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**Kingston Ash Recovery Project
Non-Time-Critical Removal Action**

**River System Sampling and Analysis Plan
Task Completion Technical Memorandum
Fish Sampling**

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for the Tennessee Valley Authority

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List of Acronyms

ALS Laboratory	ALS Laboratory Group
ASU	Appalachian State University
CRM	Clinch River Mile
DQO	data quality objective
EDD	electronic data deliverable
EE/CA	Engineering Evaluation/Cost Analysis
ERM	Emory River Mile
KIF	Kingston Fossil Plant
LERM	Little Emery River Mile
MDL	method detection limit
ORNL	Oak Ridge National Laboratory
Pace Analytical	Pace Analytical Services, Inc.
PCB	polychlorinated biphenyl
QC	quality control
SAP	Sampling and Analysis Plan
SOP	Standard Operating Procedure
TDEC	Tennessee Department of Environment and Conservation
TM	Technical Memorandum
TRM	Tennessee River Mile
TVA	Tennessee Valley Authority
TWRA	Tennessee Wildlife Resources Agency
WP	Work Package

1. PURPOSE

The purpose of this Technical Memorandum (TM) is to summarize the completion of the 2010 fish sampling as described in the approved *Kingston Ash Recovery Project Non-Time-Critical Removal Action for the River System Sampling and Analysis Plan* (SAP), Rev. 3, May 24, 2010, Document No. EPA-AO-021. In addition, this TM summarizes data collected in 2009, including baseline sampling, regulator special request samples, and Swan Pond Embayment samples. Data from 2010 third-party research institution split samples are also discussed and summarized. This TM is one of a series being prepared to summarize the field work and data collection activities as SAP tasks are completed. The TM series is intended to provide interim presentations of data that will become the basis for the nature and extent of contamination section of the River System Engineering Evaluation/Cost Analysis (EE/CA) Report. No data evaluation or conclusions are presented. Those on the distribution list for these TMs are anticipated to be principal reviewers of the EE/CA Report, so this provides the opportunity to review data summaries in advance of the complete report.

This TM summarizes sampling performed in 2009 and 2010 to assess bioaccumulation of ash-related contaminants (primarily metals and metalloids) in fish potentially exposed to released ash, and the data resulting from those collections. An addendum to this TM will summarize bioaccumulation data for select speciated metals, chlorinated pesticides, polychlorinated biphenyls, and radionuclides that were analyzed for a fraction of the fish samples, but for which data are not yet available. In addition, Oak Ridge National Laboratory (ORNL) collected information on fish health and reproduction in 2009 and 2010. That data will be presented in an ORNL report scheduled to be completed later this summer.

2. BACKGROUND

The data quality objective (DQO) problem statement for fish sampling is:

Naturally-occurring metals (e.g., arsenic, selenium) and radionuclides (e.g., radium-226, thorium-228) in ash may accumulate in fish to concentrations that pose unacceptable risk to human or ecological receptors who regularly consume fish from the river system.

Section 2.2.8 of the SAP discusses the design of the fish sampling studies. Fish communities of interest include both pelagic (open-water or “top feeding”) and benthic (bottom-dwelling or “bottom-feeding”) communities. Concentrations of ash-related constituents may bioaccumulate in fish over time. In addition, fish are a food source for human recreators who consume fish and for the aquatic- or riparian-feeding piscivorous wildlife. To estimate the potential ingestion of ash-related constituents in fish by human or ecological receptors, the concentrations of those constituents in fish tissues must be determined.

Fish sampling began in January 2009, immediately following the spill, to document baseline contamination conditions at the site. The purpose of that sampling was to collect fish before there was sufficient time for ash-related contaminants to bioaccumulate in resident fish. Fish sampling continued through the spring, summer, and fall of 2009. In February 2010, the SAP was approved; it included a fish sampling plan for the Emory and Clinch Rivers. Sampling in the spring and fall of 2010 followed this plan. Several agencies (Tennessee Valley Authority [TVA], Tennessee Department of Environment and Conservation [TDEC], Tennessee Wildlife Resources Agency [TWRA], ORNL, Tennessee Aquarium, and Appalachian State University [ASU]) have contributed to the various fish sampling events described in this TM. The species collected for the different events vary, along with the type of sample (whole body, fillet, organ, etc.) and the chemical analyses. Samples were collected using either electrofishing or gill netting. Each sampling event is described in Section 3, Sampling and Analysis Activities.

3. SAMPLING AND ANALYSIS ACTIVITIES

Field sampling activities occurred immediately after the release in January 2009, and continued in the spring and fall of 2009 and 2010. Sampling was conducted in accordance with the procedures described in Standard Operating Procedure (SOP) TVA-KIF-SOP-31 *Fish Sampling with Gill Nets*, (issued August 2010), TVA-KIF-SOP-32 *Fish Sampling with Seines*, (issued August 2010), and TVA-KIF-SOP-33 *Fish Sampling with Boat Mounted Electrofishing*, (issued June 2010). Sampling was performed in the Emory, Clinch, and Tennessee Rivers. Target species and collection types for each collection are described below.

Baseline Fish, Spring 2009

Baseline post-spill sampling of fish from locations on the Emory and Clinch Rivers (Emory River Mile [ERM] 0.5, Clinch River Mile [CRM] 1.5, and CRM 9.5) was conducted out in January and February 2009 and supplemental sampling event at ERM 8.0 in April 2009 to document concentrations of metals in fish tissue and fish health. TVA, TDEC, TWRA, and ORNL collaborated in collecting 53 fish consisting of largemouth bass, channel catfish, blue catfish, and spotted bass. The 53 fish were individually processed and homogenized at TDEC and subsequently split among several laboratories for analysis for metals in muscle (fillet) tissues. The results from this initial study are considered to represent baseline conditions existing at the time of and immediately prior to the ash spill. They were intended to provide a basis for future bioaccumulation comparisons. These data also were used to evaluate potential human health impacts due to fish consumption immediately after the release, when little bioaccumulation would have occurred.

At the time of the initial chemical analyses of these fish, results were reported to the specified project reporting limits. This resulted in numerous non-detected results that made evaluation of spatial and temporal trends difficult. Project quality assurance protocols were revised so that all subsequent fish sample analyses have been reported to the project method detection limit (MDL). The project MDL is set at the higher value between the 40 CFR MDL and 3σ of the average blanks. The 40 CFR MDL is the lowest concentration that the instrument can be proved to detect, based on multiple low-level known standards run with each sample group. In addition to generating the 40 CFR MDL, Pace also evaluated the 3σ of the average value of the blanks analyzed over a period of time. The project MDL was set at the highest value between these two determinations. The best commercially available technology and U.S. Environmental Protection Agency-approved methodologies were used. These rigorous testing protocols were used to generate the lowest defensible MDLs for all abiotic and biotic media analyzed by TVA for this project since September 2009.

In order to facilitate useful trend analysis, a decision was made to reanalyze the frozen, retained baseline fish samples in order to report values to the project MDLs. In 2011, frozen homogenate tissue (36 samples) and fillets (53 samples) from the 53 baseline fish were reanalyzed for metals.

Comparisons of the original baseline fish results and the reanalyzed baseline fish results are currently underway. As a result, both the original and reanalyzed datasets are provided in Appendix A. Based on current holding time requirements, all detected results for the re-analyses are qualified as estimated and all nondetected results in the reanalyzed baseline fish are qualified as rejected. Further investigation is underway to evaluate whether the current project holding times for frozen fish tissues may be extended in order to remove the “estimated” qualification. Additional work also is underway to evaluate the appropriate use of the different analytical results for these 53 “baseline fish”. A TM summarizing results of those investigations will be submitted upon the completion of this evaluation.

TDEC Special Request I, Spring, 2009

In March 2009, in preparation for testimony before a U.S. Congressional subcommittee, TDEC requested TVA assistance in collecting composite samples of bass and sunfish for metals/metalloids bioaccumulation analyses. Four redear sunfish and four largemouth bass were collected from ERM 3.0, homogenized by species as whole fish composite samples, and analyzed for a suite of 25 metals.

TDEC Special Request II, Spring, 2009

In April and May 2009, TDEC requested TVA assistance in collecting crappie for whole fish analysis from four sites (ERM 0.9, ERM 2.0/3.0, ERM 8.0, and CRM 8.0). Five black crappie were collected from each location, homogenized as whole fish, and analyzed for a suite of 25 elements.

TVA Sampling, Spring 2009

In April through July 2009, TVA, TDEC, TWRA, and ORNL collaborated in collecting fish for bioaccumulation, health, and reproduction studies. Fish species sampled included largemouth bass (fillet, liver, ovary), bluegill (fillet, liver, ovary), and white and black crappie (fillet, liver, ovary). Samples were collected by electroshocking near ERM 0.9, ERM 3.0, ERM 8.0, CRM 1.5, and CRM 7.0/8.0. At each site and for each species, the goal was to collect eight mature females with developed gonads. However, in a few cases, the target of eight individuals was not achieved for some species because of limited availability of mature females at a site. A blood sample was taken from each fish immediately upon collection, and a unique 5 digit identification number was affixed to each individual. Fish were then placed in a livewell onboard the boat. At the end of each day of sampling, fish were transported to the ORNL laboratory in aerated containers filled with water from the site.

At the ORNL lab, all fish were processed for a suite of individual health indicators (e.g., blood chemistry and physical condition) and the liver, ovaries, and fillets (muscle tissue) from six of the eight fish were harvested for metals analysis. Due to small sample masses, the liver and ovary tissues from these samples were analyzed only by the ORNL-contracted laboratory, ALS Laboratory Group, Fort Collins, CO (ALS Laboratory); fillets were analyzed by both ALS Laboratory and by TVA-contracted laboratory, Pace Analytical Services, Inc., Green Bay, WI (Pace Analytical). As a result, the analytical results for liver and ovary tissue are not yet included in the TVA project database and are not summarized in the tables presented in Appendix A.

Gizzard shad (whole body) also were collected to assess the role and importance of a main forage fish (shad) as a mechanism by which contaminants associated with fly ash are incorporated into the aquatic-terrestrial food chain. Shad are the primary forage fish of the larger piscivorous fish (i.e., bass) and also piscivorous birds (i.e., great blue heron and osprey). They also graze on primary producers (periphyton), thus representing an important step in trophic transfer of contaminants. Due to their small size, three composite samples consisting of 10 whole shad each were collected from each of the five sites.

TWRA Special Request, Summer, 2009

In June and July 2009, TVA, TDEC, TWRA, and ORNL collaborated in additional fish collections for bioaccumulation studies in the Emory River (ERM 0.7, ERM 1.0, and ERM 6.0). Species sampled included largemouth bass (whole body), channel catfish (whole body, ovary), and blue catfish (whole body).

TVA Swan Pond Embayment Sampling, Summer, 2009

In June 2009, fish from the Swan Pond East Embayment were captured for relocation to the Emory River. The capture and transfer was conducted to prevent a die-off of fish in the embayment due to reduced oxygen levels and increasing water temperatures in the stagnant water body. Approximately 1,300 fish were collected for transfer, of which 96 fish (largemouth bass, bluegill, gizzard shad, and redear sunfish) were retained for chemical analysis. Five individual largemouth bass were analyzed as whole fish homogenates. The remaining fish were analyzed as homogenized composite whole fish (or whole fish minus gut content) samples. These included six bluegill composite samples, two gizzard shad composite samples, and two redear sunfish composite samples.

TVA Sampling, Fall, 2009

In September through November of 2009, TVA, TDEC, TWRA, and ORNL collaborated in collecting fish for bioaccumulation and health study. Several different measurements were used to assess fish health. These included biochemical indicators (e.g., blood chemistry), physical condition, and analyses of tissues and organs for metals content. Fish species sampled included largemouth bass (fillet, whole body minus gut content), channel catfish (fillet), and bluegill (fillet, whole body minus gut content). Samples were collected at three locations each on the Emory River (ERM 0.9, ERM 2.0/3.0, and ERM 8.0) and Clinch River (CRM 1.5, CRM 8.0, and CRM 25.0) and one location on the Little Emory River (LERM 2.0). Eight individuals of each species were collected per site. Immediately upon collection by boat electrofishing, a blood sample was taken from each fish, a tag with a unique 5 digit identification number was affixed to each individual, fish were then placed in a livewell onboard the boat, and transported to the lab alive for processing for bioaccumulation and fish health. At the ORNL laboratory, fish were processed for a variety of individual health indicators and the liver and fillets harvested from six individuals of each species for metals analysis.

Composite samples of gizzard shad (whole body) were also collected at ERM 2.0/3.0, CRM 1.5, CRM 8.0, and CRM 25.0, and gizzard shad (whole body) and threadfin shad (whole body) were collected from the Swan Pond East Embayment.

TN Aquarium/ ASU, Winter, 2010

In January 2010, the Tennessee Aquarium and ASU collected largemouth bass (fillet, liver, ovary), redear sunfish (fillet), long ear sunfish (whole body), gizzard shad (fillet, liver, ovary), bluegill (whole body), white crappie (fillet, ovary) and black crappie (fillet, liver, ovary) from locations on the Clinch and Tennessee Rivers (CRM 3.5, CRM 5.5, and Tennessee River Mile (TRM) 567.0). At TVA's request, split samples were sent from ASU to Pace Analytical and were analyzed for a suite of elements. These samples were collected to assess the quality associated with the measurements made at the research institutions analytical laboratory.

TVA SAP Sampling, Spring, 2010

In April through July 2010, TVA, TDEC, TWRA, and ORNL collaborated in the collection of fish for bioaccumulation evaluation. Fish collected were examined for anomalies (such as disease, deformations, or hybridizations). Samples were collected from four locations on the Emory River (ERM 0.9, ERM 2.0/3.0, ERM 4.5, and ERM 8.0), four locations on the Clinch River (CRM 1.5, CRM 3.5, CRM 8.0, and CRM 25.0), and one location on the Little Emory River (LERM 2.0). Samples were collected using a combination of electroshocking and gill netting as needed to obtain sufficient sample volume for analysis.

In accordance with the SAP, samples of largemouth bass, bluegill, and channel catfish were collected. Up to six replicates were collected of each species at each sample reach location to measure variability. Both fillet and non-fillet (carcass) portions of each sample were analyzed for metals and speciation of arsenic. To the extent that a sample volume allowed, 25% of the samples were also analyzed for polychlorinated biphenyls (PCBs) and chlorinated pesticides as legacy constituents in the river system. For fillet portions, 25% of the samples were analyzed for radionuclides to assess potential risk to human health. Where insufficient sample mass was available, samples were composited to achieve the necessary mass. Percent moisture and percent lipids were also determined for each sample.

Samples of gizzard shad were also collected to evaluate food web exposures. Samples were collected from the same nine locations as the other fish species. Because of their small size, up to 10 individual fish were composited into a single sample, with up to three composite samples at each location. Samples analyzed included whole fish, whole fish with gut and gut content removed, and gut and gut content. No fillet data were collected as shad are not typically eaten by humans. Shad samples were analyzed for metals, and 25% were analyzed for arsenic speciation. Approximately 25% of the samples were also analyzed for PCBs and chlorinated pesticides.

TN Aquarium / ASU, Fall, 2010

In September 2010, the Tennessee Aquarium and ASU collected largemouth bass (fillet) and redear sunfish (fillet) from locations on the Emory and Clinch Rivers (ERM 2.0, ERM 3.5, and CRM 5.5). Split samples were sent from ASU to Pace Analytical and were analyzed for a suite of 25 metals. These samples were collected to assess the quality associated with the measurements made at the research institution's analytical laboratory and are presented as both wet weight and freeze dried.

TVA SAP Sampling, Fall, 2010

In September, October, and December 2010, and January 2011, TVA, TDEC, TWRA, and ORNL collaborated in the collecting fish for bioaccumulation evaluation. Fish collected were examined for anomalies (such as disease, deformations, or hybridizations). Samples were collected from four locations on the Emory River (ERM 0.9, ERM 2.5/3.0, ERM 4.5 and ERM 8.0), three locations on the Clinch River (CRM 1.5, CRM 3.5, and CRM 8.0), and one location on the Little Emory River (LERM 2.0). Samples were collected using a combination of electroshocking and gill netting as required for obtaining sufficient sample volume for analysis. In accordance with the SAP, samples of largemouth bass, bluegill, and catfish were collected. Up to six replicates were collected of each species at each sample reach location to measure variability within the reach. Both fillet and non-fillet (whole body minus gut content) portions of each sample were analyzed for metals and speciation of arsenic. To the extent that a sample volume allowed, 25% of the samples were also analyzed for PCBs and chlorinated pesticides as legacy constituents in the river system. For fillet portions, 25% of the samples were analyzed for radionuclides to assess potential risk to human health. Where insufficient sample mass was available, samples were composited to achieve the necessary mass. Percent moisture and percent lipids were also determined for each sample, when sufficient sample mass was available.

Samples of gizzard shad also were collected from the same locations as the other fish species, with the exception of LERM 2.0. Individual fish were composited into a single sample, with up to three composite samples at each location. Samples analyzed included whole body fish, whole body fish with gut content removed, and gut and gut content. Shad samples were analyzed for metals, and 25% were analyzed for arsenic speciation. Approximately 25% of the samples were also analyzed for PCBs and chlorinated pesticides.

Samples were shipped to the lab on dry ice for chemical analysis. Field collection activities for 2009 and 2010 are summarized in Table 1.

Table 1. Summary of Fish Field Activities

Summary	2009	2010
Field Collection Periods ^a	January – June; September – January 2010	April – July; September – January 2011
Species Collected ^b	BS, BG, CF, GS, CR, RS	BS, BG, CF, GS, CR, RS, LS
Endpoints	Bioaccumulation; Reproduction; Health	Bioaccumulation; Reproduction; Health
Collectors	TVA, ORNL, TDEC, TWRA	TVA, ORNL, TDEC, TWRA, Tennessee Aquarium / ASU

Notes:

^aSee Appendix A for collection details.

^bSpecies collected: BS=bass, BG=bluegill, CF=catfish, GS=gizzard shad, CP=crappie, RS=redear sunfish, LS=long ear sunfish

For additional definitions, see the Acronyms section.

Sampling and analyses conducted by TVA were performed in accordance with the *Quality Assurance Project Plan for the Tennessee Valley Authority Kingston Ash Recovery Project* hereinafter referred to as the TVA-KIF-QAPP, the listed SOPs, field guides, and work package WP-1063. Table 2 identifies the applicable TVA documents and SOPs associated with this fish sampling.

In 2009, field samples were shipped to Pace Analytical and ALS Laboratory for metals analysis. In 2010, metals analysis was only conducted at Pace Analytical. Samples were also shipped to Frontier Global Services, Seattle, WA for metals speciation, Pace Analytical for PCBs and chlorinated pesticides, and GEL Laboratories LLC, Charleston, SC for radionuclides.

Table 2. Applicable TVA Documents and Standard Operating Procedures

Document	Document Number
TVA KIF Ash Recovery Project Quality Assurance Project Plan	TVA-KIF-QAPP
TVA-KIF Work Package: Fish Sampling	WP-1063
STANDARD OPERATION PROCEDURES:	
Fish Sampling with Gill Nets	TVA-KIF-SOP-31
Fish Sampling with Seines	TVA-KIF-SOP-32
Fish Sampling Using Boat Mounted Electro-Shocker	TVA-KIF-SOP-33
Field Documentation	TVA-KIF-SOP-06
Sample Labeling, Packing, and Shipping	TVA-KIF-SOP-07
Decontamination of Equipment	TVA-KIF-SOP-08
Field Quality Control Sampling	TVA-KIF-SOP-11
Management and Implementation of EQuISTM-Based Chain-of-Custody	TVA-KIF-SOP-18

4. ANALYTICAL DATA REVIEW

TVA's contracted laboratories were required to submit three types of deliverables: a limited (Level 1) data package containing sample results and batch quality control (QC) sample results; a fully-documented (Level 4) data package including raw data for all analyses; and electronic data deliverables (EDDs) for storage in TVA's EarthSoft EQuIS® database.

EDDs were subjected to completeness and correctness testing during loading to TVA's EQuIS database. Once loaded to the EQuIS database, the data were subjected to verification. As defined in the TVA-KIF-QAPP, data verification involved comparison of the data loaded in the EQuIS database to the results reported in the Level 1 data package. In addition, data verification included review of the batch QC summary forms for compliance with the applicable methods and for data usability with respect to the project DQOs and the TVA-KIF-QAPP.

Following receipt of the Level 4 data package, data were subjected to validation. As defined in the TVA-KIF-QAPP, data validation included review of raw data and associated QC summary forms for compliance with the applicable methods and for data usability with respect to the appropriate guidance documents. As stated in the QAPP:

“Initially, 100% of the chemical analysis data will be reported in full documentation data packages for independent data validation. Depending on the nature and frequency of issues identified during data validation, the percentage of data undergoing full data validation may be reduced to a lesser percentage (e.g., 20%) or data verification may be substituted. The reduction in full data validation may be matrix specific, laboratory specific, or analyte specific. If after the percentage of full data validation has decreased, a trend in frequency of reporting issues, method non-compliances, or data usability issues is identified, data validation will be conducted for specific data points or the percentage of full data validation percentage may be increased until the issues have been minimized to their initial frequency.”

Data validation expands upon the completeness, correctness, and usability assessment performed during verification to include evaluation of instrumental QC analyses, review of sample preparation information, and recalculation of reported results from raw data. A summary of the data review effort is presented below in Table 3.

Table 3. Data Review Summary

No. Chains of Custody	Matrix	No. Normal by Matrix	No. Equipment Blank Samples	No. Analytical Results	Percentage Validated
125	Carcass	201	0	5,538	100%
	Fillet	715		19,929	100%
	Whole Body minus Gut Content	66		1,848	100%
	Ovary	8		223	100%
	Gut and Gut Content	59		1,652	100%
	Whole Body	180		5,038	100%
Total		1,229		34,228	-

Note: Summary includes only those samples analyzed at Pace Analytical.

5. DATA QUALITY SUMMARY

Data validation was performed based on the sample results, summary QC data, and raw data provided by the laboratory. Data validation includes a review of the following QC measures (where applicable):

- Sample condition upon laboratory receipt;
- Initial calibration linearity;
- Blank analysis results greater than the MDL;
- Sample preparation and holding times;
- Initial calibration verification/continuing calibration verification standard recoveries;
- Inductively coupled plasma interference check standard results;
- MDLs and linear ranges;
- Internal standard recoveries;
- Percent moisture;
- Matrix spike/matrix spike duplicate;
- Laboratory and field duplicate precision;
- Quantitation of positive results;
- Laboratory control sample/laboratory control sample duplicate recoveries and precision;
- Analytical sequence;
- Reporting limit standard recoveries;
- MDL verification standards; and
- Standard reference material recoveries.

The data met the DQOs defined for this task and are acceptable for use. Table 4 summarizes the data quality based on the review performed and as compared to the data quality measures identified in the TVA-KIF-QAPP. The text of the data validation reports for the samples included in this TM will be included in the EE/CA Report.

Table 4. Summary of Fish Data Quality

Matrix	Analytical Results (Total) Count	Acceptable (No Qualification) ^a		Acceptable (Estimated) ^b		Blank Qualified ^c		Rejected ^d	
		Acceptable (No Qualification) ^a	Acceptable (Estimated) ^b	Acceptable (Estimated) ^b	Blank Qualified ^c	Blank Qualified ^c	Rejected ^d		
Carcass	5,538	3,730	67%	1,479	27%	234	4%	95 ^e	2%
Fillet	19,929	13,055	66%	4,770	24%	663	3%	1,441 ^{ef}	7%
Whole Body minus Gut Content	1,848	1,376	74%	436	24%	36	2%	0	0%
Ovary	223	96	43%	88	39%	32	14%	7 ^e	3%
Gut and Gut Content	1,652	1,158	70%	413	25%	81	5%	0	0%
Whole Body	5,038	3,077	61%	1,675	33%	264	5%	22 ^e	1%

Notes:

Summary includes only those samples analyzed at Pace Analytical.

^aAcceptable, No Qualification – Qualification of data was not warranted based on a review of the applicable QC measures.

[notes continued on following page]

^bAcceptable, Estimated – Quantitation or detection limit is approximate due to limitations or bias identified during a review of the applicable QC measures.

^cBlank Qualified – Result is considered “not-detected” because it was detected in an associated blank at a similar level.

^dRejected – Unreliable results were qualified as unusable as footnoted below.

^eData included unreliable percent moisture results qualified as unusable due to limited sample mass and/or extended frozen storage prior to moisture determination.

^fFillet samples of the 53 baseline fish were reanalyzed >2x beyond the current project holding time, accordingly, the “not-detected” results have been rejected due to National Functional Guideline criteria.

6. DATA SUMMARY

Summary statistics for fish are provided in Appendices B through L for each sampling event, location, species, and body part collected in 2009 and 2010. Rejected percent moisture results were due to small sample sizes and uncertainty in holding times; as a result, the data for each species are presented in wet weight until the percent moistures issues have been clarified.

Figures

Figure 1. Field Crew on Electroshocking Boat



Figure 2. Field Crew Evaluating Bluegill



Figure 3. Field Crew Filleting Catfish



Figure 4. Field Crew Collecting Blood Sample



APPENDIX A

Summary of Fish Sampling Collections

Baseline Fish, Spring 2009
Months of Collections: Jan, Feb, April - 2009

ERM Locations	Species	Body Part
ERM 0.5	blue catfish channel catfish largemouth bass	fillet fillet fillet
ERM 8.0	channel catfish largemouth bass	fillet fillet
CRM Locations	Species	Body Part
CRM 1.5	channel catfish spotted bass largemouth bass	fillet fillet fillet
CRM 9.5	blue catfish channel catfish largemouth bass	fillet fillet fillet

TDEC Special Request I, Spring 2009
Months of Collections: March - 2009

ERM Locations	Species	Body Part
ERM 3.0	largemouth bass red ear sunfish	whole body whole body

TDEC Special Request II, Spring 2009
Months of Collections: April, May - 2009

ERM Locations	Species	Body Part
ERM 0.9	black crappie	whole body
ERM 2.0	black crappie	whole body
ERM 8.0	black crappie	whole body
CRM Locations	Species	Body Part
CRM 8.0	black crappie	whole body

TVA Sampling, Spring 2009
Months of Collections: April, May, June, July - 2009

ERM Locations	Species	Body Part
ERM 0.9	bluegill largemouth bass white crappie gizzard shad	fillet fillet fillet whole body

TVA Sampling, Spring 2009
Months of Collections: April, May, June, July - 2009

ERM 3.0	bluegill largemouth bass white crappie black crappie gizzard shad	fillet fillet fillet fillet whole body
ERM 8.0	bluegill largemouth bass white crappie gizzard shad	fillet fillet fillet whole body
CRM Locations	Species	Body Part
CRM 1.5	bluegill largemouth bass white crappie gizzard shad	fillet fillet fillet whole body
CRM 7.0	gizzard shad	whole body
CRM 8.0	bluegill largemouth bass white crappie	fillet fillet fillet

TWRA Special Request, Summer 2009
Months of Collections: June, July - 2009

ERM Locations	Species	Body Part
ERM 0.7	channel catfish	whole body, ovary
ERM 1.0	largemouth bass	whole body
ERM 6.0	blue catfish channel catfish largemouth bass	whole body whole body, ovary whole body

TVA Swan Pond Embayment Sampling, Summer 2009
Months of Collections: June

Other Locations	Species	Body Part
EEMBAY	bluegill largemouth bass red ear sunfish gizzard shad	whole body, whole body (minus gut) whole body (minus gut) whole body, whole body (minus gut) whole body

TVA Sampling, Fall 2009
Months of Collections: Sept, Oct, Nov - 2009

ERM Locations	Species	Body Part
ERM 0.9	bluegill channel catfish largemouth bass	fillet, carcass fillet fillet, carcass
ERM 2.0	gizzard shad largemouth bass	whole body carcass
ERM 2.5	gizzard shad	whole body
ERM 3.0	bluegill channel catfish largemouth bass	fillet, carcass fillet fillet, carcass
ERM 8.0	bluegill channel catfish largemouth bass	fillet, carcass fillet fillet, carcass
CRM Locations	Species	Body Part
CRM 1.5	bluegill channel catfish largemouth bass gizzard shad	fillet, carcass fillet fillet, carcass whole body
CRM 8.0	bluegill channel catfish largemouth bass gizzard shad	fillet, carcass fillet fillet, carcass whole body
CRM 25.0	bluegill channel catfish largemouth bass gizzard shad	fillet, carcass fillet fillet, carcass whole body
Other Locations	Species	Body Part
EEMBAY	gizzard shad threadfin shad	whole body whole body
LERM 2.0	bluegill largemouth bass	fillet, carcass fillet, carcass

Tennessee Aquarium / Appalachian State University (Splits), Winter 2010
Months of Collections: Jan

CRM Locations	Species	Body Part
CRM 3.5	largemouth bass red ear sunfish gizzard shad	fillet, liver, ovary fillet fillet, whole body
CRM 5.5	largemouth bass long ear sunfish red ear sunfish	fillet, liver, ovary whole body fillet
Other Locations	Species	Body Part
TRM 567.0	black crappie white crappie bluegill largemouth bass long ear sunfish red ear sunfish	fillet, liver, ovary fillet, ovary whole body fillet, liver, ovary whole body fillet

TVA SAP Sampling, Spring 2010
Months of Collections: April, May, June, July - 2010

ERM Locations	Species	Body Part
ERM 0.9	white crappie bluegill channel catfish largemouth bass red ear sunfish gizzard shad	fillet whole body, fillet, carcass fillet, carcass fillet, carcass fillet whole body, whole body (minus gut content), gut & gut content
ERM 2.0	bluegill channel catfish	whole body fillet, carcass
ERM 3.0	white crappie bluegill largemouth bass red ear sunfish gizzard shad	fillet fillet, carcass fillet, carcass fillet whole body, whole body (minus gut content), gut & gut content
ERM 4.5	bluegill channel catfish largemouth bass gizzard shad	whole body, fillet, carcass fillet, carcass fillet, carcass whole body, whole body (minus gut content), gut & gut content

TVA SAP Sampling, Spring 2010
Months of Collections: April, May, June, July - 2010

ERM 8.0	white crappie bluegill channel catfish largemouth bass red ear sunfish gizzard shad	fillet whole body, fillet, carcass fillet, carcass fillet, carcass fillet whole body, whole body (minus gut content), gut & gut content
CRM Locations	Species	Body Part
CRM 1.5	white crappie bluegill channel catfish largemouth bass red ear sunfish gizzard shad	fillet whole body, fillet, carcass fillet, carcass fillet, carcass fillet whole body, whole body (minus gut content), gut & gut content
CRM 3.5	bluegill channel catfish largemouth bass gizzard shad	whole body, fillet, carcass carcass, fillet fillet, carcass whole body, whole body (minus gut content), gut & gut content
CRM 8.0	white crappie bluegill channel catfish largemouth bass red ear sunfish gizzard shad	fillet whole body, fillet, carcass fillet, carcass carcass, fillet fillet whole body, whole body (minus gut content), gut & gut content
CRM 25.0	bluegill largemouth bass red ear sunfish gizzard shad	carcass, fillet carcass, fillet fillet whole body, whole body (minus gut content), gut & gut content
Other Locations	Species	Body Part
LERM 2.0	white crappie bluegill largemouth bass red ear sunfish gizzard shad	fillet fillet, carcass fillet, carcass fillet whole body, whole body (minus gut content), gut & gut content

Tennessee Aquarium / Appalachian State University (Splits), Fall 2010
Months of Collections: Sept

ERM Locations	Species	Body Part
ERM 2.0	largemouth bass	fillet
ERM 3.5	largemouth bass red ear sunfish	fillet fillet
CRM Locations	Species	Body Part
CRM 5.5	largemouth bass red ear sunfish	fillet fillet

TVA SAP Sampling, Fall 2010
Months of Collections: Sept, Oct, Dec, Jan - 2010 & 2011

ERM Locations	Species	Body Part
ERM 0.9	bluegill channel catfish largemouth bass gizzard shad	fillet fillet fillet whole body (minus gut), gut & gut content
ERM 2.5	gizzard shad	whole body, whole body (minus gut), gut & gut content
ERM 3.0	bluegill channel catfish largemouth bass	fillet fillet fillet
ERM 4.5	bluegill channel catfish largemouth bass gizzard shad	fillet, carcass fillet, carcass fillet, carcass whole body, whole body (minus gut), gut & gut content
ERM 8.0	bluegill channel catfish largemouth bass gizzard shad	fillet fillet fillet whole body (minus gut), gut & gut content
CRM Locations	Species	Body Part
CRM 1.5	bluegill channel catfish largemouth bass gizzard shad	fillet fillet fillet whole body, whole body (minus gut), gut & gut content
CRM 3.5	bluegill channel catfish largemouth bass gizzard shad	fillet, carcass fillet, carcass fillet whole body, whole body (minus gut), gut & gut content

TVA SAP Sampling, Fall 2010
Months of Collections: Sept, Oct, Dec, Jan - 2010 & 2011

CRM 8.0	bluegill channel catfish largemouth bass gizzard shad	fillet fillet fillet whole body, whole body (minus gut), gut & gut content
Other Locations	Species	Body Part
LERM 2.0	bluegill channel catfish largemouth bass	fillet fillet fillet

APPENDIX B

Baseline Fish, Spring 2009

Table B- 1: Baseline Fish, Spring 2009 - Blue Catfish Fillet at Emory River Mile 0.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.98	0.98	10.1	5 / 5	3.876
% Moisture	%		70.9	70.9	70.9	1 / 1	70.9
Aluminum	mg/kg	24.82 / 25.08	ND	ND	ND	0 / 5	0
Antimony	mg/kg	0.0985 / 0.1011	ND	ND	ND	0 / 5	0
Arsenic	mg/kg	0.0985 / 0.1011	ND	ND	ND	0 / 5	0
Barium	mg/kg	0.0985 / 0.1003	ND	0.1118	0.703	2 / 5	0.4074
Beryllium	mg/kg	0.0985 / 0.1011	ND	ND	ND	0 / 5	0
Boron	mg/kg	1.99 / 2.008	ND	ND	ND	0 / 5	0
Cadmium	mg/kg	0.0985 / 0.1011	ND	ND	ND	0 / 5	0
Calcium	mg/kg	99.29 / 99.29	ND	151.6	6327	4 / 5	1798
Chromium	mg/kg	0.0985 / 0.0999	ND	0.1003	0.157	2 / 5	0.1287
Cobalt	mg/kg	0.0985 / 0.1011	ND	ND	ND	0 / 5	0
Copper	mg/kg	0.4925 / 0.4995	ND	0.6235	0.6235	1 / 5	0.6235
Iron	mg/kg	24.82 / 25.08	ND	ND	ND	0 / 5	0
Lead	mg/kg	0.0985 / 0.1011	ND	0.1388	0.1388	1 / 5	0.1388
Magnesium	mg/kg		201.4	201.4	275.7	5 / 5	219.7
Manganese	mg/kg	0.4925 / 0.4947	ND	0.629	5.661	2 / 5	3.145
Mercury	mg/kg	0.0197 / 0.03783	ND	0.0476	0.0903	4 / 5	0.06214
Molybdenum	mg/kg	0.985 / 1.011	ND	ND	ND	0 / 5	0
Nickel	mg/kg	0.0985 / 0.1011	ND	ND	ND	0 / 5	0
Potassium	mg/kg		2738	2738	3026	5 / 5	2921
Selenium	mg/kg		0.2124	0.2124	0.4515	5 / 5	0.3276
Silver	mg/kg	0.04925 / 0.04995	ND	ND	ND	0 / 5	0
Sodium	mg/kg		358.5	358.5	447.7	5 / 5	390.5
Strontium	mg/kg		0.1005	0.1005	5.032	5 / 5	1.182
Thallium	mg/kg	0.0985 / 0.1011	ND	ND	ND	0 / 5	0
Vanadium	mg/kg	0.197 / 0.204	ND	ND	ND	0 / 5	0
Zinc	mg/kg		5.181	5.181	12.23	5 / 5	7.98

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table B- 2: Baseline Fish, Spring 2009 - Blue Catfish Fillet at Clinch River Mile 9.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.2	0.2	1	5 / 5	0.638
% Moisture	%		80.5	80.5	82.3	3 / 3	81.3
Aluminum	mg/kg	24.77 / 24.96	ND	ND	ND	0 / 5	0
Antimony	mg/kg	0.09858 / 0.1002	ND	ND	ND	0 / 5	0
Arsenic	mg/kg	0.09858 / 0.1002	ND	ND	ND	0 / 5	0
Barium	mg/kg	0.09858 / 0.1002	ND	0.106	0.1133	2 / 5	0.1097
Beryllium	mg/kg	0.09858 / 0.1002	ND	ND	ND	0 / 5	0
Boron	mg/kg	1.982 / 1.99	ND	ND	ND	0 / 5	0
Cadmium	mg/kg	0.09858 / 0.1002	ND	ND	ND	0 / 5	0
Calcium	mg/kg		100.9	100.9	1347	5 / 5	597.7
Chromium	mg/kg	0.09858 / 0.1002	ND	0.1346	0.1346	1 / 5	0.1346
Cobalt	mg/kg	0.09858 / 0.1002	ND	ND	ND	0 / 5	0
Copper	mg/kg	0.4875 / 0.507	ND	ND	ND	0 / 5	0
Iron	mg/kg	24.77 / 24.96	ND	ND	ND	0 / 5	0
Lead	mg/kg	0.09858 / 0.1002	ND	ND	ND	0 / 5	0
Magnesium	mg/kg		201.8	201.8	217.4	5 / 5	210.9
Manganese	mg/kg	0.4875 / 0.507	ND	0.6882	0.8673	2 / 5	0.7778
Mercury	mg/kg		0.0663	0.0663	0.1814	5 / 5	0.1008
Molybdenum	mg/kg	0.9858 / 1.002	ND	ND	ND	0 / 5	0
Nickel	mg/kg	0.09858 / 0.1002	ND	0.5487	0.5487	1 / 5	0.5487
Potassium	mg/kg		3328	3328	3588	5 / 5	3468
Selenium	mg/kg	0.1947 / 0.2079	ND	0.2145	0.2418	2 / 5	0.2282
Silver	mg/kg	0.04875 / 0.0507	ND	ND	ND	0 / 5	0
Sodium	mg/kg		425.9	425.9	472.6	5 / 5	447.9
Strontium	mg/kg	0.09858 / 0.1002	ND	0.1112	1.097	4 / 5	0.5865
Thallium	mg/kg	0.09858 / 0.1002	ND	ND	ND	0 / 5	0
Vanadium	mg/kg	0.1947 / 0.2079	ND	ND	ND	0 / 5	0
Zinc	mg/kg		5.878	5.878	9.239	5 / 5	7.338

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table B- 3: Baseline Fish, Spring 2009 - Channel Catfish Fillet at Emory River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1.5	1.5	4	6 / 6	2.933
% Moisture	%		80.1	80.1	80.2	3 / 3	80.17
Aluminum	mg/kg	24.88 / 25.16	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.099 / 0.101	ND	ND	ND	0 / 6	0
Arsenic	mg/kg	0.099 / 0.101	ND	ND	ND	0 / 6	0
Barium	mg/kg	0.099 / 0.101	ND	0.1194	0.1194	1 / 6	0.1194
Beryllium	mg/kg	0.099 / 0.101	ND	ND	ND	0 / 6	0
Boron	mg/kg	1.98 / 2.009	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.099 / 0.101	ND	ND	ND	0 / 6	0
Calcium	mg/kg	99.3 / 100.5	ND	102.4	112.5	2 / 6	107.5
Chromium	mg/kg	0.099 / 0.101	ND	0.1254	0.425	4 / 6	0.2083
Cobalt	mg/kg	0.099 / 0.101	ND	ND	ND	0 / 6	0
Copper	mg/kg	0.495 / 0.51	ND	0.5709	0.5709	1 / 6	0.5709
Iron	mg/kg	24.88 / 25.16	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.099 / 0.101	ND	ND	ND	0 / 6	0
Magnesium	mg/kg		171.7	171.7	213	6 / 6	192.2
Manganese	mg/kg	0.495 / 0.51	ND	ND	ND	0 / 6	0
Mercury	mg/kg		0.02587	0.02587	0.2178	6 / 6	0.09944
Molybdenum	mg/kg	0.99 / 1.01	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.099 / 0.101	ND	0.204	0.204	1 / 6	0.204
Potassium	mg/kg		2890	2890	3460	6 / 6	3201
Selenium	mg/kg	0.198 / 0.2009	ND	0.2076	0.306	4 / 6	0.2624
Silver	mg/kg	0.0495 / 0.051	ND	ND	ND	0 / 6	0
Sodium	mg/kg		285.1	285.1	366.8	6 / 6	310.9
Strontium	mg/kg	0.099 / 0.101	ND	0.1384	0.1564	3 / 6	0.1454
Thallium	mg/kg	0.099 / 0.101	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.198 / 0.2076	ND	ND	ND	0 / 6	0
Zinc	mg/kg		4.178	4.178	8.01	6 / 6	6.084

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table B- 4: Baseline Fish, Spring 2009 - Channel Catfish Fillet at Emory River Mile 0.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.51	0.51	2	4 / 4	1.125
% Moisture	%		81.7	81.7	81.7	1 / 1	81.7
Aluminum	mg/kg	24.88 / 25.11	ND	ND	ND	0 / 4	0
Antimony	mg/kg	0.09918 / 0.1007	ND	ND	ND	0 / 4	0
Arsenic	mg/kg	0.09918 / 0.1007	ND	ND	ND	0 / 4	0
Barium	mg/kg	0.09918 / 0.1007	ND	ND	ND	0 / 4	0
Beryllium	mg/kg	0.09918 / 0.1007	ND	ND	ND	0 / 4	0
Boron	mg/kg	1.984 / 2	ND	ND	ND	0 / 4	0
Cadmium	mg/kg	0.09918 / 0.1007	ND	ND	ND	0 / 4	0
Calcium	mg/kg		115.8	115.8	219.2	4 / 4	169.6
Chromium	mg/kg	0.09918 / 0.1007	ND	0.1092	0.1241	3 / 4	0.1149
Cobalt	mg/kg	0.09918 / 0.1007	ND	ND	ND	0 / 4	0
Copper	mg/kg	0.4914 / 0.5046	ND	ND	ND	0 / 4	0
Iron	mg/kg	24.88 / 25.11	ND	ND	ND	0 / 4	0
Lead	mg/kg	0.09918 / 0.1007	ND	ND	ND	0 / 4	0
Magnesium	mg/kg		169.1	169.1	205.3	4 / 4	184.7
Manganese	mg/kg	0.4914 / 0.5046	ND	0.657	0.657	1 / 4	0.657
Mercury	mg/kg		0.03477	0.03477	0.05402	4 / 4	0.0448
Molybdenum	mg/kg	0.9918 / 1.007	ND	ND	ND	0 / 4	0
Nickel	mg/kg	0.09918 / 0.1007	ND	ND	ND	0 / 4	0
Potassium	mg/kg		2766	2766	3404	4 / 4	3152
Selenium	mg/kg		0.2336	0.2336	0.4209	4 / 4	0.2928
Silver	mg/kg	0.04914 / 0.05046	ND	ND	ND	0 / 4	0
Sodium	mg/kg		329.4	329.4	453.8	4 / 4	406.1
Strontium	mg/kg		0.1226	0.1226	0.261	4 / 4	0.1952
Thallium	mg/kg	0.09918 / 0.1007	ND	ND	ND	0 / 4	0
Vanadium	mg/kg	0.1914 / 0.2044	ND	ND	ND	0 / 4	0
Zinc	mg/kg		5.533	5.533	8.144	4 / 4	6.709

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table B- 5: Baseline Fish, Spring 2009 - Channel Catfish Fillet at Clinch River Mile 9.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		2.6	2.6	4.5	4 / 4	3.55
Aluminum	mg/kg	24.86 / 24.94	ND	ND	ND	0 / 4	0
Antimony	mg/kg	0.0989 / 0.0999	ND	ND	ND	0 / 4	0
Arsenic	mg/kg	0.0989 / 0.0999	ND	ND	ND	0 / 4	0
Barium	mg/kg	0.0989 / 0.0999	ND	0.1583	0.1634	2 / 4	0.1609
Beryllium	mg/kg	0.0989 / 0.0999	ND	ND	ND	0 / 4	0
Boron	mg/kg	1.991 / 2.005	ND	ND	ND	0 / 4	0
Cadmium	mg/kg	0.0989 / 0.0999	ND	ND	ND	0 / 4	0
Calcium	mg/kg	99.53 / 99.8	ND	346.3	1189	3 / 4	731.8
Chromium	mg/kg	0.0989 / 0.0999	ND	0.1625	0.1656	2 / 4	0.1641
Cobalt	mg/kg	0.0989 / 0.0999	ND	ND	ND	0 / 4	0
Copper	mg/kg	0.4884 / 0.5064	ND	0.5649	1.054	2 / 4	0.8095
Iron	mg/kg	24.86 / 24.94	ND	ND	ND	0 / 4	0
Lead	mg/kg	0.0989 / 0.0999	ND	ND	ND	0 / 4	0
Magnesium	mg/kg		189.6	189.6	227.9	4 / 4	217.1
Manganese	mg/kg	0.4884 / 0.5064	ND	0.5375	0.8339	2 / 4	0.6857
Mercury	mg/kg		0.04884	0.04884	0.1055	4 / 4	0.06722
Molybdenum	mg/kg	0.989 / 0.999	ND	ND	ND	0 / 4	0
Nickel	mg/kg	0.0989 / 0.0999	ND	ND	ND	0 / 4	0
Potassium	mg/kg		3485	3485	4042	4 / 4	3712
Selenium	mg/kg	0.1991 / 0.1998	ND	0.2365	0.2532	2 / 4	0.2449
Silver	mg/kg	0.04884 / 0.05111	ND	ND	ND	0 / 4	0
Sodium	mg/kg		359.6	359.6	505.3	4 / 4	414.8
Strontium	mg/kg	0.0989 / 0.09917	ND	0.2886	0.9953	3 / 4	0.6071
Thallium	mg/kg	0.0989 / 0.0999	ND	ND	ND	0 / 4	0
Vanadium	mg/kg	0.1991 / 0.2005	ND	ND	ND	0 / 4	0
Zinc	mg/kg		5.217	5.217	6.343	4 / 4	5.902

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table B- 6: Baseline Fish, Spring 2009 - Channel Catfish Fillet at Clinch River Mile 1.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1.4	1.4	5.1	5 / 5	2.7
% Moisture	%		72.2	72.2	80.1	2 / 2	76.15
Aluminum	mg/kg	24.82 / 24.99	ND	ND	ND	0 / 5	0
Antimony	mg/kg	0.0995 / 0.1008	ND	ND	ND	0 / 5	0
Arsenic	mg/kg	0.0995 / 0.1008	ND	ND	ND	0 / 5	0
Barium	mg/kg	0.0995 / 0.1008	ND	ND	ND	0 / 5	0
Beryllium	mg/kg	0.0995 / 0.1008	ND	ND	ND	0 / 5	0
Boron	mg/kg	1.989 / 2.002	ND	ND	ND	0 / 5	0
Cadmium	mg/kg	0.0995 / 0.1008	ND	ND	ND	0 / 5	0
Calcium	mg/kg		156.8	156.8	778.1	5 / 5	336.6
Chromium	mg/kg	0.0995 / 0.1008	ND	0.1044	0.1251	3 / 5	0.1117
Cobalt	mg/kg	0.0995 / 0.1008	ND	ND	ND	0 / 5	0
Copper	mg/kg	0.4925 / 0.4975	ND	0.504	0.556	3 / 5	0.5306
Iron	mg/kg	24.82 / 24.99	ND	ND	ND	0 / 5	0
Lead	mg/kg	0.0995 / 0.1008	ND	0.164	0.164	1 / 5	0.164
Magnesium	mg/kg		181.3	181.3	247.8	5 / 5	216.5
Manganese	mg/kg	0.4925 / 0.504	ND	0.5572	0.5572	1 / 5	0.5572
Mercury	mg/kg		0.02758	0.02758	0.2112	5 / 5	0.07039
Molybdenum	mg/kg	0.995 / 1.008	ND	ND	ND	0 / 5	0
Nickel	mg/kg	0.0995 / 0.1008	ND	ND	ND	0 / 5	0
Potassium	mg/kg		3150	3150	3725	5 / 5	3403
Selenium	mg/kg	0.1936 / 0.1936	ND	0.3336	0.504	4 / 5	0.3926
Silver	mg/kg	0.04925 / 0.0504	ND	ND	ND	0 / 5	0
Sodium	mg/kg		333.6	333.6	450.6	5 / 5	402.2
Strontium	mg/kg	0.0995 / 0.1003	ND	0.1635	0.7562	4 / 5	0.3479
Thallium	mg/kg	0.0995 / 0.1008	ND	ND	ND	0 / 5	0
Vanadium	mg/kg	0.1936 / 0.2002	ND	ND	ND	0 / 5	0
Zinc	mg/kg		5.397	5.397	7.339	5 / 5	6.521

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table B- 7: Baseline Fish, Spring 2009 - Largemouth Bass Fillet at Emory River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.36	0.36	1.2	6 / 6	0.8433
% Moisture	%		79.2	79.2	79.4	2 / 2	79.3
Aluminum	mg/kg	24.72 / 25.09	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.09888 / 0.1008	ND	ND	ND	0 / 6	0
Arsenic	mg/kg	0.09888 / 0.1008	ND	0.1183	0.1478	2 / 6	0.1331
Barium	mg/kg	0.09888 / 0.1008	ND	ND	ND	0 / 6	0
Beryllium	mg/kg	0.09888 / 0.1008	ND	ND	ND	0 / 6	0
Boron	mg/kg	1.978 / 2.009	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.09888 / 0.1008	ND	ND	ND	0 / 6	0
Calcium	mg/kg	99.09 / 99.33	ND	100.5	1066	4 / 6	506.7
Chromium	mg/kg	0.09888 / 0.1005	ND	0.1071	0.315	4 / 6	0.1639
Cobalt	mg/kg	0.09888 / 0.1008	ND	ND	ND	0 / 6	0
Copper	mg/kg	0.492 / 0.504	ND	0.7616	0.7616	1 / 6	0.7616
Iron	mg/kg	24.72 / 25.09	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.09888 / 0.1008	ND	ND	ND	0 / 6	0
Magnesium	mg/kg		251.3	251.3	266.2	6 / 6	256.9
Manganese	mg/kg	0.492 / 0.504	ND	ND	ND	0 / 6	0
Mercury	mg/kg		0.0784	0.0784	0.129	6 / 6	0.1016
Molybdenum	mg/kg	0.9888 / 1.008	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.09888 / 0.1008	ND	0.1323	0.1323	1 / 6	0.1323
Potassium	mg/kg		3424	3424	3780	6 / 6	3640
Selenium	mg/kg		0.344	0.344	0.5152	6 / 6	0.423
Silver	mg/kg	0.0492 / 0.0504	ND	ND	ND	0 / 6	0
Sodium	mg/kg		297.3	297.3	399	6 / 6	362.2
Strontium	mg/kg	0.09888 / 0.1008	ND	0.615	1.03	2 / 6	0.8225
Thallium	mg/kg	0.09888 / 0.1008	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.1978 / 0.2009	ND	ND	ND	0 / 6	0
Zinc	mg/kg		4.841	4.841	13.51	6 / 6	8.059

