

# **Gulf of Mexico Produced Water Bioaccumulation Study**

## **Executive Summaries**

April 1997

**(Reformatted for Microsoft Word in May 2009)**

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ACKNOWLEDGEMENTS  
WE WOULD LIKE TO ACKNOWLEDGE THE OOC BIOACCUMULATION STUDY  
CO-SPONSORS FOR THEIR SUPPORT OF THE PROJECT:

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Union Oil of California (UNOCAL)  
Union Pacific Resources Company  
Vastar Resources, Inc.  
W & T Offshore  
Zilkha Energy Company

THE CONTRACTORS FOR THIS STUDY WOULD LIKE TO ACKNOWLEDGE THE MEMBERS OF THE BIOACCUMULATION WORKING GROUP FOR THEIR SUPPORT AND COOPERATION DURING THIS PROJECT:

Dr. James P. Ray (Shell) - Chairman  
Dr. R. C. Ayers (Robert Ayers & Associates)  
Ms. Jan Farmer (BP Oil)  
Mr. Brian E. Shannon (Arco)  
Dr. Stanley Curtice (Texaco)  
Dr. Andrew Glickman (Chevron)  
Mr. Larry R. Henry (Chevron)  
Dr. Bela M. James (Shell)  
Mr. David J. LeBlanc (Texaco)  
Dr. Lawrence A. Reitsema (Marathon)  
Dr. Joseph P. Smith (Exxon Production Research Co.)  
Dr. James E. O'Reilly (Exxon Production Research Co.)  
Dr. Jerry Hall (Texaco)

THE CONTRACTOR WOULD ALSO LIKE TO ACKNOWLEDGE THE FOLLOWING INDIVIDUALS FOR THEIR CONTRIBUTION TO THIS PROJECT:

Dr. Woollcott Smith (Temple University)  
Mr. Keith R. Parker (Data Analysis Group)  
Dr. Dan D. Caudle (Sound Environmental Solutions, Inc.)

GULF OF MEXICO  
PRODUCED WATER BIOACCUMULATION STUDY

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METALS AND ORGANIC CHEMICALS  
ASSOCIATED WITH OIL AND GAS WELL PRODUCED WATER:  
BIOACCUMULATION, FATES, AND EFFECTS IN THE MARINE ENVIRONMENT

EXECUTIVE SUMMARY

The current National Pollutant Discharge Elimination System (NPDES) General Permit (No. GMG290000) for discharges of 4,600 barrels/day or more of treated produced water from offshore oil and gas production platforms to offshore waters of the western Gulf of Mexico requires a site-specific bioaccumulation monitoring study. The offshore oil industry is participating in a U.S. Environmental Protection Agency-approved, generic bioaccumulation study that includes a more thorough evaluation of a smaller number of geographically distributed offshore produced water discharges. This report was prepared for the Gulf of Mexico Offshore Operators Committee to evaluate the scientific data concerning the bioaccumulation of chemicals commonly found in produced water to aid in interpreting the bioaccumulation monitoring data. This report evaluates the potential for bioaccumulation of the chemicals identified in the NPDES permit that require bioaccumulation evaluation and several other chemicals of environmental concern frequently found in treated produced water that is discharged to ocean waters of the Gulf of Mexico. The chemicals evaluated in this report include

- metals: arsenic, barium, cadmium, mercury, chromium, copper, lead, and zinc;
- naturally occurring radioactive material: radium-226 and radium-228;
- monocyclic aromatic hydrocarbons: benzene, toluene, ethylbenzene, and xylenes;
- polycyclic aromatic hydrocarbons (PAHs): fluorene, benzo(a)pyrene, total PAHs;
- miscellaneous organic chemicals: phenol and bis(2-ethylhexyl)phthalate (BEHP).

All these chemicals, except BEHP, are natural components of oil and gas well produced water and are natural trace ingredients of sea water.

The metals evaluated here are all, with the exception of mercury, nearly always found in produced water from the Gulf of Mexico. Mercury is only occasionally detected in produced water. These metals also are natural constituents of clean sea water. The metals most frequently found in produced water at concentrations substantially higher (1,000-fold or more) than their natural concentrations in clean sea water are barium, cadmium, chromium, copper, iron, lead, nickel, and zinc.

Some produced waters from the Gulf of Mexico contain concentrations of naturally occurring radioactivity higher than that encountered in sea water and brackish water. The most abundant radionuclides in produced water are radium-226 and radium-228. Concentrations in produced water may be up to 5,000 times higher than natural concentrations in sea water.



Monocyclic aromatic hydrocarbons (consisting primarily of benzene, toluene, ethylbenzene, and xylenes: BTEX) and PAHs are natural constituents of crude petroleum and dissolve from the oil into the produced water. Concentrations of BTEX are higher than those of PAHs in produced water and the relative concentration decreases with increasing molecular weight. High molecular weight, four- through six-ring PAHs are present at trace (sub-parts per billion) concentrations, when they can be detected at all. There are also traces of BTEX and PAHs in clean sea water, much of them derived from deposition of airborne hydrocarbons from combustion sources, and from natural oil and gas seeps that are abundant in the northwestern Gulf of Mexico.

Phenol often is present at high concentrations in produced water. BEHP is not a natural ingredient, nor is it added intentionally to produced water. It is a ubiquitous trace contaminant of the environment, being derived from leaching of plasticizers from plastics. Any traces detected in produced water probably are from this source.

For each of the chemicals, this report discusses the information available from the scientific literature on

- its occurrence in sea water;
- its occurrence in marine sediments;
- what is known about its tendency to bioaccumulate in tissues of marine organisms;
- concentrations in tissues of marine organisms in the Gulf of Mexico and in the other oceans of the world; and
- its toxicity to marine organisms.

Based on this information and information on the concentration of each chemical in Gulf of Mexico produced water, a judgement is made about the relative risk to the health of marine ecosystems and human consumers of fisheries products from these chemicals in produced water discharged to the ocean.

As a general rule, concentrations of metals in tissues of marine organisms in the Gulf of Mexico and in the immediate vicinity of offshore discharges of produced water are in the normal range and do not show evidence of bioaccumulation to potentially toxic levels for the organisms themselves or their consumers, including man. A review of the concentration of each metal in typical Gulf of Mexico produced water and its potential for bioaccumulation and toxicity reveals that only two metals have the potential to pose a health risk to marine organisms and their consumers. These metals are cadmium and copper. Any adverse effects of these metals, if they occur at all, are likely to be very localized in the immediate vicinity of the produced water discharge and affect mainly plants and animals living attached to submerged platform structures.

Radium isotopes, although often abundant in produced water, do not appear to bioaccumulate in the tissues of marine animals following discharge of produced water to the ocean. Radium is quantitatively removed from sea water by coprecipitation with barium as barium sulfate upon mixing of produced water (rich in barium) with sea water

(rich in sulfate). Radium is not toxic to marine organisms at the concentrations at which it occurs in produced water or in the receiving water environment of a produced water discharge. Therefore, it does not represent a hazard to marine organisms near produced water discharges, nor to human consumers of fishery products.

Phenol from produced water has a low potential to bioaccumulate and both phenol and BEHP are rapidly metabolized and excreted by marine animals. Therefore, these chemicals are not considered hazardous to marine organisms. BTEX are abundant in produced water, but disappear very rapidly from the receiving water environment through evaporation, dilution, and biodegradation. They are only moderately toxic and do not bioaccumulate to high concentrations in tissues of marine animals. They are not transferred to man through consumption of fishery products. Therefore, BTEX in produced water does not pose a health risk to marine organisms or human consumers of fishery products.

PAHs in produced water, represented by the low molecular weight PAH, fluorene, and the high molecular weight PAH, benzo(a)pyrene, have a low or moderate potential risk to marine organisms and human consumers of fishery products. The low molecular weight two- and three-ring PAHs often are relatively abundant in produced water, concentrations decreasing with increasing molecular weight. They have a tendency to bioaccumulate and often are persistent in sediments near produced water discharges. Because they are toxic, they pose a moderate risk to organisms near the produced water discharge or in sediments near the outfall. High molecular weight four- through six-ring PAHs, on the other hand, are rarely present in produced water at greater than trace (sub-parts per billion) concentrations. Although some, such as benzo(a)pyrene, are known or suspected mammalian carcinogens and readily bioaccumulate, their extremely low concentrations in produced water renders them a low risk to marine ecosystems and human consumers of fishery products from the vicinity of produced water discharges. The major source of high molecular weight PAHs in offshore waters of the Gulf of Mexico is soot from various combustion sources. PAHs associated with soot are tightly bound to the particles and are not readily bioavailable to marine organisms. These compounds are not accumulated efficiently from the food and are biodegraded rapidly in the tissues of most marine animals; therefore, they do not biomagnify in marine food webs and do not pose a potential hazard to fish that consume biofouling organisms from submerged platform structures.



# GULF OF MEXICO PRODUCED WATER BIOACCUMULATION STUDY DEFINITIVE COMPONENT

## EXECUTIVE SUMMARY

The objectives of the Definitive Component of the Gulf of Mexico Produced Water Bioaccumulation Study were to

- determine whether statistically significant bioaccumulation of target chemicals in produced water occurs in the edible tissues of resident fishes and invertebrates at representative Gulf of Mexico offshore platforms that discharge more than 4,600 barrels per day (bbl/d) of produced water relative to non-discharging platforms; and
- evaluate the ecological and human health implications of observed concentrations of target chemicals in edible tissues of fishes and invertebrates collected near offshore platforms in the Gulf of Mexico.

The study was performed in response to a U.S. Environmental Protection Agency (EPA) Region VI National Pollutant Discharge Elimination System General Permit requirement and was funded through the Offshore Operators Committee. The Definitive Component was designed to compare concentrations of 60 target chemicals (metals, radium isotopes, phenol, bis(2-ethylhexyl)phthalate [BEHP], monocyclic aromatic hydrocarbons, and polycyclic aromatic hydrocarbons [PAHs]) in edible tissues of fish and bivalve mollusk species from two discharging/non-discharging platform pairs. The two discharging platforms discharged approximately 7,000 and 11,000 bbl/d of treated produced water. Samples of produced water, ambient seawater, and the selected fish and mollusk species were collected from the two platform pairs during two cruises, one in the spring and one in the fall. The samples were analyzed with state-of-the-art methods that included a rigorous quality assurance/quality control program. Low detection limits for the target chemicals were achieved that made it possible to determine if the target chemicals were present in edible tissues at concentrations of ecological and human health concern. Despite the low detection limits, the target organic chemicals were not present in most tissue samples at concentrations above the method detection limits. Radium isotopes were detected in 55% of the tissue samples, but at concentrations below EPA risk-based concentrations (RBCs). The four target metals were present in tissues at concentrations typical for marine animals from clean marine environments.

There was no evidence of bioaccumulation from produced water of mercury, BEHP, fluorene, and benzo(a)pyrene. The evidence for bioaccumulation from produced water was weak, inconclusive, doubtful, or contradictory for arsenic, barium, cadmium, radium isotopes, phenol, and total PAHs. Based on a review of the published literature, none of the EPA-specified target chemicals were present in edible tissues at concentrations that might be harmful to the fishes and mollusks. Two of the target chemicals (arsenic and cadmium) were present in a few edible tissue samples, particularly mollusks, at

concentrations slightly higher than RBCs. However, these chemicals were present in tissues in nontoxic forms and do not pose a health hazard to consumers of bivalve fishes and mollusks from the northwestern Gulf of Mexico.

# GULF OF MEXICO PRODUCED WATER BIOACCUMULATION STUDY DEFINITIVE COMPONENT

## SYNOPSIS

### Objectives

The objectives of the Definitive Component of the Gulf of Mexico Produced Water Bioaccumulation Study were to

- determine whether statistically significant bioaccumulation of target chemicals in produced water occurs in the edible tissues of resident fishes and invertebrates at representative Gulf of Mexico offshore platforms that discharge more than 4,600 barrels per day (bbl/d) of produced water relative to non-discharging platforms; and
- evaluate the ecological and human health significance of observed concentrations of target chemicals in edible tissues of fishes and invertebrates collected near offshore platforms in the Gulf of Mexico.

### Background

In December 1993, the U.S. Environmental Protection Agency (EPA) Region VI published a modified version of the final National Pollutant Discharge Elimination System (NPDES) General Permit (GMG290000) for the Western Gulf of Mexico Outer Continental Shelf. The modified permit required that a site-specific bioaccumulation monitoring study be conducted by operators with existing facilities that discharge more than 4,600 bbl/d of produced water. The monitoring study design involved semiannual collections of tissues of mollusk, crustacean, and fish species at each platform discharging more than 4,600 bbl/d and analysis of these samples for volatile organic compounds (benzene, toluene, ethylbenzene), semivolatile organic compounds (phenol, fluorene, benzo[a]pyrene [BAP], bis(2-ethylhexyl)phthalate [BEHP]), metals (arsenic, cadmium, mercury), and radionuclides ( $^{226}\text{Ra}$  and  $^{228}\text{Ra}$ ). As an alternative to the preceding requirement, operators could participate in an EPA-approved, industry-wide, bioaccumulation monitoring study rather than conducting individual bioaccumulation monitoring studies. In response, the Offshore Operators Committee (OOC) proposed an industry-wide bioaccumulation study. After imposing additional requirements, EPA Region VI approved the industry-wide bioaccumulation study, which consisted of a Definitive Component and a Platform Survey Component. The Definitive Component involved intensive, statistically designed sampling to determine whether marine organisms at two locations, each representing a discharging and non-discharging platform pair, were bioaccumulating target chemicals from produced water. The Platform Survey Component met EPA requirements for sampling a broad geographic distribution of discharging and non-discharging platform sites to determine tissue concentrations of the target chemicals. Separate reports have been prepared for the Definitive and Platform Survey Components. In addition, a literature review on the

marine bioaccumulation, fate, and effects of produced water constituents has been prepared.

## Study Design and Methods

The Definitive Component was designed to compare concentrations of target chemicals (12 NPDES permit chemicals plus 48 additional chemicals [barium, four monoaromatic hydrocarbons, and 43 polycyclic aromatic hydrocarbons] added to the study by the OOC) in the tissues of several fish and invertebrate species living at two platform pairs selected from four pairs that were initially sampled. The abundances of appropriate species and isolation of the platforms from other potential sources of the target chemicals (e.g., the Mississippi River) were the primary factors in the selection of the two platform pairs. One pair consisted of a platform discharging approximately 7,000 bbl/d of produced water and a reference platform and the other pair consisted of a platform discharging approximately 11,000 bbl/d and a reference platform.

The selected platforms (**Figure S-1**) were visited during May and October-December 1995. Three samples of produced water were collected at each discharging platform. Three samples of ambient seawater, and multiple specimens of two bivalve mollusks and three fish species (**Table S-1**) were collected at each platform. Fish tissue samples consisted of muscle (edible fillet) only, while bivalve samples included the whole soft tissue. The samples were analyzed using state-of-the-art instrumentation and methods following a rigorous quality assurance/quality control program to determine the concentrations of the target chemicals. Low method detection limits (MDLs) comparable to or below risk-based concentrations (RBCs) were achieved through this effort (**Table S-2**). This made it possible to determine if target chemicals were present at concentrations of ecological and human health concern.

Data on concentrations of target chemicals in produced water and ambient seawater were used to estimate the potential exposure of marine animals to elevated concentrations of target chemicals. Statistical comparisons of concentrations of target produced water chemicals in fishes and bivalves from the discharging/reference platform pairs were used to determine if animals from discharging platforms are bioaccumulating the target chemicals from the produced water discharges. When a statistically significant difference was detected, the tissue residues were compared with the tissue residue data for the same or closely related taxa in the scientific literature. The results of this evaluation for each species and target chemical were classified based on the criteria in **Table S-3** into one of four categories: 1) strong evidence for bioaccumulation; 2) weak or inconclusive evidence for bioaccumulation; 3) doubtful or contradictory evidence for bioaccumulation; and 4) no evidence for bioaccumulation.

## Results

### Bioaccumulation

All but two of the target chemicals were found at higher concentrations in produced water than in seawater. The first exception was mercury which was not present at

concentrations above the MDL. The second exception, BEHP, is not a natural or intentionally-added component of produced water and when detected in produced water probably is due to contamination of the sample during collection, processing, or analysis. Most of the volatile and semivolatile organic compounds except BAP were present in produced water at concentrations above their MDLs, while concentrations of the same compounds in seawater and tissues were nearly all below their MDLs (**Table S-4**).

The probability of bioaccumulation from produced water was assessed for arsenic, barium, cadmium, and mercury;  $^{226}\text{Ra}$  and  $^{228}\text{Ra}$ ; phenol; BEHP; fluorene; BAP; and total polycyclic aromatic hydrocarbons (PAHs) (**Table S-5**). The volatile organics were excluded from this assessment since more than 96% of the tissue concentrations were less than the MDLs, indicating that bioaccumulation of volatile organics from produced water or any other source is not a significant concern for fishes and bivalves near offshore oil platforms.

There was no strong evidence for bioaccumulation (as defined by the criteria for Category 1 in **Table S-3**) for any of the chemicals assessed. There was no evidence at all for bioaccumulation (as defined by the criteria for Category 4 in **Table S-3**) for mercury, BEHP, fluorene, and BAP. Evidence for bioaccumulation of the other assessed chemicals was either Category 2 (weak or inconclusive) or Category 3 (doubtful and contradictory).

Evidence for bioaccumulation of arsenic in fishes was considered "weak or inconclusive" because tissue concentrations were statistically significantly higher at discharging than at reference platforms in only 3 out of 12 cases.

At one platform pair during one cruise thorny oyster from the discharging platform contained statistically significantly higher concentrations of several PAHs than thorny oyster from the paired reference site. The PAH assemblage in the thorny oyster tissues resembled that of a light refined product or produced water. Concentrations of individual PAHs generally were low and not unusual for soft tissues of bivalves. Therefore, thorny oyster was placed in Category 2 because bioaccumulation of petroleum-derived PAHs was demonstrated in only one instance, and the source(s) of the PAHs was unclear.

## **Ecological Risk**

Based on a review of the published literature on relationships between toxic response and tissue residues of metals, radium isotopes, and organics in freshwater and marine organisms, none of the EPA-specified target chemicals were present at concentrations that might be harmful to the fishes and bivalves. The only possible exception is cadmium in thorny oysters. However, natural concentrations of cadmium are elevated in soft tissues of oysters and scallops from uncontaminated marine environments world-wide. These cadmium residues are tightly bound to solid concretions, mostly in the kidneys, and are not toxic to the bivalves. It is probable that thorny oysters also naturally sequester large amounts of cadmium in inert tissue granules.



## Human Health Assessment

The method used to assess if fishes and bivalves harvested near offshore produced water discharges pose a health risk to human consumers was to compare tissue concentrations of the target chemicals in fishes and bivalves with RBCs. It should be noted that the bivalves and three of the fish species (creole-fish, yellow chub, and sergeant major) are not normally consumed by humans. Concentrations of most target chemicals in edible fish and bivalve tissues were substantially lower than the RBCs. Arsenic exceeded the RBC in all fish and bivalve species, and cadmium exceeded the RBC in the thorny oyster. However, the RBC for arsenic is believed to be overly conservative, because the arsenic present in marine organisms is present in non-toxic organic forms. As discussed above, several species of bivalves contain naturally high concentrations of cadmium (above RBC) in their tissues in inert granules; in this form it is not bioavailable to consumers of fishery products, including humans. It is therefore highly likely that the cadmium in thorny oysters is natural and does not pose a health hazard to human consumers of shellfish products. The other target chemical concentrations in fish and bivalve tissues were well below the applicable RBC values and do not pose any health risk to human consumers of fishery products harvested near produced water discharges.

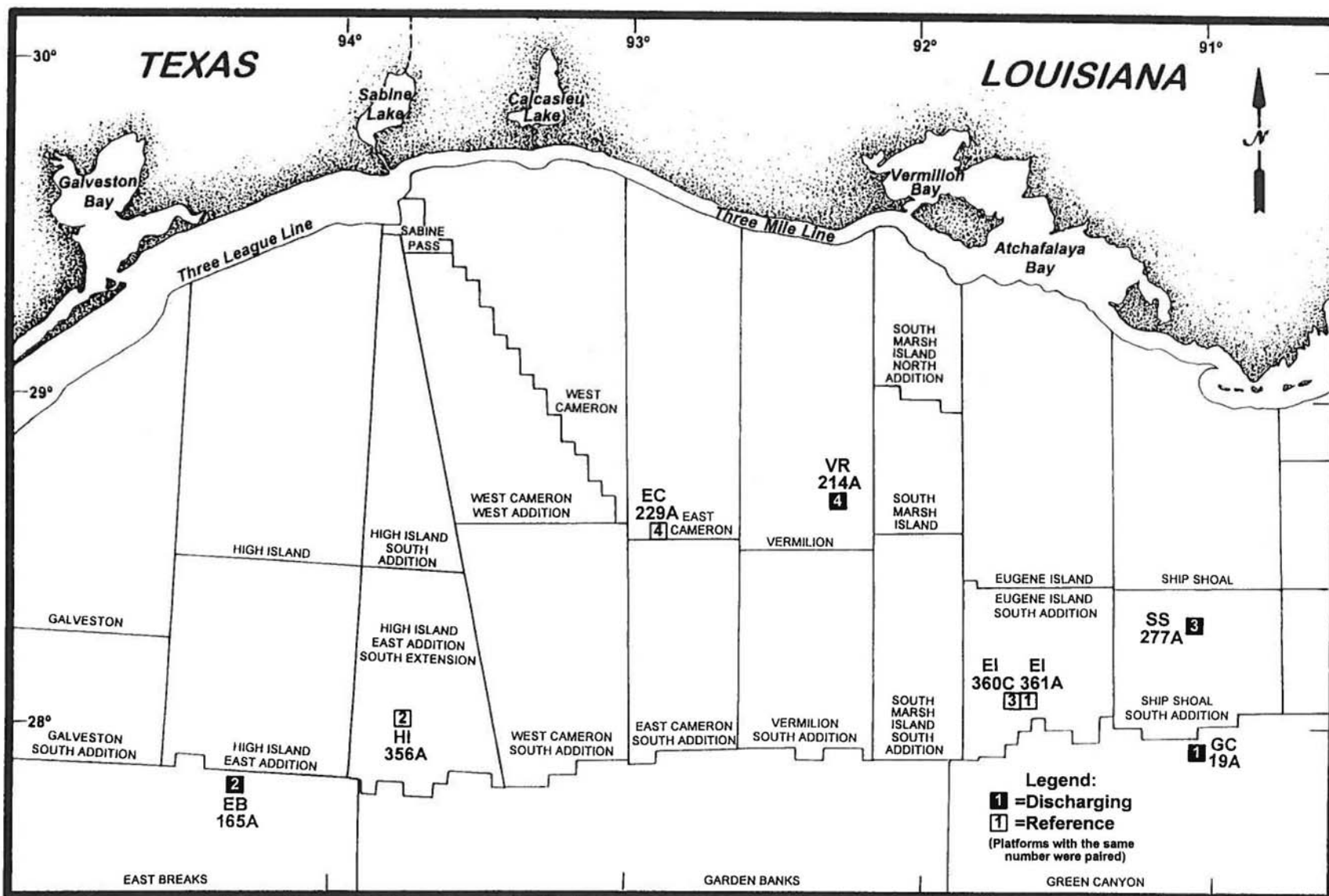


Figure S-1. Platforms sampled during Cruise 1 of the Definitive Component of the OOC Gulf of Mexico Produced Water Bioaccumulation Study.



Table S-1. Platforms sampled and species collected for the Definitive Component.

Platform Pair	Sampling Period	Species
East Breaks 165A High Island A 356A	Spring 1995	Jewel box (mollusk) Thorny oyster (mollusk) Yellow chub (fish) Creole-fish (fish) Rockhind (fish)
	Fall 1995	Jewel box (mollusk) Thorny oyster (mollusk) Yellow chub (fish) Creole-fish (fish) Sergeant major (fish)
Green Canyon 19A Eugene Island 361A	Spring 1995	Jewel box (mollusk) Thorny oyster (mollusk) Yellow chub (fish) Creole-fish (fish) Gray triggerfish (fish)
	Fall 1995	Jewel box (mollusk) Thorny oyster (mollusk) Yellow chub (fish) Creole-fish (fish) Gray triggerfish (fish)

Table S-2. Method detection limits for the Definitive Component Study.

Target Chemical Class	Produced Water (ng/L)	Ambient Seawater (ng/L) <sup>d</sup>	Tissue (ng/g - dry weight)
Volatile Organic Compounds	90 to 310	90 to 310	2.4 to 4.1
Semivolatile Organic Compounds <sup>a</sup>	1.0 to 11	1.0 to 11	1.3 to 16
Metals <sup>b</sup>	10 to 620	5 to 30	1 to 50
Radium Isotopes <sup>c</sup>	0.01 to 0.75	0.007 to 0.070	0.001 to 0.03

<sup>a</sup> Not included in range are bis(2-ethylhexyl)phthalate (90 ng/L in water and 140 ng/g in tissues) and phenol (38 ng/g in tissues).

<sup>b</sup> Not included in range is barium (240 µg/L in produced water and 140 ng/L in ambient seawater).

<sup>c</sup> pCi/L and pCi/g wet weight.

<sup>d</sup> ng/L and ng/g are approximately the same as parts per billion (ppb).

Table S-3. Criteria for produced water bioaccumulation classification for species and target chemicals.

<p><b>Category 1: Strong evidence for bioaccumulation to biologically significant tissue concentrations.</b></p> <ul style="list-style-type: none"><li>A. Tissue concentrations significantly higher at the discharging platform of both platform pairs and both surveys; and</li><li>B. Tissue residues for chemical at discharging platforms exceed the “typical” range for the chemical in marine animals from uncontaminated environments.</li></ul>
<p><b>Category 2: Weak or inconclusive evidence for bioaccumulation.</b></p> <ul style="list-style-type: none"><li>A. Tissue concentrations significantly greater at one discharging platform (compared to the paired reference platform) on both surveys, but no significant differences at the other platform pair; or</li><li>B. Tissue concentrations significantly greater at one or both discharging platforms in comparison to their paired reference platforms, but only on one survey; and</li><li>C. Differences in concentrations in tissues of marine animals from discharge and reference platforms are small and within the “typical” range for marine animals from uncontaminated marine environments.</li></ul>
<p><b>Category 3: Doubtful or contradictory evidence for bioaccumulation.</b></p> <ul style="list-style-type: none"><li>A. Tissue concentrations significantly higher at one discharging platform on one occasion (compared to the paired reference platform); and</li><li>B. Tissue concentrations significantly higher at one or both reference platforms than at the paired discharging platform on one or both cruises; and</li><li>C. Differences in concentrations in tissues of marine animals from discharge and reference platforms are small and within the “typical” range for marine animals from uncontaminated marine environments.</li></ul>
<p><b>Category 4: No evidence of bioaccumulation.</b></p> <ul style="list-style-type: none"><li>A. No significant differences between paired produced water discharging and reference platforms for either cruise or concentrations significantly higher more frequently in marine animals from the reference than from the discharging platform; and</li><li>B. All concentrations within the “typical” range for uncontaminated marine environments.</li></ul>

Table S-4. Percentage of analysis values (dry weight basis) below method detection limit (MDL) and practical quantitation level (PQL) (defined as five times MDL). There is a reduced confidence in the reported magnitude of a value that is below the PQL.

Target Chemical Class	Produced Water		Ambient Seawater		Tissues	
	MDL	PQL	MDL	PQL	MDL	PQL
Volatile Organic Compounds	5	5	98	100	96	99
Semivolatile Organic Compounds	30	34	88	97	87	98
Metals	40	43	33	36	1	12
Radium Isotopes	0	0	52	52	45 <sup>a</sup>	45

<sup>a</sup> Includes values below PQL defined in this study.

Table S-5. Ranking of the evidence for bioaccumulation from produced water by marine bivalves and fish from the vicinity of offshore, high-volume produced water discharges. The ranking categories are 1) strong evidence for bioaccumulation; 2) weak or inconclusive evidence for bioaccumulation; 3) doubtful or contradictory evidence for bioaccumulation; and 4) no evidence for bioaccumulation. Volatile organic compounds were not included in this analysis because they were not detected in 96% of the samples and were therefore Category 4.

Chemical	Jewel Box	Thorny Oyster	Fish
Arsenic	4	3	2
Barium	3	4	4
Cadmium	4	3	4 (YC, CF, RH) 3 (GT, SM)
Mercury	4	4	4
Radium Isotopes	3	4	4
Phenol	3	3	3 (GT) 4 (YC, CF, RH, SM)
Bis(2-ethylhexyl)phthalate	4	4	4
Fluorene	4	4	4
Benzo(a)pyrene	4	4	4
Total Polycyclic Aromatic Hydrocarbons	3	2	4

CF = Creole-fish.  
 RH = Rockhind.  
 SM = Sergeant major.  
 GT = Gray triggerfish.  
 YC = Yellow chub.



# GULF OF MEXICO PRODUCED WATER BIOACCUMULATION STUDY PLATFORM SURVEY COMPONENT

## EXECUTIVE SUMMARY

The National Pollutant Discharge Elimination System General Permit for the Western Gulf of Mexico Outer Continental Shelf (GMG 290000) requires bioaccumulation monitoring for facilities discharging more than 4,600 barrels/day (bbl/d) of treated produced water. The objective of the Platform Survey Component of the bioaccumulation study was to determine the concentrations of 12 U.S. Environmental Protection Agency (EPA)-specified target chemicals in edible tissues of fishes and invertebrates collected in the immediate vicinity of produced water discharging and non-discharging platforms from different regions of the western Gulf of Mexico. Two species of fish were sampled from 11 discharging/non-discharging platform pairs, and oysters, blue crabs, and 1 species of fish were collected for analysis from 1 discharging/non-discharging platform pair. The platform pairs consisted of Definitive Component Platforms and platforms located in four areas: high platform density; influenced by the Mississippi River; water depths less than 10 m; and off the Texas coast. Edible tissues of oysters, crabs, and fishes were analyzed by advanced, sensitive methods for arsenic, cadmium, mercury,  $^{226}\text{Ra}$  and  $^{228}\text{Ra}$ , benzene, toluene, ethylbenzene, phenol, bis(2-ethylhexyl)phthalate (BEHP), fluorene, and benzo(a)pyrene (BAP). The target metals were measured in 496 tissue samples; target volatile organic chemicals were measured in 494 tissue samples, target semivolatile organic chemicals were measured in 495 tissue samples; and target radionuclides were measured in 495 tissue samples. This represents the largest existing database of chemical residues in tissues of marine animals from the western Gulf of Mexico.

The analytical methods provided method detection limits (MDLs) well below screening level risk-based concentrations (RBCs) for protection of human consumers of fishery products. Nevertheless, most of the analytical results for organic chemicals in tissues were below the MDLs. The volatile aromatic hydrocarbons, benzene, toluene, and ethylbenzene were not detected in 97% of tissue samples. In the few samples in which a volatile aromatic hydrocarbon was detected, the concentration was orders of magnitude below the RBC. Fluorene was not detected in 89% of tissue samples. The highest measured concentration was 0.03% of the RBC. BAP was not detected in over 97% of 494 tissue samples. Phenol was not detected in 86% of tissue samples. Most of the other tissue samples in which phenol was detected were collected from non-discharging platforms and contained phenol concentrations 50% or less of the RBC. BEHP was not detected in 90% of tissue samples. It was found in some blank samples, indicating that, when present, it may be the result of sample contamination during collection, processing, and analysis. Tissues containing detectable concentrations of BEHP were collected about equally from discharging and non-discharging platforms. The tissue BEHP, if not an artifact, was derived from a source other than produced water, because BEHP is not a known component of produced water. Arsenic and mercury were detected in all tissue samples. Concentrations were typical of those in tissues of marine animals from clean marine



environments throughout the world. All tissue samples contained arsenic concentrations higher than the RBC. Arsenic is abundant in edible tissues of all marine animals and is present in non-toxic organic forms. There was no apparent difference in mercury and arsenic concentrations in tissues of marine animals from discharging and non-discharging platform sites. Cadmium was detected in 82% of 496 tissue samples. Cadmium concentrations were comparable in edible tissues of marine animals from discharging and non-discharging platforms. Total radium (sum of  $^{226}\text{Ra}$  and  $^{228}\text{Ra}$ ) was detected in less than half of the tissue samples.

The results of this study indicate that there is no relationship between the proximity of marine animals to offshore produced water discharges and concentrations in their edible tissues of the 12 EPA-targeted chemicals. The concentrations of the chemicals in edible tissues of marine animals from the western Gulf of Mexico are below concentrations that might represent a hazard to the marine animals themselves or their consumers, including man.

# GULF OF MEXICO PRODUCED WATER BIOACCUMULATION STUDY PLATFORM SURVEY COMPONENT

## SYNOPSIS

### Introduction

The National Pollutant Discharge Elimination System General Permit for the Western Gulf of Mexico Outer Continental Shelf (GMG 290000) requires bioaccumulation monitoring for facilities discharging more than 4,600 barrels/day (bbl/d) of produced water. The monitoring required by the permit was to be carried out according to a U.S. Environmental Protection Agency (EPA) defined sampling plan. As an alternative to sampling at each facility discharging in excess of 4,600 bbl/d, the permit allowed operators to participate in an EPA-approved, industry-wide, bioaccumulation monitoring program. The EPA approved an industry-wide study design proposed by the Offshore Operators Committee (OOC). The study consisted of two parts: the OOC-designed Definitive Component, which involved intensive, statistically designed sampling at a limited number of sites, and the EPA-specified Platform Survey Component, which involved sampling at a broad cross-section of locations in the central and western Gulf of Mexico.

### Objective

The objective of the Platform Survey Component was to determine the concentrations of EPA-specified target chemicals in the edible tissue of marine organisms collected in the immediate vicinity of discharging and non-discharging platforms from different regions in the Gulf of Mexico. To meet this objective, biological specimens were collected at 12 platform pairs (1 discharging platform and 1 non-discharging platform in each pair). The EPA required that two platform pairs be located in each of the following areas: high platform density; influenced by the Mississippi River; less than 10 m water depths; and off the Texas coast. To reach the required total of 12 platform pairs, the 4 platform pairs that were candidate study sites for the Definitive Component were also included. **Figure S-1** shows the geographic locations of the platforms.

### Sampling Design

At 11 platform pairs two species of fish were to be collected, and at 1 platform pair fish, mollusk, and crustacean species were to be collected. Sampling was conducted during the fall and spring at each platform pair. The edible tissues were analyzed to determine the concentrations of selected volatile organic compounds (VOCs) (benzene, toluene, and ethylbenzene), semivolatile organic compounds (SVOCs) (phenol, fluorene, benzo[a]pyrene [BAP], and bis[2-ethylhexyl]phthalate [BEHP]), metals (arsenic, cadmium, and mercury), and radionuclides ( $^{226}\text{Ra}$  and  $^{228}\text{Ra}$ ).

## Results

The results of this investigation represent the largest existing database on contaminant residues in tissues of marine animals, particularly fishes, from the northwestern Gulf of Mexico. The target metals were measured in 496 tissue samples; target volatile organic chemicals were measured in 494 tissue samples, target semivolatile organic chemicals were measured in 495 tissue samples; and target radionuclides were measured in 495 tissue samples.

One would expect that concentrations of the chemicals would be significantly higher in tissues of marine animals from platforms with large-volume produced water discharges than in tissues of marine animals from nearby offshore platforms with no produced water discharge. This was not found to be the case in this study. Highly specific and sensitive analytical methods were used in this investigation to quantify traces of the target chemicals in marine organisms. Method detection limits (MDLs) were well below risk-based concentrations (RBCs) (MDLs averaged 6.0% of corresponding RBCs) of the analytes in tissues of fishes consumed by man. Thus, very low tissue concentrations and small differences among sampling sites could be detected. Nevertheless, no consistent trends in concentrations of the different target chemicals were detected in tissues of marine mammals from different regions of the northwestern Gulf of Mexico and between produced water discharging and non-discharging sites.

The results for VOCs, SVOCs, metals, and radium are discussed below.

### Volatiles

Benzene, toluene, and ethylbenzene were not detectable in 96.8% of the tissue samples analyzed for this study. The MDLs were orders of magnitude below RBCs for benzene and toluene. These results show that the concentrations of volatile aromatic hydrocarbons in Gulf of Mexico marine organisms living near offshore platforms are well below levels of environmental concern. The presence of benzene, toluene, and ethylbenzene from produced water or any other source in marine organisms living near offshore platforms is not a significant environmental problem.

### Semivolatiles

Fluorene was not detectable in 89% of the samples analyzed for this study. The highest concentration measured in any sample was only 0.03% of the RBC. These results show that contamination of Gulf of Mexico organisms living near offshore platforms by fluorene from produced water or any other source is not a significant environmental problem.

Phenol was not detectable in 86% of the samples analyzed for this study. In the remaining samples, the highest concentrations (less than of the RBC) were found in samples collected near platforms that were not discharging produced water. These results show that phenol is not found at levels of concern in Gulf of Mexico marine organisms living near offshore platforms and that there is no indication

that the presence of phenol is correlated with the practice of discharging produced water.

BAP was not detectable in 97% of the 494 samples analyzed for this study. The results of this study show that BAP is not found at levels of concern in the Gulf of Mexico marine organisms living near offshore platforms. BAP usually is not detected in produced water; it is primarily from combustion sources. There is no indication that the presence of BAP is correlated with the practice of discharging produced water.

BEHP was not detectable in 90% of the samples analyzed for this study. The remaining 11% of samples in which BEHP was detectable were about equally divided between discharging and non-discharging sites. BEHP is not a natural or intentionally added component of produced water so one would not expect it to be present at elevated concentrations in tissues of marine animals near produced water discharges. It is recognized that BEHP is frequently present as an artifact in environmental samples. The results of this study were consistent with this view in that BEHP was found in concentrations exceeding the RBC in some samples at about the same number of discharging platforms and non-discharging platforms. There is no indication that the presence of BEHP is correlated with the practice of discharging produced water.

## Metals

Mercury was detectable in all samples analyzed for this study. Mean mercury concentrations were equally likely to be higher in tissues of particular species from a produced water discharge site as from a non-discharging platform. This supports the results of this study that show fishes and invertebrates are not bioaccumulating mercury from offshore produced water discharges.

Arsenic was detectable in all tissue samples analyzed for this study. As is the case with essentially all seafood, average levels of arsenic in tissues analyzed for this study were in excess of the RBC at both discharging and non-discharging platforms. Arsenic concentrations in edible tissues of marine animals analyzed in this study are within the natural range for marine animals world-wide. Average levels of arsenic in the tissues of a given species were no more likely to be higher for organisms collected near discharging platforms than for organisms collected near non-discharging platforms. This suggests that factors other than proximity to a produced water discharge are the main determinants of tissue arsenic levels. Arsenic concentrations measured in tissues of marine fishes and invertebrates from the vicinity of platforms in the northwestern Gulf of Mexico are within the range typical for animals living in the Gulf of Mexico. Therefore, there is no indication that marine animals were bioaccumulating arsenic from produced water.

Cadmium was detectable in 82% of the 496 samples analyzed for this study. Oysters world-wide contain naturally high concentrations of cadmium in soft

tissues, mostly the kidneys. Mean cadmium concentrations in oyster tissues in this study were comparable at the nearshore produced water discharging and non-discharging platforms, but were higher in the fall than in the spring, possibly reflecting seasonal changes in cadmium concentrations in the ambient seawater.

There was no consistent trend of geographic, seasonal, or discharge/non-discharge differences in concentrations of cadmium in tissues of marine fishes and crabs. This study indicates that cadmium was not bioaccumulated from produced water by the marine fishes and crabs.

## Radium

Radium was detectable in less than half of the samples analyzed for this study. The highest concentration was less than one-third the RBC. The results of this study do not indicate that contamination of organisms found near Gulf of Mexico platforms with radium from produced water or any other source is a significant environmental concern.

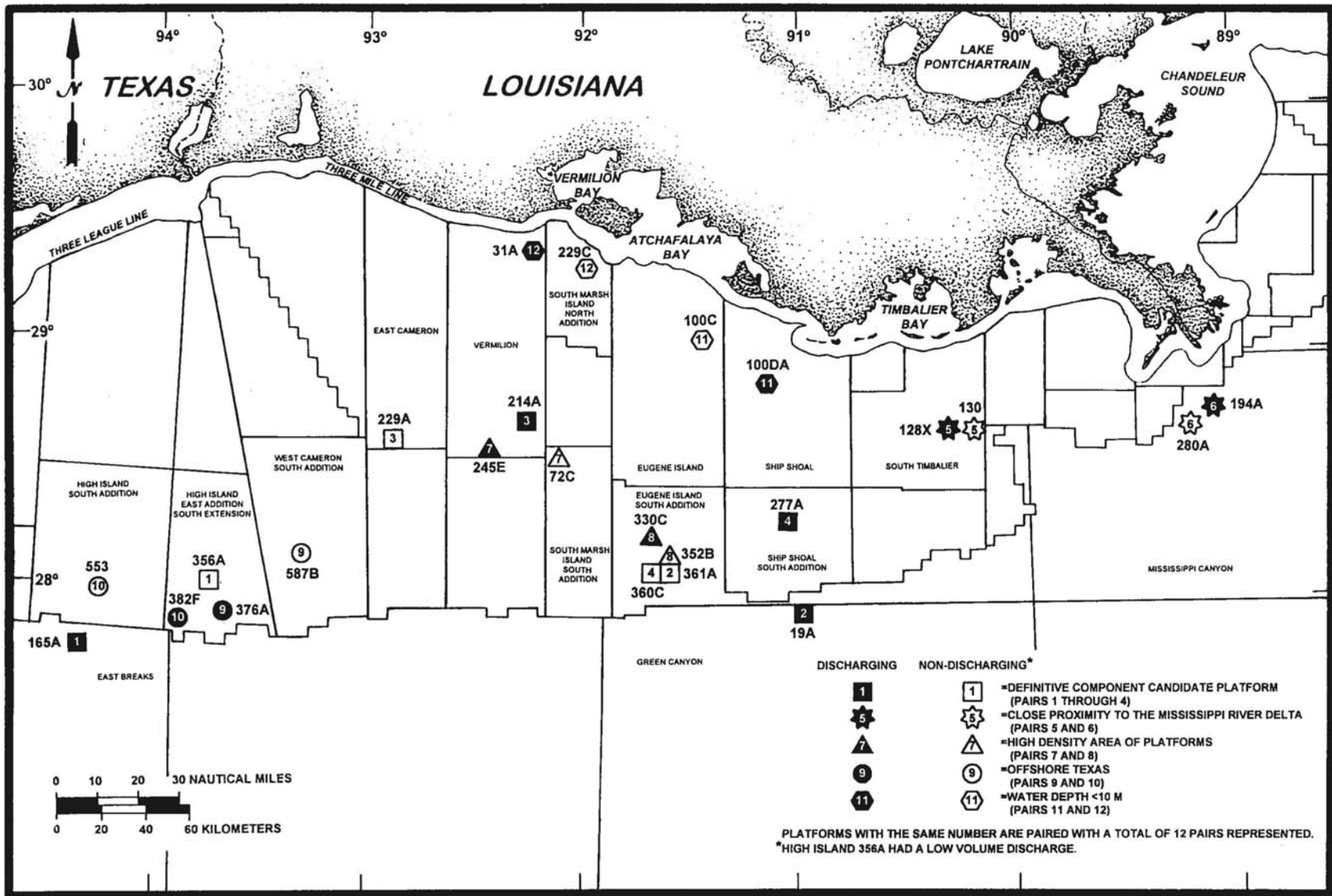


Figure S-1. Platforms sampled during the Platform Survey Component of the OOC Gulf of Mexico Produced Water Bioaccumulation Study.



# **Gulf of Mexico Produced Water Bioaccumulation Study**

## **Platform Survey Component Technical Report**

April 1997

**(Reformatted for Microsoft Word in May 2009)**

**Prepared For:**

**Offshore Operators Committee  
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# GULF OF MEXICO PRODUCED WATER BIOACCUMULATION STUDY PLATFORM SURVEY COMPONENT

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ACKNOWLEDGEMENTS  
WE WOULD LIKE TO ACKNOWLEDGE THE OOC BIOACCUMULATION STUDY  
CO-SPONSORS FOR THEIR SUPPORT OF THE PROJECT:

AEDC (USA), Inc.  
Agip Petroleum Company, Inc.  
Amerada Hess Corporation  
American Exploration Company  
Amoco Production Company  
Anadarko Petroleum Company  
ANR Production Company  
Apache Corporation  
(includes Aquila Energy Resources)  
Ashland Exploration, Inc.  
Ashlawn Energy, Inc.  
Aviara Energy Corporation  
(formerly Columbia Gas Development Corporation)  
BHP Petroleum (Americas) Incorporated  
Blue Dolphin Exploration Company  
(includes Ivory Production Company)  
BP Exploration  
British-Borneo Exploration, Inc.  
Chevron USA Prod. Company  
CNG Producing Company, Inc.  
Coastal Oil & Gas Corporation  
Cockrell Oil Corporation  
Conn Energy, Inc.  
Conoco, Inc.  
CXY Energy, Inc.  
Elf Exploration Inc.  
Enron Oil & Gas Company  
Enserch Exploration Company  
(includes DALEN Resources Oil & Gas  
and EP Operating Ltd. Partnership)  
Exxon Co., USA  
Fina Oil & Chemical  
Flores & Rucks, Inc.  
Forcenergy Gas Exploration, Inc.  
Forest Oil Corporation  
Freeport-McMoran Oil & Gas Company  
Greenhill Petroleum Corporation  
Gulfstar Energy, Inc.  
Gulfstream Resources, Inc.  
Hall-Houston Oil Company  
Houston Exploration Company  
Howell Petroleum Company

Kerr-McGee Corporation  
Louisiana Land & Exploration Company  
Marathon Oil Company  
Matrix Oil & Gas Company  
Meridian Oil  
Mesa Operating Ltd. Partnership  
MidCon Offshore Corporation  
Mitchell Energy Corporation  
Mobil E & P Company  
Murphy Exploration & Production Company  
NCX Company, Inc.  
Newfield Exploration Company  
Nippon Oil Exploration USA (NOEX)  
Norcen Explorer, Inc.  
Oryx Energy Company  
Oxy USA, Inc.  
O.E.D.C. Partners  
Panaco, Inc.  
Pel Tex Oil Company  
Pennzoil E & P Company  
Phillips Petroleum Company  
Pogo Producing Company  
Samedan Oil Corporation  
Santa Fe Energy Resources, Inc.  
Seagull Energy Corporation  
Shell Offshore Inc.  
Sonat Exploration Company  
Taylor Energy Company  
Texaco Exploration & Production, Inc.  
Torch Operating Company  
Total Minatome Corporation  
Trade & Development Corporation  
UMC Petroleum Corporation  
(includes General Atlantic Resources, Inc.)  
Union Oil of California (UNOCAL)  
Union Pacific Resources Company  
Vastar Resources, Inc.  
W & T Offshore  
Zilkha Energy Company

THE CONTRACTORS FOR THIS STUDY WOULD LIKE TO ACKNOWLEDGE THE MEMBERS OF THE BIOACCUMULATION WORKING GROUP FOR THEIR SUPPORT AND COOPERATION DURING THIS PROJECT:

Dr. James P. Ray (Shell) - Chairman  
Dr. R. C. Ayers (Robert Ayers & Associates)  
Ms. Jan Farmer (BP Oil)  
Mr. Brian E. Shannon (Arco)  
Dr. Stanley Curtice (Texaco)  
Dr. Andrew Glickman (Chevron)  
Mr. Larry R. Henry (Chevron)  
Dr. Bela M. James (Shell)  
Mr. David J. LeBlanc (Texaco)  
Dr. Lawrence A. Reitsema (Marathon)  
Dr. Joseph P. Smith (Exxon Production Research Co.)  
Dr. James E. O'Reilly (Exxon Production Research Co.)  
Dr. Jerry Hall (Texaco)

THE CONTRACTOR WOULD ALSO LIKE TO ACKNOWLEDGE THE FOLLOWING INDIVIDUALS FOR THEIR CONTRIBUTION TO THIS PROJECT:

Dr. Woollcott Smith (Temple University)  
Mr. Keith R. Parker (Data Analysis Group)  
Dr. Dan D. Caudle (Sound Environmental Solutions, Inc.)



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# GULF OF MEXICO PRODUCED WATER BIOACCUMULATION STUDY PLATFORM SURVEY COMPONENT

## SYNOPSIS

### Introduction

The National Pollutant Discharge Elimination System General Permit for the Western Gulf of Mexico Outer Continental Shelf (GMG 290000) requires bioaccumulation monitoring for facilities discharging more than 4,600 barrels/day (bbl/d) of produced water. The monitoring required by the permit was to be carried out according to a U.S. Environmental Protection Agency (EPA) defined sampling plan. As an alternative to sampling at each facility discharging in excess of 4,600 bbl/d, the permit allowed operators to participate in an EPA-approved, industry-wide, bioaccumulation monitoring program. The EPA approved an industry-wide study design proposed by the Offshore Operators Committee (OOC). The study consisted of two parts: the OOC-designed Definitive Component, which involved intensive, statistically designed sampling at a limited number of sites, and the EPA-specified Platform Survey Component, which involved sampling at a broad cross-section of locations in the central and western Gulf of Mexico.

### Objective

The objective of the Platform Survey Component was to determine the concentrations of EPA-specified target chemicals in the edible tissue of marine organisms collected in the immediate vicinity of discharging and non-discharging platforms from different regions in the Gulf of Mexico. To meet this objective, biological specimens were collected at 12 platform pairs (1 discharging platform and 1 non-discharging platform in each pair). The EPA required that two platform pairs be located in each of the following areas: high platform density; influenced by the Mississippi River; less than 10 m water depths; and off the Texas coast. To reach the required total of 12 platform pairs, the 4 platform pairs that were candidate study sites for the Definitive Component were also included. **Figure S-1** shows the geographic locations of the platforms.

### Sampling Design

At 11 platform pairs two species of fish were to be collected, and at 1 platform pair fish, mollusk, and crustacean species were to be collected. Sampling was conducted during the fall and spring at each platform pair. The edible tissues were analyzed to determine the concentrations of selected volatile organic compounds (VOCs) (benzene, toluene, and ethylbenzene), semivolatile organic compounds (SVOCs) (phenol, fluorene, benzo[a]pyrene [BAP], and bis[2-ethylhexyl]phthalate [BEHP]), metals (arsenic, cadmium, and mercury), and radionuclides ( $^{226}\text{Ra}$  and  $^{228}\text{Ra}$ ).

## Results

The results of this investigation represent the largest existing database on contaminant residues in tissues of marine animals, particularly fishes, from the northwestern Gulf of Mexico. The target metals were measured in 496 tissue samples; target volatile organic chemicals were measured in 494 tissue samples, target semivolatile organic chemicals were measured in 495 tissue samples; and target radionuclides were measured in 495 tissue samples.

One would expect that concentrations of the chemicals would be significantly higher in tissues of marine animals from platforms with large-volume produced water discharges than in tissues of marine animals from nearby offshore platforms with no produced water discharge. This was not found to be the case in this study. Highly specific and sensitive analytical methods were used in this investigation to quantify traces of the target chemicals in marine organisms. Method detection limits (MDLs) were well below risk-based concentrations (RBCs) (MDLs averaged 6.0% of corresponding RBCs) of the analytes in tissues of fishes consumed by man. Thus, very low tissue concentrations and small differences among sampling sites could be detected. Nevertheless, no consistent trends in concentrations of the different target chemicals were detected in tissues of marine mammals from different regions of the northwestern Gulf of Mexico and between produced water discharging and non-discharging sites.

The results for VOCs, SVOCs, metals, and radium are discussed below.

### Volatiles

Benzene, toluene, and ethylbenzene were not detectable in 96.8% of the tissue samples analyzed for this study. The MDLs were orders of magnitude below RBCs for benzene and toluene. These results show that the concentrations of volatile aromatic hydrocarbons in Gulf of Mexico marine organisms living near offshore platforms are well below levels of environmental concern. The presence of benzene, toluene, and ethylbenzene from produced water or any other source in marine organisms living near offshore platforms is not a significant environmental problem.

### Semivolatiles

Fluorene was not detectable in 89% of the samples analyzed for this study. The highest concentration measured in any sample was only 0.03% of the RBC. These results show that contamination of Gulf of Mexico organisms living near offshore platforms by fluorene from produced water or any other source is not a significant environmental problem.

Phenol was not detectable in 86% of the samples analyzed for this study. In the remaining samples, the highest concentrations (less than of the RBC) were found in samples collected near platforms that were not discharging produced water. These results show that phenol is not found at levels of concern in Gulf of Mexico marine organisms living near offshore platforms and that there is no indication

that the presence of phenol is correlated with the practice of discharging produced water.

BAP was not detectable in 97% of the 494 samples analyzed for this study. The results of this study show that BAP is not found at levels of concern in the Gulf of Mexico marine organisms living near offshore platforms. BAP usually is not detected in produced water; it is primarily from combustion sources. There is no indication that the presence of BAP is correlated with the practice of discharging produced water.

BEHP was not detectable in 90% of the samples analyzed for this study. The remaining 11% of samples in which BEHP was detectable were about equally divided between discharging and non-discharging sites. BEHP is not a natural or intentionally added component of produced water so one would not expect it to be present at elevated concentrations in tissues of marine animals near produced water discharges. It is recognized that BEHP is frequently present as an artifact in environmental samples. The results of this study were consistent with this view in that BEHP was found in concentrations exceeding the RBC in some samples at about the same number of discharging platforms and non-discharging platforms. There is no indication that the presence of BEHP is correlated with the practice of discharging produced water.

## Metals

Mercury was detectable in all samples analyzed for this study. Mean mercury concentrations were equally likely to be higher in tissues of particular species from a produced water discharge site as from a non-discharging platform. This supports the results of this study that show fishes and invertebrates are not bioaccumulating mercury from offshore produced water discharges.

Arsenic was detectable in all tissue samples analyzed for this study. As is the case with essentially all seafood, average levels of arsenic in tissues analyzed for this study were in excess of the RBC at both discharging and non-discharging platforms. Arsenic concentrations in edible tissues of marine animals analyzed in this study are within the natural range for marine animals world-wide. Average levels of arsenic in the tissues of a given species were no more likely to be higher for organisms collected near discharging platforms than for organisms collected near non-discharging platforms. This suggests that factors other than proximity to a produced water discharge are the main determinants of tissue arsenic levels. Arsenic concentrations measured in tissues of marine fishes and invertebrates from the vicinity of platforms in the northwestern Gulf of Mexico are within the range typical for animals living in the Gulf of Mexico. Therefore, there is no indication that marine animals were bioaccumulating arsenic from produced water.

Cadmium was detectable in 82% of the 496 samples analyzed for this study. Oysters world-wide contain naturally high concentrations of cadmium in soft

tissues, mostly the kidneys. Mean cadmium concentrations in oyster tissues in this study were comparable at the nearshore produced water discharging and non-discharging platforms, but were higher in the fall than in the spring, possibly reflecting seasonal changes in cadmium concentrations in the ambient seawater.

There was no consistent trend of geographic, seasonal, or discharge/non-discharge differences in concentrations of cadmium in tissues of marine fishes and crabs. This study indicates that cadmium was not bioaccumulated from produced water by the marine fishes and crabs.

## Radium

Radium was detectable in less than half of the samples analyzed for this study. The highest concentration was less than one-third the RBC. The results of this study do not indicate that contamination of organisms found near Gulf of Mexico platforms with radium from produced water or any other source is a significant environmental concern.

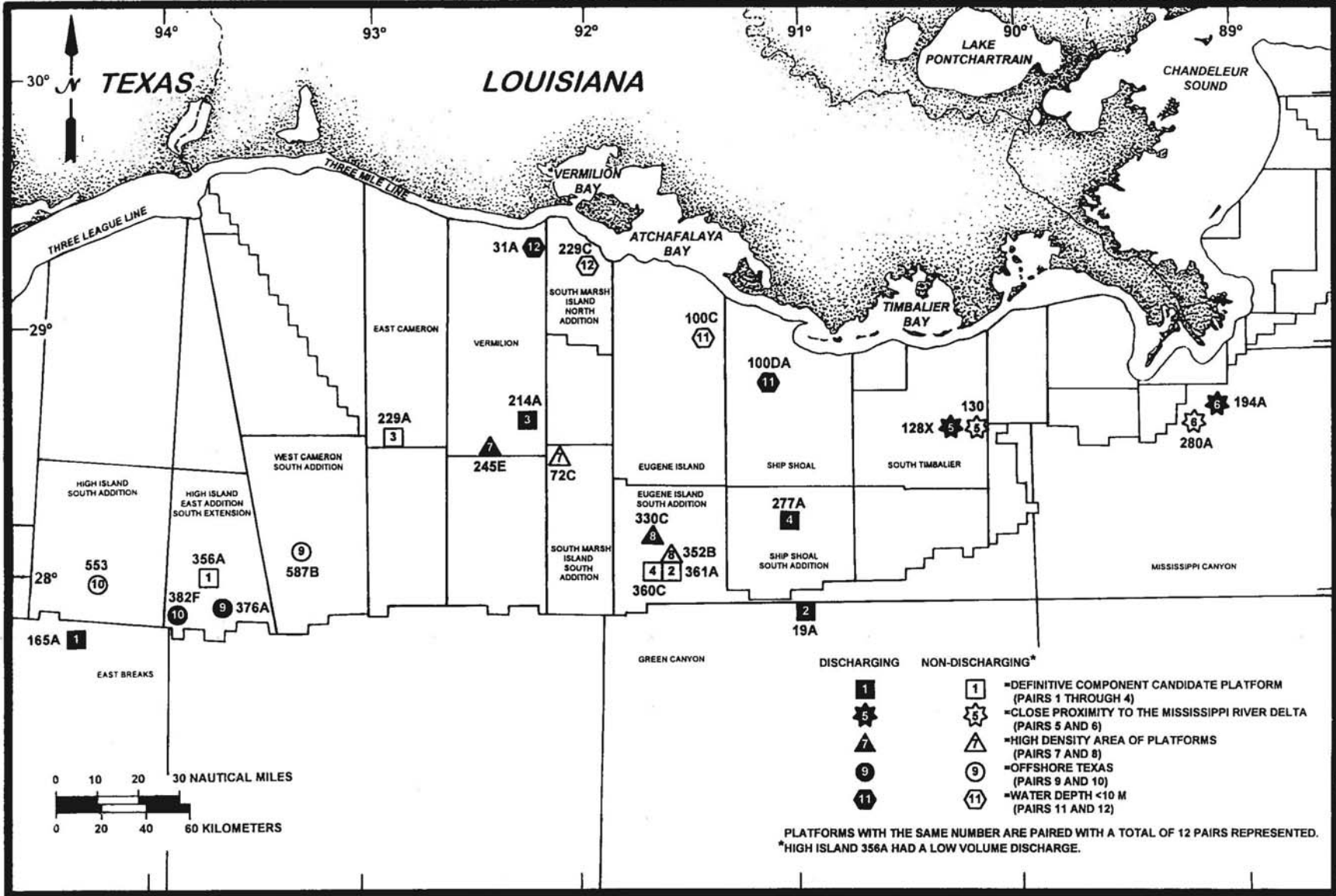


Figure S-1. Platforms sampled during the Platform Survey Component of the OOC Gulf of Mexico Produced Water Bioaccumulation Study.



## Section 1 INTRODUCTION

### 1.1 BACKGROUND

Produced water is a major effluent associated with oil and gas production and contains low concentrations of organics and inorganics (hydrocarbons, metals, and radionuclides [ $^{226}\text{Ra}$  and  $^{228}\text{Ra}$ ]). The U.S. Environmental Protection Agency (EPA) is interested in gathering data on these constituents because of 1) potential adverse impacts of produced water discharges to the indigenous species in the Gulf of Mexico; and 2) potential bioaccumulation and bioavailability of select effluent components in indigenous fish and shellfish species that are available for human consumption. EPA determined that additional information was needed to determine if produced water discharges have bioaccumulative effects in receiving waters which threaten human health (56 FR 73:15353).

The National Pollutant Discharge Elimination System General Permit for the Western Gulf of Mexico Outer Continental Shelf (GMG 290000) requires bioaccumulation monitoring for facilities discharging more than 4,600 barrels<sup>1</sup>/day (bbl/d) of produced water. The monitoring required by the permit was to be carried out according to an EPA-defined sampling plan. As an alternative to sampling at each facility discharging in excess of 4,600 bbl/d, the permit allowed operators to participate in an EPA-approved, industry-wide, bioaccumulation monitoring study rather than conducting individual bioaccumulation monitoring studies.

In response, the Offshore Operators Committee (OOC) developed a proposed industry-wide bioaccumulation study as an initial step to comply with the permit modification. The OOC is an industry organization consisting of some 107 member and associate member companies that collectively account for approximately 97% of Gulf of Mexico oil and gas production. After imposing additional requirements, the EPA approved an industry-wide study design proposed by the OOC. The study consisted of two parts: the OOC-designed Definitive Component, which involved intensive, statistically designed sampling at a limited number of sites, and the EPA-specified Platform Survey Component, which involved sampling at a broad cross-section of locations in the central and western Gulf of Mexico. This document is the final report for the Platform Survey Component of the Gulf of Mexico Produced Water Bioaccumulation Study. A separate final report has been prepared for the Definitive Component. In addition, a literature review of the bioaccumulation, fate, and effects of produced water constituents has been prepared.

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<sup>1</sup>1 barrel = 42 U.S. gallons = 0.16 cubic meters.



## 1.2 PLATFORM SURVEY COMPONENT OBJECTIVE

The objective of the Platform Survey Component was to determine the concentrations of EPA-specified target chemicals in the edible tissue of marine organisms collected in the immediate vicinity of discharging and non-discharging platforms from different regions in the Gulf of Mexico. To meet this objective, biological specimens were collected at 12 platform pairs (1 discharging platform and 1 non-discharging platform in each pair) that met a set of geographic criteria provided by EPA. Specifically, EPA required that two platform pairs be located in each of the following areas: high platform density; influenced by the Mississippi River; less than 10 m water depths; and off the Texas coast. To reach the required total of 12 platform pairs, the 4 platform pairs that were candidate study sites for the Definitive Component were also included at the discretion of the OOC. The protocol for selecting the Definitive Component candidate study sites is described in the Definitive Component Report (Gulf of Mexico Produced Water Bioaccumulation Study Definitive Component). Each platform pair consisted of an actively discharging platform and a non-discharging site. Each non-discharging site was chosen in the same general area as the corresponding discharging site.

## 1.3 SAMPLING OVERVIEW

Two types of sampling were conducted during the Platform Survey component of the Bioaccumulation Study--Biomonitoring Study Survey Sampling (BSS) and Biomonitoring Study In-Depth Sampling (BSI). BSS consisted of collecting and analyzing tissues from two species of fish (five individual specimens per species) and was performed at 11 platform pairs. BSI consisted of collecting and analyzing tissues from three species--a fish (five individual specimens), mollusk (five composite samples), and crustacean (five composite samples). BSI was performed at one platform pair. A summary of the sampling conducted at each platform pair is presented in **Table 1-1**, and the locations of the platforms comprising the platform pairs are presented in **Figure 1-1** and **Table 1-2**. The species that were collected and analyzed are presented in **Table 1-3**. A summary of the organisms collected at each platform is presented in **Table 1-4**. The edible tissues were analyzed to determine the concentrations of the analytes presented in **Table 1-5**. Each platform was sampled during two seasons: spring and fall. Sampling occurred on three cruises. Sampling dates were as follows:

- Cruise 1 -- 19 October to 15 November 1994;
- Cruise 2 -- 9 April to 29 May 1995; and
- Cruise 3 -- 25 September to 13 December 1995.

The sampling effort is summarized in **Table 1-6**.

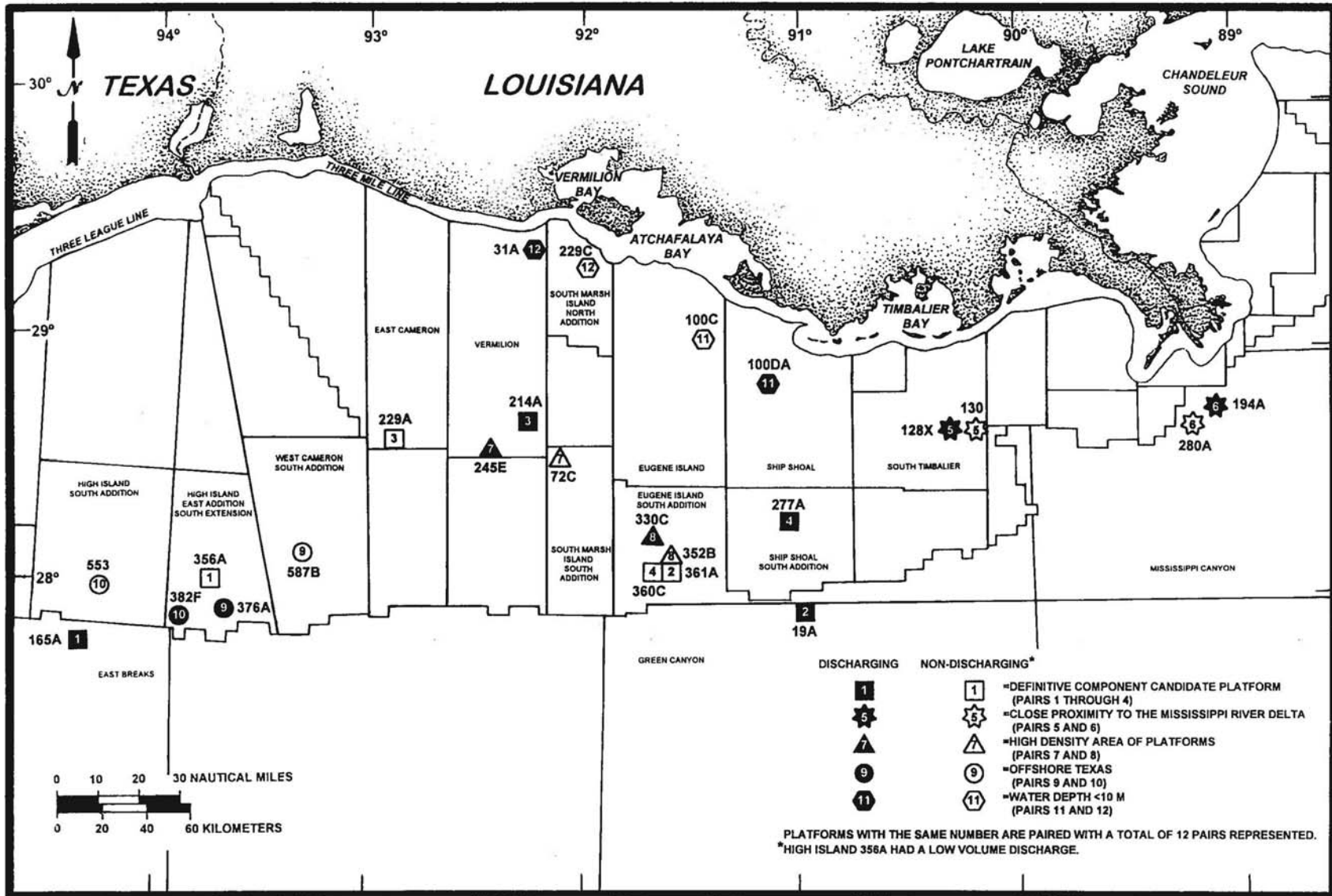


Figure 1-1. Platforms sampled during the Platform Survey Component of the OOC Gulf of Mexico Produced Water Bioaccumulation Study.



Table 1-1. Types and time of sampling at each platform pair in the Platform Survey Component.

Platform Pair		Sampling Type		
Discharging Platform	Non-discharging Platform	Cruise 1 (Fall 1994)	Cruise 2 (Spring 1995)	Cruise 3 (Fall 1995)
East Breaks 165A	High Island A 356A	BSS	BSS	
Green Canyon 19A	Eugene Island 361A	BSS	BSS	
Vermilion 214A	East Cameron 229A	BSS	BSS	
Ship Shoal 277A	Eugene Island 360C	BSS	BSS	
Mississippi Canyon 194A	Mississippi Canyon 280A		BSS	BSS
South Timbalier 130	South Timbalier 128X		BSS	BSS
Vermilion 245E	South Marsh Island 72C		BSS	BSS
Eugene Island 330C	Eugene Island 352B		BSS	BSS
High Island 376A	West Cameron 587B		BSS	BSS
High Island 382F	High Island A 553A		BSS	BSS
Eugene Island 100C	Ship Shoal 100DA		BSS	BSS
Vermilion 31A	South Marsh Island 229C		BSI	BSI

BSI = Biomonitoring Study In-Depth Sampling (one fish species, one bivalve species, and one crustacean species).

BSS = Biomonitoring Study Survey Sampling (two fish species).

Table 1-2. Locations and produced water discharge rates at each platform pair in the Platform Survey Component.

Discharging Platform			Non-discharging Platform	
Platform	Discharge Rate (bbl/d)	Location	Platform	Location
East Breaks 165A	11,000	27° 49' 07" N 94° 19' 22" W	High Island A 356A <sup>a</sup>	28° 02' 48"N 93° 45' 55"W
Green Canyon 19A	7,100 (130) <sup>b</sup>	27° 56' 45" N 90° 59' 45" W	Eugene Island 361A	28° 07' 00"N 91° 39' 26"W
Vermilion 214A	6,800	28° 41' 05" N 92° 15' 44" W	East Cameron 229A	28° 37' 31"N 92° 53' 32"W
Ship Shoal 277A	5,200	28° 17' 59" N 91° 05' 15" W	Eugene Island 360C	28° 07' 02"N 91° 40' 09"W
Mississippi Canyon 194A	14,000	28° 47' 29" N 89° 03' 21" W	Mississippi Canyon 280A	28° 39' 46" N 89° 09' 28" W
South Timbalier 130	5,200	28° 41' 11" N 90° 09' 10" W	South Timbalier 128X	28° 40' 34" N 90° 16' 07" W
Vermilion 245E	5,300	28° 34' 38" N 92° 27' 42" W	South Marsh Island 72C	28° 35' 03" N 92° 06' 40" W
Eugene Island 330C	6,600	28° 13' 37" N 91° 41' 07" W	Eugene Island 352B	28° 09' 47" N 91° 38' 33" W
High Island 376A	4,800	27° 57' 43" N 93° 40' 15" W	West Cameron 587B	28° 10' 42" N 93° 18' 54" W
High Island 382F	8,200	27° 54' 46" N 93° 56' 01" W	High Island A 553A	28° 00' 05" N 94° 16' 05" W
Eugene Island 100C	14,000	29° 03' 42" N 91° 26' 50" W	Ship Shoal 100DA	28° 52' 44" N 91° 10' 27" W
Vermilion 31A	8,200	29° 26' 53" N 92° 11' 33" W	South Marsh Island 229C	29° 20' 55" N 91° 59' 19" W

<sup>a</sup> High Island A 356A began to discharge low volumes of produced water after Cruise 1 through Cruise 2. These discharges began on 14 January 1995. From this date to the conclusion of Platform Survey Component sampling during Cruise 2 at this platform, produced water discharge volumes averaged 29 bbl/d and did not exceed 130 bbl/d.

<sup>b</sup> Discharge rate in parentheses is average discharge rate from a secondary discharge of produced water.

Table 1-3. Common and scientific names of the species collected and analyzed for the Platform Survey Component.

Common Name	Scientific Name
Invertebrates	
Eastern oyster	<i>Crassostrea virginica</i>
Blue crab	<i>Callinectes sapidus</i>
Fishes	
Yellow chub	<i>Kyphosus incisor</i>
Creole-fish	<i>Paranthias furcifer</i>
Red snapper	<i>Lutjanus campechanus</i>
Gray triggerfish	<i>Balistes capriscus</i>
Hardhead catfish	<i>Arius felis</i>
Sheepshead	<i>Archosargus probatocephalus</i>
Spadefish	<i>Chaetodipterus faber</i>
Rockhind	<i>Epinephelus adscensionis</i>

Table 1-4. Taxa analyzed at each platform pair during the three cruises in the Platform Survey Component.

Platform Pair		Cruise		
Discharging	Non-discharging	1 (Fall 1994)	2 (Spring 1995)	3 (Fall 1995)
East Breaks 165A	High Island A 356A <sup>a</sup>	Yellow chub Creole-fish	Yellow chub Creole-fish	
Green Canyon 19A	Eugene Island 361A	Yellow chub Creole-fish	Yellow chub Creole-fish	
Vermilion 214A	East Cameron 229A	Red snapper Gray triggerfish	Red snapper Gray triggerfish	
Ship Shoal 277A	Eugene Island 360C	Red snapper Yellow chub	Yellow chub Creole-fish	
Mississippi Canyon 194A	Mississippi Canyon 280A		Yellow chub Gray triggerfish	Creole-fish Gray triggerfish
South Timbalier 130	South Timbalier 128X		Red snapper Gray triggerfish	Red snapper Spadefish
Vermilion 245E	South Marsh Island 72C		Red snapper Gray triggerfish	Red snapper Gray triggerfish
Eugene Island 330C	Eugene Island 352B		Yellow chub Gray triggerfish	Yellow chub Creole-fish
High Island 376A	West Cameron 587B		Yellow chub Red snapper	Yellow chub Rockhind
High Island 382F	High Island A 553A		Yellow chub Creole-fish	Yellow chub Creole-fish
Eugene Island 100C	Ship Shoal 100DA		Hardhead catfish Sheepshead	Hardhead catfish Sheepshead
Vermilion 31A	South Marsh Island 229C		Blue crab Eastern oyster Hardhead catfish	Blue crab Eastern oyster Hardhead catfish

<sup>a</sup> High Island A 356A began to discharge low volumes of produced water after Cruise 1 through Cruise 2. These discharges began on 14 January 1995. From this date to the conclusion of Platform Survey Component sampling during Cruise 2 at this platform, produced water discharge volumes averaged 29 bbl/d and did not exceed 130 bbl/d.

Table 1-5. U.S. Environmental Protection Agency-specified target chemicals for analysis of edible tissue samples.

Class	Specific Analytes
Volatile Organic Compounds (VOCs)	Benzene Toluene Ethylbenzene
Semivolatile Organic Compounds (SVOCs)	Phenol Fluorene Benzo[a]pyrene Bis(2-ethylhexyl)phthalate
Metals	Arsenic Cadmium Mercury
Radionuclides	<sup>226</sup> Ra <sup>228</sup> Ra

Table 1-6. Field days to obtain the required samples. Platform Survey Component Sampling and Definitive Component Sampling occurred concurrently at East Breaks 165A (EB165A), High Island A 356A (HI356A), Green Canyon 19A (GC19A), Eugene Island 361A (EI361A), Vermilion 214A, East Cameron 229A, Ship Shoal 277A, and Eugene Island 360C during Cruise 1 and at EB165A, HI356A, GC19A, and EI361A during Cruise 2.

Cruise (Sampling Period)		Work Days	Weather Downtime Days	Total Field Days
1	(Fall 1994)	23	5	28
2	(Spring 1995)	36	12	48
3	(Fall 1995)	29	19	48

## Section 2 METHODS

### 2.1 FIELD LOGISTICS

#### 2.1.1 Survey Vessel and Navigation

The M/V FLING, a 30-m crew/dive boat, was used to conduct three field cruises. The boat provided air compressors, dive platform, and ample deck space for equipment storage and was able to travel at a speed of 17 knots allowing for rapid transit between survey sites. Navigation was performed with the use of a differential global positioning system (DGPS). The DGPS received position correction data from the United States Coast Guard, New Orleans, Louisiana DGPS reference beacon.

#### 2.1.2 Dive Operations

Dive operations were performed by Continental Shelf Associates, Inc. (CSA) divers, who are certified by internationally recognized dive associations, have Red Cross CPR and first aid certifications, and have years of experience performing underwater sampling tasks.

#### 2.1.3 Coordination With Operators

Lease holders and platform operators were notified of the study prior to field operations. A telefax concerning the scope of work, the approximate starting date, and duration of on-site survey operations was sent to an OOC representative approximately one month prior to survey commencement. The OOC representative, in turn, notified the platform operators of the pertinent information concerning each pending field survey. In addition, each on-site platform operator was contacted directly from the survey vessel prior to operations to ensure the safe coordination of field survey operations with platform oil and gas operations.

### 2.2 FIELD METHODS

#### 2.2.1 Tissue Sample Collection

All biological specimen collections were performed under a 21 October 1994 letter of authorization from Andrew Kemmer, Regional Director, Southeast Regional Office, National Marine Fisheries Service, National Oceanic and Atmospheric Administration (NOAA), St. Petersburg, Florida. All activities under this authorization were limited to research programs. An extension to this letter of authorization was granted in a 1 December 1995 letter from the same agency.

2.2.1.1 Bivalves. Bivalve specimens were collected by divers from the BSI platforms (discharging or non-discharging) in water depths ranging from 0 to 22 m. At the BSI discharging platform, these collections were made below the depth of the opening of the produced water discharge pipe and within an approximate 100-m horizontal



radius of the produced water discharge pipe opening. Divers collected whole specimens of the bivalve target species from the platform structures using a metal pry-bar. The number of specimens collected was based on the quantity of tissue needed for analyses. Specimens were taken intact to prevent incidental contamination during collection and subsequent processing. Once removed from the platform structure, specimens of bivalve target species were placed in a nylon dive bag and brought to the boat for processing. Bivalve shells were brushed and rinsed to remove external debris prior to storage. Bivalve specimens were placed in I-CHEM<sup>®</sup> pre-cleaned certified glass sample containers or wrapped in purified aluminum foil that had been purified in the laboratory by baking at 400°C for at least 4 h to remove contaminants. All efforts were made to minimize time between collection and storage.

2.2.1.2 Crustaceans. To collect crab specimens for BSI, standard low profile crab traps were baited with dead fish and deployed on the seafloor in the near-vicinity of the BSI platforms. Multiple standard low-profile crab traps were deployed at each sampling location. All traps were deployed during the first day of occupation at the BSI sampling locations to maximize deployment time. Continuous deployment times ranged from 1 to 7 days. Traps were periodically serviced until sufficient specimens were collected or it was evident that sufficient specimens were not available. Whole crustacean specimens were placed in I-CHEM<sup>®</sup> pre-cleaned certified glass sample containers or wrapped in purified aluminum foil.

Even after an extensive effort, sufficient crab specimens could not be collected at South Marsh Island 229C (SMI229C) platform during Cruise 3. Efforts to collect blue crab at SMI229C began 29 September 1995, when six crab traps were deployed for 7 days during a weather delay caused by Hurricane Opal. The effort yielded no specimens. Another set of seven traps were deployed at SMI229C on 6 October 1995, and these traps were recovered the following day; no adult crabs were collected. Further sampling for crab specimens at SMI229C was delayed until 5 December 1995, partially for weather and partially to let blue crabs move into the area around this platform. A set of seven traps yielded nine blue crabs after a 1-day deployment. A set of nine traps was deployed on 6 December 1995; following a 2-day deployment, seven traps were recovered and three blue crabs were collected. Concurrent sampling effort conducted at Vermilion 31A (VR31A) during December collected 66 blue crabs. Conversations with local shrimp fishermen revealed that they had not been collecting any adult blue crab in trawls in the area near SMI229C; shrimp fishermen had been collecting blue crab in trawls taken inside the bays (Vermilion and Atchafalaya) and rivers. The relative abundance of blue crab at VR31A versus SMI229C may have been due to the close proximity of VR31A to the mouth of Vermilion Bay. The extent of the efforts to collect blue crab at SMI229C was discussed with the OOC Project Manager, who advised EPA of the problems of collecting sufficient crab specimens to fulfill BSI requirements. On 9 December 1995, the OOC Project Manager advised, based on his discussion with EPA, that sampling for blue crab at SMI229C be discontinued. Analytical results of only one composite sample of blue crab tissue are available for this platform during Cruise 3.

2.2.1.3 Platform-Associated Fish Assemblage. Platform-associated fish were collected as part of BSI and BSS. Fish were collected by hook-and-line, spearfishing,

and traps. Collection of platform-associated fish was conducted in the upper water column within a 100-m radius of the platform. Hook-and-line fishing was conducted from the survey vessel and underwater by divers using hand lines. Hook-and-line fishing conducted from the survey vessel was one of the primary methodologies utilized to collect platform-associated fish. Diver hook-and-line fishing was conducted only during Cruise 1 because it was not as selective as other methods (i.e., spearfishing) and it required divers to stay underwater for long periods of time. Fish caught by either method of hook-and-line were immediately placed in a clean Dykor<sup>®</sup>-coated fish box until the fish were immobile. Dykor<sup>®</sup> is a non-contaminating coating that is composed of polyvinylidene fluoride. The Dykor<sup>®</sup> coating is baked on to the aluminum tray at 550°F for 90 min; the baking process solidifies the coating and removes solvents and plasticizers.

Spearfishing with spear guns and pole spears was conducted by two-man dive teams and was the other primary method for collecting platform-associated fish during each survey. Spears were equipped with stainless steel tips to reduce the possibility of tissue contamination. Fish caught by spearing were placed in a dive bag, brought back to the survey vessel, and then placed in a clean Dykor<sup>®</sup>-coated fish box until the fish were immobile.

Traps were utilized for the collection of platform-associated fish only during Cruise 1 because traps were not selective and were relatively unsuccessful. Traps were baited with dead fish and deployed by divers at platform structure cross-members. To prevent possible contamination, only target species of fish in good condition (no open abrasions) following capture were taken for possible analyses. Fish traps were deployed and recovered by divers. One to four fish traps were deployed at each sampling location during the first day of occupation to maximize deployment time. The number of days at a particular sampling location and subsequent deployment time for the traps varied depending on weather conditions and local logistic schedule. Traps were recovered by divers during the last day of occupation at a sampling location. Fish caught in the traps and taken for possible analyses were placed in a clean Dykor<sup>®</sup>-coated fish box until the fish were immobile.

After the fish were immobile, they were examined for conspicuous external abnormalities (e.g., abrasions and lesions), rinsed in seawater, weighed, measured (standard length), wrapped in purified aluminum foil, externally labeled (in-field tissue sample labeling and tracking are described in **Section 2.2.2**), and stored frozen in a chest freezer. All efforts were made to minimize time between collection and storage.

### 2.2.2 Tissue Sample Labeling and Tracking System

Each biological specimen collected was tracked by a serial number encoded and printed on a barcode label attached to a pre-cleaned container or sample foil wrapping. Labels were photocomposed and printed on approximately 4.0 x 1.5 cm white polyester barcode labels available from Data Composition, Inc. The barcode labels contained the following header text: "OOC BIOACCUMULATION STUDY." The labels were coded in sequence from OOC-00001 to OOC-02500. All labels were printed in pairs. One

barcode label of a pair was attached to Field Logging Sheets. The second barcode label of the pair was attached to the aluminum foil wrap or sample container.

A Percon Series 10 barcode system was interfaced with a desktop computer and was utilized to enter field sample data into a spreadsheet template to produce a computer file duplicate of the hand-written Field Logging Sheets. As each biological sample was collected, the sample descriptive information was entered into the spreadsheet file containing the same data fields as the Field Logging Sheets. Sample descriptive information, each entered as a distinct data field, included the following:

- sample ID (barcode label designation);
- cruise number;
- platform location (Oil and Gas Area Lease Block designation);
- date of sample collection;
- sample type;
- species;
- collection method;
- fish weight (g);
- fish standard length (cm);
- responsible individual; and
- comments/external abnormalities.

After a sample was placed in aluminum foil or a pre-cleaned container, the barcode label on the Field Logging Sheets was scanned into the appropriate fields of the spreadsheet sample logging template. Other data fields were completed with the sample information outlined on the template. Upon completing in-field data entry, the spreadsheet file was saved and three copies were electronically generated. One copy was stored in the computer hard drive, and two backup copies were saved on separate floppy disks.

### 2.2.3 Tissue Sample Storage and Shipping

Tissue samples have unspecified holding times (EPA, 1991) and were retained frozen in chest freezers on board as initially packed until demobilization of each survey. A maximum/minimum thermometer was placed in each chest freezer to document temperature variation of the tissue samples. When at sea, these thermometers were checked daily by the Quality Assurance (QA) Officer's Field Representative, and the results of this check were logged.

After returning to the demobilization dock, the chest freezers containing the frozen biological specimens were removed from the survey vessel and loaded onto a truck with an enclosed cargo area. The top portion of each chest freezer was packed with dry ice and sealed. A maximum/minimum thermometer was placed in each chest freezer during shipment to document temperature variation of the tissue samples. Study personnel drove the truck with the chest freezers directly from the demobilization dock to the laboratory at Battelle Ocean Sciences (Battelle) in Duxbury, Massachusetts for further processing. When stopping for the night, the chest freezers were plugged in to

insure that the samples remained frozen and to preserve the dry ice. Chain-of-custody procedures were followed for sample transport and delivery to the Battelle laboratory. The method of transport successfully delivered all frozen biological specimens to the Battelle laboratory.

#### 2.2.4 Tissue-handling Equipment Blanks

Equipment blanks for semivolatile organic compounds (SVOCs) were collected during each field survey for tissue-handling equipment. Equipment included the sorting tray, the fish holding box, and the aluminum foil used during the processing of tissue samples. Equipment blanks for the sorting tray and fish holding box consisted of rinses of this equipment after routine cleaning. The equipment blank for the aluminum foil was collected by triple wrapping a piece (approximately 0.5 m<sup>2</sup>) of purified aluminum foil in purified aluminum foil.

### 2.3 LABORATORY

#### 2.3.1 Compositing and Subsampling

Prior to tissue processing, the chemical laboratory at Battelle was examined and precautions taken to ensure that potential sources of target analyte contamination (especially phthalate and phenol) were minimized. Precautions taken were as follows:

- carbon filters were placed over heating and air conditioning vents in the laboratory;
- tissue processing tasks were completed within the shelter of a cardboard box lined with purified aluminum foil;
- solvents and aqueous solutions were checked for contamination prior to use;
- stainless steel laboratory utensils (e.g., knives, tissuemizer probes) were solvent rinsed prior to use; and
- miscellaneous laboratory supplies (e.g., aluminum foil) were baked at 400°C for 4-h prior to use.

Because individual bivalve and crab specimens did not provide sufficient tissue for analysis of the EPA-specified target chemicals, it was necessary to composite the tissues from several bivalve or crab specimens collected during a cruise at an individual platform to prepare individual samples for chemical analysis. Initially, each specimen collected at a platform during a cruise was assigned a number. The order of these specimen numbers was randomized to assign each specimen into a sample group or into an excess specimen group, which was returned to the freezer.

Soft tissue from the bivalve specimens in a single sample group was removed from the shell with a stainless steel knife. A single sample group of bivalves consisted of 15 to 30 specimens. Edible tissues were removed from crabs with a stainless steel knife. A single sample group of crabs consisted of 10 to 15 specimens. The composite of tissues removed from the individual specimens in a single sample group was then

refrozen and frozen tissue homogenized in a Tekmar Tissuemizer equipped with a stainless steel probe. After homogenization, each sample was subsampled for volatile organic compound (VOC), SVOC, metal, and radionuclide analyses. A VOC sub-sample was taken first from the homogenate and immediately returned to the freezer to minimize handling time. Although there may be potential for loss of volatiles during homogenization of bivalves or crustacean samples, analysis of individual specimens or groups of specimens would not have been appropriate to represent the entire sample.

Fish specimens were treated individually. Whole fish samples were filleted with a stainless steel knife, and the skin was removed. A piece of a fillet was diced into approximately 0.6 cm cubes and placed immediately into a volatile organic analysis (VOA) vial which was placed in the freezer until analysis for VOCs. To minimize the potential loss of volatile compounds, fish fillets for analysis of VOCs were not homogenized. The rest of the tissue was refrozen and frozen tissue was homogenized in a Tekmar Tissuemizer equipped with a stainless steel probe. The fish tissue homogenate was then subsampled for SVOC, metal, and radionuclide analyses. The SVOC subsample was taken before sub-sampling for metals and radionuclides to minimize potential phthalate contamination. A portion of each sample was retained for determination of the wet weight:dry weight ratio.

Tissue sub-samples were stored frozen at -20°C. Samples were shipped frozen on blue ice in thermal insulated coolers to the appropriate laboratories by overnight courier with chain-of-custody for all samples.

### 2.3.2 Volatile Organic Compounds

Analyses of samples for VOCs were performed by Battelle. VOCs were measured in tissue and water (equipment blanks) samples using Purge and Trap Gas Chromatography/Mass Spectrometry (GC/MS). Target VOCs were

- benzene;
- toluene; and
- ethylbenzene.

Tissue samples were analyzed in separate analytical batches in the laboratory. Each analytical batch contained 15 or fewer field samples and the following quality control (QC) samples:

- procedural blank;
- matrix spike/matrix spike duplicate; and
- sample duplicate.

Tissue sample sizes were generally 3 to 5 g. The method of preparation of tissue samples for VOC analysis is based on the EPA published method of Hiatt (1981) and Easley *et al.* (1981). Frozen tissue samples were quickly crushed, placed into a sparge vessel, weighed, and fortified with surrogate internal standards (SIS) and anti-foam

agent. Water was then added to the container eliminating headspace. The container was sealed and sonicated in a cold water bath for approximately 15 min, fortified with recovery internal standards (RIS), and analyzed. Water sample (equipment blanks) sizes were generally 25 ml. Water samples were transferred to the sparge vessel, fortified with SIS and RIS, and analyzed.

Prior to instrumental analysis, the mass spectrometer was tuned with perfluorotributylamine to maximize peak shape and intensity. After tuning, a multi-level calibration curve was analyzed to demonstrate the linear range of analysis. Continuing calibration check standards were analyzed with every ten samples.

Samples were purged and trapped on a Tekmar purge and trap/desorption unit (purge temperature: 40°C). Target compound separation and identification was achieved using a Hewlett-Packard Model 5890 gas chromatograph equipped with a 30 m x 0.25 mm i.d. DB-624 column (or equivalent) and a Hewlett-Packard Model 5970 Mass Selective Detector. Samples were quantified for VOCs by the method of internal standards, using SIS.

Data quality objectives for VOC analyses are presented in **Table 2-1**. Method detection limits (MDLs) achieved are presented in **Table 2-2**.

### 2.3.3 Semivolatile Organic Compounds

Analyses of Cruise 1 samples for SVOCs were performed by Battelle and Arthur D. Little, Inc. (ADL) laboratories. ADL performed the analysis of three specimens for each species collected at the individual platforms, and Battelle performed the analysis of two specimens for the corresponding species and platforms. Battelle performed all SVOC analyses of Cruise 2 and 3 samples.

SVOCs were measured in tissue samples using GC/MS. Target SVOCs for tissue samples were

- phenol;
- fluorene;
- benzo[a]pyrene (BAP); and
- BEHP.

The analytical methodologies used by the two laboratories are described in the following discussion.

2.3.3.1 Battelle Ocean Sciences. Tissue samples were analyzed in separate analytical batches in the Battelle laboratory. Each analytical batch contained 15 or fewer field samples and the following QC samples:

- procedural blank;
- matrix spike/matrix spike duplicate; and
- sample duplicate.

Sample sizes were generally 25 g. Samples were weighed into an extraction vessel, fortified with surrogate SIS compounds and sodium sulfate (drying reagent), with an extraction solvent (dichloromethane) added. The tissue samples were extracted three times using maceration and shaker techniques. The remaining extract was filtered through a 293-mm Gelman glass fiber filter (pore size = 1.0 µm), concentrated to 2 ml, and split for separate cleanup techniques. Split A was processed through an alumina cleanup column, concentrated to 0.50-ml, fortified with RIS, and transferred to GC/MS for analysis of BEHP. Split B was processed through a gel permeation column high pressure liquid chromatograph, concentrated to 0.35 ml, and transferred to GC/MS for analysis of phenol, fluorene, and BAP.

Prior to instrumental analysis, the mass spectrometer was tuned with the tuning compound perfluorotributylamine to maximize peak shape and intensity. After tuning, a multi-level calibration curve was analyzed to demonstrate the linear range of analysis. Continuing calibration check standards were analyzed with every ten authentic samples.

Target compound separation and identification was achieved using a Hewlett-Packard Model 5890 gas chromatograph equipped with a 30 m x 0.25 mm i.d. DB-5MS column (or equivalent) and a Hewlett-Packard Model 5970 or 5972 Mass Selective Detector. Samples were quantified for SVOCs by the method of internal standards, using SIS.

Data quality objectives for SVOC analysis performed by Battelle are presented in **Table 2-3**. MDLs achieved are listed in **Table 2-4**. These MDLs were applied to the SVOC analyses of tissue samples.

2.3.3.2 Arthur D. Little, Inc. The processed tissue samples received from Battelle were further homogenized and subsampled (25 g wet weight) for chemical analysis. Sodium sulfate was added to each sample which was then spiked with between 0.4 and 1 µg of PAH, phenol, and phthalate surrogate compounds. Samples were spiked with surrogate compounds, fluorene-d<sub>10</sub>, benzo(a)pyrene-d<sub>12</sub>, phenol-d<sub>6</sub>, and bis(2-ethylhexyl)phthalate-d<sub>4</sub>. The samples were then extracted three times by maceration using 100 ml volumes of methylene chloride as the extraction solvent. The three solvent extracts were combined and concentrated to approximately 1 ml using Kuderna-Danish concentrators and under a stream of purified nitrogen gas.

Prior to high pressure liquid chromatography (HPLC) fractionation, all tissue extracts were passed through a silica gel cleanup column in order to remove any highly polar interfering compounds. The extracts were eluted with 9:1 methylene chloride:ethyl ether through a chromatography column packed with sodium sulfate and 5% deactivated silica gel in a slurry of 9:1 methylene chloride:ethyl ether. The eluate was collected and concentrated under nitrogen to the appropriate HPLC injection volume.

The extracts were fractionated by HPLC using a size exclusion chromatography column (Envirosep Gel Permeation Column [GPC]). The HPLC procedure involved the automated injection of the sample extract and a methylene chloride elution through an Envirosep GPC column. The HPLC fraction collection windows were calibrated with a solution containing phenol, 4,4'-dibromo-octafluorobiphenyl (DBOBF),

bis(2-ethylhexyl)phthalate (BEHP), benzo(g,h,i)perylene, and the primary sample interferences, lipid (as corn oil) and sulfur, prior to the analysis of a sample sequence. The PAH, phenol, and phthalate fraction of the extract was collected by an automated fraction collector programmed to collect the specified fraction based on the HPLC calibration solution.

If interferences were encountered, the extract was split in half after concentration. One half of the sample extract was spiked with phenol recovery standard and analyzed by GC/MS for phenol. The other half of sample extract was processed through an alumina clean-up column packed with 7% deactivated alumina, and eluted with methylene chloride. The eluate was collected, concentrated under a stream of purified nitrogen gas, spiked with recovery standards, and analyzed for PAHs and phthalate by GC/MS.

The final sample extract was concentrated to between 0.25 and 0.5 ml, spiked with recovery standards (acenaphthene-d<sub>10</sub> and chrysene-d<sub>12</sub> at 1 µg/ml), and analyzed for the target analytes by GC/MS in the selected ion monitoring (SIM) mode. The GC/MS was tuned and calibrated with a minimum of a five-point PAH/phenol/phthalate calibration spanning the linear range of the mass spectrometer prior to the analysis of a sample set. Samples were quantified using a 5-point calibration ranging from 25 to 5,000 ng/ml. The PAH, phenol, and phthalate target analytes were quantified versus the surrogate compounds added to the samples prior to extraction. The analyte concentrations were corrected for instrumental response based on average response factors generated from the calibration. The recoveries of the surrogate compounds were determined versus the internal standards added to the samples just prior to instrumental analysis.

Data quality objectives for SVOC analysis performed by ADL are presented in **Table 2-5**.

#### 2.3.4 Metals

Tissues were subsampled by personnel at Battelle (see **Section 2.3.1**) and delivered frozen to the Florida Institute of Technology (FIT), Melbourne, Florida with the appropriate chain of custody forms. Samples were logged upon receipt.

Just prior to analysis, samples were thawed and one subsample was removed and placed into an acid-washed, 180-ml boiling flask and freeze-dried. A second subsample (approximately 2 g of wet tissue sample) was placed in a 50 ml centrifuge tube for mercury analysis.

Complete digestion of approximately 1 g samples of dry tissue was carried out using H<sub>2</sub>O<sub>2</sub>, HNO<sub>3</sub>, and HCl with gentle refluxing. Samples were heated with a watch glass in place until a clear solution formed. The final solution was diluted to 20 ml using distilled deionized water (DDW). Concentrations of arsenic in the samples, standards, procedural blanks, and reagent blanks were determined by graphite furnace atomic absorption spectrometry (GFAAS) using a Perkin-Elmer 5100 instrument equipped with Zeeman background correction. Analysis of samples for cadmium was carried out by



inductively coupled plasma-mass spectrometry (ICP-MS) using a Perkin-Elmer ELAN 5000 instrument. Matrix interferences were carefully monitored for all elements using the method of standard additions.

All glassware used in the procedure were acid-washed and rinsed with DDW. Procedural blanks and triplicate samples were prepared with each set of samples. Standard Reference Materials TORT-1, a sample of lobster hepatopancreas provided by the National Research Council of Canada (NRC), and 1566A, a sample of oyster tissue provided by the U.S. National Institute of Standards and Technology (NIST), were prepared and analyzed by the methods described above to check the accuracy of the technique.

Tissue mercury concentrations were determined by heating separate subsamples of wet tissue in acid-washed, polypropylene centrifuge tubes with HNO<sub>3</sub> and H<sub>2</sub>SO<sub>4</sub>. Sample tubes were heated for 2 h in an 80-90°C water bath and allowed to cool. Each tube was centrifuged at 2,000 rpm and the supernate decanted into a 25 ml graduated cylinder. Any residual material in the centrifuge tube was rinsed twice with 5 ml of DDW, centrifuged and decanted into the graduated cylinder before diluting to a final volume of 20 ml with DDW. Mercury concentrations in the samples, standards, and blanks (procedural and reagent) were determined using a Laboratory Data Control Mercury System.

