrophenol	0:4	1132.50	510.00	3000.00	1245.00
Sinclair Inlet	acenaphthene	0:4	138.75	85.00	300.00	107.50
Sinclair Inlet	acenaphthylene	0:4	138.75	85.00	300.00	107.50
Sinclair Inlet	Aldrin	0:13	33.15	8.00	320.00	86.21
Sinclair Inlet	alpha chlordane	2:13	11.05	6.30	62.50	15.50
Sinclair Inlet	alpha endosulfan	0:12	9.25	8.00	13.00	2.26
Sinclair Inlet	alpha hexachlorocyclohexane	0:13	8.28	6.30	32.00	7.13
Sinclair Inlet	aniline	0:4	488.75	85.00	1700.00	807.50
Sinclair Inlet	anthracene	0:4	138.75	85.00	300.00	107.50
Sinclair Inlet	Aroclor 1016	0:17	87.06	20.00	160.00	39.96
Sinclair Inlet	Aroclor 1221	0:17	87.06	20.00	160.00	39.96
Sinclair Inlet	Aroclor 1232	0:17	81.76	20.00	160.00	42.61
Sinclair Inlet	Aroclor 1242	0:17	81.76	20.00	160.00	42.61
Sinclair Inlet	Aroclor 1248	1:17	84.71	20.00	160.00	44.18
Sinclair Inlet	Aroclor 1254	14:17	529.47	62.00	2360.00	551.82
Sinclair Inlet	Aroclor 1260	17:17	1134.65	580.00	2920.00	558.89
Sinclair Inlet	arsenic	11:11	8.80	6.18	14.60	2.51
Sinclair Inlet	benzo(a)anthracene	0:4	343.75	125.00	1000.00	437.50
Sinclair Inlet	benzo(a)pyrene	0:4	138.75	85.00	300.00	107.50
Sinclair Inlet	benzo(b)fluoranthene	0:4	343.75	125.00	1000.00	437.50
Sinclair Inlet	benzo(g,h,i)perylene	0:4	313.75	85.00	1000.00	457.50
Sinclair Inlet	benzo(k)fluoranthene	0:4	238.75	85.00	700.00	307.50
Sinclair Inlet	benzoic acid	0:4	942.00	256.00	3000.00	1372.00
Sinclair Inlet	benzyl alcohol	4:4	2852.50	320.00	10000.00	4767.45
Sinclair Inlet	benzylbutylphthalate	0:4	405.00	100.00	1000.00	403.77
Sinclair Inlet	beta endosulfan	0:13	36.62	13.00	320.00	85.15
Sinclair Inlet	beta hexachlorocyclohexane	0:12	6.30	6.30	6.30	0.00
Sinclair Inlet	bis(2-chloroethoxy)methane	0:4	138.75	85.00	300.00	107.50
Sinclair Inlet	bis(2-chloroethyl)ether	0:4	138.75	85.00	300.00	107.50

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Sinclair Inlet	bis(2-chloroisopropyl)ether	0:4	313.75	85.00	1000.00	457.50
Sinclair Inlet	bis(2-ethylhexyl)phthalate	2:4	366.25	85.00	750.00	278.13
Sinclair Inlet	carbazole	0:4	270.00	260.00	300.00	20.00
Sinclair Inlet	chrysene	0:4	405.00	100.00	1000.00	403.77
Sinclair Inlet	copper	11:11	9.52	5.50	25.40	5.60
Sinclair Inlet	coprostanol	0:3	21000.00	21000.00	21000.00	0.00
Sinclair Inlet	delta hexachlorocyclohexane	0:13	8.28	6.30	32.00	7.13
Sinclair Inlet	dibenzo(a,h)anthracene	0:4	138.75	85.00	300.00	107.50
Sinclair Inlet	dibenzofuran	0:4	138.75	85.00	300.00	107.50
Sinclair Inlet	Dieldrin	0:13	36.62	13.00	320.00	85.15
Sinclair Inlet	diethylphthalate	0:4	138.75	85.00	300.00	107.50
Sinclair Inlet	dimethylphthalate	0:4	138.75	85.00	300.00	107.50
Sinclair Inlet	di-n-butylphthalate	0:4	138.75	85.00	300.00	107.50
Sinclair Inlet	di-n-octylphthalate	0:4	138.75	85.00	300.00	107.50
Sinclair Inlet	endosulfan sulfate	0:13	42.77	13.00	400.00	107.33
Sinclair Inlet	Endrin	0:13	36.62	13.00	320.00	85.15
Sinclair Inlet	endrin aldehyde	0:12	13.00	13.00	13.00	0.00
Sinclair Inlet	fluoranthene	0:4	313.75	85.00	1000.00	457.50
Sinclair Inlet	fluorene	0:4	138.75	85.00	300.00	107.50
Sinclair Inlet	gamma chlordane	3:13	11.38	6.30	62.50	15.47
Sinclair Inlet	gamma hexachlorocyclohexane	0:12	6.30	6.30	6.30	0.00
Sinclair Inlet	Heptachlor	0:13	30.43	6.30	320.00	87.00
Sinclair Inlet	heptachlor epoxide	0:13	8.28	6.30	32.00	7.13
Sinclair Inlet	hexachlorobenzene	3:6	43.20	1.10	85.00	45.79
Sinclair Inlet	hexachlorobutadiene	0:3	85.00	85.00	85.00	0.00
Sinclair Inlet	hexachlorocyclopentadiene	0:4	807.50	510.00	1700.00	595.00
Sinclair Inlet	hexachloroethane	0:4	138.75	85.00	300.00	107.50
Sinclair Inlet	indeno(1,2,3-c,d)pyrene	0:4	263.75	85.00	800.00	357.50
Sinclair Inlet	isophorone	0:4	138.75	85.00	300.00	107.50
Sinclair Inlet	lead	14:14	2.73	1.80	4.71	0.79
Sinclair Inlet	Lipids	14:14	6.14	4.70	9.67	1.34
Sinclair Inlet	mercury	14:14	0.12	0.08	0.17	0.03
Sinclair Inlet	Methoxychlor	0:13	60.62	32.00	63.00	8.60
Sinclair Inlet	naphthalene	0:4	138.75	85.00	300.00	107.50
Sinclair Inlet	nitrobenzene	0:4	138.75	85.00	300.00	107.50
Sinclair Inlet	N-nitrosodimethylamine	0:4	270.00	260.00	300.00	20.00
Sinclair Inlet	N-nitroso-di-n-propylamine	0:4	138.75	85.00	300.00	107.50
Sinclair Inlet	N-nitrosodiphenylamine	0:4	138.75	85.00	300.00	107.50
Sinclair Inlet	opDDD	0:1	0.44	0.44	0.44	
Sinclair Inlet	PCB101	3:3	433.33	370.00	510.00	70.95
Sinclair Inlet	PCB105	3:3	38.67	34.00	44.00	5.03
Sinclair Inlet	PCB110	3:3	80.00	67.00	99.00	16.82
Sinclair Inlet	PCB118	3:3	136.67	120.00	160.00	20.82
Sinclair Inlet	PCB126	0:3	0.15	0.09	0.24	0.08
Sinclair Inlet	PCB128	3:3	53.33	47.00	58.00	5.69
Sinclair Inlet	PCB138	3:3	133.33	110.00	160.00	25.17
Sinclair Inlet	PCB153	3:3	313.33	260.00	370.00	55.08
Sinclair Inlet	PCB156	3:3	10.23	8.40	13.00	2.44
Sinclair Inlet	PCB157	3:3	4.80	2.70	8.80	3.47
Sinclair Inlet	PCB169	0:3	0.19	0.12	0.31	0.10
Sinclair Inlet	PCB170	3:3	91.33	74.00	120.00	25.01
Sinclair Inlet	PCB180	3:3	117.67	93.00	160.00	36.83
Sinclair Inlet	PCB189	2:3	1.02	0.16	1.60	0.76

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Sinclair Inlet	PCB77	2:3	0.36	0.25	0.47	0.11
Sinclair Inlet	pentachlorophenol	0:3	259.00	256.00	265.00	5.20
Sinclair Inlet	phenanthrene	0:4	138.75	85.00	300.00	107.50
Sinclair Inlet	phenol	0:4	138.75	85.00	300.00	107.50
Sinclair Inlet	ppDDD	7:16	17.70	6.60	64.20	13.89
Sinclair Inlet	ppDDE	13:15	47.83	13.00	320.00	76.76
Sinclair Inlet	ppDDT	0:16	19.82	0.23	160.00	37.72
Sinclair Inlet	pyrene	0:4	168.75	125.00	300.00	87.50
Sinclair Inlet	Solids	14:14	24.30	21.00	27.90	1.85
Sinclair Inlet	TotalDDT	3:3	26.70	9.10	41.00	16.20
Sinclair Inlet	TotalPCB	3:3	1766.67	1500.00	2100.00	305.51
Sinclair Inlet	Toxaphene	0:13	169.23	100.00	1000.00	249.62
Strait of Georgia	Aldrin	0:12	60.42	8.00	320.00	121.26
Strait of Georgia	alpha chlordane	0:12	15.67	6.30	62.50	21.88
Strait of Georgia	alpha endosulfan	0:10	8.50	8.00	13.00	1.58
Strait of Georgia	alpha hexachlorocyclohexane	0:12	10.58	6.30	32.00	10.00
Strait of Georgia	Aroclor 1016	0:14	74.21	20.00	160.00	33.66
Strait of Georgia	Aroclor 1221	0:14	74.21	20.00	160.00	33.66
Strait of Georgia	Aroclor 1232	0:14	72.07	20.00	160.00	34.22
Strait of Georgia	Aroclor 1242	0:14	72.07	20.00	160.00	34.22
Strait of Georgia	Aroclor 1248	0:14	72.07	20.00	160.00	34.22
Strait of Georgia	Aroclor 1254	4:14	53.64	20.00	160.00	35.76
Strait of Georgia	Aroclor 1260	12:14	50.46	20.00	90.00	22.07
Strait of Georgia	arsenic	7:7	7.69	4.20	14.50	3.63
Strait of Georgia	beta endosulfan	0:12	64.17	13.00	320.00	119.50
Strait of Georgia	beta hexachlorocyclohexane	0:10	6.30	6.30	6.30	0.00
Strait of Georgia	copper	7:7	9.37	5.30	14.00	2.71
Strait of Georgia	delta hexachlorocyclohexane	0:12	10.58	6.30	32.00	10.00
Strait of Georgia	Dieldrin	0:12	64.17	13.00	320.00	119.50
Strait of Georgia	endosulfan sulfate	0:12	77.50	13.00	400.00	150.64
Strait of Georgia	Endrin	0:12	64.17	13.00	320.00	119.50
Strait of Georgia	endrin aldehyde	0:10	13.00	13.00	13.00	0.00
Strait of Georgia	gamma chlordane	2:12	16.29	6.30	62.50	21.65
Strait of Georgia	gamma hexachlorocyclohexane	0:10	6.30	6.30	6.30	0.00
Strait of Georgia	Heptachlor	0:12	58.58	6.30	320.00	122.11
Strait of Georgia	heptachlor epoxide	0:12	10.58	6.30	32.00	10.00
Strait of Georgia	lead	9:9	0.48	0.24	0.80	0.22
Strait of Georgia	Lipids	5:5	4.00	3.60	4.79	0.46
Strait of Georgia	mercury	12:12	0.07	0.05	0.12	0.02
Strait of Georgia	Methoxychlor	0:12	57.83	32.00	63.00	12.07
Strait of Georgia	ppDDD	0:12	16.17	13.00	32.00	7.40
Strait of Georgia	ppDDE	2:12	65.93	13.00	320.00	118.80
Strait of Georgia	ppDDT	0:12	37.50	13.00	160.00	57.22
Strait of Georgia	Solids	6:6	22.67	20.00	24.30	1.64
Strait of Georgia	Toxaphene	0:12	250.00	100.00	1000.00	350.32
Strait of Juan de Fuca	1,2,4-trichlorobenzene	0:1	220.00	220.00	220.00	
Strait of Juan de Fuca	1,2-dichlorobenzene	0:1	300.00	300.00	300.00	
Strait of Juan de Fuca	1,2-diphenylhydrazine	0:1	220.00	220.00	220.00	
Strait of Juan de Fuca	1,3-dichlorobenzene	0:1	300.00	300.00	300.00	
Strait of Juan de Fuca	1,4-dichlorobenzene	0:1	640.00	640.00	640.00	
Strait of Juan de Fuca	2,4-dichlorophenol	0:1	220.00	220.00	220.00	
Strait of Juan de Fuca	2,4-dimethylphenol	0:1	220.00	220.00	220.00	
Strait of Juan de Fuca	2,4-dinitrophenol	0:1	4300.00	4300.00	4300.00	



Location	Assay	No. Detected:				SD
		lo. Analyzed	Mean	Min	Max	
Strait of Juan de Fuca	2,4-dinitrotoluene	0:1	1000.00	1000.00	1000.00	
Strait of Juan de Fuca	2,6-dinitrotoluene	0:1	1000.00	1000.00	1000.00	
Strait of Juan de Fuca	2-chloronaphthalene	0:1	300.00	300.00	300.00	
Strait of Juan de Fuca	2-chlorophenol	0:1	220.00	220.00	220.00	
Strait of Juan de Fuca	2-methylnaphthalene	0:1	220.00	220.00	220.00	
Strait of Juan de Fuca	2-methylphenol	0:1	220.00	220.00	220.00	
Strait of Juan de Fuca	2-nitroaniline	0:1	420.00	420.00	420.00	
Strait of Juan de Fuca	2-nitrophenol	0:1	220.00	220.00	220.00	
Strait of Juan de Fuca	3-nitroaniline	0:1	220.00	220.00	220.00	
Strait of Juan de Fuca	4,6-dinitro-o-cresol	0:1	3200.00	3200.00	3200.00	
Strait of Juan de Fuca	4-chloro-3-methylphenol	0:1	1000.00	1000.00	1000.00	
Strait of Juan de Fuca	4-chlorophenylphenylether	0:1	220.00	220.00	220.00	
Strait of Juan de Fuca	4-methylphenol	0:1	220.00	220.00	220.00	
Strait of Juan de Fuca	4-nitroaniline	0:1	1100.00	1100.00	1100.00	
Strait of Juan de Fuca	4-nitrophenol	0:1	2200.00	2200.00	2200.00	
Strait of Juan de Fuca	acenaphthene	0:1	220.00	220.00	220.00	
Strait of Juan de Fuca	acenaphthylene	0:1	220.00	220.00	220.00	
Strait of Juan de Fuca	Aldrin	0:4	86.00	8.00	320.00	156.00
Strait of Juan de Fuca	alpha chlordane	0:4	20.35	6.30	62.50	28.10
Strait of Juan de Fuca	alpha endosulfan	0:3	8.00	8.00	8.00	0.00
Strait of Juan de Fuca	alpha hexachlorocyclohexane	0:4	12.73	6.30	32.00	12.85
Strait of Juan de Fuca	aniline	0:1	1700.00	1700.00	1700.00	
Strait of Juan de Fuca	anthracene	0:1	220.00	220.00	220.00	
Strait of Juan de Fuca	Aroclor 1016	0:4	65.00	20.00	80.00	30.00
Strait of Juan de Fuca	Aroclor 1221	0:4	65.00	20.00	80.00	30.00
Strait of Juan de Fuca	Aroclor 1232	0:4	65.00	20.00	80.00	30.00
Strait of Juan de Fuca	Aroclor 1242	0:4	65.00	20.00	80.00	30.00
Strait of Juan de Fuca	Aroclor 1248	0:4	65.00	20.00	80.00	30.00
Strait of Juan de Fuca	Aroclor 1254	3:4	59.65	20.00	84.70	27.75
Strait of Juan de Fuca	Aroclor 1260	4:4	55.98	40.00	69.50	12.18
Strait of Juan de Fuca	arsenic	5:5	15.48	13.00	17.50	1.65
Strait of Juan de Fuca	benzo(a)anthracene	0:1	640.00	640.00	640.00	
Strait of Juan de Fuca	benzo(a)pyrene	0:1	220.00	220.00	220.00	
Strait of Juan de Fuca	benzo(b)fluoranthene	0:1	640.00	640.00	640.00	
Strait of Juan de Fuca	benzo(g,h,i)perylene	0:1	640.00	640.00	640.00	
Strait of Juan de Fuca	benzo(k)fluoranthene	0:1	420.00	420.00	420.00	
Strait of Juan de Fuca	benzoic acid	1:1	28000.00	28000.00	28000.00	
Strait of Juan de Fuca	benzyl alcohol	1:1	320.00	320.00	320.00	
Strait of Juan de Fuca	benzylbutylphthalate	0:1	640.00	640.00	640.00	
Strait of Juan de Fuca	beta endosulfan	0:4	89.75	13.00	320.00	153.50
Strait of Juan de Fuca	beta hexachlorocyclohexane	0:3	6.30	6.30	6.30	0.00
Strait of Juan de Fuca	bis(2-chloroethoxy)methane	0:1	220.00	220.00	220.00	
Strait of Juan de Fuca	bis(2-chloroethyl)ether	0:1	220.00	220.00	220.00	
Strait of Juan de Fuca	bis(2-chloroisopropyl)ether	0:1	640.00	640.00	640.00	
Strait of Juan de Fuca	bis(2-ethylhexyl)phthalate	0:1	220.00	220.00	220.00	
Strait of Juan de Fuca	carbazole	0:1	220.00	220.00	220.00	
Strait of Juan de Fuca	chrysene	0:1	1000.00	1000.00	1000.00	
Strait of Juan de Fuca	copper	5:5	11.42	9.10	15.10	2.34
Strait of Juan de Fuca	delta hexachlorocyclohexane	0:4	12.73	6.30	32.00	12.85
Strait of Juan de Fuca	dibenzo(a,h)anthracene	0:1	300.00	300.00	300.00	
Strait of Juan de Fuca	dibenzofuran	0:1	300.00	300.00	300.00	
Strait of Juan de Fuca	Dieldrin	0:4	89.75	13.00	320.00	153.50
Strait of Juan de Fuca	diethylphthalate	0:1	220.00	220.00	220.00	

Location	Assay	No. Detected:				SD
		lo. Analyzed	Mean	Min	Max	
Strait of Juan de Fuca	dimethylphthalate	0:1	220.00	220.00	220.00	
Strait of Juan de Fuca	di-n-butylphthalate	0:1	220.00	220.00	220.00	
Strait of Juan de Fuca	di-n-octylphthalate	0:1	220.00	220.00	220.00	
Strait of Juan de Fuca	endosulfan sulfate	0:4	109.75	13.00	400.00	193.50
Strait of Juan de Fuca	Endrin	0:4	89.75	13.00	320.00	153.50
Strait of Juan de Fuca	endrin aldehyde	0:3	13.00	13.00	13.00	0.00
Strait of Juan de Fuca	fluoranthene	0:1	1000.00	1000.00	1000.00	
Strait of Juan de Fuca	fluorene	0:1	220.00	220.00	220.00	
Strait of Juan de Fuca	gamma chlordane	0:4	20.35	6.30	62.50	28.10
Strait of Juan de Fuca	gamma hexachlorocyclohexane	0:3	6.30	6.30	6.30	0.00
Strait of Juan de Fuca	Heptachlor	0:4	84.73	6.30	320.00	156.85
Strait of Juan de Fuca	heptachlor epoxide	0:4	12.73	6.30	32.00	12.85
Strait of Juan de Fuca	hexachlorocyclopentadiene	0:1	1700.00	1700.00	1700.00	
Strait of Juan de Fuca	hexachloroethane	0:1	300.00	300.00	300.00	
Strait of Juan de Fuca	indeno(1,2,3-c,d)pyrene	0:1	540.00	540.00	540.00	
Strait of Juan de Fuca	isophorone	0:1	220.00	220.00	220.00	
Strait of Juan de Fuca	lead	5:5	0.22	0.14	0.30	0.06
Strait of Juan de Fuca	Lipids	2:2	4.35	4.10	4.60	0.35
Strait of Juan de Fuca	mercury	5:5	0.09	0.07	0.10	0.01
Strait of Juan de Fuca	Methoxychlor	0:4	55.25	32.00	63.00	15.50
Strait of Juan de Fuca	naphthalene	0:1	220.00	220.00	220.00	
Strait of Juan de Fuca	nitrobenzene	0:1	300.00	300.00	300.00	
Strait of Juan de Fuca	N-nitrosodimethylamine	0:1	220.00	220.00	220.00	
Strait of Juan de Fuca	N-nitroso-di-n-propylamine	0:1	220.00	220.00	220.00	
Strait of Juan de Fuca	N-nitrosodiphenylamine	0:1	220.00	220.00	220.00	
Strait of Juan de Fuca	phenanthrene	0:1	220.00	220.00	220.00	
Strait of Juan de Fuca	phenol	0:1	220.00	220.00	220.00	
Strait of Juan de Fuca	ppDDD	0:4	17.75	13.00	32.00	9.50
Strait of Juan de Fuca	ppDDE	2:4	90.75	13.00	320.00	152.84
Strait of Juan de Fuca	ppDDT	0:4	49.75	13.00	160.00	73.50
Strait of Juan de Fuca	pyrene	0:1	220.00	220.00	220.00	
Strait of Juan de Fuca	Solids	1:1	21.70	21.70	21.70	
Strait of Juan de Fuca	Toxaphene	0:4	325.00	100.00	1000.00	450.00
Thea Foss Waterway	1,2,4-trichlorobenzene	0:3	85.00	85.00	85.00	0.00
Thea Foss Waterway	1,2-dichlorobenzene	0:3	85.00	85.00	85.00	0.00
Thea Foss Waterway	1,2-diphenylhydrazine	0:3	85.00	85.00	85.00	0.00
Thea Foss Waterway	1,3-dichlorobenzene	0:3	85.00	85.00	85.00	0.00
Thea Foss Waterway	1,4-dichlorobenzene	0:3	85.00	85.00	85.00	0.00
Thea Foss Waterway	2,4,5-trichlorophenol	0:3	85.00	85.00	85.00	0.00
Thea Foss Waterway	2,4,6-trichlorophenol	0:3	125.00	125.00	125.00	0.00
Thea Foss Waterway	2,4-dichlorophenol	0:3	85.00	85.00	85.00	0.00
Thea Foss Waterway	2,4-dimethylphenol	0:3	85.00	85.00	85.00	0.00
Thea Foss Waterway	2,4-dinitrophenol	0:3	510.00	510.00	510.00	0.00
Thea Foss Waterway	2,4-dinitrotoluene	0:3	125.00	125.00	125.00	0.00
Thea Foss Waterway	2,6-dinitrotoluene	0:3	125.00	125.00	125.00	0.00
Thea Foss Waterway	2-chloronaphthalene	0:3	85.00	85.00	85.00	0.00
Thea Foss Waterway	2-chlorophenol	0:3	85.00	85.00	85.00	0.00
Thea Foss Waterway	2-methylnaphthalene	0:3	85.00	85.00	85.00	0.00
Thea Foss Waterway	2-methylphenol	0:3	85.00	85.00	85.00	0.00
Thea Foss Waterway	2-nitroaniline	0:3	85.00	85.00	85.00	0.00
Thea Foss Waterway	2-nitrophenol	0:3	85.00	85.00	85.00	0.00
Thea Foss Waterway	3-nitroaniline	0:3	510.00	510.00	510.00	0.00
Thea Foss Waterway	4,6-dinitro-o-cresol	0:3	260.00	260.00	260.00	0.00

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Thea Foss Waterway	4-bromophenylphenylether	0:3	85.00	85.00	85.00	0.00
Thea Foss Waterway	4-chloro-3-methylphenol	0:3	125.00	125.00	125.00	0.00
Thea Foss Waterway	4-chloroaniline	0:3	85.00	85.00	85.00	0.00
Thea Foss Waterway	4-chlorophenylphenylether	0:3	85.00	85.00	85.00	0.00
Thea Foss Waterway	4-methylphenol	0:3	85.00	85.00	85.00	0.00
Thea Foss Waterway	4-nitroaniline	0:3	260.00	260.00	260.00	0.00
Thea Foss Waterway	4-nitrophenol	0:3	510.00	510.00	510.00	0.00
Thea Foss Waterway	acenaphthene	0:3	85.00	85.00	85.00	0.00
Thea Foss Waterway	acenaphthylene	0:3	85.00	85.00	85.00	0.00
Thea Foss Waterway	Aldrin	0:15	71.40	8.00	320.00	128.68
Thea Foss Waterway	alpha chlordane	3:15	20.38	6.30	62.50	23.21
Thea Foss Waterway	alpha endosulfan	0:12	9.25	8.00	13.00	2.26
Thea Foss Waterway	alpha hexachlorocyclohexane	0:15	11.46	6.30	32.00	10.63
Thea Foss Waterway	aniline	0:3	85.00	85.00	85.00	0.00
Thea Foss Waterway	anthracene	0:3	85.00	85.00	85.00	0.00
Thea Foss Waterway	Aroclor 1016	0:18	83.33	20.00	160.00	41.87
Thea Foss Waterway	Aroclor 1221	0:18	83.33	20.00	160.00	41.87
Thea Foss Waterway	Aroclor 1232	0:18	78.33	20.00	160.00	43.82
Thea Foss Waterway	Aroclor 1242	0:18	78.33	20.00	160.00	43.82
Thea Foss Waterway	Aroclor 1248	0:18	78.33	20.00	160.00	43.82
Thea Foss Waterway	Aroclor 1254	15:18	555.06	112.00	1280.00	336.17
Thea Foss Waterway	Aroclor 1260	18:18	862.28	290.00	1310.00	331.89
Thea Foss Waterway	arsenic	9:9	11.98	4.10	18.20	4.96
Thea Foss Waterway	benzo(a)anthracene	0:3	125.00	125.00	125.00	0.00
Thea Foss Waterway	benzo(a)pyrene	0:3	85.00	85.00	85.00	0.00
Thea Foss Waterway	benzo(b)fluoranthene	0:3	125.00	125.00	125.00	0.00
Thea Foss Waterway	benzo(g,h,i)perylene	0:3	85.00	85.00	85.00	0.00
Thea Foss Waterway	benzo(k)fluoranthene	0:3	85.00	85.00	85.00	0.00
Thea Foss Waterway	benzoic acid	0:3	256.00	256.00	256.00	0.00
Thea Foss Waterway	benzyl alcohol	3:3	1000.00	650.00	1500.00	444.41
Thea Foss Waterway	benzylbutylphthalate	0:3	260.00	260.00	260.00	0.00
Thea Foss Waterway	beta endosulfan	0:15	74.40	13.00	320.00	127.11
Thea Foss Waterway	beta hexachlorocyclohexane	0:12	6.33	6.30	6.60	0.09
Thea Foss Waterway	bis(2-chloroethoxy)methane	0:3	85.00	85.00	85.00	0.00
Thea Foss Waterway	bis(2-chloroethyl)ether	0:3	85.00	85.00	85.00	0.00
Thea Foss Waterway	bis(2-chloroisopropyl)ether	0:3	85.00	85.00	85.00	0.00
Thea Foss Waterway	bis(2-ethylhexyl)phthalate	0:3	85.00	85.00	85.00	0.00
Thea Foss Waterway	carbazole	0:3	260.00	260.00	260.00	0.00
Thea Foss Waterway	chrysene	0:3	260.00	260.00	260.00	0.00
Thea Foss Waterway	copper	9:9	5.32	3.90	7.85	1.35
Thea Foss Waterway	coprostanol	0:3	21000.00	21000.00	21000.00	0.00
Thea Foss Waterway	delta hexachlorocyclohexane	0:15	11.46	6.30	32.00	10.63
Thea Foss Waterway	dibenzo(a,h)anthracene	0:3	85.00	85.00	85.00	0.00
Thea Foss Waterway	dibenzofuran	0:3	85.00	85.00	85.00	0.00
Thea Foss Waterway	Dieldrin	0:15	74.40	13.00	320.00	127.11
Thea Foss Waterway	diethylphthalate	0:3	85.00	85.00	85.00	0.00
Thea Foss Waterway	dimethylphthalate	0:3	85.00	85.00	85.00	0.00
Thea Foss Waterway	di-n-butylphthalate	0:3	85.00	85.00	85.00	0.00
Thea Foss Waterway	di-n-octylphthalate	0:3	85.00	85.00	85.00	0.00
Thea Foss Waterway	endosulfan sulfate	0:15	90.40	13.00	400.00	160.23
Thea Foss Waterway	Endrin	0:15	74.40	13.00	320.00	127.11
Thea Foss Waterway	endrin aldehyde	0:12	13.00	13.00	13.00	0.00
Thea Foss Waterway	fluoranthene	0:3	85.00	85.00	85.00	0.00

# Appendix: English Sole Liver

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Thea Foss Waterway	fluorene	0:3	85.00	85.00	85.00	0.00
Thea Foss Waterway	gamma chlordane	6:15	20.15	6.30	62.50	22.64
Thea Foss Waterway	gamma hexachlorocyclohexane	0:12	6.33	6.30	6.60	0.09
Thea Foss Waterway	Heptachlor	0:15	69.06	6.30	320.00	129.87
Thea Foss Waterway	heptachlor epoxide	0:15	11.46	6.30	32.00	10.63
Thea Foss Waterway	hexachlorobenzene	3:6	45.27	1.90	85.00	43.67
Thea Foss Waterway	hexachlorobutadiene	0:3	85.00	85.00	85.00	0.00
Thea Foss Waterway	hexachlorocyclopentadiene	0:3	510.00	510.00	510.00	0.00
Thea Foss Waterway	hexachloroethane	0:3	85.00	85.00	85.00	0.00
Thea Foss Waterway	indeno(1,2,3-c,d)pyrene	0:3	85.00	85.00	85.00	0.00
Thea Foss Waterway	isophorone	0:3	85.00	85.00	85.00	0.00
Thea Foss Waterway	lead	12:12	0.36	0.20	0.65	0.15
Thea Foss Waterway	Lipids	8:8	5.45	4.30	7.40	0.95
Thea Foss Waterway	mercury	15:15	0.13	0.06	0.27	0.06
Thea Foss Waterway	Methoxychlor	0:15	56.80	32.00	63.00	12.84
Thea Foss Waterway	naphthalene	0:3	85.00	85.00	85.00	0.00
Thea Foss Waterway	nitrobenzene	0:3	85.00	85.00	85.00	0.00
Thea Foss Waterway	N-nitrosodimethylamine	0:3	260.00	260.00	260.00	0.00
Thea Foss Waterway	N-nitroso-di-n-propylamine	0:3	85.00	85.00	85.00	0.00
Thea Foss Waterway	N-nitrosodiphenylamine	0:3	85.00	85.00	85.00	0.00
Thea Foss Waterway	opDDT	1:3	1.04	0.30	2.50	1.26
Thea Foss Waterway	PCB101	3:3	280.00	210.00	350.00	70.00
Thea Foss Waterway	PCB105	3:3	25.67	19.00	35.00	8.33
Thea Foss Waterway	PCB110	3:3	48.00	36.00	62.00	13.11
Thea Foss Waterway	PCB118	3:3	140.00	110.00	180.00	36.06
Thea Foss Waterway	PCB126	1:3	0.16	0.12	0.23	0.06
Thea Foss Waterway	PCB128	3:3	39.67	26.00	55.00	14.57
Thea Foss Waterway	PCB138	3:3	88.33	64.00	110.00	23.12
Thea Foss Waterway	PCB153	3:3	196.67	140.00	250.00	55.08
Thea Foss Waterway	PCB156	3:3	7.57	5.40	9.30	1.99
Thea Foss Waterway	PCB157	2:3	0.47	0.08	0.85	0.39
Thea Foss Waterway	PCB169	0:3	0.16	0.15	0.17	0.01
Thea Foss Waterway	PCB170	3:3	48.33	36.00	59.00	11.59
Thea Foss Waterway	PCB180	3:3	78.00	61.00	93.00	16.09
Thea Foss Waterway	PCB189	3:3	1.16	0.87	1.30	0.25
Thea Foss Waterway	PCB77	2:3	0.34	0.13	0.44	0.18
Thea Foss Waterway	pentachlorophenol	0:3	256.00	256.00	256.00	0.00
Thea Foss Waterway	phenanthrene	0:3	85.00	85.00	85.00	0.00
Thea Foss Waterway	phenol	0:3	85.00	85.00	85.00	0.00
Thea Foss Waterway	ppDDD	11:18	26.02	13.00	73.60	14.24
Thea Foss Waterway	ppDDE	15:18	109.11	31.00	320.00	103.65
Thea Foss Waterway	ppDDT	0:15	42.40	13.00	160.00	60.86
Thea Foss Waterway	pyrene	0:3	125.00	125.00	125.00	0.00
Thea Foss Waterway	Solids	8:8	21.85	20.17	23.30	1.30
Thea Foss Waterway	TotalDDT	3:3	70.33	51.00	97.00	23.86
Thea Foss Waterway	TotalPCB	3:3	1116.67	850.00	1300.00	236.29
Thea Foss Waterway	Toxaphene	0:15	280.00	100.00	1000.00	372.64
Vendovi Island	Aldrin	0:4	8.00	8.00	8.00	0.00
Vendovi Island	alpha chlordane	0:4	6.30	6.30	6.30	0.00
Vendovi Island	alpha endosulfan	0:4	8.00	8.00	8.00	0.00
Vendovi Island	alpha hexachlorocyclohexane	0:4	6.30	6.30	6.30	0.00
Vendovi Island	Aroclor 1016	0:4	80.00	80.00	80.00	0.00
Vendovi Island	Aroclor 1221	0:4	80.00	80.00	80.00	0.00

Location	Assay	No. Detected:				SD
		lo. Analyzed	Mean	Min	Max	
Vendovi Island	Aroclor 1232	0:4	80.00	80.00	80.00	0.00
Vendovi Island	Aroclor 1242	0:4	80.00	80.00	80.00	0.00
Vendovi Island	Aroclor 1248	0:4	80.00	80.00	80.00	0.00
Vendovi Island	Aroclor 1254	3:4	53.28	40.00	71.10	12.99
Vendovi Island	Aroclor 1260	4:4	59.95	33.00	94.40	29.06
Vendovi Island	arsenic	2:2	4.09	3.40	4.77	0.97
Vendovi Island	beta endosulfan	0:4	13.00	13.00	13.00	0.00
Vendovi Island	beta hexachlorocyclohexane	0:4	6.30	6.30	6.30	0.00
Vendovi Island	copper	2:2	5.56	4.30	6.81	1.77
Vendovi Island	delta hexachlorocyclohexane	0:4	6.30	6.30	6.30	0.00
Vendovi Island	Dieldrin	0:4	13.00	13.00	13.00	0.00
Vendovi Island	endosulfan sulfate	0:4	13.00	13.00	13.00	0.00
Vendovi Island	Endrin	0:4	13.00	13.00	13.00	0.00
Vendovi Island	endrin aldehyde	0:4	13.00	13.00	13.00	0.00
Vendovi Island	gamma chlordane	0:4	6.30	6.30	6.30	0.00
Vendovi Island	gamma hexachlorocyclohexane	0:4	6.30	6.30	6.30	0.00
Vendovi Island	Heptachlor	0:4	6.30	6.30	6.30	0.00
Vendovi Island	heptachlor epoxide	0:4	6.30	6.30	6.30	0.00
Vendovi Island	lead	4:4	0.44	0.38	0.51	0.05
Vendovi Island	Lipids	1:1	6.90	6.90	6.90	0.00
Vendovi Island	mercury	5:5	0.05	0.04	0.07	0.01
Vendovi Island	Methoxychlor	0:4	63.00	63.00	63.00	0.00
Vendovi Island	ppDDD	0:4	13.00	13.00	13.00	0.00
Vendovi Island	ppDDE	0:4	13.00	13.00	13.00	0.00
Vendovi Island	ppDDT	0:4	13.00	13.00	13.00	0.00
Vendovi Island	Solids	1:1	11.80	11.80	11.80	0.00
Vendovi Island	Toxaphene	0:4	100.00	100.00	100.00	0.00
Wollochet	1,2,4-trichlorobenzene	0:1	85.00	85.00	85.00	0.00
Wollochet	1,2-dichlorobenzene	0:1	85.00	85.00	85.00	0.00
Wollochet	1,2-diphenylhydrazine	0:1	85.00	85.00	85.00	0.00
Wollochet	1,3-dichlorobenzene	0:1	85.00	85.00	85.00	0.00
Wollochet	1,4-dichlorobenzene	0:1	85.00	85.00	85.00	0.00
Wollochet	2,4,5-trichlorophenol	0:1	85.00	85.00	85.00	0.00
Wollochet	2,4,6-trichlorophenol	0:1	125.00	125.00	125.00	0.00
Wollochet	2,4-dichlorophenol	0:1	85.00	85.00	85.00	0.00
Wollochet	2,4-dimethylphenol	0:1	85.00	85.00	85.00	0.00
Wollochet	2,4-dinitrophenol	0:1	510.00	510.00	510.00	0.00
Wollochet	2,4-dinitrotoluene	0:1	125.00	125.00	125.00	0.00
Wollochet	2,6-dinitrotoluene	0:1	125.00	125.00	125.00	0.00
Wollochet	2-chloronaphthalene	0:1	85.00	85.00	85.00	0.00
Wollochet	2-chlorophenol	0:1	85.00	85.00	85.00	0.00
Wollochet	2-methylnaphthalene	0:1	85.00	85.00	85.00	0.00
Wollochet	2-methylphenol	0:1	85.00	85.00	85.00	0.00
Wollochet	2-nitroaniline	0:1	85.00	85.00	85.00	0.00
Wollochet	2-nitrophenol	0:1	85.00	85.00	85.00	0.00
Wollochet	3-nitroaniline	0:1	510.00	510.00	510.00	0.00
Wollochet	4,6-dinitro-o-cresol	0:1	260.00	260.00	260.00	0.00
Wollochet	4-bromophenylphenylether	0:1	85.00	85.00	85.00	0.00
Wollochet	4-chloro-3-methylphenol	0:1	125.00	125.00	125.00	0.00
Wollochet	4-chloroaniline	0:1	85.00	85.00	85.00	0.00
Wollochet	4-chlorophenylphenylether	0:1	85.00	85.00	85.00	0.00
Wollochet	4-methylphenol	0:1	85.00	85.00	85.00	0.00
Wollochet	4-nitroaniline	0:1	260.00	260.00	260.00	0.00

# Appendix: English Sole Liver

Location	Assay	No. Detected:			SD
		lo. Analyzed	Mean	Min	
Wollochet	4-nitrophenol	0:1	510.00	510.00	510.00
Wollochet	acenaphthene	0:1	85.00	85.00	85.00
Wollochet	acenaphthylene	0:1	85.00	85.00	85.00
Wollochet	Aldrin	0:1	13.00	13.00	13.00
Wollochet	alpha chlordane	0:1	6.30	6.30	6.30
Wollochet	alpha endosulfan	0:1	13.00	13.00	13.00
Wollochet	alpha hexachlorocyclohexane	0:1	6.30	6.30	6.30
Wollochet	aniline	0:1	85.00	85.00	85.00
Wollochet	anthracene	0:1	85.00	85.00	85.00
Wollochet	Aroclor 1016	0:1	80.00	80.00	80.00
Wollochet	Aroclor 1221	0:1	80.00	80.00	80.00
Wollochet	Aroclor 1232	0:1	50.00	50.00	50.00
Wollochet	Aroclor 1242	0:1	50.00	50.00	50.00
Wollochet	Aroclor 1248	0:1	50.00	50.00	50.00
Wollochet	Aroclor 1254	1:1	190.00	190.00	190.00
Wollochet	Aroclor 1260	1:1	290.00	290.00	290.00
Wollochet	arsenic	1:1	24.00	24.00	24.00
Wollochet	benzo(a)anthracene	0:1	125.00	125.00	125.00
Wollochet	benzo(a)pyrene	0:1	85.00	85.00	85.00
Wollochet	benzo(b)fluoranthene	0:1	125.00	125.00	125.00
Wollochet	benzo(g,h,i)perylene	0:1	85.00	85.00	85.00
Wollochet	benzo(k)fluoranthene	0:1	85.00	85.00	85.00
Wollochet	benzoic acid	0:1	256.00	256.00	256.00
Wollochet	benzyl alcohol	1:1	620.00	620.00	620.00
Wollochet	benzylbutylphthalate	0:1	260.00	260.00	260.00
Wollochet	beta endosulfan	0:1	13.00	13.00	13.00
Wollochet	beta hexachlorocyclohexane	0:1	6.30	6.30	6.30
Wollochet	bis(2-chloroethoxy)methane	0:1	85.00	85.00	85.00
Wollochet	bis(2-chloroethyl)ether	0:1	85.00	85.00	85.00
Wollochet	bis(2-chloroisopropyl)ether	0:1	85.00	85.00	85.00
Wollochet	bis(2-ethylhexyl)phthalate	0:1	85.00	85.00	85.00
Wollochet	carbazole	0:1	260.00	260.00	260.00
Wollochet	chrysene	0:1	260.00	260.00	260.00
Wollochet	copper	1:1	14.00	14.00	14.00
Wollochet	coprostanol	0:1	21000.00	21000.00	21000.00
Wollochet	delta hexachlorocyclohexane	0:1	6.30	6.30	6.30
Wollochet	dibenzo(a,h)anthracene	0:1	85.00	85.00	85.00
Wollochet	dibenzofuran	0:1	85.00	85.00	85.00
Wollochet	Dieldrin	0:1	13.00	13.00	13.00
Wollochet	diethylphthalate	0:1	85.00	85.00	85.00
Wollochet	dimethylphthalate	0:1	85.00	85.00	85.00
Wollochet	di-n-butylphthalate	0:1	85.00	85.00	85.00
Wollochet	di-n-octylphthalate	0:1	85.00	85.00	85.00
Wollochet	endosulfan sulfate	0:1	13.00	13.00	13.00
Wollochet	Endrin	0:1	13.00	13.00	13.00
Wollochet	endrin aldehyde	0:1	13.00	13.00	13.00
Wollochet	fluoranthene	0:1	85.00	85.00	85.00
Wollochet	fluorene	0:1	85.00	85.00	85.00
Wollochet	gamma chlordane	0:1	6.30	6.30	6.30
Wollochet	gamma hexachlorocyclohexane	0:1	6.30	6.30	6.30
Wollochet	Heptachlor	0:1	6.30	6.30	6.30
Wollochet	heptachlor epoxide	0:1	6.30	6.30	6.30
Wollochet	hexachlorobenzene	0:1	85.00	85.00	85.00

Location	Assay	No. Detected:			
		lo. Analyzed	Mean	Min	Max
Wollochet	hexachlorobutadiene	0:1	85.00	85.00	85.00
Wollochet	hexachlorocyclopentadiene	0:1	510.00	510.00	510.00
Wollochet	hexachloroethane	0:1	85.00	85.00	85.00
Wollochet	indeno(1,2,3-c,d)pyrene	0:1	85.00	85.00	85.00
Wollochet	isophorone	0:1	85.00	85.00	85.00
Wollochet	lead	1:1	0.58	0.58	0.58
Wollochet	mercury	1:1	0.11	0.11	0.11
Wollochet	Methoxychlor	0:1	63.00	63.00	63.00
Wollochet	naphthalene	0:1	85.00	85.00	85.00
Wollochet	nitrobenzene	0:1	85.00	85.00	85.00
Wollochet	N-nitrosodimethylamine	0:1	260.00	260.00	260.00
Wollochet	N-nitroso-di-n-propylamine	0:1	85.00	85.00	85.00
Wollochet	N-nitrosodiphenylamine	0:1	85.00	85.00	85.00
Wollochet	pentachlorophenol	0:1	256.00	256.00	256.00
Wollochet	phenanthrene	0:1	85.00	85.00	85.00
Wollochet	phenol	0:1	85.00	85.00	85.00
Wollochet	ppDDD	0:1	13.00	13.00	13.00
Wollochet	ppDDE	1:1	13.00	13.00	13.00
Wollochet	ppDDT	0:1	13.00	13.00	13.00
Wollochet	pyrene	0:1	125.00	125.00	125.00
Wollochet	Toxaphene	0:1	100.00	100.00	100.00

## **English Sole Bile**

Summary of contaminant data for all English sole bile samples collected by the Puget Sound Ambient Monitoring Program's Fish Component, 1989-1999. "No. Detected" is the number of samples for which an analyte was measured above the Method Detection Limit (MDL). "No. Analyzed" is the total number of samples analyzed for a given analyte. Mean, minimum, maximum, and standard deviation (SD) were computed for analyte and station combination, pooling all years' data. See Figure 1 for station locations.



## Appendix: English Sole Bile

Summary statistics for English sole bile samples, averaged across years from 1989-1999 by location and assay. All biliary analytes were measured above the Method Detection Limit (MDL). Refer to Figure 1 for station locations. All concentrations based on wet wt. FAC analytes in ng/ml bile, protein mg/ml bile.

Location	Assay	No. Detected:				SD
		No. Analyzed	Mean	Min	Max	
Alki	benzo(a)pyrene_FAC	3:3	251	170	346	89
Alki	naphthalene_FAC	3:3	61,968	39,790	77,133	19,634
Alki	Phenanthrene_FAC	3:3	23,655	12,659	38,840	13,584
Alki	Protein	3:3	2	1	2	1
Battle Point	benzo(a)pyrene_FAC	3:3	238	157	293	72
Battle Point	naphthalene_FAC	3:3	61,829	36,791	81,521	22,839
Battle Point	Phenanthrene_FAC	3:3	20,854	12,965	25,568	6,876
Battle Point	Protein	3:3	2	1	3	1
Battle Point	Solids	3:3	18	18	19	1
Blake Island	benzo(a)pyrene_FAC	3:3	84	43	109	36
Blake Island	naphthalene_FAC	3:3	22,588	18,535	26,967	4,225
Blake Island	Phenanthrene_FAC	3:3	5,081	4,797	5,585	438
Blake Island	Protein	3:3	1	1	2	0
Blake Island	Solids	3:3	17	16	18	1
Duwamish River	benzo(a)pyrene_FAC	3:3	375	340	412	36
Duwamish River	naphthalene_FAC	3:3	111,759	104,761	125,260	11,695
Duwamish River	Phenanthrene_FAC	3:3	40,446	32,718	55,129	12,722
Duwamish River	Protein	3:3	2	2	2	0
Eagle Harbor	benzo(a)pyrene_FAC	3:3	1,658	1,010	2,563	808
Eagle Harbor	naphthalene_FAC	3:3	200,240	107,125	368,483	145,980
Eagle Harbor	Phenanthrene_FAC	3:3	78,290	44,975	141,777	55,004
Eagle Harbor	Protein	3:3	3	3	3	0
Eagle Harbor	Solids	3:3	18	17	19	1
Harbor Island	benzo(a)pyrene_FAC	3:3	737	516	904	199
Harbor Island	naphthalene_FAC	3:3	159,943	113,191	205,018	45,936
Harbor Island	Phenanthrene_FAC	3:3	61,730	40,201	89,819	25,451
Harbor Island	Protein	3:3	5	4	5	1
Mukilteo-Everett	benzo(a)pyrene_FAC	3:3	408	324	481	79
Mukilteo-Everett	naphthalene_FAC	3:3	93,827	76,755	108,637	16,061
Mukilteo-Everett	Phenanthrene_FAC	3:3	16,803	15,202	18,768	1,811
Mukilteo-Everett	Protein	3:3	4	3	5	1
Myrtle Edwards	benzo(a)pyrene_FAC	3:3	568	482	644	82
Myrtle Edwards	naphthalene_FAC	3:3	132,189	115,315	156,162	21,329
Myrtle Edwards	Phenanthrene_FAC	3:3	47,891	37,269	57,985	10,368
Myrtle Edwards	Protein	3:3	4	4	6	1
N. Hood Canal	benzo(a)pyrene_FAC	6:6	297	108	567	211
N. Hood Canal	naphthalene_FAC	6:6	19,242	15,978	23,080	2,543
N. Hood Canal	Phenanthrene_FAC	6:6	5,571	4,871	6,623	708
N. Hood Canal	Protein	6:6	2	1	3	0
N. Hood Canal	Solids	3:3	20	19	20	0
Nisqually Reach	benzo(a)pyrene_FAC	6:6	321	153	628	227
Nisqually Reach	naphthalene_FAC	6:6	40,873	25,528	51,499	8,797
Nisqually Reach	Phenanthrene_FAC	6:6	18,543	5,738	26,430	8,446

# Appendix: English Sole Bile

Location	Assay	No. Detected:				SD
		lo. Analyzed	Mean	Min	Max	
Nisqually Reach	Protein	6:6	3	2	5	1
Nisqually Reach	Solids	3:3	18	17	20	2
Outer Sinclair Inlet	benzo(a)pyrene_FAC	3:3	185	139	253	60
Outer Sinclair Inlet	naphthalene_FAC	3:3	46,657	35,601	65,896	16,724
Outer Sinclair Inlet	Phenanthrene_FAC	3:3	12,319	9,219	17,428	4,458
Outer Sinclair Inlet	Protein	3:3	4	3	6	2
Outer Sinclair Inlet	Solids	3:3	18	17	19	1
Port Gardner	benzo(a)pyrene_FAC	6:6	584	296	1,152	344
Port Gardner	naphthalene_FAC	6:6	56,866	40,521	109,892	26,274
Port Gardner	Phenanthrene_FAC	6:6	25,598	13,193	47,330	13,239
Port Gardner	Protein	6:6	4	1	11	4
Port Gardner	Solids	3:3	17	17	17	0
Port Orchard	benzo(a)pyrene_FAC	3:3	190	147	247	51
Port Orchard	naphthalene_FAC	3:3	53,827	46,401	59,584	6,748
Port Orchard	Phenanthrene_FAC	3:3	14,703	13,383	16,237	1,439
Port Orchard	Protein	3:3	1	1	1	0
Port Orchard	Solids	3:3	18	17	19	1
Port Susan	benzo(a)pyrene_FAC	3:3	159	126	209	44
Port Susan	naphthalene_FAC	3:3	25,970	15,557	34,861	9,742
Port Susan	Phenanthrene_FAC	3:3	8,459	5,711	10,561	2,489
Port Susan	Protein	3:3	2	1	2	1
Seattle Waterfront	benzo(a)pyrene_FAC	6:6	1,043	273	3,173	1,064
Seattle Waterfront	naphthalene_FAC	6:6	198,633	57,170	580,272	192,447
Seattle Waterfront	Phenanthrene_FAC	6:6	73,724	17,369	190,954	66,712
Seattle Waterfront	Protein	6:6	4	2	4	1
Seattle Waterfront	Solids	3:3	17	16	18	1
Sinclair Inlet	benzo(a)pyrene_FAC	6:6	587	417	770	119
Sinclair Inlet	naphthalene_FAC	6:6	88,093	70,818	107,897	15,985
Sinclair Inlet	Phenanthrene_FAC	6:6	35,844	22,765	47,657	10,107
Sinclair Inlet	Protein	6:6	2	1	4	1
Sinclair Inlet	Solids	3:3	18	18	18	0
Strait of Georgia	benzo(a)pyrene_FAC	6:6	132	106	151	17
Strait of Georgia	naphthalene_FAC	6:6	23,263	21,243	26,700	1,980
Strait of Georgia	Phenanthrene_FAC	6:6	12,618	6,456	18,281	5,813
Strait of Georgia	Protein	6:6	2	1	3	1
Strait of Georgia	Solids	3:3	17	17	18	1
Thea Foss Waterway	benzo(a)pyrene_FAC	6:6	628	427	964	216
Thea Foss Waterway	naphthalene_FAC	6:6	170,393	122,935	215,048	37,725
Thea Foss Waterway	Phenanthrene_FAC	6:6	61,673	49,220	75,514	9,247
Thea Foss Waterway	Protein	6:6	4	1	12	4
Thea Foss Waterway	Solids	3:3	18	17	19	1
Vendovi Island	benzo(a)pyrene_FAC	6:6	181	61	392	111
Vendovi Island	naphthalene_FAC	6:6	32,937	25,865	40,316	5,377
Vendovi Island	Phenanthrene_FAC	6:6	15,891	8,802	22,332	5,839
Vendovi Island	Protein	6:6	3	1	6	2
Vendovi Island	Solids	3:3	19	18	19	0

## **Quillback Rockfish Muscle**

Summary of contaminant data for all quillback rockfish muscle samples collected by the Puget Sound Ambient Monitoring Program's Fish Component, 1989-1999. "No. Detected" is the number of samples for which an analyte was measured above the Method Detection Limit (MDL). "No. Analyzed" is the total number of samples analyzed for a given analyte. Mean, minimum, maximum, and standard deviation (SD) were computed for analyte and station combination, pooling all years' data. See Figure 2 for station locations.

# Appendix: Quillback Rockfish Muscle

Summary statistics for quillback rockfish muscle tissue samples, averaged across years from 1989-1999 by location and assay. A value of the median of the Method Detection Limit (MDL) was used in calculations when an analyte was undetected. Refer to Figure 2 for station locations. Shaded rows indicate location:assay combinations wherein at least one sample had a measured concentration above the MDL. Unshaded rows indicate combinations that had no measured concentrations above the MDL. All concentrations are based on wet weight. All organics in µg/kg, all elemental metals in mg/kg, all lipids and solids in %.