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table B- 8: Baseline Fish, Spring 2009 - Largemouth Bass Fillet at Emory River Mile 0.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.47	0.47	3.5	8 / 8	2.021
% Moisture	%		77.1	77.1	77.1	1 / 1	77.1
Aluminum	mg/kg	24.75 / 25.32	ND	ND	ND	0 / 8	0
Antimony	mg/kg	0.09844 / 0.1013	ND	ND	ND	0 / 8	0
Arsenic	mg/kg		0.1584	0.1584	0.2321	8 / 8	0.2
Barium	mg/kg	0.09844 / 0.1013	ND	0.1221	0.1571	2 / 8	0.1396
Beryllium	mg/kg	0.09844 / 0.1013	ND	ND	ND	0 / 8	0
Boron	mg/kg	1.985 / 2.026	ND	ND	ND	0 / 8	0
Cadmium	mg/kg	0.09844 / 0.1013	ND	ND	ND	0 / 8	0
Calcium	mg/kg		134.6	134.6	6304	8 / 8	1416
Chromium	mg/kg	0.09844 / 0.1013	ND	0.1026	0.2448	6 / 8	0.1414
Cobalt	mg/kg	0.09844 / 0.1013	ND	ND	ND	0 / 8	0
Copper	mg/kg	0.4896 / 0.5038	ND	0.4968	0.6541	3 / 8	0.5537
Iron	mg/kg	24.75 / 25.32	ND	ND	ND	0 / 8	0
Lead	mg/kg	0.09844 / 0.1013	ND	ND	ND	0 / 8	0
Magnesium	mg/kg		221.7	221.7	359	8 / 8	271.3
Manganese	mg/kg	0.4896 / 0.5103	ND	1.163	1.163	1 / 8	1.163
Mercury	mg/kg	0.01985 / 0.02017	ND	0.0218	0.07956	7 / 8	0.0426
Molybdenum	mg/kg	0.9844 / 1.013	ND	ND	ND	0 / 8	0
Nickel	mg/kg	0.09844 / 0.1013	ND	ND	ND	0 / 8	0
Potassium	mg/kg		3033	3033	3641	8 / 8	3472
Selenium	mg/kg		0.4494	0.4494	0.7412	8 / 8	0.6288
Silver	mg/kg	0.04896 / 0.05103	ND	ND	ND	0 / 8	0
Sodium	mg/kg		360.8	360.8	476.3	8 / 8	421.2
Strontium	mg/kg	0.09844 / 0.09936	ND	0.116	4.06	7 / 8	1.154
Thallium	mg/kg	0.09844 / 0.1013	ND	ND	ND	0 / 8	0
Vanadium	mg/kg	0.1985 / 0.2026	ND	ND	ND	0 / 8	0
Zinc	mg/kg		6.935	6.935	13.49	8 / 8	9.809

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table B- 9: Baseline Fish, Spring 2009 - Largemouth Bass Fillet at Clinch River Mile 9.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1.2	1.2	2.4	5 / 5	1.74
% Moisture	%		77	77	77.7	3 / 3	77.33
Aluminum	mg/kg	24.74 / 25.17	ND	ND	ND	0 / 5	0
Antimony	mg/kg	0.0989 / 0.1004	ND	ND	ND	0 / 5	0
Arsenic	mg/kg	0.0989 / 0.1215	ND	0.1817	0.2868	4 / 5	0.241
Barium	mg/kg	0.0989 / 0.1004	ND	0.1357	0.2119	2 / 5	0.1738
Beryllium	mg/kg	0.0989 / 0.1004	ND	ND	ND	0 / 5	0
Boron	mg/kg	1.975 / 2.018	ND	ND	ND	0 / 5	0
Cadmium	mg/kg	0.0989 / 0.1004	ND	ND	ND	0 / 5	0
Calcium	mg/kg		355.9	355.9	7426	5 / 5	2849
Chromium	mg/kg	0.0989 / 0.1004	ND	0.1107	0.1385	3 / 5	0.1213
Cobalt	mg/kg	0.0989 / 0.1004	ND	ND	ND	0 / 5	0
Copper	mg/kg	0.4906 / 0.506	ND	ND	ND	0 / 5	0
Iron	mg/kg	24.74 / 25.17	ND	ND	ND	0 / 5	0
Lead	mg/kg	0.0989 / 0.1004	ND	ND	ND	0 / 5	0
Magnesium	mg/kg		254.2	254.2	374.6	5 / 5	302.7
Manganese	mg/kg	0.4906 / 0.506	ND	1.048	1.048	1 / 5	1.048
Mercury	mg/kg	0.01975 / 0.03568	ND	0.04994	0.1801	4 / 5	0.1009
Molybdenum	mg/kg	0.989 / 1.004	ND	ND	ND	0 / 5	0
Nickel	mg/kg	0.0989 / 0.1004	ND	ND	ND	0 / 5	0
Potassium	mg/kg		3246	3246	3613	5 / 5	3457
Selenium	mg/kg		0.4994	0.4994	0.5859	5 / 5	0.5446
Silver	mg/kg	0.04906 / 0.0506	ND	ND	ND	0 / 5	0
Sodium	mg/kg		424.5	424.5	614.1	5 / 5	527.8
Strontium	mg/kg		0.2821	0.2821	5.553	5 / 5	2.232
Thallium	mg/kg	0.0989 / 0.1004	ND	ND	ND	0 / 5	0
Vanadium	mg/kg	0.1975 / 0.2018	ND	ND	ND	0 / 5	0
Zinc	mg/kg		7.4	7.4	12.6	5 / 5	9.71

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table B-10: Baseline Fish, Spring 2009 - Largemouth Bass Fillet at Clinch River Mile 1.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1.2	1.2	2.4	4 / 4	1.65
% Moisture	%		76.5	76.5	77.4	3 / 3	76.93
Aluminum	mg/kg	24.91 / 25.09	ND	ND	ND	0 / 4	0
Antimony	mg/kg	0.0987 / 0.1005	ND	ND	ND	0 / 4	0
Arsenic	mg/kg		0.1492	0.1492	0.282	4 / 4	0.2226
Barium	mg/kg	0.0987 / 0.09933	ND	0.1198	0.1579	2 / 4	0.1389
Beryllium	mg/kg	0.0987 / 0.1005	ND	ND	ND	0 / 4	0
Boron	mg/kg	1.987 / 1.998	ND	ND	ND	0 / 4	0
Cadmium	mg/kg	0.0987 / 0.1005	ND	ND	ND	0 / 4	0
Calcium	mg/kg		1042	1042	4531	4 / 4	2694
Chromium	mg/kg	0.0987 / 0.0987	ND	0.1784	0.2486	3 / 4	0.2062
Cobalt	mg/kg	0.0987 / 0.1005	ND	ND	ND	0 / 4	0
Copper	mg/kg	0.492 / 0.5082	ND	ND	ND	0 / 4	0
Iron	mg/kg	24.91 / 25.09	ND	ND	ND	0 / 4	0
Lead	mg/kg	0.0987 / 0.1005	ND	ND	ND	0 / 4	0
Magnesium	mg/kg		281.8	281.8	323.9	4 / 4	299.3
Manganese	mg/kg	0.492 / 0.5082	ND	0.902	0.902	1 / 4	0.902
Mercury	mg/kg	0.02209 / 0.0451	ND	ND	ND	0 / 4	0
Molybdenum	mg/kg	0.987 / 1.005	ND	ND	ND	0 / 4	0
Nickel	mg/kg	0.0987 / 0.1005	ND	0.122	0.122	1 / 4	0.122
Potassium	mg/kg		3219	3219	3673	4 / 4	3450
Selenium	mg/kg		0.3465	0.3465	0.4305	4 / 4	0.4074
Silver	mg/kg	0.0492 / 0.05082	ND	ND	ND	0 / 4	0
Sodium	mg/kg		411.3	411.3	506.4	4 / 4	465.7
Strontium	mg/kg		0.7854	0.7854	3.895	4 / 4	2.339
Thallium	mg/kg	0.0987 / 0.1005	ND	ND	ND	0 / 4	0
Vanadium	mg/kg	0.1987 / 0.1998	ND	ND	ND	0 / 4	0
Zinc	mg/kg		7.215	7.215	9.818	4 / 4	8.639

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table B-11: Baseline Fish, Spring 2009 - Spotted Bass Fillet at Clinch River Mile 1.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		4.3	4.3	4.3	1 / 1	4.3
% Moisture	%		71.7	71.7	71.7	1 / 1	71.7
Aluminum	mg/kg	24.9 / 24.9	ND	ND	ND	0 / 1	0
Antimony	mg/kg	0.09905 / 0.09905	ND	ND	ND	0 / 1	0
Arsenic	mg/kg		0.2434	0.2434	0.2434	1 / 1	0.2434
Barium	mg/kg		0.2038	0.2038	0.2038	1 / 1	0.2038
Beryllium	mg/kg	0.09905 / 0.09905	ND	ND	ND	0 / 1	0
Boron	mg/kg	1.981 / 1.981	ND	ND	ND	0 / 1	0
Cadmium	mg/kg	0.09905 / 0.09905	ND	ND	ND	0 / 1	0
Calcium	mg/kg		6679	6679	6679	1 / 1	6679
Chromium	mg/kg		0.1019	0.1019	0.1019	1 / 1	0.1019
Cobalt	mg/kg	0.09905 / 0.09905	ND	ND	ND	0 / 1	0
Copper	mg/kg	0.5094 / 0.5094	ND	ND	ND	0 / 1	0
Iron	mg/kg	24.9 / 24.9	ND	ND	ND	0 / 1	0
Lead	mg/kg	0.09905 / 0.09905	ND	ND	ND	0 / 1	0
Magnesium	mg/kg		331.1	331.1	331.1	1 / 1	331.1
Manganese	mg/kg	0.5094 / 0.5094	ND	ND	ND	0 / 1	0
Mercury	mg/kg		0.07075	0.07075	0.07075	1 / 1	0.07075
Molybdenum	mg/kg	0.9905 / 0.9905	ND	ND	ND	0 / 1	0
Nickel	mg/kg	0.09905 / 0.09905	ND	ND	ND	0 / 1	0
Potassium	mg/kg		3255	3255	3255	1 / 1	3255
Selenium	mg/kg		0.3962	0.3962	0.3962	1 / 1	0.3962
Silver	mg/kg	0.05094 / 0.05094	ND	ND	ND	0 / 1	0
Sodium	mg/kg		577.3	577.3	577.3	1 / 1	577.3
Strontium	mg/kg		5.717	5.717	5.717	1 / 1	5.717
Thallium	mg/kg	0.09905 / 0.09905	ND	ND	ND	0 / 1	0
Vanadium	mg/kg	0.1981 / 0.1981	ND	ND	ND	0 / 1	0
Zinc	mg/kg		8.066	8.066	8.066	1 / 1	8.066

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table B- 12: Baseline Fish, Spring 2009 - Blue Catfish Fillet (Reanalyzed) at Emory River Mile 0.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
Aluminum	mg/kg		5.2	5.2	7.9	4 / 4	7
Arsenic	mg/kg		0.029	0.029	0.11	5 / 5	0.058
Barium	mg/kg		0.082	0.082	0.29	4 / 4	0.1955
Cadmium	mg/kg	0.03 / 0.03	ND	ND	ND	0 / 1	0
Calcium	mg/kg		108	108	3050	5 / 5	1194
Chromium	mg/kg		0.17	0.17	0.37	2 / 2	0.27
Cobalt	mg/kg		0.018	0.018	0.028	2 / 2	0.023
Copper	mg/kg		0.25	0.25	4.2	5 / 5	1.576
Lead	mg/kg		0.03	0.03	0.043	3 / 3	0.03667
Magnesium	mg/kg		223	223	285	5 / 5	245.8
Manganese	mg/kg		0.16	0.16	3	5 / 5	1.472
Mercury	mg/kg		0.053	0.053	0.11	5 / 5	0.0736
Nickel	mg/kg		0.1	0.1	0.26	2 / 2	0.18
Potassium	mg/kg		3090	3090	3410	5 / 5	3306
Selenium	mg/kg		0.26	0.26	0.47	5 / 5	0.368
Silver	mg/kg	0.0073 / 0.0073	ND	ND	ND	0 / 1	0
Sodium	mg/kg		349	349	463	5 / 5	404.6
Strontium	mg/kg		0.096	0.096	1.7	5 / 5	0.8512
Vanadium	mg/kg		0.05	0.05	0.14	2 / 2	0.095
Zinc	mg/kg		5.4	5.4	10.4	5 / 5	7.68

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table B- 13: Baseline Fish, Spring 2009 - Blue Catfish Fillet (Reanalyzed) at Clinch River Mile 9.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
Arsenic	mg/kg		0.03	0.03	0.069	2 / 2	0.0495
Barium	mg/kg		0.061	0.061	0.18	4 / 4	0.1453
Cadmium	mg/kg	0.028 / 0.049	ND	ND	ND	0 / 2	0
Calcium	mg/kg		307	307	3300	5 / 5	1614
Chromium	mg/kg		0.44	0.44	0.44	1 / 1	0.44
Cobalt	mg/kg		0.02	0.02	0.035	2 / 2	0.0275
Copper	mg/kg		0.31	0.31	2.5	5 / 5	0.77
Lead	mg/kg		0.046	0.046	0.081	3 / 3	0.06233
Magnesium	mg/kg		221	221	287	5 / 5	251.8
Manganese	mg/kg		0.31	0.31	1.7	5 / 5	1.034
Mercury	mg/kg		0.082	0.082	0.23	5 / 5	0.1302
Nickel	mg/kg		0.2	0.2	0.23	2 / 2	0.215
Potassium	mg/kg		3790	3790	4040	5 / 5	3888
Selenium	mg/kg		0.22	0.22	0.36	5 / 5	0.254
Sodium	mg/kg		448	448	545	5 / 5	491.6
Strontium	mg/kg		0.23	0.23	2.2	5 / 5	1.236
Vanadium	mg/kg		0.068	0.068	0.068	1 / 1	0.068
Zinc	mg/kg		7.3	7.3	13.6	5 / 5	9.94

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table B- 14: Baseline Fish, Spring 2009 - Channel Catfish Fillet (Reanalyzed) at Emory River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
Aluminum	mg/kg		7.5	7.5	9.7	2 / 2	8.6
Arsenic	mg/kg		0.028	0.028	0.045	3 / 3	0.03533
Barium	mg/kg		0.043	0.043	0.05	2 / 2	0.0465
Cadmium	mg/kg		0.018	0.018	0.018	1 / 1	0.018
Calcium	mg/kg		67.3	67.3	83.6	6 / 6	75.22
Cobalt	mg/kg		0.018	0.018	0.018	1 / 1	0.018
Copper	mg/kg		0.25	0.25	1.3	6 / 6	0.575
Iron	mg/kg		35.9	35.9	35.9	1 / 1	35.9
Lead	mg/kg		0.029	0.029	0.029	1 / 1	0.029
Magnesium	mg/kg		202	202	254	6 / 6	223.8
Manganese	mg/kg		0.16	0.16	0.27	6 / 6	0.2033
Mercury	mg/kg		0.044	0.044	0.24	6 / 6	0.1248
Nickel	mg/kg		0.091	0.091	0.2	3 / 3	0.1337
Potassium	mg/kg		3080	3080	4030	6 / 6	3532
Selenium	mg/kg		0.2	0.2	0.37	6 / 6	0.2933
Sodium	mg/kg		297	297	353	6 / 6	327.7
Strontium	mg/kg		0.056	0.056	0.091	6 / 6	0.07067
Zinc	mg/kg		5.1	5.1	8.3	6 / 6	6.2

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table B- 15: Baseline Fish, Spring 2009 - Channel Catfish Fillet (Reanalyzed) at Emory River Mile 0.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
Aluminum	mg/kg		5.6	5.6	7	2 / 2	6.3
Arsenic	mg/kg		0.039	0.039	0.039	1 / 1	0.039
Barium	mg/kg		0.062	0.062	0.18	3 / 3	0.1027
Cadmium	mg/kg		0.0085	0.0085	0.0085	1 / 1	0.0085
Calcium	mg/kg		192	192	1730	4 / 4	763
Copper	mg/kg		0.28	0.28	4.5	4 / 4	1.353
Lead	mg/kg		0.027	0.027	0.036	2 / 2	0.0315
Magnesium	mg/kg		220	220	280	4 / 4	238.8
Manganese	mg/kg		0.38	0.38	1.3	4 / 4	0.65
Mercury	mg/kg		0.055	0.055	0.11	4 / 4	0.07325
Nickel	mg/kg		0.19	0.19	0.19	1 / 1	0.19
Potassium	mg/kg		3230	3230	3770	4 / 4	3543
Selenium	mg/kg		0.29	0.29	0.54	4 / 4	0.3775
Sodium	mg/kg		344	344	492	4 / 4	418.3
Strontium	mg/kg		0.13	0.13	1.7	4 / 4	0.71
Zinc	mg/kg		5.7	5.7	8.6	4 / 4	7.05

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table B- 16: Baseline Fish, Spring 2009 - Channel Catfish Fillet (Reanalyzed) at Clinch River Mile 9.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
Aluminum	mg/kg		3.9	3.9	13	2 / 2	8.45
Arsenic	mg/kg		0.061	0.061	0.061	1 / 1	0.061
Barium	mg/kg		0.043	0.043	0.46	3 / 3	0.1833
Calcium	mg/kg		215	215	12200	4 / 4	3267
Cobalt	mg/kg		0.018	0.018	0.018	1 / 1	0.018
Copper	mg/kg		0.34	0.34	2.5	4 / 4	0.9675
Lead	mg/kg		0.067	0.067	0.067	1 / 1	0.067
Magnesium	mg/kg		208	208	439	4 / 4	279.3
Manganese	mg/kg		0.21	0.21	5.8	4 / 4	1.66
Mercury	mg/kg		0.055	0.055	0.16	4 / 4	0.09075
Nickel	mg/kg		0.1	0.1	0.3	2 / 2	0.2
Potassium	mg/kg		3760	3760	4120	4 / 4	3940
Selenium	mg/kg		0.21	0.21	0.38	4 / 4	0.28
Sodium	mg/kg		376	376	660	4 / 4	483
Strontium	mg/kg		0.14	0.14	8.3	4 / 4	2.248
Vanadium	mg/kg		0.061	0.061	0.061	1 / 1	0.061
Zinc	mg/kg		6	6	17.3	4 / 4	9.025

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table B- 17: Baseline Fish, Spring 2009 - Channel Catfish Fillet (Reanalyzed) at Clinch River Mile 1.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
Aluminum	mg/kg		4.3	4.3	4.3	1 / 1	4.3
Arsenic	mg/kg		0.031	0.031	0.052	3 / 3	0.04033
Barium	mg/kg		0.048	0.048	0.19	5 / 5	0.0984
Cadmium	mg/kg		0.0086	0.0086	0.0086	1 / 1	0.0086
Calcium	mg/kg		194	194	1930	5 / 5	983.4
Cobalt	mg/kg		0.014	0.014	0.014	1 / 1	0.014
Copper	mg/kg		0.28	0.28	1.6	5 / 5	0.6
Lead	mg/kg		0.032	0.032	0.032	1 / 1	0.032
Magnesium	mg/kg		220	220	278	5 / 5	256.4
Manganese	mg/kg		0.3	0.3	1.4	5 / 5	0.724
Mercury	mg/kg		0.032	0.032	0.36	5 / 5	0.1102
Potassium	mg/kg		3580	3580	4280	5 / 5	3834
Selenium	mg/kg		0.24	0.24	0.54	5 / 5	0.394
Sodium	mg/kg		333	333	536	5 / 5	430.4
Strontium	mg/kg		0.14	0.14	1.5	5 / 5	0.774
Vanadium	mg/kg		0.05	0.05	0.05	1 / 1	0.05
Zinc	mg/kg		7.2	7.2	10.2	5 / 5	8.2

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table B- 18: Baseline Fish, Spring 2009 - Largemouth Bass Fillet (Reanalyzed) at Emory River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
Aluminum	mg/kg		4.1	4.1	4.1	1 / 1	4.1
Arsenic	mg/kg		0.032	0.032	0.22	6 / 6	0.1287
Barium	mg/kg		0.089	0.089	0.089	1 / 1	0.089
Calcium	mg/kg		106	106	1730	6 / 6	434.5
Copper	mg/kg		0.2	0.2	0.53	6 / 6	0.31
Magnesium	mg/kg		265	265	318	6 / 6	292.3
Manganese	mg/kg		0.31	0.31	0.31	1 / 1	0.31
Mercury	mg/kg		0.11	0.11	0.18	6 / 6	0.1317
Nickel	mg/kg		0.091	0.091	0.091	1 / 1	0.091
Potassium	mg/kg		3730	3730	4260	6 / 6	4070
Selenium	mg/kg		0.39	0.39	0.6	6 / 6	0.4617
Sodium	mg/kg		291	291	455	6 / 6	368
Strontium	mg/kg		0.045	0.045	1.4	5 / 5	0.362
Vanadium	mg/kg		0.046	0.046	0.046	1 / 1	0.046
Zinc	mg/kg		5.8	5.8	15.4	6 / 6	9.1

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table B- 19: Baseline Fish, Spring 2009 - Largemouth Bass Fillet (Reanalyzed) at Emory River Mile 0.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
Aluminum	mg/kg		7.6	7.6	9.5	3 / 3	8.6
Arsenic	mg/kg		0.21	0.21	0.33	8 / 8	0.2675
Barium	mg/kg		0.06	0.06	0.14	5 / 5	0.0852
Calcium	mg/kg		141	141	2990	8 / 8	1320
Copper	mg/kg		0.27	0.27	6.8	8 / 8	1.709
Lead	mg/kg		0.03	0.03	0.03	1 / 1	0.03
Magnesium	mg/kg		289	289	357	8 / 8	319.9
Manganese	mg/kg		0.21	0.21	0.87	6 / 6	0.3717
Mercury	mg/kg		0.024	0.024	0.099	8 / 8	0.05113
Nickel	mg/kg		0.099	0.099	0.099	1 / 1	0.099
Potassium	mg/kg		3790	3790	4190	8 / 8	4035
Selenium	mg/kg		0.55	0.55	0.88	8 / 8	0.7525
Sodium	mg/kg		366	366	605	8 / 8	458.6
Strontium	mg/kg		0.073	0.073	2.6	8 / 8	1.06
Thallium	mg/kg	0.013 / 0.018	ND	ND	ND	0 / 4	0
Zinc	mg/kg		8.6	8.6	13.9	8 / 8	11.44

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table B- 20: Baseline Fish, Spring 2009 - Largemouth Bass Fillet (Reanalyzed) at Clinch River Mile 9.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
Arsenic	mg/kg		0.16	0.16	0.36	5 / 5	0.288
Barium	mg/kg		0.069	0.069	0.14	5 / 5	0.1002
Calcium	mg/kg		1870	1870	3590	5 / 5	2718
Copper	mg/kg		0.29	0.29	2.1	5 / 5	0.682
Magnesium	mg/kg		313	313	353	5 / 5	330.4
Manganese	mg/kg		0.25	0.25	0.36	5 / 5	0.318
Mercury	mg/kg		0.04	0.04	0.21	5 / 5	0.1044
Nickel	mg/kg		0.17	0.17	0.17	1 / 1	0.17
Potassium	mg/kg		3760	3760	4140	5 / 5	3934
Selenium	mg/kg		0.59	0.59	0.68	5 / 5	0.634
Sodium	mg/kg		519	519	587	5 / 5	543
Strontium	mg/kg		1.3	1.3	3.1	5 / 5	2.14
Thallium	mg/kg	0.016 / 0.016	ND	ND	ND	0 / 1	0
Zinc	mg/kg		11.1	11.1	14.1	5 / 5	12.42

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table B-21: Baseline Fish, Spring 2009 - Largemouth Bass Fillet (Reanalyzed) at Clinch River Mile 1.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
Arsenic	mg/kg		0.23	0.23	0.35	4 / 4	0.27
Barium	mg/kg		0.044	0.044	0.14	3 / 3	0.08767
Calcium	mg/kg		601	601	3710	4 / 4	1683
Copper	mg/kg		0.33	0.33	0.38	4 / 4	0.3575
Magnesium	mg/kg		282	282	362	4 / 4	314
Manganese	mg/kg		0.18	0.18	0.72	4 / 4	0.3475
Mercury	mg/kg		0.022	0.022	0.057	4 / 4	0.03975
Potassium	mg/kg		3800	3800	4230	4 / 4	4028
Selenium	mg/kg		0.4	0.4	0.56	4 / 4	0.47
Sodium	mg/kg		453	453	522	4 / 4	490.3
Strontium	mg/kg		0.45	0.45	3	4 / 4	1.363
Zinc	mg/kg		9	9	13.3	4 / 4	10.75

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table B-22: Baseline Fish, Spring 2009 - Spotted Bass Fillet (Reanalyzed) at Clinch River Mile 1.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
Aluminum	mg/kg		5.2	5.2	5.2	1 / 1	5.2
Arsenic	mg/kg		0.31	0.31	0.31	1 / 1	0.31
Barium	mg/kg		0.13	0.13	0.13	1 / 1	0.13
Calcium	mg/kg		2580	2580	2580	1 / 1	2580
Copper	mg/kg		0.4	0.4	0.4	1 / 1	0.4
Magnesium	mg/kg		299	299	299	1 / 1	299
Manganese	mg/kg		0.29	0.29	0.29	1 / 1	0.29
Mercury	mg/kg		0.087	0.087	0.087	1 / 1	0.087
Nickel	mg/kg		0.12	0.12	0.12	1 / 1	0.12
Potassium	mg/kg		3890	3890	3890	1 / 1	3890
Selenium	mg/kg		0.44	0.44	0.44	1 / 1	0.44
Sodium	mg/kg		552	552	552	1 / 1	552
Strontium	mg/kg		2.3	2.3	2.3	1 / 1	2.3
Zinc	mg/kg		11.1	11.1	11.1	1 / 1	11.1

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table B- 23: Baseline Fish, Spring 2009 - Blue Catfish Fillet Homogenate (Reanalyzed) at Clinch River Mile 9.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
Arsenic	mg/kg		0.036	0.036	0.051	2 / 2	0.0435
Barium	mg/kg		0.046	0.046	0.13	4 / 4	0.07925
Cadmium	mg/kg		0.013	0.013	0.013	1 / 1	0.013
Calcium	mg/kg		149	149	1480	5 / 5	653
Chromium	mg/kg		0.19	0.19	0.19	1 / 1	0.19
Cobalt	mg/kg		0.016	0.016	0.022	3 / 3	0.01933
Copper	mg/kg		0.32	0.32	0.51	5 / 5	0.382
Lead	mg/kg		0.029	0.029	0.029	1 / 1	0.029
Magnesium	mg/kg		203	203	237	5 / 5	225.6
Manganese	mg/kg		0.27	0.27	0.98	5 / 5	0.546
Mercury	mg/kg		0.068	0.068	0.23	5 / 5	0.1262
Potassium	mg/kg		3760	3760	4090	5 / 5	3904
Selenium	mg/kg		0.19	0.19	0.32	5 / 5	0.234
Sodium	mg/kg		433	433	515	5 / 5	475.4
Strontium	mg/kg		0.12	0.12	1.2	5 / 5	0.51
Zinc	mg/kg		7	7	11.4	5 / 5	8.92

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table B- 24: Baseline Fish, Spring 2009 - Channel Catfish Fillet Homogenate (Reanalyzed) at Emory River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
Arsenic	mg/kg		0.034	0.034	0.038	2 / 2	0.036
Barium	mg/kg		0.047	0.047	0.15	4 / 4	0.0795
Cadmium	mg/kg		0.012	0.012	0.012	1 / 1	0.012
Calcium	mg/kg		78.8	78.8	232	6 / 6	116.8
Chromium	mg/kg		0.15	0.15	0.7	2 / 2	0.425
Cobalt	mg/kg		0.015	0.015	0.039	3 / 3	0.02367
Copper	mg/kg		0.22	0.22	0.57	6 / 6	0.3867
Magnesium	mg/kg		199	199	246	6 / 6	216.8
Manganese	mg/kg		0.18	0.18	0.63	6 / 6	0.3067
Mercury	mg/kg		0.044	0.044	0.24	6 / 6	0.1243
Nickel	mg/kg		0.35	0.35	0.35	1 / 1	0.35
Potassium	mg/kg		3190	3190	3880	6 / 6	3587
Selenium	mg/kg		0.18	0.18	0.38	6 / 6	0.2733
Silver	mg/kg		0.03	0.03	0.03	1 / 1	0.03
Sodium	mg/kg		305	305	387	6 / 6	338.5
Strontium	mg/kg		0.072	0.072	0.38	6 / 6	0.1617
Vanadium	mg/kg		0.1	0.1	0.1	1 / 1	0.1
Zinc	mg/kg		5.6	5.6	13.1	6 / 6	8.017

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table B- 25: Baseline Fish, Spring 2009 - Channel Catfish Fillet Homogenate (Reanalyzed) at Clinch River Mile 9.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
Aluminum	mg/kg		10.8	10.8	18	2 / 2	14.4
Arsenic	mg/kg		0.028	0.028	0.028	1 / 1	0.028
Barium	mg/kg		0.055	0.055	1.2	4 / 4	0.4163
Calcium	mg/kg		125	125	19400	4 / 4	5132
Chromium	mg/kg		0.27	0.27	0.86	2 / 2	0.565
Cobalt	mg/kg		0.025	0.025	0.077	3 / 3	0.04267
Copper	mg/kg		0.32	0.32	1.4	4 / 4	0.65
Lead	mg/kg		0.027	0.027	0.24	2 / 2	0.1335
Magnesium	mg/kg		208	208	556	4 / 4	329
Manganese	mg/kg		0.37	0.37	12.1	4 / 4	3.71
Mercury	mg/kg		0.048	0.048	0.18	4 / 4	0.099
Nickel	mg/kg		0.14	0.14	0.55	2 / 2	0.345
Potassium	mg/kg		4210	4210	4880	4 / 4	4553
Selenium	mg/kg		0.19	0.19	0.36	4 / 4	0.2725
Sodium	mg/kg		393	393	721	4 / 4	520.8
Strontium	mg/kg		0.14	0.14	14.3	4 / 4	3.833
Vanadium	mg/kg		0.15	0.15	0.15	1 / 1	0.15
Zinc	mg/kg		8.4	8.4	14	4 / 4	10.13

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table B- 26: Baseline Fish, Spring 2009 - Channel Catfish Fillet Homogenate (Reanalyzed) at Clinch River Mile 1.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
Antimony	mg/kg		0.017	0.017	0.017	1 / 1	0.017
Arsenic	mg/kg		0.053	0.053	0.053	1 / 1	0.053
Barium	mg/kg		0.072	0.072	0.16	5 / 5	0.1224
Cadmium	mg/kg		0.013	0.013	0.014	2 / 2	0.0135
Calcium	mg/kg		175	175	2430	5 / 5	690.4
Chromium	mg/kg		0.15	0.15	0.19	2 / 2	0.17
Cobalt	mg/kg		0.015	0.015	0.036	4 / 4	0.02125
Copper	mg/kg		0.32	0.32	0.57	5 / 5	0.474
Lead	mg/kg		0.043	0.043	0.043	1 / 1	0.043
Magnesium	mg/kg		221	221	278	5 / 5	247.4
Manganese	mg/kg		0.31	0.31	1.1	5 / 5	0.594
Mercury	mg/kg		0.039	0.039	0.3	5 / 5	0.098
Potassium	mg/kg		3370	3370	4460	5 / 5	3858
Selenium	mg/kg		0.2	0.2	0.66	5 / 5	0.396
Sodium	mg/kg		373	373	531	5 / 5	457
Strontium	mg/kg		0.14	0.14	1.2	5 / 5	0.414
Vanadium	mg/kg		0.047	0.047	0.048	2 / 2	0.0475
Zinc	mg/kg		8	8	12.5	5 / 5	9.38

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table B- 27: Baseline Fish, Spring 2009 - Largemouth Bass Fillet Homogenate (Reanalyzed) at Emory River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
Antimony	mg/kg		0.021	0.021	0.021	1 / 1	0.021
Arsenic	mg/kg		0.039	0.039	0.23	6 / 6	0.1315
Barium	mg/kg		0.063	0.063	0.15	3 / 3	0.1043
Calcium	mg/kg		110	110	1720	6 / 6	595.2
Chromium	mg/kg		0.16	0.16	0.44	2 / 2	0.3
Cobalt	mg/kg		0.018	0.018	0.03	2 / 2	0.024
Copper	mg/kg		0.24	0.24	1	6 / 6	0.41
Magnesium	mg/kg		284	284	353	6 / 6	312.7
Manganese	mg/kg		0.2	0.2	0.41	5 / 5	0.266
Mercury	mg/kg		0.11	0.11	0.21	6 / 6	0.1517
Molybdenum	mg/kg	0.09 / 0.09	ND	ND	ND	0 / 1	0
Nickel	mg/kg		0.21	0.21	0.21	1 / 1	0.21
Potassium	mg/kg		4080	4080	4590	6 / 6	4363
Selenium	mg/kg		0.4	0.4	0.63	6 / 6	0.475
Sodium	mg/kg		362	362	507	6 / 6	427.8
Strontium	mg/kg		0.046	0.046	1.6	6 / 6	0.4987
Vanadium	mg/kg		0.089	0.089	0.089	1 / 1	0.089
Zinc	mg/kg		6.3	6.3	19	6 / 6	9.8

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table B- 28: Baseline Fish, Spring 2009 - Largemouth Bass Fillet Homogenate (Reanalyzed) at Clinch River Mile 9.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
Aluminum	mg/kg		18.7	18.7	18.7	1 / 1	18.7
Arsenic	mg/kg		0.15	0.15	0.33	5 / 5	0.262
Barium	mg/kg		0.075	0.075	0.14	4 / 4	0.111
Calcium	mg/kg		462	462	3550	5 / 5	2208
Copper	mg/kg		0.34	0.34	0.39	5 / 5	0.374
Magnesium	mg/kg		294	294	359	5 / 5	325.2
Manganese	mg/kg		0.18	0.18	0.5	5 / 5	0.356
Mercury	mg/kg		0.043	0.043	0.21	5 / 5	0.1048
Potassium	mg/kg		3520	3520	4830	5 / 5	3974
Selenium	mg/kg		0.55	0.55	0.69	5 / 5	0.614
Sodium	mg/kg		453	453	622	5 / 5	541
Strontium	mg/kg		0.31	0.31	2.9	5 / 5	1.734
Zinc	mg/kg		7.2	7.2	13.4	5 / 5	10.48

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table B-29: Baseline Fish, Spring 2009 - Largemouth Bass Fillet Homogenate (Reanalyzed) at Clinch River Mile 1.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
Arsenic	mg/kg		0.18	0.18	0.28	4 / 4	0.2275
Barium	mg/kg		0.065	0.065	0.18	4 / 4	0.1088
Cadmium	mg/kg		0.0085	0.0085	0.017	2 / 2	0.01275
Calcium	mg/kg		1180	1180	4660	4 / 4	2713
Chromium	mg/kg		0.21	0.21	0.33	3 / 3	0.2633
Cobalt	mg/kg		0.016	0.016	0.024	3 / 3	0.019
Copper	mg/kg		0.38	0.38	0.49	4 / 4	0.4525
Magnesium	mg/kg		300	300	362	4 / 4	336
Manganese	mg/kg		0.31	0.31	1.2	4 / 4	0.6025
Mercury	mg/kg		0.024	0.024	0.051	4 / 4	0.03475
Nickel	mg/kg		0.12	0.12	0.21	3 / 3	0.1667
Potassium	mg/kg		3890	3890	4630	4 / 4	4205
Selenium	mg/kg		0.37	0.37	0.46	4 / 4	0.4175
Silver	mg/kg		0.0036	0.0036	0.0036	1 / 1	0.0036
Sodium	mg/kg		476	476	597	4 / 4	536.5
Strontium	mg/kg		0.94	0.94	3.7	4 / 4	2.21
Thallium	mg/kg	0.015 / 0.015	ND	ND	ND	0 / 1	0
Vanadium	mg/kg		0.049	0.049	0.049	1 / 1	0.049
Zinc	mg/kg		8.3	8.3	11.7	4 / 4	10.05

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table B-30: Baseline Fish, Spring 2009 - Spotted Bass Fillet Homogenate (Reanalyzed) at Clinch River Mile 1.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
Arsenic	mg/kg		0.27	0.27	0.27	1 / 1	0.27
Barium	mg/kg		0.29	0.29	0.29	1 / 1	0.29
Calcium	mg/kg		2320	2320	2320	1 / 1	2320
Copper	mg/kg		0.45	0.45	0.45	1 / 1	0.45
Magnesium	mg/kg		306	306	306	1 / 1	306
Manganese	mg/kg		0.21	0.21	0.21	1 / 1	0.21
Mercury	mg/kg		0.086	0.086	0.086	1 / 1	0.086
Potassium	mg/kg		3930	3930	3930	1 / 1	3930
Selenium	mg/kg		0.47	0.47	0.47	1 / 1	0.47
Sodium	mg/kg		607	607	607	1 / 1	607
Strontium	mg/kg		1.8	1.8	1.8	1 / 1	1.8
Zinc	mg/kg		11.3	11.3	11.3	1 / 1	11.3

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

APPENDIX C

TDEC Special Request I, Spring 2009

Table C-1: TDEC Special Request I, Spring 2009 - Largemouth Bass Whole Body at Emory River Mile 3.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		2.6	2.6	2.6	1 / 1	2.6
Aluminum	mg/kg	103 / 103	ND	ND	ND	0 / 1	0
Antimony	mg/kg	0.41 / 0.41	ND	ND	ND	0 / 1	0
Arsenic	mg/kg		0.56	0.56	0.56	1 / 1	0.56
Barium	mg/kg		0.92	0.92	0.92	1 / 1	0.92
Beryllium	mg/kg	0.41 / 0.41	ND	ND	ND	0 / 1	0
Boron	mg/kg	2.1 / 2.1	ND	ND	ND	0 / 1	0
Cadmium	mg/kg	0.41 / 0.41	ND	ND	ND	0 / 1	0
Calcium	mg/kg		16500	16500	16500	1 / 1	16500
Chromium	mg/kg		0.63	0.63	0.63	1 / 1	0.63
Cobalt	mg/kg	0.41 / 0.41	ND	ND	ND	0 / 1	0
Copper	mg/kg	2.1 / 2.1	ND	ND	ND	0 / 1	0
Iron	mg/kg	103 / 103	ND	ND	ND	0 / 1	0
Lead	mg/kg	0.41 / 0.41	ND	ND	ND	0 / 1	0
Magnesium	mg/kg		1020	1020	1020	1 / 1	1020
Manganese	mg/kg		4.2	4.2	4.2	1 / 1	4.2
Mercury	mg/kg		0.26	0.26	0.26	1 / 1	0.26
Molybdenum	mg/kg	4.1 / 4.1	ND	ND	ND	0 / 1	0
Nickel	mg/kg	0.41 / 0.41	ND	ND	ND	0 / 1	0
Potassium	mg/kg		10700	10700	10700	1 / 1	10700
Selenium	mg/kg		2.7	2.7	2.7	1 / 1	2.7
Silver	mg/kg	0.21 / 0.21	ND	ND	ND	0 / 1	0
Sodium	mg/kg		3800	3800	3800	1 / 1	3800
Strontium	mg/kg		13.3	13.3	13.3	1 / 1	13.3
Thallium	mg/kg	0.41 / 0.41	ND	ND	ND	0 / 1	0
Vanadium	mg/kg	0.82 / 0.82	ND	ND	ND	0 / 1	0
Zinc	mg/kg		60.1	60.1	60.1	1 / 1	60.1

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table C-2: TDEC Special Request I, Spring 2009 - Red Ear Sunfish Whole Body at Emory River Mile 3.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1.7	1.7	1.7	1 / 1	1.7
Aluminum	mg/kg	103 / 103	ND	ND	ND	0 / 1	0
Antimony	mg/kg	0.41 / 0.41	ND	ND	ND	0 / 1	0
Arsenic	mg/kg		0.63	0.63	0.63	1 / 1	0.63
Barium	mg/kg		10.3	10.3	10.3	1 / 1	10.3
Beryllium	mg/kg	0.41 / 0.41	ND	ND	ND	0 / 1	0
Boron	mg/kg	2.1 / 2.1	ND	ND	ND	0 / 1	0
Cadmium	mg/kg	0.41 / 0.41	ND	ND	ND	0 / 1	0
Calcium	mg/kg		91000	91000	91000	1 / 1	91000
Chromium	mg/kg		0.51	0.51	0.51	1 / 1	0.51
Cobalt	mg/kg	0.41 / 0.41	ND	ND	ND	0 / 1	0
Copper	mg/kg	2.1 / 2.1	ND	ND	ND	0 / 1	0
Iron	mg/kg	103 / 103	ND	ND	ND	0 / 1	0
Lead	mg/kg	0.41 / 0.41	ND	ND	ND	0 / 1	0
Magnesium	mg/kg		1890	1890	1890	1 / 1	1890
Manganese	mg/kg		27.9	27.9	27.9	1 / 1	27.9
Mercury	mg/kg		0.15	0.15	0.15	1 / 1	0.15
Molybdenum	mg/kg	4.1 / 4.1	ND	ND	ND	0 / 1	0
Nickel	mg/kg	0.41 / 0.41	ND	ND	ND	0 / 1	0
Potassium	mg/kg		11800	11800	11800	1 / 1	11800
Selenium	mg/kg		2.9	2.9	2.9	1 / 1	2.9
Silver	mg/kg	0.21 / 0.21	ND	ND	ND	0 / 1	0
Sodium	mg/kg		4970	4970	4970	1 / 1	4970
Strontium	mg/kg		69.8	69.8	69.8	1 / 1	69.8
Thallium	mg/kg	0.41 / 0.41	ND	ND	ND	0 / 1	0
Vanadium	mg/kg	0.82 / 0.82	ND	ND	ND	0 / 1	0
Zinc	mg/kg		85.7	85.7	85.7	1 / 1	85.7

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

APPENDIX D
TDEC Special Request II, Spring 2009

Table D-1: TDEC Special Request II, Spring 2009 - Black Crappie Whole Body at Emory River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.82	0.82	3.6	5 / 5	2.624
% Moisture	%		71.8	71.8	74.5	5 / 5	73.28
Aluminum	mg/kg	24.85 / 24.91	ND	ND	ND	0 / 5	0
Antimony	mg/kg	0.0987 / 0.1007	ND	ND	ND	0 / 5	0
Arsenic	mg/kg		0.1182	0.1182	0.3384	5 / 5	0.2176
Barium	mg/kg		0.6095	0.6095	1.734	5 / 5	1.179
Beryllium	mg/kg	0.0987 / 0.1007	ND	ND	ND	0 / 5	0
Boron	mg/kg	1.979 / 2.002	ND	ND	ND	0 / 5	0
Cadmium	mg/kg	0.0987 / 0.1007	ND	ND	ND	0 / 5	0
Calcium	mg/kg		5989	5989	35190	5 / 5	16976
Chromium	mg/kg	0.1028 / 0.3975	ND	ND	ND	0 / 5	0
Cobalt	mg/kg	0.0987 / 0.1007	ND	ND	ND	0 / 5	0
Copper	mg/kg	0.4883 / 0.51	ND	ND	ND	0 / 5	0
Iron	mg/kg	24.85 / 24.91	ND	ND	ND	0 / 5	0
Lead	mg/kg	0.0987 / 0.1007	ND	ND	ND	0 / 5	0
Magnesium	mg/kg		273	273	744.6	5 / 5	465.7
Manganese	mg/kg		2.327	2.327	7.523	5 / 5	4.474
Mercury	mg/kg	0.02002 / 0.04155	ND	ND	ND	0 / 5	0
Molybdenum	mg/kg	0.987 / 1.007	ND	ND	ND	0 / 5	0
Nickel	mg/kg	0.09945 / 0.2544	ND	ND	ND	0 / 5	0
Potassium	mg/kg		2809	2809	3356	5 / 5	3050
Selenium	mg/kg		0.408	0.408	0.6768	5 / 5	0.5203
Silver	mg/kg	0.04883 / 0.051	ND	ND	ND	0 / 5	0
Sodium	mg/kg		795	795	1349	5 / 5	1028
Strontium	mg/kg		5.115	5.115	26.01	5 / 5	13.35
Thallium	mg/kg	0.0987 / 0.1007	ND	ND	ND	0 / 5	0
Vanadium	mg/kg	0.1979 / 0.2002	ND	ND	ND	0 / 5	0
Zinc	mg/kg		10.18	10.18	17.42	5 / 5	14.85

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table D-2: TDEC Special Request II, Spring 2009 - Black Crappie Whole Body at Emory River Mile 2.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1.3	1.3	3.6	5 / 5	2.7
% Moisture	%		67.6	67.6	73.5	5 / 5	71.24
Aluminum	mg/kg	24.83 / 24.97	ND	ND	ND	0 / 5	0
Antimony	mg/kg	0.09894 / 0.1007	ND	ND	ND	0 / 5	0
Arsenic	mg/kg		0.1687	0.1687	0.2657	5 / 5	0.2061
Barium	mg/kg		0.4624	0.4624	3.498	5 / 5	1.846
Beryllium	mg/kg	0.09894 / 0.1007	ND	ND	ND	0 / 5	0
Boron	mg/kg	1.979 / 2.009	ND	ND	ND	0 / 5	0
Cadmium	mg/kg	0.09894 / 0.1007	ND	ND	ND	0 / 5	0
Calcium	mg/kg		6392	6392	56445	5 / 5	25411
Chromium	mg/kg	0.1542 / 0.3143	ND	ND	ND	0 / 5	0
Cobalt	mg/kg	0.09894 / 0.1007	ND	ND	ND	0 / 5	0
Copper	mg/kg	0.486 / 0.5035	ND	ND	ND	0 / 5	0
Iron	mg/kg	24.83 / 24.97	ND	ND	ND	0 / 5	0
Lead	mg/kg	0.09894 / 0.1007	ND	ND	ND	0 / 5	0
Magnesium	mg/kg		329.1	329.1	1026	5 / 5	579.3
Manganese	mg/kg		2.557	2.557	20.64	5 / 5	8.667
Mercury	mg/kg	0.01976 / 0.02008	ND	ND	ND	0 / 5	0
Molybdenum	mg/kg	0.9894 / 1.007	ND	ND	ND	0 / 5	0
Nickel	mg/kg	0.09894 / 0.1523	ND	ND	ND	0 / 5	0
Potassium	mg/kg		2825	2825	3026	5 / 5	2884
Selenium	mg/kg		0.6578	0.6578	0.7888	5 / 5	0.7153
Silver	mg/kg	0.0486 / 0.05035	ND	ND	ND	0 / 5	0
Sodium	mg/kg		949.3	949.3	1646	5 / 5	1148
Strontium	mg/kg		5.141	5.141	49.03	5 / 5	23.12
Thallium	mg/kg	0.09894 / 0.1007	ND	ND	ND	0 / 5	0
Vanadium	mg/kg	0.1979 / 0.2009	ND	ND	ND	0 / 5	0
Zinc	mg/kg		10.12	10.12	29.15	5 / 5	18.02

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table D-3: TDEC Special Request II, Spring 2009 - Black Crappie Whole Body at Emory River Mile 0.9

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1.8	1.8	3.1	5 / 5	2.42
% Moisture	%		72.2	72.2	77.1	5 / 5	74.26
Aluminum	mg/kg	24.73 / 24.97	ND	ND	ND	0 / 5	0
Antimony	mg/kg	0.09828 / 0.1001	ND	ND	ND	0 / 5	0
Arsenic	mg/kg		0.2075	0.2075	0.3435	5 / 5	0.2433
Barium	mg/kg		0.2748	0.2748	1.403	5 / 5	0.7052
Beryllium	mg/kg	0.09828 / 0.1001	ND	ND	ND	0 / 5	0
Boron	mg/kg	1.973 / 2.008	ND	ND	ND	0 / 5	0
Cadmium	mg/kg	0.09828 / 0.1001	ND	ND	ND	0 / 5	0
Calcium	mg/kg		4504	4504	25108	5 / 5	11930
Chromium	mg/kg	0.1012 / 0.2772	ND	ND	ND	0 / 5	0
Cobalt	mg/kg	0.09828 / 0.1001	ND	ND	ND	0 / 5	0
Copper	mg/kg	0.495 / 0.506	ND	ND	ND	0 / 5	0
Iron	mg/kg	24.73 / 24.97	ND	ND	ND	0 / 5	0
Lead	mg/kg	0.09828 / 0.1001	ND	ND	ND	0 / 5	0
Magnesium	mg/kg		277.4	277.4	577.5	5 / 5	389.1
Manganese	mg/kg		0.9389	0.9389	7.15	5 / 5	3.185
Mercury	mg/kg	0.01991 / 0.02977	ND	ND	ND	0 / 5	0
Molybdenum	mg/kg	0.9828 / 1.001	ND	ND	ND	0 / 5	0
Nickel	mg/kg	0.09847 / 0.184	ND	ND	ND	0 / 5	0
Potassium	mg/kg		2621	2621	2970	5 / 5	2795
Selenium	mg/kg		0.417	0.417	0.7056	5 / 5	0.5708
Silver	mg/kg	0.0495 / 0.0506	ND	ND	ND	0 / 5	0
Sodium	mg/kg		717.2	717.2	1298	5 / 5	1004
Strontium	mg/kg		4.145	4.145	21.09	5 / 5	9.932
Thallium	mg/kg	0.09828 / 0.1001	ND	ND	ND	0 / 5	0
Vanadium	mg/kg	0.1973 / 0.2008	ND	ND	ND	0 / 5	0
Zinc	mg/kg		10.59	10.59	14.69	5 / 5	12.36