Data quality objectives for metal analyses are presented in **Table 2-6**. MDLs are listed in **Table 2-7**.

### 2.3.5 Radium

The activities of the two radioisotopes in edible tissue were expected to be low. A procedure was developed in order to achieve lower detection limits for these isotopes and to reduce the error range of the numbers generated at these lower detection limits. The basic premise was to increase the efficiency in counting of both <sup>226</sup>Ra and <sup>228</sup>Ra. Both of these isotopes decay to shorter lived alpha and beta emitters and the classic methodologies often utilize these higher specific activity isotopes to identify and quantify the parent isotopes. In the past, it has been difficult to separate the many different decay products and identify them as to the parent responsible for their production. In this method, the approach to this problem was simplified by making an assumption that at low levels of activity there would be a relatively constant contribution from both <sup>226</sup>Ra and <sup>228</sup>Ra if the isotopes were allowed to reach secular equilibrium with their decay products. This assumption was tested by running a series of low level standards for <sup>226</sup>Ra and <sup>228</sup>Ra separately and combined. A very accurate estimate of percentage contribution to both alpha and beta was developed when the samples were allowed to equilibrate for 3 weeks.

This approach allows the <sup>228</sup>Ra activity to be estimated utilizing an unlimited counting time without the need to consider decay of the <sup>228</sup>Ac (6 h half life) decay product. The classic method utilizes the isolation of this decay product and immediate counting. The rate of decay is so rapid that extended counting times are not feasible. Results of these

calibration experiments demonstrated that there is a very constant contribution of decay products from each isotope at low activity levels.

Following initial preparation, all sample materials were treated identically using the following method. Tissue samples were thoroughly homogenized and then dissolved in concentrated HNO<sub>3</sub>. This solution was extracted with an equal volume of heptane to remove the long-chain fat molecules. The nitric acid fraction was then solubilized with consecutive digestions using dilute HNO<sub>3</sub>, then HNO<sub>3</sub>-H<sub>2</sub>O<sub>2</sub>, and finally HNO<sub>3</sub>-HClO<sub>4</sub>-HF digestion. A Na<sub>2</sub>SO<sub>4</sub> fusion was performed to complete the destruction of the organic material and to insure the ionic state of the isotopes. A PbSO<sub>4</sub> precipitation was performed by the addition of Pb(NO<sub>3</sub>)<sub>2</sub> to a solution that contained a high concentration of sulfate. This precipitate was dissolved in diethylenetriaminepentaacetic acid (DTPA) and the radium was coprecipitated with BaSO<sub>4</sub>. The resulting barium precipitate was isolated on a planchet and the planchet was set aside for a 3 week period to allow the in-growth and equilibration of the decay products from both <sup>226</sup>Ra and <sup>228</sup>Ra on the same planchet. A Berthold LB-770-L2 10 Detector Gas Flow Proportional Counter was used for counting the samples. Samples were counted for up to 600 minutes and the activity of the <sup>226</sup>Ra and <sup>228</sup>Ra determined by the original calibration curve, which was developed by utilizing low level standards. The resulting data demonstrated much lower detection limits as well as reduced uncertainty in the counting error.

Data quality objectives for radionuclide analysis are presented in **Table 2-8** and detection limits are presented in **Table 2-9**.

## 2.4 DATA REPORTING CONVENTIONS

In this report, tissue data are reported on a dry weight basis. For VOCs, SVOCs, mercury, and radium target chemicals, the wet weight:dry weight ratio was used to convert concentrations on a wet weight basis to concentrations on a dry weight basis (concentration on dry weight basis = concentration on wet weight basis × wet weight:dry weight ratio). Arsenic and cadmium were reported on a dry weight basis.

Within the text and tables of this report, values below the MDL are reported as ND. The practical quantitation level (PQL), which is the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions (50 FR 46902), is defined for the data presented in this report as five times the MDL. Levels between the MDL and the PQL are designated with a "J" qualifier. For example, a value of 4.0 ng/g dry weight of benzene in a tissue sample is reported as 4.0J ng/g dry weight because it is between the MDL (3.2 ng/g dry weight) and the PQL (16 ng/g dry weight). The purpose of the "J" qualifier is to identify values that are above the MDL for which there is reduced confidence in the reported magnitude of the value because the value is close to the MDL. Other investigators using data from this report should maintain the "J" and other data qualifiers with the numeric values to properly convey the appropriate level of confidence with the numeric value.



Table 2-1. Data quality objectives for volatile organic compound analysis.

Quality Control (QC) Measurement	Frequency	Acceptance Limits	Corrective Action
Procedural Blank	1 per 15 samples	<5x MDL	Reanalysis or justification documented
Matrix Spike/Matrix Spike Duplicate	1 per 15 samples	50%-120% recovery; 30% RPD	Reanalysis or justification documented
Sample Replicate	1 per 15 samples	30% RPD for analytes >MDL	Reanalysis or justification documented
Surrogate Recovery	3 per sample	50%-120% recovery	Reanalysis or justification documented
Instrument Calibration	Initial	±25% RSD	Recalibration or justification documented
	Continuing checks (at a minimum, every 12 h)	±25% PD	Remedial maintenance, new initial calibration or justification documented

MDL = method detection limit.

PD = percent difference = [(average response factor (RF), initial calibration - daily RF) ÷ (average RF, initial calibration)] \* 100.

RPD = relative percent difference = [(replicate 1 - replicate 2) ÷ ((replicate 1 + replicate 2)/2)] \* 100.

RSD = relative standard deviation = [(standard deviation ÷ mean value)] \* 100.

Table 2-2. Method detection limits (ng/g dry weight) for volatile organic compound analyses of tissue samples.

Analyte	Method Detection Limits
Benzene	3.2
Toluene	3.8
Ethylbenzene	2.5

Table 2-3. Data quality objectives for semivolatile organic compound analysis performed by Battelle Ocean Sciences.

Quality Control Measurement	Frequency	Acceptance Limits	Corrective Action
Procedural Blank	1 per 15 samples	<5x MDL	Reanalysis or justification documented
Matrix Spike/Matrix Spike Duplicate	1 per 15 samples	45%-120% recovery; 30% RPD	Reanalysis or justification documented
Sample Replicate	1 per 15 samples	30% RPD for analytes >MDL	Reanalysis or justification documented
Surrogate Recovery	3 per sample	15%-125% recovery for phenol-d5; 35%-125% recovery for benzo[a]pyrene-d12; 45%-125% recovery for fluorene-d10 and bis(2-ethylhexyl)phthalate-d4	Reanalysis or justification documented
Instrument Calibration	Initial	±25% RSD	Recalibration or justification documented
Instrument Calibration	Continuing checks (at a minimum, every 12 h)	±25% PD	Remedial maintenance, new initial calibration, or justification documented

MDL = method detection limit.

PD = percent difference = [(average response factor (RF), initial calibration - daily RF) ÷ (average RF, initial calibration)] \* 100.

RPD = relative percent difference = [(replicate 1 - replicate 2) ÷ ((replicate 1 + replicate 2)/2)] \* 100.

RSD = relative standard deviation = [(standard deviation ÷ mean value)] \* 100.

Table 2-4. Method detection limits<sup>a</sup> (ng/g dry weight) for semivolatile organic compound analyses of tissue samples.

Analyte	Method Detection Limit
Phenol	270
Fluorene	0.66
Benzo[a]pyrene	0.60
Bis(2-ethylhexyl)phthalate	140

<sup>a</sup> These method detection limits were applied to all semivolatile organic compound data.

Table 2-5. Data quality objectives for semivolatile organic compound analysis performed by Arthur D. Little, Inc.

Element or Sample Type	Minimum Frequency	Data Quality Objective/Acceptance Criteria
Initial Calibration	Prior to every batch sequence	5 point curve; %RSD $\pm$ 25%
Continuing Calibration	Must end analytical sequence at every 12 samples or 16 h, whichever is more frequent	%Difference $\pm$ 30% for all analytes
SRM 1491	One per gas chromatography/mass spectrometry sequence	%Difference $\pm$ 15% for all certified values
Matrix Spike	Two per batch of 15-20 tissue/water samples	%Recovery for all spiked analytes 45%-150%; RPD $\pm$ 30%
Procedural Blank	One per batch of 15-20 field samples	No more than 2 analytes to exceed 5x method detection limit (MDL) unless analyte not detected in associated sample(s) or analyte concentration >10x blank; bis(2-ethylhexyl)phthalate and phenol not to exceed 10x MDL
Duplicate Sample Analysis	Every 45 samples	RPD $\pm$ 30% for all analytes >10x MDL
Surrogate Standards	Every sample	%R 35%-125% for d <sub>8</sub> -N and D <sub>12</sub> -BAP, 45%-125% for d <sub>10</sub> -Fl, D <sub>10</sub> -Ph, and d <sub>4</sub> -bis, and 15%-125% for d <sub>6</sub> -Phenol

RPD = relative percent difference.

RSD = relative standard deviation.

Table 2-6. Data quality objectives for metal analyses.

Analyte	Reporting Unit (dry weight)	Precision (±%)	Accuracy (%)	Completeness (%)	QC Samples	Acceptance Criteria	Corrective Action
Arsenic	µg/g	20	80-120	98	Standard and solvent check: every batch IC: every batch	Analytes in acids <MDL IC: 3 to 5 point curve RSD <25%	Project Manager review to determine appropriate action (recalibrate, reextract, reanalyze, quantify). All actions and rationale documented.
Cadmium	µg/g	20	80-120	98	CC: every 5-10 samples PB: @5% or 1 per batch SRM: @5% or 1 per batch	CC: RPD <30% for all analyses PB: <5x MDL SRM: ±20% RPD vs. Certified value	
Mercury	µg/g	20	80-120	98	MS: @5% or 1 per batch DS: @5% or 1 per batch	MS recovery: 80%-120% DS: %RPD within 20%	

CC = Continuing calibration.  
 DS = Duplicate sample/analytical replicate.  
 IC = Initial calibration.  
 MDL = Method detection limit.  
 MS = Matrix spike.

PB = Procedural or method blank.  
 RPD = Relative percent difference.  
 RSD = Relative standard deviation.  
 SRM = Standard reference material.

Table 2-7. Method detection limits (µg/g dry weight) for metal analyses of tissue samples.

Analyte	Method Detection Limit
Arsenic	0.05
Cadmium	0.002
Mercury	0.001

Table 2-8. Data quality objectives for radionuclide analysis.

Measurement	Matrix	Reporting Units	Precision (±%)	Accuracy (±%)	Completeness (%)	QC Samples @% frequency	Acceptance Criteria	Corrective Action
<sup>226</sup> Ra	Tissue	pCi/g wet weight	20	20	95	IC: Calibration verification for each batch; PB@5% or 1 per batch; MS@5% or 1 per batch; DS@5% or 1 per batch; Sample data check @10%	IC: ±10 of calibration value; PB <MDL; MS recovery: 75%-125%; DS: %RPD within ±20%; Manual calculation within ±0.01% of program calculation	IC: Adjust and recalibrate; PB: reanalyze all samples; MS: Recalibration, reanalysis documented; DS: Recalibration, reanalysis documented; Data check and correction documented
<sup>228</sup> Ra	Tissue	pCi/g wet weight	20	20	95	IC: Calibration verification for each batch; PB@5% or 1 per batch; LCS one per batch; MS@5% or 1 per batch; DS@5% or 1 per batch; Sample data check @10%	IC: ±10 of calibration value; PB <MDL; LCS recovery: 80%-120% MS recovery: 75%-125%; DS: %RPD within ±20% Manual calculation within ±0.01% of program calculation	Adjust and recalibrate; PB: reanalyze all samples; LCS: Recalibration, reanalysis documented; MS: Recalibration, reanalysis documented; DS: Recalibration, reanalysis documented; Data check and correction documented

DS = Duplicate sample/analytical replicate.

IC = Initial calibration.

LCS = Laboratory control standard.

MDL = Method detection limit.

MS = Matrix spike.

MSD = Matrix spike duplicate.

PB = Procedural or method blank.

RPD = Relative percent difference.

Table 2-9. Achieved detection limits (pCi/g dry weight) for radium isotopes  $^{226}\text{Ra}$  and  $^{228}\text{Ra}$ .

Radium Isotope	Detection Limits <sup>a</sup>
$^{226}\text{Ra}$	0.0004 - 0.015
$^{228}\text{Ra}$	0.0008 - 0.026

<sup>a</sup> Detection limits for the radium isotopes were determined for each analysis because the detection limit is a function of the quantity of sample and the gross background counts. The range of detection limits is reported.





## Section 3 RESULTS

### 3.1 STUDY SITES

#### 3.1.1 Platforms That Were Candidate Study Sites for the Definitive Component

3.1.1.1 East Breaks 165A (EB165A) (Discharging) and High Island A 356A (HI356A) (Non-discharging). EB165A and HI356A (**Figure 1-1**) are located approximately 60 km apart. Underwater visibility was 30 to 50 m. EB165A was installed in 1986 and is located in a water depth of approximately 260 m. EB165A is an eight-pile platform with multiple riser pipes. The produced water discharge rate at EB 165A was about 11,000 bbl/d. Produced water was discharged from a 15 cm diameter pipe approximately 2.4 m above the sea surface. It was originally thought the above-surface discharge was diverted horizontally by a cement diffuser, but after further inspection the "diffuser" was identified as a build-up of a precipitate on the platform pile adjacent to the discharge. Two approximately 7.6 cm diameter pipes also discharged water. As many as 100 carcharhinid sharks were observed in and around the platform structure of EB165A; these sharks presented difficulties in collections of fishes for tissue analysis. During spearfishing activities, sharks sometimes became aggressive and forced the divers to leave the water.

HI356A was installed in 1978 and is also an eight-pile platform. It is located in a water depth of approximately 91 m. When this study began, HI356A had been a non-discharging platform. It was determined during the second cruise that low-volume discharges of produced water began at HI356A after Cruise 1 and continued through Cruise 2. These discharges began on 14 January 1995. From this date to the conclusion of Platform Survey Component sampling during Cruise 2 at this platform, produced water discharge volumes averaged 29 bbl/d and did not exceed 130 bbl/d (**Figure 3-1**).

3.1.1.2 Green Canyon 19A (GC19A) (Discharging) and Eugene Island 361A (EI361A) (Non-discharging). GC19A and EI361A (**Figure 1-1**) are located approximately 68 km apart. Underwater visibility ranged from approximately 50 to 60 m. GC19A is located in water depths of 229 m. It is an eight-pile platform that was installed in 1986. It has multiple riser pipes and relatively large infrastructure between the platform piles. The primary produced water discharge at GC19A (7,100 bbl/d) was from a 15-cm diameter slotted pipe approximately 1.8 m below the sea surface. A much smaller secondary discharge also occurred at this platform during the study; this secondary discharge averaged about 130 bbl/d from 28 December 1994 to 11 December 1995. Carcharhinid sharks were observed in and around the platform structure of GC19A; their presence at this platform presented difficulties in collections of fishes for tissue analysis. During spearfishing activities, sharks sometimes became aggressive and forced the divers to leave the water. EI361A is a non-discharging eight-pile platform with riser pipes that is located in water depth of 91 m. It was installed in 1981.

3.1.1.3 Vermilion 214A (VR214A) (Discharging) and East Cameron 229A (EC229A) (Non-discharging). VR214A and EC229A (**Figure 1-1**) are located approximately 62 km apart in similar water depths of approximately 35 m. VR214A is a four-pile platform that was installed in 1971. Produced water from VR214A was discharged at a rate of about 6,800 bbl/d. EC229A is a relatively isolated unmanned four-pile platform that was installed in 1971.

3.1.1.4 Ship Shoal 277A (SS277A) (Discharging) and Eugene Island 360C (EI360C) (Non-discharging). SS277A and EI360C (**Figure 1-1**) are located approximately 60.5 km apart. Underwater visibility at the two sites was approximately 20 to 30 m. SS277A is located in a water depth of 67 m. Produced water from SS277A was discharged approximately 4.5 m below the sea surface at a rate of about 5,200 bbl/d. The discharge pipe was equipped with a rubber extension tube that created a subsurface discharge. EI360C is a non-discharging platform that was installed in 1984. It is located in a water depth of about 91 m.

### 3.1.2 Platforms That Are Located in the Vicinity of the Mississippi River Delta

3.1.2.1 Mississippi Canyon 194A (MC194A) (Discharging) and Mississippi Canyon 280A (MC280A) (Non-discharging). MC194A and MC280A (**Figure 1-1**) are located approximately 17 km apart in a similar water depth of approximately 305 m. At MC194A, a murky upper water layer from the surface to a depth of approximately 15 m was present with underwater visibility of 4 m. The murky upper water layer was most probably due to the combination of tidal conditions, rough sea state, and the close proximity of MC194A to the Mississippi River delta. The murky upper water layer was not observed at MC280A, where underwater visibility was approximately 40 m. MC194A is an eight-pile platform with multiple riser pipes that was installed in 1978. Produced water from MC194A was discharged at a rate of about 14,000 bbl/d from a 15-cm diameter pipe that extended approximately 12 m below the sea surface. Carcharhinid sharks were observed in and around the platform structure of MC194A, but did not cause any problems during sampling. MC280A is a relatively large platform with numerous riser pipes that was installed in 1983.

3.1.2.2 South Timbalier 130 (ST130) (Discharging) and South Timbalier 128X (ST128X) (Non-discharging). ST130 and ST128X (**Figure 1-1**) are located approximately 11 km apart. The ST130 complex is comprised of four platforms with produced water discharged from an eight-pile platform that was installed in 1963. This platform is located in a water depth of 49 m. Produced water is discharged from a 15-cm diameter pipe approximately 1 m above the sea surface at a discharge rate of 5,200 bbl/d. A brown residue was present on the platform understructure and associated biofouling organisms to a water depth of approximately 9 m directly below the produced water discharge. ST128X is a four-pile platform that was installed in 1982 in a water depth of 31 m.

### 3.1.3 Platforms That Are Located in Areas of High Platform Density

3.1.3.1 Vermilion 245E (VR245E) (Discharging) and South Marsh Island 72C (SMI72C) (Non-discharging). VR245E and SMI72C (**Figure 1-1**) are located approximately 34 km apart in a similar water depth of approximately 37 m. The four-pile VR245E platform is part of a three-platform complex and was installed in 1981. Produced water was discharged at a rate of 5,300 bbl/d approximately 3 m below the sea surface from a 15-cm diameter pipe. The flow of produced water from the pipe was partially blocked by the build-up of an apparent precipitate. SMI72C is an eight-pile platform that was installed in 1972.

3.1.3.2 Eugene Island 330C (EI330C) (Discharging) and Eugene Island 352B (EI352B) (Non-discharging). EI330C and EI352B (**Figure 1-1**) are located approximately 8 km apart in water depths of 76 and 91 m, respectively. The eight-pile EI330C is part of a two-platform complex; this platform was installed in 1972. Produced water is discharged approximately 24 m below the sea surface at a rate of 6,600 bbl/d. EI352B is a four-pile platform that was installed in 1984.

### 3.1.4 Platforms That Are Located Offshore Texas

3.1.4.1 High Island 376A (HI376A) (Discharging) and West Cameron 587B (WC587B) (Non-discharging). HI376A and WC587B (**Figure 1-1**) are located approximately 42 km apart. HI376A is an eight-pile platform that was installed in 1981 in a water depth of 101 m. Produced water from HI376A is discharged from a 20-cm diameter pipe at a depth of 82 m below the sea surface. The produced water discharge rate was 4,800 bbl/d. WC587B is a four-pile platform that is located in a water depth of 58 m. It was installed in 1984.

3.1.4.2 High Island 382F (HI382F) (Discharging) and High Island A 553A (HI553A) (Non-discharging). HI382F and HI553A (**Figure 1-1**) are located approximately 34 km apart in water depths of 104 and 79 m, respectively. HI382F is an eight-pile platform that has been in place since 1986. Produced water from HI382F is discharged from a 15-cm diameter pipe at a depth of 38 m below the sea surface; the produced water discharge rate was about 8,200 bbl/d. HI553A is a relatively small four-pile platform.

### 3.1.5 Platforms That Are Located in Water Depths Less Than 10 Meters

3.1.5.1 Eugene Island 100C (EI100C) (Discharging) and Ship Shoal 100DA (SS100DA) (Non-discharging). EI100C and SS100DA (**Figure 1-1**) are located approximately 33 km apart in a similar water depth of approximately 6.5 m. The six-pile EI100C platform is part of a four-platform complex. This platform was installed in 1960. Produced water is discharged at a rate of about 14,000 bbl/d from a 15-cm diameter pipe; the opening of the discharge pipe was located just below the sea surface. SS100DA is a relatively isolated four-pile platform that was installed in 1987.

3.1.5.2 Vermilion 31A (VR31A) (Discharging) and South Marsh Island 229C (SMI229C) (Non-discharging). VR31A and SMI229C are located approximately 23 km apart (**Figure 1-1**). VR31A is a 20-pile platform and is part of a very large 4-platform

complex. This platform was installed in 1984. The water depth at this site is approximately 6.5 m. Produced water was discharged through a horizontal diffuser system, which consisted of a two-tiered bifurcation of a single pipe into four 15-cm diameter pipes that extended approximately 1 m below the sea surface. The discharge rate was about 8,200 bbl/d. SMI229C is a two-platform complex comprised of two relatively small four-pile structures connected by a "catwalk." This platform was installed in 1985 and the water depth at the platform site is approximately 6.5 m.

### 3.2 TISSUE RESULTS

Analytical results for the tissue samples are presented in the **Appendix** and summarized in **Tables 3-1** through **3-24**.

### 3.3 QUALITY ASSURANCE

This study was conducted under a comprehensive QA Program that encompassed all aspects of planning, sample and data collection, sample processing, analysis, and management. The same QA procedures, protocols, and standards that were used during the Definitive Component were used during this component of the study. Details for this QA program are presented in the report for the Definitive Component ([Gulf of Mexico Produced Water Bioaccumulation Study Definitive Component](#)).

Due to sample losses in the laboratory and lack of sufficient samples to repeat analyses, VOC results were not available for a gray triggerfish specimen at EC229A during Cruise 1 and two hardhead catfish specimens at VR31A during Cruise 3. Results for BEHP for a spadefish specimen were not available for ST130 during Cruise 3.

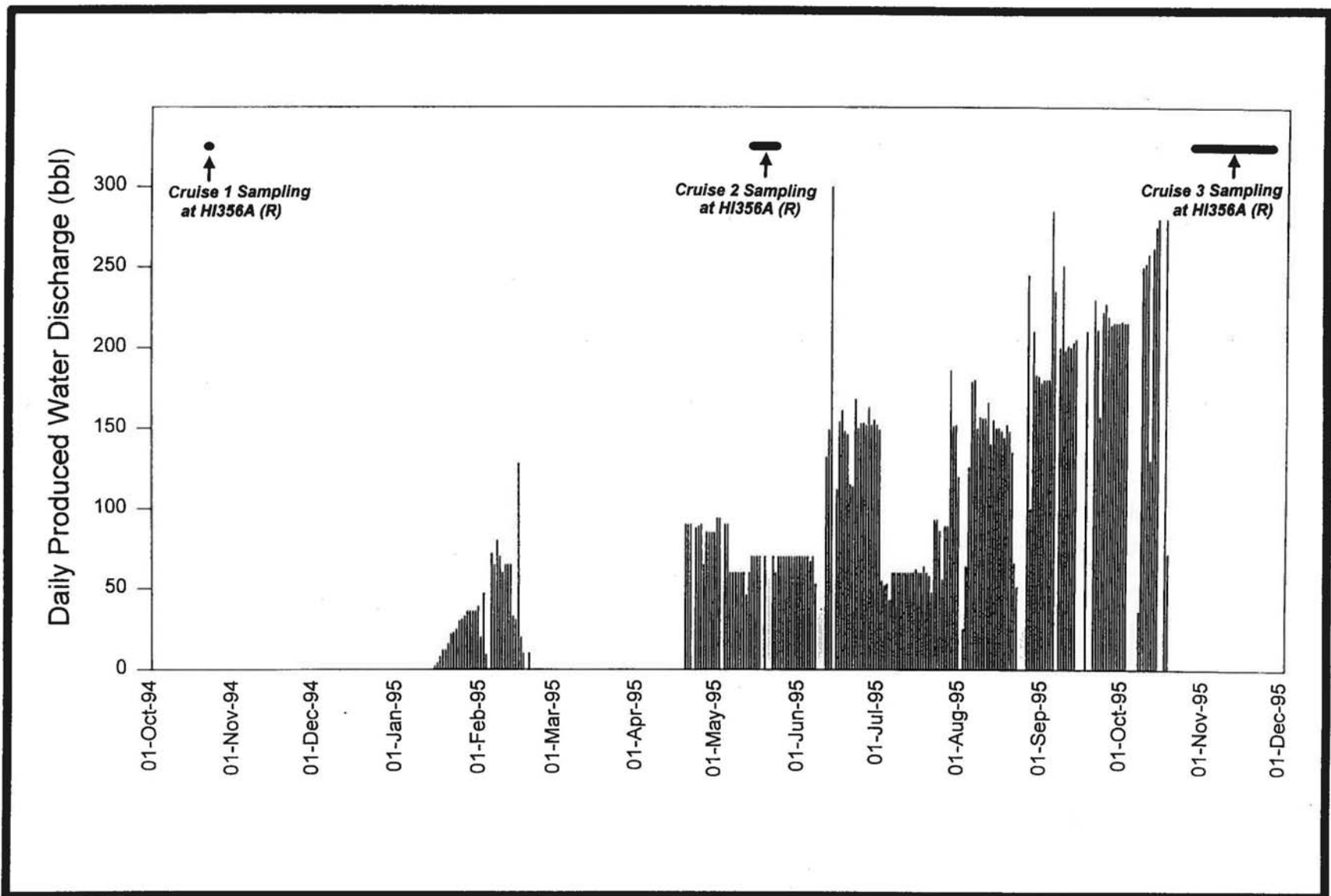


Figure 3-1. Daily produced water discharge volume at High Island A 356A (HI356A) (R).



Table 3-1. Summary of the analytical results (dry weight) for tissue samples collected during Cruise 1 (Fall 1994) at East Breaks 165A (discharging platform) and High Island A 356A<sup>a</sup>. Ranges are based on five specimens of each species at each platform.

Analyte	East Breaks 165A		High Island A 356A	
	Yellow chub	Creole-fish	Yellow chub	Creole-fish
Benzene (ng/g)	ND	ND - 8.2J	ND	ND
Toluene (ng/g)	ND	ND - 46	ND - 13J	ND
Ethylbenzene (ng/g)	ND	ND - 30	ND	ND
Phenol (ng/g)	ND	ND	ND - 330J	ND - 310J
Fluorene (ng/g)	ND	ND	ND	ND
Benzo[a]pyrene (ng/g)	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g)	ND	ND	ND	ND - 480J
Arsenic (µg/g)	1.3 - 2.2	2.0 - 3.9	0.96 - 1.8	2.7 - 18
Cadmium (µg/g)	0.010 - 0.031	0.010 - 0.035	0.007J - 0.024	0.005J - 0.036
Mercury (µg/g)	0.030 - 0.054	0.10 - 0.26	0.043 - 0.19	0.080 - 0.17
<sup>226</sup> Ra (pCi/g)	ND - 0.005	ND - 0.016	ND - 0.004	ND - 0.005
<sup>228</sup> Ra (pCi/g)	ND - 0.042	ND - 0.060	ND - 0.11	ND - 0.038

J = value between method detection limit (MDL) and practical quantitation level (five times MDL).

ND = not detected (below MDL).

<sup>a</sup> High Island A 356A was a non-discharging platform prior to Cruise 1. Low-volume discharges began on 14 January 1995 and continued through the Cruise 2 sampling. These discharges averaged 29 bbl/d over this period.

Table 3-2. Summary of the analytical results (dry weight) for tissue samples collected during Cruise 1 (Fall 1994) at Green Canyon 19A (discharging platform) and Eugene Island 361A (non-discharging platform). Ranges are based on five specimens of each species at each platform.

Analyte	Green Canyon 19A		Eugene Island 361A	
	Yellow chub	Creole-fish	Yellow chub	Creole-fish
Benzene (ng/g)	ND	ND	ND	ND
Toluene (ng/g)	ND - 9.5J	ND - 14J	ND - 11J	ND
Ethylbenzene (ng/g)	ND	ND	ND	ND
Phenol (ng/g)	ND - 990J	ND - 780J	ND - 370J	ND - 330J
Fluorene (ng/g)	ND	ND	ND	ND
Benzo[a]pyrene (ng/g)	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g)	ND - 780J	ND - 360J	ND - 1500	ND - 1700
Arsenic (µg/g)	0.60 - 2.4	2.9 - 3.8	0.72 - 1.47	1.4 - 3.9
Cadmium (µg/g)	0.005J - 0.025	0.002J - 0.018	0.005J - 0.012	ND - 0.021
Mercury (µg/g)	0.033 - 0.11	0.11 - 0.18	0.028 - 0.036	0.12 - 0.24
<sup>226</sup> Ra (pCi/g)	ND - 0.011	ND - 0.016	ND - 0.008	ND - 0.010
<sup>228</sup> Ra (pCi/g)	ND - 0.032	ND	ND - 0.11	ND - 0.084

J = value between method detection limit (MDL) and practical quantitation level (five times MDL).

ND = not detected (below MDL).



Table 3-3. Summary of the analytical results (dry weight) for tissue samples collected during Cruise 1 (Fall 1994) at Vermilion 214A (discharging platform) and East Cameron 229A (non-discharging platform). Ranges are based on five specimens of each species at each platform except as noted.

Analyte	Vermilion 214A		East Cameron 229A	
	Red snapper <sup>a</sup>	Gray triggerfish	Red snapper	Gray triggerfish <sup>b</sup>
Benzene (ng/g)	ND	ND	ND	ND
Toluene (ng/g)	ND	ND	ND - 12J	ND - 37J
Ethylbenzene (ng/g)	ND	ND	ND	ND - 19
Phenol (ng/g)	ND	ND	ND - 560J	ND
Fluorene (ng/g)	ND	ND	ND	ND - 52
Benzo[a]pyrene (ng/g)	ND	ND	ND	ND - 12
Bis(2-ethylhexyl)phthalate (ng/g)	ND - 350J	ND - 210J	ND - 290J	ND - 1100
Arsenic (µg/g)	0.28 - 0.67	18 - 26	0.48 - 0.74	5.7 - 28
Cadmium (µg/g)	ND - 0.010	0.002J - 0.011	ND - 0.007J	0.003J - 0.050
Mercury (µg/g)	0.27 - 0.39	0.026 - 0.43	0.31 - 0.45	0.076 - 1.1
<sup>226</sup> Ra (pCi/g)	ND	ND	ND	ND - 0.009
<sup>228</sup> Ra (pCi/g)	ND	ND	ND - 0.140	ND

J = value between method detection limit (MDL) and practical quantitation level (five times MDL).

ND = not detected (below MDL).

<sup>a</sup> Results for phenol, fluorene, benzo[a]pyrene, and bis(2-ethylhexyl)phthalate are based on four specimens because one sample was lost in the laboratory.

<sup>b</sup> Results for benzene, toluene, and ethylbenzene are based on four specimens because one sample was lost in the laboratory.

Table 3-4. Summary of the analytical results (dry weight) for tissue samples collected during Cruise 1 (Fall 1994) at Ship Shoal 277A (discharging platform) and Eugene Island 360C (non-discharging platform). Ranges are based on five specimens of each species at each platform except as noted.

Analyte	Ship Shoal 277A		Eugene Island 360C	
	Yellow chub	Red snapper	Yellow chub <sup>a</sup>	Red snapper
Benzene (ng/g)	ND	ND	ND	ND
Toluene (ng/g)	ND	ND	ND	ND - 12J
Ethylbenzene (ng/g)	ND	ND	ND	ND
Phenol (ng/g)	ND - 670J	ND - 300J	ND	ND - 1000J
Fluorene (ng/g)	ND	ND	ND	ND
Benzo[a]pyrene (ng/g)	ND - 3.3	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g)	ND - 240J	ND - 280J	ND - 600J	ND - 610J
Arsenic (µg/g)	0.75 - 1.5	0.37 - 0.88	1.44 - 2.1	0.27 - 0.43
Cadmium (µg/g)	ND - 0.018	0.005J - 0.025	0.009J - 0.026	ND - 0.005J
Mercury (µg/g)	0.023 - 0.25	0.19 - 0.22	0.039 - 0.064	0.21 - 0.38
<sup>226</sup> Ra (pCi/g)	ND - 0.004	ND	ND - 0.009	ND
<sup>228</sup> Ra (pCi/g)	ND - 0.034	ND - 0.083	ND - 0.10	ND

J = value between method detection limit (MDL) and practical quantitation level (five times MDL).

ND = not detected (below MDL).

<sup>a</sup> Results for benzene, toluene, and ethylbenzene are based on four specimens because one sample was lost in the laboratory.

Table 3-5. Summary of the analytical results (dry weight) for tissue samples collected during Cruise 2 (Spring 1995) at East Breaks 165A (discharging platform) and High Island A 356A<sup>a</sup>. Ranges are based on five specimens of each species at each platform.

Analyte	East Breaks 165A		High Island A 356A	
	Yellow chub	Creole-fish	Yellow chub	Creole-fish
Benzene (ng/g)	ND	ND	ND	ND
Toluene (ng/g)	ND	ND	ND	ND
Ethylbenzene (ng/g)	ND	ND	ND	ND
Phenol (ng/g)	ND - 350J	ND	ND	ND
Fluorene (ng/g)	ND	ND	ND	ND
Benzo[a]pyrene (ng/g)	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g)	ND	ND	ND - 220J	ND
Arsenic (µg/g)	4.3 - 5.4	7.0 - 17	3.8 - 5.8	5.7 - 18
Cadmium (µg/g)	0.011 - 0.023	0.006J - 0.036	0.005J - 0.022	0.008J - 0.037
Mercury (µg/g)	0.071 - 0.11	0.16 - 0.38	0.065 - 1.4	0.14 - 0.26
<sup>226</sup> Ra (pCi/g)	ND - 0.067	ND - 0.062	ND - 0.032	ND - 0.043
<sup>228</sup> Ra (pCi/g)	ND - 0.093	ND - 0.074	ND	ND - 0.071

J = value between method detection limit (MDL) and practical quantitation level (five times MDL).

ND = not detected (below MDL).

<sup>a</sup> High Island A 356A was a non-discharging platform prior to Cruise 1. Low-volume discharges began on 14 January 1995 and continued through the Cruise 2 sampling. These discharges averaged 29 bbl/d over this period.

Table 3-6. Summary of the analytical results (dry weight) for tissue samples collected during Cruise 2 (Spring 1995) at Green Canyon 19A (discharging platform) and Eugene Island 361A (non-discharging platform). Ranges are based on five specimens of each species at each platform.

Analyte	Green Canyon 19A		Eugene Island 361A	
	Yellow chub	Creole-fish	Yellow chub	Creole-fish
Benzene (ng/g)	ND	ND	ND	ND
Toluene (ng/g)	ND	ND	ND	ND
Ethylbenzene (ng/g)	ND	ND	ND	ND
Phenol (ng/g)	ND - 630J	ND - 570J	ND	ND
Fluorene (ng/g)	ND	ND	ND	ND
Benzo[a]pyrene (ng/g)	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g)	ND	ND - 141J	ND - 240J	ND - 290J
Arsenic (µg/g)	2.8 - 6.1	3.5 - 16	1.7 - 4.0	4.2 - 13
Cadmium (µg/g)	0.008J - 0.017	0.014 - 0.023	0.007J - 0.020	0.011 - 0.021
Mercury (µg/g)	0.041 - 0.079	0.18 - 0.23	0.059 - 0.230	0.14 - 0.22
<sup>226</sup> Ra (pCi/g)	ND - 0.041	ND - 0.025	ND - 0.042	ND - 0.029
<sup>228</sup> Ra (pCi/g)	ND - 0.082	ND - 0.035J	ND - 0.033J	ND - 0.079

J = value between method detection limit (MDL) and practical quantitation level (five times MDL).

ND = not detected (below MDL).

Table 3-7. Summary of the analytical results (dry weight) for tissue samples collected during Cruise 2 (Spring 1995) at Vermilion 214 (discharging platform) and East Cameron 229A (non-discharging platform). Ranges are based on five specimens of each species at each platform.

Analyte	Vermilion 214		East Cameron 229A	
	Red snapper	Gray triggerfish	Red snapper	Gray triggerfish
Benzene (ng/g)	ND - 6.2J	ND	ND	ND
Toluene (ng/g)	ND - 9.4J	ND	ND	ND
Ethylbenzene (ng/g)	ND	ND	ND	ND
Phenol (ng/g)	ND	ND	ND	ND
Fluorene (ng/g)	ND - 2.8J	ND	ND	ND
Benzo[a]pyrene (ng/g)	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g)	ND - 210J	ND	ND - 260J	ND
Arsenic ( $\mu\text{g/g}$ )	0.59 - 1.4	14 - 47	0.57 - 1.2	19 - 41
Cadmium ( $\mu\text{g/g}$ )	ND - 0.003J	ND	ND - 0.004J	ND - 0.004J
Mercury ( $\mu\text{g/g}$ )	0.30 - 0.55	0.30 - 1.9	0.64 - 0.83	0.37 - 1.3
<sup>226</sup> Ra (pCi/g)	ND - 0.049	ND - 0.059	ND - 0.023	ND - 0.033
<sup>228</sup> Ra (pCi/g)	ND - 0.13	ND - 0.11	ND - 0.13	ND - 0.12

J = value between method detection limit (MDL) and practical quantitation level (five times MDL).

ND = not detected (below MDL).

Table 3-8. Summary of the analytical results (dry weight) for tissue samples collected during Cruise 2 (Spring 1995) at Ship Shoal 277A (discharging platform) and Eugene Island 360C (non-discharging platform). Ranges are based on five specimens of each species at each platform.

Analyte	Ship Shoal 277A		Eugene Island 360C	
	Yellow chub	Creole-fish	Yellow chub	Creole-fish
Benzene (ng/g)	ND	ND	ND	ND
Toluene (ng/g)	ND	ND	ND	ND
Ethylbenzene (ng/g)	ND	ND	ND	ND
Phenol (ng/g)	ND	ND	ND - 380J	ND
Fluorene (ng/g)	ND	ND	ND	ND
Benzo[a]pyrene (ng/g)	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g)	ND - 250J	ND	ND	ND - 160J
Arsenic ( $\mu\text{g/g}$ )	2.9 - 4.8	7.3 - 26	3.4 - 5.9	5.9 - 12
Cadmium ( $\mu\text{g/g}$ )	0.007J - 0.018	0.006J - 0.011	0.007J - 0.043	ND - 0.013
Mercury ( $\mu\text{g/g}$ )	0.052 - 0.068	0.13 - 0.31	0.052 - 0.15	0.073 - 0.15
<sup>226</sup> Ra (pCi/g)	ND - 0.025	0.015 - 0.054	ND - 0.026	ND - 0.087
<sup>228</sup> Ra (pCi/g)	ND - 0.087	ND - 0.23	ND - 0.15	ND - 0.15

J = value between method detection limit (MDL) and practical quantitation level (five times MDL).

ND = not detected (below MDL).

Table 3-9. Summary of the analytical results (dry weight) for tissue samples collected during Cruise 2 (Spring 1995) at Mississippi Canyon 194A (discharging platform) and Mississippi Canyon 280A (non-discharging platform). Ranges are based on five specimens of each species at each platform.

Analyte	Mississippi Canyon 194A		Mississippi Canyon 280A	
	Yellow chub	Gray triggerfish	Yellow chub	Gray triggerfish
Benzene (ng/g)	ND	ND	ND - 4.8J	ND
Toluene (ng/g)	ND	ND	ND	ND
Ethylbenzene (ng/g)	ND	ND	ND	ND
Phenol (ng/g)	ND - 570J	ND - 280J	ND - 700J	ND - 910J
Fluorene (ng/g)	ND - 4.6	ND	ND	ND
Benzo[a]pyrene (ng/g)	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g)	ND - 400J	ND - 270J	ND	ND
Arsenic ( $\mu\text{g/g}$ )	2.0 - 5.9	24 - 59	2.8 - 6.4	13 - 22
Cadmium ( $\mu\text{g/g}$ )	ND - 0.004J	ND - 0.002J	ND - 0.008J	ND - 0.009J
Mercury ( $\mu\text{g/g}$ )	0.036 - 0.070	0.074 - 0.26	0.063 - 0.29	0.047 - 0.15
<sup>226</sup> Ra (pCi/g)	ND - 0.028	ND - 0.067	ND - 0.025J	ND - 0.068
<sup>228</sup> Ra (pCi/g)	ND - 0.15	ND - 0.18	ND - 0.16	ND - 0.15

J = value between method detection limit (MDL) and practical quantitation level (five times MDL).

ND = not detected (below MDL).

Table 3-10. Summary of the analytical results (dry weight) for tissue samples collected during Cruise 2 (Spring 1995) at South Timbalier 130 (discharging platform) and South Timbalier 128X (non-discharging platform). Ranges are based on five specimens of each species at each platform.

Analyte	South Timbalier 130		South Timbalier 128X	
	Red snapper	Gray triggerfish	Red snapper	Gray triggerfish
Benzene (ng/g)	ND	ND	ND	ND
Toluene (ng/g)	ND	ND	ND	ND
Ethylbenzene (ng/g)	ND	ND	ND	ND
Phenol (ng/g)	ND	ND	ND - 300J	ND - 350J
Fluorene (ng/g)	ND	ND	ND	ND
Benzo[a]pyrene (ng/g)	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g)	ND - 180J	ND - 280J	ND - 150J	ND - 440J
Arsenic ( $\mu\text{g/g}$ )	1.1 - 1.7	13 - 59	1.2 - 2.5	66 - 170
Cadmium ( $\mu\text{g/g}$ )	ND - 0.004J	ND	0.002J - 0.004J	ND - 0.020
Mercury ( $\mu\text{g/g}$ )	0.23 - 0.37	0.21 - 2.3	0.26 - 0.33	0.15 - 1.3
<sup>226</sup> Ra (pCi/g)	ND - 0.023J	ND - 0.073	ND - 0.054	ND - 0.052
<sup>228</sup> Ra (pCi/g)	ND - 0.089	ND - 0.079	ND - 0.14	ND - 0.11

J = value between method detection limit (MDL) and practical quantitation level (five times MDL).

ND = not detected (below MDL).

Table 3-11. Summary of the analytical results (dry weight) for tissue samples collected during Cruise 2 (Spring 1995) at Vermilion 245E (discharging platform) and South Marsh Island 72C (non-discharging platform). Ranges are based on five specimens of each species at each platform.

Analyte	Vermilion 245E		South Marsh Island 72C	
	Red snapper	Gray triggerfish	Red snapper	Gray triggerfish
Benzene (ng/g)	ND	ND	ND	ND
Toluene (ng/g)	ND	ND	ND	ND
Ethylbenzene (ng/g)	ND	ND	ND	ND
Phenol (ng/g)	ND	ND	ND - 460J	ND - 640J
Fluorene (ng/g)	ND	ND	ND	ND
Benzo[a]pyrene (ng/g)	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g)	ND	ND	ND - 990	ND
Arsenic ( $\mu\text{g/g}$ )	0.40 - 1.1	7.2 - 94	1.2 - 2.2	21 - 57
Cadmium ( $\mu\text{g/g}$ )	ND - 0.003J	ND - 0.008J	0.002J - 0.004J	ND - 0.008J
Mercury ( $\mu\text{g/g}$ )	0.49 - 0.64	0.052 - 0.79	0.62 - 0.88	0.25 - 1.7
<sup>226</sup> Ra (pCi/g)	ND - 0.050	ND - 0.027	ND - 0.048	ND - 0.023
<sup>228</sup> Ra (pCi/g)	ND - 0.38	ND - 0.044	ND - 0.16	ND - 0.13

J = value between method detection limit (MDL) and practical quantitation level (five times MDL).

ND = not detected (below MDL).

Table 3-12. Summary of the analytical results (dry weight) for tissue samples collected during Cruise 2 (Spring 1995) at Eugene Island 330C (discharging platform) and Eugene Island 352B (non-discharging platform). Ranges are based on five specimens of each species at each platform.

Analyte	Eugene Island 330C		Eugene Island 352B	
	Yellow chub	Gray triggerfish	Yellow chub	Gray triggerfish
Benzene (ng/g)	ND	ND	ND	ND
Toluene (ng/g)	ND	ND	ND	ND
Ethylbenzene (ng/g)	ND	ND	ND	ND
Phenol (ng/g)	ND	ND	ND	ND
Fluorene (ng/g)	ND	ND - 8.2	ND	ND
Benzo[a]pyrene (ng/g)	ND	ND	ND	ND - 2.2J
Bis(2-ethylhexyl)phthalate (ng/g)	ND	ND	ND	ND - 180J
Arsenic ( $\mu\text{g/g}$ )	3.5 - 7.0	21 - 35	5.6 - 73	49 - 83
Cadmium ( $\mu\text{g/g}$ )	0.002J - 0.008J	ND - 0.003J	ND - 0.003J	ND - 0.002J
Mercury ( $\mu\text{g/g}$ )	0.035 - 0.062	0.25 - 1.2	0.038 - 0.28	0.10 - 2.0
<sup>226</sup> Ra (pCi/g)	ND - 0.17	ND - 0.065	ND - 0.042	ND - 0.041
<sup>228</sup> Ra (pCi/g)	ND - 0.069	ND - 0.14	ND - 0.10	ND

J = value between method detection limit (MDL) and practical quantitation level (five times MDL).

ND = not detected (below MDL).

Table 3-13. Summary of the analytical results (dry weight) for tissue samples collected during Cruise 2 (Spring 1995) at High Island 376A (discharging platform) and West Cameron 587B (non-discharging platform). Ranges are based on five specimens of each species at each platform.

Analyte	High Island 376A		West Cameron 587B	
	Yellow chub	Red snapper	Yellow chub	Red snapper
Benzene (ng/g)	ND - 3.2J	ND - 3.5J	ND	ND - 4.3J
Toluene (ng/g)	ND	ND	ND	ND
Ethylbenzene (ng/g)	ND - 6.7J	ND	ND - 6.5J	ND
Phenol (ng/g)	ND	ND	ND	ND
Fluorene (ng/g)	ND	1.8J - 18	ND	ND
Benzo[a]pyrene (ng/g)	ND	ND - 2.0J	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g)	ND	ND	ND - 160J	ND
Arsenic ( $\mu\text{g/g}$ )	3.5 - 7.5	0.41 - 0.78	5.8 - 14	1.3 - 2.0
Cadmium ( $\mu\text{g/g}$ )	0.004J - 0.013	ND - 0.003J	0.003J - 0.013	0.002J - 0.009J
Mercury ( $\mu\text{g/g}$ )	0.081 - 0.22	0.58 - 2.0	0.038 - 0.061	0.10 - 0.59
<sup>226</sup> Ra (pCi/g)	ND - 0.029	ND - 0.17	ND - 0.023	ND - 0.049
<sup>228</sup> Ra (pCi/g)	ND - 0.14	ND - 0.14	ND - 0.050	ND - 0.14

J = value between method detection limit (MDL) and practical quantitation level (five times MDL).

ND = not detected (below MDL).

Table 3-14. Summary of the analytical results (dry weight) for tissue samples collected during Cruise 2 (Spring 1995) at High Island 382F (discharging platform) and High Island A 553A (non-discharging platform). Ranges are based on five specimens of each species at each platform.

Analyte	High Island 382F		High Island A 553A	
	Yellow chub	Creole-fish	Yellow chub	Creole-fish
Benzene (ng/g)	ND	ND	ND	ND
Toluene (ng/g)	ND	ND	ND	ND
Ethylbenzene (ng/g)	ND	ND	ND	ND
Phenol (ng/g)	ND - 590J	ND - 600J	ND - 750J	ND - 790J
Fluorene (ng/g)	ND	ND	ND	ND
Benzo[a]pyrene (ng/g)	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g)	ND	ND	ND	ND
Arsenic ( $\mu\text{g/g}$ )	1.9 - 4.0	6.2 - 14	5.6 - 9.7	6.6 - 8.5
Cadmium ( $\mu\text{g/g}$ )	0.004J - 0.020	0.005J - 0.015	0.005J - 0.010	0.007J - 0.011
Mercury ( $\mu\text{g/g}$ )	0.046 - 0.23	0.066 - 0.15	0.056 - 0.076	0.084 - 0.12
<sup>226</sup> Ra (pCi/g)	ND - 0.028	ND - 0.064	ND - 0.030	ND - 0.043
<sup>228</sup> Ra (pCi/g)	ND - 0.048	ND - 0.10	ND - 0.10	ND - 0.033

J = value between method detection limit (MDL) and practical quantitation level (five times MDL).

ND = not detected (below MDL).

Table 3-15. Summary of the analytical results (dry weight) for tissue samples collected during Cruise 2 (Spring 1995) at Eugene Island 100C (discharging platform) and Ship Shoal 100DA (non-discharging platform). Ranges are based on five specimens of each species at each platform.

Analyte	Eugene Island 100C		Ship Shoal 100DA	
	Hardhead catfish	Sheepshead	Hardhead catfish	Sheepshead
Benzene (ng/g)	ND - 23	ND	ND	ND
Toluene (ng/g)	ND - 11J	ND	ND - 30J	ND
Ethylbenzene (ng/g)	ND	ND	ND	ND - 28J
Phenol (ng/g)	ND	ND	ND - 1100J	ND
Fluorene (ng/g)	ND	ND	ND	ND
Benzo[a]pyrene (ng/g)	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g)	ND - 350J	ND - 260J	ND	ND
Arsenic ( $\mu\text{g/g}$ )	21 - 62	4.2 - 7.9	49 - 96	0.53 - 4.0
Cadmium ( $\mu\text{g/g}$ )	ND - 0.010	0.002J - 0.005J	ND - 0.015	0.004J - 0.010
Mercury ( $\mu\text{g/g}$ )	0.16 - 0.79	0.14 - 0.48	0.36 - 0.50	0.22 - 1.0
<sup>226</sup> Ra (pCi/g)	ND	ND - 0.042	ND - 0.065	ND - 0.026
<sup>228</sup> Ra (pCi/g)	ND - 0.075	ND - 0.12	ND - 0.045	ND - 0.18

J = value between method detection limit (MDL) and practical quantitation level (five times MDL).

ND = not detected (below MDL).

Table 3-16. Summary of the analytical results (dry weight) for tissue samples collected during Cruise 2 (Spring 1995) at Vermilion 31A (discharging platform) and South Marsh Island 229C (non-discharging platform). Ranges for hardhead catfish are based on five specimens per platform; ranges for blue crab and eastern oyster are based on five composite samples per platform.

Analyte	Vermilion 31A			South Marsh Island 229C		
	Blue crab	Hardhead catfish	Eastern oyster	Blue crab	Hardhead catfish	Eastern oyster
Benzene (ng/g)	ND - 14J	ND - 21	ND - 15J	ND	ND	ND
Toluene (ng/g)	ND - 19	ND - 21	ND - 25	ND	ND	ND
Ethylbenzene (ng/g)	ND	ND	ND - 11J	ND	ND	ND
Phenol (ng/g)	ND - 1300J	ND - 610J	ND	470J - 2000	ND	ND
Fluorene (ng/g)	ND - 1.8J	ND - 5.3	11 - 21	ND	ND - 24	8.3 - 18
Benzo[a]pyrene (ng/g)	ND	ND	ND - 1.9J	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g)	ND - 350J	ND	ND	ND	ND	ND
Arsenic ( $\mu\text{g/g}$ )	11 - 15	10 - 22	11 - 15	11 - 19	8.4 - 38	12 - 16
Cadmium ( $\mu\text{g/g}$ )	0.26 - 0.39	ND - 0.003J	3.3 - 3.9	0.40 - 0.61	ND - 0.004J	3.2 - 3.7
Mercury ( $\mu\text{g/g}$ )	0.20 - 0.28	0.53 - 0.86	0.027 - 0.041	0.26 - 0.39	0.37 - 0.94	0.034 - 0.044
<sup>226</sup> Ra (pCi/g)	0.012 - 0.073	ND - 0.065	ND - 0.065J	0.016 - 0.030	ND - 0.061	ND - 0.038J
<sup>228</sup> Ra (pCi/g)	0.042J - 0.25	ND - 0.092	ND - 0.070J	ND - 0.060	ND - 0.099	ND - 0.14

J = value between method detection limit (MDL) and practical quantitation level (five times MDL).

ND = not detected (below MDL).

Table 3-17. Summary of the analytical results (dry weight) for tissue samples collected during Cruise 3 (Fall 1995) at Mississippi Canyon 194A (discharging platform) and Mississippi Canyon 280A (non-discharging platform). Ranges are based on five specimens of each species at each platform.

Analyte	Mississippi Canyon 194A		Mississippi Canyon 280A	
	Creole-fish	Gray triggerfish	Creole-fish	Gray triggerfish
Benzene (ng/g)	ND	ND	ND	ND
Toluene (ng/g)	ND	ND - 5.9J	ND	ND
Ethylbenzene (ng/g)	ND	ND	ND	ND
Phenol (ng/g)	ND	ND - 280J	ND	ND
Fluorene (ng/g)	ND	ND	ND	ND
Benzo[a]pyrene (ng/g)	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g)	ND	ND	ND	ND
Arsenic ( $\mu\text{g/g}$ )	3.4 - 15	16 - 45	3.7 - 7.6	11 - 43
Cadmium ( $\mu\text{g/g}$ )	ND - 0.082	0.002J - 0.005J	0.009J - 0.021	0.003J - 0.005J
Mercury ( $\mu\text{g/g}$ )	0.074 - 0.33	0.082 - 0.15	0.17 - 0.21	0.066 - 0.099
<sup>226</sup> Ra (pCi/g)	ND - 0.005J	ND - 0.029	ND	ND - 0.005J
<sup>228</sup> Ra (pCi/g)	ND	ND	ND	ND - 0.077

J = value between method detection limit (MDL) and practical quantitation level (five times MDL).

ND = not detected (below MDL).

Table 3-18. Summary of the analytical results (dry weight) for tissue samples collected during Cruise 3 (Fall 1995) at South Timbalier 130 (discharging platform) and South Timbalier 128X (non-discharging platform). Ranges are based on five specimens of each species at each platform except as noted.

Analyte	South Timbalier 130		South Timbalier 128X	
	Red snapper	Spadefish <sup>a</sup>	Red snapper	Spadefish
Benzene (ng/g)	ND	ND	ND	ND
Toluene (ng/g)	ND	ND	ND	ND
Ethylbenzene (ng/g)	ND	ND	ND	ND
Phenol (ng/g)	ND - 420J	ND - 320J	ND	ND
Fluorene (ng/g)	ND	ND	ND - 1.1J	ND
Benzo[a]pyrene (ng/g)	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g)	ND	ND	ND	ND
Arsenic ( $\mu\text{g/g}$ )	0.78 - 2.2	5.1 - 6.7	0.98 - 1.6	3.4 - 13
Cadmium ( $\mu\text{g/g}$ )	ND - 0.003J	0.004J - 0.010	0.002J - 0.005J	0.005J - 0.010
Mercury ( $\mu\text{g/g}$ )	0.34 - 0.52	0.27 - 0.75	0.31 - 0.37	0.40 - 0.51
<sup>226</sup> Ra (pCi/g)	ND	ND - 0.009J	ND - 0.018	ND - 0.024
<sup>228</sup> Ra (pCi/g)	ND - 0.062	ND	ND - 0.031	ND

J = value between method detection limit (MDL) and practical quantitation level (five times MDL).

ND = not detected (below MDL).

<sup>a</sup> Results for bis(2-ethylhexyl)phthalate are based on four specimens because one sample was lost in the laboratory.



Table 3-19. Summary of the analytical results (dry weight) for tissue samples collected during Cruise 3 (Fall 1995) at Vermilion 245E (discharging platform) and South Marsh Island 72C (non-discharging platform). Ranges are based on five specimens of each species at each platform.

Analyte	Vermilion 245E		South Marsh Island 72C	
	Red snapper	Gray triggerfish	Red snapper	Gray triggerfish
Benzene (ng/g)	ND	ND	ND	ND
Toluene (ng/g)	ND	ND	ND	ND
Ethylbenzene (ng/g)	ND	ND	ND	ND
Phenol (ng/g)	ND	ND - 380J	ND	ND
Fluorene (ng/g)	ND	ND	ND	ND
Benzo[a]pyrene (ng/g)	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g)	ND	ND	ND	ND
Arsenic ( $\mu\text{g/g}$ )	0.56 - 1.6	22 - 55	0.78 - 2.8	21 - 28
Cadmium ( $\mu\text{g/g}$ )	ND	ND - 0.003J	ND - 0.003J	ND - 0.004J
Mercury ( $\mu\text{g/g}$ )	0.38 - 0.73	0.47 - 0.98	0.696 - 0.86	0.215 - 1.6
<sup>226</sup> Ra (pCi/g)	ND - 0.042	ND - 0.020	ND - 0.009	ND - 0.020
<sup>228</sup> Ra (pCi/g)	ND - 0.21	ND - 0.083	ND - 0.050	0.042 - 0.15

J = value between method detection limit (MDL) and practical quantitation level (five times MDL).

ND = not detected (below MDL).

Table 3-20. Summary of the analytical results (dry weight) for tissue samples collected during Cruise 3 (Fall 1995) at Eugene Island 330C (discharging platform) and Eugene Island 352B (non-discharging platform). Ranges are based on five specimens of each species at each platform.

Analyte	Eugene Island 330C		Eugene Island 352B	
	Yellow chub	Creole-fish	Yellow chub	Creole-fish
Benzene (ng/g)	ND	ND	ND	ND
Toluene (ng/g)	ND	ND	ND - 7.1J	ND
Ethylbenzene (ng/g)	ND	ND	ND	ND
Phenol (ng/g)	ND - 290J	ND	ND	ND
Fluorene (ng/g)	ND	ND - 0.99J	ND - 2.9J	ND
Benzo[a]pyrene (ng/g)	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g)	ND	ND - 350J	ND	ND
Arsenic ( $\mu\text{g/g}$ )	1.8 - 4.8	1.8 - 12	3.4 - 7.8	4.8 - 15
Cadmium ( $\mu\text{g/g}$ )	0.005J - 0.018	0.003J - 0.043	0.005J - 0.008J	0.009J - 0.025
Mercury ( $\mu\text{g/g}$ )	0.040 - 0.10	0.14 - 0.21	0.060 - 0.16	0.13 - 0.16
<sup>226</sup> Ra (pCi/g)	ND - 0.014	ND - 0.015J	ND - 0.008J	ND - 0.010J
<sup>228</sup> Ra (pCi/g)	ND	ND - 0.040	ND	ND

J = value between method detection limit (MDL) and practical quantitation level (five times MDL).

ND = not detected (below MDL).

Table 3-21. Summary of the analytical results (dry weight) for tissue samples collected during Cruise 3 (Fall 1995) at High Island 376A (discharging platform) and West Cameron 587B (non-discharging platform). Ranges are based on five specimens of each species at each platform.

Analyte	High Island 376A		West Cameron 587B	
	Yellow chub	Rockhind	Yellow chub	Rockhind
Benzene (ng/g)	ND	ND	ND	ND
Toluene (ng/g)	ND	ND	ND	ND
Ethylbenzene (ng/g)	ND	ND	ND	ND
Phenol (ng/g)	ND - 370J	ND	ND	ND
Fluorene (ng/g)	ND	ND	ND	ND
Benzo[a]pyrene (ng/g)	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g)	ND	ND	ND - 170J	ND
Arsenic ( $\mu\text{g/g}$ )	1.8 - 6.1	3.0 - 4.9	2.0 - 4.0	2.8 - 14
Cadmium ( $\mu\text{g/g}$ )	0.013 - 0.020	0.004J - 0.007J	0.004J - 0.017	0.004J - 0.006J
Mercury ( $\mu\text{g/g}$ )	0.080 - 0.81	0.39 - 0.74	0.035 - 0.064	0.35 - 0.74
<sup>226</sup> Ra (pCi/g)	ND - 0.009J	ND - 0.019	ND - 0.020	ND - 0.014
<sup>228</sup> Ra (pCi/g)	ND - 0.11	ND - 0.063	ND	ND - 0.038

J = value between method detection limit (MDL) and practical quantitation level (five times MDL).

ND = not detected (below MDL).

Table 3-22. Summary of the analytical results (dry weight) for tissue samples collected during Cruise 3 (Fall 1995) at High Island 382F (discharging platform) and High Island A 553A (non-discharging platform). Ranges are based on five specimens of each species at each platform.

Analyte	High Island 382F		High Island A 553A	
	Yellow chub	Creole-fish	Yellow chub	Creole-fish
Benzene (ng/g)	ND	ND	ND	ND
Toluene (ng/g)	ND	ND	ND	ND
Ethylbenzene (ng/g)	ND	ND	ND	ND
Phenol (ng/g)	ND	ND	ND	ND - 300J
Fluorene (ng/g)	ND	ND	ND	ND
Benzo[a]pyrene (ng/g)	ND	ND	ND - 4.1	ND
Bis(2-ethylhexyl)phthalate (ng/g)	ND - 470J	ND	ND	ND
Arsenic ( $\mu\text{g/g}$ )	1.2 - 3.7	7.3 - 21	2.5 - 6.3	8.0 - 37
Cadmium ( $\mu\text{g/g}$ )	0.009J - 0.017	0.006J - 0.051	0.006J - 0.013	ND - 0.009J
Mercury ( $\mu\text{g/g}$ )	0.053 - 0.092	0.12 - 0.16	0.043 - 0.086	0.094 - 0.14
<sup>226</sup> Ra (pCi/g)	ND - 0.014	ND - 0.013	ND	ND - 0.009J
<sup>228</sup> Ra (pCi/g)	ND	ND	ND	ND - 0.065

J = value between method detection limit (MDL) and practical quantitation level (five times MDL).

ND = not detected (below MDL).

Table 3-23. Summary of the analytical results (dry weight) for tissue samples collected during Cruise 3 (Fall 1995) at Eugene Island 100C (discharging platform) and Ship Shoal 100DA (non-discharging platform). Ranges are based on five specimens of each species at each platform.

Analyte	Eugene Island 100C		Ship Shoal 100DA	
	Hardhead catfish	Sheepshead	Hardhead catfish	Sheepshead
Benzene (ng/g)	ND	ND	ND	ND
Toluene (ng/g)	ND	ND - 8.1J	ND	ND
Ethylbenzene (ng/g)	ND	ND	ND	ND
Phenol (ng/g)	ND - 630J	ND	ND - 1300J	ND
Fluorene (ng/g)	ND - 1.8J	ND	ND - 1.8J	ND
Benzo[a]pyrene (ng/g)	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g)	ND	ND	ND	ND
Arsenic ( $\mu\text{g/g}$ )	11 - 54	10.0 - 16	22 - 147	1.3 - 23
Cadmium ( $\mu\text{g/g}$ )	0.002J - 0.013	0.003J - 0.005J	0.003J - 0.005J	0.003J - 0.012
Mercury ( $\mu\text{g/g}$ )	0.35 - 0.84	0.22 - 0.44	0.27 - 0.81	0.19 - 0.91
<sup>226</sup> Ra (pCi/g)	ND - 0.009J	ND - 0.010J	ND - 0.057	ND - 0.032
<sup>228</sup> Ra (pCi/g)	ND - 0.033	ND - 0.053	ND - 0.13	ND - 0.12

J = value between method detection limit (MDL) and practical quantitation level (five times MDL).

ND = not detected (below MDL).

Table 3-24. Summary of the analytical results (dry weight) for tissue samples collected during Cruise 3 (Fall 1995) at Vermilion 31A (VR31A) (discharging platform) and South Marsh Island 229C (SMI229C) (non-discharging platform). Ranges for hardhead catfish are based on five specimens per platform; ranges for eastern oyster are based on five composite samples per platform; ranges for blue crab at VR31A are based on five composite samples; and the values for blue crab at SMI229C are for a single composite sample.

Analyte	Vermilion 31A			South Marsh Island 229C		
	Blue crab	Hardhead catfish	Eastern oyster	Blue crab	Hardhead catfish	Eastern oyster
Benzene (ng/g)	ND	ND	ND	ND	ND	ND
Toluene (ng/g)	ND	ND	ND	ND	ND	ND
Ethylbenzene (ng/g)	ND	ND	ND	ND	ND	ND
Phenol (ng/g)	ND	ND	ND	ND	ND	ND
Fluorene (ng/g)	ND	ND - 4.0	22 - 140	ND	ND - 2.6J	7.0 - 17
Benzo[a]pyrene (ng/g)	ND	ND	2.8J - 19	ND	ND	ND - 4.9
Bis(2-ethylhexyl)phthalate (ng/g)	ND	ND - 240J	ND	ND	ND	ND
Arsenic ( $\mu\text{g/g}$ )	7.9 - 9.0	6.1 - 13	7.2 - 9.0	7.6	1.0 - 17	8.8 - 11
Cadmium ( $\mu\text{g/g}$ )	0.48 - 0.68	ND - 0.098	4.2 - 5.0	0.27	0.002J - 0.004J	5.2 - 6.6
Mercury ( $\mu\text{g/g}$ )	0.21 - 0.32	0.67 - 1.8	0.029 - 0.046	0.26	0.47 - 1.0	0.044 - 0.055
<sup>226</sup> Ra (pCi/g)	ND - 0.031	ND	ND - 0.037	0.028	ND - 0.013	ND - 0.023
<sup>228</sup> Ra (pCi/g)	ND	ND - 0.045	ND	ND	ND	ND - 0.14

J = value between method detection limit (MDL) and practical quantitation level (five times MDL).

ND = not detected (below MDL).

## Section 4 DISCUSSION

### 4.1 PROBLEMS IN DETECTING BIOACCUMULATION

Detection of bioaccumulation of chemicals by marine animals from treated produced water discharged to nearshore and open ocean waters from production platforms poses several technical difficulties. The extent of bioaccumulation of a metallic or organic chemical by marine animals from produced water or any other source depends on the concentration and chemical form(s) of the chemical in the ambient water and food (the exposure concentration) and tendency of marine organisms to bioaccumulate the chemical. Exposure concentrations (relative to background concentrations) of chemicals of concern in the ambient environment of marine organisms near offshore production platforms depend on the difference in the concentration of the chemicals in the produced water and the ambient seawater and the rate of dilution of the produced water following discharge to the ocean. Most of the chemicals of concern in produced water are natural products that are present naturally, with additions from human activities, in clean seawater and in tissues of marine animals. The problem of detecting bioaccumulation of these chemicals from produced water is to distinguish between natural bioaccumulation from background concentrations or from the multitude of non-platform point and non-point sources in the northwestern Gulf of Mexico and the additional possible bioaccumulation from the diluting produced water plume itself. This problem is made even more difficult when the composition of the produced water is not known. Each of the problems inherent in detecting bioaccumulation of chemicals from produced water is discussed in this section.

#### 4.1.1 Problem Definition

The objective of the Platform Survey Component was to determine the concentrations of EPA-specified target chemicals in the edible tissue of marine animals collected in the immediate vicinity of discharging and non-discharging platforms in different regions of the northwestern Gulf of Mexico. Produced water destined for ocean disposal is treated to remove petroleum hydrocarbons to a concentration below the current regulatory limits of 42 mg/L daily maximum and 29 mg/L monthly average total oil and grease (57 FR 224:54642, November 19, 1992 and 58 FR 231:63964, December 3, 1993). Produced waters that meet these regulatory requirements still contain small amounts of petroleum hydrocarbons, other organic compounds, and several metals and radionuclides. All the natural constituents of produced water are derived from the petroleum and the geological strata where the produced water resided for millions of years. These chemicals also are natural ingredients of seawater and are present at trace concentrations even in clean ocean water.

Produced water is diluted rapidly when it is discharged to the ocean, usually by several hundred fold within a few tens of meters of the produced water discharge (Brandsma and Smith, 1996). Most produced water chemicals reach background concentrations of natural seawater within 100 to 1,000 m or less of offshore produced water discharges.

Marine plants and animals bioaccumulate bioavailable forms of all the target chemicals in this study when they are present at natural background concentrations in the ambient seawater. Therefore, the problem in detecting or demonstrating bioaccumulation of chemicals from produced water or other point sources is to distinguish between tissue residues of target chemicals that are clearly attributable to uptake from the rapidly-diluting produced water plume and those that represent natural background concentrations of chemicals in the animal tissues. The difficulty in detecting bioaccumulation from a point source in free-ranging marine animals is greatest for metals, because most are present at naturally high and variable concentrations in coastal seawater and in the tissues of marine animals (Neff, 1997a).

#### 4.1.2 Comparison of Chemical Concentrations in Marine Animals from Discharge and Non-discharge Sites

All 12 of the target chemicals evaluated in this investigation are ubiquitous trace contaminants or natural ingredients of the marine environment. Some of the chemicals (benzene, toluene, ethylbenzene, and phenol) do not have a strong potential to bioaccumulate in tissues of marine organisms because of their high aqueous solubilities, lack of persistence in the ocean, and low octanol/water partition coefficients ( $K_{ow}$ ). These chemicals rarely are detected in tissues of marine organisms, even near point sources, such as primary treated sewage discharges (Gossett *et al.*, 1983).

The other target organic chemicals, because of their low aqueous solubilities and high affinity for tissue lipids (high  $K_{ow}$ ), do have a potential to bioaccumulate. Fluorene, BAP, and BEHP in the marine environment are derived from a wide variety of point and non-point sources, only some of which, in the case of the PAHs, are anthropogenic. Thus, their concentrations in seawater, sediments, and the tissues of marine organisms are highly variable. These semivolatile organic chemicals adsorb strongly to particles in seawater and sediments. The adsorbed forms, particularly those associated by combustion-derived soot particles, are not readily bioavailable (Readman *et al.*, 1984; Farrington, 1991; Gustafsson *et al.*, 1997). PAHs and BEHP are rapidly metabolized and excreted by most marine animals (Stegeman, 1981; Wofford *et al.*, 1981). Thus, there often is a poor correlation between concentrations of these chemicals in seawater and marine sediments on the one hand and the tissues of marine organisms on the other.

The metals and radionuclides are natural components of the marine environment. All are present in tissues of marine animals at detectable concentrations, if analytical methods are sufficiently sensitive (Newman and Jagoe, 1994). Therefore, virtually all marine animals are likely to contain traces of the target metals and radionuclides in their soft tissues.

Because of the multiple natural and anthropogenic sources of all of the target chemicals in the marine environment of the northwestern Gulf of Mexico, it is highly probable that marine animals from the Gulf, even from areas remote from human activities, will contain highly variable concentrations of each of the target chemicals in their tissues. Neff (1997a) evaluated the concentration range of the 12 target chemicals in this study

in tissues of marine animals from the Gulf of Mexico and from throughout the world and showed that concentrations of these chemicals in tissues of apparently healthy marine animals may vary by several orders of magnitude. High concentrations in tissues often are not associated with clearly-defined anthropogenic sources. For example, published values for concentrations of arsenic in tissues of marine animals from the Gulf of Mexico range from less than 0.2 to 126 µg/g dry weight (parts per million). Highest concentrations often are in marine animals living near natural phosphate mineral deposits in the eastern Gulf (NOAA, 1995).

If marine animals near offshore platforms were bioaccumulating the target chemicals from produced water, one would expect that concentrations of the chemicals would be significantly higher in tissues of marine animals from platforms with large-volume produced water discharges, than in tissues of marine animals from nearby offshore platforms with no produced water discharge. Highly specific and sensitive analytical methods were used in this investigation to quantify traces of the target chemicals in edible tissues of marine animals from several regions containing offshore oil and gas platforms in the northwestern Gulf of Mexico. The results of this investigation, representing concentrations of 12 target inorganic and organic chemicals in tissues of 494 to 496 samples of marine animals, represents the largest existing database on chemical residues in tissues of marine animals, particularly fishes, from the northwestern Gulf of Mexico. MDLs were well below risk-based concentrations of the analytes in tissues of fishes consumed by man (EPA, 1995). Thus, very low tissue concentrations and small differences among sampling sites could be detected. Nevertheless, no consistent trends in concentrations of the different target chemicals were detected in different regions of the northwestern Gulf of Mexico and between produced water discharging and non-discharging sites.

Despite the low MDLs of the analytical methods used in this study, most of the tissue samples did not contain quantifiable concentrations of organic contaminants (**Table 4-1**). More than 90% of the analytical results for benzene, toluene, ethylbenzene, BAP, and BEHP were below the MDLs. Similarly, more than 80% of the analytical results for phenol and fluorene were below the MDLs. Most of the other results (1.4 to 17.3% for different analytes) for these analytes were below the PQL, equivalent to five times the MDL (**Table 4-1**). More than half the analytical results for <sup>226</sup>Ra and <sup>228</sup>Ra were below the MDL. On the other hand all tissue samples contained concentrations of arsenic and mercury above the PQL, and more than 80% of the results for cadmium were above the MDL.

These results indicate that the concentrations of all the target organic chemicals were very low in fishes and invertebrates from the vicinity of the 12 pairs of offshore produced water discharging and non-discharging platforms in the northwestern Gulf of Mexico. Of the volatile organics (benzene, toluene, and ethylbenzene), only benzene was detected at a concentration above the PQL in tissues of marine animals. It was detected three times, in two samples of hardhead catfish, one from E1100C and one from VR31A, both discharging platforms in less than 10 m of water off the Louisiana coast, and in one composite sample of blue crab from VR31A, all from Cruise 2. Tissue concentrations of

benzene above the PQL ranged from 0.014 to 0.023  $\mu\text{g/g}$  dry weight, well below the Risk-Based Concentration of 0.55  $\mu\text{g/g}$  dry weight.

Most of the 7.1% of tissue samples containing fluorene at a concentration above the PQL were also from discharging platform VR31A. Three hardhead catfish samples and ten oyster samples collected on Cruises 2 and 3 from this site contained fluorene at concentrations above the PQL. Fluorene concentrations in the hardhead catfish ranged from 0.003 to 0.005  $\mu\text{g/g}$ . Concentrations in the oysters ranged from 0.011 to 0.14  $\mu\text{g/g}$ . Oysters collected during the second and third cruise from the paired inshore non-discharging platform SMI229C also contained quantifiable concentrations of fluorene, ranging from 0.008 to 0.018  $\mu\text{g/g}$ . One or a few fish muscle samples from a few other discharging and non-discharging platforms contained fluorene concentrations above the PQL, ranging from 0.004 to 0.052  $\mu\text{g/g}$ . The risk-based concentration of fluorene in the tissues of fishes consumed by man is 270  $\mu\text{g/g}$  dry weight (EPA, 1995). By comparison, oysters collected as part of the National Status and Trends Mussel Watch Program from the Louisiana coast contained <MDL to 0.271  $\mu\text{g/g}$  dry weight fluorene; oysters from the Texas coast contained up to 1.075  $\mu\text{g/g}$  (NOAA, 1995). Thus, the concentrations of fluorene in tissues of oysters and fishes from the vicinity of production platforms in the northwestern Gulf of Mexico were lower than in tissues of oysters from elsewhere in the area.

BAP was detected at a concentration above the PQL in two samples, an oyster sample from VR31A and a yellow chub muscle sample from HI553A, a non-discharging site. BAP concentrations were 0.019 and 0.004  $\mu\text{g/g}$ , respectively. Eight of the remaining 11 oyster samples from the VR31A/SMI229C shallow-water platform pair contained BAP concentrations less than five times the MDL (J values), ranging from 0.002J to 0.007J  $\mu\text{g/g}$ . Oysters from the Louisiana and Texas coasts contained up to 0.167 and 0.225  $\mu\text{g/g}$  BAP, respectively (NOAA, 1995). Thus, oysters from the vicinity of platforms in less than 10 m of water off the Louisiana coast contain lower concentrations of BAP than oysters from other coastal waters of the western Gulf of Mexico.

BEHP was present in two fish muscle samples at a concentration greater than the PQL. Both fish samples were from non-discharging platforms. The approximately 11% of tissue samples in which BEHP was detected were randomly distributed among platform sites and cruises. BEHP is not a natural or intentionally added component of produced water. Therefore, one would not expect to detect it at elevated concentrations in tissues of marine animals near offshore produced water discharges. Because it is a ubiquitous component of the environment, derived from evaporation from flexible plastics where is present at concentrations up to about 50% as a physical plasticizer, it is frequently found in environmental samples as an artifact, introduced during sampling, sample processing, or sample analysis (Lopezavila *et al.*, 1990). Tissues of fishes from the Gulf of Mexico contain <0.005 to about 0.1  $\mu\text{g/g}$  BEHP (Giam *et al.*, 1978). Thus, concentrations of BEHP in marine animals from the Gulf of Mexico are low.

The three target metals usually are detected in the tissues of marine animals. They are natural ingredients of seawater and marine sediments. All 496 tissue samples collected in this study contained concentrations of arsenic and mercury above the PQL

(**Table 4-1**). Only 30% of the samples contained cadmium at concentrations above the PQL. Cadmium concentrations were between the MDL and PQL (J values) in an additional 53% of tissue samples. Thus, it is possible to make comparisons of metal concentrations in tissues of different species of marine animals from different regions with offshore platforms in the northwestern Gulf of Mexico.

In this study, edible muscle tissue of eight species of fishes from the vicinity of offshore platforms in the northwestern Gulf of Mexico contained means of 0.73 to 110 µg/g dry weight total arsenic (**Tables 4-2 through 4-7**). These concentrations are within the range of arsenic concentrations reported by others for fish tissues from the Gulf (0.1 to 114 µg/g) and are considered natural levels for arsenic in muscle tissues of marine fishes worldwide (Neff, 1997a).

Blue crab and eastern oyster collected in this study from shallow water (less than 10 m water depth) platforms off Louisiana contained 7.6 to 15 µg/g arsenic in their edible soft tissues. Crustaceans and bivalves collected and analyzed by others from a wide range of coastal areas in the Gulf of Mexico contained 0.2 to 10 µg/g and 0.1 to 114 µg/g total arsenic (Neff, 1997a). These concentrations are within the natural range for arsenic in tissues of marine crustaceans and bivalve mollusks from coastal marine habitats throughout the world.

At the platforms where it occurred, gray triggerfish consistently contained the highest concentration of arsenic. This same phenomenon also was observed in a similar investigation performed for the U.S. Department of Energy (Continental Shelf Associates, Inc., 1997). Gray triggerfish graze on the macroalgal biofouling community on hard substrates, including submerged platform structures, and probably bioaccumulate arsenic from its food. Marine macroalgae contain naturally high concentrations of non-toxic organoarsenic compounds that are readily bioavailable to marine animals that consume them (Neff, 1997b). Produced waters from the Gulf of Mexico usually contain low concentrations of arsenic, usually less than 20 times the concentration in seawater. There was no obvious relationship between proximity to produced water discharges and arsenic concentrations in triggerfish muscle; therefore, these fish did not bioaccumulate their high body burdens of arsenic from produced water.

There was no apparent trend or tendency for tissue arsenic concentrations in fish muscles to vary with geographic area and proximity to produced water discharges in the northwestern Gulf of Mexico. There were large and consistent differences among fish species in mean concentrations of arsenic in muscle tissues. However, within a fish species, muscle concentrations of arsenic were similar in samples from different geographic areas (**Tables 4-2 through 4-7**). However, no single species of fish or invertebrate was collected at all platforms on all cruises, limiting this generalization. Concentrations of arsenic were consistently low in red snapper from three geographic areas in both spring and fall. On the other hand, arsenic concentrations in creole-fish collected in the fall tended to increase from the Mississippi delta region (**Table 4-2**), to the area off Louisiana with a high density of platforms (**Table 4-3**), to the area of platforms off Texas (**Table 4-4**) although the definitive candidate pair off Texas



(EB165A/HI356A) did not reflect this trend (**Table 4-6**). This probably is caused by natural differences in concentrations of arsenic in ambient seawater in the three regions. Mississippi River water contains a lower average concentration of arsenic than offshore oceanic water from the open Gulf of Mexico. Therefore, arsenic concentrations in ambient seawater tend to increase with distance away from the influence of the Mississippi River, probably causing the gradient of increasing tissue residues of arsenic in creole-fish with distance from the Mississippi River. The different response of different species of fishes to this gradient in ambient seawater arsenic probably is related differences in feeding habits and migratory patterns in the different species.

The species of marine animals sampled at the inshore (less than 10 m) platform sites were different from the species collected at all other sites. Therefore, it is not possible to make comparisons of these platform sites with other sites. Arsenic concentrations were higher in both seasons in hardhead catfish from the EI100C/SS100DA platform pair than at the VR31A/SMI229C platform pair. Arsenic concentrations always were higher in hardhead catfish muscle from the non-discharging than from the produced water discharging platforms. Mean arsenic concentrations in sheepshead muscle were slightly higher at the produced water discharging than at the non-discharging platform. There were no site-related differences in arsenic concentrations in blue crab and oyster tissues. However, concentrations were lower in both species in the fall than in the spring, probably reflecting seasonal changes in mobilization of arsenic from nearshore sediments (Neff, 1997b).

In summary, all arsenic concentrations measured in tissues of marine fishes and invertebrates from the vicinity of platforms in the northwestern Gulf of Mexico are within the range expected for animals at different trophic levels in the local marine food webs. There was no consistent pattern of arsenic concentrations with location, season, or proximity to produced water discharge. Therefore, there is no indication that marine animals were bioaccumulating arsenic from produced water.

Cadmium typically is present at much lower concentrations than arsenic in tissues of marine animals. In this investigation, 17.5% of all samples contained less than the MDL concentration of 0.002 µg/g dry weight cadmium. Most of the fishes contained mean cadmium concentrations below the PQL. Creole-fish collected in the fall nearly always contained slightly more than 0.01 µg/g cadmium in muscle tissues. Creole-fish collected in the spring from the platform pair HI382F/HI553A off the Texas coast contained just under 0.01 µg/g cadmium. Yellow chub collected from four platforms off Texas also contained just over 0.01 µg/g cadmium. Other species of fishes generally contained lower concentrations of cadmium, usually below 0.005J µg/g.

Highest cadmium concentrations were in oyster and blue crab from the four platforms in less than 10 m of water off Louisiana. Hardhead catfish and sheepshead from these platforms contained low concentrations of cadmium, similar to concentrations in fishes from the other platform sites. Therefore, the elevated levels of cadmium in invertebrate tissues from these nearshore locations probably are natural, reflecting the tendency for marine invertebrates to bioaccumulate cadmium to higher concentrations than fishes

do. There was no consistent difference in cadmium body burdens in blue crab and oyster from produced water discharging and non-discharging platforms.

Oysters, scallops, and some other bivalves are known to bioaccumulate cadmium to high concentrations (NOAA, 1995). The range of measured concentrations of cadmium in soft tissues of oysters from the U.S. Gulf of Mexico coast is 0.032 to 79  $\mu\text{g/g}$  dry weight (Neff, 1997a). Highest concentrations are in oysters from several locations along the Louisiana coast. The “high” concentration of cadmium (the mean plus one standard deviation of the lognormal distribution of concentrations) in oysters and mussels from the National Status and Trends Mussel Watch Program is 5.7  $\mu\text{g/g}$  dry weight (O’Connor and Beliaeff, 1995). Mean cadmium concentrations in oyster collected at the nearshore platform pair VR31A/SMI229C were comparable to these published values. Mean cadmium concentrations in oyster tissues in this study were comparable at the nearshore produced water discharging and non-discharging platforms, but were higher in the fall than in the spring, possibly reflecting seasonal changes in cadmium concentrations in the ambient seawater.

There was no consistent trend of other geographic, seasonal, or discharge/non-discharge differences in concentrations of cadmium in tissues of marine fishes and invertebrates. Concentrations of cadmium in produced waters from the Gulf of Mexico usually are very low (Trefry *et al.*, 1996; Neff, 1997a). Therefore, cadmium probably was not bioaccumulated from produced water by the marine fishes and invertebrates sampled in this investigation.

All tissue samples analyzed in this investigation contained concentrations of total mercury above the PQL of 0.005  $\mu\text{g/g}$  dry weight. In general mercury concentrations were higher than those of cadmium in the fish, crab, and oyster tissues (**Tables 4-2 through 4-7**). There were inter-species differences in mean muscle mercury concentrations, possibly reflecting the different trophic positions or adult sizes of the different species of fishes. There is a tendency for tissue residues of mercury to increase with size and trophic position of marine animals (Bryan, 1979; Schafer *et al.*, 1982). In this study, lowest concentrations usually were in yellow chub and creole-fish. Red snapper, gray triggerfish, and spadefish usually contained higher mean concentrations of mercury. For red snapper, mean muscle mercury concentrations tended to increase from the Mississippi River delta area, to the area with a high density of offshore platforms off the Louisiana coast, to offshore Texas. Red snapper are carnivores that obtain most of their mercury, probably in organic forms, from their food (Neff, 1997a). The gradient of mercury in red snapper tissues may reflect geographic differences in the diet of this species of fish.

The blue crab and oyster from the four platforms in less than 10 m of water off the Louisiana coast contained mean concentrations of mercury similar to or lower than concentrations in fish muscle from the same sites (**Table 4-5**). For all species combined, mean concentrations of mercury in muscle or soft tissues ranged from 0.035 (oyster) to 0.97  $\mu\text{g/g}$  (red snapper) dry weight. Measured concentrations of total mercury in soft tissues of oysters from coastal waters of the U.S. Gulf of Mexico range from less than 0.1 to 0.72  $\mu\text{g/g}$  dry weight (Neff, 1997a). A sample of oysters from the

Mississippi coast contained 33 µg/g total mercury (Lytle and Lytle, 1990). The NOAA Mussel Watch “high” concentration of mercury in oysters and mussels is 0.24 µg/g, nearly ten times higher than the mean concentration in the oyster collected in this investigation.

Measured concentrations of mercury in muscle tissues of fishes from the Gulf of Mexico range from less than 0.2 to 2.0 µg/g dry weight (Neff, 1997a). The geometric mean concentration is 0.49 µg/g. Mercury concentrations measured in this investigation in muscle tissue of fishes from the vicinity of offshore platforms in the northwestern Gulf of Mexico are for the most part in the lower part of this range. Concentrations of mercury were comparable in tissues of the four species sampled in both the Platform and Definitive Components of this study (**Table 4-6**). Therefore, it is highly likely that the mercury concentrations in these fishes are natural.

Mean mercury concentrations were equally likely to be higher in tissues of a particular species from a produced water discharge site as from a non-discharging platform (**Tables 4-2 through 4-7**). Concentrations of mercury in produced water from the northwestern Gulf of Mexico usually are very low, rarely more than ten-fold higher than concentrations in ambient seawater (Trefry *et al.*, 1996; Neff, 1997a). Therefore, it is probable that fishes and invertebrates are not bioaccumulating mercury from offshore produced water discharges.

Less than half the samples of fishes, blue crab, and oyster collected in this study contained concentrations of <sup>226</sup>Ra and <sup>228</sup>Ra above the MDL (**Table 4-1**). Only two samples of fishes contained more than 0.1 pCi/g <sup>226</sup>Ra. They were one sample of yellow chub from discharging platform EI330C and one sample of red snapper from discharging platform HI376A, both collected in the spring and both containing 0.17 pCi/g dry weight <sup>226</sup>Ra.

Forty samples of marine fishes and oyster contained 0.10 pCi/g or more of <sup>228</sup>Ra. The highest measured concentrations of <sup>228</sup>Ra were 0.38 pCi/g in red snapper collected on Cruise 2 from discharging platform VR245E and 0.23 pCi/g in creole-fish collected on Cruise 2 from discharging platform SS277A. Of all the tissue samples containing 0.10 pCi/g or more of <sup>228</sup>Ra, 26 (65%) were from non-discharging stations and 14 (35%) were from produced water discharging platforms. Two oyster samples contained more than 0.1 pCi/g <sup>228</sup>Ra. The samples were collected on the second and third cruises from non-discharging site SMI229C in shallow water off the Louisiana coast.

There is little published information about the concentrations of <sup>226</sup>Ra and <sup>228</sup>Ra in the tissues of marine animals. Published concentrations of <sup>226</sup>Ra and <sup>228</sup>R in marine fishes muscle tissues range from 0.003 to 0.36 pCi/g dry weight (geometric mean, 0.042 pCi/g) and 0.036 to 2.7 pCi/g (geometric mean, 0.27 pCi/g), respectively (Neff, 1997a). Thus, concentrations of these radionuclides in tissues of fishes from the vicinity of offshore platforms in the northwestern Gulf of Mexico are in the lower part of the range for marine fishes world-wide. Given the low concentrations of radium isotopes measured in muscle tissue of fishes in this study and the lack of a positive relationship between tissue residues and proximity to a produced water discharge, it is possible to

conclude that the fishes were not bioaccumulating radium isotopes from the produced water.

EPA (1993) monitored concentrations of  $^{226}\text{Ra}$  and  $^{228}\text{Ra}$  in soft tissues of the southern quahog clam (*Mercenaria campechiensis*) deployed in cages near two offshore produced water discharges off Louisiana (including VR31A, one of the platforms monitored in this study), and from a location remote from offshore platforms off Gulf Breeze, FL. The clam from the two discharge sites contained 0.04 to 0.15 pCi/g dry weight  $^{226}\text{Ra}$  and 0.01 to 1.78 pCi/g  $^{228}\text{Ra}$ . Clams from the reference site contained 0.06 to 0.10 pCi/g  $^{226}\text{Ra}$  and 0.1 to 1.05 pCi/g  $^{228}\text{Ra}$ . EPA (1993) concluded that the clam was not bioaccumulating radium isotopes from the two produced water discharges. In the present investigation,  $^{226}\text{Ra}$  concentration in oyster from the VR31A/SMI229C platform pair ranged from less than 0.008 to 0.065 pCi/g. Concentrations of  $^{228}\text{Ra}$  in the oyster soft tissues ranged from less than 0.03 to 0.14 pCi/g. Highest concentrations of  $^{226}\text{Ra}$  were in the oyster from the discharging platform VR31A; highest concentrations of  $^{228}\text{Ra}$  were in the oyster from the non-discharging platform SMI229C. Thus, the oyster sampled in this study contained lower concentrations of radium isotopes than the clam from the same area of offshore platforms and there was no evidence that the radium was derived all or in part from the produced water discharge.

In summary, although the design of the platform monitoring study does not allow us to clearly establish the sources of chemical contaminants in the tissues of marine animals, there is no indication that any of the 12 target analytes was bioaccumulated by marine fishes, blue crab, and oyster primarily from produced water. Concentrations of all target analytes were low in tissues of marine animals near discharging and non-discharging platforms in the northwestern Gulf of Mexico. Only the three metals were consistently detected in the muscle tissue of the fishes and blue crab and whole soft tissues of the oyster. However, concentrations of these metals in the tissue samples analyzed in this study were in the range of normal concentrations of these metals in tissues of marine animals of the same or closely related taxa. There were no consistent geographic or seasonal trends in concentrations of the metals and organic chemicals in marine animal tissues.

#### 4.1.3 Environmental Significance of Chemical Residues in Marine Tissues

None of the 12 target chemicals was present in marine animals from the paired discharge and non-discharge sites in the northwestern Gulf of Mexico at concentrations higher than expected concentrations in tissues of marine animals from clean marine environments world-wide (Neff, 1997a). Therefore, the tissue residues measured in invertebrates and fishes from the platform sites are normal and probably are not associated with any adverse effects in the marine animals themselves.

Risk based concentrations (RBCs) have been developed for concentrations of several chemicals in tissues of fishery products consumed by man. Equations for estimating RBCs for chemical residues in edible fish tissues under different exposure scenarios have been provided by EPA (1995). The RBCs are intended to represent the highest

acceptable concentration in food that does not represent an unacceptable risk of systemic toxicity or cancer in humans following life-long consumption. In the present investigation, RBCs were estimated for the target chemicals in this study. EPA (1995) has provided formulas for estimating the RBC for carcinogenic and non-carcinogenic in tissues of fishery products consumed by man. The RBC for carcinogens is estimated by the formula:

$$RBC\left(\frac{mg}{kg}\right) = \frac{TR * BWa * ATc}{EFr * EDtot * \frac{IRF}{1000} * CPSo} \text{ The RBC for non-carcinogens is}$$

estimated by the formula:

$$RBC\left(\frac{mg}{kg}\right) = \frac{THQ * RfDo * BWa * ATn}{EFr * EDtot * \frac{IRF}{1000}}$$

where TR is the target cancer risk set at  $10^{-5}$ ; see below); BWa is adult body weight (set at 70 kg); ATc is averaging time for carcinogenic effects (set at 25,550 days: 70 years); EFr is exposure frequency (set at 175 days/year: see below); EDtot is exposure duration (set at 30 years); IRF is fish ingestion rate (set at 54 g/day); CPSo is the published carcinogenic slope factor for the particular carcinogen; THQ is the target hazard quotient (set at 1); RfDo is the published reference oral dose for the particular non-carcinogen, and ATn is the averaging time for non-carcinogenic effects (set at 10,950 days: 30 years).

The default values for many of the parameters in the equation are extremely conservative and are based on the assumption that a large human population (millions of people) will be exposed on a daily basis to the chemicals of concern in their food for a minimum of 30 years. In the exposure scenario modeled here, a small number of fishermen (no more than a few hundred per platform) may fish regularly for fishes and possibly (doubtful) shellfish from the immediate vicinity of the offshore platforms. Platform crews are the most likely regular fishermen, though party boats and even small private vessels fish near some offshore platforms on a regular basis. Platform crew members who fish rotate off the platforms on a regular basis and so do not fish there daily; nor do most recreational fishermen who might visit an offshore platform. Because of the small population of people likely to fish regularly near a particular offshore platform, the target cancer risk (TR) was set at  $10^{-5}$ , representing the risk of one additional cancer per 100,000 individuals who regularly ingest fishes from the site. Because daily consumption of fishes from a given platform site is unlikely, the exposure frequency (EFr) was set at 175 days/year (equivalent to every other day). All other parameters in the equations were left at their default values. Thus, the RBCs calculated here represent extremely conservative (protective) estimates of actual risk from consumption of fishery products from these offshore platforms. The resulting RBCs,

expressed on a wet-weight and dry-weight basis (assuming that edible fish and bivalve tissue contains 80% water), are summarized in **Table 4-8**.

The only target chemical that was detected in this study in edible tissues of invertebrates and fishes at a concentration exceeding its RBC is arsenic. Concentrations of arsenic are naturally high in tissues of marine animals, even from clean oceanic environments. Most of the arsenic in tissues of marine animals, particularly fishes, is in the form of arsenobetaine which is nontoxic to the fishes themselves and their consumers, including man (Neff, 1997b). The highest concentrations measured in this investigation were in muscle tissue of gray triggerfish from ST128X, a non-discharging site. Gray triggerfish graze on the biofouling community on platform legs and on natural rocky reefs. They probably accumulated the arsenic from their food (marine algae often contain high concentrations of natural organic arsenic compounds). Concentrations of arsenic in tissues of marine animals sampled in this study were not higher at produced water discharging than at non-discharging sites. Therefore, the tissue arsenic probably is natural and, because it predominantly is in a non-toxic organic form, does not represent a toxicological risk to the marine animals themselves or their possible human consumers.

Therefore, the concentrations of the 12 target chemicals in tissues of marine invertebrates and fishes monitored in this program are all well below concentrations that would pose a risk to the marine animals themselves or to their consumers, including man.

## 4.2 DESIGN OF THE MONITORING PROGRAM

The Platform Survey Component of the Gulf of Mexico Produced Water Bioaccumulation Study was intended to provide data on the distribution and concentrations of selected target chemicals in tissues of marine animals from several regions of the northwestern Gulf of Mexico where there are offshore oil and gas production platforms, some of which are discharging treated produced water to the ocean. It was intended that data from this study also would provide an indication of whether chemicals in produced water are being bioaccumulated in the edible tissues of marine invertebrates and fishes. The sampling design specified by EPA did allow an assessment of the concentrations of target chemicals in the tissues of several species of fishes from different regions of the northwestern Gulf of Mexico and one species each of bivalves and crustaceans from a shallow water platform pair. However, the design did not allow a clear assessment to be made of the sources of the chemical contaminants in the tissues of the animals sampled in the vicinity of offshore produced water discharging and non-discharging platforms.

Although the paired discharging and non-discharging platforms were selected as close to one-another as possible, there was sufficient natural variability in tissue concentrations of the target chemicals in edible tissues of fishes and invertebrates from the platform pairs that it was, in most cases, equally likely that animals from the discharging or the non-discharging platform of a pair would contain the highest concentrations of the different target chemicals. Unknown factors other than the

presence or absence of a produced water discharge had a greater influence on tissue residues of target chemicals. The factors that may contribute to this natural variability in tissue residues of chemical contaminants include; exposure history of the marine animals to the chemicals in water and food; size and lipid content of the marine animals; natural regional and seasonal variability in concentrations and chemical species of the chemicals (particularly the metals) in ambient seawater; and taxonomic and seasonal variability in the ability of the marine animals to metabolize and actively excrete bioaccumulated chemicals.

Produced water, ambient seawater near the discharges, and local sediments were not analyzed for the target chemicals. Therefore, it was not possible to determine if the target chemicals were present at high enough concentrations in the produced water that they would not be diluted immediately to natural background concentrations in the ambient seawater and might accumulate in bottom sediments near the discharges. All of the target analytes, particularly the target metals and PAHs, are present at low concentrations in most produced waters, only slightly higher than concentrations in ambient seawater from the northwestern Gulf of Mexico. They are likely to be diluted to background concentrations within a few meters of the discharges. Monocyclic aromatic hydrocarbons and phenol, though often abundant in produced water, are not persistent in the ocean and do not have a strong tendency to bioaccumulate. BEHP is not a natural or intentionally-added ingredient of produced water. All these chemicals may be derived from a variety of other sources than produced water. Therefore, lack of information about the concentrations of target chemicals in the produced water discharges being monitored makes it difficult to identify possible sources of these chemicals in tissues of marine animals near platforms.