Location	Assay	No. Detected:				
		No. Analyzed	Mean	Min	Max	SD
Blakely Rocks	1,2,4-trichlorobenzene	0:16	5.09	5.00	5.40	0.16
Blakely Rocks	1,2-dichlorobenzene	0:16	10.15	10.00	10.60	0.27
Blakely Rocks	1,2-diphenylhydrazine	0:16	10.15	10.00	10.60	0.27
Blakely Rocks	1,3-dichlorobenzene	0:16	10.15	10.00	10.60	0.27
Blakely Rocks	1,4-dichlorobenzene	0:16	10.15	10.00	10.60	0.27
Blakely Rocks	2,4,5-trichlorophenol	0:16	28.93	25.40	30.00	1.93
Blakely Rocks	2,4,6-trichlorophenol	0:16	50.83	50.00	53.40	1.48
Blakely Rocks	2,4-dichlorophenol	0:16	28.93	25.40	30.00	1.93
Blakely Rocks	2,4-dimethylphenol	0:16	28.93	25.40	30.00	1.93
Blakely Rocks	2,4-dinitrophenol	0:16	199.38	196.00	200.00	1.20
Blakely Rocks	2,4-dinitrotoluene	0:16	28.93	25.40	30.00	1.93
Blakely Rocks	2,6-dinitrotoluene	0:16	5.09	5.00	5.40	0.16
Blakely Rocks	2-chloronaphthalene	0:16	5.09	5.00	5.40	0.16
Blakely Rocks	2-chlorophenol	0:16	28.93	25.40	30.00	1.93
Blakely Rocks	2-methylnaphthalene	0:16	28.93	25.40	30.00	1.93
Blakely Rocks	2-methylphenol	0:16	28.93	25.40	30.00	1.93
Blakely Rocks	2-nitroaniline	0:16	28.93	25.40	30.00	1.93
Blakely Rocks	2-nitrophenol	0:16	28.93	25.40	30.00	1.93
Blakely Rocks	3-nitroaniline	0:10	28.28	25.40	30.00	2.22
Blakely Rocks	4,6-dinitro-o-cresol	0:16	199.38	196.00	200.00	1.20
Blakely Rocks	4-bromophenylphenylether	0:16	50.83	50.00	53.40	1.48
Blakely Rocks	4-chloro-3-methylphenol	0:16	28.93	25.40	30.00	1.93
Blakely Rocks	4-chloroaniline	0:16	28.93	25.40	30.00	1.93
Blakely Rocks	4-chlorophenylphenylether	0:16	50.83	50.00	53.40	1.48
Blakely Rocks	4-methylphenol	0:16	28.93	25.40	30.00	1.93
Blakely Rocks	4-nitroaniline	0:16	139.63	67.00	200.00	60.48
Blakely Rocks	4-nitrophenol	0:16	28.93	25.40	30.00	1.93
Blakely Rocks	acenaphthene	0:16	5.09	5.00	5.40	0.16
Blakely Rocks	acenaphthylene	0:16	5.09	5.00	5.40	0.16
Blakely Rocks	Aldrin	0:12	0.28	0.20	0.30	0.04
Blakely Rocks	alpha chlordane	0:12	0.28	0.20	0.30	0.04
Blakely Rocks	alpha endosulfan	0:12	0.10	0.10	0.10	0.00
Blakely Rocks	alpha hexachlorocyclohexane	1:12	0.30	0.20	0.48	0.07
Blakely Rocks	aniline	0:16	10.15	10.00	10.60	0.27
Blakely Rocks	anthracene	0:16	10.15	10.00	10.60	0.27
Blakely Rocks	Aroclor 1016	0:30	19.33	10.00	20.00	2.54
Blakely Rocks	Aroclor 1221	0:30	19.33	10.00	20.00	2.54
Blakely Rocks	Aroclor 1232	0:30	19.33	10.00	20.00	2.54
Blakely Rocks	Aroclor 1242	0:30	9.93	9.00	10.00	0.25
Blakely Rocks	Aroclor 1248	0:30	2.00	2.00	2.00	0.00

# Appendix: Quillback Rockfish Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Blakely Rocks	Aroclor 1254	18:30	17.34	2.00	79.20	19.35
Blakely Rocks	Aroclor 1260	30:30	16.90	4.10	65.00	14.35
Blakely Rocks	arsenic	17:17	2.52	1.70	4.10	0.63
Blakely Rocks	benzo(a)anthracene	0:16	10.15	10.00	10.60	0.27
Blakely Rocks	benzo(a)pyrene	0:16	10.15	10.00	10.60	0.27
Blakely Rocks	benzo(b)fluoranthene	0:16	10.15	10.00	10.60	0.27
Blakely Rocks	benzo(g,h,i)perylene	0:16	28.93	25.40	30.00	1.93
Blakely Rocks	benzo(k)fluoranthene	0:16	10.15	10.00	10.60	0.27
Blakely Rocks	benzoic acid	0:16	189.50	156.80	200.00	18.79
Blakely Rocks	benzyl alcohol	0:16	10.15	10.00	10.60	0.27
Blakely Rocks	benzylbutylphthalate	0:16	28.93	25.40	30.00	1.93
Blakely Rocks	beta endosulfan	0:12	0.28	0.20	0.30	0.04
Blakely Rocks	beta hexachlorocyclohexane	0:12	0.10	0.10	0.10	0.00
Blakely Rocks	bis(2-chloroethoxy)methane	0:16	10.15	10.00	10.60	0.27
Blakely Rocks	bis(2-chloroethyl)ether	0:16	10.15	10.00	10.60	0.27
Blakely Rocks	bis(2-chloroisopropyl)ether	0:16	189.50	156.80	200.00	18.79
Blakely Rocks	bis(2-ethylhexyl)phthalate	7:16	244.69	30.00	1810.00	486.54
Blakely Rocks	carbazole	0:16	10.15	10.00	10.60	0.27
Blakely Rocks	chrysene	0:16	10.15	10.00	10.60	0.27
Blakely Rocks	copper	17:17	0.26	0.20	0.43	0.07
Blakely Rocks	coprostanol	0:16	508.31	500.00	534.60	14.92
Blakely Rocks	delta hexachlorocyclohexane	0:12	0.10	0.10	0.10	0.00
Blakely Rocks	dibenzo(a,h)anthracene	0:16	50.83	50.00	53.40	1.48
Blakely Rocks	dibenzofuran	0:16	10.15	10.00	10.60	0.27
Blakely Rocks	Dieldrin	1:12	0.31	0.20	0.61	0.10
Blakely Rocks	diethylphthalate	0:16	10.15	10.00	10.60	0.27
Blakely Rocks	dimethylphthalate	0:16	28.93	25.40	30.00	1.93
Blakely Rocks	di-n-butylphthalate	0:16	77.13	58.00	100.00	18.65
Blakely Rocks	di-n-octylphthalate	0:16	10.15	10.00	10.60	0.27
Blakely Rocks	endosulfan sulfate	0:12	0.28	0.20	0.30	0.04
Blakely Rocks	Endrin	0:12	0.48	0.40	0.50	0.04
Blakely Rocks	endrin aldehyde	0:12	0.48	0.40	0.50	0.04
Blakely Rocks	fluoranthene	0:16	5.09	5.00	5.40	0.16
Blakely Rocks	fluorene	0:16	5.09	5.00	5.40	0.16
Blakely Rocks	gamma chlordane	0:12	0.10	0.10	0.10	0.00
Blakely Rocks	gamma hexachlorocyclohexane	0:12	0.10	0.10	0.10	0.00
Blakely Rocks	Heptachlor	0:12	0.38	0.10	0.66	0.29
Blakely Rocks	heptachlor epoxide	0:12	0.77	0.60	0.80	0.08
Blakely Rocks	hexachlorobenzene	0:16	50.83	50.00	53.40	1.48
Blakely Rocks	hexachlorobutadiene	0:16	28.93	25.40	30.00	1.93
Blakely Rocks	hexachlorocyclopentadiene	0:16	189.50	156.80	200.00	18.79
Blakely Rocks	hexachloroethane	0:16	28.93	25.40	30.00	1.93
Blakely Rocks	indeno(1,2,3-c,d)pyrene	0:16	28.93	25.40	30.00	1.93
Blakely Rocks	isophorone	0:16	5.09	5.00	5.40	0.16
Blakely Rocks	lead	0:17	0.03	0.03	0.03	0.00
Blakely Rocks	Lipids	29:29	1.68	0.14	15.80	2.99
Blakely Rocks	mercury	35:35	0.25	0.08	0.47	0.10

# Appendix: Quillback Rockfish Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Blakely Rocks	Methoxychlor	0:12	1.00	1.00	1.00	0.00
Blakely Rocks	naphthalene	0:16	5.09	5.00	5.40	0.16
Blakely Rocks	nitrobenzene	0:16	10.15	10.00	10.60	0.27
Blakely Rocks	N-nitrosodimethylamine	0:16	149.50	67.00	200.00	66.01
Blakely Rocks	N-nitroso-di-n-propylamine	0:16	10.15	10.00	10.60	0.27
Blakely Rocks	N-nitrosodiphenylamine	0:16	28.93	25.40	30.00	1.93
Blakely Rocks	pentachlorophenol	0:16	50.83	50.00	53.40	1.48
Blakely Rocks	phenanthrene	0:16	5.09	5.00	5.40	0.16
Blakely Rocks	phenol	0:16	10.15	10.00	10.60	0.27
Blakely Rocks	ppDDD	0:12	0.28	0.20	0.30	0.04
Blakely Rocks	ppDDE	8:12	1.48	0.40	5.70	1.64
Blakely Rocks	ppDDT	0:12	0.48	0.40	0.50	0.04
Blakely Rocks	pyrene	0:16	5.09	5.00	5.40	0.16
Blakely Rocks	Solids	31:31	18.80	3.00	23.40	6.36
Blakely Rocks	Toxaphene	0:12	10.00	10.00	10.00	0.00
Brown's Point	Aroclor 1016	0:2	20.00	20.00	20.00	0.00
Brown's Point	Aroclor 1221	0:2	20.00	20.00	20.00	0.00
Brown's Point	Aroclor 1232	0:2	20.00	20.00	20.00	0.00
Brown's Point	Aroclor 1242	0:2	10.00	10.00	10.00	0.00
Brown's Point	Aroclor 1248	0:2	2.00	2.00	2.00	0.00
Brown's Point	Aroclor 1254	2:2	26.15	23.50	28.80	3.75
Brown's Point	Aroclor 1260	2:2	48.50	44.50	52.50	5.66
Brown's Point	hexachlorobenzene	0:2	0.04	0.03	0.04	0.00
Brown's Point	Lipids	3:3	0.22	0.17	0.27	0.05
Brown's Point	mercury	2:2	0.27	0.18	0.36	0.13
Brown's Point	opDDD	0:2	0.09	0.09	0.10	0.00
Brown's Point	opDDT	0:1	0.12	0.12	0.12	
Brown's Point	PCB101	2:2	0.59	0.59	0.59	0.00
Brown's Point	PCB105	1:2	0.07	0.03	0.10	0.05
Brown's Point	PCB110	2:2	0.22	0.13	0.31	0.13
Brown's Point	PCB118	2:2	1.14	0.98	1.30	0.23
Brown's Point	PCB126	0:2	0.05	0.05	0.05	0.00
Brown's Point	PCB128	2:2	0.10	0.09	0.10	0.01
Brown's Point	PCB138	2:2	0.46	0.24	0.67	0.30
Brown's Point	PCB153	2:2	0.69	0.45	0.92	0.33
Brown's Point	PCB156	0:2	0.04	0.03	0.04	0.00
Brown's Point	PCB157	0:2	0.03	0.03	0.04	0.00
Brown's Point	PCB169	0:2	0.07	0.07	0.07	0.00
Brown's Point	PCB170	0:2	0.03	0.03	0.04	0.00
Brown's Point	PCB180	2:2	0.22	0.13	0.30	0.12
Brown's Point	PCB189	0:2	0.04	0.03	0.04	0.00
Brown's Point	PCB77	0:2	0.05	0.05	0.05	0.00
Brown's Point	ppDDD	0:2	0.20	0.19	0.20	0.01
Brown's Point	ppDDE	0:1	0.10	0.10	0.10	
Brown's Point	ppDDT	0:2	0.12	0.12	0.12	0.00
Brown's Point	Solids	4:4	17.63	16.22	18.70	1.11
Brown's Point	TotalDDT	0:2				

# Appendix: Quillback Rockfish Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Brown's Point	TotalPCB	2:2	4.15	3.9	4.4	0.3536
Dalco Passage	Aldrin	0:2	0.26	0.26	0.26	0
Dalco Passage	alpha chlordane	0:2	0.26	0.26	0.26	0
Dalco Passage	alpha endosulfan	0:2	0.13	0.13	0.13	0
Dalco Passage	alpha hexachlorocyclohexane	0:2	0.26	0.26	0.26	0
Dalco Passage	Aroclor 1016	0:2	20	20	20	0
Dalco Passage	Aroclor 1221	0:2	20	20	20	0
Dalco Passage	Aroclor 1232	0:2	20	20	20	0
Dalco Passage	Aroclor 1242	0:2	10	10	10	0
Dalco Passage	Aroclor 1248	0:2	2	2	2	0
Dalco Passage	Aroclor 1254	1:2	17.75	2	33.5	22.274
Dalco Passage	Aroclor 1260	2:2	46.45	2	90.9	62.862
Dalco Passage	beta endosulfan	0:2	0.26	0.26	0.26	0
Dalco Passage	beta hexachlorocyclohexane	0:2	0.13	0.13	0.13	0
Dalco Passage	delta hexachlorocyclohexane	0:2	0.13	0.13	0.13	0
Dalco Passage	Dieldrin	0:2	0.26	0.26	0.26	0
Dalco Passage	endosulfan sulfate	0:2	0.26	0.26	0.26	0
Dalco Passage	Endrin	0:2	0.52	0.52	0.52	0
Dalco Passage	endrin aldehyde	0:2	0.52	0.52	0.52	0
Dalco Passage	gamma chlordane	0:2	0.13	0.13	0.13	0
Dalco Passage	gamma hexachlorocyclohexane	0:2	0.13	0.13	0.13	0
Dalco Passage	Heptachlor	0:2	0.8	0.8	0.8	0
Dalco Passage	heptachlor epoxide	0:2	0.13	0.13	0.13	0
Dalco Passage	Lipids	2:2	0.16	0.15	0.17	0.0141
Dalco Passage	Mercury	2:2	0.496	0.372	0.62	0.1754
Dalco Passage	Methoxychlor	0:2	1.3	1.3	1.3	0
Dalco Passage	ppDDD	0:2	0.26	0.26	0.26	0
Dalco Passage	ppDDE	1:2	3.02	0.52	5.52	3.5355
Dalco Passage	ppDDT	0:2	0.52	0.52	0.52	0
Dalco Passage	Solids	2:2	16.9	16.4	17.4	0.7071
Dalco Passage	Toxaphene	0:2	14	14	14	0
Day Island	1,2,4-trichlorobenzene	0:6	5.6	5.6	5.6	9E-08
Day Island	1,2-dichlorobenzene	0:6	5.6	5.6	5.6	9E-08
Day Island	1,2-diphenylhydrazine	0:6	22	22	22	0
Day Island	1,3-dichlorobenzene	0:6	5.6	5.6	5.6	9E-08
Day Island	1,4-dichlorobenzene	0:6	5.6	5.6	5.6	9E-08
Day Island	2,4,5-trichlorophenol	0:6	44	44	44	0
Day Island	2,4,6-trichlorophenol	0:6	44	44	44	0
Day Island	2,4-dichlorophenol	0:6	11	11	11	0
Day Island	2,4-dimethylphenol	0:6	11	11	11	0
Day Island	2,4-dinitrotoluene	0:6	4.4	4.4	4.4	6E-08
Day Island	2,6-dinitrotoluene	0:6	4.4	4.4	4.4	6E-08
Day Island	2-chloronaphthalene	0:6	5.6	5.6	5.6	9E-08
Day Island	2-chlorophenol	0:6	22	22	22	0
Day Island	2-methylnaphthalene	0:6	17	17	17	0
Day Island	2-methylphenol	0:6	11	11	11	0
Day Island	2-nitroaniline	0:6	33	33	33	0

# Appendix: Quillback Rockfish Muscle

Location	Assay	No. Detected:				
		No. Analyzed	Mean	Min	Max	SD
Day Island	2-nitrophenol	0:6	11	11	11	0
Day Island	3,3-dichlorobenzidine	0:6	11	11	11	0
Day Island	3-nitroaniline	0:6	33	33	33	0
Day Island	4-bromophenylphenylether	0:6	3.3	3.3	3.3	4E-08
Day Island	4-chloro-3-methylphenol	0:3	22	22	22	0
Day Island	4-chloroaniline	0:6	22	22	22	0
Day Island	4-chlorophenylphenylether	0:6	5.6	5.6	5.6	9E-08
Day Island	4-methylphenol	0:6	11	11	11	0
Day Island	4-nitroaniline	0:6	33	33	33	0
Day Island	4-nitrophenol	0:3	22	22	22	0
Day Island	acenaphthene	0:6	4.4	4.4	4.4	6E-08
Day Island	acenaphthylene	0:6	5.6	5.6	5.6	9E-08
Day Island	aniline	0:6	22	22	22	0
Day Island	anthracene	0:6	5.6	5.6	5.6	9E-08
Day Island	arsenic	6:6	0.445	0.3	0.57	0.1184
Day Island	benzo(a)anthracene	0:6	5.6	5.6	5.6	9E-08
Day Island	benzo(a)pyrene	0:6	11	11	11	0
Day Island	benzo(b)fluoranthene	0:6	17	17	17	0
Day Island	benzo(g,h,i)perylene	0:6	11	11	11	0
Day Island	benzo(k)fluoranthene	0:6	17	17	17	0
Day Island	benzoic acid	0:6	33	33	33	0
Day Island	benzyl alcohol	1:6	22	11	77	26.944
Day Island	benzylbutylphthalate	0:6	5.6	5.6	5.6	9E-08
Day Island	bis(2-chloroethoxy)methane	0:6	11	11	11	0
Day Island	bis(2-chloroethyl)ether	0:6	5.6	5.6	5.6	9E-08
Day Island	bis(2-chloroisopropyl)ether	0:6	22	22	22	0
Day Island	bis(2-ethylhexyl)phthalate	1:6	32.3333	5.6	166	65.483
Day Island	chrysene	0:6	5.6	5.6	5.6	9E-08
Day Island	copper	6:6	0.20167	0.18	0.24	0.0214
Day Island	dibenzo(a,h)anthracene	0:6	17	17	17	0
Day Island	dibenzofuran	0:6	11	11	11	0
Day Island	diethylphthalate	3:6	42.3333	16	52	14.166
Day Island	dimethylphthalate	0:6	3.3	3.3	3.3	4E-08
Day Island	di-n-butylphthalate	0:6	11	11	11	0
Day Island	di-n-octylphthalate	0:6	5.6	5.6	5.6	9E-08
Day Island	fluoranthene	0:6	6.7	6.7	6.7	9E-08
Day Island	fluorene	0:6	5.6	5.6	5.6	9E-08
Day Island	hexachlorobenzene	0:6	5.6	5.6	5.6	9E-08
Day Island	hexachlorobutadiene	0:6	11	11	11	0
Day Island	hexachlorocyclopentadiene	0:6	11	11	11	0
Day Island	hexachloroethane	0:6	11	11	11	0
Day Island	indeno(1,2,3-c,d)pyrene	0:6	11	11	11	0
Day Island	isophorone	0:6	11	11	11	0
Day Island	lead	0:6	0.03167	0.02	0.09	0.0286
Day Island	mercury	6:6	0.09833	0.06	0.13	0.0264
Day Island	naphthalene	0:6	17	17	17	0
Day Island	nitrobenzene	0:6	11	11	11	0



# Appendix: Quillback Rockfish Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Day Island	N-nitrosodimethylamine	0:6	33	33	33	0
Day Island	N-nitroso-di-n-propylamine	0:6	11	11	11	0
Day Island	N-nitrosodiphenylamine	0:6	11	11	11	0
Day Island	pentachlorophenol	0:6	11	11	11	0
Day Island	phenanthrene	1:6	9.08333	9	9.5	0.2041
Day Island	phenol	0:6	33	33	33	0
Day Island	ppDDD	1:1	0.18	0.18	0.18	
Day Island	ppDDE	4:4	1.1	0.7	1.5	0.4619
Day Island	pyrene	0:6	5.6	5.6	5.6	9E-08
Day Island	Solids	6:6	21.1667	20	22	0.7528
Double Bluff	1,2,4-trichlorobenzene	0:17	5.09412	5	5.4	0.16
Double Bluff	1,2-dichlorobenzene	0:17	10.1882	10	10.8	0.3039
Double Bluff	1,2-diphenylhydrazine	0:17	10.1882	10	10.8	0.3039
Double Bluff	1,3-dichlorobenzene	0:17	10.1882	10	10.8	0.3039
Double Bluff	1,4-dichlorobenzene	0:17	10.1882	10	10.8	0.3039
Double Bluff	2,4,5-trichlorophenol	0:17	28.7294	25.4	30	2.0334
Double Bluff	2,4,6-trichlorophenol	0:17	50.9882	50	54	1.5913
Double Bluff	2,4-dichlorophenol	0:17	28.7294	25.4	30	2.0334
Double Bluff	2,4-dimethylphenol	0:17	28.7294	25.4	30	2.0334
Double Bluff	2,4-dinitrophenol	0:17	199.294	196	200	1.4038
Double Bluff	2,4-dinitrotoluene	0:17	28.7294	25.4	30	2.0334
Double Bluff	2,6-dinitrotoluene	0:17	5.09412	5	5.4	0.16
Double Bluff	2-chloronaphthalene	0:17	5.09412	5	5.4	0.16
Double Bluff	2-chlorophenol	0:17	28.7294	25.4	30	2.0334
Double Bluff	2-methylnaphthalene	0:17	28.7294	25.4	30	2.0334
Double Bluff	2-methylphenol	0:17	28.7294	25.4	30	2.0334
Double Bluff	2-nitroaniline	0:17	28.7294	25.4	30	2.0334
Double Bluff	2-nitrophenol	0:17	28.7294	25.4	30	2.0334
Double Bluff	3-nitroaniline	0:11	28.0364	25.4	30	2.2624
Double Bluff	4,6-dinitro-o-cresol	0:17	199.294	196	200	1.4038
Double Bluff	4-bromophenylphenylether	0:17	50.9882	50	54	1.5913
Double Bluff	4-chloro-3-methylphenol	0:17	28.7294	25.4	30	2.0334
Double Bluff	4-chloroaniline	0:17	28.7294	25.4	30	2.0334
Double Bluff	4-chlorophenylphenylether	0:17	50.9882	50	54	1.5913
Double Bluff	4-methylphenol	0:17	28.7294	25.4	30	2.0334
Double Bluff	4-nitroaniline	0:17	140.729	67	200	58.74
Double Bluff	4-nitrophenol	0:17	28.7294	25.4	30	2.0334
Double Bluff	acenaphthene	0:17	5.09412	5	5.4	0.16
Double Bluff	acenaphthylene	0:17	5.09412	5	5.4	0.16
Double Bluff	Aldrin	0:12	0.29167	0.2	0.3	0.0289
Double Bluff	alpha chlordane	0:12	0.29167	0.2	0.3	0.0289
Double Bluff	alpha endosulfan	0:12	0.1	0.1	0.1	2E-09
Double Bluff	alpha hexachlorocyclohexane	0:12	0.29167	0.2	0.3	0.0289
Double Bluff	aniline	0:17	10.1882	10	10.8	0.3039
Double Bluff	anthracene	0:17	10.1882	10	10.8	0.3039
Double Bluff	Aroclor 1016	0:30	19.6667	10	20	1.8257
Double Bluff	Aroclor 1221	0:30	19.6667	10	20	1.8257

# Appendix: Quillback Rockfish Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Double Bluff	Aroclor 1232	0:30	19.6667	10	20	1.8257
Double Bluff	Aroclor 1242	0:30	9.96667	9	10	0.1826
Double Bluff	Aroclor 1248	0:30	2	2	2	0
Double Bluff	Aroclor 1254	2:30	2.55567	2	12.1	2.1649
Double Bluff	Aroclor 1260	12:30	3.31333	2	15	2.6199
Double Bluff	arsenic	18:18	2.12778	1.5	2.9	0.4041
Double Bluff	benzo(a)anthracene	0:17	10.1882	10	10.8	0.3039
Double Bluff	benzo(a)pyrene	0:17	10.1882	10	10.8	0.3039
Double Bluff	benzo(b)fluoranthene	0:17	10.1882	10	10.8	0.3039
Double Bluff	benzo(g,h,i)perylene	0:17	28.7294	25.4	30	2.0334
Double Bluff	benzo(k)fluoranthene	0:17	10.1882	10	10.8	0.3039
Double Bluff	benzoic acid	0:17	187.671	156.8	200	19.7
Double Bluff	benzyl alcohol	0:17	10.1882	10	10.8	0.3039
Double Bluff	benzylbutylphthalate	0:17	28.7294	25.4	30	2.0334
Double Bluff	beta endosulfan	0:12	0.29167	0.2	0.3	0.0289
Double Bluff	beta hexachlorocyclohexane	0:12	0.1	0.1	0.1	2E-09
Double Bluff	bis(2-chloroethoxy)methane	0:17	10.1882	10	10.8	0.3039
Double Bluff	bis(2-chloroethyl)ether	0:17	10.1882	10	10.8	0.3039
Double Bluff	bis(2-chloroisopropyl)ether	0:17	187.671	156.8	200	19.7
Double Bluff	bis(2-ethylhexyl)phthalate	7:17	162.059	30	920	283.47
Double Bluff	carbazole	0:17	10.1882	10	10.8	0.3039
Double Bluff	chrysene	0:17	10.1882	10	10.8	0.3039
Double Bluff	copper	18:18	0.26611	0.1	1.1	0.2148
Double Bluff	coprostanol	0:17	509.859	500	540	15.905
Double Bluff	delta hexachlorocyclohexane	0:12	0.1	0.1	0.1	2E-09
Double Bluff	dibenzo(a,h)anthracene	0:17	50.9882	50	54	1.5913
Double Bluff	dibenzofuran	0:17	10.1882	10	10.8	0.3039
Double Bluff	Dieldrin	1:12	0.30917	0.3	0.41	0.0318
Double Bluff	diethylphthalate	0:17	10.1882	10	10.8	0.3039
Double Bluff	dimethylphthalate	0:17	28.7294	25.4	30	2.0334
Double Bluff	di-n-butylphthalate	0:17	76	58	100	18.645
Double Bluff	di-n-octylphthalate	0:17	10.1882	10	10.8	0.3039
Double Bluff	endosulfan sulfate	0:12	0.29167	0.2	0.3	0.0289
Double Bluff	Endrin	0:12	0.49167	0.4	0.5	0.0289
Double Bluff	endrin aldehyde	0:12	0.49167	0.4	0.5	0.0289
Double Bluff	fluoranthene	0:17	5.09412	5	5.4	0.16
Double Bluff	fluorene	0:17	5.09412	5	5.4	0.16
Double Bluff	gamma chlordane	0:12	0.1	0.1	0.1	2E-09
Double Bluff	gamma hexachlorocyclohexane	0:12	0.1	0.1	0.1	2E-09
Double Bluff	Heptachlor	0:12	0.38	0.1	0.66	0.2925
Double Bluff	heptachlor epoxide	0:12	0.78333	0.6	0.8	0.0577
Double Bluff	hexachlorobenzene	0:17	50.9882	50	54	1.5913
Double Bluff	hexachlorobutadiene	0:17	28.7294	25.4	30	2.0334
Double Bluff	hexachlorocyclopentadiene	0:17	187.671	156.8	200	19.7
Double Bluff	hexachloroethane	0:17	28.7294	25.4	30	2.0334
Double Bluff	indeno(1,2,3-c,d)pyrene	0:17	28.7294	25.4	30	2.0334
Double Bluff	isophorone	0:17	5.09412	5	5.4	0.16

# Appendix: Quillback Rockfish Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Double Bluff	lead	0:18	0.03	0.03	0.03	1E-09
Double Bluff	Lipids	30:30	0.3751	0.1	2.63	0.4518
Double Bluff	mercury	36:36	0.23049	0.0987	0.41	0.078
Double Bluff	Methoxychlor	0:12	1	1	1	0
Double Bluff	naphthalene	0:17	5.09412	5	5.4	0.16
Double Bluff	nitrobenzene	0:17	10.1882	10	10.8	0.3039
Double Bluff	N-nitrosodimethylamine	0:17	152.353	67	200	64.99
Double Bluff	N-nitroso-di-n-propylamine	0:17	10.1882	10	10.8	0.3039
Double Bluff	N-nitrosodiphenylamine	0:17	28.7294	25.4	30	2.0334
Double Bluff	pentachlorophenol	0:17	50.9882	50	54	1.5913
Double Bluff	phenanthrene	0:17	5.09412	5	5.4	0.16
Double Bluff	phenol	0:17	10.1882	10	10.8	0.3039
Double Bluff	ppDDD	0:12	0.29167	0.2	0.3	0.0289
Double Bluff	ppDDE	2:12	0.6025	0.5	1.3	0.2521
Double Bluff	ppDDT	0:12	0.49167	0.4	0.5	0.0289
Double Bluff	pyrene	0:17	5.09412	5	5.4	0.16
Double Bluff	Solids	32:32	17.7156	3.4	25	6.7725
Double Bluff	Toxaphene	0:12	10	10	10	0
Foulweather Bluff	Aroclor 1016	0:11	20	20	20	0
Foulweather Bluff	Aroclor 1221	0:11	20	20	20	0
Foulweather Bluff	Aroclor 1232	0:11	20	20	20	0
Foulweather Bluff	Aroclor 1242	0:11	10	10	10	0
Foulweather Bluff	Aroclor 1248	0:11	2	2	2	0
Foulweather Bluff	Aroclor 1254	8:11	4.91818	2	7.55	2.138
Foulweather Bluff	Aroclor 1260	9:11	4.35364	2	6	1.4345
Foulweather Bluff	hexachlorobenzene	0:14	0.03029	0.021	0.047	0.0075
Foulweather Bluff	Lipids	26:26	0.17904	0.054	0.41	0.0974
Foulweather Bluff	Mercury	14:14	0.29093	0.137	0.751	0.1613
Foulweather Bluff	opDDD	0:14	0.07429	0.055	0.11	0.0153
Foulweather Bluff	opDDT	0:1	0.11	0.11	0.11	
Foulweather Bluff	PCB101	14:14	0.71143	0.2	2.1	0.4691
Foulweather Bluff	PCB105	6:14	0.10993	0.02	0.38	0.119
Foulweather Bluff	PCB118	8:14	0.44679	0.023	2.2	0.5859
Foulweather Bluff	PCB126	0:14	0.03479	0.022	0.055	0.0098
Foulweather Bluff	PCB128	8:14	0.13843	0.025	0.44	0.1226
Foulweather Bluff	PCB138	13:14	0.361	0.034	1.1	0.2637
Foulweather Bluff	PCB153	14:14	0.60714	0.24	2	0.4514
Foulweather Bluff	PCB156	0:14	0.02336	0.017	0.034	0.0047
Foulweather Bluff	PCB157	0:14	0.02443	0.018	0.036	0.005
Foulweather Bluff	PCB169	0:14	0.0495	0.037	0.072	0.0099
Foulweather Bluff	PCB170	1:13	0.04738	0.018	0.32	0.082
Foulweather Bluff	PCB180	9:14	0.1295	0.019	0.44	0.1317
Foulweather Bluff	PCB189	0:14	0.02793	0.021	0.04	0.0053
Foulweather Bluff	PCB77	0:14	0.04064	0.031	0.057	0.0073
Foulweather Bluff	ppDDD	0:14	0.12593	0.093	0.18	0.0247
Foulweather Bluff	ppDDE	5:7	0.52971	0.073	1.2	0.3986
Foulweather Bluff	ppDDT	0:13	0.099	0.068	0.15	0.0228

# Appendix: Quillback Rockfish Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Foulweather Bluff	Solids	14:14	20.6071	19.1	22.2	0.6978
Foulweather Bluff	TotalDDT	14:14	0.75507	0.224	1.59	0.5663
Foulweather Bluff	TotalPCB	14:14	3.87429	1.68	10.7	2.348
Fuller Wreck	1,2,4-trichlorobenzene	0:3	5.4	5.4	5.4	1E-07
Fuller Wreck	1,2-dichlorobenzene	0:3	11	11	11	0
Fuller Wreck	1,2-diphenylhydrazine	0:3	11	11	11	0
Fuller Wreck	1,3-dichlorobenzene	0:3	11	11	11	0
Fuller Wreck	1,4-dichlorobenzene	0:3	11	11	11	0
Fuller Wreck	2,4,5-trichlorophenol	0:3	26	26	26	0
Fuller Wreck	2,4,6-trichlorophenol	0:3	54	54	54	0
Fuller Wreck	2,4-dichlorophenol	0:3	26	26	26	0
Fuller Wreck	2,4-dimethylphenol	0:3	26	26	26	0
Fuller Wreck	2,4-dinitrophenol	0:3	200	200	200	0
Fuller Wreck	2,4-dinitrotoluene	0:3	26	26	26	0
Fuller Wreck	2,6-dinitrotoluene	0:3	5.4	5.4	5.4	1E-07
Fuller Wreck	2-chloronaphthalene	0:3	5.4	5.4	5.4	1E-07
Fuller Wreck	2-chlorophenol	0:3	26	26	26	0
Fuller Wreck	2-methylnaphthalene	0:3	26	26	26	0
Fuller Wreck	2-methylphenol	0:3	26	26	26	0
Fuller Wreck	2-nitroaniline	0:3	26	26	26	0
Fuller Wreck	2-nitrophenol	0:3	26	26	26	0
Fuller Wreck	3-nitroaniline	0:3	1700	1700	1700	0
Fuller Wreck	4,6-dinitro-o-cresol	0:3	200	200	200	0
Fuller Wreck	4-bromophenylphenylether	0:3	54	54	54	0
Fuller Wreck	4-chloro-3-methylphenol	0:3	26	26	26	0
Fuller Wreck	4-chloroaniline	0:3	1700	1700	1700	0
Fuller Wreck	4-chlorophenylphenylether	0:3	54	54	54	0
Fuller Wreck	4-methylphenol	0:3	26	26	26	0
Fuller Wreck	4-nitroaniline	0:3	1700	1700	1700	0
Fuller Wreck	4-nitrophenol	0:3	26	26	26	0
Fuller Wreck	acenaphthene	0:3	5.4	5.4	5.4	1E-07
Fuller Wreck	acenaphthylene	0:3	5.4	5.4	5.4	1E-07
Fuller Wreck	Aldrin	0:3	0.26	0.26	0.26	0
Fuller Wreck	alpha chlordane	0:3	0.26	0.26	0.26	0
Fuller Wreck	alpha endosulfan	0:3	0.13	0.13	0.13	0
Fuller Wreck	alpha hexachlorocyclohexane	0:3	0.26	0.26	0.26	0
Fuller Wreck	aniline	0:3	11	11	11	0
Fuller Wreck	anthracene	0:3	11	11	11	0
Fuller Wreck	Aroclor 1016	0:21	20	20	20	0
Fuller Wreck	Aroclor 1221	0:21	20	20	20	0
Fuller Wreck	Aroclor 1232	0:21	20	20	20	0
Fuller Wreck	Aroclor 1242	0:21	10	10	10	0
Fuller Wreck	Aroclor 1248	0:21	2	2	2	0
Fuller Wreck	Aroclor 1254	21:21	49.0905	22.6	93.3	20.371
Fuller Wreck	Aroclor 1260	21:21	60.7476	28.6	122	25.072
Fuller Wreck	arsenic	3:3	2.71	2.3	2.97	0.3593
Fuller Wreck	benzo(a)anthracene	0:3	11	11	11	0

## Appendix: Quillback Rockfish Muscle

Location	Assay	No. Detected:				
		No. Analyzed	Mean	Min	Max	SD
Fuller Wreck	benzo(a)pyrene	0:3	11	11	11	0
Fuller Wreck	benzo(b)fluoranthene	0:3	11	11	11	0
Fuller Wreck	benzo(g,h,i)perylene	0:3	26	26	26	0
Fuller Wreck	benzo(k)fluoranthene	0:3	11	11	11	0
Fuller Wreck	benzoic acid	0:3	200	200	200	0
Fuller Wreck	benzyl alcohol	0:3	11	11	11	0
Fuller Wreck	benzylbutylphthalate	0:3	26	26	26	0
Fuller Wreck	beta endosulfan	0:3	0.26	0.26	0.26	0
Fuller Wreck	beta hexachlorocyclohexane	0:3	0.13	0.13	0.13	0
Fuller Wreck	bis(2-chloroethoxy)methane	0:3	11	11	11	0
Fuller Wreck	bis(2-chloroethyl)ether	0:3	11	11	11	0
Fuller Wreck	bis(2-chloroisopropyl)ether	0:3	160	160	160	0
Fuller Wreck	bis(2-ethylhexyl)phthalate	0:3	30	30	30	0
Fuller Wreck	carbazole	0:3	11	11	11	0
Fuller Wreck	chrysene	0:3	11	11	11	0
Fuller Wreck	copper	3:3	0.21633	0.18	0.269	0.0467
Fuller Wreck	coprostanol	0:3	540	540	540	0
Fuller Wreck	delta hexachlorocyclohexane	0:3	0.13	0.13	0.13	0
Fuller Wreck	dibenzo(a,h)anthracene	0:3	54	54	54	0
Fuller Wreck	dibenzofuran	0:3	11	11	11	0
Fuller Wreck	Dieldrin	0:3	0.26	0.26	0.26	0
Fuller Wreck	diethylphthalate	0:3	11	11	11	0
Fuller Wreck	dimethylphthalate	0:3	26	26	26	0
Fuller Wreck	di-n-butylphthalate	0:3	67	67	67	0
Fuller Wreck	di-n-octylphthalate	0:3	11	11	11	0
Fuller Wreck	endosulfan sulfate	0:3	0.26	0.26	0.26	0
Fuller Wreck	Endrin	0:3	0.52	0.52	0.52	0
Fuller Wreck	endrin aldehyde	0:3	0.52	0.52	0.52	0
Fuller Wreck	fluoranthene	0:3	5.4	5.4	5.4	1E-07
Fuller Wreck	fluorene	0:3	5.4	5.4	5.4	1E-07
Fuller Wreck	gamma chlordane	0:3	0.13	0.13	0.13	0
Fuller Wreck	gamma hexachlorocyclohexane	0:3	0.13	0.13	0.13	0
Fuller Wreck	Heptachlor	0:3	0.66	0.66	0.66	1E-08
Fuller Wreck	heptachlor epoxide	0:3	0.8	0.8	0.8	0
Fuller Wreck	hexachlorobenzene	0:6	27.0137	0.026	54	29.562
Fuller Wreck	hexachlorobutadiene	0:3	26	26	26	0
Fuller Wreck	hexachlorocyclopentadiene	0:3	1700	1700	1700	0
Fuller Wreck	hexachloroethane	0:3	26	26	26	0
Fuller Wreck	indeno(1,2,3-c,d)pyrene	0:3	26	26	26	0
Fuller Wreck	isophorone	0:3	5.4	5.4	5.4	1E-07
Fuller Wreck	lead	0:3	0.02	0.02	0.02	3E-10
Fuller Wreck	Lipids	20:20	0.84955	0.05	5.95	1.5046
Fuller Wreck	mercury	21:21	0.35582	0.0922	0.631	0.15
Fuller Wreck	Methoxychlor	0:3	1.3	1.3	1.3	2E-08
Fuller Wreck	naphthalene	0:3	5.4	5.4	5.4	1E-07
Fuller Wreck	nitrobenzene	0:3	11	11	11	0
Fuller Wreck	N-nitrosodimethylamine	0:3	67	67	67	0

# Appendix: Quillback Rockfish Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Fuller Wreck	N-nitroso-di-n-propylamine	0:3	11	11	11	0
Fuller Wreck	N-nitrosodiphenylamine	0:3	26	26	26	0
Fuller Wreck	opDDD	0:3	0.059	0.056	0.063	0.0036
Fuller Wreck	PCB101	3:3	4.56667	3.7	5.6	0.9609
Fuller Wreck	PCB105	3:3	0.46667	0.3	0.62	0.1604
Fuller Wreck	PCB118	3:3	1.96667	1.4	2.5	0.5508
Fuller Wreck	PCB126	0:3	0.03167	0.03	0.034	0.0021
Fuller Wreck	PCB128	3:3	0.64333	0.46	0.77	0.1626
Fuller Wreck	PCB138	3:3	2.13333	1.6	2.6	0.5033
Fuller Wreck	PCB153	3:3	4.8	3.9	5.8	0.9539
Fuller Wreck	PCB156	3:3	0.16667	0.09	0.25	0.0802
Fuller Wreck	PCB157	0:3	0.01933	0.018	0.021	0.0015
Fuller Wreck	PCB169	0:3	0.04033	0.038	0.043	0.0025
Fuller Wreck	PCB170	3:3	1	0.75	1.3	0.2784
Fuller Wreck	PCB180	3:3	2.36667	2	2.8	0.4041
Fuller Wreck	PCB189	0:3	0.02233	0.021	0.024	0.0015
Fuller Wreck	PCB77	0:3	0.029	0.027	0.031	0.002
Fuller Wreck	pentachlorophenol	0:3	54	54	54	0
Fuller Wreck	phenanthrene	0:3	5.4	5.4	5.4	1E-07
Fuller Wreck	phenol	0:3	11	11	11	0
Fuller Wreck	ppDDD	0:6	0.1815	0.099	0.26	0.0861
Fuller Wreck	ppDDE	3:3	1.18	1.11	1.31	0.1127
Fuller Wreck	ppDDT	0:4	0.41075	0.083	0.52	0.2185
Fuller Wreck	pyrene	0:3	5.4	5.4	5.4	1E-07
Fuller Wreck	Solids	20:20	20.64	18.6	21.6	0.8338
Fuller Wreck	TotalDDT	3:3	0.25533	0.217	0.326	0.0613
Fuller Wreck	TotalPCB	3:3	21.4667	17	26.1	4.5523
Fuller Wreck	Toxaphene	0:3	14	14	14	0
Gig Harbor	Aroclor 1016	0:5	20	20	20	0
Gig Harbor	Aroclor 1221	0:5	20	20	20	0
Gig Harbor	Aroclor 1232	0:5	20	20	20	0
Gig Harbor	Aroclor 1242	0:5	10	10	10	0
Gig Harbor	Aroclor 1248	0:5	2	2	2	0
Gig Harbor	Aroclor 1254	5:5	41.04	25.5	71.5	20.215
Gig Harbor	Aroclor 1260	5:5	36.04	20.9	68.9	19.55
Gig Harbor	Lipids	5:5	0.452	0.28	0.86	0.2345
Gig Harbor	mercury	4:5	0.2214	0.004	0.394	0.1504
Gig Harbor	Solids	5:5	19.44	19	20.8	0.7701
Harbor Island	Aroclor 1016	0:5	20	20	20	0
Harbor Island	Aroclor 1221	0:5	20	20	20	0
Harbor Island	Aroclor 1232	0:5	20	20	20	0
Harbor Island	Aroclor 1242	0:5	10	10	10	0
Harbor Island	Aroclor 1248	0:5	2	2	2	0
Harbor Island	Aroclor 1254	5:5	72.96	41.5	96.6	22.288
Harbor Island	Aroclor 1260	5:5	218.76	84.8	340	92.093
Harbor Island	hexachlorobenzene	0:9	0.031	0.027	0.035	0.0024
Harbor Island	Lipids	15:15	0.1488	0.023	0.33	0.0949

# Appendix: Quillback Rockfish Muscle

Location	Assay	No. Detected:				
		No. Analyzed	Mean	Min	Max	SD
Harbor Island	Mercury	8:8	0.40763	0.225	0.567	0.1245
Harbor Island	opDDD	0:9	0.06956	0.063	0.078	0.005
Harbor Island	PCB101	9:9	11.3222	5.3	20	4.7402
Harbor Island	PCB105	9:9	1.36556	0.63	2.2	0.5368
Harbor Island	PCB118	9:9	6.05556	2.6	9.4	2.589
Harbor Island	PCB126	0:9	0.03633	0.032	0.04	0.0026
Harbor Island	PCB128	9:9	1.73222	0.72	3.5	0.8408
Harbor Island	PCB138	9:9	6.83333	2.3	13	3.6445
Harbor Island	PCB153	9:9	14.2111	4.5	25	7.4124
Harbor Island	PCB156	8:9	0.47811	0.023	0.87	0.2741
Harbor Island	PCB157	4:9	0.13056	0.021	0.36	0.1412
Harbor Island	PCB169	0:9	0.04744	0.042	0.052	0.0033
Harbor Island	PCB170	9:9	2.92222	0.93	6.7	1.8259
Harbor Island	PCB180	9:9	6.56667	1.9	15	4.2175
Harbor Island	PCB189	1:9	0.03611	0.025	0.11	0.0278
Harbor Island	PCB77	0:9	0.036	0.032	0.044	0.0037
Harbor Island	ppDDD	0:9	0.12111	0.11	0.13	0.0078
Harbor Island	ppDDE	0:1	0.07	0.07	0.07	
Harbor Island	ppDDT	2:6	0.147	0.086	0.39	0.1196
Harbor Island	Solids	8:8	18.525	14.4	21.3	2.0155
Harbor Island	TotalDDT	9:9	0.47667	0.264	1.373	0.3553
Harbor Island	TotalPCB	9:9	61.6778	22.8	114	30.411
Lakota	Aroclor 1016	0:4	20	20	20	0
Lakota	Aroclor 1221	0:4	20	20	20	0
Lakota	Aroclor 1232	0:4	20	20	20	0
Lakota	Aroclor 1242	0:4	10	10	10	0
Lakota	Aroclor 1248	0:4	2	2	2	0
Lakota	Aroclor 1254	4:4	21.0575	9.03	31.4	10.527
Lakota	Aroclor 1260	4:4	40.575	10.3	55.3	20.768
Lakota	Lipids	4:4	0.2125	0.09	0.47	0.174
Lakota	mercury	4:4	0.29483	0.0963	0.409	0.1409
Lakota	Solids	4:4	18.375	17.6	19.3	0.7042
Mukilteo-Everett	Aldrin	0:6	0.26	0.26	0.26	0
Mukilteo-Everett	alpha chlordane	0:6	0.26	0.26	0.26	0
Mukilteo-Everett	alpha endosulfan	0:6	0.13	0.13	0.13	0
Mukilteo-Everett	alpha hexachlorocyclohexane	0:6	0.26	0.26	0.26	0
Mukilteo-Everett	Aroclor 1016	0:5	20	20	20	0
Mukilteo-Everett	Aroclor 1221	0:5	20	20	20	0
Mukilteo-Everett	Aroclor 1232	0:5	20	20	20	0
Mukilteo-Everett	Aroclor 1242	0:5	10	10	10	0
Mukilteo-Everett	Aroclor 1248	0:5	2	2	2	0
Mukilteo-Everett	Aroclor 1254	5:5	17.3	10.3	33.1	9.2174
Mukilteo-Everett	Aroclor 1260	5:5	13.652	8.1	27.3	7.9331
Mukilteo-Everett	beta endosulfan	0:6	0.26	0.26	0.26	0
Mukilteo-Everett	beta hexachlorocyclohexane	0:6	0.13	0.13	0.13	0
Mukilteo-Everett	delta hexachlorocyclohexane	0:6	0.10833	0	0.13	0.0531
Mukilteo-Everett	Dieldrin	0:6	0.26	0.26	0.26	0

# Appendix: Quillback Rockfish Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Mukilteo-Everett	endosulfan sulfate	0:6	0.26	0.26	0.26	0
Mukilteo-Everett	Endrin	0:6	0.52	0.52	0.52	0
Mukilteo-Everett	endrin aldehyde	0:6	0.52	0.52	0.52	0
Mukilteo-Everett	gamma chlordane	0:6	0.13	0.13	0.13	0
Mukilteo-Everett	gamma hexachlorocyclohexane	0:6	0.13	0.13	0.13	0
Mukilteo-Everett	Heptachlor	0:6	0.8	0.8	0.8	2E-08
Mukilteo-Everett	heptachlor epoxide	0:6	0.8	0.8	0.8	2E-08
Mukilteo-Everett	hexachlorobenzene	0:4	0.0245	0.021	0.028	0.0035
Mukilteo-Everett	lead	0:6	0.02	0.02	0.02	2E-10
Mukilteo-Everett	Lipids	4:4	0.1725	0.1	0.35	0.1198
Mukilteo-Everett	Mercury	6:6	0.32383	0.229	0.49	0.0883
Mukilteo-Everett	Methoxychlor	0:6	1	1	1	0
Mukilteo-Everett	opDDD	0:4	0.06325	0.054	0.072	0.0091
Mukilteo-Everett	PCB101	4:4	2.55	1.1	5.2	1.812
Mukilteo-Everett	PCB105	4:4	0.5475	0.26	1.1	0.3782
Mukilteo-Everett	PCB118	4:4	3.275	1.3	6.7	2.367
Mukilteo-Everett	PCB126	0:4	0.02075	0.018	0.023	0.0026
Mukilteo-Everett	PCB128	4:4	0.5975	0.19	1.3	0.4924
Mukilteo-Everett	PCB138	4:4	1.91	0.64	4.3	1.6286
Mukilteo-Everett	PCB153	4:4	3.3	1.3	7.1	2.591
Mukilteo-Everett	PCB156	2:4	0.11475	0.017	0.32	0.142
Mukilteo-Everett	PCB157	0:4	0.021	0.018	0.024	0.0029
Mukilteo-Everett	PCB169	0:4	0.04225	0.036	0.048	0.0061
Mukilteo-Everett	PCB170	4:4	0.46	0.21	0.93	0.3211
Mukilteo-Everett	PCB180	4:4	0.9175	0.29	2	0.7503
Mukilteo-Everett	PCB189	0:4	0.024	0.02	0.027	0.0036
Mukilteo-Everett	PCB77	0:4	0.03625	0.031	0.041	0.005
Mukilteo-Everett	ppDDD	0:10	0.1988	0.091	0.26	0.0795
Mukilteo-Everett	ppDDE	10:10	2.674	0.83	6.4	1.7868
Mukilteo-Everett	ppDDT	0:10	0.345	0.07	0.52	0.226
Mukilteo-Everett	Solids	6:6	18.5333	16.7	20	1.3064
Mukilteo-Everett	TotalDDT	4:4	1.58075	0.273	5.329	2.4992
Mukilteo-Everett	TotalPCB	4:4	14.8075	6.13	31.3	11.224
Mukilteo-Everett	Toxaphene	0:6	14	14	14	0
Myrtle Edwards	hexachlorobenzene	0:7	0.03586	0.031	0.04	0.0034
Myrtle Edwards	Lipids	7:7	0.12071	0.021	0.24	0.0777
Myrtle Edwards	opDDD	0:6	0.0835	0.071	0.094	0.0088
Myrtle Edwards	opDDT	0:3	0.10967	0.099	0.12	0.0105
Myrtle Edwards	PCB101	7:7	5.01429	1.9	9.7	2.7126
Myrtle Edwards	PCB105	7:7	0.68286	0.23	1.3	0.3388
Myrtle Edwards	PCB118	7:7	3.38571	2	6.2	1.469
Myrtle Edwards	PCB126	0:7	0.04271	0.036	0.048	0.0042
Myrtle Edwards	PCB128	7:7	1.05571	0.7	1.6	0.3791
Myrtle Edwards	PCB138	7:7	2.94286	1.3	5	1.2608
Myrtle Edwards	PCB153	7:7	5.77143	2.7	9.7	2.5336
Myrtle Edwards	PCB156	6:7	0.21843	0.029	0.44	0.1277
Myrtle Edwards	PCB157	0:7	0.02757	0.024	0.031	0.0024



# Appendix: Quillback Rockfish Muscle

Location	Assay	No. Detected:				
		No. Analyzed	Mean	Min	Max	SD
Myrtle Edwards	PCB169	0:7	0.05543	0.047	0.062	0.0053
Myrtle Edwards	PCB170	7:7	1.23143	0.52	1.9	0.5394
Myrtle Edwards	PCB180	7:7	2.80714	0.95	5.1	1.4658
Myrtle Edwards	PCB189	0:7	0.031	0.026	0.035	0.0031
Myrtle Edwards	PCB77	0:7	0.04414	0.038	0.049	0.0041
Myrtle Edwards	ppDDD	0:7	0.13857	0.12	0.16	0.0135
Myrtle Edwards	ppDDE	0:3	0.086	0.079	0.093	0.007
Myrtle Edwards	ppDDT	0:7	0.11529	0.097	0.13	0.0121
Myrtle Edwards	TotalDDT	7:7	0.83943	0.408	2.06	0.6372
Myrtle Edwards	TotalPCB	7:7	26.4143	14.6	45.5	11.611
Old Tacoma	hexachlorobenzene	0:1	0.04	0.04	0.04	
Old Tacoma	Lipids	1:1	0.69	0.69	0.69	
Old Tacoma	opDDD	0:1	0.1	0.1	0.1	
Old Tacoma	PCB101	1:1	15	15	15	
Old Tacoma	PCB105	1:1	1.8	1.8	1.8	
Old Tacoma	PCB110	1:1	2.4	2.4	2.4	
Old Tacoma	PCB118	1:1	15	15	15	
Old Tacoma	PCB126	0:1	0.059	0.059	0.059	
Old Tacoma	PCB128	1:1	2.4	2.4	2.4	
Old Tacoma	PCB138	1:1	7.7	7.7	7.7	
Old Tacoma	PCB153	1:1	15	15	15	
Old Tacoma	PCB156	1:1	0.15	0.15	0.15	
Old Tacoma	PCB157	1:1	0.49	0.49	0.49	
Old Tacoma	PCB169	0:1	0.081	0.081	0.081	
Old Tacoma	PCB170	1:1	1.8	1.8	1.8	
Old Tacoma	PCB180	1:1	3.2	3.2	3.2	
Old Tacoma	PCB189	0:1	0.041	0.041	0.041	
Old Tacoma	PCB77	0:1	0.06	0.06	0.06	
Old Tacoma	ppDDD	0:1	0.23	0.23	0.23	
Old Tacoma	ppDDE	1:1	7.1	7.1	7.1	
Old Tacoma	Solids	1:1	18.3869	18.3869	18.3869	
Old Tacoma	TotalDDT	1:1	7.1	7.1	7.1	
Old Tacoma	TotalPCB	1:1	77	77	77	
Orcas Island	hexachlorobenzene	0:5	0.0644	0.051	0.072	0.0088
Orcas Island	Lipids	5:5	0.19356	0.145	0.24594	0.0466
Orcas Island	Mercury	5:5	0.4012	0.135	0.77	0.3232
Orcas Island	opDDD	0:5	0.164	0.13	0.18	0.023
Orcas Island	opDDT	0:4	0.245	0.22	0.26	0.0173
Orcas Island	PCB101	5:5	0.354	0.18	0.56	0.1455
Orcas Island	PCB105	0:5	0.069	0.055	0.077	0.0093
Orcas Island	PCB110	2:5	0.1208	0.057	0.31	0.1062
Orcas Island	PCB118	1:5	0.3078	0.049	1.3	0.5547
Orcas Island	PCB126	0:5	0.1002	0.079	0.11	0.0142
Orcas Island	PCB128	0:5	0.0752	0.06	0.084	0.01
Orcas Island	PCB138	4:5	0.2364	0.082	0.48	0.1521
Orcas Island	PCB153	5:5	0.428	0.08	0.92	0.3196
Orcas Island	PCB156	0:5	0.0574	0.046	0.064	0.0077