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table D-4: TDEC Special Request II, Spring 2009 - Black Crappie Whole Body at Clinch River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		2.9	2.9	5.1	5 / 5	4.02
% Moisture	%		65.4	65.4	77.7	5 / 5	71.36
Aluminum	mg/kg	24.92 / 25.04	ND	ND	ND	0 / 5	0
Antimony	mg/kg	0.09867 / 0.1006	ND	ND	ND	0 / 5	0
Arsenic	mg/kg		0.2176	0.2176	0.3806	5 / 5	0.3037
Barium	mg/kg		0.3768	0.3768	1.012	5 / 5	0.7133
Beryllium	mg/kg	0.09867 / 0.1006	ND	ND	ND	0 / 5	0
Boron	mg/kg	1.999 / 2.013	ND	ND	ND	0 / 5	0
Cadmium	mg/kg	0.09867 / 0.1006	ND	ND	ND	0 / 5	0
Calcium	mg/kg		6751	6751	15244	5 / 5	11474
Chromium	mg/kg	0.1211 / 0.2135	ND	ND	ND	0 / 5	0
Cobalt	mg/kg	0.09867 / 0.1006	ND	ND	ND	0 / 5	0
Copper	mg/kg	0.4844 / 0.506	ND	0.7958	0.7958	1 / 5	0.7958
Iron	mg/kg	24.92 / 25.04	ND	ND	ND	0 / 5	0
Lead	mg/kg	0.09867 / 0.1006	ND	ND	ND	0 / 5	0
Magnesium	mg/kg		297.7	297.7	423.3	5 / 5	364
Manganese	mg/kg		2.857	2.857	8.071	5 / 5	4.628
Mercury	mg/kg	0.01978 / 0.01983	ND	0.02201	0.08304	3 / 5	0.04394
Molybdenum	mg/kg	0.9867 / 1.006	ND	ND	ND	0 / 5	0
Nickel	mg/kg	0.1004 / 0.1211	ND	ND	ND	0 / 5	0
Potassium	mg/kg		2560	2560	2808	5 / 5	2682
Selenium	mg/kg		0.3542	0.3542	0.6574	5 / 5	0.4617
Silver	mg/kg	0.04844 / 0.0506	ND	ND	ND	0 / 5	0
Sodium	mg/kg		831.8	831.8	1141	5 / 5	967.8
Strontium	mg/kg		5.181	5.181	13.38	5 / 5	9.818
Thallium	mg/kg	0.09867 / 0.1006	ND	ND	ND	0 / 5	0
Vanadium	mg/kg	0.1999 / 0.2013	ND	ND	ND	0 / 5	0
Zinc	mg/kg		11.84	11.84	16.37	5 / 5	14.06

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

APPENDIX E
TVA Sampling, Spring 2009

Table E-1: TVA Sampling, Spring 2009 - Black Crappie Fillet at Emory River Mile 3.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.44	0.44	1.6	2 / 2	1.02
% Moisture	%		79	79	80.3	2 / 2	79.65
Aluminum	mg/kg		1.261	1.261	4.683	2 / 2	2.972
Antimony	mg/kg	0.01931 / 0.01932	ND	ND	ND	0 / 2	0
Arsenic	mg/kg		0.1694	0.1694	0.315	2 / 2	0.2422
Barium	mg/kg	0.0394 / 0.0399	ND	ND	ND	0 / 2	0
Beryllium	mg/kg	0.01491 / 0.01497	ND	ND	ND	0 / 2	0
Boron	mg/kg	0.0651 / 0.2167	ND	ND	ND	0 / 2	0
Cadmium	mg/kg	0.01399 / 0.0252	ND	ND	ND	0 / 2	0
Calcium	mg/kg		116.6	116.6	132.8	2 / 2	124.7
Chromium	mg/kg	0.1239 / 0.1241	ND	ND	ND	0 / 2	0
Cobalt	mg/kg	0.0065 / 0.01008	ND	ND	ND	0 / 2	0
Copper	mg/kg		0.1931	0.1931	0.294	2 / 2	0.2436
Iron	mg/kg	12.49 / 12.54	ND	ND	ND	0 / 2	0
Lead	mg/kg	0.01064 / 0.01071	ND	ND	ND	0 / 2	0
Magnesium	mg/kg		273.8	273.8	296.1	2 / 2	285
Manganese	mg/kg		0.0882	0.0882	0.1005	2 / 2	0.09435
Mercury	mg/kg	0.00433 / 0.0252	ND	0.0985	0.0985	1 / 2	0.0985
Molybdenum	mg/kg	0.01134 / 0.0132	ND	ND	ND	0 / 2	0
Nickel	mg/kg	0.03743 / 0.0441	ND	ND	ND	0 / 2	0
Potassium	mg/kg		3948	3948	4236	2 / 2	4092
Selenium	mg/kg		0.504	0.504	0.5319	2 / 2	0.518
Silver	mg/kg	0.00296 / 0.00588	ND	ND	ND	0 / 2	0
Sodium	mg/kg		364.5	364.5	369.6	2 / 2	367.1
Strontium	mg/kg	0.06698 / 0.0903	ND	ND	ND	0 / 2	0
Thallium	mg/kg	0.0147 / 0.01478	ND	ND	ND	0 / 2	0
Vanadium	mg/kg	0.1092 / 0.1103	ND	ND	ND	0 / 2	0
Zinc	mg/kg		6.153	6.153	6.974	2 / 2	6.564

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table E-2: TVA Sampling, Spring 2009 - Bluegill Fillet at Emory River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.43	0.43	0.82	6 / 6	0.6
% Moisture	%		80.9	80.9	83.2	5 / 5	81.76
Aluminum	mg/kg	0.8786 / 2.15	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.01848 / 0.01991	ND	ND	ND	0 / 6	0
Arsenic	mg/kg		0.0181	0.0181	0.03192	6 / 6	0.02213
Barium	mg/kg	0.01958 / 0.04163	ND	0.0267	0.1848	5 / 6	0.07158
Beryllium	mg/kg	0.00991 / 0.00997	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.06335 / 0.06516	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.00587 / 0.00605	ND	ND	ND	0 / 6	0
Calcium	mg/kg		97.38	97.38	778.3	6 / 6	421.4
Chromium	mg/kg	0.1228 / 0.1249	ND	ND	ND	0 / 6	0
Cobalt	mg/kg	0.00481 / 0.00996	ND	0.00571	0.01068	4 / 6	0.007484
Copper	mg/kg	0.178 / 0.181	ND	0.2101	0.2184	3 / 6	0.214
Iron	mg/kg	12.37 / 12.51	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.0105 / 0.01068	ND	ND	ND	0 / 6	0
Magnesium	mg/kg		252	252	296.1	6 / 6	277.1
Manganese	mg/kg		0.1412	0.1412	0.6048	6 / 6	0.4003
Mercury	mg/kg		0.0543	0.0543	0.181	6 / 6	0.08674
Molybdenum	mg/kg	0.01068 / 0.01089	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.03258 / 0.09359	ND	ND	ND	0 / 6	0
Potassium	mg/kg		3158	3158	3705	6 / 6	3485
Selenium	mg/kg		0.3192	0.3192	0.5162	6 / 6	0.43
Silver	mg/kg	0.0029 / 0.00308	ND	ND	ND	0 / 6	0
Sodium	mg/kg		233.5	233.5	355.3	6 / 6	297.5
Strontium	mg/kg	0.01502 / 0.0152	ND	0.1958	0.5792	5 / 6	0.3357
Thallium	mg/kg	0.0146 / 0.01471	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.0543 / 0.05544	ND	ND	ND	0 / 6	0
Zinc	mg/kg		7.084	7.084	12.7	6 / 6	8.671

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table E-3: TVA Sampling, Spring 2009 - Bluegill Fillet at Emory River Mile 3.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.42	0.42	1.4	5 / 5	0.79
% Moisture	%		81.5	81.5	83.8	3 / 3	82.33
Aluminum	mg/kg	0.8748 / 3.386	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.0183 / 0.01944	ND	ND	ND	0 / 6	0
Arsenic	mg/kg		0.03088	0.03088	0.0481	6 / 6	0.0394
Barium	mg/kg	0.0197 / 0.04255	ND	0.04053	0.08228	4 / 6	0.0574
Beryllium	mg/kg	0.00988 / 0.01005	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.06369 / 0.1627	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.00586 / 0.00599	ND	ND	ND	0 / 6	0
Calcium	mg/kg		108.3	108.3	1005	6 / 6	500.2
Chromium	mg/kg	0.1226 / 0.1241	ND	ND	ND	0 / 6	0
Cobalt	mg/kg		0.00796	0.00796	0.01351	6 / 6	0.01056
Copper	mg/kg	0.1782 / 0.1782	ND	0.183	0.3281	5 / 6	0.2465
Iron	mg/kg	12.37 / 12.51	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.01043 / 0.01064	ND	ND	ND	0 / 6	0
Magnesium	mg/kg		243.4	243.4	284.9	6 / 6	264.5
Manganese	mg/kg		0.1574	0.1574	0.7293	6 / 6	0.3783
Mercury	mg/kg		0.02244	0.02244	0.05022	6 / 6	0.03703
Molybdenum	mg/kg	0.01085 / 0.01458	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.03281 / 0.1135	ND	0.2316	0.2316	1 / 6	0.2316
Potassium	mg/kg		3179	3179	3885	6 / 6	3471
Selenium	mg/kg		0.7106	0.7106	1.042	6 / 6	0.8132
Silver	mg/kg	0.00293 / 0.00309	ND	ND	ND	0 / 6	0
Sodium	mg/kg		267.2	267.2	353.2	6 / 6	308.3
Strontium	mg/kg		0.0366	0.0366	0.8865	6 / 6	0.4263
Thallium	mg/kg	0.01458 / 0.01608	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.05404 / 0.0555	ND	ND	ND	0 / 6	0
Zinc	mg/kg		7.499	7.499	10.94	6 / 6	9.774

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table E-4: TVA Sampling, Spring 2009 - Bluegill Fillet at Emory River Mile 1.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.47	0.47	0.99	6 / 6	0.65
% Moisture	%		77.9	77.9	81.5	6 / 6	79.53
Aluminum	mg/kg		1.3	1.3	4.664	6 / 6	2.402
Antimony	mg/kg	0.0185 / 0.0194	ND	ND	ND	0 / 6	0
Arsenic	mg/kg	0.01569 / 0.07956	ND	0.09945	0.09945	1 / 6	0.09945
Barium	mg/kg		0.0408	0.0408	0.4074	6 / 6	0.1112
Beryllium	mg/kg	0.00326 / 0.00333	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.0638 / 0.06528	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.00592 / 0.00601	ND	ND	ND	0 / 6	0
Calcium	mg/kg		134.4	134.4	5607	6 / 6	1267
Chromium	mg/kg	0.1232 / 0.1244	ND	ND	ND	0 / 6	0
Cobalt	mg/kg	0.00718 / 0.01369	ND	ND	ND	0 / 6	0
Copper	mg/kg		0.1897	0.1897	1.856	6 / 6	0.5234
Iron	mg/kg	12.43 / 12.53	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.01055 / 0.01061	ND	0.01513	0.06188	2 / 6	0.03851
Magnesium	mg/kg		267.2	267.2	343.4	6 / 6	291.5
Manganese	mg/kg		0.1489	0.1489	5.413	6 / 6	1.27
Mercury	mg/kg	0.00418 / 0.02431	ND	0.0306	0.05916	5 / 6	0.04753
Molybdenum	mg/kg	0.01276 / 0.03298	ND	ND	ND	0 / 6	0
Nickel	mg/kg		0.0194	0.0194	0.05304	6 / 6	0.04559
Potassium	mg/kg		3330	3330	3580	6 / 6	3459
Selenium	mg/kg		0.6984	0.6984	0.858	6 / 6	0.7749
Silver	mg/kg	0.00296 / 0.0031	ND	ND	ND	0 / 6	0
Sodium	mg/kg		257.4	257.4	330.5	6 / 6	300.8
Strontium	mg/kg		0.06936	0.06936	4.617	6 / 6	1.019
Thallium	mg/kg	0.01459 / 0.01474	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.05432 / 0.0555	ND	ND	ND	0 / 6	0
Zinc	mg/kg		12.49	12.49	16.78	6 / 6	14.12

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table E-5: TVA Sampling, Spring 2009 - Bluegill Fillet at Clinch River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.56	0.56	1.1	6 / 6	0.7367
% Moisture	%		78.7	78.7	82.3	5 / 5	80.9
Aluminum	mg/kg	0.792 / 0.8528	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.0234 / 0.02832	ND	ND	ND	0 / 6	0
Arsenic	mg/kg		0.04779	0.04779	0.0684	6 / 6	0.05966
Barium	mg/kg		0.027	0.027	0.1274	6 / 6	0.06678
Beryllium	mg/kg	0.00288 / 0.00328	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.0576 / 0.06232	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.0054 / 0.00584	ND	ND	ND	0 / 6	0
Calcium	mg/kg		203.4	203.4	2653	6 / 6	1050
Chromium	mg/kg	0.1116 / 0.1197	ND	ND	ND	0 / 6	0
Cobalt	mg/kg	0.00476 / 0.01327	ND	ND	ND	0 / 6	0
Copper	mg/kg		0.1725	0.1725	0.27	6 / 6	0.2286
Iron	mg/kg	11.21 / 12.12	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.00954 / 0.01033	ND	ND	ND	0 / 6	0
Magnesium	mg/kg		269.3	269.3	299.1	6 / 6	283.3
Manganese	mg/kg		0.1728	0.1728	1.267	6 / 6	0.5202
Mercury	mg/kg		0.03444	0.03444	0.08733	6 / 6	0.05358
Molybdenum	mg/kg	0.00972 / 0.01253	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.03168 / 0.0576	ND	ND	ND	0 / 6	0
Potassium	mg/kg		3152	3152	3628	6 / 6	3371
Selenium	mg/kg		0.495	0.495	0.6888	6 / 6	0.591
Silver	mg/kg	0.0027 / 0.00295	ND	ND	ND	0 / 6	0
Sodium	mg/kg		260.2	260.2	381.3	6 / 6	318
Strontium	mg/kg		0.1242	0.1242	2.297	6 / 6	0.8365
Thallium	mg/kg	0.01314 / 0.01427	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.0486 / 0.05412	ND	ND	ND	0 / 6	0
Zinc	mg/kg		8.264	8.264	20.2	6 / 6	13.33

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table E-6: TVA Sampling, Spring 2009 - Bluegill Fillet at Clinch River Mile 1.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.47	0.47	1.6	6 / 6	0.8517
% Moisture	%		79.7	79.7	81.9	6 / 6	80.45
Aluminum	mg/kg	0.88 / 0.8932	ND	0.9774	3.268	5 / 6	1.971
Antimony	mg/kg	0.019 / 0.01991	ND	ND	ND	0 / 6	0
Arsenic	mg/kg	0.03801 / 0.078	ND	ND	ND	0 / 6	0
Barium	mg/kg		0.0297	0.0297	0.05075	6 / 6	0.04099
Beryllium	mg/kg	0.00322 / 0.0034	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.06335 / 0.06534	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.00594 / 0.0138	ND	ND	ND	0 / 6	0
Calcium	mg/kg		153.8	153.8	877	6 / 6	384.6
Chromium	mg/kg	0.1231 / 0.1254	ND	ND	ND	0 / 6	0
Cobalt	mg/kg	0.00525 / 0.0146	ND	ND	ND	0 / 6	0
Copper	mg/kg		0.19	0.19	0.34	6 / 6	0.2528
Iron	mg/kg	12.45 / 12.56	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.0105 / 0.01064	ND	0.01989	0.03216	4 / 6	0.02817
Magnesium	mg/kg		242.5	242.5	294	6 / 6	272.9
Manganese	mg/kg		0.1525	0.1525	0.7	6 / 6	0.3671
Mercury	mg/kg		0.03	0.03	0.07602	6 / 6	0.04672
Molybdenum	mg/kg	0.01166 / 0.01665	ND	ND	ND	0 / 6	0
Nickel	mg/kg		0.03762	0.03762	0.0418	6 / 6	0.03934
Potassium	mg/kg		2968	2968	3307	6 / 6	3166
Selenium	mg/kg		0.4422	0.4422	0.855	6 / 6	0.7
Silver	mg/kg	0.00297 / 0.00308	ND	ND	ND	0 / 6	0
Sodium	mg/kg		300	300	389.8	6 / 6	335.3
Strontium	mg/kg		0.062	0.062	0.7308	6 / 6	0.2713
Thallium	mg/kg	0.01465 / 0.0285	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.05427 / 0.056	ND	ND	ND	0 / 6	0
Zinc	mg/kg		8.66	8.66	18.01	6 / 6	12.87

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table E-7: TVA Sampling, Spring 2009 - Gizzard Shad Whole Body at Emory River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1	1	2	3 / 3	1.5
% Moisture	%		74.4	74.4	75.2	3 / 3	74.77
Aluminum	mg/kg		322.4	322.4	399.4	3 / 3	372.2
Antimony	mg/kg	0.0992 / 0.1012	ND	ND	ND	0 / 3	0
Arsenic	mg/kg		0.2976	0.2976	0.3795	3 / 3	0.3452
Barium	mg/kg		9.027	9.027	9.437	3 / 3	9.167
Beryllium	mg/kg	0.0992 / 0.1012	ND	ND	ND	0 / 3	0
Boron	mg/kg	1.984 / 1.999	ND	ND	ND	0 / 3	0
Cadmium	mg/kg	0.0992 / 0.1012	ND	ND	ND	0 / 3	0
Calcium	mg/kg		8349	8349	12375	3 / 3	9989
Chromium	mg/kg		1.771	1.771	2.381	3 / 3	2.029
Cobalt	mg/kg		0.2976	0.2976	0.4048	3 / 3	0.3621
Copper	mg/kg		1.392	1.392	2.306	3 / 3	1.89
Iron	mg/kg		585.3	585.3	708.4	3 / 3	652.2
Lead	mg/kg		0.768	0.768	0.8096	3 / 3	0.7904
Magnesium	mg/kg		320	320	359.6	3 / 3	340.4
Manganese	mg/kg		45.29	45.29	50.84	3 / 3	47.74
Mercury	mg/kg	0.01984 / 0.01999	ND	ND	ND	0 / 3	0
Molybdenum	mg/kg	0.992 / 1.012	ND	ND	ND	0 / 3	0
Nickel	mg/kg		0.62	0.62	0.768	3 / 3	0.6819
Potassium	mg/kg		2220	2220	2421	3 / 3	2321
Selenium	mg/kg		0.512	0.512	0.5566	3 / 3	0.5298
Silver	mg/kg	0.04864 / 0.0506	ND	ND	ND	0 / 3	0
Sodium	mg/kg		1002	1002	1111	3 / 3	1048
Strontium	mg/kg		5.49	5.49	7.638	3 / 3	6.305
Thallium	mg/kg	0.0992 / 0.1012	ND	ND	ND	0 / 3	0
Vanadium	mg/kg		0.5704	0.5704	0.7084	3 / 3	0.6481
Zinc	mg/kg		16.77	16.77	18.25	3 / 3	17.64

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table E-8: TVA Sampling, Spring 2009 - Gizzard Shad Whole Body at Emory River Mile 3.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1.1	1.1	1.4	3 / 3	1.267
% Moisture	%		76.7	76.7	77.6	3 / 3	77.23
Aluminum	mg/kg		331.5	331.5	443	3 / 3	370
Antimony	mg/kg	0.09944 / 0.1008	ND	ND	ND	0 / 3	0
Arsenic	mg/kg		0.5359	0.5359	0.8136	3 / 3	0.6664
Barium	mg/kg		7.706	7.706	10.11	3 / 3	9.073
Beryllium	mg/kg	0.09944 / 0.1008	ND	ND	ND	0 / 3	0
Boron	mg/kg	1.981 / 1.994	ND	ND	ND	0 / 3	0
Cadmium	mg/kg	0.09944 / 0.1008	ND	ND	ND	0 / 3	0
Calcium	mg/kg		9744	9744	18314	3 / 3	12991
Chromium	mg/kg		1.785	1.785	1.957	3 / 3	1.845
Cobalt	mg/kg		0.3495	0.3495	0.4972	3 / 3	0.4092
Copper	mg/kg		1.538	1.538	2.845	3 / 3	2.079
Iron	mg/kg		463.7	463.7	619.2	3 / 3	539.4
Lead	mg/kg		0.5825	0.5825	0.6944	3 / 3	0.6516
Magnesium	mg/kg		306.9	306.9	400.8	3 / 3	351.9
Manganese	mg/kg		51.74	51.74	57.78	3 / 3	54.29
Mercury	mg/kg	0.01981 / 0.01994	ND	ND	ND	0 / 3	0
Molybdenum	mg/kg	0.9944 / 1.008	ND	ND	ND	0 / 3	0
Nickel	mg/kg		0.699	0.699	0.904	3 / 3	0.7882
Potassium	mg/kg		2172	2172	2418	3 / 3	2299
Selenium	mg/kg		0.6496	0.6496	0.7458	3 / 3	0.7059
Silver	mg/kg	0.04893 / 0.04972	ND	ND	ND	0 / 3	0
Sodium	mg/kg		1048	1048	1330	3 / 3	1165
Strontium	mg/kg		7.594	7.594	13.12	3 / 3	9.91
Thallium	mg/kg	0.09944 / 0.1008	ND	ND	ND	0 / 3	0
Vanadium	mg/kg		0.8064	0.8064	1.062	3 / 3	0.8946
Zinc	mg/kg		15.95	15.95	19.71	3 / 3	17.46

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table E-9: TVA Sampling, Spring 2009 - Gizzard Shad Whole Body at Emory River Mile 0.9

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1	1	1.4	3 / 3	1.167
% Moisture	%		76	76	76.9	3 / 3	76.57
Aluminum	mg/kg		517.4	517.4	561.4	3 / 3	534
Antimony	mg/kg	0.09933 / 0.1008	ND	ND	ND	0 / 3	0
Arsenic	mg/kg		0.6699	0.6699	1.152	3 / 3	0.9553
Barium	mg/kg		8.686	8.686	10.51	3 / 3	9.822
Beryllium	mg/kg	0.09933 / 0.1008	ND	ND	ND	0 / 3	0
Boron	mg/kg	1.987 / 1.995	ND	ND	ND	0 / 3	0
Cadmium	mg/kg	0.09933 / 0.1008	ND	ND	ND	0 / 3	0
Calcium	mg/kg		10776	10776	13421	3 / 3	12095
Chromium	mg/kg		1.536	1.536	1.81	3 / 3	1.701
Cobalt	mg/kg		0.504	0.504	0.5568	3 / 3	0.5307
Copper	mg/kg		1.571	1.571	3.526	3 / 3	2.387
Iron	mg/kg		542.4	542.4	665.3	3 / 3	617.6
Lead	mg/kg		0.7623	0.7623	0.9512	3 / 3	0.8432
Magnesium	mg/kg		362.4	362.4	387.4	3 / 3	372.4
Manganese	mg/kg		60.72	60.72	71.84	3 / 3	66.61
Mercury	mg/kg	0.01987 / 0.02134	ND	ND	ND	0 / 3	0
Molybdenum	mg/kg	0.9933 / 1.008	ND	ND	ND	0 / 3	0
Nickel	mg/kg		0.816	0.816	0.928	3 / 3	0.8585
Potassium	mg/kg		2151	2151	2413	3 / 3	2293
Selenium	mg/kg		0.6237	0.6237	0.864	3 / 3	0.7511
Silver	mg/kg	0.04872 / 0.05082	ND	ND	ND	0 / 3	0
Sodium	mg/kg		1037	1037	1223	3 / 3	1119
Strontium	mg/kg		9.794	9.794	11.45	3 / 3	10.81
Thallium	mg/kg	0.09933 / 0.1008	ND	ND	ND	0 / 3	0
Vanadium	mg/kg		1.109	1.109	1.464	3 / 3	1.322
Zinc	mg/kg		16.85	16.85	18.57	3 / 3	17.53

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table E-10: TVA Sampling, Spring 2009 - Gizzard Shad Whole Body at Clinch River Mile 7.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1.6	1.6	2.7	3 / 3	2
% Moisture	%		75.3	75.3	76.9	3 / 3	76.3
Aluminum	mg/kg		164	164	302.6	3 / 3	213.9
Antimony	mg/kg	0.0988 / 0.1002	ND	ND	ND	0 / 3	0
Arsenic	mg/kg		0.2347	0.2347	0.2796	3 / 3	0.2638
Barium	mg/kg		4.551	4.551	4.846	3 / 3	4.746
Beryllium	mg/kg	0.0988 / 0.1002	ND	ND	ND	0 / 3	0
Boron	mg/kg	1.976 / 1.987	ND	ND	ND	0 / 3	0
Cadmium	mg/kg	0.0988 / 0.1002	ND	ND	ND	0 / 3	0
Calcium	mg/kg		11642	11642	16203	3 / 3	14151
Chromium	mg/kg		0.932	0.932	1.155	3 / 3	1.033
Cobalt	mg/kg		0.1748	0.1748	0.2772	3 / 3	0.2223
Copper	mg/kg		0.7904	0.7904	0.9702	3 / 3	0.9053
Iron	mg/kg		213.7	213.7	397.3	3 / 3	281.2
Lead	mg/kg		0.3458	0.3458	0.5775	3 / 3	0.4476
Magnesium	mg/kg		332.6	332.6	398.4	3 / 3	368
Manganese	mg/kg		46.68	46.68	49.2	3 / 3	47.57
Mercury	mg/kg	0.01976 / 0.02541	ND	ND	ND	0 / 3	0
Molybdenum	mg/kg	0.988 / 1.002	ND	ND	ND	0 / 3	0
Nickel	mg/kg		0.2796	0.2796	0.4158	3 / 3	0.3553
Potassium	mg/kg		2128	2128	2400	3 / 3	2257
Selenium	mg/kg		0.5126	0.5126	0.5313	3 / 3	0.5209
Silver	mg/kg	0.04893 / 0.05082	ND	ND	ND	0 / 3	0
Sodium	mg/kg		997.9	997.9	1242	3 / 3	1084
Strontium	mg/kg		6.607	6.607	11.88	3 / 3	9.572
Thallium	mg/kg	0.0988 / 0.1002	ND	ND	ND	0 / 3	0
Vanadium	mg/kg		0.2964	0.2964	0.5544	3 / 3	0.3846
Zinc	mg/kg		17.41	17.41	17.46	3 / 3	17.44

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table E-11: TVA Sampling, Spring 2009 - Gizzard Shad Whole Body at Clinch River Mile 1.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1.6	1.6	2	3 / 3	1.8
% Moisture	%		76	76	76.9	2 / 2	76.45
Aluminum	mg/kg		222.5	222.5	496.8	3 / 3	325.2
Antimony	mg/kg	0.0984 / 0.09954	ND	ND	ND	0 / 3	0
Arsenic	mg/kg		0.4503	0.4503	0.84	3 / 3	0.6303
Barium	mg/kg		4.74	4.74	8.4	3 / 3	6.166
Beryllium	mg/kg	0.0984 / 0.09954	ND	ND	ND	0 / 3	0
Boron	mg/kg	1.987 / 1.992	ND	ND	ND	0 / 3	0
Cadmium	mg/kg	0.0984 / 0.09954	ND	ND	ND	0 / 3	0
Calcium	mg/kg		10141	10141	12864	3 / 3	11926
Chromium	mg/kg		0.4977	0.4977	2.033	3 / 3	1.172
Cobalt	mg/kg		0.1659	0.1659	0.312	3 / 3	0.2263
Copper	mg/kg		1.398	1.398	2.016	3 / 3	1.692
Iron	mg/kg		212.6	212.6	424.8	3 / 3	309.5
Lead	mg/kg		0.3318	0.3318	0.6	3 / 3	0.4569
Magnesium	mg/kg		310.5	310.5	393.6	3 / 3	351
Manganese	mg/kg		38.81	38.81	55.2	3 / 3	47.06
Mercury	mg/kg	0.01987 / 0.0264	ND	ND	ND	0 / 3	0
Molybdenum	mg/kg	0.984 / 0.9954	ND	ND	ND	0 / 3	0
Nickel	mg/kg		0.3318	0.3318	0.672	3 / 3	0.4809
Potassium	mg/kg		2657	2657	3294	3 / 3	2872
Selenium	mg/kg		0.474	0.474	0.624	3 / 3	0.5431
Silver	mg/kg	0.04977 / 0.05082	ND	ND	ND	0 / 3	0
Sodium	mg/kg		971.7	971.7	1222	3 / 3	1097
Strontium	mg/kg		7.679	7.679	12.6	3 / 3	9.639
Thallium	mg/kg	0.0984 / 0.09954	ND	ND	ND	0 / 3	0
Vanadium	mg/kg		0.5688	0.5688	1.248	3 / 3	0.8289
Zinc	mg/kg		15.85	15.85	27.49	3 / 3	20.72

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table E-12: TVA Sampling, Spring 2009 - Largemouth Bass Fillet at Emory River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.24	0.24	2.5	11 / 11	1.189
% Moisture	%		78.7	78.7	81.5	8 / 8	79.93
Aluminum	mg/kg	0.8756 / 25.01	ND	4.1	4.1	1 / 12	4.1
Antimony	mg/kg	0.015 / 0.1008	ND	0.021	0.021	1 / 12	0.021
Arsenic	mg/kg	0.01548 / 0.1008	ND	0.032	0.2786	17 / 21	0.1338
Barium	mg/kg	0.0196 / 0.1008	ND	0.063	0.1	3 / 13	0.08243
Beryllium	mg/kg	0.0032 / 0.1008	ND	ND	ND	0 / 11	0
Boron	mg/kg	0.06368 / 2.009	ND	ND	ND	0 / 11	0
Cadmium	mg/kg	0.00588 / 0.1008	ND	ND	ND	0 / 11	0
Calcium	mg/kg	43 / 99.33	ND	100.2	1130	19 / 21	257.6
Chromium	mg/kg	0.09888 / 0.124	ND	0.1071	0.44	4 / 12	0.2426
Cobalt	mg/kg	0.0048 / 0.1008	ND	0.00498	0.03	7 / 13	0.01226
Copper	mg/kg	0.13 / 0.504	ND	0.2	0.35	13 / 21	0.2822
Iron	mg/kg	12.39 / 25.01	ND	ND	ND	0 / 11	0
Lead	mg/kg	0.01055 / 0.1008	ND	ND	ND	0 / 11	0
Magnesium	mg/kg		240.8	240.8	353	21 / 21	276.5
Manganese	mg/kg	0.08325 / 0.504	ND	0.0962	0.25	10 / 15	0.1587
Mercury	mg/kg		0.04975	0.04975	0.21	21 / 21	0.1264
Molybdenum	mg/kg	0.01075 / 1.008	ND	ND	ND	0 / 11	0
Nickel	mg/kg	0.0333 / 0.1005	ND	0.091	0.21	3 / 13	0.1444
Potassium	mg/kg		3423	3423	4590	21 / 21	3906
Selenium	mg/kg		0.344	0.344	0.7455	21 / 21	0.4563
Silver	mg/kg	0.00294 / 0.0504	ND	ND	ND	0 / 11	0
Sodium	mg/kg		291	291	507	21 / 21	389.9
Strontium	mg/kg	0.01509 / 0.1008	ND	0.0194	0.87	15 / 20	0.1928
Thallium	mg/kg	0.0145 / 0.1008	ND	ND	ND	0 / 11	0
Vanadium	mg/kg	0.041 / 0.2009	ND	0.089	0.089	1 / 12	0.089
Zinc	mg/kg		4.841	4.841	11.28	21 / 21	7.311

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table E-13: TVA Sampling, Spring 2009 - Largemouth Bass Fillet at Emory River Mile 3.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.4	0.4	1.3	5 / 5	0.854
% Moisture	%		77.8	77.8	81.5	5 / 5	79.92
Aluminum	mg/kg	0.8786 / 0.888	ND	1.566	1.566	1 / 5	1.566
Antimony	mg/kg	0.0185 / 0.01921	ND	0.02042	0.02042	1 / 5	0.02042
Arsenic	mg/kg		0.0882	0.0882	0.222	5 / 5	0.1478
Barium	mg/kg	0.0196 / 0.04202	ND	0.02548	0.03145	2 / 5	0.02847
Beryllium	mg/kg	0.00333 / 0.01491	ND	ND	ND	0 / 5	0
Boron	mg/kg	0.063 / 0.06494	ND	ND	ND	0 / 5	0
Cadmium	mg/kg	0.00592 / 0.01394	ND	ND	ND	0 / 5	0
Calcium	mg/kg		140.7	140.7	501.4	5 / 5	300
Chromium	mg/kg	0.1235 / 0.1243	ND	ND	ND	0 / 5	0
Cobalt	mg/kg	0.00481 / 0.00798	ND	ND	ND	0 / 5	0
Copper	mg/kg	0.1795 / 0.1803	ND	0.2101	0.273	3 / 5	0.2424
Iron	mg/kg	12.41 / 12.52	ND	ND	ND	0 / 5	0
Lead	mg/kg	0.0105 / 0.01066	ND	ND	ND	0 / 5	0
Magnesium	mg/kg		250.9	250.9	279.7	5 / 5	261.7
Manganese	mg/kg		0.1155	0.1155	0.161	5 / 5	0.1369
Mercury	mg/kg		0.04884	0.04884	0.191	5 / 5	0.103
Molybdenum	mg/kg	0.01071 / 0.01089	ND	ND	ND	0 / 5	0
Nickel	mg/kg	0.0333 / 0.0378	ND	ND	ND	0 / 5	0
Potassium	mg/kg		3478	3478	4263	5 / 5	3801
Selenium	mg/kg		0.481	0.481	0.7326	5 / 5	0.5912
Silver	mg/kg	0.00294 / 0.00311	ND	ND	ND	0 / 5	0
Sodium	mg/kg		397.4	397.4	453.3	5 / 5	415.6
Strontium	mg/kg	0.01509 / 0.03108	ND	0.1512	0.3885	4 / 5	0.2248
Thallium	mg/kg	0.01449 / 0.01471	ND	ND	ND	0 / 5	0
Vanadium	mg/kg	0.05488 / 0.1092	ND	ND	ND	0 / 5	0
Zinc	mg/kg		5.527	5.527	11.46	5 / 5	7.992

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table E-14: TVA Sampling, Spring 2009 - Largemouth Bass Fillet at Emory River Mile 0.9

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.79	0.79	4.1	6 / 6	2.115
% Moisture	%		76.7	76.7	80.6	6 / 6	78.85
Aluminum	mg/kg	0.873 / 0.8865	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.01921 / 0.01935	ND	ND	ND	0 / 6	0
Arsenic	mg/kg		0.1399	0.1399	0.3029	6 / 6	0.2202
Barium	mg/kg	0.0197 / 0.03024	ND	ND	ND	0 / 6	0
Beryllium	mg/kg	0.00321 / 0.00335	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.06402 / 0.06524	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.00591 / 0.00606	ND	ND	ND	0 / 6	0
Calcium	mg/kg		149.4	149.4	436.5	6 / 6	244.6
Chromium	mg/kg	0.1222 / 0.1247	ND	ND	ND	0 / 6	0
Cobalt	mg/kg	0.00493 / 0.01113	ND	ND	ND	0 / 6	0
Copper	mg/kg	0.1793 / 0.1812	ND	0.2086	0.2376	5 / 6	0.219
Iron	mg/kg	12.4 / 12.54	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.01048 / 0.01072	ND	ND	ND	0 / 6	0
Magnesium	mg/kg		252.5	252.5	285.2	6 / 6	271.6
Manganese	mg/kg		0.1084	0.1084	0.2365	6 / 6	0.1518
Mercury	mg/kg		0.04893	0.04893	0.1084	6 / 6	0.07624
Molybdenum	mg/kg	0.01067 / 0.01097	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.0324 / 0.0344	ND	0.03424	0.07689	4 / 6	0.04897
Potassium	mg/kg		3448	3448	3585	6 / 6	3520
Selenium	mg/kg		0.4708	0.4708	0.7289	6 / 6	0.6121
Silver	mg/kg	0.00291 / 0.00303	ND	ND	ND	0 / 6	0
Sodium	mg/kg		337	337	468.7	6 / 6	401.7
Strontium	mg/kg		0.0466	0.0466	0.258	6 / 6	0.123
Thallium	mg/kg	0.01455 / 0.01484	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.054 / 0.05592	ND	ND	ND	0 / 6	0
Zinc	mg/kg		6.12	6.12	10.59	6 / 6	8.048

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table E-15: TVA Sampling, Spring 2009 - Largemouth Bass Fillet at Clinch River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1.1	1.1	3	6 / 6	2
% Moisture	%		78.3	78.3	79.7	6 / 6	78.93
Aluminum	mg/kg	0.8772 / 0.8944	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.0191 / 0.01934	ND	ND	ND	0 / 6	0
Arsenic	mg/kg		0.1897	0.1897	0.3472	6 / 6	0.2718
Barium	mg/kg	0.0203 / 0.02062	ND	ND	ND	0 / 6	0
Beryllium	mg/kg	0.00323 / 0.00629	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.06324 / 0.0651	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.00586 / 0.00609	ND	ND	ND	0 / 6	0
Calcium	mg/kg		119.6	119.6	365.5	6 / 6	227.2
Chromium	mg/kg	0.1226 / 0.1244	ND	0.2233	0.2233	1 / 6	0.2233
Cobalt	mg/kg	0.00477 / 0.00853	ND	ND	ND	0 / 6	0
Copper	mg/kg	0.1795 / 0.1795	ND	0.2387	0.3952	5 / 6	0.2916
Iron	mg/kg	12.43 / 12.5	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.01054 / 0.01063	ND	ND	ND	0 / 6	0
Magnesium	mg/kg		206.8	206.8	268.8	6 / 6	246.5
Manganese	mg/kg		0.104	0.104	0.1806	6 / 6	0.1359
Mercury	mg/kg		0.0387	0.0387	0.09996	6 / 6	0.05963
Molybdenum	mg/kg	0.01075 / 0.01085	ND	0.01584	0.01584	1 / 6	0.01584
Nickel	mg/kg	0.03255 / 0.03451	ND	0.04576	0.04576	1 / 6	0.04576
Potassium	mg/kg		2821	2821	3677	6 / 6	3446
Selenium	mg/kg		0.3468	0.3468	0.7696	6 / 6	0.6002
Silver	mg/kg	0.00291 / 0.00306	ND	ND	ND	0 / 6	0
Sodium	mg/kg		334.2	334.2	441	6 / 6	391.9
Strontium	mg/kg	0.01505 / 0.03255	ND	0.0816	0.2107	4 / 6	0.1393
Thallium	mg/kg	0.01462 / 0.01801	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.05375 / 0.05508	ND	ND	ND	0 / 6	0
Zinc	mg/kg		6.508	6.508	10.88	6 / 6	9.164

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table E-16: TVA Sampling, Spring 2009 - Largemouth Bass Fillet at Clinch River Mile 1.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.57	0.57	2.5	6 / 6	1.312
% Moisture	%		78.2	78.2	80.1	6 / 6	79.3
Aluminum	mg/kg	0.832 / 0.8976	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.02743 / 0.03636	ND	ND	ND	0 / 6	0
Arsenic	mg/kg		0.1731	0.1731	0.3165	6 / 6	0.2295
Barium	mg/kg	0.01914 / 0.0204	ND	0.02834	0.07878	2 / 6	0.05356
Beryllium	mg/kg	0.00312 / 0.00326	ND	0.00567	0.00567	1 / 6	0.005668
Boron	mg/kg	0.0597 / 0.06528	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.00557 / 0.00592	ND	0.00828	0.00828	1 / 6	0.008282
Calcium	mg/kg		166	166	2081	6 / 6	652.9
Chromium	mg/kg	0.1144 / 0.1244	ND	ND	ND	0 / 6	0
Cobalt	mg/kg	0.00505 / 0.00959	ND	ND	ND	0 / 6	0
Copper	mg/kg		0.1751	0.1751	0.3165	6 / 6	0.2454
Iron	mg/kg	11.61 / 12.53	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.00978 / 0.01061	ND	ND	ND	0 / 6	0
Magnesium	mg/kg		268	268	305	6 / 6	279.5
Manganese	mg/kg		0.1174	0.1174	0.3434	6 / 6	0.1946
Mercury	mg/kg		0.05275	0.05275	0.1353	6 / 6	0.07631
Molybdenum	mg/kg	0.00998 / 0.01155	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.0312 / 0.05252	ND	ND	ND	0 / 6	0
Potassium	mg/kg		3737	3737	4019	6 / 6	3829
Selenium	mg/kg		0.4578	0.4578	0.633	6 / 6	0.5577
Silver	mg/kg	0.0027 / 0.00306	ND	ND	ND	0 / 6	0
Sodium	mg/kg		382.1	382.1	508.5	6 / 6	446.8
Strontium	mg/kg		0.07696	0.07696	1.717	6 / 6	0.471
Thallium	mg/kg	0.01373 / 0.01469	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.05174 / 0.05508	ND	ND	ND	0 / 6	0
Zinc	mg/kg		5.114	5.114	12.45	6 / 6	7.503

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table E-17: TVA Sampling, Spring 2009 - White Crappie Fillet at Emory River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.38	0.38	4.3	4 / 4	1.675
% Moisture	%		79.1	79.1	81.4	4 / 4	80.23
Aluminum	mg/kg	0.819 / 0.8556	ND	ND	ND	0 / 4	0
Antimony	mg/kg	0.0279 / 0.0351	ND	ND	ND	0 / 4	0
Arsenic	mg/kg		0.1108	0.1108	0.2232	4 / 4	0.162
Barium	mg/kg	0.01911 / 0.0197	ND	0.0209	0.03162	2 / 4	0.02626
Beryllium	mg/kg	0.00312 / 0.00322	ND	ND	ND	0 / 4	0
Boron	mg/kg	0.06045 / 0.06231	ND	ND	ND	0 / 4	0
Cadmium	mg/kg	0.00564 / 0.00583	ND	ND	ND	0 / 4	0
Calcium	mg/kg		99.26	99.26	390.8	4 / 4	220.4
Chromium	mg/kg	0.1151 / 0.119	ND	ND	ND	0 / 4	0
Cobalt	mg/kg	0.00449 / 0.00481	ND	ND	ND	0 / 4	0
Copper	mg/kg	0.1677 / 0.1693	ND	0.1767	0.2412	2 / 4	0.209
Iron	mg/kg	11.58 / 12	ND	ND	ND	0 / 4	0
Lead	mg/kg	0.00975 / 0.01023	ND	ND	ND	0 / 4	0
Magnesium	mg/kg		245.5	245.5	282.2	4 / 4	263.1
Manganese	mg/kg		0.0858	0.0858	0.1376	4 / 4	0.1103
Mercury	mg/kg		0.02613	0.02613	0.0663	4 / 4	0.05227
Molybdenum	mg/kg	0.01014 / 0.01045	ND	ND	ND	0 / 4	0
Nickel	mg/kg	0.0312 / 0.04422	ND	0.2232	0.2232	1 / 4	0.2232
Potassium	mg/kg		3569	3569	3783	4 / 4	3658
Selenium	mg/kg		0.2613	0.2613	0.5208	4 / 4	0.423
Silver	mg/kg	0.00272 / 0.00298	ND	ND	ND	0 / 4	0
Sodium	mg/kg		210.6	210.6	364.6	4 / 4	268.6
Strontium	mg/kg	0.01421 / 0.0312	ND	0.0195	0.2604	3 / 4	0.1699
Thallium	mg/kg	0.01365 / 0.01414	ND	ND	ND	0 / 4	0
Vanadium	mg/kg	0.0507 / 0.05226	ND	ND	ND	0 / 4	0
Zinc	mg/kg		6.162	6.162	6.897	4 / 4	6.59

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table E-18: TVA Sampling, Spring 2009 - White Crappie Fillet at Emory River Mile 3.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1.4	1.4	2.1	4 / 4	1.85
% Moisture	%		78.6	78.6	80	4 / 4	79.2
Aluminum	mg/kg	0.8774 / 0.8904	ND	ND	ND	0 / 4	0
Antimony	mg/kg	0.0192 / 0.01929	ND	0.01957	0.01957	1 / 4	0.01957
Arsenic	mg/kg		0.1875	0.1875	0.2544	4 / 4	0.2093
Barium	mg/kg	0.02 / 0.0206	ND	0.024	0.02568	2 / 4	0.02484
Beryllium	mg/kg	0.00318 / 0.0033	ND	ND	ND	0 / 4	0
Boron	mg/kg	0.0636 / 0.0642	ND	ND	ND	0 / 4	0
Cadmium	mg/kg	0.00594 / 0.006	ND	ND	ND	0 / 4	0
Calcium	mg/kg		135.9	135.9	455.3	4 / 4	297.1
Chromium	mg/kg	0.123 / 0.1241	ND	ND	ND	0 / 4	0
Cobalt	mg/kg	0.0048 / 0.00494	ND	ND	ND	0 / 4	0
Copper	mg/kg	0.18 / 0.1819	ND	0.36	0.36	1 / 4	0.36
Iron	mg/kg	12.4 / 12.5	ND	ND	ND	0 / 4	0
Lead	mg/kg	0.01049 / 0.0106	ND	ND	ND	0 / 4	0
Magnesium	mg/kg		262	262	295.3	4 / 4	274.7
Manganese	mg/kg		0.09328	0.09328	0.1627	4 / 4	0.1261
Mercury	mg/kg	0.0042 / 0.0195	ND	0.0309	0.076	2 / 4	0.05345
Molybdenum	mg/kg	0.0108 / 0.01092	ND	ND	ND	0 / 4	0
Nickel	mg/kg	0.03296 / 0.03424	ND	ND	ND	0 / 4	0
Potassium	mg/kg		3540	3540	3702	4 / 4	3613
Selenium	mg/kg		0.4876	0.4876	0.642	4 / 4	0.5763
Silver	mg/kg	0.00297 / 0.00309	ND	ND	ND	0 / 4	0
Sodium	mg/kg		276	276	313.8	4 / 4	295.5
Strontium	mg/kg	0.015 / 0.03392	ND	0.2472	0.36	2 / 4	0.3036
Thallium	mg/kg	0.01463 / 0.022	ND	ND	ND	0 / 4	0
Vanadium	mg/kg	0.054 / 0.05564	ND	ND	ND	0 / 4	0
Zinc	mg/kg		4.665	4.665	6.798	4 / 4	5.632

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table E-19: TVA Sampling, Spring 2009 - White Crappie Fillet at Emory River Mile 0.9

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1.2	1.2	1.2	1 / 1	1.2
% Moisture	%		80.4	80.4	80.4	1 / 1	80.4
Aluminum	mg/kg	0.882 / 0.882	ND	ND	ND	0 / 1	0
Antimony	mg/kg	0.01921 / 0.01921	ND	ND	ND	0 / 1	0
Arsenic	mg/kg		0.196	0.196	0.196	1 / 1	0.196
Barium	mg/kg	0.0196 / 0.0196	ND	ND	ND	0 / 1	0
Beryllium	mg/kg	0.00333 / 0.00333	ND	ND	ND	0 / 1	0
Boron	mg/kg	0.06468 / 0.06468	ND	ND	ND	0 / 1	0
Cadmium	mg/kg	0.00608 / 0.00608	ND	ND	ND	0 / 1	0
Calcium	mg/kg		258.7	258.7	258.7	1 / 1	258.7
Chromium	mg/kg	0.1235 / 0.1235	ND	ND	ND	0 / 1	0
Cobalt	mg/kg	0.0049 / 0.0049	ND	ND	ND	0 / 1	0
Copper	mg/kg		0.3136	0.3136	0.3136	1 / 1	0.3136
Iron	mg/kg	12.47 / 12.47	ND	ND	ND	0 / 1	0
Lead	mg/kg	0.01058 / 0.01058	ND	ND	ND	0 / 1	0
Magnesium	mg/kg		268.5	268.5	268.5	1 / 1	268.5
Manganese	mg/kg		0.1156	0.1156	0.1156	1 / 1	0.1156
Mercury	mg/kg	0.02156 / 0.02156	ND	ND	ND	0 / 1	0
Molybdenum	mg/kg	0.01078 / 0.01078	ND	ND	ND	0 / 1	0
Nickel	mg/kg		0.07056	0.07056	0.07056	1 / 1	0.07056
Potassium	mg/kg		3548	3548	3548	1 / 1	3548
Selenium	mg/kg		0.5096	0.5096	0.5096	1 / 1	0.5096
Silver	mg/kg	0.00294 / 0.00294	ND	ND	ND	0 / 1	0
Sodium	mg/kg		284.2	284.2	284.2	1 / 1	284.2
Strontium	mg/kg		0.1215	0.1215	0.1215	1 / 1	0.1215
Thallium	mg/kg	0.02156 / 0.02156	ND	ND	ND	0 / 1	0
Vanadium	mg/kg	0.05488 / 0.05488	ND	ND	ND	0 / 1	0
Zinc	mg/kg		4.998	4.998	4.998	1 / 1	4.998

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table E-20: TVA Sampling, Spring 2009 - White Crappie Fillet at Clinch River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.87	0.87	1.6	4 / 4	1.318
% Moisture	%		79.5	79.5	80.2	4 / 4	79.75
Aluminum	mg/kg	0.8815 / 0.8976	ND	ND	ND	0 / 4	0
Antimony	mg/kg	0.01921 / 0.0406	ND	0.02244	0.02244	1 / 4	0.02244
Arsenic	mg/kg		0.2178	0.2178	0.246	4 / 4	0.233
Barium	mg/kg	0.0198 / 0.0609	ND	0.03075	0.1802	3 / 4	0.08596
Beryllium	mg/kg	0.00326 / 0.01502	ND	ND	ND	0 / 4	0
Boron	mg/kg	0.06355 / 0.06534	ND	ND	ND	0 / 4	0
Cadmium	mg/kg	0.00592 / 0.01401	ND	ND	ND	0 / 4	0
Calcium	mg/kg		94.25	94.25	671.9	4 / 4	434.2
Chromium	mg/kg	0.123 / 0.1247	ND	ND	ND	0 / 4	0
Cobalt	mg/kg	0.0049 / 0.00995	ND	ND	ND	0 / 4	0
Copper	mg/kg	0.1802 / 0.1816	ND	0.1929	0.5125	2 / 4	0.3527
Iron	mg/kg	12.42 / 12.53	ND	ND	ND	0 / 4	0
Lead	mg/kg	0.01046 / 0.01061	ND	ND	ND	0 / 4	0
Magnesium	mg/kg		271.3	271.3	289.1	4 / 4	279.9
Manganese	mg/kg		0.1285	0.1285	0.3654	4 / 4	0.2446
Mercury	mg/kg	0.00426 / 0.01948	ND	0.02856	0.08932	3 / 4	0.06173
Molybdenum	mg/kg	0.01076 / 0.01089	ND	ND	ND	0 / 4	0
Nickel	mg/kg	0.0328 / 0.1117	ND	ND	ND	0 / 4	0
Potassium	mg/kg		3623	3623	3854	4 / 4	3736
Selenium	mg/kg		0.3762	0.3762	0.492	4 / 4	0.4257
Silver	mg/kg	0.00297 / 0.00308	ND	ND	ND	0 / 4	0
Sodium	mg/kg		235.6	235.6	265.9	4 / 4	249.1
Strontium	mg/kg	0.01517 / 0.03468	ND	0.246	0.4466	3 / 4	0.3629
Thallium	mg/kg	0.01462 / 0.01775	ND	ND	ND	0 / 4	0
Vanadium	mg/kg	0.05508 / 0.1096	ND	ND	ND	0 / 4	0
Zinc	mg/kg		6.514	6.514	9.588	4 / 4	7.894