The fishes and blue crab sampled in this study are motile, so the length of their residence near a produced water discharge is not known, making it difficult to attribute tissue residues of target chemicals to a particular source. Bivalves are immobile and are good sentinels for monitoring concentrations of bioavailable chemicals in the water. However, oysters are only present on or near underwater platform structures in shallow coastal and estuarine waters. There are no bivalves that are of commercial value as human food on underwater structures of platforms and reefs or in bottom sediments in deep offshore waters of the Gulf of Mexico. Non-commercial species such as the jewel box (*Chama macerophylla*) and thorny oyster (*Spondylus americanus*) may be used as surrogates. However, position, both vertical and horizontal, on submerged platform structures relative to the position and depth of the produced water discharge affects the exposure history to the produced water of attached biofouling organisms, such as bivalves. This makes representative sampling difficult and results in wide variability in concentrations of target chemicals in replicate samples of bivalves collected from the same discharging platform. All these factors contribute to the difficulty in identifying bioaccumulation of chemicals from produced water by natural populations of marine animals. The use of caged bivalves, as was done by EPA (1993) does not solve the problem because the diluting produced water plume is continuously being moved in different directions by local water currents, resulting in highly variable exposure of the caged bivalves.

This study did utilize advanced analytical methods with high precision and accuracy and low, environmentally relevant detection limits. A large number of analyses (496) was performed on edible tissues of fishes and invertebrates collected over a wide geographic range in the northwestern Gulf of Mexico. This is the largest existing database for concentrations of the target chemicals in edible tissues of free-ranging marine fishes from offshore waters of the northwestern Gulf of Mexico. The data do show that concentrations of these chemicals, particularly the organic chemicals, in tissue of fishes from the northwestern Gulf of Mexico are low, and comparable to tissue residues in marine fishes from clean environments elsewhere in the world. The data also provide new evidence of the wide natural variability in concentrations of a few metals, particularly arsenic, in the tissues of offshore populations of marine fishes. These data will be extremely useful in designing future tissue residue and bioaccumulation monitoring programs.





Table 4-1. Percent distribution of concentrations of target analytes in tissues of marine animals from the vicinity of offshore produced water discharging and non-discharging platforms in the northwest Gulf of Mexico. Practical quantitation level (PQL) is five times the method detection limit (MDL). Concentrations between MDL and PQL are listed as “J” values in the text and **Appendix**. A total of 494 (VOAs) or 496 (other analytes) tissue samples were analyzed for each analyte.

Chemical	MDL <sup>a</sup>	% <MDL	MDL < % <PQL	% >PQL
Benzene	3.2 µg/g dry	96.8	2.6	0.6
Toluene	3.8 µg/g dry	95.3	4.7	0
Ethylbenzene	2.5 µg/g dry	98.6	1.4	0
Phenol <sup>b</sup>	0.40 µg/g dry	85.7	14.3	0
Fluorene	0.0007 µg/g dry	89.1	3.8	7.1
Benzo(a)pyrene	0.0006 µg/g dry	97.2	2.4	0.4
Bis(2-ethylhexyl)phthalate (BEHP) <sup>c</sup>	0.17 µg/g dry	89.5	9.5	1.0
Arsenic	0.05 µg/g dry	0	0	100
Cadmium	0.002 µg/g dry	17.5	52.6	29.8
Mercury	0.001 µg/g dry	0	0	100
<sup>226</sup> Ra	0.001 - 0.008 pCi/g dry	55.8	16.1	28.0
<sup>228</sup> Ra	0.0008 - 0.03 pCi/g dry	67.1	4.6	28.2

<sup>a</sup> MDLs were calculated for wet-weight concentrations and so may vary from means and ranges given here because of variations of the wet weight/dry weight ratios for different samples.

<sup>b</sup> 1.8% of the samples contained phenol in the accompanying procedural blanks.

<sup>c</sup> 0.6% of the samples contained BEHP in the accompanying procedural blanks.

Table 4-2. Mean and standard deviation concentrations of arsenic, cadmium, and mercury in tissues of five species of fishes from the vicinity of two pairs of produced water discharging (D) and non-discharging (N-D) platforms close to the Mississippi River Delta (n=5). Concentrations are µg/g dry weight.

Metal/Species	Spring				Fall			
	ST130 (D)	ST128X (N-D)	MC194A (D)	MC280A (N-D)	ST130 (D)	ST128X (N-D)	MC194A (D)	MC280A (N-D)
<b>Arsenic</b>								
Yellow chub			3.8±1.5	4.3±1.8				
Creole-fish							4.0±4.2	5.8±1.5
Red snapper	1.4±0.22	1.7±0.51			1.4±0.62	1.3±0.26		
Gray triggerfish	39±22	110±50	43±15	16±3.5			30±12	20±13
Spadefish					5.9±0.61	6.9±4.3		
<b>Cadmium</b>								
Yellow chub			0.003±0.001	0.003±0.001				
Creole-fish							0.018±0.036	0.014±0.005
Red snapper	0.002±0.001	0.003±0.001			0.002±0.001	0.004±0.001		
Gray triggerfish	0.001±0.000	0.005±0.008	0.001±0.000	0.003±0.004			0.003±0.001	0.004±0.001
Spadefish					0.006±0.002	0.007±0.002		
<b>Mercury</b>								
Yellow chub			0.049±0.013	0.14±0.092				
Creole-fish							0.17±0.10	0.18±0.015
Red snapper	0.29±0.056	0.29±0.026			0.42±0.073	0.34±0.026		
Gray triggerfish	0.72±0.89	0.68±0.44	0.14±0.072	0.078±0.042			0.10±0.028	0.082±0.015
Spadefish					0.44±0.19	0.45±0.051		

Table 4-3. Mean and standard deviation concentrations of arsenic, cadmium, and mercury in tissues of four species of fishes from the vicinity of two pairs of produced water discharging (D) and non-discharging (N-D) platforms in a high-density area of production platforms (n=5). Concentrations are  $\mu\text{g/g}$  dry weight.

Metal/Species	Spring				Fall			
	VR245E (D)	SMI72C (N-D)	EI330C (D)	EI352B (N-D)	VR245E (D)	SMI72C (N-D)	EI330C (D)	EI352B (N-D)
Arsenic								
Yellow chub			5.8±1.4	20±29			3.4±1.1	5.1±1.8
Creole-fish							6.7±5.0	10±4.1
Red snapper	0.73±0.29	1.6±0.41			1.0±0.38	1.6±0.88		
Gray triggerfish	50±32	38±15	28±6.1	72±14	46±13	25±2.8		
Cadmium								
Yellow chub			0.005±0.002	0.002±0.001			0.01±0.005	0.007±0.001
Creole-fish							0.019±0.015	0.02±0.007
Red snapper	0.014±0.001	0.003±0.001			0.001±0.000	0.002±0.001		
Gray triggerfish	0.003±0.003	0.003±0.003	0.002±0.001	0.001±0.000	0.002±0.001	0.002±0.002		
Mercury								
Yellow chub			0.051±0.01	0.095±0.10			0.071±0.027	0.093±0.043
Creole-fish							0.16±0.03	0.15±0.016
Red snapper	0.58±0.058	0.71±0.10			0.52±0.13	0.76±0.06		
Gray triggerfish	0.51±0.31	0.82±0.64	0.62±0.40	0.58±0.86	0.73±0.21	0.92±0.60		

Table 4-4. Mean and standard deviation concentrations of arsenic, cadmium, and mercury in tissues of four species of fishes from the vicinity of two pairs of produced water discharging (D) and non-discharging (N-D) platforms offshore Texas (n=5). Concentrations are  $\mu\text{g/g}$  dry weight.

Metal/Species	Spring				Fall			
	HI376A (D)	WC587B (N-D)	HI382F (D)	HI553A (N-D)	HI376A (D)	WC587B (N-D)	HI382F (D)	HI553A (N-D)
Arsenic								
Yellow chub	5.1±1.5	11±3.2	2.9±0.8	8.0±2.0	3.4±1.7	3.2±0.86	2.1±0.98	4.5±1.6
Creole-fish			8.9±3.2	7.8±0.76			14±6.5	21±14
Red snapper	0.64±0.15	1.7±0.29						
Rockhind					4.1±0.76	6.8±4.4		
Cadmium								
Yellow chub	0.007±0.004	0.006±0.004	0.009±0.006	0.008±0.002	0.016±0.003	0.012±0.005	0.012±0.003	0.01±0.003
Creole-fish			0.009±0.004	0.009±0.002			0.019±0.019	0.005±0.003
Red snapper	0.001±0.001	0.004±0.002						
Rockhind					0.005±0.001	0.005±0.001		
Mercury								
Yellow chub	0.13±0.06	0.051±0.009	0.10±0.073	0.066±0.008	0.32±0.31	0.052±0.011	0.073±0.017	0.069±0.018
Creole-fish			0.12±0.033	0.11±0.018			0.14±0.015	0.11±0.019
Red snapper	0.97±0.59	0.36±0.20						
Rockhind					0.59±0.14	0.47±0.16		

Table 4-5. Mean and standard deviation concentrations of arsenic, cadmium, and mercury in tissues of two species of fishes, blue crab, and oyster from the vicinity of two pairs of produced water discharging (D) and non-discharging (N-D) platforms in less than 10 m of water along the Louisiana coast (n=5). Concentrations are µg/g dry weight.

Metal/Species	Spring				Fall			
	EI100C (D)	SS100DA (N-D)	VR31A (D)	SMI229C (N-D)	EI100C (D)	SS100DA (N-D)	VR31A (D)	SMI229C (N-D)
Arsenic								
Hardhead catfish	35±16	74±22	16±5.4	25±13	27±16	83±47	7.7±3.0	9.0±5.7
Sheepshead	6.2±1.6	2.3±1.5			13±2.8	12±9.7		
Blue crab			13±1.5	15±3.6			8.5±0.51	7.6
Eastern oyster			13±1.7	14±1.6			8.3±0.75	9.8±0.8
Cadmium								
Hardhead catfish	0.003±0.004	0.005±0.006	0.001±0.001	0.002±0.001	0.006±0.004	0.004±0.001	0.021±0.043	0.003±0.001
Sheepshead	0.004±0.001	0.006±0.003			0.004±0.001	0.005±0.004		
Blue crab			0.33±0.053	0.48±0.09			0.57±0.083	0.27
Eastern oyster			3.6±0.14	3.5±0.31			4.6±0.29	6.1±0.54
Mercury								
Hardhead catfish	0.45±0.23	0.45±0.069	0.78±0.14	0.59±0.24	0.49±0.20	0.58±0.20	0.99±0.46	0.74±0.23
Sheepshead	0.23±0.14	0.50±0.31			0.32±0.083	0.42±0.29		
Blue crab			0.25±0.033	0.30±0.052			0.27±0.046	0.26
Eastern oyster			0.035±0.005	0.038±0.004			0.04±0.007	0.05±0.004

Table 4-6. Mean and standard deviation concentrations of arsenic, cadmium, and mercury concentrations in tissues of two species of fishes from the vicinity of two pairs of produced water discharging (D) and non-discharging (N-D) platforms (n=5). The platforms are Definitive Component Candidate Platforms. Concentrations are µg/g dry weight.

Metal/Species	Spring				Fall			
	EB165A (D)	HI356A (N-D) <sup>a</sup>	GC19A (D)	EI361A (N-D)	EB165A (D)	HI356A (N-D) <sup>a</sup>	GC19A (D)	EI361A (N-D)
Arsenic								
Yellow chub	4.9±0.46	4.7±0.77	4.3±1.4	3.0±0.91	1.6±0.36	1.4±0.37	1.3±0.68	1.1±0.37
Creole-fish	9.5±4.2	12±5.2	7.8±5.0	7.3±3.3	3.0±0.73	6.8±6.4	3.2±0.34	2.8±1.1
Cadmium								
Yellow chub	0.015±0.005	0.010±0.007	0.011±0.004	0.013±0.006	0.018±0.010	0.014±0.007	0.011±0.008	0.009±0.003
Creole-fish	0.020±0.012	0.015±0.012	0.018±0.004	0.016±0.004	0.019±0.010	0.020±0.015	0.008±0.007	0.007±0.008
Mercury								
Yellow chub	0.086±0.015	0.36±0.58	0.061±0.016	0.11±0.067	0.045±0.010	0.098±0.059	0.070±0.032	0.032±0.003
Creole-fish	0.27±0.094	0.21±0.047	0.21±0.021	0.18±0.034	0.16±0.062	0.13±0.043	0.15±0.027	0.18±0.044

<sup>a</sup> High Island A 356A began to discharge low volumes of produced water after Cruise 1 through Cruise 2. These discharges began on 14 January 1995. From this date to the conclusion of Platform Survey Component sampling during Cruise 2 at this platform, produced water discharge volumes averaged 29 bbl/d and did not exceed 130 bbl/d.

Table 4-7. Mean and standard deviation concentrations of arsenic, cadmium, and mercury concentrations in tissues of four species of fishes from the vicinity of two pairs of produced water discharging (D) and non-discharging (N-D) platforms (n=5). The platforms are Definitive Component Candidate platforms. Concentrations are µg/g dry weight.

Metal/Species	Spring				Fall			
	VR214A (D)	EC229A (N-D)	SS277A (D)	EI360C (N-D)	VR214A (D)	EC229A (N-D)	SS277A (D)	EI360C (N-D)
<b>Arsenic</b>								
Yellow chub			3.7±0.72	4.9±1.0			1.2±0.30	1.7±0.21
Creole-fish			13±7.8	8.1±2.8				
Red snapper	0.97±0.29	0.98±0.27			0.42±0.16	0.62±0.11	0.64±0.21	0.34±0.070
Gray triggerfish	28±13	29±8.8			22±3.2	18±9.0		
<b>Cadmium</b>								
Yellow chub			0.011±0.004	0.015±0.016			0.010±0.007	0.014±0.007
Creole-fish			0.008±0.002	0.005±0.005				
Red snapper	0.002±0.001	0.003±0.002			0.004±0.004	0.003±0.002	0.057±0.11	0.002±0.002
Gray triggerfish	0.001±0.000	0.002±0.001			0.005±0.004	0.023±0.018		
<b>Mercury</b>								
Yellow chub			0.060±0.006	0.079±0.040			0.074±0.098	0.051±0.012
Creole-fish			0.20±0.077	0.11±0.034				
Red snapper	0.40±0.11	0.74±0.072			0.31±0.048	0.40±0.055	0.21±0.015	0.28±0.084
Gray triggerfish	0.88±0.70	0.76±0.36			0.22±0.19	0.38±0.41		

Table 4-8. Risk-based concentrations (RBCs) for target chemicals in edible tissues of fish and bivalve mollusks consumed by man. RBCs were estimated by the equations for carcinogens and non-carcinogens described by EPA Region III (1995). The target cancer risk was set at 10<sup>-5</sup>, and consumption frequency was set at 175 days/year. All other parameters were set at the default values.

Chemical	Wet-Weight RBC (µg/g wet)	Dry-Weight RBC (µg/g dry)
Benzene	2.17 <sup>a</sup>	10.85 <sup>a</sup>
Toluene	541	2,705
Ethylbenzene	270	1,350
Phenol	1,622	8,110
Fluorene	108	540
Benzo(a)pyrene	0.0086 <sup>a</sup>	0.043 <sup>a</sup>
Bis(2-ethylhexyl)phthalate	4.51 <sup>a</sup>	22.55 <sup>a</sup>
Arsenic	0.81/0.036 <sup>a</sup>	4.05/0.18 <sup>a</sup>
Cadmium	1.35	6.75
Mercury	0.81	4.05

<sup>a</sup> Based on carcinogenic response.

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Section 6  
LIST OF ABBREVIATIONS

BAP	benzo(a)pyrene
BEHP	bis(2-ethylhexyl)phthalate
BSI	Biomonitoring Study In-Depth Sampling
BSS	Biomonitoring Study Survey Sampling
CSA	Continental Shelf Associates, Inc.
DDW	distilled deionized water
DGPS	differential global positioning system
EPA	U.S. Environmental Protection Agency
FIT	Florida Institute of Technology
GC/MS	gas chromatography/mass spectrometry
GFAAS	graphite furnace atomic absorption spectrometry
GPC	gel permeation column
HPLC	high pressure liquid chromatography
ICP-MS	inductively coupled plasma-mass spectrometry
MDL	method detection limit
ND	not detected
NIST	U.S. National Institute of Standards and Technology
NOAA	National Oceanic and Atmospheric Administration
NRC	National Research Council of Canada
OOC	Offshore Operators Committee
PQL	practical quantification level
QA	quality assurance
QC	quality control
RBC	risk based concentration
RIS	recovery internal standard
SIS	surrogate internal standard
SVOC	semivolatile organic compound
VOA	volatile organic analysis
VOC	volatile organic compound



# **Gulf of Mexico Produced Water Bioaccumulation Study**

## **Platform Survey Component Appendices**

April 1997

**(Reformatted for Microsoft Word in May 2009)**

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## **APPENDIX**



Table A-1. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 1 at East Breaks 165A.

Analyte	Sample ID				
	(PSVT-001)	(PSVT-002)	(PSVT-003)	(PSVT-004)	(PSVT-005)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-2. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of creole-fish collected during Cruise 1 at East Breaks 165A.

Analyte	Sample ID				
	(PSVT-006)	(PSVT-007)	(PSVT-008)	(PSVT-009)	(PSVT-010)
Benzene (ng/g wet weight)	1.5 J	1.1 J	ND	ND	ND
Toluene (ng/g wet weight)	8.4 J	8.4 J	ND	ND	ND
Ethylbenzene (ng/g wet weight)	3.4 J	5.8 J	ND	ND	ND
Benzene (ng/g dry weight)	8.2 J	5.7 J	ND	ND	ND
Toluene (ng/g dry weight)	46 J	43 J	ND	ND	ND
Ethylbenzene (ng/g dry weight)	19 J	30 J	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-3. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 2 at East Breaks 165A.

Analyte	Sample ID				
	(PSVT-011)	(PSVT-012)	(PSVT-013)	(PSVT-014)	(PSVT-015)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-4. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of creole-fish collected during Cruise 2 at East Breaks 165A.

Analyte	Sample ID				
	(PSVT-016)	(PSVT-017)	(PSVT-018)	(PSVT-019)	(PSVT-020)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-5. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 1 at High Island A 356A.

Analyte	Sample ID				
	(PSVT-021)	(PSVT-022)	(PSVT-023)	(PSVT-024)	(PSVT-025)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	2.8 J	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	13 J	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-6. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of creole-fish collected during Cruise 1 at High Island A 356A.

Analyte	Sample ID				
	(PSVT-026)	(PSVT-027)	(PSVT-028)	(PSVT-029)	(PSVT-030)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.



Table A-7. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 2 at High Island A 356A.

Analyte	Sample ID				
	(PSVT-031)	(PSVT-032)	(PSVT-033)	(PSVT-034)	(PSVT-035)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-8. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of creole-fish collected during Cruise 2 at High Island A 356A.

Analyte	Sample ID				
	(PSVT-036)	(PSVT-037)	(PSVT-038)	(PSVT-039)	(PSVT-040)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-9. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 1 at Green Canyon 19A.

Analyte	Sample ID				
	(PSVT-041)	(PSVT-042)	(PSVT-043)	(PSVT-044)	(PSVT-045)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	2.3 J	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	9.5 J	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).  
 ND = Concentration below the MDL.

Table A-10. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of creole-fish collected during Cruise 1 at Green Canyon 19A.

Analyte	Sample ID				
	(PSVT-046)	(PSVT-047)	(PSVT-048)	(PSVT-049)	(PSVT-050)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	2.7 J	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	14 J	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).  
 ND = Concentration below the MDL.

Table A-11. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 2 at Green Canyon 19A.

Analyte	Sample ID				
	(PSVT-051)	(PSVT-052)	(PSVT-053)	(PSVT-054)	(PSVT-055)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-12. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of creole-fish collected during Cruise 2 at Green Canyon 19A.

Analyte	Sample ID				
	(PSVT-056)	(PSVT-057)	(PSVT-058)	(PSVT-059)	(PSVT-060)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-13. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 1 at Eugene Island 361A.

Analyte	Sample ID				
	(PSVT-061)	(PSVT-062)	(PSVT-063)	(PSVT-064)	(PSVT-065)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	2.6 J
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	11 J
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-14. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of creole-fish collected during Cruise 1 at Eugene Island 361A.

Analyte	Sample ID				
	(PSVT-066)	(PSVT-067)	(PSVT-068)	(PSVT-069)	(PSVT-070)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-15. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 2 at Eugene Island 361A.

Analyte	Sample ID				
	(PSVT-071)	(PSVT-072)	(PSVT-073)	(PSVT-074)	(PSVT-075)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-16. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of creole-fish collected during Cruise 2 at Eugene Island 361A.

Analyte	Sample ID				
	(PSVT-076)	(PSVT-077)	(PSVT-078)	(PSVT-079)	(PSVT-080)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-17. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of red snapper collected during Cruise 1 at Vermilion 214A.

Analyte	Sample ID				
	(PSVT-081)	(PSVT-082)	(PSVT-083)	(PSVT-084)	(PSVT-085)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-18. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of gray triggerfish collected during Cruise 1 at Vermilion 214A.

Analyte	Sample ID				
	(PSVT-086)	(PSVT-087)	(PSVT-088)	(PSVT-089)	(PSVT-090)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-19. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of red snapper collected during Cruise 2 at Vermilion 214A.

Analyte	Sample ID				
	(PSVT-091)	(PSVT-092)	(PSVT-093)	(PSVT-094)	(PSVT-095)
Benzene (ng/g wet weight)	ND	1.3 J	ND	ND	ND
Toluene (ng/g wet weight)	ND	2 J	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	6.2 J	ND	ND	ND
Toluene (ng/g dry weight)	ND	9.4 J	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-20. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of gray triggerfish collected during Cruise 2 at Vermilion 214A.

Analyte	Sample ID				
	(PSVT-096)	(PSVT-097)	(PSVT-098)	(PSVT-099)	(PSVT-100)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-21. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of red snapper collected during Cruise 1 at East Cameron 229A.

Analyte	Sample ID				
	(PSVT-101)	(PSVT-102)	(PSVT-103)	(PSVT-104)	(PSVT-105)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	2.7 J
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	12 J
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-22. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of gray triggerfish collected during Cruise 1 at East Cameron 229A.

Analyte	Sample ID			
	(PSVT-106)	(PSVT-107)	(PSVT-109)	(PSVT-110)
Benzene (ng/g wet weight)	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	8.3 J	3.1 J
Ethylbenzene (ng/g wet weight)	ND	ND	4.1 J	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	37 J	16 J
Ethylbenzene (ng/g dry weight)	ND	ND	19 J	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.



Table A-23. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of red snapper collected during Cruise 2 at East Cameron 229A.

Analyte	Sample ID				
	(PSVT-111)	(PSVT-112)	(PSVT-113)	(PSVT-114)	(PSVT-115)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-24. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of gray triggerfish collected during Cruise 2 at East Cameron 229A.

Analyte	Sample ID				
	(PSVT-116)	(PSVT-117)	(PSVT-118)	(PSVT-119)	(PSVT-120)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-25. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 1 at Ship Shoal 277A.

Analyte	Sample ID				
	(PSVT-121)	(PSVT-122)	(PSVT-123)	(PSVT-124)	(PSVT-125)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-26. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of red snapper collected during Cruise 1 at Ship Shoal 277A.

Analyte	Sample ID				
	(PSVT-126)	(PSVT-127)	(PSVT-128)	(PSVT-129)	(PSVT-130)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-27. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 2 at Ship Shoal 277A.

Analyte	Sample ID				
	(PSVT-131)	(PSVT-132)	(PSVT-133)	(PSVT-134)	(PSVT-135)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-28. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of creole-fish collected during Cruise 2 at Ship Shoal 277A.

Analyte	Sample ID				
	(PSVT-136)	(PSVT-137)	(PSVT-138)	(PSVT-139)	(PSVT-140)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-29. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 1 at Eugene Island 360C.

Analyte	Sample ID			
	(PSVT-141)	(PSVT-142)	(PSVT-144)	(PSVT-145)
Benzene (ng/g wet weight)	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-30. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of red snapper collected during Cruise 1 at Eugene Island 360C.

Analyte	Sample ID				
	(PSVT-146)	(PSVT-147)	(PSVT-148)	(PSVT-149)	(PSVT-150)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	2.8 J
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	12 J
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-31. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 2 at Eugene Island 360C.

Analyte	Sample ID				
	(PSVT-151)	(PSVT-152)	(PSVT-153)	(PSVT-154)	(PSVT-155)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-32. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of creole-fish collected during Cruise 2 at Eugene Island 360C.

Analyte	Sample ID				
	(PSVT-156)	(PSVT-157)	(PSVT-158)	(PSVT-159)	(PSVT-160)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-33. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 2 at Mississippi Canyon 194A.

Analyte	Sample ID				
	(PSVT-161)	(PSVT-162)	(PSVT-163)	(PSVT-164)	(PSVT-165)
Benzene (ng/g wet weight)	ND	ND	ND	0.78 J	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	2.7 J	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-34. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of gray triggerfish collected during Cruise 2 at Mississippi Canyon 194A.

Analyte	Sample ID				
	(PSVT-166)	(PSVT-167)	(PSVT-168)	(PSVT-169)	(PSVT-170)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-35. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of creole-fish collected during Cruise 3 at Mississippi Canyon 194A.

Analyte	Sample ID				
	(PSVT-171)	(PSVT-172)	(PSVT-173)	(PSVT-174)	(PSVT-175)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-36. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of gray triggerfish collected during Cruise 3 at Mississippi Canyon 194A.

Analyte	Sample ID				
	(PSVT-176)	(PSVT-177)	(PSVT-178)	(PSVT-179)	(PSVT-180)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	1.4 J	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	5.9 J	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-37. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 2 at Mississippi Canyon 280A.

Analyte	Sample ID				
	(PSVT-181)	(PSVT-182)	(PSVT-183)	(PSVT-184)	(PSVT-185)
Benzene (ng/g wet weight)	ND	ND	ND	1.2 J	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	4.8 J	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-38. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of gray triggerfish collected during Cruise 2 at Mississippi Canyon 280A.

Analyte	Sample ID				
	(PSVT-186)	(PSVT-187)	(PSVT-188)	(PSVT-189)	(PSVT-190)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.



Table A-39. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of creole-fish collected during Cruise 3 at Mississippi Canyon 280A.

Analyte	Sample ID				
	(PSVT-191)	(PSVT-192)	(PSVT-193)	(PSVT-194)	(PSVT-195)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-40. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of gray triggerfish collected during Cruise 3 at Mississippi Canyon 280A.

Analyte	Sample ID				
	(PSVT-196)	(PSVT-197)	(PSVT-198)	(PSVT-199)	(PSVT-200)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-41. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of red snapper collected during Cruise 2 at South Timbalier 130.

Analyte	Sample ID				
	(PSVT-201)	(PSVT-202)	(PSVT-203)	(PSVT-204)	(PSVT-205)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-42. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of gray triggerfish collected during Cruise 2 at South Timbalier 130.

Analyte	Sample ID				
	(PSVT-206)	(PSVT-207)	(PSVT-208)	(PSVT-209)	(PSVT-210)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-43. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of red snapper collected during Cruise 3 at South Timbalier 130.

Analyte	Sample ID				
	(PSVT-211)	(PSVT-212)	(PSVT-213)	(PSVT-214)	(PSVT-215)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-44. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of spadefish collected during Cruise 3 at South Timbalier 130.

Analyte	Sample ID				
	(PSVT-216)	(PSVT-217)	(PSVT-218)	(PSVT-219)	(PSVT-220)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-45. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of red snapper collected during Cruise 2 at South Timbalier 128X.

Analyte	Sample ID				
	(PSVT-221)	(PSVT-222)	(PSVT-223)	(PSVT-224)	(PSVT-225)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-46. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of gray triggerfish collected during Cruise 2 at South Timbalier 128X.

Analyte	Sample ID				
	(PSVT-226)	(PSVT-227)	(PSVT-228)	(PSVT-229)	(PSVT-230)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-47. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of red snapper collected during Cruise 3 at South Timbalier 128X.

Analyte	Sample ID				
	(PSVT-231)	(PSVT-232)	(PSVT-233)	(PSVT-234)	(PSVT-235)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-48. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of spadefish collected during Cruise 3 at South Timbalier 128X.

Analyte	Sample ID				
	(PSVT-236)	(PSVT-237)	(PSVT-238)	(PSVT-239)	(PSVT-240)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-49. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of red snapper collected during Cruise 2 at Vermilion 245E.

Analyte	Sample ID				
	(PSVT-241)	(PSVT-242)	(PSVT-243)	(PSVT-244)	(PSVT-245)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-50. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of gray triggerfish collected during Cruise 2 at Vermilion 245E.

Analyte	Sample ID				
	(PSVT-246)	(PSVT-247)	(PSVT-248)	(PSVT-249)	(PSVT-250)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-51. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of red snapper collected during Cruise 3 at Vermilion 245E.

Analyte	Sample ID				
	(PSVT-251)	(PSVT-252)	(PSVT-253)	(PSVT-254)	(PSVT-255)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-52. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of gray triggerfish collected during Cruise 3 at Vermilion 245E.

Analyte	Sample ID				
	(PSVT-256)	(PSVT-257)	(PSVT-258)	(PSVT-259)	(PSVT-260)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-53. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of red snapper collected during Cruise 2 at South Marsh Island 72C.

Analyte	Sample ID				
	(PSVT-261)	(PSVT-262)	(PSVT-263)	(PSVT-264)	(PSVT-265)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-54. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of gray triggerfish collected during Cruise 2 at South Marsh Island 72C.

Analyte	Sample ID				
	(PSVT-266)	(PSVT-267)	(PSVT-268)	(PSVT-269)	(PSVT-270)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.



Table A-55. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of red snapper collected during Cruise 3 at South Marsh Island 72C.

Analyte	Sample ID				
	(PSVT-271)	(PSVT-272)	(PSVT-273)	(PSVT-274)	(PSVT-275)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-56. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of gray triggerfish collected during Cruise 3 at South Marsh Island 72C.

Analyte	Sample ID				
	(PSVT-276)	(PSVT-277)	(PSVT-278)	(PSVT-279)	(PSVT-280)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-57. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 2 at Eugene Island 330C.

Analyte	Sample ID				
	(PSVT-281)	(PSVT-282)	(PSVT-283)	(PSVT-284)	(PSVT-285)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-58. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of gray triggerfish collected during Cruise 2 at Eugene Island 330C.

Analyte	Sample ID				
	(PSVT-286)	(PSVT-287)	(PSVT-288)	(PSVT-289)	(PSVT-290)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-59. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 3 at Eugene Island 330C.

Analyte	Sample ID				
	(PSVT-291)	(PSVT-292)	(PSVT-293)	(PSVT-294)	(PSVT-295)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-60. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of creole-fish collected during Cruise 3 at Eugene Island 330C.

Analyte	Sample ID				
	(PSVT-296)	(PSVT-297)	(PSVT-298)	(PSVT-299)	(PSVT-300)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-61. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 2 at Eugene Island 352B.

Analyte	Sample ID				
	(PSVT-301)	(PSVT-302)	(PSVT-303)	(PSVT-304)	(PSVT-305)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-62. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of gray triggerfish collected during Cruise 2 at Eugene Island 352B.

Analyte	Sample ID				
	(PSVT-306)	(PSVT-307)	(PSVT-308)	(PSVT-309)	(PSVT-310)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-63. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 3 at Eugene Island 352B.

Analyte	Sample ID				
	(PSVT-311)	(PSVT-312)	(PSVT-313)	(PSVT-314)	(PSVT-315)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	7.1 J	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-64. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of creole-fish collected during Cruise 3 at Eugene Island 352B.

Analyte	Sample ID				
	(PSVT-316)	(PSVT-317)	(PSVT-318)	(PSVT-319)	(PSVT-320)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-65. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 2 at High Island 376A.

Analyte	Sample ID				
	(PSVT-321)	(PSVT-322)	(PSVT-323)	(PSVT-324)	(PSVT-325)
Benzene (ng/g wet weight)	ND	ND	ND	ND	0.69 J
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	1.4 J	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	3.2 J
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	6.7 J	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-66. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of red snapper collected during Cruise 2 at High Island 376A.

Analyte	Sample ID				
	(PSVT-326)	(PSVT-327)	(PSVT-328)	(PSVT-329)	(PSVT-330)
Benzene (ng/g wet weight)	ND	ND	ND	ND	0.82 J
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	3.5 J
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-67. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 3 at High Island 376A.

Analyte	Sample ID				
	(PSVT-331)	(PSVT-332)	(PSVT-333)	(PSVT-334)	(PSVT-335)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-68. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of rockhind collected during Cruise 3 at High Island 376A.

Analyte	Sample ID				
	(PSVT-336)	(PSVT-337)	(PSVT-338)	(PSVT-339)	(PSVT-340)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-69. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 2 at West Cameron 587B.

Analyte	Sample ID				
	(PSVT-341)	(PSVT-342)	(PSVT-343)	(PSVT-344)	(PSVT-345)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	1.6 J	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	6.5 J	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-70. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of red snapper collected during Cruise 2 at West Cameron 587B.

Analyte	Sample ID				
	(PSVT-346)	(PSVT-347)	(PSVT-348)	(PSVT-349)	(PSVT-350)
Benzene (ng/g wet weight)	ND	ND	ND	ND	0.99 J
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	4.3 J
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.



Table A-71. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 3 at West Cameron 587B.

Analyte	Sample ID				
	(PSVT-351)	(PSVT-352)	(PSVT-353)	(PSVT-354)	(PSVT-355)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-72. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of rockhind collected during Cruise 3 at West Cameron 587B.

Analyte	Sample ID				
	(PSVT-356)	(PSVT-357)	(PSVT-358)	(PSVT-359)	(PSVT-360)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-73. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 2 at High Island 382F.

Analyte	Sample ID				
	(PSVT-361)	(PSVT-362)	(PSVT-363)	(PSVT-364)	(PSVT-365)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-74. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of creole-fish collected during Cruise 2 at High Island 382F.

Analyte	Sample ID				
	(PSVT-366)	(PSVT-367)	(PSVT-368)	(PSVT-369)	(PSVT-370)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-75. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 3 at High Island 382F.

Analyte	Sample ID				
	(PSVT-371)	(PSVT-372)	(PSVT-373)	(PSVT-374)	(PSVT-375)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-76. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of creole-fish collected during Cruise 2 at High Island 382F.

Analyte	Sample ID				
	(PSVT-376)	(PSVT-377)	(PSVT-378)	(PSVT-379)	(PSVT-380)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-77. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 2 at High Island A 553A.

Analyte	Sample ID				
	(PSVT-381)	(PSVT-382)	(PSVT-383)	(PSVT-384)	(PSVT-385)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-78. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of creole-fish collected during Cruise 2 at High Island A 553A.

Analyte	Sample ID				
	(PSVT-386)	(PSVT-387)	(PSVT-388)	(PSVT-389)	(PSVT-390)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-79. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 3 at High Island A 553A.

Analyte	Sample ID				
	(PSVT-391)	(PSVT-392)	(PSVT-393)	(PSVT-394)	(PSVT-395)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-80. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of creole-fish collected during Cruise 3 at High Island A 553A.

Analyte	Sample ID				
	(PSVT-396)	(PSVT-397)	(PSVT-398)	(PSVT-399)	(PSVT-400)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-81. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of hardhead catfish collected during Cruise 2 at Eugene Island 100C.

Analyte	Sample ID				
	(PSVT-401)	(PSVT-402)	(PSVT-403)	(PSVT-404)	(PSVT-405)
Benzene (ng/g wet weight)	5.1	ND	1.9 J	ND	ND
Toluene (ng/g wet weight)	2.5 J	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	23	ND	8.4 J	ND	ND
Toluene (ng/g dry weight)	11 J	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-82. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of sheepshead collected during Cruise 2 at Eugene Island 100C.

Analyte	Sample ID				
	(PSVT-406)	(PSVT-407)	(PSVT-408)	(PSVT-409)	(PSVT-410)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-83. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of hardhead catfish collected during Cruise 3 at Eugene Island 100C.

Analyte	Sample ID				
	(PSVT-411)	(PSVT-412)	(PSVT-413)	(PSVT-414)	(PSVT-415)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-84. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of sheepshead collected during Cruise 3 at Eugene Island 100C.

Analyte	Sample ID				
	(PSVT-416)	(PSVT-417)	(PSVT-418)	(PSVT-419)	(PSVT-420)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	1.7 J
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	8.1 J
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-85. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of hardhead catfish collected during Cruise 2 at Ship Shoal 100DA.

Analyte	Sample ID				
	(PSVT-421)	(PSVT-422)	(PSVT-423)	(PSVT-424)	(PSVT-425)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	5.8 J	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	30 J	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).  
 ND = Concentration below the MDL.

Table A-86. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of sheepshead collected during Cruise 2 at Ship Shoal 100DA.

Analyte	Sample ID				
	(PSVT-426)	(PSVT-427)	(PSVT-428)	(PSVT-429)	(PSVT-430)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	5.4 J	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	28 J	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).  
 ND = Concentration below the MDL.



Table A-87. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of hardhead catfish collected during Cruise 3 at Ship Shoal 100DA.

Analyte	Sample ID				
	(PSVT-431)	(PSVT-432)	(PSVT-433)	(PSVT-434)	(PSVT-435)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-88. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of sheepshead collected during Cruise 3 at Ship Shoal 100DA.

Analyte	Sample ID				
	(PSVT-436)	(PSVT-437)	(PSVT-438)	(PSVT-439)	(PSVT-440)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-89. Concentrations of volatile organic compound target chemicals in composite tissue samples of blue crab collected during Cruise 2 at Vermilion 31A.

Analyte	Sample ID				
	(PSVT-441)	(PSVT-442)	(PSVT-443)	(PSVT-444)	(PSVT-445)
Benzene (ng/g wet weight)	ND	ND	ND	2.4	ND
Toluene (ng/g wet weight)	ND	2 J	2 J	3.3 J	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	14	ND
Toluene (ng/g dry weight)	ND	11 J	11 J	19 J	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).  
 ND = Concentration below the MDL.

Table A-90. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of hardhead catfish collected during Cruise 2 at Vermilion 31A.

Analyte	Sample ID				
	(PSVT-446)	(PSVT-447)	(PSVT-448)	(PSVT-449)	(PSVT-450)
Benzene (ng/g wet weight)	ND	4.7	ND	ND	ND
Toluene (ng/g wet weight)	ND	4.6 J	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	21	ND	ND	ND
Toluene (ng/g dry weight)	ND	21 J	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).  
 ND = Concentration below the MDL.

Table A-91. Concentrations of volatile organic compound target chemicals in composite tissue samples of eastern oyster collected during Cruise 2 at Vermilion 31A.

Analyte	Sample ID				
	(PSVT-451)	(PSVT-452)	(PSVT-453)	(PSVT-454)	(PSVT-455)
Benzene (ng/g wet weight)	ND	2.2 J	1.7 J	1.9 J	1.1 J
Toluene (ng/g wet weight)	ND	3.6 J	2.3 J	2.9 J	ND
Ethylbenzene (ng/g wet weight)	ND	1.6 J	ND	ND	ND
Benzene (ng/g dry weight)	ND	15 J	11 J	13 J	8.3 J
Toluene (ng/g dry weight)	ND	25 J	15 J	20 J	ND
Ethylbenzene (ng/g dry weight)	ND	11 J	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).  
 ND = Concentration below the MDL.

Table A-92. Concentrations of volatile organic compound target chemicals in composite tissue samples of blue crab collected during Cruise 3 at Vermilion 31A.

Analyte	Sample ID				
	(PSVT-456)	(PSVT-457)	(PSVT-458)	(PSVT-459)	(PSVT-460)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-93. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of hardhead catfish collected during Cruise 3 at Vermilion 31A.

Analyte	Sample ID				
	(PSVT-461)	(PSVT-462)	(PSVT-463)	(PSVT-464)	(PSVT-465)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	3.5	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	15	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-94. Concentrations of volatile organic compound target chemicals in composite tissue samples of eastern oyster collected during Cruise 3 at Vermilion 31A.

Analyte	Sample ID				
	(PSVT-466)	(PSVT-467)	(PSVT-468)	(PSVT-469)	(PSVT-470)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-95. Concentrations of volatile organic compound target chemicals in composite tissue samples of blue crab collected during Cruise 2 at South Marsh Island 229C.

Analyte	Sample ID				
	(PSVT-471)	(PSVT-472)	(PSVT-473)	(PSVT-474)	(PSVT-475)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-96. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of hardhead catfish collected during Cruise 2 at South Marsh Island 229C.

Analyte	Sample ID				
	(PSVT-476)	(PSVT-477)	(PSVT-478)	(PSVT-479)	(PSVT-480)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-97. Concentrations of volatile organic compound target chemicals in composite tissue samples of eastern oyster collected during Cruise 2 at South Marsh Island 229C.

Analyte	Sample ID				
	(PSVT-481)	(PSVT-482)	(PSVT-483)	(PSVT-484)	(PSVT-485)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-98. Concentrations of volatile organic compound target chemicals in a composite tissue sample of blue crab collected during Cruise 3 at South Marsh Island 229C.

Analyte	Sample ID
	(PSVT-486)
Benzene (ng/g wet weight)	ND
Toluene (ng/g wet weight)	ND
Ethylbenzene (ng/g wet weight)	ND
Benzene (ng/g dry weight)	ND
Toluene (ng/g dry weight)	ND
Ethylbenzene (ng/g dry weight)	ND

ND = Concentration below the method detection limit.

Table A-99. Concentrations of volatile organic compound target chemicals in tissue samples from individual specimens of hardhead catfish collected during Cruise 3 at South Marsh Island 229C.

Analyte	Sample ID				
	(PSVT-487)	(PSVT-488)	(PSVT-489)	(PSVT-490)	(PSVT-491)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-100. Concentrations of volatile organic compound target chemicals in composite tissue samples of eastern oyster collected during Cruise 3 at South Marsh Island 229C.

Analyte	Sample ID				
	(PSVT-492)	(PSVT-493)	(PSVT-494)	(PSVT-495)	(PSVT-496)
Benzene (ng/g wet weight)	ND	ND	ND	ND	ND
Toluene (ng/g wet weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzene (ng/g dry weight)	ND	ND	ND	ND	ND
Toluene (ng/g dry weight)	ND	ND	ND	ND	ND
Ethylbenzene (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-101. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 1 at East Breaks 165A.

Analyte	Sample ID				
	(PSST-001)	(PSST-002)	(PSST-003)	(PSST-004)	(PSST-005)
Phenol (ng/g wet weight)	ND	ND	ND	ND	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	ND	ND	ND	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-102. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of creole-fish collected during Cruise 1 at East Breaks 165A.

Analyte	Sample ID				
	(PSST-006)	(PSST-007)	(PSST-008)	(PSST-009)	(PSST-010)
Phenol (ng/g wet weight)	ND	ND	ND	ND	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	ND	ND	ND	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.



Table A-103. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 2 at East Breaks 165A.

Analyte	Sample ID				
	(PSST-011)	(PSST-012)	(PSST-013)	(PSST-014)	(PSST-015)
Phenol (ng/g wet weight)	ND	ND	ND	79 J	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	ND	ND	350 J	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-104. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of creole-fish collected during Cruise 2 at East Breaks 165A.

Analyte	Sample ID				
	(PSST-016)	(PSST-017)	(PSST-018)	(PSST-019)	(PSST-020)
Phenol (ng/g wet weight)	ND	ND	ND	ND	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	ND	ND	ND	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-105. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 1 at High Island A 356A.

Analyte	Sample ID				
	(PSST-021)	(PSST-022)	(PSST-023)	(PSST-024)	(PSST-025)
Phenol (ng/g wet weight)	ND	ND	ND	71 J	84 J
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	ND	ND	330 J	330 J
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-106. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of creole-fish collected during Cruise 1 at High Island A 356A.

Analyte	Sample ID				
	(PSST-026)	(PSST-027)	(PSST-028)	(PSST-029)	(PSST-030)
Phenol (ng/g wet weight)	ND	ND	ND	60 J	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	97 J	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	ND	ND	310 J	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	480 J	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-107. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 2 at High Island A 356A.

Analyte	Sample ID				
	(PSST-031)	(PSST-032)	(PSST-033)	(PSST-034)	(PSST-035)
Phenol (ng/g wet weight)	ND	ND	ND	ND	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	60 J	ND
Phenol (ng/g dry weight)	ND	ND	ND	ND	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	220 J	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-108. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of creole-fish collected during Cruise 2 at High Island A 356A.

Analyte	Sample ID				
	(PSST-036)	(PSST-037)	(PSST-038)	(PSST-039)	(PSST-040)
Phenol (ng/g wet weight)	ND	ND	ND	ND	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	ND	ND	ND	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-109. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 1 at Green Canyon 19A.

Analyte	Sample ID				
	(PSST-041)	(PSST-042)	(PSST-043)	(PSST-044)	(PSST-045)
Phenol (ng/g wet weight)	ND	ND	ND	230 J	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	71 JB	180 B	ND	ND	53 J
Phenol (ng/g dry weight)	ND	ND	ND	990 J	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	290 JB	780 B	ND	ND	200 J

B = Analyte present in procedural blank.

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-110. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of creole-fish collected during Cruise 1 at Green Canyon 19A.

Analyte	Sample ID				
	(PSST-046)	(PSST-047)	(PSST-048)	(PSST-049)	(PSST-050)
Phenol (ng/g wet weight)	150 B	ND	ND	91 J	110 J
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	69 J	ND	52 J
Phenol (ng/g dry weight)	780 B	ND	ND	460 J	540 J
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	360 J	ND	260 J

B = Analyte present in procedural blank.

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-111. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 2 at Green Canyon 19A.

Analyte	Sample ID				
	(PSST-051)	(PSST-052)	(PSST-053)	(PSST-054)	(PSST-055)
Phenol (ng/g wet weight)	89 J	110 J	110 J	150 J	73 J
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	ND
Phenol (ng/g dry weight)	400 J	450 J	480 J	630 J	280 J
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-112. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of creole-fish collected during Cruise 2 at Green Canyon 19A.

Analyte	Sample ID				
	(PSST-056)	(PSST-057)	(PSST-058)	(PSST-059)	(PSST-060)
Phenol (ng/g wet weight)	ND	120 J	ND	ND	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	29 J	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	570 J	ND	ND	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	141 J	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-113. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 1 at Eugene Island 361A.

Analyte	Sample ID				
	(PSST-061)	(PSST-062)	(PSST-063)	(PSST-064)	(PSST-065)
Phenol (ng/g wet weight)	ND	ND	ND	90 J	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	390	ND	ND
Phenol (ng/g dry weight)	ND	ND	ND	370 J	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	1500	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-114. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of creole-fish collected during Cruise 1 at Eugene Island 361A.

Analyte	Sample ID				
	(PSST-066)	(PSST-067)	(PSST-068)	(PSST-069)	(PSST-070)
Phenol (ng/g wet weight)	ND	ND	ND	ND	65 J
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	320 B	ND	ND	90 J
Phenol (ng/g dry weight)	ND	ND	ND	ND	330 J
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	1700 B	ND	ND	460 J

B = Analyte present in procedural blank.

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-115. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 2 at Eugene Island 361A.

Analyte	Sample ID				
	(PSST-071)	(PSST-072)	(PSST-073)	(PSST-074)	(PSST-075)
Phenol (ng/g wet weight)	ND	ND	ND	ND	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	56 J	ND
Phenol (ng/g dry weight)	ND	ND	ND	ND	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	240 J	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-116. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of creole-fish collected during Cruise 2 at Eugene Island 361A.

Analyte	Sample ID				
	(PSST-076)	(PSST-077)	(PSST-078)	(PSST-079)	(PSST-080)
Phenol (ng/g wet weight)	ND	ND	ND	ND	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	59 J	58 J	ND	39 J
Phenol (ng/g dry weight)	ND	ND	ND	ND	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	290 J	270 J	ND	190 J

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-117. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of red snapper collected during Cruise 1 at Vermilion 214A.

Analyte	Sample ID			
	(PSST-081)	(PSST-082)	(PSST-083)	(PSST-085)
Phenol (ng/g wet weight)	ND	ND	ND	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	76 J	ND	42 J	ND
Phenol (ng/g dry weight)	ND	ND	ND	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	350 J	ND	180 J	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).  
 ND = Concentration below the MDL.

Table A-118. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of gray triggerfish collected during Cruise 1 at Vermilion 214A.

Analyte	Sample ID				
	(PSST-086)	(PSST-087)	(PSST-088)	(PSST-089)	(PSST-090)
Phenol (ng/g wet weight)	ND	ND	ND	ND	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	45 J	ND	ND	ND
Phenol (ng/g dry weight)	ND	ND	ND	ND	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	210 J	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).  
 ND = Concentration below the MDL.



Table A-119. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of red snapper collected during Cruise 2 at Vermilion 214A.

Analyte	Sample ID				
	(PSST-091)	(PSST-092)	(PSST-093)	(PSST-094)	(PSST-095)
Phenol (ng/g wet weight)	ND	ND	ND	ND	ND
Fluorene (ng/g wet weight)	ND	ND	0.59 J	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	46 J	ND	ND
Phenol (ng/g dry weight)	ND	ND	ND	ND	ND
Fluorene (ng/g dry weight)	ND	ND	2.8 J	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	210 J	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-120. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of gray triggerfish collected during Cruise 2 at Vermilion 214A.

Analyte	Sample ID				
	(PSST-096)	(PSST-097)	(PSST-098)	(PSST-099)	(PSST-100)
Phenol (ng/g wet weight)	ND	ND	ND	ND	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	ND	ND	ND	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-121. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of red snapper collected during Cruise 1 at East Cameron 229A.

Analyte	Sample ID				
	(PSST-101)	(PSST-102)	(PSST-103)	(PSST-104)	(PSST-105)
Phenol (ng/g wet weight)	ND	ND	ND	120 J	120 J
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	55 J	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	ND	ND	530 J	560 J
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	290 J	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-122. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of gray triggerfish collected during Cruise 1 at East Cameron 229A.

Analyte	Sample ID				
	(PSST-106)	(PSST-107)	(PSST-108)	(PSST-109)	(PSST-110)
Phenol (ng/g wet weight)	ND	ND	ND	ND	ND
Fluorene (ng/g wet weight)	11	ND	ND	0.84	ND
Benzo[a]pyrene (ng/g wet weight)	2.6 J	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	250 B	ND	44 J	ND
Phenol (ng/g dry weight)	ND	ND	ND	ND	ND
Fluorene (ng/g dry weight)	52	ND	ND	3.8	ND
Benzo[a]pyrene (ng/g dry weight)	12 J	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	1100 B	ND	200 J	ND

B = Analyte present in procedural blank.

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-123. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of red snapper collected during Cruise 2 at East Cameron 229A.

Analyte	Sample ID				
	(PSST-111)	(PSST-112)	(PSST-113)	(PSST-114)	(PSST-115)
Phenol (ng/g wet weight)	ND	ND	ND	ND	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	56 J	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	ND	ND	ND	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	260 J	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-124. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of gray triggerfish collected during Cruise 2 at East Cameron 229A.

Analyte	Sample ID				
	(PSST-116)	(PSST-117)	(PSST-118)	(PSST-119)	(PSST-120)
Phenol (ng/g wet weight)	ND	ND	ND	ND	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	ND	ND	ND	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-125. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 1 at Ship Shoal 277A.

Analyte	Sample ID				
	(PSST-121)	(PSST-122)	(PSST-123)	(PSST-124)	(PSST-125)
Phenol (ng/g wet weight)	125 B	ND	ND	110 J	170 J
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	0.75 J	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	35 J	54 J	ND	ND	ND
Phenol (ng/g dry weight)	520 B	ND	ND	480 J	670 J
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	3.3 J	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	150 J	240 J	ND	ND	ND

B = Analyte present in procedural blank.

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-126. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of red snapper collected during Cruise 1 at Ship Shoal 277A.

Analyte	Sample ID				
	(PSST-126)	(PSST-127)	(PSST-128)	(PSST-129)	(PSST-130)
Phenol (ng/g wet weight)	ND	ND	67 JB	63 J	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	59 J	ND	ND	ND
Phenol (ng/g dry weight)	ND	ND	300 JB	290 J	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	280 J	ND	ND	ND

B = Analyte present in procedural blank.

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-127. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 2 at Ship Shoal 277A.

Analyte	Sample ID				
	(PSST-131)	(PSST-132)	(PSST-133)	(PSST-134)	(PSST-135)
Phenol (ng/g wet weight)	ND	ND	ND	ND	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	60 J	ND	ND	ND
Phenol (ng/g dry weight)	ND	ND	ND	ND	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	250 J	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-128. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of creole-fish collected during Cruise 2 at Ship Shoal 277A.

Analyte	Sample ID				
	(PSST-136)	(PSST-137)	(PSST-138)	(PSST-139)	(PSST-140)
Phenol (ng/g wet weight)	ND	ND	ND	ND	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	ND	ND	ND	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-129. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 1 at Eugene Island 360C.

Analyte	Sample ID				
	(PSST-141)	(PSST-142)	(PSST-143)	(PSST-144)	(PSST-145)
Phenol (ng/g wet weight)	ND	ND	ND	ND	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	60 J	140 JB	ND	ND	ND
Phenol (ng/g dry weight)	ND	ND	ND	ND	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	220 J	600 JB	ND	ND	ND

B = Analyte present in procedural blank.

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-130. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of red snapper collected during Cruise 1 at Eugene Island 360C.

Analyte	Sample ID				
	(PSST-146)	(PSST-147)	(PSST-148)	(PSST-149)	(PSST-150)
Phenol (ng/g wet weight)	ND	ND	ND	230 J	98 J
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	61 J	140 JB	ND	ND	ND
Phenol (ng/g dry weight)	ND	ND	ND	1000 J	440 J
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	290 J	610 JB	ND	ND	ND

B = Analyte present in procedural blank.

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-131. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 2 at Eugene Island 360C.

Analyte	Sample ID				
	(PSST-151)	(PSST-152)	(PSST-153)	(PSST-154)	(PSST-155)
Phenol (ng/g wet weight)	ND	87 J	ND	ND	74 J
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	380 J	ND	ND	300 J
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-132. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of creole-fish collected during Cruise 2 at Eugene Island 360C.

Analyte	Sample ID				
	(PSST-156)	(PSST-157)	(PSST-158)	(PSST-159)	(PSST-160)
Phenol (ng/g wet weight)	ND	ND	ND	ND	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	32 J	31 J
Phenol (ng/g dry weight)	ND	ND	ND	ND	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	160 J	150 J

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-133. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 2 at Mississippi Canyon 194A.

Analyte	Sample ID				
	(PSST-161)	(PSST-162)	(PSST-163)	(PSST-164)	(PSST-165)
Phenol (ng/g wet weight)	ND	140 J	100 J	ND	ND
Fluorene (ng/g wet weight)	ND	ND	ND	1.3	0.31 J
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	120 J	ND
Phenol (ng/g dry weight)	ND	570 J	400 J	ND	ND
Fluorene (ng/g dry weight)	ND	ND	ND	4.6	1.2 J
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	400 J	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-134. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of gray triggerfish collected during Cruise 2 at Mississippi Canyon 194A.

Analyte	Sample ID				
	(PSST-166)	(PSST-167)	(PSST-168)	(PSST-169)	(PSST-170)
Phenol (ng/g wet weight)	ND	56 J	ND	ND	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	60 J
Phenol (ng/g dry weight)	ND	280 J	ND	ND	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	270 J

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.



Table A-135. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of creole-fish collected during Cruise 3 at Mississippi Canyon 194A.

Analyte	Sample ID				
	(PSST-171)	(PSST-172)	(PSST-173)	(PSST-174)	(PSST-175)
Phenol (ng/g wet weight)	ND	ND	ND	ND	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	ND	ND	ND	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-136. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of gray triggerfish collected during Cruise 3 at Mississippi Canyon 194A.

Analyte	Sample ID				
	(PSST-176)	(PSST-177)	(PSST-178)	(PSST-179)	(PSST-180)
Phenol (ng/g wet weight)	ND	ND	ND	67 J	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	ND	ND	280 J	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-137. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 2 at Mississippi Canyon 280A.

Analyte	Sample ID				
	(PSST-181)	(PSST-182)	(PSST-183)	(PSST-184)	(PSST-185)
Phenol (ng/g wet weight)	160 J	ND	ND	77 J	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	ND
Phenol (ng/g dry weight)	700 J	ND	ND	320 J	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-138. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of gray triggerfish collected during Cruise 2 at Mississippi Canyon 280A.

Analyte	Sample ID				
	(PSST-186)	(PSST-187)	(PSST-188)	(PSST-189)	(PSST-190)
Phenol (ng/g wet weight)	180 J	ND	ND	ND	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	ND
Phenol (ng/g dry weight)	910 J	ND	ND	ND	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-139. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of creole-fish collected during Cruise 3 at Mississippi Canyon 280A.

Analyte	Sample ID				
	(PSST-191)	(PSST-192)	(PSST-193)	(PSST-194)	(PSST-195)
Phenol (ng/g wet weight)	ND	ND	ND	ND	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	ND	ND	ND	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-140. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of gray triggerfish collected during Cruise 3 at Mississippi Canyon 280A.

Analyte	Sample ID				
	(PSST-196)	(PSST-197)	(PSST-198)	(PSST-199)	(PSST-200)
Phenol (ng/g wet weight)	ND	ND	ND	ND	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	ND	ND	ND	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-141. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of red snapper collected during Cruise 2 at South Timbalier 130.

Analyte	Sample ID				
	(PSST-201)	(PSST-202)	(PSST-203)	(PSST-204)	(PSST-205)
Phenol (ng/g wet weight)	ND	ND	ND	ND	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	44 J	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	ND	ND	ND	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	180 J	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-142. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of gray triggerfish collected during Cruise 2 at South Timbalier 130.

Analyte	Sample ID				
	(PSST-206)	(PSST-207)	(PSST-208)	(PSST-209)	(PSST-210)
Phenol (ng/g wet weight)	ND	ND	ND	ND	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	57 J
Phenol (ng/g dry weight)	ND	ND	ND	ND	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	280 J

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-143. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of red snapper collected during Cruise 3 at South Timbalier 130.

Analyte	Sample ID				
	(PSST-211)	(PSST-212)	(PSST-213)	(PSST-214)	(PSST-215)
Phenol (ng/g wet weight)	ND	ND	94 J	ND	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	ND	420 J	ND	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-144. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of spadefish collected during Cruise 3 at South Timbalier 130.

Analyte	Sample ID				
	(PSST-216)	(PSST-217)	(PSST-218)	(PSST-219)	(PSST-220)
Phenol (ng/g wet weight)	ND	ND	ND	ND	64 J
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	--	ND	ND
Phenol (ng/g dry weight)	ND	ND	ND	ND	320 J
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	--	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

-- = Sample lost in laboratory.

Table A-145. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of red snapper collected during Cruise 2 at South Timbalier 128X.

Analyte	Sample ID				
	(PSST-221)	(PSST-222)	(PSST-223)	(PSST-224)	(PSST-225)
Phenol (ng/g wet weight)	ND	ND	ND	65 J	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	34 J	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	ND	ND	300 J	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	150 J	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-146. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of gray triggerfish collected during Cruise 2 at South Timbalier 128X.

Analyte	Sample ID				
	(PSST-226)	(PSST-227)	(PSST-228)	(PSST-229)	(PSST-230)
Phenol (ng/g wet weight)	ND	74 J	ND	ND	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	92 J	ND	46 J	ND
Phenol (ng/g dry weight)	ND	350 J	ND	ND	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	440 J	ND	210 J	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-147. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of red snapper collected during Cruise 3 at South Timbalier 128X.

Analyte	Sample ID				
	(PSST-231)	(PSST-232)	(PSST-233)	(PSST-234)	(PSST-235)
Phenol (ng/g wet weight)	ND	ND	ND	ND	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	0.26 J
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	ND	ND	ND	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	1.1 J
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-148. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of spadefish collected during Cruise 3 at South Timbalier 128X.

Analyte	Sample ID				
	(PSST-236)	(PSST-237)	(PSST-238)	(PSST-239)	(PSST-240)
Phenol (ng/g wet weight)	ND	ND	ND	ND	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	ND	ND	ND	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-149. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of red snapper collected during Cruise 2 at Vermilion 245E.

Analyte	Sample ID				
	(PSST-241)	(PSST-242)	(PSST-243)	(PSST-244)	(PSST-245)
Phenol (ng/g wet weight)	ND	ND	ND	ND	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	ND	ND	ND	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-150. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of gray triggerfish collected during Cruise 2 at Vermilion 245E.

Analyte	Sample ID				
	(PSST-246)	(PSST-247)	(PSST-248)	(PSST-249)	(PSST-250)
Phenol (ng/g wet weight)	ND	ND	ND	ND	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	ND	ND	ND	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.



Table A-151. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of red snapper collected during Cruise 3 at Vermilion 245E.

Analyte	Sample ID				
	(PSST-251)	(PSST-252)	(PSST-253)	(PSST-254)	(PSST-255)
Phenol (ng/g wet weight)	ND	ND	ND	ND	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	ND	ND	ND	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-152. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of gray triggerfish collected during Cruise 3 at Vermilion 245E.

Analyte	Sample ID				
	(PSST-256)	(PSST-257)	(PSST-258)	(PSST-259)	(PSST-260)
Phenol (ng/g wet weight)	ND	ND	85 J	ND	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	ND	380 J	ND	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-153. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of red snapper collected during Cruise 2 at South Marsh Island 72C.

Analyte	Sample ID				
	(PSST-261)	(PSST-262)	(PSST-263)	(PSST-264)	(PSST-265)
Phenol (ng/g wet weight)	ND	ND	ND	96 J	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	210	ND
Phenol (ng/g dry weight)	ND	ND	ND	460 J	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	990	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-154. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of gray triggerfish collected during Cruise 2 at South Marsh Island 72C.

Analyte	Sample ID				
	(PSST-266)	(PSST-267)	(PSST-268)	(PSST-269)	(PSST-270)
Phenol (ng/g wet weight)	ND	ND	110 J	ND	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	ND	640 J	ND	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-155. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of red snapper collected during Cruise 3 at South Marsh Island 72C.

Analyte	Sample ID				
	(PSST-271)	(PSST-272)	(PSST-273)	(PSST-274)	(PSST-275)
Phenol (ng/g wet weight)	ND	ND	ND	ND	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	ND	ND	ND	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-156. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of gray triggerfish collected during Cruise 3 at South Marsh Island 72C.

Analyte	Sample ID				
	(PSST-276)	(PSST-277)	(PSST-278)	(PSST-279)	(PSST-280)
Phenol (ng/g wet weight)	ND	ND	ND	ND	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	ND	ND	ND	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-157. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 2 at Eugene Island 330C.

Analyte	Sample ID				
	(PSST-281)	(PSST-282)	(PSST-283)	(PSST-284)	(PSST-285)
Phenol (ng/g wet weight)	ND	ND	ND	ND	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	ND	ND	ND	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-158. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of gray triggerfish collected during Cruise 2 at Eugene Island 330C.

Analyte	Sample ID				
	(PSST-286)	(PSST-287)	(PSST-288)	(PSST-289)	(PSST-290)
Phenol (ng/g wet weight)	ND	ND	ND	ND	ND
Fluorene (ng/g wet weight)	1.8	0.77	ND	0.89	0.44 J
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	ND	ND	ND	ND
Fluorene (ng/g dry weight)	8.2	3.6	ND	4.0	2.2 J
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-159. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 3 at Eugene Island 330C.

Analyte	Sample ID				
	(PSST-291)	(PSST-292)	(PSST-293)	(PSST-294)	(PSST-295)
Phenol (ng/g wet weight)	ND	ND	ND	ND	61 J
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	ND	ND	ND	290 J
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-160. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of creole-fish collected during Cruise 3 at Eugene Island 330C.

Analyte	Sample ID				
	(PSST-296)	(PSST-297)	(PSST-298)	(PSST-299)	(PSST-300)
Phenol (ng/g wet weight)	ND	ND	ND	ND	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	0.22 J
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	70 J	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	ND	ND	ND	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	0.99 J
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	350 J	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-161. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 2 at Eugene Island 352B.

Analyte	Sample ID				
	(PSST-301)	(PSST-302)	(PSST-303)	(PSST-304)	(PSST-305)
Phenol (ng/g wet weight)	ND	ND	ND	ND	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	ND	ND	ND	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-162. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of gray triggerfish collected during Cruise 2 at Eugene Island 352B.

Analyte	Sample ID				
	(PSST-306)	(PSST-307)	(PSST-308)	(PSST-309)	(PSST-310)
Phenol (ng/g wet weight)	ND	ND	ND	ND	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	0.49 J	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	32 J	ND	37 J	ND
Phenol (ng/g dry weight)	ND	ND	ND	ND	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	2.2 J	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	150 J	ND	180 J	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-163. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 3 at Eugene Island 352B.

Analyte	Sample ID				
	(PSST-311)	(PSST-312)	(PSST-313)	(PSST-314)	(PSST-315)
Phenol (ng/g wet weight)	ND	ND	ND	ND	ND
Fluorene (ng/g wet weight)	0.68	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	ND	ND	ND	ND
Fluorene (ng/g dry weight)	2.9	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-164. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of creole-fish collected during Cruise 3 at Eugene Island 352B.

Analyte	Sample ID				
	(PSST-316)	(PSST-317)	(PSST-318)	(PSST-319)	(PSST-320)
Phenol (ng/g wet weight)	ND	ND	ND	ND	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	ND	ND	ND	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-165. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 2 at High Island 376A.

Analyte	Sample ID				
	(PSST-321)	(PSST-322)	(PSST-323)	(PSST-324)	(PSST-325)
Phenol (ng/g wet weight)	ND	ND	ND	ND	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	ND	ND	ND	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-166. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of red snapper collected during Cruise 2 at High Island 376A.

Analyte	Sample ID				
	(PSST-326)	(PSST-327)	(PSST-328)	(PSST-329)	(PSST-330)
Phenol (ng/g wet weight)	ND	ND	ND	ND	ND
Fluorene (ng/g wet weight)	4.3	2.9	1.7	0.39 J	0.82
Benzo[a]pyrene (ng/g wet weight)	0.46 J	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	ND	ND	ND	ND
Fluorene (ng/g dry weight)	18	12	7.3	1.8 J	3.5
Benzo[a]pyrene (ng/g dry weight)	2.0 J	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.



Table A-167. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 3 at High Island 376A.

Analyte	Sample ID				
	(PSST-331)	(PSST-332)	(PSST-333)	(PSST-334)	(PSST-335)
Phenol (ng/g wet weight)	79 J	ND	ND	ND	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	ND
Phenol (ng/g dry weight)	370 J	ND	ND	ND	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-168. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of rockhind collected during Cruise 3 at High Island 376A.

Analyte	Sample ID				
	(PSST-336)	(PSST-337)	(PSST-338)	(PSST-339)	(PSST-340)
Phenol (ng/g wet weight)	ND	ND	ND	ND	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	ND	ND	ND	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-169. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 2 at West Cameron 587B.

Analyte	Sample ID				
	(PSST-341)	(PSST-342)	(PSST-343)	(PSST-344)	(PSST-345)
Phenol (ng/g wet weight)	ND	ND	ND	ND	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	40 J
Phenol (ng/g dry weight)	ND	ND	ND	ND	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	160 J

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-170. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of red snapper collected during Cruise 2 at West Cameron 587B.

Analyte	Sample ID				
	(PSST-346)	(PSST-347)	(PSST-348)	(PSST-349)	(PSST-350)
Phenol (ng/g wet weight)	ND	ND	ND	ND	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	ND	ND	ND	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-171. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 3 at West Cameron 587B.

Analyte	Sample ID				
	(PSST-351)	(PSST-352)	(PSST-353)	(PSST-354)	(PSST-355)
Phenol (ng/g wet weight)	ND	ND	ND	ND	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	42 J	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	ND	ND	ND	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	170 J	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-172. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of rockhind collected during Cruise 3 at West Cameron 587B.

Analyte	Sample ID				
	(PSST-356)	(PSST-357)	(PSST-358)	(PSST-359)	(PSST-360)
Phenol (ng/g wet weight)	ND	ND	ND	ND	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	ND	ND	ND	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-173. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 2 at High Island 382F.

Analyte	Sample ID				
	(PSST-361)	(PSST-362)	(PSST-363)	(PSST-364)	(PSST-365)
Phenol (ng/g wet weight)	ND	84 J	ND	130 J	130 J
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	340 J	ND	590 J	510 J
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-174. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of creole-fish collected during Cruise 2 at High Island 382F.

Analyte	Sample ID				
	(PSST-366)	(PSST-367)	(PSST-368)	(PSST-369)	(PSST-370)
Phenol (ng/g wet weight)	ND	97 J	120 J	ND	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	480 J	600 J	ND	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-175. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 3 at High Island 382F.

Analyte	Sample ID				
	(PSST-371)	(PSST-372)	(PSST-373)	(PSST-374)	(PSST-375)
Phenol (ng/g wet weight)	ND	ND	ND	ND	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	100 J	ND	ND
Phenol (ng/g dry weight)	ND	ND	ND	ND	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	470 J	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-176. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of creole-fish collected during Cruise 3 at High Island 382F.

Analyte	Sample ID				
	(PSST-376)	(PSST-377)	(PSST-378)	(PSST-379)	(PSST-380)
Phenol (ng/g wet weight)	ND	ND	ND	ND	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	ND	ND	ND	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-177. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 2 at High Island A 553A.

Analyte	Sample ID				
	(PSST-381)	(PSST-382)	(PSST-383)	(PSST-384)	(PSST-385)
Phenol (ng/g wet weight)	80 J	170 J	ND	170 J	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	ND
Phenol (ng/g dry weight)	340 J	750 J	ND	670 J	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-178. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of creole-fish collected during Cruise 2 at High Island A 553A.

Analyte	Sample ID				
	(PSST-386)	(PSST-387)	(PSST-388)	(PSST-389)	(PSST-390)
Phenol (ng/g wet weight)	ND	ND	ND	160 J	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	ND	ND	790 J	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-179. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 3 at High Island A 553A.

Analyte	Sample ID				
	(PSST-391)	(PSST-392)	(PSST-393)	(PSST-394)	(PSST-395)
Phenol (ng/g wet weight)	ND	ND	ND	ND	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	0.91 J	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	19	ND	ND	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	4.1	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-180. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of creole-fish collected during Cruise 3 at High Island A 553A.

Analyte	Sample ID				
	(PSST-396)	(PSST-397)	(PSST-398)	(PSST-399)	(PSST-400)
Phenol (ng/g wet weight)	68 J	ND	ND	ND	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	ND
Phenol (ng/g dry weight)	300 J	ND	ND	ND	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-181. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of hardhead catfish collected during Cruise 2 at Eugene Island 100C.

Analyte	Sample ID				
	(PSST-401)	(PSST-402)	(PSST-403)	(PSST-404)	(PSST-405)
Phenol (ng/g wet weight)	ND	ND	ND	ND	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	78 J	45 J	ND
Phenol (ng/g dry weight)	ND	ND	ND	ND	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	350 J	200 J	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-182. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of sheephead collected during Cruise 2 at Eugene Island 100C.

Analyte	Sample ID				
	(PSST-406)	(PSST-407)	(PSST-408)	(PSST-409)	(PSST-410)
Phenol (ng/g wet weight)	ND	ND	ND	ND	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	50 J	ND	ND
Phenol (ng/g dry weight)	ND	ND	ND	ND	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	260 J	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.



Table A-183. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of hardhead catfish collected during Cruise 3 at Eugene Island 100C.

Analyte	Sample ID				
	(PSST-411)	(PSST-412)	(PSST-413)	(PSST-414)	(PSST-415)
Phenol (ng/g wet weight)	ND	140 J	73 J	84 J	ND
Fluorene (ng/g wet weight)	ND	ND	0.44 J	0.31	0.44 J
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	630 J	300 J	360 J	ND
Fluorene (ng/g dry weight)	ND	ND	1.8 J	1.3 J	1.8 J
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-184. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of sheephead collected during Cruise 3 at Eugene Island 100C.

Analyte	Sample ID				
	(PSST-416)	(PSST-417)	(PSST-418)	(PSST-419)	(PSST-420)
Phenol (ng/g wet weight)	ND	ND	ND	ND	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	ND	ND	ND	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-185. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of hardhead catfish collected during Cruise 2 at Ship Shoal 100DA.

Analyte	Sample ID				
	(PSST-421)	(PSST-422)	(PSST-423)	(PSST-424)	(PSST-425)
Phenol (ng/g wet weight)	ND	120 J	ND	230 J	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	650 J	ND	1100 J	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-186. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of sheepshead collected during Cruise 2 at Ship Shoal 100DA.

Analyte	Sample ID				
	(PSST-426)	(PSST-427)	(PSST-428)	(PSST-429)	(PSST-430)
Phenol (ng/g wet weight)	ND	ND	ND	ND	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	ND	ND	ND	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-187. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of hardhead catfish collected during Cruise 3 at Ship Shoal 100DA.

Analyte	Sample ID				
	(PSST-431)	(PSST-432)	(PSST-433)	(PSST-434)	(PSST-435)
Phenol (ng/g wet weight)	ND	ND	250 J	ND	ND
Fluorene (ng/g wet weight)	ND	ND	ND	0.44 J	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	ND	1300 J	ND	ND
Fluorene (ng/g dry weight)	ND	ND	ND	1.8 J	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-188. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of sheephead collected during Cruise 3 at Ship Shoal 100DA.

Analyte	Sample ID				
	(PSST-436)	(PSST-437)	(PSST-438)	(PSST-439)	(PSST-440)
Phenol (ng/g wet weight)	ND	ND	ND	ND	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	ND	ND	ND	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-189. Concentrations of semivolatile organic compound target chemicals in composite tissue samples of blue crab collected during Cruise 2 at Vermilion 31A.

Analyte	Sample ID				
	(PSST-441)	(PSST-442)	(PSST-443)	(PSST-444)	(PSST-445)
Phenol (ng/g wet weight)	ND	240 J	110 J	51 J	97 J
Fluorene (ng/g wet weight)	0.27 J	ND	0.28 J	ND	0.31 J
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	65 J	29 J	ND	ND
Phenol (ng/g dry weight)	ND	1300 J	590 J	290 J	580 J
Fluorene (ng/g dry weight)	1.6 J	ND	1.5 J	ND	1.8 J
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	350 J	160 J	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-190. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of hardhead catfish collected during Cruise 2 at Vermilion 31A.

Analyte	Sample ID				
	(PSST-446)	(PSST-447)	(PSST-448)	(PSST-449)	(PSST-450)
Phenol (ng/g wet weight)	120 J	120 J	96 J	120 J	74 J
Fluorene (ng/g wet weight)	0.71 J	0.64 J	0.38 J	ND	1.2
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	ND
Phenol (ng/g dry weight)	530 J	540 J	460 J	610 J	320 J
Fluorene (ng/g dry weight)	3.1 J	2.9 J	1.8 J	ND	5.3
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-191. Concentrations of semivolatile organic compound target chemicals in composite tissue samples of oyster collected during Cruise 2 at Vermilion 31A.

Analyte	Sample ID				
	(PSST-451)	(PSST-452)	(PSST-453)	(PSST-454)	(PSST-455)
Phenol (ng/g wet weight)	ND	ND	ND	ND	ND
Fluorene (ng/g wet weight)	1.5	1.8	2.0	2.1	2.7
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	0.25 J
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	ND	ND	ND	ND
Fluorene (ng/g dry weight)	11	13	13	15	21
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	1.9 J
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-192. Concentrations of semivolatile organic compound target chemicals in composite tissue samples of blue crab collected during Cruise 3 at Vermilion 31A.

Analyte	Sample ID				
	(PSST-456)	(PSST-457)	(PSST-458)	(PSST-459)	(PSST-460)
Phenol (ng/g wet weight)	ND	ND	ND	ND	ND
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	ND	ND	ND	ND
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-193. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of hardhead catfish collected during Cruise 3 at Vermilion 31A.

Analyte	Sample ID				
	(PSST-461)	(PSST-462)	(PSST-463)	(PSST-464)	(PSST-465)
Phenol (ng/g wet weight)	ND	ND	ND	ND	ND
Fluorene (ng/g wet weight)	ND	0.57	0.92	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	58 J	ND
Phenol (ng/g dry weight)	ND	ND	ND	ND	ND
Fluorene (ng/g dry weight)	ND	2.6	4.0	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	240 J	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-194. Concentrations of semivolatile organic compound target chemicals in composite tissue samples of oyster collected during Cruise 3 at Vermilion 31A.

Analyte	Sample ID				
	(PSST-466)	(PSST-467)	(PSST-468)	(PSST-469)	(PSST-470)
Phenol (ng/g wet weight)	ND	ND	ND	ND	ND
Fluorene (ng/g wet weight)	3.6	2.0	4.6	4.9	14
Benzo[a]pyrene (ng/g wet weight)	0.47 J	0.28 J	0.29 J	0.71 J	1.9
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	81 J	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	ND	ND	ND	ND
Fluorene (ng/g dry weight)	34	22	45	46	140
Benzo[a]pyrene (ng/g dry weight)	4.4 J	3.1 J	2.8 J	6.6 J	19
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-195. Concentrations of semivolatile organic compound target chemicals in composite tissue samples of blue crab collected during Cruise 2 at South Marsh Island 229C.

Analyte	Sample ID				
	(PSST-471)	(PSST-472)	(PSST-473)	(PSST-474)	(PSST-475)
Phenol (ng/g wet weight)	220 J	310 J	370 J	370 J	82 J
Fluorene (ng/g wet weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	ND
Phenol (ng/g dry weight)	1300 J	1900 J	2000 J	2000 J	470 J
Fluorene (ng/g dry weight)	ND	ND	ND	ND	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-196. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of hardhead catfish collected during Cruise 2 at South Marsh Island 229C.

Analyte	Sample ID				
	(PSST-476)	(PSST-477)	(PSST-478)	(PSST-479)	(PSST-480)
Phenol (ng/g wet weight)	ND	ND	ND	ND	ND
Fluorene (ng/g wet weight)	ND	0.36 J	ND	5.7	ND
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	ND	ND	ND	ND
Fluorene (ng/g dry weight)	ND	1.6 J	ND	24	ND
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-197. Concentrations of semivolatile organic compound target chemicals in composite tissue samples of oyster collected during Cruise 2 at South Marsh Island 229C.

Analyte	Sample ID				
	(PSST-481)	(PSST-482)	(PSST-483)	(PSST-484)	(PSST-485)
Phenol (ng/g wet weight)	ND	ND	ND	ND	ND
Fluorene (ng/g wet weight)	2.3	2.0	1.6	1.9	1.2
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	ND	ND	ND	ND
Fluorene (ng/g dry weight)	18	13	11	13	8.3
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-198. Concentrations of semivolatile organic compound target chemicals in composite tissue samples of blue crab collected during Cruise 3 at South Marsh Island 229C.

Analyte	Sample ID
	(PSST-486)
Phenol (ng/g wet weight)	ND
Fluorene (ng/g wet weight)	ND
Benzo[a]pyrene (ng/g wet weight)	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND
Phenol (ng/g dry weight)	ND
Fluorene (ng/g dry weight)	ND
Benzo[a]pyrene (ng/g dry weight)	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND

ND = Concentration below the method detection limit.



Table A-199. Concentrations of semivolatile organic compound target chemicals in tissue samples from individual specimens of hardhead catfish collected during Cruise 3 at South Marsh Island 229C.

Analyte	Sample ID				
	(PSST-487)	(PSST-488)	(PSST-489)	(PSST-490)	(PSST-491)
Phenol (ng/g wet weight)	ND	ND	ND	ND	ND
Fluorene (ng/g wet weight)	0.53 J	ND	ND	ND	0.49 J
Benzo[a]pyrene (ng/g wet weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	ND	ND	ND	ND
Fluorene (ng/g dry weight)	2.6 J	ND	ND	ND	2.1 J
Benzo[a]pyrene (ng/g dry weight)	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-200. Concentrations of semivolatile organic compound target chemicals in composite tissue samples of oyster collected during Cruise 3 at South Marsh Island 229C.

Analyte	Sample ID				
	(PSST-492)	(PSST-493)	(PSST-494)	(PSST-495)	(PSST-496)
Phenol (ng/g wet weight)	ND	ND	ND	ND	ND
Fluorene (ng/g wet weight)	1.6	2.0	2.1	1.1	0.65
Benzo[a]pyrene (ng/g wet weight)	0.34 J	0.31 J	0.60 J	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g wet weight)	ND	ND	ND	ND	ND
Phenol (ng/g dry weight)	ND	ND	ND	ND	ND
Fluorene (ng/g dry weight)	12	17	17	12	7.0
Benzo[a]pyrene (ng/g dry weight)	2.6 J	2.6 J	4.9 J	ND	ND
Bis(2-ethylhexyl)phthalate (ng/g dry weight)	ND	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-201. Concentrations of metal target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 1 at East Breaks 165A.

Analyte	Sample ID				
	(PSMT-001)	(PSMT-002)	(PSMT-003)	(PSMT-004)	(PSMT-005)
Arsenic (µg/g wet weight)	0.52	0.30	0.44	0.35	0.39
Cadmium (µg/g wet weight)	0.003	0.003	0.003 J	0.008	0.007
Mercury (µg/g wet weight)	0.012	0.012	0.012	0.010	0.008
Arsenic (µg/g dry weight)	2.2	1.3	1.8	1.4	1.5
Cadmium (µg/g dry weight)	0.011	0.013	0.010 J	0.031	0.027
Mercury (µg/g dry weight)	0.051	0.054	0.049	0.040	0.030

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

Table A-202. Concentrations of metal target chemicals in tissue samples from individual specimens of creole-fish collected during Cruise 1 at East Breaks 165A.

Analyte	Sample ID				
	(PSMT-006)	(PSMT-007)	(PSMT-008)	(PSMT-009)	(PSMT-010)
Arsenic (µg/g wet weight)	0.58	0.72	0.54	0.42	0.87
Cadmium (µg/g wet weight)	0.007	0.002 J	0.004	0.003	0.004
Mercury (µg/g wet weight)	0.052	0.022	0.026	0.034	0.040
Arsenic (µg/g dry weight)	2.9	3.4	2.6	2.0	3.9
Cadmium (µg/g dry weight)	0.035	0.010 J	0.018	0.015	0.017
Mercury (µg/g dry weight)	0.26	0.10	0.12	0.16	0.18

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

Table A-203. Concentrations of metal target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 2 at East Breaks 165A.

Analyte	Sample ID				
	(PSMT-011)	(PSMT-012)	(PSMT-013)	(PSMT-014)	(PSMT-015)
Arsenic (µg/g wet weight)	1.2	1.1	0.94	1.2	1.1
Cadmium (µg/g wet weight)	0.004	0.003	0.005	0.003	0.003
Mercury (µg/g wet weight)	0.016	0.018	0.018	0.025	0.021
Arsenic (µg/g dry weight)	5.4	4.7	4.3	5.3	4.7
Cadmium (µg/g dry weight)	0.018	0.012	0.023	0.011	0.012
Mercury (µg/g dry weight)	0.071	0.077	0.081	0.11	0.093

Table A-204. Concentrations of metal target chemicals in tissue samples from individual specimens of creole-fish collected during Cruise 2 at East Breaks 165A.

Analyte	Sample ID				
	(PSMT-016)	(PSMT-017)	(PSMT-018)	(PSMT-019)	(PSMT-020)
Arsenic (µg/g wet weight)	1.5	1.8	1.5	3.5	1.6
Cadmium (µg/g wet weight)	0.007	0.004	0.001 J	0.006	0.002
Mercury (µg/g wet weight)	0.059	0.079	0.033	0.067	0.039
Arsenic (µg/g dry weight)	7.3	8.5	7.0	17	7.8
Cadmium (µg/g dry weight)	0.036	0.020	0.006 J	0.028	0.010
Mercury (µg/g dry weight)	0.30	0.38	0.16	0.33	0.19

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

Table A-205. Concentrations of metal target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 1 at High Island A 356A.

Analyte	Sample ID				
	(PSMT-021)	(PSMT-022)	(PSMT-023)	(PSMT-024)	(PSMT-025)
Arsenic (µg/g wet weight)	0.39	0.41	0.38	0.27	0.24
Cadmium (µg/g wet weight)	0.006	0.002 J	0.002 J	0.005	0.003
Mercury (µg/g wet weight)	0.050	0.027	0.013	0.020	0.011
Arsenic (µg/g dry weight)	1.5	1.8	1.7	1.1	0.96
Cadmium (µg/g dry weight)	0.024	0.007 J	0.010 J	0.018	0.012
Mercury (µg/g dry weight)	0.19	0.12	0.057	0.078	0.043

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

Table A-206. Concentrations of metal target chemicals in tissue samples from individual specimens of creole-fish collected during Cruise 1 at High Island A 356A.

Analyte	Sample ID				
	(PSMT-026)	(PSMT-027)	(PSMT-028)	(PSMT-029)	(PSMT-030)
Arsenic (µg/g wet weight)	0.66	1.3	1.1	3.7	0.61
Cadmium (µg/g wet weight)	0.008	0.001 J	0.001 J	0.005	0.008
Mercury (µg/g wet weight)	0.033	0.017	0.024	0.036	0.035
Arsenic (µg/g dry weight)	3.1	6.3	3.8	18	2.7
Cadmium (µg/g dry weight)	0.036	0.005 J	0.005 J	0.022	0.033
Mercury (µg/g dry weight)	0.16	0.080	0.084	0.17	0.15

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

Table A-207. Concentrations of metal target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 2 at High Island A 356A.

Analyte	Sample ID				
	(PSMT-031)	(PSMT-032)	(PSMT-033)	(PSMT-034)	(PSMT-035)
Arsenic (µg/g wet weight)	1.0	0.98	1.2	1.2	1.3
Cadmium (µg/g wet weight)	0.001 J	0.002 J	0.005	0.001 J	0.002
Mercury (µg/g wet weight)	0.023	0.36	0.026	0.028	0.015
Arsenic (µg/g dry weight)	4.2	3.8	5.0	4.8	5.8
Cadmium (µg/g dry weight)	0.005 J	0.008 J	0.022	0.006 J	0.010
Mercury (µg/g dry weight)	0.094	1.4	0.11	0.12	0.065

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

Table A-208. Concentrations of metal target chemicals in tissue samples from individual specimens of creole-fish collected during Cruise 2 at High Island A 356A.

Analyte	Sample ID				
	(PSMT-036)	(PSMT-037)	(PSMT-038)	(PSMT-039)	(PSMT-040)
Arsenic (µg/g wet weight)	3.9	1.2	2.1	3.6	2.3
Cadmium (µg/g wet weight)	0.002 J	0.008	0.002 J	0.002 J	0.002
Mercury (µg/g wet weight)	0.051	0.041	0.032	0.055	0.040
Arsenic (µg/g dry weight)	18	5.7	8.9	17	12
Cadmium (µg/g dry weight)	0.009 J	0.037	0.008 J	0.008 J	0.012
Mercury (µg/g dry weight)	0.24	0.19	0.14	0.26	0.21

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

Table A-209. Concentrations of metal target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 1 at Green Canyon 19A.

Analyte	Sample ID				
	(PSMT-041)	(PSMT-042)	(PSMT-043)	(PSMT-044)	(PSMT-045)
Arsenic (µg/g wet weight)	0.31	0.30	0.17	0.24	0.58
Cadmium (µg/g wet weight)	0.002 J	0.002 J	0.001 J	0.002 J	0.006
Mercury (µg/g wet weight)	0.026	0.015	0.009	0.014	0.024
Arsenic (µg/g dry weight)	1.3	1.1	0.60	0.95	2.4
Cadmium (µg/g dry weight)	0.006 J	0.009 J	0.005 J	0.009 J	0.025
Mercury (µg/g dry weight)	0.11	0.054	0.033	0.055	0.098

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

Table A-210. Concentrations of metal target chemicals in tissue samples from individual specimens of creole-fish collected during Cruise 1 at Green Canyon 19A.

Analyte	Sample ID				
	(PSMT-046)	(PSMT-047)	(PSMT-048)	(PSMT-049)	(PSMT-050)
Arsenic (µg/g wet weight)	0.67	0.66	0.60	0.60	0.81
Cadmium (µg/g wet weight)	0.004	0.003	0.001 J	0.0004 J	0.0004 J
Mercury (µg/g wet weight)	0.033	0.028	0.021	0.038	0.031
Arsenic (µg/g dry weight)	3.3	3.1	3.1	2.9	3.8
Cadmium (µg/g dry weight)	0.018	0.013	0.005 J	0.002 J	0.002 J
Mercury (µg/g dry weight)	0.16	0.13	0.11	0.18	0.15

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

Table A-211. Concentrations of metal target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 2 at Green Canyon 19A.

Analyte	Sample ID				
	(PSMT-051)	(PSMT-052)	(PSMT-053)	(PSMT-054)	(PSMT-055)
Arsenic (µg/g wet weight)	1.1	1.5	1.1	0.73	0.75
Cadmium (µg/g wet weight)	0.002 J	0.004	0.002	0.002	0.002 J
Mercury (µg/g wet weight)	0.014	0.019	0.017	0.011	0.011
Arsenic (µg/g dry weight)	4.9	6.1	4.6	3.0	2.8
Cadmium (µg/g dry weight)	0.008 J	0.017	0.010	0.010	0.008 J
Mercury (µg/g dry weight)	0.065	0.079	0.073	0.047	0.041

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

Table A-212. Concentrations of metal target chemicals in tissue samples from individual specimens of creole-fish collected during Cruise 2 at Green Canyon 19A.

Analyte	Sample ID				
	(PSMT-056)	(PSMT-057)	(PSMT-058)	(PSMT-059)	(PSMT-060)
Arsenic (µg/g wet weight)	1.5	0.86	3.3	1.8	0.74
Cadmium (µg/g wet weight)	0.004	0.004	0.003	0.003	0.005
Mercury (µg/g wet weight)	0.048	0.045	0.041	0.040	0.043
Arsenic (µg/g dry weight)	6.9	4.3	16	8.3	3.5
Cadmium (µg/g dry weight)	0.020	0.019	0.015	0.014	0.023
Mercury (µg/g dry weight)	0.23	0.23	0.20	0.18	0.21

Table A-213. Concentrations of metal target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 1 at Eugene Island 361A.

Analyte	Sample ID				
	(PSMT-061)	(PSMT-062)	(PSMT-063)	(PSMT-064)	(PSMT-065)
Arsenic (µg/g wet weight)	0.35	0.23	0.25	0.20	0.35
Cadmium (µg/g wet weight)	0.002 J	0.003	0.002 J	0.001 J	0.003
Mercury (µg/g wet weight)	0.008	0.009	0.010	0.009	0.007
Arsenic (µg/g dry weight)	1.5	0.91	0.75	0.72	1.4
Cadmium (µg/g dry weight)	0.010 J	0.011	0.006 J	0.005 J	0.012
Mercury (µg/g dry weight)	0.034	0.036	0.030	0.032	0.028

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

Table A-214. Concentrations of metal target chemicals in tissue samples from individual specimens of creole-fish collected during Cruise 1 at Eugene Island 361A.

Analyte	Sample ID				
	(PSMT-066)	(PSMT-067)	(PSMT-068)	(PSMT-069)	(PSMT-070)
Arsenic (µg/g wet weight)	0.32	0.83	0.57	1.0	0.46
Cadmium (µg/g wet weight)	0.001 J	0.001 J	0.005	ND	0.001 J
Mercury (µg/g wet weight)	0.028	0.031	0.044	0.055	0.050
Arsenic (µg/g dry weight)	1.4	3.9	2.6	3.8	2.2
Cadmium (µg/g dry weight)	0.003 J	0.006 J	0.021	ND	0.006 J
Mercury (µg/g dry weight)	0.13	0.15	0.20	0.20	0.24

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.



Table A-215. Concentrations of metal target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 2 at Eugene Island 361A.

Analyte	Sample ID				
	(PSMT-071)	(PSMT-072)	(PSMT-073)	(PSMT-074)	(PSMT-075)
Arsenic (µg/g wet weight)	0.47	0.80	0.63	0.78	0.93
Cadmium (µg/g wet weight)	0.005	0.003	0.003	0.002 J	0.005
Mercury (µg/g wet weight)	0.017	0.021	0.020	0.025	0.053
Arsenic (µg/g dry weight)	1.7	3.5	2.5	3.3	4.0
Cadmium (µg/g dry weight)	0.019	0.011	0.010	0.007 J	0.020
Mercury (µg/g dry weight)	0.059	0.092	0.081	0.11	0.23

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

Table A-216. Concentrations of metal target chemicals in tissue samples from individual specimens of creole-fish collected during Cruise 2 at Eugene Island 361A.

Analyte	Sample ID				
	(PSMT-076)	(PSMT-077)	(PSMT-078)	(PSMT-079)	(PSMT-080)
Arsenic (µg/g wet weight)	1.3	1.4	1.3	2.3	0.79
Cadmium (µg/g wet weight)	0.003	0.002	0.004	0.004	0.003
Mercury (µg/g wet weight)	0.034	0.045	0.030	0.038	0.033
Arsenic (µg/g dry weight)	6.2	6.8	6.3	13	4.2
Cadmium (µg/g dry weight)	0.012	0.011	0.021	0.020	0.015
Mercury (µg/g dry weight)	0.16	0.22	0.14	0.21	0.17

Table A-217. Concentrations of metal target chemicals in tissue samples from individual specimens of red snapper collected during Cruise 1 at Vermilion 214A.

Analyte	Sample ID				
	(PSMT-081)	(PSMT-082)	(PSMT-083)	(PSMT-084)	(PSMT-085)
Arsenic (µg/g wet weight)	0.083	0.074	0.12	0.15	0.061
Cadmium (µg/g wet weight)	ND	0.0005 J	0.001 J	0.001 J	0.002 J
Mercury (µg/g wet weight)	0.067	0.077	0.077	0.085	0.060
Arsenic (µg/g dry weight)	0.35	0.32	0.46	0.67	0.28
Cadmium (µg/g dry weight)	ND	0.002 J	0.004 J	0.004 J	0.010 J
Mercury (µg/g dry weight)	0.28	0.33	0.30	0.39	0.27

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-218. Concentrations of metal target chemicals in tissue samples from individual specimens of gray triggerfish collected during Cruise 1 at Vermilion 214A.

Analyte	Sample ID				
	(PSMT-086)	(PSMT-087)	(PSMT-088)	(PSMT-089)	(PSMT-090)
Arsenic (µg/g wet weight)	4.3	5.4	4.8	4.2	5.9
Cadmium (µg/g wet weight)	0.001 J	0.001 J	0.002	0.001 J	0.0005 J
Mercury (µg/g wet weight)	0.024	0.097	0.095	0.026	0.006
Arsenic (µg/g dry weight)	20	24	22	18	26
Cadmium (µg/g dry weight)	0.003 J	0.004 J	0.011	0.003 J	0.002 J
Mercury (µg/g dry weight)	0.11	0.42	0.43	0.11	0.026

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

Table A-219. Concentrations of metal target chemicals in tissue samples from individual specimens of red snapper collected during Cruise 2 at Vermilion 214A.

Analyte	Sample ID				
	(PSMT-091)	(PSMT-092)	(PSMT-093)	(PSMT-094)	(PSMT-095)
Arsenic (µg/g wet weight)	0.14	0.19	0.23	0.31	0.22
Cadmium (µg/g wet weight)	0.001 J	ND	0.0004 J	0.0004 J	ND
Mercury (µg/g wet weight)	0.070	0.070	0.10	0.12	0.083
Arsenic (µg/g dry weight)	0.59	0.84	1.0	1.4	1.0
Cadmium (µg/g dry weight)	0.003 J	ND	0.002 J	0.002 J	ND
Mercury (µg/g dry weight)	0.30	0.31	0.46	0.55	0.38

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-220. Concentrations of metal target chemicals in tissue samples from individual specimens of gray triggerfish collected during Cruise 2 at Vermilion 214A.

Analyte	Sample ID				
	(PSMT-096)	(PSMT-097)	(PSMT-098)	(PSMT-099)	(PSMT-100)
Arsenic (µg/g wet weight)	9.9	3.8	3.1	6.0	7.3
Cadmium (µg/g wet weight)	ND	ND	ND	ND	ND
Mercury (µg/g wet weight)	0.11	0.40	0.30	0.078	0.068
Arsenic (µg/g dry weight)	47	18	14	27	32
Cadmium (µg/g dry weight)	ND	ND	ND	ND	ND
Mercury (µg/g dry weight)	0.53	1.9	1.3	0.36	0.30

ND = Concentration below the method detection limit.

Table A-221. Concentrations of metal target chemicals in tissue samples from individual specimens of red snapper collected during Cruise 1 at East Cameron 229A.

Analyte	Sample ID				
	(PSMT-101)	(PSMT-102)	(PSMT-103)	(PSMT-104)	(PSMT-105)
Arsenic (µg/g wet weight)	0.18	0.11	0.13	0.18	0.14
Cadmium (µg/g wet weight)	0.001 J	ND	ND	0.002 J	0.001 J
Mercury (µg/g wet weight)	0.096	0.10	0.092	0.078	0.10
Arsenic (µg/g dry weight)	0.74	0.48	0.56	0.72	0.60
Cadmium (µg/g dry weight)	0.003 J	ND	ND	0.007 J	0.004 J
Mercury (µg/g dry weight)	0.40	0.44	0.40	0.31	0.45

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-222. Concentrations of metal target chemicals in tissue samples from individual specimens of gray triggerfish collected during Cruise 1 at East Cameron 229A.

Analyte	Sample ID				
	(PSMT-106)	(PSMT-107)	(PSMT-108)	(PSMT-109)	(PSMT-110)
Arsenic (µg/g wet weight)	1.3	5.4	4.5	3.8	5.9
Cadmium (µg/g wet weight)	0.006	0.001 J	0.006	0.015	0.002 J
Mercury (µg/g wet weight)	0.017	0.063	0.060	0.053	0.24
Arsenic (µg/g dry weight)	5.7	24	21	13	28
Cadmium (µg/g dry weight)	0.026	0.003 J	0.027	0.050	0.009 J
Mercury (µg/g dry weight)	0.076	0.27	0.28	0.18	1.1

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

Table A-223. Concentrations of metal target chemicals in tissue samples from individual specimens of red snapper collected during Cruise 2 at East Cameron 229A.