# Appendix: Quillback Rockfish Muscle

Location	Assay	No. Detected:				
		No. Analyzed	Mean	Min	Max	SD
Orcas Island	PCB157	0:5	0.0586	0.047	0.066	0.0079
Orcas Island	PCB169	0:5	0.13	0.1	0.15	0.02
Orcas Island	PCB170	0:5	0.0674	0.054	0.075	0.0091
Orcas Island	PCB180	1:5	0.0848	0.06	0.15	0.0368
Orcas Island	PCB189	0:5	0.0738	0.059	0.083	0.01
Orcas Island	PCB77	0:5	0.1096	0.088	0.12	0.0149
Orcas Island	ppDDD	0:5	0.214	0.17	0.24	0.0288
Orcas Island	ppDDE	0:5	0.204	0.16	0.23	0.0288
Orcas Island	ppDDT	0:5	0.0952	0.077	0.11	0.0126
Orcas Island	Solids	10:10	20.26	19.2	21.9019	0.7751
Orcas Island	TotalDDT	0:5				
Orcas Island	TotalPCB	5:5	2.558	1.79	5	1.3681
San Juan Islands	1,2,4-trichlorobenzene	0:18	5.21111	5	7	0.4727
San Juan Islands	1,2-dichlorobenzene	0:18	10.2	10	10.8	0.299
San Juan Islands	1,2-diphenylhydrazine	0:18	10.2	10	10.8	0.299
San Juan Islands	1,3-dichlorobenzene	0:18	10.2	10	10.8	0.299
San Juan Islands	1,4-dichlorobenzene	0:18	10.2	10	10.8	0.299
San Juan Islands	2,4,5-trichlorophenol	0:18	28.5333	25.2	30	2.1409
San Juan Islands	2,4,6-trichlorophenol	0:18	52.1778	50	70	4.7124
San Juan Islands	2,4-dichlorophenol	0:18	28.5333	25.2	30	2.1409
San Juan Islands	2,4-dimethylphenol	0:18	28.5333	25.2	30	2.1409
San Juan Islands	2,4-dinitrophenol	0:18	204.556	194	300	23.89
San Juan Islands	2,4-dinitrotoluene	0:18	28.5333	25.2	30	2.1409
San Juan Islands	2,6-dinitrotoluene	0:18	5.21111	5	7	0.4727
San Juan Islands	2-chloronaphthalene	0:18	5.21111	5	7	0.4727
San Juan Islands	2-chlorophenol	0:18	28.5333	25.2	30	2.1409
San Juan Islands	2-methylnaphthalene	0:18	28.5333	25.2	30	2.1409
San Juan Islands	2-methylphenol	0:18	28.5333	25.2	30	2.1409
San Juan Islands	2-nitroaniline	0:18	28.5333	25.2	30	2.1409
San Juan Islands	2-nitrophenol	0:18	28.5333	25.2	30	2.1409
San Juan Islands	3-nitroaniline	0:12	27.8	25.2	30	2.3073
San Juan Islands	4,6-dinitro-o-cresol	0:18	204.556	194	300	23.89
San Juan Islands	4-bromophenylphenylether	0:18	52.1778	50	70	4.7124
San Juan Islands	4-chloro-3-methylphenol	0:18	28.5333	25.2	30	2.1409
San Juan Islands	4-chloroaniline	0:18	28.5333	25.2	30	2.1409
San Juan Islands	4-chlorophenylphenylether	0:18	52.1778	50	70	4.7124
San Juan Islands	4-methylphenol	0:18	28.5333	25.2	30	2.1409
San Juan Islands	4-nitroaniline	0:18	141.533	67	200	57.088
San Juan Islands	4-nitrophenol	0:18	28.5333	25.2	30	2.1409
San Juan Islands	acenaphthene	0:18	5.21111	5	7	0.4727
San Juan Islands	acenaphthylene	0:18	5.21111	5	7	0.4727
San Juan Islands	Aldrin	0:12	0.29167	0.2	0.3	0.0289
San Juan Islands	alpha chlordane	0:12	0.29167	0.2	0.3	0.0289
San Juan Islands	alpha endosulfan	0:12	0.1	0.1	0.1	2E-09
San Juan Islands	alpha hexachlorocyclohexane	0:12	0.29167	0.2	0.3	0.0289
San Juan Islands	aniline	0:18	10.2	10	10.8	0.299
San Juan Islands	anthracene	0:18	10.2	10	10.8	0.299

## Appendix: Quillback Rockfish Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
San Juan Islands	Aroclor 1016	0:30	19.6667	10	20	1.8257
San Juan Islands	Aroclor 1221	0:30	19.6667	10	20	1.8257
San Juan Islands	Aroclor 1232	0:30	19.6667	10	20	1.8257
San Juan Islands	Aroclor 1242	0:30	9.96667	9	10	0.1826
San Juan Islands	Aroclor 1248	0:30	2	2	2	0
San Juan Islands	Aroclor 1254	0:30	2	2	2	0
San Juan Islands	Aroclor 1260	10:30	2.38667	2	8.9	1.426
San Juan Islands	arsenic	18:18	1.77778	1	2.7	0.4008
San Juan Islands	benzo(a)anthracene	0:18	10.2	10	10.8	0.299
San Juan Islands	benzo(a)pyrene	0:18	10.2	10	10.8	0.299
San Juan Islands	benzo(b)fluoranthene	0:18	10.2	10	10.8	0.299
San Juan Islands	benzo(g,h,i)perylene	0:18	28.5333	25.2	30	2.1409
San Juan Islands	benzo(k)fluoranthene	0:18	10.2	10	10.8	0.299
San Juan Islands	benzoic acid	0:18	185.867	155.2	200	20.587
San Juan Islands	benzyl alcohol	0:18	10.2	10	10.8	0.299
San Juan Islands	benzylbutylphthalate	0:18	28.5333	25.2	30	2.1409
San Juan Islands	beta endosulfan	0:12	0.29167	0.2	0.3	0.0289
San Juan Islands	beta hexachlorocyclohexane	0:12	0.1	0.1	0.1	2E-09
San Juan Islands	bis(2-chloroethoxy)methane	0:18	10.2	10	10.8	0.299
San Juan Islands	bis(2-chloroethyl)ether	0:18	10.2	10	10.8	0.299
San Juan Islands	bis(2-chloroisopropyl)ether	0:18	185.867	155.2	200	20.587
San Juan Islands	bis(2-ethylhexyl)phthalate	4:18	52.2056	30	250	54.136
San Juan Islands	carbazole	0:18	10.2	10	10.8	0.299
San Juan Islands	chrysene	0:18	10.2	10	10.8	0.299
San Juan Islands	copper	18:18	0.23556	0.1	0.32	0.0543
San Juan Islands	coprostanol	0:18	521.744	500	700	47.126
San Juan Islands	delta hexachlorocyclohexane	0:12	0.1	0.1	0.1	2E-09
San Juan Islands	dibenzo(a,h)anthracene	0:18	52.1778	50	70	4.7124
San Juan Islands	dibenzofuran	0:18	10.2	10	10.8	0.299
San Juan Islands	Dieldrin	0:12	0.29167	0.2	0.3	0.0289
San Juan Islands	diethylphthalate	0:18	10.2	10	10.8	0.299
San Juan Islands	dimethylphthalate	0:18	28.5333	25.2	30	2.1409
San Juan Islands	di-n-butylphthalate	0:18	78.7222	58	134	23.054
San Juan Islands	di-n-octylphthalate	0:18	10.2	10	10.8	0.299
San Juan Islands	endosulfan sulfate	0:12	0.29167	0.2	0.3	0.0289
San Juan Islands	Endrin	0:12	0.49167	0.4	0.5	0.0289
San Juan Islands	endrin aldehyde	0:12	0.49167	0.4	0.5	0.0289
San Juan Islands	fluoranthene	0:18	5.21111	5	7	0.4727
San Juan Islands	fluorene	0:18	5.21111	5	7	0.4727
San Juan Islands	gamma chlordane	0:12	0.1	0.1	0.1	2E-09
San Juan Islands	gamma hexachlorocyclohexane	0:12	0.1	0.1	0.1	2E-09
San Juan Islands	Heptachlor	0:12	0.38	0.1	0.66	0.2925
San Juan Islands	heptachlor epoxide	0:12	0.78333	0.6	0.8	0.0577
San Juan Islands	hexachlorobenzene	0:18	52.1778	50	70	4.7124
San Juan Islands	hexachlorobutadiene	0:18	28.5333	25.2	30	2.1409
San Juan Islands	hexachlorocyclopentadiene	0:18	185.867	155.2	200	20.587
San Juan Islands	hexachloroethane	0:18	28.5333	25.2	30	2.1409

# Appendix: Quillback Rockfish Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
San Juan Islands	indeno(1,2,3-c,d)pyrene	0:18	28.5333	25.2	30	2.1409
San Juan Islands	isophorone	0:18	5.21111	5	7	0.4727
San Juan Islands	lead	1:18	0.03	0.03	0.03	1E-09
San Juan Islands	Lipids	29:29	0.40141	0.161	1.06	0.1817
San Juan Islands	mercury	36:36	0.24231	0.0818	0.806	0.1564
San Juan Islands	Methoxychlor	0:12	1	1	1	0
San Juan Islands	naphthalene	0:18	5.21111	5	7	0.4727
San Juan Islands	nitrobenzene	0:18	10.2	10	10.8	0.299
San Juan Islands	N-nitrosodimethylamine	0:18	156.5	67	200	61.578
San Juan Islands	N-nitroso-di-n-propylamine	0:18	10.2	10	10.8	0.299
San Juan Islands	N-nitrosodiphenylamine	0:18	28.5333	25.2	30	2.1409
San Juan Islands	pentachlorophenol	0:18	52.1778	50	70	4.7124
San Juan Islands	phenanthrene	0:18	5.21111	5	7	0.4727
San Juan Islands	phenol	0:18	10.2	10	10.8	0.299
San Juan Islands	ppDDD	0:12	0.29167	0.2	0.3	0.0289
San Juan Islands	ppDDE	5:13	0.69385	0.4	1.5	0.3645
San Juan Islands	ppDDT	0:12	0.49167	0.4	0.5	0.0289
San Juan Islands	pyrene	0:18	5.21111	5	7	0.4727
San Juan Islands	Solids	32:32	18.3094	3.8	22.6	6.6426
San Juan Islands	Toxaphene	0:12	10	10	10	0
Seattle Waterfront	Aroclor 1016	0:9	21.8889	20	37	5.6667
Seattle Waterfront	Aroclor 1221	0:9	21.8889	20	37	5.6667
Seattle Waterfront	Aroclor 1232	0:9	21.8889	20	37	5.6667
Seattle Waterfront	Aroclor 1242	0:9	11.4444	10	23	4.3333
Seattle Waterfront	Aroclor 1248	0:9	2.28889	2	4.6	0.8667
Seattle Waterfront	Aroclor 1254	9:9	46.4667	12.6	144	43.096
Seattle Waterfront	Aroclor 1260	9:9	74.9	16.4	212	70.193
Seattle Waterfront	hexachlorobenzene	0:38	0.05011	0.023	0.1	0.0179
Seattle Waterfront	Lipids	52:52	0.23791	0.02	1.21	0.1966
Seattle Waterfront	mercury	35:35	0.39792	0.0761	0.832	0.1982
Seattle Waterfront	opDDD	0:37	0.13346	0.051	0.29	0.0552
Seattle Waterfront	opDDT	0:22	0.18982	0.066	0.39	0.0795
Seattle Waterfront	PCB101	38:38	6.29737	1	22	4.1997
Seattle Waterfront	PCB105	31:32	0.74091	0.019	2.5	0.5046
Seattle Waterfront	PCB110	29:29	1.00655	0.34	2.4	0.626
Seattle Waterfront	PCB118	38:38	3.08447	0.63	11	2.1188
Seattle Waterfront	PCB126	0:38	0.07429	0.019	0.17	0.0337
Seattle Waterfront	PCB128	36:37	1.34689	0.055	6.1	1.222
Seattle Waterfront	PCB138	38:38	3.55842	0.49	13	2.4856
Seattle Waterfront	PCB153	38:38	7.53842	0.86	25	4.844
Seattle Waterfront	PCB156	16:34	0.21791	0.017	0.97	0.2336
Seattle Waterfront	PCB157	1:35	0.04831	0.017	0.18	0.0287
Seattle Waterfront	PCB169	0:38	0.09876	0.036	0.22	0.0411
Seattle Waterfront	PCB170	35:38	1.57258	0.017	5.3	1.0618
Seattle Waterfront	PCB180	38:38	3.55263	0.43	12	2.2565
Seattle Waterfront	PCB189	0:38	0.05453	0.02	0.12	0.0235
Seattle Waterfront	PCB77	1:38	0.09392	0.025	0.54	0.0823

# Appendix: Quillback Rockfish Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Seattle Waterfront	ppDDD	0:38	0.18979	0.09	0.32	0.057
Seattle Waterfront	ppDDE	10:32	0.75369	0.088	6.7	1.2916
Seattle Waterfront	ppDDT	0:33	0.12833	0.047	0.41	0.0781
Seattle Waterfront	Solids	65:65	19.0068	15.7289	20.8	1.0127
Seattle Waterfront	TotalDDT	17:38	1.48865	0.3	6.7	1.5113
Seattle Waterfront	TotalPCB	38:38	33.935	4.93	113	21.526
Sinclair Inlet	1,2,4-trichlorobenzene	0:1	5.4	5.4	5.4	
Sinclair Inlet	1,2-dichlorobenzene	0:1	11	11	11	
Sinclair Inlet	1,2-diphenylhydrazine	0:1	11	11	11	
Sinclair Inlet	1,3-dichlorobenzene	0:1	11	11	11	
Sinclair Inlet	1,4-dichlorobenzene	0:1	11	11	11	
Sinclair Inlet	2,4,5-trichlorophenol	0:1	26	26	26	
Sinclair Inlet	2,4,6-trichlorophenol	0:1	54	54	54	
Sinclair Inlet	2,4-dichlorophenol	0:1	26	26	26	
Sinclair Inlet	2,4-dimethylphenol	0:1	26	26	26	
Sinclair Inlet	2,4-dinitrophenol	0:1	200	200	200	
Sinclair Inlet	2,4-dinitrotoluene	0:1	26	26	26	
Sinclair Inlet	2,6-dinitrotoluene	0:1	5.4	5.4	5.4	
Sinclair Inlet	2-chloronaphthalene	0:1	5.4	5.4	5.4	
Sinclair Inlet	2-chlorophenol	0:1	26	26	26	
Sinclair Inlet	2-methylnaphthalene	0:1	26	26	26	
Sinclair Inlet	2-methylphenol	0:1	26	26	26	
Sinclair Inlet	2-nitroaniline	0:1	26	26	26	
Sinclair Inlet	2-nitrophenol	0:1	26	26	26	
Sinclair Inlet	3-nitroaniline	0:1	1700	1700	1700	
Sinclair Inlet	4,6-dinitro-o-cresol	0:1	200	200	200	
Sinclair Inlet	4-bromophenylphenylether	0:1	54	54	54	
Sinclair Inlet	4-chloro-3-methylphenol	0:1	26	26	26	
Sinclair Inlet	4-chloroaniline	0:1	1700	1700	1700	
Sinclair Inlet	4-chlorophenylphenylether	0:1	54	54	54	
Sinclair Inlet	4-methylphenol	0:1	26	26	26	
Sinclair Inlet	4-nitroaniline	0:1	1700	1700	1700	
Sinclair Inlet	4-nitrophenol	0:1	26	26	26	
Sinclair Inlet	acenaphthene	0:1	5.4	5.4	5.4	
Sinclair Inlet	acenaphthylene	0:1	5.4	5.4	5.4	
Sinclair Inlet	aniline	0:1	11	11	11	
Sinclair Inlet	anthracene	0:1	11	11	11	
Sinclair Inlet	Aroclor 1016	0:3	20	20	20	0
Sinclair Inlet	Aroclor 1221	0:3	20	20	20	0
Sinclair Inlet	Aroclor 1232	0:3	20	20	20	0
Sinclair Inlet	Aroclor 1242	0:3	10	10	10	0
Sinclair Inlet	Aroclor 1248	0:3	2	2	2	0
Sinclair Inlet	Aroclor 1254	3:3	82.6667	52.5	115	31.306
Sinclair Inlet	Aroclor 1260	3:3	60	32.2	99.8	35.362
Sinclair Inlet	benzo(a)anthracene	0:1	11	11	11	
Sinclair Inlet	benzo(a)pyrene	0:1	11	11	11	
Sinclair Inlet	benzo(b)fluoranthene	0:1	11	11	11	

Location	Assay	No. Detected:				SD
		lo. Analyzed	Mean	Min	Max	
Sinclair Inlet	benzo(g,h,i)perylene	0:1	26	26	26	
Sinclair Inlet	benzo(k)fluoranthene	0:1	11	11	11	
Sinclair Inlet	benzoic acid	0:1	200	200	200	
Sinclair Inlet	benzyl alcohol	0:1	11	11	11	
Sinclair Inlet	benzylbutylphthalate	0:1	26	26	26	
Sinclair Inlet	bis(2-chloroethoxy)methane	0:1	11	11	11	
Sinclair Inlet	bis(2-chloroethyl)ether	0:1	11	11	11	
Sinclair Inlet	bis(2-chloroisopropyl)ether	0:1	160	160	160	
Sinclair Inlet	bis(2-ethylhexyl)phthalate	0:1	33	33	33	
Sinclair Inlet	carbazole	0:1	11	11	11	
Sinclair Inlet	chrysene	0:1	11	11	11	
Sinclair Inlet	coprostanol	0:1	540	540	540	
Sinclair Inlet	dibenzo(a,h)anthracene	0:1	54	54	54	
Sinclair Inlet	dibenzofuran	0:1	11	11	11	
Sinclair Inlet	diethylphthalate	0:1	11	11	11	
Sinclair Inlet	dimethylphthalate	0:1	26	26	26	
Sinclair Inlet	di-n-butylphthalate	0:1	67	67	67	
Sinclair Inlet	di-n-octylphthalate	0:1	11	11	11	
Sinclair Inlet	fluoranthene	0:1	5.4	5.4	5.4	
Sinclair Inlet	fluorene	0:1	5.4	5.4	5.4	
Sinclair Inlet	hexachlorobenzene	0:1	54	54	54	
Sinclair Inlet	hexachlorobutadiene	0:1	26	26	26	
Sinclair Inlet	hexachlorocyclopentadiene	0:1	1700	1700	1700	
Sinclair Inlet	hexachloroethane	0:1	26	26	26	
Sinclair Inlet	indeno(1,2,3-c,d)pyrene	0:1	26	26	26	
Sinclair Inlet	isophorone	0:1	5.4	5.4	5.4	
Sinclair Inlet	lead	0:3	0.02	0.02	0.02	3E-10
Sinclair Inlet	Lipids	3:3	0.4419	0.0977	0.697	0.3094
Sinclair Inlet	mercury	3:3	0.81767	0.512	1.06	0.2794
Sinclair Inlet	naphthalene	0:1	5.4	5.4	5.4	
Sinclair Inlet	nitrobenzene	0:1	11	11	11	
Sinclair Inlet	N-nitrosodimethylamine	0:1	67	67	67	
Sinclair Inlet	N-nitroso-di-n-propylamine	0:1	11	11	11	
Sinclair Inlet	N-nitrosodiphenylamine	0:1	26	26	26	
Sinclair Inlet	pentachlorophenol	0:1	54	54	54	
Sinclair Inlet	phenanthrene	0:1	5.4	5.4	5.4	
Sinclair Inlet	phenol	0:1	11	11	11	
Sinclair Inlet	pyrene	0:1	5.4	5.4	5.4	
Sinclair Inlet	Solids	3:3	19.4	17.5	22.5	2.7074
Triton Head	1,2,4-trichlorobenzene	0:8	5.275	5	5.4	0.1832
Triton Head	1,2-dichlorobenzene	0:8	10.525	10	10.8	0.3536
Triton Head	1,2-diphenylhydrazine	0:8	10.525	10	10.8	0.3536
Triton Head	1,3-dichlorobenzene	0:8	10.525	10	10.8	0.3536
Triton Head	1,4-dichlorobenzene	0:8	10.525	10	10.8	0.3536
Triton Head	2,4,5-trichlorophenol	0:8	26.875	25.2	30	1.9477
Triton Head	2,4,6-trichlorophenol	0:8	52.725	50	54	1.7694
Triton Head	2,4-dichlorophenol	0:8	26.875	25.2	30	1.9477

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Triton Head	2,4-dimethylphenol	0:8	26.875	25.2	30	1.9477
Triton Head	2,4-dinitrophenol	0:8	199	194	200	2.1381
Triton Head	2,4-dinitrotoluene	0:8	26.875	25.2	30	1.9477
Triton Head	2,6-dinitrotoluene	0:8	5.275	5	5.4	0.1832
Triton Head	2-chloronaphthalene	0:8	5.275	5	5.4	0.1832
Triton Head	2-chlorophenol	0:8	26.875	25.2	30	1.9477
Triton Head	2-methylnaphthalene	0:8	26.875	25.2	30	1.9477
Triton Head	2-methylphenol	0:8	26.875	25.2	30	1.9477
Triton Head	2-nitroaniline	0:8	26.875	25.2	30	1.9477
Triton Head	2-nitrophenol	0:8	26.875	25.2	30	1.9477
Triton Head	3-nitroaniline	0:6	25.8333	25.2	26	0.3204
Triton Head	4,6-dinitro-o-cresol	0:8	199	194	200	2.1381
Triton Head	4-bromophenylphenylether	0:8	52.725	50	54	1.7694
Triton Head	4-chloro-3-methylphenol	0:8	26.875	25.2	30	1.9477
Triton Head	4-chloroaniline	0:8	26.875	25.2	30	1.9477
Triton Head	4-chlorophenylphenylether	0:8	52.725	50	54	1.7694
Triton Head	4-methylphenol	0:8	26.875	25.2	30	1.9477
Triton Head	4-nitroaniline	0:8	169.2	155.2	200	19.081
Triton Head	4-nitrophenol	0:8	26.875	25.2	30	1.9477
Triton Head	acenaphthene	0:8	5.275	5	5.4	0.1832
Triton Head	acenaphthylene	0:8	5.275	5	5.4	0.1832
Triton Head	Aldrin	0:2	0.3	0.3	0.3	0
Triton Head	alpha chlordane	0:2	0.3	0.3	0.3	0
Triton Head	alpha endosulfan	0:2	0.1	0.1	0.1	0
Triton Head	alpha hexachlorocyclohexane	0:2	0.3	0.3	0.3	0
Triton Head	aniline	0:8	10.525	10	10.8	0.3536
Triton Head	anthracene	0:8	10.525	10	10.8	0.3536
Triton Head	Aroclor 1016	0:2	20	20	20	0
Triton Head	Aroclor 1221	0:2	20	20	20	0
Triton Head	Aroclor 1232	0:2	20	20	20	0
Triton Head	Aroclor 1242	0:2	10	10	10	0
Triton Head	Aroclor 1248	0:2	2	2	2	0
Triton Head	Aroclor 1254	0:2	2	2	2	0
Triton Head	Aroclor 1260	2:2	5.65	4.7	6.6	1.3435
Triton Head	arsenic	8:8	4.3625	2.3	6.6	1.8031
Triton Head	benzo(a)anthracene	0:8	10.525	10	10.8	0.3536
Triton Head	benzo(a)pyrene	0:8	10.525	10	10.8	0.3536
Triton Head	benzo(b)fluoranthene	0:8	10.525	10	10.8	0.3536
Triton Head	benzo(g,h,i)perylene	0:8	26.875	25.2	30	1.9477
Triton Head	benzo(k)fluoranthene	0:8	10.525	10	10.8	0.3536
Triton Head	benzoic acid	0:8	169.2	155.2	200	19.081
Triton Head	benzyl alcohol	0:8	10.525	10	10.8	0.3536
Triton Head	benzylbutylphthalate	0:8	26.875	25.2	30	1.9477
Triton Head	beta endosulfan	0:2	0.3	0.3	0.3	0
Triton Head	beta hexachlorocyclohexane	0:2	0.1	0.1	0.1	0
Triton Head	bis(2-chloroethoxy)methane	0:8	10.525	10	10.8	0.3536
Triton Head	bis(2-chloroethyl)ether	0:8	10.525	10	10.8	0.3536

# Appendix: Quillback Rockfish Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Triton Head	bis(2-chloroisopropyl)ether	0:8	169.2	155.2	200	19.081
Triton Head	bis(2-ethylhexyl)phthalate	4:8	65	30	130	39.911
Triton Head	carbazole	0:8	10.525	10	10.8	0.3536
Triton Head	chrysene	0:8	10.525	10	10.8	0.3536
Triton Head	copper	8:8	0.245	0.2	0.32	0.0532
Triton Head	coprostanol	0:8	527.3	500	540	17.733
Triton Head	delta hexachlorocyclohexane	0:2	0.1	0.1	0.1	0
Triton Head	dibenzo(a,h)anthracene	0:8	52.725	50	54	1.7694
Triton Head	dibenzofuran	0:8	10.525	10	10.8	0.3536
Triton Head	Dieldrin	0:2	0.3	0.3	0.3	0
Triton Head	diethylphthalate	0:8	10.525	10	10.8	0.3536
Triton Head	dimethylphthalate	0:8	26.875	25.2	30	1.9477
Triton Head	di-n-butylphthalate	0:8	68.5	58	100	19.442
Triton Head	di-n-octylphthalate	0:8	10.525	10	10.8	0.3536
Triton Head	endosulfan sulfate	0:2	0.3	0.3	0.3	0
Triton Head	Endrin	0:2	0.5	0.5	0.5	0
Triton Head	endrin aldehyde	0:2	0.5	0.5	0.5	0
Triton Head	fluoranthene	0:8	5.275	5	5.4	0.1832
Triton Head	fluorene	0:8	5.275	5	5.4	0.1832
Triton Head	gamma chlordanes	0:2	0.1	0.1	0.1	0
Triton Head	gamma hexachlorocyclohexane	0:2	0.1	0.1	0.1	0
Triton Head	Heptachlor	0:2	0.1	0.1	0.1	0
Triton Head	heptachlor epoxide	0:2	0.8	0.8	0.8	0
Triton Head	hexachlorobenzene	0:8	52.725	50	54	1.7694
Triton Head	hexachlorobutadiene	0:8	26.875	25.2	30	1.9477
Triton Head	hexachlorocyclopentadiene	0:8	169.2	155.2	200	19.081
Triton Head	hexachloroethane	0:8	26.875	25.2	30	1.9477
Triton Head	indeno(1,2,3-c,d)pyrene	0:8	26.875	25.2	30	1.9477
Triton Head	isophorone	0:8	5.275	5	5.4	0.1832
Triton Head	lead	0:8	0.03	0.03	0.03	4E-10
Triton Head	Lipids	2:2	0.54	0.39	0.69	0.2121
Triton Head	mercury	8:8	0.1825	0.1	0.4	0.107
Triton Head	Methoxychlor	0:2	1	1	1	0
Triton Head	naphthalene	0:8	5.275	5	5.4	0.1832
Triton Head	nitrobenzene	0:8	10.525	10	10.8	0.3536
Triton Head	N-nitrosodimethylamine	0:8	199	194	200	2.1381
Triton Head	N-nitroso-di-n-propylamine	0:8	10.525	10	10.8	0.3536
Triton Head	N-nitrosodiphenylamine	0:8	26.875	25.2	30	1.9477
Triton Head	pentachlorophenol	0:8	52.725	50	54	1.7694
Triton Head	phenanthrene	0:8	5.275	5	5.4	0.1832
Triton Head	phenol	0:8	10.525	10	10.8	0.3536
Triton Head	ppDDD	0:2	0.3	0.3	0.3	0
Triton Head	ppDDE	1:3	0.6	0.5	0.8	0.1732
Triton Head	ppDDT	0:2	0.5	0.5	0.5	0
Triton Head	pyrene	0:8	5.275	5	5.4	0.1832
Triton Head	Solids	6:6	6.3	2.2	22	7.7594
Triton Head	Toxaphene	0:2	10	10	10	0



## **Quillback Rockfish Bile**

Summary of contaminant data for all quillback rockfish bile samples collected by the Puget Sound Ambient Monitoring Program's Fish Component, 1989-1999. "No. Detected" is the number of samples for which an analyte was measured above the Method Detection Limit (MDL). "No. Analyzed" is the total number of samples analyzed for a given analyte. Mean, minimum, maximum, and standard deviation (SD) were computed for analyte and station combination, pooling all years' data. See Figure 2 for station locations.

# Appendix: Quillback Rockfish Bile

Summary statistics for quillback rockfish bile samples, averaged across years from 1989-1999 by location and assay. All biliary analytes were measured above the Method Detection Limit (MDL). Refer to Figure 2 for station locations. All concentrations based on wet wt. FAC analytes in ng/ml bile, protein mg/ml bile.

Location	Assay	No. Detected:				
		No. Analyzed	Mean	Min	Max	SD
Foulweather Bluff	benzo(a)pyrene_FAC	28:28	226	59	822	185
Foulweather Bluff	naphthalene_FAC	28:28	58,595	16,157	217,194	52,541
Foulweather Bluff	Phenanthrene_FAC	28:28	12,474	4,542	51,143	11,120
Foulweather Bluff	Protein	28:28	7	1	25	6
Fuller Wreck	benzo(a)pyrene_FAC	1:1	183	183	183	
Fuller Wreck	naphthalene_FAC	1:1	11,259	11,259	11,259	
Fuller Wreck	Phenanthrene_FAC	1:1	5,687	5,687	5,687	
Fuller Wreck	Protein	1:1	1	1	1	
Harbor Island	benzo(a)pyrene_FAC	9:9	412	173	909	237
Harbor Island	naphthalene_FAC	9:9	70,260	18,305	130,767	45,744
Harbor Island	Phenanthrene_FAC	9:9	19,752	6,989	35,464	11,222
Harbor Island	Protein	9:9	3	1	4	1
Mukilteo-Everett	benzo(a)pyrene_FAC	6:6	220	136	299	77
Mukilteo-Everett	naphthalene_FAC	6:6	39,377	19,785	54,020	15,457
Mukilteo-Everett	Phenanthrene_FAC	6:6	12,125	6,029	17,933	5,001
Mukilteo-Everett	Protein	6:6	6	3	9	3
Myrtle Edwards	benzo(a)pyrene_FAC	7:7	371	71	869	282
Myrtle Edwards	naphthalene_FAC	7:7	87,953	7,364	216,317	73,183
Myrtle Edwards	Phenanthrene_FAC	7:7	23,900	2,929	57,500	19,852
Myrtle Edwards	Protein	7:7	5	1	15	5
Orcas Island	benzo(a)pyrene_FAC	5:5	69	55	91	15
Orcas Island	naphthalene_FAC	5:5	17,481	11,806	19,813	3,268
Orcas Island	Phenanthrene_FAC	5:5	4,313	2,949	4,981	792
Orcas Island	Protein	5:5	1	0	4	2
Port Gardner	benzo(a)pyrene_FAC	1:1	33	33	33	
Port Gardner	naphthalene_FAC	1:1	13,201	13,201	13,201	
Port Gardner	Phenanthrene_FAC	1:1	1,928	1,928	1,928	
Port Gardner	Protein	1:1	2	2	2	
Seattle Waterfront	benzo(a)pyrene_FAC	37:37	572	103	3,770	610
Seattle Waterfront	naphthalene_FAC	37:37	134,935	10,731	725,810	130,903
Seattle Waterfront	Phenanthrene_FAC	37:37	33,019	4,541	185,866	31,693
Seattle Waterfront	Protein	37:37	3	1	20	3

## **Copper Rockfish Muscle**

Summary of contaminant data for all copper rockfish muscle samples collected by the Puget Sound Ambient Monitoring Program's Fish Component, 1989-1999. "No. Detected" is the number of samples for which an analyte was measured above the Method Detection Limit (MDL). "No. Analyzed" is the total number of samples analyzed for a given analyte. Mean, minimum, maximum, and standard deviation (SD) were computed for analyte and station combination, pooling all years' data. See Figure 2 for station locations.

# Appendix: Copper Rockfish Muscle

Summary statistics for copper rockfish muscle tissue samples, averaged across years from 1989-1999 by location and assay. A value of the median of the Method Detection Limit (MDL) was used in calculations when an analyte was undetected. Refer to Figure 2 for station locations. Shaded rows indicate location:assay combinations wherein at least one sample had a measured concentration above the MDL. Unshaded rows indicate combinations that had no measured concentrations above the MDL. All concentrations are based on wet weight. All organics in µg/kg, all elemental metals in mg/kg, all lipids and solids in %.

Location	Assay	No. Detected:				
		No. Analyzed	Mean	Min	Max	SD
Blakely Rocks	1,2,4-trichlorobenzene	0:9	5.51	5.20	5.60	0.15
Blakely Rocks	1,2-dichlorobenzene	0:9	7.27	5.60	10.80	2.50
Blakely Rocks	1,2-diphenylhydrazine	0:9	18.20	10.40	22.00	5.70
Blakely Rocks	1,3-dichlorobenzene	0:9	7.27	5.60	10.80	2.50
Blakely Rocks	1,4-dichlorobenzene	0:9	7.27	5.60	10.80	2.50
Blakely Rocks	2,4,5-trichlorophenol	0:9	37.89	25.20	44.00	9.17
Blakely Rocks	2,4,6-trichlorophenol	0:9	47.09	44.00	54.00	4.65
Blakely Rocks	2,4-dichlorophenol	0:9	15.89	11.00	26.00	7.34
Blakely Rocks	2,4-dimethylphenol	0:9	15.89	11.00	26.00	7.34
Blakely Rocks	2,4-dinitrophenol	0:3	197.33	194.00	200.00	3.06
Blakely Rocks	2,4-dinitrotoluene	0:9	11.49	4.40	26.00	10.64
Blakely Rocks	2,6-dinitrotoluene	0:9	4.71	4.40	5.40	0.47
Blakely Rocks	2-chloronaphthalene	0:9	5.51	5.20	5.60	0.15
Blakely Rocks	2-chlorophenol	0:9	23.22	22.00	26.00	1.85
Blakely Rocks	2-methylnaphthalene	0:9	19.89	17.00	26.00	4.34
Blakely Rocks	2-methylphenol	0:9	15.89	11.00	26.00	7.34
Blakely Rocks	2-nitroaniline	0:9	30.56	25.20	33.00	3.67
Blakely Rocks	2-nitrophenol	0:9	15.89	11.00	26.00	7.34
Blakely Rocks	3,3-dichlorobenzidine	0:6	11.00	11.00	11.00	0.00
Blakely Rocks	3-nitroaniline	0:9	30.56	25.20	33.00	3.67
Blakely Rocks	4,6-dinitro-o-cresol	0:3	197.33	194.00	200.00	3.06
Blakely Rocks	4-bromophenylphenylether	0:9	19.96	3.30	54.00	24.99
Blakely Rocks	4-chloro-3-methylphenol	0:3	25.67	25.20	26.00	0.42
Blakely Rocks	4-chloroaniline	0:9	23.22	22.00	26.00	1.85
Blakely Rocks	4-chlorophenylphenylether	0:9	21.49	5.60	54.00	23.84
Blakely Rocks	4-methylphenol	0:9	15.89	11.00	26.00	7.34
Blakely Rocks	4-nitroaniline	0:9	74.62	33.00	160.00	62.45
Blakely Rocks	4-nitrophenol	0:3	25.67	25.20	26.00	0.42
Blakely Rocks	acenaphthene	0:9	4.71	4.40	5.40	0.47
Blakely Rocks	acenaphthylene	0:9	5.51	5.20	5.60	0.15
Blakely Rocks	aniline	0:9	18.20	10.40	22.00	5.70
Blakely Rocks	anthracene	0:9	7.27	5.60	10.80	2.50
Blakely Rocks	arsenic	9:9	1.21	0.29	2.04	0.70
Blakely Rocks	benzo(a)anthracene	0:9	7.27	5.60	10.80	2.50
Blakely Rocks	benzo(a)pyrene	0:9	10.87	10.40	11.00	0.22
Blakely Rocks	benzo(b)fluoranthene	0:9	14.87	10.40	17.00	3.20
Blakely Rocks	benzo(g,h,i)perylene	0:9	15.89	11.00	26.00	7.34
Blakely Rocks	benzo(k)fluoranthene	0:9	14.87	10.40	17.00	3.20
Blakely Rocks	benzoic acid	0:9	74.62	33.00	160.00	62.45
Blakely Rocks	benzyl alcohol	0:9	10.87	10.40	11.00	0.22

# Appendix: Copper Rockfish Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Blakely Rocks	benzylbutylphthalate	0:9	12.29	5.60	26.00	10.04
Blakely Rocks	bis(2-chloroethoxy)methane	0:9	10.87	10.40	11.00	0.22
Blakely Rocks	bis(2-chloroethyl)ether	0:9	7.27	5.60	10.80	2.50
Blakely Rocks	bis(2-chloroisopropyl)ether	0:9	67.29	22.00	160.00	67.94
Blakely Rocks	bis(2-ethylhexyl)phthalate	2:9	27.62	5.60	130.00	41.75
Blakely Rocks	carbazole	0:3	10.60	10.40	10.80	0.20
Blakely Rocks	chrysene	0:9	7.27	5.60	10.80	2.50
Blakely Rocks	copper	7:7	0.23	0.13	0.30	0.06
Blakely Rocks	coprostanol	0:3	532.80	523.80	540.00	8.25
Blakely Rocks	dibenzo(a,h)anthracene	0:9	29.09	17.00	54.00	18.14
Blakely Rocks	dibenzofuran	0:9	10.87	10.40	11.00	0.22
Blakely Rocks	diethylphthalate	1:9	37.31	10.40	54.00	20.08
Blakely Rocks	dimethylphthalate	0:9	10.76	3.30	26.00	11.19
Blakely Rocks	di-n-butylphthalate	0:9	26.67	11.00	58.00	23.50
Blakely Rocks	di-n-octylphthalate	0:9	7.27	5.60	10.80	2.50
Blakely Rocks	fluoranthene	0:9	6.24	5.20	6.70	0.69
Blakely Rocks	fluorene	0:9	5.51	5.20	5.60	0.15
Blakely Rocks	hexachlorobenzene	0:9	21.49	5.60	54.00	23.84
Blakely Rocks	hexachlorobutadiene	0:9	15.89	11.00	26.00	7.34
Blakely Rocks	hexachlorocyclopentadiene	0:9	59.96	11.00	160.00	73.44
Blakely Rocks	hexachloroethane	0:9	15.89	11.00	26.00	7.34
Blakely Rocks	indeno(1,2,3-c,d)pyrene	0:9	15.89	11.00	26.00	7.34
Blakely Rocks	isophorone	0:9	9.11	5.20	11.00	2.83
Blakely Rocks	lead	0:9	0.031	0.020	0.090	0.023
Blakely Rocks	mercury	9:9	0.123	0.060	0.300	0.077
Blakely Rocks	naphthalene	0:9	13.11	5.20	17.00	5.83
Blakely Rocks	nitrobenzene	0:9	10.87	10.40	11.00	0.22
Blakely Rocks	N-nitrosodimethylamine	0:9	87.78	33.00	200.00	82.18
Blakely Rocks	N-nitroso-di-n-propylamine	0:9	10.87	10.40	11.00	0.22
Blakely Rocks	N-nitrosodiphenylamine	0:9	15.89	11.00	26.00	7.34
Blakely Rocks	pentachlorophenol	0:9	25.09	11.00	54.00	21.14
Blakely Rocks	phenanthrene	5:9	7.60	5.20	9.20	1.73
Blakely Rocks	phenol	0:9	25.53	10.40	33.00	11.20
Blakely Rocks	ppDDE	6:6	0.67	0.30	1.40	0.44
Blakely Rocks	pyrene	0:9	5.51	5.20	5.60	0.15
Blakely Rocks	solids	9:9	15.7	3.0	23.0	8.6
Day Island	1,2,4-trichlorobenzene	0:16	5.09	5.00	5.40	0.15
Day Island	1,2-dichlorobenzene	0:16	10.16	10.00	10.60	0.26
Day Island	1,2-diphenylhydrazine	0:16	10.16	10.00	10.60	0.26
Day Island	1,3-dichlorobenzene	0:16	10.16	10.00	10.60	0.26
Day Island	1,4-dichlorobenzene	0:16	10.16	10.00	10.60	0.26
Day Island	2,4,5-trichlorophenol	0:16	28.59	25.20	30.00	2.17
Day Island	2,4,6-trichlorophenol	0:16	50.91	50.00	53.40	1.42
Day Island	2,4-dichlorophenol	0:16	28.59	25.20	30.00	2.17
Day Island	2,4-dimethylphenol	0:16	28.59	25.20	30.00	2.17
Day Island	2,4-dinitrophenol	0:16	198.75	194.00	200.00	2.18
Day Island	2,4-dinitrotoluene	0:16	28.59	25.20	30.00	2.17

## Appendix: Copper Rockfish Muscle

Location	Assay	No. Detected:					
		lo. Analyzed	Mean	Min	Max	SD	
Day Island	2,6-dinitrotoluene	0:16	5.09	5.00	5.40	0.15	
Day Island	2-chloronaphthalene	0:16	5.09	5.00	5.40	0.15	
Day Island	2-chlorophenol	0:16	28.59	25.20	30.00	2.17	
Day Island	2-methylnaphthalene	0:16	28.59	25.20	30.00	2.17	
Day Island	2-methylphenol	0:16	28.59	25.20	30.00	2.17	
Day Island	2-nitroaniline	0:16	28.59	25.20	30.00	2.17	
Day Island	2-nitrophenol	0:16	28.59	25.20	30.00	2.17	
Day Island	3-nitroaniline	0:10	27.74	25.20	30.00	2.39	
Day Island	4,6-dinitro-o-cresol	0:16	198.75	194.00	200.00	2.18	
Day Island	4-bromophenylphenylether	0:16	50.91	50.00	53.40	1.42	
Day Island	4-chloro-3-methylphenol	0:16	28.59	25.20	30.00	2.17	
Day Island	4-chloroaniline	0:16	28.59	25.20	30.00	2.17	
Day Island	4-chlorophenylphenylether	0:16	50.91	50.00	53.40	1.42	
Day Island	4-methylphenol	0:16	28.59	25.20	30.00	2.17	
Day Island	4-nitroaniline	0:16	144.94	67.00	200.00	57.32	
Day Island	4-nitrophenol	0:16	28.59	25.20	30.00	2.17	
Day Island	acenaphthene	0:16	5.09	5.00	5.40	0.15	
Day Island	acenaphthylene	0:16	5.09	5.00	5.40	0.15	
Day Island	Aldrin	0:11	0.30	0.30	0.30	0.00	
Day Island	alpha chlordane	0:11	0.30	0.30	0.30	0.00	
Day Island	alpha endosulfan	0:11	0.10	0.10	0.10	0.00	
Day Island	alpha hexachlorocyclohexane	0:11	0.30	0.30	0.30	0.00	
Day Island	aniline	0:16	10.16	10.00	10.60	0.26	
Day Island	anthracene	0:16	10.16	10.00	10.60	0.26	
Day Island	Aroclor 1016	0:11	20.00	20.00	20.00	0.00	
Day Island	Aroclor 1221	0:11	20.00	20.00	20.00	0.00	
Day Island	Aroclor 1232	0:11	20.00	20.00	20.00	0.00	
Day Island	Aroclor 1242	0:11	10.00	10.00	10.00	0.00	
Day Island	Aroclor 1248	0:11	2.00	2.00	2.00	0.00	
Day Island	Aroclor 1254	0:11	2.00	2.00	2.00	0.00	
Day Island	Aroclor 1260	11:11	6.21	3.90	12.00	2.37	
Day Island	arsenic	18:18	1.90	0.36	2.70	0.65	
Day Island	benzo(a)anthracene	0:16	10.16	10.00	10.60	0.26	
Day Island	benzo(a)pyrene	0:16	10.16	10.00	10.60	0.26	
Day Island	benzo(b)fluoranthene	0:16	10.16	10.00	10.60	0.26	
Day Island	benzo(g,h,i)perylene	0:16	28.59	25.20	30.00	2.17	
Day Island	benzo(k)fluoranthene	0:16	10.16	10.00	10.60	0.26	
Day Island	benzoic acid	0:16	186.50	155.20	200.00	20.70	
Day Island	benzyl alcohol	0:16	10.16	10.00	10.60	0.26	
Day Island	benzylbutylphthalate	0:16	28.59	25.20	30.00	2.17	
Day Island	beta endosulfan	0:11	0.30	0.30	0.30	0.00	
Day Island	beta hexachlorocyclohexane	0:11	0.10	0.10	0.10	0.00	
Day Island	bis(2-chloroethoxy)methane	0:16	10.16	10.00	10.60	0.26	
Day Island	bis(2-chloroethyl)ether	0:16	10.16	10.00	10.60	0.26	
Day Island	bis(2-chloroisopropyl)ether	0:16	186.50	155.20	200.00	20.70	
Day Island	bis(2-ethylhexyl)phthalate	3:16	55.00	30.00	210.00	59.05	
Day Island	carbazole	0:16	10.16	10.00	10.60	0.26	

# Appendix: Copper Rockfish Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Day Island	chrysene	0:16	10.16	10.00	10.60	0.26
Day Island	copper	17:17	0.23	0.20	0.30	0.04
Day Island	coprostanol	0:16	509.13	500.00	534.60	14.25
Day Island	delta hexachlorocyclohexane	0:11	0.10	0.10	0.10	0.00
Day Island	dibenzo(a,h)anthracene	0:16	50.91	50.00	53.40	1.42
Day Island	dibenzofuran	0:16	10.16	10.00	10.60	0.26
Day Island	Dieldrin	1:11	0.31	0.30	0.39	0.03
Day Island	diethylphthalate	0:16	10.16	10.00	10.60	0.26
Day Island	dimethylphthalate	0:16	28.59	25.20	30.00	2.17
Day Island	di-n-butylphthalate	0:16	76.56	58.00	100.00	19.11
Day Island	di-n-octylphthalate	0:16	10.16	10.00	10.60	0.26
Day Island	endosulfan sulfate	0:11	0.30	0.30	0.30	0.00
Day Island	Endrin	0:11	0.50	0.50	0.50	0.00
Day Island	endrin aldehyde	0:11	0.50	0.50	0.50	0.00
Day Island	fluoranthene	0:16	5.09	5.00	5.40	0.15
Day Island	fluorene	0:16	5.09	5.00	5.40	0.15
Day Island	gamma chlordane	0:11	0.10	0.10	0.10	0.00
Day Island	gamma hexachlorocyclohexane	0:11	0.10	0.10	0.10	0.00
Day Island	heptachlor	0:11	0.35	0.10	0.66	0.29
Day Island	heptachlor epoxide	0:11	0.80	0.80	0.80	0.00
Day Island	hexachlorobenzene	0:16	50.91	50.00	53.40	1.42
Day Island	hexachlorobutadiene	0:16	28.59	25.20	30.00	2.17
Day Island	hexachlorocyclopentadiene	0:16	186.50	155.20	200.00	20.70
Day Island	hexachloroethane	0:16	28.59	25.20	30.00	2.17
Day Island	indeno(1,2,3-c,d)pyrene	0:16	28.59	25.20	30.00	2.17
Day Island	isophorone	0:16	5.09	5.00	5.40	0.15
Day Island	lead	0:18	0.029	0.020	0.030	0.003
Day Island	lipids	11:11	0.43	0.21	0.79	0.21
Day Island	mercury	18:18	0.095	0.040	0.200	0.036
Day Island	meythoxychlor	0:11	1.00	1.00	1.00	0.00
Day Island	naphthalene	0:16	5.09	5.00	5.40	0.15
Day Island	nitrobenzene	0:16	10.16	10.00	10.60	0.26
Day Island	N-nitrosodimethylamine	0:16	157.19	67.00	200.00	62.83
Day Island	N-nitroso-di-n-propylamine	0:16	10.16	10.00	10.60	0.26
Day Island	N-nitrosodiphenylamine	0:16	28.59	25.20	30.00	2.17
Day Island	pentachlorophenol	0:16	50.91	50.00	53.40	1.42
Day Island	phenanthrene	0:16	5.09	5.00	5.40	0.15
Day Island	phenol	0:16	10.16	10.00	10.60	0.26
Day Island	ppDDD	0:11	0.30	0.30	0.30	0.00
Day Island	ppDDE	4:11	0.68	0.50	1.20	0.28
Day Island	ppDDT	0:11	0.50	0.50	0.50	0.00
Day Island	pyrene	0:16	5.09	5.00	5.40	0.15
Day Island	solids	11:11	15.8	3.4	24.0	8.8
Day Island	Toxaphene	0:11	10.00	10.00	10.00	0.00
Mukilteo-Everett	Aldrin	0:5	0.26	0.26	0.26	0.00
Mukilteo-Everett	alpha chlordane	0:5	0.26	0.26	0.26	0.00
Mukilteo-Everett	alpha endosulfan	0:5	0.13	0.13	0.13	0.00

# Appendix: Copper Rockfish Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Mukilteo-Everett	alpha hexachlorocyclohexane	0:5	0.26	0.26	0.26	0.00
Mukilteo-Everett	Aroclor 1016	0:5	20.00	20.00	20.00	0.00
Mukilteo-Everett	Aroclor 1221	0:5	20.00	20.00	20.00	0.00
Mukilteo-Everett	Aroclor 1232	0:5	20.00	20.00	20.00	0.00
Mukilteo-Everett	Aroclor 1242	0:5	10.00	10.00	10.00	0.00
Mukilteo-Everett	Aroclor 1248	0:5	2.00	2.00	2.00	0.00
Mukilteo-Everett	Aroclor 1254	5:5	9.25	8.58	10.50	0.79
Mukilteo-Everett	Aroclor 1260	5:5	7.37	5.10	12.00	2.67
Mukilteo-Everett	beta endosulfan	0:5	0.26	0.26	0.26	0.00
Mukilteo-Everett	beta hexachlorocyclohexane	0:5	0.13	0.13	0.13	0.00
Mukilteo-Everett	delta hexachlorocyclohexane	0:5	0.13	0.13	0.13	0.00
Mukilteo-Everett	Dieldrin	0:5	0.26	0.26	0.26	0.00
Mukilteo-Everett	endosulfan sulfate	0:5	0.26	0.26	0.26	0.00
Mukilteo-Everett	Endrin	0:5	0.52	0.52	0.52	0.00
Mukilteo-Everett	endrin aldehyde	0:5	0.52	0.52	0.52	0.00
Mukilteo-Everett	gamma chlordane	0:5	0.13	0.13	0.13	0.00
Mukilteo-Everett	gamma hexachlorocyclohexane	0:5	0.13	0.13	0.13	0.00
Mukilteo-Everett	heptachlor	0:5	0.80	0.80	0.80	0.00
Mukilteo-Everett	heptachlor epoxide	0:5	0.80	0.80	0.80	0.00
Mukilteo-Everett	lead	0:5	0.020	0.020	0.020	0.000
Mukilteo-Everett	mercury	5:5	0.210	0.116	0.386	0.111
Mukilteo-Everett	meythoxychlor	0:5	1.00	1.00	1.00	0.00
Mukilteo-Everett	ppDDD	0:5	0.26	0.26	0.26	0.00
Mukilteo-Everett	ppDDE	5:5	1.47	1.16	1.88	0.26
Mukilteo-Everett	ppDDT	0:5	0.52	0.52	0.52	0.00
Mukilteo-Everett	solids	5:5	19.8	19.1	20.4	0.5
Mukilteo-Everett	Toxaphene	0:5	14.00	14.00	14.00	0.00
Outer Sinclair Inlet	Aroclor 1016	0:1	20.00	20.00	20.00	
Outer Sinclair Inlet	Aroclor 1221	0:1	20.00	20.00	20.00	
Outer Sinclair Inlet	Aroclor 1232	0:1	20.00	20.00	20.00	
Outer Sinclair Inlet	Aroclor 1242	0:1	10.00	10.00	10.00	
Outer Sinclair Inlet	Aroclor 1248	0:1	2.00	2.00	2.00	
Outer Sinclair Inlet	Aroclor 1254	1:1	8.13	8.13	8.13	
Outer Sinclair Inlet	Aroclor 1260	1:1	9.31	9.31	9.31	
Outer Sinclair Inlet	hexachlorobenzene	0:1	0.06	0.06	0.06	
Outer Sinclair Inlet	lead	0:1	0.020	0.020	0.020	
Outer Sinclair Inlet	lipids	1:1	0.19	0.19	0.19	
Outer Sinclair Inlet	mercury	1:1	0.508	0.508	0.508	
Outer Sinclair Inlet	opDDD	0:1	0.16	0.16	0.16	
Outer Sinclair Inlet	PCB101	1:1	0.94	0.94	0.94	
Outer Sinclair Inlet	PCB110	0:1	0.06	0.06	0.06	
Outer Sinclair Inlet	PCB118	1:1	0.73	0.73	0.73	
Outer Sinclair Inlet	PCB126	0:1	0.09	0.09	0.09	
Outer Sinclair Inlet	PCB138	1:1	0.69	0.69	0.69	
Outer Sinclair Inlet	PCB153	1:1	1.20	1.20	1.20	
Outer Sinclair Inlet	PCB156	0:1	0.05	0.05	0.05	
Outer Sinclair Inlet	PCB157	0:1	0.06	0.06	0.06	