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table E-21: TVA Sampling, Spring 2009 - White Crappie Fillet at Clinch River Mile 1.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1.5	1.5	2.6	2 / 2	2.05
% Moisture	%		77.6	77.6	78.6	2 / 2	78.1
Aluminum	mg/kg	0.8064 / 0.8346	ND	ND	ND	0 / 2	0
Antimony	mg/kg	0.03136 / 0.03638	ND	ND	ND	0 / 2	0
Arsenic	mg/kg		0.2354	0.2354	0.2912	2 / 2	0.2633
Barium	mg/kg	0.01882 / 0.01926	ND	ND	ND	0 / 2	0
Beryllium	mg/kg	0.00291 / 0.003	ND	ND	ND	0 / 2	0
Boron	mg/kg	0.05824 / 0.05992	ND	ND	ND	0 / 2	0
Cadmium	mg/kg	0.00538 / 0.00556	ND	ND	ND	0 / 2	0
Calcium	mg/kg		202.9	202.9	360.6	2 / 2	281.8
Chromium	mg/kg	0.1142 / 0.1156	ND	ND	ND	0 / 2	0
Cobalt	mg/kg	0.00448 / 0.00449	ND	ND	ND	0 / 2	0
Copper	mg/kg	0.1658 / 0.1691	ND	0.1904	0.1904	1 / 2	0.1904
Iron	mg/kg	11.42 / 11.71	ND	ND	ND	0 / 2	0
Lead	mg/kg	0.00963 / 0.00984	ND	ND	ND	0 / 2	0
Magnesium	mg/kg		293.4	293.4	299.6	2 / 2	296.5
Manganese	mg/kg		0.09416	0.09416	0.1635	2 / 2	0.1288
Mercury	mg/kg		0.00984	0.00984	0.0112	2 / 2	0.01052
Molybdenum	mg/kg	0.00986 / 0.01006	ND	ND	ND	0 / 2	0
Nickel	mg/kg	0.03136 / 0.0321	ND	ND	ND	0 / 2	0
Potassium	mg/kg		3674	3674	3809	2 / 2	3742
Selenium	mg/kg		0.336	0.336	0.3638	2 / 2	0.3499
Silver	mg/kg	0.00269 / 0.00278	ND	ND	ND	0 / 2	0
Sodium	mg/kg		273.3	273.3	312.4	2 / 2	292.9
Strontium	mg/kg		0.06848	0.06848	0.177	2 / 2	0.1227
Thallium	mg/kg	0.01344 / 0.0137	ND	ND	ND	0 / 2	0
Vanadium	mg/kg	0.04928 / 0.05136	ND	ND	ND	0 / 2	0
Zinc	mg/kg		4.537	4.537	5.085	2 / 2	4.811

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

APPENDIX F

TWRA Special Request, Summer 2009

Table F-1: TWRA Special Request, Summer 2009 - Blue Catfish Whole Body at Emory River Mile 6.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		2.3	2.3	6.8	9 / 9	4.178
% Moisture	%		70.4	70.4	79.1	4 / 4	74.85
Aluminum	mg/kg		5.002	5.002	91.44	9 / 9	52.27
Antimony	mg/kg	0.01306 / 0.01484	ND	ND	ND	0 / 9	0
Arsenic	mg/kg	0.0248 / 0.05328	ND	0.03276	0.1569	8 / 9	0.09196
Barium	mg/kg		0.2753	0.2753	3.011	9 / 9	1.504
Beryllium	mg/kg	0.054 / 0.06111	ND	ND	ND	0 / 9	0
Boron	mg/kg	0.372 / 0.4365	ND	ND	ND	0 / 9	0
Cadmium	mg/kg		0.00886	0.00886	0.05235	9 / 9	0.02302
Calcium	mg/kg		2596	2596	38456	9 / 9	16266
Chromium	mg/kg	0.1141 / 0.129	ND	0.1601	1.789	7 / 9	0.5471
Cobalt	mg/kg		0.0145	0.0145	0.1187	9 / 9	0.06644
Copper	mg/kg		0.3289	0.3289	0.5235	9 / 9	0.4443
Iron	mg/kg		39.07	39.07	157.1	9 / 9	92.17
Lead	mg/kg	0.0248 / 0.02694	ND	0.06528	0.2125	8 / 9	0.1116
Magnesium	mg/kg		239.8	239.8	898.2	9 / 9	491.5
Manganese	mg/kg		1.391	1.391	21.74	9 / 9	12.38
Mercury	mg/kg		0.02976	0.02976	0.1989	9 / 9	0.05733
Molybdenum	mg/kg	0.03224 / 0.03553	ND	0.04032	0.04032	1 / 9	0.04032
Nickel	mg/kg	0.08704 / 0.09894	ND	0.1338	0.8316	6 / 9	0.3183
Potassium	mg/kg		2646	2646	3618	9 / 9	3072
Selenium	mg/kg		0.372	0.372	0.6688	9 / 9	0.5343
Silver	mg/kg	0.00261 / 0.00304	ND	0.00279	0.00279	1 / 9	0.002792
Sodium	mg/kg		1018	1018	1675	9 / 9	1251
Strontium	mg/kg		2.117	2.117	25.2	9 / 9	12.96
Thallium	mg/kg	0.0124 / 0.01426	ND	ND	ND	0 / 9	0
Vanadium	mg/kg	0.0408 / 0.0444	ND	0.1188	0.2282	8 / 9	0.1619
Zinc	mg/kg		14.53	14.53	33.96	9 / 9	23.54

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table F-2: TWRA Special Request, Summer 2009 - Channel Catfish Ovary at Emory River Mile 6.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		8.1	8.1	13.4	5 / 5	10.06
Aluminum	mg/kg	0.874 / 4.046	ND	6.624	8.288	2 / 5	7.456
Antimony	mg/kg	0.01907 / 0.01932	ND	ND	ND	0 / 5	0
Arsenic	mg/kg	0.0156 / 0.03405	ND	ND	ND	0 / 5	0
Barium	mg/kg		0.345	0.345	0.651	5 / 5	0.5143
Beryllium	mg/kg	0.00977 / 0.01012	ND	ND	ND	0 / 5	0
Boron	mg/kg	0.064 / 0.1472	ND	ND	ND	0 / 5	0
Cadmium	mg/kg	0.00582 / 0.00605	ND	ND	ND	0 / 5	0
Calcium	mg/kg		841.8	841.8	1089	5 / 5	970.1
Chromium	mg/kg	0.1209 / 0.1254	ND	0.1434	0.293	2 / 5	0.2182
Cobalt	mg/kg		0.05376	0.05376	0.069	5 / 5	0.06288
Copper	mg/kg		0.9856	0.9856	1.12	5 / 5	1.056
Iron	mg/kg		14.96	14.96	22.63	5 / 5	17.49
Lead	mg/kg		0.01299	0.01299	0.03082	5 / 5	0.02022
Magnesium	mg/kg		389.2	389.2	483.8	5 / 5	456.5
Manganese	mg/kg		2.867	2.867	6.28	5 / 5	5.132
Mercury	mg/kg	0.00426 / 0.00672	ND	ND	ND	0 / 5	0
Molybdenum	mg/kg	0.01075 / 0.022	ND	ND	ND	0 / 5	0
Nickel	mg/kg	0.0332 / 0.1349	ND	ND	ND	0 / 5	0
Potassium	mg/kg		2034	2034	2289	5 / 5	2184
Selenium	mg/kg		1.12	1.12	1.886	5 / 5	1.458
Silver	mg/kg	0.00298 / 0.00644	ND	ND	ND	0 / 5	0
Sodium	mg/kg		380.4	380.4	568	5 / 5	478
Strontium	mg/kg		1.535	1.535	2.64	5 / 5	1.892
Thallium	mg/kg	0.0144 / 0.01478	ND	ND	ND	0 / 5	0
Vanadium	mg/kg	0.056 / 0.112	ND	ND	ND	0 / 5	0
Zinc	mg/kg		31.23	31.23	52.44	5 / 5	39.13

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table F-3: TWRA Special Request, Summer 2009 - Channel Catfish Whole Body at Emory River Mile 6.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		4.1	4.1	10.2	9 / 9	6.122
% Moisture	%		68.9	68.9	79.4	9 / 9	74.46
Aluminum	mg/kg	0.8806 / 4.766	ND	20.24	50.88	3 / 9	32.43
Antimony	mg/kg	0.01904 / 0.01933	ND	ND	ND	0 / 9	0
Arsenic	mg/kg		0.01983	0.01983	0.1421	9 / 9	0.04686
Barium	mg/kg		0.6496	0.6496	2.101	9 / 9	1.393
Beryllium	mg/kg	0.00986 / 0.01006	ND	ND	ND	0 / 9	0
Boron	mg/kg	0.06386 / 0.1309	ND	ND	ND	0 / 9	0
Cadmium	mg/kg	0.00591 / 0.00605	ND	0.0061	0.0117	7 / 9	0.00802
Calcium	mg/kg		4784	4784	24973	9 / 9	11009
Chromium	mg/kg	0.1224 / 0.1244	ND	0.1279	0.8736	5 / 9	0.3481
Cobalt	mg/kg	0.00476 / 0.02208	ND	0.03514	0.05474	7 / 9	0.04374
Copper	mg/kg		0.2584	0.2584	3.919	9 / 9	1.037
Iron	mg/kg	12.39 / 12.5	ND	13.08	57.89	6 / 9	34.41
Lead	mg/kg		0.04522	0.04522	0.2519	9 / 9	0.1006
Magnesium	mg/kg		236.1	236.1	547.4	9 / 9	333.4
Manganese	mg/kg		3.674	3.674	12.77	9 / 9	6.606
Mercury	mg/kg	0.00426 / 0.03296	ND	0.04043	0.0952	3 / 9	0.06462
Molybdenum	mg/kg	0.01071 / 0.06272	ND	ND	ND	0 / 9	0
Nickel	mg/kg	0.03264 / 0.2023	ND	0.04624	0.7464	4 / 9	0.3375
Potassium	mg/kg		2278	2278	2643	9 / 9	2453
Selenium	mg/kg		0.2986	0.2986	0.423	9 / 9	0.3577
Silver	mg/kg	0.00287 / 0.0031	ND	ND	ND	0 / 9	0
Sodium	mg/kg		728.2	728.2	1197	9 / 9	927.1
Strontium	mg/kg		3.522	3.522	22.36	9 / 9	9.854
Thallium	mg/kg	0.01452 / 0.01473	ND	ND	ND	0 / 9	0
Vanadium	mg/kg	0.0544 / 0.11	ND	0.07028	0.1607	3 / 9	0.1006
Zinc	mg/kg		14.07	14.07	30.73	9 / 9	20.73

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table F-4: TWRA Special Request, Summer 2009 - Channel Catfish Ovary at Emory River Mile 0.7

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		8.3	8.3	10.3	2 / 2	9.3
% Moisture	%		58.7	58.7	58.7	1 / 1	58.7
Aluminum	mg/kg	0.874 / 3.696	ND	5.856	5.856	1 / 3	5.856
Antimony	mg/kg	0.01923 / 0.01941	ND	ND	ND	0 / 3	0
Arsenic	mg/kg	0.01554 / 0.03387	ND	0.03696	0.03696	1 / 3	0.03696
Barium	mg/kg		0.2189	0.2189	0.3192	3 / 3	0.2639
Beryllium	mg/kg	0.00991 / 0.01008	ND	ND	ND	0 / 3	0
Boron	mg/kg	0.063 / 0.2561	ND	ND	ND	0 / 3	0
Cadmium	mg/kg	0.00588 / 0.0062	ND	0.01596	0.01596	1 / 3	0.01596
Calcium	mg/kg		882	882	957	3 / 3	907.6
Chromium	mg/kg		0.1302	0.1302	0.1661	3 / 3	0.147
Cobalt	mg/kg		0.05782	0.05782	0.0966	3 / 3	0.07624
Copper	mg/kg		1.093	1.093	1.9	3 / 3	1.39
Iron	mg/kg		19.03	19.03	20.67	3 / 3	20.1
Lead	mg/kg		0.01569	0.01569	0.0462	3 / 3	0.02879
Magnesium	mg/kg		436.8	436.8	475	3 / 3	449.6
Manganese	mg/kg		3.387	3.387	4.41	3 / 3	3.881
Mercury	mg/kg	0.00785 / 0.01224	ND	ND	ND	0 / 3	0
Molybdenum	mg/kg	0.01748 / 0.03738	ND	ND	ND	0 / 3	0
Nickel	mg/kg	0.0336 / 0.05369	ND	0.05244	0.0588	2 / 3	0.05562
Potassium	mg/kg		1911	1911	2152	3 / 3	2070
Selenium	mg/kg		1.363	1.363	1.879	3 / 3	1.557
Silver	mg/kg	0.00298 / 0.00302	ND	ND	ND	1 / 3	0
Sodium	mg/kg		392.3	392.3	470.8	3 / 3	439.2
Strontium	mg/kg		1.136	1.136	1.735	3 / 3	1.517
Thallium	mg/kg	0.01442 / 0.02646	ND	ND	ND	0 / 3	0
Vanadium	mg/kg	0.0546 / 0.1115	ND	0.05681	0.0672	2 / 3	0.06201
Zinc	mg/kg		36.14	36.14	55.44	3 / 3	44.84

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table F-5: TWRA Special Request, Summer 2009 - Channel Catfish Whole Body at Emory River Mile 0.7

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		2.8	2.8	7.8	7 / 7	5.443
% Moisture	%		72	72	76.6	7 / 7	73.57
Aluminum	mg/kg	0.864 / 1.544	ND	6.867	18.2	6 / 7	14.61
Antimony	mg/kg	0.01917 / 0.01936	ND	ND	ND	0 / 7	0
Arsenic	mg/kg		0.01802	0.01802	0.1674	7 / 7	0.08808
Barium	mg/kg		0.6318	0.6318	3.219	7 / 7	2.121
Beryllium	mg/kg	0.00992 / 0.01026	ND	ND	ND	0 / 7	0
Boron	mg/kg	0.06394 / 0.252	ND	ND	ND	0 / 7	0
Cadmium	mg/kg	0.00584 / 0.00594	ND	0.00842	0.0308	6 / 7	0.01556
Calcium	mg/kg		12379	12379	48600	7 / 7	25191
Chromium	mg/kg	0.1215 / 0.124	ND	0.1242	0.42	3 / 7	0.25
Cobalt	mg/kg		0.02574	0.02574	0.05082	7 / 7	0.03717
Copper	mg/kg		0.2808	0.2808	1.529	7 / 7	0.7947
Iron	mg/kg	12.39 / 12.48	ND	19.47	30.55	5 / 7	25.49
Lead	mg/kg		0.0756	0.0756	0.363	7 / 7	0.1761
Magnesium	mg/kg		369.7	369.7	936.9	7 / 7	578.2
Manganese	mg/kg		3.346	3.346	21.34	7 / 7	10.86
Mercury	mg/kg	0.00417 / 0.0468	ND	0.04448	0.04448	1 / 7	0.04448
Molybdenum	mg/kg	0.01076 / 0.02662	ND	ND	ND	0 / 7	0
Nickel	mg/kg	0.0324 / 0.2212	ND	0.04212	0.324	5 / 7	0.1847
Potassium	mg/kg		2492	2492	2904	7 / 7	2688
Selenium	mg/kg		0.2697	0.2697	0.5148	7 / 7	0.3839
Silver	mg/kg	0.0029 / 0.00532	ND	0.00445	0.00726	2 / 7	0.005854
Sodium	mg/kg		921.9	921.9	1382	7 / 7	1054
Strontium	mg/kg		6.997	6.997	31.05	7 / 7	19.01
Thallium	mg/kg	0.01446 / 0.0167	ND	ND	ND	0 / 7	0
Vanadium	mg/kg		0.05838	0.05838	0.2105	7 / 7	0.1274
Zinc	mg/kg		22.41	22.41	32.67	7 / 7	25.96

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table F-6: TWRA Special Request, Summer 2009 - Largemouth Bass Whole Body at Emory River Mile 6.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.7	0.7	4.2	5 / 5	2.028
% Moisture	%		64	64	74.2	3 / 3	69.6
Aluminum	mg/kg	4.017 / 7.56	ND	14.8	27.09	2 / 5	20.95
Antimony	mg/kg	0.0145 / 0.02736	ND	ND	ND	0 / 5	0
Arsenic	mg/kg		0.1548	0.1548	0.3234	5 / 5	0.2296
Barium	mg/kg		0.9579	0.9579	1.393	5 / 5	1.15
Beryllium	mg/kg	0.05871 / 0.1116	ND	ND	ND	0 / 5	0
Boron	mg/kg	0.4017 / 2.116	ND	ND	ND	0 / 5	0
Cadmium	mg/kg	0.00755 / 0.02916	ND	0.01832	0.04326	2 / 5	0.03079
Calcium	mg/kg		9455	9455	33282	5 / 5	21961
Chromium	mg/kg	0.1267 / 0.1294	ND	0.576	11.77	3 / 5	5.328
Cobalt	mg/kg	0.01411 / 0.07224	ND	0.02114	0.1205	2 / 5	0.07082
Copper	mg/kg	0.145 / 0.7482	ND	0.3234	0.8034	4 / 5	0.512
Iron	mg/kg	12.11 / 61.92	ND	12.73	77.87	3 / 5	36.58
Lead	mg/kg	0.02809 / 0.054	ND	0.05562	0.06708	2 / 5	0.06135
Magnesium	mg/kg		451.1	451.1	843.8	5 / 5	669
Manganese	mg/kg		1.721	1.721	8.617	5 / 5	3.679
Mercury	mg/kg		0.0618	0.0618	0.144	5 / 5	0.1126
Molybdenum	mg/kg	0.03399 / 0.0648	ND	0.07224	0.1916	2 / 5	0.1319
Nickel	mg/kg	0.09664 / 0.09996	ND	0.2484	5.253	3 / 5	2.384
Potassium	mg/kg		2350	2350	4057	5 / 5	3197
Selenium	mg/kg		0.576	0.576	0.774	5 / 5	0.6501
Silver	mg/kg	0.0029 / 0.0054	ND	0.00335	0.00371	2 / 5	0.003531
Sodium	mg/kg		993.6	993.6	1711	5 / 5	1320
Strontium	mg/kg		6.582	6.582	24.61	5 / 5	16.62
Thallium	mg/kg	0.01382 / 0.02592	ND	ND	ND	0 / 5	0
Vanadium	mg/kg	0.0453 / 0.0864	ND	0.1112	1.832	2 / 5	0.9716
Zinc	mg/kg		14.91	14.91	29.15	5 / 5	19.53

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table F-7: TWRA Special Request, Summer 2009 - Largemouth Bass Whole Body at Emory River Mile 0.9

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1.8	1.8	7.8	7 / 7	4.071
% Moisture	%		66.6	66.6	73.9	2 / 2	70.25
Aluminum	mg/kg	3.641 / 40.87	ND	4.724	9.263	4 / 7	6.761
Antimony	mg/kg	0.01303 / 0.01495	ND	ND	ND	0 / 7	0
Arsenic	mg/kg		0.1252	0.1252	0.5004	7 / 7	0.28
Barium	mg/kg		0.1827	0.1827	1.877	7 / 7	0.6534
Beryllium	mg/kg	0.05344 / 0.06255	ND	ND	ND	0 / 7	0
Boron	mg/kg	0.3674 / 0.4225	ND	ND	ND	0 / 7	0
Cadmium	mg/kg	0.00701 / 0.00792	ND	ND	ND	0 / 7	0
Calcium	mg/kg		4855	4855	55044	7 / 7	19007
Chromium	mg/kg	0.1136 / 1.293	ND	0.1169	1.07	4 / 7	0.5815
Cobalt	mg/kg	0.01269 / 0.1418	ND	0.01412	0.0261	6 / 7	0.02107
Copper	mg/kg	0.1303 / 1.46	ND	0.3388	0.4494	6 / 7	0.3877
Iron	mg/kg	10.96 / 123	ND	14.85	23.69	4 / 7	18.84
Lead	mg/kg	0.02538 / 0.0286	ND	0.04587	0.04587	1 / 7	0.04587
Magnesium	mg/kg		315.5	315.5	1301	7 / 7	591.3
Manganese	mg/kg		0.5778	0.5778	5.945	7 / 7	2.588
Mercury	mg/kg		0.03859	0.03859	0.06741	7 / 7	0.05239
Molybdenum	mg/kg	0.03206 / 0.03575	ND	0.03836	0.03836	1 / 7	0.03836
Nickel	mg/kg	0.08988 / 1.001	ND	0.1788	0.4959	3 / 7	0.3308
Potassium	mg/kg		2974	2974	3674	7 / 7	3246
Selenium	mg/kg		0.6356	0.6356	0.9396	7 / 7	0.811
Silver	mg/kg	0.00261 / 0.00299	ND	ND	ND	0 / 7	0
Sodium	mg/kg		903.5	903.5	1810	7 / 7	1249
Strontium	mg/kg		3.811	3.811	44.2	7 / 7	14.48
Thallium	mg/kg	0.01252 / 0.05004	ND	ND	ND	0 / 7	0
Vanadium	mg/kg	0.04008 / 0.4587	ND	ND	ND	0 / 7	0
Zinc	mg/kg		9.983	9.983	22.39	7 / 7	16.28

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

APPENDIX G

TVA Swan Pond Embayment, Summer 2009

Table G-1: TVA Swan Pond Embayment, Summer 2009 - Bluegill Whole Body at East Embayment

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1.6	1.6	3.6	5 / 5	2.66
% Moisture	%		73.4	73.4	74.3	5 / 5	73.96
Aluminum	mg/kg		37.04	37.04	81.47	5 / 5	55.23
Antimony	mg/kg	0.09842 / 0.101	ND	ND	ND	0 / 5	0
Arsenic	mg/kg		0.4522	0.4522	0.6312	5 / 5	0.5309
Barium	mg/kg		2.538	2.538	3.919	5 / 5	3.147
Beryllium	mg/kg	0.09842 / 0.101	ND	ND	ND	0 / 5	0
Boron	mg/kg	1.979 / 2.005	ND	ND	ND	0 / 5	0
Cadmium	mg/kg	0.09842 / 0.101	ND	ND	ND	0 / 5	0
Calcium	mg/kg		14860	14860	17296	5 / 5	16153
Chromium	mg/kg	0.1476 / 0.2056	ND	ND	ND	0 / 5	0
Cobalt	mg/kg	0.09842 / 0.101	ND	ND	ND	0 / 5	0
Copper	mg/kg	0.4883 / 0.5054	ND	0.6168	0.6168	1 / 5	0.6168
Iron	mg/kg		49.99	49.99	87.89	5 / 5	69.59
Lead	mg/kg	0.09842 / 0.101	ND	0.1131	0.1131	1 / 5	0.1131
Magnesium	mg/kg		441.8	441.8	488.3	5 / 5	468.1
Manganese	mg/kg		65.7	65.7	90.47	5 / 5	74.31
Mercury	mg/kg	0.01995 / 0.02287	ND	0.02493	0.02926	2 / 5	0.0271
Molybdenum	mg/kg		1.036	1.036	1.184	5 / 5	1.109
Nickel	mg/kg	0.1224 / 0.2236	ND	ND	ND	0 / 5	0
Potassium	mg/kg		2465	2465	2599	5 / 5	2567
Selenium	mg/kg		1.259	1.259	1.476	5 / 5	1.333
Silver	mg/kg	0.04883 / 0.05054	ND	ND	ND	0 / 5	0
Sodium	mg/kg		917.9	917.9	984.3	5 / 5	945.7
Strontium	mg/kg		21.05	21.05	25.15	5 / 5	23.15
Thallium	mg/kg	0.09842 / 0.101	ND	ND	ND	0 / 5	0
Vanadium	mg/kg		0.2227	0.2227	0.3598	5 / 5	0.2862
Zinc	mg/kg		22.9	22.9	27.35	5 / 5	24.66

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table G-2: TVA Swan Pond Embayment, Summer 2009 - Bluegill Whole Body (Minus Gut) at East Embayment

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		2	2	2	1 / 1	2
% Moisture	%		73.6	73.6	73.6	1 / 1	73.6
Aluminum	mg/kg	24.9 / 24.9	ND	ND	ND	0 / 1	0
Antimony	mg/kg	0.1003 / 0.1003	ND	ND	ND	0 / 1	0
Arsenic	mg/kg		0.2165	0.2165	0.2165	1 / 1	0.2165
Barium	mg/kg		2.508	2.508	2.508	1 / 1	2.508
Beryllium	mg/kg	0.1003 / 0.1003	ND	ND	ND	0 / 1	0
Boron	mg/kg	1.98 / 1.98	ND	ND	ND	0 / 1	0
Cadmium	mg/kg	0.1003 / 0.1003	ND	ND	ND	0 / 1	0
Calcium	mg/kg		27720	27720	27720	1 / 1	27720
Chromium	mg/kg	0.1399 / 0.1399	ND	ND	ND	0 / 1	0
Cobalt	mg/kg	0.1003 / 0.1003	ND	ND	ND	0 / 1	0
Copper	mg/kg	0.5016 / 0.5016	ND	ND	ND	0 / 1	0
Iron	mg/kg		27.19	27.19	27.19	1 / 1	27.19
Lead	mg/kg	0.1003 / 0.1003	ND	ND	ND	0 / 1	0
Magnesium	mg/kg		609.8	609.8	609.8	1 / 1	609.8
Manganese	mg/kg		40.66	40.66	40.66	1 / 1	40.66
Mercury	mg/kg		0.0264	0.0264	0.0264	1 / 1	0.0264
Molybdenum	mg/kg	1.003 / 1.003	ND	ND	ND	0 / 1	0
Nickel	mg/kg	0.1003 / 0.1003	ND	ND	ND	0 / 1	0
Potassium	mg/kg		2368	2368	2368	1 / 1	2368
Selenium	mg/kg		1.082	1.082	1.082	1 / 1	1.082
Silver	mg/kg	0.05016 / 0.05016	ND	ND	ND	0 / 1	0
Sodium	mg/kg		1199	1199	1199	1 / 1	1199
Strontium	mg/kg		36.17	36.17	36.17	1 / 1	36.17
Thallium	mg/kg	0.1003 / 0.1003	ND	ND	ND	0 / 1	0
Vanadium	mg/kg	0.198 / 0.198	ND	ND	ND	0 / 1	0
Zinc	mg/kg		26.66	26.66	26.66	1 / 1	26.66

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table G-3: TVA Swan Pond Embayment, Summer 2009 - Gizzard Shad Whole Body at East Embayment

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		3	3	4.8	2 / 2	3.9
% Moisture	%		75.2	75.2	75.6	2 / 2	75.4
Aluminum	mg/kg		672.1	672.1	710	2 / 2	691.1
Antimony	mg/kg	0.0992 / 0.1	ND	ND	ND	0 / 2	0
Arsenic	mg/kg		1.786	1.786	2.172	2 / 2	1.979
Barium	mg/kg		9.052	9.052	11.13	2 / 2	10.09
Beryllium	mg/kg	0.0992 / 0.1	ND	ND	ND	0 / 2	0
Boron	mg/kg	1.984 / 2.001	ND	ND	ND	0 / 2	0
Cadmium	mg/kg	0.0992 / 0.1	ND	ND	ND	0 / 2	0
Calcium	mg/kg		7415	7415	12322	2 / 2	9869
Chromium	mg/kg		1.538	1.538	2.123	2 / 2	1.831
Cobalt	mg/kg		0.3968	0.3968	0.4636	2 / 2	0.4302
Copper	mg/kg		1.903	1.903	2.207	2 / 2	2.055
Iron	mg/kg		682	682	734.4	2 / 2	708.2
Lead	mg/kg		0.7564	0.7564	0.7688	2 / 2	0.7626
Magnesium	mg/kg		310	310	366	2 / 2	338
Manganese	mg/kg		60.51	60.51	77.59	2 / 2	69.05
Mercury	mg/kg	0.01984 / 0.02001	ND	ND	ND	0 / 2	0
Molybdenum	mg/kg	0.992 / 1	ND	ND	ND	0 / 2	0
Nickel	mg/kg		0.8432	0.8432	1	2 / 2	0.9216
Potassium	mg/kg		2438	2438	2604	2 / 2	2521
Selenium	mg/kg		1.414	1.414	1.464	2 / 2	1.439
Silver	mg/kg	0.0488 / 0.0496	ND	ND	ND	0 / 2	0
Sodium	mg/kg		875.4	875.4	937	2 / 2	906.2
Strontium	mg/kg		8.854	8.854	12.86	2 / 2	10.86
Thallium	mg/kg	0.0992 / 0.1	ND	ND	ND	0 / 2	0
Vanadium	mg/kg		1.438	1.438	1.635	2 / 2	1.537
Zinc	mg/kg		15.55	15.55	17.91	2 / 2	16.73

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table G-4: TVA Swan Pond Embayment, Summer 2009 - Largemouth Bass Whole Body (Minus Gut) at East Embayment

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.38	0.38	0.98	5 / 5	0.608
% Moisture	%		71.9	71.9	76.1	5 / 5	74.86
Aluminum	mg/kg	24.68 / 24.93	ND	ND	ND	0 / 5	0
Antimony	mg/kg	0.09835 / 0.1004	ND	ND	ND	0 / 5	0
Arsenic	mg/kg	0.09835 / 0.09922	ND	0.1404	0.1697	3 / 5	0.1596
Barium	mg/kg		0.484	0.484	1.321	5 / 5	0.9671
Beryllium	mg/kg	0.09835 / 0.1004	ND	ND	ND	0 / 5	0
Boron	mg/kg	1.973 / 1.995	ND	ND	ND	0 / 5	0
Cadmium	mg/kg	0.09835 / 0.1004	ND	ND	ND	0 / 5	0
Calcium	mg/kg		14399	14399	27117	5 / 5	20910
Chromium	mg/kg	0.09835 / 0.1004	ND	ND	ND	0 / 5	0
Cobalt	mg/kg	0.09835 / 0.1004	ND	ND	ND	0 / 5	0
Copper	mg/kg	0.484 / 0.5082	ND	ND	ND	0 / 5	0
Iron	mg/kg	24.68 / 24.93	ND	ND	ND	0 / 5	0
Lead	mg/kg	0.09835 / 0.1004	ND	ND	ND	0 / 5	0
Magnesium	mg/kg		469.5	469.5	666	5 / 5	574.3
Manganese	mg/kg		1.601	1.601	5.251	5 / 5	3.156
Mercury	mg/kg		0.0484	0.0484	0.0847	5 / 5	0.05883
Molybdenum	mg/kg	0.9835 / 1.004	ND	ND	ND	0 / 5	0
Nickel	mg/kg	0.09835 / 0.1004	ND	ND	ND	0 / 5	0
Potassium	mg/kg		2414	2414	3049	5 / 5	2678
Selenium	mg/kg		0.9321	0.9321	1.113	5 / 5	1.016
Silver	mg/kg	0.0484 / 0.05082	ND	ND	ND	0 / 5	0
Sodium	mg/kg		980.1	980.1	1422	5 / 5	1237
Strontium	mg/kg		12.39	12.39	24.62	5 / 5	19.08
Thallium	mg/kg	0.09835 / 0.1004	ND	ND	ND	0 / 5	0
Vanadium	mg/kg	0.1973 / 0.1995	ND	ND	ND	0 / 5	0
Zinc	mg/kg		16.99	16.99	26.44	5 / 5	20.85

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table G-5: TVA Swan Pond Embayment, Summer 2009 - Red Ear Sunfish Whole Body at East Embayment

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		2.6	2.6	2.6	1 / 1	2.6
% Moisture	%		74.7	74.7	74.7	1 / 1	74.7
Aluminum	mg/kg		51.11	51.11	51.11	1 / 1	51.11
Antimony	mg/kg	0.09867 / 0.09867	ND	ND	ND	0 / 1	0
Arsenic	mg/kg		0.5313	0.5313	0.5313	1 / 1	0.5313
Barium	mg/kg		3.694	3.694	3.694	1 / 1	3.694
Beryllium	mg/kg	0.09867 / 0.09867	ND	ND	ND	0 / 1	0
Boron	mg/kg	1.999 / 1.999	ND	ND	ND	0 / 1	0
Cadmium	mg/kg	0.09867 / 0.09867	ND	ND	ND	0 / 1	0
Calcium	mg/kg		14775	14775	14775	1 / 1	14775
Chromium	mg/kg	0.1467 / 0.1467	ND	ND	ND	0 / 1	0
Cobalt	mg/kg	0.09867 / 0.09867	ND	ND	ND	0 / 1	0
Copper	mg/kg	0.506 / 0.506	ND	ND	ND	0 / 1	0
Iron	mg/kg		67.8	67.8	67.8	1 / 1	67.8
Lead	mg/kg		0.1063	0.1063	0.1063	1 / 1	0.1063
Magnesium	mg/kg		414.9	414.9	414.9	1 / 1	414.9
Manganese	mg/kg		47.06	47.06	47.06	1 / 1	47.06
Mercury	mg/kg	0.01999 / 0.01999	ND	ND	ND	0 / 1	0
Molybdenum	mg/kg	0.9867 / 0.9867	ND	ND	ND	0 / 1	0
Nickel	mg/kg	0.1189 / 0.1189	ND	ND	ND	0 / 1	0
Potassium	mg/kg		2783	2783	2783	1 / 1	2783
Selenium	mg/kg		1.695	1.695	1.695	1 / 1	1.695
Silver	mg/kg	0.0506 / 0.0506	ND	ND	ND	0 / 1	0
Sodium	mg/kg		946.2	946.2	946.2	1 / 1	946.2
Strontium	mg/kg		22.21	22.21	22.21	1 / 1	22.21
Thallium	mg/kg	0.09867 / 0.09867	ND	ND	ND	0 / 1	0
Vanadium	mg/kg		0.2783	0.2783	0.2783	1 / 1	0.2783
Zinc	mg/kg		17.96	17.96	17.96	1 / 1	17.96

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table G-6: TVA Swan Pond Embayment, Summer 2009 - Red Ear Sunfish Whole Body (Minus Gut) at East Embayment

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.69	0.69	0.69	1 / 1	0.69
% Moisture	%		73.4	73.4	73.4	1 / 1	73.4
Aluminum	mg/kg	25 / 25	ND	ND	ND	0 / 1	0
Antimony	mg/kg	0.1011 / 0.1011	ND	ND	ND	0 / 1	0
Arsenic	mg/kg		0.3192	0.3192	0.3192	1 / 1	0.3192
Barium	mg/kg		3.538	3.538	3.538	1 / 1	3.538
Beryllium	mg/kg	0.1011 / 0.1011	ND	ND	ND	0 / 1	0
Boron	mg/kg	1.995 / 1.995	ND	ND	ND	0 / 1	0
Cadmium	mg/kg	0.1011 / 0.1011	ND	ND	ND	0 / 1	0
Calcium	mg/kg		24924	24924	24924	1 / 1	24924
Chromium	mg/kg	0.2314 / 0.2314	ND	ND	ND	0 / 1	0
Cobalt	mg/kg	0.1011 / 0.1011	ND	ND	ND	0 / 1	0
Copper	mg/kg	0.5054 / 0.5054	ND	ND	ND	0 / 1	0
Iron	mg/kg		31.39	31.39	31.39	1 / 1	31.39
Lead	mg/kg	0.1011 / 0.1011	ND	ND	ND	0 / 1	0
Magnesium	mg/kg		555.9	555.9	555.9	1 / 1	555.9
Manganese	mg/kg		13.43	13.43	13.43	1 / 1	13.43
Mercury	mg/kg		0.03458	0.03458	0.03458	1 / 1	0.03458
Molybdenum	mg/kg	1.011 / 1.011	ND	ND	ND	0 / 1	0
Nickel	mg/kg	0.141 / 0.141	ND	ND	ND	0 / 1	0
Potassium	mg/kg		2519	2519	2519	1 / 1	2519
Selenium	mg/kg		1.17	1.17	1.17	1 / 1	1.17
Silver	mg/kg	0.05054 / 0.05054	ND	ND	ND	0 / 1	0
Sodium	mg/kg		1420	1420	1420	1 / 1	1420
Strontium	mg/kg		21.89	21.89	21.89	1 / 1	21.89
Thallium	mg/kg	0.1011 / 0.1011	ND	ND	ND	0 / 1	0
Vanadium	mg/kg	0.1995 / 0.1995	ND	ND	ND	0 / 1	0
Zinc	mg/kg		27.93	27.93	27.93	1 / 1	27.93

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

APPENDIX H
TVA Sampling, Fall 2009

Table H-1: TVA Sampling, Fall 2009 - Bluegill Carcass at Little Emory River Mile 2.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
Aluminum	mg/kg		6.682	6.682	56.6	4 / 4	29.73
Antimony	mg/kg	0.01436 / 0.01479	ND	ND	ND	0 / 4	0
Arsenic	mg/kg		0.2871	0.2871	0.392	4 / 4	0.3271
Barium	mg/kg		3.628	3.628	7.859	4 / 4	6.042
Beryllium	mg/kg	0.02871 / 0.0294	ND	ND	ND	0 / 4	0
Boron	mg/kg	0.4165 / 0.435	ND	ND	ND	0 / 4	0
Cadmium	mg/kg	0.0319 / 0.04959	ND	ND	ND	0 / 4	0
Calcium	mg/kg		23490	23490	74725	4 / 4	38684
Chromium	mg/kg		0.29	0.29	0.6003	4 / 4	0.4356
Cobalt	mg/kg	0.0248 / 0.08091	ND	ND	ND	0 / 4	0
Copper	mg/kg		0.3654	0.3654	0.4437	4 / 4	0.4007
Iron	mg/kg		17.1	17.1	70.07	4 / 4	46.09
Lead	mg/kg	0.02871 / 0.1789	ND	0.261	0.261	1 / 4	0.261
Magnesium	mg/kg		1188	1188	1740	4 / 4	1365
Manganese	mg/kg		19.58	19.58	69.83	4 / 4	48.17
Mercury	mg/kg		0.0174	0.0174	0.02062	4 / 4	0.01944
Molybdenum	mg/kg	0.1054 / 0.154	ND	ND	ND	0 / 4	0
Nickel	mg/kg		0.4698	0.4698	0.7105	4 / 4	0.5561
Potassium	mg/kg	3210 / 3741	ND	ND	ND	0 / 4	0
Selenium	mg/kg		0.464	0.464	0.4959	4 / 4	0.4799
Silver	mg/kg	0.00287 / 0.00294	ND	ND	ND	0 / 4	0
Sodium	mg/kg		1656	1656	2383	4 / 4	1962
Strontium	mg/kg		21.14	21.14	60.27	4 / 4	43.9
Thallium	mg/kg	0.01227 / 0.01421	ND	ND	ND	0 / 4	0
Vanadium	mg/kg		0.04655	0.04655	0.4176	4 / 4	0.1689
Zinc	mg/kg		23.57	23.57	49.25	4 / 4	40

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table H-2: TVA Sampling, Fall 2009 - Bluegill Fillet at Little Emory River Mile 2.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.18	0.18	0.61	6 / 6	0.35
Aluminum	mg/kg	0.874 / 2.307	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.01627 / 0.019	ND	ND	ND	0 / 6	0
Arsenic	mg/kg	0.03035 / 0.06806	ND	ND	ND	0 / 6	0
Barium	mg/kg		0.03128	0.03128	0.1643	6 / 6	0.1012
Beryllium	mg/kg	0.01262 / 0.01499	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.1693 / 0.1995	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.00515 / 0.00592	ND	ND	ND	0 / 6	0
Calcium	mg/kg		133.4	133.4	1284	6 / 6	719.9
Chromium	mg/kg	0.1046 / 0.124	ND	ND	ND	0 / 6	0
Cobalt	mg/kg	0.00415 / 0.00699	ND	ND	ND	0 / 6	0
Copper	mg/kg		0.2015	0.2015	0.37	6 / 6	0.2738
Iron	mg/kg	10.56 / 12.43	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.00896 / 0.05226	ND	ND	ND	0 / 6	0
Magnesium	mg/kg		223.1	223.1	340.4	6 / 6	282.7
Manganese	mg/kg		0.1634	0.1634	1.428	6 / 6	0.7741
Mercury	mg/kg	0.0266 / 0.037	ND	ND	ND	0 / 6	0
Molybdenum	mg/kg	0.00913 / 0.01083	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.02822 / 0.0306	ND	0.03496	0.05427	5 / 6	0.0423
Potassium	mg/kg		2814	2814	4398	6 / 6	3532
Selenium	mg/kg		0.4422	0.4422	0.5365	6 / 6	0.4902
Silver	mg/kg	0.00249 / 0.00304	ND	ND	ND	0 / 6	0
Sodium	mg/kg		255	255	323.8	6 / 6	283.6
Strontium	mg/kg		0.1083	0.1083	1.394	6 / 6	0.6915
Thallium	mg/kg	0.01245 / 0.01463	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.04648 / 0.0555	ND	ND	ND	0 / 6	0
Zinc	mg/kg		8.436	8.436	21.51	6 / 6	15.85

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table H-3: TVA Sampling, Fall 2009 - Bluegill Carcass at Emory River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
Aluminum	mg/kg	3.854 / 4.014	ND	5.396	9.373	3 / 4	7.925
Antimony	mg/kg	0.01402 / 0.01469	ND	ND	ND	0 / 4	0
Arsenic	mg/kg		0.1067	0.1067	0.2628	4 / 4	0.1936
Barium	mg/kg		1.358	1.358	2.737	4 / 4	2.13
Beryllium	mg/kg	0.02847 / 0.03081	ND	ND	ND	0 / 4	0
Boron	mg/kg	0.3942 / 0.4301	ND	ND	ND	0 / 4	0
Cadmium	mg/kg	0.00745 / 0.04977	ND	0.1489	0.1489	1 / 4	0.1489
Calcium	mg/kg		15660	15660	24946	4 / 4	20454
Chromium	mg/kg		0.4176	0.4176	0.5865	4 / 4	0.4727
Cobalt	mg/kg	0.01624 / 0.04977	ND	ND	ND	0 / 4	0
Copper	mg/kg		0.3712	0.3712	0.4503	4 / 4	0.4117
Iron	mg/kg		14.23	14.23	18.68	4 / 4	16.81
Lead	mg/kg	0.05694 / 0.1469	ND	ND	ND	0 / 4	0
Magnesium	mg/kg		462.2	462.2	1118	4 / 4	710
Manganese	mg/kg		14.72	14.72	34.99	4 / 4	22.12
Mercury	mg/kg		0.0219	0.0219	0.07888	4 / 4	0.04072
Molybdenum	mg/kg	0.03504 / 0.0948	ND	0.2409	0.2409	1 / 4	0.2409
Nickel	mg/kg		0.2607	0.2607	0.4692	4 / 4	0.3352
Potassium	mg/kg	746.6 / 3531	ND	2441	2441	1 / 4	2441
Selenium	mg/kg		0.2784	0.2784	0.7227	4 / 4	0.543
Silver	mg/kg	0.00278 / 0.00545	ND	ND	ND	0 / 4	0
Sodium	mg/kg		1240	1240	1768	4 / 4	1505
Strontium	mg/kg		19.53	19.53	30.62	4 / 4	24.45
Thallium	mg/kg	0.01253 / 0.03285	ND	ND	ND	0 / 4	0
Vanadium	mg/kg		0.07424	0.07424	0.3942	4 / 4	0.1716
Zinc	mg/kg		22.34	22.34	51.97	4 / 4	33.29

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table H-4: TVA Sampling, Fall 2009 - Bluegill Fillet at Emory River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.38	0.38	1	6 / 6	0.5417
Aluminum	mg/kg	0.756 / 2.147	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.01638 / 0.01924	ND	ND	ND	0 / 6	0
Arsenic	mg/kg	0.01344 / 0.03336	ND	ND	ND	0 / 6	0
Barium	mg/kg	0.0273 / 0.1872	ND	ND	ND	0 / 6	0
Beryllium	mg/kg	0.00273 / 0.00335	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.0546 / 0.1001	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.01197 / 0.01397	ND	ND	ND	0 / 6	0
Calcium	mg/kg		127	127	1405	6 / 6	753.5
Chromium	mg/kg	0.105 / 0.1237	ND	ND	ND	0 / 6	0
Cobalt	mg/kg	0.00462 / 0.01001	ND	ND	ND	0 / 6	0
Copper	mg/kg		0.2141	0.2141	0.3468	6 / 6	0.2667
Iron	mg/kg	10.67 / 12.41	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.00903 / 0.01056	ND	ND	ND	0 / 6	0
Magnesium	mg/kg		212	212	321.1	6 / 6	277
Manganese	mg/kg		0.1449	0.1449	1.534	6 / 6	0.7955
Mercury	mg/kg	0.00357 / 0.03664	ND	0.04284	0.1209	4 / 6	0.06641
Molybdenum	mg/kg	0.00924 / 0.01084	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.0294 / 0.05394	ND	ND	ND	0 / 6	0
Potassium	mg/kg		2678	2678	3901	6 / 6	3431
Selenium	mg/kg		0.279	0.279	0.8896	6 / 6	0.556
Silver	mg/kg	0.00252 / 0.00306	ND	ND	ND	0 / 6	0
Sodium	mg/kg		232.6	232.6	293.9	6 / 6	272.9
Strontium	mg/kg	0.01302 / 0.1029	ND	0.168	1.537	5 / 6	0.8349
Thallium	mg/kg	0.0126 / 0.03614	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.0945 / 0.1099	ND	ND	ND	0 / 6	0
Zinc	mg/kg		7.589	7.589	19.34	6 / 6	14.62

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table H-5: TVA Sampling, Fall 2009 - Bluegill Carcass at Emory River Mile 3.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
Aluminum	mg/kg	18.18 / 19.97	ND	23.29	23.29	1 / 4	23.29
Antimony	mg/kg	0.0132 / 0.01456	ND	ND	ND	0 / 4	0
Arsenic	mg/kg	0.1265 / 0.1404	ND	0.1458	0.1531	2 / 4	0.1495
Barium	mg/kg		1.585	1.585	4.794	4 / 4	3.25
Beryllium	mg/kg	0.1348 / 0.1481	ND	ND	ND	0 / 4	0
Boron	mg/kg	1.87 / 2.083	ND	ND	ND	0 / 4	0
Cadmium	mg/kg	0.03765 / 0.07608	ND	0.05616	0.2761	2 / 4	0.1661
Calcium	mg/kg		23395	23395	47850	4 / 4	37717
Chromium	mg/kg	0.5775 / 0.6526	ND	0.6669	0.6974	2 / 4	0.6822
Cobalt	mg/kg	0.06325 / 0.07028	ND	ND	ND	0 / 4	0
Copper	mg/kg	0.66 / 0.7371	ND	ND	ND	0 / 4	0
Iron	mg/kg	54.73 / 60.99	ND	ND	ND	0 / 4	0
Lead	mg/kg		0.05072	0.05072	0.11	4 / 4	0.08985
Magnesium	mg/kg		586.5	586.5	1001	4 / 4	847.2
Manganese	mg/kg		13.79	13.79	33.27	4 / 4	21.99
Mercury	mg/kg		0.02134	0.02134	0.02808	4 / 4	0.02435
Molybdenum	mg/kg	0.1595 / 0.1782	ND	ND	ND	0 / 4	0
Nickel	mg/kg	0.44 / 0.502	ND	ND	ND	0 / 4	0
Potassium	mg/kg		2038	2038	2431	4 / 4	2188
Selenium	mg/kg		0.605	0.605	0.7608	4 / 4	0.6814
Silver	mg/kg	0.0132 / 0.01456	ND	ND	ND	0 / 4	0
Sodium	mg/kg		1706	1706	1905	4 / 4	1808
Strontium	mg/kg		25.04	25.04	47.03	4 / 4	38.45
Thallium	mg/kg	0.01265 / 0.01406	ND	ND	ND	0 / 4	0
Vanadium	mg/kg	0.4125 / 0.4563	ND	ND	ND	0 / 4	0
Zinc	mg/kg		39.31	39.31	48.44	4 / 4	45.03

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table H-6: TVA Sampling, Fall 2009 - Bluegill Fillet at Emory River Mile 3.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.18	0.18	0.49	6 / 6	0.33
Aluminum	mg/kg	0.8256 / 1.303	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.0171 / 0.01991	ND	ND	ND	0 / 6	0
Arsenic	mg/kg	0.03165 / 0.0679	ND	ND	ND	0 / 6	0
Barium	mg/kg	0.01991 / 0.1071	ND	0.1991	0.1991	1 / 6	0.1991
Beryllium	mg/kg	0.00291 / 0.00615	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.0582 / 0.1358	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.00547 / 0.02626	ND	ND	ND	0 / 6	0
Calcium	mg/kg		155.6	155.6	2082	6 / 6	929.3
Chromium	mg/kg	0.1125 / 0.1231	ND	ND	ND	0 / 6	0
Cobalt	mg/kg	0.00485 / 0.01394	ND	ND	ND	0 / 6	0
Copper	mg/kg		0.3096	0.3096	0.6076	6 / 6	0.4221
Iron	mg/kg	11.35 / 12.42	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.0097 / 0.01738	ND	ND	ND	0 / 6	0
Magnesium	mg/kg		247.7	247.7	340.7	6 / 6	282.5
Manganese	mg/kg		0.194	0.194	1.412	6 / 6	0.5553
Mercury	mg/kg		0.02716	0.02716	0.05454	6 / 6	0.03946
Molybdenum	mg/kg	0.00989 / 0.01086	ND	ND	ND	0 / 6	0
Nickel	mg/kg		0.03249	0.03249	0.04887	6 / 6	0.03829
Potassium	mg/kg		3251	3251	4383	6 / 6	3541
Selenium	mg/kg		0.684	0.684	0.9548	6 / 6	0.8241
Silver	mg/kg	0.00272 / 0.00308	ND	ND	ND	0 / 6	0
Sodium	mg/kg		225	225	439.8	6 / 6	342.9
Strontium	mg/kg		0.1145	0.1145	2.299	6 / 6	0.9512
Thallium	mg/kg	0.01351 / 0.02715	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.05044 / 0.0543	ND	ND	ND	0 / 6	0
Zinc	mg/kg		10.54	10.54	15.62	6 / 6	13.11

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table H-7: TVA Sampling, Fall 2009 - Bluegill Carcass at Emory River Mile 0.9