Analyte	Sample ID				
	(PSMT-111)	(PSMT-112)	(PSMT-113)	(PSMT-114)	(PSMT-115)
Arsenic ( $\mu\text{g/g}$ wet weight)	0.27	0.25	0.18	0.26	0.12
Cadmium ( $\mu\text{g/g}$ wet weight)	ND	0.001 J	ND	0.001 J	0.001 J
Mercury ( $\mu\text{g/g}$ wet weight)	0.17	0.14	0.18	0.17	0.15
Arsenic ( $\mu\text{g/g}$ dry weight)	1.2	1.1	0.83	1.2	0.57
Cadmium ( $\mu\text{g/g}$ dry weight)	ND	0.003 J	ND	0.004 J	0.004 J
Mercury ( $\mu\text{g/g}$ dry weight)	0.76	0.65	0.83	0.76	0.68

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-224. Concentrations of metal target chemicals in tissue samples from individual specimens of gray triggerfish collected during Cruise 2 at East Cameron 229A.

Analyte	Sample ID				
	(PSMT-116)	(PSMT-117)	(PSMT-118)	(PSMT-119)	(PSMT-120)
Arsenic ( $\mu\text{g/g}$ wet weight)	6.5	9.3	4.5	4.6	7.3
Cadmium ( $\mu\text{g/g}$ wet weight)	ND	ND	ND	0.001 J	0.0004 J
Mercury ( $\mu\text{g/g}$ wet weight)	0.13	0.084	0.30	0.13	0.20
Arsenic ( $\mu\text{g/g}$ dry weight)	29	41	19	22	33
Cadmium ( $\mu\text{g/g}$ dry weight)	ND	ND	ND	0.004 J	0.002 J
Mercury ( $\mu\text{g/g}$ dry weight)	0.58	0.37	1.3	0.64	0.91

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-225. Concentrations of metal target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 1 at Ship Shoal 277A.

Analyte	Sample ID				
	(PSMT-121)	(PSMT-122)	(PSMT-123)	(PSMT-124)	(PSMT-125)
As (µg/g wet weight)	0.34	0.37	0.34	0.18	0.36
Cadmium (µg/g wet weight)	0.002 J	0.005	0.003 J	ND	0.004
Mercury (µg/g wet weight)	0.007	0.009	0.010	0.060	0.009
As (µg/g dry weight)	1.1	1.5	1.0	0.75	1.4
Cadmium (µg/g dry weight)	0.006 J	0.018	0.009 J	ND	0.016
Mercury (µg/g dry weight)	0.023	0.035	0.029	0.25	0.034

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-226. Concentrations of metal target chemicals in tissue samples from individual specimens of red snapper collected during Cruise 1 at Ship Shoal 277A.

Analyte	Sample ID				
	(PSMT-126)	(PSMT-127)	(PSMT-128)	(PSMT-129)	(PSMT-130)
As (µg/g wet weight)	0.20	0.089	0.13	0.18	0.15
Cadmium (µg/g wet weight)	0.004	0.001 J	0.001 J	0.058	0.002 J
Mercury (µg/g wet weight)	0.049	0.045	0.045	0.050	0.053
As (µg/g dry weight)	0.88	0.37	0.52	0.80	0.62
Cadmium (µg/g dry weight)	0.016	0.005 J	0.006 J	0.25	0.008 J
Mercury (µg/g dry weight)	0.21	0.19	0.19	0.22	0.22

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

Table A-227. Concentrations of metal target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 3 at Ship Shoal 277A.

Analyte	Sample ID				
	(PSMT-131)	(PSMT-132)	(PSMT-133)	(PSMT-134)	(PSMT-135)
As (µg/g wet weight)	0.99	0.84	0.92	0.74	1.2
Cadmium (µg/g wet weight)	0.005	0.002 J	0.002 J	0.002 J	0.003
Mercury (µg/g wet weight)	0.019	0.015	0.015	0.014	0.015
As (µg/g dry weight)	3.5	3.4	4.0	2.9	4.8
Cadmium (µg/g dry weight)	0.018	0.008 J	0.009 J	0.007 J	0.012
Mercury (µg/g dry weight)	0.068	0.058	0.064	0.052	0.058

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

Table A-228. Concentrations of metal target chemicals in tissue samples from individual specimens of creole-fish collected during Cruise 2 at Ship Shoal 277A.

Analyte	Sample ID				
	(PSMT-136)	(PSMT-137)	(PSMT-138)	(PSMT-139)	(PSMT-140)
Arsenic (µg/g wet weight)	2.9	1.7	5.2	2.0	1.6
Cadmium (µg/g wet weight)	0.001 J	0.002 J	0.001 J	0.002	0.001 J
Mercury (µg/g wet weight)	0.062	0.038	0.050	0.028	0.032
Arsenic (µg/g dry weight)	15	7.3	26	9.7	7.8
Cadmium (µg/g dry weight)	0.006 J	0.008 J	0.007 J	0.011	0.007 J
Mercury (µg/g dry weight)	0.31	0.16	0.25	0.13	0.15

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

Table A-229. Concentrations of metal target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 1 at Eugene Island 360C.

Analyte	Sample ID				
	(PSMT-141)	(PSMT-142)	(PSMT-143)	(PSMT-144)	(PSMT-145)
Arsenic (µg/g wet weight)	0.46	0.39	0.43	0.52	0.48
Cadmium (µg/g wet weight)	0.002 J	0.004	0.003	0.007	0.003
Mercury (µg/g wet weight)	0.014	0.016	0.010	0.010	0.017
Arsenic (µg/g dry weight)	1.7	1.4	1.6	2.1	1.9
Cadmium (µg/g dry weight)	0.009 J	0.014	0.012	0.026	0.011
Mercury (µg/g dry weight)	0.051	0.060	0.039	0.039	0.064

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

Table A-230. Concentrations of metal target chemicals in tissue samples from individual specimens of red snapper collected during Cruise 1 at Eugene Island 360C.

Analyte	Sample ID				
	(PSMT-146)	(PSMT-147)	(PSMT-148)	(PSMT-149)	(PSMT-150)
Arsenic (µg/g wet weight)	0.10	0.094	0.064	0.069	0.070
Cadmium (µg/g wet weight)	0.0005 J	0.0005 J	0.0005 J	ND	0.001 J
Mercury (µg/g wet weight)	0.088	0.055	0.054	0.091	0.047
Arsenic (µg/g dry weight)	0.43	0.39	0.27	0.29	0.30
Cadmium (µg/g dry weight)	0.002 J	0.002 J	0.002 J	ND	0.005 J
Mercury (µg/g dry weight)	0.37	0.23	0.23	0.38	0.21

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.



Table A-231. Concentrations of metal target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 2 at Eugene Island 360C.

Analyte	Sample ID				
	(PSMT-151)	(PSMT-152)	(PSMT-153)	(PSMT-154)	(PSMT-155)
Arsenic (µg/g wet weight)	1.2	1.3	0.95	1.4	1.1
Cadmium (µg/g wet weight)	0.009	0.002 J	0.002 J	0.003	0.002 J
Mercury (µg/g wet weight)	0.032	0.016	0.015	0.016	0.017
Arsenic (µg/g dry weight)	5.9	5.2	3.4	5.6	4.2
Cadmium (µg/g dry weight)	0.043	0.008 J	0.008 J	0.011	0.007 J
Mercury (µg/g dry weight)	0.15	0.062	0.052	0.065	0.068

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

Table A-232. Concentrations of metal target chemicals in tissue samples from individual specimens of creole-fish collected during Cruise 2 at Eugene Island 360C.

Analyte	Sample ID				
	(PSMT-156)	(PSMT-157)	(PSMT-158)	(PSMT-159)	(PSMT-160)
Arsenic (µg/g wet weight)	1.4	1.2	1.3	2.0	2.6
Cadmium (µg/g wet weight)	ND	0.001 J	0.001 J	0.003	0.001 J
Mercury (µg/g wet weight)	0.017	0.017	0.021	0.029	0.033
Arsenic (µg/g dry weight)	5.9	6.0	6.4	10	12
Cadmium (µg/g dry weight)	ND	0.003 J	0.003 J	0.013	0.006 J
Mercury (µg/g dry weight)	0.073	0.084	0.11	0.14	0.15

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-233. Concentrations of metal target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 2 at Mississippi Canyon 194A.

Analyte	Sample ID				
	(PSMT-161)	(PSMT-162)	(PSMT-163)	(PSMT-164)	(PSMT-165)
Arsenic ( $\mu\text{g/g}$ wet weight)	1.2	0.77	0.91	0.57	1.5
Cadmium ( $\mu\text{g/g}$ wet weight)	0.001 J	0 J	0.001 J	0.001 J	ND
Mercury ( $\mu\text{g/g}$ wet weight)	0.010	0.011	0.018	0.015	0.011
Arsenic ( $\mu\text{g/g}$ dry weight)	4.4	3.1	3.6	2.0	5.9
Cadmium ( $\mu\text{g/g}$ dry weight)	0.003 J	0.004 J	0.003 J	0.002 J	ND
Mercury ( $\mu\text{g/g}$ dry weight)	0.036	0.043	0.070	0.053	0.044

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-234. Concentrations of metal target chemicals in tissue samples from individual specimens of gray triggerfish collected during Cruise 2 at Mississippi Canyon 194A.

Analyte	Sample ID				
	(PSMT-166)	(PSMT-167)	(PSMT-168)	(PSMT-169)	(PSMT-170)
Arsenic ( $\mu\text{g/g}$ wet weight)	12	10	12	5.7	7.1
Cadmium ( $\mu\text{g/g}$ wet weight)	ND	0.0004 J	0.0004 J	ND	ND
Mercury ( $\mu\text{g/g}$ wet weight)	0.016	0.022	0.026	0.062	0.035
Arsenic ( $\mu\text{g/g}$ dry weight)	53	47	59	24	31
Cadmium ( $\mu\text{g/g}$ dry weight)	ND	0.002 J	0.002 J	ND	ND
Mercury ( $\mu\text{g/g}$ dry weight)	0.074	0.099	0.12	0.26	0.15

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-235. Concentrations of metal target chemicals in tissue samples from individual specimens of creole-fish collected during Cruise 3 at Mississippi Canyon 194A.

Analyte	Sample ID				
	(PSMT-171)	(PSMT-172)	(PSMT-173)	(PSMT-174)	(PSMT-175)
Arsenic (µg/g wet weight)	1.5	1.8	2.3	0.68	2.9
Cadmium (µg/g wet weight)	ND	0.001 J	ND	0.016	0.0004 J
Mercury (µg/g wet weight)	0.016	0.028	0.045	0.066	0.023
Arsenic (µg/g dry weight)	7.4	9.0	10	3.4	15
Cadmium (µg/g dry weight)	ND	0.004 J	ND	0.082	0.002 J
Mercury (µg/g dry weight)	0.074	0.14	0.20	0.33	0.11

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-236. Concentrations of metal target chemicals in tissue samples from individual specimens of gray triggerfish collected during Cruise 3 at Mississippi Canyon 194A.

Analyte	Sample ID				
	(PSMT-176)	(PSMT-177)	(PSMT-178)	(PSMT-179)	(PSMT-180)
Arsenic (µg/g wet weight)	6.7	9.5	4.1	3.6	8.3
Cadmium (µg/g wet weight)	0.001 J	0.001 J	0.001 J	0.0005 J	0.0004 J
Mercury (µg/g wet weight)	0.019	0.018	0.018	0.021	0.033
Arsenic (µg/g dry weight)	32	45	19	16	38
Cadmium (µg/g dry weight)	0.004 J	0.005 J	0.003 J	0.002 J	0.002 J
Mercury (µg/g dry weight)	0.092	0.085	0.082	0.092	0.15

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

Table A-237. Concentrations of metal target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 2 at Mississippi Canyon 280A.

Analyte	Sample ID				
	(PSMT-181)	(PSMT-182)	(PSMT-183)	(PSMT-184)	(PSMT-185)
Arsenic (µg/g wet weight)	1.5	0.71	0.63	1.5	0.91
Cadmium (µg/g wet weight)	ND	0 J	ND	0.001 J	0.002 J
Mercury (µg/g wet weight)	0.015	0.035	0.067	0.017	0.031
Arsenic (µg/g dry weight)	6.4	2.8	2.8	6.1	3.5
Cadmium (µg/g dry weight)	ND	0.004 J	ND	0.003 J	0.008 J
Mercury (µg/g dry weight)	0.063	0.14	0.29	0.070	0.12

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-238. Concentrations of metal target chemicals in tissue samples from individual specimens of gray triggerfish collected during Cruise 2 at Mississippi Canyon 280A.

Analyte	Sample ID				
	(PSMT-186)	(PSMT-187)	(PSMT-188)	(PSMT-189)	(PSMT-190)
Arsenic (µg/g wet weight)	3.5	4.6	3.0	3.4	3.5
Cadmium (µg/g wet weight)	0.001 J	0.002 J	ND	ND	ND
Mercury (µg/g wet weight)	0.033	0.014	0.017	0.012	0.010
Arsenic (µg/g dry weight)	16	22	13	14	16
Cadmium (µg/g dry weight)	0.003 J	0.009 J	ND	ND	ND
Mercury (µg/g dry weight)	0.15	0.066	0.076	0.049	0.047

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-239. Concentrations of metal target chemicals in tissue samples from individual specimens of creole-fish collected during Cruise 3 at Mississippi Canyon 280A.

Analyte	Sample ID				
	(PSMT-191)	(PSMT-192)	(PSMT-193)	(PSMT-194)	(PSMT-195)
Arsenic (µg/g wet weight)	0.78	1.3	1.1	1.5	1.2
Cadmium (µg/g wet weight)	0.003	0.002	0.004	0.003	0.002 J
Mercury (µg/g wet weight)	0.036	0.043	0.039	0.036	0.038
Arsenic (µg/g dry weight)	3.7	6.7	5.2	7.6	5.8
Cadmium (µg/g dry weight)	0.014	0.011	0.021	0.016	0.009 J
Mercury (µg/g dry weight)	0.17	0.21	0.18	0.18	0.18

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

Table A-240. Concentrations of metal target chemicals in tissue samples from individual specimens of gray triggerfish collected during Cruise 3 at Mississippi Canyon 280A.

Analyte	Sample ID				
	(PSMT-196)	(PSMT-197)	(PSMT-198)	(PSMT-199)	(PSMT-200)
Arsenic (µg/g wet weight)	2.4	9.6	3.7	3.8	3.0
Cadmium (µg/g wet weight)	0.001 J	0.001 J	0.001 J	0.001 J	0.001 J
Mercury (µg/g wet weight)	0.022	0.015	0.016	0.022	0.018
Arsenic (µg/g dry weight)	11	43	17	17	13
Cadmium (µg/g dry weight)	0.005 J	0.003 J	0.003 J	0.005 J	0.003 J
Mercury (µg/g dry weight)	0.099	0.066	0.072	0.097	0.078

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

Table A-241. Concentrations of metal target chemicals in tissue samples from individual specimens of red snapper collected during Cruise 2 at South Timbalier 130.

Analyte	Sample ID				
	(PSMT-201)	(PSMT-202)	(PSMT-203)	(PSMT-204)	(PSMT-205)
Arsenic (µg/g wet weight)	0.39	0.34	0.32	0.32	0.26
Cadmium (µg/g wet weight)	ND	0.0005 J	0.0004 J	0.001 J	0.001 J
Mercury (µg/g wet weight)	0.069	0.055	0.081	0.051	0.069
Arsenic (µg/g dry weight)	1.7	1.5	1.4	1.4	1.1
Cadmium (µg/g dry weight)	ND	0.002 J	0.002 J	0.003 J	0.004 J
Mercury (µg/g dry weight)	0.30	0.24	0.37	0.23	0.29

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-242. Concentrations of metal target chemicals in tissue samples from individual specimens of gray triggerfish collected during Cruise 2 at South Timbalier 130.

Analyte	Sample ID				
	(PSMT-206)	(PSMT-207)	(PSMT-208)	(PSMT-209)	(PSMT-210)
Arsenic (µg/g wet weight)	4.5	3.0	9.9	13	12
Cadmium (µg/g wet weight)	ND	ND	ND	ND	ND
Mercury (µg/g wet weight)	0.062	0.56	0.062	0.12	0.041
Arsenic (µg/g dry weight)	19	13	43	59	59
Cadmium (µg/g dry weight)	ND	ND	ND	ND	ND
Mercury (µg/g dry weight)	0.26	2.3	0.27	0.54	0.21

ND = Concentration below the method detection limit.

Table A-243. Concentrations of metal target chemicals in tissue samples from individual specimens of red snapper collected during Cruise 3 at South Timbalier 130.

Analyte	Sample ID				
	(PSMT-211)	(PSMT-212)	(PSMT-213)	(PSMT-214)	(PSMT-215)
Arsenic (µg/g wet weight)	0.18	0.44	0.25	0.52	0.23
Cadmium (µg/g wet weight)	0.001 J	0.001 J	0.0005 J	0.0005 J	ND
Mercury (µg/g wet weight)	0.087	0.083	0.10	0.12	0.087
Arsenic (µg/g dry weight)	0.78	1.9	1.1	2.2	1.0
Cadmium (µg/g dry weight)	0.003 J	0.003 J	0.002 J	0.002 J	ND
Mercury (µg/g dry weight)	0.38	0.34	0.46	0.52	0.38

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-244. Concentrations of metal target chemicals in tissue samples from individual specimens of spadefish collected during Cruise 3 at South Timbalier 130.

Analyte	Sample ID				
	(PSMT-216)	(PSMT-217)	(PSMT-218)	(PSMT-219)	(PSMT-220)
Arsenic (µg/g wet weight)	1.1	1.4	1.2	1.4	1.5
Cadmium (µg/g wet weight)	0.001 J	0.001 J	0.002 J	0.001 J	0.002 J
Mercury (µg/g wet weight)	0.068	0.063	0.10	0.094	0.17
Arsenic (µg/g dry weight)	5.1	6.0	5.6	6.2	6.7
Cadmium (µg/g dry weight)	0.005 J	0.006 J	0.007 J	0.004 J	0.010 J
Mercury (µg/g dry weight)	0.31	0.27	0.46	0.43	0.75

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

Table A-245. Concentrations of metal target chemicals in tissue samples from individual specimens of red snapper collected during Cruise 2 at South Timbalier 128X.

Analyte	Sample ID				
	(PSMT-221)	(PSMT-222)	(PSMT-223)	(PSMT-224)	(PSMT-225)
Arsenic ( $\mu\text{g/g}$ wet weight)	0.56	0.40	0.29	0.39	0.27
Cadmium ( $\mu\text{g/g}$ wet weight)	0.0004 J	0.0004 J	0.001 J	0.0005 J	0.001 J
Mercury ( $\mu\text{g/g}$ wet weight)	0.063	0.065	0.065	0.059	0.073
Arsenic ( $\mu\text{g/g}$ dry weight)	2.5	1.8	1.3	1.7	1.2
Cadmium ( $\mu\text{g/g}$ dry weight)	0.002 J	0.002 J	0.003 J	0.002 J	0.004 J
Mercury ( $\mu\text{g/g}$ dry weight)	0.29	0.30	0.28	0.26	0.33

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

Table A-246. Concentrations of metal target chemicals in tissue samples from individual specimens of gray triggerfish collected during Cruise 2 at South Timbalier 128X.

Analyte	Sample ID				
	(PSMT-226)	(PSMT-227)	(PSMT-228)	(PSMT-229)	(PSMT-230)
Arsenic ( $\mu\text{g/g}$ wet weight)	39	14	18	21	40
Cadmium ( $\mu\text{g/g}$ wet weight)	0.0005 J	ND	ND	0.005	ND
Mercury ( $\mu\text{g/g}$ wet weight)	0.21	0.27	0.036	0.15	0.099
Arsenic ( $\mu\text{g/g}$ dry weight)	169	66	76	90	167
Cadmium ( $\mu\text{g/g}$ dry weight)	0.002 J	ND	ND	0.020	ND
Mercury ( $\mu\text{g/g}$ dry weight)	0.90	1.3	0.15	0.65	0.41

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.



Table A-247. Concentrations of metal target chemicals in tissue samples from individual specimens of red snapper collected during Cruise 3 at South Timbalier 128X.

Analyte	Sample ID				
	(PSMT-231)	(PSMT-232)	(PSMT-233)	(PSMT-234)	(PSMT-235)
Arsenic (µg/g wet weight)	0.22	0.37	0.39	0.26	0.30
Cadmium (µg/g wet weight)	0.0005 J	0.001 J	0.001 J	0.001 J	0.001 J
Mercury (µg/g wet weight)	0.071	0.088	0.082	0.082	0.078
Arsenic (µg/g dry weight)	0.98	1.5	1.6	1.1	1.3
Cadmium (µg/g dry weight)	0.002 J	0.003 J	0.005 J	0.003 J	0.005 J
Mercury (µg/g dry weight)	0.31	0.37	0.34	0.36	0.32

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

Table A-248. Concentrations of metal target chemicals in tissue samples from individual specimens of spadefish collected during Cruise 3 at South Timbalier 128X.

Analyte	Sample ID				
	(PSMT-236)	(PSMT-237)	(PSMT-238)	(PSMT-239)	(PSMT-240)
Arsenic (µg/g wet weight)	2.8	0.75	2.2	0.87	0.98
Cadmium (µg/g wet weight)	0.002 J	0.002 J	0.002 J	0.001 J	0.001 J
Mercury (µg/g wet weight)	0.095	0.090	0.087	0.10	0.12
Arsenic (µg/g dry weight)	13	3.4	9.8	4.1	4.3
Cadmium (µg/g dry weight)	0.010 J	0.007 J	0.009 J	0.005 J	0.005 J
Mercury (µg/g dry weight)	0.45	0.41	0.40	0.49	0.52

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

Table A-249. Concentrations of metal target chemicals in tissue samples from individual specimens of red snapper collected during Cruise 2 at Vermilion 245E.

Analyte	Sample ID				
	(PSMT-241)	(PSMT-242)	(PSMT-243)	(PSMT-244)	(PSMT-245)
Arsenic ( $\mu\text{g/g}$ wet weight)	0.22	0.11	0.16	0.092	0.20
Cadmium ( $\mu\text{g/g}$ wet weight)	ND	ND	ND	ND	0.001 J
Mercury ( $\mu\text{g/g}$ wet weight)	0.13	0.13	0.14	0.11	0.13
Arsenic ( $\mu\text{g/g}$ dry weight)	1.1	0.50	0.74	0.40	0.92
Cadmium ( $\mu\text{g/g}$ dry weight)	ND	ND	ND	ND	0.003 J
Mercury ( $\mu\text{g/g}$ dry weight)	0.64	0.57	0.62	0.49	0.59

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-250. Concentrations of metal target chemicals in tissue samples from individual specimens of gray triggerfish collected during Cruise 2 at Vermilion 245E.

Analyte	Sample ID				
	(PSMT-246)	(PSMT-247)	(PSMT-248)	(PSMT-249)	(PSMT-250)
Arsenic ( $\mu\text{g/g}$ wet weight)	13	7.8	1.8	12	21
Cadmium ( $\mu\text{g/g}$ wet weight)	0.002 J	ND	0.001 J	ND	ND
Mercury ( $\mu\text{g/g}$ wet weight)	0.17	0.17	0.013	0.085	0.12
Arsenic ( $\mu\text{g/g}$ dry weight)	61	35	7.2	51	94
Cadmium ( $\mu\text{g/g}$ dry weight)	0.008 J	ND	0.005 J	ND	ND
Mercury ( $\mu\text{g/g}$ dry weight)	0.77	0.79	0.052	0.37	0.56

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-251. Concentrations of metal target chemicals in tissue samples from individual specimens of red snapper collected during Cruise 3 at Vermilion 245E.

Analyte	Sample ID				
	(PSMT-251)	(PSMT-252)	(PSMT-253)	(PSMT-254)	(PSMT-255)
Arsenic (µg/g wet weight)	0.37	0.21	0.25	0.21	0.12
Cadmium (µg/g wet weight)	ND	ND	ND	ND	ND
Mercury (µg/g wet weight)	0.12	0.17	0.12	0.11	0.083
Arsenic (µg/g dry weight)	1.6	0.93	1.0	0.92	0.56
Cadmium (µg/g dry weight)	ND	ND	ND	ND	ND
Mercury (µg/g dry weight)	0.52	0.73	0.47	0.48	0.38

ND = Concentration below the method detection limit.

Table A-252. Concentrations of metal target chemicals in tissue samples from individual specimens of gray triggerfish collected during Cruise 3 at Vermilion 245E.

Analyte	Sample ID				
	(PSMT-256)	(PSMT-257)	(PSMT-258)	(PSMT-259)	(PSMT-260)
Arsenic (µg/g wet weight)	4.9	11	11	12	12
Cadmium (µg/g wet weight)	ND	0.0004 J	ND	0.0004 J	0.001 J
Mercury (µg/g wet weight)	0.18	0.18	0.22	0.10	0.12
Arsenic (µg/g dry weight)	22	49	49	55	53
Cadmium (µg/g dry weight)	ND	0.002 J	ND	0.002 J	0.003 J
Mercury (µg/g dry weight)	0.83	0.81	0.98	0.47	0.54

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-253. Concentrations of metal target chemicals in tissue samples from individual specimens of red snapper collected during Cruise 2 at South Marsh Island 72C.

Analyte	Sample ID				
	(PSMT-261)	(PSMT-262)	(PSMT-263)	(PSMT-264)	(PSMT-265)
Arsenic (µg/g wet weight)	0.27	0.30	0.41	0.26	0.48
Cadmium (µg/g wet weight)	0.0004 J	0.001 J	0.0005 J	0.001 J	0.001 J
Mercury (µg/g wet weight)	0.15	0.18	0.15	0.15	0.14
Arsenic (µg/g dry weight)	1.3	1.4	1.8	1.2	2.2
Cadmium (µg/g dry weight)	0.002 J	0.003 J	0.002 J	0.003 J	0.004 J
Mercury (µg/g dry weight)	0.73	0.88	0.64	0.70	0.62

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

Table A-254. Concentrations of metal target chemicals in tissue samples from individual specimens of gray triggerfish collected during Cruise 2 at South Marsh Island 72C.

Analyte	Sample ID				
	(PSMT-266)	(PSMT-267)	(PSMT-268)	(PSMT-269)	(PSMT-270)
Arsenic (µg/g wet weight)	7.3	7.0	4.5	11	12
Cadmium (µg/g wet weight)	ND	0.002 J	0.001 J	ND	ND
Mercury (µg/g wet weight)	0.36	0.11	0.27	0.054	0.082
Arsenic (µg/g dry weight)	35	30	21	49	57
Cadmium (µg/g dry weight)	ND	0.008 J	0.005 J	ND	ND
Mercury (µg/g dry weight)	1.7	0.47	1.3	0.25	0.37

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-255. Concentrations of metal target chemicals in tissue samples from individual specimens of red snapper collected during Cruise 3 at South Marsh Island 72C.

Analyte	Sample ID				
	(PSMT-271)	(PSMT-272)	(PSMT-273)	(PSMT-274)	(PSMT-275)
Arsenic ( $\mu\text{g/g}$ wet weight)	0.50	0.64	0.22	0.18	0.24
Cadmium ( $\mu\text{g/g}$ wet weight)	0.001 J	ND	0.001 J	ND	ND
Mercury ( $\mu\text{g/g}$ wet weight)	0.17	0.16	0.17	0.20	0.17
Arsenic ( $\mu\text{g/g}$ dry weight)	2.2	2.8	0.97	0.78	1.1
Cadmium ( $\mu\text{g/g}$ dry weight)	0.003 J	ND	0.003 J	ND	ND
Mercury ( $\mu\text{g/g}$ dry weight)	0.73	0.70	0.76	0.86	0.75

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-256. Concentrations of metal target chemicals in tissue samples from individual specimens of gray triggerfish collected during Cruise 3 at South Marsh Island 72C.

Analyte	Sample ID				
	(PSMT-276)	(PSMT-277)	(PSMT-278)	(PSMT-279)	(PSMT-280)
Arsenic ( $\mu\text{g/g}$ wet weight)	6.2	6.0	4.7	4.9	5.5
Cadmium ( $\mu\text{g/g}$ wet weight)	ND	ND	ND	0.001 J	0.001 J
Mercury ( $\mu\text{g/g}$ wet weight)	0.092	0.049	0.21	0.34	0.30
Arsenic ( $\mu\text{g/g}$ dry weight)	28	26	21	23	26
Cadmium ( $\mu\text{g/g}$ dry weight)	ND	ND	ND	0.004 J	0.004 J
Mercury ( $\mu\text{g/g}$ dry weight)	0.42	0.22	0.94	1.6	1.4

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-257. Concentrations of metal target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 2 at Eugene Island 330C.

Analyte	Sample ID				
	(PSMT-281)	(PSMT-282)	(PSMT-283)	(PSMT-284)	(PSMT-285)
Arsenic (µg/g wet weight)	1.6	1.4	1.7	1.4	0.98
Cadmium (µg/g wet weight)	0.002 J	0.001 J	0.001 J	0.001 J	0.001 J
Mercury (µg/g wet weight)	0.014	0.012	0.009	0.012	0.017
Arsenic (µg/g dry weight)	7.0	6.0	7.0	5.6	3.5
Cadmium (µg/g dry weight)	0.008 J	0.005 J	0.005 J	0.005 J	0.002 J
Mercury (µg/g dry weight)	0.062	0.050	0.035	0.051	0.059

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

Table A-258. Concentrations of metal target chemicals in tissue samples from individual specimens of gray triggerfish collected during Cruise 2 at Eugene Island 330C.

Analyte	Sample ID				
	(PSMT-286)	(PSMT-287)	(PSMT-288)	(PSMT-289)	(PSMT-290)
Arsenic (µg/g wet weight)	7.8	5.6	5.3	7.4	4.7
Cadmium (µg/g wet weight)	0.001 J	0.001 J	ND	0.001 J	ND
Mercury (µg/g wet weight)	0.13	0.058	0.052	0.18	0.25
Arsenic (µg/g dry weight)	35	26	25	34	21
Cadmium (µg/g dry weight)	0.003 J	0.003 J	ND	0.003 J	ND
Mercury (µg/g dry weight)	0.58	0.26	0.25	0.81	1.2

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-259. Concentrations of metal target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 3 at Eugene Island 330C.

Analyte	Sample ID				
	(PSMT-291)	(PSMT-292)	(PSMT-293)	(PSMT-294)	(PSMT-295)
Arsenic (µg/g wet weight)	0.92	1.2	1.0	0.66	0.40
Cadmium (µg/g wet weight)	0.002 J	0.002 J	0.002 J	0.003	0.004
Mercury (µg/g wet weight)	0.010	0.014	0.018	0.024	0.022
Arsenic (µg/g dry weight)	3.8	4.8	3.5	2.9	1.8
Cadmium (µg/g dry weight)	0.008 J	0.007 J	0.005 J	0.012	0.018
Mercury (µg/g dry weight)	0.040	0.057	0.059	0.10	0.10

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

Table A-260. Concentrations of metal target chemicals in tissue samples from individual specimens of creole-fish collected during Cruise 3 at Eugene Island 330C.

Analyte	Sample ID				
	(PSMT-296)	(PSMT-297)	(PSMT-298)	(PSMT-299)	(PSMT-300)
Arsenic (µg/g wet weight)	0.89	2.4	2.5	0.68	0.36
Cadmium (µg/g wet weight)	0.004	0.002	0.009	0.004	0.001 J
Mercury (µg/g wet weight)	0.029	0.029	0.046	0.032	0.034
Arsenic (µg/g dry weight)	4.3	12	12	3.2	1.8
Cadmium (µg/g dry weight)	0.018	0.011	0.043	0.018	0.003 J
Mercury (µg/g dry weight)	0.14	0.14	0.21	0.15	0.17

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

Table A-261. Concentrations of metal target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 2 at Eugene Island 352B.

Analyte	Sample ID				
	(PSMT-301)	(PSMT-302)	(PSMT-303)	(PSMT-304)	(PSMT-305)
Arsenic (µg/g wet weight)	1.9	2.1	1.7	16	1.5
Cadmium (µg/g wet weight)	0.0005 J	0.0005 J	0.0005 J	ND	0.001 J
Mercury (µg/g wet weight)	0.013	0.013	0.012	0.061	0.010
Arsenic (µg/g dry weight)	7.9	8.4	7.3	73	5.6
Cadmium (µg/g dry weight)	0.002 J	0.002 J	0.002 J	ND	0.003 J
Mercury (µg/g dry weight)	0.054	0.052	0.052	0.28	0.038

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-262. Concentrations of metal target chemicals in tissue samples from individual specimens of gray triggerfish collected during Cruise 2 at Eugene Island 352B.

Analyte	Sample ID				
	(PSMT-306)	(PSMT-307)	(PSMT-308)	(PSMT-309)	(PSMT-310)
Arsenic (µg/g wet weight)	19	17	16	19	10
Cadmium (µg/g wet weight)	0.0005 J	ND	ND	ND	ND
Mercury (µg/g wet weight)	0.023	0.024	0.049	0.47	0.081
Arsenic (µg/g dry weight)	82	74	74	83	49
Cadmium (µg/g dry weight)	0.002 J	ND	ND	ND	ND
Mercury (µg/g dry weight)	0.10	0.11	0.23	2.1	0.38

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.



Table A-263. Concentrations of metal target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 3 at Eugene Island 352B.

Analyte	Sample ID				
	(PSMT-311)	(PSMT-312)	(PSMT-313)	(PSMT-314)	(PSMT-315)
Arsenic (µg/g wet weight)	1.4	0.88	0.82	1.2	1.9
Cadmium (µg/g wet weight)	0.002 J	0.001 J	0.002 J	0.002 J	0.002 J
Mercury (µg/g wet weight)	0.036	0.014	0.016	0.017	0.025
Arsenic (µg/g dry weight)	6.2	3.7	3.4	4.6	7.8
Cadmium (µg/g dry weight)	0.008 J	0.005 J	0.008 J	0.006 J	0.008 J
Mercury (µg/g dry weight)	0.16	0.060	0.065	0.069	0.11

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

Table A-264. Concentrations of metal target chemicals in tissue samples from individual specimens of creole-fish collected during Cruise 3 at Eugene Island 352B.

Analyte	Sample ID				
	(PSMT-316)	(PSMT-317)	(PSMT-318)	(PSMT-319)	(PSMT-320)
Arsenic (µg/g wet weight)	0.97	2.3	2.7	1.6	3.1
Cadmium (µg/g wet weight)	0.003	0.005	0.002 J	0.005	0.005
Mercury (µg/g wet weight)	0.027	0.034	0.028	0.034	0.034
Arsenic (µg/g dry weight)	4.8	11	13	7.5	15
Cadmium (µg/g dry weight)	0.017	0.025	0.009 J	0.024	0.025
Mercury (µg/g dry weight)	0.13	0.16	0.13	0.16	0.16

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

Table A-265. Concentrations of metal target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 2 at High Island 376A.

Analyte	Sample ID				
	(PSMT-321)	(PSMT-322)	(PSMT-323)	(PSMT-324)	(PSMT-325)
Arsenic (µg/g wet weight)	1.6	1.1	0.98	0.77	1.1
Cadmium (µg/g wet weight)	0.001 J	0.001 J	0.003	0.002 J	0.002 J
Mercury (µg/g wet weight)	0.034	0.020	0.019	0.019	0.049
Arsenic (µg/g dry weight)	7.5	5.1	4.3	3.5	5.1
Cadmium (µg/g dry weight)	0.004 J	0.005 J	0.013	0.008 J	0.007 J
Mercury (µg/g dry weight)	0.16	0.093	0.081	0.087	0.22

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

Table A-266. Concentrations of metal target chemicals in tissue samples from individual specimens of red snapper collected during Cruise 2 at High Island 376A.

Analyte	Sample ID				
	(PSMT-326)	(PSMT-327)	(PSMT-328)	(PSMT-329)	(PSMT-330)
Arsenic (µg/g wet weight)	0.098	0.19	0.17	0.14	0.15
Cadmium (µg/g wet weight)	ND	0.001 J	ND	ND	ND
Mercury (µg/g wet weight)	0.15	0.14	0.17	0.43	0.22
Arsenic (µg/g dry weight)	0.41	0.78	0.76	0.65	0.61
Cadmium (µg/g dry weight)	ND	0.003 J	ND	ND	ND
Mercury (µg/g dry weight)	0.62	0.58	0.72	2.0	0.91

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-267. Concentrations of metal target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 3 at High Island 376A.

Analyte	Sample ID				
	(PSMT-331)	(PSMT-332)	(PSMT-333)	(PSMT-334)	(PSMT-335)
Arsenic (µg/g wet weight)	1.4	0.44	0.63	0.40	0.91
Cadmium (µg/g wet weight)	0.005	0.003	0.003	0.004	0.003
Mercury (µg/g wet weight)	0.10	0.017	0.037	0.018	0.021
Arsenic (µg/g dry weight)	6.1	2.1	3.0	1.8	4.1
Cadmium (µg/g dry weight)	0.020	0.015	0.013	0.016	0.014
Mercury (µg/g dry weight)	0.45	0.080	0.18	0.81	0.097

Table A-268. Concentrations of metal target chemicals in tissue samples from individual specimens of rockhind collected during Cruise 3 at High Island 376A.

Analyte	Sample ID				
	(PSMT-336)	(PSMT-337)	(PSMT-338)	(PSMT-339)	(PSMT-340)
Arsenic (µg/g wet weight)	0.87	1.0	0.65	0.83	1.2
Cadmium (µg/g wet weight)	0.002 J	0.001 J	0.001 J	0.001 J	0.001 J
Mercury (µg/g wet weight)	0.16	0.11	0.16	0.12	0.093
Arsenic (µg/g dry weight)	3.8	4.7	3.0	3.9	4.9
Cadmium (µg/g dry weight)	0.007 J	0.004 J	0.004 J	0.004 J	0.004 J
Mercury (µg/g dry weight)	0.70	0.52	0.74	0.59	0.39

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

Table A-269. Concentrations of metal target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 2 at West Cameron 587B.

Analyte	Sample ID				
	(PSMT-341)	(PSMT-342)	(PSMT-343)	(PSMT-344)	(PSMT-345)
Arsenic (µg/g wet weight)	3.3	3.3	3.3	2.7	1.5
Cadmium (µg/g wet weight)	0.001 J	0 J	0.002 J	0.003	0.001 J
Mercury (µg/g wet weight)	0.015	0.012	0.010	0.014	0.013
Arsenic (µg/g dry weight)	14	13	12	12	5.8
Cadmium (µg/g dry weight)	0.003 J	0.004 J	0.006 J	0.013	0.004 J
Mercury (µg/g dry weight)	0.061	0.046	0.038	0.059	0.050

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

Table A-270. Concentrations of metal target chemicals in tissue samples from individual specimens of red snapper collected during Cruise 2 at West Cameron 587B.

Analyte	Sample ID				
	(PSMT-346)	(PSMT-347)	(PSMT-348)	(PSMT-349)	(PSMT-350)
Arsenic (µg/g wet weight)	0.30	0.46	0.38	0.44	0.33
Cadmium (µg/g wet weight)	0.001 J	0.001 J	0.002 J	0.0005 J	0.001 J
Mercury (µg/g wet weight)	0.055	0.11	0.023	0.081	0.14
Arsenic (µg/g dry weight)	1.3	2.0	1.6	1.9	1.5
Cadmium (µg/g dry weight)	0.003 J	0.004 J	0.009 J	0.002 J	0.004 J
Mercury (µg/g dry weight)	0.24	0.50	0.10	0.35	0.59

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

Table A-271. Concentrations of metal target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 3 at West Cameron 587B.

Analyte	Sample ID				
	(PSMT-351)	(PSMT-352)	(PSMT-353)	(PSMT-354)	(PSMT-355)
Arsenic (µg/g wet weight)	1.1	0.54	0.67	0.83	1.1
Cadmium (µg/g wet weight)	0.001 J	0.005	0.003	0.004	0.003
Mercury (µg/g wet weight)	0.010	0.014	0.014	0.014	0.017
Arsenic (µg/g dry weight)	4.0	2.0	2.7	3.3	4.0
Cadmium (µg/g dry weight)	0.004 J	0.017	0.012	0.015	0.011
Mercury (µg/g dry weight)	0.035	0.053	0.054	0.054	0.064

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

Table A-272. Concentrations of metal target chemicals in tissue samples from individual specimens of rockhind collected during Cruise 3 at West Cameron 587B.

Analyte	Sample ID				
	(PSMT-356)	(PSMT-357)	(PSMT-358)	(PSMT-359)	(PSMT-360)
Arsenic (µg/g wet weight)	1.5	0.84	0.61	1.5	3.1
Cadmium (µg/g wet weight)	0.001 J	0.001 J	0.001 J	0.001 J	0.001 J
Mercury (µg/g wet weight)	0.16	0.099	0.099	0.089	0.077
Arsenic (µg/g dry weight)	7.0	3.8	2.8	6.3	14
Cadmium (µg/g dry weight)	0.005 J	0.004 J	0.004 J	0.006 J	0.006 J
Mercury (µg/g dry weight)	0.74	0.45	0.45	0.37	0.35

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

Table A-273. Concentrations of metal target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 2 at High Island 382F.

Analyte	Sample ID				
	(PSMT-361)	(PSMT-362)	(PSMT-363)	(PSMT-364)	(PSMT-365)
Arsenic (µg/g wet weight)	0.71	0.46	0.78	0.79	1.0
Cadmium (µg/g wet weight)	0 J	0.002 J	0.002 J	0.005	0.002 J
Mercury (µg/g wet weight)	0.058	0.021	0.019	0.020	0.012
Arsenic (µg/g dry weight)	2.8	1.9	2.6	3.4	4.0
Cadmium (µg/g dry weight)	0.004 J	0.007 J	0.007 J	0.020	0.009 J
Mercury (µg/g dry weight)	0.23	0.086	0.064	0.087	0.046

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

Table A-274. Concentrations of metal target chemicals in tissue samples from individual specimens of creole-fish collected during Cruise 2 at High Island 382F.

Analyte	Sample ID				
	(PSMT-366)	(PSMT-367)	(PSMT-368)	(PSMT-369)	(PSMT-370)
Arsenic (µg/g wet weight)	1.5	2.1	2.8	1.2	1.4
Cadmium (µg/g wet weight)	0.001 J	0.001 J	0.002	0.002	0.003
Mercury (µg/g wet weight)	0.013	0.024	0.022	0.027	0.029
Arsenic (µg/g dry weight)	7.6	9.9	14	6.2	6.8
Cadmium (µg/g dry weight)	0.006 J	0.005 J	0.011	0.010	0.015
Mercury (µg/g dry weight)	0.066	0.11	0.11	0.14	0.15

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

Table A-275. Concentrations of metal target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 3 at High Island 382F.

Analyte	Sample ID				
	(PSMT-371)	(PSMT-372)	(PSMT-373)	(PSMT-374)	(PSMT-375)
Arsenic (µg/g wet weight)	0.27	0.50	0.36	1.3	0.47
Cadmium (µg/g wet weight)	0.002 J	0.003	0.003 J	0.003 J	0.004
Mercury (µg/g wet weight)	0.017	0.014	0.021	0.019	0.021
Arsenic (µg/g dry weight)	1.2	2.1	1.4	3.7	2.1
Cadmium (µg/g dry weight)	0.010 J	0.014	0.010 J	0.009 J	0.017
Mercury (µg/g dry weight)	0.074	0.059	0.085	0.053	0.092

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

Table A-276. Concentrations of metal target chemicals in tissue samples from individual specimens of creole-fish collected during Cruise 3 at High Island 382F.

Analyte	Sample ID				
	(PSMT-376)	(PSMT-377)	(PSMT-378)	(PSMT-379)	(PSMT-380)
Arsenic (µg/g wet weight)	4.2	1.9	1.6	2.1	4.5
Cadmium (µg/g wet weight)	0.001 J	0.002 J	0.011	0.004	0.001 J
Mercury (µg/g wet weight)	0.031	0.032	0.026	0.032	0.032
Arsenic (µg/g dry weight)	20	8.2	7.3	11	21
Cadmium (µg/g dry weight)	0.006 J	0.010 J	0.051	0.020	0.006 J
Mercury (µg/g dry weight)	0.15	0.14	0.12	0.16	0.15

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

Table A-277. Concentrations of metal target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 2 at High Island A 553A.

Analyte	Sample ID				
	(PSMT-381)	(PSMT-382)	(PSMT-383)	(PSMT-384)	(PSMT-385)
Arsenic (µg/g wet weight)	2.2	1.5	1.2	2.3	2.0
Cadmium (µg/g wet weight)	0.001 J	0.002	0.002 J	0.002 J	0.002 J
Mercury (µg/g wet weight)	0.016	0.016	0.017	0.013	0.014
Arsenic (µg/g dry weight)	9.7	6.1	5.6	9.7	8.8
Cadmium (µg/g dry weight)	0.005 J	0.010	0.009 J	0.009 J	0.008 J
Mercury (µg/g dry weight)	0.071	0.067	0.076	0.056	0.059

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

Table A-278. Concentrations of metal target chemicals in tissue samples from individual specimens of creole-fish collected during Cruise 2 at High Island A 553A.

Analyte	Sample ID				
	(PSMT-386)	(PSMT-387)	(PSMT-388)	(PSMT-389)	(PSMT-390)
Arsenic (µg/g wet weight)	1.7	1.8	1.4	1.9	1.7
Cadmium (µg/g wet weight)	0.002 J	0.002 J	0.002	0.002 J	0.001 J
Mercury (µg/g wet weight)	0.025	0.019	0.020	0.027	0.024
Arsenic (µg/g dry weight)	7.9	7.7	6.6	8.5	8.4
Cadmium (µg/g dry weight)	0.009 J	0.008 J	0.011	0.009 J	0.007 J
Mercury (µg/g dry weight)	0.12	0.084	0.093	0.12	0.12

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).



Table A-279. Concentrations of metal target chemicals in tissue samples from individual specimens of yellow chub collected during Cruise 3 at High Island A 553A.

Analyte	Sample ID				
	(PSMT-391)	(PSMT-392)	(PSMT-393)	(PSMT-394)	(PSMT-395)
Arsenic (µg/g wet weight)	1.4	0.57	1.1	0.76	1.5
Cadmium (µg/g wet weight)	0.002 J	0.002 J	0.003	0.001 J	0.002 J
Mercury (µg/g wet weight)	0.010	0.018	0.013	0.018	0.021
Arsenic (µg/g dry weight)	5.9	2.5	4.6	3.3	6.3
Cadmium (µg/g dry weight)	0.009 J	0.010 J	0.013	0.006 J	0.010 J
Mercury (µg/g dry weight)	0.043	0.080	0.058	0.079	0.086

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

Table A-280. Concentrations of metal target chemicals in tissue samples from individual specimens of creole-fish collected during Cruise 3 at High Island A 553A.

Analyte	Sample ID				
	(PSMT-396)	(PSMT-397)	(PSMT-398)	(PSMT-399)	(PSMT-400)
Arsenic (µg/g wet weight)	2.9	2.2	7.7	1.7	7.4
Cadmium (µg/g wet weight)	0.001 J	0.002 J	ND	0.001 J	0.001 J
Mercury (µg/g wet weight)	0.021	0.024	0.025	0.020	0.029
Arsenic (µg/g dry weight)	13	10	37	8.0	35
Cadmium (µg/g dry weight)	0.004 J	0.009 J	ND	0.003 J	0.007 J
Mercury (µg/g dry weight)	0.097	0.11	0.12	0.094	0.14

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-281. Concentrations of metal target chemicals in tissue samples from individual specimens of hardhead catfish collected during Cruise 2 at Eugene Island 100C.

Analyte	Sample ID				
	(PSMT-401)	(PSMT-402)	(PSMT-403)	(PSMT-404)	(PSMT-405)
Arsenic (µg/g wet weight)	7.2	8.8	4.8	14	5.5
Cadmium (µg/g wet weight)	0.002	ND	ND	ND	0.001 J
Mercury (µg/g wet weight)	0.084	0.036	0.087	0.17	0.13
Arsenic (µg/g dry weight)	33	38	21	62	23
Cadmium (µg/g dry weight)	0.010	ND	ND	ND	0.004 J
Mercury (µg/g dry weight)	0.38	0.16	0.38	0.79	0.55

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-282. Concentrations of metal target chemicals in tissue samples from individual specimens of sheephead collected during Cruise 2 at Eugene Island 100C.

Analyte	Sample ID				
	(PSMT-406)	(PSMT-407)	(PSMT-408)	(PSMT-409)	(PSMT-410)
Arsenic (µg/g wet weight)	1.3	0.89	1.0	1.6	1.7
Cadmium (µg/g wet weight)	0.0004 J	0.001 J	0 J	0 J	0.001 J
Mercury (µg/g wet weight)	0.029	0.041	0.041	0.096	0.032
Arsenic (µg/g dry weight)	6.0	4.2	5.2	7.9	7.5
Cadmium (µg/g dry weight)	0.002 J	0.004 J	0.005 J	0.005 J	0.003 J
Mercury (µg/g dry weight)	0.14	0.19	0.20	0.48	0.14

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

Table A-283. Concentrations of metal target chemicals in tissue samples from individual specimens of hardhead catfish collected during Cruise 3 at Eugene Island 100C.

Analyte	Sample ID				
	(PSMT-411)	(PSMT-412)	(PSMT-413)	(PSMT-414)	(PSMT-415)
Arsenic (µg/g wet weight)	2.6	5.7	12	5.7	4.9
Cadmium (µg/g wet weight)	0.001 J	0.001 J	0.003	0.001 J	0.0005 J
Mercury (µg/g wet weight)	0.19	0.084	0.083	0.11	0.092
Arsenic (µg/g dry weight)	11	24	54	24	21
Cadmium (µg/g dry weight)	0.005 J	0.005 J	0.013	0.003 J	0.002 J
Mercury (µg/g dry weight)	0.84	0.35	0.36	0.48	0.40

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

Table A-284. Concentrations of metal target chemicals in tissue samples from individual specimens of sheepshead collected during Cruise 3 at Eugene Island 100C.

Analyte	Sample ID				
	(PSMT-416)	(PSMT-417)	(PSMT-418)	(PSMT-419)	(PSMT-420)
Arsenic (µg/g wet weight)	3.6	2.4	2.2	3.6	2.6
Cadmium (µg/g wet weight)	0.001 J	0.001 J	0.001 J	0.001 J	0.001 J
Mercury (µg/g wet weight)	0.10	0.074	0.048	0.064	0.064
Arsenic (µg/g dry weight)	16	11	10	16	12
Cadmium (µg/g dry weight)	0.004 J	0.005 J	0.004 J	0.005 J	0.003 J
Mercury (µg/g dry weight)	0.44	0.35	0.22	0.28	0.29

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

Table A-285. Concentrations of metal target chemicals in tissue samples from individual specimens of hardhead catfish collected during Cruise 2 at Ship Shoal 100DA.

Analyte	Sample ID				
	(PSMT-421)	(PSMT-422)	(PSMT-423)	(PSMT-424)	(PSMT-425)
Arsenic (µg/g wet weight)	10	12	21	20	17
Cadmium (µg/g wet weight)	ND	0.001 J	0.003	0.0004 J	0.0005 J
Mercury (µg/g wet weight)	0.083	0.11	0.079	0.10	0.12
Arsenic (µg/g dry weight)	49	55	96	96	74
Cadmium (µg/g dry weight)	ND	0.006 J	0.015	0.002 J	0.002 J
Mercury (µg/g dry weight)	0.40	0.50	0.36	0.50	0.51

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-286. Concentrations of metal target chemicals in tissue samples from individual specimens of sheephead collected during Cruise 2 at Ship Shoal 100DA.

Analyte	Sample ID				
	(PSMT-426)	(PSMT-427)	(PSMT-428)	(PSMT-429)	(PSMT-430)
Arsenic (µg/g wet weight)	0.096	0.16	0.75	0.55	0.63
Cadmium (µg/g wet weight)	0.001 J	0.001 J	0.002 J	0.002	0.001 J
Mercury (µg/g wet weight)	0.062	0.070	0.20	0.10	0.046
Arsenic (µg/g dry weight)	0.53	0.82	4.0	3.0	3.0
Cadmium (µg/g dry weight)	0.004 J	0.004 J	0.009 J	0.010	0.004 J
Mercury (µg/g dry weight)	0.35	0.35	1.0	0.58	0.22

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

Table A-287. Concentrations of metal target chemicals in tissue samples from individual specimens of hardhead catfish collected during Cruise 3 at Ship Shoal 100DA.

Analyte	Sample ID				
	(PSMT-431)	(PSMT-432)	(PSMT-433)	(PSMT-434)	(PSMT-435)
Arsenic (µg/g wet weight)	13	5.2	22	32	21
Cadmium (µg/g wet weight)	0.001 J	0.001 J	0.001 J	0.001 J	0.001 J
Mercury (µg/g wet weight)	0.12	0.064	0.15	0.18	0.13
Arsenic (µg/g dry weight)	55	22	99	147	94
Cadmium (µg/g dry weight)	0.004 J	0.003 J	0.005 J	0.004 J	0.004 J
Mercury (µg/g dry weight)	0.52	0.27	0.69	0.81	0.59

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

Table A-288. Concentrations of metal target chemicals in tissue samples from individual specimens of sheepshead collected during Cruise 3 at Ship Shoal 100DA.

Analyte	Sample ID				
	(PSMT-436)	(PSMT-437)	(PSMT-438)	(PSMT-439)	(PSMT-440)
Arsenic (µg/g wet weight)	1.7	4.4	0.28	1.6	5.2
Cadmium (µg/g wet weight)	0.001 J	0.002	0.001 J	0.001 J	0.001 J
Mercury (µg/g wet weight)	0.068	0.18	0.095	0.061	0.043
Arsenic (µg/g dry weight)	7.9	22	1.3	7.0	23
Cadmium (µg/g dry weight)	0.004 J	0.012	0.003 J	0.004 J	0.004 J
Mercury (µg/g dry weight)	0.32	0.91	0.43	0.27	0.19

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

Table A-289. Concentrations of metal target chemicals in composite tissue samples of blue crab collected during Cruise 2 at Vermilion 31A.

Analyte	Sample ID				
	(PSMT-441)	(PSMT-442)	(PSMT-443)	(PSMT-444)	(PSMT-445)
Arsenic (µg/g wet weight)	2.2	2.4	2.5	2.4	2.7
Cadmium (µg/g wet weight)	0.069	0.068	0.058	0.050	0.070
Mercury (µg/g wet weight)	0.044	0.040	0.056	0.051	0.048
Arsenic (µg/g dry weight)	11	12	13	13	15
Cadmium (µg/g dry weight)	0.36	0.34	0.29	0.26	0.39
Mercury (µg/g dry weight)	0.23	0.20	0.28	0.27	0.26

Table A-290. Concentrations of metal target chemicals in tissue samples from individual specimens of hardhead catfish collected during Cruise 2 at Vermilion 31A.

Analyte	Sample ID				
	(PSMT-446)	(PSMT-447)	(PSMT-448)	(PSMT-449)	(PSMT-450)
Arsenic (µg/g wet weight)	4.2	4.2	5.2	2.4	2.4
Cadmium (µg/g wet weight)	ND	ND	ND	0.001 J	ND
Mercury (µg/g wet weight)	0.17	0.12	0.20	0.19	0.19
Arsenic (µg/g dry weight)	20	18	22	11	10
Cadmium (µg/g dry weight)	ND	ND	ND	0.003 J	ND
Mercury (µg/g dry weight)	0.83	0.53	0.85	0.86	0.81

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-291. Concentrations of metal target chemicals in composite tissue samples of eastern oyster collected during Cruise 2 at Vermilion 31A.

Analyte	Sample ID				
	(PSMT-451)	(PSMT-452)	(PSMT-453)	(PSMT-454)	(PSMT-455)
Arsenic (µg/g wet weight)	1.7	2.3	2.4	2.0	1.8
Cadmium (µg/g wet weight)	0.50	0.53	0.55	0.56	0.54
Mercury (µg/g wet weight)	0.005	0.006	0.006	0.004	0.005
Arsenic (µg/g dry weight)	11	15	15	13	13
Cadmium (µg/g dry weight)	3.3	3.5	3.4	3.5	3.9
Mercury (µg/g dry weight)	0.034	0.041	0.038	0.027	0.037

Table A-292. Concentrations of metal target chemicals in composite tissue samples of blue crab collected during Cruise 3 at Vermilion 31A.

Analyte	Sample ID				
	(PSMT-456)	(PSMT-457)	(PSMT-458)	(PSMT-459)	(PSMT-460)
Arsenic (µg/g wet weight)	1.8	1.6	1.6	1.5	1.5
Cadmium (µg/g wet weight)	0.095	0.12	0.10	0.13	0.10
Mercury (µg/g wet weight)	0.063	0.045	0.041	0.047	0.062
Arsenic (µg/g dry weight)	8.9	9.0	8.7	7.9	8.0
Cadmium (µg/g dry weight)	0.48	0.64	0.53	0.68	0.54
Mercury (µg/g dry weight)	0.31	0.25	0.21	0.25	0.32

Table A-293. Concentrations of metal target chemicals in tissue samples from individual specimens of hardhead catfish collected during Cruise 3 at Vermilion 31A.

Analyte	Sample ID				
	(PSMT-461)	(PSMT-462)	(PSMT-463)	(PSMT-464)	(PSMT-465)
Arsenic (µg/g wet weight)	3.0	1.5	1.5	1.6	1.5
Cadmium (µg/g wet weight)	0.0005 J	0.022	0.001 J	ND	0.0005 J
Mercury (µg/g wet weight)	0.16	0.39	0.20	0.19	0.21
Arsenic (µg/g dry weight)	13	6.8	6.1	6.3	6.3
Cadmium (µg/g dry weight)	0.002 J	0.098	0.002 J	ND	0.002 J
Mercury (µg/g dry weight)	0.67	1.8	0.84	0.76	0.87

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-294. Concentrations of metal target chemicals in composite tissue samples of eastern oyster collected during Cruise 3 at Vermilion 31A.

Analyte	Sample ID				
	(PSMT-466)	(PSMT-467)	(PSMT-468)	(PSMT-469)	(PSMT-470)
Arsenic (µg/g wet weight)	1.1	0.58	0.86	0.98	0.80
Cadmium (µg/g wet weight)	0.55	0.37	0.45	0.55	0.42
Mercury (µg/g wet weight)	0.005	0.004	0.004	0.005	0.003
Arsenic (µg/g dry weight)	9.0	7.2	8.6	8.9	8.0
Cadmium (µg/g dry weight)	4.6	4.6	4.5	5.0	4.2
Mercury (µg/g dry weight)	0.038	0.046	0.042	0.045	0.029



Table A-295. Concentrations of metal target chemicals in composite tissue samples of blue crab collected during Cruise 2 at South Marsh Island 229C.

Analyte	Sample ID				
	(PSMT-471)	(PSMT-472)	(PSMT-473)	(PSMT-474)	(PSMT-475)
Arsenic (µg/g wet weight)	3.0	2.4	2.8	4.0	2.1
Cadmium (µg/g wet weight)	0.098	0.073	0.090	0.11	0.076
Mercury (µg/g wet weight)	0.041	0.071	0.057	0.065	0.052
Arsenic (µg/g dry weight)	19	13	14	19	11
Cadmium (µg/g dry weight)	0.61	0.40	0.45	0.52	0.40
Mercury (µg/g dry weight)	0.26	0.39	0.29	0.31	0.27

Table A-296. Concentrations of metal target chemicals in tissue samples from individual specimens of hardhead catfish collected during Cruise 2 at South Marsh Island 229C.

Analyte	Sample ID				
	(PSMT-476)	(PSMT-477)	(PSMT-478)	(PSMT-479)	(PSMT-480)
Arsenic (µg/g wet weight)	5.7	8.0	8.3	1.8	3.6
Cadmium (µg/g wet weight)	ND	0.001 J	ND	ND	0.0004 J
Mercury (µg/g wet weight)	0.081	0.13	0.081	0.14	0.21
Arsenic (µg/g dry weight)	26	38	38	8.4	16
Cadmium (µg/g dry weight)	ND	0.004 J	ND	ND	0.002 J
Mercury (µg/g dry weight)	0.37	0.61	0.37	0.65	0.95

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).  
 ND = Concentration below the MDL.

Table A-297. Concentrations of metal target chemicals in composite tissue samples of eastern oyster collected during Cruise 2 at South Marsh Island 229C.

Analyte	Sample ID				
	(PSMT-481)	(PSMT-482)	(PSMT-483)	(PSMT-484)	(PSMT-485)
Arsenic (µg/g wet weight)	2.0	1.9	1.9	2.4	2.0
Cadmium (µg/g wet weight)	0.48	0.59	0.56	0.49	0.47
Mercury (µg/g wet weight)	0.005	0.005	0.007	0.006	0.006
Arsenic (µg/g dry weight)	15	12	13	16	13
Cadmium (µg/g dry weight)	3.4	3.7	3.7	3.3	3.2
Mercury (µg/g dry weight)	0.036	0.034	0.044	0.037	0.039

Table A-298. Concentrations of metal target chemicals in a composite tissue sample of blue crab collected during Cruise 3 at South Marsh Island 229C.

Analyte	Sample ID
	(PSMT-486)
Arsenic (µg/g wet weight)	1.5
Cadmium (µg/g wet weight)	0.055
Mercury (µg/g wet weight)	0.053
Arsenic (µg/g dry weight)	7.6
Cadmium (µg/g dry weight)	0.27
Mercury (µg/g dry weight)	0.26

Table A-299. Concentrations of metal target chemicals in tissue samples from individual specimens of hardhead catfish collected during Cruise 3 at South Marsh Island 229C.

Analyte	Sample ID				
	(PSMT-487)	(PSMT-488)	(PSMT-489)	(PSMT-490)	(PSMT-491)
Arsenic (µg/g wet weight)	2.3	0.22	4.3	2.7	1.8
Cadmium (µg/g wet weight)	0.001 J	0.0004 J	0.001 J	0.001 J	0.001 J
Mercury (µg/g wet weight)	0.23	0.10	0.17	0.16	0.24
Arsenic (µg/g dry weight)	9.6	1.0	17	9.6	8.0
Cadmium (µg/g dry weight)	0.003 J	0.002 J	0.003 J	0.003 J	0.004 J
Mercury (µg/g dry weight)	0.95	0.47	0.68	0.58	1.0

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

Table A-300. Concentrations of metal target chemicals in composite tissue samples of eastern oyster collected during Cruise 3 at South Marsh Island 229C.

Analyte	Sample ID				
	(PSMT-492)	(PSMT-493)	(PSMT-494)	(PSMT-495)	(PSMT-496)
Arsenic (µg/g wet weight)	1.4	1.1	1.2	1.1	0.96
Cadmium (µg/g wet weight)	0.93	0.73	0.80	0.61	0.52
Mercury (µg/g wet weight)	0.007	0.007	0.006	0.005	0.005
Arsenic (µg/g dry weight)	10	8.8	9.6	11	9.6
Cadmium (µg/g dry weight)	6.7	6.1	6.2	6.1	5.2
Mercury (µg/g dry weight)	0.052	0.055	0.044	0.053	0.048

Table A-301. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in tissue samples from individual specimens of yellow chub collected during Cruise 1 at East Breaks 165A.

Analyte	Sample ID				
	(PSRT-001)	(PSRT-002)	(PSRT-003)	(PSRT-004)	(PSRT-005)
<sup>226</sup> Ra (pCi/g wet weight)	0.001	ND	ND	ND	0.001
<sup>228</sup> Ra (pCi/g wet weight)	0.009	ND	ND	ND	ND
<sup>226</sup> Ra (pCi/g dry weight)	0.005	ND	ND	ND	0.004
<sup>228</sup> Ra (pCi/g dry weight)	0.042	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-302. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in tissue samples from individual specimens of creole-fish collected during Cruise 1 at East Breaks 165A.

Analyte	Sample ID				
	(PSRT-006)	(PSRT-007)	(PSRT-008)	(PSRT-009)	(PSRT-010)
<sup>226</sup> Ra (pCi/g wet weight)	0.002	ND	0.001	ND	0.003
<sup>228</sup> Ra (pCi/g wet weight)	0.011	0.004	ND	ND	ND
<sup>226</sup> Ra (pCi/g dry weight)	0.011	ND	0.005	ND	0.016
<sup>228</sup> Ra (pCi/g dry weight)	0.060	0.020	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-303. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in tissue samples from individual specimens of yellow chub collected during Cruise 2 at East Breaks 165A.

Analyte	Sample ID				
	(PSRT-011)	(PSRT-012)	(PSRT-013)	(PSRT-014)	(PSRT-015)
<sup>226</sup> Ra (pCi/g wet weight)	0.015	ND	0.003 J	ND	ND
<sup>228</sup> Ra (pCi/g wet weight)	0.021	ND	ND	ND	ND
<sup>226</sup> Ra (pCi/g dry weight)	0.067	ND	0.013 J	ND	ND
<sup>228</sup> Ra (pCi/g dry weight)	0.093	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).  
 ND = Concentration below the MDL.

Table A-304. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in tissue samples from individual specimens of yellow chub collected during Cruise 2 at East Breaks 165A.

Analyte	Sample ID				
	(PSRT-016)	(PSRT-017)	(PSRT-018)	(PSRT-019)	(PSRT-020)
<sup>226</sup> Ra (pCi/g wet weight)	0.012	ND	ND	ND	ND
<sup>228</sup> Ra (pCi/g wet weight)	ND	0.014	0.014	0.014	ND
<sup>226</sup> Ra (pCi/g dry weight)	0.062	ND	ND	ND	ND
<sup>228</sup> Ra (pCi/g dry weight)	ND	0.074	0.071	0.070	ND

ND = Concentration below the method detection limit.

Table A-305. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in tissue samples from individual specimens of yellow chub collected during Cruise 1 at High Island A 356A.

Analyte	Sample ID				
	(PSRT-021)	(PSRT-022)	(PSRT-023)	(PSRT-024)	(PSRT-025)
<sup>226</sup> Ra (pCi/g wet weight)	ND	ND	ND	ND	0.001
<sup>228</sup> Ra (pCi/g wet weight)	0.024	ND	ND	ND	ND
<sup>226</sup> Ra (pCi/g dry weight)	ND	ND	ND	ND	0.004
<sup>228</sup> Ra (pCi/g dry weight)	0.11	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-306. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in tissue samples from individual specimens of creole-fish collected during Cruise 1 at High Island A 356A.

Analyte	Sample ID				
	(PSRT-026)	(PSRT-027)	(PSRT-028)	(PSRT-029)	(PSRT-030)
<sup>226</sup> Ra (pCi/g wet weight)	0.001	ND	0.001	ND	ND
<sup>228</sup> Ra (pCi/g wet weight)	ND	0.008	ND	ND	ND
<sup>226</sup> Ra (pCi/g dry weight)	0.005	ND	0.004	ND	ND
<sup>228</sup> Ra (pCi/g dry weight)	ND	0.038	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-307. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in tissue samples from individual specimens of yellow chub collected during Cruise 2 at High Island A 356A.

Analyte	Sample ID				
	(PSRT-031)	(PSRT-032)	(PSRT-033)	(PSRT-034)	(PSRT-035)
<sup>226</sup> Ra (pCi/g wet weight)	0.003 J	0.008	ND	ND	ND
<sup>228</sup> Ra (pCi/g wet weight)	ND	ND	ND	ND	ND
<sup>226</sup> Ra (pCi/g dry weight)	0.013 J	0.032	ND	ND	ND
<sup>228</sup> Ra (pCi/g dry weight)	ND	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).  
 ND = Concentration below the MDL.

Table A-308. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in tissue samples from individual specimens of creole-fish collected during Cruise 2 at High Island A 356A.

Analyte	Sample ID				
	(PSRT-036)	(PSRT-037)	(PSRT-038)	(PSRT-039)	(PSRT-040)
<sup>226</sup> Ra (pCi/g wet weight)	ND	ND	0.005	0.009	0.007
<sup>228</sup> Ra (pCi/g wet weight)	ND	ND	ND	0.015	ND
<sup>226</sup> Ra (pCi/g dry weight)	ND	ND	0.024	0.043	0.036
<sup>228</sup> Ra (pCi/g dry weight)	ND	ND	ND	0.071	ND

ND = Concentration below the method detection limit.

Table A-309. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in tissue samples from individual specimens of yellow chub collected during Cruise 1 at Green Canyon 19A.

Analyte	Sample ID				
	(PSRT-041)	(PSRT-042)	(PSRT-043)	(PSRT-044)	(PSRT-045)
<sup>226</sup> Ra (pCi/g wet weight)	ND	ND	0.002	0.002	0.003
<sup>228</sup> Ra (pCi/g wet weight)	0.008	ND	ND	ND	ND
<sup>226</sup> Ra (pCi/g dry weight)	ND	ND	0.008	0.009	0.011
<sup>228</sup> Ra (pCi/g dry weight)	0.032	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-310. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in tissue samples from individual specimens of creole-fish collected during Cruise 1 at Green Canyon 19A.

Analyte	Sample ID				
	(PSRT-046)	(PSRT-047)	(PSRT-048)	(PSRT-049)	(PSRT-050)
<sup>226</sup> Ra (pCi/g wet weight)	0.001	ND	0.003	ND	0.001
<sup>228</sup> Ra (pCi/g wet weight)	ND	ND	ND	ND	ND
<sup>226</sup> Ra (pCi/g dry weight)	0.005	ND	0.016	ND	0.005
<sup>228</sup> Ra (pCi/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.



Table A-311. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in tissue samples from individual specimens of yellow chub collected during Cruise 2 at Green Canyon 19A.

Analyte	Sample ID				
	(PSRT-051)	(PSRT-052)	(PSRT-053)	(PSRT-054)	(PSRT-055)
<sup>226</sup> Ra (pCi/g wet weight)	0.009	0.006	ND	ND	ND
<sup>228</sup> Ra (pCi/g wet weight)	0.018	ND	ND	ND	0.007
<sup>226</sup> Ra (pCi/g dry weight)	0.041	0.025	ND	ND	ND
<sup>228</sup> Ra (pCi/g dry weight)	0.082	ND	ND	ND	0.027

ND = Concentration below the method detection limit.

Table A-312. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in tissue samples from individual specimens of creole-fish collected during Cruise 2 at Green Canyon 19A.

Analyte	Sample ID				
	(PSRT-056)	(PSRT-057)	(PSRT-058)	(PSRT-059)	(PSRT-060)
<sup>226</sup> Ra (pCi/g wet weight)	0.005	ND	0.002 J	ND	ND
<sup>228</sup> Ra (pCi/g wet weight)	ND	ND	ND	0.007 J	ND
<sup>226</sup> Ra (pCi/g dry weight)	0.025	ND	0.010 J	ND	ND
<sup>228</sup> Ra (pCi/g dry weight)	ND	ND	ND	0.035 J	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-313. Activities of  $^{226}\text{Ra}$  and  $^{228}\text{Ra}$  in tissue samples from individual specimens of yellow chub collected during Cruise 1 at Eugene Island 361A.

Analyte	Sample ID				
	(PSRT-061)	(PSRT-062)	(PSRT-063)	(PSRT-064)	(PSRT-065)
$^{226}\text{Ra}$ (pCi/g wet weight)	0.001	0.001	ND	ND	0.002
$^{228}\text{Ra}$ (pCi/g wet weight)	ND	0.024	ND	0.005	ND
$^{226}\text{Ra}$ (pCi/g dry weight)	0.004	0.004	ND	ND	0.008
$^{228}\text{Ra}$ (pCi/g dry weight)	ND	0.10	ND	0.021	ND

ND = Concentration below the method detection limit.

Table A-314. Activities of  $^{226}\text{Ra}$  and  $^{228}\text{Ra}$  in tissue samples from individual specimens of creole-fish collected during Cruise 1 at Eugene Island 361A.

Analyte	Sample ID				
	(PSRT-066)	(PSRT-067)	(PSRT-068)	(PSRT-069)	(PSRT-070)
$^{226}\text{Ra}$ (pCi/g wet weight)	ND	0.001	ND	ND	0.002
$^{228}\text{Ra}$ (pCi/g wet weight)	ND	ND	ND	0.017	0.003
$^{226}\text{Ra}$ (pCi/g dry weight)	ND	0.005	ND	ND	0.010
$^{228}\text{Ra}$ (pCi/g dry weight)	ND	ND	ND	0.084	0.015

ND = Concentration below the method detection limit.

Table A-315. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in tissue samples from individual specimens of yellow chub collected during Cruise 2 at Eugene Island 361A.

Analyte	Sample ID				
	(PSRT-071)	(PSRT-072)	(PSRT-073)	(PSRT-074)	(PSRT-075)
<sup>226</sup> Ra (pCi/g wet weight)	ND	0.010	ND	ND	ND
<sup>228</sup> Ra (pCi/g wet weight)	ND	0.008 J	ND	0.007 J	ND
<sup>226</sup> Ra (pCi/g dry weight)	ND	0.042	ND	ND	ND
<sup>228</sup> Ra (pCi/g dry weight)	ND	0.033 J	ND	0.030 J	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).  
 ND = Concentration below the MDL.

Table A-316. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in tissue samples from individual specimens of creole-fish collected during Cruise 2 at Eugene Island 361A.

Analyte	Sample ID				
	(PSRT-076)	(PSRT-077)	(PSRT-078)	(PSRT-079)	(PSRT-080)
<sup>226</sup> Ra (pCi/g wet weight)	0.003 J	0.006	0.005	0.003 J	ND
<sup>228</sup> Ra (pCi/g wet weight)	ND	0.007	ND	0.016	ND
<sup>226</sup> Ra (pCi/g dry weight)	0.0 J	0.029	0.023	0.015 J	ND
<sup>228</sup> Ra (pCi/g dry weight)	ND	0.034	ND	0.079	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).  
 ND = Concentration below the MDL.

Table A-317. Activities of  $^{226}\text{Ra}$  and  $^{228}\text{Ra}$  in tissue samples from individual specimens of red snapper collected during Cruise 1 at Vermilion 214A.

Analyte	Sample ID				
	(PSRT-081)	(PSRT-082)	(PSRT-083)	(PSRT-084)	(PSRT-085)
$^{226}\text{Ra}$ (pCi/g wet weight)	ND	ND	ND	ND	ND
$^{228}\text{Ra}$ (pCi/g wet weight)	ND	ND	ND	ND	ND
$^{226}\text{Ra}$ (pCi/g dry weight)	ND	ND	ND	ND	ND
$^{228}\text{Ra}$ (pCi/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-318. Activities of  $^{226}\text{Ra}$  and  $^{228}\text{Ra}$  in tissue samples from individual specimens of gray triggerfish collected during Cruise 1 at Vermilion 214A.

Analyte	Sample ID				
	(PSRT-086)	(PSRT-087)	(PSRT-088)	(PSRT-089)	(PSRT-090)
$^{226}\text{Ra}$ (pCi/g wet weight)	ND	ND	ND	ND	ND
$^{228}\text{Ra}$ (pCi/g wet weight)	ND	ND	ND	ND	ND
$^{226}\text{Ra}$ (pCi/g dry weight)	ND	ND	ND	ND	ND
$^{228}\text{Ra}$ (pCi/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-319. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in tissue samples from individual specimens of red snapper collected during Cruise 2 at Vermilion 214A.

Analyte	Sample ID				
	(PSRT-091)	(PSRT-092)	(PSRT-093)	(PSRT-094)	(PSRT-095)
<sup>226</sup> Ra (pCi/g wet weight)	ND	ND	0.005	0.011	ND
<sup>228</sup> Ra (pCi/g wet weight)	ND	ND	0.028	ND	ND
<sup>226</sup> Ra (pCi/g dry weight)	ND	ND	0.023	0.049	ND
<sup>228</sup> Ra (pCi/g dry weight)	ND	ND	0.13	ND	ND

ND = Concentration below the method detection limit.

Table A-320. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in tissue samples from individual specimens of gray triggerfish collected during Cruise 2 at Vermilion 214A.

Analyte	Sample ID				
	(PSRT-096)	(PSRT-097)	(PSRT-098)	(PSRT-099)	(PSRT-100)
<sup>226</sup> Ra (pCi/g wet weight)	ND	0.003 J	0.013	ND	ND
<sup>228</sup> Ra (pCi/g wet weight)	ND	0.020	0.025	ND	ND
<sup>226</sup> Ra (pCi/g dry weight)	ND	0.014 J	0.059	ND	ND
<sup>228</sup> Ra (pCi/g dry weight)	ND	0.094	0.11	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-321. Activities of  $^{226}\text{Ra}$  and  $^{228}\text{Ra}$  in tissue samples from individual specimens of red snapper collected during Cruise 1 at East Cameron 229A.

Analyte	Sample ID				
	(PSRT-101)	(PSRT-102)	(PSRT-103)	(PSRT-104)	(PSRT-105)
$^{226}\text{Ra}$ (pCi/g wet weight)	ND	ND	ND	ND	ND
$^{228}\text{Ra}$ (pCi/g wet weight)	ND	0.031	0.006	0.008	ND
$^{226}\text{Ra}$ (pCi/g dry weight)	ND	ND	ND	ND	ND
$^{228}\text{Ra}$ (pCi/g dry weight)	ND	0.14	0.029	0.036	ND

ND = Concentration below the method detection limit.

Table A-322. Activities of  $^{226}\text{Ra}$  and  $^{228}\text{Ra}$  in tissue samples from individual specimens of gray triggerfish collected during Cruise 1 at East Cameron 229A.

Analyte	Sample ID				
	(PSRT-106)	(PSRT-107)	(PSRT-108)	(PSRT-109)	(PSRT-110)
$^{226}\text{Ra}$ (pCi/g wet weight)	0.002	ND	ND	ND	ND
$^{228}\text{Ra}$ (pCi/g wet weight)	ND	ND	ND	ND	ND
$^{226}\text{Ra}$ (pCi/g dry weight)	0.009	ND	ND	ND	ND
$^{228}\text{Ra}$ (pCi/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-323. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in tissue samples from individual specimens of red snapper collected during Cruise 2 at East Cameron 229A.

Analyte	Sample ID				
	(PSRT-111)	(PSRT-112)	(PSRT-113)	(PSRT-114)	(PSRT-115)
<sup>226</sup> Ra (pCi/g wet weight)	0.005	ND	ND	ND	ND
<sup>228</sup> Ra (pCi/g wet weight)	0.029	ND	ND	ND	ND
<sup>226</sup> Ra (pCi/g dry weight)	0.023	ND	ND	ND	ND
<sup>228</sup> Ra (pCi/g dry weight)	0.13	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-324. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in tissue samples from individual specimens of gray triggerfish collected during Cruise 2 at East Cameron 229A.

Analyte	Sample ID				
	(PSRT-116)	(PSRT-117)	(PSRT-118)	(PSRT-119)	(PSRT-120)
<sup>226</sup> Ra (pCi/g wet weight)	ND	ND	0.007	0.002 J	ND
<sup>228</sup> Ra (pCi/g wet weight)	0.011	0.026	ND	ND	ND
<sup>226</sup> Ra (pCi/g dry weight)	ND	ND	0.033	0.010 J	ND
<sup>228</sup> Ra (pCi/g dry weight)	0.052	0.12	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-325. Activities of  $^{226}\text{Ra}$  and  $^{228}\text{Ra}$  in tissue samples from individual specimens of yellow chub collected during Cruise 1 at Ship Shoal 277A.

Analyte	Sample ID				
	(PSRT-121)	(PSRT-122)	(PSRT-123)	(PSRT-124)	(PSRT-125)
$^{226}\text{Ra}$ (pCi/g wet weight)	ND	ND	ND	ND	0.001
$^{228}\text{Ra}$ (pCi/g wet weight)	0.003	ND	0.009	ND	ND
$^{226}\text{Ra}$ (pCi/g dry weight)	ND	ND	ND	ND	0.004
$^{228}\text{Ra}$ (pCi/g dry weight)	0.013	ND	0.034	ND	ND

ND = Concentration below the method detection limit.

Table A-326. Activities of  $^{226}\text{Ra}$  and  $^{228}\text{Ra}$  in tissue samples from individual specimens of red snapper collected during Cruise 1 at Ship Shoal 277A.

Analyte	Sample ID				
	(PSRT-126)	(PSRT-127)	(PSRT-128)	(PSRT-129)	(PSRT-130)
$^{226}\text{Ra}$ (pCi/g wet weight)	ND	ND	ND	ND	ND
$^{228}\text{Ra}$ (pCi/g wet weight)	ND	ND	ND	0.018	ND
$^{226}\text{Ra}$ (pCi/g dry weight)	ND	ND	ND	ND	ND
$^{228}\text{Ra}$ (pCi/g dry weight)	ND	ND	ND	0.083	ND

ND = Concentration below the method detection limit.



Table A-327. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in tissue samples from individual specimens of yellow chub collected during Cruise 2 at Ship Shoal 277A.

Analyte	Sample ID				
	(PSRT-131)	(PSRT-132)	(PSRT-133)	(PSRT-134)	(PSRT-135)
<sup>226</sup> Ra (pCi/g wet weight)	ND	ND	0.003 J	0.002 J	0.006
<sup>228</sup> Ra (pCi/g wet weight)	ND	0.014	0.021	ND	0.006
<sup>226</sup> Ra (pCi/g dry weight)	ND	ND	0.012 J	0.008 J	0.025
<sup>228</sup> Ra (pCi/g dry weight)	ND	0.058	0.087	ND	0.025

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).  
 ND = Concentration below the MDL.

Table A-328. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in tissue samples from individual specimens of creole-fish collected during Cruise 2 at Ship Shoal 277A.

Analyte	Sample ID				
	(PSRT-136)	(PSRT-137)	(PSRT-138)	(PSRT-139)	(PSRT-140)
<sup>226</sup> Ra (pCi/g wet weight)	0.003	0.007	0.011	0.007	0.003
<sup>228</sup> Ra (pCi/g wet weight)	ND	0.024	0.047	ND	0.006
<sup>226</sup> Ra (pCi/g dry weight)	0.015	0.034	0.054	0.034	0.015
<sup>228</sup> Ra (pCi/g dry weight)	ND	0.12	0.23	ND	0.029

ND = Concentration below the method detection limit.

Table A-329. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in tissue samples from individual specimens of yellow chub collected during Cruise 1 at Eugene Island 360C.

Analyte	Sample ID				
	(PSRT-141)	(PSRT-142)	(PSRT-143)	(PSRT-144)	(PSRT-145)
<sup>226</sup> Ra (pCi/g wet weight)	ND	0.001	0.002	ND	ND
<sup>228</sup> Ra (pCi/g wet weight)	ND	0.003	ND	0.025	ND
<sup>226</sup> Ra (pCi/g dry weight)	ND	0.004	0.009	ND	ND
<sup>228</sup> Ra (pCi/g dry weight)	ND	0.013	ND	0.10	ND

ND = Concentration below the method detection limit.

Table A-330. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in tissue samples from individual specimens of red snapper collected during Cruise 1 at Eugene Island 360C.

Analyte	Sample ID				
	(PSRT-146)	(PSRT-147)	(PSRT-148)	(PSRT-149)	(PSRT-150)
<sup>226</sup> Ra (pCi/g wet weight)	ND	ND	ND	ND	ND
<sup>228</sup> Ra (pCi/g wet weight)	ND	ND	ND	ND	ND
<sup>226</sup> Ra (pCi/g dry weight)	ND	ND	ND	ND	ND
<sup>228</sup> Ra (pCi/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-331. Activities of  $^{226}\text{Ra}$  and  $^{228}\text{Ra}$  in tissue samples from individual specimens of yellow chub collected during Cruise 2 at Eugene Island 360C.

Analyte	Sample ID				
	(PSRT-151)	(PSRT-152)	(PSRT-153)	(PSRT-154)	(PSRT-155)
$^{226}\text{Ra}$ (pCi/g wet weight)	ND	0.006	ND	0.004	0.003
$^{228}\text{Ra}$ (pCi/g wet weight)	ND	0.036	0.007	ND	0.008
$^{226}\text{Ra}$ (pCi/g dry weight)	ND	0.026	ND	0.017	0.013
$^{228}\text{Ra}$ (pCi/g dry weight)	ND	0.15	0.030	ND	0.034

ND = Concentration below the method detection limit.

Table A-332. Activities of  $^{226}\text{Ra}$  and  $^{228}\text{Ra}$  in tissue samples from individual specimens of creole-fish collected during Cruise 2 at Eugene Island 360C.

Analyte	Sample ID				
	(PSRT-156)	(PSRT-157)	(PSRT-158)	(PSRT-159)	(PSRT-160)
$^{226}\text{Ra}$ (pCi/g wet weight)	ND	0.019	0.009	0.006	ND
$^{228}\text{Ra}$ (pCi/g wet weight)	0.016	0.033	ND	0.019	ND
$^{226}\text{Ra}$ (pCi/g dry weight)	ND	0.087	0.041	0.027	ND
$^{228}\text{Ra}$ (pCi/g dry weight)	0.073	0.15	ND	0.087	ND

ND = Concentration below the method detection limit.

Table A-333. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in tissue samples from individual specimens of yellow chub collected during Cruise 2 at Mississippi Canyon 194A.

Analyte	Sample ID				
	(PSRT-161)	(PSRT-162)	(PSRT-163)	(PSRT-164)	(PSRT-165)
<sup>226</sup> Ra (pCi/g wet weight)	ND	ND	ND	0.008	0.006
<sup>228</sup> Ra (pCi/g wet weight)	0.009 J	ND	ND	0.044	0.021
<sup>226</sup> Ra (pCi/g dry weight)	ND	ND	ND	0.028	0.023
<sup>228</sup> Ra (pCi/g dry weight)	0.033 J	ND	ND	0.15	0.080

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).  
 ND = Concentration below the MDL.

Table A-334. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in tissue samples from individual specimens of gray triggerfish collected during Cruise 2 at Mississippi Canyon 194A.

Analyte	Sample ID				
	(PSRT-166)	(PSRT-167)	(PSRT-168)	(PSRT-169)	(PSRT-170)
<sup>226</sup> Ra (pCi/g wet weight)	ND	0.002 J	ND	0.015	ND
<sup>228</sup> Ra (pCi/g wet weight)	ND	ND	ND	0.040	ND
<sup>226</sup> Ra (pCi/g dry weight)	ND	0.009 J	ND	0.067	ND
<sup>228</sup> Ra (pCi/g dry weight)	ND	ND	ND	0.18	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).  
 ND = Concentration below the MDL.

Table A-335. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in tissue samples from individual specimens of creole-fish collected during Cruise 3 at Mississippi Canyon 194A.

Analyte	Sample ID				
	(PSRT-171)	(PSRT-172)	(PSRT-173)	(PSRT-174)	(PSRT-175)
<sup>226</sup> Ra (pCi/g wet weight)	ND	ND	ND	ND	0.001 J
<sup>228</sup> Ra (pCi/g wet weight)	ND	ND	ND	ND	ND
<sup>226</sup> Ra (pCi/g dry weight)	ND	ND	ND	ND	0.005 J
<sup>228</sup> Ra (pCi/g dry weight)	ND	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).  
 ND = Concentration below the MDL.

Table A-336. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in tissue samples from individual specimens of gray triggerfish collected during Cruise 3 at Mississippi Canyon 194A.

Analyte	Sample ID				
	(PSRT-176)	(PSRT-177)	(PSRT-178)	(PSRT-179)	(PSRT-180)
<sup>226</sup> Ra (pCi/g wet weight)	0.002 J	ND	0.006	ND	ND
<sup>228</sup> Ra (pCi/g wet weight)	ND	ND	ND	ND	ND
<sup>226</sup> Ra (pCi/g dry weight)	0.010 J	ND	0.029	ND	ND
<sup>228</sup> Ra (pCi/g dry weight)	ND	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).  
 ND = Concentration below the MDL.

Table A-337. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in tissue samples from individual specimens of yellow chub collected during Cruise 2 at Mississippi Canyon 280A.

Analyte	Sample ID				
	(PSRT-181)	(PSRT-182)	(PSRT-183)	(PSRT-184)	(PSRT-185)
<sup>226</sup> Ra (pCi/g wet weight)	ND	0.003 J	0.006 J	0.005 J	ND
<sup>228</sup> Ra (pCi/g wet weight)	ND	0.015	0.037	ND	0.028
<sup>226</sup> Ra (pCi/g dry weight)	ND	0.012 J	0.025 J	0.021 J	ND
<sup>228</sup> Ra (pCi/g dry weight)	ND	0.059	0.16	ND	0.12

J=Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).  
 ND=Concentration below the MDL.

Table A-338. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in tissue samples from individual specimens of gray triggerfish collected during Cruise 2 at Mississippi Canyon 280A.

Analyte	Sample ID				
	(PSRT-186)	(PSRT-187)	(PSRT-188)	(PSRT-189)	(PSRT-190)
<sup>226</sup> Ra (pCi/g wet weight)	ND	ND	0.015	0.011	0.007
<sup>228</sup> Ra (pCi/g wet weight)	ND	ND	0.033	0.031	0.016
<sup>226</sup> Ra (pCi/g dry weight)	ND	ND	0.068	0.049	0.034
<sup>228</sup> Ra (pCi/g dry weight)	ND	ND	0.15	0.14	0.077

ND = Concentration below the method detection limit.

Table A-339. Activities of  $^{226}\text{Ra}$  and  $^{228}\text{Ra}$  in tissue samples from individual specimens of creole-fish collected during Cruise 3 at Mississippi Canyon 280A.

Analyte	Sample ID				
	(PSRT-191)	(PSRT-192)	(PSRT-193)	(PSRT-194)	(PSRT-195)
$^{226}\text{Ra}$ (pCi/g wet weight)	ND	ND	ND	ND	ND
$^{228}\text{Ra}$ (pCi/g wet weight)	ND	ND	ND	ND	ND
$^{226}\text{Ra}$ (pCi/g dry weight)	ND	ND	ND	ND	ND
$^{228}\text{Ra}$ (pCi/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-340. Activities of  $^{226}\text{Ra}$  and  $^{228}\text{Ra}$  in tissue samples from individual specimens of gray triggerfish collected during Cruise 3 at Mississippi Canyon 280A.

Analyte	Sample ID				
	(PSRT-196)	(PSRT-197)	(PSRT-198)	(PSRT-199)	(PSRT-200)
$^{226}\text{Ra}$ (pCi/g wet weight)	ND	ND	0.001 J	ND	0.001 J
$^{228}\text{Ra}$ (pCi/g wet weight)	ND	0.016	ND	ND	ND
$^{226}\text{Ra}$ (pCi/g dry weight)	ND	ND	0.005 J	ND	0.005 J
$^{228}\text{Ra}$ (pCi/g dry weight)	ND	0.077	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-341. Activities of  $^{226}\text{Ra}$  and  $^{228}\text{Ra}$  in tissue samples from individual specimens of red snapper collected during Cruise 2 at South Timbalier 130.

Analyte	Sample ID				
	(PSRT-201)	(PSRT-202)	(PSRT-203)	(PSRT-204)	(PSRT-205)
$^{226}\text{Ra}$ (pCi/g wet weight)	0.005	0.005 J	0.002 J	ND	0.002 J
$^{228}\text{Ra}$ (pCi/g wet weight)	ND	ND	0.020	0.010 J	0.015
$^{226}\text{Ra}$ (pCi/g dry weight)	0.021	0.023 J	0.009 J	ND	0.009 J
$^{228}\text{Ra}$ (pCi/g dry weight)	ND	ND	0.089	0.046 J	0.064

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).  
 ND = Concentration below the MDL.

Table A-342. Activities of  $^{226}\text{Ra}$  and  $^{228}\text{Ra}$  in tissue samples from individual specimens of gray triggerfish collected during Cruise 2 at South Timbalier 130.

Analyte	Sample ID				
	(PSRT-206)	(PSRT-207)	(PSRT-208)	(PSRT-209)	(PSRT-210)
$^{226}\text{Ra}$ (pCi/g wet weight)	ND	0.005	0.016	ND	0.002
$^{228}\text{Ra}$ (pCi/g wet weight)	ND	ND	0.010 J	0.016	0.013
$^{226}\text{Ra}$ (pCi/g dry weight)	ND	0.023	0.073	ND	0.010 J
$^{228}\text{Ra}$ (pCi/g dry weight)	ND	ND	0.045 J	0.079	0.064

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).  
 ND = Concentration below the MDL.



Table A-343. Activities of  $^{226}\text{Ra}$  and  $^{228}\text{Ra}$  in tissue samples from individual specimens of red snapper collected during Cruise 3 at South Timbalier 130.

Analyte	Sample ID				
	(PSRT-211)	(PSRT-212)	(PSRT-213)	(PSRT-214)	(PSRT-215)
$^{226}\text{Ra}$ (pCi/g wet weight)	ND	ND	ND	ND	ND
$^{228}\text{Ra}$ (pCi/g wet weight)	ND	ND	0.014	ND	ND
$^{226}\text{Ra}$ (pCi/g dry weight)	ND	ND	ND	ND	ND
$^{228}\text{Ra}$ (pCi/g dry weight)	ND	ND	0.062	ND	ND

ND = Concentration below the method detection limit.

Table A-344. Activities of  $^{226}\text{Ra}$  and  $^{228}\text{Ra}$  in tissue samples from individual specimens of spadefish collected during Cruise 3 at South Timbalier 130.

Analyte	Sample ID				
	(PSRT-216)	(PSRT-217)	(PSRT-218)	(PSRT-219)	(PSRT-220)
$^{226}\text{Ra}$ (pCi/g wet weight)	ND	0.002 J	0.002	ND	0.001 J
$^{228}\text{Ra}$ (pCi/g wet weight)	ND	ND	ND	ND	ND
$^{226}\text{Ra}$ (pCi/g dry weight)	ND	0.009 J	0.009 J	ND	0.005 J
$^{228}\text{Ra}$ (pCi/g dry weight)	ND	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-345. Activities of  $^{226}\text{Ra}$  and  $^{228}\text{Ra}$  in tissue samples from individual specimens of red snapper collected during Cruise 2 at South Timbalier 128X.

Analyte	Sample ID				
	(PSRT-221)	(PSRT-222)	(PSRT-223)	(PSRT-224)	(PSRT-225)
$^{226}\text{Ra}$ (pCi/g wet weight)	0.012	0.006	0.004 J	ND	0.008 J
$^{228}\text{Ra}$ (pCi/g wet weight)	0.018	0.031	ND	ND	0.030
$^{226}\text{Ra}$ (pCi/g dry weight)	0.054	0.027	0.017 J	ND	0.037 J
$^{228}\text{Ra}$ (pCi/g dry weight)	0.081	0.14	ND	ND	0.14

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).  
 ND = Concentration below the MDL.

Table A-346. Activities of  $^{226}\text{Ra}$  and  $^{228}\text{Ra}$  in tissue samples from individual specimens of gray triggerfish collected during Cruise 2 at South Timbalier 128X.

Analyte	Sample ID				
	(PSRT-226)	(PSRT-227)	(PSRT-228)	(PSRT-229)	(PSRT-230)
$^{226}\text{Ra}$ (pCi/g wet weight)	0.004 J	ND	ND	0.011	0.005
$^{228}\text{Ra}$ (pCi/g wet weight)	0.011	0.023	ND	0.010	ND
$^{226}\text{Ra}$ (pCi/g dry weight)	0.019 J	ND	ND	0.052	0.022
$^{228}\text{Ra}$ (pCi/g dry weight)	0.051	0.11	ND	0.047	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).  
 ND = Concentration below the MDL.

Table A-347. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in tissue samples from individual specimens of red snapper collected during Cruise 3 at South Timbalier128X.

Analyte	Sample ID				
	(PSRT-231)	(PSRT-232)	(PSRT-233)	(PSRT-234)	(PSRT-235)
<sup>226</sup> Ra (pCi/g wet weight)	ND	ND	ND	ND	0.004
<sup>228</sup> Ra (pCi/g wet weight)	ND	ND	ND	ND	0.007
<sup>226</sup> Ra (pCi/g dry weight)	ND	ND	ND	ND	0.018
<sup>228</sup> Ra (pCi/g dry weight)	ND	ND	ND	ND	0.031

ND = Concentration below the method detection limit.

Table A-348. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in tissue samples from individual specimens of spadefish collected during Cruise 3 at South Timbalier 128X.

Analyte	Sample ID				
	(PSRT-236)	(PSRT-237)	(PSRT-238)	(PSRT-239)	(PSRT-240)
<sup>226</sup> Ra (pCi/g wet weight)	ND	0.005	ND	ND	0.001 J
<sup>228</sup> Ra (pCi/g wet weight)	ND	ND	ND	ND	ND
<sup>226</sup> Ra (pCi/g dry weight)	ND	0.024	ND	ND	0.005 J
<sup>228</sup> Ra (pCi/g dry weight)	ND	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-349. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in tissue samples from individual specimens of red snapper collected during Cruise 2 at Vermilion 245E.

Analyte	Sample ID				
	(PSRT-241)	(PSRT-242)	(PSRT-243)	(PSRT-244)	(PSRT-245)
<sup>226</sup> Ra (pCi/g wet weight)	ND	ND	0.011	0.004 J	ND
<sup>228</sup> Ra (pCi/g wet weight)	ND	ND	0.083	ND	ND
<sup>226</sup> Ra (pCi/g dry weight)	ND	ND	0.050	0.018 J	ND
<sup>228</sup> Ra (pCi/g dry weight)	ND	ND	0.38	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).  
 ND = Concentration below the MDL.

Table A-350. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in tissue samples from individual specimens of gray triggerfish collected during Cruise 2 at Vermilion 245E.

Analyte	Sample ID				
	(PSRT-246)	(PSRT-247)	(PSRT-248)	(PSRT-249)	(PSRT-250)
<sup>226</sup> Ra (pCi/g wet weight)	0.006	ND	ND	0.004 J	ND
<sup>228</sup> Ra (pCi/g wet weight)	0.010	ND	ND	ND	ND
<sup>226</sup> Ra (pCi/g dry weight)	0.027	ND	ND	0.019 J	ND
<sup>228</sup> Ra (pCi/g dry weight)	0.044	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).  
 ND = Concentration below the MDL.