# Appendix: Copper Rockfish Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Outer Sinclair Inlet	PCB169	0:1	0.12	0.12	0.12	
Outer Sinclair Inlet	PCB77	0:1	0.10	0.10	0.10	
Outer Sinclair Inlet	ppDDD	0:1	0.18	0.18	0.18	
Outer Sinclair Inlet	ppDDT	0:1	0.22	0.22	0.22	
Outer Sinclair Inlet	solids	2:2	17.2	16.3	18.1	1.3
Outer Sinclair Inlet	TotalDDT	0:1				
Outer Sinclair Inlet	TotalPCB	1:1	10.00	10.00	10.00	
Port Gardner	hexachlorobenzene	0:2	0.06	0.04	0.08	0.03
Port Gardner	lipids	2:2	0.26	0.19	0.33	0.10
Port Gardner	mercury	2:2	0.414	0.138	0.690	0.390
Port Gardner	opDDD	0:2	0.19	0.12	0.25	0.09
Port Gardner	opDDT	0:1	0.28	0.28	0.28	
Port Gardner	PCB101	2:2	2.70	2.00	3.40	0.99
Port Gardner	PCB118	2:2	1.90	1.50	2.30	0.57
Port Gardner	PCB126	0:2	0.09	0.07	0.12	0.04
Port Gardner	PCB128	1:1	0.52	0.52	0.52	
Port Gardner	PCB138	2:2	1.15	0.59	1.70	0.78
Port Gardner	PCB153	2:2	2.60	1.90	3.30	0.99
Port Gardner	PCB156	0:2	0.05	0.03	0.08	0.03
Port Gardner	PCB157	0:2	0.06	0.04	0.08	0.03
Port Gardner	PCB169	0:2	0.12	0.09	0.16	0.05
Port Gardner	PCB170	1:1	0.72	0.72	0.72	
Port Gardner	PCB180	2:2	0.87	0.81	0.93	0.08
Port Gardner	PCB189	0:2	0.07	0.05	0.09	0.03
Port Gardner	PCB77	0:2	0.10	0.07	0.13	0.04
Port Gardner	ppDDD	0:2	0.20	0.12	0.27	0.11
Port Gardner	ppDDE	2:2	1.59	0.98	2.20	0.86
Port Gardner	ppDDT	0:2	0.15	0.12	0.17	0.04
Port Gardner	solids	4:4	19.5	17.8	20.5	1.2
Port Gardner	TotalDDT	2:2	1.59	0.98	2.20	0.86
Port Gardner	TotalPCB	2:2	13.00	10.00	16.00	4.24
Triton Head	1,2,4-trichlorobenzene	0:1	5.00	5.00	5.00	
Triton Head	1,2-dichlorobenzene	0:1	10.00	10.00	10.00	
Triton Head	1,2-diphenylhydrazine	0:1	10.00	10.00	10.00	
Triton Head	1,3-dichlorobenzene	0:1	10.00	10.00	10.00	
Triton Head	1,4-dichlorobenzene	0:1	10.00	10.00	10.00	
Triton Head	2,4,5-trichlorophenol	0:1	30.00	30.00	30.00	
Triton Head	2,4,6-trichlorophenol	0:1	50.00	50.00	50.00	
Triton Head	2,4-dichlorophenol	0:1	30.00	30.00	30.00	
Triton Head	2,4-dimethylphenol	0:1	30.00	30.00	30.00	
Triton Head	2,4-dinitrophenol	0:1	200.00	200.00	200.00	
Triton Head	2,4-dinitrotoluene	0:1	30.00	30.00	30.00	
Triton Head	2,6-dinitrotoluene	0:1	5.00	5.00	5.00	
Triton Head	2-chloronaphthalene	0:1	5.00	5.00	5.00	
Triton Head	2-chlorophenol	0:1	30.00	30.00	30.00	
Triton Head	2-methylnaphthalene	0:1	30.00	30.00	30.00	
Triton Head	2-methylphenol	0:1	30.00	30.00	30.00	

## Appendix: Copper Rockfish Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Triton Head	2-nitroaniline	0:1	30.00	30.00	30.00	
Triton Head	2-nitrophenol	0:1	30.00	30.00	30.00	
Triton Head	4,6-dinitro-o-cresol	0:1	200.00	200.00	200.00	
Triton Head	4-bromophenylphenylether	0:1	50.00	50.00	50.00	
Triton Head	4-chloro-3-methylphenol	0:1	30.00	30.00	30.00	
Triton Head	4-chloroaniline	0:1	30.00	30.00	30.00	
Triton Head	4-chlorophenylphenylether	0:1	50.00	50.00	50.00	
Triton Head	4-methylphenol	0:1	30.00	30.00	30.00	
Triton Head	4-nitroaniline	0:1	200.00	200.00	200.00	
Triton Head	4-nitrophenol	0:1	30.00	30.00	30.00	
Triton Head	acenaphthene	0:1	5.00	5.00	5.00	
Triton Head	acenaphthylene	0:1	5.00	5.00	5.00	
Triton Head	Aldrin	0:1	0.30	0.30	0.30	
Triton Head	alpha chlordane	0:1	0.30	0.30	0.30	
Triton Head	alpha endosulfan	0:1	0.10	0.10	0.10	
Triton Head	alpha hexachlorocyclohexane	0:1	0.30	0.30	0.30	
Triton Head	aniline	0:1	10.00	10.00	10.00	
Triton Head	anthracene	0:1	10.00	10.00	10.00	
Triton Head	Aroclor 1016	0:1	20.00	20.00	20.00	
Triton Head	Aroclor 1221	0:1	20.00	20.00	20.00	
Triton Head	Aroclor 1232	0:1	20.00	20.00	20.00	
Triton Head	Aroclor 1242	0:1	10.00	10.00	10.00	
Triton Head	Aroclor 1248	0:1	2.00	2.00	2.00	
Triton Head	Aroclor 1254	0:1	2.00	2.00	2.00	
Triton Head	Aroclor 1260	1:1	4.50	4.50	4.50	
Triton Head	arsenic	1:1	4.80	4.80	4.80	
Triton Head	benzo(a)anthracene	0:1	10.00	10.00	10.00	
Triton Head	benzo(a)pyrene	0:1	10.00	10.00	10.00	
Triton Head	benzo(b)fluoranthene	0:1	10.00	10.00	10.00	
Triton Head	benzo(g,h,i)perylene	0:1	30.00	30.00	30.00	
Triton Head	benzo(k)fluoranthene	0:1	10.00	10.00	10.00	
Triton Head	benzoic acid	0:1	200.00	200.00	200.00	
Triton Head	benzyl alcohol	0:1	10.00	10.00	10.00	
Triton Head	benzylbutylphthalate	0:1	30.00	30.00	30.00	
Triton Head	beta endosulfan	0:1	0.30	0.30	0.30	
Triton Head	beta hexachlorocyclohexane	0:1	0.10	0.10	0.10	
Triton Head	bis(2-chloroethoxy)methane	0:1	10.00	10.00	10.00	
Triton Head	bis(2-chloroethyl)ether	0:1	10.00	10.00	10.00	
Triton Head	bis(2-chloroisopropyl)ether	0:1	200.00	200.00	200.00	
Triton Head	bis(2-ethylhexyl)phthalate	0:1	30.00	30.00	30.00	
Triton Head	carbazole	0:1	10.00	10.00	10.00	
Triton Head	chrysene	0:1	10.00	10.00	10.00	
Triton Head	copper	1:1	0.20	0.20	0.20	
Triton Head	coprostanol	0:1	500.00	500.00	500.00	
Triton Head	delta hexachlorocyclohexane	0:1	0.10	0.10	0.10	
Triton Head	dibenzo(a,h)anthracene	0:1	50.00	50.00	50.00	
Triton Head	dibenzofuran	0:1	10.00	10.00	10.00	

# Appendix: Copper Rockfish Muscle

Location	Assay	No. Detected:		Mean	Min	Max	SD
		lo.	lo. Analyzed				
Triton Head	Dieldrin	0:1		0.30	0.30	0.30	
Triton Head	diethylphthalate	0:1		10.00	10.00	10.00	
Triton Head	dimethylphthalate	0:1		30.00	30.00	30.00	
Triton Head	di-n-butylphthalate	0:1		100.00	100.00	100.00	
Triton Head	di-n-octylphthalate	0:1		10.00	10.00	10.00	
Triton Head	endosulfan sulfate	0:1		0.30	0.30	0.30	
Triton Head	Endrin	0:1		0.50	0.50	0.50	
Triton Head	endrin aldehyde	0:1		0.50	0.50	0.50	
Triton Head	fluoranthene	0:1		5.00	5.00	5.00	
Triton Head	fluorene	0:1		5.00	5.00	5.00	
Triton Head	gamma chlordane	0:1		0.10	0.10	0.10	
Triton Head	gamma hexachlorocyclohexane	0:1		0.10	0.10	0.10	
Triton Head	heptachlor	0:1		0.10	0.10	0.10	
Triton Head	heptachlor epoxide	0:1		0.80	0.80	0.80	
Triton Head	hexachlorobenzene	0:1		50.00	50.00	50.00	
Triton Head	hexachlorobutadiene	0:1		30.00	30.00	30.00	
Triton Head	hexachlorocyclopentadiene	0:1		200.00	200.00	200.00	
Triton Head	hexachloroethane	0:1		30.00	30.00	30.00	
Triton Head	indeno(1,2,3-c,d)pyrene	0:1		30.00	30.00	30.00	
Triton Head	isophorone	0:1		5.00	5.00	5.00	
Triton Head	lead	0:1		0.030	0.030	0.030	
Triton Head	lipids	1:1		0.35	0.35	0.35	
Triton Head	mercury	1:1		0.170	0.170	0.170	
Triton Head	meythoxychlor	0:1		1.00	1.00	1.00	
Triton Head	naphthalene	0:1		5.00	5.00	5.00	
Triton Head	nitrobenzene	0:1		10.00	10.00	10.00	
Triton Head	N-nitrosodimethylamine	0:1		200.00	200.00	200.00	
Triton Head	N-nitroso-di-n-propylamine	0:1		10.00	10.00	10.00	
Triton Head	N-nitrosodiphenylamine	0:1		30.00	30.00	30.00	
Triton Head	pentachlorophenol	0:1		50.00	50.00	50.00	
Triton Head	phenanthrene	0:1		5.00	5.00	5.00	
Triton Head	phenol	0:1		10.00	10.00	10.00	
Triton Head	ppDDD	0:1		0.30	0.30	0.30	
Triton Head	ppDDE	0:1		0.50	0.50	0.50	
Triton Head	ppDDT	0:1		0.50	0.50	0.50	
Triton Head	pyrene	0:1		5.00	5.00	5.00	
Triton Head	solids	1:1		22.0	22.0	22.0	
Triton Head	Toxaphene	0:1		10.00	10.00	10.00	

## **Copper Rockfish Bile**

Summary of contaminant data for all copper rockfish bile samples collected by the Puget Sound Ambient Monitoring Program's Fish Component, 1989-1999. "No. Detected" is the number of samples for which an analyte was measured above the Method Detection Limit (MDL). "No. Analyzed" is the total number of samples analyzed for a given analyte. Mean, minimum, maximum, and standard deviation (SD) were computed for analyte and station combination, pooling all years' data. See Figure 2 for station locations.

# Appendix: Copper Rockfish Bile

Summary statistics for copper rockfish bile samples, averaged across years from 1989-1999 by location and assay. All biliary analytes were measured above the Method Detection Limit (MDL). Refer to Figure 2 for station locations. All concentrations based on wet wt. FAC analytes in ng/ml bile, protein mg/ml bile.

Location	Assay	No. Detected:			SD	
		No. Analyzed	Mean	Min		Max
Outer Sinclair Inlet	benzo(a)pyrene_FAC	1:1	2,346	2,346	2,346	
Outer Sinclair Inlet	naphthalene_FAC	1:1	288,654	288,654	288,654	
Outer Sinclair Inlet	Phenanthrene_FAC	1:1	84,701	84,701	84,701	
Outer Sinclair Inlet	Protein	1:1	5	5	5	
Port Gardner	benzo(a)pyrene_FAC	2:2	241	222	259	26
Port Gardner	naphthalene_FAC	2:2	58,930	55,328	62,532	5,094
Port Gardner	Phenanthrene_FAC	2:2	13,804	12,242	15,365	2,208
Port Gardner	Protein	2:2	5	3	7	3

## **Brown Rockfish Muscle**

Summary of contaminant data for all brown rockfish muscle samples collected by the Puget Sound Ambient Monitoring Program's Fish Component, 1989-1999. "No. Detected" is the number of samples for which an analyte was measured above the Method Detection Limit (MDL). "No. Analyzed" is the total number of samples analyzed for a given analyte. Mean, minimum, maximum, and standard deviation (SD) were computed for analyte and station combination, pooling all years' data. See Figure 2 for station locations.

## Appendix: Brown Rockfish Muscle

Summary statistics for brown rockfish muscle tissue samples, averaged across years from 1989-1999 by location and assay. A value of the median of the Method Detection Limit (MDL) was used in calculations when an analyte was undetected. Refer to Figure 2 for station locations. Shaded rows indicate location:assay combinations wherein at least one sample had a measured concentration above the MDL. Unshaded rows indicate combinations that had no measured concentrations above the MDL. All concentrations are based on wet weight. All organics in  $\mu\text{g}/\text{kg}$ , all elemental metals in  $\text{mg}/\text{kg}$ , all lipids and solids in %.

Location	Assay	No. Detected:				
		No. Analyzed	Mean	Min	Max	SD
Brown's Point	hexachlorobenzene	0:7	0.05	0.04	0.06	0.01
Brown's Point	Lipids	7:7	0.38	0.27	0.62	0.12
Brown's Point	opDDD	0:7	0.11	0.10	0.14	0.01
Brown's Point	opDDT	0:2	0.17	0.16	0.18	0.01
Brown's Point	PCB101	7:7	1.97	0.87	5.50	1.70
Brown's Point	PCB105	5:7	0.32	0.04	1.20	0.40
Brown's Point	PCB110	7:7	0.44	0.12	1.70	0.57
Brown's Point	PCB118	7:7	2.54	1.10	4.70	1.26
Brown's Point	PCB126	0:7	0.06	0.06	0.08	0.01
Brown's Point	PCB128	7:7	0.36	0.13	0.75	0.24
Brown's Point	PCB138	7:7	0.95	0.32	2.30	0.70
Brown's Point	PCB153	7:7	1.66	0.62	4.40	1.38
Brown's Point	PCB156	1:7	0.06	0.04	0.17	0.05
Brown's Point	PCB157	0:7	0.04	0.04	0.05	0.00
Brown's Point	PCB169	0:7	0.08	0.07	0.10	0.01
Brown's Point	PCB170	2:7	0.13	0.04	0.58	0.20
Brown's Point	PCB180	6:7	0.43	0.04	1.40	0.46
Brown's Point	PCB189	0:7	0.04	0.04	0.05	0.00
Brown's Point	PCB77	0:7	0.06	0.06	0.08	0.01
Brown's Point	ppDDD	0:7	0.23	0.21	0.27	0.02
Brown's Point	ppDDE	3:7	0.61	0.11	1.40	0.62
Brown's Point	ppDDT	0:7	0.15	0.13	0.18	0.02
Brown's Point	Solids	7:7	18.63	16.94	20.25	1.46
Brown's Point	TotalDDT	3:7	1.27	1.10	1.40	0.15
Brown's Point	TotalPCB	7:7	10.03	3.60	25.00	7.38
Old Tacoma	hexachlorobenzene	0:1	0.03	0.03	0.03	
Old Tacoma	Lipids	1:1	0.26	0.26	0.26	
Old Tacoma	opDDD	0:1	0.08	0.08	0.08	
Old Tacoma	opDDT	0:1	0.11	0.11	0.11	
Old Tacoma	PCB101	1:1	8.90	8.90	8.90	
Old Tacoma	PCB105	1:1	0.89	0.89	0.89	
Old Tacoma	PCB110	1:1	0.56	0.56	0.56	
Old Tacoma	PCB118	1:1	7.50	7.50	7.50	
Old Tacoma	PCB126	0:1	0.05	0.05	0.05	
Old Tacoma	PCB128	1:1	1.90	1.90	1.90	
Old Tacoma	PCB138	1:1	4.90	4.90	4.90	
Old Tacoma	PCB153	1:1	9.30	9.30	9.30	
Old Tacoma	PCB156	1:1	0.34	0.34	0.34	
Old Tacoma	PCB157	0:1	0.03	0.03	0.03	
Old Tacoma	PCB169	0:1	0.06	0.06	0.06	

# Appendix: Brown Rockfish Muscle

Location	Assay	No. Detected:				
		No. Analyzed	Mean	Min	Max	SD
Old Tacoma	PCB170	1:1	1.40	1.40	1.40	
Old Tacoma	PCB180	1:1	2.70	2.70	2.70	
Old Tacoma	PCB189	0:1	0.03	0.03	0.03	
Old Tacoma	PCB77	0:1	0.05	0.05	0.05	
Old Tacoma	ppDDD	0:1	0.18	0.18	0.18	
Old Tacoma	ppDDE	1:1	4.70	4.70	4.70	
Old Tacoma	Solids	1:1	19.10	19.10	19.10	
Old Tacoma	TotalDDT	1:1	4.70	4.70	4.70	
Old Tacoma	TotalPCB	1:1	45.00	45.00	45.00	
Outer Comm. Bay	hexachlorobenzene	0:7	0.04	0.04	0.05	0.00
Outer Comm. Bay	Lipids	5:5	0.51	0.31	0.62	0.15
Outer Comm. Bay	opDDD	0:7	0.11	0.10	0.13	0.01
Outer Comm. Bay	opDDT	0:5	0.15	0.13	0.17	0.02
Outer Comm. Bay	PCB101	7:7	2.88	0.53	7.10	2.46
Outer Comm. Bay	PCB105	6:7	0.48	0.04	1.20	0.43
Outer Comm. Bay	PCB110	7:7	0.69	0.17	2.10	0.68
Outer Comm. Bay	PCB118	7:7	5.37	1.90	11.00	3.12
Outer Comm. Bay	PCB126	0:7	0.06	0.06	0.07	0.01
Outer Comm. Bay	PCB128	7:7	0.99	0.31	1.70	0.54
Outer Comm. Bay	PCB138	7:7	1.54	0.46	3.50	1.27
Outer Comm. Bay	PCB153	7:7	3.20	0.92	7.30	2.41
Outer Comm. Bay	PCB156	2:7	0.09	0.04	0.23	0.08
Outer Comm. Bay	PCB157	0:7	0.04	0.04	0.05	0.00
Outer Comm. Bay	PCB169	0:7	0.09	0.08	0.10	0.01
Outer Comm. Bay	PCB170	5:7	0.43	0.04	2.00	0.70
Outer Comm. Bay	PCB180	6:7	0.98	0.04	4.10	1.41
Outer Comm. Bay	PCB189	0:7	0.04	0.04	0.05	0.01
Outer Comm. Bay	PCB77	0:7	0.06	0.06	0.07	0.01
Outer Comm. Bay	ppDDD	0:7	0.24	0.22	0.29	0.03
Outer Comm. Bay	ppDDE	7:7	1.39	0.51	2.20	0.73
Outer Comm. Bay	ppDDT	0:7	0.14	0.12	0.16	0.02
Outer Comm. Bay	Solids	7:7	17.89	13.68	19.43	2.00
Outer Comm. Bay	TotalDDT	7:7	1.39	0.51	2.20	0.73
Outer Comm. Bay	TotalPCB	7:7	20.36	6.00	46.00	14.56
Seattle Waterfront	hexachlorobenzene	0:2	0.05	0.05	0.05	0.00
Seattle Waterfront	Lipids	2:2	0.59	0.55	0.64	0.06
Seattle Waterfront	opDDD	0:2	0.13	0.12	0.13	0.01
Seattle Waterfront	opDDT	0:1	0.16	0.16	0.16	
Seattle Waterfront	PCB101	2:2	7.95	4.90	11.00	4.31
Seattle Waterfront	PCB105	2:2	0.92	0.24	1.60	0.96
Seattle Waterfront	PCB110	2:2	1.35	0.70	2.00	0.92
Seattle Waterfront	PCB118	2:2	5.95	2.80	9.10	4.45
Seattle Waterfront	PCB126	0:2	0.07	0.07	0.08	0.00
Seattle Waterfront	PCB128	2:2	1.55	0.49	2.60	1.49
Seattle Waterfront	PCB138	2:2	4.60	2.10	7.10	3.54
Seattle Waterfront	PCB153	2:2	8.60	4.20	13.00	6.22
Seattle Waterfront	PCB156	2:2	0.26	0.12	0.39	0.19



# Appendix: Brown Rockfish Muscle

Location	Assay	No. Detected:				
		No. Analyzed	Mean	Min	Max	SD
Seattle Waterfront	PCB157	0:2	0.05	0.05	0.05	0.00
Seattle Waterfront	PCB169	0:2	0.10	0.09	0.10	0.01
Seattle Waterfront	PCB170	2:2	1.39	0.67	2.10	1.01
Seattle Waterfront	PCB180	2:2	2.95	1.60	4.30	1.91
Seattle Waterfront	PCB189	0:2	0.05	0.05	0.05	0.00
Seattle Waterfront	PCB77	0:2	0.07	0.07	0.08	0.00
Seattle Waterfront	ppDDD	2:2	0.45	0.30	0.59	0.21
Seattle Waterfront	ppDDE	1:2	1.97	0.14	3.80	2.59
Seattle Waterfront	ppDDT	0:1	0.16	0.16	0.16	
Seattle Waterfront	Solids	2:2	19.52	19.35	19.70	0.25
Seattle Waterfront	TotalDDT	2:2	2.35	0.30	4.40	2.90
Seattle Waterfront	TotalPCB	2:2	42.00	21.00	63.00	29.70
Sinclair Inlet	1,2,4-trichlorobenzene	0:2	5.40	5.40	5.40	0.00
Sinclair Inlet	1,2-dichlorobenzene	0:2	11.00	11.00	11.00	0.00
Sinclair Inlet	1,2-diphenylhydrazine	0:2	11.00	11.00	11.00	0.00
Sinclair Inlet	1,3-dichlorobenzene	0:2	11.00	11.00	11.00	0.00
Sinclair Inlet	1,4-dichlorobenzene	0:2	11.00	11.00	11.00	0.00
Sinclair Inlet	2,4,5-trichlorophenol	0:2	26.00	26.00	26.00	0.00
Sinclair Inlet	2,4,6-trichlorophenol	0:2	54.00	54.00	54.00	0.00
Sinclair Inlet	2,4-dichlorophenol	0:2	26.00	26.00	26.00	0.00
Sinclair Inlet	2,4-dimethylphenol	0:2	26.00	26.00	26.00	0.00
Sinclair Inlet	2,4-dinitrophenol	0:2	200.00	200.00	200.00	0.00
Sinclair Inlet	2,4-dinitrotoluene	0:2	26.00	26.00	26.00	0.00
Sinclair Inlet	2,6-dinitrotoluene	0:2	5.40	5.40	5.40	0.00
Sinclair Inlet	2-chloronaphthalene	0:2	5.40	5.40	5.40	0.00
Sinclair Inlet	2-chlorophenol	0:2	26.00	26.00	26.00	0.00
Sinclair Inlet	2-methylnaphthalene	0:2	26.00	26.00	26.00	0.00
Sinclair Inlet	2-methylphenol	0:2	26.00	26.00	26.00	0.00
Sinclair Inlet	2-nitroaniline	0:2	26.00	26.00	26.00	0.00
Sinclair Inlet	2-nitrophenol	0:2	26.00	26.00	26.00	0.00
Sinclair Inlet	3-nitroaniline	0:2	1700.00	1700.00	1700.00	0.00
Sinclair Inlet	4,6-dinitro-o-cresol	0:2	200.00	200.00	200.00	0.00
Sinclair Inlet	4-bromophenylphenylether	0:2	54.00	54.00	54.00	0.00
Sinclair Inlet	4-chloro-3-methylphenol	0:2	26.00	26.00	26.00	0.00
Sinclair Inlet	4-chloroaniline	0:2	1700.00	1700.00	1700.00	0.00
Sinclair Inlet	4-chlorophenylphenylether	0:2	54.00	54.00	54.00	0.00
Sinclair Inlet	4-methylphenol	0:2	26.00	26.00	26.00	0.00
Sinclair Inlet	4-nitroaniline	0:2	1700.00	1700.00	1700.00	0.00
Sinclair Inlet	4-nitrophenol	0:2	26.00	26.00	26.00	0.00
Sinclair Inlet	acenaphthene	0:2	5.40	5.40	5.40	0.00
Sinclair Inlet	acenaphthylene	0:2	5.40	5.40	5.40	0.00
Sinclair Inlet	aniline	0:2	11.00	11.00	11.00	0.00
Sinclair Inlet	anthracene	0:2	11.00	11.00	11.00	0.00
Sinclair Inlet	Aroclor 1016	0:11	20.00	20.00	20.00	0.00
Sinclair Inlet	Aroclor 1221	0:11	20.00	20.00	20.00	0.00
Sinclair Inlet	Aroclor 1232	0:11	20.00	20.00	20.00	0.00
Sinclair Inlet	Aroclor 1242	0:11	10.00	10.00	10.00	0.00

# Appendix: Brown Rockfish Muscle

Location	Assay	No. Detected:				
		No. Analyzed	Mean	Min	Max	SD
Sinclair Inlet	Aroclor 1248	0:11	2.00	2.00	2.00	0.00
Sinclair Inlet	Aroclor 1254	11:11	99.53	6.36	272.00	97.91
Sinclair Inlet	Aroclor 1260	11:11	112.38	12.50	341.00	106.85
Sinclair Inlet	benzo(a)anthracene	0:2	11.00	11.00	11.00	0.00
Sinclair Inlet	benzo(a)pyrene	0:2	11.00	11.00	11.00	0.00
Sinclair Inlet	benzo(b)fluoranthene	0:2	11.00	11.00	11.00	0.00
Sinclair Inlet	benzo(g,h,i)perylene	0:2	26.00	26.00	26.00	0.00
Sinclair Inlet	benzo(k)fluoranthene	0:2	11.00	11.00	11.00	0.00
Sinclair Inlet	benzoic acid	1:2	205.00	200.00	210.00	7.07
Sinclair Inlet	benzyl alcohol	0:2	11.00	11.00	11.00	0.00
Sinclair Inlet	benzylbutylphthalate	0:2	26.00	26.00	26.00	0.00
Sinclair Inlet	bis(2-chloroethoxy)methane	0:2	11.00	11.00	11.00	0.00
Sinclair Inlet	bis(2-chloroethyl)ether	0:2	11.00	11.00	11.00	0.00
Sinclair Inlet	bis(2-chloroisopropyl)ether	0:2	160.00	160.00	160.00	0.00
Sinclair Inlet	bis(2-ethylhexyl)phthalate	0:2	33.00	33.00	33.00	0.00
Sinclair Inlet	carbazole	0:2	11.00	11.00	11.00	0.00
Sinclair Inlet	chrysene	0:2	11.00	11.00	11.00	0.00
Sinclair Inlet	coprostanol	0:2	540.00	540.00	540.00	0.00
Sinclair Inlet	dibenzo(a,h)anthracene	0:2	54.00	54.00	54.00	0.00
Sinclair Inlet	dibenzofuran	0:2	11.00	11.00	11.00	0.00
Sinclair Inlet	diethylphthalate	0:2	11.00	11.00	11.00	0.00
Sinclair Inlet	dimethylphthalate	0:2	26.00	26.00	26.00	0.00
Sinclair Inlet	di-n-butylphthalate	0:2	67.00	67.00	67.00	0.00
Sinclair Inlet	di-n-octylphthalate	0:2	11.00	11.00	11.00	0.00
Sinclair Inlet	fluoranthene	0:2	5.40	5.40	5.40	0.00
Sinclair Inlet	fluorene	0:2	5.40	5.40	5.40	0.00
Sinclair Inlet	hexachlorobenzene	0:13	8.34	0.03	54.00	20.26
Sinclair Inlet	hexachlorobutadiene	0:2	26.00	26.00	26.00	0.00
Sinclair Inlet	hexachlorocyclopentadiene	0:2	1700.00	1700.00	1700.00	0.00
Sinclair Inlet	hexachloroethane	0:2	26.00	26.00	26.00	0.00
Sinclair Inlet	indeno(1,2,3-c,d)pyrene	0:2	26.00	26.00	26.00	0.00
Sinclair Inlet	isophorone	0:2	5.40	5.40	5.40	0.00
Sinclair Inlet	lead	0:11	0.02	0.02	0.02	0.00
Sinclair Inlet	Lipids	16:16	0.30	0.13	0.65	0.16
Sinclair Inlet	mercury	11:11	0.81	0.33	1.15	0.28
Sinclair Inlet	naphthalene	0:2	5.40	5.40	5.40	0.00
Sinclair Inlet	nitrobenzene	0:2	11.00	11.00	11.00	0.00
Sinclair Inlet	N-nitrosodimethylamine	0:2	67.00	67.00	67.00	0.00
Sinclair Inlet	N-nitroso-di-n-propylamine	0:2	11.00	11.00	11.00	0.00
Sinclair Inlet	N-nitrosodiphenylamine	0:2	26.00	26.00	26.00	0.00
Sinclair Inlet	opDDD	0:11	0.11	0.10	0.14	0.02
Sinclair Inlet	opDDT	0:5	0.15	0.13	0.19	0.03
Sinclair Inlet	PCB101	11:11	8.50	0.64	22.00	6.12
Sinclair Inlet	PCB105	9:10	1.22	0.05	2.50	0.79
Sinclair Inlet	PCB110	9:9	1.37	0.43	3.90	1.04
Sinclair Inlet	PCB118	10:10	4.78	1.10	8.20	2.58
Sinclair Inlet	PCB126	0:11	0.07	0.06	0.08	0.01

# Appendix: Brown Rockfish Muscle

Location	Assay	No. Detected:				
		No. Analyzed	Mean	Min	Max	SD
Sinclair Inlet	PCB128	10:11	2.00	0.06	6.00	1.71
Sinclair Inlet	PCB138	10:10	5.45	1.20	15.00	3.99
Sinclair Inlet	PCB153	11:11	9.34	0.57	30.00	8.09
Sinclair Inlet	PCB156	7:10	0.26	0.03	0.55	0.20
Sinclair Inlet	PCB157	0:10	0.04	0.03	0.05	0.01
Sinclair Inlet	PCB169	0:11	0.09	0.07	0.11	0.01
Sinclair Inlet	PCB170	10:11	1.74	0.05	5.80	1.55
Sinclair Inlet	PCB180	10:10	3.50	0.82	12.00	3.21
Sinclair Inlet	PCB189	0:11	0.05	0.04	0.06	0.01
Sinclair Inlet	PCB77	0:11	0.07	0.06	0.09	0.01
Sinclair Inlet	pentachlorophenol	0:2	54.00	54.00	54.00	0.00
Sinclair Inlet	phenanthrene	0:2	5.40	5.40	5.40	0.00
Sinclair Inlet	phenol	0:2	11.00	11.00	11.00	0.00
Sinclair Inlet	ppDDD	0:11	0.18	0.11	0.24	0.05
Sinclair Inlet	ppDDE	7:10	1.37	0.11	2.70	1.00
Sinclair Inlet	ppDDT	0:9	0.15	0.12	0.20	0.03
Sinclair Inlet	pyrene	0:2	5.40	5.40	5.40	0.00
Sinclair Inlet	Solids	22:22	19.74	17.57	20.90	0.95
Sinclair Inlet	TotalDDT	7:11	1.91	0.94	2.70	0.62
Sinclair Inlet	TotalPCB	11:11	45.55	12.00	123.00	31.02
Thea Foss Waterway	hexachlorobenzene	0:7	0.04	0.03	0.06	0.01
Thea Foss Waterway	Lipids	6:6	0.43	0.15	0.69	0.21
Thea Foss Waterway	Mercury	1:1	0.11	0.11	0.11	
Thea Foss Waterway	opDDD	0:7	0.11	0.08	0.17	0.03
Thea Foss Waterway	opDDT	0:6	0.14	0.10	0.19	0.03
Thea Foss Waterway	PCB101	7:7	3.13	0.92	5.00	1.41
Thea Foss Waterway	PCB105	7:7	0.77	0.23	1.20	0.34
Thea Foss Waterway	PCB110	7:7	0.66	0.18	0.94	0.30
Thea Foss Waterway	PCB118	7:7	3.03	1.20	4.50	1.11
Thea Foss Waterway	PCB126	0:7	0.06	0.04	0.09	0.01
Thea Foss Waterway	PCB128	7:7	0.60	0.31	0.78	0.19
Thea Foss Waterway	PCB138	7:7	1.82	0.51	2.60	0.72
Thea Foss Waterway	PCB153	7:7	2.98	0.74	4.50	1.26
Thea Foss Waterway	PCB156	5:7	0.13	0.04	0.29	0.09
Thea Foss Waterway	PCB157	0:7	0.04	0.03	0.05	0.01
Thea Foss Waterway	PCB169	0:7	0.08	0.06	0.11	0.02
Thea Foss Waterway	PCB170	7:7	0.37	0.10	0.58	0.17
Thea Foss Waterway	PCB180	7:7	0.84	0.46	1.30	0.32
Thea Foss Waterway	PCB189	0:7	0.04	0.03	0.06	0.01
Thea Foss Waterway	PCB77	0:7	0.06	0.04	0.09	0.02
Thea Foss Waterway	ppDDD	0:7	0.21	0.17	0.25	0.03
Thea Foss Waterway	ppDDE	6:7	0.79	0.17	1.30	0.41
Thea Foss Waterway	ppDDT	0:7	0.12	0.08	0.14	0.02
Thea Foss Waterway	Solids	8:8	19.43	18.04	20.99	1.00
Thea Foss Waterway	TotalDDT	6:7	0.89	0.49	1.30	0.34
Thea Foss Waterway	TotalPCB	7:7	16.20	5.40	25.00	6.48

## **Brown Rockfish Bile**

Summary of contaminant data for all brown rockfish bile samples collected by the Puget Sound Ambient Monitoring Program's Fish Component, 1989-1999. "No. Detected" is the number of samples for which an analyte was measured above the Method Detection Limit (MDL). "No. Analyzed" is the total number of samples analyzed for a given analyte. Mean, minimum, maximum, and standard deviation (SD) were computed for analyte and station combination, pooling all years' data. See Figure 2 for station locations.

# Appendix: Brown Rockfish Bile

Summary statistics for brown rockfish bile samples, averaged across years from 1989-1999 by location and assay. All biliary analytes were measured above the Method Detection Limit (MDL). Refer to Figure 2 for station locations. All concentrations based on wet wt. FAC analytes in ng/ml bile, protein in mg/ml bile.

Location	Assay	No. Detected:				SD
		No. Analyzed	Mean	Min	Max	
Seattle Waterfront	benzo(a)pyrene_FAC	9:9	1,209	192	5,154	1,576
Seattle Waterfront	naphthalene_FAC	9:9	175,171	40,803	597,885	175,159
Seattle Waterfront	Phenanthrene_FAC	9:9	53,529	10,474	222,079	66,430
Seattle Waterfront	Protein	9:9	3	1	7	2
Sinclair Inlet	benzo(a)pyrene_FAC	1:1	761	761	761	
Sinclair Inlet	naphthalene_FAC	1:1	116,017	116,017	116,017	
Sinclair Inlet	Phenanthrene_FAC	1:1	41,139	41,139	41,139	
Sinclair Inlet	Protein	1:1	2.70	2.70	2.70	

## **Yelloweye Rockfish Muscle**

Summary of contaminant data for all yelloweye rockfish muscle samples collected by the Puget Sound Ambient Monitoring Program's Fish Component, 1989-1999. "No. Detected" is the number of samples for which an analyte was measured above the Method Detection Limit (MDL). "No. Analyzed" is the total number of samples analyzed for a given analyte. Mean, minimum, maximum, and standard deviation (SD) were computed for analyte and station combination, pooling all years' data. See Figure 2 for station locations.

## Appendix: Yelloweye Rockfish Muscle

Summary statistics for yelloweye rockfish muscle tissue sampled in 1996, by location and assay. A value of the median of the Method Detection Limit (MDL) was used in calculations when an analyte was undetected. Refer to Figure 2 for station locations. Shaded rows indicate location:assay combinations wherein at least one sample had a measured concentration above the MDL. Unshaded rows indicate combinations that had no measured concentrations above the MDL. All concentrations are based on wet weight. All organics in µg/kg, all elemental metals in mg/kg, all lipids and solids in %.

Location	Assay	No. Detected:			
		No. Analyzed	Mean	Min	Max
Brace Point	Aldrin	0:1	0.26	0.26	0.26
Brace Point	alpha chlordane	0:1	0.26	0.26	0.26
Brace Point	alpha endosulfan	0:1	0.13	0.13	0.13
Brace Point	alpha hexachlorocyclohexane	0:1	0.26	0.26	0.26
Brace Point	Aroclor 1016	0:1	20	20	20
Brace Point	Aroclor 1221	0:1	20	20	20
Brace Point	Aroclor 1232	0:1	20	20	20
Brace Point	Aroclor 1242	0:1	10	10	10
Brace Point	Aroclor 1248	0:1	2	2	2
Brace Point	Aroclor 1254	1:1	5.01	5.01	5.01
Brace Point	Aroclor 1260	1:1	11.3	11.3	11.3
Brace Point	beta endosulfan	0:1	0.26	0.26	0.26
Brace Point	beta hexachlorocyclohexane	0:1	0.13	0.13	0.13
Brace Point	delta hexachlorocyclohexane	0:1	0.13	0.13	0.13
Brace Point	Dieldrin	0:1	0.26	0.26	0.26
Brace Point	endosulfan sulfate	0:1	0.26	0.26	0.26
Brace Point	Endrin	0:1	0.52	0.52	0.52
Brace Point	endrin aldehyde	0:1	0.52	0.52	0.52
Brace Point	gamma chlordane	0:1	0.13	0.13	0.13
Brace Point	gamma hexachlorocyclohexane	0:1	0.13	0.13	0.13
Brace Point	Heptachlor	0:1	0.8	0.8	0.8
Brace Point	heptachlor epoxide	0:1	0.13	0.13	0.13
Brace Point	Lipids	1:1	0.17	0.17	0.17
Brace Point	Mercury	1:1	1.44	1.44	1.44
Brace Point	Methoxychlor	0:1	1.3	1.3	1.3
Brace Point	ppDDD	0:1	0.26	0.26	0.26
Brace Point	ppDDE	1:1	0.646	0.646	0.646
Brace Point	ppDDT	0:1	0.52	0.52	0.52
Brace Point	Solids	1:1	17.8	17.8	17.8
Brace Point	Toxaphene	0:1	14	14	14
San Juan Islands	Aldrin	0:1	0.26	0.26	0.26
San Juan Islands	alpha chlordane	1:1	1.5	1.5	1.5
San Juan Islands	alpha endosulfan	0:1	0.13	0.13	0.13
San Juan Islands	alpha hexachlorocyclohexane	0:1	0.26	0.26	0.26
San Juan Islands	Aroclor 1016	0:1	20	20	20
San Juan Islands	Aroclor 1221	0:1	20	20	20
San Juan Islands	Aroclor 1232	0:1	20	20	20
San Juan Islands	Aroclor 1242	0:1	10	10	10
San Juan Islands	Aroclor 1248	0:1	2	2	2
San Juan Islands	Aroclor 1254	1:1	36.6	36.6	36.6

# Appendix: Yelloweye Rockfish Muscle

Location	Assay	No. Detected:			
		lo.	Mean	Min	Max
San Juan Islands	Aroclor 1260	1:1	11.6	11.6	11.6
San Juan Islands	beta endosulfan	0:1	0.26	0.26	0.26
San Juan Islands	beta hexachlorocyclohexane	0:1	0.13	0.13	0.13
San Juan Islands	delta hexachlorocyclohexane	0:1	0.13	0.13	0.13
San Juan Islands	Dieldrin	0:1	0.26	0.26	0.26
San Juan Islands	endosulfan sulfate	0:1	0.26	0.26	0.26
San Juan Islands	Endrin	0:1	0.52	0.52	0.52
San Juan Islands	endrin aldehyde	0:1	0.52	0.52	0.52
San Juan Islands	gamma chlordane	1:1	0.261	0.26	0.26
San Juan Islands	gamma hexachlorocyclohexane	0:1	0.13	0.13	0.13
San Juan Islands	Heptachlor	0:1	0.8	0.8	0.8
San Juan Islands	heptachlor epoxide	0:1	0.13	0.13	0.13
San Juan Islands	Lipids	1:1	1.8	1.8	1.8
San Juan Islands	Mercury	1:1	0.928	0.93	0.93
San Juan Islands	Methoxychlor	0:1	1.3	1.3	1.3
San Juan Islands	ppDDD	1:1	0.939	0.94	0.94
San Juan Islands	ppDDE	1:1	13.9	13.9	13.9
San Juan Islands	ppDDT	1:1	3.41	3.41	3.41
San Juan Islands	Solids	1:1	21.6	21.6	21.6
San Juan Islands	Toxaphene	0:1	14	14	14



## **Chinook Salmon Muscle**

Summary of contaminant data for all chinook salmon muscle samples collected by the Puget Sound Ambient Monitoring Program's Fish Component, 1989-1999. "No. Detected" is the number of samples for which an analyte was measured above the Method Detection Limit (MDL). "No. Analyzed" is the total number of samples analyzed for a given analyte. Mean, minimum, maximum, and standard deviation (SD) were computed for analyte and station combination, pooling all years' data. See Figure 3 for station locations.

# Appendix: Chinook Salmon Muscle

Summary statistics for chinook salmon muscle tissue samples, averaged across years from 1989-1999 by location and assay. A value of the median of the Method Detection Limit (MDL) was used in calculations when an analyte was undetected. Refer to Figure 3 for station locations. Shaded rows indicate location:assay combinations wherein at least one sample had a measured concentration above the MDL. Unshaded rows indicate combinations that had no measured concentrations above the MDL. All concentrations are based on wet weight. All organics in µg/kg, all elemental metals in mg/kg, all lipids and solids in %.

Location	Assay	No. Detected:				
		No. Analyzed	Mean	Min	Max	SD
Apple Cove Pt	1,2,4-trichlorobenzene	0:7	48.57	40.00	50.00	3.78
Apple Cove Pt	1,2-dichlorobenzene	0:7	48.57	40.00	50.00	3.78
Apple Cove Pt	1,2-diphenylhydrazine	0:7	48.57	40.00	50.00	3.78
Apple Cove Pt	1,3-dichlorobenzene	0:7	57.14	40.00	60.00	7.56
Apple Cove Pt	1,4-dichlorobenzene	0:7	48.57	40.00	50.00	3.78
Apple Cove Pt	2,4,5-trichlorophenol	0:7	20.00	20.00	20.00	0.00
Apple Cove Pt	2,4,6-trichlorophenol	0:7	57.14	40.00	60.00	7.56
Apple Cove Pt	2,4-dichlorophenol	0:7	57.14	40.00	60.00	7.56
Apple Cove Pt	2,4-dimethylphenol	0:7	57.14	40.00	60.00	7.56
Apple Cove Pt	2,4-dinitrophenol	0:7	314.29	300.00	400.00	37.80
Apple Cove Pt	2,4-dinitrotoluene	0:7	177.14	40.00	200.00	60.47
Apple Cove Pt	2,6-dinitrotoluene	0:7	20.00	20.00	20.00	0.00
Apple Cove Pt	2-chloronaphthalene	0:7	10.00	10.00	10.00	0.00
Apple Cove Pt	2-chlorophenol	0:7	57.14	40.00	60.00	7.56
Apple Cove Pt	2-methylnaphthalene	0:7	20.00	20.00	20.00	0.00
Apple Cove Pt	2-methylphenol	0:7	48.57	40.00	50.00	3.78
Apple Cove Pt	2-nitroaniline	0:7	177.14	40.00	200.00	60.47
Apple Cove Pt	2-nitrophenol	0:7	48.57	40.00	50.00	3.78
Apple Cove Pt	3-nitroaniline	0:7	268.57	80.00	300.00	83.15
Apple Cove Pt	4,6-dinitro-o-cresol	0:7	285.71	200.00	300.00	37.80
Apple Cove Pt	4-bromophenylphenylether	0:7	57.14	40.00	60.00	7.56
Apple Cove Pt	4-chloro-3-methylphenol	0:7	57.14	40.00	60.00	7.56
Apple Cove Pt	4-chloroaniline	0:7	74.29	20.00	400.00	143.63
Apple Cove Pt	4-chlorophenylphenylether	0:7	57.14	40.00	60.00	7.56
Apple Cove Pt	4-methylphenol	0:7	57.14	40.00	60.00	7.56
Apple Cove Pt	4-nitroaniline	0:7	268.57	80.00	300.00	83.15
Apple Cove Pt	4-nitrophenol	0:7	485.71	400.00	500.00	37.80
Apple Cove Pt	acenaphthene	0:7	10.00	10.00	10.00	0.00
Apple Cove Pt	acenaphthylene	0:7	10.00	10.00	10.00	0.00
Apple Cove Pt	Aldrin	0:12	0.30	0.30	0.30	0.00
Apple Cove Pt	alpha chlordane	0:12	0.50	0.50	0.50	0.00
Apple Cove Pt	alpha endosulfan	0:12	0.59	0.50	0.67	0.09
Apple Cove Pt	alpha hexachlorocyclohexane	6:12	1.67	0.50	3.80	1.47
Apple Cove Pt	aniline	0:7	49.29	45.00	50.00	1.89
Apple Cove Pt	anthracene	0:7	20.00	20.00	20.00	0.00
Apple Cove Pt	Aroclor 1016	0:12	20.00	20.00	20.00	0.00
Apple Cove Pt	Aroclor 1221	0:12	20.00	20.00	20.00	0.00
Apple Cove Pt	Aroclor 1232	0:12	20.00	20.00	20.00	0.00
Apple Cove Pt	Aroclor 1242	0:12	10.00	10.00	10.00	0.00
Apple Cove Pt	Aroclor 1248	1:12	6.08	2.00	51.00	14.15

# Appendix: Chinook Salmon Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Apple Cove Pt	Aroclor 1254	12:12	49.84	25.60	81.00	21.51
Apple Cove Pt	Aroclor 1260	11:12	35.83	2.00	52.10	15.45
Apple Cove Pt	arsenic	7:7	1.41	0.72	1.80	0.44
Apple Cove Pt	benzo(a)anthracene	0:7	57.14	40.00	60.00	7.56
Apple Cove Pt	benzo(a)pyrene	0:7	10.00	10.00	10.00	0.00
Apple Cove Pt	benzo(b)fluoranthene	0:7	48.57	40.00	50.00	3.78
Apple Cove Pt	benzo(g,h,i)perylene	0:7	57.14	40.00	60.00	7.56
Apple Cove Pt	benzo(k)fluoranthene	0:7	48.57	40.00	50.00	3.78
Apple Cove Pt	benzoic acid	0:7	294.29	260.00	300.00	15.12
Apple Cove Pt	benzyl alcohol	0:7	48.57	40.00	50.00	3.78
Apple Cove Pt	benzylbutylphthalate	0:7	60.71	60.00	65.00	1.89
Apple Cove Pt	beta endosulfan	0:12	1.15	1.00	1.30	0.16
Apple Cove Pt	beta hexachlorocyclohexane	0:12	0.84	0.67	1.00	0.17
Apple Cove Pt	bis(2-chloroethoxy)methane	0:7	57.14	40.00	60.00	7.56
Apple Cove Pt	bis(2-chloroethyl)ether	0:7	48.57	40.00	50.00	3.78
Apple Cove Pt	bis(2-chloroisopropyl)ether	0:7	48.57	40.00	50.00	3.78
Apple Cove Pt	bis(2-ethylhexyl)phthalate	3:7	186.43	60.00	700.00	233.93
Apple Cove Pt	carbazole	0:7	57.14	40.00	60.00	7.56
Apple Cove Pt	chrysene	0:7	57.14	40.00	60.00	7.56
Apple Cove Pt	copper	7:7	0.37	0.32	0.48	0.05
Apple Cove Pt	coprostanol	0:1	400.00	400.00	400.00	
Apple Cove Pt	delta hexachlorocyclohexane	0:12	0.50	0.50	0.50	0.00
Apple Cove Pt	dibenzo(a,h)anthracene	0:7	57.14	40.00	60.00	7.56
Apple Cove Pt	dibenzofuran	0:7	48.57	40.00	50.00	3.78
Apple Cove Pt	Dieldrin	6:12	1.21	0.50	2.70	0.91
Apple Cove Pt	diethylphthalate	0:7	48.57	40.00	50.00	3.78
Apple Cove Pt	dimethylphthalate	0:7	48.57	40.00	50.00	3.78
Apple Cove Pt	di-n-butylphthalate	0:7	49.29	45.00	50.00	1.89
Apple Cove Pt	di-n-octylphthalate	0:7	10.00	10.00	10.00	0.00
Apple Cove Pt	endosulfan sulfate	0:12	1.05	1.00	1.10	0.05
Apple Cove Pt	Endrin	0:12	1.00	1.00	1.00	0.00
Apple Cove Pt	endrin aldehyde	0:12	1.00	1.00	1.00	0.00
Apple Cove Pt	fluoranthene	0:7	20.00	20.00	20.00	0.00
Apple Cove Pt	fluorene	0:7	48.57	40.00	50.00	3.78
Apple Cove Pt	gamma chlordane	0:12	0.50	0.50	0.50	0.00
Apple Cove Pt	gamma hexachlorocyclohexane	5:12	0.57	0.50	0.75	0.09
Apple Cove Pt	heptachlor	0:12	0.50	0.50	0.50	0.00
Apple Cove Pt	heptachlor epoxide	0:12	0.50	0.50	0.50	0.00
Apple Cove Pt	hexachlorobenzene	0:7	57.14	40.00	60.00	7.56
Apple Cove Pt	hexachlorobutadiene	0:7	48.57	40.00	50.00	3.78
Apple Cove Pt	hexachlorocyclopentadiene	0:7	195.14	166.00	200.00	12.85
Apple Cove Pt	hexachloroethane	0:7	57.14	40.00	60.00	7.56
Apple Cove Pt	indeno(1,2,3-c,d)pyrene	0:7	57.14	40.00	60.00	7.56
Apple Cove Pt	isophorone	0:7	57.14	40.00	60.00	7.56
Apple Cove Pt	lead	0:7	0.021	0.020	0.030	0.004
Apple Cove Pt	lipids	12:12	5.74	2.67	22.20	5.47
Apple Cove Pt	mercury	12:12	0.062	0.051	0.074	0.007

# Appendix: Chinook Salmon Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Apple Cove Pt	meythoxychlor	0:12	5.15	5.00	5.30	0.16
Apple Cove Pt	naphthalene	0:7	57.14	40.00	60.00	7.56
Apple Cove Pt	nitrobenzene	0:7	48.57	40.00	50.00	3.78
Apple Cove Pt	N-nitrosodimethylamine	0:7	177.14	40.00	200.00	60.47
Apple Cove Pt	N-nitroso-di-n-propylamine	0:7	48.57	40.00	50.00	3.78
Apple Cove Pt	N-nitrosodiphenylamine	0:7	57.14	40.00	60.00	7.56
Apple Cove Pt	pentachlorophenol	0:7	194.29	160.00	200.00	15.12
Apple Cove Pt	phenanthrene	0:7	48.57	40.00	50.00	3.78
Apple Cove Pt	phenol	0:7	57.14	40.00	60.00	7.56
Apple Cove Pt	ppDDD	12:12	2.87	0.50	4.40	1.20
Apple Cove Pt	ppDDE	12:12	19.81	8.40	28.00	7.25
Apple Cove Pt	ppDDT	5:12	2.88	1.30	5.90	2.06
Apple Cove Pt	pyrene	0:7	48.57	40.00	50.00	3.78
Apple Cove Pt	solids	8:8	30.3	26.0	36.0	3.3
Apple Cove Pt	Toxaphene	0:12	10.00	10.00	10.00	0.00
Budd Inlet	Aldrin	0:10	0.67	0.67	0.67	0.00
Budd Inlet	alpha chlordane	4:10	0.86	0.52	1.55	0.45
Budd Inlet	alpha endosulfan	0:10	0.67	0.67	0.67	0.00
Budd Inlet	alpha hexachlorocyclohexane	0:10	0.52	0.52	0.52	0.00
Budd Inlet	Aroclor 1016	0:10	20.00	20.00	20.00	0.00
Budd Inlet	Aroclor 1221	0:10	20.00	20.00	20.00	0.00
Budd Inlet	Aroclor 1232	0:10	20.00	20.00	20.00	0.00
Budd Inlet	Aroclor 1242	0:10	20.00	20.00	20.00	0.00
Budd Inlet	Aroclor 1248	0:10	2.00	2.00	2.00	0.00
Budd Inlet	Aroclor 1254	10:10	32.61	15.00	75.00	18.06
Budd Inlet	Aroclor 1260	10:10	21.74	7.64	47.70	11.95
Budd Inlet	beta endosulfan	0:10	1.30	1.30	1.30	0.00
Budd Inlet	beta hexachlorocyclohexane	0:10	0.67	0.67	0.67	0.00
Budd Inlet	delta hexachlorocyclohexane	0:10	0.52	0.52	0.52	0.00
Budd Inlet	Dieldrin	0:10	0.67	0.67	0.67	0.00
Budd Inlet	endosulfan sulfate	0:10	1.30	1.30	1.30	0.00
Budd Inlet	Endrin	0:10	1.30	1.30	1.30	0.00
Budd Inlet	endrin aldehyde	0:10	1.00	1.00	1.00	0.00
Budd Inlet	gamma chlordane	0:10	0.52	0.52	0.52	0.00
Budd Inlet	gamma hexachlorocyclohexane	0:10	0.52	0.52	0.52	0.00
Budd Inlet	heptachlor	0:10	0.52	0.52	0.52	0.00
Budd Inlet	heptachlor epoxide	0:10	0.52	0.52	0.52	0.00
Budd Inlet	lipids	10:10	5.64	4.61	6.38	0.66
Budd Inlet	meythoxychlor	0:10	5.30	5.30	5.30	0.00
Budd Inlet	ppDDD	10:10	1.63	1.09	2.63	0.49
Budd Inlet	ppDDE	10:10	12.94	8.69	17.30	2.45
Budd Inlet	ppDDT	8:10	0.81	0.52	1.55	0.31
Budd Inlet	solids	10:10	30.4	29.1	32.0	1.1
Budd Inlet	Toxaphene	0:10	10.00	10.00	10.00	0.00
Central Sound	1,2,4-trichlorobenzene	0:4	13.00	13.00	13.00	0.00
Central Sound	1,2-dichlorobenzene	0:4	13.00	13.00	13.00	0.00
Central Sound	1,2-diphenylhydrazine	0:4	13.00	13.00	13.00	0.00