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
Aluminum	mg/kg	3.618 / 3.676	ND	5.494	30.07	3 / 4	13.95
Antimony	mg/kg	0.01306 / 0.01462	ND	ND	ND	0 / 4	0
Arsenic	mg/kg		0.392	0.392	0.4896	4 / 4	0.4385
Barium	mg/kg		3.763	3.763	5.387	4 / 4	4.764
Beryllium	mg/kg	0.02666 / 0.02986	ND	ND	ND	0 / 4	0
Boron	mg/kg	0.364 / 0.4043	ND	ND	ND	0 / 4	0
Cadmium	mg/kg	0.01006 / 0.03881	ND	ND	ND	0 / 4	0
Calcium	mg/kg		42224	42224	54736	4 / 4	47200
Chromium	mg/kg	0.1254 / 2.426	ND	0.728	1.098	2 / 4	0.913
Cobalt	mg/kg	0.01986 / 0.05287	ND	ND	ND	0 / 4	0
Copper	mg/kg	0.1411 / 2.426	ND	0.5096	0.5096	1 / 4	0.5096
Iron	mg/kg		11.83	11.83	44.3	4 / 4	28.87
Lead	mg/kg		0.09016	0.09016	0.1306	4 / 4	0.1144
Magnesium	mg/kg		899.1	899.1	1169	4 / 4	1011
Manganese	mg/kg		16.74	16.74	34.52	4 / 4	25.87
Mercury	mg/kg		0.0182	0.0182	0.02312	4 / 4	0.02056
Molybdenum	mg/kg		0.09016	0.09016	0.1496	4 / 4	0.1217
Nickel	mg/kg	0.098 / 2.426	ND	0.4704	0.546	2 / 4	0.5082
Potassium	mg/kg		2344	2344	2535	4 / 4	2430
Selenium	mg/kg		0.7888	0.7888	0.9952	4 / 4	0.8618
Silver	mg/kg	0.00261 / 0.00292	ND	ND	ND	0 / 4	0
Sodium	mg/kg		1803	1803	2193	4 / 4	1966
Strontium	mg/kg		46.51	46.51	58.47	4 / 4	51.68
Thallium	mg/kg	0.01251 / 0.014	ND	ND	ND	0 / 4	0
Vanadium	mg/kg	0.04312 / 0.6916	ND	0.1529	0.1529	1 / 4	0.1529
Zinc	mg/kg		2.548	2.548	55.67	4 / 4	38.47

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table H-8: TVA Sampling, Fall 2009 - Bluegill Fillet at Emory River Mile 0.9

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.33	0.33	0.94	6 / 6	0.6583
Aluminum	mg/kg	0.8358 / 1.786	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.01786 / 0.01947	ND	ND	ND	0 / 6	0
Arsenic	mg/kg	0.01448 / 0.03384	ND	0.03894	0.08282	5 / 6	0.05955
Barium	mg/kg		0.0282	0.0282	0.09964	6 / 6	0.06224
Beryllium	mg/kg	0.00301 / 0.00323	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.06016 / 0.1818	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.00564 / 0.01091	ND	0.05427	0.05427	1 / 6	0.05427
Calcium	mg/kg		91.74	91.74	798	6 / 6	463.4
Chromium	mg/kg	0.1147 / 0.1221	ND	ND	ND	0 / 6	0
Cobalt	mg/kg	0.00451 / 0.01062	ND	ND	ND	0 / 6	0
Copper	mg/kg	0.1673 / 0.177	ND	0.188	0.3008	5 / 6	0.2502
Iron	mg/kg	11.6 / 12.32	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.00978 / 0.01044	ND	ND	ND	0 / 6	0
Magnesium	mg/kg		240.8	240.8	299.5	6 / 6	268.6
Manganese	mg/kg		0.1147	0.1147	0.3618	6 / 6	0.2674
Mercury	mg/kg		0.02985	0.02985	0.04824	6 / 6	0.03782
Molybdenum	mg/kg	0.01015 / 0.01414	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.03184 / 0.03363	ND	0.0195	0.03434	3 / 6	0.0286
Potassium	mg/kg		2965	2965	3271	6 / 6	3126
Selenium	mg/kg		0.7562	0.7562	1.168	6 / 6	0.9563
Silver	mg/kg	0.00279 / 0.00302	ND	ND	ND	0 / 6	0
Sodium	mg/kg		246.3	246.3	413.9	6 / 6	313
Strontium	mg/kg	0.0141 / 0.5841	ND	0.7708	0.7839	2 / 6	0.7774
Thallium	mg/kg	0.01372 / 0.01451	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.05076 / 0.05487	ND	ND	ND	0 / 6	0
Zinc	mg/kg		9.749	9.749	18.66	6 / 6	13.05

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table H-9: TVA Sampling, Fall 2009 - Bluegill Carcass at Clinch River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
Aluminum	mg/kg		4.957	4.957	61.45	3 / 3	30.12
Antimony	mg/kg	0.01256 / 0.0149	ND	ND	ND	0 / 3	0
Arsenic	mg/kg	0.0237 / 0.2417	ND	0.3458	0.3792	2 / 3	0.3625
Barium	mg/kg		0.8262	0.8262	3.2	3 / 3	1.972
Beryllium	mg/kg	0.02607 / 0.02926	ND	ND	ND	0 / 3	0
Boron	mg/kg	0.3555 / 0.4256	ND	ND	ND	0 / 3	0
Cadmium	mg/kg	0.02128 / 0.03672	ND	ND	ND	0 / 3	0
Calcium	mg/kg		16799	16799	50955	3 / 3	32959
Chromium	mg/kg	2.086 / 2.474	ND	ND	ND	0 / 3	0
Cobalt	mg/kg	0.02876 / 0.04788	ND	ND	ND	0 / 3	0
Copper	mg/kg	2.086 / 2.474	ND	ND	ND	0 / 3	0
Iron	mg/kg		17.38	17.38	67.3	3 / 3	37.86
Lead	mg/kg		0.1071	0.1071	0.1889	3 / 3	0.1469
Magnesium	mg/kg		452.9	452.9	1057	3 / 3	732.9
Manganese	mg/kg		13.95	13.95	43.85	3 / 3	27.38
Mercury	mg/kg		0.0237	0.0237	0.0306	3 / 3	0.02697
Molybdenum	mg/kg	0.06162 / 0.1091	ND	ND	ND	0 / 3	0
Nickel	mg/kg	2.086 / 2.474	ND	ND	ND	0 / 3	0
Potassium	mg/kg		2056	2056	2773	3 / 3	2401
Selenium	mg/kg		0.5688	0.5688	0.6732	3 / 3	0.6179
Silver	mg/kg	0.00261 / 0.00293	ND	ND	ND	0 / 3	0
Sodium	mg/kg		1196	1196	2038	3 / 3	1615
Strontium	mg/kg		14.81	14.81	38.39	3 / 3	25.75
Thallium	mg/kg	0.01185 / 0.0141	ND	ND	ND	0 / 3	0
Vanadium	mg/kg	0.3978 / 0.5586	ND	ND	ND	0 / 3	0
Zinc	mg/kg		34.27	34.27	62.09	3 / 3	44.36

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table H-10: TVA Sampling, Fall 2009 - Bluegill Fillet at Clinch River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.22	0.22	0.41	6 / 6	0.3317
Aluminum	mg/kg	0.8692 / 1.833	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.0184 / 0.0189	ND	ND	ND	0 / 6	0
Arsenic	mg/kg		0.03332	0.03332	0.07182	6 / 6	0.05172
Barium	mg/kg		0.03604	0.03604	0.1803	6 / 6	0.08548
Beryllium	mg/kg	0.00314 / 0.00607	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.0636 / 0.2208	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.00583 / 0.02208	ND	ND	ND	0 / 6	0
Calcium	mg/kg		263.2	263.2	2548	6 / 6	1055
Chromium	mg/kg	0.1203 / 0.1233	ND	ND	ND	0 / 6	0
Cobalt	mg/kg	0.00488 / 0.01398	ND	ND	ND	0 / 6	0
Copper	mg/kg		0.212	0.212	0.6016	6 / 6	0.4278
Iron	mg/kg	12.13 / 12.38	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.01034 / 0.01058	ND	0.01748	0.04888	2 / 6	0.03318
Magnesium	mg/kg		250	250	288.1	6 / 6	264.5
Manganese	mg/kg	0.2068 / 0.9828	ND	ND	ND	0 / 6	0
Mercury	mg/kg		0.03969	0.03969	0.09016	6 / 6	0.05292
Molybdenum	mg/kg	0.01053 / 0.02208	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.03196 / 0.03392	ND	0.03591	0.0564	5 / 6	0.04499
Potassium	mg/kg		3062	3062	3328	6 / 6	3161
Selenium	mg/kg		0.5076	0.5076	0.736	6 / 6	0.6007
Silver	mg/kg	0.00284 / 0.00478	ND	ND	ND	0 / 6	0
Sodium	mg/kg		330.8	330.8	403	6 / 6	352.9
Strontium	mg/kg		0.2256	0.2256	2.038	6 / 6	0.8417
Thallium	mg/kg	0.01429 / 0.01455	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.05264 / 0.0552	ND	ND	ND	0 / 6	0
Zinc	mg/kg		8.505	8.505	22.45	6 / 6	14.89

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table H-11: TVA Sampling, Fall 2009 - Bluegill Carcass at Clinch River Mile 25.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
Aluminum	mg/kg		5.711	5.711	30.15	4 / 4	13.12
Antimony	mg/kg	0.01374 / 0.01513	ND	ND	ND	0 / 4	0
Arsenic	mg/kg		0.3588	0.3588	0.45	4 / 4	0.3904
Barium	mg/kg		2.55	2.55	6.399	4 / 4	3.797
Beryllium	mg/kg	0.02814 / 0.03065	ND	ND	ND	0 / 4	0
Boron	mg/kg	0.402 / 0.4268	ND	ND	ND	0 / 4	0
Cadmium	mg/kg	0.01316 / 0.02328	ND	ND	ND	0 / 4	0
Calcium	mg/kg		35175	35175	51604	4 / 4	43335
Chromium	mg/kg	0.6375 / 2.483	ND	1.125	1.125	1 / 4	1.125
Cobalt	mg/kg	0.01876 / 0.04875	ND	ND	ND	0 / 4	0
Copper	mg/kg	0.7176 / 2.475	ND	ND	ND	0 / 4	0
Iron	mg/kg		12.56	12.56	65.63	4 / 4	32.72
Lead	mg/kg		0.04355	0.04355	0.0975	4 / 4	0.07925
Magnesium	mg/kg		765	765	1180	4 / 4	953.9
Manganese	mg/kg		20.21	20.21	30.2	4 / 4	23.48
Mercury	mg/kg	0.01106 / 0.01203	ND	0.01238	0.01238	1 / 4	0.01238
Molybdenum	mg/kg	0.097 / 0.1346	ND	ND	ND	0 / 4	0
Nickel	mg/kg	2.312 / 2.483	ND	ND	ND	0 / 4	0
Potassium	mg/kg		2472	2472	2805	4 / 4	2584
Selenium	mg/kg	0.06365 / 0.3647	ND	0.4485	0.6375	3 / 4	0.563
Silver	mg/kg	0.00275 / 0.00299	ND	ND	ND	0 / 4	0
Sodium	mg/kg		1969	1969	2506	4 / 4	2152
Strontium	mg/kg		32.29	32.29	44.89	4 / 4	37.37
Thallium	mg/kg	0.01307 / 0.01436	ND	ND	ND	0 / 4	0
Vanadium	mg/kg	0.3685 / 0.5625	ND	ND	ND	0 / 4	0
Zinc	mg/kg		41.63	41.63	45.9	4 / 4	44.37

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table H-12: TVA Sampling, Fall 2009 - Bluegill Fillet at Clinch River Mile 25.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.28	0.28	0.88	6 / 6	0.5317
% Moisture	%		79.4	79.4	81.4	6 / 6	80.7
Aluminum	mg/kg	0.846 / 1.771	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.01692 / 0.01916	ND	ND	ND	0 / 6	0
Arsenic	mg/kg	0.01373 / 0.08556	ND	0.1154	0.1154	1 / 6	0.1154
Barium	mg/kg		0.04092	0.04092	0.4512	6 / 6	0.1789
Beryllium	mg/kg	0.00299 / 0.00338	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.06386 / 0.1617	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.00517 / 0.02256	ND	ND	ND	0 / 6	0
Calcium	mg/kg		204.6	204.6	3252	6 / 6	1598
Chromium	mg/kg	0.1095 / 0.1241	ND	ND	ND	0 / 6	0
Cobalt	mg/kg	0.00438 / 0.00651	ND	ND	ND	0 / 6	0
Copper	mg/kg		0.2256	0.2256	0.5076	6 / 6	0.3123
Iron	mg/kg	10.95 / 12.46	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.00935 / 0.01053	ND	0.01214	0.02256	2 / 6	0.01735
Magnesium	mg/kg		273.4	273.4	348.1	6 / 6	311.2
Manganese	mg/kg		0.094	0.094	1.547	6 / 6	0.7743
Mercury	mg/kg		0.01471	0.01471	0.02256	6 / 6	0.01793
Molybdenum	mg/kg	0.00955 / 0.01466	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.03162 / 0.04136	ND	ND	ND	0 / 6	0
Potassium	mg/kg		3088	3088	3801	6 / 6	3469
Selenium	mg/kg		0.3296	0.3296	0.6324	6 / 6	0.4825
Silver	mg/kg	0.00259 / 0.00309	ND	ND	ND	0 / 6	0
Sodium	mg/kg		290.5	290.5	423	6 / 6	364.1
Strontium	mg/kg		0.1469	0.1469	2.745	6 / 6	1.188
Thallium	mg/kg	0.01294 / 0.01466	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.09612 / 0.1096	ND	ND	ND	0 / 6	0
Zinc	mg/kg		12.16	12.16	19.36	6 / 6	15.6

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table H-13: TVA Sampling, Fall 2009 - Bluegill Carcass at Clinch River Mile 1.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
Aluminum	mg/kg	18.77 / 19.68	ND	25.12	66.22	3 / 4	40.11
Antimony	mg/kg	0.01357 / 0.0149	ND	ND	ND	0 / 4	0
Arsenic	mg/kg	0.1324 / 0.1435	ND	0.1433	0.1947	3 / 4	0.1773
Barium	mg/kg		3.186	3.186	6.997	4 / 4	4.446
Beryllium	mg/kg	0.1389 / 0.1518	ND	ND	ND	0 / 4	0
Boron	mg/kg	1.938 / 2.125	ND	ND	ND	0 / 4	0
Cadmium	mg/kg	0.03553 / 0.07728	ND	0.04845	0.04845	1 / 4	0.04845
Calcium	mg/kg		31464	31464	58115	4 / 4	46177
Chromium	mg/kg	0.5814 / 0.6195	ND	0.8004	0.8004	1 / 4	0.8004
Cobalt	mg/kg	0.0646 / 0.07176	ND	0.06783	0.06783	1 / 4	0.06783
Copper	mg/kg	0.6783 / 0.7452	ND	0.7868	0.7868	1 / 4	0.7868
Iron	mg/kg	56.53 / 61.55	ND	ND	ND	0 / 4	0
Lead	mg/kg		0.1076	0.1076	0.2455	4 / 4	0.1745
Magnesium	mg/kg		761.8	761.8	1133	4 / 4	956.2
Manganese	mg/kg		19.43	19.43	43.27	4 / 4	27.43
Mercury	mg/kg		0.01918	0.01918	0.02972	4 / 4	0.02475
Molybdenum	mg/kg	0.1647 / 0.1794	ND	ND	ND	0 / 4	0
Nickel	mg/kg	0.4522 / 0.4968	ND	ND	ND	0 / 4	0
Potassium	mg/kg		2165	2165	2358	4 / 4	2276
Selenium	mg/kg		0.7452	0.7452	0.8398	4 / 4	0.7851
Silver	mg/kg	0.01357 / 0.0149	ND	ND	ND	0 / 4	0
Sodium	mg/kg		1579	1579	1979	4 / 4	1777
Strontium	mg/kg		34.78	34.78	58.41	4 / 4	47.82
Thallium	mg/kg	0.01292 / 0.01408	ND	ND	ND	0 / 4	0
Vanadium	mg/kg	0.2132 / 0.4692	ND	0.2519	0.5015	3 / 4	0.3354
Zinc	mg/kg		45.73	45.73	50.86	4 / 4	47.31

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table H-14: TVA Sampling, Fall 2009 - Bluegill Fillet at Clinch River Mile 1.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.3	0.3	0.71	6 / 6	0.5083
Aluminum	mg/kg	0.8471 / 2.88	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.018 / 0.01927	ND	ND	ND	0 / 6	0
Arsenic	mg/kg	0.01484 / 0.05064	ND	0.02295	0.0918	4 / 6	0.04794
Barium	mg/kg		0.02758	0.02758	0.198	6 / 6	0.09753
Beryllium	mg/kg	0.00306 / 0.00328	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.0612 / 0.0738	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.00566 / 0.0216	ND	ND	ND	0 / 6	0
Calcium	mg/kg		139.7	139.7	1980	6 / 6	721.9
Chromium	mg/kg	0.1163 / 0.123	ND	0.2561	0.2561	1 / 6	0.2561
Cobalt	mg/kg	0.00459 / 0.01032	ND	ND	ND	0 / 6	0
Copper	mg/kg		0.2665	0.2665	0.522	6 / 6	0.3301
Iron	mg/kg	11.01 / 12.27	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.00995 / 0.01054	ND	ND	ND	0 / 6	0
Magnesium	mg/kg		250.9	250.9	338.4	6 / 6	278
Manganese	mg/kg		0.123	0.123	0.828	6 / 6	0.4253
Mercury	mg/kg	0.00398 / 0.02365	ND	0.027	0.05945	5 / 6	0.03886
Molybdenum	mg/kg	0.01025 / 0.01087	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.03152 / 0.0344	ND	0.0468	0.1123	3 / 6	0.08516
Potassium	mg/kg		3010	3010	3618	6 / 6	3206
Selenium	mg/kg		0.8568	0.8568	1.14	6 / 6	0.9903
Silver	mg/kg	0.00288 / 0.00308	ND	ND	ND	0 / 6	0
Sodium	mg/kg		262.3	262.3	375.2	6 / 6	316.6
Strontium	mg/kg		0.09259	0.09259	2.124	6 / 6	0.7261
Thallium	mg/kg	0.01377 / 0.01462	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.05202 / 0.05535	ND	ND	ND	0 / 6	0
Zinc	mg/kg		9.84	9.84	20.6	6 / 6	14.06

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table H-15: TVA Sampling, Fall 2009 - Channel Catfish Fillet at Emory River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1.7	1.7	4.8	6 / 6	2.767
Aluminum	mg/kg	1.189 / 3.627	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.0172 / 0.1273	ND	0.2145	0.43	2 / 6	0.3223
Arsenic	mg/kg	0.03027 / 0.03342	ND	ND	ND	0 / 6	0
Barium	mg/kg	0.01848 / 0.0203	ND	0.0258	0.04389	4 / 6	0.03248
Beryllium	mg/kg	0.01342 / 0.01476	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.05676 / 0.06355	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.0129 / 0.0312	ND	ND	ND	0 / 6	0
Calcium	mg/kg		59.86	59.86	75.51	6 / 6	70.99
Chromium	mg/kg	0.1101 / 0.123	ND	0.172	0.2752	5 / 6	0.2138
Cobalt	mg/kg	0.00894 / 0.00984	ND	ND	ND	0 / 6	0
Copper	mg/kg		0.2408	0.2408	0.344	6 / 6	0.292
Iron	mg/kg	11.11 / 12.3	ND	ND	ND	0 / 6	0
Lead	mg/kg		0.0122	0.0122	4.193	6 / 6	1.684
Magnesium	mg/kg		185.8	185.8	228.3	6 / 6	205.8
Manganese	mg/kg		0.1187	0.1187	0.205	6 / 6	0.1574
Mercury	mg/kg	0.00378 / 0.0697	ND	0.04472	0.1871	5 / 6	0.0987
Molybdenum	mg/kg	0.00963 / 0.01066	ND	ND	ND	0 / 6	0
Nickel	mg/kg		0.0344	0.0344	0.05775	6 / 6	0.04223
Potassium	mg/kg		2976	2976	3639	6 / 6	3363
Selenium	mg/kg		0.1462	0.1462	0.2938	6 / 6	0.2057
Silver	mg/kg	0.00273 / 0.00294	ND	ND	ND	0 / 6	0
Sodium	mg/kg		254.1	254.1	379.3	6 / 6	323.8
Strontium	mg/kg	0.01363 / 0.078	ND	0.0904	0.0924	2 / 6	0.0914
Thallium	mg/kg	0.01307 / 0.01456	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.04816 / 0.05424	ND	ND	ND	0 / 6	0
Zinc	mg/kg		5.745	5.745	8.316	6 / 6	6.64

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table H-16: TVA Sampling, Fall 2009 - Channel Catfish Fillet at Emory River Mile 3.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1.2	1.2	5.1	6 / 6	3.25
Aluminum	mg/kg	0.8694 / 5.54	ND	7.069	7.069	1 / 6	7.069
Antimony	mg/kg	0.01673 / 0.1044	ND	0.7752	0.7752	1 / 6	0.7752
Arsenic	mg/kg	0.03383 / 0.08142	ND	ND	ND	0 / 6	0
Barium	mg/kg	0.02292 / 0.07611	ND	ND	ND	0 / 6	0
Beryllium	mg/kg	0.00286 / 0.00335	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.05508 / 0.07584	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.00669 / 0.1221	ND	ND	ND	0 / 6	0
Calcium	mg/kg		57.99	57.99	100.2	6 / 6	70.92
Chromium	mg/kg		0.1242	0.1242	0.632	6 / 6	0.2285
Cobalt	mg/kg	0.00428 / 0.01947	ND	ND	ND	0 / 6	0
Copper	mg/kg		0.2292	0.2292	0.7965	6 / 6	0.3629
Iron	mg/kg	10.87 / 12.5	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.00918 / 0.01299	ND	0.1304	7.67	4 / 6	2.482
Magnesium	mg/kg		212	212	230.5	6 / 6	221.7
Manganese	mg/kg		0.1266	0.1266	0.2655	6 / 6	0.1782
Mercury	mg/kg		0.03009	0.03009	0.189	6 / 6	0.07399
Molybdenum	mg/kg	0.00938 / 0.0108	ND	ND	ND	0 / 6	0
Nickel	mg/kg		0.04202	0.04202	0.3024	6 / 6	0.1084
Potassium	mg/kg		3459	3459	3813	6 / 6	3669
Selenium	mg/kg		0.3213	0.3213	0.3672	6 / 6	0.3448
Silver	mg/kg	0.00265 / 0.00302	ND	ND	ND	0 / 6	0
Sodium	mg/kg		231.1	231.1	373.5	6 / 6	282.6
Strontium	mg/kg	0.0567 / 0.1151	ND	ND	ND	0 / 6	0
Thallium	mg/kg	0.01285 / 0.01469	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.04692 / 0.0558	ND	ND	ND	0 / 6	0
Zinc	mg/kg		4.93	4.93	6.691	6 / 6	5.838

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table H-17: TVA Sampling, Fall 2009 - Channel Catfish Fillet at Emory River Mile 0.9

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1.6	1.6	4.8	6 / 6	2.75
Aluminum	mg/kg		2.993	2.993	5.18	6 / 6	4.085
Antimony	mg/kg	0.0175 / 0.148	ND	ND	ND	0 / 6	0
Arsenic	mg/kg	0.03075 / 0.03357	ND	ND	ND	0 / 6	0
Barium	mg/kg		0.026	0.026	0.09625	6 / 6	0.04364
Beryllium	mg/kg	0.00298 / 0.00864	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.0574 / 0.1186	ND	ND	ND	0 / 6	0
Cadmium	mg/kg		0.01568	0.01568	0.056	6 / 6	0.0323
Calcium	mg/kg		64.26	64.26	135.3	6 / 6	80.78
Chromium	mg/kg		0.1251	0.1251	0.5775	6 / 6	0.2624
Cobalt	mg/kg		0.0062	0.0062	0.0135	6 / 6	0.01001
Copper	mg/kg		0.24	0.24	0.78	6 / 6	0.3915
Iron	mg/kg	11.3 / 12.38	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.00963 / 0.00975	ND	0.05425	1.28	5 / 6	0.4633
Magnesium	mg/kg		187.2	187.2	234	6 / 6	210
Manganese	mg/kg		0.142	0.142	0.2255	6 / 6	0.1823
Mercury	mg/kg		0.02535	0.02535	0.2211	6 / 6	0.08007
Molybdenum	mg/kg	0.0098 / 0.01065	ND	ND	ND	0 / 6	0
Nickel	mg/kg		0.048	0.048	0.1663	6 / 6	0.08186
Potassium	mg/kg		3204	3204	3900	6 / 6	3519
Selenium	mg/kg		0.252	0.252	0.44	6 / 6	0.3494
Silver	mg/kg	0.00267 / 0.00302	ND	ND	ND	0 / 6	0
Sodium	mg/kg		250.2	250.2	456.3	6 / 6	324.7
Strontium	mg/kg		0.058	0.058	0.1151	6 / 6	0.07907
Thallium	mg/kg	0.02706 / 0.02975	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.09922 / 0.1089	ND	ND	ND	0 / 6	0
Zinc	mg/kg		4.078	4.078	6.332	6 / 6	5.433

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table H-18: TVA Sampling, Fall 2009 - Channel Catfish Fillet at Clinch River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		3.2	3.2	7.9	6 / 6	4.917
Aluminum	mg/kg	0.7718 / 2.807	ND	2.429	5.213	5 / 6	3.795
Antimony	mg/kg	0.01766 / 0.04896	ND	ND	ND	0 / 6	0
Arsenic	mg/kg	0.01362 / 0.03366	ND	0.01694	0.02202	4 / 6	0.0187
Barium	mg/kg	0.01793 / 0.02009	ND	0.02992	0.04232	5 / 6	0.03407
Beryllium	mg/kg	0.00288 / 0.00319	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.05675 / 0.06358	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.00522 / 0.02057	ND	0.00718	0.02497	5 / 6	0.01833
Calcium	mg/kg		68.26	68.26	96.12	6 / 6	80.56
Chromium	mg/kg		0.276	0.276	0.9307	6 / 6	0.4978
Cobalt	mg/kg	0.00431 / 0.01839	ND	0.00617	0.01022	5 / 6	0.008311
Copper	mg/kg		0.2904	0.2904	0.354	6 / 6	0.3214
Iron	mg/kg	10.87 / 12.38	ND	ND	ND	0 / 6	0
Lead	mg/kg		0.04488	0.04488	0.5184	6 / 6	0.2548
Magnesium	mg/kg		187.7	187.7	229.9	6 / 6	210.6
Manganese	mg/kg	0.07264 / 0.1646	ND	0.1566	0.1958	5 / 6	0.1705
Mercury	mg/kg		0.03872	0.03872	0.1027	6 / 6	0.07291
Molybdenum	mg/kg	0.00953 / 0.01066	ND	ND	ND	0 / 6	0
Nickel	mg/kg		0.04232	0.04232	0.06549	6 / 6	0.05747
Potassium	mg/kg		3540	3540	3790	6 / 6	3672
Selenium	mg/kg		0.1717	0.1717	0.2951	6 / 6	0.2224
Silver	mg/kg	0.00271 / 0.00299	ND	ND	ND	0 / 6	0
Sodium	mg/kg		275.3	275.3	404.1	6 / 6	319.5
Strontium	mg/kg		0.06256	0.06256	0.101	6 / 6	0.08188
Thallium	mg/kg	0.01428 / 0.02973	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.05324 / 0.1086	ND	ND	ND	0 / 6	0
Zinc	mg/kg		5.743	5.743	7.747	6 / 6	6.801

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table H-19: TVA Sampling, Fall 2009 - Channel Catfish Fillet at Clinch River Mile 25.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		3.9	3.9	9.9	6 / 6	6
Aluminum	mg/kg		1.206	1.206	3.649	6 / 6	2.717
Antimony	mg/kg	0.01706 / 0.01958	ND	0.1596	0.5016	2 / 6	0.3306
Arsenic	mg/kg	0.01373 / 0.03293	ND	0.02704	0.0798	5 / 6	0.05076
Barium	mg/kg	0.0181 / 0.04	ND	ND	ND	0 / 6	0
Beryllium	mg/kg	0.00291 / 0.00334	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.05616 / 0.152	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.00587 / 0.03648	ND	ND	ND	0 / 6	0
Calcium	mg/kg		51.83	51.83	91.4	6 / 6	65.34
Chromium	mg/kg	0.1082 / 0.121	ND	0.1144	0.2	3 / 6	0.1515
Cobalt	mg/kg	0.00661 / 0.01484	ND	ND	ND	0 / 6	0
Copper	mg/kg		0.208	0.208	0.48	6 / 6	0.3014
Iron	mg/kg	10.98 / 12.27	ND	ND	ND	0 / 6	0
Lead	mg/kg		0.02574	0.02574	5.413	6 / 6	1.178
Magnesium	mg/kg		188.3	188.3	218	6 / 6	206.3
Manganese	mg/kg		0.1144	0.1144	0.22	6 / 6	0.1463
Mercury	mg/kg		0.02	0.02	0.1109	6 / 6	0.05375
Molybdenum	mg/kg	0.00957 / 0.0128	ND	ND	ND	0 / 6	0
Nickel	mg/kg		0.0356	0.0356	0.084	6 / 6	0.05319
Potassium	mg/kg		3128	3128	3596	6 / 6	3378
Selenium	mg/kg		0.03382	0.03382	0.3328	6 / 6	0.2526
Silver	mg/kg	0.0027 / 0.00297	ND	0.0028	0.0028	1 / 6	0.0028
Sodium	mg/kg		259.9	259.9	429.7	6 / 6	342.1
Strontium	mg/kg		0.03762	0.03762	0.09306	6 / 6	0.06131
Thallium	mg/kg	0.03952 / 0.04431	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.04784 / 0.05434	ND	ND	ND	0 / 6	0
Zinc	mg/kg		5.221	5.221	7.12	6 / 6	6.248

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table H-20: TVA Sampling, Fall 2009 - Channel Catfish Fillet at Clinch River Mile 1.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1.8	1.8	8.5	5 / 5	5.1
Aluminum	mg/kg		3.082	3.082	6.122	5 / 5	4.64
Antimony	mg/kg	0.01732 / 0.01879	ND	0.2338	0.444	3 / 5	0.3384
Arsenic	mg/kg	0.01436 / 0.03326	ND	0.03173	0.03173	1 / 5	0.03173
Barium	mg/kg	0.01837 / 0.01863	ND	0.02886	0.06012	4 / 5	0.04063
Beryllium	mg/kg	0.00289 / 0.00332	ND	ND	ND	0 / 5	0
Boron	mg/kg	0.0575 / 0.06409	ND	ND	ND	0 / 5	0
Cadmium	mg/kg		0.00805	0.00805	0.1398	5 / 5	0.05941
Calcium	mg/kg		67.49	67.49	766.5	5 / 5	271.2
Chromium	mg/kg		0.1332	0.1332	0.2505	5 / 5	0.1804
Cobalt	mg/kg		0.00437	0.00437	0.00752	5 / 5	0.006321
Copper	mg/kg		0.2277	0.2277	0.482	5 / 5	0.3272
Iron	mg/kg	11.14 / 12.22	ND	ND	ND	0 / 5	0
Lead	mg/kg		0.02001	0.02001	3.495	5 / 5	1.969
Magnesium	mg/kg		203.8	203.8	236.5	5 / 5	220.7
Manganese	mg/kg		0.1199	0.1199	0.2338	5 / 5	0.1547
Mercury	mg/kg		0.03978	0.03978	0.2169	5 / 5	0.1177
Molybdenum	mg/kg	0.00977 / 0.01061	ND	ND	ND	0 / 5	0
Nickel	mg/kg		0.0483	0.0483	0.07712	5 / 5	0.06791
Potassium	mg/kg		3552	3552	3904	5 / 5	3704
Selenium	mg/kg		0.2314	0.2314	0.5083	5 / 5	0.3418
Silver	mg/kg	0.00266 / 0.00289	ND	ND	ND	0 / 5	0
Sodium	mg/kg		307.2	307.2	468.4	5 / 5	371.7
Strontium	mg/kg		0.0644	0.0644	0.668	5 / 5	0.2386
Thallium	mg/kg	0.02664 / 0.0294	ND	ND	ND	0 / 5	0
Vanadium	mg/kg	0.09812 / 0.1077	ND	ND	ND	0 / 5	0
Zinc	mg/kg		5.52	5.52	13.39	5 / 5	8.964

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table H-21: TVA Sampling, Fall 2009 - Gizzard Shad Whole Body at Emory River Mile 2.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1	1	1.3	3 / 3	1.2
Aluminum	mg/kg		373.1	373.1	545	3 / 3	440
Antimony	mg/kg		0.03248	0.03248	0.04784	3 / 3	0.03839
Arsenic	mg/kg		1.015	1.015	1.602	3 / 3	1.248
Barium	mg/kg		10.13	10.13	14.08	3 / 3	11.64
Beryllium	mg/kg	0.00312 / 0.0609	ND	0.08112	0.08112	1 / 3	0.08112
Boron	mg/kg	0.05824 / 0.609	ND	0.9152	0.9152	1 / 3	0.9152
Cadmium	mg/kg	0.02912 / 0.03485	ND	ND	ND	0 / 3	0
Calcium	mg/kg		11378	11378	15163	3 / 3	13888
Chromium	mg/kg		0.6355	0.6355	0.832	3 / 3	0.7192
Cobalt	mg/kg		0.3248	0.3248	0.4368	3 / 3	0.3632
Copper	mg/kg		1.644	1.644	2.059	3 / 3	1.822
Iron	mg/kg		315.7	315.7	451.4	3 / 3	367.4
Lead	mg/kg		0.451	0.451	0.6448	3 / 3	0.5209
Magnesium	mg/kg		336.2	336.2	385.7	3 / 3	365.4
Manganese	mg/kg		43.46	43.46	57.82	3 / 3	49.8
Mercury	mg/kg		0.01477	0.01477	0.01583	3 / 3	0.01519
Molybdenum	mg/kg	0.07511 / 0.1186	ND	ND	ND	0 / 3	0
Nickel	mg/kg		0.6355	0.6355	0.8736	3 / 3	0.7263
Potassium	mg/kg		2246	2246	2419	3 / 3	2340
Selenium	mg/kg		0.7917	0.7917	1.061	3 / 3	0.9319
Silver	mg/kg	0.00267 / 0.0027	ND	0.00406	0.00406	1 / 3	0.00406
Sodium	mg/kg		1193	1193	1267	3 / 3	1238
Strontium	mg/kg		12.26	12.26	15.85	3 / 3	14.11
Thallium	mg/kg	0.03977 / 0.04784	ND	ND	ND	0 / 3	0
Vanadium	mg/kg		1.271	1.271	1.914	3 / 3	1.508
Zinc	mg/kg		17.57	17.57	18.89	3 / 3	18.28

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table H-22: TVA Sampling, Fall 2009 - Gizzard Shad Whole Body at Emory River Mile 2.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		3.2	3.2	3.2	1 / 1	3.2
% Moisture	%		76.2	76.2	76.2	1 / 1	76.2
Aluminum	mg/kg		280.8	280.8	280.8	1 / 1	280.8
Antimony	mg/kg	0.01904 / 0.01904	ND	ND	ND	0 / 1	0
Arsenic	mg/kg		0.476	0.476	0.476	1 / 1	0.476
Barium	mg/kg		7.188	7.188	7.188	1 / 1	7.188
Beryllium	mg/kg	0.0238 / 0.0238	ND	ND	ND	0 / 1	0
Boron	mg/kg	0.1071 / 0.1071	ND	ND	ND	0 / 1	0
Cadmium	mg/kg	0.0219 / 0.0219	ND	ND	ND	0 / 1	0
Calcium	mg/kg		13447	13447	13447	1 / 1	13447
Chromium	mg/kg		1.285	1.285	1.285	1 / 1	1.285
Cobalt	mg/kg		0.2856	0.2856	0.2856	1 / 1	0.2856
Copper	mg/kg		1.642	1.642	1.642	1 / 1	1.642
Iron	mg/kg		368.9	368.9	368.9	1 / 1	368.9
Lead	mg/kg		0.476	0.476	0.476	1 / 1	0.476
Magnesium	mg/kg		371.3	371.3	371.3	1 / 1	371.3
Manganese	mg/kg		46.89	46.89	46.89	1 / 1	46.89
Mercury	mg/kg	0.01785 / 0.01785	ND	ND	ND	0 / 1	0
Molybdenum	mg/kg	0.0595 / 0.0595	ND	ND	ND	0 / 1	0
Nickel	mg/kg		0.4998	0.4998	0.4998	1 / 1	0.4998
Potassium	mg/kg		2666	2666	2666	1 / 1	2666
Selenium	mg/kg		0.7378	0.7378	0.7378	1 / 1	0.7378
Silver	mg/kg	0.00309 / 0.00309	ND	ND	ND	0 / 1	0
Sodium	mg/kg		1280	1280	1280	1 / 1	1280
Strontium	mg/kg		9.925	9.925	9.925	1 / 1	9.925
Thallium	mg/kg	0.02618 / 0.02618	ND	ND	ND	0 / 1	0
Vanadium	mg/kg		0.6664	0.6664	0.6664	1 / 1	0.6664
Zinc	mg/kg		17.09	17.09	17.09	1 / 1	17.09

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table H-23: TVA Sampling, Fall 2009 - Gizzard Shad Whole Body at East Embayment

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		3.1	3.1	3.6	3 / 3	3.367
% Moisture	%		77.8	77.8	78.5	3 / 3	78.07
Aluminum	mg/kg		206.6	206.6	244.2	3 / 3	225.4
Antimony	mg/kg	0.01871 / 0.01923	ND	ND	ND	0 / 3	0
Arsenic	mg/kg		0.6235	0.6235	0.8214	3 / 3	0.71
Barium	mg/kg		5.879	5.879	8.747	3 / 3	7.205
Beryllium	mg/kg	0.01485 / 0.0157	ND	ND	ND	0 / 3	0
Boron	mg/kg		0.1547	0.1547	0.2365	3 / 3	0.1918
Cadmium	mg/kg	0.01352 / 0.03094	ND	ND	ND	0 / 3	0
Calcium	mg/kg		14409	14409	22156	3 / 3	17743
Chromium	mg/kg		0.3225	0.3225	0.7735	3 / 3	0.4985
Cobalt	mg/kg		0.1548	0.1548	0.1843	3 / 3	0.169
Copper	mg/kg		1.054	1.054	1.149	3 / 3	1.09
Iron	mg/kg		202.7	202.7	239.8	3 / 3	220.1
Lead	mg/kg		0.1989	0.1989	0.2886	3 / 3	0.2413
Magnesium	mg/kg		340.3	340.3	444	3 / 3	389.7
Manganese	mg/kg		46.41	46.41	72.15	3 / 3	62.53
Mercury	mg/kg	0.01598 / 0.01806	ND	ND	ND	0 / 3	0
Molybdenum	mg/kg	0.01066 / 0.137	ND	0.222	0.222	1 / 3	0.222
Nickel	mg/kg		0.258	0.258	0.3108	3 / 3	0.2854
Potassium	mg/kg		2232	2232	2464	3 / 3	2361
Selenium	mg/kg		1.161	1.161	1.199	3 / 3	1.177
Silver	mg/kg	0.00289 / 0.00398	ND	ND	ND	0 / 3	0
Sodium	mg/kg		1043	1043	1268	3 / 3	1135
Strontium	mg/kg		11.85	11.85	19.29	3 / 3	15.48
Thallium	mg/kg	0.04199 / 0.05994	ND	ND	ND	0 / 3	0
Vanadium	mg/kg		0.559	0.559	0.7104	3 / 3	0.6147
Zinc	mg/kg		18.1	18.1	19.96	3 / 3	19.05

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table H-24: TVA Sampling, Fall 2009 - Gizzard Shad Whole Body at Clinch River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		4.6	4.6	5.2	3 / 3	4.933
% Moisture	%		73.8	73.8	77.5	3 / 3	75.57
Aluminum	mg/kg		89.6	89.6	156.5	3 / 3	115
Antimony	mg/kg	0.01703 / 0.01943	ND	ND	ND	0 / 3	0
Arsenic	mg/kg		0.2489	0.2489	0.2952	3 / 3	0.2789
Barium	mg/kg		3.038	3.038	4.674	3 / 3	4.108
Beryllium	mg/kg	0.00288 / 0.0081	ND	ND	ND	0 / 3	0
Boron	mg/kg	0.07074 / 0.1255	ND	ND	ND	0 / 3	0
Cadmium	mg/kg		0.01205	0.01205	0.05175	3 / 3	0.02758
Calcium	mg/kg		7830	7830	15458	3 / 3	11699
Chromium	mg/kg		0.1939	0.1939	0.4182	3 / 3	0.309
Cobalt	mg/kg		0.108	0.108	0.1574	3 / 3	0.1269
Copper	mg/kg		0.8908	0.8908	1.148	3 / 3	0.9994
Iron	mg/kg		117.9	117.9	202	3 / 3	153.7
Lead	mg/kg		0.1755	0.1755	0.2362	3 / 3	0.2019
Magnesium	mg/kg		315	315	411.3	3 / 3	360.2
Manganese	mg/kg		29.48	29.48	46.25	3 / 3	39.83
Mercury	mg/kg		0.02306	0.02306	0.03198	3 / 3	0.02885
Molybdenum	mg/kg	0.01231 / 0.01823	ND	ND	ND	0 / 3	0
Nickel	mg/kg		0.1467	0.1467	0.3825	3 / 3	0.2584
Potassium	mg/kg		2485	2485	2882	3 / 3	2667
Selenium	mg/kg		0.4182	0.4182	0.5764	3 / 3	0.5115
Silver	mg/kg	0.00262 / 0.00295	ND	0.0099	0.0099	1 / 3	0.0099
Sodium	mg/kg		833.9	833.9	1085	3 / 3	919.4
Strontium	mg/kg		5.94	5.94	14.17	3 / 3	10.25
Thallium	mg/kg	0.02646 / 0.03001	ND	ND	ND	0 / 3	0
Vanadium	mg/kg		0.1733	0.1733	0.2706	3 / 3	0.2108
Zinc	mg/kg		18.38	18.38	19.22	3 / 3	18.93

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table H-25: TVA Sampling, Fall 2009 - Gizzard Shad Whole Body at Clinch River Mile 25.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		3.8	3.8	3.8	2 / 2	3.8
% Moisture	%		76	76	77.4	2 / 2	76.7
Aluminum	mg/kg		115.7	115.7	138.7	2 / 2	127.2
Antimony	mg/kg	0.01718 / 0.01752	ND	ND	ND	0 / 2	0
Arsenic	mg/kg		0.2215	0.2215	0.24	2 / 2	0.2308
Barium	mg/kg		2.576	2.576	3.144	2 / 2	2.86
Beryllium	mg/kg	0.00294 / 0.00312	ND	ND	ND	0 / 2	0
Boron	mg/kg	0.0936 / 0.1266	ND	ND	ND	0 / 2	0
Cadmium	mg/kg	0.00723 / 0.01416	ND	ND	ND	0 / 2	0
Calcium	mg/kg		11255	11255	11352	2 / 2	11304
Chromium	mg/kg		0.1831	0.1831	0.288	2 / 2	0.2356
Cobalt	mg/kg		0.09718	0.09718	0.1608	2 / 2	0.129
Copper	mg/kg		0.7232	0.7232	0.84	2 / 2	0.7816
Iron	mg/kg		124.1	124.1	139.2	2 / 2	131.7
Lead	mg/kg		0.1062	0.1062	0.1584	2 / 2	0.1323
Magnesium	mg/kg		345.8	345.8	357.6	2 / 2	351.7
Manganese	mg/kg		24.18	24.18	33.6	2 / 2	28.89
Mercury	mg/kg		0.01175	0.01175	0.012	2 / 2	0.01188
Molybdenum	mg/kg	0.0174 / 0.02088	ND	ND	ND	0 / 2	0
Nickel	mg/kg	0.1514 / 0.1944	ND	ND	ND	0 / 2	0
Potassium	mg/kg		2832	2832	2848	2 / 2	2840
Selenium	mg/kg		0.7458	0.7458	0.84	2 / 2	0.7929
Silver	mg/kg	0.00264 / 0.00271	ND	ND	ND	0 / 2	0
Sodium	mg/kg		1053	1053	1092	2 / 2	1073
Strontium	mg/kg		7.512	7.512	9.967	2 / 2	8.74
Thallium	mg/kg	0.01311 / 0.01344	ND	ND	ND	0 / 2	0
Vanadium	mg/kg		0.165	0.165	0.264	2 / 2	0.2145
Zinc	mg/kg		14.46	14.46	15.02	2 / 2	14.74

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table H-26: TVA Sampling, Fall 2009 - Gizzard Shad Whole Body at Clinch River Mile 1.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1.6	1.6	2.2	3 / 3	1.967
% Moisture	%		77.7	77.7	78.5	3 / 3	77.97
Aluminum	mg/kg		320.4	320.4	374.6	3 / 3	348.4
Antimony	mg/kg	0.01762 / 0.01918	ND	ND	ND	0 / 3	0
Arsenic	mg/kg		0.4237	0.4237	0.4515	3 / 3	0.4404
Barium	mg/kg		6.45	6.45	7.805	3 / 3	7.301
Beryllium	mg/kg	0.02365 / 0.02899	ND	ND	ND	0 / 3	0
Boron	mg/kg		0.258	0.258	0.3122	3 / 3	0.2867
Cadmium	mg/kg	0.01806 / 0.0258	ND	ND	ND	0 / 3	0
Calcium	mg/kg		10127	10127	13269	3 / 3	11902
Chromium	mg/kg		0.645	0.645	0.7582	3 / 3	0.6907
Cobalt	mg/kg		0.215	0.215	0.2676	3 / 3	0.2426
Copper	mg/kg		1.583	1.583	1.72	3 / 3	1.629
Iron	mg/kg		309.6	309.6	374.6	3 / 3	338.8
Lead	mg/kg		0.3791	0.3791	0.645	3 / 3	0.4752
Magnesium	mg/kg		395.6	395.6	450.5	3 / 3	420.3
Manganese	mg/kg		47.3	47.3	57.31	3 / 3	52.41
Mercury	mg/kg	0.02795 / 0.02899	ND	ND	ND	0 / 3	0
Molybdenum	mg/kg	0.03225 / 0.03568	ND	ND	ND	0 / 3	0
Nickel	mg/kg		0.5352	0.5352	0.645	3 / 3	0.5941
Potassium	mg/kg		2542	2542	2654	3 / 3	2585
Selenium	mg/kg		0.6467	0.6467	0.669	3 / 3	0.6607
Silver	mg/kg	0.00268 / 0.0029	ND	ND	ND	0 / 3	0
Sodium	mg/kg		1187	1187	1229	3 / 3	1211
Strontium	mg/kg		8.299	8.299	10.9	3 / 3	9.87
Thallium	mg/kg	0.01762 / 0.02453	ND	ND	ND	0 / 3	0
Vanadium	mg/kg		0.7525	0.7525	0.8028	3 / 3	0.7786
Zinc	mg/kg		17.44	17.44	18.6	3 / 3	17.9

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table H-27: TVA Sampling, Fall 2009 - Largemouth Bass Carcass at Little Emory River Mile 2.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		5	5	5.1	2 / 2	5.05
Aluminum	mg/kg	2.957 / 4.109	ND	22.01	22.01	1 / 4	22.01
Antimony	mg/kg	0.01439 / 0.0192	ND	0.1308	0.1308	1 / 4	0.1308
Arsenic	mg/kg		0.1655	0.1655	0.4251	4 / 4	0.2925
Barium	mg/kg		0.7613	0.7613	1.733	4 / 4	1.173
Beryllium	mg/kg	0.0149 / 0.03017	ND	ND	ND	0 / 4	0
Boron	mg/kg	0.1993 / 0.4251	ND	ND	ND	0 / 4	0
Cadmium	mg/kg	0.00585 / 0.05778	ND	ND	ND	0 / 4	0
Calcium	mg/kg		11772	11772	23100	4 / 4	17734
Chromium	mg/kg	0.1201 / 0.1201	ND	0.2878	0.5136	3 / 4	0.4106
Cobalt	mg/kg	0.01201 / 0.0327	ND	ND	ND	0 / 4	0
Copper	mg/kg		0.3852	0.3852	0.4965	4 / 4	0.4268
Iron	mg/kg		15.57	15.57	41.86	4 / 4	26.68
Lead	mg/kg	0.01059 / 0.07194	ND	ND	ND	0 / 4	0
Magnesium	mg/kg		486.6	486.6	728.7	4 / 4	591
Manganese	mg/kg		1.766	1.766	5.297	4 / 4	3.174
Mercury	mg/kg	0.0043 / 0.04004	ND	0.05559	0.07613	3 / 4	0.06317
Molybdenum	mg/kg	0.01622 / 0.03597	ND	ND	ND	0 / 4	0
Nickel	mg/kg		0.09548	0.09548	0.2729	4 / 4	0.2122
Potassium	mg/kg	48.05 / 3695	ND	2261	2452	2 / 4	2357
Selenium	mg/kg		0.5544	0.5544	0.642	4 / 4	0.6117
Silver	mg/kg	0.00288 / 0.01669	ND	ND	ND	0 / 4	0
Sodium	mg/kg		1481	1481	1843	4 / 4	1623
Strontium	mg/kg		15.56	15.56	21.47	4 / 4	17.94
Thallium	mg/kg	0.0138 / 0.01456	ND	ND	ND	0 / 4	0
Vanadium	mg/kg	0.04578 / 0.04815	ND	0.04905	0.1109	3 / 4	0.07759
Zinc	mg/kg		18.93	18.93	24	4 / 4	21.98

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table H-28: TVA Sampling, Fall 2009 - Largemouth Bass Fillet at Little Emory River Mile 2.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.31	0.31	6.2	6 / 6	1.48
Aluminum	mg/kg	0.8643 / 11.85	ND	78.79	78.79	1 / 6	78.79
Antimony	mg/kg	0.01679 / 0.01869	ND	0.1183	1.09	3 / 6	0.7538
Arsenic	mg/kg	0.01474 / 0.1266	ND	0.1452	0.1862	2 / 6	0.1657
Barium	mg/kg	0.01788 / 0.01958	ND	0.02604	0.0402	5 / 6	0.03527
Beryllium	mg/kg	0.01308 / 0.01489	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.1748 / 0.1973	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.00564 / 0.04142	ND	ND	ND	0 / 6	0
Calcium	mg/kg		108.2	108.2	283.4	6 / 6	186.1
Chromium	mg/kg	0.109 / 0.1172	ND	0.1518	0.3136	5 / 6	0.2255
Cobalt	mg/kg	0.00436 / 0.00784	ND	ND	ND	0 / 6	0
Copper	mg/kg	0.157 / 0.1693	ND	0.187	0.5037	5 / 6	0.3232
Iron	mg/kg	10.9 / 12.31	ND	12.45	13.8	2 / 6	13.13
Lead	mg/kg	0.00981 / 0.022	ND	0.2613	0.4599	3 / 6	0.3449
Magnesium	mg/kg		261.3	261.3	310.3	6 / 6	281.7
Manganese	mg/kg		0.0902	0.0902	0.1658	6 / 6	0.1361
Mercury	mg/kg		0.06048	0.06048	0.09765	6 / 6	0.08416
Molybdenum	mg/kg	0.00937 / 0.01814	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.02834 / 0.03255	ND	0.0396	0.06272	5 / 6	0.05262
Potassium	mg/kg		3678	3678	4211	6 / 6	3955
Selenium	mg/kg		0.4221	0.4221	0.5694	6 / 6	0.4983
Silver	mg/kg	0.00262 / 0.00307	ND	ND	ND	0 / 6	0
Sodium	mg/kg		311.7	311.7	369.6	6 / 6	332.9
Strontium	mg/kg	0.0133 / 0.09855	ND	0.1003	0.2018	3 / 6	0.1664
Thallium	mg/kg	0.01286 / 0.01456	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.04796 / 0.05208	ND	0.06322	0.448	5 / 6	0.1814
Zinc	mg/kg		5.346	5.346	17.71	6 / 6	11.11