Table A-351. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in tissue samples from individual specimens of red snapper collected during Cruise 3 at Vermilion 245E.

Analyte	Sample ID				
	(PSRT-251)	(PSRT-252)	(PSRT-253)	(PSRT-254)	(PSRT-255)
<sup>226</sup> Ra (pCi/g wet weight)	0.003	0.003	ND	0.010	0.001 J
<sup>228</sup> Ra (pCi/g wet weight)	0.033	ND	0.014	0.051	0.009
<sup>226</sup> Ra (pCi/g dry weight)	0.013	0.014	ND	0.042	0.004 J
<sup>228</sup> Ra (pCi/g dry weight)	0.15	ND	0.062	0.21	0.040

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).  
 ND = Concentration below the MDL.

Table A-352. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in tissue samples from individual specimens of gray triggerfish collected during Cruise 3 at Vermilion 245E.

Analyte	Sample ID				
	(PSRT-256)	(PSRT-257)	(PSRT-258)	(PSRT-259)	(PSRT-260)
<sup>226</sup> Ra (pCi/g wet weight)	0.004	0.002 J	ND	ND	0.002 J
<sup>228</sup> Ra (pCi/g wet weight)	0.017	ND	ND	ND	ND
<sup>226</sup> Ra (pCi/g dry weight)	0.020	0.010 J	ND	ND	0.009 J
<sup>228</sup> Ra (pCi/g dry weight)	0.083	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).  
 ND = Concentration below the MDL.

Table A-353. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in tissue samples from individual specimens of red snapper collected during Cruise 2 at South Marsh Island 72C.

Analyte	Sample ID				
	(PSRT-261)	(PSRT-262)	(PSRT-263)	(PSRT-264)	(PSRT-265)
<sup>226</sup> Ra (pCi/g wet weight)	0.010	0.007	0.006	0.003 J	ND
<sup>228</sup> Ra (pCi/g wet weight)	0.034	0.014	ND	ND	ND
<sup>226</sup> Ra (pCi/g dry weight)	0.048	0.034	0.026	0.014 J	ND
<sup>228</sup> Ra (pCi/g dry weight)	0.16	0.069	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).  
 ND = Concentration below the MDL.

Table A-354. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in tissue samples from individual specimens of gray triggerfish collected during Cruise 2 at South Marsh Island 72C.

Analyte	Sample ID				
	(PSRT-266)	(PSRT-267)	(PSRT-268)	(PSRT-269)	(PSRT-270)
<sup>226</sup> Ra (pCi/g wet weight)	0.004 J	0.005	ND	ND	ND
<sup>228</sup> Ra (pCi/g wet weight)	0.029	ND	ND	0.017	ND
<sup>226</sup> Ra (pCi/g dry weight)	0.019 J	0.023	ND	ND	ND
<sup>228</sup> Ra (pCi/g dry weight)	0.13	ND	ND	0.078	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).  
 ND = Concentration below the MDL.

Table A-355. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in tissue samples from individual specimens of red snapper collected during Cruise 3 at South Marsh Island 72C.

Analyte	Sample ID				
	(PSRT-271)	(PSRT-272)	(PSRT-273)	(PSRT-274)	(PSRT-275)
<sup>226</sup> Ra (pCi/g wet weight)	0.002	0.001 J	0.002 J	ND	0.002 J
<sup>228</sup> Ra (pCi/g wet weight)	0.006	0.011	0.006	ND	0.006
<sup>226</sup> Ra (pCi/g dry weight)	0.009	0.005 J	0.009 J	ND	0.009 J
<sup>228</sup> Ra (pCi/g dry weight)	0.028	0.050	0.028	ND	0.027

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).  
 ND = Concentration below the MDL.

Table A-356. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in tissue samples from individual specimens of gray triggerfish collected during Cruise 3 at South Marsh Island 72C.

Analyte	Sample ID				
	(PSRT-276)	(PSRT-277)	(PSRT-278)	(PSRT-279)	(PSRT-280)
<sup>226</sup> Ra (pCi/g wet weight)	ND	ND	0.003	0.001 J	0.004
<sup>228</sup> Ra (pCi/g wet weight)	0.015	0.010	0.009	0.011	0.030
<sup>226</sup> Ra (pCi/g dry weight)	ND	ND	0.014	0.005 J	0.020
<sup>228</sup> Ra (pCi/g dry weight)	0.072	0.047	0.042	0.051	0.15

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).  
 ND = Concentration below the MDL.

Table A-357. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in tissue samples from individual specimens of yellow chub collected during Cruise 2 at Eugene Island 330C.

Analyte	Sample ID				
	(PSRT-281)	(PSRT-282)	(PSRT-283)	(PSRT-284)	(PSRT-285)
<sup>226</sup> Ra (pCi/g wet weight)	0.008	0.004 J	0.042	ND	ND
<sup>228</sup> Ra (pCi/g wet weight)	ND	ND	0.017	ND	ND
<sup>226</sup> Ra (pCi/g dry weight)	0.036	0.018 J	0.17	ND	ND
<sup>228</sup> Ra (pCi/g dry weight)	ND	ND	0.069	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).  
 ND = Concentration below the MDL.

Table A-358. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in tissue samples from individual specimens of gray triggerfish collected during Cruise 2 at Eugene Island 330C.

Analyte	Sample ID				
	(PSRT-286)	(PSRT-287)	(PSRT-288)	(PSRT-289)	(PSRT-290)
<sup>226</sup> Ra (pCi/g wet weight)	ND	ND	0.014	ND	0.003 J
<sup>228</sup> Ra (pCi/g wet weight)	ND	ND	0.030	ND	0.016
<sup>226</sup> Ra (pCi/g dry weight)	ND	ND	0.065	ND	0.015 J
<sup>228</sup> Ra (pCi/g dry weight)	ND	ND	0.14	ND	0.078

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).  
 ND = Concentration below the MDL.



Table A-359. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in tissue samples from individual specimens of yellow chub collected during Cruise 3 at Eugene Island 330C.

Analyte	Sample ID				
	(PSRT-291)	(PSRT-292)	(PSRT-293)	(PSRT-294)	(PSRT-295)
<sup>226</sup> Ra (pCi/g wet weight)	0.002 J	ND	ND	0.003	ND
<sup>228</sup> Ra (pCi/g wet weight)	ND	ND	ND	ND	ND
<sup>226</sup> Ra (pCi/g dry weight)	0.008 J	ND	ND	0.014	ND
<sup>228</sup> Ra (pCi/g dry weight)	ND	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).  
 ND = Concentration below the MDL.

Table A-360. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in tissue samples from individual specimens of creole-fish collected during Cruise 3 at Eugene Island 330C.

Analyte	Sample ID				
	(PSRT-296)	(PSRT-297)	(PSRT-298)	(PSRT-299)	(PSRT-300)
<sup>226</sup> Ra (pCi/g wet weight)	ND	ND	ND	0.003 J	0.002 J
<sup>228</sup> Ra (pCi/g wet weight)	ND	ND	ND	ND	0.009
<sup>226</sup> Ra (pCi/g dry weight)	ND	ND	ND	0.015 J	0.009 J
<sup>228</sup> Ra (pCi/g dry weight)	ND	ND	ND	ND	0.040

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).  
 ND = Concentration below the MDL.

Table A-361. Activities of  $^{226}\text{Ra}$  and  $^{228}\text{Ra}$  in tissue samples from individual specimens of yellow chub collected during Cruise 2 at Eugene Island 352B.

Analyte	Sample ID				
	(PSRT-301)	(PSRT-302)	(PSRT-303)	(PSRT-304)	(PSRT-305)
$^{226}\text{Ra}$ (pCi/g wet weight)	0.010	0.007	0.004 J	0.004 J	ND
$^{228}\text{Ra}$ (pCi/g wet weight)	ND	ND	ND	0.024	0.015
$^{226}\text{Ra}$ (pCi/g dry weight)	0.042	0.029	0.017 J	0.017 J	ND
$^{228}\text{Ra}$ (pCi/g dry weight)	ND	ND	ND	0.10	0.063

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).  
 ND = Concentration below the MDL.

Table A-362. Activities of  $^{226}\text{Ra}$  and  $^{228}\text{Ra}$  in tissue samples from individual specimens of gray triggerfish collected during Cruise 2 at Eugene Island 352B.

Analyte	Sample ID				
	(PSRT-306)	(PSRT-307)	(PSRT-308)	(PSRT-309)	(PSRT-310)
$^{226}\text{Ra}$ (pCi/g wet weight)	0.003	0.006	0.009	ND	0.002 J
$^{228}\text{Ra}$ (pCi/g wet weight)	ND	ND	ND	ND	ND
$^{226}\text{Ra}$ (pCi/g dry weight)	0.013	0.027	0.041	ND	0.010 J
$^{228}\text{Ra}$ (pCi/g dry weight)	ND	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).  
 ND = Concentration below the MDL.

Table A-363. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in tissue samples from individual specimens of yellow chub collected during Cruise 3 at Eugene Island 352B.

Analyte	Sample ID				
	(PSRT-311)	(PSRT-312)	(PSRT-313)	(PSRT-314)	(PSRT-315)
<sup>226</sup> Ra (pCi/g wet weight)	ND	0.002 J	0.002 J	ND	ND
<sup>228</sup> Ra (pCi/g wet weight)	ND	ND	ND	ND	ND
<sup>226</sup> Ra (pCi/g dry weight)	ND	0.008 J	0.008 J	ND	ND
<sup>228</sup> Ra (pCi/g dry weight)	ND	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).  
 ND = Concentration below the MDL.

Table A-364. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in tissue samples from individual specimens of creole-fish collected during Cruise 3 at Eugene Island 352B.

Analyte	Sample ID				
	(PSRT-316)	(PSRT-317)	(PSRT-318)	(PSRT-319)	(PSRT-320)
<sup>226</sup> Ra (pCi/g wet weight)	ND	0.002 J	ND	ND	ND
<sup>228</sup> Ra (pCi/g wet weight)	ND	ND	ND	ND	ND
<sup>226</sup> Ra (pCi/g dry weight)	ND	0.010 J	ND	ND	ND
<sup>228</sup> Ra (pCi/g dry weight)	ND	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).  
 ND = Concentration below the MDL.

Table A-365. Activities of  $^{226}\text{Ra}$  and  $^{228}\text{Ra}$  in tissue samples from individual specimens of yellow chub collected during Cruise 2 at High Island 376A.

Analyte	Sample ID				
	(PSRT-321)	(PSRT-322)	(PSRT-323)	(PSRT-324)	(PSRT-325)
$^{226}\text{Ra}$ (pCi/g wet weight)	0.003 J	0.006	0.005	ND	ND
$^{228}\text{Ra}$ (pCi/g wet weight)	0.029	0.008 J	ND	ND	ND
$^{226}\text{Ra}$ (pCi/g dry weight)	0.014 J	0.029	0.022	ND	ND
$^{228}\text{Ra}$ (pCi/g dry weight)	0.14	0.039 J	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).  
 ND = Concentration below the MDL.

Table A-366. Activities of  $^{226}\text{Ra}$  and  $^{228}\text{Ra}$  in tissue samples from individual specimens of red snapper collected during Cruise 2 at High Island 376A.

Analyte	Sample ID				
	(PSRT-326)	(PSRT-327)	(PSRT-328)	(PSRT-329)	(PSRT-330)
$^{226}\text{Ra}$ (pCi/g wet weight)	ND	ND	ND	0.037	ND
$^{228}\text{Ra}$ (pCi/g wet weight)	ND	0.016	ND	0.031	ND
$^{226}\text{Ra}$ (pCi/g dry weight)	ND	ND	ND	0.17	ND
$^{228}\text{Ra}$ (pCi/g dry weight)	ND	0.069	ND	0.14	ND

ND = Concentration below the method detection limit.

Table A-367. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in tissue samples from individual specimens of yellow chub collected during Cruise 3 at High Island 376A.

Analyte	Sample ID				
	(PSRT-331)	(PSRT-332)	(PSRT-333)	(PSRT-334)	(PSRT-335)
<sup>226</sup> Ra (pCi/g wet weight)	0.002 J	ND	ND	0.002	ND
<sup>228</sup> Ra (pCi/g wet weight)	0.014	ND	ND	0.023	0.026
<sup>226</sup> Ra (pCi/g dry weight)	0.009 J	ND	ND	0.009	ND
<sup>228</sup> Ra (pCi/g dry weight)	0.065	ND	ND	0.10	0.11

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).  
 ND = Concentration below the MDL.

Table A-368. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in tissue samples from individual specimens of rockhind collected during Cruise 3 at High Island 376A.

Analyte	Sample ID				
	(PSRT-336)	(PSRT-337)	(PSRT-338)	(PSRT-339)	(PSRT-340)
<sup>226</sup> Ra (pCi/g wet weight)	ND	ND	0.001 J	0.004	ND
<sup>228</sup> Ra (pCi/g wet weight)	0.008	ND	0.014	ND	ND
<sup>226</sup> Ra (pCi/g dry weight)	ND	ND	0.005 J	0.019	ND
<sup>228</sup> Ra (pCi/g dry weight)	0.036	ND	0.063	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).  
 ND = Concentration below the MDL.

Table A-369. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in tissue samples from individual specimens of yellow chub collected during Cruise 2 at West Cameron 587B.

Analyte	Sample ID				
	(PSRT-341)	(PSRT-342)	(PSRT-343)	(PSRT-344)	(PSRT-345)
<sup>226</sup> Ra (pCi/g wet weight)	ND	0.004 J	ND	ND	0.006
<sup>228</sup> Ra (pCi/g wet weight)	ND	ND	ND	0.012	ND
<sup>226</sup> Ra (pCi/g dry weight)	ND	0.016 J	ND	ND	0.023
<sup>228</sup> Ra (pCi/g dry weight)	ND	ND	ND	0.050	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).  
 ND = Concentration below the MDL.

Table A-370. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in tissue samples from individual specimens of red snapper collected during Cruise 2 at West Cameron 587B.

Analyte	Sample ID				
	(PSRT-346)	(PSRT-347)	(PSRT-348)	(PSRT-349)	(PSRT-350)
<sup>226</sup> Ra (pCi/g wet weight)	ND	0.008	0.011	0.005	ND
<sup>228</sup> Ra (pCi/g wet weight)	0.009 J	ND	0.031	ND	ND
<sup>226</sup> Ra (pCi/g dry weight)	ND	0.038	0.049	0.022	ND
<sup>228</sup> Ra (pCi/g dry weight)	0.054 J	ND	0.14	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).  
 ND = Concentration below the MDL.

Table A-371. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in tissue samples from individual specimens of yellow chub collected during Cruise 3 at West Cameron 587B.

Analyte	Sample ID				
	(PSRT-351)	(PSRT-352)	(PSRT-353)	(PSRT-354)	(PSRT-355)
<sup>226</sup> Ra (pCi/g wet weight)	0.001 J	0.005	0.003	0.003	ND
<sup>228</sup> Ra (pCi/g wet weight)	ND	ND	ND	ND	ND
<sup>226</sup> Ra (pCi/g dry weight)	0.004 J	0.020	0.013	0.013	ND
<sup>228</sup> Ra (pCi/g dry weight)	ND	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).  
 ND = Concentration below the MDL.

Table A-372. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in tissue samples from individual specimens of rockhind collected during Cruise 3 at West Cameron 587B.

Analyte	Sample ID				
	(PSRT-356)	(PSRT-357)	(PSRT-358)	(PSRT-359)	(PSRT-360)
<sup>226</sup> Ra (pCi/g wet weight)	ND	ND	ND	0.003	ND
<sup>228</sup> Ra (pCi/g wet weight)	ND	0.008	ND	0.008	ND
<sup>226</sup> Ra (pCi/g dry weight)	ND	ND	ND	0.014	ND
<sup>228</sup> Ra (pCi/g dry weight)	ND	0.036	ND	0.038	ND

ND = Concentration below the method detection limit.

Table A-373. Activities of  $^{226}\text{Ra}$  and  $^{228}\text{Ra}$  in tissue samples from individual specimens of yellow chub collected during Cruise 2 at High Island 382F.

Analyte	Sample ID				
	(PSRT-361)	(PSRT-362)	(PSRT-363)	(PSRT-364)	(PSRT-365)
$^{226}\text{Ra}$ (pCi/g wet weight)	0.005	ND	0.007	ND	ND
$^{228}\text{Ra}$ (pCi/g wet weight)	ND	ND	0.010	0.011	ND
$^{226}\text{Ra}$ (pCi/g dry weight)	0.021	ND	0.028	ND	ND
$^{228}\text{Ra}$ (pCi/g dry weight)	ND	ND	0.040	0.048	ND

ND = Concentration below the method detection limit.

Table A-374. Activities of  $^{226}\text{Ra}$  and  $^{228}\text{Ra}$  in tissue samples from individual specimens of creole-fish collected during Cruise 2 at High Island 382F.

Analyte	Sample ID				
	(PSRT-366)	(PSRT-367)	(PSRT-368)	(PSRT-369)	(PSRT-370)
$^{226}\text{Ra}$ (pCi/g wet weight)	ND	ND	0.013	ND	0.005
$^{228}\text{Ra}$ (pCi/g wet weight)	0.014	ND	0.021	ND	ND
$^{226}\text{Ra}$ (pCi/g dry weight)	ND	ND	0.064	ND	0.025
$^{228}\text{Ra}$ (pCi/g dry weight)	0.069	ND	0.10	ND	ND

ND = Concentration below the method detection limit.



Table A-375. Activities of  $^{226}\text{Ra}$  and  $^{228}\text{Ra}$  in tissue samples from individual specimens of yellow chub collected during Cruise 3 at High Island 382F.

Analyte	Sample ID				
	(PSRT-371)	(PSRT-372)	(PSRT-373)	(PSRT-374)	(PSRT-375)
$^{226}\text{Ra}$ (pCi/g wet weight)	ND	ND	ND	ND	0.003
$^{228}\text{Ra}$ (pCi/g wet weight)	ND	ND	ND	ND	ND
$^{226}\text{Ra}$ (pCi/g dry weight)	ND	ND	ND	ND	0.014
$^{228}\text{Ra}$ (pCi/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-376. Activities of  $^{226}\text{Ra}$  and  $^{228}\text{Ra}$  in tissue samples from individual specimens of creole-fish collected during Cruise 3 at High Island 382F.

Analyte	Sample ID				
	(PSRT-376)	(PSRT-377)	(PSRT-378)	(PSRT-379)	(PSRT-380)
$^{226}\text{Ra}$ (pCi/g wet weight)	ND	ND	0.003	ND	ND
$^{228}\text{Ra}$ (pCi/g wet weight)	ND	ND	ND	ND	ND
$^{226}\text{Ra}$ (pCi/g dry weight)	ND	ND	0.013	ND	ND
$^{228}\text{Ra}$ (pCi/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-377. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in tissue samples from individual specimens of yellow chub collected during Cruise 2 at High Island A 553A.

Analyte	Sample ID				
	(PSRT-381)	(PSRT-382)	(PSRT-383)	(PSRT-384)	(PSRT-385)
<sup>226</sup> Ra (pCi/g wet weight)	0.007	ND	ND	ND	ND
<sup>228</sup> Ra (pCi/g wet weight)	0.024	0.014	ND	ND	0.016
<sup>226</sup> Ra (pCi/g dry weight)	0.030	ND	ND	ND	ND
<sup>228</sup> Ra (pCi/g dry weight)	0.10	0.062	ND	ND	0.067

ND = Concentration below the method detection limit.

Table A-378. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in tissue samples from individual specimens of creole-fish collected during Cruise 2 at High Island A 553A.

Analyte	Sample ID				
	(PSRT-386)	(PSRT-387)	(PSRT-388)	(PSRT-389)	(PSRT-390)
<sup>226</sup> Ra (pCi/g wet weight)	0.009	ND	0.004	0.002 J	ND
<sup>228</sup> Ra (pCi/g wet weight)	ND	0.007	ND	ND	ND
<sup>226</sup> Ra (pCi/g dry weight)	0.043	ND	0.019	0.010 J	ND
<sup>228</sup> Ra (pCi/g dry weight)	ND	0.033	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-379. Activities of  $^{226}\text{Ra}$  and  $^{228}\text{Ra}$  in tissue samples from individual specimens of yellow chub collected during Cruise 3 at High Island A 553A.

Analyte	Sample ID				
	(PSRT-391)	(PSRT-392)	(PSRT-393)	(PSRT-394)	(PSRT-395)
$^{226}\text{Ra}$ (pCi/g wet weight)	ND	ND	ND	ND	ND
$^{228}\text{Ra}$ (pCi/g wet weight)	ND	ND	ND	ND	ND
$^{226}\text{Ra}$ (pCi/g dry weight)	ND	ND	ND	ND	ND
$^{228}\text{Ra}$ (pCi/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-380. Activities of  $^{226}\text{Ra}$  and  $^{228}\text{Ra}$  in tissue samples from individual specimens of creole-fish collected during Cruise 3 at High Island A 553A.

Analyte	Sample ID				
	(PSRT-396)	(PSRT-397)	(PSRT-398)	(PSRT-399)	(PSRT-400)
$^{226}\text{Ra}$ (pCi/g wet weight)	ND	ND	ND	0.001 J	0.002 J
$^{228}\text{Ra}$ (pCi/g wet weight)	ND	ND	ND	ND	0.014
$^{226}\text{Ra}$ (pCi/g dry weight)	ND	ND	ND	0.004 J	0.009 J
$^{228}\text{Ra}$ (pCi/g dry weight)	ND	ND	ND	ND	0.065

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-381. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in tissue samples from individual specimens of hardhead catfish collected during Cruise 2 at Eugene Island 100C.

Analyte	Sample ID				
	(PSRT-401)	(PSRT-402)	(PSRT-403)	(PSRT-404)	(PSRT-405)
<sup>226</sup> Ra (pCi/g wet weight)	ND	ND	ND	ND	ND
<sup>228</sup> Ra (pCi/g wet weight)	ND	0.017	0.017	0.009 J	ND
<sup>226</sup> Ra (pCi/g dry weight)	ND	ND	ND	ND	ND
<sup>228</sup> Ra (pCi/g dry weight)	ND	0.075	0.075	0.040 J	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).  
 ND = Concentration below the MDL.

Table A-382. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in tissue samples from individual specimens of sheepshead collected during Cruise 2 at Eugene Island 100C.

Analyte	Sample ID				
	(PSRT-406)	(PSRT-407)	(PSRT-408)	(PSRT-409)	(PSRT-410)
<sup>226</sup> Ra (pCi/g wet weight)	0.004 J	0.009	ND	0.006	0.005
<sup>228</sup> Ra (pCi/g wet weight)	0.014 J	0.008 J	ND	0.024	0.009 J
<sup>226</sup> Ra (pCi/g dry weight)	0.019 J	0.042	ND	0.029	0.024
<sup>228</sup> Ra (pCi/g dry weight)	0.068 J	0.037 J	ND	0.12	0.043 J

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).  
 ND = Concentration below the MDL.

Table A-383. Activities of  $^{226}\text{Ra}$  and  $^{228}\text{Ra}$  in tissue samples from individual specimens of hardhead catfish collected during Cruise 3 at Eugene Island 100C.

Analyte	Sample ID				
	(PSRT-411)	(PSRT-412)	(PSRT-413)	(PSRT-414)	(PSRT-415)
$^{226}\text{Ra}$ (pCi/g wet weight)	0.002 J	ND	ND	ND	ND
$^{228}\text{Ra}$ (pCi/g wet weight)	ND	ND	ND	0.007	ND
$^{226}\text{Ra}$ (pCi/g dry weight)	0.009 J	ND	ND	ND	ND
$^{228}\text{Ra}$ (pCi/g dry weight)	ND	ND	ND	0.033	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).  
 ND = Concentration below the MDL.

Table A-384. Activities of  $^{226}\text{Ra}$  and  $^{228}\text{Ra}$  in tissue samples from individual specimens of sheepshead collected during Cruise 3 at Eugene Island 100C.

Analyte	Sample ID				
	(PSRT-416)	(PSRT-417)	(PSRT-418)	(PSRT-419)	(PSRT-420)
$^{226}\text{Ra}$ (pCi/g wet weight)	ND	0.002 J	0.001 J	0.002 J	ND
$^{228}\text{Ra}$ (pCi/g wet weight)	ND	ND	0.007	ND	0.011
$^{226}\text{Ra}$ (pCi/g dry weight)	ND	0.010 J	0.005 J	0.009 J	ND
$^{228}\text{Ra}$ (pCi/g dry weight)	ND	ND	0.033	ND	0.053

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).  
 ND = Concentration below the MDL.

Table A-385. Activities of  $^{226}\text{Ra}$  and  $^{228}\text{Ra}$  in tissue samples from individual specimens of hardhead catfish collected during Cruise 2 at Ship Shoal 100DA.

Analyte	Sample ID				
	(PSRT-421)	(PSRT-422)	(PSRT-423)	(PSRT-424)	(PSRT-425)
$^{226}\text{Ra}$ (pCi/g wet weight)	ND	ND	0.013	ND	ND
$^{228}\text{Ra}$ (pCi/g wet weight)	ND	0.009 J	0.008 J	ND	0.008 J
$^{226}\text{Ra}$ (pCi/g dry weight)	ND	ND	0.065	ND	ND
$^{228}\text{Ra}$ (pCi/g dry weight)	ND	0.045 J	0.040 J	ND	0.040 J

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).  
 ND = Concentration below the MDL.

Table A-386. Activities of  $^{226}\text{Ra}$  and  $^{228}\text{Ra}$  in tissue samples from individual specimens of sheepshead collected during Cruise 2 at Ship Shoal 100DA.

Analyte	Sample ID				
	(PSRT-426)	(PSRT-427)	(PSRT-428)	(PSRT-429)	(PSRT-430)
$^{226}\text{Ra}$ (pCi/g wet weight)	ND	0.005	ND	ND	ND
$^{228}\text{Ra}$ (pCi/g wet weight)	ND	0.036	ND	ND	ND
$^{226}\text{Ra}$ (pCi/g dry weight)	ND	0.026	ND	ND	ND
$^{228}\text{Ra}$ (pCi/g dry weight)	ND	0.19	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-387. Activities of  $^{226}\text{Ra}$  and  $^{228}\text{Ra}$  in tissue samples from individual specimens of hardhead catfish collected during Cruise 3 at Ship Shoal 100DA.

Analyte	Sample ID				
	(PSRT-431)	(PSRT-432)	(PSRT-433)	(PSRT-434)	(PSRT-435)
$^{226}\text{Ra}$ (pCi/g wet weight)	ND	0.011	0.002 J	0.002 J	0.011
$^{228}\text{Ra}$ (pCi/g wet weight)	0.008	0.018	ND	0.011	0.025
$^{226}\text{Ra}$ (pCi/g dry weight)	ND	0.052	0.009 J	0.009 J	0.057
$^{228}\text{Ra}$ (pCi/g dry weight)	0.038	0.085	ND	0.051	0.13

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).  
 ND = Concentration below the MDL.

Table A-388. Activities of  $^{226}\text{Ra}$  and  $^{228}\text{Ra}$  in tissue samples from individual specimens of sheepshead collected during Cruise 3 at Ship Shoal 100DA.

Analyte	Sample ID				
	(PSRT-436)	(PSRT-437)	(PSRT-438)	(PSRT-439)	(PSRT-440)
$^{226}\text{Ra}$ (pCi/g wet weight)	ND	0.002 J	0.001 J	0.001 J	0.007
$^{228}\text{Ra}$ (pCi/g wet weight)	ND	0.021	ND	ND	ND
$^{226}\text{Ra}$ (pCi/g dry weight)	ND	0.011 J	0.005 J	0.005 J	0.032
$^{228}\text{Ra}$ (pCi/g dry weight)	ND	0.12	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).  
 ND = Concentration below the MDL.

Table A-389. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in composite tissue samples of blue crab collected during Cruise 2 at Vermilion 31A.

Analyte	Sample ID				
	(PSRT-441)	(PSRT-442)	(PSRT-443)	(PSRT-444)	(PSRT-445)
<sup>226</sup> Ra (pCi/g wet weight)	0.002 J	0.012	0.003 J	0.013	0.002 J
<sup>228</sup> Ra (pCi/g wet weight)	0.011	0.016	0.011	0.044	0.007 J
<sup>226</sup> Ra (pCi/g dry weight)	0.012 J	0.065	0.016 J	0.073	0.012 J
<sup>228</sup> Ra (pCi/g dry weight)	0.065	0.087	0.060	0.25	0.042 J

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

Table A-390. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in tissue samples from individual specimens of hardhead catfish collected during Cruise 2 at Vermilion 31A.

Analyte	Sample ID				
	(PSRT-446)	(PSRT-447)	(PSRT-448)	(PSRT-449)	(PSRT-450)
<sup>226</sup> Ra (pCi/g wet weight)	ND	0.007	ND	0.008	0.014
<sup>228</sup> Ra (pCi/g wet weight)	0.020	0.017	ND	ND	0.012 J
<sup>226</sup> Ra (pCi/g dry weight)	ND	0.032	ND	0.037	0.065
<sup>228</sup> Ra (pCi/g dry weight)	0.092	0.078	ND	ND	0.055 J

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.



Table A-391. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in composite tissue samples of eastern oyster collected during Cruise 2 at Vermilion 31A.

Analyte	Sample ID				
	(PSRT-451)	(PSRT-452)	(PSRT-453)	(PSRT-454)	(PSRT-455)
<sup>226</sup> Ra (pCi/g wet weight)	0.009 J	ND	0.005	0.008	0.004 J
<sup>228</sup> Ra (pCi/g wet weight)	ND	0.010 J	ND	ND	ND
<sup>226</sup> Ra (pCi/g dry weight)	0.065 J	ND	0.034	0.056	0.030 J
<sup>228</sup> Ra (pCi/g dry weight)	ND	0.070 J	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).  
 ND = Concentration below the MDL.

Table A-392. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in composite tissue samples of blue crab collected during Cruise 3 at Vermilion 31A.

Analyte	Sample ID				
	(PSRT-456)	(PSRT-457)	(PSRT-458)	(PSRT-459)	(PSRT-460)
<sup>226</sup> Ra (pCi/g wet weight)	ND	0.004	ND	0.005	ND
<sup>228</sup> Ra (pCi/g wet weight)	ND	ND	ND	ND	ND
<sup>226</sup> Ra (pCi/g dry weight)	ND	0.025	ND	0.031	ND
<sup>228</sup> Ra (pCi/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-393. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in tissue samples from individual specimens of hardhead catfish collected during Cruise 3 at Vermilion 31A.

Analyte	Sample ID				
	(PSRT-461)	(PSRT-462)	(PSRT-463)	(PSRT-464)	(PSRT-465)
<sup>226</sup> Ra (pCi/g wet weight)	ND	ND	ND	ND	ND
<sup>228</sup> Ra (pCi/g wet weight)	ND	0.010	ND	ND	0.007 J
<sup>226</sup> Ra (pCi/g dry weight)	ND	ND	ND	ND	ND
<sup>228</sup> Ra (pCi/g dry weight)	ND	0.045	ND	ND	0.032 J

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).  
 ND = Concentration below the MDL.

Table A-394. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in composite tissue samples of eastern oyster collected during Cruise 3 at Vermilion 31A.

Analyte	Sample ID				
	(PSRT-466)	(PSRT-467)	(PSRT-468)	(PSRT-469)	(PSRT-470)
<sup>226</sup> Ra (pCi/g wet weight)	0.004	ND	ND	ND	ND
<sup>228</sup> Ra (pCi/g wet weight)	ND	ND	ND	ND	ND
<sup>226</sup> Ra (pCi/g dry weight)	0.037	ND	ND	ND	ND
<sup>228</sup> Ra (pCi/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-395. Activities of  $^{226}\text{Ra}$  and  $^{228}\text{Ra}$  in composite tissue samples of blue crab collected during Cruise 2 at South Marsh Island 229C.

Analyte	Sample ID				
	(PSRT-471)	(PSRT-472)	(PSRT-473)	(PSRT-474)	(PSRT-475)
$^{226}\text{Ra}$ (pCi/g wet weight)	0.003 J	0.005	0.005	0.003 J	0.005
$^{228}\text{Ra}$ (pCi/g wet weight)	0.007 J	ND	ND	0.011	0.007 J
$^{226}\text{Ra}$ (pCi/g dry weight)	0.018 J	0.030	0.027	0.016 J	0.029
$^{228}\text{Ra}$ (pCi/g dry weight)	0.042 J	ND	ND	0.060	0.040 J

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).  
 ND = Concentration below the MDL.

Table A-396. Activities of  $^{226}\text{Ra}$  and  $^{228}\text{Ra}$  in tissue samples from individual specimens of hardhead catfish collected during Cruise 2 at South Marsh Island 229C.

Analyte	Sample ID				
	(PSRT-476)	(PSRT-477)	(PSRT-478)	(PSRT-479)	(PSRT-480)
$^{226}\text{Ra}$ (pCi/g wet weight)	ND	ND	0.003 J	0.002 J	0.012
$^{228}\text{Ra}$ (pCi/g wet weight)	0.010	ND	0.019	0.023	0.011
$^{226}\text{Ra}$ (pCi/g dry weight)	ND	ND	0.015 J	0.009 J	0.061
$^{228}\text{Ra}$ (pCi/g dry weight)	0.046	ND	0.095	0.099	0.055

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).  
 ND = Concentration below the MDL.

Table A-397. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in composite tissue samples of eastern oyster collected during Cruise 2 at South Marsh Island 229C.

Analyte	Sample ID				
	(PSRT-481)	(PSRT-482)	(PSRT-483)	(PSRT-484)	(PSRT-485)
<sup>226</sup> Ra (pCi/g wet weight)	0.005 J	ND	0.003 J	ND	0.003 J
<sup>228</sup> Ra (pCi/g wet weight)	0.010 J	ND	ND	0.012 J	0.020
<sup>226</sup> Ra (pCi/g dry weight)	0.038 J	ND	0.021 J	ND	0.021 J
<sup>228</sup> Ra (pCi/g dry weight)	0.077 J	ND	ND	0.082 J	0.14

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-398. Activities of <sup>226</sup>Ra and <sup>228</sup>Ra in composite tissue sample of blue crab collected during Cruise 3 at South Marsh Island 229C.

Analyte	Sample ID
	(PSRT-486)
<sup>226</sup> Ra (pCi/g wet weight)	0.005
<sup>228</sup> Ra (pCi/g wet weight)	ND
<sup>226</sup> Ra (pCi/g dry weight)	0.028
<sup>228</sup> Ra (pCi/g dry weight)	ND

ND = Concentration below the method detection limit.

Table A-399. Activities of  $^{226}\text{Ra}$  and  $^{228}\text{Ra}$  in tissue samples from individual specimens of hardhead catfish collected during Cruise 3 at South Marsh Island 229C.

Analyte	Sample ID				
	(PSRT-487)	(PSRT-488)	(PSRT-489)	(PSRT-490)	(PSRT-491)
$^{226}\text{Ra}$ (pCi/g wet weight)	ND	ND	ND	ND	0.003
$^{228}\text{Ra}$ (pCi/g wet weight)	ND	ND	ND	ND	ND
$^{226}\text{Ra}$ (pCi/g dry weight)	ND	ND	ND	ND	0.013
$^{228}\text{Ra}$ (pCi/g dry weight)	ND	ND	ND	ND	ND

ND = Concentration below the method detection limit.

Table A-400. Activities of  $^{226}\text{Ra}$  and  $^{228}\text{Ra}$  in composite tissue samples of eastern oyster collected during Cruise 3 at South Marsh Island 229C.

Analyte	Sample ID				
	(PSRT-492)	(PSRT-493)	(PSRT-494)	(PSRT-495)	(PSRT-496)
$^{226}\text{Ra}$ (pCi/g wet weight)	0.003	ND	0.001 J	ND	0.001 J
$^{228}\text{Ra}$ (pCi/g wet weight)	0.019	ND	ND	ND	ND
$^{226}\text{Ra}$ (pCi/g dry weight)	0.023	ND	0.008 J	ND	0.011 J
$^{228}\text{Ra}$ (pCi/g dry weight)	0.14	ND	ND	ND	ND

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitation level (defined as five times MDL).

ND = Concentration below the MDL.

Table A-401. Sample specific data and surrogate recoveries for volatile organic analysis of tissue samples.

Sample ID	Field ID	Lab ID:	Associated Blank	Sample Size (g wet weight)	Percent Dry Weight	Benzene-d6	Toluene-d8	Ethylbenzene-d10
PSVT-001	I-EB165-CHUB-VOC-A	PV27	QH72PB	3.73	22	94	89	81
PSVT-002	I-EB165-CHUB-VOC-B	PU99	QH72PB	3.42	22	95	91	84
PSVT-003	I-EB165-CHUB-VOC-C	PT09	QH72PB	4.48	23	101	93	82
PSVT-004	I-EB165-CHUB-VOC-D	PV17-1	QH72PB	4.15	24	122&	108	78
PSVT-005	I-EB165-CHUB-VOC-E	PU48-2	QH72PB	3.46	23	98	103	88
PSVT-006	I-EB165-CREOLEFISH-VOC-A	PV53	QH72PB	4.55	18	113	99	85
PSVT-007	I-EB165-CREOLEFISH-VOC-B	PT17	QH72PB	4.06	20	93	81	71
PSVT-008	I-EB165-CREOLEFISH-VOC-C	PV09	QH72PB	3.61	20	91	86	80
PSVT-009	I-EB165-CREOLEFISH-VOC-D	PT29	QH72PB	4.15	19	118	110	93
PSVT-010	I-EB165-CREOLEFISH-VOC-E	PT25	QH72PB	3.92	19	123&	111	88
PSVT-011	II-EB165-CHUB-VOC-A	RP29	SH10PB	5.12	23	100	100	87
PSVT-012	II-EB165-CHUB-VOC-B	RP23	SH10PB	5.30	25	96	96	83
PSVT-013	II-EB165-CHUB-VOC-C	RP12	SH10PB	6.18	22	88	91	80
PSVT-014	II-EB165-CHUB-VOC-D	RO63	SH10PB	5.48	22	90	90	81
PSVT-015	II-EB165-CHUB-VOC-E	RM36	SH10PB	5.59	23	88	89	80
PSVT-016	II-EB165-CREOLEFISH-VOC-A	RO90	SH10PB	5.39	19	94	95	84
PSVT-017	II-EB165-CREOLEFISH-VOC-B	RM43	SH10PB	4.87	19	88	93	85
PSVT-018	II-EB165-CREOLEFISH-VOC-C	RO79	SH10PB	5.52	20	88	88	80
PSVT-019	II-EB165-CREOLEFISH-VOC-D	RO88	SH10PB	5.59	20	95	95	85
PSVT-020	II-EB165-CREOLEFISH-VOC-E	RM64	SH10PB	5.33	20	80	85	84
PSVT-021	I-HI356-CHUB-VOC-A	PS91	QJ44PB	3.13	23	106	102	86
PSVT-022	I-HI356-CHUB-VOC-B	PS86	QJ44PB	3.66	22	108	97	72
PSVT-023	I-HI356-CHUB-VOC-C1	PS79-1	QJ44PB	3.28	27	107	102	82
PSVT-024	I-HI356-CHUB-VOC-D	PS68	QJ44PB	3.05	22	112	95	76
PSVT-025	I-HI356-CHUB-VOC-E	PS40	QJ44PB	3.11	26	124&	103	77
PSVT-026	I-HI356-CREOLEFISH-VOC-A	PT35	QJ44PB	3.62	20	113	100	81
PSVT-027	I-HI356-CREOLEFISH-VOC-B	PS31	QJ44PB	3.98	21	123&	109	80
PSVT-028	I-HI356-CREOLEFISH-VOC-C	PS87	QJ44PB	3.08	26	123&	101	74
PSVT-029	I-HI356-CREOLEFISH-VOC-D	PS94	QK56PB	3.15	19	97	92	72
PSVT-030	I-HI356-CREOLEFISH-VOC-E	PS77	QK56PB	3.16	20	122&	103	80

Table A-401. (Continued).

Sample ID	Field ID	Lab ID:	Associated Blank	Sample Size (g wet weight)	Percent Dry Weight	Benzene-d6	Toluene-d8	Ethylbenzene-d10
PSVT-031	II-HI356-CHUB-VOC-A	RN12	SH18PB	5.38	23	94	93	86
PSVT-032	II-HI356-CHUB-VOC-B	RM08	SH18PB	5.22	25	93	96	83
PSVT-033	II-HI356-CHUB-VOC-C	RM96	SH18PB	5.34	23	97	96	86
PSVT-034	II-HI356-CHUB-VOC-D	RP28	SH18PB	5.57	27	99	94	78
PSVT-035	II-HI356-CHUB-VOC-E	RM52	SH22PB	5.94	24	93	89	76
PSVT-036	II-HI356-CREOLEFISH-VOC-A	RP85-1	SH18PB	4.85	21	92	89	78
PSVT-037	II-HI356-CREOLEFISH-VOC-B	RM07	SH18PB	5.22	21	94	92	80
PSVT-038	II-HI356-CREOLEFISH-VOC-C	RL90	SH18PB	5.34	21	87	90	81
PSVT-039	II-HI356-CREOLEFISH-VOC-D	RQ19	SH18PB	5.76	21	90	94	83
PSVT-040	II-HI356-CREOLEFISH-VOC-E	RP97	SH18PB	5.21	19	89	92	79
PSVT-041	I-GC19-CHUB-VOC-A	PV01	QJ40PB	3.67	25	112	104	85
PSVT-042	I-GC19-CHUB-VOC-B	PU92	QJ40PB	3.43	23	112	104	87
PSVT-043	I-GC19-CHUB-VOC-C	PV52	QJ40PB	3.01	25	113	105	90
PSVT-044	I-GC19-CHUB-VOC-D	PT76	QJ40PB	3.03	23	117	107	87
PSVT-045	I-GC19-CHUB-VOC-E	PT79	QJ40PB	3.41	27	108	107	85
PSVT-046	I-GC19-CREOLEFISH-VOC-A	PV14	QJ40PB	3.39	19	111	106	86
PSVT-047	I-GC19-CREOLEFISH-VOC-B	PV43	QJ40PB	4.30	20	89	86	83
PSVT-048	I-GC19-CREOLEFISH-VOC-C	PU83-1	QJ40PB	3.15	19	107	100	77
PSVT-049	I-GC19-CREOLEFISH-VOC-D	PU28	QJ44PB	3.02	20	103	101	81
PSVT-050	I-GC19-CREOLEFISH-VOC-E	PU23	QJ44PB	4.03	20	114	105	85
PSVT-051	II-GC19-CHUB-VOC-A	RO99-1	SH14PB	5.42	22	87	89	80
PSVT-052	II-GC19-CHUB-VOC-B	RO93	SH14PB	5.22	24	99	96	79
PSVT-053	II-GC19-CHUB-VOC-C	RN35	SH14PB	5.63	22	95	95	83
PSVT-054	II-GC19-CHUB-VOC-D	RQ99	SH10PB	5.31	25	106	102	91
PSVT-055	II-GC19-CHUB-VOC-E	RO31	SH14PB	4.83	26	107	103	85
PSVT-056	II-GC19-CREOLEFISH-VOC-A	RO03	SH14PB	5.45	20	97	97	85
PSVT-057	II-GC19-CREOLEFISH-VOC-B	RN52	SH14PB	5.42	21	87	86	80
PSVT-058	II-GC19-CREOLEFISH-VOC-C	RN69	SH14PB	5.20	19	88	92	81
PSVT-059	II-GC19-CREOLEFISH-VOC-D	RN75	SH14PB	4.93	20	94	96	81
PSVT-060	II-GC19-CREOLEFISH-VOC-E	RN73	SH14PB	5.68	19	96	95	82

Table A-401. (Continued).

Sample ID	Field ID	Lab ID:	Associated Blank	Sample Size (g wet weight)	Percent Dry Weight	Benzene-d6	Toluene-d8	Ethylbenzene-d10
PSVT-061	I-EI361-CHUB-VOC-A	PU65	QI60PB	3.66	23	86	94	86
PSVT-062	I-EI361-CHUB-VOC-B	PU72	QI60PB	3.75	23	91	82	71
PSVT-063	I-EI361-CHUB-VOC-C	PU51-1	QI60PB	3.64	26	109	104	88
PSVT-064	I-EI361-CHUB-VOC-D	PU62-1	QI60PB	3.48	24	102	102	87
PSVT-065	I-EI361-CHUB-VOC-E	PV07	QI60PB	3.33	24	103	98	86
PSVT-066	I-EI361-CREOLEFISH-VOC-A	PT47	QI60PB	3.29	19	109	100	84
PSVT-067	I-EI361-CREOLEFISH-VOC-B	PT91	QI60PB	3.04	19	116	112	89
PSVT-068	I-EI361-CREOLEFISH-VOC-C	PU24	QJ40PB	3.36	20	113	110	89
PSVT-069	I-EI361-CREOLEFISH-VOC-D	PT84	QJ40PB	3.22	20	117	112	88
PSVT-070	I-EI361-CREOLEFISH-VOC-E	PU20	QJ40PB	3.28	19	117	111	88
PSVT-071	II-EI361-CHUB-VOC-A	RO34	SH14PB	5.31	26	92	88	77
PSVT-072	II-EI361-CHUB-VOC-B	RQ07	SH14PB	5.25	24	101	101	86
PSVT-073	II-EI361-CHUB-VOC-C	RO44	SH14PB	5.35	25	99	97	77
PSVT-074	II-EI361-CHUB-VOC-D	RN76	SH10PB	5.15	23	86	90	87
PSVT-075	II-EI361-CHUB-VOC-E	RO25	SH10PB	5.84	23	91	91	80
PSVT-076	II-EI361-CREOLEFISH-VOC-A	RQ93	SH10PB	5.38	21	89	92	85
PSVT-077	II-EI361-CREOLEFISH-VOC-B	RP94-1	SH14PB	5.64	21	91	93	79
PSVT-078	II-EI361-CREOLEFISH-VOC-C	RQ53	SH14PB	5.53	22	93	94	79
PSVT-079	II-EI361-CREOLEFISH-VOC-D	RO32	SH10PB	5.52	20	90	88	81
PSVT-080	II-EI361-CREOLEFISH-VOC-E	RQ68	SH14PB	4.97	20	88	90	81
PSVT-081	I-VR214-REDSNAPPER-VOC-A	PU57	QL85PB-2	3.80	22	107	89	78
PSVT-082	I-VR214-REDSNAPPER-VOC-B1	PU58	QL85PB-2	3.16	24	119	98	89
PSVT-083	I-VR214-REDSNAPPER-VOC-C	PS47	QL85PB-2	3.41	23	97	78	68
PSVT-084	I-VR214-REDSNAPPER-VOC-D	PV06	QL85PB-2	4.21	21	117	99	81
PSVT-085	I-VR214-REDSNAPPER-VOC-E	PT04	QL85PB-2	4.07	22	113	93	79
PSVT-086	I-VR214-TRIGGERFISH-VOC-A	PV18-1	QL85PB-2	3.45	20	106	88	77
PSVT-087	I-VR214-TRIGGERFISH-VOC-B	PU67	QL85PB-2	3.40	22	101	79	69
PSVT-088	I-VR214-TRIGGERFISH-VOC-C	PU95	QL85PB-2	3.30	18	102	86	75
PSVT-089	I-VR214-TRIGGERFISH-VOC-D	PU96	QL85PB-2	3.21	21	118	101	83
PSVT-090	I-VR214-TRIGGERFISH-VOC-E	PU52	QL85PB-2	3.60	22	109	87	73



Table A-401. (Continued).

Sample ID	Field ID	Lab ID:	Associated Blank	Sample Size (g wet weight)	Percent Dry Weight	Benzene-d6	Toluene-d8	Ethylbenzene-d10
PSVT-091	II-VR214-REDSNAPPER-VOC-A	QX90-2	RT48PB-1	4.66	22	89	88	74
PSVT-092	II-VR214-REDSNAPPER-VOC-B	QX47-1	RT48PB-1	5.22	21	95	92	75
PSVT-093	II-VR214-REDSNAPPER-VOC-C	QX06	RT40PB	5.06	21	102	105	93
PSVT-094	II-VR214-REDSNAPPER-VOC-C	QY57	RS51PB	5.10	23	100	98	87
PSVT-095	II-VR214-REDSNAPPER-VOC-E	QX50	RS47PB	5.03	23	101	103	89
PSVT-096	II-VR214-TRIGGERFISH-VOC-A	QY42	RT52PB	5.13	21	87	85	79
PSVT-097	II-VR214-TRIGGERFISH-VOC-B	QX21	RV15PB	3.56	21	85	88	78
PSVT-098	II-VR214-TRIGGERFISH-VOC-C	QX08	RT44PB	5.22	22	102	102	86
PSVT-099	II-VR214-TRIGGERFISH-VOC-D	QX14-1	RS55PB	5.06	22	98	97	89
PSVT-100	II-VR214-TRIGGERFISH-VOC-E	QW92	RS43PB	5.10	22	97	98	91
PSVT-101	I-EC229-REDSNAPPERVOC-A	PSO4	QH76PB	3.04	19	100	104	87
PSVT-102	I-EC229-REDSNAPPERVOC-B	PT21	QH76PB	4.01	22	115	110	85
PSVT-103	I-EC229-REDSNAPPERVOC-C	PS49DUP	QH76PB	3.07	21	82	93	81
PSVT-104	I-EC229-REDSNAPPERVOC-D	PT27-1	QH76PB	3.24	22	100	97	81
PSVT-105	I-EC229-REDSNAPPERVOC-E	PS29-1	QH76PB	3.12	22	106	98	79
PSVT-106	I-EC229-TRIGGERFISHVOC-A	PV05	QH76PB	3.62	21	99	101	84
PSVT-107	I-EC229-TRIGGERFISHVOC-B	PS13	QH76PB	3.75	22	105	108	87
PSVT-109	I-EC229-TRIGGERFISHVOC-D	PS97	QH76PB	3.14	22	101	97	84
PSVT-110	I-EC229-TRIGGERFISHVOC-E	PU55	QH76PB	3.42	20	95	100	81
PSVT-111	II-EC229-REDSNAPPER-VOC-A	QX40-1	RT48PB-1	5.19	22	87	91	78
PSVT-112	II-EC229-REDSNAPPER-VOC-B	QY02	RT44PB	5.13	21	103	101	86
PSVT-113	II-EC229-REDSNAPPER-VOC-C	QV78	RS51PB	5.19	22	107	105	93
PSVT-114	II-EC229-REDSNAPPER-VOC-D	QX48	RS47PB	4.02	21	96	101	89
PSVT-115	II-EC229-REDSNAPPER-VOC-E	QX39	RS47PB	5.05	22	97	97	88
PSVT-116	II-EC229-TRIGGERFISH-VOC-A	QW33-1	RT48PB-1	4.59	20	91	97	86
PSVT-117	II-EC229-TRIGGERFISH-VOC-B	QX31	RT52PB	5.32	20	95	93	82
PSVT-118	II-EC229-TRIGGERFISH-VOC-C	QX15	RT56PB	4.92	21	87	88	79
PSVT-119	II-EC229-TRIGGERFISH-VOC-D	QY03	RT56PB	5.42	22	91	93	86
PSVT-120	II-EC229-TRIGGERFISH-VOC-E	QY24	RT52PB	5.32	22	99	94	82
PSVT-121	I-SS227-CHUB-VOC-A	PV46	QK56PB	3.68	24	102	91	78

Table A-401. (Continued).

Sample ID	Field ID	Lab ID:	Associated Blank	Sample Size (g wet weight)	Percent Dry Weight	Benzene-d6	Toluene-d8	Ethylbenzene-d10
PSVT-122	I-SS227-CHUB-VOC-B	PU85-3	QK56PB	1.97	23	121&	96	86
PSVT-123	I-SS227-CHUB-VOC-C	PU86	QK56PB	3.32	26	107	88	73
PSVT-124	I-SS227-CHUB-VOC-D	PS75	QK56PB	3.81	22	117	97	81
PSVT-125	I-SS227-CHUB-VOC-E	PU73	QK56PB	3.72	26	119	97	82
PSVT-126	I-SS227-REDSNAPPER-VOC-A	PS73-1	QL85PB-2	3.16	23	116	95	86
PSVT-127	I-SS227-REDSNAPPER-VOC-B	PS51-1	QL85PB-2	2.60	21	119	99	84
PSVT-128	I-SS227-REDSNAPPER-VOC-C	PS50-1	QL85PB-2	3.13	22	113	94	82
PSVT-129	I-SS227-REDSNAPPER-VOC-D	PS82-1	QL85PB-2	3.10	22	121&	100	87
PSVT-130	I-SS227-REDSNAPPER-VOC-E	PS30-3	QL85PB-2	2.85	23	91	79	72
PSVT-131	II-SS277-CHUB-VOC-A	RQ37	SH22PB	5.35	25	94	90	77
PSVT-132	II-SS277-CHUB-VOC-B	RQ08	SH22PB	5.55	24	94	83	74
PSVT-133	II-SS277-CHUB-VOC-C	RQ76	SH22PB	5.23	23	91	90	76
PSVT-134	II-SS277-CHUB-VOC-D	RQ74	SH22PB	5.35	25	87	86	72
PSVT-135	II-SS277-CHUB-VOC-H	QU43	SH22PB	5.19	24	92	88	75
PSVT-136	II-SS277-CREOLEFISH-VOC-A	RQ47	SH22PB	5.72	21	93	90	76
PSVT-137	II-SS277-CREOLEFISH-VOC-B	RQ77	SH22PB	5.58	20	95	90	79
PSVT-138	II-SS277-CREOLEFISH-VOC-C	RQ45	SH22PB	5.14	20	95	89	74
PSVT-139	II-SS277-CREOLEFISH-VOC-D	RQ14	SH26PB	5.71	21	89	87	78
PSVT-140	II-SS277-CREOLEFISH-VOC-H	QW71	SH30PB	5.10	21	103	97	80
PSVT-141	I-EI360-CHUB-VOC-A	PT75	QH76PB	3.67	27	101	96	84
PSVT-142	I-EI360-CHUB-VOC-B	PU12	QH76PB	3.29	23	102	106	85
PSVT-143	I-EI360-CHUB-VOC-C	PU16	QJ40PB	0.00	10	113	110	89
PSVT-144	I-EI360-CHUB-VOC-D	PT90-2	QI60PB	3.08	24	107	108	89
PSVT-145	I-EI360-CHUB-VOC-E	PU04-2	QI60PB	3.07	25	113	113	96
PSVT-146	I-EI360-REDSNAPPERVOC-A	PU09	QI60PB	3.10	21	79	92	85
PSVT-147	I-EI360-REDSNAPPERVOC-B	PT59	QI60PB	3.40	23	81	94	85
PSVT-148	I-EI360-REDSNAPPERVOC-C	PT78-2	QI60PB	3.29	22	114	116	95
PSVT-149	I-EI360-REDSNAPPERVOC-D	PT92	QI60PB	3.47	22	89	91	79
PSVT-150	I-EI360-REDSNAPPERVOC-E	PT48	QI60PB	3.75	22	90	85	77
PSVT-151	II-EI360-CHUB-VOC-A	QY68	SH30PB	5.33	22	96	96	85

Table A-401. (Continued).

Sample ID	Field ID	Lab ID:	Associated Blank	Sample Size (g wet weight)	Percent Dry Weight	Benzene-d6	Toluene-d8	Ethylbenzene-d10
PSVT-152	II-EI360-CHUB-VOC-B	QY08	SH26PB	5.43	23	121&	106	83
PSVT-153	II-EI360-CHUB-VOC-C	QV90	SH26PB	5.26	24	96	97	86
PSVT-154	II-EI360-CHUB-VOC-D	QU40	SH30PB	5.10	22	109	101	85
PSVT-155	II-EI360-CHUB-VOC-E	QV76	SH26PB	5.89	25	107	105	92
PSVT-156	II-EI360-CREOLEFISH-VOC-A	QV16	SH30PB	5.07	22	93	93	81
PSVT-157	II-EI360-CREOLEFISH-VOC-B	QV27	SH26PB	5.81	24	108	97	80
PSVT-158	II-EI360-CREOLEFISH-VOC-C	QU36	SH26PB	5.35	22	99	97	86
PSVT-159	II-EI360-CREOLEFISH-VOC-D	QU49	SH30PB	5.00	21	107	105	87
PSVT-160	II-EI360-CREOLEFISH-VOC-E	QW10	SH30PB	5.89	21	104	101	86
PSVT-161	II-MC194-CHUB-VOC-A	QV84	RV15PB	1.65	27	92	91	76
PSVT-162	II-MC194-CHUB-VOC-B	QV67	RT40PB	5.04	25	99	101	88
PSVT-163	II-MC194-CHUB-VOC-C	QW27	RS51PB	5.15	25	94	95	82
PSVT-164	II-MC194-CHUB-VOC-D	QW64	RS47PB	5.10	29	100	94	73
PSVT-165	II-MC194-CHUB-VOC-E	QW05	RS47PB	5.01	26	103	100	81
PSVT-166	II-MC194-TRIGGERFISH-VOC-A	QY31	RT56PB	5.71	21	92	92	81
PSVT-167	II-MC194-TRIGGERFISH-VOC-B	QX80	RT56PB	5.43	21	94	91	79
PSVT-168	II-MC194-TRIGGERFISH-VOC-E	QY21-1	RS55PB	5.31	22	91	97	86
PSVT-169	II-MC194-TRIGGERFISH-VOC-F	QY51	RS55PB	5.60	22	87	89	81
PSVT-170	II-MC194-TRIGGERFISH-VOC-G	QY46	RS43PB	5.70	22	99	100	87
PSVT-171	III-MC194-CREOLEFISH-VOC-A	TH52	TY05PB	4.65	20	101	96	86
PSVT-172	III-MC194-CREOLEFISH-VOC-B	TG95	TY05PB	4.57	20	117	107	95
PSVT-173	III-MC194-CREOLEFISH-VOC-C	TG73	TY05PB	5.08	19	97	92	85
PSVT-174	III-MC194-CREOLEFISH-VOC-D	TG80	TY05PB	5.1	20	104	92	81
PSVT-175	III-MC194-CREOLEFISH-VOC-E	TH01	TY05PB	4.53	21	109	99	90
PSVT-176	III-MC194-TRIGGERFISH-VOC-A	TG92	TY09PB	4.97	21	100	92	91
PSVT-177	III-MC194-TRIGGERFISH-VOC-B	TH36	TY09PB	4.66	20	111	102	93
PSVT-178	III-MC194-TRIGGERFISH-VOC-C	TG91	TY09PB	5.22	21	104	97	87
PSVT-179	III-MC194-TRIGGERFISH-VOC-D	TG98	TY09PB	4.76	24	108	96	89
PSVT-180	III-MC194-TRIGGERFISH-VOC-E	TG54	TY09PB	5.15	21	103	94	86
PSVT-181	II-MC280-CHUB-VOC-A	QW59	RT52PB	5.10	23	95	98	88

Table A-401. (Continued).

Sample ID	Field ID	Lab ID:	Associated Blank	Sample Size (g wet weight)	Percent Dry Weight	Benzene-d6	Toluene-d8	Ethylbenzene-d10
PSVT-182	II-MC280-CHUB-VOC-B	QX28-1	RT44PB	5.17	25	95	94	80
PSVT-183	II-MC280-CHUB-VOC-C	QX58	RS51PB	5.34	24	105	100	88
PSVT-184	II-MC280-CHUB-VOC-D	QY18	RS47PB	5.08	24	101	104	87
PSVT-185	II-MC280-CHUB-VOC-E	QV93	RV15PB	5.35	24	86	85	72
PSVT-186	II-MC280-TRIGGERFISH-VOC-A	QV80	RT44PB	5.39	20	96	98	84
PSVT-187	II-MC280-TRIGGERFISH-VOC-B	QX86	RT44PB	5.55	21	93	97	88
PSVT-188	II-MC280-TRIGGERFISH-VOC-C	QX51	RS55PB	5.56	22	95	94	86
PSVT-189	II-MC280-TRIGGERFISH-VOC-D	QW89	RS55PB	4.90	22	92	96	85
PSVT-190	II-MC280-TRIGGERFISH-VOC-E	QY58	RS51PB	5.26	21	110	112	100
PSVT-191	III-MC280-CREOLEFISH-VOC-A	TG66	TY09PB	4	19	104	92	83
PSVT-192	III-MC280-CREOLEFISH-VOC-B	TH31	TY09PB	4.66	19	113	101	89
PSVT-193	III-MC280-CREOLEFISH-VOC-C	TH50	TY09PB	4.75	20	99	92	83
PSVT-194	III-MC280-CREOLEFISH-VOC-D	TG85	TY09PB	4.52	20	104	98	88
PSVT-195	III-MC280-CREOLEFISH-VOC-E	TG51	TY09PB	5.56	19	104	87	77
PSVT-196	III-MC280-TRIGGERFISH-VOC-A	TG97-1	TY17PB	5.09	21	112	97	88
PSVT-197	III-MC280-TRIGGERFISH-VOC-B	TH03	TY09PB	5.11	21	109	95	85
PSVT-198	III-MC280-TRIGGERFISH-VOC-C	TH22	TY09PB	5.02	21	107	96	88
PSVT-199	III-MC280-TRIGGERFISH-VOC-D	TG69	TY09PB	5.48	22	113	98	88
PSVT-200	III-MC280-TRIGGERFISH-VOC-E	TG72	TY09PB	4.85	21	116	98	85
PSVT-201	II-ST130-REDSNAPPER-VOC-A	QU68	RT40PB	5.17	24	97	99	86
PSVT-202	II-ST130-REDSNAPPER-VOC-B	QV79	RT40PB	5.01	22	97	98	88
PSVT-203	II-ST130-REDSNAPPER-VOC-C	QX88	RT44PB	5.02	22	103	103	84
PSVT-204	II-ST130-REDSNAPPER-VOC-D	QW41	RT44PB	5.29	22	103	100	84
PSVT-205	II-ST130-REDSNAPPER-VOC-E	QY54-1	RT48PB-1	5.11	23	93	94	78
PSVT-206	II-ST130-TRIGGERFISH-VOC-A	QW77	RT40PB	5.10	22	98	97	85
PSVT-207	II-ST130-TRIGGERFISH-VOC-B	QY14	RS51PB	5.28	22	106	105	90
PSVT-208	II-ST130-TRIGGERFISH-VOC-C	QW04-1	RS47PB	4.44	22	88	93	81
PSVT-209	II-ST130-TRIGGERFISH-VOC-D	QY27-1	RS43PB	4.70	20	91	94	89
PSVT-210	II-ST130-TRIGGERFISH-VOC-E	QY53	RS43PB	5.60	20	114	115	107
PSVT-211	III-ST130-REDSNAPPER-VOC-A	SV20	TY13PB	4.78	23	123&	109	98

Table A-401. (Continued).

Sample ID	Field ID	Lab ID:	Associated Blank	Sample Size (g wet weight)	Percent Dry Weight	Benzene-d6	Toluene-d8	Ethylbenzene-d10
PSVT-212	III-ST130-REDSNAPPER-VOC-B	SU73	TY13PB	4.75	23	118	113	103
PSVT-213	III-ST130-REDSNAPPER-VOC-C	SV87	TY13PB	5.3	23	108	97	90
PSVT-214	III-ST130-REDSNAPPER-VOC-D	SU71-1	TY17PB	5.11	23	103	86	73
PSVT-215	III-ST130-REDSNAPPER-VOC-E	SU75	TY13PB	4.18	22	115	101	88
PSVT-216	III-ST130-SPADEFISH-VOC-A	TH21	TY17PB	4.58	22	108	99	88
PSVT-217	III-ST130-SPADEFISH-VOC-B	TG43	TY17PB	5.18	22	114	103	90
PSVT-218	III-ST130-SPADEFISH-VOC-C	TG20	TY17PB	4.76	21	89	80	72
PSVT-219	III-ST130-SPADEFISH-VOC-D	TG21	TY17PB	5.27	21	97	91	81
PSVT-220	III-ST130-SPADEFISH-VOC-E	TG19	TY17PB	4.69	20	91	84	75
PSVT-221	II-ST128-REDSNAPPER-VOC-A	QY17-1	RT48PB-1	5.03	22	93	92	76
PSVT-222	II-ST128-REDSNAPPER-VOC-B	QV85-1	RT48PB-1	4.68	22	85	90	83
PSVT-223	II-ST128-REDSNAPPER-VOC-C	QV66-1	RT48PB-1	5.09	23	95	92	77
PSVT-224	II-ST128-REDSNAPPER-VOC-D	QY40	RT52PB	5.25	22	89	95	88
PSVT-225	II-ST128-REDSNAPPER-VOC-E	QV98	RT40PB	5.16	22	100	102	88
PSVT-226	II-ST128-TRIGGERFISH-VOC-A	QW62	RT56PB	5.01	21	90	89	81
PSVT-227	II-ST128-TRIGGERFISH-VOC-C	QV65	RU91PB	5.99	21	91	92	82
PSVT-228	II-ST128-TRIGGERFISH-VOC-D	QX76	RT52PB	5.07	21	104	99	85
PSVT-229	II-ST128-TRIGGERFISH-VOC-E	QV99	RU91PB	5.08	21	88	93	86
PSVT-230	II-ST128-TRIGGERFISH-VOC-F	QW51-1	RS55PB	5.31	23	100	97	86
PSVT-231	III-ST128-REDSNAPPER-VOC-A	SW73	TY13PB	4.71	23	97	84	79
PSVT-232	III-ST128-REDSNAPPER-VOC-B	SW64	TY13PB	5.03	23	111	100	90
PSVT-233	III-ST128-REDSNAPPER-VOC-C	SW98	TY13PB	4.15	21	105	99	90
PSVT-234	III-ST128-REDSNAPPER-VOC-D	SX19	TY13PB	5.04	21	107	97	85
PSVT-235	III-ST128-REDSNAPPER-VOC-E	SX48	TY13PB	5.07	23	104	96	84
PSVT-236	III-ST128-SPADEFISH-VOC-A	SX20	TY13PB	4.97	20	106	95	86
PSVT-237	III-ST128-SPADEFISH-VOC-B	SX30	TY13PB	4.76	21	107	97	84
PSVT-238	III-ST128-SPADEFISH-VOC-C	SX28	TY13PB	4.75	21	106	96	86
PSVT-239	III-ST128-SPADEFISH-VOC-D	SX26	TY13PB	4.77	20	107	98	88
PSVT-240	III-ST128-SPADEFISH-VOC-E	SX03	TY13PB	4.69	21	116	105	93
PSVT-241	II-VR245-REDSNAPPER-VOC-A	QX91	RS47PB	5.50	22	94	96	89

Table A-401. (Continued).

Sample ID	Field ID	Lab ID:	Associated Blank	Sample Size (g wet weight)	Percent Dry Weight	Benzene-d6	Toluene-d8	Ethylbenzene-d10
PSVT-242	II-VR245-REDSNAPPER-VOC-B	QX17	RS47PB	5.29	22	95	98	92
PSVT-243	II-VR245-REDSNAPPER-VOC-C	QX30	RS47PB	4.58	22	91	96	87
PSVT-244	II-VR245-REDSNAPPER-VOC-D	QX59	RV19PB	5.50	22	94	100	88
PSVT-245	II-VR245-REDSNAPPER-VOC-E	QX20	RV19PB	5.66	22	95	96	83
PSVT-246	II-VR245-TRIGGERFISH-VOC-A	QX18	RU91PB	5.46	21	85	81	71
PSVT-247	II-VR245-TRIGGERFISH-VOC-B	QW86	RU91PB	5.32	22	85	91	80
PSVT-248	II-VR245-TRIGGERFISH-VOC-E	QY36	RT44PB	5.28	27	96	93	80
PSVT-249	II-VR245-TRIGGERFISH-VOC-F	QW96	RT44PB	5.73	21	97	99	87
PSVT-250	II-VR245-TRIGGERFISH-VOC-G	QX33	RS55PB	5.32	22	96	101	85
PSVT-251	III-VR245-REDSNAPPER-VOC-A	SW28	TV17PB	5.32	22	103	88	77
PSVT-252	III-VR245-REDSNAPPER-VOC-B	SW47	TV17PB	5.13	22	104	90	76
PSVT-253	III-VR245-REDSNAPPER-VOC-C	SX49	TV17PB	5.19	23	99	81	68
PSVT-254	III-VR245-REDSNAPPER-VOC-D	SX55	TV17PB	5.12	24	116	92	81
PSVT-255	III-VR245-REDSNAPPER-VOC-E	SW12-1	TV17PB	3.17	23	96	87	79
PSVT-256	III-VR245-TRIGGERFISH-VOC-A	SW32	TV21PB	5.63	20	98	87	76
PSVT-257	III-VR245-TRIGGERFISH-VOC-B	SW27	TV21PB	5.15	21	98	83	73
PSVT-258	III-VR245-TRIGGERFISH-VOC-C	SW14	TV21PB	5.22	22	95	84	80
PSVT-259	III-VR245-TRIGGERFISH-VOC-D	SX58	TV21PB	5.27	20	97	87	76
PSVT-260	III-VR245-TRIGGERFISH-VOC-E	SW72	TV21PB	5.8	22	89	78	71
PSVT-261	II-SM172-REDSNAPPER-VOC-A	QX42	RT44PB	5.19	21	101	99	84
PSVT-262	II-SM172-REDSNAPPER-VOC-B	QX43	RT40PB	5.29	20	100	103	87
PSVT-263	II-SM172-REDSNAPPER-VOC-C	QY41	RS55PB	6.00	23	93	90	77
PSVT-264	II-SM172-REDSNAPPER-VOC-D	QY43	RS55PB	5.36	21	89	94	80
PSVT-265	II-SM172-REDSNAPPER-VOC-E	QY37	RS51PB	5.71	22	98	100	87
PSVT-266	II-SM172-TRIGGERFISH-VOC-A	QX34-1	RT44PB	5.28	22	98	98	84
PSVT-267	II-SM172-TRIGGERFISH-VOC-B	QY19	RT52PB	4.97	22	94	95	86
PSVT-268	II-SM172-TRIGGERFISH-VOC-C	QY22	RT44PB	5.12	18	103	99	84
PSVT-269	II-SM172-TRIGGERFISH-VOC-D	QY30	RT40PB	5.04	22	95	99	88
PSVT-270	II-SM172-TRIGGERFISH-VOC-E	QV37-1	RS51PB	4.87	22	88	89	79
PSVT-271	III-SM172-REDSNAPPER-VOC-A	SX62	TV13PB	5.35	22	105	95	89

Table A-401. (Continued).

Sample ID	Field ID	Lab ID:	Associated Blank	Sample Size (g wet weight)	Percent Dry Weight	Benzene-d6	Toluene-d8	Ethylbenzene-d10
PSVT-272	III-SM172-REDSNAPPER-VOC-B	SW92	TV13PB	5.23	22	109	98	86
PSVT-273	III-SM172-REDSNAPPER-VOC-C	SW86	TV13PB	5.01	22	95	90	86
PSVT-274	III-SM172-REDSNAPPER-VOC-D	SX63	TV13PB	6.24	23	105	94	82
PSVT-275	III-SM172-REDSNAPPER-VOC-E	SW15	TV13PB	5.06	22	105	97	88
PSVT-276	III-SM172-TRIGGERFISH-VOC-A	SX01	TV13PB	5.36	21	115	104	93
PSVT-277	III-SM172-TRIGGERFISH-VOC-B	SW34	TV13PB	5.62	21	120	103	92
PSVT-278	III-SM172-TRIGGERFISH-VOC-C	SW63	TV13PB	5.2	21	99	93	87
PSVT-279	III-SM172-TRIGGERFISH-VOC-D	SW24	TV13PB	4.74	22	96	88	79
PSVT-280	III-SM172-TRIGGERFISH-VOC-E	SW54	TV13PB	5.16	20	109	96	93
PSVT-281	II-EI330-CHUB-VOC-A	QU99	RS55PB	4.21	22	93	96	86
PSVT-282	II-EI330-CHUB-VOC-B	QU45	RS51PB	4.91	23	96	97	92
PSVT-283	II-EI330-CHUB-VOC-C	QU35	RS51PB	4.99	25	104	105	88
PSVT-284	II-EI330-CHUB-VOC-D	QU41	RS51PB	4.95	24	116	113	97
PSVT-285	II-EI330-CHUB-VOC-E	QV20	RS51PB	5.24	25	109	106	92
PSVT-286	II-EI330-TRIGGERFISH-VOC-A	QU37	RS55PB	4.93	23	93	96	90
PSVT-287	II-EI330-TRIGGERFISH-VOC-B	QV03	RT40PB	5.18	22	95	103	90
PSVT-288	II-EI330-TRIGGERFISH-VOC-C	QV14	RS51PB	5.74	21	100	102	90
PSVT-289	II-EI330-TRIGGERFISH-VOC-D	QW35	RS55PB	4.95	22	97	98	92
PSVT-290	II-EI330-TRIGGERFISH-VOC-E	QU39	RS43PB	5.30	21	105	106	94
PSVT-291	III-EI330-CHUB-VOC-A	TH09	TX96PB	3.15	24	109	98	90
PSVT-292	III-EI330-CHUB-VOC-B	TF74	TX96PB	4.89	24	100	86	75
PSVT-293	III-EI330-CHUB-VOC-C	TH05	TX96PB	4.69	24	94	94	87
PSVT-294	III-EI330-CHUB-VOC-D	TF54	TX96PB	4.32	21	121&	110	97
PSVT-295	III-EI330-CHUB-VOC-E	TD73	TX96PB	4.7	21	106	97	88
PSVT-296	III-EI330-CREOLEFISH-VOC-A	TF73	TX96PB	4.83	20	117	103	93
PSVT-297	III-EI330-CREOLEFISH-VOC-B	TH06	TX96PB	5.08	20	116	105	96
PSVT-298	III-EI330-CREOLEFISH-VOC-C	TH23	TX96PB	4.87	20	105	92	85
PSVT-299	III-EI330-CREOLEFISH-VOC-D	TF26	TX96PB	4.71	21	121&	107	99
PSVT-300	III-EI330-CREOLEFISH-VOC-E	TH13	TX96PB	4.38	22	129&	116	102
PSVT-301	II-EI352-CHUB-VOC-A	QX13	RT56PB	5.27	25	88	87	77

Table A-401. (Continued).

Sample ID	Field ID	Lab ID:	Associated Blank	Sample Size (g wet weight)	Percent Dry Weight	Benzene-d6	Toluene-d8	Ethylbenzene-d10
PSVT-302	II-EI352-CHUB-VOC-B	QW24	RT56PB	5.11	22	89	89	76
PSVT-303	II-EI352-CHUB-VOC-C	QW67	RT52PB	5.47	24	98	91	80
PSVT-304	II-EI352-CHUB-VOC-B	QX09	RT52PB	5.10	24	105	100	82
PSVT-305	II-EI352-CHUB-VOC-E	QX29	RU91PB	5.02	24	87	86	75
PSVT-306	II-EI352-TRIGGERFISH-VOC-A	QW78	RS51PB	4.80	22	111	115	100
PSVT-307	II-EI352-TRIGGERFISH-VOC-B	QW94	RS47PB	2.68	22	92	96	87
PSVT-308	II-EI352-TRIGGERFISH-VOC-C	QW70	RS43PB	5.10	22	85	89	78
PSVT-309	II-EI352-TRIGGERFISH-VOC-D	QW76	RS43PB	5.00	21	98	97	88
PSVT-310	II-EI352-TRIGGERFISH-VOC-E	QW82	RS43PB	5.30	21	109	106	96
PSVT-311	III-EI352-CHUB-VOC-A	TI80	TX96PB	4.65	23	118	106	90
PSVT-312	III-EI352-CHUB-VOC-C	TI35	TX96PB	4.95	25	112	101	84
PSVT-313	III-EI352-CHUB-VOC-D	TI94	TX96PB	4.65	26	125&	108	94
PSVT-314	III-EI352-CHUB-VOC-E	TD74	TX96PB	4.6	23	108	93	79
PSVT-315	III-EI352-CHUB-VOC-F	TF55	TX96PB	3.36	23	112	104	93
PSVT-316	III-EI352-CREOLEFISH-VOC-A	TH34	TY01PB	3.15	21	106	94	86
PSVT-317	III-EI352-CREOLEFISH-VOC-B	TF63	TY01PB	4.5	21	109	102	95
PSVT-318	III-EI352-CREOLEFISH-VOC-C	TG96	TY01PB	4.38	20	116	104	91
PSVT-319	III-EI352-CREOLEFISH-VOC-D	TH24	TY01PB	4.71	21	109	99	88
PSVT-320	III-EI352-CREOLEFISH-VOC-E	TF69	TY01PB	4.51	20	110	99	87
PSVT-321	II-HI376-CHUB-VOC-A	QY78	RU91PB	5.06	21	86	86	77
PSVT-322	II-HI376-CHUB-VOC-B	QY84	RT52PB	5.00	20	96	100	88
PSVT-323	II-HI376-CHUB-VOC-C	QW28-1	RT48PB-1	5.44	23	93	89	75
PSVT-324	II-HI376-CHUB-VOC-D	QW60	RT40PB	5.28	21	102	100	88
PSVT-325	II-HI376-CHUB-VOC-E	QW56	RS47PB	5.16	22	89	93	83
PSVT-326	II-HI376-REDSNAPPER-VOC-A	QU57	RS43PB	5.40	24	101	104	91
PSVT-327	II-HI376-REDSNAPPER-VOC-B	QU63	RS47PB	5.05	23	99	100	89
PSVT-328	II-HI376-REDSNAPPER-VOC-C	QU88	RS43PB	5.20	23	102	101	91
PSVT-329	II-HI376-REDSNAPPER-VOC-D	QU61	RS43PB	4.90	22	90	94	85
PSVT-330	II-HI376-REDSNAPPER-VOC-E	QU56	RS43PB	4.90	23	107	112	99
PSVT-331	III-HI376-CHUB-VOC-A	SV33	TV09PB	4.4	22	95	85	77



Table A-401. (Continued).

Sample ID	Field ID	Lab ID:	Associated Blank	Sample Size (g wet weight)	Percent Dry Weight	Benzene-d6	Toluene-d8	Ethylbenzene-d10
PSVT-332	III-HI376-CHUB-VOC-B	SV05	TV09PB	4.71	20	98	86	69
PSVT-333	III-HI376-CHUB-VOC-C	SV32	TV09PB	4.94	21	100	88	81
PSVT-334	III-HI376-CHUB-VOC-D	SV28	TV09PB	4.89	22	95	81	67
PSVT-335	III-HI376-CHUB-VOC-E	SU94	TV09PB	4.85	23	93	82	73
PSVT-336	III-HI376-ROCKHIND-VOC-A	SV39	TV13PB	5.16	22	83	85	78
PSVT-337	III-HI376-ROCKHIND-VOC-F	SV56	TV13PB	5.71	25	97	86	78
PSVT-338	III-HI376-ROCKHIND-VOC-G	SW91	TV13PB	5.2	21	88	82	77
PSVT-339	III-HI376-ROCKHIND-VOC-H	SV40	TV13PB	5.14	20	90	81	78
PSVT-340	III-HI376-ROCKHIND-VOC-I	SV50	TV13PB	5.14	23	99	90	82
PSVT-341	II-WC587-CHUB-VOC-A	QY76-1	RT48PB-1	5.27	24	96	92	80
PSVT-342	II-WC587-CHUB-VOC-B	QV77	RT44PB	5.20	25	111	101	87
PSVT-343	II-WC587-CHUB-VOC-C	QW37	RT40PB	5.02	25	99	100	87
PSVT-344	II-WC587-CHUB-VOC-D	QW43-1	RU91PB	5.26	22	89	91	77
PSVT-345	II-WC587-CHUB-VOC-I	QV17	RT40PB	5.01	26	105	106	85
PSVT-346	II-WC587-REDSNAPPER-VOC-A	QW19-1	RT44PB	5.04	17	100	99	83
PSVT-347	II-WC587-REDSNAPPER-VOC-B	QW15	RT40PB	5.04	21	101	102	88
PSVT-348	II-WC587-REDSNAPPER-VOC-C	QW58	RS55PB	5.78	23	94	95	86
PSVT-349	II-WC587-REDSNAPPER-VOC-D	QX01	RS55PB	4.82	22	97	101	87
PSVT-350	II-WC587-REDSNAPPER-VOC-E	QW42	RS47PB	5.18	23	105	107	93
PSVT-351	III-WC587-CHUB-VOC-A	SX54	TV21PB	5.18	26	96	84	73
PSVT-352	III-WC587-CHUB-VOC-B	SW78	TV21PB	5.08	25	115	100	82
PSVT-353	III-WC587-CHUB-VOC-C	SW71	TV21PB	4.13	23	89	82	70
PSVT-354	III-WC587-CHUB-VOC-D	SW19	TV21PB	5.39	24	106	91	80
PSVT-355	III-WC587-CHUB-VOC-E	SW77	TV21PB	5.93	26	86	79	68
PSVT-356	III-WC587-ROCKHIND-VOC-F	SW61	TV21PB	5.13	21	94	85	75
PSVT-357	III-WC587-ROCKHIND-VOC-G	SW56	TV21PB	5.22	23	88	80	81
PSVT-358	III-WC587-ROCKHIND-VOC-H	SX73	TV21PB	5.48	21	84	77	75
PSVT-359	III-WC587-ROCKHIND-VOC-I	SW74	TV21PB	5.08	23	91	81	73
PSVT-360	III-WC587-ROCKHIND-VOC-J	SW99	TV21PB	5.1	22	90	82	74
PSVT-361	II-HI382-CHUB-VOC-A	QU51	SH30PB	5.36	24	89	91	80

Table A-401. (Continued).

Sample ID	Field ID	Lab ID:	Associated Blank	Sample Size (g wet weight)	Percent Dry Weight	Benzene-d6	Toluene-d8	Ethylbenzene-d10
PSVT-362	II-HI382-CHUB-VOC-B	QU91	SH26PB	5.45	25	102	96	78
PSVT-363	II-HI382-CHUB-VOC-C	QV13	SH22PB	5.11	25	94	91	78
PSVT-364	II-HI382-CHUB-VOC-D	QV93	SH18PB	5.79	23	97	99	87
PSVT-365	II-HI382-CHUB-VOC-E	QV23	SH22PB	5.63	25	116	95	73
PSVT-366	II-HI382-CREOLEFISH-VOC-A	QY92	SH18PB	5.21	20	98	93	82
PSVT-367	II-HI382-CREOLEFISH-VOC-B	QV07	SH18PB	5.39	21	94	92	82
PSVT-368	II-HI382-CREOLEFISH-VOC-C	QV01	SH18PB	5.85	20	98	97	85
PSVT-369	II-HI382-CREOLEFISH-VOC-D	QV15	SH18PB	5.58	20	100	99	87
PSVT-370	II-HI382-CREOLEFISH-VOC-I	QV08	SH18PB	5.62	20	104	105	95
PSVT-371	III-HI382-CHUB-VOC-A	SU74	TY01PB	4.38	23	111	100	89
PSVT-372	III-HI382-CHUB-VOC-B	SV45	TY01PB	4.63	22	116	106	94
PSVT-373	III-HI382-CHUB-VOC-C	SV52	TY01PB	4.51	22	112	94	77
PSVT-374	III-HI382-CHUB-VOC-D	SU87	TY01PB	4.82	24	113	105	95
PSVT-375	III-HI382-CHUB-VOC-E	SW25	TY01PB	5.18	22	107	96	82
PSVT-376	III-HI382-CREOLEFISH-VOC-A	SU98	TY01PB	4.23	20	118	106	95
PSVT-377	III-HI382-CREOLEFISH-VOC-C	SV55	TY01PB	4.63	21	123&	115	107
PSVT-378	III-HI382-CREOLEFISH-VOC-D	SU97	TY01PB	4.63	23	99	87	80
PSVT-379	III-HI382-CREOLEFISH-VOC-E	SW10	TY01PB	4.67	20	118	109	98
PSVT-380	III-HI382-CREOLEFISH-VOC-F	SV04	TY01PB	5.19	21	98	91	82
PSVT-381	II-HI553-CHUB-VOC-A	QU89	SH22PB	5.65	24	85	86	69
PSVT-382	II-HI553-CHUB-VOC-B	QV31	SH26PB	5.65	23	100	97	79
PSVT-383	II-HI553-CHUB-VOC-C	QY25	SH26PB	5.28	22	99	94	80
PSVT-384	II-HI553-CHUB-VOC-D	QU95	SH26PB	5.58	25	112	103	80
PSVT-385	II-HI553-CHUB-VOC-E	QU94	SH30PB	5.70	24	113	111	89
PSVT-386	II-HI553-CREOLEFISH-VOC-A	RQ44	SH26PB	5.06	21	89	92	83
PSVT-387	II-HI553-CREOLEFISH-VOC-B	RQ09	SH22PB	5.19	22	90	88	78
PSVT-388	II-HI553-CREOLEFISH-VOC-C	RQ64	SH22PB	5.51	21	87	89	76
PSVT-389	II-HI553-CREOLEFISH-VOC-D	QY92	SH30PB	5.43	20	91	92	80
PSVT-390	II-HI553-CREOLEFISH-VOC-E	RQ48	SH22PB	5.55	21	84	84	73
PSVT-391	III-HI553-CHUB-VOC-A	SU79	TY05PB	4.06	23	114	105	98

Table A-401. (Continued).

Sample ID	Field ID	Lab ID:	Associated Blank	Sample Size (g wet weight)	Percent Dry Weight	Benzene-d6	Toluene-d8	Ethylbenzene-d10
PSVT-392	III-HI553-CHUB-VOC-B	SU69	TY05PB	4.52	22	108	100	95
PSVT-393	III-HI553-CHUB-VOC-C	SW18-1	TY61PB	4.91	23	105	98	87
PSVT-394	III-HI553-CHUB-VOC-D	SW35	TY05PB	4.97	22	108	93	87
PSVT-395	III-HI553-CHUB-VOC-E	SW29	TY05PB	4.69	21	113	102	92
PSVT-396	III-HI553-CREOLEFISH-VOC-A	SV53	TY05PB	3.82	23	103	94	85
PSVT-397	III-HI553-CREOLEFISH-VOC-B	SV78	TY05PB	5.32	20	104	97	90
PSVT-398	III-HI553-CREOLEFISH-VOC-C	SV51	TY05PB	4.98	20	95	86	79
PSVT-399	III-HI553-CREOLEFISH-VOC-D	SU92	TY05PB	3.7	21	110	96	87
PSVT-400	III-HI553-CREOLEFISH-VOC-E	SU93	TY05PB	4.67	20	111	101	88
PSVT-401	II-EI100-CATFISH-VOC-A	QW25	RU91PB	5.06	22	86	88	77
PSVT-402	II-EI100-CATFISH-VOC-B	QW12	RU91PB	5.01	24	87	86	76
PSVT-403	II-EI100-CATFISH-VOC-C	QW61	RT56PB	5.11	22	91	90	79
PSVT-404	II-EI100-CATFISH-VOC-D	QW73	RT48PB-1	2.31	23	90	91	79
PSVT-405	II-EI100-CATFISH-VOC-I	QX63	RT56PB	5.72	23	92	89	77
PSVT-406	II-EI100-SHEEPSHEAD-VOC-A	QY52	RS51PB	4.86	21	91	95	84
PSVT-407	II-EI100-SHEEPSHEAD-VOC-B	QY49	RS47PB	3.23	21	99	102	88
PSVT-408	II-EI100-SHEEPSHEAD-VOC-C	QY16	RS43PB	5.20	19	100	98	86
PSVT-409	II-EI100-SHEEPSHEAD-VOC-D	QW45-1	RS43PB	3.70	20	94	95	90
PSVT-410	II-EI100-SHEEPSHEAD-VOC-E	QW69	RS43PB	4.90	21	83	91	82
PSVT-411	III-EI100-CATFISH-VOC-A	SX57	TV09PB	4.41	22	93	84	76
PSVT-412	III-EI100-CATFISH-VOC-F	SX37	TV09PB	4.67	22	89	79	71
PSVT-413	III-EI100-CATFISH-VOC-G	SX35	TV09PB	4.75	24	93	80	75
PSVT-414	III-EI100-CATFISH-VOC-H	SW13	TV09PB	4.23	23	90	81	74
PSVT-415	III-EI100-CATFISH-VOC-I	SW11	TV09PB	4.44	25	96	85	78
PSVT-416	III-EI100-SHEEPSHEAD-VOC-A	SX21	TV09PB	5.72	22	94	87	78
PSVT-417	III-EI100-SHEEPSHEAD-VOC-B	SW95	TV09PB	4.73	21	92	82	77
PSVT-418	III-EI100-SHEEPSHEAD-VOC-C	SW36	TV09PB	4.55	21	100	85	77
PSVT-419	III-EI100-SHEEPSHEAD-VOC-D	SW31	TV09PB	4.5	22	93	82	74
PSVT-420	III-EI100-SHEEPSHEAD-VOC-E	SW88	TV09PB	4.46	21	87	76	68
PSVT-421	II-SS100-CATFISH-VOC-A	QW98	RV15PB	3.88	20	94	96	79

Table A-401. (Continued).

Sample ID	Field ID	Lab ID:	Associated Blank	Sample Size (g wet weight)	Percent Dry Weight	Benzene-d6	Toluene-d8	Ethylbenzene-d10
PSVT-422	II-SS100-CATFISH-VOC-B	QW74-1	RT48PB-1	5.48	19	124&	108	75
PSVT-423	II-SS100-CATFISH-VOC-C	QX77	RT52PB	5.43	20	90	89	80
PSVT-424	II-SS100-CATFISH-VOC-D	QW23-1	RT48PB-1	4.82	20	87	94	82
PSVT-425	II-SS100-CATFISH-VOC-E	QX37	RT56PB	5.22	21	87	85	76
PSVT-426	II-SS100-SHEEPSHEAD-VOC-A	QX67	RT44PB	5.87	21	100	100	88
PSVT-427	II-SS100-SHEEPSHEAD-VOC-B	QV91	RT56PB	5.28	20	83	83	76
PSVT-428	II-SS100-SHEEPSHEAD-VOC-E	QW91	RT40PB	5.11	19	96	99	86
PSVT-429	II-SS100-SHEEPSHEAD-VOC-F	QX78	RS55PB	4.77	17	93	95	89
PSVT-430	II-SS100-SHEEPSHEAD-VOC-G	QX56	RT40PB	5.10	20	97	100	85
PSVT-431	III-SS100-CATFISH-VOC-F	SW42	TV17PB	5.11	20	98	90	83
PSVT-432	III-SS100-CATFISH-VOC-G	SW51	TV17PB	5.12	25	111	97	88
PSVT-433	III-SS100-CATFISH-VOC-H	SX18	TV17PB	5.08	21	93	88	80
PSVT-434	III-SS100-CATFISH-VOC-I	SW38	TV17PB	3.4	22	91	84	78
PSVT-435	III-SS100-CATFISH-VOC-J	SW85	TV17PB	5.14	20	98	88	81
PSVT-436	III-SS100-SHEEPSHEAD-VOC-A	SX67	TV17PB	5.5	20	94	85	83
PSVT-437	III-SS100-SHEEPSHEAD-VOC-B	SW90	TV17PB	5.43	18	102	88	84
PSVT-438	III-SS100-SHEEPSHEAD-VOC-C	SW87	TV17PB	4.97	22	107	97	89
PSVT-439	III-SS100-SHEEPSHEAD-VOC-D	SX25	TV17PB	5.03	22	88	76	62
PSVT-440	III-SS100-SHEEPSHEAD-VOC-E	SW26	TV17PB	5.63	22	109	93	77
PSVT-441	II-VR31-BLUECRAB-VOC-A	RS01	RV19PB	5.21	17	91	90	78
PSVT-442	II-VR31-BLUECRAB-VOC-B	RS02-1	RV19PB	4.37	18	78	78	65
PSVT-443	II-VR31-BLUECRAB-VOC-C	RS03	RU91PB	5.12	18	82	82	67
PSVT-444	II-VR31-BLUECRAB-VOC-D	RS04-1	RT48PB-1	5.59	18	92	101	86
PSVT-445	II-VR31-BLUECRAB-VOC-E	RS05-2	RT48PB-1	5.05	17	115	95	77
PSVT-446	II-VR31-CATFISH-VOC-A	QX83	RT56PB	5.79	23	89	89	77
PSVT-447	II-VR31-CATFISH-VOC-B	QX61	RU91PB	4.99	22	98	94	80
PSVT-448	II-VR31-CATFISH-VOC-C	QX64	RT56PB	5.55	21	90	92	82
PSVT-449	II-VR31-CATFISH-VOC-D	QY35	RT56PB	5.18	20	85	87	79
PSVT-450	II-VR31-CATFISH-VOC-E	QX54	RU91PB	5.09	23	90	89	79
PSVT-451	II-VR31-OYSTER-VOC-A	RU13-1	RV19PB	4.87	14	93	85	67

Table A-401. (Continued).

Sample ID	Field ID	Lab ID:	Associated Blank	Sample Size (g wet weight)	Percent Dry Weight	Benzene-d6	Toluene-d8	Ethylbenzene-d10
PSVT-452	II-VR31-OYSTER-VOC-B	RU14	RV19PB	5.06	14	106	95	68
PSVT-453	II-VR31-OYSTER-VOC-C	RU15	RV19PB	5.25	15	96	79	52
PSVT-454	II-VR31-OYSTER-VOC-D	RU16	RV19PB	5.71	14	94	86	66
PSVT-455	II-VR31-OYSTER-VOC-E	RU17	RV19PB	5.86	13	99	95	72
PSVT-456	III-VR31-BLUECRAB-VOC-A	TW60	TY61PB	4.98	17	105	98	90
PSVT-457	III-VR31-BLUECRAB-VOC-B	TW61-1	TY61PB	4.18	16	101	90	82
PSVT-458	III-VR31-BLUECRAB-VOC-C	TW62	TY61PB	4.98	18	106	96	88
PSVT-459	III-VR31-BLUECRAB-VOC-D	TW63-1	TY61PB	3.6	16	104	96	85
PSVT-460	III-VR31-BLUECRAB-VOC-E	TW64-1	TY61PB	5.35	17	69	83	84
PSVT-461	III-VR31-CATFISH-VOC-A	SX64-1	TY61PB	2.96	22	104	90	82
PSVT-462	III-VR31-CATFISH-VOC-C	SX34-1	TY61PB	4.11	22	108	99	95
PSVT-463	III-VR31-CATFISH-VOC-D	SX14-1	TY61PB	4.56	23	100	89	79
PSVT-464	III-VR31-CATFISH-VOC-E	SX52	TY61PB	4.75	24	114	105	97
PSVT-465	III-VR31-CATFISH-VOC-F	SX23	TY61PB	4.81	22	95	84	77
PSVT-466	III-VR31-OYSTER-VOC-A	TW65	TY61PB	5.69	11	105	93	87
PSVT-467	III-VR31-OYSTER-VOC-B	TW66	TY61PB	5.53	9	97	81	68
PSVT-468	III-VR31-OYSTER-VOC-C	TW67	TY61PB	5.65	10	108	102	86
PSVT-469	III-VR31-OYSTER-VOC-D	TW68	TY61PB	6.18	11	99	93	81
PSVT-470	III-VR31-OYSTER-VOC-E	TW69	TY61PB	4.87	10	103	94	80
PSVT-471	II-SMI229-BLUECRAB-VOC-A	RR95	RU91PB	5.06	17	91	91	76
PSVT-472	II-SMI229-BLUECRAB-VOC-B	RR96	RU91PB	5.18	17	96	97	85
PSVT-473	II-SMI229-BLUECRAB-VOC-C	RR97	RU91PB	5.21	18	98	91	75
PSVT-474	II-SMI229-BLUECRAB-VOC-D	RR98	RV15PB	4.95	18	92	92	76
PSVT-475	II-SMI229-BLUECRAB-VOC-E	RR99	RV15PB	4.07	17	81	83	75
PSVT-476	II-SMI229-CATFISH-VOC-A	QX65	RT56PB	5.38	21	100	102	87
PSVT-477	II-SMI229-CATFISH-VOC-B	QW16	RT52PB	5.39	20	88	91	83
PSVT-478	II-SMI229-CATFISH-VOC-C	QW29	RT52PB	5.27	22	102	103	87
PSVT-479	II-SMI229-CATFISH-VOC-D	QW75	RT52PB	5.35	22	100	100	81
PSVT-480	II-SMI229-CATFISH-VOC-E	QX60	RT52PB	5.60	21	92	94	84
PSVT-481	II-SMI229-OYSTER-VOC-A	RU18	RV15PB	6.43	13	85	81	63

Table A-401. (Continued).

Sample ID	Field ID	Lab ID:	Associated Blank	Sample Size (g wet weight)	Percent Dry Weight	Benzene-d6	Toluene-d8	Ethylbenzene-d10
PSVT-482	II-SMI229-OYSTER-VOC-B	RU19	RV15PB	5.93	15	97	94	70
PSVT-483	II-SMI229-OYSTER-VOC-C	RU20	RV15PB	5.20	15	94	89	69
PSVT-484	II-SMI229-OYSTER-VOC-D	RU21	RV15PB	5.14	15	101	96	77
PSVT-485	II-SMI229-OYSTER-VOC-E	RU22	RV19PB	5.31	14	95	94	69
PSVT-486	III-SMI229-BLUECRAB-VOC-A	TW54	TY17PB	5.09	18	109	99	89
PSVT-487	III-SMI229-CATFISH-VOC-A	SX47	TY17PB	4.86	20	102	94	85
PSVT-488	III-SMI229-CATFISH-VOC-B	SX56	TY17PB	5.05	22	99	89	79
PSVT-489	III-SMI229-CATFISH-VOC-C	SX40	TY17PB	4.62	23	101	90	80
PSVT-490	III-SMI229-CATFISH-VOC-D	SX46	TY17PB	4.89	25	85	76	71
PSVT-491	III-SMI229-CATFISH-VOC-E	SX53	TY17PB	4.69	23	101	93	83
PSVT-492	III-SMI229-OYSTER-VOC-A	TW55	TY17PB	5.2	13	104	91	84
PSVT-493	III-SMI229-OYSTER-VOC-B	TW56	TY17PB	5.17	12	108	92	82
PSVT-494	III-SMI229-OYSTER-VOC-C	TW57	TY17PB	3.47	12	104	94	85
PSVT-495	III-SMI229-OYSTER-VOC-D	TW58	TY17PB	5.03	9	100	86	80
PSVT-496	III-SMI229-OYSTER-VOC-E	TW59	TY61PB	5.81	9	103	97	85

& = Result outside quality control surrogate recovery criteria.