## Appendix: Chinook Salmon Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Central Sound	1,3-dichlorobenzene	0:4	13.00	13.00	13.00	0.00
Central Sound	1,4-dichlorobenzene	0:4	13.00	13.00	13.00	0.00
Central Sound	2,4,5-trichlorophenol	0:4	13.00	13.00	13.00	0.00
Central Sound	2,4,6-trichlorophenol	0:4	13.00	13.00	13.00	0.00
Central Sound	2,4-dichlorophenol	0:4	13.00	13.00	13.00	0.00
Central Sound	2,4-dimethylphenol	0:4	13.00	13.00	13.00	0.00
Central Sound	2,4-dinitrotoluene	0:4	13.00	13.00	13.00	0.00
Central Sound	2,6-dinitrotoluene	0:4	13.00	13.00	13.00	0.00
Central Sound	2-chloronaphthalene	0:4	13.00	13.00	13.00	0.00
Central Sound	2-chlorophenol	0:4	13.00	13.00	13.00	0.00
Central Sound	2-methylnaphthalene	0:4	13.00	13.00	13.00	0.00
Central Sound	2-methylphenol	0:4	13.00	13.00	13.00	0.00
Central Sound	2-nitroaniline	0:4	13.00	13.00	13.00	0.00
Central Sound	2-nitrophenol	0:4	13.00	13.00	13.00	0.00
Central Sound	3,3-dichlorobenzidine	0:4	19.50	13.00	26.00	7.51
Central Sound	3-nitroaniline	0:4	13.00	13.00	13.00	0.00
Central Sound	4-bromophenylphenylether	0:4	13.00	13.00	13.00	0.00
Central Sound	4-chloro-3-methylphenol	0:4	13.00	13.00	13.00	0.00
Central Sound	4-chloroaniline	0:4	13.00	13.00	13.00	0.00
Central Sound	4-chlorophenylphenylether	0:4	13.00	13.00	13.00	0.00
Central Sound	4-methylphenol	0:4	13.00	13.00	13.00	0.00
Central Sound	4-nitroaniline	0:4	13.00	13.00	13.00	0.00
Central Sound	acenaphthene	0:4	13.00	13.00	13.00	0.00
Central Sound	acenaphthylene	0:4	13.00	13.00	13.00	0.00
Central Sound	aniline	0:4	13.00	13.00	13.00	0.00
Central Sound	anthracene	0:4	13.00	13.00	13.00	0.00
Central Sound	arsenic	0:4	0.09	0.09	0.10	0.00
Central Sound	benzo(a)anthracene	0:4	19.50	13.00	26.00	7.51
Central Sound	benzo(a)pyrene	0:4	13.00	13.00	13.00	0.00
Central Sound	benzo(b)fluoranthene	0:4	13.00	13.00	13.00	0.00
Central Sound	benzo(g,h,i)perylene	0:4	13.00	13.00	13.00	0.00
Central Sound	benzo(k)fluoranthene	0:4	13.00	13.00	13.00	0.00
Central Sound	benzoic acid	0:4	500.00	500.00	500.00	0.00
Central Sound	benzyl alcohol	0:4	13.00	13.00	13.00	0.00
Central Sound	benzylbutylphthalate	0:4	19.50	13.00	26.00	7.51
Central Sound	bis(2-chloroethoxy)methane	0:4	13.00	13.00	13.00	0.00
Central Sound	bis(2-chloroethyl)ether	0:4	13.00	13.00	13.00	0.00
Central Sound	bis(2-chloroisopropyl)ether	0:4	13.00	13.00	13.00	0.00
Central Sound	bis(2-ethylhexyl)phthalate	0:4	19.50	13.00	26.00	7.51
Central Sound	chrysene	0:4	19.50	13.00	26.00	7.51
Central Sound	copper	4:4	0.28	0.26	0.29	0.01
Central Sound	dibenzo(a,h)anthracene	0:4	13.00	13.00	13.00	0.00
Central Sound	dibenzofuran	0:4	13.00	13.00	13.00	0.00
Central Sound	diethylphthalate	0:4	13.00	13.00	13.00	0.00
Central Sound	dimethylphthalate	0:4	13.00	13.00	13.00	0.00
Central Sound	di-n-butylphthalate	0:4	13.00	13.00	13.00	0.00
Central Sound	di-n-octylphthalate	0:4	13.00	13.00	13.00	0.00

# Appendix: Chinook Salmon Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Central Sound	fluoranthene	0:4	13.00	13.00	13.00	0.00
Central Sound	fluorene	0:4	13.00	13.00	13.00	0.00
Central Sound	hexachlorobenzene	0:4	13.00	13.00	13.00	0.00
Central Sound	hexachlorobutadiene	0:4	13.00	13.00	13.00	0.00
Central Sound	hexachlorocyclopentadiene	0:4	13.00	13.00	13.00	0.00
Central Sound	hexachloroethane	0:4	13.00	13.00	13.00	0.00
Central Sound	indeno(1,2,3-c,d)pyrene	0:4	13.00	13.00	13.00	0.00
Central Sound	isophorone	0:4	13.00	13.00	13.00	0.00
Central Sound	lead	3:4	0.025	0.020	0.030	0.006
Central Sound	mercury	4:4	0.070	0.070	0.070	0.000
Central Sound	naphthalene	0:4	13.00	13.00	13.00	0.00
Central Sound	nitrobenzene	0:4	13.00	13.00	13.00	0.00
Central Sound	N-nitroso-di-n-propylamine	0:4	13.00	13.00	13.00	0.00
Central Sound	N-nitrosodiphenylamine	0:4	33.00	33.00	33.00	0.00
Central Sound	pentachlorophenol	0:4	60.00	60.00	60.00	0.00
Central Sound	phenanthrene	0:4	13.00	13.00	13.00	0.00
Central Sound	ppDDE	4:4	0.60	0.44	0.79	0.17
Central Sound	pyrene	0:4	19.50	13.00	26.00	7.51
Central Sound	solids	4:4	17.3	16.0	18.0	1.0
Deschutes River	1,2,4-trichlorobenzene	0:12	42.50	40.00	45.00	2.61
Deschutes River	1,2-dichlorobenzene	0:12	42.50	40.00	45.00	2.61
Deschutes River	1,2-diphenylhydrazine	0:12	42.50	40.00	45.00	2.61
Deschutes River	1,3-dichlorobenzene	0:12	52.50	40.00	65.00	13.06
Deschutes River	1,4-dichlorobenzene	0:12	42.50	40.00	45.00	2.61
Deschutes River	2,4,5-trichlorophenol	0:12	20.00	20.00	20.00	0.00
Deschutes River	2,4,6-trichlorophenol	0:12	52.50	40.00	65.00	13.06
Deschutes River	2,4-dichlorophenol	0:12	52.50	40.00	65.00	13.06
Deschutes River	2,4-dimethylphenol	0:12	52.50	40.00	65.00	13.06
Deschutes River	2,4-dinitrophenol	0:12	330.00	260.00	400.00	73.11
Deschutes River	2,4-dinitrotoluene	0:12	53.50	40.00	67.00	14.10
Deschutes River	2,6-dinitrotoluene	0:12	20.00	20.00	20.00	0.00
Deschutes River	2-chloronaphthalene	0:12	10.00	10.00	10.00	0.00
Deschutes River	2-chlorophenol	0:12	52.50	40.00	65.00	13.06
Deschutes River	2-methylnaphthalene	0:12	20.00	20.00	20.00	0.00
Deschutes River	2-methylphenol	0:12	42.50	40.00	45.00	2.61
Deschutes River	2-nitroaniline	0:12	53.50	40.00	67.00	14.10
Deschutes River	2-nitrophenol	0:12	42.50	40.00	45.00	2.61
Deschutes River	3-nitroaniline	0:12	170.00	80.00	260.00	94.00
Deschutes River	4,6-dinitro-o-cresol	0:12	200.00	200.00	200.00	0.00
Deschutes River	4-bromophenylphenylether	0:12	52.50	40.00	65.00	13.06
Deschutes River	4-chloro-3-methylphenol	0:12	52.50	40.00	65.00	13.06
Deschutes River	4-chloroaniline	0:12	400.00	400.00	400.00	0.00
Deschutes River	4-chlorophenylphenylether	0:12	52.50	40.00	65.00	13.06
Deschutes River	4-methylphenol	0:12	52.50	40.00	65.00	13.06
Deschutes River	4-nitroaniline	0:12	170.00	80.00	260.00	94.00
Deschutes River	4-nitrophenol	0:12	470.00	400.00	540.00	73.11
Deschutes River	acenaphthene	0:12	10.00	10.00	10.00	0.00

# Appendix: Chinook Salmon Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Deschutes River	acenaphthylene	0:12	10.00	10.00	10.00	0.00
Deschutes River	Aldrin	0:34	0.55	0.30	0.70	0.18
Deschutes River	alpha chlordane	11:34	1.06	0.50	3.09	0.85
Deschutes River	alpha endosulfan	0:34	0.71	0.50	3.00	0.41
Deschutes River	alpha hexachlorocyclohexane	0:34	0.53	0.50	1.00	0.08
Deschutes River	aniline	0:12	45.00	45.00	45.00	0.00
Deschutes River	anthracene	0:12	20.00	20.00	20.00	0.00
Deschutes River	Aroclor 1016	0:34	20.00	20.00	20.00	0.00
Deschutes River	Aroclor 1221	0:34	20.00	20.00	20.00	0.00
Deschutes River	Aroclor 1232	0:34	20.00	20.00	20.00	0.00
Deschutes River	Aroclor 1242	0:34	16.47	10.00	20.00	4.85
Deschutes River	Aroclor 1248	0:34	2.00	2.00	2.00	0.00
Deschutes River	Aroclor 1254	34:34	35.59	5.40	141.00	27.14
Deschutes River	Aroclor 1260	34:34	23.86	1.00	80.50	17.00
Deschutes River	arsenic	12:12	0.82	0.60	1.20	0.19
Deschutes River	benzo(a)anthracene	0:12	52.50	40.00	65.00	13.06
Deschutes River	benzo(a)pyrene	0:12	10.00	10.00	10.00	0.00
Deschutes River	benzo(b)fluoranthene	0:12	42.50	40.00	45.00	2.61
Deschutes River	benzo(g,h,i)perylene	0:12	52.50	40.00	65.00	13.06
Deschutes River	benzo(k)fluoranthene	0:12	42.50	40.00	45.00	2.61
Deschutes River	benzoic acid	0:12	260.00	260.00	260.00	0.00
Deschutes River	benzyl alcohol	0:12	42.50	40.00	45.00	2.61
Deschutes River	benzylbutylphthalate	0:12	65.00	65.00	65.00	0.00
Deschutes River	beta endosulfan	0:34	1.35	1.10	4.00	0.47
Deschutes River	beta hexachlorocyclohexane	0:34	0.82	0.67	4.00	0.57
Deschutes River	bis(2-chloroethoxy)methane	0:12	52.50	40.00	65.00	13.06
Deschutes River	bis(2-chloroethyl)ether	0:12	42.50	40.00	45.00	2.61
Deschutes River	bis(2-chloroisopropyl)ether	0:12	42.50	40.00	45.00	2.61
Deschutes River	bis(2-ethylhexyl)phthalate	2:12	257.00	65.00	1527.00	467.49
Deschutes River	carbazole	0:12	52.50	40.00	65.00	13.06
Deschutes River	chrysene	0:12	52.50	40.00	65.00	13.06
Deschutes River	copper	12:12	0.67	0.37	1.12	0.22
Deschutes River	coprostanol	0:6	400.00	400.00	400.00	0.00
Deschutes River	delta hexachlorocyclohexane	0:34	0.53	0.50	1.00	0.08
Deschutes River	dibenzo(a,h)anthracene	0:12	52.50	40.00	65.00	13.06
Deschutes River	dibenzofuran	0:12	42.50	40.00	45.00	2.61
Deschutes River	Dieldrin	0:34	0.62	0.50	1.00	0.10
Deschutes River	diethylphthalate	0:12	42.50	40.00	45.00	2.61
Deschutes River	dimethylphthalate	0:12	42.50	40.00	45.00	2.61
Deschutes River	di-n-butylphthalate	0:12	45.00	45.00	45.00	0.00
Deschutes River	di-n-octylphthalate	0:12	10.00	10.00	10.00	0.00
Deschutes River	endosulfan sulfate	0:34	1.23	1.00	1.30	0.10
Deschutes River	Endrin	0:34	1.25	1.00	3.00	0.34
Deschutes River	endrin aldehyde	0:34	1.06	1.00	3.00	0.34
Deschutes River	fluoranthene	0:12	20.00	20.00	20.00	0.00
Deschutes River	fluorene	0:12	42.50	40.00	45.00	2.61
Deschutes River	gamma chlordane	0:34	0.53	0.50	1.00	0.08

# Appendix: Chinook Salmon Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Deschutes River	gamma hexachlorocyclohexane	0:34	0.53	0.50	1.00	0.08
Deschutes River	heptachlor	0:34	0.53	0.50	1.00	0.08
Deschutes River	heptachlor epoxide	0:34	0.53	0.50	1.00	0.08
Deschutes River	hexachlorobenzene	0:12	52.50	40.00	65.00	13.06
Deschutes River	hexachlorobutadiene	0:12	42.50	40.00	45.00	2.61
Deschutes River	hexachlorocyclopentadiene	0:12	183.00	166.00	200.00	17.76
Deschutes River	hexachloroethane	0:12	52.50	40.00	65.00	13.06
Deschutes River	indeno(1,2,3-c,d)pyrene	0:12	53.50	40.00	67.00	14.10
Deschutes River	isophorone	0:12	52.50	40.00	65.00	13.06
Deschutes River	lead	0:12	0.030	0.030	0.030	0.000
Deschutes River	lipids	34:34	1.74	0.24	4.33	1.02
Deschutes River	mercury	12:12	0.108	0.077	0.160	0.028
Deschutes River	meythoxychlor	0:34	5.39	5.00	10.00	0.82
Deschutes River	naphthalene	0:12	52.50	40.00	65.00	13.06
Deschutes River	nitrobenzene	0:12	42.50	40.00	45.00	2.61
Deschutes River	N-nitrosodimethylamine	0:12	100.00	40.00	160.00	62.67
Deschutes River	N-nitroso-di-n-propylamine	0:12	42.50	40.00	45.00	2.61
Deschutes River	N-nitrosodiphenylamine	0:12	52.50	40.00	65.00	13.06
Deschutes River	pentachlorophenol	0:12	160.00	160.00	160.00	0.00
Deschutes River	phenanthrene	0:12	42.50	40.00	45.00	2.61
Deschutes River	phenol	0:12	52.50	40.00	65.00	13.06
Deschutes River	ppDDD	34:34	2.51	0.57	5.65	1.25
Deschutes River	ppDDE	34:34	22.11	3.70	48.30	11.75
Deschutes River	ppDDT	17:34	1.29	0.52	4.00	0.68
Deschutes River	pyrene	0:12	42.50	40.00	45.00	2.61
Deschutes River	solids	34:34	22.7	17.6	29.0	2.8
Deschutes River	Toxaphene	0:34	10.59	10.00	30.00	3.43
Duamish River	1,2,4-trichlorobenzene	0:18	45.00	40.00	50.00	4.20
Duamish River	1,2-dichlorobenzene	0:18	45.00	40.00	50.00	4.20
Duamish River	1,2-diphenylhydrazine	0:18	45.00	40.00	50.00	4.20
Duamish River	1,3-dichlorobenzene	0:18	56.11	40.00	70.00	12.07
Duamish River	1,4-dichlorobenzene	0:18	45.00	40.00	50.00	4.20
Duamish River	2,4,5-trichlorophenol	0:18	20.00	20.00	20.00	0.00
Duamish River	2,4,6-trichlorophenol	0:18	56.11	40.00	70.00	12.07
Duamish River	2,4-dichlorophenol	0:18	56.11	40.00	70.00	12.07
Duamish River	2,4-dimethylphenol	0:18	56.11	40.00	70.00	12.07
Duamish River	2,4-dinitrophenol	0:18	320.00	260.00	400.00	60.59
Duamish River	2,4-dinitrotoluene	0:18	102.33	40.00	200.00	71.96
Duamish River	2,6-dinitrotoluene	0:18	20.00	20.00	20.00	0.00
Duamish River	2-chloronaphthalene	0:18	10.00	10.00	10.00	0.00
Duamish River	2-chlorophenol	0:18	56.11	40.00	70.00	12.07
Duamish River	2-methylnaphthalene	0:18	20.00	20.00	20.00	0.00
Duamish River	2-methylphenol	0:18	45.00	40.00	50.00	4.20
Duamish River	2-nitroaniline	0:18	102.33	40.00	200.00	71.96
Duamish River	2-nitrophenol	0:18	45.00	40.00	50.00	4.20
Duamish River	3-nitroaniline	0:18	213.33	80.00	300.00	98.46
Duamish River	4,6-dinitro-o-cresol	0:18	233.33	200.00	300.00	48.51



# Appendix: Chinook Salmon Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Duwamish River	4-bromophenylphenylether	0:18	56.11	40.00	70.00	12.07
Duwamish River	4-chloro-3-methylphenol	0:18	56.11	40.00	70.00	12.07
Duwamish River	4-chloroaniline	0:18	273.33	20.00	400.00	184.33
Duwamish River	4-chlorophenylphenylether	0:18	56.11	40.00	70.00	12.07
Duwamish River	4-methylphenol	0:18	56.11	40.00	70.00	12.07
Duwamish River	4-nitroaniline	0:18	213.33	80.00	300.00	98.46
Duwamish River	4-nitrophenol	0:18	480.00	400.00	540.00	60.59
Duwamish River	acenaphthene	0:18	10.00	10.00	10.00	0.00
Duwamish River	acenaphthylene	0:18	10.00	10.00	10.00	0.00
Duwamish River	Aldrin	0:83	0.59	0.30	0.67	0.15
Duwamish River	alpha chlordane	50:83	1.30	0.50	13.70	1.61
Duwamish River	alpha endosulfan	0:83	0.65	0.50	0.67	0.06
Duwamish River	alpha hexachlorocyclohexane	6:83	0.54	0.50	1.00	0.08
Duwamish River	aniline	0:18	46.67	45.00	50.00	2.43
Duwamish River	anthracene	0:18	20.00	20.00	20.00	0.00
Duwamish River	Aroclor 1016	0:83	20.00	20.00	20.00	0.00
Duwamish River	Aroclor 1221	0:83	20.00	20.00	20.00	0.00
Duwamish River	Aroclor 1232	0:83	20.00	20.00	20.00	0.00
Duwamish River	Aroclor 1242	0:83	17.83	10.00	20.00	4.15
Duwamish River	Aroclor 1248	0:83	2.00	2.00	2.00	0.00
Duwamish River	Aroclor 1254	72:72	34.43	11.00	87.80	16.07
Duwamish River	Aroclor 1260	71:72	19.76	2.00	72.00	11.03
Duwamish River	arsenic	18:18	1.03	0.64	1.40	0.23
Duwamish River	benzo(a)anthracene	0:18	56.11	40.00	70.00	12.07
Duwamish River	benzo(a)pyrene	0:18	10.00	10.00	10.00	0.00
Duwamish River	benzo(b)fluoranthene	0:18	45.00	40.00	50.00	4.20
Duwamish River	benzo(g,h,i)perylene	0:18	56.11	40.00	70.00	12.07
Duwamish River	benzo(k)fluoranthene	0:18	45.00	40.00	50.00	4.20
Duwamish River	benzoic acid	0:18	273.33	260.00	300.00	19.40
Duwamish River	benzyl alcohol	0:18	45.00	40.00	50.00	4.20
Duwamish River	benzylbutylphthalate	0:18	64.44	60.00	70.00	2.91
Duwamish River	beta endosulfan	0:83	1.26	1.00	1.30	0.09
Duwamish River	beta hexachlorocyclohexane	0:83	0.72	0.67	1.00	0.12
Duwamish River	bis(2-chloroethoxy)methane	0:18	56.11	40.00	70.00	12.07
Duwamish River	bis(2-chloroethyl)ether	0:18	45.00	40.00	50.00	4.20
Duwamish River	bis(2-chloroisopropyl)ether	0:18	45.00	40.00	50.00	4.20
Duwamish River	bis(2-ethylhexyl)phthalate	4:18	443.33	65.00	5350.00	1242.33
Duwamish River	carbazole	0:18	56.11	40.00	70.00	12.07
Duwamish River	chrysene	0:18	56.11	40.00	70.00	12.07
Duwamish River	copper	18:18	0.70	0.47	1.09	0.21
Duwamish River	coprostanol	0:6	400.00	400.00	400.00	0.00
Duwamish River	delta hexachlorocyclohexane	0:83	0.52	0.50	0.52	0.01
Duwamish River	dibenzo(a,h)anthracene	0:18	56.11	40.00	70.00	12.07
Duwamish River	dibenzofuran	0:18	45.00	40.00	50.00	4.20
Duwamish River	Dieldrin	6:83	0.66	0.50	1.10	0.10
Duwamish River	diethylphthalate	0:18	45.00	40.00	50.00	4.20
Duwamish River	dimethylphthalate	0:18	45.00	40.00	50.00	4.20

# Appendix: Chinook Salmon Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Duwamish River	di-n-butylphthalate	0:18	46.67	45.00	50.00	2.43
Duwamish River	di-n-octylphthalate	0:18	10.00	10.00	10.00	0.00
Duwamish River	endosulfan sulfate	0:83	1.25	1.00	1.30	0.10
Duwamish River	Endrin	0:83	1.23	1.00	1.30	0.12
Duwamish River	endrin aldehyde	0:83	1.06	1.00	1.10	0.05
Duwamish River	fluoranthene	0:18	20.00	20.00	20.00	0.00
Duwamish River	fluorene	0:18	45.00	40.00	50.00	4.20
Duwamish River	gamma chlordane	15:83	0.72	0.50	2.37	0.49
Duwamish River	gamma hexachlorocyclohexane	1:83	0.52	0.50	0.54	0.01
Duwamish River	heptachlor	0:83	0.52	0.50	0.52	0.01
Duwamish River	heptachlor epoxide	0:83	0.52	0.50	0.52	0.01
Duwamish River	hexachlorobenzene	0:18	56.11	40.00	70.00	12.07
Duwamish River	hexachlorobutadiene	0:18	45.00	40.00	50.00	4.20
Duwamish River	hexachlorocyclopentadiene	0:18	188.67	166.00	200.00	16.49
Duwamish River	hexachloroethane	0:18	56.11	40.00	70.00	12.07
Duwamish River	indeno(1,2,3-c,d)pyrene	0:18	56.78	40.00	70.00	12.62
Duwamish River	isophorone	0:18	56.11	40.00	70.00	12.07
Duwamish River	lead	0:18	0.027	0.020	0.030	0.005
Duwamish River	lipids	82:82	3.03	0.69	15.98	2.26
Duwamish River	mercury	18:18	0.102	0.059	0.150	0.027
Duwamish River	meythoxychlor	0:83	5.26	5.00	5.30	0.11
Duwamish River	naphthalene	0:18	56.11	40.00	70.00	12.07
Duwamish River	nitrobenzene	0:18	45.00	40.00	50.00	4.20
Duwamish River	N-nitrosodimethylamine	0:18	133.33	40.00	200.00	69.96
Duwamish River	N-nitroso-di-n-propylamine	0:18	45.00	40.00	50.00	4.20
Duwamish River	N-nitrosodiphenylamine	0:18	56.11	40.00	70.00	12.07
Duwamish River	pentachlorophenol	0:18	173.33	160.00	200.00	19.40
Duwamish River	phenanthrene	0:18	45.00	40.00	50.00	4.20
Duwamish River	phenol	0:18	56.11	40.00	70.00	12.07
Duwamish River	ppDDD	79:83	2.63	0.52	6.47	1.38
Duwamish River	ppDDE	83:83	17.40	2.40	53.10	9.91
Duwamish River	ppDDT	55:83	1.29	0.52	2.70	0.61
Duwamish River	pyrene	0:18	45.00	40.00	50.00	4.20
Duwamish River	solids	79:79	26.9	20.0	35.1	2.7
Duwamish River	Toxaphene	0:83	10.00	10.00	10.00	0.00
Nisqually River	1,2,4-trichlorobenzene	0:12	42.50	40.00	45.00	2.61
Nisqually River	1,2-dichlorobenzene	0:12	42.50	40.00	45.00	2.61
Nisqually River	1,2-diphenylhydrazine	0:12	42.50	40.00	45.00	2.61
Nisqually River	1,3-dichlorobenzene	0:12	52.50	40.00	65.00	13.06
Nisqually River	1,4-dichlorobenzene	0:12	42.50	40.00	45.00	2.61
Nisqually River	2,4,5-trichlorophenol	0:12	20.00	20.00	20.00	0.00
Nisqually River	2,4,6-trichlorophenol	0:12	52.50	40.00	65.00	13.06
Nisqually River	2,4-dichlorophenol	0:12	52.50	40.00	65.00	13.06
Nisqually River	2,4-dimethylphenol	0:12	52.50	40.00	65.00	13.06
Nisqually River	2,4-dinitrophenol	0:12	330.00	260.00	400.00	73.11
Nisqually River	2,4-dinitrotoluene	0:12	53.50	40.00	67.00	14.10
Nisqually River	2,6-dinitrotoluene	0:12	20.00	20.00	20.00	0.00

# Appendix: Chinook Salmon Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Nisqually River	2-chloronaphthalene	0:12	10.00	10.00	10.00	0.00
Nisqually River	2-chlorophenol	0:12	52.50	40.00	65.00	13.06
Nisqually River	2-methylnaphthalene	0:12	20.00	20.00	20.00	0.00
Nisqually River	2-methylphenol	0:12	42.50	40.00	45.00	2.61
Nisqually River	2-nitroaniline	0:12	53.50	40.00	67.00	14.10
Nisqually River	2-nitrophenol	0:12	42.50	40.00	45.00	2.61
Nisqually River	3-nitroaniline	0:12	170.00	80.00	260.00	94.00
Nisqually River	4,6-dinitro-o-cresol	0:12	200.00	200.00	200.00	0.00
Nisqually River	4-bromophenylphenylether	0:12	52.50	40.00	65.00	13.06
Nisqually River	4-chloro-3-methylphenol	0:12	52.50	40.00	65.00	13.06
Nisqually River	4-chloroaniline	0:12	400.00	400.00	400.00	0.00
Nisqually River	4-chlorophenylphenylether	0:12	52.50	40.00	65.00	13.06
Nisqually River	4-methylphenol	0:12	52.50	40.00	65.00	13.06
Nisqually River	4-nitroaniline	0:12	170.00	80.00	260.00	94.00
Nisqually River	4-nitrophenol	0:12	470.00	400.00	540.00	73.11
Nisqually River	acenaphthene	0:12	10.00	10.00	10.00	0.00
Nisqually River	acenaphthylene	0:12	10.00	10.00	10.00	0.00
Nisqually River	Aldrin	0:20	0.45	0.30	0.67	0.19
Nisqually River	alpha chlordane	2:20	0.64	0.50	2.51	0.46
Nisqually River	alpha endosulfan	0:20	0.62	0.50	0.67	0.08
Nisqually River	alpha hexachlorocyclohexane	0:20	0.51	0.50	0.52	0.01
Nisqually River	aniline	0:12	45.00	45.00	45.00	0.00
Nisqually River	anthracene	0:12	20.00	20.00	20.00	0.00
Nisqually River	Aroclor 1016	0:20	20.00	20.00	20.00	0.00
Nisqually River	Aroclor 1221	0:20	20.00	20.00	20.00	0.00
Nisqually River	Aroclor 1232	0:20	20.00	20.00	20.00	0.00
Nisqually River	Aroclor 1242	0:20	14.00	10.00	20.00	5.03
Nisqually River	Aroclor 1248	0:20	2.00	2.00	2.00	0.00
Nisqually River	Aroclor 1254	20:20	22.32	10.80	60.30	11.97
Nisqually River	Aroclor 1260	20:20	18.44	3.30	59.90	14.29
Nisqually River	arsenic	12:12	0.84	0.57	1.10	0.16
Nisqually River	benzo(a)anthracene	0:12	52.50	40.00	65.00	13.06
Nisqually River	benzo(a)pyrene	0:12	10.00	10.00	10.00	0.00
Nisqually River	benzo(b)fluoranthene	0:12	42.50	40.00	45.00	2.61
Nisqually River	benzo(g,h,i)perylene	0:12	52.50	40.00	65.00	13.06
Nisqually River	benzo(k)fluoranthene	0:12	42.50	40.00	45.00	2.61
Nisqually River	benzoic acid	0:12	260.00	260.00	260.00	0.00
Nisqually River	benzyl alcohol	0:12	42.50	40.00	45.00	2.61
Nisqually River	benzylbutylphthalate	0:12	65.00	65.00	65.00	0.00
Nisqually River	beta endosulfan	0:20	1.24	1.10	1.30	0.09
Nisqually River	beta hexachlorocyclohexane	0:20	0.77	0.67	1.00	0.16
Nisqually River	bis(2-chloroethoxy)methane	0:12	52.50	40.00	65.00	13.06
Nisqually River	bis(2-chloroethyl)ether	0:12	42.50	40.00	45.00	2.61
Nisqually River	bis(2-chloroisopropyl)ether	0:12	42.50	40.00	45.00	2.61
Nisqually River	bis(2-ethylhexyl)phthalate	0:12	65.00	65.00	65.00	0.00
Nisqually River	carbazole	0:12	52.50	40.00	65.00	13.06
Nisqually River	chrysene	0:12	52.50	40.00	65.00	13.06

# Appendix: Chinook Salmon Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Nisqually River	copper	12:12	0.55	0.51	0.65	0.04
Nisqually River	coprostanol	0:6	400.00	400.00	400.00	0.00
Nisqually River	delta hexachlorocyclohexane	0:20	0.51	0.50	0.52	0.01
Nisqually River	dibenzo(a,h)anthracene	0:12	52.50	40.00	65.00	13.06
Nisqually River	dibenzofuran	0:12	42.50	40.00	45.00	2.61
Nisqually River	Dieldrin	0:20	0.57	0.50	0.67	0.09
Nisqually River	diethylphthalate	0:12	42.50	40.00	45.00	2.61
Nisqually River	dimethylphthalate	0:12	42.50	40.00	45.00	2.61
Nisqually River	di-n-butylphthalate	0:12	45.00	45.00	45.00	0.00
Nisqually River	di-n-octylphthalate	0:12	10.00	10.00	10.00	0.00
Nisqually River	endosulfan sulfate	0:20	1.18	1.10	1.30	0.10
Nisqually River	Endrin	0:20	1.12	1.00	1.30	0.15
Nisqually River	endrin aldehyde	0:20	1.00	1.00	1.00	0.00
Nisqually River	fluoranthene	0:12	20.00	20.00	20.00	0.00
Nisqually River	fluorene	0:12	42.50	40.00	45.00	2.61
Nisqually River	gamma chlordane	0:20	0.51	0.50	0.52	0.01
Nisqually River	gamma hexachlorocyclohexane	0:20	0.51	0.50	0.52	0.01
Nisqually River	heptachlor	0:20	0.51	0.50	0.52	0.01
Nisqually River	heptachlor epoxide	0:20	0.51	0.50	0.52	0.01
Nisqually River	hexachlorobenzene	0:12	52.50	40.00	65.00	13.06
Nisqually River	hexachlorobutadiene	0:12	42.50	40.00	45.00	2.61
Nisqually River	hexachlorocyclopentadiene	0:12	183.00	166.00	200.00	17.76
Nisqually River	hexachloroethane	0:12	52.50	40.00	65.00	13.06
Nisqually River	indeno(1,2,3-c,d)pyrene	0:12	53.50	40.00	67.00	14.10
Nisqually River	isophorone	0:12	52.50	40.00	65.00	13.06
Nisqually River	lead	0:12	0.030	0.030	0.030	0.000
Nisqually River	lipids	20:20	3.76	0.80	8.91	2.67
Nisqually River	mercury	12:12	0.085	0.065	0.105	0.014
Nisqually River	meythoxychlor	0:20	5.21	5.00	5.30	0.14
Nisqually River	naphthalene	0:12	52.50	40.00	65.00	13.06
Nisqually River	nitrobenzene	0:12	42.50	40.00	45.00	2.61
Nisqually River	N-nitrosodimethylamine	0:12	100.00	40.00	160.00	62.67
Nisqually River	N-nitroso-di-n-propylamine	0:12	42.50	40.00	45.00	2.61
Nisqually River	N-nitrosodiphenylamine	0:12	52.50	40.00	65.00	13.06
Nisqually River	pentachlorophenol	0:12	160.00	160.00	160.00	0.00
Nisqually River	phenanthrene	0:12	42.50	40.00	45.00	2.61
Nisqually River	phenol	0:12	52.50	40.00	65.00	13.06
Nisqually River	ppDDD	20:20	1.86	1.10	3.34	0.53
Nisqually River	ppDDE	20:20	12.64	6.50	23.90	4.27
Nisqually River	ppDDT	5:20	1.29	0.52	2.00	0.56
Nisqually River	pyrene	0:12	42.50	40.00	45.00	2.61
Nisqually River	solids	20:20	28.3	25.0	33.8	2.6
Nisqually River	Toxaphene	0:20	10.00	10.00	10.00	0.00
Nooksack River	1,2,4-trichlorobenzene	0:18	45.00	40.00	50.00	4.20
Nooksack River	1,2-dichlorobenzene	0:18	45.00	40.00	50.00	4.20
Nooksack River	1,2-diphenylhydrazine	0:18	45.00	40.00	50.00	4.20
Nooksack River	1,3-dichlorobenzene	0:18	55.00	40.00	65.00	11.11

# Appendix: Chinook Salmon Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Nooksack River	1,4-dichlorobenzene	0:18	45.00	40.00	50.00	4.20
Nooksack River	2,4,5-trichlorophenol	0:18	20.00	20.00	20.00	0.00
Nooksack River	2,4,6-trichlorophenol	0:18	55.00	40.00	65.00	11.11
Nooksack River	2,4-dichlorophenol	0:18	55.00	40.00	65.00	11.11
Nooksack River	2,4-dimethylphenol	0:18	55.00	40.00	65.00	11.11
Nooksack River	2,4-dinitrophenol	0:18	320.00	260.00	400.00	60.59
Nooksack River	2,4-dinitrotoluene	0:18	102.33	40.00	200.00	71.96
Nooksack River	2,6-dinitrotoluene	0:18	20.00	20.00	20.00	0.00
Nooksack River	2-chloronaphthalene	0:18	10.00	10.00	10.00	0.00
Nooksack River	2-chlorophenol	0:18	55.00	40.00	65.00	11.11
Nooksack River	2-methylnaphthalene	0:18	20.00	20.00	20.00	0.00
Nooksack River	2-methylphenol	0:18	45.00	40.00	50.00	4.20
Nooksack River	2-nitroaniline	0:18	102.33	40.00	200.00	71.96
Nooksack River	2-nitrophenol	0:18	45.00	40.00	50.00	4.20
Nooksack River	3-nitroaniline	0:18	213.33	80.00	300.00	98.46
Nooksack River	4,6-dinitro-o-cresol	0:18	233.33	200.00	300.00	48.51
Nooksack River	4-bromophenylphenylether	0:18	55.00	40.00	65.00	11.11
Nooksack River	4-chloro-3-methylphenol	0:18	55.00	40.00	65.00	11.11
Nooksack River	4-chloroaniline	0:18	273.33	20.00	400.00	184.33
Nooksack River	4-chlorophenylphenylether	0:18	55.00	40.00	65.00	11.11
Nooksack River	4-methylphenol	0:18	55.00	40.00	65.00	11.11
Nooksack River	4-nitroaniline	0:18	213.33	80.00	300.00	98.46
Nooksack River	4-nitrophenol	0:18	480.00	400.00	540.00	60.59
Nooksack River	acenaphthene	0:18	10.00	10.00	10.00	0.00
Nooksack River	acenaphthylene	0:18	10.00	10.00	10.00	0.00
Nooksack River	Aldrin	0:28	0.43	0.30	0.67	0.18
Nooksack River	alpha chlordane	4:28	0.62	0.50	1.54	0.29
Nooksack River	alpha endosulfan	0:28	0.60	0.50	0.67	0.09
Nooksack River	alpha hexachlorocyclohexane	6:28	0.59	0.50	1.10	0.17
Nooksack River	aniline	0:18	46.67	45.00	50.00	2.43
Nooksack River	anthracene	0:18	20.00	20.00	20.00	0.00
Nooksack River	Aroclor 1016	0:28	20.00	20.00	20.00	0.00
Nooksack River	Aroclor 1221	0:28	20.00	20.00	20.00	0.00
Nooksack River	Aroclor 1232	0:28	20.00	20.00	20.00	0.00
Nooksack River	Aroclor 1242	0:28	13.57	10.00	20.00	4.88
Nooksack River	Aroclor 1248	0:28	2.00	2.00	2.00	0.00
Nooksack River	Aroclor 1254	28:28	22.37	12.00	34.90	6.29
Nooksack River	Aroclor 1260	28:28	14.56	2.90	38.00	7.21
Nooksack River	arsenic	18:18	0.88	0.60	1.20	0.18
Nooksack River	benzo(a)anthracene	0:18	55.00	40.00	65.00	11.11
Nooksack River	benzo(a)pyrene	0:18	10.00	10.00	10.00	0.00
Nooksack River	benzo(b)fluoranthene	0:18	45.00	40.00	50.00	4.20
Nooksack River	benzo(g,h,i)perylene	0:18	55.00	40.00	65.00	11.11
Nooksack River	benzo(k)fluoranthene	0:18	45.00	40.00	50.00	4.20
Nooksack River	benzoic acid	0:18	273.33	260.00	300.00	19.40
Nooksack River	benzyl alcohol	0:18	45.00	40.00	50.00	4.20
Nooksack River	benzylbutylphthalate	0:18	63.33	60.00	65.00	2.43

# Appendix: Chinook Salmon Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Nooksack River	beta endosulfan	0:28	1.19	1.00	1.30	0.13
Nooksack River	beta hexachlorocyclohexane	0:28	0.81	0.67	1.00	0.17
Nooksack River	bis(2-chloroethoxy)methane	0:18	55.00	40.00	65.00	11.11
Nooksack River	bis(2-chloroethyl)ether	0:18	45.00	40.00	50.00	4.20
Nooksack River	bis(2-chloroisopropyl)ether	0:18	45.00	40.00	50.00	4.20
Nooksack River	bis(2-ethylhexyl)phthalate	1:18	84.44	60.00	440.00	88.76
Nooksack River	carbazole	0:18	55.00	40.00	65.00	11.11
Nooksack River	chrysene	0:18	55.00	40.00	65.00	11.11
Nooksack River	copper	18:18	0.66	0.41	1.20	0.29
Nooksack River	coprostanol	0:6	400.00	400.00	400.00	0.00
Nooksack River	delta hexachlorocyclohexane	0:28	0.51	0.50	0.52	0.01
Nooksack River	dibenzo(a,h)anthracene	0:18	55.00	40.00	65.00	11.11
Nooksack River	dibenzofuran	0:18	45.00	40.00	50.00	4.20
Nooksack River	Dieldrin	6:28	0.66	0.50	1.20	0.20
Nooksack River	diethylphthalate	0:18	45.00	40.00	50.00	4.20
Nooksack River	dimethylphthalate	0:18	45.00	40.00	50.00	4.20
Nooksack River	di-n-butylphthalate	0:18	46.67	45.00	50.00	2.43
Nooksack River	di-n-octylphthalate	0:18	10.00	10.00	10.00	0.00
Nooksack River	endosulfan sulfate	0:28	1.15	1.00	1.30	0.12
Nooksack River	Endrin	0:28	1.11	1.00	1.30	0.15
Nooksack River	endrin aldehyde	0:28	1.00	1.00	1.00	0.00
Nooksack River	fluoranthene	0:18	20.00	20.00	20.00	0.00
Nooksack River	fluorene	0:18	45.00	40.00	50.00	4.20
Nooksack River	gamma chlordane	0:28	0.51	0.50	0.52	0.01
Nooksack River	gamma hexachlorocyclohexane	3:28	0.51	0.50	0.53	0.01
Nooksack River	heptachlor	0:28	0.51	0.50	0.52	0.01
Nooksack River	heptachlor epoxide	0:28	0.51	0.50	0.52	0.01
Nooksack River	hexachlorobenzene	0:18	55.00	40.00	65.00	11.11
Nooksack River	hexachlorobutadiene	0:18	45.00	40.00	50.00	4.20
Nooksack River	hexachlorocyclopentadiene	0:18	188.67	166.00	200.00	16.49
Nooksack River	hexachloroethane	0:18	55.00	40.00	65.00	11.11
Nooksack River	indeno(1,2,3-c,d)pyrene	0:18	55.67	40.00	67.00	11.77
Nooksack River	isophorone	0:18	55.00	40.00	65.00	11.11
Nooksack River	lead	0:18	0.027	0.020	0.030	0.005
Nooksack River	lipids	28:28	3.45	0.98	6.74	1.60
Nooksack River	mercury	18:18	0.087	0.062	0.110	0.015
Nooksack River	meythoxychlor	0:28	5.17	5.00	5.30	0.15
Nooksack River	naphthalene	0:18	55.00	40.00	65.00	11.11
Nooksack River	nitrobenzene	0:18	45.00	40.00	50.00	4.20
Nooksack River	N-nitrosodimethylamine	0:18	133.33	40.00	200.00	69.96
Nooksack River	N-nitroso-di-n-propylamine	0:18	45.00	40.00	50.00	4.20
Nooksack River	N-nitrosodiphenylamine	0:18	55.00	40.00	65.00	11.11
Nooksack River	pentachlorophenol	0:18	173.33	160.00	200.00	19.40
Nooksack River	phenanthrene	0:18	45.00	40.00	50.00	4.20
Nooksack River	phenol	0:18	55.00	40.00	65.00	11.11
Nooksack River	ppDDD	28:28	2.19	0.56	4.25	0.92
Nooksack River	ppDDE	28:28	17.12	5.20	41.70	9.21

# Appendix: Chinook Salmon Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Nooksack River	ppDDT	11:28	1.60	0.52	3.70	0.77
Nooksack River	pyrene	0:18	45.00	40.00	50.00	4.20
Nooksack River	solids	24:24	27.5	24.0	29.4	1.3
Nooksack River	Toxaphene	0:28	10.00	10.00	10.00	0.00
Sinclair Inlet	1,2,4-trichlorobenzene	0:6	50.00	50.00	50.00	0.00
Sinclair Inlet	1,2-dichlorobenzene	0:6	50.00	50.00	50.00	0.00
Sinclair Inlet	1,2-diphenylhydrazine	0:6	50.00	50.00	50.00	0.00
Sinclair Inlet	1,3-dichlorobenzene	0:6	60.00	60.00	60.00	0.00
Sinclair Inlet	1,4-dichlorobenzene	0:6	50.00	50.00	50.00	0.00
Sinclair Inlet	2,4,5-trichlorophenol	0:6	20.00	20.00	20.00	0.00
Sinclair Inlet	2,4,6-trichlorophenol	0:6	60.00	60.00	60.00	0.00
Sinclair Inlet	2,4-dichlorophenol	0:6	60.00	60.00	60.00	0.00
Sinclair Inlet	2,4-dimethylphenol	0:6	60.00	60.00	60.00	0.00
Sinclair Inlet	2,4-dinitrophenol	0:6	300.00	300.00	300.00	0.00
Sinclair Inlet	2,4-dinitrotoluene	0:6	200.00	200.00	200.00	0.00
Sinclair Inlet	2,6-dinitrotoluene	0:6	20.00	20.00	20.00	0.00
Sinclair Inlet	2-chloronaphthalene	0:6	10.00	10.00	10.00	0.00
Sinclair Inlet	2-chlorophenol	0:6	60.00	60.00	60.00	0.00
Sinclair Inlet	2-methylnaphthalene	0:6	20.00	20.00	20.00	0.00
Sinclair Inlet	2-methylphenol	0:6	50.00	50.00	50.00	0.00
Sinclair Inlet	2-nitroaniline	0:6	200.00	200.00	200.00	0.00
Sinclair Inlet	2-nitrophenol	0:6	50.00	50.00	50.00	0.00
Sinclair Inlet	3-nitroaniline	0:6	300.00	300.00	300.00	0.00
Sinclair Inlet	4,6-dinitro-o-cresol	0:6	300.00	300.00	300.00	0.00
Sinclair Inlet	4-bromophenylphenylether	0:6	60.00	60.00	60.00	0.00
Sinclair Inlet	4-chloro-3-methylphenol	0:6	60.00	60.00	60.00	0.00
Sinclair Inlet	4-chloroaniline	0:6	20.00	20.00	20.00	0.00
Sinclair Inlet	4-chlorophenylphenylether	0:6	60.00	60.00	60.00	0.00
Sinclair Inlet	4-methylphenol	0:6	60.00	60.00	60.00	0.00
Sinclair Inlet	4-nitroaniline	0:6	300.00	300.00	300.00	0.00
Sinclair Inlet	4-nitrophenol	0:6	500.00	500.00	500.00	0.00
Sinclair Inlet	acenaphthene	0:6	10.00	10.00	10.00	0.00
Sinclair Inlet	acenaphthylene	0:6	10.00	10.00	10.00	0.00
Sinclair Inlet	Aldrin	0:6	0.30	0.30	0.30	0.00
Sinclair Inlet	alpha chlordane	0:6	0.50	0.50	0.50	0.00
Sinclair Inlet	alpha endosulfan	0:6	0.50	0.50	0.50	0.00
Sinclair Inlet	alpha hexachlorocyclohexane	6:6	1.00	0.68	1.40	0.31
Sinclair Inlet	aniline	0:6	50.00	50.00	50.00	0.00
Sinclair Inlet	anthracene	0:6	20.00	20.00	20.00	0.00
Sinclair Inlet	Aroclor 1016	0:6	20.00	20.00	20.00	0.00
Sinclair Inlet	Aroclor 1221	0:6	20.00	20.00	20.00	0.00
Sinclair Inlet	Aroclor 1232	0:6	20.00	20.00	20.00	0.00
Sinclair Inlet	Aroclor 1242	0:6	10.00	10.00	10.00	0.00
Sinclair Inlet	Aroclor 1248	0:6	2.00	2.00	2.00	0.00
Sinclair Inlet	Aroclor 1254	6:6	28.33	14.00	46.00	11.91
Sinclair Inlet	Aroclor 1260	6:6	16.17	6.00	33.00	9.97
Sinclair Inlet	arsenic	6:6	1.22	1.10	1.40	0.10

# Appendix: Chinook Salmon Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Sinclair Inlet	benzo(a)anthracene	0:6	60.00	60.00	60.00	0.00
Sinclair Inlet	benzo(a)pyrene	0:6	10.00	10.00	10.00	0.00
Sinclair Inlet	benzo(b)fluoranthene	0:6	50.00	50.00	50.00	0.00
Sinclair Inlet	benzo(g,h,i)perylene	0:6	60.00	60.00	60.00	0.00
Sinclair Inlet	benzo(k)fluoranthene	0:6	50.00	50.00	50.00	0.00
Sinclair Inlet	benzoic acid	0:6	300.00	300.00	300.00	0.00
Sinclair Inlet	benzyl alcohol	0:6	50.00	50.00	50.00	0.00
Sinclair Inlet	benzylbutylphthalate	0:6	60.00	60.00	60.00	0.00
Sinclair Inlet	beta endosulfan	0:6	1.00	1.00	1.00	0.00
Sinclair Inlet	beta hexachlorocyclohexane	0:6	1.00	1.00	1.00	0.00
Sinclair Inlet	bis(2-chloroethoxy)methane	0:6	60.00	60.00	60.00	0.00
Sinclair Inlet	bis(2-chloroethyl)ether	0:6	50.00	50.00	50.00	0.00
Sinclair Inlet	bis(2-chloroisopropyl)ether	0:6	50.00	50.00	50.00	0.00
Sinclair Inlet	bis(2-ethylhexyl)phthalate	0:6	60.00	60.00	60.00	0.00
Sinclair Inlet	carbazole	0:6	60.00	60.00	60.00	0.00
Sinclair Inlet	chrysene	0:6	60.00	60.00	60.00	0.00
Sinclair Inlet	copper	6:6	0.47	0.41	0.51	0.04
Sinclair Inlet	delta hexachlorocyclohexane	0:6	0.50	0.50	0.50	0.00
Sinclair Inlet	dibenzo(a,h)anthracene	0:6	60.00	60.00	60.00	0.00
Sinclair Inlet	dibenzofuran	0:6	50.00	50.00	50.00	0.00
Sinclair Inlet	Dieldrin	6:6	1.19	0.81	1.50	0.26
Sinclair Inlet	diethylphthalate	0:6	50.00	50.00	50.00	0.00
Sinclair Inlet	dimethylphthalate	0:6	50.00	50.00	50.00	0.00
Sinclair Inlet	di-n-butylphthalate	0:6	50.00	50.00	50.00	0.00
Sinclair Inlet	di-n-octylphthalate	0:6	10.00	10.00	10.00	0.00
Sinclair Inlet	endosulfan sulfate	0:6	1.00	1.00	1.00	0.00
Sinclair Inlet	Endrin	0:6	1.00	1.00	1.00	0.00
Sinclair Inlet	endrin aldehyde	0:6	1.00	1.00	1.00	0.00
Sinclair Inlet	fluoranthene	0:6	20.00	20.00	20.00	0.00
Sinclair Inlet	fluorene	0:6	50.00	50.00	50.00	0.00
Sinclair Inlet	gamma chlordane	0:6	0.50	0.50	0.50	0.00
Sinclair Inlet	gamma hexachlorocyclohexane	0:6	0.50	0.50	0.50	0.00
Sinclair Inlet	heptachlor	0:6	0.50	0.50	0.50	0.00
Sinclair Inlet	heptachlor epoxide	0:6	0.50	0.50	0.50	0.00
Sinclair Inlet	hexachlorobenzene	0:6	60.00	60.00	60.00	0.00
Sinclair Inlet	hexachlorobutadiene	0:6	50.00	50.00	50.00	0.00
Sinclair Inlet	hexachlorocyclopentadiene	0:6	200.00	200.00	200.00	0.00
Sinclair Inlet	hexachloroethane	0:6	60.00	60.00	60.00	0.00
Sinclair Inlet	indeno(1,2,3-c,d)pyrene	0:6	60.00	60.00	60.00	0.00
Sinclair Inlet	isophorone	0:6	60.00	60.00	60.00	0.00
Sinclair Inlet	lead	1:6	0.032	0.030	0.040	0.004
Sinclair Inlet	lipids	6:6	3.66	1.84	5.18	1.39
Sinclair Inlet	mercury	6:6	0.099	0.074	0.120	0.018
Sinclair Inlet	meythoxychlor	0:6	5.00	5.00	5.00	0.00
Sinclair Inlet	naphthalene	0:6	60.00	60.00	60.00	0.00
Sinclair Inlet	nitrobenzene	0:6	50.00	50.00	50.00	0.00
Sinclair Inlet	N-nitrosodimethylamine	0:6	200.00	200.00	200.00	0.00



# Appendix: Chinook Salmon Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Sinclair Inlet	N-nitroso-di-n-propylamine	0:6	50.00	50.00	50.00	0.00
Sinclair Inlet	N-nitrosodiphenylamine	0:6	60.00	60.00	60.00	0.00
Sinclair Inlet	pentachlorophenol	0:6	200.00	200.00	200.00	0.00
Sinclair Inlet	phenanthrene	0:6	50.00	50.00	50.00	0.00
Sinclair Inlet	phenol	0:6	60.00	60.00	60.00	0.00
Sinclair Inlet	ppDDD	6:6	2.80	1.50	3.90	0.90
Sinclair Inlet	ppDDE	6:6	18.32	9.90	26.00	6.40
Sinclair Inlet	ppDDT	4:6	2.45	2.00	3.40	0.56
Sinclair Inlet	pyrene	0:6	50.00	50.00	50.00	0.00
Sinclair Inlet	solids	2:2	28.0	28.0	28.0	0.0
Sinclair Inlet	Toxaphene	0:6	10.00	10.00	10.00	0.00
Skagit River	1,2,4-trichlorobenzene	0:18	45.00	40.00	50.00	4.20
Skagit River	1,2-dichlorobenzene	0:18	45.00	40.00	50.00	4.20
Skagit River	1,2-diphenylhydrazine	0:18	45.00	40.00	50.00	4.20
Skagit River	1,3-dichlorobenzene	0:18	55.00	40.00	65.00	11.11
Skagit River	1,4-dichlorobenzene	0:18	45.00	40.00	50.00	4.20
Skagit River	2,4,5-trichlorophenol	0:18	20.00	20.00	20.00	0.00
Skagit River	2,4,6-trichlorophenol	0:18	55.00	40.00	65.00	11.11
Skagit River	2,4-dichlorophenol	0:18	55.00	40.00	65.00	11.11
Skagit River	2,4-dimethylphenol	0:18	55.00	40.00	65.00	11.11
Skagit River	2,4-dinitrophenol	0:18	320.00	260.00	400.00	60.59
Skagit River	2,4-dinitrotoluene	0:18	102.33	40.00	200.00	71.96
Skagit River	2,6-dinitrotoluene	0:18	20.00	20.00	20.00	0.00
Skagit River	2-chloronaphthalene	0:18	10.00	10.00	10.00	0.00
Skagit River	2-chlorophenol	0:18	55.00	40.00	65.00	11.11
Skagit River	2-methylnaphthalene	0:18	20.00	20.00	20.00	0.00
Skagit River	2-methylphenol	0:18	45.00	40.00	50.00	4.20
Skagit River	2-nitroaniline	0:18	102.33	40.00	200.00	71.96
Skagit River	2-nitrophenol	0:18	45.00	40.00	50.00	4.20
Skagit River	3-nitroaniline	0:18	213.33	80.00	300.00	98.46
Skagit River	4,6-dinitro-o-cresol	0:18	233.33	200.00	300.00	48.51
Skagit River	4-bromophenylphenylether	0:18	55.00	40.00	65.00	11.11
Skagit River	4-chloro-3-methylphenol	0:18	55.00	40.00	65.00	11.11
Skagit River	4-chloroaniline	0:18	273.33	20.00	400.00	184.33
Skagit River	4-chlorophenylphenylether	0:18	55.00	40.00	65.00	11.11
Skagit River	4-methylphenol	0:18	55.00	40.00	65.00	11.11
Skagit River	4-nitroaniline	0:18	213.33	80.00	300.00	98.46
Skagit River	4-nitrophenol	0:18	480.00	400.00	540.00	60.59
Skagit River	acenaphthene	0:18	10.00	10.00	10.00	0.00
Skagit River	acenaphthylene	0:18	10.00	10.00	10.00	0.00
Skagit River	Aldrin	0:29	0.44	0.30	0.67	0.18
Skagit River	alpha chlordane	2:29	0.59	0.50	1.92	0.31
Skagit River	alpha endosulfan	0:29	0.60	0.50	0.67	0.09
Skagit River	alpha hexachlorocyclohexane	6:29	0.67	0.50	2.00	0.40
Skagit River	aniline	0:18	46.67	45.00	50.00	2.43
Skagit River	anthracene	0:18	20.00	20.00	20.00	0.00
Skagit River	Aroclor 1016	0:29	20.00	20.00	20.00	0.00