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table H-29: TVA Sampling, Fall 2009 - Largemouth Bass Carcass at Emory River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		6.2	6.2	7.4	2 / 2	6.8
% Moisture	%		67.8	67.8	67.8	2 / 2	67.8
Aluminum	mg/kg	2.351 / 3.059	ND	13.14	14.25	2 / 4	13.7
Antimony	mg/kg	0.01431 / 0.01932	ND	ND	ND	0 / 4	0
Arsenic	mg/kg		0.2157	0.2157	0.3542	4 / 4	0.2719
Barium	mg/kg		0.7728	0.7728	1.664	4 / 4	1.192
Beryllium	mg/kg	0.00319 / 0.03014	ND	ND	ND	0 / 4	0
Boron	mg/kg	0.06118 / 0.411	ND	ND	ND	0 / 4	0
Cadmium	mg/kg	0.01352 / 0.03014	ND	ND	ND	0 / 4	0
Calcium	mg/kg		11476	11476	22315	4 / 4	17027
Chromium	mg/kg		0.1224	0.1224	0.4508	4 / 4	0.2894
Cobalt	mg/kg	0.00934 / 0.02599	ND	ND	ND	0 / 4	0
Copper	mg/kg		0.3836	0.3836	0.5256	4 / 4	0.4527
Iron	mg/kg		22.44	22.44	27.95	4 / 4	24.68
Lead	mg/kg	0.01191 / 0.1898	ND	ND	ND	0 / 4	0
Magnesium	mg/kg		463.7	463.7	649.4	4 / 4	571.2
Manganese	mg/kg		2.479	2.479	6.249	4 / 4	4.105
Mercury	mg/kg		0.07728	0.07728	0.103	4 / 4	0.09391
Molybdenum	mg/kg	0.01191 / 0.03562	ND	ND	ND	0 / 4	0
Nickel	mg/kg	0.0322 / 0.0805	ND	0.2479	0.438	3 / 4	0.3117
Potassium	mg/kg	48.3 / 3617	ND	2167	2360	2 / 4	2264
Selenium	mg/kg		0.483	0.483	0.5474	4 / 4	0.5192
Silver	mg/kg	0.00283 / 0.00483	ND	ND	ND	0 / 4	0
Sodium	mg/kg		1385	1385	1863	4 / 4	1606
Strontium	mg/kg		15.01	15.01	20.5	4 / 4	17.86
Thallium	mg/kg	0.0137 / 0.01449	ND	ND	ND	0 / 4	0
Vanadium	mg/kg	0.0438 / 0.1095	ND	0.0548	0.0548	1 / 4	0.0548
Zinc	mg/kg		17.52	17.52	22.58	4 / 4	19.95

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table H-30: TVA Sampling, Fall 2009 - Largemouth Bass Fillet at Emory River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.17	0.17	1.8	6 / 6	1.012
Aluminum	mg/kg	0.8897 / 11.01	ND	80.51	80.51	1 / 6	80.51
Antimony	mg/kg	0.01697 / 0.1154	ND	0.9812	1.162	2 / 6	1.072
Arsenic	mg/kg	0.0145 / 0.08405	ND	0.1204	0.1773	4 / 6	0.1491
Barium	mg/kg	0.01968 / 0.0434	ND	ND	ND	0 / 6	0
Beryllium	mg/kg	0.00283 / 0.00333	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.05656 / 0.0651	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.01232 / 0.04728	ND	ND	ND	0 / 6	0
Calcium	mg/kg		103.9	103.9	293	6 / 6	178.9
Chromium	mg/kg	0.1091 / 0.1091	ND	0.162	0.3152	5 / 6	0.2228
Cobalt	mg/kg	0.00513 / 0.00999	ND	ND	ND	0 / 6	0
Copper	mg/kg	0.1596 / 0.1596	ND	0.1886	0.4662	5 / 6	0.3169
Iron	mg/kg	10.99 / 12.5	ND	11.62	14.6	2 / 6	13.11
Lead	mg/kg	0.00981 / 0.1312	ND	1.154	14.32	3 / 6	8.958
Magnesium	mg/kg		262.6	262.6	290.8	6 / 6	273.9
Manganese	mg/kg		0.0861	0.0861	0.1675	6 / 6	0.1271
Mercury	mg/kg		0.09456	0.09456	0.1989	6 / 6	0.1365
Molybdenum	mg/kg	0.00949 / 0.0165	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.0303 / 0.06944	ND	ND	ND	0 / 6	0
Potassium	mg/kg		3636	3636	3916	6 / 6	3799
Selenium	mg/kg		0.3838	0.3838	0.555	6 / 6	0.4361
Silver	mg/kg	0.00263 / 0.00304	ND	ND	ND	0 / 6	0
Sodium	mg/kg		280.8	280.8	336.7	6 / 6	317.1
Strontium	mg/kg	0.01333 / 0.1064	ND	0.1778	0.1996	2 / 6	0.1887
Thallium	mg/kg	0.01293 / 0.01476	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.09696 / 0.1107	ND	ND	ND	0 / 6	0
Zinc	mg/kg		4.531	4.531	16.99	6 / 6	10.18

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table H-31: TVA Sampling, Fall 2009 - Largemouth Bass Carcass at Emory River Mile 3.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
Aluminum	mg/kg	19.73 / 20.72	ND	ND	ND	0 / 3	0
Antimony	mg/kg	0.0143 / 0.01492	ND	ND	ND	0 / 3	0
Arsenic	mg/kg		0.2009	0.2009	0.292	3 / 3	0.2539
Barium	mg/kg		1.32	1.32	1.57	3 / 3	1.459
Beryllium	mg/kg	0.1459 / 0.1521	ND	ND	ND	0 / 3	0
Boron	mg/kg	2.031 / 2.153	ND	ND	ND	0 / 3	0
Cadmium	mg/kg	0.04018 / 0.0785	ND	0.04879	0.04879	1 / 3	0.04879
Calcium	mg/kg		27007	27007	31746	3 / 3	29549
Chromium	mg/kg	0.6292 / 0.6601	ND	ND	ND	0 / 3	0
Cobalt	mg/kg	0.06864 / 0.07222	ND	ND	ND	0 / 3	0
Copper	mg/kg	0.715 / 0.7536	ND	ND	ND	0 / 3	0
Iron	mg/kg	59.49 / 62.28	ND	ND	ND	0 / 3	0
Lead	mg/kg	0.02746 / 0.0287	ND	0.04082	0.04576	2 / 3	0.04329
Magnesium	mg/kg		700.3	700.3	756.7	3 / 3	737.3
Manganese	mg/kg		5.711	5.711	9.326	3 / 3	7.93
Mercury	mg/kg		0.03432	0.03432	0.05652	3 / 3	0.04846
Molybdenum	mg/kg	0.1745 / 0.1808	ND	ND	ND	0 / 3	0
Nickel	mg/kg	0.4862 / 0.5166	ND	ND	ND	0 / 3	0
Potassium	mg/kg		2168	2168	2418	3 / 3	2290
Selenium	mg/kg		0.429	0.429	0.7462	3 / 3	0.6011
Silver	mg/kg	0.0143 / 0.01492	ND	ND	ND	0 / 3	0
Sodium	mg/kg		1758	1758	1905	3 / 3	1810
Strontium	mg/kg		21.64	21.64	23.54	3 / 3	22.78
Thallium	mg/kg	0.01373 / 0.01435	ND	ND	ND	0 / 3	0
Vanadium	mg/kg	0.4576 / 0.471	ND	ND	ND	0 / 3	0
Zinc	mg/kg		22.25	22.25	31.05	3 / 3	26.6

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table H-32: TVA Sampling, Fall 2009 - Largemouth Bass Fillet at Emory River Mile 3.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.58	0.58	7.3	6 / 6	3.047
Aluminum	mg/kg	0.798 / 4.699	ND	6.494	109.7	3 / 6	43.33
Antimony	mg/kg	0.01647 / 0.08487	ND	0.2784	2.247	2 / 6	1.263
Arsenic	mg/kg	0.01346 / 0.1801	ND	0.2042	0.2042	1 / 6	0.2042
Barium	mg/kg	0.01763 / 0.04011	ND	ND	ND	0 / 6	0
Beryllium	mg/kg	0.00278 / 0.00318	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.05568 / 0.06129	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.00554 / 0.0812	ND	0.3438	1.325	2 / 6	0.8344
Calcium	mg/kg		115.4	115.4	409.5	6 / 6	195.3
Chromium	mg/kg		0.126	0.126	0.4761	6 / 6	0.2201
Cobalt	mg/kg	0.00441 / 0.01398	ND	ND	ND	0 / 6	0
Copper	mg/kg		0.2323	0.2323	0.4872	6 / 6	0.3438
Iron	mg/kg	10.67 / 11.8	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.00905 / 0.05348	ND	0.7245	25.41	4 / 6	7.45
Magnesium	mg/kg		267.4	267.4	294.6	6 / 6	286.1
Manganese	mg/kg		0.1114	0.1114	0.176	6 / 6	0.1474
Mercury	mg/kg		0.05104	0.05104	0.1218	6 / 6	0.07687
Molybdenum	mg/kg	0.00928 / 0.01022	ND	ND	ND	0 / 6	0
Nickel	mg/kg		0.042	0.042	0.1509	6 / 6	0.08221
Potassium	mg/kg		3648	3648	4171	6 / 6	3881
Selenium	mg/kg		0.454	0.454	0.714	6 / 6	0.5947
Silver	mg/kg	0.00255 / 0.0058	ND	ND	ND	0 / 6	0
Sodium	mg/kg		347.3	347.3	419.5	6 / 6	388.3
Strontium	mg/kg	0.01365 / 0.1108	ND	0.1677	0.294	2 / 6	0.2309
Thallium	mg/kg	0.01253 / 0.01778	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.0464 / 0.05221	ND	ND	ND	0 / 6	0
Zinc	mg/kg		5.516	5.516	9.321	6 / 6	8.078

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table H-33: TVA Sampling, Fall 2009 - Largemouth Bass Carcass at Emory River Mile 2.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		9.9	9.9	9.9	1 / 1	9.9
% Moisture	%		66.6	66.6	66.6	1 / 1	66.6
Aluminum	mg/kg	1.002 / 1.002	ND	ND	ND	0 / 1	0
Antimony	mg/kg	0.01937 / 0.01937	ND	ND	ND	0 / 1	0
Arsenic	mg/kg		0.314	0.314	0.314	1 / 1	0.314
Barium	mg/kg		0.7014	0.7014	0.7014	1 / 1	0.7014
Beryllium	mg/kg	0.00334 / 0.00334	ND	ND	ND	0 / 1	0
Boron	mg/kg	0.1102 / 0.1102	ND	ND	ND	0 / 1	0
Cadmium	mg/kg	0.01035 / 0.01035	ND	ND	ND	0 / 1	0
Calcium	mg/kg		15431	15431	15431	1 / 1	15431
Chromium	mg/kg	0.1236 / 0.1236	ND	ND	ND	0 / 1	0
Cobalt	mg/kg	0.03073 / 0.03073	ND	ND	ND	0 / 1	0
Copper	mg/kg		0.5678	0.5678	0.5678	1 / 1	0.5678
Iron	mg/kg		22.98	22.98	22.98	1 / 1	22.98
Lead	mg/kg	0.01804 / 0.01804	ND	ND	ND	0 / 1	0
Magnesium	mg/kg		424.2	424.2	424.2	1 / 1	424.2
Manganese	mg/kg		2.639	2.639	2.639	1 / 1	2.639
Mercury	mg/kg		0.0334	0.0334	0.0334	1 / 1	0.0334
Molybdenum	mg/kg	0.02271 / 0.02271	ND	ND	ND	0 / 1	0
Nickel	mg/kg		0.05678	0.05678	0.05678	1 / 1	0.05678
Potassium	mg/kg		2144	2144	2144	1 / 1	2144
Selenium	mg/kg		0.6346	0.6346	0.6346	1 / 1	0.6346
Silver	mg/kg	0.00301 / 0.00301	ND	ND	ND	0 / 1	0
Sodium	mg/kg		1510	1510	1510	1 / 1	1510
Strontium	mg/kg		14.8	14.8	14.8	1 / 1	14.8
Thallium	mg/kg	0.01536 / 0.01536	ND	ND	ND	0 / 1	0
Vanadium	mg/kg	0.05344 / 0.05344	ND	ND	ND	0 / 1	0
Zinc	mg/kg		19.07	19.07	19.07	1 / 1	19.07

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table H-34: TVA Sampling, Fall 2009 - Largemouth Bass Carcass at Emory River Mile 0.9

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		9.1	9.1	9.1	1 / 1	9.1
% Moisture	%		67.7	67.7	67.7	1 / 1	67.7
Aluminum	mg/kg	0.8721 / 4.114	ND	ND	ND	0 / 4	0
Antimony	mg/kg	0.01324 / 0.01938	ND	ND	ND	0 / 4	0
Arsenic	mg/kg		0.3553	0.3553	0.68	4 / 4	0.5203
Barium	mg/kg		0.5814	0.5814	1.292	4 / 4	1.023
Beryllium	mg/kg	0.00323 / 0.03026	ND	ND	ND	0 / 4	0
Boron	mg/kg	0.08721 / 0.442	ND	ND	ND	0 / 4	0
Cadmium	mg/kg	0.00918 / 0.03133	ND	ND	ND	0 / 4	0
Calcium	mg/kg		18346	18346	46240	4 / 4	28866
Chromium	mg/kg	0.1227 / 2.34	ND	0.85	0.85	1 / 4	0.85
Cobalt	mg/kg	0.00485 / 0.0342	ND	0.05814	0.05814	1 / 4	0.05814
Copper	mg/kg	0.1809 / 2.482	ND	0.5491	0.5491	1 / 4	0.5491
Iron	mg/kg		13.02	13.02	18.16	4 / 4	15.96
Lead	mg/kg	0.01066 / 0.02552	ND	0.02746	0.0476	3 / 4	0.03426
Magnesium	mg/kg		461.9	461.9	914.6	4 / 4	675.1
Manganese	mg/kg		2.293	2.293	4.974	4 / 4	3.617
Mercury	mg/kg		0.04522	0.04522	0.0646	4 / 4	0.05106
Molybdenum	mg/kg	0.02358 / 0.0374	ND	ND	ND	0 / 4	0
Nickel	mg/kg	0.0323 / 2.482	ND	0.04199	0.04199	1 / 4	0.04199
Potassium	mg/kg		2225	2225	2615	4 / 4	2379
Selenium	mg/kg		0.578	0.578	1.008	4 / 4	0.768
Silver	mg/kg	0.00265 / 0.00549	ND	ND	ND	0 / 4	0
Sodium	mg/kg		1463	1463	2098	4 / 4	1782
Strontium	mg/kg		13.66	13.66	39.1	4 / 4	24.38
Thallium	mg/kg	0.0126 / 0.01486	ND	ND	ND	0 / 4	0
Vanadium	mg/kg	0.05491 / 0.34	ND	ND	ND	0 / 4	0
Zinc	mg/kg		17.31	17.31	28.59	4 / 4	23.76

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table H-35: TVA Sampling, Fall 2009 - Largemouth Bass Fillet at Emory River Mile 0.9

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.64	0.64	4.5	6 / 6	2.11
Aluminum	mg/kg	1.387 / 3.72	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.01691 / 0.1088	ND	ND	ND	0 / 6	0
Arsenic	mg/kg		0.05952	0.05952	0.2354	6 / 6	0.163
Barium	mg/kg	0.01805 / 0.01901	ND	0.0266	0.1027	4 / 6	0.05426
Beryllium	mg/kg	0.00285 / 0.0032	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.057 / 0.06864	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.00532 / 0.02176	ND	ND	ND	0 / 6	0
Calcium	mg/kg		137.1	137.1	346	6 / 6	209.7
Chromium	mg/kg		0.2568	0.2568	0.56	6 / 6	0.353
Cobalt	mg/kg	0.0048 / 0.02198	ND	ND	ND	0 / 6	0
Copper	mg/kg		0.1862	0.1862	0.444	6 / 6	0.2976
Iron	mg/kg	10.96 / 12.34	ND	19.49	19.49	1 / 6	19.49
Lead	mg/kg	0.00931 / 0.0104	ND	0.06448	1.177	2 / 6	0.6207
Magnesium	mg/kg		255.4	255.4	276	6 / 6	268.4
Manganese	mg/kg		0.131	0.131	0.26	6 / 6	0.1774
Mercury	mg/kg		0.06656	0.06656	0.3072	6 / 6	0.1104
Molybdenum	mg/kg	0.0095 / 0.0144	ND	ND	ND	0 / 6	0
Nickel	mg/kg		0.0428	0.0428	0.102	6 / 6	0.07052
Potassium	mg/kg		3474	3474	3895	6 / 6	3636
Selenium	mg/kg		0.54	0.54	0.7872	6 / 6	0.6705
Silver	mg/kg	0.00266 / 0.003	ND	ND	ND	0 / 6	0
Sodium	mg/kg		336	336	433.9	6 / 6	372.6
Strontium	mg/kg	0.07488 / 0.26	ND	ND	ND	0 / 6	0
Thallium	mg/kg	0.01292 / 0.0146	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.0475 / 0.054	ND	ND	ND	0 / 6	0
Zinc	mg/kg		4.685	4.685	12.81	6 / 6	9.895

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table H-36: TVA Sampling, Fall 2009 - Largemouth Bass Carcass at Clinch River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		8.7	8.7	8.7	1 / 1	8.7
% Moisture	%		68.5	68.5	68.5	1 / 1	68.5
Aluminum	mg/kg	0.882 / 4.016	ND	6.581	8.532	2 / 4	7.557
Antimony	mg/kg	0.01357 / 0.01922	ND	ND	ND	0 / 4	0
Arsenic	mg/kg		0.315	0.315	0.6783	4 / 4	0.5084
Barium	mg/kg		0.567	0.567	1.5	4 / 4	1.134
Beryllium	mg/kg	0.00315 / 0.03069	ND	ND	ND	0 / 4	0
Boron	mg/kg	0.07245 / 0.4433	ND	ND	ND	0 / 4	0
Cadmium	mg/kg	0.01197 / 0.04998	ND	ND	ND	0 / 4	0
Calcium	mg/kg		22302	22302	38199	4 / 4	29282
Chromium	mg/kg	0.1229 / 2.489	ND	ND	ND	0 / 4	0
Cobalt	mg/kg	0.01355 / 0.02619	ND	ND	ND	0 / 4	0
Copper	mg/kg	0.1796 / 2.489	ND	0.4725	0.4725	1 / 4	0.4725
Iron	mg/kg		13.04	13.04	37.8	4 / 4	19.77
Lead	mg/kg	0.0104 / 0.02794	ND	0.01418	0.04284	3 / 4	0.0289
Magnesium	mg/kg		491.4	491.4	881.8	4 / 4	690.6
Manganese	mg/kg		2.463	2.463	3.444	4 / 4	2.993
Mercury	mg/kg		0.04725	0.04725	0.0714	4 / 4	0.06199
Molybdenum	mg/kg	0.01575 / 0.03751	ND	ND	ND	0 / 4	0
Nickel	mg/kg	0.03465 / 2.489	ND	0.0945	0.0945	1 / 4	0.0945
Potassium	mg/kg		2107	2107	2549	4 / 4	2414
Selenium	mg/kg		0.4725	0.4725	0.6402	4 / 4	0.5574
Silver	mg/kg	0.00268 / 0.003	ND	ND	ND	0 / 4	0
Sodium	mg/kg		1295	1295	2203	4 / 4	1854
Strontium	mg/kg		16.41	16.41	27.88	4 / 4	20.7
Thallium	mg/kg	0.01285 / 0.01449	ND	ND	ND	0 / 4	0
Vanadium	mg/kg	0.05355 / 0.341	ND	ND	ND	0 / 4	0
Zinc	mg/kg	0.5985 / 24.96	ND	11.2	20.85	3 / 4	16.65

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table H-37: TVA Sampling, Fall 2009 - Largemouth Bass Fillet at Clinch River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.49	0.49	2.7	6 / 6	1.652
Aluminum	mg/kg	1.62 / 4.558	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.01778 / 0.03408	ND	ND	ND	0 / 6	0
Arsenic	mg/kg		0.1598	0.1598	0.2297	6 / 6	0.2003
Barium	mg/kg	0.01832 / 0.02009	ND	0.02323	0.03604	2 / 6	0.02964
Beryllium	mg/kg	0.00298 / 0.00324	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.05751 / 0.0648	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.00545 / 0.04028	ND	0.04408	0.04977	2 / 6	0.04693
Calcium	mg/kg		130.4	130.4	1208	6 / 6	370.7
Chromium	mg/kg	0.1108 / 0.1208	ND	0.1296	0.4266	4 / 6	0.2189
Cobalt	mg/kg	0.00464 / 0.00948	ND	ND	ND	0 / 6	0
Copper	mg/kg		0.1683	0.1683	0.2607	6 / 6	0.2226
Iron	mg/kg	11.16 / 12.19	ND	ND	ND	0 / 6	0
Lead	mg/kg		0.01555	0.01555	0.3621	6 / 6	0.1508
Magnesium	mg/kg		266.8	266.8	318	6 / 6	284.2
Manganese	mg/kg	0.1235 / 0.2056	ND	ND	ND	0 / 6	0
Mercury	mg/kg		0.04686	0.04686	0.116	6 / 6	0.08581
Molybdenum	mg/kg	0.0098 / 0.0128	ND	ND	ND	0 / 6	0
Nickel	mg/kg		0.02982	0.02982	0.1398	6 / 6	0.07305
Potassium	mg/kg		3389	3389	3774	6 / 6	3643
Selenium	mg/kg		0.4104	0.4104	0.5214	6 / 6	0.4681
Silver	mg/kg	0.00269 / 0.00302	ND	ND	ND	0 / 6	0
Sodium	mg/kg		330.2	330.2	488.2	6 / 6	407.1
Strontium	mg/kg		0.05751	0.05751	0.8268	6 / 6	0.2339
Thallium	mg/kg	0.01321 / 0.01442	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.04899 / 0.054	ND	ND	ND	0 / 6	0
Zinc	mg/kg		7.308	7.308	12.66	6 / 6	9.149

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table H-38: TVA Sampling, Fall 2009 - Largemouth Bass Carcass at Clinch River Mile 25.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		4.1	4.1	6.1	2 / 2	5.1
% Moisture	%		62.6	62.6	68.6	2 / 2	65.6
Aluminum	mg/kg	0.8602 / 4.126	ND	5.127	5.127	1 / 4	5.127
Antimony	mg/kg	0.015 / 0.01915	ND	ND	ND	0 / 4	0
Arsenic	mg/kg		0.2952	0.2952	0.8525	4 / 4	0.5747
Barium	mg/kg		0.5236	0.5236	1.633	4 / 4	1.083
Beryllium	mg/kg	0.00322 / 0.03054	ND	ND	ND	0 / 4	0
Boron	mg/kg	0.06358 / 0.4147	ND	ND	ND	0 / 4	0
Cadmium	mg/kg	0.00598 / 0.01159	ND	ND	ND	0 / 4	0
Calcium	mg/kg		23487	23487	50868	4 / 4	33885
Chromium	mg/kg	0.1197 / 2.489	ND	ND	ND	0 / 4	0
Cobalt	mg/kg	0.00486 / 0.02575	ND	ND	ND	0 / 4	0
Copper	mg/kg	0.1758 / 2.489	ND	0.3454	0.3553	2 / 4	0.3504
Iron	mg/kg		14.19	14.19	17.91	4 / 4	16.05
Lead	mg/kg	0.01047 / 0.02865	ND	0.01384	0.03454	2 / 4	0.02419
Magnesium	mg/kg		576	576	979.7	4 / 4	762.4
Manganese	mg/kg		1.346	1.346	6.688	4 / 4	3.228
Mercury	mg/kg		0.02558	0.02558	0.03703	4 / 4	0.0302
Molybdenum	mg/kg	0.01197 / 0.03751	ND	ND	ND	0 / 4	0
Nickel	mg/kg	0.0374 / 2.489	ND	ND	ND	0 / 4	0
Potassium	mg/kg		1944	1944	2503	4 / 4	2243
Selenium	mg/kg		0.748	0.748	1.169	4 / 4	0.8886
Silver	mg/kg	0.00292 / 0.00301	ND	ND	ND	0 / 4	0
Sodium	mg/kg		1625	1625	2214	4 / 4	1854
Strontium	mg/kg		21.06	21.06	37.68	4 / 4	28.04
Thallium	mg/kg	0.01421 / 0.01507	ND	ND	ND	0 / 4	0
Vanadium	mg/kg	0.1073 / 0.377	ND	ND	ND	0 / 4	0
Zinc	mg/kg		16.72	16.72	29.46	4 / 4	23.83

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table H-39: TVA Sampling, Fall 2009 - Largemouth Bass Fillet at Clinch River Mile 25.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.98	0.98	2.3	5 / 5	1.736
% Moisture	%		76.4	76.4	81.2	5 / 5	78.06
Aluminum	mg/kg	0.7668 / 1.982	ND	ND	ND	0 / 5	0
Antimony	mg/kg	0.01661 / 0.01778	ND	0.02769	0.2053	4 / 5	0.1157
Arsenic	mg/kg		0.141	0.141	0.4047	5 / 5	0.2602
Barium	mg/kg	0.01768 / 0.0188	ND	0.02475	0.06136	4 / 5	0.04094
Beryllium	mg/kg	0.00277 / 0.00329	ND	ND	ND	0 / 5	0
Boron	mg/kg	0.05538 / 0.06345	ND	ND	ND	0 / 5	0
Cadmium	mg/kg	0.00564 / 0.0376	ND	ND	ND	0 / 5	0
Calcium	mg/kg		93.44	93.44	549.5	5 / 5	294.5
Chromium	mg/kg		0.1274	0.1274	0.27	5 / 5	0.1835
Cobalt	mg/kg	0.00426 / 0.00684	ND	ND	ND	0 / 5	0
Copper	mg/kg		0.3195	0.3195	1.062	5 / 5	0.4931
Iron	mg/kg	10.8 / 12.24	ND	ND	ND	0 / 5	0
Lead	mg/kg		0.0198	0.0198	1.817	5 / 5	0.8495
Magnesium	mg/kg		183.1	183.1	305.5	5 / 5	256.9
Manganese	mg/kg		0.08325	0.08325	0.177	5 / 5	0.1188
Mercury	mg/kg		0.01581	0.01581	0.07332	5 / 5	0.04848
Molybdenum	mg/kg	0.00937 / 0.01058	ND	ND	ND	0 / 5	0
Nickel	mg/kg	0.036 / 0.0752	ND	ND	ND	0 / 5	0
Potassium	mg/kg		2620	2620	4160	5 / 5	3467
Selenium	mg/kg		0.7332	0.7332	0.9165	5 / 5	0.7961
Silver	mg/kg	0.00256 / 0.00306	ND	ND	ND	0 / 5	0
Sodium	mg/kg		328	328	446	5 / 5	386.5
Strontium	mg/kg		0.03948	0.03948	0.4686	5 / 5	0.2265
Thallium	mg/kg	0.01278 / 0.01434	ND	ND	ND	0 / 5	0
Vanadium	mg/kg	0.09521 / 0.1074	ND	ND	ND	0 / 5	0
Zinc	mg/kg		9.344	9.344	35.87	5 / 5	16

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table H-40: TVA Sampling, Fall 2009 - Largemouth Bass Carcass at Clinch River Mile 1.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		9	9	11.5	2 / 2	10.25
% Moisture	%		63.6	63.6	65.5	2 / 2	64.55
Aluminum	mg/kg	0.8625 / 20.09	ND	ND	ND	0 / 4	0
Antimony	mg/kg	0.01373 / 0.01929	ND	ND	ND	0 / 4	0
Arsenic	mg/kg		0.1997	0.1997	0.6048	4 / 4	0.4047
Barium	mg/kg		0.728	0.728	2.028	4 / 4	1.274
Beryllium	mg/kg	0.00311 / 0.1469	ND	ND	ND	0 / 4	0
Boron	mg/kg	0.0621 / 2.074	ND	ND	ND	0 / 4	0
Cadmium	mg/kg	0.00552 / 0.07776	ND	ND	ND	0 / 4	0
Calcium	mg/kg		29775	29775	36374	4 / 4	33042
Chromium	mg/kg	0.1173 / 0.648	ND	ND	ND	0 / 4	0
Cobalt	mg/kg	0.01484 / 0.06912	ND	ND	ND	0 / 4	0
Copper	mg/kg	0.1691 / 0.7344	ND	0.414	0.4368	2 / 4	0.4254
Iron	mg/kg	12.42 / 60.48	ND	16.49	54.24	2 / 4	35.37
Lead	mg/kg	0.02277 / 0.04732	ND	ND	ND	0 / 4	0
Magnesium	mg/kg		622.4	622.4	881.3	4 / 4	756.2
Manganese	mg/kg		2.243	2.243	6.998	4 / 4	3.896
Mercury	mg/kg	0.00414 / 0.00437	ND	0.00821	0.04368	3 / 4	0.02684
Molybdenum	mg/kg	0.01035 / 0.1771	ND	ND	ND	0 / 4	0
Nickel	mg/kg	0.0314 / 0.4752	ND	0.04004	0.05175	2 / 4	0.0459
Potassium	mg/kg		1866	1866	2402	4 / 4	2115
Selenium	mg/kg		0.4061	0.4061	0.5616	4 / 4	0.4724
Silver	mg/kg	0.00283 / 0.01469	ND	ND	ND	0 / 4	0
Sodium	mg/kg		1645	1645	1863	4 / 4	1727
Strontium	mg/kg		20.97	20.97	36.5	4 / 4	28.96
Thallium	mg/kg	0.0131 / 0.01893	ND	ND	ND	0 / 4	0
Vanadium	mg/kg	0.05175 / 0.4752	ND	ND	ND	0 / 4	0
Zinc	mg/kg		20.35	20.35	25.12	4 / 4	23.02

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table H-41: TVA Sampling, Fall 2009 - Largemouth Bass Fillet at Clinch River Mile 1.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.23	0.23	4.9	6 / 6	2.397
Aluminum	mg/kg	1.511 / 2.94	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.01739 / 0.01929	ND	0.04872	0.207	3 / 6	0.1225
Arsenic	mg/kg		0.05858	0.05858	0.2892	6 / 6	0.1892
Barium	mg/kg		0.01863	0.01863	0.04263	6 / 6	0.03041
Beryllium	mg/kg	0.0029 / 0.00325	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.05796 / 0.06496	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.00566 / 0.01615	ND	0.1212	0.1212	1 / 6	0.1212
Calcium	mg/kg		265	265	1192	6 / 6	617.6
Chromium	mg/kg		0.135	0.135	0.4646	6 / 6	0.238
Cobalt	mg/kg	0.0047 / 0.01279	ND	ND	ND	0 / 6	0
Copper	mg/kg		0.1827	0.1827	0.2892	6 / 6	0.2415
Iron	mg/kg	10.91 / 11.97	ND	13.97	13.97	1 / 6	13.97
Lead	mg/kg	0.00952 / 0.01475	ND	0.1567	2.298	5 / 6	0.8816
Magnesium	mg/kg		279.6	279.6	298.4	6 / 6	289.8
Manganese	mg/kg		0.1201	0.1201	0.2436	6 / 6	0.1789
Mercury	mg/kg		0.03374	0.03374	0.06868	6 / 6	0.05217
Molybdenum	mg/kg	0.00973 / 0.01076	ND	ND	ND	0 / 6	0
Nickel	mg/kg		0.03105	0.03105	0.2222	6 / 6	0.06987
Potassium	mg/kg		3309	3309	3575	6 / 6	3450
Selenium	mg/kg		0.3519	0.3519	0.5858	6 / 6	0.4191
Silver	mg/kg	0.00269 / 0.00305	ND	ND	ND	0 / 6	0
Sodium	mg/kg		333.2	333.2	403.7	6 / 6	375.8
Strontium	mg/kg		0.1739	0.1739	0.9048	6 / 6	0.5083
Thallium	mg/kg	0.01325 / 0.01462	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.04968 / 0.05481	ND	ND	ND	0 / 6	0
Zinc	mg/kg		7.981	7.981	10.82	6 / 6	9.164

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table H-42: TVA Sampling, Fall 2009 - Threadfin Shad Whole Body at East Embayment

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1.4	1.4	2	3 / 3	1.7
% Moisture	%		82	82	82.8	3 / 3	82.53
Aluminum	mg/kg		114.1	114.1	197.8	3 / 3	143.9
Antimony	mg/kg	0.01782 / 0.01892	ND	ND	ND	0 / 3	0
Arsenic	mg/kg		0.3956	0.3956	0.516	3 / 3	0.4359
Barium	mg/kg		4.506	4.506	5.022	3 / 3	4.748
Beryllium	mg/kg	0.01386 / 0.01479	ND	ND	ND	0 / 3	0
Boron	mg/kg	0.0594 / 0.0594	ND	0.0688	0.08256	2 / 3	0.07568
Cadmium	mg/kg	0.01294 / 0.01381	ND	ND	ND	0 / 3	0
Calcium	mg/kg		9598	9598	11232	3 / 3	10399
Chromium	mg/kg		0.198	0.198	0.2752	3 / 3	0.2265
Cobalt	mg/kg	0.00482 / 0.09288	ND	0.1238	0.1238	1 / 3	0.1238
Copper	mg/kg		0.936	0.936	1.015	3 / 3	0.9771
Iron	mg/kg		106.6	106.6	175.4	3 / 3	130.4
Lead	mg/kg		0.086	0.086	0.1376	3 / 3	0.1045
Magnesium	mg/kg		292.4	292.4	326.8	3 / 3	312
Manganese	mg/kg		37.5	37.5	39.56	3 / 3	38.59
Mercury	mg/kg	0.0108 / 0.01686	ND	ND	ND	0 / 3	0
Molybdenum	mg/kg	0.0688 / 0.08428	ND	ND	ND	0 / 3	0
Nickel	mg/kg		0.1278	0.1278	0.2236	3 / 3	0.1682
Potassium	mg/kg		1823	1823	2098	3 / 3	1943
Selenium	mg/kg		0.7224	0.7224	0.828	3 / 3	0.7691
Silver	mg/kg	0.00292 / 0.00414	ND	ND	ND	0 / 3	0
Sodium	mg/kg		612.3	612.3	703.5	3 / 3	652.2
Strontium	mg/kg		7.946	7.946	8.686	3 / 3	8.298
Thallium	mg/kg	0.01892 / 0.02408	ND	ND	ND	0 / 3	0
Vanadium	mg/kg		0.252	0.252	0.43	3 / 3	0.3191
Zinc	mg/kg		27	27	30.06	3 / 3	28.19

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

APPENDIX I

Tennessee Aquarium / Appalachian State University (Splits), Winter 2010

Table I-1: Tennessee Aquarium / Appalachian State University (Splits), Jan 2010 - Black Crappie Fillet at Tennessee River Mile 567.0

Analyte	Units (freeze dried basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		2	2	3.7	2 / 2	2.85
Aluminum	mg/kg	0.83 / 0.83	ND	1.5	1.5	1 / 2	1.5
Antimony	mg/kg	0.018 / 0.019	ND	ND	ND	0 / 2	0
Arsenic	mg/kg		0.66	0.66	1.3	2 / 2	0.98
Barium	mg/kg		0.095	0.095	0.13	2 / 2	0.1125
Beryllium	mg/kg	0.0031 / 0.0031	ND	0.0099	0.0099	1 / 2	0.0099
Boron	mg/kg	0.06 / 0.06	ND	0.11	0.11	1 / 2	0.11
Cadmium	mg/kg	0.0056 / 0.0056	ND	0.0077	0.0077	1 / 2	0.0077
Calcium	mg/kg		1020	1020	1830	2 / 2	1425
Chromium	mg/kg		0.14	0.14	0.16	2 / 2	0.15
Cobalt	mg/kg		0.0064	0.0064	0.015	2 / 2	0.0107
Copper	mg/kg		0.69	0.69	1.1	2 / 2	0.895
Iron	mg/kg	11.7 / 12.3	ND	ND	ND	0 / 2	0
Lead	mg/kg		0.019	0.019	0.34	2 / 2	0.1795
Magnesium	mg/kg		1450	1450	1480	2 / 2	1465
Manganese	mg/kg		0.46	0.46	1.1	2 / 2	0.78
Mercury	mg/kg		0.076	0.076	0.16	2 / 2	0.118
Molybdenum	mg/kg	0.01 / 0.011	ND	ND	ND	0 / 2	0
Nickel	mg/kg		0.05	0.05	0.072	2 / 2	0.061
Potassium	mg/kg		20800	20800	22300	2 / 2	21550
Selenium	mg/kg		1.8	1.8	2.5	2 / 2	2.15
Silver	mg/kg	0.0028 / 0.003	ND	ND	ND	0 / 2	0
Sodium	mg/kg		1110	1110	1130	2 / 2	1120
Strontium	mg/kg		0.65	0.65	1.3	2 / 2	0.975
Thallium	mg/kg		0.048	0.048	0.062	2 / 2	0.055
Vanadium	mg/kg	0.051 / 0.054	ND	ND	ND	0 / 2	0
Zinc	mg/kg		21.1	21.1	22.2	2 / 2	21.65

Notes:

Grab sample results are from freeze dried samples.

For definitions, see the Acronyms section.

Table I-2: Tennessee Aquarium / Appalachian State University (Splits), Jan 2010 - Black Crappie Liver at Tennessee River Mile 567.0

Analyte	Units (freeze dried basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
Aluminum	mg/kg		2.5	2.5	2.5	1 / 1	2.5
Antimony	mg/kg	0.019 / 0.019	ND	ND	ND	0 / 1	0
Arsenic	mg/kg		3.2	3.2	3.2	1 / 1	3.2
Barium	mg/kg	0.027 / 0.027	ND	ND	ND	0 / 1	0
Beryllium	mg/kg	0.0033 / 0.0033	ND	ND	ND	0 / 1	0
Boron	mg/kg	0.064 / 0.064	ND	ND	ND	0 / 1	0
Cadmium	mg/kg		0.051	0.051	0.051	1 / 1	0.051
Calcium	mg/kg		132	132	132	1 / 1	132
Chromium	mg/kg		0.26	0.26	0.26	1 / 1	0.26
Cobalt	mg/kg		0.068	0.068	0.068	1 / 1	0.068
Copper	mg/kg		7.9	7.9	7.9	1 / 1	7.9
Iron	mg/kg		203	203	203	1 / 1	203
Lead	mg/kg		0.052	0.052	0.052	1 / 1	0.052
Magnesium	mg/kg		722	722	722	1 / 1	722
Manganese	mg/kg		2.7	2.7	2.7	1 / 1	2.7
Mercury	mg/kg		0.06	0.06	0.06	1 / 1	0.06
Molybdenum	mg/kg		0.33	0.33	0.33	1 / 1	0.33
Nickel	mg/kg		0.17	0.17	0.17	1 / 1	0.17
Potassium	mg/kg		11300	11300	11300	1 / 1	11300
Selenium	mg/kg		6.3	6.3	6.3	1 / 1	6.3
Silver	mg/kg		0.01	0.01	0.01	1 / 1	0.01
Sodium	mg/kg		3160	3160	3160	1 / 1	3160
Strontium	mg/kg		0.14	0.14	0.14	1 / 1	0.14
Thallium	mg/kg		0.13	0.13	0.13	1 / 1	0.13
Vanadium	mg/kg		0.12	0.12	0.12	1 / 1	0.12
Zinc	mg/kg		91.4	91.4	91.4	1 / 1	91.4

Notes:

Grab sample results are from freeze dried samples.

For definitions, see the Acronyms section.

Table I-3: Tennessee Aquarium / Appalachian State University (Splits), Jan 2010 - Black Crappie Ovary at Tennessee River Mile 567.0

Analyte	Units (freeze dried basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		20.6	20.6	20.6	1 / 1	20.6
Aluminum	mg/kg		3	3	3	1 / 1	3
Antimony	mg/kg	0.017 / 0.017	ND	ND	ND	0 / 1	0
Arsenic	mg/kg		1	1	1	1 / 1	1
Barium	mg/kg		0.14	0.14	0.14	1 / 1	0.14
Beryllium	mg/kg	0.0029 / 0.0029	ND	ND	ND	0 / 1	0
Boron	mg/kg	0.057 / 0.057	ND	ND	ND	0 / 1	0
Cadmium	mg/kg	0.0053 / 0.0053	ND	ND	ND	0 / 1	0
Calcium	mg/kg		317	317	317	1 / 1	317
Chromium	mg/kg	0.11 / 0.11	ND	ND	ND	0 / 1	0
Cobalt	mg/kg		0.094	0.094	0.094	1 / 1	0.094
Copper	mg/kg		3.6	3.6	3.6	1 / 1	3.6
Iron	mg/kg		48.7	48.7	48.7	1 / 1	48.7
Lead	mg/kg		0.051	0.051	0.051	1 / 1	0.051
Magnesium	mg/kg		987	987	987	1 / 1	987
Manganese	mg/kg		3.2	3.2	3.2	1 / 1	3.2
Mercury	mg/kg		0.009	0.009	0.009	1 / 1	0.009
Molybdenum	mg/kg		0.099	0.099	0.099	1 / 1	0.099
Nickel	mg/kg		0.14	0.14	0.14	1 / 1	0.14
Potassium	mg/kg		12000	12000	12000	1 / 1	12000
Selenium	mg/kg		4.2	4.2	4.2	1 / 1	4.2
Silver	mg/kg	0.0027 / 0.0027	ND	ND	ND	0 / 1	0
Sodium	mg/kg		2330	2330	2330	1 / 1	2330
Strontium	mg/kg		0.3	0.3	0.3	1 / 1	0.3
Thallium	mg/kg		0.06	0.06	0.06	1 / 1	0.06
Vanadium	mg/kg	0.049 / 0.049	ND	ND	ND	0 / 1	0
Zinc	mg/kg		164	164	164	1 / 1	164

Notes:

Grab sample results are from freeze dried samples.

For definitions, see the Acronyms section.

Table I-4: Tennessee Aquarium / Appalachian State University (Splits), Jan 2010 - Bluegill Whole Body at Tennessee River Mile 567.0

Analyte	Units (freeze dried basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		2.8	2.8	13.9	34 / 34	8.353
Aluminum	mg/kg	4 / 25.1	ND	7.1	712	24 / 34	89.65
Antimony	mg/kg	0.035 / 0.039	ND	ND	ND	0 / 34	0
Arsenic	mg/kg		0.45	0.45	1.5	34 / 34	0.8056
Barium	mg/kg		3.7	3.7	12.8	34 / 34	6.179
Beryllium	mg/kg	0.0061 / 0.016	ND	0.0068	0.095	11 / 34	0.02127
Boron	mg/kg	0.12 / 0.32	ND	0.3	0.9	3 / 34	0.6067
Cadmium	mg/kg	0.027 / 0.03	ND	0.028	0.063	11 / 34	0.04145
Calcium	mg/kg		48300	48300	112000	34 / 34	69541
Chromium	mg/kg	0.55 / 0.62	ND	0.74	4.9	34 / 34	1.43
Cobalt	mg/kg		0.049	0.049	0.53	34 / 34	0.1273
Copper	mg/kg		1.1	1.1	2.7	34 / 34	1.579
Iron	mg/kg	55.9 / 62.5	ND	62.1	601	22 / 34	127.9
Lead	mg/kg		0.1	0.1	1.2	34 / 34	0.3571
Magnesium	mg/kg		1700	1700	2810	34 / 34	2135
Manganese	mg/kg		29.5	29.5	108	34 / 34	52.39
Mercury	mg/kg		0.029	0.029	0.18	34 / 34	0.05821
Molybdenum	mg/kg		0.077	0.077	0.64	34 / 34	0.171
Nickel	mg/kg		0.22	0.22	1.6	34 / 34	0.59
Potassium	mg/kg		8680	8680	11800	34 / 34	10608
Selenium	mg/kg		1.2	1.2	3.7	34 / 34	2.003
Silver	mg/kg	0.013 / 0.015	ND	ND	ND	0 / 34	0
Sodium	mg/kg		3190	3190	5940	34 / 34	4419
Strontium	mg/kg		42.3	42.3	108	34 / 34	63.4
Thallium	mg/kg	0.026 / 0.029	ND	0.028	0.12	17 / 34	0.05524
Vanadium	mg/kg	0.25 / 0.28	ND	0.29	2.7	31 / 34	0.7371
Zinc	mg/kg		81.9	81.9	175	34 / 34	136.7

Notes:

Grab sample results are from freeze dried samples.

For definitions, see the Acronyms section.

Table I-5: Tennessee Aquarium / Appalachian State University (Splits), Jan 2010 - Gizzard Shad Fillet at Clinch River Mile 3.5

Analyte	Units (freeze dried basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		4.3	4.3	8.2	4 / 4	6.75
Aluminum	mg/kg		18.7	18.7	139	4 / 4	60.35
Antimony	mg/kg	0.018 / 0.019	ND	ND	ND	0 / 4	0
Arsenic	mg/kg		0.17	0.17	0.51	4 / 4	0.2825
Barium	mg/kg		2	2	4.4	4 / 4	2.85
Beryllium	mg/kg	0.003 / 0.0033	ND	0.004	0.018	3 / 4	0.009633
Boron	mg/kg	0.06 / 0.064	ND	0.11	0.11	1 / 4	0.11
Cadmium	mg/kg	0.0055 / 0.006	ND	0.0096	0.0096	1 / 4	0.0096
Calcium	mg/kg		5580	5580	8670	4 / 4	7463
Chromium	mg/kg		0.16	0.16	0.78	4 / 4	0.46
Cobalt	mg/kg		0.05	0.05	0.14	4 / 4	0.0775
Copper	mg/kg		1.5	1.5	4	4 / 4	2.45
Iron	mg/kg		52.4	52.4	161	4 / 4	86.33
Lead	mg/kg		0.077	0.077	0.38	4 / 4	0.1648
Magnesium	mg/kg		1040	1040	1280	4 / 4	1148
Manganese	mg/kg		9.6	9.6	33.2	4 / 4	20.95
Mercury	mg/kg		0.052	0.052	0.069	4 / 4	0.0595
Molybdenum	mg/kg		0.016	0.016	0.031	4 / 4	0.021
Nickel	mg/kg		0.11	0.11	0.39	4 / 4	0.2075
Potassium	mg/kg		16200	16200	19800	4 / 4	18125
Selenium	mg/kg		1.2	1.2	4.2	4 / 4	2.8
Silver	mg/kg	0.0028 / 0.003	ND	ND	ND	0 / 4	0
Sodium	mg/kg		2910	2910	4140	4 / 4	3353
Strontium	mg/kg		4	4	6.6	4 / 4	5.125
Thallium	mg/kg		0.026	0.026	0.067	4 / 4	0.04775
Vanadium	mg/kg		0.069	0.069	0.4	4 / 4	0.1798
Zinc	mg/kg		18.7	18.7	23.4	4 / 4	20.6

Notes:

Grab sample results are from freeze dried samples.

For definitions, see the Acronyms section.

Table I-6: Tennessee Aquarium / Appalachian State University (Splits), Jan 2010 - Gizzard Shad Whole Body at Clinch River Mile 3.5

Analyte	Units (freeze dried basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		6.4	6.4	14.5	4 / 4	10.93
Aluminum	mg/kg		888	888	1610	4 / 4	1290
Antimony	mg/kg		0.047	0.047	0.074	4 / 4	0.06125
Arsenic	mg/kg		1.9	1.9	3.2	4 / 4	2.55
Barium	mg/kg		22.6	22.6	50.3	4 / 4	32.63
Beryllium	mg/kg		0.089	0.089	0.14	4 / 4	0.1173
Boron	mg/kg		0.71	0.71	1.3	4 / 4	1.063
Cadmium	mg/kg		0.08	0.08	0.16	4 / 4	0.1225
Calcium	mg/kg		24600	24600	68100	4 / 4	47825
Chromium	mg/kg		2.3	2.3	4	4 / 4	2.95
Cobalt	mg/kg		0.76	0.76	1.4	4 / 4	1.135
Copper	mg/kg		5.2	5.2	7.9	4 / 4	6.175
Iron	mg/kg		992	992	1810	4 / 4	1423
Lead	mg/kg		1.1	1.1	2.5	4 / 4	1.95
Magnesium	mg/kg		1030	1030	1570	4 / 4	1325
Manganese	mg/kg		141	141	395	4 / 4	263.8
Mercury	mg/kg		0.18	0.18	0.35	4 / 4	0.2275
Molybdenum	mg/kg		0.14	0.14	0.19	4 / 4	0.175
Nickel	mg/kg		1.4	1.4	2.3	4 / 4	1.875
Potassium	mg/kg		8790	8790	10900	4 / 4	10098
Selenium	mg/kg		2.8	2.8	3.8	4 / 4	3.375
Silver	mg/kg		0.0068	0.0068	0.027	4 / 4	0.0136
Sodium	mg/kg		3210	3210	5480	4 / 4	4460
Strontium	mg/kg		23.5	23.5	61.2	4 / 4	39.68
Thallium	mg/kg		0.093	0.093	0.14	4 / 4	0.1183
Vanadium	mg/kg		2.7	2.7	4.1	4 / 4	3.425
Zinc	mg/kg		41.6	41.6	95.3	4 / 4	64.48

Notes:

Grab sample results are from freeze dried samples.

For definitions, see the Acronyms section.