Table A-402. Results of volatile organic compound analysis of procedural blanks for tissue samples.

Lab ID	QH72PB	QH76PB	QI60PB	QJ40PB	QJ44PB	QK56PB	QL85PB-2
Sample Wet Weight (g)	3.92	3.53	3.44	3.43	3.34	3.19	3.27
Percent Dry Weight	18.66	19.11	20.41		19.36	17.70	21.27
Benzene	ND	ND	ND	ND	ND	ND	ND
Toluene	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND
Surrogate Recovery (%)							
Benzene-d6	89	96	107	103	101	99	100
Toluene-d8	91	98	99	108	100	97	88
Ethylbenzene-d10	90	88	104	89	89	85	82

Lab ID	RT44PB	RS43PB	RS47PB	RS51PB	RS55PB	RT40PB	RT48PB-1
Sample Wet Weight (g)	5.30	5.05	4.71	5.16	5.19	5.11	4.95
Percent Dry Weight	21.63	21.48	22.96	22.69	21.99	22.15	21.26
Benzene	ND	ND	ND	ND	ND	ND	ND
Toluene	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND
Surrogate Recovery (%)							
Benzene-d6	83	92	86	87	93	86	90
Toluene-d8	95	98	99	94	101	95	96
Ethylbenzene-d10	93	90	94	88	90	94	83

Lab ID	RT52PB	RT56PB	RU91PB	RV15PB	RV19PB	SH14PB	SH10PB
Sample Wet Weight (g)	5.25	5.26	5.22	4.54	5.25	5.29	5.45
Percent Dry Weight	21.58	21.48	20.80	18.53	16.38	22.13	21.67
Benzene	ND	ND	ND	ND	ND	ND	ND
Toluene	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND
Surrogate Recovery (%)							
Benzene-d6	91	84	99	90	88	80	86
Toluene-d8	97	88	102	96	96	88	93
Ethylbenzene-d10	84	80	88	83	88	82	93

Lab ID	SH18PB	SH22PB	SH26PB	SH30PB	TV09PB	TV13PB	TV17PB
Sample Wet Weight (g)	5.45	5.48	5.48	5.27	4.66	5.28	4.68
Percent Dry Weight	21.76	22.85	23.10	21.89	22.08	21.81	21.68
Benzene	ND	ND	ND	ND	ND	ND	ND
Toluene	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND
Surrogate Recovery (%)							
Benzene-d6	82	92	83	85	88	94	87
Toluene-d8	88	94	92	95	86	91	85
Ethylbenzene-d10	85	88	85	95	86	92	85

Table A-402. (Continued).

Lab ID	TV21PB	TX96PB	TY01PB	TY05PB	TY09PB	TY13PB	TY17PB
Sample Wet Weight (g)	5.19	4.47	4.54	4.62	4.87	4.73	4.89
Percent Dry Weight	22.50	21.79	21.50	20.93	20.58	21.70	19.26
Benzene	ND	ND	ND	ND	ND	ND	ND
Toluene	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND
Surrogate Recovery (%)							
Benzene-d6	76	100	99	94	92	100	100
Toluene-d8	75	100	97	92	95	98	99
Ethylbenzene-d10	77	95	95	92	93	95	96

ND = Concentration below the method detection limit.



Table A-403. Sample specific data for semivolatile organic analysis of tissue samples analyzed by Arthur D. Little, Inc. (ADL).

Sample ID	Field ID	Lab ID	Lab Name	Associated Blank	Sample Size (g wet weight)	Percent Dry Weight
PSST-001	I-EB165-CHUB-SVHC-A1	GM112	ADL	AV-S-77PB	25.43	21.7
PSST-002	I-EB165-CHUB-SVHC-B	GM107	ADL	AV-S-72PB	25.69	22.2
PSST-003	I-EB165-CHUB-SVHC-C1	GM083	ADL	AV-S-69PB	25.76	22.8
PSST-006	I-EB165-CREOLEFISH-SVHC-A1	GM095	ADL	AV-S-72pb	26.09	18.3
PSST-007	I-EB165-CREOLEFISH-SVHC-B1	GM071	ADL	AV-S-66PB RE	25.61	19.6
PSST-008	I-EB165-CREOLEFISH-SVHC-C	GM106	ADL	AV-S-72PB	25.74	20.1
PSST-101	I-EC229-REDSNAPPER-SVHC-A1	GM060	ADL	AV-S-63PB	25.51	19
PSST-102	I-EC229-REDSNAPPER-SVHC-B1	GM069	ADL	AV-S-66PB RE	25.41	22.2
PSST-103	I-EC229-REDSNAPPER-SVHC-C	GM076	ADL	AV-S-66PB RE	25.56	20.7
PSST-106	I-EC229-TRIGGERFISH-SVHC-A	GM058	ADL	AV-S-63PB	25.21	21.2
PSST-107	I-EC229-TRIGGERFISH-SVHC-B1	GM056	ADL	AV-S-63PB	25.53	22.4
PSST-108	I-EC229-TRIGGERFISH-SVHC-C1	GM079	ADL	AV-S-69PB	25.41	20.9
PSST-141	I-EI360-CHUB-SVHC-A1	GM091	ADL	AV-S-69PB	25.99	26.8
PSST-142	I-EI360-CHUB-SVHC-B1	GM0110re	ADL	AX-S-28pb	14.74	23.2
PSST-143	I-EI360-CHUB-SVHC-C	GM089	ADL	AV-S-69PB	25.57	22.9
PSST-146	I-EI360-REDSNAPPER-SVHC-A	GM051	ADL	AV-S-63PB	25.16	21.3
PSST-147	I-EI360-REDSNAPPER-SVHC-B	GM055re	ADL	AX-S-28pb	14.66	23.1
PSST-148	I-EI360-REDSNAPPER-SVHC-C1	GM093	ADL	AV-S-72PB	26.14	21.8
PSST-061	I-EI361-CHUB-SVHC-A	GM116	ADL	AV-S-77PB	25.38	22.6
PSST-062	I-EI361-CHUB-SVHC-B	GM105	ADL	AV-S-72PB	25.58	23.4
PSST-063	I-EI361-CHUB-SVHC-C1	GM0115re	ADL	AX-S-28pb	14.26	25.6
PSST-066	I-EI361-CREOLEFISH-SVHC-A1	GM097	ADL	AV-S-72pb	25.2	19
PSST-067	I-EI361-CREOLEFISH-SVHC-B1	GM066re	ADL	AX-S-28pb	5.93	19.1
PSST-068	I-EI361-CREOLEFISH-SVHC-C1	GM109	ADL	AV-S-77PB	25.36	20.3
PSST-041	I-GC19-CHUB-SVHC-A1	GM074	ADL	AV-S-66PB RE	25.2	24.8
PSST-042	I-GC19-CHUB-SVHC-B	GM084re	ADL	AX-S-28pb	15.22	23.1
PSST-043	I-GC19-CHUB-SVHC-C1	GM068	ADL	AV-S-66PB RE	25.4	24.7
PSST-046	I-GC19-CREOLEFISH-SVHC-A1	GM108	ADL	AV-S-72PB	25.82	19.2
PSST-047	I-GC19-CREOLEFISH-SVHC-B	GM073	ADL	AV-S-66PB RE	25.49	20.3
PSST-048	I-GC19-CREOLEFISH-SVHC-C	GM053	ADL	AV-S-63PB	25.61	19.3
PSST-021	I-HI356-CHUB-SVHC-A1	GM100	ADL	AV-S-72PB	26.36	22.5

Table A-403. (Continued).

Sample ID	Field ID	Lab ID	Lab Name	Associated Blank	Sample Size (g wet weight)	Percent Dry Weight
PSST-022	I-HI356-CHUB-SVHC-B	GM082	ADL	AV-S-69PB	25.49	21.9
PSST-023	I-HI356-CHUB-SVHC-C1	GM085	ADL	AV-S-69PB	25.65	27.2
PSST-026	I-HI356-CREOLEFISH-SVHC-A	GM054	ADL	AV-S-63PB	25.46	20.3
PSST-027	I-HI356-CREOLEFISH-SVHC-B	GM090	ADL	AV-S-69PB	25.14	21
PSST-028	I-HI356-CREOLEFISH-SVHC-C1	GM072 RE	ADL	AV-S-66PB RE	5.39	25.6
PSST-121	I-SS277-CHUB-SVHC-A1	GM094	ADL	AV-S-72PB	26.06	23.9
PSST-122	I-SS277-CHUB-SVHC-B	GM052	ADL	AV-S-63PB	25.04	22.5
PSST-123	I-SS277-CHUB-SVHC-C1	GM078	ADL	AV-S-66PB RE	26.05	26.5
PSST-126	I-SS277-REDSNAPPER-SVHC-A1	GM157	ADL	AV-S-83PB	26.02	23.2
PSST-127	I-SS277-REDSNAPPER-SVHC-B1	GM104	ADL	AV-S-72PB	25.51	21.3
PSST-128	I-SS277-REDSNAPPER-SVHC-C1	GM113	ADL	AV-S-77PB	25.21	22.3
PSST-081	I-VR214-REDSNAPPER-SVHC-A1	GM064	ADL	AV-S-63PB	25.78	21.7
PSST-082	I-VR214-REDSNAPPER-SVHC-B1	GM158	ADL	AV-S-88PB	25.8	24.4
PSST-083	I-VR214-REDSNAPPER-SVHC-C1	GM096	ADL	AV-S-72PB	13.91	23.1
PSST-086	I-VR214-TRIGGERFISH-SVHC-A1	GM065	ADL	AV-S-66PB RE	25.88	20.3
PSST-087	I-VR214-TRIGGERFISH-SVHC-B1	GM061	ADL	AV-S-63PB	26.7	21.8
PSST-088	I-VR214-TRIGGERFISH-SVHC-C1	GM092	ADL	AV-S-69PB	25.18	17.7

Table A-404. Results of semivolatile organic compound analysis of procedural blanks for tissue samples analyzed by Arthur D. Little, Inc. (ADL).

Lab ID	AV-S-63PB	AV-S-66PB RE	AV-S-69PB	AV-S-72PB	AV-S-77PB
Lab Name	ADL	ADL	ADL	ADL	ADL
Sample Size	25	25	25	25	25
Units	ng/g	ng/g	ng/g	ng/g	ng/g
Phenol	32 J	12 J	ND	40 J	ND
Fluorene	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate	ND	48 J	ND	ND	ND
Benzo[a]pyrene	ND	ND	ND	ND	ND
Surrogate Recovery (%)					
d6-Phenol	16	44	39	4.9 &	0 &
d10-Fluorene	74	69	74	63	31 &
d4-Bis(2-ethylhexyl)phthalate	95	118	106	149 &	69
d12-Benzo[a]pyrene	85	69	69	60	38 &

Lab ID	AV-S-80PB	AV-S-88PB	AV-S-83PB	AX-S-28pb
Lab Name	ADL	ADL	ADL	ADL
Sample Size	25	25	25	25
Units	ng/g	ng/g	ng/g	ng/g
Phenol	11 J	15 J	ND	11 J
Fluorene	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate	ND	ND	ND	76 J
Benzo[a]pyrene	ND	ND	ND	ND
Surrogate Recovery (%)				
d6-Phenol	111	9.2	35	25
d10-Fluorene	45	52	65	54
d4-Bis(2-ethylhexyl)phthalate	68	98	118	81
d12-Benzo[a]pyrene	28 &	56	80	46

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitative level (defined as five times MDL).

ND = Concentration below the MDL.

& = Result outside quality control surrogate recovery criteria.

Table A-405. Surrogate recoveries for semivolatile organic analysis of tissue samples analyzed by Arthur D. Little, Inc. (ADL).

Sample ID	Surrogate Recoveries (%)			
	d6-Phenol	d10-Fluorene	d4-Bis(2-ethylhexyl) phthalate	d12-Benzo[a]pyrene
PSST-001	31	60	60	37&
PSST-002	78	80	104	35&
PSST-003	86	96	99	53
PSST-006	18	105	160	98
PSST-007	82	99	121	96
PSST-008	84	108	117	102
PSST-101	51	105	119	114
PSST-102	80	97	108	82
PSST-103	49	91	113	81
PSST-106	106	97	64	48
PSST-107	46	112	125	102
PSST-108	53	88	124	75
PSST-141	100	96	104	46
PSST-142	98	64	137&	37&
PSST-143	112	96	125	54
PSST-146	69	108	109	104
PSST-147	51	67	68	50
PSST-148	34	98	130&	60
PSST-061	27	53	61	36&
PSST-062	81	88	121	41&
PSST-063	56	61	67	43
PSST-066	17	113	162	108
PSST-067	44	69	78	62
PSST-068	30	61	61	40&
PSST-041	75	81	104	51
PSST-042	57	47	53	26&
PSST-043	85	103	109	68
PSST-046	42	100	124	94
PSST-047	71	91	104	71
PSST-048	84	60	46	72
PSST-021	48	109	158&	99
PSST-022	66	108	113	57
PSST-023	78	113	142&	69
PSST-026	101	125	123	82
PSST-027	27	69	73	38&
PSST-028	48	115	125	102
PSST-121	21	122	162&	60
PSST-122	48	100	126	57
PSST-123	44	110	120	56
PSST-126	19	70	86	40&
PSST-127	102	79	103	51
PSST-128	28	56	55	26&
PSST-081	88	109	74	79
PSST-082	36	91	128&	66
PSST-083	19	76	75	54
PSST-086	75	86	102	80
PSST-087	117	110	115	92
PSST-088	65	106	149&	87

& = Result outside quality control surrogate recovery criteria.

Table A-406. Sample specific data for semivolatile organic analysis of tissue samples analyzed by Battelle Ocean Sciences (BOS).

Sample ID	Field ID	Lab ID	Lab Name	Associated Blank	Sample Size (g wet weight)	Percent Dry Weight
PSST-004	I-EB165-CHUB-SVHC-D	PV17-1	BOS	SS86PB	25.57	23.93
PSST-005	I-EB165-CHUB-SVHC-E	PU48-1	BOS	SS86PB	25.44	22.87
PSST-009	I-EB165-CREOLEFISH-SVHC-D	PT29-1	BOS	SS86PB	13.63	18.96
PSST-010	I-EB165-CREOLEFISH-SVHC-E	PT25-1	BOS	SS86PB	25.16	19.34
PSST-011	II-EB165-CHUB-SVHC-A	RP29	BOS	SU21PB	25.03	22.53
PSST-012	II-EB165-CHUB-SVHC-B	RP23	BOS	SU21PB	27.20	24.78
PSST-013	II-EB165-CHUB-SVHC-C	RP12	BOS	SS75PB	25.11	22.26
PSST-014	II-EB165-CHUB-SVHC-D	RO63	BOS	SU21PB	25.48	22.21
PSST-015	II-EB165-CHUB-SVHC-E	RM36	BOS	SY24PB	25.29	23.17
PSST-016	II-EB165-CREOLEFISHSVHC-A	RO90	BOS	SU21PB	26.09	19.47
PSST-017	II-EB165-CREOLEFISH-SVHC-B	RM43	BOS	SY24PB	25.66	18.98
PSST-018	II-EB165-CREOLEFISHSVHC-C	RO79	BOS	SU21PB	23.09	19.84
PSST-019	II-EB165-CREOLEFISHSVHC-D	RO88	BOS	SU21PB	25.80	19.88
PSST-020	II-EB165-CREOLEFISH-SVHC-E	RM64	BOS	SY24PB	26.29	20.04
PSST-024	I-HI356-CHUB-SVHC-D	PS68-1	BOS	SS82PB	25.44	21.59
PSST-025	I-HI356-CHUB-SVHC-E	PS40-1	BOS	SS82PB	25.41	25.66
PSST-029	I-HI356-CREOLEFISH-SVHC-D	PS94-1	BOS	SS82PB	24.25	19.49
PSST-030	I-HI356-CREOLEFISH-SVHC-E	PS77-1	BOS	SS82PB	25.21	20.16
PSST-031	II-HI356-CHUB-SVHC-A	RN12	BOS	SX81PB	25.02	22.94
PSST-032	II-HI356-CHUB-SVHC-B	RM08	BOS	SZ18PB	26.14	25.36
PSST-033	II-HI356-CHUB-SVHC-C	RM96	BOS	SZ18PB	25.98	23.38
PSST-034	II-HI356-CHUB-SVHC-D	RP28	BOS	SZ18PB	25.86	26.92
PSST-035	II-HI356-CHUB-SVHC-E	RM52	BOS	SS23PB	25.14	24.07
PSST-036	II-HI356-CREOLEFISH-SVHC-A	RP85	BOS	SZ18PB	25.28	21.24
PSST-037	II-HI356-CREOLEFISH-SVHC-B	RM07	BOS	TX19PB	24.68	20.63
PSST-038	II-HI356-CREOLEFISH-SVHC-C	RL90	BOS	SZ18PB	25.60	20.90
PSST-039	II-HI356-CREOLEFISH-SVHC-D	RQ19	BOS	SU21PB	25.83	20.98
PSST-040	II-HI356-CREOLEFISH-SVHC-E	RP97	BOS	SZ18PB	26.04	19.44
PSST-044	I-GC19-CHUB-SVHC-D	PT76-1	BOS	SS82PB	13.44	22.99
PSST-045	I-GC19-CHUB-SVHC-E	PT79	BOS	QH81PB	25.13	27.26
PSST-049	I-GC19-CREOLEFISH-SVHC-D	PV28-1	BOS	SS82PB	13.18	19.87

Table A-406. (Continued).

Sample ID	Field ID	Lab ID	Lab Name	Associated Blank	Sample Size (g wet weight)	Percent Dry Weight
PSST-050	I-GC19-CREOLEFISH-SVHC-E	PV23	BOS	QH81PB	25.36	19.95
PSST-051	II-GC19-CHUB-SVHC-A	RO99	BOS	SX81PB	26.37	22.07
PSST-052	II-GC19-CHUB-SVHC-B	RO93	BOS	SX81PB	25.85	24.15
PSST-053	II-GC19-CHUB-SVHC-C	RN35	BOS	SX81PB	25.66	22.25
PSST-054	II-GC19-CHUB-SVHC-D	RQ99	BOS	SX81PB	24.96	24.68
PSST-055	II-GC19-CHUB-SVHC-E	RO31	BOS	SX81PB	24.62	26.29
PSST-056	II-GC19-CREOLEFISH-SVHC-A	RO03	BOS	SX81PB	21.02	20.21
PSST-057	II-GC19-CREOLEFISH-SVHC-B	RN52	BOS	SX81PB	25.41	20.66
PSST-058	II-GC19-CREOLEFISH-SVHC-C	RN69	BOS	SX81PB	26.05	19.29
PSST-059	II-GC19-CREOLEFISH-SVHC-D	RN75	BOS	SY24PB	25.92	20.14
PSST-060	II-GC19-CREOLEFISH-SVHC-E	RN73	BOS	SX81PB	25.57	19.49
PSST-064	I-EI361-CHUBSVHC-D	PU62-1	BOS	SS86PB	17.14	24.14
PSST-065	I-EI361-CHUBSVHC-E	PV07-1	BOS	SS86PB	25.28	23.95
PSST-069	I-EI361-CREOLEFISH-SVHC-D	PT84	BOS	QH81PB	25.59	20.20
PSST-070	I-EI361-CREOLEFISH-SVHC-E	PU20-1	BOS	SS82PB	17.43	19.49
PSST-071	II-EI361-CHUB-SVHC-A	RO34	BOS	SU44PB	25.24	25.60
PSST-072	II-EI361-CHUB-SVHC-B	RQ07	BOS	SU44PB	24.95	23.92
PSST-073	II-EI361-CHUB-SVHC-C	RO44	BOS	SU44PB	26.31	25.24
PSST-074	II-EI361-CHUB-SVHC-D	RN76	BOS	SU44PB	25.54	23.18
PSST-075	II-EI361-CHUB-SVHC-E	RO25	BOS	SU44PB	24.99	23.42
PSST-076	II-EI361-CREOLEFISH-SVHC-A	RQ93	BOS	SU44PB	26.14	20.55
PSST-077	II-EI361-CREOLEFISH-SVHC-B	RP94	BOS	SU44PB	26.28	20.56
PSST-078	II-EI361-CREOLEFISH-SVHC-C	RQ53-1	BOS	SX81PB	4.19	21.72
PSST-079	II-EI361-CREOLEFISH-SVHC-D	R032	BOS	SX81PB	29.08	20.20
PSST-080	II-EI361-CREOLEFISH-SVHC-E	RQ68	BOS	SX81PB	23.07	20.40
PSST-085	I-VR214-REDSNAPPER-SVHC-E	PT04-1	BOS	SS86PB	25.40	21.67
PSST-089	I-VR214-TRIGGERFISH-SVHC-D	PU96-1	BOS	SS86PB	24.21	21.20
PSST-090	I-VR214-TRIGGERFISH-SVHC-E	PU52-1	BOS	SS86PB	25.33	21.57
PSST-091	II-VR214-REDSNAPPER-SVHC-A	QX90	BOS	SU21PB	25.22	21.97
PSST-092	II-VR214-REDSNAPPER-SVHC-B	QX47	BOS	SU21PB	25.19	21.20
PSST-093	II-VR214-REDSNAPPER-SVHC-C	QX06	BOS	SU21PB	25.30	21.34
PSST-094	II-VR214-REDSNAPPER-SVHC-D	QY57	BOS	SU21PB	25.31	22.52

Table A-406. (Continued).

Sample ID	Field ID	Lab ID	Lab Name	Associated Blank	Sample Size (g wet weight)	Percent Dry Weight
PSST-095	II-VR214-REDSNAPPER-SVHC-E	QX50	BOS	SH82PB	25.04	22.56
PSST-096	II-VR214-TRIGGERFISH-SVHC-A	QY42	BOS	SS75PB	25.08	20.70
PSST-097	II-VR214-TRIGGERFISH-SVHC-B	QX21	BOS	RS72PB	32.06	21.24
PSST-098	II-VR214-TRIGGERFISH-SVHC-C	QX08	BOS	SS75PB	25.45	22.13
PSST-099	II-VR214-TRIGGERFISH-SVHC-D	QX14	BOS	SS75PB	25.77	22.50
PSST-100	II-VR214-TRIGGERFISH-SVHC-E	QW92-1	BOS	SU44PB	25.51	22.15
PSST-104	I-EC229-REDSNAPPER-SVHC-D	PT27-1	BOS	SS86PB	25.20	22.09
PSST-105	I-EC229-REDSNAPPER-SVHC-E	PS29-1	BOS	SS86PB	21.18	21.70
PSST-109	I-EC229-TRIGGERFISH-SVHC-D	PS97-1	BOS	SS86PB	8.04	22.16
PSST-110	I-EC229-TRIGGERFISH-SVHC-E	PU55-1	BOS	SS86PB	22.23	19.57
PSST-111	II-EC229-REDSNAPPER-SVHC-A	QX40	BOS	RS72PB	30.45	21.66
PSST-112	II-EC229-REDSNAPPER-SVHC-B	QY02	BOS	SS75PB	26.07	21.06
PSST-113	II-EC229-REDSNAPPER-SVHC-C	QV78	BOS	SS75PB	25.47	22.14
PSST-114	II-EC229-REDSNAPPER-SVHC-D	QX48	BOS	SS75PB	25.27	21.42
PSST-115	II-EC229-REDSNAPPER-SVHC-E	QX39	BOS	SQ11PB	25.22	21.93
PSST-116	II-EC229-TRIGGERFISH-SVHC-A	QW33	BOS	SS75PB	25.95	19.87
PSST-117	II-EC229-TRIGGERFISH-SVHC-B	QX31	BOS	SS75PB	25.72	20.09
PSST-118	II-EC229-TRIGGERFISH-SVHC-C	QX15	BOS	SS75PB	25.53	21.26
PSST-119	II-EC229-TRIGGERFISH-SVHC-D	QY03	BOS	SS75PB	26.42	21.69
PSST-120	II-EC229-TRIGGERFISH-SVHC-E	QY24	BOS	SS75PB	25.61	21.99
PSST-124	I-SS227-CHUB-SVHC-D	PS75-1	BOS	SS82PB	25.84	22.26
PSST-125	I-SS227-CHUB-SVHC-E	PU73-1	BOS	SS82PB	14.20	25.61
PSST-129	I-SS227-REDSNAPPER-SVHC-D	PS82-1	BOS	SS82PB	25.30	21.76
PSST-130	I-SS227-REDSNAPPER-SVHC-E	PS30-1	BOS	SS82PB	25.21	23.08
PSST-131	II-SS277-CHUB-SVHC-A	RQ37	BOS	SY24PB	25.20	25.16
PSST-132	II-SS277-CHUB-SVHC-B	RQ08	BOS	SY24PB	25.20	23.61
PSST-133	II-SS277-CHUB-SVHC-C	RQ76	BOS	SY24PB	25.92	23.03
PSST-134	II-SS277-CHUB-SVHC-D	RQ74	BOS	SY24PB	25.55	24.93
PSST-135	II-SS277-CHUB-SVHC-H	QU43	BOS	SY24PB	26.60	23.87
PSST-136	II-SS277-CREOLEFISH-SVHC-A	RQ47	BOS	SY24PB	25.24	20.80
PSST-137	II-SS277-CREOLEFISH-SVHC-B	RQ77	BOS	SY24PB	26.16	19.80
PSST-138	II-SS277-CREOLEFISH-SVHC-C	RQ45	BOS	SY24PB	25.53	20.05

Table A-406. (Continued).

Sample ID	Field ID	Lab ID	Lab Name	Associated Blank	Sample Size (g wet weight)	Percent Dry Weight
PSST-139	II-SS277-CREOLEFISH-SVHC-D	RQ14	BOS	SY24PB	25.93	20.79
PSST-140	II-SS277-CREOLEFISH-SVHC-H	QW71	BOS	SU21PB	26.11	20.95
PSST-144	I-EI360-CHUBSVHC-D	PT90-1	BOS	SS86PB	25.45	24.22
PSST-145	I-EI360-CHUBSVHC-E	PU04-1	BOS	SS86PB	25.76	24.56
PSST-149	I-EI360-REDSNAPPER-SVHC-D	PT92	BOS	QH81PB	32.40	22.41
PSST-150	I-EI360-REDSNAPPER-SVHC-E	PT48-1	BOS	SS86PB	25.04	22.21
PSST-151	II-EI360-CHUB-SVHC-A	QY68-1	BOS	SU21PB	23.60	22.25
PSST-152	II-EI360-CHUB-SVHC-B	QY08	BOS	SU21PB	26.39	22.93
PSST-153	II-EI360-CHUB-SVHC-C	QV90	BOS	SU21PB	25.53	24.48
PSST-154	II-EI360-CHUB-SVHC-D	QU40	BOS	SU44PB	29.19	22.28
PSST-155	II-EI360-CHUB-SVHC-E	QV76	BOS	SU44PB	25.17	24.92
PSST-156	II-EI360-CREOLEFISH-SVHC-A	QV16	BOS	SU44PB	26.74	21.80
PSST-157	II-EI360-CREOLEFISH-SVHC-B	QV27	BOS	SU44PB	25.65	24.06
PSST-158	II-EI360-CREOLEFISH-SVHC-C	QU36	BOS	SU44PB	25.58	22.02
PSST-159	II-EI360-CREOLEFISH-SVHC-D	QU49	BOS	SU44PB	28.69	20.54
PSST-160	II-EI360-CREOLEFISH-SVHC-E	QW10	BOS	SU44PB	25.88	20.68
PSST-161	II-MC194-CHUB-SVHC-A	QV84	BOS	RS72PB	31.41	27.06
PSST-162	II-MC194-CHUB-SVHC-B	QV67	BOS	SO69PB	25.44	24.81
PSST-163	II-MC194-CHUB-SVHC-C	QW27	BOS	SO69PB	25.55	24.95
PSST-164	II-MC194-CHUB-SVHC-D	QW64-1	BOS	TV25PB	2.72	29.04
PSST-165	II-MC194-CHUB-SVHC-E	QW05-1	BOS	TV25PB	19.20	26.09
PSST-166	II-MC194-TRIGGERFISH-SVHC-A	QY31-1	BOS	TV25PB	21.77	20.67
PSST-167	II-MC194-TRIGGERFISH-SVHC-B	QX80	BOS	SO69PB	25.60	20.52
PSST-168	II-MC194-TRIGGERFISH-SVHC-E	QY21	BOS	SO69PB	28.36	22.15
PSST-169	II-MC194-TRIGGERFISH-SVHC-F	QY51	BOS	SO69PB	25.40	22.33
PSST-170	II-MC194-TRIGGERFISH-SVHC-G	QY46-1	BOS	TV25PB	9.70	21.96
PSST-171	III-MC194-CREOLEFISH-SVHC-A	TH52	BOS	TX19PB	15.54	19.83
PSST-172	III-MC194-CREOLEFISH-SVHC-B	TG95	BOS	TX40PB	25.15	20.28
PSST-173	III-MC194-CREOLEFISH-SVHC-C	TG73	BOS	TX19PB	24.15	19.48
PSST-174	III-MC194-CREOLEFISH-SVHC-D	TG80	BOS	TX36PB	21.85	19.50
PSST-175	III-MC194-CREOLEFISH-SVHC-E	TH01	BOS	TX80PB	25.61	20.55
PSST-176	III-MC194-TRIGGERFISH-SVHC-A	TG92	BOS	TX80PB	25.43	20.61



Table A-406. (Continued).

Sample ID	Field ID	Lab ID	Lab Name	Associated Blank	Sample Size (g wet weight)	Percent Dry Weight
PSST-177	III-MC194-TRIGGERFISH-SVHC-B	TH36	BOS	TX36PB	18.67	20.43
PSST-178	III-MC194-TRIGGERFISH-SVHC-C	TG91	BOS	TX76PB	20.32	20.52
PSST-179	III-MC194-TRIGGERFISH-SVHC-D	TG98	BOS	TX76PB	25.58	23.73
PSST-180	III-MC194-TRIGGERFISH-SVHC-E	TG54	BOS	TX80PB	25.00	20.93
PSST-181	II-MC280-CHUB-SVHC-A	QW59	BOS	SQ11PB	25.47	23.32
PSST-182	II-MC280-CHUB-SVHC-B	QX28	BOS	SQ11PB	25.19	25.29
PSST-183	II-MC280-CHUB-SVHC-C	QX58	BOS	SQ11PB	25.95	23.55
PSST-184	II-MC280-CHUB-SVHC-D	QY18	BOS	SQ11PB	25.22	24.11
PSST-185	II-MC280-CHUB-SVHC-E	QV93	BOS	SQ11PB	25.23	23.82
PSST-186	II-MC280-TRIGGERFISH-SVHC-A	QV80	BOS	SQ11PB	25.15	20.04
PSST-187	II-MC280-TRIGGERFISH-SVHC-B	QX86	BOS	SQ11PB	25.26	20.82
PSST-188	II-MC280-TRIGGERFISH-SVHC-C	QX51	BOS	SQ11PB	25.45	21.89
PSST-189	II-MC280-TRIGGERFISH-SVHC-D	QW89	BOS	SQ11PB	25.37	22.23
PSST-190	II-MC280-TRIGGERFISH-SVHC-E	QY58	BOS	SQ11PB	27.89	20.69
PSST-191	III-MC280-CREOLEFISH-SVHC-A	TG66	BOS	TX80PB	20.00	19.48
PSST-192	III-MC280-CREOLEFISH-SVHC-B	TH31	BOS	TY29PB	25.31	19.28
PSST-193	III-MC280-CREOLEFISH-SVHC-C	TH50	BOS	TX40PB	25.47	19.98
PSST-194	III-MC280-CREOLEFISH-SVHC-D	TG85	BOS	TX40PB	25.17	19.83
PSST-195	III-MC280-CREOLEFISH-SVHC-E	TG51	BOS	TX40PB	25.32	18.88
PSST-196	III-MC280-TRIGGERFISH-SVHC-A	TG97	BOS	TX40PB	25.57	21.43
PSST-197	III-MC280-TRIGGERFISH-SVHC-B	TH03-1	BOS	TZ60PB	8.86	20.88
PSST-198	III-MC280-TRIGGERFISH-SVHC-C	TH22	BOS	TX19PB	26.13	21.13
PSST-199	III-MC280-TRIGGERFISH-SVHC-D	TG69	BOS	TX36PB	21.74	21.64
PSST-200	III-MC280-TRIGGERFISH-SVHC-E	TG72-1	BOS	TZ60PB	12.77	20.75
PSST-201	II-ST130-REDSNAPPER-SVHC-A	QU68-1	BOS	SZ22PB	17.02	24.38
PSST-202	II-ST130-REDSNAPPER-SVHC-B	QV79-2	BOS	TV25PB	24.79	21.98
PSST-203	II-ST130-REDSNAPPER-SVHC-C	QX88	BOS	RS72PB	30.63	22.45
PSST-204	II-ST130-REDSNAPPER-SVHC-D	QW41	BOS	RS72PB	30.61	21.76
PSST-205	II-ST130-REDSNAPPER-SVHC-E	QY54	BOS	RS72PB	30.31	23.42
PSST-206	II-ST130-TRIGGERFISH-SVHC-A	QW77	BOS	SH47PB	30.98	22.09
PSST-207	II-ST130-TRIGGERFISH-SVHC-B	QY14	BOS	SH47PB	31.96	21.96
PSST-208	II-ST130-TRIGGERFISH-SVHC-C	QW04	BOS	SH47PB	30.41	22.02

Table A-406. (Continued).

Sample ID	Field ID	Lab ID	Lab Name	Associated Blank	Sample Size (g wet weight)	Percent Dry Weight
PSST-209	II-ST130-TRIGGERFISH-SVHC-D	QY27	BOS	SH47PB	25.88	20.22
PSST-210	II-ST130-TRIGGERFISH-SVHC-E	QY53-1	BOS	SZ22PB	4.33	20.32
PSST-211	III-ST130-REDSNAPPER-SVHC-A	SV20	BOS	TX40PB	25.11	23.06
PSST-212	III-ST130-REDSNAPPER-SVHC-B	SU73	BOS	TX80PB	25.34	22.80
PSST-213	III-ST130-REDSNAPPER-SVHC-C	SV87	BOS	TX80PB	26.01	22.56
PSST-214	III-ST130-REDSNAPPER-SVHC-D	SU71	BOS	TX36PB	21.78	23.11
PSST-215	III-ST130-REDSNAPPER-SVHC-E	SU75	BOS	TY29PB	25.77	22.35
PSST-216	III-ST130-SPADEFISH-SVHC-A	TH21	BOS	TY29PB	25.71	21.67
PSST-217	III-ST130-SPADEFISH-SVHC-B	TG43	BOS	TY29PB	22.85	21.75
PSST-218	III-ST130-SPADEFISH-SVHC-C	TG20	BOS	TZ60PB	25.61	21.20
PSST-219	III-ST130-SPADEFISH-EXC-D	TG21	BOS	TX76PB	25.05	20.76
PSST-220	III-ST130-SPADEFISH-SVHC-E	TG19	BOS	TX36PB	21.05	20.30
PSST-221	II-ST128-REDSNAPPER-SVHC-A	QY17-1	BOS	SZ22PB	20.75	22.31
PSST-222	II-ST128-REDSNAPPER-SVHC-B	QV85	BOS	SH47PB	30.57	21.98
PSST-223	II-ST128-REDSNAPPER-SVHC-C	QV66	BOS	RS72PB	30.42	23.13
PSST-224	II-ST128-REDSNAPPER-SVHC-D	QY40-R	BOS	SH82PB	17.16	21.56
PSST-225	II-ST128-REDSNAPPER-SVHC-E	QV98-R	BOS	SH82PB	22.17	21.79
PSST-226	II-ST128-TRIGGERFISH-SVHC-A	QW62	BOS	SH55PB-B	30.95	20.58
PSST-227	II-ST128-TRIGGERFISH-SVHC-C	QV65-R	BOS	SH82PB	3.32	21.08
PSST-228	II-ST128-TRIGGERFISH-SVHC-D	QX76	BOS	SH47PB	30.50	21.32
PSST-229	II-ST128-TRIGGERFISH-SVHC-E	QV99-1	BOS	SZ22PB	19.71	21.31
PSST-230	II-ST128-TRIGGERFISH-SVHC-F	QW51	BOS	SH47PB	31.09	23.09
PSST-231	III-ST128-REDSNAPPER-SVHC-A	SW73	BOS	TX36PB	21.03	22.51
PSST-232	III-ST128-REDSNAPPER-SVHC-B	SW64	BOS	TX40PB	25.31	22.64
PSST-233	III-ST128-REDSNAPPER-SVHC-C	SW98	BOS	TX19PB	25.18	21.13
PSST-234	III-ST128-REDSNAPPER-SVHC-D	SX19	BOS	TX80PB	25.09	21.24
PSST-235	III-ST128-REDSNAPPER-SVHC-E	SX48	BOS	TX40PB	22.00	22.68
PSST-236	III-ST128-SPADEFISH-SVHC-A	SX20	BOS	TX19PB	27.31	19.64
PSST-237	III-ST128-SPADEFISH-SVHC-B	SX30	BOS	TX36PB	20.65	20.82
PSST-238	III-ST128-SPADEFISH-SVHC-C	SX28	BOS	TX36PB	21.94	21.23
PSST-239	III-ST128-SPADEFISH-SVHC-D	SX26	BOS	TX40PB	25.15	20.36
PSST-240	III-ST128-SPADEFISH-SVHC-E	SX03-1	BOS	TZ60PB	24.91	20.75

Table A-406. (Continued).

Sample ID	Field ID	Lab ID	Lab Name	Associated Blank	Sample Size (g wet weight)	Percent Dry Weight
PSST-241	II-VR245-REDSNAPPER-SVHC-A	QX91	BOS	SS23PB	20.52	21.59
PSST-242	II-VR245-REDSNAPPER-SVHC-B	QX17	BOS	SS23PB	25.61	22.37
PSST-243	II-VR245-REDSNAPPER-SVHC-C	QX30	BOS	SS23PB	25.57	21.90
PSST-244	II-VR245-REDSNAPPER-SVHC-D	QX59	BOS	SS23PB	25.17	21.77
PSST-245	II-VR245-REDSNAPPER-SVHC-E	QX20	BOS	SS23PB	25.08	21.65
PSST-246	II-VR245-TRIGGERFISH-SVHC-A	QX18	BOS	SS23PB	25.64	20.64
PSST-247	II-VR245-TRIGGERFISH-SVHC-B	QW86	BOS	SS23PB	25.33	21.63
PSST-248	II-VR245-TRIGGERFISH-SVHC-E	QY36	BOS	RS72PB	30.59	27.27
PSST-249	II-VR245-TRIGGERFISH-SVHC-F	QW96	BOS	RS72PB	30.20	21.08
PSST-250	II-VR245-TRIGGERFISH-SVHC-G	QX33	BOS	SS23PB	25.05	22.44
PSST-251	III-VR245-REDSNAPPER-SVHC-A	SW28	BOS	TV80PB	20.39	22.27
PSST-252	III-VR245-REDSNAPPER-SVHC-B	SW47	BOS	TU96PB	27.02	21.98
PSST-253	III-VR245-REDSNAPPER-SVHC-C	SX49	BOS	TU96PB	25.22	22.68
PSST-254	III-VR245-REDSNAPPER-SVHC-D	SX55	BOS	TU96PB	25.30	23.91
PSST-255	III-VR245-REDSNAPPER-SVHC-E	SW12	BOS	TU35PB	24.99	22.57
PSST-256	III-VR245-TRIGGERFISH-SVHC-A	SW32	BOS	TU96PB	29.35	20.37
PSST-257	III-VR245-TRIGGERFISH-SVHC-B	SW27	BOS	TU96PB	25.51	20.54
PSST-258	III-VR245-TRIGGERFISH-SVHC-C	SW14	BOS	TU96PB	25.52	22.41
PSST-259	III-VR245-TRIGGERFISH-SVHC-D	SX58	BOS	TV80PB	20.36	19.99
PSST-260	III-VR245-TRIGGERFISH-SVHC-E	SW72	BOS	TV80PB	20.20	21.68
PSST-261	II-SM172-REDSNAPPER-SVHC-A	QX42	BOS	SS23PB	25.19	20.69
PSST-262	II-SM172-REDSNAPPER-SVHC-B	QX43	BOS	SS23PB	25.76	20.42
PSST-263	II-SM172-REDSNAPPER-SVHC-C	QY41	BOS	SS23PB	25.18	23.44
PSST-264	II-SM172-REDSNAPPER-SVHC-D	QY43-2	BOS	SH82PB	0.90	21.11
PSST-265	II-SM172-REDSNAPPER-SVHC-E	QY37	BOS	SS23PB	25.43	22.45
PSST-266	II-SM172-TRIGGERFISH-SVHC-A	QX34	BOS	SS75PB	26.74	21.59
PSST-267	II-SM172-TRIGGERFISH-SVHC-B	QY19	BOS	SS75PB	25.96	21.81
PSST-268	II-SM172-TRIGGERFISH-SVHC-C	QY22	BOS	SS75PB	25.64	17.69
PSST-269	II-SM172-TRIGGERFISH-SVHC-D	QY30	BOS	SS23PB	25.09	21.80
PSST-270	II-SM172-TRIGGERFISH-SVHC-E	QV37	BOS	SS23PB	25.30	21.54
PSST-271	III-SM172-REDSNAPPER-SVHC-A	SX62	BOS	TU39PB	19.14	21.68
PSST-272	III-SM172-REDSNAPPER-SVHC-B	SW92	BOS	TV80PB	22.37	21.99

Table A-406. (Continued).

Sample ID	Field ID	Lab ID	Lab Name	Associated Blank	Sample Size (g wet weight)	Percent Dry Weight
PSST-273	III-SM172-REDSNAPPER-SVHC-C	SW86	BOS	TU39PB	25.62	21.80
PSST-274	III-SM172-REDSNAPPER-SVHC-D	SX63	BOS	TU39PB	25.17	22.99
PSST-275	III-SM172-REDSNAPPER-SVHC-E	SW15	BOS	TU39PB	25.20	22.34
PSST-276	III-SMI72-TRIGGERFISH-SVHC-A	SX01	BOS	TV80PB	20.08	20.72
PSST-277	III-SM172-TRIGGERFISH-SVHC-B	SW34	BOS	TU39PB	25.19	21.19
PSST-278	III-SM172-TRIGGERFISH-SVHC-C	SW63	BOS	TU39PB	25.75	21.27
PSST-279	III-SM172-TRIGGERFISH-SVHC-D	SW24	BOS	TU39PB	25.26	21.54
PSST-280	III-SM172-TRIGGERFISH-SVHC-E	SW54	BOS	TU39PB	25.22	20.19
PSST-281	II-EI330-CHUB-SVHC-A	QU99	BOS	SH55PB-B	30.08	22.01
PSST-282	II-EI330-CHUB-SVHC-B	QU45	BOS	SH55PB-B	28.93	22.71
PSST-283	II-EI330-CHUB-SVHC-C	QU35	BOS	SH55PB-B	30.39	24.68
PSST-284	II-EI330-CHUB-SVHC-D	QU41	BOS	SH55PB-B	30.36	23.95
PSST-285	II-EI330-CHUB-SVHC-E	QV20-R	BOS	SH82PB	16.86	24.73
PSST-286	II-EI330-TRIGGERFISH-SVHC-A	QU37-R	BOS	SH82PB	23.56	22.54
PSST-287	II-EI330-TRIGGERFISH-SVHC-B	QV03-R	BOS	SH82PB	20.84	21.79
PSST-288	II-EI330-TRIGGERFISH-SVHC-C	QV14-2	BOS	SH82PB	22.27	21.46
PSST-289	II-EI330-TRIGGERFISH-SVHC-D	QW35-R	BOS	SH82PB	9.83	22.38
PSST-290	II-EI330-TRIGGERFISH-SVHC-E	QU39-R	BOS	SH82PB	17.72	20.54
PSST-291	III-EI330-CHUB-SVHC-A	TH09	BOS	TX19PB	24.60	24.35
PSST-292	III-EI330-CHUB-SVHC-B	TF74	BOS	TX19PB	24.97	23.91
PSST-293	III-EI330-CHUB-SVHC-C	TH05	BOS	TX19PB	24.94	24.30
PSST-294	III-EI330-CHUB-SVHC-D	TF54	BOS	TX19PB	24.17	21.04
PSST-295	III-EI330-CHUB-SVHC-E	TD73	BOS	TX36PB	20.01	20.84
PSST-296	III-EI330-CREOLEFISH-SVHC-A	TF73	BOS	TX72PB	25.21	19.83
PSST-297	III-EI330-CREOLEFISH-SVHC-B	TH06	BOS	TX72PB	25.11	20.31
PSST-298	III-EI330-CREOLEFISH-SVHC-C	TH23	BOS	TX40PB	25.50	20.36
PSST-299	III-EI330-CREOLEFISH-SVHC-D	TF26	BOS	TX19PB	24.97	20.69
PSST-300	III-EI330-CREOLEFISH-SVHC-E	TH13	BOS	TX36PB	19.38	22.43
PSST-301	II-EI352-CHUB-SVHC-A	QX13	BOS	SH77PB	30.71	24.64
PSST-302	II-EI352-CHUB-SVHC-B	QX09	BOS	SH77PB	30.24	24.18
PSST-303	II-EI352-CHUB-SVHC-C	QW67-1	BOS	SH77PB	16.24	24.01
PSST-304	II-EI352-CHUB-SVHC-D	QW24	BOS	SH77PB	30.84	22.32

Table A-406. (Continued).

Sample ID	Field ID	Lab ID	Lab Name	Associated Blank	Sample Size (g wet weight)	Percent Dry Weight
PSST-305	II-EI352-CHUB-SVHC-E	QX29	BOS	SH77PB	30.28	24.20
PSST-306	II-EI352-TRIGGERFISH-SVHC-A	QW78	BOS	SH77PB	30.31	22.44
PSST-307	II-EI352-TRIGGERFISH-SVHC-B	QW94-1	BOS	SZ22PB	21.00	22.00
PSST-308	II-EI352-TRIGGERFISH-SVHC-C	QW70	BOS	SH77PB	31.79	22.07
PSST-309	II-EI352-TRIGGERFISH-SVHC-D	QW76-1	BOS	SZ22PB	21.45	21.07
PSST-310	II-EI352-TRIGGERFISH-SVHC-E	QW82	BOS	SH77PB	33.18	20.64
PSST-311	III-EI352-CHUB-SVHC-A	TI80	BOS	TZ60PB	26.19	23.25
PSST-312	III-EI352-CHUB-SVHC-C	TI35	BOS	TX72PB	25.07	24.61
PSST-313	III-EI352-CHUB-SVHC-D	TI94	BOS	TX72PB	25.44	25.70
PSST-314	III-EI352-CHUB-SVHC-E	TD74	BOS	TX72PB	26.46	22.67
PSST-315	III-EI352-CHUB-SVHC-F	TF55	BOS	TX72PB	25.35	22.76
PSST-316	III-EI352-CREOLEFISH-SVHC-A	TH34	BOS	TX72PB	25.27	21.21
PSST-317	III-EI352-CREOLEFISH-SVHC-B	TF63	BOS	TX72PB	25.26	21.22
PSST-318	III-EI352-CREOLEFISH-SVHC-C	TG96	BOS	TX72PB	25.40	20.47
PSST-319	III-EI352-CREOLEFISH-SVHC-D	TH24	BOS	TX72PB	25.10	21.15
PSST-320	III-EI352-CREOLEFISH-SVHC-E	TF69	BOS	TX72PB	25.54	20.24
PSST-321	II-HI376-CHUB-SVHC-A	QY78	BOS	SG71PB	30.15	20.73
PSST-322	II-HI376-CHUB-SVHC-B	QY84	BOS	SG71PB	31.00	20.48
PSST-323	II-HI376-CHUB-SVHC-C	QW28	BOS	RS72PB	29.91	22.96
PSST-324	II-HI376-CHUB-SVHC-D	QW60	BOS	SG71PB	32.55	20.68
PSST-325	II-HI376-CHUB-SVHC-E	QW56	BOS	SG71PB	30.28	21.83
PSST-326	II-HI376-REDSNAPPER-SVHC-A	QU57	BOS	SG71PB	30.51	23.70
PSST-327	II-HI376-REDSNAPPER-SVHC-B	QU63	BOS	SG71PB	30.29	23.18
PSST-328	II-HI376-REDSNAPPER-SVHC-C	QU88	BOS	SG71PB	30.70	22.61
PSST-329	II-HI376-REDSNAPPER-SVHC-D	QU61	BOS	SG71PB	30.79	21.73
PSST-330	II-HI376-REDSNAPPER-SVHC-E	QU56-1	BOS	SG71PB	23.78	23.38
PSST-331	III-HI376-CHUB-SVHC-A	SV33	BOS	TU35PB	25.70	21.60
PSST-332	III-HI376-CHUB-SVHC-B	SV05	BOS	TU35PB	25.21	20.39
PSST-333	III-HI376-CHUB-SVHC-C	SV32	BOS	TU39PB	26.60	21.07
PSST-334	III-HI376-CHUB-SVHC-D	SV28	BOS	TU35PB	24.90	22.29
PSST-335	III-HI376-CHUB-SVHC-E	SU94	BOS	TU35PB	25.41	22.75
PSST-336	III-HI376-ROCKHIND-SVHC-A	SV39	BOS	TU39PB	25.48	22.18

Table A-406. (Continued).

Sample ID	Field ID	Lab ID	Lab Name	Associated Blank	Sample Size (g wet weight)	Percent Dry Weight
PSST-337	III-HI376-ROCKHIND-SVHC-F	SV56	BOS	TU39PB	25.98	24.80
PSST-338	III-HI376-ROCKHIND-SVHC-G	SW91	BOS	TU39PB	26.49	21.43
PSST-339	III-HI376-ROCKHIND-SVHC-H	SV40-1	BOS	TU96PB	21.06	20.09
PSST-340	III-HI376-ROCKHIND-SVHC-I	SV50	BOS	TU39PB	25.02	22.92
PSST-341	II-WC587-CHUB-SVHC-E	QY72	BOS	SG71PB	30.02	24.95
PSST-342	II-WC587-CHUBSVHC-F	QU42-1	BOS	SZ18PB	15.43	25.28
PSST-343	II-WC587-CHUB-SVHC-G	QU54	BOS	SG71PB	30.82	23.91
PSST-344	II-WC587-CHUB-SVHC-H	QU62	BOS	SG71PB	30.52	23.75
PSST-345	II-WC587-CHUBSVHC-I	QV17-1	BOS	SZ18PB	16.10	25.90
PSST-346	II-WC587-REDSNAPPER-SVHC-A	QW19	BOS	SG71PB	30.13	16.56
PSST-347	II-WC587-REDSNAPPER-SVHC-B	QW15	BOS	SG71PB	30.28	20.94
PSST-348	II-WC587-REDSNAPPER-SVHC-C	QW58-1	BOS	SZ22PB	18.25	22.52
PSST-349	II-WC587-REDSNAPPER-SVHC-D	QX01-1	BOS	SZ22PB	20.23	22.44
PSST-350	II-WC587-REDSNAPPER-SVHC-E	QW42	BOS	SH47PB	30.11	22.86
PSST-351	III-WC587-CHUB-SVHC-A	SX54	BOS	TV80PB	20.03	25.66
PSST-352	III-WC587-CHUB-SVHC-B	SW78	BOS	TV80PB	20.66	24.59
PSST-353	III-WC587-CHUB-SVHC-C	SW71	BOS	TV80PB	21.55	23.48
PSST-354	III-WC587-CHUB-SVHC-D	SW19	BOS	TV80PB	21.12	23.86
PSST-355	III-WC587-CHUB-SVHC-E	SW77	BOS	TV80PB	20.62	25.75
PSST-356	III-WC587-ROCKHIND-SVHC-A	SW62	BOS	TV80PB	20.77	21.52
PSST-357	III-WC587-ROCKHIND-SVHC-B	SW79	BOS	TV80PB	20.02	22.28
PSST-358	III-WC587-ROCKHIND-SVHC-F	SW61	BOS	TV80PB	20.10	20.95
PSST-359	III-WC587-ROCKHIND-SVHC-G	SW56	BOS	TV80PB	20.43	22.76
PSST-360	III-WC587-ROCKHIND-SVHC-H	SX73	BOS	TV80PB	20.44	20.99
PSST-361	II-HI382-CHUB-SVHC-A	QU51	BOS	SQ11PB	26.01	24.22
PSST-362	II-HI382-CHUB-SVHC-B	QU91	BOS	SQ11PB	25.61	24.87
PSST-363	II-HI382-CHUB-SVHC-C	QV13	BOS	SY24PB	25.32	25.28
PSST-364	II-HI382-CHUB-EXC-D	QU93	BOS	SQ11PB	25.83	22.73
PSST-365	II-HI382-CHUB-SVHC-E	QV23	BOS	SQ11PB	25.28	24.49
PSST-366	II-HI382-CREOLEFISH-SVHC-C	QV01	BOS	SR17PB	25.08	20.49
PSST-367	II-HI382-CREOLEFISH-SVHC-D	QV15	BOS	SR17PB	20.26	20.19
PSST-368	II-HI382-CREOLEFISH-SVHC-G	QU60	BOS	SY24PB	25.00	20.32

Table A-406. (Continued).

Sample ID	Field ID	Lab ID	Lab Name	Associated Blank	Sample Size (g wet weight)	Percent Dry Weight
PSST-369	II-HI382-CREOLEFISH-SVHC-H	QV24	BOS	SR17PB	26.35	20.19
PSST-370	II-HI382-CREOLEFISH-SVHC-I	QV08	BOS	SR17PB	25.37	19.71
PSST-371	III-HI382-CHUB-SVHC-A	SU74	BOS	TX72PB	25.40	22.88
PSST-372	III-HI382-CHUB-SVHC-B	SV45	BOS	TX40PB	25.46	22.42
PSST-373	III-HI382-CHUB-SVHC-C	SV52	BOS	TX72PB	25.26	22.13
PSST-374	III-HI382-CHUB-SVHC-D	SU87-1	BOS	TZ60PB	7.76	24.23
PSST-375	III-HI382-CHUB-SVHC-E	SW25	BOS	TX40PB	27.31	21.93
PSST-376	III-HI382-CREOLEFISH-SVHC-A	SU98	BOS	TX72PB	25.72	20.22
PSST-377	III-HI382-CREOLEFISH-SVHC-C	SV55	BOS	TX36PB	20.62	21.13
PSST-378	III-HI382-CREOLEFISH-SVHC-D	SU97	BOS	TX36PB	19.96	23.00
PSST-379	III-HI382-CREOLEFISH-SVHC-E	SW10	BOS	TX19PB	25.14	19.86
PSST-380	III-HI382-CREOLEFISH-SVHC-F	SV04	BOS	TX36PB	21.66	20.54
PSST-381	II-HI553-CHUB-SVHC-A	QU89	BOS	SR17PB	26.28	23.60
PSST-382	II-HI553-CHUB-SVHC-B	QV31	BOS	SR17PB	25.30	22.63
PSST-383	II-HI553-CHUB-SVHC-C	QY25	BOS	SR17PB	25.78	22.00
PSST-384	II-HI553-CHUB-SVHC-D	QU95	BOS	SR17PB	25.77	24.82
PSST-385	II-HI553-CHUB-SVHC-E	QU94	BOS	SR17PB	26.90	24.04
PSST-386	II-HI553-CREOLEFISH-SVHC-A	RQ44	BOS	SR17PB	26.02	20.60
PSST-387	II-HI553-CREOLEFISH-SVHC-B	RQ09	BOS	SR17PB	25.90	21.95
PSST-388	II-HI553-CREOLEFISH-SVHC-C	RQ64	BOS	SR17PB	25.19	21.40
PSST-389	II-HI553-CREOLEFISH-SVHC-D	QY92	BOS	SR17PB	25.40	20.24
PSST-390	II-HI553-CREOLEFISH-SVHC-E	RQ48	BOS	SR17PB	26.34	20.74
PSST-391	III-HI553-CHUB-SVHC-A	SU79-1	BOS	TZ60PB	13.56	23.08
PSST-392	III-HI553-CHUBSVHC-B	SU69	BOS	TX76PB	25.12	21.98
PSST-393	III-HI553-CHUB-SVHC-C	SW18	BOS	TX19PB	25.68	22.57
PSST-394	III-HI553-CHUB-SVHC-D	SW35	BOS	TX40PB	25.45	22.44
PSST-395	III-HI553-CHUBSVHC-E	SW29	BOS	TX76PB	25.05	21.36
PSST-396	III-HI553-CREOLEFISH-SVHC-A	SV53	BOS	TX80PB	25.20	22.69
PSST-397	III-HI553-CREOLEFISH-SVHC-B	SV78	BOS	TX40PB	25.24	20.01
PSST-398	III-HI553-CREOLEFISH-SVHC-C	SV51	BOS	TX80PB	25.03	20.36
PSST-399	III-HI553-CREOLEFISH-SVHC-D	SU92	BOS	TX36PB	20.19	21.33
PSST-400	III-HI553-CREOLEFISH-SVHC-E	SU93	BOS	TX80PB	25.17	20.12

Table A-406. (Continued).

Sample ID	Field ID	Lab ID	Lab Name	Associated Blank	Sample Size (g wet weight)	Percent Dry Weight
PSST-401	II-EI100-CATFISH-SVHC-A	QW25	BOS	SH77PB	30.11	21.92
PSST-402	II-EI100-CATFISH-SVHC-B	QW12	BOS	SH77PB	22.98	23.72
PSST-403	II-EI100-CATFISH-SVHC-C	QW61-1	BOS	SZ22PB	8.55	22.22
PSST-404	II-EI100-CATFISH-SVHC-D	QW73	BOS	RS72PB	30.14	22.80
PSST-405	II-EI100-CATFISH-SVHC-I	QX63	BOS	SH77PB	30.67	23.08
PSST-406	II-EI100-SHEEPSHEAD-SVHC-A	QY52	BOS	SH82PB	25.04	20.69
PSST-407	II-EI100-SHEEPSHEAD-SVHC-B	QY49	BOS	SH82PB	25.00	21.40
PSST-408	II-EI100-SHEEPSHEAD-SVHC-C	QY16-1	BOS	SH77PB	7.18	19.36
PSST-409	II-EI100-SHEEPSHEAD-SVHC-D	QW45	BOS	SH82PB	25.72	20.45
PSST-410	II-EI100-SHEEPSHEAD-SVHC-E	QW69	BOS	SH82PB	25.88	20.71
PSST-411	III-EI100-CATFISH-SVHC-A	SX57	BOS	TU35PB	25.14	21.68
PSST-412	III-EI100-CATFISH-SVHC-F	SX37	BOS	TU35PB	25.25	22.38
PSST-413	III-EI100-CATFISH-SVHC-G	SX35	BOS	TU35PB	25.42	24.27
PSST-414	III-EI100-CATFISH-SVHC-H	SW13	BOS	TU35PB	25.67	23.06
PSST-415	III-EI100-CATFISH-SVHC-I	SW11	BOS	TU35PB	25.53	24.60
PSST-416	III-EI100-SHEEPSHEAD-SVHC-A	SX21	BOS	TU35PB	24.85	22.49
PSST-417	III-EI100-SHEEPSHEAD-SVHC-B	SW95	BOS	TU35PB	25.27	20.62
PSST-418	III-EI100-SHEEPSHEAD-SVHC-C	SW36	BOS	TU35PB	25.64	21.22
PSST-419	III-EI100-SHEEPSHEAD-SVHC-D	SW31	BOS	TU35PB	25.17	22.05
PSST-420	III-EI100-SHEEPSHEAD-SVHC-E	SW88	BOS	TZ60PB	25.26	20.70
PSST-421	II-SS100-CATFISH-SVHC-A	QW98	BOS	SO69PB	26.00	35.14
PSST-422	II-SS100-CATFISH-SVHC-B	QW74	BOS	SO69PB	25.89	19.20
PSST-423	II-SS100-CATFISH-SVHC-C	QX77	BOS	RS72PB	30.37	19.81
PSST-424	II-SS100-CATFISH-SVHC-D	QW23	BOS	RS72PB	25.08	20.22
PSST-425	II-SS100-CATFISH-SVHC-E	QX37 *	BOS	TX19PB	25.15	20.52
PSST-426	II-SS100-SHEEPSHEAD-SVHC-A	QX67	BOS	RS72PB	31.91	21.10
PSST-427	II-SS100-SHEEPSHEAD-SVHC-B	QV91	BOS	SO69PB	26.29	19.99
PSST-428	II-SS100-SHEEPSHEAD-SVHC-E	QW91	BOS	SO69PB	25.01	18.90
PSST-429	II-SS100-SHEEPSHEAD-SVHC-F	QX78	BOS	SO69PB	26.63	16.86
PSST-430	II-SS100-SHEEPSHEAD-SVHC-G	QX56	BOS	SO69PB	31.09	23.09
PSST-431	III-SS100-CATFISH-SVHC-A	SX12	BOS	TU39PB	25.09	20.87
PSST-432	III-SS100-CATFISH-SVHC-B	SX65	BOS	TU39PB	22.52	21.19



Table A-406. (Continued).

Sample ID	Field ID	Lab ID	Lab Name	Associated Blank	Sample Size (g wet weight)	Percent Dry Weight
PSST-433	III-SS100-CATFISH-SVHC-F	SW42-1	BOS	TU96PB	6.63	19.91
PSST-434	III-SS100-CATFISH-SVHC-G	SW51	BOS	TU96PB	24.50	24.82
PSST-435	III-SS100-CATFISH-SVHC-H	SX18	BOS	TU96PB	23.75	21.31
PSST-436	III-SS100-SHEEPSHEAD-SVHC-A	SX67	BOS	TU96PB	25.73	20.25
PSST-437	III-SS100-SHEEPSHEAD-SVHC-B	SW90	BOS	TU96PB	28.25	18.23
PSST-438	III-SS100-SHEEPSHEAD-SVHC-C	SW87	BOS	TU96PB	23.49	21.58
PSST-439	III-SS100-SHEEPSHEAD-SVHC-D	SX25	BOS	TU96PB	25.52	21.71
PSST-440	III-SS100-SHEEPSHEAD-SVHC-E	SW26	BOS	TU96PB	25.33	21.87
PSST-441	II-VR31-BLUECRAB-SVHC-A	RS01	BOS	SG34PB	31.49	17.04
PSST-442	II-VR31-BLUECRAB-SVHC-B	RS02-1	BOS	SG34PB	4.84	18.39
PSST-443	II-VR31-BLUECRAB-SVHC-C	RS03	BOS	SG34PB	31.22	18.28
PSST-444	II-VR31-BLUECRAB-SVHC-D	RS04	BOS	SG34PB	31.56	17.74
PSST-445	II-VR31-BLUECRAB-SVHC-E	RS05	BOS	SG34PB	31.52	16.83
PSST-446	II-VR31-CATFISH-SVHC-A	QX83-1	BOS	SG34PB	19.95	22.71
PSST-447	II-VR31-CATFISH-SVHC-B	QX61	BOS	SG34PB	31.27	22.01
PSST-448	II-VR31-CATFISH-SVHC-C	QX64	BOS	SG34PB	31.96	20.95
PSST-449	II-VR31-CATFISH-SVHC-D	QY35	BOS	SG34PB	31.06	19.91
PSST-450	II-VR31-CATFISH-SVHC-E	QX54	BOS	SG34PB	31.76	22.86
PSST-451	II-VR31-OYSTER-SVHC-A	RU13	BOS	SG34PB	31.53	13.85
PSST-452	II-VR31-OYSTER-SVHC-B	RU14	BOS	SG34PB	31.80	14.23
PSST-453	II-VR31-OYSTER-SVHC-C	RU15	BOS	SG34PB	31.42	14.86
PSST-454	II-VR31-OYSTER-SVHC-D	RU16	BOS	SG34PB	31.52	14.37
PSST-455	II-VR31-OYSTER-SVHC-E	RU17	BOS	SG34PB	31.17	13.18
PSST-456	III-VR31-BLUECRAB-SVHC-A	TW60	BOS	TY29PB	25.32	17.49
PSST-457	III-VR31-BLUECRAB-SVHC-B	TW61	BOS	TY29PB	21.28	16.31
PSST-458	III-VR31-BLUECRAB-SVHC-C	TW62	BOS	TY29PB	25.99	18.31
PSST-459	III-VR31-BLUECRAB-SVHC-D	TW63	BOS	TY29PB	26.24	16.23
PSST-460	III-VR31-BLUECRAB-SVHC-E	TW64	BOS	TY29PB	17.84	16.93
PSST-461	III-VR31-CATFISH-SVHC-A	SX64	BOS	TY29PB	25.36	22.36
PSST-462	III-VR31-CATFISH-SVHC-C	SX34	BOS	TY29PB	25.43	22.18
PSST-463	III-VR31-CATFISH-SVHC-D	SX14	BOS	TX19PB	24.84	22.81
PSST-464	III-VR31-CATFISH-SVHC-E	SX52-1	BOS	TX40PB	4.09	24.45

Table A-406. (Continued).

Sample ID	Field ID	Lab ID	Lab Name	Associated Blank	Sample Size (g wet weight)	Percent Dry Weight
PSST-465	III-VR31-CATFISH-SVHC-F	SX23	BOS	TZ60PB	25.73	22.04
PSST-466	III-VR31-OYSTER-SVHC-A	TW65	BOS	TX76PB	25.30	10.68
PSST-467	III-VR31-OYSTER-SVHC-B	TW66	BOS	TX76PB	26.11	8.97
PSST-468	III-VR31-OYSTER-SVHC-C	TW67	BOS	TX76PB	25.69	10.26
PSST-469	III-VR31-OYSTER-SVHC-D	TW68	BOS	TX76PB	28.20	10.69
PSST-470	III-VR31-OYSTER-SVHC-E	TW69-1	BOS	TZ60PB	21.12	10.09
PSST-471	II-SMI229-BLUECRABSVHC-A	RR95	BOS	SG38PB	30.23	16.77
PSST-472	II-SMI229-BLUECRABSVHC-B	RR96	BOS	SG38PB	30.46	16.75
PSST-473	II-SMI229-BLUECRABSVHC-C	RR97	BOS	SG38PB	30.41	18.41
PSST-474	II-SMI229-BLUECRABSVHC-D	RR98	BOS	SG38PB	30.41	18.28
PSST-475	II-SMI229-BLUECRABSVHC-E	RR99	BOS	SG38PB	30.68	17.37
PSST-476	II-SMI229-CATFISHSVHC-F	QX66	BOS	SG38PB	31.65	20.26
PSST-477	II-SMI229-CATFISH-SVHC-G	QX68	BOS	RS72PB	25.32	22.30
PSST-478	II-SMI229-CATFISHSVHC-H	QX73	BOS	SG38PB	29.76	20.00
PSST-479	II-SMI229-CATFISHSVHC-I	QW55	BOS	SG38PB	32.80	23.27
PSST-480	II-SMI229-CATFISHSVHC-J	QW17	BOS	SG38PB	37.05	19.82
PSST-481	II-SMI229-OYSTERSVHC-A	RU18	BOS	SG38PB	15.16	13.06
PSST-482	II-SMI229-OYSTERSVHC-B	RU19	BOS	SG38PB	30.10	15.44
PSST-483	II-SMI229-OYSTERSVHC-C	RU20	BOS	SG38PB	33.59	14.61
PSST-484	II-SMI229-OYSTERSVHC-D	RU21	BOS	SG38PB	38.68	14.69
PSST-485	II-SMI229-OYSTERSVHC-E	RU22	BOS	SG38PB	30.32	14.41
PSST-486	III-SMI229-BLUECRAB-SVHC-A	TW54	BOS	TY29PB	25.85	17.91
PSST-487	III-SMI229-CATFISH-SVHC-A	SX47	BOS	TX36PB	15.84	20.36
PSST-488	III-SMI229-CATFISH-SVHC-B	SX56	BOS	TY29PB	25.25	21.67
PSST-489	III-SMI229-CATFISH-SVHC-C	SX40	BOS	TY29PB	18.24	22.75
PSST-490	III-SMI229-CATFISH-SVHC-D	SX46	BOS	TY29PB	25.51	25.13
PSST-491	III-SMI229-CATFISH-SVHC-E	SX53	BOS	TX36PB	21.60	23.00
PSST-492	III-SMI229-OYSTER-SVHC-A	TW55	BOS	TX76PB	25.08	13.14
PSST-493	III-SMI229-OYSTER-SVHC-B	TW56	BOS	TX76PB	25.30	11.77
PSST-494	III-SMI229-OYSTER-SVHC-C	TW57	BOS	TX76PB	25.09	12.23
PSST-495	III-SMI229-OYSTER-SVHC-D	TW58	BOS	TX76PB	25.10	9.30
PSST-496	III-SMI229-OYSTER-SVHC-E	TW59	BOS	TX76PB	25.88	9.19

Table A-407. Results of semivolatile organic compound analysis of procedural blanks for tissue samples analyzed by Battelle Ocean Sciences (BOS).

Lab ID	SS82PB	SS86PB	QH81PB	RS72PB	SG34PB	SG38PB	SG71PB	SH47PB
Lab Name	BOS	BOS	BOS	BOS	BOS	BOS	BOS	BOS
Sample Size (g)	21.65	22.66	25.33	29.96	31.09	30.47	30.66	30.46
Units	ng/g	ng/g	ng/g	ng/g	ng/g	ng/g	ng/g	ng/g
Phenol	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	ND	ND	ND	ND	ND	7.2	ND	ND
Benzo[a]pyrene	ND	ND	ND	ND	ND	6.6	ND	ND
Bis(2-ethylhexyl)phthalate	ND	ND	ND	ND	ND	ND	ND	ND
Surrogate Recovery (%)								
d5-Phenol	55	56	48	64	18	113	46	27
d10-Fluorene	72	75	75	85	95	86	86	90
d12-Benzo[a]pyrene	52	66	71	83	104	79	67	69
d4-Bis(2-ethylhexyl)phthalate	77	63	78	82	91	81	84	89

Lab ID	SH55PB-B	SH77PB	SH82PB	SO69PB	SQ11PB	SR17PB	SS23PB	SS75PB
Lab Name	BOS	BOS	BOS	BOS	BOS	BOS	BOS	BOS
Sample Size (g)	29.80	28.62	18.62	25.75	25.42	24.36	24.72	25.63
Units	ng/g	ng/g	ng/g	ng/g	ng/g	ng/g	ng/g	ng/g
Phenol	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[a]pyrene	0.91J	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate	ND	ND	ND	ND	ND	ND	ND	ND
Surrogate Recovery (%)								
d5-Phenol	63	43	59	50	41	35	60	50
d10-Fluorene	75	64	81	61	72	61	71	63
d12-Benzo[a]pyrene	50	38	85	49	65	61	74	56
d4-Bis(2-ethylhexyl)phthalate	80	69	61	88	70	87	44&	64

Table A-407. (Continued).

Lab ID	SX81PB	SU21PB	SU44PB	SY24PB	SZ18PB	SZ22PB	TV25PB	TU35PB
Lab Name	BOS	BOS	BOS	BOS	BOS	BOS	BOS	BOS
Sample Size (g)	25.36	25.52	26.11	25.78	20.04	18.57	14.11	25.26
Units	ng/g	ng/g	ng/g	ng/g	ng/g	ng/g	ng/g	ng/g
Phenol	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[a]pyrene	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate	ND	ND	ND	ND	ND	ND	ND	ND
Surrogate Recovery (%)								
d5-Phenol	54	52	54	53	72	64	69	68
d10-Fluorene	68	66	71	67	67	58	70	66
d12-Benzo[a]pyrene	63	53	58	58	52	46	60	68
d4-Bis(2-ethylhexyl)phthalate	40&	91	67	78	72	68	87	62

Lab ID	TU39PB	TU96PB	TV80PB	TX19PB	TX36PB	TX40PB	TX72PB	TX76PB
Lab Name	BOS	BOS	BOS	BOS	BOS	BOS	BOS	BOS
Sample Size (g)	25.00	25.18	20.62	24.49	20.44	25.12	25.47	25.21
Units	ng/g	ng/g	ng/g	ng/g	ng/g	ng/g	ng/g	ng/g
Phenol	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[a]pyrene	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate	ND	ND	ND	ND	ND	ND	ND	ND
Surrogate Recovery (%)								
d5-Phenol	85	72	62	74	53	68	71	80
d10-Fluorene	92	64	70	79	68	64	79	79
d12-Benzo[a]pyrene	74	56	68	71	64	61	95	79
d4-Bis(2-ethylhexyl)phthalate	68	84	103	74	88	70	71	34&

Table A-407. (Continued).

Lab ID	TX80PB	TY29PB	TZ60PB
Lab Name	BOS	BOS	BOS
Sample Size (g)	24.89	20.07	14.53
Units	ng/g	ng/g	ng/g
Phenol	ND	ND	ND
Fluorene	ND	ND	ND
Benzo[a]pyrene	ND	ND	ND
Bis(2-ethylhexyl)phthalate	130J	ND	ND
Surrogate Recovery (%)			
d5-Phenol	62	88	85
d10-Fluorene	63	79	76
d12-Benzo[a]pyrene	53	69	74
d4-Bis(2-ethylhexyl)phthalate	71	67	108

J = Qualifier indicating the value is between the method detection limit (MDL) and the practical quantitative level (defined as five times MDL).

ND = Concentration below the MDL.

& = Result outside quality control surrogate recovery criteria.

Table A-408. Surrogate recoveries for semivolatile organic analysis of tissue samples analyzed by Battelle Ocean Sciences (BOS).

Sample ID	Surrogate Recoveries (%)			
	d5-Phenol	d10-Fluorene	d12-Benzo[a]pyrene	d4-Bis(2-ethylhexyl) phthalate
PSST-004	37	57	63	66
PSST-005	38	64	72	55
PSST-009	56	72	75	66
PSST-010	48	72	89	61
PSST-011	37	51	75	47
PSST-012	41	52	108	57
PSST-013	22	61	50	48
PSST-014	32	46	80	39&
PSST-015	40	52	61	56
PSST-016	27	76	94	52
PSST-017	50	66	58	71
PSST-018	44	66	74	57
PSST-019	35	65	72	55
PSST-020	47	61	55	71
PSST-024	39	59	54	49
PSST-025	32	50	51	48
PSST-029	62	78	100	58
PSST-030	45	67	78	46
PSST-031	56	78	130&	45
PSST-032	44	49	42	46
PSST-033	55	62	55	61
PSST-034	62	68	62	55
PSST-035	59	64	146&	57
PSST-036	62	62	54	59
PSST-037	67	66	66	74
PSST-038	63	66	60	65
PSST-039	42	65	79	57
PSST-040	60	62	54	63
PSST-044	41	59	62	69
PSST-045	33	71	42	56
PSST-049	50	72	89	76
PSST-050	69	83	70	64
PSST-051	24	49	72	38&
PSST-052	26	39&	67	36&
PSST-053	38	48	96	63
PSST-054	31	45	84	39&
PSST-055	34	43&	102	49
PSST-056	39	50	74	59
PSST-057	45	70	96	37&
PSST-058	53	63	95	55
PSST-059	44	57	50	59
PSST-060	50	69	87	36&
PSST-064	45	63	63	70

Table A-408. (Continued).

Sample ID	Surrogate Recoveries (%)			
	d5-Phenol	d10-Fluorene	d12-Benzo[a]pyrene	d4-Bis(2-ethylhexyl) phthalate
PSST-065	40	65	69	52
PSST-069	47	62	49	48
PSST-070	38	55	66	57
PSST-071	46	70	113	52
PSST-072	59	84	118	59
PSST-073	18	35&	67	73
PSST-074	47	67	121	66
PSST-075	50	76	103	63
PSST-076	43	67	86	61
PSST-077	40	65	89	59
PSST-078	76	75	77	77
PSST-079	48	59	96	36&
PSST-080	43	58	87	36&
PSST-085	50	68	72	83
PSST-089	41	62	83	54
PSST-090	50	66	84	55
PSST-091	37	57	73	53
PSST-092	36	63	80	56
PSST-093	24	68	93	57
PSST-094	43	64	108	55
PSST-095	21	43&	37	35&
PSST-096	28	54	41	65
PSST-097	37	74	84	72
PSST-098	37	65	46	60
PSST-099	31	63	46	64
PSST-100	46	75	105	63
PSST-104	32	66	70	74
PSST-105	58	75	83	66
PSST-109	56	72	90	54
PSST-110	57	71	92	57
PSST-111	31	76	82	75
PSST-112	29	58	42	66
PSST-113	40	55	41	66
PSST-114	48	58	41	62
PSST-115	26	67	109	64
PSST-116	32	65	53	58
PSST-117	34	68	55	59
PSST-118	36	63	52	66
PSST-119	34	58	48	57
PSST-120	37	59	51	60
PSST-124	28	49	41	35&
PSST-125	38	57	49	52
PSST-129	41	69	91	64
PSST-130	46	72	66	73
PSST-131	36	60	60	57

Table A-408. (Continued).

Sample ID	Surrogate Recoveries (%)			
	d5-Phenol	d10-Fluorene	d12-Benzo[a]pyrene	d4-Bis(2-ethylhexyl) phthalate
PSST-132	36	56	54	46
PSST-133	41	62	65	56
PSST-134	42	62	68	39&
PSST-135	46	65	75	53
PSST-136	45	64	58	59
PSST-137	44	61	56	59
PSST-138	47	65	59	61
PSST-139	44	63	57	66
PSST-140	41	64	74	53
PSST-144	31	64	71	56
PSST-145	41	64	64	60
PSST-149	15	40&	29&	23&
PSST-150	47	67	82	74
PSST-151	68	74	79	68
PSST-152	33	52	97	55
PSST-153	25	53	67	55
PSST-154	34	57	103	65
PSST-155	42	70	118	66
PSST-156	41	65	95	55
PSST-157	44	60	88	53
PSST-158	42	63	91	61
PSST-159	45	72	95	61
PSST-160	49	76	98	49
PSST-161	26	55	20&	46
PSST-162	29	52	39	47
PSST-163	34	51	35	48
PSST-164	81	79	68	42&
PSST-165	51	63	67	36&
PSST-166	66	70	78	74
PSST-167	41	57	50	63
PSST-168	32	48	41	65
PSST-169	46	61	54	60
PSST-170	85	83	95	83
PSST-171	70	67	67	85
PSST-172	63	66	65	65
PSST-173	66	66	67	83
PSST-174	50	63	69	74
PSST-175	43	51	58	57
PSST-176	45	55	82	74
PSST-177	56	64	70	75
PSST-178	66	69	71	41&
PSST-179	77	81	82	32&
PSST-180	34	37&	57	74
PSST-181	16	58	119	49
PSST-182	32	65	116	49



Table A-408. (Continued).

Sample ID	Surrogate Recoveries (%)			
	d5-Phenol	d10-Fluorene	d12-Benzo[a]pyrene	d4-Bis(2-ethylhexyl) phthalate
PSST-183	41	68	124	51
PSST-184	34	69	146&	54
PSST-185	33	63	127&	40&
PSST-186	31	60	120	42&
PSST-187	33	67	132&	51
PSST-188	31	63	124	45
PSST-189	28	62	121	46
PSST-190	28	69	137&	52
PSST-191	62	65	76	62
PSST-192	60	68	75	54
PSST-193	52	54	55	63
PSST-194	60	59	61	59
PSST-195	63	61	61	73
PSST-196	55	62	62	58
PSST-197	68	80	105	95
PSST-198	59	62	63	74
PSST-199	54	64	70	76
PSST-200	58	74	87	102
PSST-201	49	50	49	57
PSST-202	21	48	57	71
PSST-203	33	78	46	77
PSST-204	47	89	57	90
PSST-205	44	75	33&	73
PSST-206	45	85	61	68
PSST-207	32	81	50	61
PSST-208	42	81	49	65
PSST-209	55	70	42	52
PSST-210	62	59	60	72
PSST-211	53	60	58	62
PSST-212	49	58	69	66
PSST-213	32	45	56	51
PSST-214	42	52	56	66
PSST-215	61	72	78	44&
PSST-216	53	48	51	20&
PSST-217	69	68	71	54
PSST-218	55	65	57	64
PSST-219	64	66	68	48
PSST-220	49	68	69	74
PSST-221	56	59	60	74
PSST-222	43	94	66	71
PSST-223	44	93	43	86
PSST-224	21	45	43	33&
PSST-225	28	57	45	46
PSST-226	39	62	41	68
PSST-227	37	70	78	56

Table A-408. (Continued).

Sample ID	Surrogate Recoveries (%)			
	d5-Phenol	d10-Fluorene	d12-Benzo[a]pyrene	d4-Bis(2-ethylhexyl) phthalate
PSST-228	40	75	49	62
PSST-229	53	53	56	67
PSST-230	42	85	59	69
PSST-231	44	63	69	70
PSST-232	59	64	61	63
PSST-233	60	60	62	84
PSST-234	57	61	78	54
PSST-235	57	64	60	62
PSST-236	47	60	56	49
PSST-237	86	64	69	73
PSST-238	58	67	72	71
PSST-239	53	58	58	62
PSST-240	44	68	71	99
PSST-241	43	67	108	53
PSST-242	43	68	146&	53
PSST-243	33	65	140&	56
PSST-244	50	72	141&	55
PSST-245	45	69	143&	52
PSST-246	57	70	161&	55
PSST-247	55	68	155&	43&
PSST-248	35	90	30&	74
PSST-249	46	86	70	89
PSST-250	54	69	154&	52
PSST-251	67	65	69	83
PSST-252	58	63	61	64
PSST-253	50	54	51	51
PSST-254	52	57	56	33&
PSST-255	61	68	74	63
PSST-256	44	48	50	71
PSST-257	55	58	56	72
PSST-258	62	68	73	73
PSST-259	62	63	67	97
PSST-260	82	79	84	95
PSST-261	35	67	150&	55
PSST-262	41	71	144&	56
PSST-263	50	66	152&	53
PSST-264	67	71	68	81
PSST-265	51	69	150&	59
PSST-266	45	71	65	55
PSST-267	42	66	58	63
PSST-268	54	65	57	66
PSST-269	51	72	170&	51
PSST-270	55	70	154&	51
PSST-271	59	65	82	54
PSST-272	65	65	68	91

Table A-408. (Continued).

Sample ID	Surrogate Recoveries (%)			
	d5-Phenol	d10-Fluorene	d12-Benzo[a]pyrene	d4-Bis(2-ethylhexyl) phthalate
PSST-273	58	62	79	58
PSST-274	57	62	80	65
PSST-275	57	61	80	64
PSST-276	69	64	68	98
PSST-277	54	62	84	63
PSST-278	59	61	80	65
PSST-279	60	62	82	65
PSST-280	141&	87	110	72
PSST-281	35	61	35	27&
PSST-282	29	64	34&	50
PSST-283	32	80	33&	55
PSST-284	39	67	103	34&
PSST-285	23	52	36	29&
PSST-286	22	54	51	37&
PSST-287	16	57	47	53
PSST-288	69	70	81	78
PSST-289	27	67	69	47
PSST-290	22	60	58	52
PSST-291	59	62	63	61
PSST-292	54	60	61	67
PSST-293	52	62	63	59
PSST-294	66	67	67	68
PSST-295	138&	58	61	68
PSST-296	58	80	90	42&
PSST-297	52	81	92	40&
PSST-298	58	63	63	73
PSST-299	74	72	75	75
PSST-300	42	48	52	61
PSST-301	24	84	65	20&
PSST-302	25	75	73	46
PSST-303	66	72	71	59
PSST-304	28	58	61	44&
PSST-305	23	67	60	31&
PSST-306	30	78	91	43&
PSST-307	52	50	51	64
PSST-308	29	62	78	71
PSST-309	52	54	57	57
PSST-310	31	73	91	66
PSST-311	56	79	90	41&
PSST-312	37	84	92	35&
PSST-313	59	75	86	34&
PSST-314	66	88	101	31&
PSST-315	53	75	79	44&
PSST-316	47	76	87	39&
PSST-317	45	70	80	33&

Table A-408. (Continued).

Sample ID	Surrogate Recoveries (%)			
	d5-Phenol	d10-Fluorene	d12-Benzo[a]pyrene	d4-Bis(2-ethylhexyl) phthalate
PSST-318	49	74	87	34&
PSST-319	29	40	46	23&
PSST-320	49	72	82	43&
PSST-321	57	71	63	68
PSST-322	22	77	65	71
PSST-323	37	81	28&	60
PSST-324	33	76	66	70
PSST-325	20	76	60	70
PSST-326	58	78	51	54
PSST-327	70	78	45	57
PSST-328	18	79	69	65
PSST-329	20	77	48	64
PSST-330	67	74	80	45
PSST-331	56	59	64	62
PSST-332	50	57	59	48
PSST-333	55	61	76	57
PSST-334	29	68	68	50
PSST-335	59	64	68	52
PSST-336	58	60	76	56
PSST-337	59	67	90	67
PSST-338	56	58	79	61
PSST-339	57	57	58	67
PSST-340	53	56	70	47
PSST-341	17	71	48	47
PSST-342	53	63	43	61
PSST-343	62	79	44	26&
PSST-344	18	81	45	55
PSST-345	58	64	45	40&
PSST-346	28	76	57	73
PSST-347	32	76	61	74
PSST-348	55	60	54	81
PSST-349	56	58	54	75
PSST-350	47	74	43	49
PSST-351	52	59	61	52
PSST-352	55	60	56	55
PSST-353	39	39&	42	68
PSST-354	62	62	62	69
PSST-355	63	64	66	62
PSST-356	66	65	67	72
PSST-357	63	63	65	57
PSST-358	70	69	73	80
PSST-359	63	62	65	65
PSST-360	47	77	78	70
PSST-361	16	54	82	42&
PSST-362	24	45	58	53

Table A-408. (Continued).

Sample ID	Surrogate Recoveries (%)			
	d5-Phenol	d10-Fluorene	d12-Benzo[a]pyrene	d4-Bis(2-ethylhexyl) phthalate
PSST-363	38	57	57	53
PSST-364	29	59	103	56
PSST-365	37	67	126&	55
PSST-366	23	57	92	69
PSST-367	29	56	97	67
PSST-368	51	64	55	69
PSST-369	31	60	110	63
PSST-370	29	59	103	68
PSST-371	64	87	99	40&
PSST-372	45	58	49	65
PSST-373	55	80	92	41&
PSST-374	64	74	82	96
PSST-375	53	59	59	67
PSST-376	61	84	92	45
PSST-377	41	51	54	60
PSST-378	49	56	60	73
PSST-379	48	64	66	76
PSST-380	50	56	62	64
PSST-381	24	53	85	60
PSST-382	30	64	82	64
PSST-383	36	62	88	69
PSST-384	42	57	90	63
PSST-385	31	48	81	59
PSST-386	24	56	89	62
PSST-387	38	56	94	57
PSST-388	33	57	97	41&
PSST-389	24	58	92	65
PSST-390	34	63	107	63
PSST-391	53	60	73	89
PSST-392	34	69	68	33&
PSST-393	51	53	54	46
PSST-394	58	57	51	64
PSST-395	65	69	67	48
PSST-396	40	53	60	45
PSST-397	66	66	69	68
PSST-398	50	60	66	56
PSST-399	50	57	59	61
PSST-400	43	53	67	63
PSST-401	27	76	40	48
PSST-402	29	69	57	29&
PSST-403	60	61	64	79
PSST-404	52	84	70	82
PSST-405	16	69	36	22&
PSST-406	23	62	56	51
PSST-407	25	58	51	48

Table A-408. (Continued).

Sample ID	Surrogate Recoveries (%)			
	d5-Phenol	d10-Fluorene	d12-Benzo[a]pyrene	d4-Bis(2-ethylhexyl) phthalate
PSST-408	71	70	61	74
PSST-409	24	60	56	49
PSST-410	26	64	55	52
PSST-411	52	64	79	55
PSST-412	110	62	80	49
PSST-413	50	61	71	54
PSST-414	55	75	82	58
PSST-415	55	64	82	57
PSST-416	58	68	74	54
PSST-417	54	62	68	49
PSST-418	48	59	63	50
PSST-419	49	58	60	49
PSST-420	71	52	52	71
PSST-421	42	57	41	46
PSST-422	44	59	46	56
PSST-423	67	89	88	84
PSST-424	14&	86	81	80
PSST-425	56	62	63	72
PSST-426	45	90	80	84
PSST-427	38	53	44	53
PSST-428	43	57	48	57
PSST-429	47	58	47	56
PSST-430	20	28&	22&	25&
PSST-431	61	63	93	87
PSST-432	59	65	90	89
PSST-433	82	75	75	73
PSST-434	45	65	67	40&
PSST-435	57	75	67	43&
PSST-436	58	57	56	70
PSST-437	59	60	61	72
PSST-438	57	59	58	72
PSST-439	66	71	71	76
PSST-440	35	36&	36	37&
PSST-441	36	94	99	84
PSST-442	69	73	73	86
PSST-443	38	86	94	77
PSST-444	42	72	76	66
PSST-445	48	87	91	81
PSST-446	42	65	65	60
PSST-447	46	94	46	90
PSST-448	17	89	59	85
PSST-449	26	84	68	83
PSST-450	25	89	57	55
PSST-451	59	75	21&	61
PSST-452	52	84	47	64

Table A-408. (Continued).

Sample ID	Surrogate Recoveries (%)			
	d5-Phenol	d10-Fluorene	d12-Benzo[a]pyrene	d4-Bis(2-ethylhexyl) phthalate
PSST-453	44	83	50	58
PSST-454	66	74	49	48
PSST-455	51	79	81	55
PSST-456	62	76	87	56
PSST-457	68	73	86	44&
PSST-458	69	75	90	47
PSST-459	73	78	90	50
PSST-460	63	71	79	56
PSST-461	51	61	57	29&
PSST-462	74	83	83	18&
PSST-463	63	62	65	64
PSST-464	71	73	56	38&
PSST-465	44	44&	46	23&
PSST-466	45	57	67	36&
PSST-467	53	68	71	49
PSST-468	63	75	76	29&
PSST-469	50	63	67	39&
PSST-470	58	62	78	131&
PSST-471	36	82	85	89
PSST-472	44	81	88	98
PSST-473	57	75	78	74
PSST-474	44	70	76	69
PSST-475	44	78	80	86
PSST-476	43	51	36	49
PSST-477	52	86	35	71
PSST-478	33	79	50	97
PSST-479	41	92	39	101
PSST-480	39	77	35	67
PSST-481	64	78	26&	44&
PSST-482	49	87	152&	62
PSST-483	72	70	101	37&
PSST-484	62	70	102	29&
PSST-485	64	83	118	33&
PSST-486	62	76	86	42&
PSST-487	35	44&	47	53
PSST-488	61	70	77	40&
PSST-489	43	73	73	40&
PSST-490	52	78	88	37&
PSST-491	45	56	52	53
PSST-492	42	58	63	36&
PSST-493	38	44	45	32&
PSST-494	47	58	59	40&
PSST-495	60	64	64	46
PSST-496	65	76	79	34&

& = Result outside quality control surrogate recovery criteria.

Table A-409. Results of semivolatile organic compound analysis of matrix spike and matrix spike duplicate samples.

Lab ID	Percent Recoveries		RPD
	RS74MS	RS75MSD	
Phenol	98	101	3
Fluorene	110	110	1
Benzo[a]pyrene	125	126	1
Bis(2-ethylhexyl)phthalate	108	1611&	174&
Surrogate Recoveries (%)			
Phenol-d5	31	19	
Fluorene-d10	80	84	
Benzo[a]pyrene-d12	57	61	
Bis(2-ethylhexyl)phthalate-d4	79	72	

Lab ID	Percent Recoveries		RPD
	SG36MS	SG37MSD	
Phenol	100	77	25
Fluorene	110	109	0
Benzo[a]pyrene	121	121	0
Bis(2-ethylhexyl)phthalate	104	96	8
Surrogate Recoveries (%)			
Phenol-d5	32	39	
Fluorene-d10	89	100	
Benzo[a]pyrene-d12	107	120	
Bis(2-ethylhexyl)phthalate-d4	90	102	

Lab ID	Percent Recoveries		RPD
	SG40MS	SG41MSD	
Phenol	95	96	2
Fluorene	117	117	0
Benzo[a]pyrene	132	131	1
Bis(2-ethylhexyl)phthalate	103	104	1
Surrogate Recoveries (%)			
Phenol-d5	62	75	
Fluorene-d10	91	91	
Benzo[a]pyrene-d12	16&	7&	
Bis(2-ethylhexyl)phthalate-d4	62	52	

Lab ID	Percent Recoveries		RPD
	SG73MS	SG74MSD	
Phenol	101	0&	200&
Fluorene	106	107	1
Benzo[a]pyrene	113	96	16
Bis(2-ethylhexyl)phthalate	99	106	7
Surrogate Recoveries (%)			
Phenol-d5	11&	0&	
Fluorene-d10	86	79	
Benzo[a]pyrene-d12	7&	70	
Bis(2-ethylhexyl)phthalate-d4	84	76	



Table A-409. (Continued).

Lab ID	Percent Recoveries		RPD
	SH49MS	SH50MSD	
Phenol	93	98	4
Fluorene	104	106	2
Benzo[a]pyrene	93	95	3
Bis(2-ethylhexyl)phthalate	110	114	4
Surrogate Recoveries (%)			
Phenol-d5	48	30	
Fluorene-d10	67	74	
Benzo[a]pyrene-d12	60	64	
Bis(2-ethylhexyl)phthalate-d4	41	50	

Lab ID	Percent Recoveries		RPD
	SH79MS	SH80MSD	
Phenol	84	98	15
Fluorene	102	109	7
Benzo[a]pyrene	100	107	6
Bis(2-ethylhexyl)phthalate	112	123	10
Surrogate Recoveries (%)			
Phenol-d5	34	18	
Fluorene-d10	61	100	
Benzo[a]pyrene-d12	79	123	
Bis(2-ethylhexyl)phthalate-d4	36&	23&	

Lab ID	Percent Recoveries		RPD
	SH84MS	SH85MSD	
Phenol	97	95	2
Fluorene	98	100	3
Benzo[a]pyrene	115	118	3
Bis(2-ethylhexyl)phthalate	110	114	4
Surrogate Recoveries (%)			
Phenol-d5	25	27	
Fluorene-d10	47	49	
Benzo[a]pyrene-d12	38	40	
Bis(2-ethylhexyl)phthalate-d4	43&	36&	

Lab ID	Percent Recoveries		RPD
	RS74MS	RS75MSD	
Phenol	76	69	10
Fluorene	114	111	3
Benzo[a]pyrene	98	94	5
Bis(2-ethylhexyl)phthalate	106	85	22
Surrogate Recoveries (%)			
Phenol-d5	37	25	
Fluorene-d10	61	50	
Benzo[a]pyrene-d12	56	43	
Bis(2-ethylhexyl)phthalate-d4	62	51	

Table A-409. (Continued).

Lab ID	Percent Recoveries		RPD
	SQ13MS	SQ14MSD	
Phenol	111	109	2
Fluorene	108	113	4
Benzo[a]pyrene	120	121	1
Bis(2-ethylhexyl)phthalate	122	124	1
Surrogate Recoveries (%)			
Phenol-d5	21	29	
Fluorene-d10	76	73	
Benzo[a]pyrene-d12	128&	127&	
Bis(2-ethylhexyl)phthalate-d4	73	72	

Lab ID	Percent Recoveries		RPD
	SR19MS	SR20MSD	
Phenol	102	100	2
Fluorene	111	114	3
Benzo[a]pyrene	119	121	2
Bis(2-ethylhexyl)phthalate	129	132	2
Surrogate Recoveries (%)			
Phenol-d5	29	39	
Fluorene-d10	60	64	
Benzo[a]pyrene-d12	100	101	
Bis(2-ethylhexyl)phthalate-d4	65	67	

Lab ID	Percent Recoveries		RPD
	SS25MS	SS26MSD	
Phenol	91	91	0
Fluorene	111	111	0
Benzo[a]pyrene	112	117	4
Bis(2-ethylhexyl)phthalate	18538&	179&	196&
Surrogate Recoveries (%)			
Phenol-d5	50	63	
Fluorene-d10	75	78	
Benzo[a]pyrene-d12	214&	198&	
Bis(2-ethylhexyl)phthalate-d4	40&	60	

Lab ID	Percent Recoveries		RPD
	SS77MS	SS78MSD	
Phenol	89	85	4
Fluorene	109	111	2
Benzo[a]pyrene	98	104	6
Bis(2-ethylhexyl)phthalate	126	124	1
Surrogate Recoveries (%)			
Phenol-d5	57	31	
Fluorene-d10	74	59	
Benzo[a]pyrene-d12	67	51	
Bis(2-ethylhexyl)phthalate-d4	40&	62	

Table A-409. (Continued).