# Appendix: Chinook Salmon Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Skagit River	Aroclor 1221	0:29	20.00	20.00	20.00	0.00
Skagit River	Aroclor 1232	0:29	20.00	20.00	20.00	0.00
Skagit River	Aroclor 1242	0:29	13.79	10.00	20.00	4.94
Skagit River	Aroclor 1248	0:29	2.00	2.00	2.00	0.00
Skagit River	Aroclor 1254	29:29	24.62	7.47	59.00	13.48
Skagit River	Aroclor 1260	29:29	14.88	2.70	41.40	8.66
Skagit River	arsenic	18:18	1.05	0.60	1.60	0.31
Skagit River	benzo(a)anthracene	0:18	55.00	40.00	65.00	11.11
Skagit River	benzo(a)pyrene	0:18	10.00	10.00	10.00	0.00
Skagit River	benzo(b)fluoranthene	0:18	45.00	40.00	50.00	4.20
Skagit River	benzo(g,h,i)perylene	0:18	55.00	40.00	65.00	11.11
Skagit River	benzo(k)fluoranthene	0:18	45.00	40.00	50.00	4.20
Skagit River	benzoic acid	0:18	273.33	260.00	300.00	19.40
Skagit River	benzyl alcohol	0:18	45.00	40.00	50.00	4.20
Skagit River	benzylbutylphthalate	0:18	63.33	60.00	65.00	2.43
Skagit River	beta endosulfan	0:29	1.20	1.00	1.30	0.13
Skagit River	beta hexachlorocyclohexane	2:29	0.82	0.67	1.40	0.20
Skagit River	bis(2-chloroethoxy)methane	0:18	55.00	40.00	65.00	11.11
Skagit River	bis(2-chloroethyl)ether	0:18	45.00	40.00	50.00	4.20
Skagit River	bis(2-chloroisopropyl)ether	0:18	45.00	40.00	50.00	4.20
Skagit River	bis(2-ethylhexyl)phthalate	0:18	63.33	60.00	65.00	2.43
Skagit River	carbazole	0:18	55.00	40.00	65.00	11.11
Skagit River	chrysene	0:18	55.00	40.00	65.00	11.11
Skagit River	copper	18:18	0.50	0.43	0.59	0.05
Skagit River	coprostanol	0:6	400.00	400.00	400.00	0.00
Skagit River	delta hexachlorocyclohexane	0:29	0.51	0.50	0.52	0.01
Skagit River	dibenzo(a,h)anthracene	0:18	55.00	40.00	65.00	11.11
Skagit River	dibenzofuran	0:18	45.00	40.00	50.00	4.20
Skagit River	Dieldrin	6:29	0.78	0.50	2.10	0.43
Skagit River	diethylphthalate	0:18	45.00	40.00	50.00	4.20
Skagit River	dimethylphthalate	0:18	45.00	40.00	50.00	4.20
Skagit River	di-n-butylphthalate	0:18	46.67	45.00	50.00	2.43
Skagit River	di-n-octylphthalate	0:18	10.00	10.00	10.00	0.00
Skagit River	endosulfan sulfate	0:29	1.16	1.00	1.30	0.12
Skagit River	Endrin	0:29	1.11	1.00	1.30	0.15
Skagit River	endrin aldehyde	0:29	1.00	1.00	1.00	0.00
Skagit River	fluoranthene	0:18	20.00	20.00	20.00	0.00
Skagit River	fluorene	0:18	45.00	40.00	50.00	4.20
Skagit River	gamma chlordane	0:29	0.51	0.50	0.52	0.01
Skagit River	gamma hexachlorocyclohexane	2:29	0.51	0.50	0.52	0.01
Skagit River	heptachlor	0:29	0.51	0.50	0.52	0.01
Skagit River	heptachlor epoxide	0:29	0.51	0.50	0.52	0.01
Skagit River	hexachlorobenzene	0:18	55.00	40.00	65.00	11.11
Skagit River	hexachlorobutadiene	0:18	45.00	40.00	50.00	4.20
Skagit River	hexachlorocyclopentadiene	0:18	188.67	166.00	200.00	16.49
Skagit River	hexachloroethane	0:18	55.00	40.00	65.00	11.11
Skagit River	indeno(1,2,3-c,d)pyrene	0:18	55.67	40.00	67.00	11.77

# Appendix: Chinook Salmon Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Skagit River	isophorone	0:18	55.00	40.00	65.00	11.11
Skagit River	lead	0:18	0.030	0.030	0.030	0.000
Skagit River	lipids	29:29	4.83	0.66	18.02	3.61
Skagit River	mercury	18:18	0.100	0.058	0.160	0.030
Skagit River	meythoxychlor	0:29	5.18	5.00	5.30	0.15
Skagit River	naphthalene	0:18	55.00	40.00	65.00	11.11
Skagit River	nitrobenzene	0:18	45.00	40.00	50.00	4.20
Skagit River	N-nitrosodimethylamine	0:18	133.33	40.00	200.00	69.96
Skagit River	N-nitroso-di-n-propylamine	0:18	45.00	40.00	50.00	4.20
Skagit River	N-nitrosodiphenylamine	0:18	55.00	40.00	65.00	11.11
Skagit River	pentachlorophenol	0:18	173.33	160.00	200.00	19.40
Skagit River	phenanthrene	0:18	45.00	40.00	50.00	4.20
Skagit River	phenol	0:18	55.00	40.00	65.00	11.11
Skagit River	ppDDD	28:29	2.15	0.52	5.10	1.05
Skagit River	ppDDE	29:29	16.16	4.20	37.00	8.24
Skagit River	ppDDT	9:29	1.51	0.52	3.60	0.91
Skagit River	pyrene	0:18	45.00	40.00	50.00	4.20
Skagit River	solids	25:25	28.6	25.0	34.0	2.3
Skagit River	Toxaphene	0:29	10.00	10.00	10.00	0.00
South Sound	1,2,4-trichlorobenzene	0:6	50.00	50.00	50.00	0.00
South Sound	1,2-dichlorobenzene	0:6	50.00	50.00	50.00	0.00
South Sound	1,2-diphenylhydrazine	0:6	50.00	50.00	50.00	0.00
South Sound	1,3-dichlorobenzene	0:6	60.00	60.00	60.00	0.00
South Sound	1,4-dichlorobenzene	0:6	50.00	50.00	50.00	0.00
South Sound	2,4,5-trichlorophenol	0:6	20.00	20.00	20.00	0.00
South Sound	2,4,6-trichlorophenol	0:6	60.00	60.00	60.00	0.00
South Sound	2,4-dichlorophenol	0:6	60.00	60.00	60.00	0.00
South Sound	2,4-dimethylphenol	0:6	60.00	60.00	60.00	0.00
South Sound	2,4-dinitrophenol	0:6	300.00	300.00	300.00	0.00
South Sound	2,4-dinitrotoluene	0:6	200.00	200.00	200.00	0.00
South Sound	2,6-dinitrotoluene	0:6	20.00	20.00	20.00	0.00
South Sound	2-chloronaphthalene	0:6	10.00	10.00	10.00	0.00
South Sound	2-chlorophenol	0:6	60.00	60.00	60.00	0.00
South Sound	2-methylnaphthalene	0:6	20.00	20.00	20.00	0.00
South Sound	2-methylphenol	0:6	50.00	50.00	50.00	0.00
South Sound	2-nitroaniline	0:6	200.00	200.00	200.00	0.00
South Sound	2-nitrophenol	0:6	50.00	50.00	50.00	0.00
South Sound	3-nitroaniline	0:6	300.00	300.00	300.00	0.00
South Sound	4,6-dinitro-o-cresol	0:6	300.00	300.00	300.00	0.00
South Sound	4-bromophenylphenylether	0:6	60.00	60.00	60.00	0.00
South Sound	4-chloro-3-methylphenol	0:6	60.00	60.00	60.00	0.00
South Sound	4-chloroaniline	0:6	20.00	20.00	20.00	0.00
South Sound	4-chlorophenylphenylether	0:6	60.00	60.00	60.00	0.00
South Sound	4-methylphenol	0:6	60.00	60.00	60.00	0.00
South Sound	4-nitroaniline	0:6	300.00	300.00	300.00	0.00
South Sound	4-nitrophenol	0:6	500.00	500.00	500.00	0.00
South Sound	acenaphthene	0:6	10.00	10.00	10.00	0.00

# Appendix: Chinook Salmon Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
South Sound	acenaphthylene	0:6	10.00	10.00	10.00	0.00
South Sound	Aldrin	0:6	0.30	0.30	0.30	0.00
South Sound	alpha chlordane	0:6	0.50	0.50	0.50	0.00
South Sound	alpha endosulfan	0:6	0.50	0.50	0.50	0.00
South Sound	alpha hexachlorocyclohexane	1:6	0.62	0.50	1.20	0.29
South Sound	aniline	0:6	50.00	50.00	50.00	0.00
South Sound	anthracene	0:6	20.00	20.00	20.00	0.00
South Sound	Aroclor 1016	0:6	20.00	20.00	20.00	0.00
South Sound	Aroclor 1221	0:6	20.00	20.00	20.00	0.00
South Sound	Aroclor 1232	0:6	20.00	20.00	20.00	0.00
South Sound	Aroclor 1242	0:6	10.00	10.00	10.00	0.00
South Sound	Aroclor 1248	0:6	2.00	2.00	2.00	0.00
South Sound	Aroclor 1254	6:6	52.00	28.00	120.00	35.63
South Sound	Aroclor 1260	6:6	42.67	23.00	91.00	26.70
South Sound	arsenic	6:6	1.12	0.90	1.50	0.26
South Sound	benzo(a)anthracene	0:6	60.00	60.00	60.00	0.00
South Sound	benzo(a)pyrene	0:6	10.00	10.00	10.00	0.00
South Sound	benzo(b)fluoranthene	0:6	50.00	50.00	50.00	0.00
South Sound	benzo(g,h,i)perylene	0:6	60.00	60.00	60.00	0.00
South Sound	benzo(k)fluoranthene	0:6	50.00	50.00	50.00	0.00
South Sound	benzoic acid	0:6	300.00	300.00	300.00	0.00
South Sound	benzyl alcohol	0:6	50.00	50.00	50.00	0.00
South Sound	benzylbutylphthalate	0:6	60.00	60.00	60.00	0.00
South Sound	beta endosulfan	0:6	1.00	1.00	1.00	0.00
South Sound	beta hexachlorocyclohexane	0:6	1.00	1.00	1.00	0.00
South Sound	bis(2-chloroethoxy)methane	0:6	60.00	60.00	60.00	0.00
South Sound	bis(2-chloroethyl)ether	0:6	50.00	50.00	50.00	0.00
South Sound	bis(2-chloroisopropyl)ether	0:6	50.00	50.00	50.00	0.00
South Sound	bis(2-ethylhexyl)phthalate	0:6	60.00	60.00	60.00	0.00
South Sound	carbazole	0:6	60.00	60.00	60.00	0.00
South Sound	chrysene	0:6	60.00	60.00	60.00	0.00
South Sound	copper	6:6	0.52	0.48	0.55	0.03
South Sound	delta hexachlorocyclohexane	0:6	0.50	0.50	0.50	0.00
South Sound	dibenzo(a,h)anthracene	0:6	60.00	60.00	60.00	0.00
South Sound	dibenzofuran	0:6	50.00	50.00	50.00	0.00
South Sound	Dieldrin	1:6	0.57	0.50	0.89	0.16
South Sound	diethylphthalate	0:6	50.00	50.00	50.00	0.00
South Sound	dimethylphthalate	0:6	50.00	50.00	50.00	0.00
South Sound	di-n-butylphthalate	0:6	50.00	50.00	50.00	0.00
South Sound	di-n-octylphthalate	0:6	10.00	10.00	10.00	0.00
South Sound	endosulfan sulfate	0:6	1.00	1.00	1.00	0.00
South Sound	Endrin	0:6	1.00	1.00	1.00	0.00
South Sound	endrin aldehyde	0:6	1.00	1.00	1.00	0.00
South Sound	fluoranthene	0:6	20.00	20.00	20.00	0.00
South Sound	fluorene	0:6	50.00	50.00	50.00	0.00
South Sound	gamma chlordane	0:6	0.50	0.50	0.50	0.00
South Sound	gamma hexachlorocyclohexane	1:6	0.51	0.50	0.56	0.02

# Appendix: Chinook Salmon Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
South Sound	heptachlor	0:6	0.50	0.50	0.50	0.00
South Sound	heptachlor epoxide	0:6	0.50	0.50	0.50	0.00
South Sound	hexachlorobenzene	0:6	60.00	60.00	60.00	0.00
South Sound	hexachlorobutadiene	0:6	50.00	50.00	50.00	0.00
South Sound	hexachlorocyclopentadiene	0:6	200.00	200.00	200.00	0.00
South Sound	hexachloroethane	0:6	60.00	60.00	60.00	0.00
South Sound	indeno(1,2,3-c,d)pyrene	0:6	60.00	60.00	60.00	0.00
South Sound	isophorone	0:6	60.00	60.00	60.00	0.00
South Sound	lead	0:6	0.030	0.030	0.030	0.000
South Sound	lipids	6:6	1.66	1.23	2.53	0.46
South Sound	mercury	6:6	0.113	0.092	0.130	0.016
South Sound	meythoxychlor	0:6	5.00	5.00	5.00	0.00
South Sound	naphthalene	0:6	60.00	60.00	60.00	0.00
South Sound	nitrobenzene	0:6	50.00	50.00	50.00	0.00
South Sound	N-nitrosodimethylamine	0:6	200.00	200.00	200.00	0.00
South Sound	N-nitroso-di-n-propylamine	0:6	50.00	50.00	50.00	0.00
South Sound	N-nitrosodiphenylamine	0:6	60.00	60.00	60.00	0.00
South Sound	pentachlorophenol	0:6	200.00	200.00	200.00	0.00
South Sound	phenanthrene	0:6	50.00	50.00	50.00	0.00
South Sound	phenol	0:6	60.00	60.00	60.00	0.00
South Sound	ppDDD	6:6	2.45	1.50	5.90	1.70
South Sound	ppDDE	6:6	18.33	11.00	45.00	13.14
South Sound	ppDDT	6:6	3.62	2.10	7.90	2.26
South Sound	pyrene	0:6	50.00	50.00	50.00	0.00
South Sound	solids	2:2	26.0	25.0	27.0	1.4
South Sound	Toxaphene	0:6	10.00	10.00	10.00	0.00

## **Coho Salmon Muscle**

Summary of contaminant data for all coho salmon muscle samples collected by the Puget Sound Ambient Monitoring Program's Fish Component, 1989-1999. "No. Detected" is the number of samples for which an analyte was measured above the Method Detection Limit (MDL). "No. Analyzed" is the total number of samples analyzed for a given analyte. Mean, minimum, maximum, and standard deviation (SD) were computed for analyte and station combination, pooling all years' data. See Figure 3 for station locations.

# Appendix: Coho Salmon Muscle

Summary statistics for coho salmon muscle tissue samples, averaged across years from 1989-1999 by location and assay. A value of the median of the Method Detection Limit (MDL) was used in calculations when an analyte was undetected. Refer to Figure 3 for station locations. Shaded rows indicate location:assay combinations wherein at least one sample had a measured concentration above the MDL. Unshaded rows indicate combinations that had no measured concentrations above the MDL. All concentrations are based on wet weight. All organics in µg/kg, all elemental metals in mg/kg, all

Location	Assay	No. Detected:				
		No. Analyzed	Mean	Min	Max	SD
Apple Cove Pt	1,2,4-trichlorobenzene	0:7	48.57	40.00	50.00	3.78
Apple Cove Pt	1,2-dichlorobenzene	0:7	48.57	40.00	50.00	3.78
Apple Cove Pt	1,2-diphenylhydrazine	0:7	48.57	40.00	50.00	3.78
Apple Cove Pt	1,3-dichlorobenzene	0:7	58.57	40.00	70.00	9.00
Apple Cove Pt	1,4-dichlorobenzene	0:7	48.57	40.00	50.00	3.78
Apple Cove Pt	2,4,5-trichlorophenol	0:7	20.00	20.00	20.00	0.00
Apple Cove Pt	2,4,6-trichlorophenol	0:7	58.57	40.00	70.00	9.00
Apple Cove Pt	2,4-dichlorophenol	0:7	58.57	40.00	70.00	9.00
Apple Cove Pt	2,4-dimethylphenol	0:7	58.57	40.00	70.00	9.00
Apple Cove Pt	2,4-dinitrophenol	0:7	314.29	300.00	400.00	37.80
Apple Cove Pt	2,4-dinitrotoluene	0:7	177.14	40.00	200.00	60.47
Apple Cove Pt	2,6-dinitrotoluene	0:7	20.00	20.00	20.00	0.00
Apple Cove Pt	2-chloronaphthalene	0:7	10.00	10.00	10.00	0.00
Apple Cove Pt	2-chlorophenol	0:7	58.57	40.00	70.00	9.00
Apple Cove Pt	2-methylnaphthalene	0:7	20.00	20.00	20.00	0.00
Apple Cove Pt	2-methylphenol	0:7	48.57	40.00	50.00	3.78
Apple Cove Pt	2-nitroaniline	0:7	177.14	40.00	200.00	60.47
Apple Cove Pt	2-nitrophenol	0:7	48.57	40.00	50.00	3.78
Apple Cove Pt	3-nitroaniline	0:7	268.57	80.00	300.00	83.15
Apple Cove Pt	4,6-dinitro-o-cresol	0:7	285.71	200.00	300.00	37.80
Apple Cove Pt	4-bromophenylphenylether	0:7	58.57	40.00	70.00	9.00
Apple Cove Pt	4-chloro-3-methylphenol	0:7	58.57	40.00	70.00	9.00
Apple Cove Pt	4-chloroaniline	0:7	74.29	20.00	400.00	143.63
Apple Cove Pt	4-chlorophenylphenylether	0:7	58.57	40.00	70.00	9.00
Apple Cove Pt	4-methylphenol	0:7	58.57	40.00	70.00	9.00
Apple Cove Pt	4-nitroaniline	0:7	268.57	80.00	300.00	83.15
Apple Cove Pt	4-nitrophenol	0:7	485.71	400.00	500.00	37.80
Apple Cove Pt	acenaphthene	0:7	10.00	10.00	10.00	0.00
Apple Cove Pt	acenaphthylene	0:7	10.00	10.00	10.00	0.00
Apple Cove Pt	Aldrin	0:12	0.30	0.30	0.30	0.00
Apple Cove Pt	alpha chlordane	0:12	0.50	0.50	0.50	0.00
Apple Cove Pt	alpha endosulfan	0:12	0.59	0.50	0.67	0.09
Apple Cove Pt	alpha hexachlorocyclohexane	3:12	0.57	0.50	0.89	0.14
Apple Cove Pt	aniline	0:7	49.29	45.00	50.00	1.89
Apple Cove Pt	anthracene	0:7	20.00	20.00	20.00	0.00
Apple Cove Pt	Aroclor 1016	0:12	20.00	20.00	20.00	0.00
Apple Cove Pt	Aroclor 1221	0:12	20.00	20.00	20.00	0.00
Apple Cove Pt	Aroclor 1232	0:12	20.00	20.00	20.00	0.00
Apple Cove Pt	Aroclor 1242	0:12	10.00	10.00	10.00	0.00
Apple Cove Pt	Aroclor 1248	0:12	2.00	2.00	2.00	0.00

# Appendix: Coho Salmon Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Apple Cove Pt	Aroclor 1254	12:12	11.22	5.00	36.00	8.57
Apple Cove Pt	Aroclor 1260	7:12	5.48	2.00	24.00	6.22
Apple Cove Pt	arsenic	7:7	0.59	0.33	1.00	0.25
Apple Cove Pt	benzo(a)anthracene	0:7	58.57	40.00	70.00	9.00
Apple Cove Pt	benzo(a)pyrene	0:7	10.00	10.00	10.00	0.00
Apple Cove Pt	benzo(b)fluoranthene	0:7	48.57	40.00	50.00	3.78
Apple Cove Pt	benzo(g,h,i)perylene	0:7	58.57	40.00	70.00	9.00
Apple Cove Pt	benzo(k)fluoranthene	0:7	48.57	40.00	50.00	3.78
Apple Cove Pt	benzoic acid	0:7	294.29	260.00	300.00	15.12
Apple Cove Pt	benzyl alcohol	0:7	48.57	40.00	50.00	3.78
Apple Cove Pt	benzylbutylphthalate	0:7	62.14	60.00	70.00	3.93
Apple Cove Pt	beta endosulfan	0:12	1.15	1.00	1.30	0.16
Apple Cove Pt	beta hexachlorocyclohexane	0:12	0.84	0.67	1.00	0.17
Apple Cove Pt	bis(2-chloroethoxy)methane	0:7	58.57	40.00	70.00	9.00
Apple Cove Pt	bis(2-chloroethyl)ether	0:7	48.57	40.00	50.00	3.78
Apple Cove Pt	bis(2-chloroisopropyl)ether	0:7	48.57	40.00	50.00	3.78
Apple Cove Pt	bis(2-ethylhexyl)phthalate	2:7	159.29	60.00	530.00	180.80
Apple Cove Pt	carbazole	0:7	58.57	40.00	70.00	9.00
Apple Cove Pt	chrysene	0:7	58.57	40.00	70.00	9.00
Apple Cove Pt	copper	7:7	0.45	0.40	0.50	0.03
Apple Cove Pt	coprostanol	0:1	400.00	400.00	400.00	
Apple Cove Pt	delta hexachlorocyclohexane	0:12	0.50	0.50	0.50	0.00
Apple Cove Pt	dibenzo(a,h)anthracene	0:7	58.57	40.00	70.00	9.00
Apple Cove Pt	dibenzofuran	0:7	48.57	40.00	50.00	3.78
Apple Cove Pt	Dieldrin	0:12	0.50	0.50	0.50	0.00
Apple Cove Pt	diethylphthalate	0:7	48.57	40.00	50.00	3.78
Apple Cove Pt	dimethylphthalate	0:7	48.57	40.00	50.00	3.78
Apple Cove Pt	di-n-butylphthalate	0:7	49.29	45.00	50.00	1.89
Apple Cove Pt	di-n-octylphthalate	0:7	10.00	10.00	10.00	0.00
Apple Cove Pt	endosulfan sulfate	0:12	1.05	1.00	1.10	0.05
Apple Cove Pt	Endrin	0:12	1.00	1.00	1.00	0.00
Apple Cove Pt	endrin aldehyde	0:12	1.00	1.00	1.00	0.00
Apple Cove Pt	fluoranthene	0:7	20.00	20.00	20.00	0.00
Apple Cove Pt	fluorene	0:7	48.57	40.00	50.00	3.78
Apple Cove Pt	gamma chlordane	0:12	0.50	0.50	0.50	0.00
Apple Cove Pt	gamma hexachlorocyclohexane	0:12	0.50	0.50	0.50	0.00
Apple Cove Pt	heptachlor	0:12	0.50	0.50	0.50	0.00
Apple Cove Pt	heptachlor epoxide	0:12	0.50	0.50	0.50	0.00
Apple Cove Pt	hexachlorobenzene	0:7	58.57	40.00	70.00	9.00
Apple Cove Pt	hexachlorobutadiene	0:7	48.57	40.00	50.00	3.78
Apple Cove Pt	hexachlorocyclopentadiene	0:7	195.14	166.00	200.00	12.85
Apple Cove Pt	hexachloroethane	0:7	58.57	40.00	70.00	9.00
Apple Cove Pt	indeno(1,2,3-c,d)pyrene	0:7	58.57	40.00	70.00	9.00
Apple Cove Pt	isophorone	0:7	58.57	40.00	70.00	9.00
Apple Cove Pt	lead	0:7	0.021	0.020	0.030	0.004
Apple Cove Pt	lipids	12:12	1.46	0.67	2.95	0.62
Apple Cove Pt	mercury	12:12	0.040	0.028	0.054	0.008



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Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Apple Cove Pt	meythoxychlor	0:12	5.15	5.00	5.30	0.16
Apple Cove Pt	naphthalene	0:7	58.57	40.00	70.00	9.00
Apple Cove Pt	nitrobenzene	0:7	48.57	40.00	50.00	3.78
Apple Cove Pt	N-nitrosodimethylamine	0:7	177.14	40.00	200.00	60.47
Apple Cove Pt	N-nitroso-di-n-propylamine	0:7	48.57	40.00	50.00	3.78
Apple Cove Pt	N-nitrosodiphenylamine	0:7	58.57	40.00	70.00	9.00
Apple Cove Pt	pentachlorophenol	0:7	194.29	160.00	200.00	15.12
Apple Cove Pt	phenanthrene	0:7	48.57	40.00	50.00	3.78
Apple Cove Pt	phenol	0:7	58.57	40.00	70.00	9.00
Apple Cove Pt	ppDDD	9:12	0.78	0.50	1.30	0.28
Apple Cove Pt	ppDDE	12:12	6.30	2.70	11.80	2.84
Apple Cove Pt	ppDDT	1:12	1.68	1.30	2.40	0.42
Apple Cove Pt	pyrene	0:7	48.57	40.00	50.00	3.78
Apple Cove Pt	solids	8:8	27.5	27.0	28.0	0.4
Apple Cove Pt	Toxaphene	0:12	10.00	10.00	10.00	0.00
Central Sound	1,2,4-trichlorobenzene	0:6	13.00	13.00	13.00	0.00
Central Sound	1,2-dichlorobenzene	0:6	13.00	13.00	13.00	0.00
Central Sound	1,2-diphenylhydrazine	0:6	13.00	13.00	13.00	0.00
Central Sound	1,3-dichlorobenzene	0:6	13.00	13.00	13.00	0.00
Central Sound	1,4-dichlorobenzene	0:6	13.00	13.00	13.00	0.00
Central Sound	2,4,5-trichlorophenol	0:6	26.00	13.00	52.00	16.44
Central Sound	2,4,6-trichlorophenol	0:6	26.00	13.00	52.00	16.44
Central Sound	2,4-dichlorophenol	0:6	13.00	13.00	13.00	0.00
Central Sound	2,4-dimethylphenol	0:6	13.00	13.00	13.00	0.00
Central Sound	2,4-dinitrotoluene	0:6	26.00	13.00	52.00	16.44
Central Sound	2,6-dinitrotoluene	0:6	26.00	13.00	52.00	16.44
Central Sound	2-chloronaphthalene	0:6	26.00	13.00	52.00	16.44
Central Sound	2-chlorophenol	0:6	13.00	13.00	13.00	0.00
Central Sound	2-methylnaphthalene	0:6	13.00	13.00	13.00	0.00
Central Sound	2-methylphenol	0:6	13.00	13.00	13.00	0.00
Central Sound	2-nitroaniline	0:6	26.00	13.00	52.00	16.44
Central Sound	2-nitrophenol	0:6	13.00	13.00	13.00	0.00
Central Sound	3,3-dichlorobenzidine	0:6	41.17	13.00	65.00	22.39
Central Sound	3-nitroaniline	0:6	26.00	13.00	52.00	16.44
Central Sound	4-bromophenylphenylether	0:6	13.00	13.00	13.00	0.00
Central Sound	4-chloro-3-methylphenol	0:6	13.00	13.00	13.00	0.00
Central Sound	4-chloroaniline	0:6	13.00	13.00	13.00	0.00
Central Sound	4-chlorophenylphenylether	0:6	26.00	13.00	52.00	16.44
Central Sound	4-methylphenol	0:6	13.00	13.00	13.00	0.00
Central Sound	4-nitroaniline	0:6	26.00	13.00	52.00	16.44
Central Sound	acenaphthene	0:6	26.00	13.00	52.00	16.44
Central Sound	acenaphthylene	0:6	26.00	13.00	52.00	16.44
Central Sound	aniline	0:6	13.00	13.00	13.00	0.00
Central Sound	anthracene	0:6	13.00	13.00	13.00	0.00
Central Sound	arsenic	0:6	0.10	0.09	0.10	0.01
Central Sound	benzo(a)anthracene	0:6	41.17	13.00	65.00	22.39
Central Sound	benzo(a)pyrene	0:6	13.00	13.00	13.00	0.00

# Appendix: Coho Salmon Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Central Sound	benzo(b)fluoranthene	0:6	13.00	13.00	13.00	0.00
Central Sound	benzo(g,h,i)perylene	0:6	13.00	13.00	13.00	0.00
Central Sound	benzo(k)fluoranthene	0:6	13.00	13.00	13.00	0.00
Central Sound	benzoic acid	0:6	500.00	500.00	500.00	0.00
Central Sound	benzyl alcohol	0:6	13.00	13.00	13.00	0.00
Central Sound	benzylbutylphthalate	0:6	41.17	13.00	65.00	22.39
Central Sound	bis(2-chloroethoxy)methane	0:6	13.00	13.00	13.00	0.00
Central Sound	bis(2-chloroethyl)ether	0:6	13.00	13.00	13.00	0.00
Central Sound	bis(2-chloroisopropyl)ether	0:6	13.00	13.00	13.00	0.00
Central Sound	bis(2-ethylhexyl)phthalate	0:6	41.17	13.00	65.00	22.39
Central Sound	chrysene	0:6	41.17	13.00	65.00	22.39
Central Sound	copper	6:6	0.25	0.23	0.27	0.02
Central Sound	dibenzo(a,h)anthracene	0:6	13.00	13.00	13.00	0.00
Central Sound	dibenzofuran	0:6	26.00	13.00	52.00	16.44
Central Sound	diethylphthalate	0:6	26.00	13.00	52.00	16.44
Central Sound	dimethylphthalate	0:6	26.00	13.00	52.00	16.44
Central Sound	di-n-butylphthalate	0:6	13.00	13.00	13.00	0.00
Central Sound	di-n-octylphthalate	0:6	13.00	13.00	13.00	0.00
Central Sound	fluoranthene	0:6	13.00	13.00	13.00	0.00
Central Sound	fluorene	0:6	26.00	13.00	52.00	16.44
Central Sound	hexachlorobenzene	0:6	13.00	13.00	13.00	0.00
Central Sound	hexachlorobutadiene	0:6	13.00	13.00	13.00	0.00
Central Sound	hexachlorocyclopentadiene	0:6	26.00	13.00	52.00	16.44
Central Sound	hexachloroethane	0:6	13.00	13.00	13.00	0.00
Central Sound	indeno(1,2,3-c,d)pyrene	0:6	13.00	13.00	13.00	0.00
Central Sound	isophorone	0:6	13.00	13.00	13.00	0.00
Central Sound	lead	5:6	0.023	0.020	0.030	0.005
Central Sound	mercury	6:6	0.052	0.050	0.060	0.004
Central Sound	naphthalene	0:6	13.00	13.00	13.00	0.00
Central Sound	nitrobenzene	0:6	13.00	13.00	13.00	0.00
Central Sound	N-nitroso-di-n-propylamine	0:6	13.00	13.00	13.00	0.00
Central Sound	N-nitrosodiphenylamine	1:6	30.83	20.00	33.00	5.31
Central Sound	pentachlorophenol	0:6	60.00	60.00	60.00	0.00
Central Sound	phenanthrene	0:6	13.00	13.00	13.00	0.00
Central Sound	ppDDE	4:4	0.53	0.39	0.62	0.10
Central Sound	pyrene	0:6	41.17	13.00	65.00	22.39
Central Sound	solids	6:6	18.0	17.0	19.0	0.6
Colvos Passage	1,2,4-trichlorobenzene	0:6	50.00	50.00	50.00	0.00
Colvos Passage	1,2-dichlorobenzene	0:6	50.00	50.00	50.00	0.00
Colvos Passage	1,2-diphenylhydrazine	0:6	50.00	50.00	50.00	0.00
Colvos Passage	1,3-dichlorobenzene	0:6	68.33	60.00	70.00	4.08
Colvos Passage	1,4-dichlorobenzene	0:6	50.00	50.00	50.00	0.00
Colvos Passage	2,4,5-trichlorophenol	0:6	20.00	20.00	20.00	0.00
Colvos Passage	2,4,6-trichlorophenol	0:6	68.33	60.00	70.00	4.08
Colvos Passage	2,4-dichlorophenol	0:6	68.33	60.00	70.00	4.08
Colvos Passage	2,4-dimethylphenol	0:6	68.33	60.00	70.00	4.08
Colvos Passage	2,4-dinitrophenol	0:6	300.00	300.00	300.00	0.00

## Appendix: Coho Salmon Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Colvos Passage	2,4-dinitrotoluene	0:6	200.00	200.00	200.00	0.00
Colvos Passage	2,6-dinitrotoluene	0:6	20.00	20.00	20.00	0.00
Colvos Passage	2-chloronaphthalene	0:6	10.00	10.00	10.00	0.00
Colvos Passage	2-chlorophenol	0:6	68.33	60.00	70.00	4.08
Colvos Passage	2-methylnaphthalene	0:6	20.00	20.00	20.00	0.00
Colvos Passage	2-methylphenol	0:6	50.00	50.00	50.00	0.00
Colvos Passage	2-nitroaniline	0:6	200.00	200.00	200.00	0.00
Colvos Passage	2-nitrophenol	0:6	50.00	50.00	50.00	0.00
Colvos Passage	3-nitroaniline	0:6	300.00	300.00	300.00	0.00
Colvos Passage	4,6-dinitro-o-cresol	0:6	300.00	300.00	300.00	0.00
Colvos Passage	4-bromophenylphenylether	0:6	68.33	60.00	70.00	4.08
Colvos Passage	4-chloro-3-methylphenol	0:6	68.33	60.00	70.00	4.08
Colvos Passage	4-chloroaniline	0:6	20.00	20.00	20.00	0.00
Colvos Passage	4-chlorophenylphenylether	0:6	68.33	60.00	70.00	4.08
Colvos Passage	4-methylphenol	0:6	68.33	60.00	70.00	4.08
Colvos Passage	4-nitroaniline	0:6	300.00	300.00	300.00	0.00
Colvos Passage	4-nitrophenol	0:6	500.00	500.00	500.00	0.00
Colvos Passage	acenaphthene	0:6	10.00	10.00	10.00	0.00
Colvos Passage	acenaphthylene	0:6	10.00	10.00	10.00	0.00
Colvos Passage	Aldrin	0:6	0.30	0.30	0.30	0.00
Colvos Passage	alpha chlordane	0:6	0.50	0.50	0.50	0.00
Colvos Passage	alpha endosulfan	0:6	0.50	0.50	0.50	0.00
Colvos Passage	alpha hexachlorocyclohexane	6:6	0.89	0.50	1.30	0.32
Colvos Passage	aniline	0:6	50.00	50.00	50.00	0.00
Colvos Passage	anthracene	0:6	20.00	20.00	20.00	0.00
Colvos Passage	Aroclor 1016	0:6	20.00	20.00	20.00	0.00
Colvos Passage	Aroclor 1221	0:6	20.00	20.00	20.00	0.00
Colvos Passage	Aroclor 1232	0:6	20.00	20.00	20.00	0.00
Colvos Passage	Aroclor 1242	0:6	10.00	10.00	10.00	0.00
Colvos Passage	Aroclor 1248	0:6	2.00	2.00	2.00	0.00
Colvos Passage	Aroclor 1254	6:6	15.50	9.00	24.00	5.39
Colvos Passage	Aroclor 1260	0:6	2.00	2.00	2.00	0.00
Colvos Passage	arsenic	6:6	1.00	0.84	1.10	0.10
Colvos Passage	benzo(a)anthracene	0:6	68.33	60.00	70.00	4.08
Colvos Passage	benzo(a)pyrene	0:6	10.00	10.00	10.00	0.00
Colvos Passage	benzo(b)fluoranthene	0:6	50.00	50.00	50.00	0.00
Colvos Passage	benzo(g,h,i)perylene	0:6	68.33	60.00	70.00	4.08
Colvos Passage	benzo(k)fluoranthene	0:6	50.00	50.00	50.00	0.00
Colvos Passage	benzoic acid	0:6	300.00	300.00	300.00	0.00
Colvos Passage	benzyl alcohol	0:6	50.00	50.00	50.00	0.00
Colvos Passage	benzylbutylphthalate	0:6	68.33	60.00	70.00	4.08
Colvos Passage	beta endosulfan	0:6	1.00	1.00	1.00	0.00
Colvos Passage	beta hexachlorocyclohexane	0:6	1.00	1.00	1.00	0.00
Colvos Passage	bis(2-chloroethoxy)methane	0:6	68.33	60.00	70.00	4.08
Colvos Passage	bis(2-chloroethyl)ether	0:6	50.00	50.00	50.00	0.00
Colvos Passage	bis(2-chloroisopropyl)ether	0:6	50.00	50.00	50.00	0.00
Colvos Passage	bis(2-ethylhexyl)phthalate	3:6	1680.00	60.00	5050.00	2388.66

# Appendix: Coho Salmon Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Colvos Passage	carbazole	0:6	68.33	60.00	70.00	4.08
Colvos Passage	chrysene	0:6	68.33	60.00	70.00	4.08
Colvos Passage	copper	6:6	0.54	0.46	0.73	0.10
Colvos Passage	delta hexachlorocyclohexane	0:6	0.50	0.50	0.50	0.00
Colvos Passage	dibenzo(a,h)anthracene	0:6	68.33	60.00	70.00	4.08
Colvos Passage	dibenzofuran	0:6	50.00	50.00	50.00	0.00
Colvos Passage	Dieldrin	3:6	0.57	0.50	0.72	0.09
Colvos Passage	diethylphthalate	0:6	50.00	50.00	50.00	0.00
Colvos Passage	dimethylphthalate	0:6	50.00	50.00	50.00	0.00
Colvos Passage	di-n-butylphthalate	0:6	50.00	50.00	50.00	0.00
Colvos Passage	di-n-octylphthalate	0:6	10.00	10.00	10.00	0.00
Colvos Passage	endosulfan sulfate	0:6	1.00	1.00	1.00	0.00
Colvos Passage	Endrin	0:6	1.00	1.00	1.00	0.00
Colvos Passage	endrin aldehyde	0:6	1.00	1.00	1.00	0.00
Colvos Passage	fluoranthene	0:6	20.00	20.00	20.00	0.00
Colvos Passage	fluorene	0:6	50.00	50.00	50.00	0.00
Colvos Passage	gamma chlordane	0:6	0.50	0.50	0.50	0.00
Colvos Passage	gamma hexachlorocyclohexane	0:6	0.50	0.50	0.50	0.00
Colvos Passage	heptachlor	0:6	0.50	0.50	0.50	0.00
Colvos Passage	heptachlor epoxide	0:6	0.50	0.50	0.50	0.00
Colvos Passage	hexachlorobenzene	0:6	68.33	60.00	70.00	4.08
Colvos Passage	hexachlorobutadiene	0:6	50.00	50.00	50.00	0.00
Colvos Passage	hexachlorocyclopentadiene	0:6	200.00	200.00	200.00	0.00
Colvos Passage	hexachloroethane	0:6	68.33	60.00	70.00	4.08
Colvos Passage	indeno(1,2,3-c,d)pyrene	0:6	68.33	60.00	70.00	4.08
Colvos Passage	isophorone	0:6	68.33	60.00	70.00	4.08
Colvos Passage	lead	0:6	0.020	0.020	0.020	0.000
Colvos Passage	lipids	6:6	2.45	1.13	4.48	1.15
Colvos Passage	mercury	6:6	0.062	0.051	0.069	0.006
Colvos Passage	meythoxychlor	0:6	5.00	5.00	5.00	0.00
Colvos Passage	naphthalene	0:6	68.33	60.00	70.00	4.08
Colvos Passage	nitrobenzene	0:6	50.00	50.00	50.00	0.00
Colvos Passage	N-nitrosodimethylamine	0:6	200.00	200.00	200.00	0.00
Colvos Passage	N-nitroso-di-n-propylamine	0:6	50.00	50.00	50.00	0.00
Colvos Passage	N-nitrosodiphenylamine	0:6	68.33	60.00	70.00	4.08
Colvos Passage	pentachlorophenol	0:6	200.00	200.00	200.00	0.00
Colvos Passage	phenanthrene	0:6	50.00	50.00	50.00	0.00
Colvos Passage	phenol	0:6	68.33	60.00	70.00	4.08
Colvos Passage	ppDDD	6:6	1.23	0.83	1.70	0.36
Colvos Passage	ppDDE	6:6	10.82	6.70	14.00	2.97
Colvos Passage	ppDDT	0:6	2.00	2.00	2.00	0.00
Colvos Passage	pyrene	0:6	50.00	50.00	50.00	0.00
Colvos Passage	solids	2:2	30.0	30.0	30.0	0.0
Colvos Passage	Toxaphene	0:6	10.00	10.00	10.00	0.00
Deschutes River	1,2,4-trichlorobenzene	0:10	42.00	40.00	45.00	2.58
Deschutes River	1,2-dichlorobenzene	0:10	42.00	40.00	45.00	2.58
Deschutes River	1,2-diphenylhydrazine	0:10	42.00	40.00	45.00	2.58

# Appendix: Coho Salmon Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Deschutes River	1,3-dichlorobenzene	0:10	50.00	40.00	65.00	12.91
Deschutes River	1,4-dichlorobenzene	0:10	42.00	40.00	45.00	2.58
Deschutes River	2,4,5-trichlorophenol	0:10	20.00	20.00	20.00	0.00
Deschutes River	2,4,6-trichlorophenol	0:10	50.00	40.00	65.00	12.91
Deschutes River	2,4-dichlorophenol	0:10	50.00	40.00	65.00	12.91
Deschutes River	2,4-dimethylphenol	0:10	50.00	40.00	65.00	12.91
Deschutes River	2,4-dinitrophenol	0:10	344.00	260.00	400.00	72.30
Deschutes River	2,4-dinitrotoluene	0:10	50.80	40.00	67.00	13.94
Deschutes River	2,6-dinitrotoluene	0:10	20.00	20.00	20.00	0.00
Deschutes River	2-chloronaphthalene	0:10	10.00	10.00	10.00	0.00
Deschutes River	2-chlorophenol	0:10	50.00	40.00	65.00	12.91
Deschutes River	2-methylnaphthalene	0:10	20.00	20.00	20.00	0.00
Deschutes River	2-methylphenol	0:10	42.00	40.00	45.00	2.58
Deschutes River	2-nitroaniline	0:10	50.80	40.00	67.00	13.94
Deschutes River	2-nitrophenol	0:10	42.00	40.00	45.00	2.58
Deschutes River	3-nitroaniline	0:10	152.00	80.00	260.00	92.95
Deschutes River	4,6-dinitro-o-cresol	0:10	200.00	200.00	200.00	0.00
Deschutes River	4-bromophenylphenylether	0:10	50.00	40.00	65.00	12.91
Deschutes River	4-chloro-3-methylphenol	0:10	50.00	40.00	65.00	12.91
Deschutes River	4-chloroaniline	0:10	400.00	400.00	400.00	0.00
Deschutes River	4-chlorophenylphenylether	0:10	50.00	40.00	65.00	12.91
Deschutes River	4-methylphenol	0:10	50.00	40.00	65.00	12.91
Deschutes River	4-nitroaniline	0:10	152.00	80.00	260.00	92.95
Deschutes River	4-nitrophenol	0:10	456.00	400.00	540.00	72.30
Deschutes River	acenaphthene	0:10	10.00	10.00	10.00	0.00
Deschutes River	acenaphthylene	0:10	10.00	10.00	10.00	0.00
Deschutes River	Aldrin	0:39	0.58	0.30	0.67	0.16
Deschutes River	alpha chlordane	9:39	0.60	0.50	1.54	0.22
Deschutes River	alpha endosulfan	0:39	0.65	0.50	0.67	0.05
Deschutes River	alpha hexachlorocyclohexane	0:39	0.51	0.50	0.52	0.01
Deschutes River	aniline	0:10	45.00	45.00	45.00	0.00
Deschutes River	anthracene	0:10	20.00	20.00	20.00	0.00
Deschutes River	Aroclor 1016	0:39	20.00	20.00	20.00	0.00
Deschutes River	Aroclor 1221	0:39	20.00	20.00	20.00	0.00
Deschutes River	Aroclor 1232	0:39	20.00	20.00	20.00	0.00
Deschutes River	Aroclor 1242	0:39	17.44	10.00	20.00	4.42
Deschutes River	Aroclor 1248	0:39	2.00	2.00	2.00	0.00
Deschutes River	Aroclor 1254	29:31	16.89	2.00	27.90	6.02
Deschutes River	Aroclor 1260	30:31	10.48	2.00	21.80	3.77
Deschutes River	arsenic	10:10	0.51	0.36	0.90	0.14
Deschutes River	benzo(a)anthracene	0:10	50.00	40.00	65.00	12.91
Deschutes River	benzo(a)pyrene	0:10	10.00	10.00	10.00	0.00
Deschutes River	benzo(b)fluoranthene	0:10	42.00	40.00	45.00	2.58
Deschutes River	benzo(g,h,i)perylene	0:10	50.00	40.00	65.00	12.91
Deschutes River	benzo(k)fluoranthene	0:10	42.00	40.00	45.00	2.58
Deschutes River	benzoic acid	0:10	260.00	260.00	260.00	0.00
Deschutes River	benzyl alcohol	0:10	42.00	40.00	45.00	2.58

# Appendix: Coho Salmon Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Deschutes River	benzylbutylphthalate	0:10	65.00	65.00	65.00	0.00
Deschutes River	beta endosulfan	0:39	1.28	1.10	1.30	0.06
Deschutes River	beta hexachlorocyclohexane	0:39	0.70	0.67	1.00	0.10
Deschutes River	bis(2-chloroethoxy)methane	0:10	50.00	40.00	65.00	12.91
Deschutes River	bis(2-chloroethyl)ether	0:10	42.00	40.00	45.00	2.58
Deschutes River	bis(2-chloroisopropyl)ether	0:10	42.00	40.00	45.00	2.58
Deschutes River	bis(2-ethylhexyl)phthalate	1:10	106.00	65.00	475.00	129.65
Deschutes River	carbazole	0:10	50.00	40.00	65.00	12.91
Deschutes River	chrysene	0:10	50.00	40.00	65.00	12.91
Deschutes River	copper	10:10	0.69	0.51	0.80	0.11
Deschutes River	coprostanol	0:6	400.00	400.00	400.00	0.00
Deschutes River	delta hexachlorocyclohexane	0:39	0.51	0.50	0.52	0.01
Deschutes River	dibenzo(a,h)anthracene	0:10	50.00	40.00	65.00	12.91
Deschutes River	dibenzofuran	0:10	42.00	40.00	45.00	2.58
Deschutes River	Dieldrin	0:39	0.63	0.50	0.67	0.08
Deschutes River	diethylphthalate	0:10	42.00	40.00	45.00	2.58
Deschutes River	dimethylphthalate	0:10	42.00	40.00	45.00	2.58
Deschutes River	di-n-butylphthalate	0:10	45.00	45.00	45.00	0.00
Deschutes River	di-n-octylphthalate	0:10	10.00	10.00	10.00	0.00
Deschutes River	endosulfan sulfate	0:39	1.25	1.10	1.30	0.09
Deschutes River	Endrin	0:39	1.22	1.00	1.30	0.13
Deschutes River	endrin aldehyde	0:39	1.02	1.00	1.10	0.04
Deschutes River	fluoranthene	0:10	20.00	20.00	20.00	0.00
Deschutes River	fluorene	0:10	42.00	40.00	45.00	2.58
Deschutes River	gamma chlordane	4:39	0.52	0.50	0.60	0.02
Deschutes River	gamma hexachlorocyclohexane	0:39	0.51	0.50	0.52	0.01
Deschutes River	heptachlor	0:39	0.51	0.50	0.52	0.01
Deschutes River	heptachlor epoxide	0:39	0.51	0.50	0.52	0.01
Deschutes River	hexachlorobenzene	0:10	50.00	40.00	65.00	12.91
Deschutes River	hexachlorobutadiene	0:10	42.00	40.00	45.00	2.58
Deschutes River	hexachlorocyclopentadiene	0:10	179.60	166.00	200.00	17.56
Deschutes River	hexachloroethane	0:10	50.00	40.00	65.00	12.91
Deschutes River	indeno(1,2,3-c,d)pyrene	0:10	50.80	40.00	67.00	13.94
Deschutes River	isophorone	0:10	50.00	40.00	65.00	12.91
Deschutes River	lead	1:10	0.031	0.030	0.035	0.002
Deschutes River	lipids	36:36	3.44	0.17	15.00	3.12
Deschutes River	mercury	10:10	0.049	0.026	0.073	0.017
Deschutes River	meythoxychlor	0:39	5.27	5.00	5.30	0.09
Deschutes River	naphthalene	0:10	50.00	40.00	65.00	12.91
Deschutes River	nitrobenzene	0:10	42.00	40.00	45.00	2.58
Deschutes River	N-nitrosodimethylamine	0:10	88.00	40.00	160.00	61.97
Deschutes River	N-nitroso-di-n-propylamine	0:10	42.00	40.00	45.00	2.58
Deschutes River	N-nitrosodiphenylamine	0:10	50.00	40.00	65.00	12.91
Deschutes River	pentachlorophenol	0:10	160.00	160.00	160.00	0.00
Deschutes River	phenanthrene	0:10	42.00	40.00	45.00	2.58
Deschutes River	phenol	0:10	50.00	40.00	65.00	12.91
Deschutes River	ppDDD	36:39	1.14	0.50	2.17	0.47

# Appendix: Coho Salmon Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Deschutes River	ppDDE	39:39	9.32	3.50	19.00	3.91
Deschutes River	ppDDT	6:39	0.81	0.52	2.00	0.50
Deschutes River	pyrene	0:10	42.00	40.00	45.00	2.58
Deschutes River	solids	39:39	26.7	22.1	33.4	2.5
Deschutes River	Toxaphene	0:39	10.00	10.00	10.00	0.00
Duamish River	1,2,4-trichlorobenzene	0:18	45.00	40.00	50.00	4.20
Duamish River	1,2-dichlorobenzene	0:18	45.00	40.00	50.00	4.20
Duamish River	1,2-diphenylhydrazine	0:18	45.00	40.00	50.00	4.20
Duamish River	1,3-dichlorobenzene	0:18	55.00	40.00	65.00	11.11
Duamish River	1,4-dichlorobenzene	0:18	45.00	40.00	50.00	4.20
Duamish River	2,4,5-trichlorophenol	0:18	20.00	20.00	20.00	0.00
Duamish River	2,4,6-trichlorophenol	0:18	55.00	40.00	65.00	11.11
Duamish River	2,4-dichlorophenol	0:18	55.00	40.00	65.00	11.11
Duamish River	2,4-dimethylphenol	0:18	55.00	40.00	65.00	11.11
Duamish River	2,4-dinitrophenol	0:18	320.00	260.00	400.00	60.59
Duamish River	2,4-dinitrotoluene	0:18	102.33	40.00	200.00	71.96
Duamish River	2,6-dinitrotoluene	0:18	20.00	20.00	20.00	0.00
Duamish River	2-chloronaphthalene	0:18	10.00	10.00	10.00	0.00
Duamish River	2-chlorophenol	0:18	55.00	40.00	65.00	11.11
Duamish River	2-methylnaphthalene	0:18	20.00	20.00	20.00	0.00
Duamish River	2-methylphenol	0:18	45.00	40.00	50.00	4.20
Duamish River	2-nitroaniline	0:18	102.33	40.00	200.00	71.96
Duamish River	2-nitrophenol	0:18	45.00	40.00	50.00	4.20
Duamish River	3-nitroaniline	0:18	213.33	80.00	300.00	98.46
Duamish River	4,6-dinitro-o-cresol	0:18	233.33	200.00	300.00	48.51
Duamish River	4-bromophenylphenylether	0:18	55.00	40.00	65.00	11.11
Duamish River	4-chloro-3-methylphenol	0:18	55.00	40.00	65.00	11.11
Duamish River	4-chloroaniline	0:18	273.33	20.00	400.00	184.33
Duamish River	4-chlorophenylphenylether	0:18	55.00	40.00	65.00	11.11
Duamish River	4-methylphenol	0:18	55.00	40.00	65.00	11.11
Duamish River	4-nitroaniline	0:18	213.33	80.00	300.00	98.46
Duamish River	4-nitrophenol	0:18	480.00	400.00	540.00	60.59
Duamish River	acenaphthene	0:18	10.00	10.00	10.00	0.00
Duamish River	acenaphthylene	0:18	10.00	10.00	10.00	0.00
Duamish River	Aldrin	0:57	0.55	0.30	0.67	0.17
Duamish River	alpha chlordane	24:57	0.78	0.50	2.12	0.43
Duamish River	alpha endosulfan	0:57	0.63	0.50	0.67	0.07
Duamish River	alpha hexachlorocyclohexane	6:57	0.55	0.50	1.10	0.12
Duamish River	aniline	0:18	46.67	45.00	50.00	2.43
Duamish River	anthracene	0:18	20.00	20.00	20.00	0.00
Duamish River	Aroclor 1016	0:57	20.00	20.00	20.00	0.00
Duamish River	Aroclor 1221	0:57	20.00	20.00	20.00	0.00
Duamish River	Aroclor 1232	0:57	20.00	20.00	20.00	0.00
Duamish River	Aroclor 1242	0:57	16.84	10.00	20.00	4.69
Duamish River	Aroclor 1248	0:57	2.00	2.00	2.00	0.00
Duamish River	Aroclor 1254	47:47	27.22	6.90	65.50	16.30
Duamish River	Aroclor 1260	42:47	10.92	2.00	31.90	6.85