Table I-7: Tennessee Aquarium / Appalachian State University (Splits), Jan 2010 - Largemouth Bass Fillet at Tennessee River Mile 567.0

Analyte	Units (freeze dried basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		2.9	2.9	7.7	8 / 8	4.275
Aluminum	mg/kg	0.83 / 0.85	ND	0.94	5.5	7 / 8	2.206
Antimony	mg/kg	0.018 / 0.019	ND	ND	ND	0 / 8	0
Arsenic	mg/kg		1	1	1.7	8 / 8	1.35
Barium	mg/kg		0.049	0.049	0.11	8 / 8	0.07775
Beryllium	mg/kg	0.0031 / 0.0033	ND	ND	ND	0 / 8	0
Boron	mg/kg	0.061 / 0.064	ND	0.067	0.067	1 / 8	0.067
Cadmium	mg/kg	0.0056 / 0.0059	ND	0.0073	0.016	3 / 8	0.01043
Calcium	mg/kg		1140	1140	2250	8 / 8	1673
Chromium	mg/kg	0.12 / 0.12	ND	0.2	0.39	6 / 8	0.2867
Cobalt	mg/kg		0.018	0.018	0.025	8 / 8	0.02163
Copper	mg/kg		1.1	1.1	1.4	8 / 8	1.238
Iron	mg/kg	11.8 / 12.5	ND	12.3	14.1	5 / 8	12.98
Lead	mg/kg		0.01	0.01	0.16	8 / 8	0.037
Magnesium	mg/kg		1170	1170	1470	8 / 8	1340
Manganese	mg/kg		0.48	0.48	1	8 / 8	0.7913
Mercury	mg/kg		0.09	0.09	0.25	8 / 8	0.1488
Molybdenum	mg/kg	0.01 / 0.011	ND	ND	ND	0 / 8	0
Nickel	mg/kg		0.05	0.05	0.28	8 / 8	0.1324
Potassium	mg/kg		16300	16300	22800	8 / 8	20100
Selenium	mg/kg		1.6	1.6	2.1	8 / 8	1.8
Silver	mg/kg	0.0028 / 0.003	ND	ND	ND	0 / 8	0
Sodium	mg/kg		1150	1150	1430	8 / 8	1331
Strontium	mg/kg		0.73	0.73	1.5	8 / 8	1.118
Thallium	mg/kg		0.025	0.025	0.052	8 / 8	0.0375
Vanadium	mg/kg	0.052 / 0.055	ND	ND	ND	0 / 8	0
Zinc	mg/kg		21.6	21.6	36.5	8 / 8	27.6

Notes:

Grab sample results are from freeze dried samples.

For definitions, see the Acronyms section.

Table I-8: Tennessee Aquarium / Appalachian State University (Splits), Jan 2010 - Largemouth Bass Liver at Tennessee River Mile 567.0

Analyte	Units (freeze dried basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		17.3	17.3	17.3	1 / 1	17.3
Aluminum	mg/kg		1.5	1.5	4.2	2 / 2	2.85
Antimony	mg/kg	0.018 / 0.019	ND	ND	ND	0 / 2	0
Arsenic	mg/kg		1.6	1.6	2.2	2 / 2	1.9
Barium	mg/kg	0.025 / 0.04	ND	ND	ND	0 / 2	0
Beryllium	mg/kg	0.003 / 0.0032	ND	ND	ND	0 / 2	0
Boron	mg/kg	0.06 / 0.062	ND	ND	ND	0 / 2	0
Cadmium	mg/kg		0.097	0.097	5.6	2 / 2	2,849
Calcium	mg/kg		80.4	80.4	292	2 / 2	186.2
Chromium	mg/kg	0.11 / 0.12	ND	ND	ND	0 / 2	0
Cobalt	mg/kg		0.29	0.29	0.4	2 / 2	0.345
Copper	mg/kg		7.9	7.9	29.1	2 / 2	18.5
Iron	mg/kg		391	391	407	2 / 2	399
Lead	mg/kg		0.039	0.039	0.058	2 / 2	0.0485
Magnesium	mg/kg		437	437	748	2 / 2	592.5
Manganese	mg/kg		3.5	3.5	5	2 / 2	4.25
Mercury	mg/kg		0.032	0.032	0.11	2 / 2	0.071
Molybdenum	mg/kg		0.36	0.36	0.62	2 / 2	0.49
Nickel	mg/kg		0.12	0.12	0.23	2 / 2	0.175
Potassium	mg/kg		9840	9840	11900	2 / 2	10870
Selenium	mg/kg		3.9	3.9	5.7	2 / 2	4.8
Silver	mg/kg		0.0091	0.0091	0.058	2 / 2	0.03355
Sodium	mg/kg		1860	1860	3660	2 / 2	2760
Strontium	mg/kg		0.094	0.094	0.26	2 / 2	0.177
Thallium	mg/kg		0.085	0.085	0.13	2 / 2	0.1075
Vanadium	mg/kg		0.062	0.062	0.27	2 / 2	0.166
Zinc	mg/kg		49.4	49.4	108	2 / 2	78.7

Notes:

Grab sample results are from freeze dried samples.

For definitions, see the Acronyms section.

Table I-9: Tennessee Aquarium / Appalachian State University (Splits), Jan 2010 - Largemouth Bass Ovary at Tennessee River Mile 567.0

Analyte	Units (freeze dried basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		23	23	23	1 / 1	23
Aluminum	mg/kg		8.1	8.1	8.1	1 / 1	8.1
Antimony	mg/kg	0.018 / 0.018	ND	ND	ND	0 / 1	0
Arsenic	mg/kg		1.1	1.1	1.1	1 / 1	1.1
Barium	mg/kg	0.07 / 0.07	ND	ND	ND	0 / 1	0
Beryllium	mg/kg	0.0031 / 0.0031	ND	ND	ND	0 / 1	0
Boron	mg/kg	0.061 / 0.061	ND	ND	ND	0 / 1	0
Cadmium	mg/kg		0.049	0.049	0.049	1 / 1	0.049
Calcium	mg/kg		472	472	472	1 / 1	472
Chromium	mg/kg		0.17	0.17	0.17	1 / 1	0.17
Cobalt	mg/kg		0.16	0.16	0.16	1 / 1	0.16
Copper	mg/kg		5.3	5.3	5.3	1 / 1	5.3
Iron	mg/kg		91.9	91.9	91.9	1 / 1	91.9
Lead	mg/kg		0.14	0.14	0.14	1 / 1	0.14
Magnesium	mg/kg		826	826	826	1 / 1	826
Manganese	mg/kg		20	20	20	1 / 1	20
Mercury	mg/kg		0.04	0.04	0.04	1 / 1	0.04
Molybdenum	mg/kg		0.17	0.17	0.17	1 / 1	0.17
Nickel	mg/kg		0.067	0.067	0.067	1 / 1	0.067
Potassium	mg/kg		16500	16500	16500	1 / 1	16500
Selenium	mg/kg		3.8	3.8	3.8	1 / 1	3.8
Silver	mg/kg	0.0029 / 0.0029	ND	ND	ND	0 / 1	0
Sodium	mg/kg		3900	3900	3900	1 / 1	3900
Strontium	mg/kg		0.39	0.39	0.39	1 / 1	0.39
Thallium	mg/kg		0.039	0.039	0.039	1 / 1	0.039
Vanadium	mg/kg	0.052 / 0.052	ND	ND	ND	0 / 1	0
Zinc	mg/kg		210	210	210	1 / 1	210

Notes:

Grab sample results are from freeze dried samples.

For definitions, see the Acronyms section.

Table I-10: Tennessee Aquarium / Appalachian State University (Splits), Jan 2010 - Largemouth Bass Fillet at Clinch River Mile 5.5

Analyte	Units (freeze dried basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		3.3	3.3	4.7	5 / 5	3.64
Aluminum	mg/kg	0.82 / 0.99	ND	0.89	0.9	2 / 5	0.895
Antimony	mg/kg	0.018 / 0.019	ND	ND	ND	0 / 5	0
Arsenic	mg/kg		0.73	0.73	0.97	5 / 5	0.87
Barium	mg/kg		0.029	0.029	0.12	5 / 5	0.0642
Beryllium	mg/kg	0.0031 / 0.0032	ND	ND	ND	0 / 5	0
Boron	mg/kg	0.06 / 0.062	ND	ND	ND	0 / 5	0
Cadmium	mg/kg	0.0056 / 0.0058	ND	ND	ND	0 / 5	0
Calcium	mg/kg		689	689	5880	5 / 5	2053
Chromium	mg/kg	0.12 / 0.12	ND	0.13	0.39	5 / 5	0.225
Cobalt	mg/kg		0.005	0.005	0.026	5 / 5	0.01618
Copper	mg/kg		0.76	0.76	1.4	5 / 5	1.114
Iron	mg/kg	11.6 / 12	ND	ND	ND	1 / 5	0
Lead	mg/kg	0.0099 / 0.011	ND	0.011	0.045	3 / 5	0.024
Magnesium	mg/kg		1380	1380	1760	5 / 5	1508
Manganese	mg/kg		0.58	0.58	1.7	5 / 5	0.986
Mercury	mg/kg		0.33	0.33	1.2	5 / 5	0.606
Molybdenum	mg/kg	0.01 / 0.01	ND	0.017	0.017	1 / 5	0.017
Nickel	mg/kg	0.031 / 0.031	ND	0.041	0.11	4 / 5	0.06675
Potassium	mg/kg		19300	19300	20500	5 / 5	20060
Selenium	mg/kg		2.2	2.2	3.8	5 / 5	3.02
Silver	mg/kg	0.0028 / 0.0029	ND	ND	ND	0 / 5	0
Sodium	mg/kg		1770	1770	2950	5 / 5	2062
Strontium	mg/kg		0.32	0.32	4.4	5 / 5	1.42
Thallium	mg/kg		0.024	0.024	0.076	5 / 5	0.044
Vanadium	mg/kg	0.051 / 0.053	ND	ND	ND	0 / 5	0
Zinc	mg/kg		21.3	21.3	35	5 / 5	26.68

Notes:

Grab sample results are from freeze dried samples.

For definitions, see the Acronyms section.

Table I-11: Tennessee Aquarium / Appalachian State University (Splits), Jan 2010 - Largemouth Bass Liver at Clinch River Mile 5.5

Analyte	Units (freeze dried basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		16.3	16.3	23	2 / 2	19.65
Aluminum	mg/kg		3.2	3.2	10.5	3 / 3	7.333
Antimony	mg/kg	0.018 / 0.019	ND	ND	ND	0 / 3	0
Arsenic	mg/kg		1.5	1.5	2.4	3 / 3	1.967
Barium	mg/kg		0.027	0.027	0.044	3 / 3	0.03533
Beryllium	mg/kg	0.003 / 0.0033	ND	ND	ND	0 / 3	0
Boron	mg/kg	0.059 / 0.064	ND	ND	ND	0 / 3	0
Cadmium	mg/kg		0.21	0.21	0.8	3 / 3	0.4167
Calcium	mg/kg		146	146	361	3 / 3	263.7
Chromium	mg/kg	0.11 / 0.11	ND	ND	0.15	2 / 3	0.15
Cobalt	mg/kg		0.17	0.17	0.51	3 / 3	0.3367
Copper	mg/kg		10.2	10.2	51.4	3 / 3	25.1
Iron	mg/kg		139	139	1340	3 / 3	619.7
Lead	mg/kg		0.02	0.02	0.069	3 / 3	0.045
Magnesium	mg/kg		591	591	790	3 / 3	684.7
Manganese	mg/kg		4.5	4.5	4.9	3 / 3	4.667
Mercury	mg/kg		0.11	0.11	0.73	3 / 3	0.3233
Molybdenum	mg/kg		0.5	0.5	0.73	3 / 3	0.61
Nickel	mg/kg		0.047	0.047	0.14	3 / 3	0.08367
Potassium	mg/kg		10300	10300	11600	3 / 3	11067
Selenium	mg/kg		5.2	5.2	7.4	3 / 3	6.633
Silver	mg/kg		0.016	0.016	0.19	3 / 3	0.077
Sodium	mg/kg		2870	2870	6160	3 / 3	4323
Strontium	mg/kg		0.13	0.13	0.43	3 / 3	0.28
Thallium	mg/kg		0.15	0.15	0.25	3 / 3	0.1833
Vanadium	mg/kg		0.19	0.19	1.5	3 / 3	0.6333
Zinc	mg/kg		67.6	67.6	103	3 / 3	89.63

Notes:

Grab sample results are from freeze dried samples.

For definitions, see the Acronyms section.

Table I-12: Tennessee Aquarium / Appalachian State University (Splits), Jan 2010 - Largemouth Bass Ovary at Clinch River Mile 5.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		27.5	27.5	42	3 / 3	33.6
Aluminum	mg/kg		2.6	2.6	4.8	3 / 3	3.633
Antimony	mg/kg	0.018 / 0.019	ND	ND	ND	0 / 3	0
Arsenic	mg/kg		0.69	0.69	1.3	3 / 3	1.097
Barium	mg/kg		0.062	0.062	0.19	3 / 3	0.1157
Beryllium	mg/kg	0.0031 / 0.0032	ND	ND	ND	0 / 3	0
Boron	mg/kg	0.06 / 0.063	ND	ND	ND	0 / 3	0
Cadmium	mg/kg	0.0056 / 0.0059	ND	0.0099	0.012	2 / 3	0.01095
Calcium	mg/kg		384	384	817	3 / 3	640.7
Chromium	mg/kg	0.12 / 0.12	ND	0.17	0.2	2 / 3	0.185
Cobalt	mg/kg		0.13	0.13	0.31	3 / 3	0.21
Copper	mg/kg		5.7	5.7	11.2	3 / 3	8
Iron	mg/kg		110	110	137	3 / 3	120.3
Lead	mg/kg	0.0099 / 0.01	ND	0.035	0.15	2 / 3	0.0925
Magnesium	mg/kg		762	762	856	3 / 3	813.7
Manganese	mg/kg		11	11	26.2	3 / 3	16.47
Mercury	mg/kg		0.033	0.033	0.061	3 / 3	0.04667
Molybdenum	mg/kg		0.13	0.13	0.21	3 / 3	0.1733
Nickel	mg/kg		0.057	0.057	0.092	3 / 3	0.074
Potassium	mg/kg		14200	14200	17000	3 / 3	15167
Selenium	mg/kg		4.2	4.2	4.9	3 / 3	4.633
Silver	mg/kg	0.0028 / 0.003	ND	ND	ND	0 / 3	0
Sodium	mg/kg		2760	2760	2890	3 / 3	2813
Strontium	mg/kg		0.4	0.4	0.65	3 / 3	0.5667
Thallium	mg/kg		0.087	0.087	0.14	3 / 3	0.1123
Vanadium	mg/kg	0.051 / 0.054	ND	0.054	0.17	2 / 3	0.112
Zinc	mg/kg		147	147	216	3 / 3	174

Notes:

Grab sample results are from freeze dried samples.

For definitions, see the Acronyms section.

Table I-13: Tennessee Aquarium / Appalachian State University (Splits), Jan 2010 - Largemouth Bass Fillet at Clinch River Mile 3.5

Analyte	Units (freeze dried basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1.1	1.1	5.9	3 / 3	3.667
Aluminum	mg/kg	0.81 / 0.88	ND	ND	ND	0 / 3	0
Antimony	mg/kg	0.018 / 0.019	ND	ND	ND	0 / 3	0
Arsenic	mg/kg		0.84	0.84	1.2	3 / 3	1.01
Barium	mg/kg		0.026	0.026	0.059	3 / 3	0.047
Beryllium	mg/kg	0.003 / 0.0033	ND	0.0037	0.0037	1 / 3	0.0037
Boron	mg/kg	0.059 / 0.064	ND	ND	ND	0 / 3	0
Cadmium	mg/kg	0.0055 / 0.0058	ND	0.026	0.026	1 / 3	0.026
Calcium	mg/kg		934	934	2010	3 / 3	1605
Chromium	mg/kg		0.18	0.18	0.38	3 / 3	0.2833
Cobalt	mg/kg		0.013	0.013	0.033	3 / 3	0.02167
Copper	mg/kg		1	1	1.1	3 / 3	1.033
Iron	mg/kg	11.4 / 12.5	ND	ND	ND	0 / 3	0
Lead	mg/kg	0.01 / 0.011	ND	0.012	0.016	2 / 3	0.014
Magnesium	mg/kg		1320	1320	1360	3 / 3	1337
Manganese	mg/kg		0.83	0.83	1	3 / 3	0.89
Mercury	mg/kg		0.28	0.28	1.6	3 / 3	0.7833
Molybdenum	mg/kg		0.01	0.01	0.012	3 / 3	0.011
Nickel	mg/kg		0.064	0.064	0.099	3 / 3	0.085
Potassium	mg/kg		19300	19300	21100	3 / 3	20200
Selenium	mg/kg		2.4	2.4	2.7	3 / 3	2.567
Silver	mg/kg	0.0028 / 0.0029	ND	0.0037	0.0037	1 / 3	0.0037
Sodium	mg/kg		1840	1840	2260	3 / 3	2040
Strontium	mg/kg		0.57	0.57	1.4	3 / 3	1.023
Thallium	mg/kg		0.054	0.054	0.077	3 / 3	0.068
Vanadium	mg/kg	0.05 / 0.055	ND	ND	ND	0 / 3	0
Zinc	mg/kg		21.3	21.3	28.7	3 / 3	24.7

Notes:

Grab sample results are from freeze dried samples.

For definitions, see the Acronyms section.

Table I-14: Tennessee Aquarium / Appalachian State University (Splits), Jan 2010 - Largemouth Bass Liver at Clinch River Mile 3.5

Analyte	Units (freeze dried basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		13.8	13.8	33.2	3 / 3	22.33
Aluminum	mg/kg		4.7	4.7	17.6	3 / 3	10.3
Antimony	mg/kg	0.019 / 0.019	ND	ND	ND	0 / 3	0
Arsenic	mg/kg		1.8	1.8	2	3 / 3	1.867
Barium	mg/kg		0.036	0.036	0.039	3 / 3	0.037
Beryllium	mg/kg	0.0032 / 0.0033	ND	0.012	0.012	1 / 3	0.012
Boron	mg/kg		0.064	0.064	0.13	3 / 3	0.095
Cadmium	mg/kg		0.36	0.36	1.3	3 / 3	0.6833
Calcium	mg/kg		247	247	393	3 / 3	309.3
Chromium	mg/kg	0.12 / 0.12	ND	ND	ND	0 / 3	0
Cobalt	mg/kg		0.22	0.22	0.34	3 / 3	0.2733
Copper	mg/kg		11.1	11.1	36.3	3 / 3	21.5
Iron	mg/kg		492	492	680	3 / 3	564
Lead	mg/kg		0.037	0.037	0.052	3 / 3	0.045
Magnesium	mg/kg		690	690	786	3 / 3	725.7
Manganese	mg/kg		5.3	5.3	6.1	3 / 3	5.7
Mercury	mg/kg		0.14	0.14	1.6	3 / 3	0.6467
Molybdenum	mg/kg		0.59	0.59	0.85	3 / 3	0.6933
Nickel	mg/kg		0.053	0.053	0.1	3 / 3	0.08033
Potassium	mg/kg		11100	11100	13700	3 / 3	12000
Selenium	mg/kg		6.6	6.6	11.4	3 / 3	8.333
Silver	mg/kg		0.0063	0.0063	0.02	3 / 3	0.01277
Sodium	mg/kg		4240	4240	5070	3 / 3	4620
Strontium	mg/kg		0.23	0.23	0.32	3 / 3	0.28
Thallium	mg/kg		0.23	0.23	0.29	3 / 3	0.2533
Vanadium	mg/kg		0.18	0.18	1.2	3 / 3	0.5933
Zinc	mg/kg		84.1	84.1	113	3 / 3	95.37

Notes:

Grab sample results are from freeze dried samples.

For definitions, see the Acronyms section.

Table I-15: Tennessee Aquarium / Appalachian State University (Splits), Jan 2010 - Largemouth Bass Ovary at Clinch River Mile 3.5

Analyte	Units (freeze dried basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		25.7	25.7	30.5	3 / 3	27.57
Aluminum	mg/kg		3.3	3.3	4.9	3 / 3	3.867
Antimony	mg/kg	0.018 / 0.019	ND	ND	ND	0 / 3	0
Arsenic	mg/kg		1	1	1.4	3 / 3	1.2
Barium	mg/kg		0.035	0.035	0.08	3 / 3	0.06
Beryllium	mg/kg	0.003 / 0.0033	ND	ND	ND	0 / 3	0
Boron	mg/kg	0.06 / 0.064	ND	ND	ND	0 / 3	0
Cadmium	mg/kg		0.012	0.012	0.05	3 / 3	0.02633
Calcium	mg/kg		337	337	556	3 / 3	477.7
Chromium	mg/kg	0.11 / 0.12	ND	0.36	0.36	1 / 3	0.36
Cobalt	mg/kg		0.14	0.14	0.26	3 / 3	0.1933
Copper	mg/kg		4.9	4.9	21.5	3 / 3	10.67
Iron	mg/kg		120	120	139	3 / 3	128
Lead	mg/kg		0.023	0.023	0.36	3 / 3	0.1367
Magnesium	mg/kg		752	752	896	3 / 3	805.7
Manganese	mg/kg		7.9	7.9	23.7	3 / 3	13.93
Mercury	mg/kg		0.034	0.034	0.34	3 / 3	0.1387
Molybdenum	mg/kg		0.19	0.19	0.23	3 / 3	0.2067
Nickel	mg/kg		0.037	0.037	0.15	3 / 3	0.1123
Potassium	mg/kg		15500	15500	17700	3 / 3	16367
Selenium	mg/kg		4	4	5.9	3 / 3	4.833
Silver	mg/kg	0.0028 / 0.003	ND	ND	ND	0 / 3	0
Sodium	mg/kg		3120	3120	4690	3 / 3	3647
Strontium	mg/kg		0.3	0.3	0.51	3 / 3	0.41
Thallium	mg/kg		0.12	0.12	0.15	3 / 3	0.1367
Vanadium	mg/kg	0.051 / 0.055	ND	0.056	0.13	2 / 3	0.093
Zinc	mg/kg		126	126	216	3 / 3	171

Notes:

Grab sample results are from freeze dried samples.

For definitions, see the Acronyms section.

Table I-16: Tennessee Aquarium / Appalachian State University (Splits), Jan 2010 - Long Ear Sunfish Whole Body at Tennessee River Mile 567.0

Analyte	Units (freeze dried basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		4	4	4	1 / 1	4
Aluminum	mg/kg		21.9	21.9	21.9	1 / 1	21.9
Antimony	mg/kg	0.038 / 0.038	ND	ND	ND	0 / 1	0
Arsenic	mg/kg		0.97	0.97	0.97	1 / 1	0.97
Barium	mg/kg		7.1	7.1	7.1	1 / 1	7.1
Beryllium	mg/kg	0.016 / 0.016	ND	ND	ND	0 / 1	0
Boron	mg/kg		0.33	0.33	0.33	1 / 1	0.33
Cadmium	mg/kg		0.12	0.12	0.12	1 / 1	0.12
Calcium	mg/kg		86000	86000	86000	1 / 1	86000
Chromium	mg/kg	0.62 / 0.62	ND	ND	ND	0 / 1	0
Cobalt	mg/kg		0.061	0.061	0.061	1 / 1	0.061
Copper	mg/kg		1.4	1.4	1.4	1 / 1	1.4
Iron	mg/kg		63.4	63.4	63.4	1 / 1	63.4
Lead	mg/kg		0.43	0.43	0.43	1 / 1	0.43
Magnesium	mg/kg		2070	2070	2070	1 / 1	2070
Manganese	mg/kg		24.5	24.5	24.5	1 / 1	24.5
Mercury	mg/kg		0.075	0.075	0.075	1 / 1	0.075
Molybdenum	mg/kg		0.16	0.16	0.16	1 / 1	0.16
Nickel	mg/kg		0.34	0.34	0.34	1 / 1	0.34
Potassium	mg/kg		9900	9900	9900	1 / 1	9900
Selenium	mg/kg		1.5	1.5	1.5	1 / 1	1.5
Silver	mg/kg		0.025	0.025	0.025	1 / 1	0.025
Sodium	mg/kg		5810	5810	5810	1 / 1	5810
Strontium	mg/kg		67.2	67.2	67.2	1 / 1	67.2
Thallium	mg/kg	0.029 / 0.029	ND	ND	ND	0 / 1	0
Vanadium	mg/kg		1.7	1.7	1.7	1 / 1	1.7
Zinc	mg/kg		106	106	106	1 / 1	106

Notes:

Grab sample results are from freeze dried samples.

For definitions, see the Acronyms section.

Table I-17: Tennessee Aquarium / Appalachian State University (Splits), Jan 2010 - Long Ear Sunfish Whole Body at Clinch River Mile 5.5

Analyte	Units (freeze dried basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		9	9	9	1 / 1	9
Aluminum	mg/kg	17.2 / 17.2	ND	ND	ND	0 / 1	0
Antimony	mg/kg	0.038 / 0.038	ND	ND	ND	0 / 1	0
Arsenic	mg/kg		0.55	0.55	0.55	1 / 1	0.55
Barium	mg/kg		6.5	6.5	6.5	1 / 1	6.5
Beryllium	mg/kg		0.015	0.015	0.015	1 / 1	0.015
Boron	mg/kg		0.15	0.15	0.15	1 / 1	0.15
Cadmium	mg/kg	0.029 / 0.029	ND	ND	ND	0 / 1	0
Calcium	mg/kg		74700	74700	74700	1 / 1	74700
Chromium	mg/kg	0.61 / 0.61	ND	ND	ND	0 / 1	0
Cobalt	mg/kg		0.066	0.066	0.066	1 / 1	0.066
Copper	mg/kg		2.1	2.1	2.1	1 / 1	2.1
Iron	mg/kg	61.3 / 61.3	ND	ND	ND	0 / 1	0
Lead	mg/kg		0.43	0.43	0.43	1 / 1	0.43
Magnesium	mg/kg		2220	2220	2220	1 / 1	2220
Manganese	mg/kg		50.9	50.9	50.9	1 / 1	50.9
Mercury	mg/kg		0.1	0.1	0.1	1 / 1	0.1
Molybdenum	mg/kg		0.16	0.16	0.16	1 / 1	0.16
Nickel	mg/kg		0.21	0.21	0.21	1 / 1	0.21
Potassium	mg/kg		10900	10900	10900	1 / 1	10900
Selenium	mg/kg		2.3	2.3	2.3	1 / 1	2.3
Silver	mg/kg	0.015 / 0.015	ND	ND	ND	0 / 1	0
Sodium	mg/kg		5250	5250	5250	1 / 1	5250
Strontium	mg/kg		66.2	66.2	66.2	1 / 1	66.2
Thallium	mg/kg		0.055	0.055	0.055	1 / 1	0.055
Vanadium	mg/kg		1.1	1.1	1.1	1 / 1	1.1
Zinc	mg/kg		132	132	132	1 / 1	132

Notes:

Grab sample results are from freeze dried samples.

For definitions, see the Acronyms section.

Table I-18: Tennessee Aquarium / Appalachian State University (Splits), Jan 2010 - Red Ear Sunfish Fillet at Tennessee River Mile 567.0

Analyte	Units (freeze dried basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		3.2	3.2	10.4	11 / 11	5
Aluminum	mg/kg	0.76 / 0.87	ND	0.88	22.8	10 / 11	4.368
Antimony	mg/kg	0.016 / 0.019	ND	ND	ND	0 / 11	0
Arsenic	mg/kg		0.82	0.82	1.7	11 / 11	1.238
Barium	mg/kg	0.019 / 0.098	ND	0.077	0.68	10 / 11	0.2375
Beryllium	mg/kg	0.0028 / 0.0033	ND	ND	ND	0 / 11	0
Boron	mg/kg	0.055 / 0.064	ND	ND	ND	0 / 11	0
Cadmium	mg/kg	0.0051 / 0.006	ND	ND	ND	0 / 11	0
Calcium	mg/kg		798	798	5550	11 / 11	2442
Chromium	mg/kg	0.11 / 0.12	ND	0.21	0.21	1 / 11	0.21
Cobalt	mg/kg		0.0096	0.0096	0.033	11 / 11	0.01824
Copper	mg/kg		0.57	0.57	1.4	11 / 11	0.7182
Iron	mg/kg	10.7 / 12.5	ND	11.4	49	8 / 11	24.94
Lead	mg/kg	0.0091 / 0.0097	ND	0.011	0.1	10 / 11	0.0377
Magnesium	mg/kg		1360	1360	1440	11 / 11	1395
Manganese	mg/kg		0.43	0.43	1.6	11 / 11	0.8718
Mercury	mg/kg		0.064	0.064	0.33	11 / 11	0.1186
Molybdenum	mg/kg	0.0093 / 0.0093	ND	0.024	0.059	10 / 11	0.0382
Nickel	mg/kg	0.029 / 0.032	ND	0.034	0.068	10 / 11	0.0495
Potassium	mg/kg		17600	17600	21400	11 / 11	19836
Selenium	mg/kg		2	2	3.3	11 / 11	2.591
Silver	mg/kg	0.0026 / 0.003	ND	ND	ND	0 / 11	0
Sodium	mg/kg		1420	1420	2890	11 / 11	1933
Strontium	mg/kg		0.46	0.46	3.9	11 / 11	1.711
Thallium	mg/kg	0.013 / 0.015	ND	0.015	0.052	8 / 11	0.0245
Vanadium	mg/kg	0.047 / 0.055	ND	0.06	0.093	3 / 11	0.07633
Zinc	mg/kg		26.4	26.4	47.5	11 / 11	35.39

Notes:

Grab sample results are from freeze dried samples.

For definitions, see the Acronyms section.

Table I-19: Tennessee Aquarium / Appalachian State University (Splits), Jan 2010 - Red Ear Sunfish Fillet at Clinch River Mile 5.5

Analyte	Units (freeze dried basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		2.1	2.1	3.9	8 / 8	3.05
Aluminum	mg/kg	0.79 / 0.88	ND	0.95	2.9	6 / 8	1.642
Antimony	mg/kg	0.017 / 0.019	ND	ND	ND	0 / 8	0
Arsenic	mg/kg		1.2	1.2	2.8	8 / 8	1.775
Barium	mg/kg		0.062	0.062	0.59	8 / 8	0.2478
Beryllium	mg/kg	0.003 / 0.0033	ND	ND	ND	0 / 8	0
Boron	mg/kg	0.058 / 0.063	ND	0.13	0.13	1 / 8	0.13
Cadmium	mg/kg	0.0054 / 0.0059	ND	0.017	0.017	1 / 8	0.017
Calcium	mg/kg		1010	1010	5160	8 / 8	2520
Chromium	mg/kg	0.11 / 0.12	ND	0.16	0.29	2 / 8	0.225
Cobalt	mg/kg		0.012	0.012	0.048	8 / 8	0.02275
Copper	mg/kg		0.59	0.59	0.75	8 / 8	0.6575
Iron	mg/kg	11.2 / 12.2	ND	12.6	21.6	7 / 8	17.14
Lead	mg/kg	0.009 / 0.01	ND	0.0099	0.33	5 / 8	0.08098
Magnesium	mg/kg		1250	1250	1500	8 / 8	1388
Manganese	mg/kg		0.4	0.4	1.1	8 / 8	0.6988
Mercury	mg/kg		0.19	0.19	0.98	8 / 8	0.3688
Molybdenum	mg/kg		0.041	0.041	0.13	8 / 8	0.0675
Nickel	mg/kg	0.03 / 0.033	ND	0.043	0.32	6 / 8	0.114
Potassium	mg/kg		17500	17500	21600	8 / 8	19788
Selenium	mg/kg		3.5	3.5	5.1	8 / 8	4.313
Silver	mg/kg	0.0027 / 0.0029	ND	ND	ND	1 / 8	0
Sodium	mg/kg		2680	2680	3900	8 / 8	3171
Strontium	mg/kg		0.54	0.54	4	8 / 8	1.703
Thallium	mg/kg	0.013 / 0.014	ND	0.018	0.042	7 / 8	0.0275
Vanadium	mg/kg	0.049 / 0.054	ND	0.058	0.13	4 / 8	0.09125
Zinc	mg/kg		30.2	30.2	46.6	8 / 8	38.3

Notes:

Grab sample results are from freeze dried samples.

For definitions, see the Acronyms section.

Table I-20: Tennessee Aquarium / Appalachian State University (Splits), Jan 2010 - Red Ear Sunfish Fillet at Clinch River Mile 3.5

Analyte	Units (freeze dried basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		3.9	3.9	4	2 / 2	3.95
Aluminum	mg/kg		3.1	3.1	3.6	2 / 2	3.35
Antimony	mg/kg	0.018 / 0.019	ND	ND	ND	0 / 2	0
Arsenic	mg/kg		1.4	1.4	1.9	2 / 2	1.65
Barium	mg/kg		0.28	0.28	0.34	2 / 2	0.31
Beryllium	mg/kg	0.0032 / 0.0032	ND	ND	ND	0 / 2	0
Boron	mg/kg	0.062 / 0.063	ND	ND	ND	0 / 2	0
Cadmium	mg/kg	0.0057 / 0.0058	ND	ND	ND	0 / 2	0
Calcium	mg/kg		2960	2960	5690	2 / 2	4325
Chromium	mg/kg	0.12 / 0.12	ND	0.44	0.44	1 / 2	0.44
Cobalt	mg/kg		0.012	0.012	0.037	2 / 2	0.0245
Copper	mg/kg		0.7	0.7	0.77	2 / 2	0.735
Iron	mg/kg	12 / 12	ND	40.8	40.8	1 / 2	40.8
Lead	mg/kg		0.016	0.016	0.22	2 / 2	0.118
Magnesium	mg/kg		1380	1380	1400	2 / 2	1390
Manganese	mg/kg		1.1	1.1	1.5	2 / 2	1.3
Mercury	mg/kg		0.18	0.18	0.46	2 / 2	0.32
Molybdenum	mg/kg		0.083	0.083	0.12	2 / 2	0.1015
Nickel	mg/kg		0.047	0.047	0.079	2 / 2	0.063
Potassium	mg/kg		19200	19200	19300	2 / 2	19250
Selenium	mg/kg		4.3	4.3	4.9	2 / 2	4.6
Silver	mg/kg	0.0029 / 0.0029	ND	ND	ND	0 / 2	0
Sodium	mg/kg		2940	2940	4380	2 / 2	3660
Strontium	mg/kg		2.3	2.3	4.3	2 / 2	3.3
Thallium	mg/kg		0.028	0.028	0.034	2 / 2	0.031
Vanadium	mg/kg	0.053 / 0.053	ND	0.25	0.25	1 / 2	0.25
Zinc	mg/kg		41.3	41.3	82.3	2 / 2	61.8

Notes:

Grab sample results are from freeze dried samples.

For definitions, see the Acronyms section.

Table I-21: Tennessee Aquarium / Appalachian State University (Splits), Jan 2010 - White Crappie Fillet at Tennessee River Mile 567.0

Analyte	Units (freeze dried basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		3.2	3.2	4.9	3 / 3	3.9
Aluminum	mg/kg	0.87 / 0.88	ND	ND	ND	0 / 3	0
Antimony	mg/kg	0.019 / 0.019	ND	ND	ND	0 / 3	0
Arsenic	mg/kg		1.1	1.1	1.5	3 / 3	1.3
Barium	mg/kg	0.02 / 0.073	ND	0.037	0.14	2 / 3	0.0885
Beryllium	mg/kg	0.0032 / 0.0033	ND	ND	ND	0 / 3	0
Boron	mg/kg	0.063 / 0.064	ND	0.1	0.1	1 / 3	0.1
Cadmium	mg/kg	0.0059 / 0.006	ND	ND	ND	0 / 3	0
Calcium	mg/kg		882	882	3980	3 / 3	2104
Chromium	mg/kg	0.12 / 0.12	ND	ND	ND	0 / 3	0
Cobalt	mg/kg		0.0089	0.0089	0.013	3 / 3	0.0105
Copper	mg/kg		0.67	0.67	1.3	3 / 3	0.9467
Iron	mg/kg	12.3 / 12.5	ND	ND	ND	0 / 3	0
Lead	mg/kg	0.01 / 0.011	ND	0.04	0.04	1 / 3	0.04
Magnesium	mg/kg		1450	1450	1500	3 / 3	1470
Manganese	mg/kg		0.53	0.53	0.9	3 / 3	0.67
Mercury	mg/kg		0.071	0.071	0.14	3 / 3	0.1007
Molybdenum	mg/kg	0.011 / 0.011	ND	ND	ND	0 / 3	0
Nickel	mg/kg		0.039	0.039	0.062	3 / 3	0.05367
Potassium	mg/kg		20600	20600	21200	3 / 3	20967
Selenium	mg/kg		1.6	1.6	1.9	3 / 3	1.733
Silver	mg/kg	0.003 / 0.003	ND	ND	ND	0 / 3	0
Sodium	mg/kg		1090	1090	1350	3 / 3	1217
Strontium	mg/kg		0.47	0.47	3	3 / 3	1.483
Thallium	mg/kg		0.017	0.017	0.095	3 / 3	0.05067
Vanadium	mg/kg	0.054 / 0.055	ND	ND	ND	0 / 3	0
Zinc	mg/kg		20.2	20.2	22.1	3 / 3	21.23

Notes:

Grab sample results are from freeze dried samples.

For definitions, see the Acronyms section.

Table I-22: Tennessee Aquarium / Appalachian State University (Splits), Jan 2010 - White Crappie Ovary at Tennessee River Mile 567.0

Analyte	Units (freeze dried basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		34.5	34.5	34.5	1 / 1	34.5
Aluminum	mg/kg		1.8	1.8	1.8	1 / 1	1.8
Antimony	mg/kg	0.018 / 0.018	ND	ND	ND	0 / 1	0
Arsenic	mg/kg		1.8	1.8	1.8	1 / 1	1.8
Barium	mg/kg	0.1 / 0.1	ND	ND	ND	0 / 1	0
Beryllium	mg/kg	0.003 / 0.003	ND	ND	ND	0 / 1	0
Boron	mg/kg	0.059 / 0.059	ND	ND	ND	0 / 1	0
Cadmium	mg/kg	0.0054 / 0.0054	ND	ND	ND	0 / 1	0
Calcium	mg/kg		251	251	251	1 / 1	251
Chromium	mg/kg		0.12	0.12	0.12	1 / 1	0.12
Cobalt	mg/kg		0.1	0.1	0.1	1 / 1	0.1
Copper	mg/kg		3.4	3.4	3.4	1 / 1	3.4
Iron	mg/kg		43.3	43.3	43.3	1 / 1	43.3
Lead	mg/kg		0.018	0.018	0.018	1 / 1	0.018
Magnesium	mg/kg		870	870	870	1 / 1	870
Manganese	mg/kg		2.7	2.7	2.7	1 / 1	2.7
Mercury	mg/kg		0.011	0.011	0.011	1 / 1	0.011
Molybdenum	mg/kg		0.077	0.077	0.077	1 / 1	0.077
Nickel	mg/kg		0.054	0.054	0.054	1 / 1	0.054
Potassium	mg/kg		12100	12100	12100	1 / 1	12100
Selenium	mg/kg		5.4	5.4	5.4	1 / 1	5.4
Silver	mg/kg	0.0027 / 0.0027	ND	ND	ND	0 / 1	0
Sodium	mg/kg		1930	1930	1930	1 / 1	1930
Strontium	mg/kg		0.21	0.21	0.21	1 / 1	0.21
Thallium	mg/kg		0.092	0.092	0.092	1 / 1	0.092
Vanadium	mg/kg	0.05 / 0.05	ND	ND	ND	0 / 1	0
Zinc	mg/kg		168	168	168	1 / 1	168

Notes:

Grab sample results are from freeze dried samples.

For definitions, see the Acronyms section.

APPENDIX J

TVA SAP Sampling, Spring 2010

Table J-1: TVA SAP Sampling, Spring 2010 - Bluegill Carcass at Little Emory River Mile 2.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
Aluminum	mg/kg		21.78	21.78	107	3 / 3	61.24
Antimony	mg/kg	0.0693 / 0.07412	ND	ND	ND	0 / 3	0
Arsenic	mg/kg	0.1348 / 0.1417	ND	0.1439	0.1439	1 / 3	0.1439
Barium	mg/kg		4.578	4.578	5.174	3 / 3	4.855
Beryllium	mg/kg	0.2888 / 0.2988	ND	ND	ND	0 / 3	0
Boron	mg/kg	2.002 / 2.136	ND	ND	ND	0 / 3	0
Cadmium	mg/kg	0.07315 / 0.077	ND	ND	ND	0 / 3	0
Calcium	mg/kg		41965	41965	60984	3 / 3	53355
Chromium	mg/kg		0.9856	0.9856	1.964	3 / 3	1.477
Cobalt	mg/kg	0.0693 / 0.07084	ND	0.1003	0.1271	2 / 3	0.1137
Copper	mg/kg	0.693 / 0.7392	ND	0.7412	0.7412	1 / 3	0.7412
Iron	mg/kg	58.14 / 60.68	ND	80.66	147.5	2 / 3	114.1
Lead	mg/kg		0.157	0.157	0.2195	3 / 3	0.185
Magnesium	mg/kg		970.2	970.2	1297	3 / 3	1154
Manganese	mg/kg		65.84	65.84	153.7	3 / 3	99.49
Mercury	mg/kg		0.0157	0.0157	0.0308	3 / 3	0.02282
Molybdenum	mg/kg	0.1694 / 0.2033	ND	ND	ND	0 / 3	0
Nickel	mg/kg	0.462 / 0.4928	ND	0.5005	0.5005	1 / 3	0.5005
Potassium	mg/kg		2221	2221	2652	3 / 3	2367
Selenium	mg/kg		0.5005	0.5005	0.654	3 / 3	0.5696
Silver	mg/kg	0.01386 / 0.01482	ND	ND	ND	0 / 3	0
Sodium	mg/kg		1790	1790	2156	3 / 3	1991
Strontium	mg/kg		37.27	37.27	52.36	3 / 3	46.01
Thallium	mg/kg	0.01348 / 0.01571	ND	ND	ND	0 / 3	0
Vanadium	mg/kg		0.2526	0.2526	0.539	3 / 3	0.4092
Zinc	mg/kg		54.29	54.29	61.48	3 / 3	58.82

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-2: TVA SAP Sampling, Spring 2010 - Bluegill Fillet at Little Emory River Mile 2.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.26	0.26	2.4	6 / 6	1.063
% Moisture	%		80.5	80.5	81.2	3 / 3	80.83
Aluminum	mg/kg	3.61 / 4.152	ND	4.136	4.136	1 / 6	4.136
Antimony	mg/kg	0.01297 / 0.01505	ND	ND	ND	0 / 6	0
Arsenic	mg/kg	0.02444 / 0.02715	ND	0.0288	0.06747	5 / 6	0.04335
Barium	mg/kg	0.04136 / 0.2172	ND	0.0663	0.1203	2 / 6	0.0933
Beryllium	mg/kg	0.02896 / 0.05655	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.376 / 0.4325	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.00742 / 0.01482	ND	ND	ND	0 / 6	0
Calcium	mg/kg		243.8	243.8	1508	6 / 6	833.5
Chromium	mg/kg	0.1147 / 0.1315	ND	0.1539	0.1539	1 / 6	0.1539
Cobalt	mg/kg	0.01278 / 0.01453	ND	ND	ND	0 / 6	0
Copper	mg/kg		0.1767	0.1767	0.3077	6 / 6	0.231
Iron	mg/kg	10.89 / 12.49	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.02444 / 0.02941	ND	ND	ND	0 / 6	0
Magnesium	mg/kg		266.4	266.4	302.7	6 / 6	282.2
Manganese	mg/kg		0.288	0.288	2.612	6 / 6	1.225
Mercury	mg/kg		0.03456	0.03456	0.06516	6 / 6	0.04874
Molybdenum	mg/kg	0.03196 / 0.03633	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.08836 / 0.1003	ND	ND	ND	0 / 6	0
Potassium	mg/kg		3168	3168	3910	6 / 6	3399
Selenium	mg/kg		0.4344	0.4344	0.5952	6 / 6	0.4975
Silver	mg/kg	0.00263 / 0.00294	ND	ND	ND	0 / 6	0
Sodium	mg/kg		262.5	262.5	361	6 / 6	301.9
Strontium	mg/kg		0.1738	0.1738	1.241	6 / 6	0.6491
Thallium	mg/kg	0.01241 / 0.01436	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.04525 / 0.08775	ND	ND	ND	0 / 6	0
Zinc	mg/kg		10.33	10.33	18.43	6 / 6	13.12

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-3: TVA SAP Sampling, Spring 2010 - Bluegill Carcass at Emory River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
Aluminum	mg/kg	4.107 / 19.91	ND	15.72	16.97	2 / 4	16.35
Antimony	mg/kg	0.01441 / 0.04725	ND	ND	ND	0 / 4	0
Arsenic	mg/kg		0.104	0.104	0.1632	4 / 4	0.1365
Barium	mg/kg		2.557	2.557	11.79	4 / 4	6.807
Beryllium	mg/kg	0.02882 / 0.0945	ND	ND	ND	0 / 4	0
Boron	mg/kg	0.4192 / 1.355	ND	ND	ND	0 / 4	0
Cadmium	mg/kg	0.0076 / 0.02457	ND	0.01197	0.02882	3 / 4	0.01791
Calcium	mg/kg		35088	35088	72836	4 / 4	57331
Chromium	mg/kg	0.1306 / 0.6288	ND	0.68	1.114	3 / 4	0.934
Cobalt	mg/kg	0.01442 / 0.07074	ND	0.03264	0.05355	3 / 4	0.03995
Copper	mg/kg	0.1496 / 0.7074	ND	0.3536	0.4725	3 / 4	0.3962
Iron	mg/kg	12.38 / 60	ND	26.03	27.97	2 / 4	27
Lead	mg/kg		0.1061	0.1061	0.2489	4 / 4	0.18
Magnesium	mg/kg		767	767	1381	4 / 4	1037
Manganese	mg/kg		21.6	21.6	96.42	4 / 4	54.01
Mercury	mg/kg		0.0262	0.0262	0.0441	4 / 4	0.03551
Molybdenum	mg/kg		0.1243	0.1243	0.1965	4 / 4	0.1471
Nickel	mg/kg	0.1006 / 0.4978	ND	0.1578	0.1735	2 / 4	0.1657
Potassium	mg/kg	742.6 / 3589	ND	2706	3339	3 / 4	2973
Selenium	mg/kg		0.524	0.524	0.816	4 / 4	0.6271
Silver	mg/kg	0.00288 / 0.00945	ND	ND	ND	0 / 4	0
Sodium	mg/kg		1708	1708	2196	4 / 4	1960
Strontium	mg/kg		38.35	38.35	72.52	4 / 4	54.59
Thallium	mg/kg	0.01362 / 0.0441	ND	ND	ND	0 / 4	0
Vanadium	mg/kg	0.04624 / 0.2279	ND	0.1787	0.2448	3 / 4	0.2073
Zinc	mg/kg		42.98	42.98	77.03	4 / 4	59.16

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-4: TVA SAP Sampling, Spring 2010 - Bluegill Fillet at Emory River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.5	0.5	1.4	6 / 6	0.7867
% Moisture	%		79.1	79.1	83.5	4 / 4	80.68
Aluminum	mg/kg	3.63 / 57.6	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.0132 / 0.2	ND	ND	ND	0 / 6	0
Arsenic	mg/kg	0.02475 / 0.4	ND	0.04004	0.05236	2 / 6	0.0462
Barium	mg/kg	0.0528 / 0.66	ND	ND	ND	0 / 6	0
Beryllium	mg/kg	0.0264 / 0.42	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.3795 / 5.96	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.00693 / 0.11	ND	ND	ND	0 / 6	0
Calcium	mg/kg	43.73 / 694	ND	445.5	783.5	3 / 6	635.3
Chromium	mg/kg	0.1155 / 1.82	ND	ND	ND	0 / 6	0
Cobalt	mg/kg	0.01271 / 0.2	ND	ND	ND	0 / 6	0
Copper	mg/kg	0.1304 / 2.08	ND	0.2805	0.4675	3 / 6	0.3889
Iron	mg/kg	10.94 / 173.6	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.02475 / 0.2388	ND	0.52	0.52	1 / 6	0.52
Magnesium	mg/kg	43.73 / 694	ND	260.7	321.9	4 / 6	280.3
Manganese	mg/kg	0.1551 / 2.46	ND	0.363	0.9911	3 / 6	0.6819
Mercury	mg/kg	0.01056 / 0.166	ND	0.04186	0.08987	4 / 6	0.06701
Molybdenum	mg/kg	0.03135 / 0.5	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.0891 / 1.4	ND	ND	ND	0 / 6	0
Potassium	mg/kg	656.7 / 10420	ND	3548	3678	4 / 6	3601
Selenium	mg/kg	0.06105 / 0.98	ND	0.396	1.003	4 / 6	0.6509
Silver	mg/kg	0.00264 / 0.042	ND	ND	ND	0 / 6	0
Sodium	mg/kg	43.73 / 694	ND	269.3	376.7	4 / 6	298.1
Strontium	mg/kg	0.0396 / 0.64	ND	0.33	0.7106	3 / 6	0.5046
Thallium	mg/kg	0.01254 / 0.198	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.04125 / 0.66	ND	ND	ND	0 / 6	0
Zinc	mg/kg	1.98 / 31.4	ND	10.3	13.89	4 / 6	11.75

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-5: TVA SAP Sampling, Spring 2010 - Bluegill Whole Body at Emory River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		2.8	2.8	2.9	3 / 3	2.833
% Moisture	%		76.7	76.7	77.2	3 / 3	76.97
Aluminum	mg/kg		13.77	13.77	45.77	3 / 3	30.8
Antimony	mg/kg	0.01426 / 0.01468	ND	ND	ND	0 / 3	0
Arsenic	mg/kg		0.1002	0.1002	0.114	3 / 3	0.109
Barium	mg/kg		1.887	1.887	2.116	3 / 3	2.026
Beryllium	mg/kg	0.02964 / 0.03029	ND	ND	ND	0 / 3	0
Boron	mg/kg	0.4104 / 0.4194	ND	ND	ND	0 / 3	0
Cadmium	mg/kg		0.00798	0.00798	0.00909	3 / 3	0.008449
Calcium	mg/kg		14615	14615	15479	3 / 3	14963
Chromium	mg/kg	0.1242 / 0.1254	ND	0.1328	0.851	2 / 3	0.4919
Cobalt	mg/kg		0.03648	0.03648	0.05126	3 / 3	0.04381
Copper	mg/kg		0.342	0.342	0.391	3 / 3	0.3608
Iron	mg/kg		28.27	28.27	69.69	3 / 3	49.66
Lead	mg/kg		0.0456	0.0456	0.0759	3 / 3	0.05836
Magnesium	mg/kg		410.4	410.4	441.6	3 / 3	430.8
Manganese	mg/kg		28.73	28.73	33.12	3 / 3	30.95
Mercury	mg/kg		0.03192	0.03192	0.03495	3 / 3	0.03302
Molybdenum	mg/kg	0.0342 / 0.03495	ND	0.0414	0.0414	1 / 3	0.0414
Nickel	mg/kg	0.09576 / 0.1002	ND	0.1127	0.1127	1 / 3	0.1127
Potassium	mg/kg		2599	2599	2645	3 / 3	2626
Selenium	mg/kg		0.3648	0.3648	0.3728	3 / 3	0.3685
Silver	mg/kg	0.00276 / 0.00303	ND	ND	ND	0 / 3	0
Sodium	mg/kg		772.8	772.8	820.8	3 / 3	802.3
Strontium	mg/kg		12.98	12.98	13.77	3 / 3	13.37
Thallium	mg/kg	0.01357 / 0.01398	ND	ND	ND	0 / 3	0
Vanadium	mg/kg		0.04788	0.04788	0.0828	3 / 3	0.06997
Zinc	mg/kg		32.2	32.2	34.95	3 / 3	33.4