Lab ID	Percent Recoveries		RPD
	SX83MS	SX84MSD	
Phenol	95	95	1
Fluorene	111	113	2
Benzo[a]pyrene	118	117	1
Bis(2-ethylhexyl)phthalate	132	123	7
Surrogate Recoveries (%)			
Phenol-d5	58	49	
Fluorene-d10	66	57	
Benzo[a]pyrene-d12	94	81	
Bis(2-ethylhexyl)phthalate-d4	38&	42&	

Lab ID	Percent Recoveries		RPD
	SU23MS	SU24MSD	
Phenol	0&	0&	0
Fluorene	92	93	1
Benzo[a]pyrene	117	118	1
Bis(2-ethylhexyl)phthalate	133	130	2
Surrogate Recoveries (%)			
Phenol-d5	18	47	
Fluorene-d10	27&	71	
Benzo[a]pyrene-d12	31&	117	
Bis(2-ethylhexyl)phthalate-d4	23&	59	

Lab ID	Percent Recoveries		RPD
	SU46MS	SU47MSD	
Phenol	92	218&	81&
Fluorene	103	103	1
Benzo[a]pyrene	113	108	4
Bis(2-ethylhexyl)phthalate	130	133	2
Surrogate Recoveries (%)			
Phenol-d5	42	34	
Fluorene-d10	68	49	
Benzo[a]pyrene-d12	102	101	
Bis(2-ethylhexyl)phthalate-d4	79	53	

Lab ID	Percent Recoveries		RPD
	SY26MS	SY27MSD	
Phenol	88	83	5
Fluorene	106	108	1
Benzo[a]pyrene	113	116	3
Bis(2-ethylhexyl)phthalate	111	107	3
Surrogate Recoveries (%)			
Phenol-d5	46	49	
Fluorene-d10	72	71	
Benzo[a]pyrene-d12	84	71	
Bis(2-ethylhexyl)phthalate-d4	76	73	

Table A-409. (Continued).

Lab ID	Percent Recoveries		RPD
	SZ20MS	SZ21MSD	
Phenol	70	91	26
Fluorene	115	113	2
Benzo[a]pyrene	116	113	3
Bis(2-ethylhexyl)phthalate	71	73	3
Surrogate Recoveries (%)			
Phenol-d5	54	49	
Fluorene-d10	67	53	
Benzo[a]pyrene-d12	60	49	
Bis(2-ethylhexyl)phthalate-d4	62	72	

Lab ID	Percent Recoveries		RPD
	SZ24MS	SZ25MSD	
Phenol	70	81	14
Fluorene	109	111	1
Benzo[a]pyrene	117	117	0
Bis(2-ethylhexyl)phthalate	0&	0&	0
Surrogate Recoveries (%)			
Phenol-d5	51	48	
Fluorene-d10	65	58	
Benzo[a]pyrene-d12	52	49	
Bis(2-ethylhexyl)phthalate-d4	70	60	

Lab ID	Percent Recoveries		RPD
	TV27MS	TV28MSD	
Phenol	81	81	1
Fluorene	105	105	0
Benzo[a]pyrene	109	111	2
Bis(2-ethylhexyl)phthalate	106	104	2
Surrogate Recoveries (%)			
Phenol-d5	55	67	
Fluorene-d10	62	72	
Benzo[a]pyrene-d12	66	71	
Bis(2-ethylhexyl)phthalate-d4	85	88	

Lab ID	Percent Recoveries		RPD
	TU37MS	TU38MSD	
Phenol	63	64	1
Fluorene	109	108	0
Benzo[a]pyrene	110	109	0
Bis(2-ethylhexyl)phthalate	111	110	2
Surrogate Recoveries (%)			
Phenol-d5	61	50	
Fluorene-d10	67	60	
Benzo[a]pyrene-d12	75	67	
Bis(2-ethylhexyl)phthalate-d4	60	65	

Table A-409. (Continued).

Lab ID	Percent Recoveries		RPD
	TU41MS	TU42MSD	
Phenol	82	82	1
Fluorene	103	102	2
Benzo[a]pyrene	104	101	3
Bis(2-ethylhexyl)phthalate	102	101	0
Surrogate Recoveries (%)			
Phenol-d5	50	61	
Fluorene-d10	68	69	
Benzo[a]pyrene-d12	84	86	
Bis(2-ethylhexyl)phthalate-d4	66	57	

Lab ID	Percent Recoveries		RPD
	TU98MS	TU99MSD	
Phenol	84	87	3
Fluorene	112	113	1
Benzo[a]pyrene	112	110	2
Bis(2-ethylhexyl)phthalate	90	91	1
Surrogate Recoveries (%)			
Phenol-d5	66	12&	
Fluorene-d10	62	12&	
Benzo[a]pyrene-d12	65	13&	
Bis(2-ethylhexyl)phthalate-d4	89	13&	

Lab ID	Percent Recoveries		RPD
	TV82MS	TV83MSD	
Phenol	82	86	4
Fluorene	111	113	2
Benzo[a]pyrene	108	109	1
Bis(2-ethylhexyl)phthalate	110	113	3
Surrogate Recoveries (%)			
Phenol-d5	33	64	
Fluorene-d10	65	61	
Benzo[a]pyrene-d12	71	65	
Bis(2-ethylhexyl)phthalate-d4	103	102	

Lab ID	Percent Recoveries	
	TX17MS	
Phenol	87	
Fluorene	91	
Benzo[a]pyrene	102	
Bis(2-ethylhexyl)phthalate	111	
Surrogate Recoveries (%)		
Phenol-d5	51	
Fluorene-d10	60	
Benzo[a]pyrene-d12	60	
Bis(2-ethylhexyl)phthalate-d4	56	

Table A-409. (Continued).

Lab ID	Percent Recoveries		RPD
	TX38MS	TX39MSD	
Phenol	16&	85	137
Fluorene	93	95	1
Benzo[a]pyrene	100	100	0
Bis(2-ethylhexyl)phthalate	113	116	2
Surrogate Recoveries (%)			
Phenol-d5	40	50	
Fluorene-d10	67	61	
Benzo[a]pyrene-d12	67	63	
Bis(2-ethylhexyl)phthalate-d4	76	79	

Lab ID	Percent Recoveries		RPD
	TX42MS	TX43MSD	
Phenol	87	87	1
Fluorene	105	107	2
Benzo[a]pyrene	108	108	1
Bis(2-ethylhexyl)phthalate	107	106	1
Surrogate Recoveries (%)			
Phenol-d5	68	68	
Fluorene-d10	65	64	
Benzo[a]pyrene-d12	65	65	
Bis(2-ethylhexyl)phthalate-d4	79	71	

Lab ID	Percent Recoveries		RPD
	TX74MS	TX75MSD	
Phenol	87	88	2
Fluorene	102	100	1
Benzo[a]pyrene	99	96	3
Bis(2-ethylhexyl)phthalate	91	92	1
Surrogate Recoveries (%)			
Phenol-d5	75	73	
Fluorene-d10	93	87	
Benzo[a]pyrene-d12	105	99	
Bis(2-ethylhexyl)phthalate-d4	52	40&	

Lab ID	Percent Recoveries		RPD
	TX78MS	TX79MSD	
Phenol	95	91	4
Fluorene	114	112	2
Benzo[a]pyrene	108	107	0
Bis(2-ethylhexyl)phthalate	95	93	2
Surrogate Recoveries (%)			
Phenol-d5	53	53	
Fluorene-d10	72	66	
Benzo[a]pyrene-d12	75	69	
Bis(2-ethylhexyl)phthalate-d4	32&	43&	

Table A-409. (Continued).

Lab ID	Percent Recoveries		RPD
	TX82MS	TX83MSD	
Phenol	82	116	35
Fluorene	125	124	1
Benzo[a]pyrene	124	120	3
Bis(2-ethylhexyl)phthalate	95	97	2
Surrogate Recoveries (%)			
Phenol-d5	45	47	
Fluorene-d10	55	44&	
Benzo[a]pyrene-d12	48	44	
Bis(2-ethylhexyl)phthalate-d4	61	47	

Lab ID	Percent Recoveries		RPD
	TY27MS	TY28MSD	
Phenol	97	93	5
Fluorene	113	114	1
Benzo[a]pyrene	114	114	0
Bis(2-ethylhexyl)phthalate	91	90	1
Surrogate Recoveries (%)			
Phenol-d5	66	71	
Fluorene-d10	85	79	
Benzo[a]pyrene-d12	96	88	
Bis(2-ethylhexyl)phthalate-d4	54	51	

Lab ID	Percent Recoveries		RPD
	TZ62MS	TZ63MSD	
Phenol	98	91	6
Fluorene	124	123	0
Benzo[a]pyrene	116	114	2
Bis(2-ethylhexyl)phthalate	94	90	5
Surrogate Recoveries (%)			
Phenol-d5	46	82	
Fluorene-d10	67	85	
Benzo[a]pyrene-d12	95	112	
Bis(2-ethylhexyl)phthalate-d4	119	94	

Lab ID	Percent Recoveries		RPD
	TY31MS	TY32MSD	
Phenol	95	93	2
Fluorene	109	116	7
Benzo[a]pyrene	115	111	3
Bis(2-ethylhexyl)phthalate	85	84	2
Surrogate Recoveries (%)			
Phenol-d5	72	77	
Fluorene-d10	80	82	
Benzo[a]pyrene-d12	88	93	
Bis(2-ethylhexyl)phthalate-d4	40&	44&	

& = Result outside quality control surrogate recovery criteria.

Table A-410. Sample specific data for tissue samples analyzed for arsenic and cadmium with results for procedural blanks and matrix spike samples.

Sample ID	Tissue wet weight (g)	Tissue dry weight (g)	Percent Water Content
I-EB165-CREOLEFISH-TM-A	6.1875	1.2206	80
I-EB165-CREOLEFISH-TM-B	5.1098	1.0711	79
I-EB165-CREOLEFISH-TM-C	4.0518	0.8497	79
I-EI361-CREOLEFISH-TM-A	4.4394	0.9632	78
I-EI361-CREOLEFISH-TM-B1	2.4986	0.5214	79
I-EI361-CREOLEFISH-TM-C	4.7985	1.0338	78
I-EI361-CREOLEFISH-TM-D	4.5435	1.2213	73
I-EI361-CREOLEFISH-TM-E	3.7156	0.7658	79
I-GC19-CREOLEFISH-TM-A	4.2857	0.8633	80
I-GC19-CREOLEFISH-TM-B	4.4834	0.9315	79
I-GC19-CREOLEFISH-TM-C	5.1858	1.0039	81
I-GC19-CREOLEFISH-TM-D	5.7871	1.2056	79
I-GC19-CREOLEFISH-TM-E	5.2615	1.0970	79
I-HI356-CREOLEFISH-TM-A	4.4271	0.9207	79
I-HI356-CREOLEFISH-TM-B	4.9970	1.0359	79
I-HI356-CREOLEFISH-TM-C	4.4861	1.2598	72
Procedural Blanks	Arsenic (µg/g)	Cadmium (µg/g)	
Procedural Blank #1	ND	ND	
Procedural Blank #2	ND	ND	
Percent Spike Recovery	Arsenic (%)	Cadmium (%)	
I-EB165-CREOLEFISH-TM-A	--	96	
I-GC19-CREOLEFISH-TM-A	--	95	
I-HI356-CREOLEFISH-TM-A	--	107	

Sample ID	Tissue wet weight (g)	Tissue dry weight (g)	Percent Water Content
I-EB165-CHUB-TM-A	4.5776	1.0770	76
I-EB165-CHUB-TM-B	4.6557	1.0937	77
I-EB165-CHUB-TM-C	4.7929	1.1972	75
I-EI360-CHUB-TM-A	4.6985	1.2581	73
I-EI360-CHUB-TM-B	5.4316	1.4475	73
I-EI360-CHUB-TM-C	4.8097	1.2290	74
I-EI360-CHUB-TM-D	4.5712	1.1566	75
I-EI360-CHUB-TM-E	4.0063	1.0531	74
I-EI361-CHUB-TM-A	4.6595	1.1196	76
I-EI361-CHUB-TM-B	5.0231	1.2669	75
I-EI361-CHUB-TM-C	4.6526	1.5273	67
I-EI361-CHUB-TM-D	5.4408	1.5433	72
I-EI361-CHUB-TM-E	5.1544	1.3048	75
I-GC19-CHUB-TM-A	5.7374	1.4335	75
I-GC19-CHUB-TM-B	6.4139	1.7445	73
I-GC19-CHUB-TM-C	5.5879	1.5509	72
I-GC19-CHUB-TM-D	4.9643	1.2375	75
I-GC19-CHUB-TM-E	4.0024	0.9734	76
I-HI356-CHUB-TM-A	5.5184	1.4295	74
I-HI356-CHUB-TM-B	5.0214	1.1729	77
I-HI356-CHUB-TM-C1	4.9675	1.1614	77



Table A-410. (Continued).

Sample ID	Tissue wet weight (g)	Tissue dry weight (g)	Percent Water Content
I-SS277-CHUB-TM-A	5.3973	1.6592	69
I-SS277-CHUB-TM-B	5.5460	1.3848	75
I-SS277-CHUB-TM-C	5.1885	1.7465	66
I-SS277-CHUB-TM-D	5.5978	1.3159	76
I-SS277-CHUB-TM-E	4.1860	1.0847	74
Procedural Blanks			
	Arsenic (µg/g)	Cadmium (µg/g)	
Procedural Blank #1	ND	ND	
Procedural Blank #2	ND	ND	

Sample ID	Tissue wet weight (g)	Tissue dry weight (g)	Percent Water Content
I-EB165-CHUB-TM-D	4.1619	1.0526	75
I-EB165-CHUB-TM-E	4.1458	1.0582	74
I-HI356-CHUB-TM-D	4.7289	1.1875	75
I-HI356-CHUB-TM-E	4.4378	1.0919	75
I-EI165-CREOLEFISH-TM-D	4.7036	1.0005	79
I-EI165-CREOLEFISH-TM-E	4.2997	0.9586	78
I-HI356-CREOLEFISH-TM-D	4.5114	0.9363	79
I-HI356-CREOLEFISH-TM-E	4.8875	1.1034	77
Procedural Blanks			
	Arsenic (µg/g)	Cadmium (µg/g)	
Procedural Blank #1	ND	ND	
Percent Spike Recovery			
	Arsenic (%)	Cadmium (%)	
I-EB165-CHUB-TM-D	103	--	
I-HI356-CHUB-TM-E	97	--	
I-SS277-CREOLEFISH-TM-C	96	--	

Sample ID	Tissue wet weight (g)	Tissue dry weight (g)	Percent Water Content
I-EC229-REDSNAPPER-TM-A	4.7993	1.1499	76
I-EC229-REDSNAPPER-TM-B	4.5881	1.0759	77
I-EC229-REDSNAPPER-TM-C	4.6389	1.0447	77
I-EC229-REDSNAPPER-TM-D	4.4137	1.0837	75
I-EC229-REDSNAPPER-TM-E	4.6498	1.0573	77
I-EI360-REDSNAPPER-TM-A	4.5571	1.0809	76
I-EI360-REDSNAPPER-TM-B	4.2127	1.0290	76
I-EI360-REDSNAPPER-TM-C	4.6293	1.0948	76
I-EI360-REDSNAPPER-TM-D	4.4312	1.0834	76
I-EI360-REDSNAPPER-TM-E	4.7696	1.1033	77
I-SS277-REDSNAPPER-TM-B	4.0992	0.9669	76
I-SS277-REDSNAPPER-TM-C	4.5976	1.0866	76
I-VR214-REDSNAPPER-TM-A	4.4985	1.0669	76
I-VR214-REDSNAPPER-TM-C	4.4005	1.1244	74
Procedural Blanks			
	Arsenic (µg/g)	Cadmium (µg/g)	
Procedural Blank #1	ND	ND	
Procedural Blank #2	ND	ND	

Table A-410. (Continued).

Sample ID	Tissue wet weight (g)	Tissue dry weight (g)	Percent Water Content
I-SS277-REDSNAPPER-TM-A	4.4301	1.0408	77
I-SS277-REDSNAPPER-TM-D	4.4311	1.0169	77
I-SS277-REDSNAPPER-TM-E	5.2509	1.2691	76
I-VR214-REDSNAPPER-TM-B	4.5409	1.0489	77
I-VR214-REDSNAPPER-TM-D	4.1772	0.9364	78
I-VR214-REDSNAPPER-TM-E	4.4541	0.9963	78
I-EC229-TRIGGERFISH-TM-A	4.6971	1.0423	78
I-EC229-TRIGGERFISH-TM-B	4.8399	1.0946	77
I-EC229-TRIGGERFISH-TM-C	4.9380	1.0440	79
I-EC229-TRIGGERFISH-TM-D	4.1720	1.2419	70
I-EC229-TRIGGERFISH-TM-E	4.3236	0.9152	79
I-VR214-TRIGGERFISH-TM-A	4.4151	0.9890	78
I-VR214-TRIGGERFISH-TM-B	4.6069	1.0679	77
I-VR214-TRIGGERFISH-TM-C	4.3266	0.9453	78
I-VR214-TRIGGERFISH-TM-D	4.6956	1.0904	77
I-VR214-TRIGGERFISH-TM-E	4.8209	1.0883	77
Procedural Blanks	Arsenic (µg/g)	Cadmium (µg/g)	
Procedural Blank #1	ND	ND	
Procedural Blank #2	ND	ND	

Sample ID	Tissue wet weight (g)	Tissue dry weight (g)	Percent Water Content
II-SMI229-BLUECRAB-TM-A	2.6175	0.4158	84
II-SMI229-BLUECRAB-TM-B	3.0766	0.5665	82
II-SMI229-BLUECRAB-TM-C	3.0699	0.6256	80
II-SMI229-BLUECRAB-TM-D	2.6878	0.5588	79
II-SMI229-BLUECRAB-TM-E	3.3694	0.6487	81
II-VR31-BLUECRAB-TM-A	3.5625	0.6768	81
II-VR31-BLUECRAB-TM-B	3.6138	0.7160	80
II-VR31-BLUECRAB-TM-C	3.2747	0.6573	80
II-VR31-BLUECRAB-TM-D	3.0283	0.5769	81
II-VR31-BLUECRAB-TM-E	3.3771	0.6177	82
II-EI100-SHEEPSHEAD-TM-A	2.9509	0.6226	79
II-EI100-SHEEPSHEAD-TM-B	2.3017	0.4864	79
II-EI100-SHEEPSHEAD-TM-C	2.8485	0.5727	80
II-EI100-SHEEPSHEAD-TM-D	2.8014	0.5558	80
II-EI100-SHEEPSHEAD-TM-E	2.4905	0.5665	77
II-SS100-SHEEPSHEAD-TM-C	2.6666	0.4672	82
II-SS100-SHEEPSHEAD-TM-D	2.6157	0.5361	80
II-SS100-SHEEPSHEAD-TM-E	2.8716	0.5523	81
II-SS100-SHEEPSHEAD-TM-F	3.0330	0.5412	82
II-SS100-SHEEPSHEAD-TM-G	3.4667	0.7120	79
II-EI100-CATFISH-TM-E	3.0150	0.6587	78
II-EI100-CATFISH-TM-F	2.6887	0.6285	77
II-EI100-CATFISH-TM-G	2.4490	0.5692	77
II-EI100-CATFISH-TM-H	2.6642	0.5909	78
II-EI100-CATFISH-TM-I	2.6783	0.6446	76
II-SMI229-CATFISH-TM-A #1	2.8400	0.6200	78
II-SMI229-CATFISH-TM-A #2	2.8715	0.6268	
II-SMI229-CATFISH-TM-B	2.6071	0.5449	79

Table A-410. (Continued).

Sample ID	Tissue wet weight (g)	Tissue dry weight (g)	Percent Water Content
II-SMI229-CATFISH-TM-C	2.7985	0.6118	78
II-SMI229-CATFISH-TM-F	3.0517	0.6487	79
II-SMI229-CATFISH-TM-G	2.6558	0.5837	78
II-SS100-CATFISH-TM-F #1	3.1058	0.6543	79
II-SS100-CATFISH-TM-F #2	2.7586	0.5812	
II-SS100-CATFISH-TM-G	2.6185	0.5756	78
II-SS100-CATFISH-TM-H	2.8874	0.6420	78
II-SS100-CATFISH-TM-I	2.6129	0.5606	79
II-SS100-CATFISH-TM-J	2.9066	0.6648	77
II-VR31-CATFISH-TM-F	2.8746	0.6128	79
II-VR31-CATFISH-TM-G	2.9099	0.6651	77
II-VR31-CATFISH-TM-H	2.8919	0.6583	77
II-VR31-CATFISH-TM-I	2.6536	0.5771	78
II-VR31-CATFISH-TM-J	2.9387	0.6659	77
Procedural Blanks			
	Arsenic (µg/g)	Cadmium (µg/g)	
Procedural Blank #1	ND	ND	
Procedural Blank #2	ND	ND	
Percent Spike Recovery			
	Arsenic (%)	Cadmium (%)	
II-VR31-CATFISH-TM-I	96	114	
II-VR31-CATFISH-TM-J	95	127	

Sample ID	Tissue wet weight (g)	Tissue dry weight (g)	Percent Water Content
II-EI330-CHUB-TM-A	2.5235	0.5782	77
II-EI330-CHUB-TM-B	2.5644	0.6032	76
II-EI330-CHUB-TM-C	2.5263	0.6390	75
II-EI330-CHUB-TM-D	2.8095	0.6735	76
II-EI330-CHUB-TM-E	2.5910	0.7219	72
II-EI352-CHUB-TM-F	2.6673	0.6334	76
II-EI352-CHUB-TM-G	2.5632	0.6521	75
II-EI352-CHUB-TM-H	2.6075	0.6284	76
II-EI352-CHUB-TM-I	2.7204	0.6019	78
II-EI352-CHUB-TM-J	3.0193	0.8170	73
II-HI376-CHUB-TM-A	2.5848	0.5528	79
II-HI376-CHUB-TM-B	2.6916	0.5564	79
II-HI376-CHUB-TM-C	2.5385	0.5960	77
II-HI376-CHUB-TM-D	2.6107	0.5619	78
II-HI376-CHUB-TM-E	2.5013	0.5485	78
II-MC194-CHUB-TM-A #1	3.0434	0.8343	73
II-MC194-CHUB-TM-A #2	2.7219	0.7462	
II-MC194-CHUB-TM-B	2.5779	0.6570	75
II-MC194-CHUB-TM-C	2.6194	0.6440	75
II-MC194-CHUB-TM-D	2.6787	0.7486	72
II-MC194-CHUB-TM-E	2.5109	0.6613	74
II-MC280-CHUB-TM-A	2.5325	0.6048	76
II-MC280-CHUB-TM-B	2.5731	0.6364	75
II-MC280-CHUB-TM-C	2.5038	0.5856	77
II-MC280-CHUB-TM-D	2.5485	0.6203	76
II-MC280-CHUB-TM-E	2.5666	0.6697	74

Table A-410. (Continued).

Sample ID	Tissue wet weight (g)	Tissue dry weight (g)	Percent Water Content
II-WC587-CHUB-TM-A	2.6856	0.6411	76
II-WC587-CHUB-TM-B	2.5188	0.6395	75
II-WC587-CHUB-TM-C	2.8335	0.7510	73
II-WC587-CHUB-TM-D	2.5573	0.5874	77
II-WC587-CHUB-TM-I	2.5373	0.6681	74
II-EI352-TRIGGERFISH-TM-A #1	3.1058	0.7144	77
II-EI352-TRIGGERFISH-TM-A #2	2.7586	0.6345	
II-EI352-TRIGGERFISH-TM-B	2.6185	0.5917	77
II-EI352-TRIGGERFISH-TM-C	2.8874	0.6058	79
II-EI352-TRIGGERFISH-TM-D	2.6129	0.6129	77
II-EI352-TRIGGERFISH-TM-E	2.9066	0.6145	79
II-VR245-TRIGGERFISH-TM-C	2.8746	0.6256	78
II-VR245-TRIGGERFISH-TM-D	2.9099	0.6274	78
II-VR245-TRIGGERFISH-TM-E	2.8919	0.7235	75
II-VR245-TRIGGERFISH-TM-F	2.6536	0.6022	77
II-VR245-TRIGGERFISH-TM-G	2.9387	0.6578	78
Procedural Blanks	Arsenic (µg/g)	Cadmium (µg/g)	
Procedural Blank #1	0.15	ND	
Procedural Blank #2	0.20	ND	
Percent Spike Recovery	Arsenic (%)	Cadmium (%)	
II-VR245-TRIGGERFISH-TM-F	97	107	
II-VR245-TRIGGERFISH-TM-G	107	106	

Sample ID	Tissue wet weight (g)	Tissue dry weight (g)	Percent Water Content
II-EC229-TRIGGERFISH-TM-F	2.8907	0.6325	78
II-EC229-TRIGGERFISH-TM-G	2.6800	0.6159	77
II-EC229-TRIGGERFISH-TM-H #1	2.5553	0.6075	76
II-EC229-TRIGGERFISH-TM-H #2	2.6902	0.6396	
II-EC229-TRIGGERFISH-TM-I	2.7075	0.5615	79
II-EC229-TRIGGERFISH-TM-J	2.6508	0.5728	78
II-EI330-TRIGGERFISH-TM-A	2.5066	0.5441	78
II-EI330-TRIGGERFISH-TM-B	2.5844	0.5588	78
II-EI330-TRIGGERFISH-TM-C	2.7205	0.5692	79
II-EI330-TRIGGERFISH-TM-D	2.5741	0.5749	78
II-EI330-TRIGGERFISH-TM-E	2.8665	0.6246	78
II-MC194-TRIGGERFISH-TM-C	2.7303	0.6043	78
II-MC194-TRIGGERFISH-TM-D	2.7827	0.5995	78
II-MC194-TRIGGERFISH-TM-E #1	2.5792	0.5436	79
II-MC194-TRIGGERFISH-TM-E #2	2.9394	0.6195	
II-MC194-TRIGGERFISH-TM-F	2.9196	0.6911	76
II-MC194-TRIGGERFISH-TM-G	2.8926	0.6624	77
II-MC280-TRIGGERFISH-TM-A	2.5540	0.5500	78
II-MC280-TRIGGERFISH-TM-B	2.7469	0.5682	79
II-MC280-TRIGGERFISH-TM-C	2.9334	0.6448	78
II-MC280-TRIGGERFISH-TM-D	2.5630	0.6121	76
II-MC280-TRIGGERFISH-TM-E	2.6959	0.5970	78
II-SMI72-TRIGGERFISH-TM-A	2.4743	0.5312	79
II-SMI72-TRIGGERFISH-TM-B	2.6498	0.5984	77

Table A-410. (Continued).

Sample ID	Tissue wet weight (g)	Tissue dry weight (g)	Percent Water Content
II-SMI72-TRIGGERFISH-TM-C	2.5280	0.5299	79
II-SMI72-TRIGGERFISH-TM-D	3.0318	0.6569	78
II-SMI72-TRIGGERFISH-TM-E	2.5261	0.5657	78
II-ST128-TRIGGERFISH-TM-B	2.6131	0.6050	77
II-ST128-TRIGGERFISH-TM-C	2.5076	0.5239	79
II-ST128-TRIGGERFISH-TM-D	2.6431	0.6347	76
II-ST128-TRIGGERFISH-TM-E	2.5861	0.5856	77
II-ST128-TRIGGERFISH-TM-F	2.5844	0.6126	76
II-ST130-TRIGGERFISH-TM-A	2.9053	0.6974	76
II-ST130-TRIGGERFISH-TM-B	2.5526	0.6005	76
II-ST130-TRIGGERFISH-TM-C	2.7318	0.6151	77
II-ST130-TRIGGERFISH-TM-D	2.6137	0.5698	78
II-ST130-TRIGGERFISH-TM-E	2.6703	0.5461	80
II-VR214-TRIGGERFISH-TM-A	2.7869	0.5975	79
II-VR214-TRIGGERFISH-TM-B	2.7000	0.5704	79
II-VR214-TRIGGERFISH-TM-C	2.7565	0.5943	78
II-VR214-TRIGGERFISH-TM-D	2.8465	0.6260	78
II-VR214-TRIGGERFISH-TM-E	2.5537	0.5862	77
Procedural Blanks	Arsenic (µg/g)	Cadmium (µg/g)	
Procedural Blank #1	ND	ND	
Procedural Blank #2	ND	ND	
Percent Spike Recovery	Arsenic (%)	Cadmium (%)	
II-VR214-TRIGGERFISH-TM-D	94	114	
II-VR214-TRIGGERFISH-TM-E	88	97	

Sample ID	Tissue wet weight (g)	Tissue dry weight (g)	Percent Water Content
II-EC229-REDSNAPPER-TM-A	2.6149	0.5736	78
II-EC229-REDSNAPPER-TM-B	2.5006	0.5502	78
II-EC229-REDSNAPPER-TM-C	2.5740	0.5606	78
II-EC229-REDSNAPPER-TM-D	2.8220	0.6209	78
II-EC229-REDSNAPPER-TM-E #1	2.7028	0.5884	78
II-EC229-REDSNAPPER-TM-E #2	2.5322	0.5513	
II-HI376-REDSNAPPER-TM-A	2.5335	0.6111	76
II-HI376-REDSNAPPER-TM-B	2.7470	0.6529	76
II-HI376-REDSNAPPER-TM-B2 of 2	2.8706	0.6431	78
II-HI376-REDSNAPPER-TM-C	2.6769	0.6203	77
II-HI376-REDSNAPPER-TM-D	2.7470	0.6020	78
II-HI376-REDSNAPPER-TM-E	2.5805	0.6119	76
II-SMI72-REDSNAPPER-TM-A	2.6555	0.5660	79
II-SMI72-REDSNAPPER-TM-B	2.5875	0.5556	79
II-SMI72-REDSNAPPER-TM-C	2.5849	0.5930	77
II-SMI72-REDSNAPPER-TM-D	2.8478	0.6121	79
II-SMI72-REDSNAPPER-TM-E	2.5812	0.5614	78
II-ST128-REDSNAPPER-TM-A	2.5091	0.5513	78
II-ST128-REDSNAPPER-TM-B	2.5551	0.5732	78
II-ST128-REDSNAPPER-TM-C	2.5922	0.5933	77
II-ST128-REDSNAPPER-TM-D	2.6255	0.5961	77
II-ST128-REDSNAPPER-TM-E	2.5107	0.5589	78

Table A-410. (Continued).

Sample ID	Tissue wet weight (g)	Tissue dry weight (g)	Percent Water Content
II-ST130-REDSNAPPER-TM-A	2.5684	0.5820	77
II-ST130-REDSNAPPER-TM-B	2.5381	0.5778	77
II-ST130-REDSNAPPER-TM-C	2.5509	0.5722	78
II-ST130-REDSNAPPER-TM-D	2.7101	0.6073	78
II-VR214-REDSNAPPER-TM-A	2.8929	0.6530	77
II-VR214-REDSNAPPER-TM-B	2.5983	0.5916	77
II-VR214-REDSNAPPER-TM-C	2.6830	0.5807	78
II-VR214-REDSNAPPER-TM-D	2.5600	0.5728	78
II-VR214-REDSNAPPER-TM-E #1	2.5349	0.5588	78
II-VR214-REDSNAPPER-TM-E #2	2.7113	0.5977	
II-VR245-REDSNAPPER-TM-A	2.7562	0.5896	79
II-VR245-REDSNAPPER-TM-B	2.5577	0.5801	77
II-VR245-REDSNAPPER-TM-C	2.8038	0.6191	78
II-VR245-REDSNAPPER-TM-D	2.5150	0.5766	77
II-VR245-REDSNAPPER-TM-E	2.6576	0.5952	78
II-WC587-REDSNAPPER-TM-A	2.6661	0.6043	77
II-WC587-REDSNAPPER-TM-C	2.7418	0.6322	77
II-WC587-REDSNAPPER-TM-D	2.6181	0.5975	77
II-WC587-REDSNAPPER-TM-E	2.6689	0.6106	77
II-WC587-REDSNAPPER-TM-E2 of 2	3.0739	0.7118	77
Procedural Blanks	Arsenic (µg/g)	Cadmium (µg/g)	
Procedural Blank #1	ND	ND	
Procedural Blank #2	ND	ND	
Percent Spike Recovery	Arsenic (%)	Cadmium (%)	
II-WC587-REDSNAPPER-TM-E	105	106	
II-WC587-REDSNAPPER-TM-E2 of 2	105	110	

Sample ID	Tissue wet weight (g)	Tissue dry weight (g)	Percent Water Content
II-SMI229-OYSTER-TM-A	4.9528	0.6770	86
II-SMI229-OYSTER-TM-B	4.4747	0.7307	84
II-SMI229-OYSTER-TM-C	4.7715	0.7360	85
II-SMI229-OYSTER-TM-D	4.9586	0.7396	85
II-SMI229-OYSTER-TM-E	6.7847	1.0172	85
II-VR31-OYSTER-TM-A	5.0253	0.7524	85
II-VR31-OYSTER-TM-B	4.4762	0.6716	85
II-VR31-OYSTER-TM-C	4.4748	0.7029	84
II-VR31-OYSTER-TM-D	4.7134	0.7377	84
II-VR31-OYSTER-TM-E	5.0870	0.7038	86
II-VR31-OYSTER-TM-E2 of 2	5.4950	0.7609	86
II-ST130-REDSNAPPER-TM-E	3.7693	0.8893	76
Procedural Blanks	Arsenic (µg/g)	Cadmium (µg/g)	
Procedural Blank #1	0.07	ND	
Procedural Blank #2	ND	ND	
Percent Spike Recovery	Arsenic (%)	Cadmium (%)	
II-EB165-DEF-CHUB-TM-A #1	101	101	
II-EI361-DEF-CHUB-TM-A #1	100	102	

Table A-410. (Continued).

Sample ID	Tissue wet weight (g)	Tissue dry weight (g)	Percent Water Content
II-EB165-CHUB-TM-A	3.7955	0.8316	78
II-EB165-CHUB-TM-B #1	3.4956	0.8100	77
II-EB165-CHUB-TM-B #2	3.6228	0.8394	
II-EB165-CHUB-TM-C	3.7696	0.8364	78
II-EB165-CHUB-TM-D	3.5376	0.8000	77
II-EB165-CHUB-TM-E	3.7339	0.8424	77
II-EI360-CHUB-TM-A	3.6722	0.7864	79
II-EI360-CHUB-TM-F	3.5257	0.8736	75
II-EI360-CHUB-TM-G	3.5910	1.0163	72
II-EI360-CHUB-TM-H	4.1305	1.0438	75
II-EI360-CHUB-TM-I	3.6490	0.9305	75
II-EI361-CHUB-TM-A	3.8771	1.0812	72
II-EI361-CHUB-TM-B	3.6410	0.8553	77
II-EI361-CHUB-TM-C	3.6198	0.9100	75
II-EI361-CHUB-TM-D	3.6277	0.8726	76
II-EI361-CHUB-TM-E	3.9561	0.9017	77
II-GC19-CHUB-TM-A	3.7066	0.8272	78
II-GC19-CHUB-TM-B	3.4694	0.8319	76
II-GC19-CHUB-TM-C	3.5839	0.8158	77
II-GC19-CHUB-TM-D	3.5893	0.8655	76
II-GC19-CHUB-TM-E	3.5497	0.9579	73
II-HI356-CHUB-TM-A	3.8550	0.9292	76
II-HI356-CHUB-TM-B #1	3.6312	0.9451	74
II-HI356-CHUB-TM-B #2	3.6086	0.9392	
II-HI356-CHUB-TM-C	3.6781	0.8538	77
II-HI356-CHUB-TM-D	3.8224	0.9169	76
II-HI356-CHUB-TM-E	3.5480	0.8201	77
II-HI382-CHUB-TM-A	3.5956	0.8998	75
II-HI382-CHUB-TM-B	3.8710	0.9434	76
II-HI382-CHUB-TM-C	3.7629	1.1131	70
II-HI382-CHUB-TM-D	4.0163	0.9132	77
II-HI382-CHUB-TM-F	3.7797	0.9681	74
II-HI553-CHUB-TM-A	3.5408	0.8273	77
II-HI553-CHUB-TM-B	4.0020	0.9481	76
II-HI553-CHUB-TM-C	3.9709	0.8721	78
II-HI553-CHUB-TM-D	3.6122	0.8715	76
II-HI553-CHUB-TM-E	3.7465	0.8725	77
II-SS277-CHUB-TM-A	3.5358	0.9841	72
II-SS277-CHUB-TM-E	3.5798	0.8812	75
II-SS277-CHUB-TM-F	3.5200	0.8162	77
II-SS277-CHUB-TM-G	3.6681	0.9519	74
II-SS277-CHUB-TM-I	3.5260	0.8810	75
Procedural Blanks			
	Arsenic (µg/g)	Cadmium (µg/g)	
Procedural Blank #1	ND	ND	
Procedural Blank #2	ND	ND	
Percent Spike Recovery			
	Arsenic (%)	Cadmium (%)	
II-EB165-CHUB-TM-A	97	103	
II-EI361-CHUB-TM-A	100	94	

Table A-410. (Continued).

Sample ID	Tissue wet weight (g)	Tissue dry weight (g)	Percent Water Content
II-EB165-CREOLEFISH-TM-A	3.6751	0.7381	80
II-EB165-CREOLEFISH-TM-B	3.3663	0.6986	79
II-EB165-CREOLEFISH-TM-C	3.2042	0.6583	79
II-EB165-CREOLEFISH-TM-D	3.2749	0.6521	80
II-EB165-CREOLEFISH-TM-E	3.8168	0.7522	80
II-EI360-CREOLEFISH-TM-F	3.4225	0.7958	77
II-EI360-CREOLEFISH-TM-G	3.5629	0.7202	80
II-EI360-CREOLEFISH-TM-H	3.9587	0.8007	80
II-EI360-CREOLEFISH-TM-I	3.3415	0.6690	80
II-EI360-CREOLEFISH-TM-J	3.6573	0.8018	78
II-EI361-CREOLEFISH-TM-A	3.4292	0.7157	79
II-EI361-CREOLEFISH-TM-B	3.3493	0.6760	80
II-EI361-CREOLEFISH-TM-C	3.3927	0.7044	79
II-EI361-CREOLEFISH-TM-D	3.1501	0.5703	82
II-EI361-CREOLEFISH-TM-E	3.7015	0.7033	81
II-GC19-CREOLEFISH-TM-F	3.5805	0.7604	79
II-GC19-CREOLEFISH-TM-G	3.4399	0.6973	80
II-GC19-CREOLEFISH-TM-H	4.4254	0.9152	79
II-GC19-CREOLEFISH-TM-I #1	3.7463	0.8062	78
II-GC19-CREOLEFISH-TM-I #2	3.8615	0.8310	
II-GC19-CREOLEFISH-TM-J	3.5914	0.7371	79
II-HI356-CREOLEFISH-TM-A	3.8166	0.8009	79
II-HI356-CREOLEFISH-TM-B	3.9025	0.8216	79
II-HI356-CREOLEFISH-TM-C	3.4767	0.8003	77
II-HI356-CREOLEFISH-TM-D	3.7475	0.7768	79
II-HI356-CREOLEFISH-TM-E	3.9695	0.7710	81
II-HI382-CREOLEFISH-TM-A #1	3.2457	0.6504	80
II-HI382-CREOLEFISH-TM-A #2	3.3034	0.6620	
II-HI382-CREOLEFISH-TM-B	3.2258	0.6644	79
II-HI382-CREOLEFISH-TM-E	3.3630	0.6749	80
II-HI382-CREOLEFISH-TM-F	3.5470	0.7223	80
II-HI382-CREOLEFISH-TM-I	3.8741	0.7795	80
II-HI553-CREOLEFISH-TM-F	3.2667	0.6998	79
II-HI553-CREOLEFISH-TM-G	4.1415	0.9529	77
II-HI553-CREOLEFISH-TM-H	3.2307	0.6837	79
II-HI553-CREOLEFISH-TM-I	3.2911	0.7121	78
II-HI553-CREOLEFISH-TM-J	4.3380	0.8823	80
II-SS277-CREOLEFISH-TM-E	3.4598	0.7043	80
II-SS277-CREOLEFISH-TM-F	3.3564	0.7833	77
II-SS277-CREOLEFISH-TM-G	3.4604	0.6962	80
II-SS277-CREOLEFISH-TM-I	3.4935	0.7481	79
II-SS277-CREOLEFISH-TM-J	3.6494	0.7836	79
Procedural Blanks			
	Arsenic (µg/g)	Cadmium (µg/g)	
Procedural Blank #1	0.12	ND	
Procedural Blank #2	ND	ND	
Percent Spike Recovery			
	Arsenic (%)	Cadmium (%)	
II-EB165-CREOLEFISH-TM-A	101	103	
II-EI360-CREOLEFISH-TM-F	98	121	



Table A-410. (Continued).

Sample ID	Tissue wet weight (g)	Tissue dry weight (g)	Percent Water Content
III-EI100-CATFISH-TM-A	3.3388	0.7836	77
III-EI100-CATFISH-TM-B	3.7474	0.9001	76
III-EI100-CATFISH-TM-C	3.5744	0.8311	77
III-EI100-CATFISH-TM-D	3.3500	0.8162	76
III-EI100-CATFISH-TM-E	3.2923	0.7698	77
III-SS100-CATFISH-TM-C	3.4674	0.8292	76
III-SS100-CATFISH-TM-D	3.6750	0.8926	76
III-SS100-CATFISH-TM-E	3.5934	0.7786	78
III-SS100-CATFISH-TM-I #1	3.6865	0.8225	78
III-SS100-CATFISH-TM-I #2	3.8361	0.8519	78
III-SS100-CATFISH-TM-J	3.4323	0.7636	78
III-HI376-CHUB-TM-A	4.1125	0.9483	77
III-HI376-CHUB-TM-B	3.6584	0.7839	79
III-HI376-CHUB-TM-C	3.5366	0.7441	79
III-HI376-CHUB-TM-D	3.4706	0.7779	78
III-HI376-CHUB-TM-E	3.5410	0.7666	78
III-WC587-CHUB-TM-A	4.4634	1.2341	72
III-WC587-CHUB-TM-B	3.6070	0.9890	73
III-WC587-CHUB-TM-C #1	3.7583	0.9458	75
III-WC587-CHUB-TM-C #2	3.7311	0.9259	75
III-WC587-CHUB-TM-D	3.7335	0.9285	75
III-WC587-CHUB-TM-E	3.5452	0.9101	74
III-HI376-ROCKHIND-TM-A	3.4711	0.8111	77
III-HI376-ROCKHIND-TM-B	3.6352	0.8159	78
III-HI376-ROCKHIND-TM-C	3.5747	0.8013	78
III-HI376-ROCKHIND-TM-D	3.8099	0.8089	79
III-HI376-ROCKHIND-TM-E	3.4069	0.8128	76
III-WC587-ROCKHIND-TM-C	3.7474	0.8430	78
III-WC587-ROCKHIND-TM-D	3.6232	0.7902	78
III-WC587-ROCKHIND-TM-E	3.6053	0.7983	78
III-WC587-ROCKHIND-TM-I	3.6620	0.8836	76
III-WC587-ROCKHIND-TM-J	3.6900	0.8269	78
III-EI100-SHEEPSHEAD-TM-A	3.5425	0.7998	77
III-EI100-SHEEPSHEAD-TM-B	3.6575	0.7549	79
III-EI100-SHEEPSHEAD-TM-C	3.8871	0.8569	78
III-EI100-SHEEPSHEAD-TM-D	3.6178	0.8184	77
III-EI100-SHEEPSHEAD-TM-E	3.6902	0.7946	78
III-SS100-SHEEPSHEAD-TM-A	3.7679	0.7893	79
III-SS100-SHEEPSHEAD-TM-B	3.5993	0.7045	80
III-SS100-SHEEPSHEAD-TM-C	3.4951	0.7803	78
III-SS100-SHEEPSHEAD-TM-D	3.7499	0.8547	77
III-SS100-SHEEPSHEAD-TM-E	3.6080	0.8248	77
Procedural Blanks			
	Arsenic (µg/g)	Cadmium (µg/g)	
Procedural Blank #1	ND	ND	
Procedural Blank #2	0.12	ND	
Percent Spike Recovery			
	Arsenic (%)	Cadmium (%)	
III-EI100-CATFISH-TM-A	92	104	
III-HI376-ROCKHIND-TM-A	95	102	

Table A-410. (Continued).

Sample ID	Tissue wet weight (g)	Tissue dry weight (g)	Percent Water Content
III-SMI172-REDSNAPPER-TM-A	3.5830	0.8231	77
III-SMI172-REDSNAPPER-TM-B	3.5438	0.8154	77
III-SMI172-REDSNAPPER-TM-C #1	3.5787	0.8162	77
III-SMI172-REDSNAPPER-TM-C #2	3.4987	0.7931	77
III-SMI172-REDSNAPPER-TM-D	3.6929	0.8560	77
III-SMI172-REDSNAPPER-TM-E	3.6840	0.8346	77
III-VR245-REDSNAPPER-TM-A	3.7815	0.8930	76
III-VR245-REDSNAPPER-TM-B	3.6082	0.8219	77
III-VR245-REDSNAPPER-TM-C	4.3092	1.0306	76
III-VR245-REDSNAPPER-TM-D	3.5359	0.8783	75
III-VR245-REDSNAPPER-TM-E	3.6393	0.8498	77
III-SMI172-TRIGGERFISH-TM-A	3.6505	0.8114	78
III-SMI172-TRIGGERFISH-TM-B	3.6084	0.8264	77
III-SMI172-TRIGGERFISH-TM-C	3.7709	0.8255	78
III-SMI172-TRIGGERFISH-TM-D	3.4975	0.7507	79
III-SMI172-TRIGGERFISH-TM-E	3.8523	0.8265	79
III-VR245-TRIGGERFISH-TM-A	3.6753	0.8062	78
III-VR245-TRIGGERFISH-TM-B	3.8711	0.8561	78
III-VR245-TRIGGERFISH-TM-C	3.6320	0.8143	78
III-VR245-TRIGGERFISH-TM-D	4.2599	0.9282	78
III-VR245-TRIGGERFISH-TM-E	4.0009	0.9058	77
Procedural Blanks	Arsenic (µg/g)	Cadmium (µg/g)	
Procedural Blank #1	0.11	ND	
Procedural Blank #2	0.10	ND	
Percent Spike Recovery	Arsenic (%)	Cadmium (%)	
III-SMI172-REDSNAPPER-TM-A	107	125	

Sample ID	Tissue wet weight (g)	Tissue dry weight (g)	Percent Water Content
III-EI330-CREOLEFISH-TM-A	3.9019	0.8072	79
III-EI330-CREOLEFISH-TM-B	3.5879	0.7505	79
III-EI330-CREOLEFISH-TM-C	3.9941	0.8637	78
III-EI330-CREOLEFISH-TM-D	3.4836	0.7446	79
III-EI330-CREOLEFISH-TM-E	3.4298	0.6982	80
III-EI352-CREOLEFISH-TM-F	3.4481	0.7015	80
III-EI352-CREOLEFISH-TM-G	3.4386	0.7071	79
III-EI352-CREOLEFISH-TM-H	3.5242	0.7298	79
III-EI352-CREOLEFISH-TM-I	3.8006	0.7871	79
III-EI352-CREOLEFISH-TM-J #1	3.6204	0.7447	79
III-EI352-CREOLEFISH-TM-J #2	3.4465	0.7205	79
III-HI382-CREOLEFISH-TM-B	3.5257	0.7444	79
III-HI382-CREOLEFISH-TM-C	3.6379	0.8200	77
III-HI382-CREOLEFISH-TM-D	3.4889	0.7633	78
III-HI382-CREOLEFISH-TM-E	3.5056	0.7152	80
III-HI382-CREOLEFISH-TM-F #1	3.4338	0.7370	79
III-HI382-CREOLEFISH-TM-F #2	3.5963	0.7872	78
III-HI553-CREOLEFISH-TM-F	3.7882	0.8296	78
III-HI553-CREOLEFISH-TM-G	3.6399	0.7474	79
III-HI553-CREOLEFISH-TM-H	3.5085	0.7469	79

Table A-410. (Continued).

Sample ID	Tissue wet weight (g)	Tissue dry weight (g)	Percent Water Content
III-HI553-CREOLEFISH-TM-I	3.6320	0.7759	79
III-HI553-CREOLEFISH-TM-J	3.4461	0.7350	79
III-MC194-CREOLEFISH-TM-A	3.4721	0.7428	79
III-MC194-CREOLEFISH-TM-B	3.4983	0.7111	80
III-MC194-CREOLEFISH-TM-C	3.7981	0.8431	78
III-MC194-CREOLEFISH-TM-D	3.6261	0.7256	80
III-MC194-CREOLEFISH-TM-E	3.5120	0.7108	80
III-MC280-CREOLEFISH-TM-A	3.8532	0.7957	79
III-MC280-CREOLEFISH-TM-B	3.6274	0.7294	80
III-MC280-CREOLEFISH-TM-C	3.5912	0.7646	79
III-MC280-CREOLEFISH-TM-D	3.6510	0.7397	80
III-MC280-CREOLEFISH-TM-E	3.5396	0.7609	79
III-SMI229-CATFISH-TM-A	4.0859	0.9996	76
III-SMI229-CATFISH-TM-B	3.5080	0.7757	78
III-SMI229-CATFISH-TM-C	3.5138	0.8822	75
III-SMI229-CATFISH-TM-D	3.5345	0.9816	72
III-SMI229-CATFISH-TM-E	3.7310	0.8413	77
III-VR31-CATFISH-TM-B	3.6646	0.8847	76
III-VR31-CATFISH-TM-C	3.6219	0.8067	78
III-VR31-CATFISH-TM-D	3.5334	0.8560	76
III-VR31-CATFISH-TM-E	3.4753	0.8638	75
III-VR31-CATFISH-TM-F	3.6197	0.8640	76
Procedural Blanks	Arsenic (µg/g)	Cadmium (µg/g)	
Procedural Blank #1	ND	ND	
Procedural Blank #2	ND	ND	
Percent Spike Recovery	Arsenic (%)	Cadmium (%)	
III-EI330-CREOLEFISH-TM-A	96	104	
III-SMI229-CATFISH-TM-A	101	112	

Sample ID	Tissue wet weight (g)	Tissue dry weight (g)	Percent Water Content
III-EI330-CHUB-TM-A	3.8317	0.9373	76
III-EI330-CHUB-TM-B #1	3.4886	0.8668	75
III-EI330-CHUB-TM-B #2	3.7091	0.9491	74
III-EI330-CHUB-TM-C	3.4805	1.0366	70
III-EI330-CHUB-TM-D	3.6999	0.8593	77
III-EI330-CHUB-TM-E	3.6251	0.7840	78
III-EI352-CHUB-TM-B	3.7330	0.8728	77
III-EI352-CHUB-TM-C	3.7323	0.9072	76
III-EI352-CHUB-TM-D	3.6451	0.8840	76
III-EI352-CHUB-TM-E	3.5384	0.8690	75
III-EI352-CHUB-TM-F	3.4804	0.8263	76
III-HI382-CHUB-TM-A	3.5239	0.8204	77
III-HI382-CHUB-TM-B	3.5689	0.8537	76
III-HI382-CHUB-TM-C	3.9360	0.9907	75
III-HI382-CHUB-TM-D	3.5823	1.2518	65
III-HI382-CHUB-TM-E	3.9413	0.8897	77
III-HI553-CHUB-TM-A	3.5734	0.8643	76
III-HI553-CHUB-TM-B	3.6426	0.8528	77

Table A-410. (Continued).

Sample ID	Tissue wet weight (g)	Tissue dry weight (g)	Percent Water Content
III-HI553-CHUB-TM-C	3.5563	0.8079	77
III-HI553-CHUB-TM-D	3.5228	0.8126	77
III-HI553-CHUB-TM-E	3.4929	0.8394	76
III-ST128-SPADEFISH-TM-A	3.5162	0.7433	79
III-ST128-SPADEFISH-TM-B	3.6527	0.8000	78
III-ST128-SPADEFISH-TM-C	3.6389	0.8098	78
III-ST128-SPADEFISH-TM-D	3.7897	0.7802	79
III-ST128-SPADEFISH-TM-E	3.5113	0.7997	77
III-ST130-SPADEFISH-TM-A	3.6994	0.8282	78
III-ST130-SPADEFISH-TM-B	3.6224	0.8330	77
III-ST130-SPADEFISH-TM-C #1	3.8749	0.8572	78
III-ST130-SPADEFISH-TM-C #2	3.6238	0.8168	77
III-ST130-SPADEFISH-TM-D	3.5373	0.7696	78
III-ST130-SPADEFISH-TM-E	3.9910	0.9035	77
III-MC194-TRIGGERFISH-TM-A	3.7905	0.8050	79
III-MC194-TRIGGERFISH-TM-B	3.5398	0.7561	79
III-MC194-TRIGGERFISH-TM-C	3.5196	0.7804	78
III-MC194-TRIGGERFISH-TM-D	3.8954	0.9015	77
III-MC194-TRIGGERFISH-TM-E	3.8804	0.8596	78
III-MC280-TRIGGERFISH-TM-A	3.8450	0.8594	78
III-MC280-TRIGGERFISH-TM-B	3.6618	0.8080	78
III-MC280-TRIGGERFISH-TM-C	4.0970	0.9046	78
III-MC280-TRIGGERFISH-TM-D	3.8111	0.8888	77
III-MC280-TRIGGERFISH-TM-E	4.7143	1.0797	77
Procedural Blanks	Arsenic ( $\mu\text{g/g}$ )	Cadmium ( $\mu\text{g/g}$ )	
Procedural Blank #1	0.07	ND	
Percent Spike Recovery	Arsenic (%)	Cadmium (%)	
III-EI330-CHUB-TM-A	96	96	
III-MC194-TRIGGERFISH-TM-A	95	102	

Sample ID	Tissue wet weight (g)	Tissue dry weight (g)	Percent Water Content
III-SMI229-BLUECRAB-TM-A	3.6829	0.7376	80
III-VR31-BLUECRAB-TM-A	3.7923	0.7440	80
III-VR31-BLUECRAB-TM-B	3.5945	0.6453	82
III-VR31-BLUECRAB-TM-C #1	3.5611	0.6859	81
III-VR31-BLUECRAB-TM-C #2	3.6744	0.6973	81
III-VR31-BLUECRAB-TM-D	3.7116	0.6874	81
III-VR31-BLUECRAB-TM-E	3.6863	0.7110	81
III-SMI229-OYSTER-TM-A	3.5103	0.5029	86
III-SMI229-OYSTER-TM-B	4.1635	0.5071	88
III-SMI229-OYSTER-TM-C	3.8833	0.5023	87
III-SMI229-OYSTER-TM-D	3.6113	0.3727	90
III-SMI229-OYSTER-TM-E	3.5806	0.3586	90
III-VR31-OYSTER-TM-A #1	3.7898	0.4527	88
III-VR31-OYSTER-TM-A #2	3.6835	0.4327	88
III-VR31-OYSTER-TM-B	5.9391	0.4626	92
III-VR31-OYSTER-TM-C	3.9723	0.3981	90
III-VR31-OYSTER-TM-D	4.1208	0.4469	89

Table A-410. (Continued).

Sample ID	Tissue wet weight (g)	Tissue dry weight (g)	Percent Water Content
III-VR31-OYSTER-TM-E	3.8955	0.4053	90
III-ST128-REDSNAPPER-TM-A	3.7673	0.8784	77
III-ST128-REDSNAPPER-TM-B	3.9939	0.9497	76
III-ST128-REDSNAPPER-TM-C	3.7000	0.8775	76
III-ST128-REDSNAPPER-TM-D	3.5453	0.8000	77
III-ST128-REDSNAPPER-TM-E	3.6113	0.8781	76
III-ST130-REDSNAPPER-TM-A	3.8465	0.8950	77
III-ST130-REDSNAPPER-TM-B	3.5434	0.8422	76
III-ST130-REDSNAPPER-TM-C	3.7433	0.8719	77
III-ST130-REDSNAPPER-TM-D	3.6659	0.8721	76
III-ST130-REDSNAPPER-TM-E	3.6912	0.8483	77
II-WC587-REDSNAPPER-TM-B	3.5221	0.8248	77
Procedural Blanks			
	Arsenic ( $\mu\text{g/g}$ )	Cadmium ( $\mu\text{g/g}$ )	
Procedural Blank #1	0.09	ND	
Procedural Blank #2	0.09	ND	
Percent Spike Recovery			
	Arsenic (%)	Cadmium (%)	
III-SMI229-BLUECRAB-TM-A	89	92	
III-ST128-REDSNAPPER-TM-A	98	86	

ND=Concentration below the method detection limit.

Table A-411. Sample specific data for tissue samples analyzed for mercury with results for procedural blanks and matrix spike samples.

Sample ID	Tissue wet weight (g)	Tissue dry weight (g)	Percent Water Content
I-EB165-CREOLEFISH-TM-A	2.016	0.3977	80
I-EB165-CREOLEFISH-TM-B	2.139	0.4484	79
I-EB165-CREOLEFISH-TM-C	2.744	0.5755	79
I-EI361-CREOLEFISH-TM-A	2.077	0.4506	78
I-EI361-CREOLEFISH-TM-B1	1.931	0.4029	79
I-EI361-CREOLEFISH-TM-C	2.334	0.5028	78
I-EI361-CREOLEFISH-TM-D	2.111	0.5675	73
I-EI361-CREOLEFISH-TM-E	2.148	0.4426	79
I-GC19-CREOLEFISH-TM-A	1.815	0.3657	80
I-GC19-CREOLEFISH-TM-B	3.046	0.6328	79
I-GC19-CREOLEFISH-TM-C	2.089	0.4044	81
I-GC19-CREOLEFISH-TM-D	2.229	0.4643	79
I-GC19-CREOLEFISH-TM-E	2.608	0.5438	79
I-HI356-CREOLEFISH-TM-A	2.264	0.4709	79
I-HI356-CREOLEFISH-TM-B	1.907	0.3954	79
I-HI356-CREOLEFISH-TM-C	2.749	0.7719	72
<b>Procedural Blanks</b>			
	<b>Mercury (µg/g)</b>		
Procedural Blank #1	ND		
Procedural Blank #2	ND		
<b>Percent Spike Recovery</b>			
	<b>Mercury (%)</b>		
I-EI360-CREOLEFISH-TM-A	101		
I-GC19-CREOLEFISH-TM-A	93		
I-SS277-CREOLEFISH-TM-A	93		

Table A-411. (Continued).

Sample ID	Tissue wet weight (g)	Tissue dry weight (g)	Percent Water Content
I-EB165-CHUB-TM-A	1.6212	0.3814	76
I-EB165-CHUB-TM-B	1.4555	0.3419	77
I-EB165-CHUB-TM-C	1.6192	0.4045	75
I-EI360-CHUB-TM-A	1.4649	0.3923	73
I-EI360-CHUB-TM-B	1.7774	0.4737	73
I-EI360-CHUB-TM-C	1.7059	0.4359	74
I-EI360-CHUB-TM-D	1.5616	0.3951	75
I-EI360-CHUB-TM-E	1.5694	0.4125	74
I-EI361-CHUB-TM-A	1.8652	0.4482	76
I-EI361-CHUB-TM-B	2.1382	0.5393	75
I-EI361-CHUB-TM-C	1.4326	0.4703	67
I-EI361-CHUB-TM-D	1.6079	0.4561	72
I-EI361-CHUB-TM-E	1.5505	0.3925	75
I-GC19-CHUB-TM-A	1.8743	0.4683	75
I-GC19-CHUB-TM-B	1.9798	0.5385	73
I-GC19-CHUB-TM-C	1.7628	0.4893	72
I-GC19-CHUB-TM-D	1.6458	0.4103	75
I-GC19-CHUB-TM-E	1.5250	0.3709	76
I-HI356-CHUB-TM-A	1.5922	0.4124	74
I-HI356-CHUB-TM-B	2.6513	0.6193	77
I-HI356-CHUB-TM-C1	1.5645	0.3658	77
I-SS277-CHUB-TM-A	1.9582	0.6020	69
I-SS277-CHUB-TM-B	1.5499	0.3870	75
I-SS277-CHUB-TM-C	1.5626	0.5260	66
I-SS277-CHUB-TM-D	2.0881	0.4909	76
I-SS277-CHUB-TM-E	1.5348	0.3977	74
Procedural Blanks	Mercury (µg/g)		
Procedural Blank #1	ND		

Sample ID	Tissue wet weight (g)	Tissue dry weight (g)	Percent Water Content
I-EB165-CHUB-TM-D	1.6814	0.4252	75
I-EB165-CHUB-TM-E	1.9857	0.5068	74
I-HI356-CHUB-TM-D	1.4397	0.3615	75
I-HI356-CHUB-TM-E	2.0753	0.5106	75
I-EI165-CREOLEFISH-TM-D	1.9420	0.4131	79
I-EI165-CREOLEFISH-TM-E	1.7323	0.3862	78
I-HI356-CREOLEFISH-TM-D	1.7405	0.3612	79
I-HI356-CREOLEFISH-TM-E	1.4615	0.3299	77
Procedural Blanks	Mercury (µg/g)		
Procedural Blank #1	ND		

Table A-411. (Continued).

Sample ID	Tissue wet weight (g)	Tissue dry weight (g)	Percent Water Content
I-EC229-REDSNAPPER-TM-A	1.7977	0.4307	76
I-EC229-REDSNAPPER-TM-B	1.6281	0.3818	77
I-EC229-REDSNAPPER-TM-C	1.7135	0.3859	77
I-EC229-REDSNAPPER-TM-D	1.6720	0.4105	75
I-EC229-REDSNAPPER-TM-E	1.7041	0.3875	77
I-EI360-REDSNAPPER-TM-A	1.6940	0.4018	76
I-EI360-REDSNAPPER-TM-B	1.9017	0.4645	76
I-EI360-REDSNAPPER-TM-C	1.6315	0.3858	76
I-EI360-REDSNAPPER-TM-D	1.9315	0.4722	76
I-EI360-REDSNAPPER-TM-E	1.6413	0.3797	77
I-SS277-REDSNAPPER-TM-A	1.5928	0.3742	77
I-SS277-REDSNAPPER-TM-B	1.9144	0.4516	76
I-SS277-REDSNAPPER-TM-C	1.6556	0.3913	76
I-SS277-REDSNAPPER-TM-D	1.6737	0.3841	77
I-SS277-REDSNAPPER-TM-E	1.6544	0.3999	76
I-VR214-REDSNAPPER-TM-A	1.8134	0.4301	76
I-VR214-REDSNAPPER-TM-B	1.6948	0.3915	77
I-VR214-REDSNAPPER-TM-C	1.8349	0.4688	74
I-VR214-REDSNAPPER-TM-D	1.8919	0.4241	78
I-VR214-REDSNAPPER-TM-E	1.6839	0.3767	78
I-EC229-TRIGGERFISH-TM-A	1.6127	0.3579	78
I-EC229-TRIGGERFISH-TM-B	1.7670	0.3996	77
I-EC229-TRIGGERFISH-TM-C	1.7290	0.3655	79
I-EC229-TRIGGERFISH-TM-D	1.1310	0.3367	70
I-EC229-TRIGGERFISH-TM-E	1.6146	0.3418	79
I-VR214-TRIGGERFISH-TM-A	1.8615	0.4170	78
I-VR214-TRIGGERFISH-TM-B	1.6074	0.3726	77
I-VR214-TRIGGERFISH-TM-C	1.8035	0.3940	78
I-VR214-TRIGGERFISH-TM-D	1.5452	0.3588	77
I-VR214-TRIGGERFISH-TM-E	1.7202	0.3883	77
Procedural Blanks			
Procedural Blanks		Mercury ( $\mu\text{g/g}$ )	
Procedural Blank #1		ND	



Table A-411. (Continued).

Sample ID	Tissue wet weight (g)	Tissue dry weight (g)	Percent Water Content
II-SMI229-BLUECRAB-TM-A	1.2647	0.2009	84
II-SMI229-BLUECRAB-TM-B	1.5767	0.2903	82
II-SMI229-BLUECRAB-TM-C	2.0875	0.4254	80
II-SMI229-BLUECRAB-TM-D	1.4440	0.3002	79
II-SMI229-BLUECRAB-TM-E	1.3322	0.2565	81
II-VR31-BLUECRAB-TM-A	1.7035	0.3236	81
II-VR31-BLUECRAB-TM-B	1.1991	0.2376	80
II-VR31-BLUECRAB-TM-C	1.7669	0.3547	80
II-VR31-BLUECRAB-TM-D	2.2121	0.4214	81
II-VR31-BLUECRAB-TM-E	2.2398	0.4097	82
II-EI100-SHEEPSHEAD-TM-A	1.6164	0.3410	79
II-EI100-SHEEPSHEAD-TM-B	1.6811	0.3552	79
II-EI100-SHEEPSHEAD-TM-C	1.7805	0.3580	80
II-EI100-SHEEPSHEAD-TM-D	1.4602	0.2897	80
II-EI100-SHEEPSHEAD-TM-E	1.5041	0.3421	77
II-SS100-SHEEPSHEAD-TM-C	1.4777	0.2589	82
II-SS100-SHEEPSHEAD-TM-D	1.6047	0.3289	80
II-SS100-SHEEPSHEAD-TM-E	1.9090	0.3671	81
II-SS100-SHEEPSHEAD-TM-F	1.4588	0.2603	82
II-SS100-SHEEPSHEAD-TM-G	1.9651	0.4036	79
II-EI100-CATFISH-TM-E	1.5774	0.3446	78
II-EI100-CATFISH-TM-F	1.6227	0.3793	77
II-EI100-CATFISH-TM-G	1.4427	0.3353	77
II-EI100-CATFISH-TM-H	1.5358	0.3406	78
II-EI100-CATFISH-TM-I	1.5809	0.3805	76
II-SMI229-CATFISH-TM-A #1	1.4356	0.3134	78
II-SMI229-CATFISH-TM-A #2	1.4571	0.3181	
II-SMI229-CATFISH-TM-B	1.4654	0.3063	79
II-SMI229-CATFISH-TM-C	1.6541	0.3616	78
II-SMI229-CATFISH-TM-F	1.6487	0.3505	79
II-SMI229-CATFISH-TM-G	1.5091	0.3317	78
II-SS100-CATFISH-TM-F #1	1.4636	0.3084	79
II-SS100-CATFISH-TM-F #2	1.5339	0.3232	
II-SS100-CATFISH-TM-G	1.4490	0.3185	78
II-SS100-CATFISH-TM-H	1.5921	0.3540	78
II-SS100-CATFISH-TM-I	1.4914	0.3200	79
II-SS100-CATFISH-TM-J	1.6581	0.3793	77
II-VR31-CATFISH-TM-F	1.6129	0.3438	79
II-VR31-CATFISH-TM-G	1.4865	0.3398	77
II-VR31-CATFISH-TM-H	1.5544	0.3538	77
II-VR31-CATFISH-TM-I	1.4475	0.3148	78
II-VR31-CATFISH-TM-J	1.7671	0.4004	77
<b>Procedural Blanks</b>			
		<b>Mercury (µg/g)</b>	
Procedural Blank #1		ND	
Procedural Blank #2		ND	
<b>Percent Spike Recovery</b>			
		<b>Mercury (%)</b>	
II-VR31-CATFISH-TM-I		100	
II-VR31-CATFISH-TM-J		98	

Table A-411. (Continued).

Sample ID	Tissue wet weight (g)	Tissue dry weight (g)	Percent Water Content
II-EI330-CHUB-TM-A	1.6704	0.3827	77
II-EI330-CHUB-TM-B	1.5520	0.3651	76
II-EI330-CHUB-TM-C	1.9421	0.4913	75
II-EI330-CHUB-TM-D	1.7208	0.4125	76
II-EI330-CHUB-TM-E	1.7231	0.4801	72
II-EI352-CHUB-TM-F	1.4478	0.3438	76
II-EI352-CHUB-TM-G	1.5154	0.3855	75
II-EI352-CHUB-TM-H	1.6530	0.3983	76
II-EI352-CHUB-TM-I	1.5744	0.3483	78
II-EI352-CHUB-TM-J	1.6658	0.4508	73
II-HI376-CHUB-TM-A	1.5964	0.3414	79
II-HI376-CHUB-TM-B	1.8220	0.3766	79
II-HI376-CHUB-TM-C	1.5753	0.3699	77
II-HI376-CHUB-TM-D	1.4450	0.3110	78
II-HI376-CHUB-TM-E	1.8100	0.3969	78
II-MC194-CHUB-TM-A #1	1.5183	0.4162	73
II-MC194-CHUB-TM-A #2	1.5624	0.4283	
II-MC194-CHUB-TM-B	1.5466	0.3941	75
II-MC194-CHUB-TM-C	1.4495	0.3564	75
II-MC194-CHUB-TM-D	1.4611	0.4083	72
II-MC194-CHUB-TM-E	1.5827	0.4168	74
II-MC280-CHUB-TM-A	1.6634	0.3972	76
II-MC280-CHUB-TM-B	1.5803	0.3908	75
II-MC280-CHUB-TM-C	1.5786	0.3692	77
II-MC280-CHUB-TM-D	1.5616	0.3801	76
II-MC280-CHUB-TM-E	1.4927	0.3895	74
II-WC587-CHUB-TM-A	1.7491	0.4175	76
II-WC587-CHUB-TM-B	1.6484	0.4185	75
II-WC587-CHUB-TM-C	1.5606	0.4136	73
II-WC587-CHUB-TM-D	1.5890	0.3650	77
II-WC587-CHUB-TM-I	1.5615	0.4112	74
II-EI352-TRIGGERFISH-TM-A #1	2.3776	0.5469	77
II-EI352-TRIGGERFISH-TM-A #2	2.3099	0.5313	
II-EI352-TRIGGERFISH-TM-B	1.5026	0.3395	77
II-EI352-TRIGGERFISH-TM-C	1.6373	0.3435	79
II-EI352-TRIGGERFISH-TM-D	1.5968	0.3746	77
II-EI352-TRIGGERFISH-TM-E	1.8034	0.3812	79
II-VR245-TRIGGERFISH-TM-C	1.5336	0.3337	78
II-VR245-TRIGGERFISH-TM-D	1.6812	0.3625	78
II-VR245-TRIGGERFISH-TM-E	1.5110	0.3780	75
II-VR245-TRIGGERFISH-TM-F	1.6210	0.3679	77
II-VR245-TRIGGERFISH-TM-G	1.4800	0.3313	78
Procedural Blanks		Mercury (µg/g)	
Procedural Blank #1		ND	
Procedural Blank #2		ND	
Percent Spike Recovery		Mercury (%)	
II-VR245-TRIGGERFISH-TM-F		98	
II-VR245-TRIGGERFISH-TM-G		101	

Table A-411. (Continued).

Sample ID	Tissue wet weight (g)	Tissue dry weight (g)	Percent Water Content
II-EC229-TRIGGERFISH-TM-F	1.8751	0.4103	78
II-EC229-TRIGGERFISH-TM-G	1.4319	0.3291	77
II-EC229-TRIGGERFISH-TM-H #1	1.5899	0.3780	76
II-EC229-TRIGGERFISH-TM-H #2	1.5721	0.3738	
II-EC229-TRIGGERFISH-TM-I	1.8449	0.3826	79
II-EC229-TRIGGERFISH-TM-J	1.5842	0.3423	78
II-EI330-TRIGGERFISH-TM-A	1.5517	0.3368	78
II-EI330-TRIGGERFISH-TM-B	1.5206	0.3288	78
II-EI330-TRIGGERFISH-TM-C	1.6418	0.3435	79
II-EI330-TRIGGERFISH-TM-D	1.7299	0.3864	78
II-EI330-TRIGGERFISH-TM-E	1.5246	0.3322	78
II-MC194-TRIGGERFISH-TM-C	1.7307	0.3830	78
II-MC194-TRIGGERFISH-TM-D	1.4850	0.3199	78
II-MC194-TRIGGERFISH-TM-E #1	1.7820	0.3755	79
II-MC194-TRIGGERFISH-TM-E #2	1.9107	0.4027	
II-MC194-TRIGGERFISH-TM-F	1.6186	0.3831	76
II-MC194-TRIGGERFISH-TM-G	1.6261	0.3724	77
II-MC280-TRIGGERFISH-TM-A	1.7400	0.3747	78
II-MC280-TRIGGERFISH-TM-B	1.7549	0.3630	79
II-MC280-TRIGGERFISH-TM-C	1.5268	0.3356	78
II-MC280-TRIGGERFISH-TM-D	1.5327	0.3660	76
II-MC280-TRIGGERFISH-TM-E	1.6945	0.3752	78
II-SMI72-TRIGGERFISH-TM-A	1.5945	0.3423	79
II-SMI72-TRIGGERFISH-TM-B	1.7178	0.3879	77
II-SMI72-TRIGGERFISH-TM-C	1.5846	0.3322	79
II-SMI72-TRIGGERFISH-TM-D	1.5760	0.3415	78
II-SMI72-TRIGGERFISH-TM-E	1.6183	0.3624	78
II-ST128-TRIGGERFISH-TM-B	1.6076	0.3722	77
II-ST128-TRIGGERFISH-TM-C	1.5842	0.3310	79
II-ST128-TRIGGERFISH-TM-D	1.4549	0.3494	76
II-ST128-TRIGGERFISH-TM-E	1.6023	0.3628	77
II-ST128-TRIGGERFISH-TM-F	1.5419	0.3655	76
II-ST130-TRIGGERFISH-TM-A	1.6956	0.4070	76
II-ST130-TRIGGERFISH-TM-B	1.6024	0.3769	76
II-ST130-TRIGGERFISH-TM-C	2.0436	0.4601	77
II-ST130-TRIGGERFISH-TM-D	1.6401	0.3576	78
II-ST130-TRIGGERFISH-TM-E	1.8250	0.3732	80
II-VR214-TRIGGERFISH-TM-A	1.5649	0.3355	79
II-VR214-TRIGGERFISH-TM-B	1.5346	0.3242	79
II-VR214-TRIGGERFISH-TM-C	1.5979	0.3445	78
II-VR214-TRIGGERFISH-TM-D	1.7443	0.3836	78
II-VR214-TRIGGERFISH-TM-E	1.5182	0.3485	77
<b>Procedural Blanks</b>			
		<b>Mercury (µg/g)</b>	
Procedural Blank #1		ND	
Procedural Blank #2		ND	
<b>Percent Spike Recovery</b>			
		<b>Mercury (%)</b>	
II-VR214-TRIGGERFISH-TM-D		105	
II-VR214-TRIGGERFISH-TM-E		88	

Table A-411. (Continued).

Sample ID	Tissue wet weight (g)	Tissue dry weight (g)	Percent Water Content
II-EC229-REDSNAPPER-TM-A	1.5103	0.3313	78
II-EC229-REDSNAPPER-TM-B	1.4900	0.3278	78
II-EC229-REDSNAPPER-TM-C	1.7734	0.3863	78
II-EC229-REDSNAPPER-TM-D	1.6019	0.3524	78
II-EC229-REDSNAPPER-TM-E #1	1.5719	0.3422	78
II-EC229-REDSNAPPER-TM-E #2	1.7765	0.3867	
II-HI376-REDSNAPPER-TM-A	1.4848	0.3582	76
II-HI376-REDSNAPPER-TM-B	1.5801	0.3756	76
II-HI376-REDSNAPPER-TM-B2 of 2	1.7557	0.3934	78
II-HI376-REDSNAPPER-TM-C	1.5003	0.3476	77
II-HI376-REDSNAPPER-TM-D	1.6436	0.3602	78
II-HI376-REDSNAPPER-TM-E	1.6609	0.3938	76
II-SMI72-REDSNAPPER-TM-A	1.6860	0.3594	79
II-SMI72-REDSNAPPER-TM-B	1.5519	0.3332	79
II-SMI72-REDSNAPPER-TM-C	1.8544	0.4254	77
II-SMI72-REDSNAPPER-TM-D	1.5319	0.3293	79
II-SMI72-REDSNAPPER-TM-E	1.7730	0.3856	78
II-ST128-REDSNAPPER-TM-A	1.6165	0.3552	78
II-ST128-REDSNAPPER-TM-B	1.6186	0.3631	78
II-ST128-REDSNAPPER-TM-C	1.5444	0.3535	77
II-ST128-REDSNAPPER-TM-D	1.6513	0.3749	77
II-ST128-REDSNAPPER-TM-E	1.7382	0.3870	78
II-ST130-REDSNAPPER-TM-A	1.4740	0.3340	77
II-ST130-REDSNAPPER-TM-B	1.5556	0.3542	77
II-ST130-REDSNAPPER-TM-C	1.5597	0.3499	78
II-ST130-REDSNAPPER-TM-D	1.5355	0.3441	78
II-VR214-REDSNAPPER-TM-A	1.5140	0.3418	77
II-VR214-REDSNAPPER-TM-B	1.5609	0.3554	77
II-VR214-REDSNAPPER-TM-C	1.4926	0.3230	78
II-VR214-REDSNAPPER-TM-D	1.5079	0.3374	78
II-VR214-REDSNAPPER-TM-E #1	1.5188	0.3348	78
II-VR214-REDSNAPPER-TM-E #2	1.5047	0.3317	
II-VR245-REDSNAPPER-TM-A	1.4957	0.3200	79
II-VR245-REDSNAPPER-TM-B	1.5799	0.3583	77
II-VR245-REDSNAPPER-TM-C	1.6279	0.3595	78
II-VR245-REDSNAPPER-TM-D	1.8811	0.4313	77
II-VR245-REDSNAPPER-TM-E	1.7778	0.3981	78
II-WC587-REDSNAPPER-TM-A	1.5211	0.3448	77
II-WC587-REDSNAPPER-TM-C	1.5591	0.3595	77
II-WC587-REDSNAPPER-TM-D	1.5020	0.3428	77
II-WC587-REDSNAPPER-TM-E	1.5789	0.3612	77
II-WC587-REDSNAPPER-TM-E2 of 2	1.7631	0.4083	77
Procedural Blanks			
		Mercury (µg/g)	
Procedural Blank #1		ND	
Procedural Blank #2		ND	
Percent Spike Recovery			
		Mercury (%)	
II-WC587-REDSNAPPER-TM-E		99	
II-WC587-REDSNAPPER-TM-E2 of 2		94	

Table A-411. (Continued).

Sample ID	Tissue wet weight (g)	Tissue dry weight (g)	Percent Water Content
II-SMI229-OYSTER-TM-A	2.0469	0.2798	86
II-SMI229-OYSTER-TM-B	2.2850	0.3731	84
II-SMI229-OYSTER-TM-C	2.6775	0.4130	85
II-SMI229-OYSTER-TM-D	3.0544	0.4556	85
II-SMI229-OYSTER-TM-E	2.5875	0.3879	85
II-VR31-OYSTER-TM-A	2.1942	0.3285	85
II-VR31-OYSTER-TM-B	2.6507	0.3977	85
II-VR31-OYSTER-TM-C	2.7452	0.4312	84
II-VR31-OYSTER-TM-D	2.5614	0.4009	84
II-VR31-OYSTER-TM-E	3.1809	0.4401	86
II-VR31-OYSTER-TM-E2 of 2	3.0545	0.4230	86
II-ST130-REDSNAPPER-TM-E	1.6725	0.3946	76
Procedural Blanks		Mercury (µg/g)	
Procedural Blank #1		ND	
Procedural Blank #2		ND	
Percent Spike Recovery		Mercury (%)	
II-SMI229-OYSTER-TM-A		66	
II-SMI229-OYSTER-TM-D		63	
II-VR31-OYSTER-TM-A		65	
II-VR31-OYSTER-TM-E2 of 2		62	
II-ST130-REDSNAPPER-TM-E		87	
II-EB165-DEF-CHAMA-TM-A #1		67	
II-EB165-DEF-CHAMA-TM-B #1		70	
II-EB165-DEF-CHAMA-TM-C #1		70	
II-EI361-DEF-CHAMA-TM-A #1		60	
II-EI361-DEF-CHAMA-TM-C #1		72	
II-GC19-DEF-CHAMA-TM-A #1		74	
II-HI356-DEF-CHAMA-TM-A #1		71	
II-HI356-DEF-CHAMA-TM-C #1		42	
II-HI356-DEF-CHAMA-TM-C #2		72	

Sample ID	Tissue wet weight (g)	Tissue dry weight (g)	Percent Water Content
II-EB165-CHUB-TM-A	2.1157	0.4636	78
II-EB165-CHUB-TM-B #1	2.3913	0.5541	77
II-EB165-CHUB-TM-B #2	2.3173	0.5369	
II-EB165-CHUB-TM-C	2.2008	0.4883	78
II-EB165-CHUB-TM-D	2.3940	0.5414	77
II-EB165-CHUB-TM-E	2.0229	0.4564	77
II-EI360-CHUB-TM-A	2.7185	0.5822	79
II-EI360-CHUB-TM-F	2.0766	0.5145	75
II-EI360-CHUB-TM-G	2.0058	0.5676	72
II-EI360-CHUB-TM-H	2.0295	0.5129	75
II-EI360-CHUB-TM-I	2.2696	0.5787	75
II-EI361-CHUB-TM-A	2.3750	0.6623	72
II-EI361-CHUB-TM-B	2.4755	0.5815	77
II-EI361-CHUB-TM-C	2.3421	0.5888	75
II-EI361-CHUB-TM-D	2.0243	0.4869	76
II-EI361-CHUB-TM-E	2.3320	0.5315	77

Table A-411. (Continued).

Sample ID	Tissue wet weight (g)	Tissue dry weight (g)	Percent Water Content
II-GC19-CHUB-TM-A	2.4050	0.5367	78
II-GC19-CHUB-TM-B	2.4347	0.5838	76
II-GC19-CHUB-TM-C	2.3052	0.5247	77
II-GC19-CHUB-TM-D	2.0787	0.5013	76
II-GC19-CHUB-TM-E	2.3229	0.6269	73
II-HI356-CHUB-TM-A	2.6239	0.6325	76
II-HI356-CHUB-TM-B #1	2.4565	0.6393	74
II-HI356-CHUB-TM-B #2	2.4088	0.6269	
II-HI356-CHUB-TM-C	2.4168	0.5610	77
II-HI356-CHUB-TM-D	2.5840	0.6199	76
II-HI356-CHUB-TM-E	2.4696	0.5708	77
II-HI382-CHUB-TM-A	2.1905	0.5482	75
II-HI382-CHUB-TM-B	2.4535	0.5980	76
II-HI382-CHUB-TM-C	2.2325	0.6604	70
II-HI382-CHUB-TM-D	2.0750	0.4718	77
II-HI382-CHUB-TM-F	2.3496	0.6018	74
II-HI553-CHUB-TM-A	2.5777	0.6023	77
II-HI553-CHUB-TM-B	2.6071	0.6176	76
II-HI553-CHUB-TM-C	2.4068	0.5286	78
II-HI553-CHUB-TM-D	2.1028	0.5073	76
II-HI553-CHUB-TM-E	2.0805	0.4845	77
II-SS277-CHUB-TM-A	2.3110	0.6432	72
II-SS277-CHUB-TM-E	2.1066	0.5186	75
II-SS277-CHUB-TM-F	2.0235	0.4692	77
II-SS277-CHUB-TM-G	2.3340	0.6057	74
II-SS277-CHUB-TM-I	2.1517	0.5376	75
<b>Procedural Blanks</b>			
	<b>Mercury (µg/g)</b>		
Procedural Blank #1	ND		
Procedural Blank #2	ND		
<b>Percent Spike Recovery</b>			
	<b>Mercury (%)</b>		
II-EB165-CHUB-TM-A	65		
II-EI360-CHUB-TM-A	67		
II-EI361-CHUB-TM-A	70		
II-GC19-CHUB-TM-A	72		
II-HI356-CHUB-TM-A	73		
II-HI382-CHUB-TM-B	70		
II-HI553-CHUB-TM-A	70		
II-SS277-CHUB-TM-A	71		

Table A-411. (Continued).

Sample ID	Tissue wet weight (g)	Tissue dry weight (g)	Percent Water Content
II-EB165-CREOLEFISH-TM-A	2.8064	0.5636	80
II-EB165-CREOLEFISH-TM-B	2.3028	0.4779	79
II-EB165-CREOLEFISH-TM-C	2.7492	0.5648	79
II-EB165-CREOLEFISH-TM-D	2.3880	0.4755	80
II-EB165-CREOLEFISH-TM-E	2.6118	0.5147	80
II-EI360-CREOLEFISH-TM-F	2.4925	0.5796	77
II-EI360-CREOLEFISH-TM-G	2.4048	0.4861	80
II-EI360-CREOLEFISH-TM-H	2.5584	0.5175	80
II-EI360-CREOLEFISH-TM-I	2.7784	0.5563	80
II-EI360-CREOLEFISH-TM-J	2.8058	0.6151	78
II-EI361-CREOLEFISH-TM-A	2.7826	0.5807	79
II-EI361-CREOLEFISH-TM-B	3.0264	0.6108	80
II-EI361-CREOLEFISH-TM-C	3.0180	0.6266	79
II-EI361-CREOLEFISH-TM-D	2.6473	0.4793	82
II-EI361-CREOLEFISH-TM-E	2.5007	0.4751	81
II-GC19-CREOLEFISH-TM-F	2.7726	0.5888	79
II-GC19-CREOLEFISH-TM-G	2.9233	0.5926	80
II-GC19-CREOLEFISH-TM-H	2.4448	0.5056	79
II-GC19-CREOLEFISH-TM-I #1	3.4811	0.7491	78
II-GC19-CREOLEFISH-TM-I #2	3.2918	0.7084	
II-GC19-CREOLEFISH-TM-J	2.9624	0.6080	79
II-HI356-CREOLEFISH-TM-A	2.9951	0.6285	79
II-HI356-CREOLEFISH-TM-B	2.8835	0.6071	79
II-HI356-CREOLEFISH-TM-C	2.9846	0.6870	77
II-HI356-CREOLEFISH-TM-D	3.1172	0.6462	79
II-HI356-CREOLEFISH-TM-E	2.8651	0.5565	81
II-HI382-CREOLEFISH-TM-A #1	3.1064	0.6225	80
II-HI382-CREOLEFISH-TM-A #2	3.3452	0.6704	
II-HI382-CREOLEFISH-TM-B	2.9503	0.6077	79
II-HI382-CREOLEFISH-TM-E	2.4308	0.4878	80
II-HI382-CREOLEFISH-TM-F	2.5345	0.5161	80
II-HI382-CREOLEFISH-TM-I	2.3750	0.4779	80
II-HI553-CREOLEFISH-TM-F	2.5761	0.5518	79
II-HI553-CREOLEFISH-TM-G	2.5694	0.5912	77
II-HI553-CREOLEFISH-TM-H	2.9132	0.6166	79
II-HI553-CREOLEFISH-TM-I	2.7404	0.5929	78
II-HI553-CREOLEFISH-TM-J	2.7457	0.5584	80
II-SS277-CREOLEFISH-TM-E	2.6566	0.5408	80
II-SS277-CREOLEFISH-TM-F	2.9714	0.6935	77
II-SS277-CREOLEFISH-TM-G	2.7209	0.5474	80
II-SS277-CREOLEFISH-TM-I	3.0860	0.6608	79
II-SS277-CREOLEFISH-TM-J	2.5207	0.5413	79
<b>Procedural Blanks</b>			
		<b>Mercury (µg/g)</b>	
Procedural Blank #1		ND	
Procedural Blank #2		ND	
<b>Percent Spike Recovery</b>			
		<b>Mercury (%)</b>	
II-EB165-CREOLEFISH-TM-A		74	
II-EI360-CREOLEFISH-TM-F		75	
II-EI361-CREOLEFISH-TM-A		76	

Table A-411. (Continued).

Sample ID	Tissue wet weight (g)	Tissue dry weight (g)	Percent Water Content
II-GC19-CREOLEFISH-TM-F		78	
II-HI356-CREOLEFISH-TM-A		74	
II-HI382-CREOLEFISH-TM-B		73	
II-HI553-CREOLEFISH-TM-F		72	
II-SS277-CREOLEFISH-TM-E		77	

Sample ID	Tissue wet weight (g)	Tissue dry weight (g)	Percent Water Content
III-EI100-CATFISH-TM-A	2.5499	0.5984	77
III-EI100-CATFISH-TM-B	2.5959	0.6235	76
III-EI100-CATFISH-TM-C	2.5877	0.6017	77
III-EI100-CATFISH-TM-D	2.6131	0.6367	76
III-EI100-CATFISH-TM-E	2.5473	0.5956	77
III-SS100-CATFISH-TM-C	2.6546	0.6348	76
III-SS100-CATFISH-TM-D	2.9471	0.7158	76
III-SS100-CATFISH-TM-E	2.5353	0.5493	78
III-SS100-CATFISH-TM-I #1	2.6021	0.5806	78
III-SS100-CATFISH-TM-I #2	2.6435	0.5871	78
III-SS100-CATFISH-TM-J	2.8398	0.6318	78
III-HI376-ROCKHIND-TM-A	2.5077	0.5860	77
III-HI376-ROCKHIND-TM-B	2.5247	0.5667	78
III-HI376-ROCKHIND-TM-C	2.7851	0.6243	78
III-HI376-ROCKHIND-TM-D	2.8974	0.6152	79
III-HI376-ROCKHIND-TM-E	2.7453	0.6550	76
III-WC587-ROCKHIND-TM-C	2.6620	0.5988	78
III-WC587-ROCKHIND-TM-D	2.6767	0.5838	78
III-WC587-ROCKHIND-TM-E	2.6529	0.5874	78
III-WC587-ROCKHIND-TM-I	2.6158	0.6312	76
III-WC587-ROCKHIND-TM-J	2.8519	0.6391	78
III-EI100-SHEEPSHEAD-TM-A	2.7928	0.6305	77
III-EI100-SHEEPSHEAD-TM-B	2.6818	0.5535	79
III-EI100-SHEEPSHEAD-TM-C	2.6354	0.5810	78
III-EI100-SHEEPSHEAD-TM-D	2.7547	0.6232	77
III-EI100-SHEEPSHEAD-TM-E	3.1203	0.6719	78
III-SS100-SHEEPSHEAD-TM-A	2.5549	0.5352	79
III-SS100-SHEEPSHEAD-TM-B	3.1131	0.6093	80
III-SS100-SHEEPSHEAD-TM-C	2.8463	0.6355	78
III-SS100-SHEEPSHEAD-TM-D	2.9051	0.6621	77
III-SS100-SHEEPSHEAD-TM-E	2.5889	0.5918	77
Procedural Blanks		Mercury ( $\mu\text{g/g}$ )	
Procedural Blank #1		ND	
Procedural Blank #2		ND	
Percent Spike Recovery		Mercury (%)	
III-EI100-CATFISH-TM-A		74	
III-SS100-CATFISH-TM-C		80	
III-HI376-ROCKHIND-TM-A		74	
III-WC587-ROCKHIND-TM-C		77	
III-EI100-SHEEPSHEAD-TM-A		82	
III-SS100-SHEEPSHEAD-TM-A		79	



Table A-411. (Continued).

Sample ID	Tissue wet weight (g)	Tissue dry weight (g)	Percent Water Content
III-HI376-CHUB-TM-A	2.4749	0.5707	77
III-HI376-CHUB-TM-B	2.5875	0.5544	79
III-HI376-CHUB-TM-C	2.6975	0.5676	79
III-HI376-CHUB-TM-D	2.5121	0.5631	78
III-HI376-CHUB-TM-E	2.4679	0.5343	78
III-WC587-CHUB-TM-A	2.7232	0.7529	72
III-WC587-CHUB-TM-B	2.4643	0.6757	73
III-WC587-CHUB-TM-C #1	2.6977	0.6789	75
III-WC587-CHUB-TM-C #2	2.4601	0.6105	75
III-WC587-CHUB-TM-D	2.5284	0.6288	75
III-WC587-CHUB-TM-E	2.6873	0.6899	74
III-SMI172-REDSNAPPER-TM-A	2.6998	0.6202	77
III-SMI172-REDSNAPPER-TM-B	2.5528	0.5874	77
III-SMI172-REDSNAPPER-TM-C #1	2.5759	0.5875	77
III-SMI172-REDSNAPPER-TM-C #2	2.6948	0.6109	77
III-SMI172-REDSNAPPER-TM-D	2.7407	0.6353	77
III-SMI172-REDSNAPPER-TM-E	2.5022	0.5669	77
III-VR245-REDSNAPPER-TM-A	2.6243	0.6197	76
III-VR245-REDSNAPPER-TM-B	2.7057	0.6163	77
III-VR245-REDSNAPPER-TM-C	2.8830	0.6895	76
III-VR245-REDSNAPPER-TM-D	2.6632	0.6615	75
III-VR245-REDSNAPPER-TM-E	2.6780	0.6253	77
III-SMI172-TRIGGERFISH-TM-A	2.6419	0.5872	78
III-SMI172-TRIGGERFISH-TM-B	2.4646	0.5644	77
III-SMI172-TRIGGERFISH-TM-C	2.9304	0.6415	78
III-SMI172-TRIGGERFISH-TM-D	2.6946	0.5784	79
III-SMI172-TRIGGERFISH-TM-E	2.6702	0.5729	79
III-VR245-TRIGGERFISH-TM-A	2.6469	0.5806	78
III-VR245-TRIGGERFISH-TM-B	2.5028	0.5535	78
III-VR245-TRIGGERFISH-TM-C	2.7263	0.6112	78
III-VR245-TRIGGERFISH-TM-D	2.5541	0.5565	78
III-VR245-TRIGGERFISH-TM-E	2.5934	0.5871	77
Procedural Blanks		Mercury ( $\mu\text{g/g}$ )	
Procedural Blank #1		ND	
Procedural Blank #2		ND	
Percent Spike Recovery		Mercury (%)	
III-HI376-CHUB-TM-A		68	
III-WC587-CHUB-TM-A		66	
III-SMI172-REDSNAPPER-TM-A		75	
III-VR245-REDSNAPPER-TM-A		74	
III-SMI172-TRIGGERFISH-TM-A		79	
III-VR245-TRIGGERFISH-TM-A		75	

Table A-411. (Continued).

Sample ID	Tissue wet weight (g)	Tissue dry weight (g)	Percent Water Content
III-EI330-CREOLEFISH-TM-A	2.3374	0.4835	79
III-EI330-CREOLEFISH-TM-B	2.2354	0.4676	79
III-EI330-CREOLEFISH-TM-C	2.3518	0.5086	78
III-EI330-CREOLEFISH-TM-D	2.3672	0.5060	79
III-EI330-CREOLEFISH-TM-E	2.4630	0.5014	80
III-EI352-CREOLEFISH-TM-F	2.6630	0.5418	80
III-EI352-CREOLEFISH-TM-G	2.5294	0.5201	79
III-EI352-CREOLEFISH-TM-H	2.5022	0.5182	79
III-EI352-CREOLEFISH-TM-I	2.2770	0.4716	79
III-EI352-CREOLEFISH-TM-J #1	2.2061	0.4575	79
III-EI352-CREOLEFISH-TM-J #2	2.1929	0.4548	79
III-HI382-CREOLEFISH-TM-B	2.2649	0.4782	79
III-HI382-CREOLEFISH-TM-C	2.2236	0.5012	77
III-HI382-CREOLEFISH-TM-D	2.2943	0.5019	78
III-HI382-CREOLEFISH-TM-E	2.2523	0.4595	80
III-HI382-CREOLEFISH-TM-F #1	2.3804	0.5160	78
III-HI382-CREOLEFISH-TM-F #2	2.3233	0.5036	78
III-HI553-CREOLEFISH-TM-F	2.3885	0.5231	78
III-HI553-CREOLEFISH-TM-G	2.3604	0.4847	79
III-HI553-CREOLEFISH-TM-H	2.4404	0.5195	79
III-HI553-CREOLEFISH-TM-I	2.2546	0.4816	79
III-HI553-CREOLEFISH-TM-J	2.2561	0.4812	79
III-MC194-CREOLEFISH-TM-A	2.4314	0.5202	79
III-MC194-CREOLEFISH-TM-B	2.4083	0.4895	80
III-MC194-CREOLEFISH-TM-C	2.2804	0.5062	78
III-MC194-CREOLEFISH-TM-D	2.2524	0.4507	80
III-MC194-CREOLEFISH-TM-E	2.3462	0.4749	80
III-MC280-CREOLEFISH-TM-A	2.3624	0.4878	79
III-MC280-CREOLEFISH-TM-B	2.2821	0.4589	80
III-MC280-CREOLEFISH-TM-C	2.2748	0.4843	79
III-MC280-CREOLEFISH-TM-D	2.4385	0.4940	80
III-MC280-CREOLEFISH-TM-E	2.2894	0.4921	79
III-SMI229-CATFISH-TM-A	2.2617	0.5533	76
III-SMI229-CATFISH-TM-B	2.2781	0.5037	78
III-SMI229-CATFISH-TM-C	2.2517	0.5653	75
III-SMI229-CATFISH-TM-D	2.2803	0.6333	72
III-SMI229-CATFISH-TM-E	2.2075	0.4978	77
III-VR31-CATFISH-TM-B	2.3272	0.5618	76
III-VR31-CATFISH-TM-C	2.2738	0.5064	78
III-VR31-CATFISH-TM-D	2.4514	0.5939	76
III-VR31-CATFISH-TM-E	2.2753	0.5655	75
III-VR31-CATFISH-TM-F	2.3312	0.5564	76
<b>Procedural Blanks</b>			
		<b>Mercury (µg/g)</b>	
Procedural Blank #1		ND	
Procedural Blank #2		ND	
<b>Percent Spike Recovery</b>			
		<b>Mercury (%)</b>	
III-EI330-CREOLEFISH-TM-A		67	
III-EI352-CREOLEFISH-TM-F		70	
III-HI382-CREOLEFISH-TM-B		67	

Table A-411. (Continued).