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Duwamish River	arsenic	18:18	0.76	0.41	1.60	0.28
Duwamish River	benzo(a)anthracene	0:18	55.00	40.00	65.00	11.11
Duwamish River	benzo(a)pyrene	0:18	10.00	10.00	10.00	0.00
Duwamish River	benzo(b)fluoranthene	0:18	45.00	40.00	50.00	4.20
Duwamish River	benzo(g,h,i)perylene	0:18	55.00	40.00	65.00	11.11
Duwamish River	benzo(k)fluoranthene	0:18	45.00	40.00	50.00	4.20
Duwamish River	benzoic acid	1:18	295.00	260.00	650.00	90.64
Duwamish River	benzyl alcohol	0:18	45.00	40.00	50.00	4.20
Duwamish River	benzylbutylphthalate	0:18	63.33	60.00	65.00	2.43
Duwamish River	beta endosulfan	0:57	1.25	1.00	1.30	0.11
Duwamish River	beta hexachlorocyclohexane	0:57	0.74	0.67	1.00	0.14
Duwamish River	bis(2-chloroethoxy)methane	0:18	55.00	40.00	65.00	11.11
Duwamish River	bis(2-chloroethyl)ether	0:18	45.00	40.00	50.00	4.20
Duwamish River	bis(2-chloroisopropyl)ether	0:18	45.00	40.00	50.00	4.20
Duwamish River	bis(2-ethylhexyl)phthalate	4:18	427.78	60.00	4750.00	1134.14
Duwamish River	carbazole	0:18	55.00	40.00	65.00	11.11
Duwamish River	chrysene	0:18	55.00	40.00	65.00	11.11
Duwamish River	copper	18:18	0.62	0.42	0.97	0.19
Duwamish River	coprostanol	0:6	400.00	400.00	400.00	0.00
Duwamish River	delta hexachlorocyclohexane	0:57	0.51	0.50	0.52	0.01
Duwamish River	dibenzo(a,h)anthracene	0:18	55.00	40.00	65.00	11.11
Duwamish River	dibenzofuran	0:18	45.00	40.00	50.00	4.20
Duwamish River	Dieldrin	4:57	0.62	0.50	0.67	0.08
Duwamish River	diethylphthalate	0:18	45.00	40.00	50.00	4.20
Duwamish River	dimethylphthalate	0:18	45.00	40.00	50.00	4.20
Duwamish River	di-n-butylphthalate	0:18	46.67	45.00	50.00	2.43
Duwamish River	di-n-octylphthalate	0:18	10.00	10.00	10.00	0.00
Duwamish River	endosulfan sulfate	0:57	1.23	1.00	1.30	0.11
Duwamish River	Endrin	0:57	1.21	1.00	1.30	0.14
Duwamish River	endrin aldehyde	0:57	2.26	1.00	6.40	2.27
Duwamish River	fluoranthene	0:18	20.00	20.00	20.00	0.00
Duwamish River	fluorene	0:18	45.00	40.00	50.00	4.20
Duwamish River	gamma chlordane	8:57	0.55	0.50	1.42	0.14
Duwamish River	gamma hexachlorocyclohexane	0:57	0.51	0.50	0.52	0.01
Duwamish River	heptachlor	0:57	0.51	0.50	0.52	0.01
Duwamish River	heptachlor epoxide	0:57	0.51	0.50	0.52	0.01
Duwamish River	hexachlorobenzene	8:28	35.69	0.03	65.00	27.82
Duwamish River	hexachlorobutadiene	0:18	45.00	40.00	50.00	4.20
Duwamish River	hexachlorocyclopentadiene	0:18	188.67	166.00	200.00	16.49
Duwamish River	hexachloroethane	0:18	55.00	40.00	65.00	11.11
Duwamish River	indeno(1,2,3-c,d)pyrene	0:18	55.67	40.00	67.00	11.77
Duwamish River	isophorone	0:18	55.00	40.00	65.00	11.11
Duwamish River	lead	1:18	0.028	0.020	0.040	0.005
Duwamish River	lipids	51:51	3.64	0.97	6.23	1.60
Duwamish River	mercury	18:18	0.041	0.025	0.053	0.008
Duwamish River	meythoxychlor	0:57	5.21	5.00	5.30	0.12
Duwamish River	naphthalene	0:18	55.00	40.00	65.00	11.11



# Appendix: Coho Salmon Muscle

Location	Assay	No. Detected:		Mean	Min	Max	SD
		lo.	Analyzed				
Duwamish River	nitrobenzene	0:18		45.00	40.00	50.00	4.20
Duwamish River	N-nitrosodimethylamine	0:18		133.33	40.00	200.00	69.96
Duwamish River	N-nitroso-di-n-propylamine	0:18		45.00	40.00	50.00	4.20
Duwamish River	N-nitrosodiphenylamine	0:18		55.00	40.00	65.00	11.11
Duwamish River	opDDD	2:12		1.10	0.07	7.80	2.43
Duwamish River	opDDT	0:5		0.21	0.18	0.25	0.03
Duwamish River	PCB101	11:13		3.17	0.06	8.80	2.53
Duwamish River	PCB105	11:13		0.94	0.05	3.60	1.04
Duwamish River	PCB110	9:11		0.77	0.06	1.70	0.51
Duwamish River	PCB118	12:13		2.87	0.05	8.90	2.35
Duwamish River	PCB126	0:13		0.07	0.04	0.10	0.02
Duwamish River	PCB128	10:11		1.17	0.07	5.00	1.32
Duwamish River	PCB138	9:11		1.23	0.06	3.00	0.85
Duwamish River	PCB153	13:13		3.89	2.10	6.40	1.91
Duwamish River	PCB156	1:12		0.11	0.02	0.85	0.23
Duwamish River	PCB157	0:13		0.04	0.02	0.06	0.01
Duwamish River	PCB169	0:13		0.09	0.05	0.13	0.03
Duwamish River	PCB170	10:10		1.83	0.21	6.40	2.42
Duwamish River	PCB180	10:11		0.61	0.05	1.30	0.34
Duwamish River	PCB189	0:13		0.05	0.03	0.08	0.02
Duwamish River	PCB77	0:13		0.08	0.04	0.11	0.03
Duwamish River	pentachlorophenol	0:18		173.33	160.00	200.00	19.40
Duwamish River	phenanthrene	0:18		45.00	40.00	50.00	4.20
Duwamish River	phenol	0:18		55.00	40.00	65.00	11.11
Duwamish River	ppDDD	40:70		0.95	0.08	3.16	0.68
Duwamish River	ppDDE	70:70		9.04	1.90	17.40	3.35
Duwamish River	ppDDT	7:68		0.82	0.04	2.00	0.64
Duwamish River	pyrene	0:18		45.00	40.00	50.00	4.20
Duwamish River	solids	66:66		27.8	19.6	31.0	1.5
Duwamish River	TotalDDT	13:13		12.88	7.20	22.80	4.16
Duwamish River	TotalPCB	13:13		24.39	13.30	42.00	10.90
Duwamish River	Toxaphene	0:57		10.00	10.00	10.00	0.00
Minter Cr. Hatchery	hexachlorobenzene	2:2		0.72	0.55	0.88	0.23
Minter Cr. Hatchery	lipids	7:7		3.01	2.35	3.66	0.42
Minter Cr. Hatchery	opDDD	0:6		0.16	0.07	0.55	0.19
Minter Cr. Hatchery	opDDT	0:2		0.49	0.18	0.80	0.44
Minter Cr. Hatchery	PCB101	6:7		5.38	0.05	26.00	9.19
Minter Cr. Hatchery	PCB105	3:5		0.36	0.05	0.73	0.30
Minter Cr. Hatchery	PCB110	5:6		1.26	0.05	5.40	2.05
Minter Cr. Hatchery	PCB118	6:6		3.72	0.62	15.00	5.59
Minter Cr. Hatchery	PCB126	0:7		0.10	0.04	0.34	0.11
Minter Cr. Hatchery	PCB128	4:7		0.94	0.03	5.50	2.02
Minter Cr. Hatchery	PCB138	6:7		1.88	0.06	8.80	3.10
Minter Cr. Hatchery	PCB153	7:7		4.83	1.10	20.00	6.80
Minter Cr. Hatchery	PCB156	2:5		0.32	0.03	0.76	0.33
Minter Cr. Hatchery	PCB157	0:7		0.06	0.03	0.21	0.07
Minter Cr. Hatchery	PCB169	0:7		0.12	0.06	0.44	0.14

# Appendix: Coho Salmon Muscle

Location	Assay	No. Detected:				
		No. Analyzed	Mean	Min	Max	SD
Minter Cr. Hatchery	PCB170	1:2	0.26	0.05	0.47	0.30
Minter Cr. Hatchery	PCB180	4:5	1.48	0.05	4.00	1.60
Minter Cr. Hatchery	PCB189	0:7	0.07	0.03	0.25	0.08
Minter Cr. Hatchery	PCB77	0:7	0.11	0.05	0.38	0.12
Minter Cr. Hatchery	ppDDD	0:7	0.20	0.09	0.73	0.23
Minter Cr. Hatchery	ppDDE	7:7	6.53	4.30	10.00	2.13
Minter Cr. Hatchery	ppDDT	0:6	0.10	0.04	0.33	0.12
Minter Cr. Hatchery	solids	7:7	24.7	23.7	25.4	0.7
Minter Cr. Hatchery	TotalDDT	7:7	6.53	4.30	10.00	2.13
Minter Cr. Hatchery	TotalPCB	7:7	26.35	7.00	105.00	35.20
Nisqually River	1,2,4-trichlorobenzene	0:12	42.50	40.00	45.00	2.61
Nisqually River	1,2-dichlorobenzene	0:12	42.50	40.00	45.00	2.61
Nisqually River	1,2-diphenylhydrazine	0:12	42.50	40.00	45.00	2.61
Nisqually River	1,3-dichlorobenzene	0:12	52.50	40.00	65.00	13.06
Nisqually River	1,4-dichlorobenzene	0:12	42.50	40.00	45.00	2.61
Nisqually River	2,4,5-trichlorophenol	0:12	20.00	20.00	20.00	0.00
Nisqually River	2,4,6-trichlorophenol	0:12	52.50	40.00	65.00	13.06
Nisqually River	2,4-dichlorophenol	0:12	52.50	40.00	65.00	13.06
Nisqually River	2,4-dimethylphenol	0:12	52.50	40.00	65.00	13.06
Nisqually River	2,4-dinitrophenol	0:12	330.00	260.00	400.00	73.11
Nisqually River	2,4-dinitrotoluene	0:12	53.50	40.00	67.00	14.10
Nisqually River	2,6-dinitrotoluene	0:12	20.00	20.00	20.00	0.00
Nisqually River	2-chloronaphthalene	0:12	10.00	10.00	10.00	0.00
Nisqually River	2-chlorophenol	0:12	52.50	40.00	65.00	13.06
Nisqually River	2-methylnaphthalene	0:12	20.00	20.00	20.00	0.00
Nisqually River	2-methylphenol	0:12	42.50	40.00	45.00	2.61
Nisqually River	2-nitroaniline	0:12	53.50	40.00	67.00	14.10
Nisqually River	2-nitrophenol	0:12	42.50	40.00	45.00	2.61
Nisqually River	3-nitroaniline	0:12	170.00	80.00	260.00	94.00
Nisqually River	4,6-dinitro-o-cresol	0:12	200.00	200.00	200.00	0.00
Nisqually River	4-bromophenylphenylether	0:12	52.50	40.00	65.00	13.06
Nisqually River	4-chloro-3-methylphenol	0:12	52.50	40.00	65.00	13.06
Nisqually River	4-chloroaniline	0:12	400.00	400.00	400.00	0.00
Nisqually River	4-chlorophenylphenylether	0:12	52.50	40.00	65.00	13.06
Nisqually River	4-methylphenol	0:12	52.50	40.00	65.00	13.06
Nisqually River	4-nitroaniline	0:12	170.00	80.00	260.00	94.00
Nisqually River	4-nitrophenol	0:12	470.00	400.00	540.00	73.11
Nisqually River	acenaphthene	0:12	10.00	10.00	10.00	0.00
Nisqually River	acenaphthylene	0:12	10.00	10.00	10.00	0.00
Nisqually River	Aldrin	0:38	0.55	0.30	0.67	0.17
Nisqually River	alpha chlordane	15:38	0.79	0.50	1.95	0.45
Nisqually River	alpha endosulfan	0:38	0.64	0.50	0.67	0.06
Nisqually River	alpha hexachlorocyclohexane	0:38	0.51	0.50	0.52	0.01
Nisqually River	aniline	0:12	45.00	45.00	45.00	0.00
Nisqually River	anthracene	0:12	20.00	20.00	20.00	0.00
Nisqually River	Aroclor 1016	0:39	20.00	20.00	20.00	0.00
Nisqually River	Aroclor 1221	0:39	20.00	20.00	20.00	0.00

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Nisqually River	Aroclor 1232	0:39	20.00	20.00	20.00	0.00
Nisqually River	Aroclor 1242	0:39	16.92	10.00	20.00	4.68
Nisqually River	Aroclor 1248	0:39	2.00	2.00	2.00	0.00
Nisqually River	Aroclor 1254	34:34	21.05	4.90	57.60	11.20
Nisqually River	Aroclor 1260	34:34	13.26	5.50	32.20	7.27
Nisqually River	arsenic	12:12	0.72	0.48	1.00	0.18
Nisqually River	benzo(a)anthracene	0:12	52.50	40.00	65.00	13.06
Nisqually River	benzo(a)pyrene	0:12	10.00	10.00	10.00	0.00
Nisqually River	benzo(b)fluoranthene	0:12	42.50	40.00	45.00	2.61
Nisqually River	benzo(g,h,i)perylene	0:12	52.50	40.00	65.00	13.06
Nisqually River	benzo(k)fluoranthene	0:12	42.50	40.00	45.00	2.61
Nisqually River	benzoic acid	0:12	260.00	260.00	260.00	0.00
Nisqually River	benzyl alcohol	0:12	42.50	40.00	45.00	2.61
Nisqually River	benzylbutylphthalate	0:12	65.00	65.00	65.00	0.00
Nisqually River	beta endosulfan	0:38	1.27	1.10	1.30	0.07
Nisqually River	beta hexachlorocyclohexane	0:38	0.72	0.67	1.00	0.12
Nisqually River	bis(2-chloroethoxy)methane	0:12	52.50	40.00	65.00	13.06
Nisqually River	bis(2-chloroethyl)ether	0:12	42.50	40.00	45.00	2.61
Nisqually River	bis(2-chloroisopropyl)ether	0:12	42.50	40.00	45.00	2.61
Nisqually River	bis(2-ethylhexyl)phthalate	0:12	65.00	65.00	65.00	0.00
Nisqually River	carbazole	0:12	52.50	40.00	65.00	13.06
Nisqually River	chrysene	0:12	52.50	40.00	65.00	13.06
Nisqually River	copper	12:12	0.75	0.52	1.01	0.19
Nisqually River	coprostanol	0:6	400.00	400.00	400.00	0.00
Nisqually River	delta hexachlorocyclohexane	0:38	0.51	0.50	0.52	0.01
Nisqually River	dibenzo(a,h)anthracene	0:12	52.50	40.00	65.00	13.06
Nisqually River	dibenzofuran	0:12	42.50	40.00	45.00	2.61
Nisqually River	Dieldrin	0:38	0.62	0.50	0.67	0.08
Nisqually River	diethylphthalate	0:12	42.50	40.00	45.00	2.61
Nisqually River	dimethylphthalate	0:12	42.50	40.00	45.00	2.61
Nisqually River	di-n-butylphthalate	0:12	45.00	45.00	45.00	0.00
Nisqually River	di-n-octylphthalate	0:12	10.00	10.00	10.00	0.00
Nisqually River	endosulfan sulfate	0:38	1.24	1.10	1.30	0.09
Nisqually River	Endrin	0:38	1.21	1.00	1.30	0.14
Nisqually River	endrin aldehyde	0:38	1.05	1.00	1.10	0.05
Nisqually River	fluoranthene	0:12	20.00	20.00	20.00	0.00
Nisqually River	fluorene	0:12	42.50	40.00	45.00	2.61
Nisqually River	gamma chlordane	13:38	0.62	0.50	1.33	0.21
Nisqually River	gamma hexachlorocyclohexane	0:38	0.51	0.50	0.52	0.01
Nisqually River	heptachlor	0:38	0.51	0.50	0.52	0.01
Nisqually River	heptachlor epoxide	0:38	0.51	0.50	0.52	0.01
Nisqually River	hexachlorobenzene	0:12	52.50	40.00	65.00	13.06
Nisqually River	hexachlorobutadiene	0:12	42.50	40.00	45.00	2.61
Nisqually River	hexachlorocyclopentadiene	0:12	183.00	166.00	200.00	17.76
Nisqually River	hexachloroethane	0:12	52.50	40.00	65.00	13.06
Nisqually River	indeno(1,2,3-c,d)pyrene	0:12	53.50	40.00	67.00	14.10
Nisqually River	isophorone	0:12	52.50	40.00	65.00	13.06

# Appendix: Coho Salmon Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Nisqually River	lead	0:12	0.030	0.030	0.030	0.000
Nisqually River	lipids	35:35	2.32	0.25	7.53	2.14
Nisqually River	mercury	12:12	0.070	0.037	0.110	0.023
Nisqually River	meythoxychlor	0:38	5.25	5.00	5.30	0.11
Nisqually River	naphthalene	0:12	52.50	40.00	65.00	13.06
Nisqually River	nitrobenzene	0:12	42.50	40.00	45.00	2.61
Nisqually River	N-nitrosodimethylamine	0:12	100.00	40.00	160.00	62.67
Nisqually River	N-nitroso-di-n-propylamine	0:12	42.50	40.00	45.00	2.61
Nisqually River	N-nitrosodiphenylamine	0:12	52.50	40.00	65.00	13.06
Nisqually River	pentachlorophenol	0:12	160.00	160.00	160.00	0.00
Nisqually River	phenanthrene	0:12	42.50	40.00	45.00	2.61
Nisqually River	phenol	0:12	52.50	40.00	65.00	13.06
Nisqually River	ppDDD	36:38	1.63	0.52	3.29	0.76
Nisqually River	ppDDE	38:38	11.97	5.20	26.00	4.54
Nisqually River	ppDDT	10:38	0.94	0.52	2.00	0.55
Nisqually River	pyrene	0:12	42.50	40.00	45.00	2.61
Nisqually River	solids	39:39	25.4	18.5	30.7	2.4
Nisqually River	Toxaphene	0:38	10.00	10.00	10.00	0.00
Nooksack River	1,2,4-trichlorobenzene	0:18	45.00	40.00	50.00	4.20
Nooksack River	1,2-dichlorobenzene	0:18	45.00	40.00	50.00	4.20
Nooksack River	1,2-diphenylhydrazine	0:18	45.00	40.00	50.00	4.20
Nooksack River	1,3-dichlorobenzene	0:18	55.00	40.00	65.00	11.11
Nooksack River	1,4-dichlorobenzene	0:18	45.00	40.00	50.00	4.20
Nooksack River	2,4,5-trichlorophenol	0:18	20.00	20.00	20.00	0.00
Nooksack River	2,4,6-trichlorophenol	0:18	55.00	40.00	65.00	11.11
Nooksack River	2,4-dichlorophenol	0:18	55.00	40.00	65.00	11.11
Nooksack River	2,4-dimethylphenol	0:18	55.00	40.00	65.00	11.11
Nooksack River	2,4-dinitrophenol	0:18	320.00	260.00	400.00	60.59
Nooksack River	2,4-dinitrotoluene	0:18	102.33	40.00	200.00	71.96
Nooksack River	2,6-dinitrotoluene	0:18	20.00	20.00	20.00	0.00
Nooksack River	2-chloronaphthalene	0:18	10.00	10.00	10.00	0.00
Nooksack River	2-chlorophenol	0:18	55.00	40.00	65.00	11.11
Nooksack River	2-methylnaphthalene	0:18	20.00	20.00	20.00	0.00
Nooksack River	2-methylphenol	0:18	45.00	40.00	50.00	4.20
Nooksack River	2-nitroaniline	0:18	102.33	40.00	200.00	71.96
Nooksack River	2-nitrophenol	0:18	45.00	40.00	50.00	4.20
Nooksack River	3-nitroaniline	0:18	213.33	80.00	300.00	98.46
Nooksack River	4,6-dinitro-o-cresol	0:18	233.33	200.00	300.00	48.51
Nooksack River	4-bromophenylphenylether	0:18	55.00	40.00	65.00	11.11
Nooksack River	4-chloro-3-methylphenol	0:18	55.00	40.00	65.00	11.11
Nooksack River	4-chloroaniline	0:18	273.33	20.00	400.00	184.33
Nooksack River	4-chlorophenylphenylether	0:18	55.00	40.00	65.00	11.11
Nooksack River	4-methylphenol	0:18	55.00	40.00	65.00	11.11
Nooksack River	4-nitroaniline	0:18	213.33	80.00	300.00	98.46
Nooksack River	4-nitrophenol	0:18	480.00	400.00	540.00	60.59
Nooksack River	acenaphthene	0:18	10.00	10.00	10.00	0.00
Nooksack River	acenaphthylene	0:18	10.00	10.00	10.00	0.00

# Appendix: Coho Salmon Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Nooksack River	Aldrin	0:43	0.52	0.30	0.67	0.18
Nooksack River	alpha chlordane	13:43	0.70	0.50	2.55	0.46
Nooksack River	alpha endosulfan	0:43	0.62	0.50	0.67	0.08
Nooksack River	alpha hexachlorocyclohexane	6:43	0.55	0.50	0.93	0.11
Nooksack River	aniline	0:18	46.67	45.00	50.00	2.43
Nooksack River	anthracene	0:18	20.00	20.00	20.00	0.00
Nooksack River	Aroclor 1016	0:43	20.00	20.00	20.00	0.00
Nooksack River	Aroclor 1221	0:43	20.00	20.00	20.00	0.00
Nooksack River	Aroclor 1232	0:43	20.00	20.00	20.00	0.00
Nooksack River	Aroclor 1242	0:43	15.81	10.00	20.00	4.99
Nooksack River	Aroclor 1248	0:43	2.00	2.00	2.00	0.00
Nooksack River	Aroclor 1254	42:42	16.59	2.00	37.10	8.73
Nooksack River	Aroclor 1260	39:42	7.39	1.00	16.00	3.48
Nooksack River	arsenic	18:18	0.56	0.38	0.72	0.10
Nooksack River	benzo(a)anthracene	0:18	55.00	40.00	65.00	11.11
Nooksack River	benzo(a)pyrene	0:18	10.00	10.00	10.00	0.00
Nooksack River	benzo(b)fluoranthene	0:18	45.00	40.00	50.00	4.20
Nooksack River	benzo(g,h,i)perylene	0:18	55.00	40.00	65.00	11.11
Nooksack River	benzo(k)fluoranthene	0:18	45.00	40.00	50.00	4.20
Nooksack River	benzoic acid	0:18	273.33	260.00	300.00	19.40
Nooksack River	benzyl alcohol	0:18	45.00	40.00	50.00	4.20
Nooksack River	benzylbutylphthalate	0:18	63.33	60.00	65.00	2.43
Nooksack River	beta endosulfan	0:43	1.23	1.00	1.30	0.12
Nooksack River	beta hexachlorocyclohexane	0:43	0.76	0.67	1.00	0.15
Nooksack River	bis(2-chloroethoxy)methane	0:18	55.00	40.00	65.00	11.11
Nooksack River	bis(2-chloroethyl)ether	0:18	45.00	40.00	50.00	4.20
Nooksack River	bis(2-chloroisopropyl)ether	0:18	45.00	40.00	50.00	4.20
Nooksack River	bis(2-ethylhexyl)phthalate	1:18	79.72	60.00	360.00	69.99
Nooksack River	carbazole	0:18	55.00	40.00	65.00	11.11
Nooksack River	chrysene	0:18	55.00	40.00	65.00	11.11
Nooksack River	copper	18:18	0.54	0.41	0.87	0.15
Nooksack River	coprostanol	0:6	400.00	400.00	400.00	0.00
Nooksack River	delta hexachlorocyclohexane	0:43	0.51	0.50	0.52	0.01
Nooksack River	dibenzo(a,h)anthracene	0:18	55.00	40.00	65.00	11.11
Nooksack River	dibenzofuran	0:18	45.00	40.00	50.00	4.20
Nooksack River	Dieldrin	6:43	0.62	0.50	0.82	0.09
Nooksack River	diethylphthalate	0:18	45.00	40.00	50.00	4.20
Nooksack River	dimethylphthalate	0:18	45.00	40.00	50.00	4.20
Nooksack River	di-n-butylphthalate	0:18	46.67	45.00	50.00	2.43
Nooksack River	di-n-octylphthalate	0:18	10.00	10.00	10.00	0.00
Nooksack River	endosulfan sulfate	0:43	1.20	1.00	1.30	0.12
Nooksack River	Endrin	0:43	1.17	1.00	1.30	0.15
Nooksack River	endrin aldehyde	0:43	1.78	1.00	6.40	1.88
Nooksack River	fluoranthene	0:18	20.00	20.00	20.00	0.00
Nooksack River	fluorene	0:18	45.00	40.00	50.00	4.20
Nooksack River	gamma chlordane	3:43	0.52	0.50	0.82	0.06
Nooksack River	gamma hexachlorocyclohexane	0:43	0.51	0.50	0.52	0.01

# Appendix: Coho Salmon Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Nooksack River	heptachlor	0:43	0.51	0.50	0.52	0.01
Nooksack River	heptachlor epoxide	0:43	0.51	0.50	0.52	0.01
Nooksack River	hexachlorobenzene	4:24	41.40	0.03	65.00	25.89
Nooksack River	hexachlorobutadiene	0:18	45.00	40.00	50.00	4.20
Nooksack River	hexachlorocyclopentadiene	0:18	188.67	166.00	200.00	16.49
Nooksack River	hexachloroethane	0:18	55.00	40.00	65.00	11.11
Nooksack River	indeno(1,2,3-c,d)pyrene	0:18	55.67	40.00	67.00	11.77
Nooksack River	isophorone	0:18	55.00	40.00	65.00	11.11
Nooksack River	lead	0:18	0.029	0.020	0.030	0.002
Nooksack River	lipids	43:43	2.87	0.52	6.68	1.53
Nooksack River	mercury	18:18	0.041	0.027	0.056	0.010
Nooksack River	meythoxychlor	0:43	5.20	5.00	5.30	0.13
Nooksack River	naphthalene	0:18	55.00	40.00	65.00	11.11
Nooksack River	nitrobenzene	0:18	45.00	40.00	50.00	4.20
Nooksack River	N-nitrosodimethylamine	0:18	133.33	40.00	200.00	69.96
Nooksack River	N-nitroso-di-n-propylamine	0:18	45.00	40.00	50.00	4.20
Nooksack River	N-nitrosodiphenylamine	0:18	55.00	40.00	65.00	11.11
Nooksack River	opDDD	0:6	0.08	0.07	0.10	0.01
Nooksack River	opDDT	0:1	0.11	0.11	0.11	
Nooksack River	PCB101	6:6	1.82	1.40	2.80	0.52
Nooksack River	PCB105	6:6	0.52	0.27	0.81	0.20
Nooksack River	PCB110	6:6	0.53	0.40	0.74	0.13
Nooksack River	PCB118	6:6	1.56	0.87	2.70	0.65
Nooksack River	PCB126	0:6	0.05	0.04	0.06	0.01
Nooksack River	PCB128	6:6	0.64	0.47	0.83	0.13
Nooksack River	PCB138	6:6	0.91	0.69	1.30	0.22
Nooksack River	PCB153	6:6	1.80	1.20	2.70	0.54
Nooksack River	PCB156	0:6	0.03	0.02	0.03	0.00
Nooksack River	PCB157	0:6	0.03	0.02	0.04	0.00
Nooksack River	PCB169	0:6	0.06	0.05	0.07	0.01
Nooksack River	PCB170	6:6	0.26	0.19	0.31	0.05
Nooksack River	PCB180	6:6	0.35	0.25	0.50	0.11
Nooksack River	PCB189	0:6	0.03	0.03	0.04	0.01
Nooksack River	PCB77	0:6	0.05	0.04	0.06	0.01
Nooksack River	pentachlorophenol	0:18	173.33	160.00	200.00	19.40
Nooksack River	phenanthrene	0:18	45.00	40.00	50.00	4.20
Nooksack River	phenol	0:18	55.00	40.00	65.00	11.11
Nooksack River	ppDDD	30:49	0.82	0.08	1.85	0.43
Nooksack River	ppDDE	49:49	6.81	1.30	14.10	2.70
Nooksack River	ppDDT	5:49	0.93	0.04	2.00	0.69
Nooksack River	pyrene	0:18	45.00	40.00	50.00	4.20
Nooksack River	solids	45:45	26.4	23.5	30.2	1.5
Nooksack River	TotalDDT	6:6	8.23	7.10	9.90	1.03
Nooksack River	TotalPCB	6:6	11.50	8.00	18.00	3.62
Nooksack River	Toxaphene	0:43	10.00	10.00	10.00	0.00
S.Sound Net Pen	Aldrin	0:14	0.67	0.67	0.67	0.00
S.Sound Net Pen	alpha chlordane	12:14	1.53	0.52	3.03	0.69

# Appendix: Coho Salmon Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
S.Sound Net Pen	alpha endosulfan	0:14	0.67	0.67	0.67	0.00
S.Sound Net Pen	alpha hexachlorocyclohexane	0:14	0.52	0.52	0.52	0.00
S.Sound Net Pen	Aroclor 1016	0:14	20.00	20.00	20.00	0.00
S.Sound Net Pen	Aroclor 1221	0:14	20.00	20.00	20.00	0.00
S.Sound Net Pen	Aroclor 1232	0:14	20.00	20.00	20.00	0.00
S.Sound Net Pen	Aroclor 1242	0:14	20.00	20.00	20.00	0.00
S.Sound Net Pen	Aroclor 1248	0:14	2.00	2.00	2.00	0.00
S.Sound Net Pen	Aroclor 1254	14:14	27.10	11.00	59.30	14.77
S.Sound Net Pen	Aroclor 1260	14:14	7.62	5.30	14.00	2.19
S.Sound Net Pen	beta endosulfan	0:14	1.30	1.30	1.30	0.00
S.Sound Net Pen	beta hexachlorocyclohexane	0:14	0.67	0.67	0.67	0.00
S.Sound Net Pen	delta hexachlorocyclohexane	0:14	0.52	0.52	0.52	0.00
S.Sound Net Pen	Dieldrin	0:14	0.67	0.67	0.67	0.00
S.Sound Net Pen	endosulfan sulfate	0:14	1.30	1.30	1.30	0.00
S.Sound Net Pen	Endrin	0:14	1.30	1.30	1.30	0.00
S.Sound Net Pen	endrin aldehyde	0:14	6.40	6.40	6.40	0.00
S.Sound Net Pen	gamma chlordane	1:14	0.61	0.52	1.77	0.33
S.Sound Net Pen	gamma hexachlorocyclohexane	0:14	0.52	0.52	0.52	0.00
S.Sound Net Pen	heptachlor	0:14	0.52	0.52	0.52	0.00
S.Sound Net Pen	heptachlor epoxide	0:14	0.52	0.52	0.52	0.00
S.Sound Net Pen	hexachlorobenzene	13:14	0.90	0.03	1.50	0.32
S.Sound Net Pen	lipids	14:14	4.56	3.23	6.23	0.85
S.Sound Net Pen	meythoxychlor	0:14	5.20	5.20	5.20	0.00
S.Sound Net Pen	opDDD	1:13	0.62	0.08	6.60	1.80
S.Sound Net Pen	opDDT	1:10	0.31	0.11	1.60	0.46
S.Sound Net Pen	PCB101	14:14	2.86	1.80	4.90	0.80
S.Sound Net Pen	PCB105	11:11	0.78	0.40	1.40	0.32
S.Sound Net Pen	PCB110	13:13	0.86	0.54	1.40	0.29
S.Sound Net Pen	PCB118	14:14	2.16	1.40	3.60	0.60
S.Sound Net Pen	PCB126	0:14	0.07	0.05	0.11	0.02
S.Sound Net Pen	PCB128	13:13	1.07	0.41	1.90	0.41
S.Sound Net Pen	PCB138	14:14	1.13	0.61	2.00	0.38
S.Sound Net Pen	PCB153	14:14	2.83	1.70	4.10	0.74
S.Sound Net Pen	PCB156	0:14	0.04	0.03	0.07	0.01
S.Sound Net Pen	PCB157	0:14	0.04	0.03	0.07	0.01
S.Sound Net Pen	PCB169	0:14	0.09	0.06	0.14	0.02
S.Sound Net Pen	PCB170	10:11	0.58	0.07	2.00	0.54
S.Sound Net Pen	PCB180	11:13	0.50	0.05	0.84	0.26
S.Sound Net Pen	PCB189	0:14	0.05	0.03	0.08	0.01
S.Sound Net Pen	PCB77	0:14	0.08	0.05	0.12	0.02
S.Sound Net Pen	ppDDD	11:26	0.46	0.14	0.93	0.28
S.Sound Net Pen	ppDDE	28:28	12.58	7.10	23.30	3.72
S.Sound Net Pen	ppDDT	0:22	0.36	0.04	0.52	0.22
S.Sound Net Pen	solids	28:28	28.2	24.1	33.2	2.3
S.Sound Net Pen	TotalDDT	14:14	14.00	8.70	25.60	3.94
S.Sound Net Pen	TotalPCB	14:14	18.01	12.00	31.80	5.66
S.Sound Net Pen	Toxaphene	0:14	10.00	10.00	10.00	0.00

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Sinclair Inlet	1,2,4-trichlorobenzene	0:2	50.00	50.00	50.00	0.00
Sinclair Inlet	1,2-dichlorobenzene	0:2	50.00	50.00	50.00	0.00
Sinclair Inlet	1,2-diphenylhydrazine	0:2	50.00	50.00	50.00	0.00
Sinclair Inlet	1,3-dichlorobenzene	0:2	60.00	60.00	60.00	0.00
Sinclair Inlet	1,4-dichlorobenzene	0:2	50.00	50.00	50.00	0.00
Sinclair Inlet	2,4,5-trichlorophenol	0:2	20.00	20.00	20.00	0.00
Sinclair Inlet	2,4,6-trichlorophenol	0:2	60.00	60.00	60.00	0.00
Sinclair Inlet	2,4-dichlorophenol	0:2	60.00	60.00	60.00	0.00
Sinclair Inlet	2,4-dimethylphenol	0:2	60.00	60.00	60.00	0.00
Sinclair Inlet	2,4-dinitrophenol	0:2	300.00	300.00	300.00	0.00
Sinclair Inlet	2,4-dinitrotoluene	0:2	200.00	200.00	200.00	0.00
Sinclair Inlet	2,6-dinitrotoluene	0:2	20.00	20.00	20.00	0.00
Sinclair Inlet	2-chloronaphthalene	0:2	10.00	10.00	10.00	0.00
Sinclair Inlet	2-chlorophenol	0:2	60.00	60.00	60.00	0.00
Sinclair Inlet	2-methylnaphthalene	0:2	20.00	20.00	20.00	0.00
Sinclair Inlet	2-methylphenol	0:2	50.00	50.00	50.00	0.00
Sinclair Inlet	2-nitroaniline	0:2	200.00	200.00	200.00	0.00
Sinclair Inlet	2-nitrophenol	0:2	50.00	50.00	50.00	0.00
Sinclair Inlet	3-nitroaniline	0:2	300.00	300.00	300.00	0.00
Sinclair Inlet	4,6-dinitro-o-cresol	0:2	300.00	300.00	300.00	0.00
Sinclair Inlet	4-bromophenylphenylether	0:2	60.00	60.00	60.00	0.00
Sinclair Inlet	4-chloro-3-methylphenol	0:2	60.00	60.00	60.00	0.00
Sinclair Inlet	4-chloroaniline	0:2	20.00	20.00	20.00	0.00
Sinclair Inlet	4-chlorophenylphenylether	0:2	60.00	60.00	60.00	0.00
Sinclair Inlet	4-methylphenol	0:2	60.00	60.00	60.00	0.00
Sinclair Inlet	4-nitroaniline	0:2	300.00	300.00	300.00	0.00
Sinclair Inlet	4-nitrophenol	0:2	500.00	500.00	500.00	0.00
Sinclair Inlet	acenaphthene	0:2	10.00	10.00	10.00	0.00
Sinclair Inlet	acenaphthylene	0:2	10.00	10.00	10.00	0.00
Sinclair Inlet	Aldrin	0:2	0.30	0.30	0.30	0.00
Sinclair Inlet	alpha chlordane	0:2	0.50	0.50	0.50	0.00
Sinclair Inlet	alpha endosulfan	0:2	0.50	0.50	0.50	0.00
Sinclair Inlet	alpha hexachlorocyclohexane	2:2	0.90	0.84	0.95	0.08
Sinclair Inlet	aniline	0:2	50.00	50.00	50.00	0.00
Sinclair Inlet	anthracene	0:2	20.00	20.00	20.00	0.00
Sinclair Inlet	Aroclor 1016	0:2	20.00	20.00	20.00	0.00
Sinclair Inlet	Aroclor 1221	0:2	20.00	20.00	20.00	0.00
Sinclair Inlet	Aroclor 1232	0:2	20.00	20.00	20.00	0.00
Sinclair Inlet	Aroclor 1242	0:2	10.00	10.00	10.00	0.00
Sinclair Inlet	Aroclor 1248	0:2	2.00	2.00	2.00	0.00
Sinclair Inlet	Aroclor 1254	2:2	16.50	12.00	21.00	6.36
Sinclair Inlet	Aroclor 1260	2:2	9.00	6.00	12.00	4.24
Sinclair Inlet	arsenic	2:2	1.00	0.80	1.20	0.28
Sinclair Inlet	benzo(a)anthracene	0:2	60.00	60.00	60.00	0.00
Sinclair Inlet	benzo(a)pyrene	0:2	10.00	10.00	10.00	0.00
Sinclair Inlet	benzo(b)fluoranthene	0:2	50.00	50.00	50.00	0.00
Sinclair Inlet	benzo(g,h,i)perylene	0:2	60.00	60.00	60.00	0.00



Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Sinclair Inlet	benzo(k)fluoranthene	0:2	50.00	50.00	50.00	0.00
Sinclair Inlet	benzoic acid	0:2	300.00	300.00	300.00	0.00
Sinclair Inlet	benzyl alcohol	0:2	50.00	50.00	50.00	0.00
Sinclair Inlet	benzylbutylphthalate	0:2	60.00	60.00	60.00	0.00
Sinclair Inlet	beta endosulfan	0:2	1.00	1.00	1.00	0.00
Sinclair Inlet	beta hexachlorocyclohexane	0:2	1.00	1.00	1.00	0.00
Sinclair Inlet	bis(2-chloroethoxy)methane	0:2	60.00	60.00	60.00	0.00
Sinclair Inlet	bis(2-chloroethyl)ether	0:2	50.00	50.00	50.00	0.00
Sinclair Inlet	bis(2-chloroisopropyl)ether	0:2	50.00	50.00	50.00	0.00
Sinclair Inlet	bis(2-ethylhexyl)phthalate	0:2	60.00	60.00	60.00	0.00
Sinclair Inlet	carbazole	0:2	60.00	60.00	60.00	0.00
Sinclair Inlet	chrysene	0:2	60.00	60.00	60.00	0.00
Sinclair Inlet	copper	2:2	0.53	0.45	0.61	0.11
Sinclair Inlet	delta hexachlorocyclohexane	0:2	0.50	0.50	0.50	0.00
Sinclair Inlet	dibenzo(a,h)anthracene	0:2	60.00	60.00	60.00	0.00
Sinclair Inlet	dibenzofuran	0:2	50.00	50.00	50.00	0.00
Sinclair Inlet	Dieldrin	2:2	0.72	0.69	0.75	0.04
Sinclair Inlet	diethylphthalate	0:2	50.00	50.00	50.00	0.00
Sinclair Inlet	dimethylphthalate	0:2	50.00	50.00	50.00	0.00
Sinclair Inlet	di-n-butylphthalate	0:2	50.00	50.00	50.00	0.00
Sinclair Inlet	di-n-octylphthalate	0:2	10.00	10.00	10.00	0.00
Sinclair Inlet	endosulfan sulfate	0:2	1.00	1.00	1.00	0.00
Sinclair Inlet	Endrin	0:2	1.00	1.00	1.00	0.00
Sinclair Inlet	endrin aldehyde	0:2	1.00	1.00	1.00	0.00
Sinclair Inlet	fluoranthene	0:2	20.00	20.00	20.00	0.00
Sinclair Inlet	fluorene	0:2	50.00	50.00	50.00	0.00
Sinclair Inlet	gamma chlordane	0:2	0.50	0.50	0.50	0.00
Sinclair Inlet	gamma hexachlorocyclohexane	0:2	0.50	0.50	0.50	0.00
Sinclair Inlet	heptachlor	0:2	0.50	0.50	0.50	0.00
Sinclair Inlet	heptachlor epoxide	0:2	0.50	0.50	0.50	0.00
Sinclair Inlet	hexachlorobenzene	0:2	60.00	60.00	60.00	0.00
Sinclair Inlet	hexachlorobutadiene	0:2	50.00	50.00	50.00	0.00
Sinclair Inlet	hexachlorocyclopentadiene	0:2	200.00	200.00	200.00	0.00
Sinclair Inlet	hexachloroethane	0:2	60.00	60.00	60.00	0.00
Sinclair Inlet	indeno(1,2,3-c,d)pyrene	0:2	60.00	60.00	60.00	0.00
Sinclair Inlet	isophorone	0:2	60.00	60.00	60.00	0.00
Sinclair Inlet	lead	0:2	0.030	0.030	0.030	0.000
Sinclair Inlet	lipids	2:2	4.44	3.65	5.23	1.12
Sinclair Inlet	mercury	2:2	0.060	0.059	0.061	0.001
Sinclair Inlet	meythoxychlor	0:2	5.00	5.00	5.00	0.00
Sinclair Inlet	naphthalene	0:2	60.00	60.00	60.00	0.00
Sinclair Inlet	nitrobenzene	0:2	50.00	50.00	50.00	0.00
Sinclair Inlet	N-nitrosodimethylamine	0:2	200.00	200.00	200.00	0.00
Sinclair Inlet	N-nitroso-di-n-propylamine	0:2	50.00	50.00	50.00	0.00
Sinclair Inlet	N-nitrosodiphenylamine	0:2	60.00	60.00	60.00	0.00
Sinclair Inlet	pentachlorophenol	0:2	200.00	200.00	200.00	0.00
Sinclair Inlet	phenanthrene	0:2	50.00	50.00	50.00	0.00

# Appendix: Coho Salmon Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Sinclair Inlet	phenol	0:2	60.00	60.00	60.00	0.00
Sinclair Inlet	ppDDD	2:2	1.50	1.50	1.50	0.00
Sinclair Inlet	ppDDE	2:2	9.85	9.70	10.00	0.21
Sinclair Inlet	ppDDT	0:2	2.00	2.00	2.00	0.00
Sinclair Inlet	pyrene	0:2	50.00	50.00	50.00	0.00
Sinclair Inlet	solids	1:1	29.0	29.0	29.0	
Sinclair Inlet	Toxaphene	0:2	10.00	10.00	10.00	0.00
Skagit River	1,2,4-trichlorobenzene	0:18	45.00	40.00	50.00	4.20
Skagit River	1,2-dichlorobenzene	0:18	45.00	40.00	50.00	4.20
Skagit River	1,2-diphenylhydrazine	0:18	45.00	40.00	50.00	4.20
Skagit River	1,3-dichlorobenzene	0:18	55.00	40.00	65.00	11.11
Skagit River	1,4-dichlorobenzene	0:18	45.00	40.00	50.00	4.20
Skagit River	2,4,5-trichlorophenol	0:18	20.00	20.00	20.00	0.00
Skagit River	2,4,6-trichlorophenol	0:18	55.00	40.00	65.00	11.11
Skagit River	2,4-dichlorophenol	0:18	55.00	40.00	65.00	11.11
Skagit River	2,4-dimethylphenol	0:18	55.00	40.00	65.00	11.11
Skagit River	2,4-dinitrophenol	0:18	320.00	260.00	400.00	60.59
Skagit River	2,4-dinitrotoluene	0:18	102.33	40.00	200.00	71.96
Skagit River	2,6-dinitrotoluene	0:18	20.00	20.00	20.00	0.00
Skagit River	2-chloronaphthalene	0:18	10.00	10.00	10.00	0.00
Skagit River	2-chlorophenol	0:18	55.00	40.00	65.00	11.11
Skagit River	2-methylnaphthalene	0:18	20.00	20.00	20.00	0.00
Skagit River	2-methylphenol	0:18	45.00	40.00	50.00	4.20
Skagit River	2-nitroaniline	0:18	102.33	40.00	200.00	71.96
Skagit River	2-nitrophenol	0:18	45.00	40.00	50.00	4.20
Skagit River	3-nitroaniline	0:18	213.33	80.00	300.00	98.46
Skagit River	4,6-dinitro-o-cresol	0:18	233.33	200.00	300.00	48.51
Skagit River	4-bromophenylphenylether	0:18	55.00	40.00	65.00	11.11
Skagit River	4-chloro-3-methylphenol	0:18	55.00	40.00	65.00	11.11
Skagit River	4-chloroaniline	0:18	273.33	20.00	400.00	184.33
Skagit River	4-chlorophenylphenylether	0:18	55.00	40.00	65.00	11.11
Skagit River	4-methylphenol	0:18	55.00	40.00	65.00	11.11
Skagit River	4-nitroaniline	0:18	213.33	80.00	300.00	98.46
Skagit River	4-nitrophenol	0:18	480.00	400.00	540.00	60.59
Skagit River	acenaphthene	0:18	10.00	10.00	10.00	0.00
Skagit River	acenaphthylene	0:18	10.00	10.00	10.00	0.00
Skagit River	Aldrin	0:43	0.52	0.30	0.67	0.18
Skagit River	alpha chlordane	14:43	0.72	0.50	1.83	0.40
Skagit River	alpha endosulfan	0:43	0.62	0.50	0.67	0.08
Skagit River	alpha hexachlorocyclohexane	6:43	0.57	0.50	1.20	0.16
Skagit River	aniline	0:18	46.67	45.00	50.00	2.43
Skagit River	anthracene	0:18	20.00	20.00	20.00	0.00
Skagit River	Aroclor 1016	0:43	20.00	20.00	20.00	0.00
Skagit River	Aroclor 1221	0:43	20.00	20.00	20.00	0.00
Skagit River	Aroclor 1232	0:43	20.00	20.00	20.00	0.00
Skagit River	Aroclor 1242	0:43	15.81	10.00	20.00	4.99
Skagit River	Aroclor 1248	0:43	2.00	2.00	2.00	0.00

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Skagit River	Aroclor 1254	31:33	14.47	2.00	27.90	7.52
Skagit River	Aroclor 1260	32:33	8.68	1.00	17.60	4.22
Skagit River	arsenic	18:18	0.65	0.34	1.30	0.27
Skagit River	benzo(a)anthracene	0:18	55.00	40.00	65.00	11.11
Skagit River	benzo(a)pyrene	0:18	10.00	10.00	10.00	0.00
Skagit River	benzo(b)fluoranthene	0:18	45.00	40.00	50.00	4.20
Skagit River	benzo(g,h,i)perylene	0:18	55.00	40.00	65.00	11.11
Skagit River	benzo(k)fluoranthene	0:18	45.00	40.00	50.00	4.20
Skagit River	benzoic acid	0:18	273.33	260.00	300.00	19.40
Skagit River	benzyl alcohol	0:18	45.00	40.00	50.00	4.20
Skagit River	benzylbutylphthalate	0:18	63.33	60.00	65.00	2.43
Skagit River	beta endosulfan	0:43	1.23	1.00	1.30	0.12
Skagit River	beta hexachlorocyclohexane	0:43	0.76	0.67	1.00	0.15
Skagit River	bis(2-chloroethoxy)methane	0:18	55.00	40.00	65.00	11.11
Skagit River	bis(2-chloroethyl)ether	0:18	45.00	40.00	50.00	4.20
Skagit River	bis(2-chloroisopropyl)ether	0:18	45.00	40.00	50.00	4.20
Skagit River	bis(2-ethylhexyl)phthalate	3:18	140.22	60.00	1177.00	262.62
Skagit River	carbazole	0:18	55.00	40.00	65.00	11.11
Skagit River	chrysene	0:18	55.00	40.00	65.00	11.11
Skagit River	copper	18:18	0.55	0.43	0.79	0.11
Skagit River	coprostanol	0:6	400.00	400.00	400.00	0.00
Skagit River	delta hexachlorocyclohexane	0:43	0.51	0.50	0.52	0.01
Skagit River	dibenzo(a,h)anthracene	0:18	55.00	40.00	65.00	11.11
Skagit River	dibenzofuran	0:18	45.00	40.00	50.00	4.20
Skagit River	Dieldrin	6:43	0.63	0.50	0.88	0.09
Skagit River	diethylphthalate	0:18	45.00	40.00	50.00	4.20
Skagit River	dimethylphthalate	0:18	45.00	40.00	50.00	4.20
Skagit River	di-n-butylphthalate	0:18	46.67	45.00	50.00	2.43
Skagit River	di-n-octylphthalate	0:18	10.00	10.00	10.00	0.00
Skagit River	endosulfan sulfate	0:43	1.20	1.00	1.30	0.12
Skagit River	Endrin	0:43	1.17	1.00	1.30	0.15
Skagit River	endrin aldehyde	0:43	1.04	1.00	1.10	0.05
Skagit River	fluoranthene	0:18	20.00	20.00	20.00	0.00
Skagit River	fluorene	0:18	45.00	40.00	50.00	4.20
Skagit River	gamma chlordane	13:43	0.58	0.50	0.99	0.14
Skagit River	gamma hexachlorocyclohexane	0:43	0.51	0.50	0.52	0.01
Skagit River	heptachlor	0:43	0.51	0.50	0.52	0.01
Skagit River	heptachlor epoxide	0:43	0.51	0.50	0.52	0.01
Skagit River	hexachlorobenzene	0:18	55.00	40.00	65.00	11.11
Skagit River	hexachlorobutadiene	0:18	45.00	40.00	50.00	4.20
Skagit River	hexachlorocyclopentadiene	0:18	188.67	166.00	200.00	16.49
Skagit River	hexachloroethane	0:18	55.00	40.00	65.00	11.11
Skagit River	indeno(1,2,3-c,d)pyrene	0:18	55.67	40.00	67.00	11.77
Skagit River	isophorone	0:18	55.00	40.00	65.00	11.11
Skagit River	lead	0:18	0.030	0.030	0.030	0.000
Skagit River	lipids	40:40	4.11	0.54	10.30	2.70
Skagit River	mercury	18:18	0.049	0.028	0.075	0.014

# Appendix: Coho Salmon Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
Skagit River	meythoxychlor	0:43	5.22	5.00	5.30	0.14
Skagit River	naphthalene	0:18	55.00	40.00	65.00	11.11
Skagit River	nitrobenzene	0:18	45.00	40.00	50.00	4.20
Skagit River	N-nitrosodimethylamine	0:18	133.33	40.00	200.00	69.96
Skagit River	N-nitroso-di-n-propylamine	0:18	45.00	40.00	50.00	4.20
Skagit River	N-nitrosodiphenylamine	0:18	55.00	40.00	65.00	11.11
Skagit River	pentachlorophenol	0:18	173.33	160.00	200.00	19.40
Skagit River	phenanthrene	0:18	45.00	40.00	50.00	4.20
Skagit River	phenol	0:18	55.00	40.00	65.00	11.11
Skagit River	ppDDD	41:43	1.60	0.50	7.32	1.22
Skagit River	ppDDE	42:43	10.16	1.00	30.10	5.78
Skagit River	ppDDT	10:43	1.11	0.52	2.00	0.64
Skagit River	pyrene	0:18	45.00	40.00	50.00	4.20
Skagit River	solids	39:39	28.1	19.4	32.6	2.4
Skagit River	Toxaphene	0:43	10.00	10.00	10.00	0.00
South Sound	1,2,4-trichlorobenzene	0:6	50.00	50.00	50.00	0.00
South Sound	1,2-dichlorobenzene	0:6	50.00	50.00	50.00	0.00
South Sound	1,2-diphenylhydrazine	0:6	50.00	50.00	50.00	0.00
South Sound	1,3-dichlorobenzene	0:6	60.00	60.00	60.00	0.00
South Sound	1,4-dichlorobenzene	0:6	50.00	50.00	50.00	0.00
South Sound	2,4,5-trichlorophenol	0:6	20.00	20.00	20.00	0.00
South Sound	2,4,6-trichlorophenol	0:6	60.00	60.00	60.00	0.00
South Sound	2,4-dichlorophenol	0:6	60.00	60.00	60.00	0.00
South Sound	2,4-dimethylphenol	0:6	60.00	60.00	60.00	0.00
South Sound	2,4-dinitrophenol	0:6	300.00	300.00	300.00	0.00
South Sound	2,4-dinitrotoluene	0:6	200.00	200.00	200.00	0.00
South Sound	2,6-dinitrotoluene	0:6	20.00	20.00	20.00	0.00
South Sound	2-chloronaphthalene	0:6	10.00	10.00	10.00	0.00
South Sound	2-chlorophenol	0:6	60.00	60.00	60.00	0.00
South Sound	2-methylnaphthalene	0:6	20.00	20.00	20.00	0.00
South Sound	2-methylphenol	0:6	50.00	50.00	50.00	0.00
South Sound	2-nitroaniline	0:6	200.00	200.00	200.00	0.00
South Sound	2-nitrophenol	0:6	50.00	50.00	50.00	0.00
South Sound	3-nitroaniline	0:6	300.00	300.00	300.00	0.00
South Sound	4,6-dinitro-o-cresol	0:6	300.00	300.00	300.00	0.00
South Sound	4-bromophenylphenylether	0:6	60.00	60.00	60.00	0.00
South Sound	4-chloro-3-methylphenol	0:6	60.00	60.00	60.00	0.00
South Sound	4-chloroaniline	0:6	20.00	20.00	20.00	0.00
South Sound	4-chlorophenylphenylether	0:6	60.00	60.00	60.00	0.00
South Sound	4-methylphenol	0:6	60.00	60.00	60.00	0.00
South Sound	4-nitroaniline	0:6	300.00	300.00	300.00	0.00
South Sound	4-nitrophenol	0:6	500.00	500.00	500.00	0.00
South Sound	acenaphthene	0:6	10.00	10.00	10.00	0.00
South Sound	acenaphthylene	0:6	10.00	10.00	10.00	0.00
South Sound	Aldrin	0:12	0.49	0.30	0.67	0.19
South Sound	alpha chlordane	1:12	0.61	0.50	1.71	0.35
South Sound	alpha endosulfan	0:12	0.59	0.50	0.67	0.09