Sample ID	Tissue wet weight (g)	Tissue dry weight (g)	Percent Water Content
III-HI553-CREOLEFISH-TM-F		70	
III-MC194-CREOLEFISH-TM-A		67	
III-MC280-CREOLEFISH-TM-A		67	
III-SMI229-CATFISH-TM-A		81	
III-VR31-CATFISH-TM-B		74	

Sample ID	Tissue wet weight (g)	Tissue dry weight (g)	Percent Water Content
III-EI330-CHUB-TM-A	2.8283	0.6919	76
III-EI330-CHUB-TM-B #1	2.4802	0.6254	75
III-EI330-CHUB-TM-B #2	3.0827	0.7774	75
III-EI330-CHUB-TM-C	2.5926	0.7722	70
III-EI330-CHUB-TM-D	2.6037	0.6047	77
III-EI330-CHUB-TM-E	2.4783	0.5360	78
III-EI352-CHUB-TM-B	2.3706	0.5543	77
III-EI352-CHUB-TM-C	2.3135	0.5623	76
III-EI352-CHUB-TM-D	2.4046	0.5832	76
III-EI352-CHUB-TM-E	2.3762	0.5836	75
III-EI352-CHUB-TM-F	2.5536	0.6063	76
III-HI382-CHUB-TM-A	2.2394	0.5214	77
III-HI382-CHUB-TM-B	2.3014	0.5505	76
III-HI382-CHUB-TM-C	2.2787	0.5736	75
III-HI382-CHUB-TM-D	2.7865	0.9737	65
III-HI382-CHUB-TM-E	2.6645	0.6015	77
III-HI553-CHUB-TM-A	2.4050	0.5817	76
III-HI553-CHUB-TM-B	2.3252	0.5444	77
III-HI553-CHUB-TM-C	2.6611	0.6045	77
III-HI553-CHUB-TM-D	2.4332	0.5613	77
III-HI553-CHUB-TM-E	2.5419	0.6109	76
III-ST128-SPADEFISH-TM-A	2.3951	0.5063	79
III-ST128-SPADEFISH-TM-B	2.5668	0.5622	78
III-ST128-SPADEFISH-TM-C	2.2878	0.5091	78
III-ST128-SPADEFISH-TM-D	2.3636	0.4866	79
III-ST128-SPADEFISH-TM-E	2.5413	0.5788	77
III-ST130-SPADEFISH-TM-A	2.4450	0.5474	78
III-ST130-SPADEFISH-TM-B	2.5143	0.5782	77
III-ST130-SPADEFISH-TM-C #1	2.2173	0.4951	78
III-ST130-SPADEFISH-TM-C #2	2.2435	0.5010	78
III-ST130-SPADEFISH-TM-D	2.6445	0.5754	78
III-ST130-SPADEFISH-TM-E	2.5371	0.5744	77
III-MC194-TRIGGERFISH-TM-A	2.3971	0.5091	79
III-MC194-TRIGGERFISH-TM-B	2.3979	0.5122	79
III-MC194-TRIGGERFISH-TM-C	2.4619	0.5459	78
III-MC194-TRIGGERFISH-TM-D	2.2521	0.5212	77
III-MC194-TRIGGERFISH-TM-E	2.5048	0.5549	78
III-MC280-TRIGGERFISH-TM-A	2.2460	0.5020	78
III-MC280-TRIGGERFISH-TM-B	2.6499	0.5847	78
III-MC280-TRIGGERFISH-TM-C	2.3234	0.5130	78
III-MC280-TRIGGERFISH-TM-D	2.4705	0.5762	77
III-MC280-TRIGGERFISH-TM-E	2.5558	0.5853	77

Table A-411. (Continued).

Procedural Blanks	Mercury ( $\mu\text{g/g}$ )
Procedural Blank #1	ND
Procedural Blank #2	ND
Percent Spike Recovery	Mercury (%)
III-EI330-CHUB-TM-A	60
III-EI352-CHUB-TM-B	66
III-HI382-CHUB-TM-A	67
III-HI553-CHUB-TM-A	71
III-ST128-SPADEFISH-TM-A	73
III-ST130-SPADEFISH-TM-A	75
III-MC194-TRIGGERFISH-TM-A	67
III-MC280-TRIGGERFISH-TM-A	70

Sample ID	Tissue wet weight (g)	Tissue dry weight (g)	Percent Water Content
III-SMI229-BLUECRAB-TM-A	2.6147	0.5237	80
III-VR31-BLUECRAB-TM-A	2.6724	0.5243	80
III-VR31-BLUECRAB-TM-B	2.8633	0.5140	82
III-VR31-BLUECRAB-TM-C #1	2.7993	0.5352	81
III-VR31-BLUECRAB-TM-C #2	2.8932	0.5532	81
III-VR31-BLUECRAB-TM-D	2.7043	0.5008	81
III-VR31-BLUECRAB-TM-E	2.8846	0.5564	81
III-SMI229-OYSTER-TM-A	2.5920	0.3713	86
III-SMI229-OYSTER-TM-B	2.5513	0.3107	88
III-SMI229-OYSTER-TM-C	2.8889	0.3737	87
III-SMI229-OYSTER-TM-D	2.6083	0.2692	90
III-SMI229-OYSTER-TM-E	2.9795	0.2984	90
III-VR31-OYSTER-TM-A #1	2.6112	0.3093	88
III-VR31-OYSTER-TM-A #2	2.6545	0.3145	88
III-VR31-OYSTER-TM-B	2.6986	0.2102	92
III-VR31-OYSTER-TM-C	2.8211	0.2827	90
III-VR31-OYSTER-TM-D	2.7375	0.2969	89
III-VR31-OYSTER-TM-E	3.1209	0.3247	90
III-ST128-REDSNAPPER-TM-A	2.4565	0.5728	77
III-ST128-REDSNAPPER-TM-B	2.7440	0.6525	76
III-ST128-REDSNAPPER-TM-C	2.5165	0.5968	76
III-ST128-REDSNAPPER-TM-D	2.7545	0.6216	77
III-ST128-REDSNAPPER-TM-E	2.5240	0.6137	76
III-ST130-REDSNAPPER-TM-A	2.7220	0.6334	77
III-ST130-REDSNAPPER-TM-B	2.4096	0.5727	76
III-ST130-REDSNAPPER-TM-C	2.4708	0.5755	77
III-ST130-REDSNAPPER-TM-D	2.5863	0.6153	76
III-ST130-REDSNAPPER-TM-E	2.9521	0.6784	77
II-WC587-REDSNAPPER-TM-B	2.6540	0.6215	77
Procedural Blanks	Mercury ( $\mu\text{g/g}$ )		
Procedural Blank #1	ND		
Procedural Blank #2	ND		
Percent Spike Recovery	Mercury (%)		
III-SMI229-BLUECRAB-TM-A	68		

Table A-411. (Continued).

Sample ID	Tissue wet weight (g)	Tissue dry weight (g)	Percent Water Content
III-VR31-BLUECRAB-TM-A		63	
III-SMI229-OYSTER-TM-A		71	
III-VR31-OYSTER-TM-A #1		74	
III-ST128-REDSNAPPER-TM-A		77	
III-ST130-REDSNAPPER-TM-A		78	
II-WC587-REDSNAPPER-TM-B		82	

ND=Concentration below the method detection limit.

Table A-412. Listing of field and laboratory IDs for tissues samples analyzed for <sup>226</sup>Ra and <sup>228</sup>Ra with method blank, reference standard, and spiked sample IDs.

Sample ID	Field ID	Lab ID	<sup>226</sup> Ra			<sup>228</sup> Ra		
			Blank ID	Standard ID	Spike ID	Blank ID	Standard ID	Spike ID
PSRT-001	I-EB165-CHUB-NORM-A	950111011	MB2R60130	LC1R60130	950111-3	MB2R80130	LC1R80130	950111-18
PSRT-002	I-EB165-CHUB-NORM-B	950108018	MB4R60124	LC2R60124	950108-13	MB4R80124	LC2R80124	950108-13
PSRT-003	I-EB165-CHUB-NORM-C	950110001	MB2R60126	LC1R60126	950110-4	MB2R80126	LC1R80126	950110-19
PSRT-004	I-EB165-CHUB-NORM-D	950202005	MB6R60206	LC3R60206	950202-2	MB6R80206	LC3R80206	950202-10
PSRT-005	I-EB165-CHUB-NORM-E	950202006	MB6R60206	LC3R60206	950202-2	MB6R80206	LC3R80206	950202-10
PSRT-006	I-EB165-CREOLEFISH-NORM-A	950108004	MB4R60124	LC2R60124	950108-13	MB4R80124	LC2R80124	950108-13
PSRT-007	I-EB165-CREOLEFISH-NORM-B	950109004	MB2R60125	LC1R60125	950109-7	MB2R80125	LC1R80125	950109-14
PSRT-008	I-EB165-CREOLEFISH-NORM-C	950108017	MB4R60124	LC2R60124	950108-13	MB4R80124	LC2R80124	950108-13
PSRT-009	I-EB165-CREOLEFISH-NORM-D	950202003	MB6R60206	LC3R60206	950202-2	MB6R80206	LC3R80206	950202-10
PSRT-010	I-EB165-CREOLEFISH-NORM-E	950202004	MB6R60206	LC3R60206	950202-2	MB6R80206	LC3R80206	950202-10
PSRT-011	II-EB165-CHUB-NORM-A	951861015	MB4R60831	LC2R60831	951861-5	MB4R80831	LC2R80821	951622-12
PSRT-012	II-EB165-CHUB-NORM-B	951861001	MB4R60831	LC2R60831	951861-5	MB4R80831	LC2R80821	951622-12
PSRT-013	II-EB165-CHUB-NORM-C	951860017	MB2R60831	LC1R60831	951860-13	MB2R80831	LC1R80831	951622-11
PSRT-014	II-EB165-CHUB-NORM-D	951860003	MB2R60831	LC1R60831	951860-13	MB2R80831	LC1R80831	951622-11
PSRT-015	II-EB165-CHUB-NORM-E	951862017	MB4R680905	LC2R60905	951862-11	MB4R680905	LC2R80905	951368-1
PSRT-016	II-EB165-CREOLEFISH-NORM-A	951856013	MB2R680829	LC1R60829	951856-1	MB2R680829	LC1R80829	951856-19
PSRT-017	II-EB165-CREOLEFISH-NORM-B	951862009	MB4R680905	LC2R60905	951862-11	MB4R680905	LC2R80905	951368-1
PSRT-018	II-EB165-CREOLEFISH-NORM-C	951857001	MB4R60829	LC2R60829	951857-7	MB4R80829	LC2R80829	951626-1
PSRT-019	II-EB165-CREOLEFISH-NORM-D	951859011	MB4R60830	LC2R60830	951859-11	MB4R80830	LC2R80830	951859-17
PSRT-020	II-EB165-CREOLEFISH-NORM-E	951862013	MB4R680905	LC2R60905	951862-11	MB4R680905	LC2R80905	951368-1
PSRT-021	I-HI356-CHUB-NORM-A	950108012	MB4R60124	LC2R60124	950108-13	MB4R80124	LC2R80124	950108-13
PSRT-022	I-HI356-CHUB-NORM-B	950110002	MB2R60126	LC1R60126	950110-4	MB2R80126	LC1R80126	950110-19
PSRT-023	I-HI356-CHUB-NORM-C1	950241004	MB2R60313	LC1R60313	950241-1	MB2R80313	LC1R80313	950241-8
PSRT-024	I-HI356-CHUB-NORM-D	950202001	MB6R60206	LC3R60206	950202-2	MB6R80206	LC3R80206	950202-10
PSRT-025	I-HI356-CHUB-NORM-E	950202007	MB6R60206	LC3R60206	950202-2	MB6R80206	LC3R80206	950202-10
PSRT-026	I-HI356-CREOLEFISH-NORM-A	950111006	MB2R60130	LC1R60130	950111-3	MB2R80130	LC1R80130	950111-18
PSRT-027	I-HI356-CREOLEFISH-NORM-B	950110005	MB2R60126	LC1R60126	950110-4	MB2R80126	LC1R80126	950110-19
PSRT-028	I-HI356-CREOLEFISH-NORM-C	950109009	MB2R60125	LC1R60125	950109-7	MB2R80125	LC1R80125	950109-14
PSRT-029	I-HI356-CREOLEFISH-NORM-D	950202002	MB6R60206	LC3R60206	950202-2	MB6R80206	LC3R80206	950202-10
PSRT-030	I-HI356-CREOLEFISH-NORM-E	950202008	MB6R60206	LC3R60206	950202-2	MB6R80206	LC3R80206	950202-10

Table A-412. (Continued).

Sample ID	Field ID	Lab ID	<sup>226</sup> Ra			<sup>228</sup> Ra		
			Blank ID	Standard ID	Spike ID	Blank ID	Standard ID	Spike ID
PSRT-031	II-HI356-CHUB-NORM-A	951859009	MB4R60830	LC2R60830	951859-11	MB4R80830	LC2R80830	951859-17
PSRT-032	II-HI356-CHUB-NORM-B	951859015	MB4R60830	LC2R60830	951859-11	MB4R80830	LC2R80830	951859-17
PSRT-033	II-HI356-CHUB-NORM-C	951861005	MB4R60831	LC2R60831	951861-5	MB4R80831	LC2R80821	951622-12
PSRT-034	II-HI356-CHUB-NORM-D	951860013	MB2R60831	LC1R60831	951860-13	MB2R80831	LC1R80831	951622-11
PSRT-035	II-HI356-CHUB-NORM-E	951862015	MB4R680905	LC2R60905	951862-11	MB4R680905	LC2R80905	951368-1
PSRT-036	II-HI356-CREOLEFISH-NORM-A	951860005	MB2R60831	LC1R60831	951860-13	MB2R80831	LC1R80831	951622-11
PSRT-037	II-HI356-CREOLEFISH-NORM-B	951863005	MB6R680905	LC3R60905	951367-9	MB6R680905	LC3R80905	951373-11
PSRT-038	II-HI356-CREOLEFISH-NORM-C	951859007	MB4R60830	LC2R60830	951859-11	MB4R80830	LC2R80830	951859-17
PSRT-039	II-HI356-CREOLEFISH-NORM-D	951861011	MB4R60831	LC2R60831	951861-5	MB4R80831	LC2R80821	951622-12
PSRT-040	II-HI356-CREOLEFISH-NORM-E	951856019	MB2R680829	LC1R60829	951856-1	MB2R680829	LC1R80829	951856-19
PSRT-041	I-GC19-CHUB-NORM-A	950109014	MB2R60125	LC1R60125	950109-7	MB2R80125	LC1R80125	950109-14
PSRT-042	I-GC19-CHUB-NORM-B	950109008	MB2R60125	LC1R60125	950109-7	MB2R80125	LC1R80125	950109-14
PSRT-043	I-GC19-CHUB-NORM-C	950112001	MB2R60131	LC1R60131	950112-1	MB2R80131	LC1R80131	950112-8
PSRT-044	I-GC19-CHUB-NORM-D	950111012	MB2R60130	LC1R60130	950111-3	MB2R80130	LC1R80130	950111-18
PSRT-045	I-GC19-CHUB-NORM-E	950111017	MB2R60130	LC1R60130	950111-3	MB2R80130	LC1R80130	950111-18
PSRT-046	I-GC19-CREOLEFISH-NORM-A	950109005	MB2R60125	LC1R60125	950109-7	MB2R80125	LC1R80125	950109-14
PSRT-047	I-GC19-CREOLEFISH-NORM-B	950109011	MB2R60125	LC1R60125	950109-7	MB2R80125	LC1R80125	950109-14
PSRT-048	I-GC19-CREOLEFISH-NORM-C	950111008	MB2R60130	LC1R60130	950111-3	MB2R80130	LC1R80130	950111-18
PSRT-049	I-GC19-CREOLEFISH-NORM-D	950109017	MB2R60125	LC1R60125	950109-7	MB2R80125	LC1R80125	950109-14
PSRT-050	I-GC19-CREOLEFISH-NORM-E	950111001	MB2R60130	LC1R60130	950111-3	MB2R80130	LC1R80130	950111-18
PSRT-051	II-GC19-CHUB-NORM-A	951861009	MB4R60831	LC2R60831	951861-5	MB4R80831	LC2R80821	951622-12
PSRT-052	II-GC19-CHUB-NORM-B	951856017	MB2R680829	LC1R60829	951856-1	MB2R680829	LC1R80829	951856-19
PSRT-053	II-GC19-CHUB-NORM-C	951860007	MB2R60831	LC1R60831	951860-13	MB2R80831	LC1R80831	951622-11
PSRT-054	II-GC19-CHUB-NORM-D	951859003	MB4R60830	LC2R60830	951859-11	MB4R80830	LC2R80830	951859-17
PSRT-055	II-GC19-CHUB-NORM-E	951859001	MB4R60830	LC2R60830	951859-11	MB4R80830	LC2R80830	951859-17
PSRT-056	II-GC19-CREOLEFISH-NORM-F	951856015	MB2R680829	LC1R60829	951856-1	MB2R680829	LC1R80829	951856-19
PSRT-057	II-GC19-CREOLEFISH-NORM-G	951862005	MB4R680905	LC2R60905	951862-11	MB4R680905	LC2R80905	951368-1
PSRT-058	II-GC19-CREOLEFISH-NORM-H	951863007	MB6R680905	LC3R60905	951367-9	MB6R680905	LC3R80905	951373-11
PSRT-059	II-GC19-CREOLEFISH-NORM-I	951863013	MB6R680905	LC3R60905	951367-9	MB6R680905	LC3R80905	951373-11
PSRT-060	II-GC19-CREOLEFISH-NORM-J	951862007	MB4R680905	LC2R60905	951862-11	MB4R680905	LC2R80905	951368-1
PSRT-061	I-EI361-CHUB-NORM-A	950112002	MB2R60131	LC1R60131	950112-1	MB2R80131	LC1R80131	950112-8
PSRT-062	I-EI361-CHUB-NORM-B	950109002	MB2R60125	LC1R60125	950109-7	MB2R80125	LC1R80125	950109-14

Table A-412. (Continued).

Sample ID	Field ID	Lab ID	<sup>226</sup> Ra			<sup>228</sup> Ra		
			Blank ID	Standard ID	Spike ID	Blank ID	Standard ID	Spike ID
PSRT-063	I-EI361-CHUB-NORM-C	950112006	MB2R60131	LC1R60131	950112-1	MB2R80131	LC1R80131	950112-8
PSRT-064	I-EI361-CHUB-NORM-D	950108013	MB4R60124	LC2R60124	950108-13	MB4R80124	LC2R80124	950108-13
PSRT-065	I-EI361-CHUB-NORM-E	950112008	MB2R60131	LC1R60131	950112-1	MB2R80131	LC1R80131	950112-8
PSRT-066	I-EI361-CREOLEFISH-NORM-A	950108008	MB4R60124	LC2R60124	950108-13	MB4R80124	LC2R80124	950108-13
PSRT-067	I-EI361-CREOLE-NORM-B1	950112009	MB2R60131	LC1R60131	950112-1	MB2R80131	LC1R80131	950112-8
PSRT-068	I-EI361-CREOLEFISH-NORM-C	950109006	MB2R60125	LC1R60125	950109-7	MB2R80125	LC1R80125	950109-14
PSRT-069	I-EI361-CREOLEFISH-NORM-D	950110013	MB2R60126	LC1R60126	950110-4	MB2R80126	LC1R80126	950110-19
PSRT-070	I-EI361-CREOLEFISH-NORM-E	950111010	MB2R60130	LC1R60130	950111-3	MB2R80130	LC1R80130	950111-18
PSRT-071	II-EI361-CHUB-NORM-A	951860001	MB2R60831	LC1R60831	951860-13	MB2R80831	LC1R80831	951622-11
PSRT-072	II-EI361-CHUB-NORM-B	951859017	MB4R60830	LC2R60830	951859-11	MB4R80830	LC2R80830	951859-17
PSRT-073	II-EI361-CHUB-NORM-C	951861003	MB4R60831	LC2R60831	951861-5	MB4R80831	LC2R80821	951622-12
PSRT-074	II-EI361-CHUB-NORM-D	951863009	MB6R680905	LC3R60905	951367-9	MB6R680905	LC3R80905	951373-11
PSRT-075	II-EI361-CHUB-NORM-E	951862011	MB4R680905	LC2R60905	951862-11	MB4R680905	LC2R80905	951368-1
PSRT-076	II-EI361-CREOLEFISH-NORM-A	951860011	MB2R60831	LC1R60831	951860-13	MB2R80831	LC1R80831	951622-11
PSRT-077	II-EI361-CREOLEFISH-NORM-B	951859013	MB4R60830	LC2R60830	951859-11	MB4R80830	LC2R80830	951859-17
PSRT-078	II-EI361-CREOLEFISH-NORM-C	951860015	MB2R60831	LC1R60831	951860-13	MB2R80831	LC1R80831	951622-11
PSRT-079	II-EI361-CREOLEFISH-NORM-D	951861007	MB4R60831	LC2R60831	951861-5	MB4R80831	LC2R80821	951622-12
PSRT-080	II-EI361-CREOLEFISH-NORM-E	951859019	MB4R60830	LC2R60830	951859-11	MB4R80830	LC2R80830	951859-17
PSRT-081	I-VR214-REDSNAPPER-NORM-A	950110016	MB2R60126	LC1R60126	950110-4	MB2R80126	LC1R80126	950110-19
PSRT-082	I-VR214-REDSNAPPER-NORM-B	950241008	MB2R60313	LC1R60313	950241-1	MB2R80313	LC1R80313	950241-8
PSRT-083	I-VR214-REDSNAPPER-NORM-C	950108009	MB4R60124	LC2R60124	950108-13	MB4R80124	LC2R80124	950108-13
PSRT-084	I-VR214-REDSNAPPER-NORM-D	950108007	MB4R60124	LC2R60124	950108-13	MB4R80124	LC2R80124	950108-13
PSRT-085	I-VR214-REDSNAPPER-NORM-E	950111002	MB2R60130	LC1R60130	950111-3	MB2R80130	LC1R80130	950111-18
PSRT-086	I-VR214-TRIGGERFISH-NORM-A	950112010	MB2R60131	LC1R60131	950112-1	MB2R80131	LC1R80131	950112-8
PSRT-087	I-VR214-TRIGGERFISH-NORM-B	950111015	MB2R60130	LC1R60130	950111-3	MB2R80130	LC1R80130	950111-18
PSRT-088	I-VR214-TRIGGERFISH-NORM-C	950108002	MB4R60124	LC2R60124	950108-13	MB4R80124	LC2R80124	950108-13
PSRT-089	I-VR214-TRIGGERFISH-NORM-D	950110014	MB2R60126	LC1R60126	950110-4	MB2R80126	LC1R80126	950110-19
PSRT-090	I-VR214-TRIGGERFISH-NORM-E	950109001	MB2R60125	LC1R60125	950109-7	MB2R80125	LC1R80125	950109-14
PSRT-091	II-VR214-REDSNAPPER-NORM-A	951366003	MB4R680626	LC2R60626	951366-5	MB4R680626	LC2R80626	951366-20
PSRT-092	II-VR214-REDSNAPPER-NORM-B	951366009	MB4R680626	LC2R60626	951366-5	MB4R680626	LC2R80626	951366-20
PSRT-093	II-VR214-REDSNAPPER-NORM-C	951365018	MB4R60625	LC2R60625	951365-1	MB4R80625	LC2R80625	951365-16
PSRT-094	II-VR214-REDSNAPPER-NORM-D	951372004	MB4R680630	LC2R60630	951372-2	MB4R680630	LC2R80630	951372-17



Table A-412. (Continued).

Sample ID	Field ID	Lab ID	<sup>226</sup> Ra			<sup>228</sup> Ra		
			Blank ID	Standard ID	Spike ID	Blank ID	Standard ID	Spike ID
PSRT-095	II-VR214-REDSNAPPER-NORM-E	951369019	MB6R680626	LC3R60626	951369-2	MB6R680626	LC3R80626	951369-17
PSRT-096	II-VR214-TRIGGERFISH-NORM-A	951367008	MB2R680628	LC1R60628	951367-3	MB2R680628	LC1R80628	951367-9
PSRT-097	II-VR214-TRIGGERFISH-NORM-B	951367012	MB2R680628	LC1R60628	951367-3	MB2R680628	LC1R80628	951367-9
PSRT-098	II-VR214-TRIGGERFISH-NORM-C	951372006	MB4R680630	LC2R60630	951372-2	MB4R680630	LC2R80630	951372-17
PSRT-099	II-VR214-TRIGGERFISH-NORM-D	951370012	MB8R680629	LC4R60629	951370-4	MB8R680629	LC4R80629	951370-18
PSRT-100	II-VR214-TRIGGERFISH-NORM-E	951371020	MB2R680630	LC1R60630	951371-3	MB2R680630	LC1R80630	951371-12
PSRT-101	I-EC229-REDSNAPPER-NORM-A	950111016	MB2R60130	LC1R60130	950111-3	MB2R80130	LC1R80130	950111-18
PSRT-102	I-EC229-REDSNAPPER-NORM-B	950111020	MB2R60130	LC1R60130	950111-3	MB2R80130	LC1R80130	950111-18
PSRT-103	I-EC229-REDSNAPPER-NORM-C	950109020	MB2R60125	LC1R60125	950109-7	MB2R80125	LC1R80125	950109-14
PSRT-104	I-EC229-REDSNAPPER-NORM-D	950110004	MB2R60126	LC1R60126	950110-4	MB2R80126	LC1R80126	950110-19
PSRT-105	I-EC229-REDSNAPPER-NORM-E	950112007	MB2R60131	LC1R60131	950112-1	MB2R80131	LC1R80131	950112-8
PSRT-106	I-EC229-TRIGGERFISH-NORM-A1	950241007	MB2R60313	LC1R60313	950241-1	MB2R80313	LC1R80313	950241-8
PSRT-107	I-EC229-TRIGGERFISH-NORM-B	950111004	MB2R60130	LC1R60130	950111-3	MB2R80130	LC1R80130	950111-18
PSRT-108	I-EC229-TRIGGERFISH-NORM-C	950109016	MB2R60125	LC1R60125	950109-7	MB2R80125	LC1R80125	950109-14
PSRT-109	I-EC229-TRIGGERFISH-NORM-D	950111009	MB2R60130	LC1R60130	950111-3	MB2R80130	LC1R80130	950111-18
PSRT-110	I-EC229-TRIGGERFISH-NORM-E	950110018	MB2R60126	LC1R60126	950110-4	MB2R80126	LC1R80126	950110-19
PSRT-111	II-EC229-REDSNAPPER-NORM-A	951367010	MB2R680628	LC1R60628	951367-3	MB2R680628	LC1R80628	951367-9
PSRT-112	II-EC229-REDSNAPPER-NORM-B	951371004	MB2R680630	LC1R60630	951371-3	MB2R680630	LC1R80630	951371-12
PSRT-113	II-EC229-REDSNAPPER-NORM-C	951371016	MB2R680630	LC1R60630	951371-3	MB2R680630	LC1R80630	951371-12
PSRT-114	II-EC229-REDSNAPPER-NORM-D	951373004	MB6R680630	LC3R60630	951373-4	MB6R680630	LC3R80630	951373-11
PSRT-115	II-EC229-REDSNAPPER-NORM-E	951369002	MB6R680626	LC3R60626	951369-2	MB6R680626	LC3R80626	951369-17
PSRT-116	II-EC229-TRIGGERFISH-NORM-F	951367016	MB2R680628	LC1R60628	951367-3	MB2R680628	LC1R80628	951367-9
PSRT-117	II-EC229-TRIGGERFISH-NORM-G	951369013	MB6R680626	LC3R60626	951369-2	MB6R680626	LC3R80626	951369-17
PSRT-118	II-EC229-TRIGGERFISH-NORM-H	951366014	MB4R680626	LC2R60626	951366-5	MB4R680626	LC2R80626	951366-20
PSRT-119	II-EC229-TRIGGERFISH-NORM-I	951368013	MB6R680628	LC3R60628	951368-1	MB6R680628	LC3R80628	951368-14
PSRT-120	II-EC229-TRIGGERFISH-NORM-J	951366013	MB4R680626	LC2R60626	951366-5	MB4R680626	LC2R80626	951366-20
PSRT-121	I-SS277-CHUB-NORM-A	950108005	MB4R60124	LC2R60124	950108-13	MB4R80124	LC2R80124	950108-13
PSRT-122	I-SS277-CHUB-NORM-B	950110009	MB2R60126	LC1R60126	950110-4	MB2R80126	LC1R80126	950110-19
PSRT-123	I-SS277-CHUB-NORM-C	950109019	MB2R60125	LC1R60125	950109-7	MB2R80125	LC1R80125	950109-14
PSRT-124	I-SS277-CHUB-NORM-D	950111003	MB2R60130	LC1R60130	950111-3	MB2R80130	LC1R80130	950111-18
PSRT-125	I-SS277-CHUB-NORM-E	950109007	MB2R60125	LC1R60125	950109-7	MB2R80125	LC1R80125	950109-14
PSRT-126	I-SS277-REDSNAPPER-NORM-A1	950241001	MB2R60313	LC1R60313	950241-1	MB2R80313	LC1R80313	950241-8

Table A-412. (Continued).

Sample ID	Field ID	Lab ID	<sup>226</sup> Ra			<sup>228</sup> Ra		
			Blank ID	Standard ID	Spike ID	Blank ID	Standard ID	Spike ID
PSRT-127	I-SS277-REDSNAPPER-NORM-B	950108019	MB4R60124	LC2R60124	950108-13	MB4R80124	LC2R80124	950108-13
PSRT-128	I-SS277-REDSNAPPER-NORM-C	950110017	MB2R60126	LC1R60126	950110-4	MB2R80126	LC1R80126	950110-19
PSRT-129	I-SS277-REDSNAPPER-NORM-D	950111007	MB2R60130	LC1R60130	950111-3	MB2R80130	LC1R80130	950111-18
PSRT-130	I-SS277-REDSNAPPER-NORM-E	950110012	MB2R60126	LC1R60126	950110-4	MB2R80126	LC1R80126	950110-19
PSRT-131	II-SS277-CHUB-NORM-A	951856009	MB2R680829	LC1R60829	951856-1	MB2R680829	LC1R80829	951856-19
PSRT-132	II-SS277-CHUB-NORM-E	951858001	MB2R680830	LC1R60830	951624-9	MB2R680830	LC1R68083	951626-2
PSRT-133	II-SS277-CHUB-NORM-F	951857005	MB4R60829	LC2R60829	951857-7	MB4R80829	LC2R80829	951626-1
PSRT-134	II-SS277-CHUB-NORM-G	951857003	MB4R60829	LC2R60829	951857-7	MB4R80829	LC2R80829	951626-1
PSRT-135	II-SS277-CHUB-NORM-I	951855001	MB4R680828	LC2R60828	951855-5	MB4R680828	LC2R80828	951855-14
PSRT-136	II-SS277-CREOLEFISH-NORM-E	951855019	MB4R680828	LC2R60828	951855-5	MB4R680828	LC2R80828	951855-14
PSRT-137	II-SS277-CREOLEFISH-NORM-F	951857011	MB4R60829	LC2R60829	951857-7	MB4R80829	LC2R80829	951626-1
PSRT-138	II-SS277-CREOLEFISH-NORM-G	951857017	MB4R60829	LC2R60829	951857-7	MB4R80829	LC2R80829	951626-1
PSRT-139	II-SS277-CREOLEFISH-NORM-I	951855013	MB4R680828	LC2R60828	951855-5	MB4R680828	LC2R80828	951855-14
PSRT-140	II-SS277-CREOLEFISH-NORM-J	951855005	MB4R680828	LC2R60828	951855-5	MB4R680828	LC2R80828	951855-14
PSRT-141	I-EI360-CHUB-NORM-A	950108001	MB4R60124	LC2R60124	950108-13	MB4R80124	LC2R80124	950108-13
PSRT-142	I-EI360-CHUB-NORM-B	950109003	MB2R60125	LC1R60125	950109-7	MB2R80125	LC1R80125	950109-14
PSRT-143	I-EI360-CHUB-NORM-C	950110015	MB2R60126	LC1R60126	950110-4	MB2R80126	LC1R80126	950110-19
PSRT-144	I-EI360-CHUB-NORM-D	950109018	MB2R60125	LC1R60125	950109-7	MB2R80125	LC1R80125	950109-14
PSRT-145	I-EI360-CHUB-NORM-E	950108006	MB4R60124	LC2R60124	950108-13	MB4R80124	LC2R80124	950108-13
PSRT-146	I-EI360-REDSNAPPER-NORM-A	950110011	MB2R60126	LC1R60126	950110-4	MB2R80126	LC1R80126	950110-19
PSRT-147	I-EI360-REDSNAPPER-NORM-B	950111005	MB2R60130	LC1R60130	950111-3	MB2R80130	LC1R80130	950111-18
PSRT-148	I-EI360-REDSNAPPER-NORM-C	950108003	MB4R60124	LC2R60124	950108-13	MB4R80124	LC2R80124	950108-13
PSRT-149	I-EI360-REDSNAPPER-NORM-D	950111019	MB2R60130	LC1R60130	950111-3	MB2R80130	LC1R80130	950111-18
PSRT-150	I-EI360-REDSNAPPER-NORM-E	950109013	MB2R60125	LC1R60125	950109-7	MB2R80125	LC1R80125	950109-14
PSRT-151	II-EI360-CHUB-NORM-A	951857007	MB4R60829	LC2R60829	951857-7	MB4R80829	LC2R80829	951626-1
PSRT-152	II-EI360-CHUB-NORM-F	951857013	MB4R60829	LC2R60829	951857-7	MB4R80829	LC2R80829	951626-1
PSRT-153	II-EI360-CHUB-NORM-G	951855011	MB4R680828	LC2R60828	951855-5	MB4R680828	LC2R80828	951855-14
PSRT-154	II-EI360-CHUB-NORM-H	951856007	MB2R680829	LC1R60829	951856-1	MB2R680829	LC1R80829	951856-19
PSRT-155	II-EI360-CHUB-NORM-I	951858007	MB2R680830	LC1R60830	951624-9	MB2R680830	LC1R68083	951626-2
PSRT-156	II-EI360-CREOLEFISH-NORM-F	951858003	MB2R680830	LC1R60830	951624-9	MB2R680830	LC1R68083	951626-2
PSRT-157	II-EI360-CREOLEFISH-NORM-G	951857015	MB4R60829	LC2R60829	951857-7	MB4R80829	LC2R80829	951626-1
PSRT-158	II-EI360-CREOLEFISH-NORM-H	951856001	MB2R680829	LC1R60829	951856-1	MB2R680829	LC1R80829	951856-19

Table A-412. (Continued).

Sample ID	Field ID	Lab ID	<sup>226</sup> Ra			<sup>228</sup> Ra		
			Blank ID	Standard ID	Spike ID	Blank ID	Standard ID	Spike ID
PSRT-159	II-EI360-CREOLEFISH-NORM-I	951857009	MB4R60829	LC2R60829	951857-7	MB4R80829	LC2R80829	951626-1
PSRT-160	II-EI360-CREOLEFISH-NORM-J	951856003	MB2R680829	LC1R60829	951856-1	MB2R680829	LC1R80829	951856-19
PSRT-161	II-MC194-CHUB-NORM-A	951365015	MB4R60625	LC2R60625	951365-1	MB4R80625	LC2R80625	951365-16
PSRT-162	II-MC194-CHUB-NORM-B	951373002	MB6R680630	LC3R60630	951373-4	MB6R680630	LC3R68030	951373-11
PSRT-163	II-MC194-CHUB-NORM-C	951371002	MB2R680630	LC1R60630	951371-3	MB2R680630	LC1R80630	951371-12
PSRT-164	II-MC194-CHUB-NORM-D	951365012	MB4R60625	LC2R60625	951365-1	MB4R80625	LC2R80625	951365-16
PSRT-165	II-MC194-CHUB-NORM-E	951372005	MB4R680630	LC2R60630	951372-2	MB4R680630	LC2R80630	951372-17
PSRT-166	II-MC194-TRIGGERFISH-NORM-C	951366011	MB4R680626	LC2R60626	951366-5	MB4R680626	LC2R80626	951366-20
PSRT-167	II-MC194-TRIGGERFISH-NORM-D	951368016	MB6R680628	LC3R60628	951368-1	MB6R680628	LC3R80628	951368-14
PSRT-168	II-MC194-TRIGGERFISH-NORM-E	951371018	MB2R680630	LC1R60630	951371-3	MB2R680630	LC1R80630	951371-12
PSRT-169	II-MC194-TRIGGERFISH-NORM-F	951371007	MB2R680630	LC1R60630	951371-3	MB2R680630	LC1R80630	951371-12
PSRT-170	II-MC194-TRIGGERFISH-NORM-G	951369011	MB6R680626	LC3R60626	951369-2	MB6R680626	LC3R80626	951369-17
PSRT-171	III-MC194-CREOLEFISH-NORM-A	960417004	MB2R680308	ST1R60308	960417-8	MB2R680308	LC2R80308	960417-12
PSRT-172	III-MC194-CREOLEFISH-NORM-B	960415006	MB2R680307	LC1R60307	960415-7	MB2R680307	LC1R80307	960415-17
PSRT-173	III-MC194-CREOLEFISH-NORM-C	960418003	MB4R680311	LC2R60311	960417-21	MB4R680311	LC2R80311	960417-21
PSRT-174	III-MC194-CREOLEFISH-NORM-D	960416005	MB4R680307	LC2R60307	960416-7	MB4R680307	LC2R80307	960416-15
PSRT-175	III-MC194-CREOLEFISH-NORM-E	960413016	MB2R680305	ST1R60305	960413-1	MB2R680305	LC1R80305	960413-13
PSRT-176	III-MC194-TRIGGERFISH-NORM-A	960414009	MB4R680305	LC2R60305	960414-4	MB4R680305	LC2R80305	960414-17
PSRT-177	III-MC194-TRIGGERFISH-NORM-B	960415011	MB2R680307	LC1R60307	960415-7	MB2R680307	LC1R80307	960415-17
PSRT-178	III-MC194-TRIGGERFISH-NORM-C	960414015	MB4R680305	LC2R60305	960414-4	MB4R680305	LC2R80305	960414-17
PSRT-179	III-MC194-TRIGGERFISH-NORM-D	960413008	MB2R680305	ST1R60305	960413-1	MB2R680305	LC1R80305	960413-13
PSRT-180	III-MC194-TRIGGERFISH-NORM-E	960413004	MB2R680305	ST1R60305	960413-1	MB2R680305	LC1R80305	960413-13
PSRT-181	II-MC280-CHUB-NORM-A	951367017	MB2R680628	LC1R60628	951367-3	MB2R680628	LC1R80628	951367-9
PSRT-182	II-MC280-CHUB-NORM-B	951365016	MB4R60625	LC2R60625	951365-1	MB4R80625	LC2R80625	951365-16
PSRT-183	II-MC280-CHUB-NORM-C	951369012	MB6R680626	LC3R60626	951369-2	MB6R680626	LC3R80626	951369-17
PSRT-184	II-MC280-CHUB-NORM-D	951371006	MB2R680630	LC1R60630	951371-3	MB2R680630	LC1R80630	951371-12
PSRT-185	II-MC280-CHUB-NORM-E	951370001	MB8R680629	LC4R60629	951370-4	MB8R680629	LC4R80629	951370-18
PSRT-186	II-MC280-TRIGGERFISH-NORM-A	951367001	MB2R680628	LC1R60628	951367-3	MB2R680628	LC1R80628	951367-9
PSRT-187	II-MC280-TRIGGERFISH-NORM-B	951369009	MB6R680626	LC3R60626	951369-2	MB6R680626	LC3R80626	951369-17
PSRT-188	II-MC280-TRIGGERFISH-NORM-C	951372018	MB4R680630	LC2R60630	951372-2	MB4R680630	LC2R80630	951372-17
PSRT-189	II-MC280-TRIGGERFISH-NORM-D	951372012	MB4R680630	LC2R60630	951372-2	MB4R680630	LC2R80630	951372-17
PSRT-190	II-MC280-TRIGGERFISH-NORM-E	951370014	MB8R680629	LC4R60629	951370-4	MB8R680629	LC4R80629	951370-18

Table A-412. (Continued).

Sample ID	Field ID	Lab ID	<sup>226</sup> Ra			<sup>228</sup> Ra		
			Blank ID	Standard ID	Spike ID	Blank ID	Standard ID	Spike ID
PSRT-191	III-MC280-CREOLEFISH-NORM-A	960413010	MB2R680305	ST1R60305	960413-1	MB2R680305	LC1R80305	960413-13
PSRT-192	III-MC280-CREOLEFISH-NORM-B	960413018	MB2R680305	ST1R60305	960413-1	MB2R680305	LC1R80305	960413-13
PSRT-193	III-MC280-CREOLEFISH-NORM-C	960415005	MB2R680307	LC1R60307	960415-7	MB2R680307	LC1R80307	960415-17
PSRT-194	III-MC280-CREOLEFISH-NORM-D	960415012	MB2R680307	LC1R60307	960415-7	MB2R680307	LC1R80307	960415-17
PSRT-195	III-MC280-CREOLEFISH-NORM-E	960417001	MB2R680308	ST1R60308	960417-8	MB2R680308	LC2R80308	960417-12
PSRT-196	III-MC280-TRIGGERFISH-NORM-A	960415014	MB2R680307	LC1R60307	960415-7	MB2R680307	LC1R80307	960415-17
PSRT-197	III-MC280-TRIGGERFISH-NORM-B	960415008	MB2R680307	LC1R60307	960415-7	MB2R680307	LC1R80307	960415-17
PSRT-198	III-MC280-TRIGGERFISH-NORM-C	960416011	MB4R680307	LC2R60307	960416-7	MB4R680307	LC2R80307	960416-15
PSRT-199	III-MC280-TRIGGERFISH-NORM-D	960417017	MB2R680308	ST1R60308	960417-8	MB2R680308	LC2R80308	960417-12
PSRT-200	III-MC280-TRIGGERFISH-NORM-E	960416017	MB4R680307	LC2R60307	960416-7	MB4R680307	LC2R80307	960416-15
PSRT-201	II-ST130-REDSNAPPER-NORM-A	951369016	MB6R680626	LC3R60626	951369-2	MB6R680626	LC3R80626	951369-17
PSRT-202	II-ST130-REDSNAPPER-NORM-B	951370008	MB8R680629	LC4R60629	951370-4	MB8R680629	LC4R80629	951370-18
PSRT-203	II-ST130-REDSNAPPER-NORM-C	951368006	MB6R680628	LC3R60628	951368-1	MB6R680628	LC3R80628	951368-14
PSRT-204	II-ST130-REDSNAPPER-NORM-D	951369015	MB6R680626	LC3R60626	951369-2	MB6R680626	LC3R80626	951369-17
PSRT-205	II-ST130-REDSNAPPER-NORM-E	951367009	MB2R680628	LC1R60628	951367-3	MB2R680628	LC1R80628	951367-9
PSRT-206	II-ST130-TRIGGERFISH-NORM-A	951371012	MB2R680630	LC1R60630	951371-3	MB2R680630	LC1R80630	951371-12
PSRT-207	II-ST130-TRIGGERFISH-NORM-B	951372003	MB4R680630	LC2R60630	951372-2	MB4R680630	LC2R80630	951372-17
PSRT-208	II-ST130-TRIGGERFISH-NORM-C	951372015	MB4R680630	LC2R60630	951372-2	MB4R680630	LC2R80630	951372-17
PSRT-209	II-ST130-TRIGGERFISH-NORM-D	951365020	MB4R60625	LC2R60625	951365-1	MB4R80625	LC2R80625	951365-16
PSRT-210	II-ST130-TRIGGERFISH-NORM-E	951369017	MB6R680626	LC3R60626	951369-2	MB6R680626	LC3R80626	951369-17
PSRT-211	III-ST130-REDSNAPPER-NORM-A	960414011	MB4R680305	LC2R60305	960414-4	MB4R680305	LC2R80305	960414-17
PSRT-212	III-ST130-REDSNAPPER-NORM-B	960414012	MB4R680305	LC2R60305	960414-4	MB4R680305	LC2R80305	960414-17
PSRT-213	III-ST130-REDSNAPPER-NORM-C	960416007	MB4R680307	LC2R60307	960416-7	MB4R680307	LC2R80307	960416-15
PSRT-214	III-ST130-REDSNAPPER-NORM-D	960414006	MB4R680305	LC2R60305	960414-4	MB4R680305	LC2R80305	960414-17
PSRT-215	III-ST130-REDSNAPPER-NORM-E	960413017	MB2R680305	ST1R60305	960413-1	MB2R680305	LC1R80305	960413-13
PSRT-216	III-ST130-SPADEFISH-NORM-A	960413002	MB2R680305	ST1R60305	960413-1	MB2R680305	LC1R80305	960413-13
PSRT-217	III-ST130-SPADEFISH-NORM-B	960414003	MB4R680305	LC2R60305	960414-4	MB4R680305	LC2R80305	960414-17
PSRT-218	III-ST130-SPADEFISH-NORM-C	960414004	MB4R680305	LC2R60305	960414-4	MB4R680305	LC2R80305	960414-17
PSRT-219	III-ST130-SPADEFISH-NORM-D	960413012	MB2R680305	ST1R60305	960413-1	MB2R680305	LC1R80305	960413-13
PSRT-220	III-ST130-SPADEFISH-NORM-E	960414010	MB4R680305	LC2R60305	960414-4	MB4R680305	LC2R80305	960414-17
PSRT-221	II-ST128-REDSNAPPER-NORM-A	951368005	MB6R680628	LC3R60628	951368-1	MB6R680628	LC3R80628	951368-14
PSRT-222	II-ST128-REDSNAPPER-NORM-B	951367006	MB2R680628	LC1R60628	951367-3	MB2R680628	LC1R80628	951367-9

Table A-412. (Continued).

Sample ID	Field ID	Lab ID	<sup>226</sup> Ra			<sup>228</sup> Ra		
			Blank ID	Standard ID	Spike ID	Blank ID	Standard ID	Spike ID
PSRT-223	II-ST128-REDSNAPPER-NORM-C	951368009	MB6R680628	LC3R60628	951368-1	MB6R680628	LC3R80628	951368-14
PSRT-224	II-ST128-REDSNAPPER-NORM-D	951366001	MB4R680626	LC2R60626	951366-5	MB4R680626	LC2R80626	951366-20
PSRT-225	II-ST128-REDSNAPPER-NORM-E	951371013	MB2R680630	LC1R60630	951371-3	MB2R680630	LC1R80630	951371-12
PSRT-226	II-ST128-TRIGGERFISH-NORM-B	951366016	MB4R680626	LC2R60626	951366-5	MB4R680626	LC2R80626	951366-20
PSRT-227	II-ST128-TRIGGERFISH-NORM-C	951368002	MB6R680628	LC3R60628	951368-1	MB6R680628	LC3R80628	951368-14
PSRT-228	II-ST128-TRIGGERFISH-NORM-D	951367015	MB2R680628	LC1R60628	951367-3	MB2R680628	LC1R80628	951367-9
PSRT-229	II-ST128-TRIGGERFISH-NORM-E	951368014	MB6R680628	LC3R60628	951368-1	MB6R680628	LC3R80628	951368-14
PSRT-230	II-ST128-TRIGGERFISH-NORM-F	951372007	MB4R680630	LC2R60630	951372-2	MB4R680630	LC2R80630	951372-17
PSRT-231	III-ST128-REDSNAPPER-NORM-C	960417013	MB2R680308	ST1R60308	960417-8	MB2R680308	LC2R80308	960417-12
PSRT-232	III-ST128-REDSNAPPER-NORM-A	960415013	MB2R680307	LC1R60307	960415-7	MB2R680307	LC1R80307	960415-17
PSRT-233	III-ST128-REDSNAPPER-NORM-B	960415002	MB2R680307	LC1R60307	960415-7	MB2R680307	LC1R80307	960415-17
PSRT-234	III-ST128-REDSNAPPER-NORM-D	960413013	MB2R680305	ST1R60305	960413-1	MB2R680305	LC1R80305	960413-13
PSRT-235	III-ST128-REDSNAPPER-NORM-E	960414017	MB4R680305	LC2R60305	960414-4	MB4R680305	LC2R80305	960414-17
PSRT-236	III-ST128-SPADEFISH-NORM-A	960417008	MB2R680308	ST1R60308	960417-8	MB2R680308	LC2R80308	960417-12
PSRT-237	III-ST128-SPADEFISH-NORM-B	960414016	MB4R680305	LC2R60305	960414-4	MB4R680305	LC2R80305	960414-17
PSRT-238	III-ST128-SPADEFISH-NORM-C	960416015	MB4R680307	LC2R60307	960416-7	MB4R680307	LC2R80307	960416-15
PSRT-239	III-ST128-SPADEFISH-NORM-D	960415010	MB2R680307	LC1R60307	960415-7	MB2R680307	LC1R80307	960415-17
PSRT-240	III-ST128-SPADEFISH-NORM-E	960414001	MB4R680305	LC2R60305	960414-4	MB4R680305	LC2R80305	960414-17
PSRT-241	II-VR245-REDSNAPPER-NORM-A	951369008	MB6R680626	LC3R60626	951369-2	MB6R680626	LC3R80626	951369-17
PSRT-242	II-VR245-REDSNAPPER-NORM-B	951373009	MB6R680630	LC3R60630	951373-4	MB6R680630	LC3R80630	951373-11
PSRT-243	II-VR245-REDSNAPPER-NORM-C	951369018	MB6R680626	LC3R60626	951369-2	MB6R680626	LC3R80626	951369-17
PSRT-244	II-VR245-REDSNAPPER-NORM-D	951369007	MB6R680626	LC3R60626	951369-2	MB6R680626	LC3R80626	951369-17
PSRT-245	II-VR245-REDSNAPPER-NORM-E	951370009	MB8R680629	LC4R60629	951370-4	MB8R680629	LC4R80629	951370-18
PSRT-246	II-VR245-TRIGGERFISH-NORM-C	951365011	MB4R60625	LC2R60625	951365-1	MB4R60625	LC2R80625	951365-16
PSRT-247	II-VR245-TRIGGERFISH-NORM-D	951371019	MB2R680630	LC1R60630	951371-3	MB2R680630	LC1R80630	951371-12
PSRT-248	II-VR245-TRIGGERFISH-NORM-E	951367004	MB2R680628	LC1R60628	951367-3	MB2R680628	LC1R80628	951367-9
PSRT-249	II-VR245-TRIGGERFISH-NORM-F	951369004	MB6R680626	LC3R60626	951369-2	MB6R680626	LC3R80626	951369-17
PSRT-250	II-VR245-TRIGGERFISH-NORM-G	951371009	MB2R680630	LC1R60630	951371-3	MB2R680630	LC1R80630	951371-12
PSRT-251	III-VR245-REDSNAPPER-NORM-A	952944011	MB4R681226	LC2R61226	952944-2	MB4R81226	LC2R81226	952944-3
PSRT-252	III-VR245-REDSNAPPER-NORM-B	952945001	MB2R61227	LC1R61227	952945-16	MB2R81227	LC1R81227	952945-16
PSRT-253	III-VR245-REDSNAPPER-NORM-C	952944003	MB4R681226	LC2R61226	952944-2	MB4R81226	LC2R81226	952944-3
PSRT-254	III-VR245-REDSNAPPER-NORM-D	952944018	MB4R681226	LC2R61226	952944-2	MB4R81226	LC2R81226	952944-3

Table A-412. (Continued).

Sample ID	Field ID	Lab ID	<sup>226</sup> Ra			<sup>228</sup> Ra		
			Blank ID	Standard ID	Spike ID	Blank ID	Standard ID	Spike ID
PSRT-255	III-VR245-REDSNAPPER-NORM-E	952945017	MB2R61227	LC1R61227	952945-16	MB2R81227	LC1R81227	952945-16
PSRT-256	III-VR245-TRIGGERFISH-NORM-A	952945012	MB2R61227	LC1R61227	952945-16	MB2R81227	LC1R81227	952945-16
PSRT-257	III-VR245-TRIGGERFISH-NORM-B	952945005	MB2R61227	LC1R61227	952945-16	MB2R81227	LC1R81227	952945-16
PSRT-258	III-VR245-TRIGGERFISH-NORM-C	952946002	MB2R61228	LC1R61228	952946-7	MB2R81228	LC1R81228	952946-10
PSRT-259	III-VR245-TRIGGERFISH-NORM-D	952944015	MB4R681226	LC2R61226	952944-2	MB4R81226	LC2R81226	952944-3
PSRT-260	III-VR245-TRIGGERFISH-NORM-E	952946013	MB2R61228	LC1R61228	952946-7	MB2R81228	LC1R81228	952946-10
PSRT-261	II-SM172-RED SNAPPER-NORM-A	951365008	MB4R60625	LC2R60625	951365-1	MB4R80625	LC2R80625	951365-16
PSRT-262	II-SM172-REDSNAPPER-NORM-B	951365014	MB4R60625	LC2R60625	951365-1	MB4R80625	LC2R80625	951365-16
PSRT-263	II-SM172-REDSNAPPER-NORM-C	951370018	MB8R680629	LC4R60629	951370-4	MB8R680629	LC4R80629	951370-18
PSRT-264	II-SM172-REDSNAPPER-NORM-D	951372009	MB4R680630	LC2R60630	951372-2	MB4R680630	LC2R80630	951372-17
PSRT-265	II-SM172-REDSNAPPER-NORM-E	951373003	MB6R680630	LC3R60630	951373-4	MB6R680630	LC3R68030	951373-11
PSRT-266	II-SM172-TRIGGERFISH-NORM-A	951367020	MB2R680628	LC1R60628	951367-3	MB2R680628	LC1R80628	951367-9
PSRT-267	II-SM172-TRIGGERFISH-NORM-B	951366017	MB4R680626	LC2R60626	951366-5	MB4R680626	LC2R80626	951366-20
PSRT-268	II-SM172-TRIGGERFISH-NORM-C	951373005	MB6R680630	LC3R60630	951373-4	MB6R680630	LC3R68030	951373-11
PSRT-269	II-SM172-TRIGGERFISH-NORM-D	951365017	MB4R60625	LC2R60625	951365-1	MB4R80625	LC2R80625	951365-16
PSRT-270	II-SM172-TRIGGERFISH-NORM-E	951372002	MB4R680630	LC2R60630	951372-2	MB4R680630	LC2R80630	951372-17
PSRT-271	III-SM172-REDSNAPPER-NORM-A	952945016	MB2R61227	LC1R61227	952945-16	MB2R81227	LC1R81227	952945-16
PSRT-272	III-SM172-REDSNAPPER-NORM-B	952946016	MB2R61228	LC1R61228	952946-7	MB2R81228	LC1R81228	952946-10
PSRT-273	III-SM172-REDSNAPPER-NORM-C	952945013	MB2R61227	LC1R61227	952945-16	MB2R81227	LC1R81227	952945-16
PSRT-274	III-SM172-REDSNAPPER-NORM-D	952946005	MB2R61228	LC1R61228	952946-7	MB2R81228	LC1R81228	952946-10
PSRT-275	III-SM172-REDSNAPPER-NORM-E	952947002	MB4R61229	LC2R61229	952947-2	MB4R81229	LC2R81229	952947-2
PSRT-276	III-SM172-TRIGGERFISH-NORM-A	952944013	MB4R681226	LC2R61226	952944-2	MB4R81226	LC2R81226	952944-3
PSRT-277	III-SM172-TRIGGERFISH-NORM-B	952944009	MB4R681226	LC2R61226	952944-2	MB4R81226	LC2R81226	952944-3
PSRT-278	III-SM172-TRIGGERFISH-NORM-C	952944016	MB4R681226	LC2R61226	952944-2	MB4R81226	LC2R81226	952944-3
PSRT-279	III-SM172-TRIGGERFISH-NORM-D	952947004	MB4R61229	LC2R61229	952947-2	MB4R81229	LC2R81229	952947-2
PSRT-280	III-SM172-TRIGGERFISH-NORM-E	952945014	MB2R61227	LC1R61227	952945-16	MB2R81227	LC1R81227	952945-16
PSRT-281	II-EI330-CHUB-NORM-A	951370011	MB8R680629	LC4R60629	951370-4	MB8R680629	LC4R80629	951370-18
PSRT-282	II-EI330-CHUB-NORM-B	951370016	MB8R680629	LC4R60629	951370-4	MB8R680629	LC4R80629	951370-18
PSRT-283	II-EI330-CHUB-NORM-C	951372014	MB4R680630	LC2R60630	951372-2	MB4R680630	LC2R80630	951372-17
PSRT-284	II-EI330-CHUB-NORM-D	951370002	MB8R680629	LC4R60629	951370-4	MB8R680629	LC4R80629	951370-18
PSRT-285	II-EI330-CHUB-NORM-E	951373008	MB6R680630	LC3R60630	951373-4	MB6R680630	LC3R68030	951373-11
PSRT-286	II-EI330-TRIGGERFISH-NORM-A	951371011	MB2R680630	LC1R60630	951371-3	MB2R680630	LC1R80630	951371-12

Table A-412. (Continued).

Sample ID	Field ID	Lab ID	<sup>226</sup> Ra			<sup>228</sup> Ra		
			Blank ID	Standard ID	Spike ID	Blank ID	Standard ID	Spike ID
PSRT-287	II-EI330-TRIGGERFISH-NORM-B	951369003	MB6R680626	LC3R60626	951369-2	MB6R680626	LC3R80626	951369-17
PSRT-288	II-EI330-TRIGGERFISH-NORM-C	951370007	MB8R680629	LC4R60629	951370-4	MB8R680629	LC4R80629	951370-18
PSRT-289	II-EI330-TRIGGERFISH-NORM-D	951373006	MB6R680630	LC3R60630	951373-4	MB6R680630	LC3R68030	951373-11
PSRT-290	II-EI330-TRIGGERFISH-NORM-E	951365019	MB4R60625	LC2R60625	951365-1	MB4R60625	LC2R80625	951365-16
PSRT-291	III-EI330-CHUB-NORM-A	960418008	MB4R680311	LC2R60311	960417-21	MB4R680311	LC2R80311	960417-21
PSRT-292	III-EI330-CHUB-NORM-B	960418002	MB4R680311	LC2R60311	960417-21	MB4R680311	LC2R80311	960417-21
PSRT-293	III-EI330-CHUB-NORM-C	960418007	MB4R680311	LC2R60311	960417-21	MB4R680311	LC2R80311	960417-21
PSRT-294	III-EI330-CHUB-NORM-D	960418005	MB4R680311	LC2R60311	960417-21	MB4R680311	LC2R80311	960417-21
PSRT-295	III-EI330-CHUB-NORM-E	960417018	MB2R680308	ST1R60308	960417-8	MB2R680308	LC2R80308	960417-12
PSRT-296	III-EI330-CREOLEFISH-NORM-A	960417019	MB2R680308	ST1R60308	960417-8	MB2R680308	LC2R80308	960417-12
PSRT-297	III-EI330-CREOLEFISH-NORM-B	960413011	MB2R680305	ST1R60305	960413-1	MB2R680305	LC1R80305	960413-13
PSRT-298	III-EI330-CREOLEFISH-NORM-C	960415007	MB2R680307	LC1R60307	960415-7	MB2R680307	LC1R80307	960415-17
PSRT-299	III-EI330-CREOLEFISH-NORM-D	960418006	MB4R680311	LC2R60311	960417-21	MB4R680311	LC2R80311	960417-21
PSRT-300	III-EI330-CREOLEFISH-NORM-E	960416006	MB4R680307	LC2R60307	960416-7	MB4R680307	LC2R80307	960416-15
PSRT-301	II-EI352-CHUB-NORM-F	951370015	MB8R680629	LC4R60629	951370-4	MB8R680629	LC4R80629	951370-18
PSRT-302	II-EI352-CHUB-NORM-G	951366018	MB4R680626	LC2R60626	951366-5	MB4R680626	LC2R80626	951366-20
PSRT-303	II-EI352-CHUB-NORM-H	951368010	MB6R680628	LC3R60628	951368-1	MB6R680628	LC3R80628	951368-14
PSRT-304	II-EI352-CHUB-NORM-I	951365013	MB4R60625	LC2R60625	951365-1	MB4R60625	LC2R80625	951365-16
PSRT-305	II-EI352-CHUB-NORM-J	951368003	MB6R680628	LC3R60628	951368-1	MB6R680628	LC3R80628	951368-14
PSRT-306	II-EI352-TRIGGERFISH-NORM-A	951370004	MB8R680629	LC4R60629	951370-4	MB8R680629	LC4R80629	951370-18
PSRT-307	II-EI352-TRIGGERFISH-NORM-B	951370003	MB8R680629	LC4R60629	951370-4	MB8R680629	LC4R80629	951370-18
PSRT-308	II-EI352-TRIGGERFISH-NORM-C	951370017	MB8R680629	LC4R60629	951370-4	MB8R680629	LC4R80629	951370-18
PSRT-309	II-EI352-TRIGGERFISH-NORM-D	951371015	MB2R680630	LC1R60630	951371-3	MB2R680630	LC1R80630	951371-12
PSRT-310	II-EI352-TRIGGERFISH-NORM-E	951372016	MB4R680630	LC2R60630	951372-2	MB4R680630	LC2R80630	951372-17
PSRT-311	III-EI352-CHUB-NORM-B	960418004	MB4R680311	LC2R60311	960417-21	MB4R680311	LC2R80311	960417-21
PSRT-312	III-EI352-CHUB-NORM-C	960414008	MB4R680305	LC2R60305	960414-4	MB4R680305	LC2R80305	960414-17
PSRT-313	III-EI352-CHUB-NORM-D	960416013	MB4R680307	LC2R60307	960416-7	MB4R680307	LC2R80307	960416-15
PSRT-314	III-EI352-CHUB-NORM-E	960413009	MB2R680305	ST1R60305	960413-1	MB2R680305	LC1R80305	960413-13
PSRT-315	III-EI352-CHUB-NORM-F	960417021	MB2R680308	ST1R60308	960417-8	MB2R680308	LC2R80308	960417-12
PSRT-316	III-EI352-CREOLEFISH-NORM-F	960417005	MB2R680308	ST1R60308	960417-8	MB2R680308	LC2R80308	960417-12
PSRT-317	III-EI352-CREOLEFISH-NORM-G	960417016	MB2R680308	ST1R60308	960417-8	MB2R680308	LC2R80308	960417-12
PSRT-318	III-EI352-CREOLEFISH-NORM-H	960417015	MB2R680308	ST1R60308	960417-8	MB2R680308	LC2R80308	960417-12

Table A-412. (Continued).

Sample ID	Field ID	Lab ID	<sup>226</sup> Ra			<sup>228</sup> Ra		
			Blank ID	Standard ID	Spike ID	Blank ID	Standard ID	Spike ID
PSRT-319	III-EI352-CREOLEFISH-NORM-I	960417014	MB2R680308	ST1R60308	960417-8	MB2R680308	LC2R80308	960417-12
PSRT-320	III-EI352-CREOLEFISH-NORM-J	960417020	MB2R680308	ST1R60308	960417-8	MB2R680308	LC2R80308	960417-12
PSRT-321	II-HI376-CHUB-NORM-A	951368007	MB6R680628	LC3R60628	951368-1	MB6R680628	LC3R80628	951368-14
PSRT-322	II-HI376-CHUB-NORM-B	951366015	MB4R680626	LC2R60626	951366-5	MB4R680626	LC2R80626	951366-20
PSRT-323	II-HI376-CHUB-NORM-C	951366006	MB4R680626	LC2R60626	951366-5	MB4R680626	LC2R80626	951366-20
PSRT-324	II-HI376-CHUB-NORM-D	951369014	MB6R680626	LC3R60626	951369-2	MB6R680626	LC3R80626	951369-17
PSRT-325	II-HI376-CHUB-NORM-E	951372011	MB4R680630	LC2R60630	951372-2	MB4R680630	LC2R80630	951372-17
PSRT-326	II-HI376-REDSNAPPER-NORM-A	951369001	MB6R680626	LC3R60626	951369-2	MB6R680626	LC3R80626	951369-17
PSRT-327	II-HI376-REDSNAPPER-NORM-B	951371001	MB2R680630	LC1R60630	951371-3	MB2R680630	LC1R80630	951371-12
PSRT-328	II-HI376-REDSNAPPER-NORM-C	951371014	MB2R680630	LC1R60630	951371-3	MB2R680630	LC1R80630	951371-12
PSRT-329	II-HI376-REDSNAPPER-NORM-D	951372013	MB4R680630	LC2R60630	951372-2	MB4R680630	LC2R80630	951372-17
PSRT-330	II-HI376-REDSNAPPER-NORM-E	951371003	MB2R680630	LC1R60630	951371-3	MB2R680630	LC1R80630	951371-12
PSRT-331	III-HI376-CHUB-NORM-A	952945015	MB2R61227	LC1R61227	952945-16	MB2R81227	LC1R81227	952945-16
PSRT-332	III-HI376-CHUB-NORM-B	952946007	MB2R61228	LC1R61228	952946-7	MB2R81228	LC1R81228	952946-10
PSRT-333	III-HI376-CHUB-NORM-C	952945006	MB2R61227	LC1R61227	952945-16	MB2R81227	LC1R81227	952945-16
PSRT-334	III-HI376-CHUB-NORM-D	952945018	MB2R61227	LC1R61227	952945-16	MB2R81227	LC1R81227	952945-16
PSRT-335	III-HI376-CHUB-NORM-E	952944004	MB4R681226	LC2R61226	952944-2	MB4R81226	LC2R81226	952944-3
PSRT-336	III-HI376-ROCKHIND-NORM-A	952944002	MB4R681226	LC2R61226	952944-2	MB4R81226	LC2R81226	952944-3
PSRT-337	III-HI376-ROCKHIND-NORM-B	952946004	MB2R61228	LC1R61228	952946-7	MB2R81228	LC1R81228	952946-10
PSRT-338	III-HI376-ROCKHIND-NORM-C	952945007	MB2R61227	LC1R61227	952945-16	MB2R81227	LC1R81227	952945-16
PSRT-339	III-HI376-ROCKHIND-NORM-D	952946008	MB2R61228	LC1R61228	952946-7	MB2R81228	LC1R81228	952946-10
PSRT-340	III-HI376-ROCKHIND-NORM-E	952944006	MB4R681226	LC2R61226	952944-2	MB4R81226	LC2R81226	952944-3
PSRT-341	II-WC587-CHUB-NORM-E	951369005	MB6R680626	LC3R60626	951369-2	MB6R680626	LC3R80626	951369-17
PSRT-342	II-WC587-CHUB-NORM-F	951365010	MB4R60625	LC2R60625	951365-1	MB4R80625	LC2R80625	951365-16
PSRT-343	II-WC587-CHUB-NORM-G	951373001	MB6R680630	LC3R60630	951373-4	MB6R680630	LC3R68030	951373-11
PSRT-344	II-WC587-CHUB-NORM-H	951367002	MB2R680628	LC1R60628	951367-3	MB2R680628	LC1R80628	951367-9
PSRT-345	II-WC587-CHUB-NORM-I	951372010	MB4R680630	LC2R60630	951372-2	MB4R680630	LC2R80630	951372-17
PSRT-346	II-WC587-REDSNAPPER-NORM-A	951368004	MB6R680628	LC3R60628	951368-1	MB6R680628	LC3R80628	951368-14
PSRT-347	II-WC587-REDSNAPPER-NORM-B	951372017	MB4R680630	LC2R60630	951372-2	MB4R680630	LC2R80630	951372-17
PSRT-348	II-WC587-REDSNAPPER-NORM-C	951372019	MB4R680630	LC2R60630	951372-2	MB4R680630	LC2R80630	951372-17
PSRT-349	II-WC587-REDSNAPPER-NORM-D	951370013	MB8R680629	LC4R60629	951370-4	MB8R680629	LC4R80629	951370-18
PSRT-350	II-WC587-REDSNAPPER-NORM-E	951369010	MB6R680626	LC3R60626	951369-2	MB6R680626	LC3R80626	951369-17



Table A-412. (Continued).

Sample ID	Field ID	Lab ID	<sup>226</sup> Ra			<sup>228</sup> Ra		
			Blank ID	Standard ID	Spike ID	Blank ID	Standard ID	Spike ID
PSRT-351	III-WC587-CHUB-NORM-A	952946015	MB2R61228	LC1R61228	952946-7	MB2R81228	LC1R81228	952946-10
PSRT-352	III-WC587-CHUB-NORM-B	952946012	MB2R61228	LC1R61228	952946-7	MB2R81228	LC1R81228	952946-10
PSRT-353	III-WC587-CHUB-NORM-C	952947003	MB4R61229	LC2R61229	952947-2	MB4R81229	LC2R81229	952947-2
PSRT-354	III-WC587-CHUB-NORM-D	952945004	MB2R61227	LC1R61227	952945-16	MB2R81227	LC1R81227	952945-16
PSRT-355	III-WC587-CHUB-NORM-E	952945002	MB2R61227	LC1R61227	952945-16	MB2R81227	LC1R81227	952945-16
PSRT-356	III-WC587-ROCKHIND-NORM-A	952946001	MB2R61228	LC1R61228	952946-7	MB2R81228	LC1R81228	952946-10
PSRT-357	III-WC587-ROCKHIND-NORM-B	952944008	MB4R681226	LC2R61226	952944-2	MB4R81226	LC2R81226	952944-3
PSRT-358	III-WC587-ROCKHIND-NORM-C	952944005	MB4R681226	LC2R61226	952944-2	MB4R81226	LC2R81226	952944-3
PSRT-359	III-WC587-ROCKHIND-NORM-D	952947005	MB4R61229	LC2R61229	952947-2	MB4R81229	LC2R81229	952947-2
PSRT-360	III-WC587-ROCKHIND-NORM-E	952944007	MB4R681226	LC2R61226	952944-2	MB4R81226	LC2R81226	952944-3
PSRT-361	II-HI382-CHUB-NORM-A	951855007	MB4R680828	LC2R60828	951855-5	MB4R680828	LC2R80828	951855-14
PSRT-362	II-HI382-CHUB-NORM-B	951863011	MB6R680905	LC3R60905	951367-9	MB6R680905	LC3R80905	951373-11
PSRT-363	II-HI382-CHUB-NORM-C	951861013	MB4R60831	LC2R60831	951861-5	MB4R80831	LC2R80821	951622-12
PSRT-364	II-HI382-CHUB-NORM-D	951863001	MB6R680905	LC3R60905	951367-9	MB6R680905	LC3R80905	951373-11
PSRT-365	II-HI382-CHUB-NORM-F	951863003	MB6R680905	LC3R60905	951367-9	MB6R680905	LC3R80905	951373-11
PSRT-366	II-HI382-CREOLEFISH-NORM-E	951862003	MB4R680905	LC2R60905	951862-11	MB4R680905	LC2R80905	951368-1
PSRT-367	II-HI382-CREOLEFISH-NORM-F	951862001	MB4R680905	LC2R60905	951862-11	MB4R680905	LC2R80905	951368-1
PSRT-368	II-HI382-CREOLEFISH-NORM-G	951861017	MB4R60831	LC2R60831	951861-5	MB4R80831	LC2R80821	951622-12
PSRT-369	II-HI382-CREOLEFISH-NORM-H	951860009	MB2R60831	LC1R60831	951860-13	MB2R80831	LC1R80831	951622-11
PSRT-370	II-HI382-CREOLEFISH-NORM-I	951859005	MB4R60830	LC2R60830	951859-11	MB4R80830	LC2R80830	951859-17
PSRT-371	III-HI382-CHUB-NORM-A	960413005	MB2R680305	ST1R60305	960413-1	MB2R680305	LC1R80305	960413-13
PSRT-372	III-HI382-CHUB-NORM-B	960415003	MB2R680307	LC1R60307	960415-7	MB2R680307	LC1R80307	960415-17
PSRT-373	III-HI382-CHUB-NORM-C	960413007	MB2R680305	ST1R60305	960413-1	MB2R680305	LC1R80305	960413-13
PSRT-374	III-HI382-CHUB-NORM-D	960416010	MB4R680307	LC2R60307	960416-7	MB4R680307	LC2R80307	960416-15
PSRT-375	III-HI382-CHUB-NORM-E	960414014	MB4R680305	LC2R60305	960414-4	MB4R680305	LC2R80305	960414-17
PSRT-376	III-HI382-CREOLEFISH-NORM-B	960414013	MB4R680305	LC2R60305	960414-4	MB4R680305	LC2R80305	960414-17
PSRT-377	III-HI382-CREOLEFISH-NORM-C	960417002	MB2R680308	ST1R60308	960417-8	MB2R680308	LC2R80308	960417-12
PSRT-378	III-HI382-CREOLEFISH-NORM-D	960414007	MB4R680305	LC2R60305	960414-4	MB4R680305	LC2R80305	960414-17
PSRT-379	III-HI382-CREOLEFISH-NORM-E	960417011	MB2R680308	ST1R60308	960417-8	MB2R680308	LC2R80308	960417-12
PSRT-380	III-HI382-CREOLEFISH-NORM-F	960417010	MB2R680308	ST1R60308	960417-8	MB2R680308	LC2R80308	960417-12
PSRT-381	II-HI553-CHUB-NORM-A	951855015	MB4R680828	LC2R60828	951855-5	MB4R680828	LC2R80828	951855-14
PSRT-382	II-HI553-CHUB-NORM-B	951855003	MB4R680828	LC2R60828	951855-5	MB4R680828	LC2R80828	951855-14

Table A-412. (Continued).

Sample ID	Field ID	Lab ID	<sup>226</sup> Ra			<sup>228</sup> Ra		
			Blank ID	Standard ID	Spike ID	Blank ID	Standard ID	Spike ID
PSRT-383	II-HI553-CHUB-NORM-C	951858009	MB2R680830	LC1R60830	951624-9	MB2R680830	LC1R68083	951626-2
PSRT-384	II-HI553-CHUB-NORM-D	951856005	MB2R680829	LC1R60829	951856-1	MB2R680829	LC1R80829	951856-19
PSRT-385	II-HI553-CHUB-NORM-E	951855009	MB4R680828	LC2R60828	951855-5	MB4R680828	LC2R80828	951855-14
PSRT-386	II-HI553-CREOLEFISH-NORM-F	951855017	MB4R680828	LC2R60828	951855-5	MB4R680828	LC2R80828	951855-14
PSRT-387	II-HI553-CREOLEFISH-NORM-G	951858011	MB2R680830	LC1R60830	951624-9	MB2R680830	LC1R68083	951626-2
PSRT-388	II-HI553-CREOLEFISH-NORM-H	951858013	MB2R680830	LC1R60830	951624-9	MB2R680830	LC1R68083	951626-2
PSRT-389	II-HI553-CREOLEFISH-NORM-I	951858005	MB2R680830	LC1R60830	951624-9	MB2R680830	LC1R68083	951626-2
PSRT-390	II-HI553-CREOLEFISH-NORM-J	951856011	MB2R680829	LC1R60829	951856-1	MB2R680829	LC1R80829	951856-19
PSRT-391	III-HI553-CHUB-NORM-A	960413020	MB2R680305	ST1R60305	960413-1	MB2R680305	LC1R80305	960413-13
PSRT-392	III-HI553-CHUB-NORM-B	960413006	MB2R680305	ST1R60305	960413-1	MB2R680305	LC1R80305	960413-13
PSRT-393	III-HI553-CHUB-NORM-C	960417012	MB2R680308	ST1R60308	960417-8	MB2R680308	LC2R80308	960417-12
PSRT-394	III-HI553-CHUB-NORM-D	960414018	MB4R680305	LC2R60305	960414-4	MB4R680305	LC2R80305	960414-17
PSRT-395	III-HI553-CHUB-NORM-E	960413015	MB2R680305	ST1R60305	960413-1	MB2R680305	LC1R80305	960413-13
PSRT-396	III-HI553-CREOLEFISH-NORM-F	960415004	MB2R680307	LC1R60307	960415-7	MB2R680307	LC1R80307	960415-17
PSRT-397	III-HI553-CREOLEFISH-NORM-G	960417003	MB2R680308	ST1R60308	960417-8	MB2R680308	LC2R80308	960417-12
PSRT-398	III-HI553-CREOLEFISH-NORM-H	960418001	MB4R680311	LC2R60311	960417-21	MB4R680311	LC2R80311	960417-21
PSRT-399	III-HI553-CREOLEFISH-NORM-I	960416012	MB4R680307	LC2R60307	960416-7	MB4R680307	LC2R80307	960416-15
PSRT-400	III-HI553-CREOLEFISH-NORM-J	960416016	MB4R680307	LC2R60307	960416-7	MB4R680307	LC2R80307	960416-15
PSRT-401	II-EI100-CATFISH-NORM-E	951366010	MB4R680626	LC2R60626	951366-5	MB4R680626	LC2R80626	951366-20
PSRT-402	II-EI100-CATFISH-NORM-F	951368012	MB6R680628	LC3R60628	951368-1	MB6R680628	LC3R80628	951368-14
PSRT-403	II-EI100-CATFISH-NORM-G	951367007	MB2R680628	LC1R60628	951367-3	MB2R680628	LC1R80628	951367-9
PSRT-404	II-EI100-CATFISH-NORM-H	951366004	MB4R680626	LC2R60626	951366-5	MB4R680626	LC2R80626	951366-20
PSRT-405	II-EI100-CATFISH-NORM-I	951366007	MB4R680626	LC2R60626	951366-5	MB4R680626	LC2R80626	951366-20
PSRT-406	II-EI100-SHEEPSHEAD-NORM-A	951371008	MB2R680630	LC1R60630	951371-3	MB2R680630	LC1R80630	951371-12
PSRT-407	II-EI100-SHEEPSHEAD-NORM-B	951370005	MB8R680629	LC4R60629	951370-4	MB8R680629	LC4R80629	951370-18
PSRT-408	II-EI100-SHEEPSHEAD-NORM-C	951371005	MB2R680630	LC1R60630	951371-3	MB2R680630	LC1R80630	951371-12
PSRT-409	II-EI100-SHEEPSHEAD-NORM-D	951369006	MB6R680626	LC3R60626	951369-2	MB6R680626	LC3R80626	951369-17
PSRT-410	II-EI100-SHEEPSHEAD-NORM-E	951372008	MB4R680630	LC2R60630	951372-2	MB4R680630	LC2R80630	951372-17
PSRT-411	III-EI100-CATFISH-NORM-A	952946014	MB2R61228	LC1R61228	952946-7	MB2R81228	LC1R81228	952946-10
PSRT-412	III-EI100-CATFISH-NORM-B	952946006	MB2R61228	LC1R61228	952946-7	MB2R81228	LC1R81228	952946-10
PSRT-413	III-EI100-CATFISH-NORM-C	952946017	MB2R61228	LC1R61228	952946-7	MB2R81228	LC1R81228	952946-10
PSRT-414	III-EI100-CATFISH-NORM-D	952944020	MB4R681226	LC2R61226	952944-2	MB4R81226	LC2R81226	952944-3

Table A-412. (Continued).

Sample ID	Field ID	Lab ID	<sup>226</sup> Ra			<sup>228</sup> Ra		
			Blank ID	Standard ID	Spike ID	Blank ID	Standard ID	Spike ID
PSRT-415	III-EI100-CATFISH-NORM-E	952944001	MB4R681226	LC2R61226	952944-2	MB4R81226	LC2R81226	952944-3
PSRT-416	III-EI100-SHEEPSHEAD-NORM-A	952946003	MB2R61228	LC1R61228	952946-7	MB2R81228	LC1R81228	952946-10
PSRT-417	III-EI100-SHEEPSHEAD-NORM-B	952946010	MB2R61228	LC1R61228	952946-7	MB2R81228	LC1R81228	952946-10
PSRT-418	III-EI100-SHEEPSHEAD-NORM-C	952947001	MB4R61229	LC2R61229	952947-2	MB4R81229	LC2R81229	952947-2
PSRT-419	III-EI100-SHEEPSHEAD-NORM-D	952946009	MB2R61228	LC1R61228	952946-7	MB2R81228	LC1R81228	952946-10
PSRT-420	III-EI100-SHEEPSHEAD-NORM-E	952944014	MB4R681226	LC2R61226	952944-2	MB4R81226	LC2R81226	952944-3
PSRT-421	II-SS100-CATFISH-NORM-F	951366012	MB4R680626	LC2R60626	951366-5	MB4R680626	LC2R60626	951366-20
PSRT-422	II-SS100-CATFISH-NORM-G	951368011	MB6R680628	LC3R60628	951368-1	MB6R680628	LC3R60628	951368-14
PSRT-423	II-SS100-CATFISH-NORM-H	951368015	MB6R680628	LC3R60628	951368-1	MB6R680628	LC3R60628	951368-14
PSRT-424	II-SS100-CATFISH-NORM-I	951366005	MB4R680626	LC2R60626	951366-5	MB4R680626	LC2R60626	951366-20
PSRT-425	II-SS100-CATFISH-NORM-J	951367003	MB2R680628	LC1R60628	951367-3	MB2R680628	LC1R60628	951367-9
PSRT-426	II-SS100-SHEEPSHEAD-NORM-C	951371017	MB2R680630	LC1R60630	951371-3	MB2R680630	LC1R60630	951371-12
PSRT-427	II-SS100-SHEEPSHEAD-NORM-D	951367011	MB2R680628	LC1R60628	951367-3	MB2R680628	LC1R60628	951367-9
PSRT-428	II-SS100-SHEEPSHEAD-NORM-E	951370010	MB8R680629	LC4R60629	951370-4	MB8R680629	LC4R60629	951370-18
PSRT-429	II-SS100-SHEEPSHEAD-NORM-F	951371010	MB2R680630	LC1R60630	951371-3	MB2R680630	LC1R60630	951371-12
PSRT-430	II-SS100-SHEEPSHEAD-NORM-G	951373007	MB6R680630	LC3R60630	951373-4	MB6R680630	LC3R68030	951373-11
PSRT-431	III-SS100-CATFISH-NORM-A	952944019	MB4R681226	LC2R61226	952944-2	MB4R81226	LC2R81226	952944-3
PSRT-432	III-SS100-CATFISH-NORM-B	952944012	MB4R681226	LC2R61226	952944-2	MB4R81226	LC2R81226	952944-3
PSRT-433	III-SS100-CATFISH-NORM-C	952945010	MB2R61227	LC1R61227	952945-16	MB2R81227	LC1R81227	952945-16
PSRT-434	III-SS100-CATFISH-NORM-D	952944010	MB4R681226	LC2R61226	952944-2	MB4R81226	LC2R81226	952944-3
PSRT-435	III-SS100-CATFISH-NORM-E	952944017	MB4R681226	LC2R61226	952944-2	MB4R81226	LC2R81226	952944-3
PSRT-436	III-SS100-SHEEPSHEAD-NORM-A	952946011	MB2R61228	LC1R61228	952946-7	MB2R81228	LC1R81228	952946-10
PSRT-437	III-SS100-SHEEPSHEAD-NORM-B	952945008	MB2R61227	LC1R61227	952945-16	MB2R81227	LC1R81227	952945-16
PSRT-438	III-SS100-SHEEPSHEAD-NORM-C	952945009	MB2R61227	LC1R61227	952945-16	MB2R81227	LC1R81227	952945-16
PSRT-439	III-SS100-SHEEPSHEAD-NORM-D	952945003	MB2R61227	LC1R61227	952945-16	MB2R81227	LC1R81227	952945-16
PSRT-440	III-SS100-SHEEPSHEAD-NORM-E	952945011	MB2R61227	LC1R61227	952945-16	MB2R81227	LC1R81227	952945-16
PSRT-441	II-VR31-BLUE CRAB-NORM-A	951368008	MB6R680628	LC3R60628	951368-1	MB6R680628	LC3R60628	951368-14
PSRT-442	II-VR31 -BLUE CRAB-NORM-B	951365006	MB4R60625	LC2R60625	951365-1	MB4R80625	LC2R60625	951365-16
PSRT-443	II-VR31 -BLUE CRAB-NORM-C	951365002	MB4R60625	LC2R60625	951365-1	MB4R80625	LC2R60625	951365-16
PSRT-444	II-VR31 -BLUE CRAB-NORM-D	951365007	MB4R60625	LC2R60625	951365-1	MB4R80625	LC2R60625	951365-16
PSRT-445	II-VR31 -BLUE CRAB-NORM-E	951365004	MB4R60625	LC2R60625	951365-1	MB4R80625	LC2R60625	951365-16
PSRT-446	II-VR31-CATFISH-NORM-F	951367005	MB2R680628	LC1R60628	951367-3	MB2R680628	LC1R60628	951367-9

Table A-412. (Continued).

Sample ID	Field ID	Lab ID	<sup>226</sup> Ra			<sup>228</sup> Ra		
			Blank ID	Standard ID	Spike ID	Blank ID	Standard ID	Spike ID
PSRT-447	II-VR31-CATFISH-NORM-G	951367019	MB2R680628	LC1R60628	951367-3	MB2R680628	LC1R80628	951367-9
PSRT-448	II-VR31-CATFISH-NORM-H	951366008	MB4R680626	LC2R60626	951366-5	MB4R680626	LC2R80626	951366-20
PSRT-449	II-VR31-CATFISH-NORM-I	951366019	MB4R680626	LC2R60626	951366-5	MB4R680626	LC2R80626	951366-20
PSRT-450	II-VR31-CATFISH-NORM-J	951370006	MB8R680629	LC4R60629	951370-4	MB8R680629	LC4R80629	951370-18
PSRT-451	II-VR31-OYSTER-NORM-A	951623017	MB2R60727	LC1R60727	951623-1	MB2R80727	LC1R80727	951623-10
PSRT-452	II-VR31-OYSTER-NORM-B	951623013	MB2R60727	LC1R60727	951623-1	MB2R80727	LC1R80727	951623-10
PSRT-453	II-VR31-OYSTER-NORM-C	951623015	MB2R60727	LC1R60727	951623-1	MB2R80727	LC1R80727	951623-10
PSRT-454	II-VR31-OYSTER-NORM-D	951623007	MB2R60727	LC1R60727	951623-1	MB2R80727	LC1R80727	951623-10
PSRT-455	II-VR31-OYSTER-NORM-E	951623001	MB2R60727	LC1R60727	951623-1	MB2R80727	LC1R80727	951623-10
PSRT-456	III-VR31-BLUECRAB-NORM-A	960435001	MB4R680311	LC2R60311	960417-21	MB4R680311	LC2R80311	960417-21
PSRT-457	III-VR31-BLUECRAB-NORM-B	960435002	MB4R680311	LC2R60311	960417-21	MB4R680311	LC2R80311	960417-21
PSRT-458	III-VR31-BLUECRAB-NORM-C	960435003	MB4R680311	LC2R60311	960417-21	MB4R680311	LC2R80311	960417-21
PSRT-459	III-VR31-BLUECRAB-NORM-D	960435004	MB4R680311	LC2R60311	960417-21	MB4R680311	LC2R80311	960417-21
PSRT-460	III-VR31-BLUECRAB-NORM-E	960435005	MB4R680311	LC2R60311	960417-21	MB4R680311	LC2R80311	960417-21
PSRT-461	III-VR31-CATFISH-NORM-B	960417009	MB2R680308	ST1R60308	960417-8	MB2R680308	LC2R80308	960417-12
PSRT-462	III-VR31-CATFISH-NORM-C	960416009	MB4R680307	LC2R60307	960416-7	MB4R680307	LC2R80307	960416-15
PSRT-463	III-VR31-CATFISH-NORM-D	960417006	MB2R680308	ST1R60308	960417-8	MB2R680308	LC2R80308	960417-12
PSRT-464	III-VR31-CATFISH-NORM-E	960415001	MB2R680307	LC1R60307	960415-7	MB2R680307	LC1R80307	960415-17
PSRT-465	III-VR31-CATFISH-NORM-F	960415009	MB2R680307	LC1R60307	960415-7	MB2R680307	LC1R80307	960415-17
PSRT-466	III-VR31-OYSTER-NORM-A	960416008	MB4R680307	LC2R60307	960416-7	MB4R680307	LC2R80307	960416-15
PSRT-467	III-VR31-OYSTER-NORM-B	960416003	MB4R680307	LC2R60307	960416-7	MB4R680307	LC2R80307	960416-15
PSRT-468	III-VR31-OYSTER-NORM-C	960413001	MB2R680305	ST1R60305	960413-1	MB2R680305	LC1R80305	960413-13
PSRT-469	III-VR31-OYSTER-NORM-D	960415015	MB2R680307	LC1R60307	960415-7	MB2R680307	LC1R80307	960415-17
PSRT-470	III-VR31-OYSTER-NORM-E	960415017	MB2R680307	LC1R60307	960415-7	MB2R680307	LC1R80307	960415-17
PSRT-471	II-SMI229-BLUE CRAB-NORM-A	951365003	MB4R60625	LC2R60625	951365-1	MB4R80625	LC2R80625	951365-16
PSRT-472	II-SMI229-BLUE CRAB-NORM-B	951365001	MB4R60625	LC2R60625	951365-1	MB4R80625	LC2R80625	951365-16
PSRT-473	II-SMI229-BLUECRAB-NORM-C	951366020	MB4R680626	LC2R60626	951366-5	MB4R680626	LC2R80626	951366-20
PSRT-474	II-SMI229-BLUE CRAB-NORM-D	951368001	MB6R680628	LC3R60628	951368-1	MB6R680628	LC3R80628	951368-14
PSRT-475	II-SMI229-BLUE CRAB-NORM-E	951365005	MB4R60625	LC2R60625	951365-1	MB4R80625	LC2R80625	951365-16
PSRT-476	II-SMI229-CATFISH-NORM-D	951367014	MB2R680628	LC1R60628	951367-3	MB2R680628	LC1R80628	951367-9
PSRT-477	II-SMI229-CATFISH-NORM-E	951366002	MB4R680626	LC2R60626	951366-5	MB4R680626	LC2R80626	951366-20
PSRT-478	II-SMI229-CATFISH-NORM-H	951367013	MB2R680628	LC1R60628	951367-3	MB2R680628	LC1R80628	951367-9

Table A-412. (Continued).

Sample ID	Field ID	Lab ID	<sup>226</sup> Ra			<sup>228</sup> Ra		
			Blank ID	Standard ID	Spike ID	Blank ID	Standard ID	Spike ID
PSRT-479	II-SMI229-CATFISH-NORM-I	951368017	MB6R680628	LC3R60628	951368-1	MB6R680628	LC3R80628	951368-14
PSRT-480	II-SMI229-CATFISH-NORM-J	951365009	MB4R60625	LC2R60625	951365-1	MB4R80625	LC2R80625	951365-16
PSRT-481	II-SMI229-OYSTER-NORM-A	951623005	MB2R60727	LC1R60727	951623-1	MB2R80727	LC1R80727	951623-10
PSRT-482	II-SMI229-OYSTER-NORM-B	951622015	MB2R60726	LC1R60726	951622-2	MB2R80726	LC1R80726	951622-12
PSRT-483	II-SMI229-OYSTER-NORM-C	951624003	MB4R60727	LC2R60727	951624-9	MB4R80727	LC2R80727	951626-2
PSRT-484	II-SMI229-OYSTER-NORM-D	951623003	MB2R60727	LC1R60727	951623-1	MB2R80727	LC1R80727	951623-10
PSRT-485	II-SMI229-OYSTER-NORM-E	951623011	MB2R60727	LC1R60727	951623-1	MB2R80727	LC1R80727	951623-10
PSRT-486	III-SMI229-BLUECRAB-NORM-A	960435006	MB4R680311	LC2R60311	960417-21	MB4R680311	LC2R80311	960417-21
PSRT-487	III-SMI229-CATFISH-NORM-A	960413014	MB2R680305	ST1R60305	960413-1	MB2R680305	LC1R80305	960413-13
PSRT-488	III-SMI229-CATFISH-NORM-B	960413003	MB2R680305	ST1R60305	960413-1	MB2R680305	LC1R80305	960413-13
PSRT-489	III-SMI229-CATFISH-NORM-C	960413019	MB2R680305	ST1R60305	960413-1	MB2R680305	LC1R80305	960413-13
PSRT-490	III-SMI229-CATFISH-NORM-D	960414005	MB4R680305	LC2R60305	960414-4	MB4R680305	LC2R80305	960414-17
PSRT-491	III-SMI229-CATFISH-NORM-E	960414002	MB4R680305	LC2R60305	960414-4	MB4R680305	LC2R80305	960414-17
PSRT-492	III-SMI229-OYSTER-NORM-A	960416004	MB4R680307	LC2R60307	960416-7	MB4R680307	LC2R80307	960416-15
PSRT-493	III-SMI229-OYSTER-NORM-B	960415018	MB2R680307	LC1R60307	960415-7	MB2R680307	LC1R80307	960415-17
PSRT-494	III-SMI229-OYSTER-NORM-C	960415016	MB2R680307	LC1R60307	960415-7	MB2R680307	LC1R80307	960415-17
PSRT-495	III-SMI229-OYSTER-NORM-D	960416002	MB4R680307	LC2R60307	960416-7	MB4R680307	LC2R80307	960416-15
PSRT-496	III-SMI229-OYSTER-NORM-E	960416001	MB4R680307	LC2R60307	960416-7	MB4R680307	LC2R80307	960416-15

Table A-413. <sup>226</sup>Ra activity in method blanks for tissue sample analyses.

Blank ID	Activity (pCi/g)
MB4R60124	0.001
MB2R60125	0.000
MB2R60126	0.000
MB2R60130	0.000
MB2R60131	0.000
MB6R60206	0.000
MB2R60313	-0.002
MB4R60625	0.008
MB4R680626	0.002
MB2R680628	0.005
MB6R680628	0.000
MB6R680626	0.001
MB8R680629	0.001
MB2R680630	0.011
MB4R680630	0.007
MB6R680630	-0.010
MB2R60726	0.002
MB2R60727	-0.023
MB4R60727	-0.003
MB4R680828	0.003
MB2R680829	0.004
MB4R60829	0.001
MB2R680830	0.004
MB4R60830	0.000
MB2R60831	0.000
MB4R60831	0.000
MB4R680905	-0.005
MB6R680905	0.003
MB4R681226	-0.007
MB2R61227	0.001
MB2R61228	0.005
MB4R61229	-0.006
MB2R680305	-0.002
MB4R680305	0.002
MB2R680307	-0.001
MB4R680307	0.004
MB2R680308	-0.002
MB4R680311	0.001
MB4R680311	0.001

Table A-414. Percent recovery of  $^{226}\text{Ra}$  in reference standard samples for tissue sample analyses.

Standard ID	Percent Recovery
LC2R60124	89
LC1R60125	95
LC1R60126	93
LC1R60130	107
LC1R60131	95
LC3R60206	105
LC1R60313	111
LC2R60625	121
LC2R60626	106
LC1R60628	97
LC3R60628	100
LC3R60626	103
LC4R60629	107
LC1R60630	99
LC2R60630	111
LC3R60630	107
LC1R60726	103
LC1R60727	126
LC2R60727	98
LC2R60828	105
LC1R60829	112
LC2R60829	108
LC1R60830	101
LC2R60830	94
LC1R60831	115
LC2R60831	100
LC2R60905	95
LC3R60905	106
LC2R61226	111
LC1R61227	117
LC1R61228	104
LC2R61229	84
ST1R60305	114
LC2R60305	105
LC1R60307	100
LC2R60307	114
ST1R60308	119
LC2R60311	98
LC2R60311	98

Table A-415. Percent recovery of  $^{226}\text{Ra}$  in spiked samples for tissue sample analyses.

Spike ID	Percent Recovery
950108-13	71
950109-7	60
950110-4	66
950111-3	94
950112-1	80
950202-2	77
950241-1	75
951365-1	90
951366-5	97
951367-3	80
951368-1	77
951369-2	102
951370-4	82
951371-3	100
951372-2	77
951373-4	95
951622-2	94
951623-1	107
951624-9	109
951855-5	105
951856-1	92
951857-7	91
951624-9	96
951859-11	99
951860-13	76
951861-5	70
951862-11	94
951367-9	102
952944-2	100
952945-16	68
952946-7	78
952947-2	84
960413-1	66
960414-4	80
960415-7	80
960416-7	80
960417-8	67
960417-21	71
960417-21	71



Table A-416. <sup>228</sup>Ra activity in method blanks for tissue sample analyses.

Blank ID	Activity (pCi/g)
MB4R80124	0.014
MB2R80125	-0.073
MB2R80126	-0.013
MB2R80130	-0.012
MB2R80131	-0.005
MB6R80206	-0.002
MB2R80313	0.012
MB4R80625	0.018
MB4R680626	0.008
MB2R680628	0.030
MB6R680628	0.007
MB6R680626	0.005
MB8R680629	-0.009
MB2R680630	0.024
MB4R680630	0.007
MB6R680630	0.023
MB2R80726	-0.008
MB2R80727	0.000
MB4R80727	0.006
MB4R680828	0.021
MB2R680829	-0.019
MB4R80829	0.003
MB2R680830	0.017
MB4R80830	0.021
MB2R80831	-0.012
MB4R80831	0.016
MB4R680905	-0.014
MB6R680905	0.014
MB4R81226	0.007
MB2R81227	0.004
MB2R81228	0.013
MB4R81229	0.015
MB2R680305	-0.016
MB4R680305	0.005
MB2R680307	-0.015
MB4R680307	0.013
MB2R680308	0.014
MB4R680311	0.000
MB4R680311	0.000

Table A-417. Percent recovery of <sup>228</sup>Ra in reference standard samples for tissue sample analyses.

Standard ID	Percent Recovery
LC2R80124	109
LC1R80125	124
LC1R80126	101
LC1R80130	121
LC1R80131	104
LC3R80206	101
LC1R80313	109
LC2R80625	104
LC2R80626	104
LC1R80628	93
LC3R80628	91
LC1R80626	122
LC2R80629	77
LC1R80630	90
LC2R80630	111
LC3R80630	92
LC1R80726	115
LC1R80727	95
LC2R80727	98
LC2R80828	91
LC1R80829	100
LC2R80829	114
LC1R80830	109
LC2R80830	100
LC1R80831	96
LC2R80821	96
LC2R80905	98
LC3R80905	100
LC2R81226	108
LC1R81227	110
LC1R81228	104
LC2R81229	90
LC1R80305	96
LC2R80305	104
LC1R80307	111
LC2R80307	101
LC2R80308	108
LC2R80311	98
LC2R80311	98

Table A-418. Percent recovery of <sup>228</sup>Ra in spiked samples for tissue sample analyses.

Spike ID	Percent Recovery
950108-13	94
950109-14	82
950110-19	97
950111-18	123
950112-8	59
950202-10	94
950241-8	46
951365-16	79
951366-20	87
951367-9	93
951368-14	91
951369-17	88
951370-18	81
951371-12	114
951372-17	92
951373-11	86
951622-12	111
951623-10	96
951626-2	98
951855-14	104
951856-19	92
951626-1	98
951626-2	104
951859-17	91
951622-11	93
951622-12	85
951368-1	99
951373-11	117
952944-3	100
952945-16	83
952946-10	90
952947-2	84
960413-13	75
960414-17	79
960415-17	77
960416-15	71
960417-12	105
960417-21	83
960417-21	83