## Appendix: Coho Salmon Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
South Sound	alpha hexachlorocyclohexane	6:12	0.68	0.50	1.20	0.25
South Sound	aniline	0:6	50.00	50.00	50.00	0.00
South Sound	anthracene	0:6	20.00	20.00	20.00	0.00
South Sound	Aroclor 1016	0:12	20.00	20.00	20.00	0.00
South Sound	Aroclor 1221	0:12	20.00	20.00	20.00	0.00
South Sound	Aroclor 1232	0:12	20.00	20.00	20.00	0.00
South Sound	Aroclor 1242	0:12	15.00	10.00	20.00	5.22
South Sound	Aroclor 1248	0:12	2.00	2.00	2.00	0.00
South Sound	Aroclor 1254	12:12	36.42	12.50	93.00	25.30
South Sound	Aroclor 1260	11:12	22.22	2.00	53.60	15.13
South Sound	arsenic	6:6	0.70	0.50	0.90	0.15
South Sound	benzo(a)anthracene	0:6	60.00	60.00	60.00	0.00
South Sound	benzo(a)pyrene	0:6	10.00	10.00	10.00	0.00
South Sound	benzo(b)fluoranthene	0:6	50.00	50.00	50.00	0.00
South Sound	benzo(g,h,i)perylene	0:6	60.00	60.00	60.00	0.00
South Sound	benzo(k)fluoranthene	0:6	50.00	50.00	50.00	0.00
South Sound	benzoic acid	0:6	300.00	300.00	300.00	0.00
South Sound	benzyl alcohol	0:6	50.00	50.00	50.00	0.00
South Sound	benzylbutylphthalate	0:6	60.00	60.00	60.00	0.00
South Sound	beta endosulfan	0:12	1.15	1.00	1.30	0.16
South Sound	beta hexachlorocyclohexane	0:12	0.84	0.67	1.00	0.17
South Sound	bis(2-chloroethoxy)methane	0:6	60.00	60.00	60.00	0.00
South Sound	bis(2-chloroethyl)ether	0:6	50.00	50.00	50.00	0.00
South Sound	bis(2-chloroisopropyl)ether	0:6	50.00	50.00	50.00	0.00
South Sound	bis(2-ethylhexyl)phthalate	0:6	60.00	60.00	60.00	0.00
South Sound	carbazole	0:6	60.00	60.00	60.00	0.00
South Sound	chrysene	0:6	60.00	60.00	60.00	0.00
South Sound	copper	6:6	0.52	0.46	0.63	0.06
South Sound	delta hexachlorocyclohexane	0:12	0.51	0.50	0.52	0.01
South Sound	dibenzo(a,h)anthracene	0:6	60.00	60.00	60.00	0.00
South Sound	dibenzofuran	0:6	50.00	50.00	50.00	0.00
South Sound	Dieldrin	2:12	0.67	0.50	1.10	0.18
South Sound	diethylphthalate	0:6	50.00	50.00	50.00	0.00
South Sound	dimethylphthalate	0:6	50.00	50.00	50.00	0.00
South Sound	di-n-butylphthalate	0:6	50.00	50.00	50.00	0.00
South Sound	di-n-octylphthalate	0:6	10.00	10.00	10.00	0.00
South Sound	endosulfan sulfate	0:12	1.15	1.00	1.30	0.16
South Sound	Endrin	0:12	1.15	1.00	1.30	0.16
South Sound	endrin aldehyde	0:12	1.00	1.00	1.00	0.00
South Sound	fluoranthene	0:6	20.00	20.00	20.00	0.00
South Sound	fluorene	0:6	50.00	50.00	50.00	0.00
South Sound	gamma chlordane	0:12	0.51	0.50	0.52	0.01
South Sound	gamma hexachlorocyclohexane	1:12	0.52	0.50	0.64	0.04
South Sound	heptachlor	0:12	0.51	0.50	0.52	0.01
South Sound	heptachlor epoxide	0:12	0.51	0.50	0.52	0.01
South Sound	hexachlorobenzene	0:6	60.00	60.00	60.00	0.00
South Sound	hexachlorobutadiene	0:6	50.00	50.00	50.00	0.00
South Sound	hexachlorocyclopentadiene	0:6	200.00	200.00	200.00	0.00

# Appendix: Coho Salmon Muscle

Location	Assay	No. Detected:				
		lo. Analyzed	Mean	Min	Max	SD
South Sound	hexachloroethane	0:6	60.00	60.00	60.00	0.00
South Sound	indeno(1,2,3-c,d)pyrene	0:6	60.00	60.00	60.00	0.00
South Sound	isophorone	0:6	60.00	60.00	60.00	0.00
South Sound	lead	0:6	0.030	0.030	0.030	0.000
South Sound	lipids	12:12	3.34	1.65	5.93	1.62
South Sound	mercury	6:6	0.057	0.045	0.071	0.009
South Sound	meythoxychlor	0:12	5.15	5.00	5.30	0.16
South Sound	naphthalene	0:6	60.00	60.00	60.00	0.00
South Sound	nitrobenzene	0:6	50.00	50.00	50.00	0.00
South Sound	N-nitrosodimethylamine	0:6	200.00	200.00	200.00	0.00
South Sound	N-nitroso-di-n-propylamine	0:6	50.00	50.00	50.00	0.00
South Sound	N-nitrosodiphenylamine	0:6	60.00	60.00	60.00	0.00
South Sound	pentachlorophenol	0:6	200.00	200.00	200.00	0.00
South Sound	phenanthrene	0:6	50.00	50.00	50.00	0.00
South Sound	phenol	0:6	60.00	60.00	60.00	0.00
South Sound	ppDDD	10:12	1.18	0.52	2.12	0.47
South Sound	ppDDE	12:12	9.75	5.50	15.00	3.12
South Sound	ppDDT	5:12	1.43	0.52	3.40	0.98
South Sound	pyrene	0:6	50.00	50.00	50.00	0.00
South Sound	solids	8:8	28.5	26.0	30.4	1.6
South Sound	Toxaphene	0:12	10.00	10.00	10.00	0.00
Wallace Rv. Hatchery	hexachlorobenzene	7:7	0.91	0.71	1.10	0.13
Wallace Rv. Hatchery	lipids	7:7	3.82	3.18	5.35	0.76
Wallace Rv. Hatchery	opDDD	1:7	0.10	0.06	0.21	0.05
Wallace Rv. Hatchery	PCB101	7:7	1.61	1.20	2.30	0.40
Wallace Rv. Hatchery	PCB105	6:6	0.57	0.28	0.82	0.23
Wallace Rv. Hatchery	PCB110	7:7	0.41	0.24	0.56	0.13
Wallace Rv. Hatchery	PCB118	7:7	1.57	0.96	2.40	0.49
Wallace Rv. Hatchery	PCB126	0:7	0.05	0.04	0.06	0.01
Wallace Rv. Hatchery	PCB128	6:6	0.28	0.19	0.46	0.11
Wallace Rv. Hatchery	PCB138	7:7	0.70	0.45	0.97	0.21
Wallace Rv. Hatchery	PCB153	7:7	1.87	1.30	2.60	0.46
Wallace Rv. Hatchery	PCB156	1:7	0.14	0.02	0.83	0.30
Wallace Rv. Hatchery	PCB157	0:7	0.03	0.02	0.03	0.00
Wallace Rv. Hatchery	PCB169	0:7	0.06	0.05	0.07	0.01
Wallace Rv. Hatchery	PCB170	3:4	0.24	0.03	0.35	0.15
Wallace Rv. Hatchery	PCB180	5:5	0.61	0.32	0.80	0.18
Wallace Rv. Hatchery	PCB189	0:7	0.04	0.03	0.04	0.00
Wallace Rv. Hatchery	PCB77	0:7	0.05	0.04	0.06	0.01
Wallace Rv. Hatchery	ppDDD	4:7	0.37	0.10	0.84	0.31
Wallace Rv. Hatchery	ppDDE	7:7	10.51	7.50	14.00	2.37
Wallace Rv. Hatchery	ppDDT	0:5	0.05	0.04	0.06	0.00
Wallace Rv. Hatchery	solids	7:7	23.4	21.3	26.3	1.5
Wallace Rv. Hatchery	TotalDDT	7:7	10.88	7.76	14.58	2.59
Wallace Rv. Hatchery	TotalPCB	7:7	11.79	8.53	15.00	2.82

## **Pacific Herring Whole-Body**

Summary of contaminant data for all Pacific herring whole-body samples collected by the Puget Sound Ambient Monitoring Program's Fish Component, 1989-1999. "No. Detected" is the number of samples for which an analyte was measured above the Method Detection Limit (MDL). "No. Analyzed" is the total number of samples analyzed for a given analyte. Mean, minimum, maximum, and standard deviation (SD) were computed for analyte and station combination, pooling all years' data. See Figure 1a-c for station locations.

# Appendix: Pacific Herring Whole Body

Summary statistics for Pacific herring whole body samples, averaged across years from 1995-1999 by location and assay. A value of the median of the Method Detection Limit (MDL) was used in calculations when an analyte was undetected. Refer to Figure 4 for station locations. Shaded rows indicate location:assay combinations wherein at least one sample had a measured concentration above the MDL. Unshaded rows indicate combinations that had no measured concentrations above the MDL. All concentrations are based on wet weight. All organics in µg/kg, all elemental metals in mg/kg, all lipids and solids in %.

Location	Assay	No. Detected:				
		No. Analyzed	Mean	Min	Max	SD
Cherry Point	hexachlorobenzene	8:10	0.35	0.06	0.62	0.19
Cherry Point	lipids	10:10	3.59	3.04	4.41	0.47
Cherry Point	opDDD	0:4	0.22	0.17	0.30	0.06
Cherry Point	PCB101	10:10	13.49	8.10	20.00	3.25
Cherry Point	PCB105	1:1	0.84	0.84	0.84	
Cherry Point	PCB110	9:9	2.61	1.90	4.30	0.77
Cherry Point	PCB118	10:10	11.54	6.90	20.00	3.51
Cherry Point	PCB126	0:10	0.10	0.07	0.16	0.03
Cherry Point	PCB128	10:10	3.83	1.90	5.60	1.13
Cherry Point	PCB138	10:10	3.81	2.50	6.00	1.08
Cherry Point	PCB153	10:10	9.46	5.70	15.00	2.63
Cherry Point	PCB156	8:10	0.16	0.05	0.44	0.11
Cherry Point	PCB157	0:10	0.06	0.04	0.10	0.02
Cherry Point	PCB169	0:10	0.13	0.09	0.20	0.04
Cherry Point	PCB170	9:9	0.63	0.40	0.90	0.18
Cherry Point	PCB180	10:10	1.52	0.74	3.00	0.68
Cherry Point	PCB189	0:10	0.07	0.04	0.11	0.02
Cherry Point	PCB77	0:10	0.12	0.07	0.18	0.03
Cherry Point	ppDDD	7:10	0.50	0.15	1.70	0.46
Cherry Point	ppDDE	10:10	12.14	9.00	18.00	2.68
Cherry Point	ppDDT	1:6	0.35	0.22	0.91	0.28
Cherry Point	solids	10:10	22.7	21.5	23.3	0.5
Cherry Point	TotalDDT	10:10	12.71	9.46	18.41	2.95
Cherry Point	TotalPCB	10:10	54.89	40.00	85.00	13.00
Fidalgo Bay	Aldrin	0:19	1.10	1.10	1.10	0.00
Fidalgo Bay	alpha chlordane	4:19	0.96	0.80	2.31	0.40
Fidalgo Bay	alpha endosulfan	0:19	0.50	0.50	0.50	0.00
Fidalgo Bay	alpha hexachlorocyclohexane	9:19	1.14	0.80	2.40	0.49
Fidalgo Bay	Aroclor 1016	0:19	26.70	26.70	26.70	0.00
Fidalgo Bay	Aroclor 1221	0:19	53.30	53.30	53.30	0.00
Fidalgo Bay	Aroclor 1232	0:19	53.30	53.30	53.30	0.00
Fidalgo Bay	Aroclor 1242	0:19	26.70	26.70	26.70	0.00
Fidalgo Bay	Aroclor 1248	0:19	26.70	26.70	26.70	0.00
Fidalgo Bay	Aroclor 1254	19:19	65.86	25.80	137.70	33.98
Fidalgo Bay	Aroclor 1260	19:19	36.52	12.40	67.20	14.30
Fidalgo Bay	arsenic	19:19	1.55	0.93	2.20	0.37
Fidalgo Bay	beta endosulfan	0:19	4.20	4.20	4.20	0.00
Fidalgo Bay	beta hexachlorocyclohexane	0:19	0.50	0.50	0.50	0.00
Fidalgo Bay	copper	19:19	0.60	0.44	0.97	0.13
Fidalgo Bay	delta hexachlorocyclohexane	0:19	0.80	0.80	0.80	0.00



# Appendix: Pacific Herring Whole Body

Location	Assay	No. Detected:				
		No. Analyzed	Mean	Min	Max	SD
Fidalgo Bay	Dieldrin	0:19	1.70	1.70	1.70	0.00
Fidalgo Bay	endosulfan sulfate	0:19	1.70	1.70	1.70	0.00
Fidalgo Bay	Endrin	0:19	1.10	1.10	1.10	0.00
Fidalgo Bay	endrin aldehyde	0:19	4.20	4.20	4.20	0.00
Fidalgo Bay	gamma chlordane	19:19	4.54	0.50	10.60	2.40
Fidalgo Bay	gamma hexachlorocyclohexane	0:19	0.53	0.53	0.53	0.00
Fidalgo Bay	heptachlor	0:19	0.80	0.80	0.80	0.00
Fidalgo Bay	heptachlor epoxide	0:19	0.50	0.50	0.50	0.00
Fidalgo Bay	lead	0:19	0.020	0.020	0.020	0.000
Fidalgo Bay	lipids	38:38	3.86	0.78	7.80	2.16
Fidalgo Bay	mercury	19:19	0.060	0.023	0.104	0.025
Fidalgo Bay	meythoxychlor	0:19	2.70	2.70	2.70	0.00
Fidalgo Bay	ppDDD	19:19	3.39	1.19	7.79	1.65
Fidalgo Bay	ppDDE	19:19	17.71	3.90	38.40	8.47
Fidalgo Bay	ppDDT	0:19	1.10	1.10	1.10	0.00
Fidalgo Bay	solids	38:38	23.7	19.1	30.5	2.6
Fidalgo Bay	Toxaphene	0:19	213.00	213.00	213.00	0.00
Northumberland	hexachlorobenzene	9:10	1.33	0.07	1.70	0.47
Northumberland	lipids	10:10	5.19	3.49	7.82	1.42
Northumberland	opDDD	0:10	0.17	0.11	0.22	0.04
Northumberland	PCB101	10:10	4.81	2.90	6.80	1.33
Northumberland	PCB105	1:1	0.57	0.57	0.57	
Northumberland	PCB110	10:10	0.96	0.70	1.30	0.22
Northumberland	PCB118	10:10	3.85	2.40	5.00	0.83
Northumberland	PCB126	0:10	0.09	0.07	0.12	0.02
Northumberland	PCB128	10:10	1.08	0.18	2.50	0.69
Northumberland	PCB138	10:10	1.23	0.80	1.60	0.28
Northumberland	PCB153	9:9	3.17	2.10	4.30	0.74
Northumberland	PCB156	0:10	0.05	0.03	0.06	0.01
Northumberland	PCB157	0:10	0.06	0.04	0.07	0.01
Northumberland	PCB169	0:10	0.11	0.08	0.14	0.02
Northumberland	PCB170	3:4	0.26	0.08	0.51	0.18
Northumberland	PCB180	9:10	0.27	0.06	0.47	0.15
Northumberland	PCB189	0:10	0.07	0.05	0.08	0.01
Northumberland	PCB77	0:10	0.11	0.08	0.13	0.02
Northumberland	ppDDD	2:10	0.23	0.12	0.61	0.16
Northumberland	ppDDE	10:10	18.30	13.00	33.00	7.39
Northumberland	ppDDT	0:9	0.24	0.15	0.31	0.06
Northumberland	solids	10:10	23.6	21.6	26.7	1.5
Northumberland	TotalDDT	10:10	18.40	13.00	33.00	7.34
Northumberland	TotalPCB	10:10	17.04	11.60	22.50	3.96
Port Orchard	hexachlorobenzene	10:10	1.42	1.20	1.80	0.18
Port Orchard	lipids	10:10	7.32	5.96	9.06	0.97
Port Orchard	opDDD	0:3	0.13	0.09	0.17	0.04
Port Orchard	PCB101	10:10	46.40	32.00	78.00	14.13
Port Orchard	PCB110	10:10	9.59	6.90	17.00	2.97
Port Orchard	PCB118	10:10	28.00	19.00	55.00	10.57

# Appendix: Pacific Herring Whole Body

Location	Assay	No. Detected:				
		No. Analyzed	Mean	Min	Max	SD
Port Orchard	PCB126	0:10	0.07	0.05	0.10	0.01
Port Orchard	PCB128	10:10	13.20	8.30	24.00	4.99
Port Orchard	PCB138	10:10	15.10	10.00	28.00	6.14
Port Orchard	PCB153	10:10	32.60	21.00	55.00	10.57
Port Orchard	PCB156	10:10	0.58	0.31	1.20	0.26
Port Orchard	PCB157	0:10	0.04	0.03	0.06	0.01
Port Orchard	PCB169	0:10	0.08	0.07	0.13	0.02
Port Orchard	PCB170	8:8	3.08	2.00	6.10	1.46
Port Orchard	PCB180	10:10	5.82	3.50	11.00	2.73
Port Orchard	PCB189	0:10	0.05	0.04	0.07	0.01
Port Orchard	PCB77	0:10	0.08	0.06	0.12	0.02
Port Orchard	ppDDD	1:10	0.24	0.10	1.30	0.37
Port Orchard	ppDDE	10:10	71.10	40.00	170.00	44.15
Port Orchard	ppDDT	0:9	0.15	0.12	0.24	0.04
Port Orchard	solids	10:10	25.3	24.2	27.0	0.8
Port Orchard	TotalDDT	10:10	71.23	40.00	171.30	44.48
Port Orchard	TotalPCB	10:10	189.40	131.00	344.00	63.29
Semiahmoo	hexachlorobenzene	10:10	1.40	1.00	1.70	0.22
Semiahmoo	lipids	10:10	5.77	3.53	7.51	1.39
Semiahmoo	opDDD	0:4	0.18	0.13	0.23	0.04
Semiahmoo	PCB101	10:10	11.53	5.00	26.00	6.73
Semiahmoo	PCB105	1:1	1.60	1.60	1.60	
Semiahmoo	PCB110	10:10	2.49	1.00	5.70	1.49
Semiahmoo	PCB118	10:10	11.03	4.20	19.00	4.98
Semiahmoo	PCB126	0:10	0.08	0.05	0.14	0.03
Semiahmoo	PCB128	10:10	3.47	0.72	7.00	1.99
Semiahmoo	PCB138	10:10	4.91	1.40	22.00	6.15
Semiahmoo	PCB153	10:10	7.93	3.50	16.00	4.12
Semiahmoo	PCB156	7:10	0.11	0.04	0.34	0.09
Semiahmoo	PCB157	1:10	0.06	0.03	0.18	0.04
Semiahmoo	PCB169	0:10	0.10	0.06	0.17	0.03
Semiahmoo	PCB170	9:9	0.57	0.20	1.10	0.36
Semiahmoo	PCB180	10:10	1.53	0.29	6.90	1.98
Semiahmoo	PCB189	0:10	0.06	0.04	0.10	0.02
Semiahmoo	PCB77	0:10	0.09	0.06	0.16	0.03
Semiahmoo	ppDDD	5:10	0.32	0.09	0.65	0.20
Semiahmoo	ppDDE	10:10	19.80	11.00	38.00	9.68
Semiahmoo	ppDDT	0:9	0.23	0.17	0.32	0.05
Semiahmoo	solids	10:10	24.3	22.1	26.0	1.1
Semiahmoo	TotalDDT	10:10	20.04	11.00	38.00	9.58
Semiahmoo	TotalPCB	10:10	51.24	21.00	122.00	31.27
Squaxin	hexachlorobenzene	10:10	1.25	0.92	1.80	0.30
Squaxin	lipids	10:10	10.70	7.03	19.94	3.63
Squaxin	opDDD	0:9	0.19	0.11	0.23	0.04
Squaxin	PCB101	10:10	51.30	39.00	70.00	11.08
Squaxin	PCB105	1:1	5.10	5.10	5.10	
Squaxin	PCB110	10:10	10.17	7.60	14.00	2.13

# Appendix: Pacific Herring Whole Body

Location	Assay	No. Detected:				
		No. Analyzed	Mean	Min	Max	SD
Squaxin	PCB118	10:10	29.20	22.00	44.00	7.61
Squaxin	PCB126	0:10	0.10	0.06	0.12	0.02
Squaxin	PCB128	10:10	10.79	8.90	15.00	2.21
Squaxin	PCB138	10:10	14.40	11.00	21.00	3.84
Squaxin	PCB153	10:10	33.40	21.00	47.00	7.93
Squaxin	PCB156	9:10	0.33	0.04	0.56	0.15
Squaxin	PCB157	1:10	0.12	0.04	0.62	0.18
Squaxin	PCB169	0:10	0.12	0.08	0.15	0.03
Squaxin	PCB170	6:6	2.53	1.60	4.80	1.21
Squaxin	PCB180	10:10	5.30	3.40	8.10	1.59
Squaxin	PCB189	0:10	0.07	0.04	0.09	0.02
Squaxin	PCB77	0:10	0.11	0.06	0.14	0.03
Squaxin	ppDDD	5:10	1.19	0.13	3.20	1.20
Squaxin	ppDDE	10:10	22.60	14.00	33.00	5.68
Squaxin	ppDDT	1:9	0.34	0.23	0.69	0.14
Squaxin	solids	10:10	28.2	26.1	30.0	1.6
Squaxin	TotalDDT	10:10	23.78	14.00	33.00	5.15
Squaxin	TotalPCB	10:10	195.90	140.00	282.00	48.95

## **Pacific Herring Bile**

Summary of contaminant data for all Pacific herring bile samples collected by the Puget Sound Ambient Monitoring Program's Fish Component, 1989-1999. "No. Detected" is the number of samples for which an analyte was measured above the Method Detection Limit (MDL). "No. Analyzed" is the total number of samples analyzed for a given analyte. Mean, minimum, maximum, and standard deviation (SD) were computed for analyte and station combination, pooling all years' data. See Figure 1a-c for station locations.

# Appendix: Pacific Herring Bile

Summary statistics for Pacific herring bile samples, averaged across years from 1995-2000 by location and assay. All biliary analytes were measured above the Method Detection Limit (MDL). Refer to Figure 4 for station locations. All concentrations based on wet wt. FAC analytes in ng/ml bile, protein in mg/ml bile.

Location	Assay	No. Detected:				
		No. Analyzed	Mean	Min	Max	SD
Fidalgo Bay	benzo(a)pyrene_FAC	31:31	855	53	2,597	702
Fidalgo Bay	naphthalene_FAC	31:31	202,081	6,853	545,409	139,343
Fidalgo Bay	phenanthrene_FAC	31:31	54,951	2,322	210,995	51,029
Fidalgo Bay	Protein	31:31	18	3	72	14

## **Pacific Cod Muscle**

Summary of contaminant data for all Pacific cod muscle samples collected by the Puget Sound Ambient Monitoring Program's Fish Component, 1989-1999. "No. Detected" is the number of samples for which an analyte was measured above the Method Detection Limit (MDL). "No. Analyzed" is the total number of samples analyzed for a given analyte. Mean, minimum, maximum, and standard deviation (SD) were computed for analyte and station combination, pooling all years' data. See Figure 1a-c for station locations.

## Appendix: Pacific Cod Muscle

Summary statistics for Pacific cod muscle tissue samples, averaged across years from 1989-1999 by location and assay. A value of the median of the Method Detection Limit (MDL) was used in calculations when an analyte was undetected. Refer to Figure 5 for station locations. Shaded rows indicate location:assay combinations wherein at least one sample had a measured concentration above the MDL. Unshaded rows indicate combinations that had no measured concentrations above the MDL. All concentrations are based on wet weight. All organics in µg/kg, all elemental metals in mg/kg, all lipids and solids in %.

Location	Assay	No. Detected:				
		No. Analyzed	Mean	Min	Max	SD
Admiralty Inlet	1,2,4-trichlorobenzene	0:16	9	5.2	13	3.1696
Admiralty Inlet	1,2-dichlorobenzene	0:16	9	5.2	13	3.1696
Admiralty Inlet	1,2-diphenylhydrazine	0:16	9	5.2	13	3.1696
Admiralty Inlet	1,3-dichlorobenzene	0:16	9	5.2	13	3.1696
Admiralty Inlet	1,4-dichlorobenzene	0:16	9	5.2	13	3.1696
Admiralty Inlet	2,4,5-trichlorophenol	0:16	31.888	13	50	15.446
Admiralty Inlet	2,4,6-trichlorophenol	0:16	19.45	12.9	30	8.4409
Admiralty Inlet	2,4-dichlorophenol	0:16	19.45	12.9	30	8.4409
Admiralty Inlet	2,4-dimethylphenol	0:16	9	5.2	13	3.1696
Admiralty Inlet	2,4-dinitrophenol	0:12	139.67	77.6	200	63.019
Admiralty Inlet	2,4-dinitrotoluene	0:16	19.45	12.9	30	8.4409
Admiralty Inlet	2,6-dinitrotoluene	0:16	9	5.2	13	3.1696
Admiralty Inlet	2-chloronaphthalene	0:16	9	5.2	13	3.1696
Admiralty Inlet	2-chlorophenol	0:16	9	5.2	13	3.1696
Admiralty Inlet	2-methylnaphthalene	0:16	9	5.2	13	3.1696
Admiralty Inlet	2-methylphenol	0:16	19.45	12.9	30	8.4409
Admiralty Inlet	2-nitroaniline	0:16	19.45	12.9	30	8.4409
Admiralty Inlet	2-nitrophenol	0:16	9	5.2	13	3.1696
Admiralty Inlet	3,3-dichlorobenzidine	0:4	13	13	13	0
Admiralty Inlet	3-nitroaniline	0:16	41.888	13	70	23.876
Admiralty Inlet	4,6-dinitro-o-cresol	0:12	38.183	25.8	50	12.344
Admiralty Inlet	4-bromophenylphenylether	0:16	9	5.2	13	3.1696
Admiralty Inlet	4-chloro-3-methylphenol	0:16	19.45	12.9	30	8.4409
Admiralty Inlet	4-chloroaniline	0:16	9	5.2	13	3.1696
Admiralty Inlet	4-chlorophenylphenylether	0:16	19.45	12.9	30	8.4409
Admiralty Inlet	4-methylphenol	0:16	19.45	12.9	30	8.4409
Admiralty Inlet	4-nitroaniline	0:16	109.12	13	200	77.815
Admiralty Inlet	4-nitrophenol	0:16	24.45	12.9	33	9.0801
Admiralty Inlet	acenaphthene	0:16	6.1313	2.6	13	4.2248
Admiralty Inlet	acenaphthylene	0:16	6.1313	2.6	13	4.2248
Admiralty Inlet	Aldrin	0:12	0.4	0.3	0.5	0.1044
Admiralty Inlet	alpha chlordane	0:12	1.4	0.8	2	0.6267
Admiralty Inlet	alpha endosulfan	0:12	0.4	0.3	0.5	0.1044
Admiralty Inlet	alpha hexachlorocyclohexane	0:12	0.2	0.1	0.3	0.1044
Admiralty Inlet	aniline	0:16	9	5.2	13	3.1696
Admiralty Inlet	anthracene	0:16	6.1313	2.6	13	4.2248
Admiralty Inlet	Aroclor 1016	0:12	29.117	17.9	40	11.368
Admiralty Inlet	Aroclor 1221	0:12	29.117	17.9	40	11.368
Admiralty Inlet	Aroclor 1232	0:12	29.117	17.9	40	11.368
Admiralty Inlet	Aroclor 1242	0:12	15.683	11.2	20	4.5089

# Appendix: Pacific Cod Muscle

Location	Assay	No. Detected:				
		No. Analyzed	Mean	Min	Max	SD
Admiralty Inlet	Aroclor 1248	0:12	3.6417	2.2	5	1.42
Admiralty Inlet	Aroclor 1254	0:12	3.6417	2.2	5	1.42
Admiralty Inlet	Aroclor 1260	2:12	4	2.2	8.7	2.05
Admiralty Inlet	arsenic	16:16	4.9625	1.5	8.8	1.78
Admiralty Inlet	benzo(a)anthracene	0:16	6.1313	2.6	13	4.22
Admiralty Inlet	benzo(a)pyrene	0:16	9	5.2	13	3.17
Admiralty Inlet	benzo(b)fluoranthene	0:16	6.1313	2.6	13	4.22
Admiralty Inlet	benzo(g,h,i)perylene	0:16	19.45	12.9	30	8.44
Admiralty Inlet	benzo(k)fluoranthene	0:16	6.1313	2.6	13	4.22
Admiralty Inlet	benzoic acid	0:12	232.8	162	300	70.2
Admiralty Inlet	benzyl alcohol	0:16	19.45	12.9	30	8.44
Admiralty Inlet	benzylbutylphthalate	2:16	16.313	5.2	80	21
Admiralty Inlet	beta endosulfan	0:12	0.4	0.3	0.5	0.1
Admiralty Inlet	beta hexachlorocyclohexane	0:12	0.4	0.3	0.5	0.1
Admiralty Inlet	bis(2-chloroethoxy)methane	0:16	9	5.2	13	3.17
Admiralty Inlet	bis(2-chloroethyl)ether	0:16	9	5.2	13	3.17
Admiralty Inlet	bis(2-chloroisopropyl)ether	0:16	19.45	12.9	30	8.44
Admiralty Inlet	bis(2-ethylhexyl)phthalate	1:16	36.344	13.3	243	55.6
Admiralty Inlet	carbazole	0:12	21.6	12.9	30	8.77
Admiralty Inlet	chrysene	0:16	6.1313	2.6	13	4.22
Admiralty Inlet	copper	14:14	0.2357	0.2	0.33	0.04
Admiralty Inlet	coprostanol	0:12	77	54	100	24
Admiralty Inlet	delta hexachlorocyclohexane	0:12	1.4	0.8	2	0.63
Admiralty Inlet	dibenzo(a,h)anthracene	0:16	19.45	12.9	30	8.44
Admiralty Inlet	dibenzofuran	0:16	6.1313	2.6	13	4.22
Admiralty Inlet	Dieldrin	0:12	0.75	0.5	1	0.26
Admiralty Inlet	diethylphthalate	1:16	7.6938	2.6	30	7.29
Admiralty Inlet	dimethylphthalate	0:16	9	5.2	13	3.17
Admiralty Inlet	di-n-butylphthalate	0:16	31.888	13	50	15.4
Admiralty Inlet	di-n-octylphthalate	0:16	6.1313	2.6	13	4.22
Admiralty Inlet	endosulfan sulfate	0:12	0.4	0.3	0.5	0.1
Admiralty Inlet	Endrin	0:12	0.75	0.5	1	0.26
Admiralty Inlet	endrin aldehyde	0:12	0.75	0.5	1	0.26
Admiralty Inlet	fluoranthene	0:16	6.1313	2.6	13	4.22
Admiralty Inlet	fluorene	0:16	6.1313	2.6	13	4.22
Admiralty Inlet	gamma chlordane	0:12	0.2	0.1	0.3	0.1
Admiralty Inlet	gamma hexachlorocyclohexane	0:12	1.4	0.8	2	0.63
Admiralty Inlet	Heptachlor	0:12	0.4	0.3	0.5	0.1
Admiralty Inlet	heptachlor epoxide	0:12	0.2	0.1	0.3	0.1
Admiralty Inlet	hexachlorobenzene	0:16	19.45	12.9	30	8.44
Admiralty Inlet	hexachlorobutadiene	0:16	19.45	12.9	30	8.44
Admiralty Inlet	hexachlorocyclopentadiene	0:16	108.25	13	200	78.1
Admiralty Inlet	hexachloroethane	0:16	19.45	12.9	30	8.44
Admiralty Inlet	indeno(1,2,3-c,d)pyrene	0:16	19.45	12.9	30	8.44
Admiralty Inlet	isophorone	0:16	6.1313	2.6	13	4.22
Admiralty Inlet	lead	2:16	0.0281	0.02	0.03	0
Admiralty Inlet	Lipids	6:6	0.2483	0.1	0.49	0.14



# Appendix: Pacific Cod Muscle

Location	Assay	No. Detected:				
		No. Analyzed	Mean	Min	Max	SD
Admiralty Inlet	mercury	16:16	0.1121	0.064	0.18	0.03
Admiralty Inlet	Methoxychlor	0:12	3.7917	2.5	5	1.26
Admiralty Inlet	naphthalene	0:16	6.1313	2.6	13	4.22
Admiralty Inlet	nitrobenzene	0:16	9	5.2	13	3.17
Admiralty Inlet	N-nitrosodimethylamine	0:16	113	33	200	72
Admiralty Inlet	N-nitroso-di-n-propylamine	0:16	6.1313	2.6	13	4.22
Admiralty Inlet	N-nitrosodiphenylamine	0:16	14	5.2	33	11.5
Admiralty Inlet	pentachlorophenol	0:12	139.67	77.6	200	63
Admiralty Inlet	phenanthrene	0:16	6.1313	2.6	13	4.22
Admiralty Inlet	phenol	0:16	14	5.2	33	11.5
Admiralty Inlet	ppDDD	0:12	0.4	0.3	0.5	0.1
Admiralty Inlet	ppDDE	0:12	0.4	0.3	0.5	0.1
Admiralty Inlet	ppDDT	0:12	2.3	1.6	3	0.73
Admiralty Inlet	pyrene	0:16	6.1313	2.6	13	4.22
Admiralty Inlet	Solids	12:12	17.167	13	19	2.55
Admiralty Inlet	Toxaphene	0:12	1.4	0.8	2	0.63
Alden Bank	1,2,4-trichlorobenzene	0:12	7.65	5.3	10	2.45
Alden Bank	1,2-dichlorobenzene	0:12	7.65	5.3	10	2.45
Alden Bank	1,2-diphenylhydrazine	0:12	7.65	5.3	10	2.45
Alden Bank	1,3-dichlorobenzene	0:12	7.65	5.3	10	2.45
Alden Bank	1,4-dichlorobenzene	0:12	7.65	5.3	10	2.45
Alden Bank	2,4,5-trichlorophenol	0:12	38.133	26.1	50	12.4
Alden Bank	2,4,6-trichlorophenol	0:12	21.583	13	30	8.79
Alden Bank	2,4-dichlorophenol	0:12	21.583	13	30	8.79
Alden Bank	2,4-dimethylphenol	0:12	7.65	5.3	10	2.45
Alden Bank	2,4-dinitrophenol	0:12	139.53	78.4	200	63.2
Alden Bank	2,4-dinitrotoluene	0:12	21.583	13	30	8.79
Alden Bank	2,6-dinitrotoluene	0:12	7.65	5.3	10	2.45
Alden Bank	2-chloronaphthalene	0:12	7.65	5.3	10	2.45
Alden Bank	2-chlorophenol	0:12	7.65	5.3	10	2.45
Alden Bank	2-methylnaphthalene	0:12	7.65	5.3	10	2.45
Alden Bank	2-methylphenol	0:12	21.583	13	30	8.79
Alden Bank	2-nitroaniline	0:12	21.583	13	30	8.79
Alden Bank	2-nitrophenol	0:12	7.65	5.3	10	2.45
Alden Bank	3-nitroaniline	0:12	51.475	32.7	70	19.3
Alden Bank	4,6-dinitro-o-cresol	0:12	38.133	26.1	50	12.4
Alden Bank	4-bromophenylphenylether	0:12	7.65	5.3	10	2.45
Alden Bank	4-chloro-3-methylphenol	0:12	21.583	13	30	8.79
Alden Bank	4-chloroaniline	0:12	7.65	5.3	10	2.45
Alden Bank	4-chlorophenylphenylether	0:12	21.583	13	30	8.79
Alden Bank	4-methylphenol	0:12	21.583	13	30	8.79
Alden Bank	4-nitroaniline	0:12	141.03	81.3	200	61.6
Alden Bank	4-nitrophenol	0:12	21.583	13	30	8.79
Alden Bank	acenaphthene	0:12	3.8417	2.6	5	1.21
Alden Bank	acenaphthylene	0:12	3.8417	2.6	5	1.21
Alden Bank	Aldrin	0:12	0.4	0.3	0.5	0.1
Alden Bank	alpha chlordane	0:12	1.4	0.8	2	0.63

# Appendix: Pacific Cod Muscle

Location	Assay	No. Detected:				
		No. Analyzed	Mean	Min	Max	SD
Alden Bank	alpha endosulfan	0:12	0.4	0.3	0.5	0.1
Alden Bank	alpha hexachlorocyclohexane	0:12	0.2	0.1	0.3	0.1
Alden Bank	aniline	0:12	7.65	5.3	10	2.45
Alden Bank	anthracene	0:12	3.8417	2.6	5	1.21
Alden Bank	Aroclor 1016	0:12	29.017	17.9	40	11.5
Alden Bank	Aroclor 1221	0:12	29.017	17.9	40	11.5
Alden Bank	Aroclor 1232	0:12	29.017	17.9	40	11.5
Alden Bank	Aroclor 1242	0:12	15.633	11.2	20	4.56
Alden Bank	Aroclor 1248	0:12	3.625	2.2	5	1.44
Alden Bank	Aroclor 1254	0:12	3.625	2.2	5	1.44
Alden Bank	Aroclor 1260	0:12	3.625	2.2	5	1.44
Alden Bank	arsenic	12:12	2.6583	1.3	5.2	1.11
Alden Bank	benzo(a)anthracene	0:12	3.8417	2.6	5	1.21
Alden Bank	benzo(a)pyrene	0:12	7.65	5.3	10	2.45
Alden Bank	benzo(b)fluoranthene	0:12	3.8417	2.6	5	1.21
Alden Bank	benzo(g,h,i)perylene	0:12	21.583	13	30	8.79
Alden Bank	benzo(k)fluoranthene	0:12	3.8417	2.6	5	1.21
Alden Bank	benzoic acid	0:12	232.52	163.7	300	70.5
Alden Bank	benzyl alcohol	0:12	21.583	13	30	8.79
Alden Bank	benzylbutylphthalate	1:12	22.65	5.3	190	52.8
Alden Bank	beta endosulfan	0:12	0.4	0.3	0.5	0.1
Alden Bank	beta hexachlorocyclohexane	0:12	0.4	0.3	0.5	0.1
Alden Bank	bis(2-chloroethoxy)methane	0:12	7.65	5.3	10	2.45
Alden Bank	bis(2-chloroethyl)ether	0:12	7.65	5.3	10	2.45
Alden Bank	bis(2-chloroisopropyl)ether	0:12	21.583	13	30	8.79
Alden Bank	bis(2-ethylhexyl)phthalate	0:12	21.65	13.3	30	8.72
Alden Bank	carbazole	0:12	21.583	13	30	8.79
Alden Bank	chrysene	0:12	3.8417	2.6	5	1.21
Alden Bank	copper	12:12	0.245	0.2	0.32	0.05
Alden Bank	coprostanol	0:12	77	54	100	24
Alden Bank	delta hexachlorocyclohexane	0:12	1.4	0.8	2	0.63
Alden Bank	dibenzo(a,h)anthracene	0:12	21.583	13	30	8.79
Alden Bank	dibenzofuran	0:12	3.8417	2.6	5	1.21
Alden Bank	Dieldrin	0:12	0.75	0.5	1	0.26
Alden Bank	diethylphthalate	0:12	3.8417	2.6	5	1.21
Alden Bank	dimethylphthalate	0:12	7.65	5.3	10	2.45
Alden Bank	di-n-butylphthalate	0:12	38.133	26.1	50	12.4
Alden Bank	di-n-octylphthalate	0:12	3.8417	2.6	5	1.21
Alden Bank	endosulfan sulfate	0:12	0.4	0.3	0.5	0.1
Alden Bank	Endrin	0:12	0.75	0.5	1	0.26
Alden Bank	endrin aldehyde	0:12	0.75	0.5	1	0.26
Alden Bank	fluoranthene	0:12	3.8417	2.6	5	1.21
Alden Bank	fluorene	0:12	3.8417	2.6	5	1.21
Alden Bank	gamma chlordane	0:12	0.2	0.1	0.3	0.1
Alden Bank	gamma hexachlorocyclohexane	0:12	1.4	0.8	2	0.63
Alden Bank	Heptachlor	0:12	0.4	0.3	0.5	0.1
Alden Bank	heptachlor epoxide	0:12	0.2	0.1	0.3	0.1

# Appendix: Pacific Cod Muscle

Location	Assay	No. Detected:		Mean	Min	Max	SD
		No. Analyzed					
Alden Bank	hexachlorobenzene	0:12		21.583	13	30	8.79
Alden Bank	hexachlorobutadiene	0:12		21.583	13	30	8.79
Alden Bank	hexachlorocyclopentadiene	0:12		140	80	200	62.7
Alden Bank	hexachloroethane	0:12		21.583	13	30	8.79
Alden Bank	indeno(1,2,3-c,d)pyrene	0:12		21.583	13	30	8.79
Alden Bank	isophorone	0:12		3.8417	2.6	5	1.21
Alden Bank	lead	0:12		0.03	0.03	0.03	0
Alden Bank	Lipids	6:6		0.155	0.1	0.21	0.05
Alden Bank	mercury	12:12		0.1033	0.07	0.15	0.02
Alden Bank	Methoxychlor	0:12		3.775	2.5	5	1.28
Alden Bank	naphthalene	0:12		3.8417	2.6	5	1.21
Alden Bank	nitrobenzene	0:12		7.65	5.3	10	2.45
Alden Bank	N-nitrosodimethylamine	0:12		139.53	78.4	200	63.2
Alden Bank	N-nitroso-di-n-propylamine	0:12		3.8417	2.6	5	1.21
Alden Bank	N-nitrosodiphenylamine	0:12		7.65	5.3	10	2.45
Alden Bank	pentachlorophenol	0:12		139.53	78.4	200	63.2
Alden Bank	phenanthrene	0:12		3.8417	2.6	5	1.21
Alden Bank	phenol	0:12		7.65	5.3	10	2.45
Alden Bank	ppDDD	0:12		0.4	0.3	0.5	0.1
Alden Bank	ppDDE	0:12		0.4	0.3	0.5	0.1
Alden Bank	ppDDT	0:12		2.3	1.6	3	0.73
Alden Bank	pyrene	0:12		3.8417	2.6	5	1.21
Alden Bank	Solids	9:9		18.333	17	19	0.71
Alden Bank	Toxaphene	0:12		1.4	0.8	2	0.63
Port Townsend	1,2,4-trichlorobenzene	0:1		13	13	13	
Port Townsend	1,2-dichlorobenzene	0:1		13	13	13	
Port Townsend	1,2-diphenylhydrazine	0:1		13	13	13	
Port Townsend	1,3-dichlorobenzene	0:1		13	13	13	
Port Townsend	1,4-dichlorobenzene	0:1		13	13	13	
Port Townsend	2,4,5-trichlorophenol	0:1		13	13	13	
Port Townsend	2,4,6-trichlorophenol	0:1		13	13	13	
Port Townsend	2,4-dichlorophenol	0:1		13	13	13	
Port Townsend	2,4-dimethylphenol	0:1		13	13	13	
Port Townsend	2,4-dinitrotoluene	0:1		13	13	13	
Port Townsend	2,6-dinitrotoluene	0:1		13	13	13	
Port Townsend	2-chloronaphthalene	0:1		13	13	13	
Port Townsend	2-chlorophenol	0:1		13	13	13	
Port Townsend	2-methylnaphthalene	0:1		13	13	13	
Port Townsend	2-methylphenol	0:1		13	13	13	
Port Townsend	2-nitroaniline	0:1		13	13	13	
Port Townsend	2-nitrophenol	0:1		13	13	13	
Port Townsend	3,3-dichlorobenzidine	0:1		13	13	13	
Port Townsend	3-nitroaniline	0:1		13	13	13	
Port Townsend	4-bromophenylphenylether	0:1		13	13	13	
Port Townsend	4-chloro-3-methylphenol	0:1		13	13	13	
Port Townsend	4-chloroaniline	0:1		13	13	13	
Port Townsend	4-chlorophenylphenylether	0:1		13	13	13	

# Appendix: Pacific Cod Muscle

Location	Assay	No. Detected:			
		No. Analyzed	Mean	Min	Max
Port Townsend	4-methylphenol	0:1	13	13	13
Port Townsend	4-nitroaniline	0:1	13	13	13
Port Townsend	4-nitrophenol	0:1	33	33	33
Port Townsend	acenaphthene	0:1	13	13	13
Port Townsend	acenaphthylene	0:1	13	13	13
Port Townsend	aniline	0:1	13	13	13
Port Townsend	anthracene	0:1	13	13	13
Port Townsend	arsenic	1:1	5.3	5.3	5.3
Port Townsend	benzo(a)anthracene	0:1	13	13	13
Port Townsend	benzo(a)pyrene	0:1	13	13	13
Port Townsend	benzo(b)fluoranthene	0:1	13	13	13
Port Townsend	benzo(g,h,i)perylene	0:1	13	13	13
Port Townsend	benzo(k)fluoranthene	0:1	13	13	13
Port Townsend	benzyl alcohol	0:1	13	13	13
Port Townsend	benzylbutylphthalate	0:1	13	13	13
Port Townsend	bis(2-chloroethoxy)methane	0:1	13	13	13
Port Townsend	bis(2-chloroethyl)ether	0:1	13	13	13
Port Townsend	bis(2-chloroisopropyl)ether	0:1	13	13	13
Port Townsend	bis(2-ethylhexyl)phthalate	0:1	23	23	23
Port Townsend	chrysene	0:1	13	13	13
Port Townsend	dibenzo(a,h)anthracene	0:1	13	13	13
Port Townsend	dibenzofuran	0:1	13	13	13
Port Townsend	diethylphthalate	0:1	13	13	13
Port Townsend	dimethylphthalate	0:1	13	13	13
Port Townsend	di-n-butylphthalate	0:1	13	13	13
Port Townsend	di-n-octylphthalate	0:1	13	13	13
Port Townsend	fluoranthene	0:1	13	13	13
Port Townsend	fluorene	0:1	13	13	13
Port Townsend	hexachlorobenzene	0:1	13	13	13
Port Townsend	hexachlorobutadiene	0:1	13	13	13
Port Townsend	hexachlorocyclopentadiene	0:1	13	13	13
Port Townsend	hexachloroethane	0:1	13	13	13
Port Townsend	indeno(1,2,3-c,d)pyrene	0:1	13	13	13
Port Townsend	isophorone	0:1	13	13	13
Port Townsend	lead	0:1	0.02	0.02	0.02
Port Townsend	mercury	1:1	0.13	0.13	0.13
Port Townsend	naphthalene	0:1	13	13	13
Port Townsend	nitrobenzene	0:1	13	13	13
Port Townsend	N-nitrosodimethylamine	0:1	33	33	33
Port Townsend	N-nitroso-di-n-propylamine	0:1	13	13	13
Port Townsend	N-nitrosodiphenylamine	0:1	33	33	33
Port Townsend	phenanthrene	0:1	13	13	13
Port Townsend	phenol	0:1	33	33	33
Port Townsend	pyrene	0:1	13	13	13
Port Townsend	Solids	1:1	11	11	11

## **Starry Flounder Liver**

Summary of contaminant data for all starry flounder liver samples collected by the Puget Sound Ambient Monitoring Program's Fish Component, 1989-1999. "No. Detected" is the number of samples for which an analyte was measured above the Method Detection Limit (MDL). "No. Analyzed" is the total number of samples analyzed for a given analyte. Mean, minimum, maximum, and standard deviation (SD) were computed for analyte and station combination, pooling all years' data. See Figure 1a-c for station locations.

# Appendix: Starry Flounder Liver

Summary statistics for starry flounder liver tissue sampled in 1997, averaged by location and assay. A value of the median of the Method Detection Limit (MDL) was used in calculations when an analyte was undetected. Refer to Figure 1 for station locations. Shaded rows indicate location:assay combinations wherein at least one sample had a measured concentration above the MDL. Unshaded rows indicate combinations that had no measured concentrations above the MDL. All concentrations are based on wet weight. All organics in µg/kg, all elemental metals in mg/kg, all lipids and solids in %.

Location	Assay	No. Detected:				SD
		No. Analyzed	Mean	Min	Max	
Oak Harbor	alpha chlordane	0:1	53.00	53.00	53.00	
Oak Harbor	alpha hexachlorocyclohexane	0:1	0.87	0.87	0.87	
Oak Harbor	Aroclor 1016	0:1	110.00	110.00	110.00	
Oak Harbor	Aroclor 1221	0:1	110.00	110.00	110.00	
Oak Harbor	Aroclor 1232	0:1	110.00	110.00	110.00	
Oak Harbor	Aroclor 1242	0:1	110.00	110.00	110.00	
Oak Harbor	Aroclor 1248	0:1	22.00	22.00	22.00	
Oak Harbor	beta hexachlorocyclohexane	0:1	0.87	0.87	0.87	
Oak Harbor	delta hexachlorocyclohexane	0:1	0.87	0.87	0.87	
Oak Harbor	di-n-butyltin	1:1	5.23	5.23	5.23	
Oak Harbor	gamma chlordane	0:1	53.00	53.00	53.00	
Oak Harbor	gamma hexachlorocyclohexane	0:1	0.87	0.87	0.87	
Oak Harbor	heptachlor	0:1	0.87	0.87	0.87	
Oak Harbor	lipids	1:1	2.81	2.81	2.81	
Oak Harbor	mono-n-butyltin	0:1	11.00	11.00	11.00	
Oak Harbor	ppDDD	0:1	107.00	107.00	107.00	
Oak Harbor	ppDDE	0:1	107.00	107.00	107.00	
Oak Harbor	ppDDT	0:1	107.00	107.00	107.00	
Oak Harbor	tetra-n-butyltin	0:1	2.70	2.70	2.70	
Oak Harbor	tri-n-butyltin	1:1	4.81	4.81	4.81	
Post Point	alpha chlordane	0:3	25.67	25.00	26.00	0.58
Post Point	alpha hexachlorocyclohexane	0:3	0.43	0.41	0.43	0.01
Post Point	Aroclor 1016	0:3	53.00	51.00	54.00	1.73
Post Point	Aroclor 1221	0:3	53.00	51.00	54.00	1.73
Post Point	Aroclor 1232	0:3	53.00	51.00	54.00	1.73
Post Point	Aroclor 1242	0:3	53.00	51.00	54.00	1.73
Post Point	Aroclor 1248	0:3	11.00	11.00	11.00	0.00
Post Point	arsenic	2:2	4.99	4.60	5.37	0.54
Post Point	beta hexachlorocyclohexane	0:3	0.43	0.41	0.43	0.01
Post Point	copper	2:2	12.70	11.10	14.30	2.26
Post Point	delta hexachlorocyclohexane	0:3	0.43	0.41	0.43	0.01
Post Point	di-n-butyltin	3:3	12.40	10.60	14.90	2.23
Post Point	gamma chlordane	0:3	25.67	25.00	26.00	0.58
Post Point	gamma hexachlorocyclohexane	0:3	0.43	0.41	0.43	0.01
Post Point	heptachlor	0:3	0.43	0.41	0.43	0.01
Post Point	lead	2:2	0.235	0.218	0.251	0.023
Post Point	lipids	3:3	4.70	3.61	6.69	1.73
Post Point	mercury	3:3	0.149	0.085	0.205	0.060
Post Point	mono-n-butyltin	0:3	3.00	2.80	3.30	0.26
Post Point	ppDDD	0:3	52.00	50.00	53.00	1.73

# Appendix: Starry Flounder Liver

Location Assay		No. Detected: No. Analyzed	Mean	Min	Max	SD
Post Point	ppDDE	0:3	52.00	50.00	53.00	1.73
Post Point	ppDDT	0:3	52.00	50.00	53.00	1.73
Post Point	solids	2:2	25.6	24.7	26.4	1.2
Post Point	tetra-n-butyltin	0:3	0.71	0.66	0.80	0.08
Post Point	tri-n-butyltin	3:3	3.18	2.77	3.49	0.37
Skagit Bay	alpha chlordane	0:3	18.00	4.00	26.00	12.17
Skagit Bay	alpha hexachlorocyclohexane	0:3	0.40	0.39	0.42	0.02
Skagit Bay	Aroclor 1016	0:3	49.67	48.00	53.00	2.89
Skagit Bay	Aroclor 1221	0:3	49.67	48.00	53.00	2.89
Skagit Bay	Aroclor 1232	0:3	49.67	48.00	53.00	2.89
Skagit Bay	Aroclor 1242	0:3	49.67	48.00	53.00	2.89
Skagit Bay	Aroclor 1248	0:3	10.10	9.60	11.00	0.78
Skagit Bay	arsenic	2:2	11.51	4.21	18.80	10.32
Skagit Bay	beta hexachlorocyclohexane	0:3	0.40	0.39	0.42	0.02
Skagit Bay	copper	2:2	17.85	17.20	18.50	0.92
Skagit Bay	delta hexachlorocyclohexane	0:3	0.40	0.39	0.42	0.02
Skagit Bay	di-n-butyltin	3:3	6.64	5.39	7.69	1.16
Skagit Bay	gamma chlordane	0:3	18.00	4.00	26.00	12.17
Skagit Bay	gamma hexachlorocyclohexane	0:3	0.40	0.39	0.42	0.02
Skagit Bay	heptachlor	0:3	0.40	0.39	0.42	0.02
Skagit Bay	lead	2:2	0.053	0.050	0.056	0.004
Skagit Bay	lipids	3:3	3.24	2.11	5.14	1.66
Skagit Bay	mercury	2:2	0.082	0.074	0.089	0.010
Skagit Bay	mono-n-butyltin	2:3	7.18	3.40	13.00	5.11
Skagit Bay	ppDDD	0:3	35.33	8.00	51.00	23.76
Skagit Bay	ppDDE	1:3	37.07	13.20	51.00	20.77
Skagit Bay	ppDDT	0:3	35.33	8.00	51.00	23.76
Skagit Bay	solids	1:1	23.1	23.1	23.1	
Skagit Bay	tetra-n-butyltin	0:3	1.01	0.54	1.70	0.61
Skagit Bay	tri-n-butyltin	3:3	2.96	2.09	4.30	1.18