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-6: TVA SAP Sampling, Spring 2010 - Bluegill Carcass at Emory River Mile 4.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
Aluminum	mg/kg		50.75	50.75	287	6 / 6	124.4
Antimony	mg/kg	0.01394 / 0.01472	ND	ND	ND	0 / 6	0
Arsenic	mg/kg		0.1653	0.1653	0.608	6 / 6	0.2934
Barium	mg/kg		3.857	3.857	6.795	6 / 6	5.003
Beryllium	mg/kg	0.0608 / 0.29	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.832 / 4.176	ND	ND	ND	0 / 6	0
Cadmium	mg/kg		0.01131	0.01131	0.03509	6 / 6	0.02028
Calcium	mg/kg		25344	25344	49300	6 / 6	35569
Chromium	mg/kg	0.256 / 1.276	ND	0.7337	4.789	5 / 6	2.588
Cobalt	mg/kg	0.02848 / 0.1421	ND	0.0861	0.384	5 / 6	0.1812
Copper	mg/kg	0.2912 / 1.45	ND	0.7337	0.768	2 / 6	0.7509
Iron	mg/kg	24.35 / 121.2	ND	81.18	944	5 / 6	298.2
Lead	mg/kg		0.1148	0.1148	0.4147	6 / 6	0.2478
Magnesium	mg/kg		579.2	579.2	890.3	6 / 6	737
Manganese	mg/kg		35.1	35.1	77.2	6 / 6	60.07
Mercury	mg/kg		0.01827	0.01827	0.02526	6 / 6	0.02167
Molybdenum	mg/kg		0.0615	0.0615	0.1856	6 / 6	0.1187
Nickel	mg/kg	0.1984 / 0.986	ND	0.6232	0.768	2 / 6	0.6956
Potassium	mg/kg	1459 / 7279	ND	1670	1670	1 / 6	1670
Selenium	mg/kg		0.533	0.533	0.7175	6 / 6	0.6157
Silver	mg/kg	0.00279 / 0.00291	ND	ND	ND	0 / 6	0
Sodium	mg/kg		1341	1341	1720	6 / 6	1503
Strontium	mg/kg		28.58	28.58	47.56	6 / 6	38.64
Thallium	mg/kg	0.01353 / 0.0201	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.0928 / 0.464	ND	0.5104	0.992	2 / 6	0.7512
Zinc	mg/kg		33.6	33.6	52.52	6 / 6	44.56

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-7: TVA SAP Sampling, Spring 2010 - Bluegill Fillet at Emory River Mile 4.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.69	0.69	1.6	6 / 6	1.07
% Moisture	%		77.5	77.5	81.2	6 / 6	79.67
Aluminum	mg/kg	3.786 / 4.08	ND	4.503	7.268	4 / 6	6.211
Antimony	mg/kg	0.01373 / 0.01482	ND	ND	ND	0 / 6	0
Arsenic	mg/kg		0.05887	0.05887	0.1109	6 / 6	0.08403
Barium	mg/kg		0.0515	0.0515	0.2704	6 / 6	0.1606
Beryllium	mg/kg	0.02704 / 0.03045	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.3952 / 0.4263	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.00728 / 0.00771	ND	ND	ND	0 / 6	0
Calcium	mg/kg		139.3	139.3	1005	6 / 6	605.2
Chromium	mg/kg	0.1206 / 0.1299	ND	ND	ND	0 / 6	0
Cobalt	mg/kg	0.01331 / 0.0138	ND	0.01542	0.02704	5 / 6	0.02014
Copper	mg/kg		0.247	0.247	0.3825	6 / 6	0.3195
Iron	mg/kg	11.4 / 12.28	ND	12.56	12.56	1 / 6	12.56
Lead	mg/kg	0.07308 / 0.3536	ND	ND	ND	0 / 6	0
Magnesium	mg/kg		251.3	251.3	301.5	6 / 6	271.1
Manganese	mg/kg		0.5768	0.5768	2.233	6 / 6	1.804
Mercury	mg/kg		0.02632	0.02632	0.0513	6 / 6	0.03463
Molybdenum	mg/kg	0.03328 / 0.03654	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.09152 / 0.09947	ND	ND	ND	0 / 6	0
Potassium	mg/kg		2558	2558	3370	6 / 6	2828
Selenium	mg/kg		0.4512	0.4512	0.684	6 / 6	0.5791
Silver	mg/kg	0.0027 / 0.00305	ND	ND	ND	0 / 6	0
Sodium	mg/kg		379.8	379.8	521.2	6 / 6	447.2
Strontium	mg/kg		0.1401	0.1401	1.31	6 / 6	0.6961
Thallium	mg/kg	0.0131 / 0.01401	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.04368 / 0.04669	ND	ND	ND	0 / 6	0
Zinc	mg/kg		10.09	10.09	18.36	6 / 6	14.01

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-8: TVA SAP Sampling, Spring 2010 - Bluegill Whole Body at Emory River Mile 4.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		2.6	2.6	3.2	3 / 3	2.833
% Moisture	%		77	77	77.4	3 / 3	77.13
Aluminum	mg/kg		25.07	25.07	42.94	3 / 3	34.71
Antimony	mg/kg	0.01401 / 0.01495	ND	ND	ND	0 / 3	0
Arsenic	mg/kg		0.1469	0.1469	0.1656	3 / 3	0.1532
Barium	mg/kg		2.305	2.305	2.691	3 / 3	2.463
Beryllium	mg/kg	0.02938 / 0.0299	ND	ND	ND	0 / 3	0
Boron	mg/kg	0.4068 / 0.437	ND	ND	ND	0 / 3	0
Cadmium	mg/kg		0.01242	0.01242	0.01288	3 / 3	0.01265
Calcium	mg/kg		13515	13515	15985	3 / 3	15008
Chromium	mg/kg	0.1243 / 0.1311	ND	0.1311	0.1794	2 / 3	0.1553
Cobalt	mg/kg		0.0529	0.0529	0.0565	3 / 3	0.05487
Copper	mg/kg		0.391	0.391	0.506	3 / 3	0.4497
Iron	mg/kg		37.49	37.49	53.11	3 / 3	45.69
Lead	mg/kg		0.0414	0.0414	0.2102	3 / 3	0.1007
Magnesium	mg/kg		438.4	438.4	453.1	3 / 3	447.4
Manganese	mg/kg		26.22	26.22	38.87	3 / 3	33.2
Mercury	mg/kg		0.02938	0.02938	0.0299	3 / 3	0.02973
Molybdenum	mg/kg	0.0339 / 0.0368	ND	ND	ND	0 / 3	0
Nickel	mg/kg	0.09492 / 0.1012	ND	0.1085	0.1085	1 / 3	0.1085
Potassium	mg/kg		2531	2531	2691	3 / 3	2615
Selenium	mg/kg		0.414	0.414	0.437	3 / 3	0.4268
Silver	mg/kg	0.00271 / 0.00299	ND	ND	ND	0 / 3	0
Sodium	mg/kg		802.3	802.3	874	3 / 3	843.2
Strontium	mg/kg		14.4	14.4	16.08	3 / 3	15.41
Thallium	mg/kg	0.01333 / 0.01587	ND	ND	ND	0 / 3	0
Vanadium	mg/kg		0.0828	0.0828	0.104	3 / 3	0.09217
Zinc	mg/kg		30.82	30.82	35.88	3 / 3	34.06

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-9: TVA SAP Sampling, Spring 2010 - Bluegill Carcass at Emory River Mile 3.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
Aluminum	mg/kg	7.38 / 20.44	ND	13.46	13.46	1 / 4	13.46
Antimony	mg/kg	0.01336 / 0.01508	ND	ND	ND	0 / 4	0
Arsenic	mg/kg	0.05256 / 0.1435	ND	0.0718	0.173	3 / 4	0.1271
Barium	mg/kg		2.54	2.54	4.569	4 / 4	3.89
Beryllium	mg/kg	0.05475 / 0.1498	ND	ND	ND	0 / 4	0
Boron	mg/kg	0.7665 / 2.122	ND	ND	ND	0 / 4	0
Cadmium	mg/kg	0.01905 / 0.03744	ND	ND	ND	0 / 4	0
Calcium	mg/kg		26718	26718	52104	4 / 4	42536
Chromium	mg/kg	0.2409 / 0.6552	ND	0.6351	0.9548	3 / 4	0.8411
Cobalt	mg/kg	0.02628 / 0.07176	ND	0.03285	0.04667	3 / 4	0.04128
Copper	mg/kg	0.2628 / 0.7488	ND	0.341	0.5475	3 / 4	0.4146
Iron	mg/kg	22.12 / 61.46	ND	25.52	25.52	1 / 4	25.52
Lead	mg/kg		0.09636	0.09636	0.2402	4 / 4	0.1653
Magnesium	mg/kg		619.8	619.8	1023	4 / 4	832.5
Manganese	mg/kg		9.811	9.811	32.45	4 / 4	19.44
Mercury	mg/kg		0.03274	0.03274	0.04161	4 / 4	0.03578
Molybdenum	mg/kg	0.0657 / 0.181	ND	0.08322	0.1221	3 / 4	0.1003
Nickel	mg/kg	0.1796 / 0.4992	ND	0.3308	0.3308	1 / 4	0.3308
Potassium	mg/kg		2181	2181	2804	4 / 4	2550
Selenium	mg/kg		0.7502	0.7502	1.183	4 / 4	0.9249
Silver	mg/kg	0.00526 / 0.01466	ND	ND	ND	0 / 4	0
Sodium	mg/kg		1380	1380	1831	4 / 4	1662
Strontium	mg/kg		28.03	28.03	56.78	4 / 4	43.44
Thallium	mg/kg	0.01364 / 0.03267	ND	ND	ND	0 / 4	0
Vanadium	mg/kg	0.08322 / 0.234	ND	0.1296	0.2836	3 / 4	0.191
Zinc	mg/kg		43.99	43.99	54.57	4 / 4	49.72

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-10: TVA SAP Sampling, Spring 2010 - Bluegill Fillet at Emory River Mile 3.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.33	0.33	1.5	6 / 6	0.8583
% Moisture	%		78.7	78.7	82.3	6 / 6	80.9
Aluminum	mg/kg	3.705 / 4.148	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.01343 / 0.01493	ND	ND	ND	0 / 6	0
Arsenic	mg/kg		0.05549	0.05549	0.08955	6 / 6	0.07255
Barium	mg/kg		0.05208	0.05208	0.3621	6 / 6	0.1266
Beryllium	mg/kg	0.02685 / 0.02985	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.3759 / 0.4278	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.00698 / 0.00781	ND	ND	ND	0 / 6	0
Calcium	mg/kg		386.9	386.9	5432	6 / 6	1688
Chromium	mg/kg	0.1171 / 0.1321	ND	ND	ND	0 / 6	0
Cobalt	mg/kg	0.01306 / 0.01451	ND	0.01363	0.02112	4 / 6	0.016
Copper	mg/kg		0.1786	0.1786	0.531	6 / 6	0.3322
Iron	mg/kg	11.15 / 12.48	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.02496 / 0.02976	ND	0.02982	0.08673	2 / 6	0.05828
Magnesium	mg/kg		238.1	238.1	394.1	6 / 6	294.4
Manganese	mg/kg		0.2604	0.2604	2.173	6 / 6	0.7312
Mercury	mg/kg		0.04776	0.04776	0.07697	6 / 6	0.05776
Molybdenum	mg/kg	0.03222 / 0.0372	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.09024 / 0.1004	ND	0.2189	0.2189	1 / 6	0.2189
Potassium	mg/kg		3130	3130	3877	6 / 6	3415
Selenium	mg/kg		0.6265	0.6265	1.129	6 / 6	0.8481
Silver	mg/kg	0.00269 / 0.00299	ND	ND	ND	0 / 6	0
Sodium	mg/kg		303.2	303.2	380.6	6 / 6	343.1
Strontium	mg/kg		0.3906	0.3906	5.602	6 / 6	1.712
Thallium	mg/kg	0.01271 / 0.02418	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.04224 / 0.04776	ND	ND	ND	0 / 6	0
Zinc	mg/kg		9.326	9.326	14.97	6 / 6	11.6

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-11: TVA SAP Sampling, Spring 2010 - Bluegill Whole Body at Emory River Mile 2.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1.2	1.2	4.1	4 / 4	2.925
% Moisture	%		76	76	78.3	4 / 4	77.18
Aluminum	mg/kg		39.84	39.84	149.7	4 / 4	90.71
Antimony	mg/kg	0.0132 / 0.01434	ND	ND	ND	0 / 4	0
Arsenic	mg/kg		0.2552	0.2552	0.3472	4 / 4	0.3066
Barium	mg/kg		1.879	1.879	3.732	4 / 4	2.736
Beryllium	mg/kg	0.0264 / 0.02912	ND	ND	ND	0 / 4	0
Boron	mg/kg	0.384 / 0.4032	ND	ND	ND	0 / 4	0
Cadmium	mg/kg		0.00912	0.00912	0.01501	4 / 4	0.01264
Calcium	mg/kg		11600	11600	20789	4 / 4	14897
Chromium	mg/kg	0.1152 / 0.123	ND	0.224	0.3472	2 / 4	0.2856
Cobalt	mg/kg		0.0432	0.0432	0.1215	4 / 4	0.07518
Copper	mg/kg		0.408	0.408	0.6272	4 / 4	0.5398
Iron	mg/kg		34.56	34.56	122.4	4 / 4	72.45
Lead	mg/kg		0.0504	0.0504	0.1953	4 / 4	0.1067
Magnesium	mg/kg		387.4	387.4	464.4	4 / 4	433.2
Manganese	mg/kg		18.99	18.99	27.78	4 / 4	23.67
Mercury	mg/kg		0.01725	0.01725	0.02604	4 / 4	0.02108
Molybdenum	mg/kg		0.04872	0.04872	0.06048	4 / 4	0.05461
Nickel	mg/kg	0.0888 / 0.0888	ND	0.1814	0.5104	3 / 4	0.2993
Potassium	mg/kg		2517	2517	2691	4 / 4	2624
Selenium	mg/kg		0.576	0.576	0.9114	4 / 4	0.7243
Silver	mg/kg	0.00264 / 0.00291	ND	ND	ND	0 / 4	0
Sodium	mg/kg		763.8	763.8	863	4 / 4	830.4
Strontium	mg/kg		13.8	13.8	23.87	4 / 4	17.3
Thallium	mg/kg	0.01346 / 0.03255	ND	ND	ND	0 / 4	0
Vanadium	mg/kg		0.1995	0.1995	0.4774	4 / 4	0.3376
Zinc	mg/kg		26.68	26.68	32.4	4 / 4	30.86

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-12: TVA SAP Sampling, Spring 2010 - Bluegill Carcass at Emory River Mile 0.9

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
Aluminum	mg/kg	7.598 / 40.6	ND	26.46	26.46	1 / 5	26.46
Antimony	mg/kg	0.01352 / 0.01457	ND	ND	ND	0 / 5	0
Arsenic	mg/kg	0.0524 / 0.2845	ND	0.04716	0.322	4 / 5	0.183
Barium	mg/kg		1.755	1.755	5.925	5 / 5	3.519
Beryllium	mg/kg	0.1127 / 0.5899	ND	ND	ND	0 / 5	0
Boron	mg/kg	0.786 / 4.199	ND	ND	ND	0 / 5	0
Cadmium	mg/kg	0.01729 / 0.07634	ND	ND	ND	0 / 5	0
Calcium	mg/kg		26095	26095	69400	5 / 5	48934
Chromium	mg/kg	0.241 / 1.284	ND	0.6517	0.8122	3 / 5	0.7476
Cobalt	mg/kg	0.0262 / 0.1423	ND	0.04978	0.04978	1 / 5	0.04978
Copper	mg/kg	0.262 / 1.457	ND	0.524	0.524	1 / 5	0.524
Iron	mg/kg	22.85 / 121.8	ND	41.13	41.13	1 / 5	41.13
Lead	mg/kg		0.1231	0.1231	0.2082	5 / 5	0.1773
Magnesium	mg/kg		565.9	565.9	1140	5 / 5	921.2
Manganese	mg/kg		13.62	13.62	38.32	5 / 5	27.51
Mercury	mg/kg		0.02673	0.02673	0.0655	5 / 5	0.0398
Molybdenum	mg/kg	0.0655 / 0.347	ND	0.07336	0.07336	1 / 5	0.07336
Nickel	mg/kg	0.186 / 0.9716	ND	0.2096	0.2096	1 / 5	0.2096
Potassium	mg/kg		2299	2299	2540	5 / 5	2458
Selenium	mg/kg	0.1284 / 1.353	ND	0.6026	0.6517	3 / 5	0.6226
Silver	mg/kg	0.0055 / 0.02915	ND	ND	ND	0 / 5	0
Sodium	mg/kg		1561	1561	1902	5 / 5	1719
Strontium	mg/kg		19.7	19.7	64.2	5 / 5	43.28
Thallium	mg/kg	0.0131 / 0.02737	ND	ND	ND	0 / 5	0
Vanadium	mg/kg	0.08646 / 0.4511	ND	0.1729	0.3068	3 / 5	0.2376
Zinc	mg/kg		50.66	50.66	54.52	5 / 5	52.53

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-13: TVA SAP Sampling, Spring 2010 - Bluegill Fillet at Emory River Mile 0.9

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.78	0.78	1.3	5 / 5	1.04
% Moisture	%		76.3	76.3	81.1	5 / 5	79.54
Aluminum	mg/kg	3.866 / 4.148	ND	ND	ND	0 / 5	0
Antimony	mg/kg	0.01404 / 0.01493	ND	ND	ND	0 / 5	0
Arsenic	mg/kg		0.03792	0.03792	0.1501	5 / 5	0.08222
Barium	mg/kg	0.04536 / 0.04775	ND	0.05688	0.1064	2 / 5	0.08164
Beryllium	mg/kg	0.03024 / 0.06162	ND	ND	ND	0 / 5	0
Boron	mg/kg	0.4104 / 0.4266	ND	ND	ND	0 / 5	0
Cadmium	mg/kg	0.00734 / 0.01588	ND	ND	ND	0 / 5	0
Calcium	mg/kg		153.4	153.4	769.5	5 / 5	420.9
Chromium	mg/kg	0.1231 / 0.1304	ND	0.247	0.247	1 / 5	0.247
Cobalt	mg/kg	0.01361 / 0.01446	ND	ND	ND	0 / 5	0
Copper	mg/kg		0.2376	0.2376	0.399	5 / 5	0.303
Iron	mg/kg	11.64 / 12.47	ND	13.93	13.93	1 / 5	13.93
Lead	mg/kg	0.02592 / 0.02865	ND	ND	ND	0 / 5	0
Magnesium	mg/kg		268.4	268.4	292.2	5 / 5	281.9
Manganese	mg/kg		0.2376	0.2376	1.102	5 / 5	0.4531
Mercury	mg/kg		0.04536	0.04536	0.1375	5 / 5	0.06696
Molybdenum	mg/kg	0.0342 / 0.03629	ND	ND	ND	0 / 5	0
Nickel	mg/kg	0.09504 / 0.1019	ND	0.114	0.114	1 / 5	0.114
Potassium	mg/kg		3247	3247	3725	5 / 5	3523
Selenium	mg/kg		0.551	0.551	0.8883	5 / 5	0.7342
Silver	mg/kg	0.00281 / 0.00993	ND	ND	ND	0 / 5	0
Sodium	mg/kg		274.1	274.1	369.7	5 / 5	312.1
Strontium	mg/kg		0.08208	0.08208	0.722	5 / 5	0.3487
Thallium	mg/kg	0.01339 / 0.04266	ND	ND	ND	0 / 5	0
Vanadium	mg/kg	0.0432 / 0.0948	ND	ND	ND	0 / 5	0
Zinc	mg/kg		11.28	11.28	21.66	5 / 5	15.95

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-14: TVA SAP Sampling, Spring 2010 - Bluegill Whole Body at Emory River Mile 0.9

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.73	0.73	3.4	3 / 3	1.843
% Moisture	%		77	77	77.7	3 / 3	77.37
Aluminum	mg/kg		58.19	58.19	221.2	3 / 3	126.9
Antimony	mg/kg	0.0138 / 0.01469	ND	ND	ND	0 / 3	0
Arsenic	mg/kg		0.3164	0.3164	0.4014	3 / 3	0.3466
Barium	mg/kg		1.955	1.955	4.036	3 / 3	3.014
Beryllium	mg/kg	0.0276 / 0.06102	ND	ND	ND	0 / 3	0
Boron	mg/kg	0.391 / 0.4294	ND	ND	ND	0 / 3	0
Cadmium	mg/kg		0.01424	0.01424	0.01656	3 / 3	0.01525
Calcium	mg/kg		15111	15111	21402	3 / 3	17746
Chromium	mg/kg		0.1794	0.1794	0.4972	3 / 3	0.3593
Cobalt	mg/kg		0.0598	0.0598	0.1918	3 / 3	0.12
Copper	mg/kg		0.565	0.565	0.667	3 / 3	0.6262
Iron	mg/kg		65.09	65.09	238.6	3 / 3	132.3
Lead	mg/kg		0.0851	0.0851	0.1873	3 / 3	0.1465
Magnesium	mg/kg		414	414	562.7	3 / 3	484.6
Manganese	mg/kg		17.02	17.02	36.57	3 / 3	24.46
Mercury	mg/kg		0.01633	0.01633	0.02486	3 / 3	0.02116
Molybdenum	mg/kg		0.0506	0.0506	0.08136	3 / 3	0.06703
Nickel	mg/kg		0.1242	0.1242	0.2899	3 / 3	0.193
Potassium	mg/kg		2644	2644	2743	3 / 3	2677
Selenium	mg/kg		0.713	0.713	1.026	3 / 3	0.8885
Silver	mg/kg	0.00276 / 0.00294	ND	ND	ND	0 / 3	0
Sodium	mg/kg		862.5	862.5	1078	3 / 3	965.7
Strontium	mg/kg		15.59	15.59	20.07	3 / 3	17.86
Thallium	mg/kg	0.02139 / 0.04068	ND	ND	ND	0 / 3	0
Vanadium	mg/kg		0.23	0.23	0.6244	3 / 3	0.4129
Zinc	mg/kg		35.88	35.88	44.75	3 / 3	39.44

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-15: TVA SAP Sampling, Spring 2010 - Bluegill Carcass at Clinch River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1.2	1.2	9.2	5 / 5	3.54
% Moisture	%		66.8	66.8	74	5 / 5	71.6
Aluminum	mg/kg	3.836 / 20.56	ND	10.56	25.95	4 / 8	21.17
Antimony	mg/kg	0.0136 / 0.01494	ND	ND	ND	0 / 8	0
Arsenic	mg/kg	0.02666 / 0.1316	ND	0.0894	0.2198	7 / 8	0.1684
Barium	mg/kg		1.671	1.671	2.976	8 / 8	2.221
Beryllium	mg/kg	0.0274 / 0.152	ND	ND	ND	0 / 8	0
Boron	mg/kg	0.3836 / 2.116	ND	ND	ND	0 / 8	0
Cadmium	mg/kg	0.00713 / 0.01196	ND	0.01209	0.05575	3 / 8	0.02847
Calcium	mg/kg		18957	18957	46500	8 / 8	34821
Chromium	mg/kg	0.1206 / 0.1289	ND	0.1394	1.426	6 / 8	0.6775
Cobalt	mg/kg	0.01343 / 0.07152	ND	0.03516	0.0548	5 / 8	0.04723
Copper	mg/kg	0.1397 / 0.745	ND	0.2366	0.3652	5 / 8	0.2841
Iron	mg/kg	11.54 / 61.98	ND	16.17	38.63	5 / 8	26.22
Lead	mg/kg		0.03984	0.03984	0.1612	8 / 8	0.09932
Magnesium	mg/kg		438.2	438.2	1040	8 / 8	740.6
Manganese	mg/kg		13.74	13.74	30.55	8 / 8	23.47
Mercury	mg/kg		0.03516	0.03516	0.06021	8 / 8	0.04614
Molybdenum	mg/kg	0.03345 / 0.0664	ND	0.0868	0.1004	3 / 8	0.09319
Nickel	mg/kg	0.09316 / 0.9238	ND	ND	ND	0 / 8	0
Potassium	mg/kg		1903	1903	2691	8 / 8	2280
Selenium	mg/kg		0.4959	0.4959	0.6244	8 / 8	0.5425
Silver	mg/kg	0.00268 / 0.00299	ND	ND	ND	0 / 8	0
Sodium	mg/kg		1298	1298	2236	8 / 8	1684
Strontium	mg/kg		9.628	9.628	38.44	8 / 8	25.91
Thallium	mg/kg	0.01293 / 0.0167	ND	ND	ND	0 / 8	0
Vanadium	mg/kg	0.04384 / 0.2354	ND	0.06739	0.1586	5 / 8	0.1208
Zinc	mg/kg		22.94	22.94	58.41	8 / 8	40.78

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-16: TVA SAP Sampling, Spring 2010 - Bluegill Fillet at Clinch River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.37	0.37	3.4	11 / 11	0.9618
% Moisture	%		75.1	75.1	84.1	11 / 11	81.07
Aluminum	mg/kg	3.75 / 4.162	ND	ND	ND	0 / 11	0
Antimony	mg/kg	0.01359 / 0.01497	ND	ND	ND	0 / 11	0
Arsenic	mg/kg		0.03384	0.03384	0.164	11 / 11	0.08556
Barium	mg/kg	0.043 / 0.04779	ND	0.06225	0.451	5 / 11	0.2334
Beryllium	mg/kg	0.02752 / 0.03096	ND	ND	ND	0 / 11	0
Boron	mg/kg	0.3956 / 0.4305	ND	0.4816	0.4816	1 / 11	0.4816
Cadmium	mg/kg	0.00705 / 0.01591	ND	ND	ND	0 / 11	0
Calcium	mg/kg		132	132	7934	11 / 11	1885
Chromium	mg/kg	0.1187 / 0.1312	ND	0.3162	0.3162	1 / 11	0.3162
Cobalt	mg/kg	0.01323 / 0.01456	ND	ND	ND	0 / 11	0
Copper	mg/kg	0.1359 / 0.1399	ND	0.1488	0.4136	10 / 11	0.257
Iron	mg/kg	11.28 / 12.51	ND	ND	ND	0 / 11	0
Lead	mg/kg	0.0258 / 0.02924	ND	ND	ND	0 / 11	0
Magnesium	mg/kg		217.8	217.8	369	11 / 11	285
Manganese	mg/kg		0.1892	0.1892	8.774	11 / 11	1.745
Mercury	mg/kg		0.05125	0.05125	0.1383	11 / 11	0.07964
Molybdenum	mg/kg	0.03213 / 0.0369	ND	ND	ND	0 / 11	0
Nickel	mg/kg	0.09072 / 0.376	ND	0.1414	0.1414	1 / 11	0.1414
Potassium	mg/kg		2528	2528	3937	11 / 11	3303
Selenium	mg/kg		0.4956	0.4956	0.6335	11 / 11	0.545
Silver	mg/kg	0.00265 / 0.00308	ND	ND	ND	0 / 11	0
Sodium	mg/kg		233.6	233.6	550.1	11 / 11	371.3
Strontium	mg/kg		0.07956	0.07956	5.822	11 / 11	1.467
Thallium	mg/kg	0.01285 / 0.01435	ND	ND	ND	0 / 11	0
Vanadium	mg/kg	0.043 / 0.04715	ND	ND	ND	0 / 11	0
Zinc	mg/kg		8.947	8.947	20.64	11 / 11	15.39

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-17: TVA SAP Sampling, Spring 2010 - Bluegill Whole Body at Clinch River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1.1	1.1	2.3	3 / 3	1.733
% Moisture	%		76.8	76.8	78	3 / 3	77.53
Aluminum	mg/kg		32.71	32.71	45.07	3 / 3	37.44
Antimony	mg/kg	0.0143 / 0.01443	ND	ND	ND	0 / 3	0
Arsenic	mg/kg		0.1376	0.1376	0.1562	3 / 3	0.1451
Barium	mg/kg		1.188	1.188	1.354	3 / 3	1.296
Beryllium	mg/kg	0.0286 / 0.03016	ND	ND	ND	0 / 3	0
Boron	mg/kg	0.4176 / 0.4218	ND	ND	ND	0 / 3	0
Cadmium	mg/kg	0.00742 / 0.00755	ND	0.00858	0.01021	2 / 3	0.009395
Calcium	mg/kg		13665	13665	15362	3 / 3	14384
Chromium	mg/kg		0.1376	0.1376	0.1879	3 / 3	0.1591
Cobalt	mg/kg		0.03712	0.03712	0.05328	3 / 3	0.0426
Copper	mg/kg		0.333	0.333	0.462	3 / 3	0.4042
Iron	mg/kg		38.98	38.98	65.05	3 / 3	51.98
Lead	mg/kg		0.05104	0.05104	0.0666	3 / 3	0.05828
Magnesium	mg/kg		424.6	424.6	488.4	3 / 3	446.6
Manganese	mg/kg		13.11	13.11	15.36	3 / 3	13.92
Mercury	mg/kg		0.033	0.033	0.05106	3 / 3	0.04117
Molybdenum	mg/kg	0.0348 / 0.03552	ND	ND	ND	0 / 3	0
Nickel	mg/kg	0.0968 / 0.09768	ND	0.1628	0.1628	1 / 3	0.1628
Potassium	mg/kg		2622	2622	2706	3 / 3	2671
Selenium	mg/kg		0.528	0.528	0.6216	3 / 3	0.5765
Silver	mg/kg	0.00278 / 0.00289	ND	ND	ND	0 / 3	0
Sodium	mg/kg		872.3	872.3	954.6	3 / 3	905.2
Strontium	mg/kg		11.73	11.73	13.68	3 / 3	12.61
Thallium	mg/kg	0.01364 / 0.01694	ND	ND	ND	0 / 3	0
Vanadium	mg/kg		0.06496	0.06496	0.1221	3 / 3	0.09682
Zinc	mg/kg		29	29	33.44	3 / 3	31.77

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-18: TVA SAP Sampling, Spring 2010 - Bluegill Carcass at Clinch River Mile 3.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1.1	1.1	2.4	6 / 6	1.617
% Moisture	%		70.7	70.7	75	6 / 6	73.13
Aluminum	mg/kg		5.686	5.686	30.51	2 / 2	18.1
Antimony	mg/kg	0.0133 / 0.0149	ND	ND	ND	0 / 6	0
Arsenic	mg/kg		0.1897	0.1897	0.3864	6 / 6	0.2716
Barium	mg/kg		1.463	1.463	3.991	6 / 6	2.114
Beryllium	mg/kg	0.0275 / 0.03036	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.375 / 0.4416	ND	ND	ND	0 / 6	0
Cadmium	mg/kg		0.00975	0.00975	0.01684	6 / 6	0.01254
Calcium	mg/kg		27250	27250	34136	6 / 6	29804
Chromium	mg/kg	0.1155 / 0.1289	ND	0.1535	0.1657	3 / 6	0.1616
Cobalt	mg/kg		0.0252	0.0252	0.05523	6 / 6	0.04039
Copper	mg/kg		0.3012	0.3012	0.425	6 / 6	0.3712
Iron	mg/kg		13.91	13.91	43.13	6 / 6	22.48
Lead	mg/kg		0.045	0.045	0.1758	6 / 6	0.09353
Magnesium	mg/kg		560	560	695.3	6 / 6	629.4
Manganese	mg/kg		9.4	9.4	16.26	6 / 6	14.32
Mercury	mg/kg		0.0251	0.0251	0.03588	6 / 6	0.02955
Molybdenum	mg/kg	0.06739 / 0.1983	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.09 / 0.09962	ND	0.1104	0.1236	2 / 6	0.117
Potassium	mg/kg		2140	2140	2483	6 / 6	2338
Selenium	mg/kg		0.6696	0.6696	0.9287	6 / 6	0.8031
Silver	mg/kg	0.00275 / 0.00304	ND	ND	ND	0 / 6	0
Sodium	mg/kg		1545	1545	1705	6 / 6	1620
Strontium	mg/kg		23.78	23.78	33.89	6 / 6	28.18
Thallium	mg/kg	0.01311 / 0.03012	ND	ND	ND	0 / 6	0
Vanadium	mg/kg		0.1088	0.1088	0.3419	6 / 6	0.1929
Zinc	mg/kg		36	36	44.44	6 / 6	39.24

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-19: TVA SAP Sampling, Spring 2010 - Bluegill Fillet at Clinch River Mile 3.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.17	0.17	0.47	6 / 6	0.3133
% Moisture	%		79.3	79.3	83.7	6 / 6	81.32
Antimony	mg/kg	0.0127 / 0.0147	ND	ND	ND	0 / 6	0
Arsenic	mg/kg	0.02392 / 0.1387	ND	0.138	0.2282	4 / 6	0.1743
Barium	mg/kg		0.0546	0.0546	0.184	5 / 5	0.1188
Beryllium	mg/kg	0.02576 / 0.02912	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.368 / 0.4186	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.00662 / 0.00766	ND	ND	ND	0 / 6	0
Calcium	mg/kg		201	201	3342	6 / 6	1712
Chromium	mg/kg	0.1104 / 0.1283	ND	ND	ND	0 / 6	0
Cobalt	mg/kg	0.01233 / 0.01428	ND	ND	ND	0 / 6	0
Copper	mg/kg	0.127 / 0.147	ND	0.1597	0.2448	5 / 6	0.2006
Lead	mg/kg	0.02392 / 0.0273	ND	0.02898	0.02898	1 / 6	0.02898
Magnesium	mg/kg		242.1	242.1	325	6 / 6	293.8
Manganese	mg/kg	0.149 / 0.1718	ND	0.306	1.712	5 / 6	1.061
Mercury	mg/kg		0.046	0.046	0.05542	6 / 6	0.05024
Molybdenum	mg/kg	0.03128 / 0.0364	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.08464 / 0.09936	ND	ND	ND	0 / 6	0
Potassium	mg/kg		2584	2584	3511	6 / 6	3157
Selenium	mg/kg		0.644	0.644	0.8976	6 / 6	0.7771
Silver	mg/kg	0.00258 / 0.00346	ND	ND	ND	0 / 6	0
Sodium	mg/kg		471.2	471.2	662.5	6 / 6	566.3
Strontium	mg/kg		0.178	0.178	2.95	6 / 6	1.584
Thallium	mg/kg	0.01196 / 0.01718	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.04048 / 0.04554	ND	ND	ND	0 / 6	0
Zinc	mg/kg	9.513 / 10.99	ND	13.21	14.46	4 / 6	13.6

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-20: TVA SAP Sampling, Spring 2010 - Bluegill Whole Body at Clinch River Mile 3.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1.3	1.3	4.2	8 / 8	2.8
% Moisture	%		76.3	76.3	77.9	8 / 8	77.23
Aluminum	mg/kg		21.59	21.59	82.67	8 / 8	49.04
Antimony	mg/kg	0.01351 / 0.01493	ND	ND	ND	0 / 8	0
Arsenic	mg/kg		0.228	0.228	0.3094	8 / 8	0.273
Barium	mg/kg		1.161	1.161	2.179	8 / 8	1.769
Beryllium	mg/kg	0.02724 / 0.03094	ND	ND	ND	0 / 8	0
Boron	mg/kg	0.3859 / 0.4266	ND	ND	ND	0 / 8	0
Cadmium	mg/kg		0.0114	0.0114	0.0229	8 / 8	0.01502
Calcium	mg/kg		11519	11519	19658	8 / 8	15111
Chromium	mg/kg	0.1186 / 0.1304	ND	0.137	0.2951	5 / 8	0.2091
Cobalt	mg/kg		0.02736	0.02736	0.08172	8 / 8	0.05279
Copper	mg/kg		0.454	0.454	2.107	8 / 8	0.8644
Iron	mg/kg		23.34	23.34	80.13	8 / 8	47.67
Lead	mg/kg		0.04029	0.04029	0.1397	8 / 8	0.08684
Magnesium	mg/kg		395.8	395.8	563	8 / 8	457.1
Manganese	mg/kg		12.28	12.28	21.96	8 / 8	16.82
Mercury	mg/kg		0.0041	0.0041	0.03164	8 / 8	0.02112
Molybdenum	mg/kg	0.03192 / 0.07718	ND	0.04332	0.06356	4 / 8	0.05031
Nickel	mg/kg	0.0912 / 0.1019	ND	0.09988	0.4122	5 / 8	0.1775
Potassium	mg/kg		2588	2588	2838	8 / 8	2727
Selenium	mg/kg		0.6412	0.6412	0.9307	8 / 8	0.7621
Silver	mg/kg	0.00272 / 0.00308	ND	ND	ND	0 / 8	0
Sodium	mg/kg		796.9	796.9	1071	8 / 8	914.8
Strontium	mg/kg		10.26	10.26	18.98	8 / 8	14.4
Thallium	mg/kg	0.01872 / 0.03876	ND	ND	ND	0 / 8	0
Vanadium	mg/kg		0.0948	0.0948	0.2873	8 / 8	0.2026
Zinc	mg/kg		27.18	27.18	47.91	8 / 8	36.06

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-21: TVA SAP Sampling, Spring 2010 - Bluegill Carcass at Clinch River Mile 25.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
Aluminum	mg/kg	19.02 / 20.66	ND	ND	ND	0 / 3	0
Antimony	mg/kg	0.0138 / 0.01485	ND	ND	ND	0 / 3	0
Arsenic	mg/kg	0.1343 / 0.144	ND	0.3282	0.3282	1 / 3	0.3282
Barium	mg/kg		1.626	1.626	2.425	3 / 3	1.898
Beryllium	mg/kg	0.1417 / 0.153	ND	ND	ND	0 / 3	0
Boron	mg/kg	1.977 / 2.138	ND	ND	ND	0 / 3	0
Cadmium	mg/kg	0.0746 / 0.07875	ND	ND	ND	0 / 3	0
Calcium	mg/kg		24975	24975	40284	3 / 3	33522
Chromium	mg/kg	0.5968 / 0.6525	ND	ND	ND	0 / 3	0
Cobalt	mg/kg	0.06714 / 0.072	ND	0.08579	0.08579	1 / 3	0.08579
Copper	mg/kg	0.6714 / 0.7425	ND	ND	ND	0 / 3	0
Iron	mg/kg	57.44 / 62.33	ND	ND	ND	0 / 3	0
Lead	mg/kg		0.03825	0.03825	0.1119	3 / 3	0.08562
Magnesium	mg/kg		569.3	569.3	865.4	3 / 3	753.4
Manganese	mg/kg		15.57	15.57	35.31	3 / 3	22.23
Mercury	mg/kg	0.01082 / 0.01193	ND	0.01676	0.02014	2 / 3	0.01845
Molybdenum	mg/kg	0.1679 / 0.1823	ND	ND	ND	0 / 3	0
Nickel	mg/kg	0.4476 / 0.495	ND	ND	ND	0 / 3	0
Potassium	mg/kg		2086	2086	2835	3 / 3	2477
Selenium	mg/kg		0.405	0.405	0.746	3 / 3	0.6207
Silver	mg/kg	0.0138 / 0.01485	ND	ND	ND	0 / 3	0
Sodium	mg/kg		1276	1276	1846	3 / 3	1594
Strontium	mg/kg		19.91	19.91	30.18	3 / 3	24.35
Thallium	mg/kg	0.01372 / 0.02025	ND	ND	ND	0 / 3	0
Vanadium	mg/kg	0.4476 / 0.4725	ND	ND	ND	0 / 3	0
Zinc	mg/kg		27.45	27.45	53.71	3 / 3	40.94

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-22: TVA SAP Sampling, Spring 2010 - Bluegill Fillet at Clinch River Mile 25.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.64	0.64	0.88	3 / 3	0.78
% Moisture	%		77.8	77.8	79.2	3 / 3	78.5
Aluminum	mg/kg	3.806 / 3.978	ND	ND	ND	0 / 3	0
Antimony	mg/kg	0.01373 / 0.01443	ND	ND	ND	0 / 3	0
Arsenic	mg/kg	0.02704 / 0.02886	ND	0.04576	0.1935	2 / 3	0.1196
Barium	mg/kg	0.04368 / 0.04662	ND	0.1419	0.1435	2 / 3	0.1427
Beryllium	mg/kg	0.02886 / 0.0301	ND	ND	ND	0 / 3	0
Boron	mg/kg	0.3952 / 0.4218	ND	ND	ND	0 / 3	0
Cadmium	mg/kg	0.00728 / 0.01532	ND	0.01435	0.01435	1 / 3	0.01435
Calcium	mg/kg		196	196	2043	3 / 3	1379
Chromium	mg/kg	0.1206 / 0.1269	ND	ND	ND	0 / 3	0
Cobalt	mg/kg	0.01331 / 0.01399	ND	0.01699	0.01699	1 / 3	0.01699
Copper	mg/kg		0.222	0.222	0.4576	3 / 3	0.3197
Iron	mg/kg	11.48 / 12	ND	ND	ND	0 / 3	0
Lead	mg/kg	0.02664 / 0.02795	ND	ND	ND	0 / 3	0
Magnesium	mg/kg		297.4	297.4	329	3 / 3	313.1
Manganese	mg/kg		0.2664	0.2664	1.789	3 / 3	0.9001
Mercury	mg/kg		0.01154	0.01154	0.02365	3 / 3	0.01866
Molybdenum	mg/kg	0.03328 / 0.03552	ND	ND	ND	0 / 3	0
Nickel	mg/kg	0.0936 / 0.09768	ND	0.1082	0.1082	1 / 3	0.1082
Potassium	mg/kg		3557	3557	4240	3 / 3	3918
Selenium	mg/kg		0.3774	0.3774	0.6656	3 / 3	0.5555
Silver	mg/kg	0.0027 / 0.00289	ND	ND	ND	0 / 3	0
Sodium	mg/kg		415.1	415.1	472.2	3 / 3	436.2
Strontium	mg/kg		0.1177	0.1177	1.462	3 / 3	1.012
Thallium	mg/kg	0.0131 / 0.01376	ND	ND	ND	0 / 3	0
Vanadium	mg/kg	0.08736 / 0.09102	ND	ND	ND	0 / 3	0
Zinc	mg/kg		9.768	9.768	20.8	3 / 3	15.5

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-23: TVA SAP Sampling, Spring 2010 - Bluegill Carcass at Clinch River Mile 1.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
Aluminum	mg/kg	18.57 / 19.89	ND	30.81	125.7	2 / 3	78.26
Antimony	mg/kg	0.01329 / 0.01443	ND	ND	ND	0 / 3	0
Arsenic	mg/kg	0.1298 / 0.1408	ND	0.4017	0.4947	2 / 3	0.4482
Barium	mg/kg		2.675	2.675	5.655	3 / 3	3.882
Beryllium	mg/kg	0.136 / 0.1478	ND	ND	ND	0 / 3	0
Boron	mg/kg	1.916 / 2.077	ND	ND	ND	0 / 3	0
Cadmium	mg/kg	0.07107 / 0.07744	ND	ND	ND	0 / 3	0
Calcium	mg/kg		25113	25113	50058	3 / 3	38081
Chromium	mg/kg	0.5871 / 0.6336	ND	2.561	2.561	1 / 3	2.561
Cobalt	mg/kg	0.06489 / 0.0704	ND	0.07107	0.1339	2 / 3	0.1025
Copper	mg/kg	0.6693 / 0.704	ND	0.873	0.873	1 / 3	0.873
Iron	mg/kg	55.93 / 59.84	ND	132.4	132.4	1 / 3	132.4
Lead	mg/kg		0.1162	0.1162	0.2534	3 / 3	0.1979
Magnesium	mg/kg		660.6	660.6	1156	3 / 3	857.8
Manganese	mg/kg		32.03	32.03	54.08	3 / 3	39.47
Mercury	mg/kg		0.02147	0.02147	0.02966	3 / 3	0.02674
Molybdenum	mg/kg	0.1638 / 0.176	ND	0.195	0.2379	2 / 3	0.2165
Nickel	mg/kg	0.4635 / 0.4928	ND	0.873	0.873	1 / 3	0.873
Potassium	mg/kg		2256	2256	2604	3 / 3	2464
Selenium	mg/kg		0.7107	0.7107	0.88	3 / 3	0.7921
Silver	mg/kg	0.01329 / 0.01443	ND	ND	ND	0 / 3	0
Sodium	mg/kg		1577	1577	1993	3 / 3	1736
Strontium	mg/kg		25.14	25.14	51.6	3 / 3	38.6
Thallium	mg/kg	0.02042 / 0.03783	ND	ND	ND	0 / 3	0
Vanadium	mg/kg	0.2132 / 0.4506	ND	0.4635	0.5238	2 / 3	0.4937
Zinc	mg/kg		41.89	41.89	67.05	3 / 3	51.74

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-24: TVA SAP Sampling, Spring 2010 - Bluegill Fillet at Clinch River Mile 1.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.55	0.55	2.7	6 / 6	1.642
% Moisture	%		78.3	78.3	83.8	5 / 5	81.12
Aluminum	mg/kg	3.993 / 4.115	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.01435 / 0.0149	ND	ND	ND	0 / 6	0
Arsenic	mg/kg		0.05425	0.05425	0.3216	6 / 6	0.1606
Barium	mg/kg	0.04557 / 0.04632	ND	0.05025	0.05859	4 / 6	0.05408
Beryllium	mg/kg	0.0288 / 0.03078	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.4048 / 0.4246	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.00754 / 0.01563	ND	ND	ND	0 / 6	0
Calcium	mg/kg		190.7	190.7	487.8	6 / 6	306.6
Chromium	mg/kg	0.1266 / 0.1312	ND	ND	ND	0 / 6	0
Cobalt	mg/kg	0.01398 / 0.01442	ND	0.01544	0.01544	1 / 6	0.01544
Copper	mg/kg		0.216	0.216	0.4221	6 / 6	0.2851
Iron	mg/kg	12.02 / 12.41	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.0276 / 0.02916	ND	0.0651	0.0651	1 / 6	0.0651
Magnesium	mg/kg		243	243	340.7	6 / 6	290.1
Manganese	mg/kg		0.184	0.184	0.3906	6 / 6	0.2926
Mercury	mg/kg		0.03689	0.03689	0.07728	6 / 6	0.05497
Molybdenum	mg/kg	0.03472 / 0.03618	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.0972 / 0.1004	ND	ND	ND	0 / 6	0
Potassium	mg/kg		3159	3159	3906	6 / 6	3683
Selenium	mg/kg		0.644	0.644	1.063	6 / 6	0.8095
Silver	mg/kg	0.00281 / 0.00294	ND	ND	ND	0 / 6	0
Sodium	mg/kg		299.9	299.9	501.3	6 / 6	365.8
Strontium	mg/kg		0.1776	0.1776	0.414	6 / 6	0.2795
Thallium	mg/kg	0.01782 / 0.03015	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.00907 / 0.09114	ND	ND	ND	0 / 6	0
Zinc	mg/kg		12.71	12.71	16.24	6 / 6	14.6

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-25: TVA SAP Sampling, Spring 2010 - Bluegill Whole Body at Clinch River Mile 1.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.84	0.84	1.1	3 / 3	0.94
% Moisture	%		77.1	77.1	78.1	3 / 3	77.47
Aluminum	mg/kg		54.97	54.97	453.4	3 / 3	189.1
Antimony	mg/kg	0.01436 / 0.01467	ND	0.01718	0.01718	1 / 3	0.01718
Arsenic	mg/kg		0.2847	0.2847	0.7328	3 / 3	0.438
Barium	mg/kg		1.847	1.847	6.527	3 / 3	3.507
Beryllium	mg/kg	0.02964 / 0.03066	ND	0.04809	0.04809	1 / 3	0.04809
Boron	mg/kg	0.4104 / 0.4161	ND	0.5038	0.5038	1 / 3	0.5038
Cadmium	mg/kg		0.01599	0.01599	0.03893	3 / 3	0.02393
Calcium	mg/kg		16165	16165	20520	3 / 3	18465
Chromium	mg/kg		0.1619	0.1619	0.6412	3 / 3	0.3268
Cobalt	mg/kg		0.05694	0.05694	0.3206	3 / 3	0.1464
Copper	mg/kg		0.5016	0.5016	1.397	3 / 3	0.8519
Iron	mg/kg		55.63	55.63	451.1	3 / 3	188
Lead	mg/kg		0.0876	0.0876	0.4809	3 / 3	0.2222
Magnesium	mg/kg		499.3	499.3	565.6	3 / 3	531.6
Manganese	mg/kg		11.65	11.65	36.64	3 / 3	21.15
Mercury	mg/kg		0.02847	0.02847	0.03664	3 / 3	0.0331
Molybdenum	mg/kg	0.07752 / 0.1122	ND	ND	ND	0 / 3	0
Nickel	mg/kg		0.1117	0.1117	0.5954	3 / 3	0.2759
Potassium	mg/kg		2847	2847	2931	3 / 3	2884
Selenium	mg/kg		0.7665	0.7665	0.916	3 / 3	0.8268
Silver	mg/kg	0.00285 / 0.00298	ND	ND	ND	0 / 3	0
Sodium	mg/kg		1056	1056	1093	3 / 3	1075
Strontium	mg/kg		15.87	15.87	20.83	3 / 3	18.76
Thallium	mg/kg	0.02508 / 0.06183	ND	ND	ND	0 / 3	0
Vanadium	mg/kg		0.2628	0.2628	1.305	3 / 3	0.6138
Zinc	mg/kg		39.44	39.44	46.49	3 / 3	43.46

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-26: TVA SAP Sampling, Spring 2010 - Channel Catfish Carcass at Emory River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1.6	1.6	15.3	8 / 8	6.25
% Moisture	%		67.1	67.1	77.2	8 / 8	72.08
Aluminum	mg/kg	3.551 / 4.113	ND	ND	ND	0 / 8	0
Antimony	mg/kg	0.01291 / 0.01493	ND	ND	ND	0 / 8	0
Arsenic	mg/kg	0.0247 / 0.02882	ND	0.03458	0.03458	1 / 8	0.03458
Barium	mg/kg		1.318	1.318	3.511	8 / 8	2.325
Beryllium	mg/kg	0.02609 / 0.03144	ND	ND	ND	0 / 8	0
Boron	mg/kg	0.3705 / 0.4199	ND	ND	ND	0 / 8	0
Cadmium	mg/kg	0.00673 / 0.00757	ND	0.01482	0.02781	5 / 8	0.02049
Calcium	mg/kg		13489	13489	34200	8 / 8	19425
Chromium	mg/kg	0.113 / 0.131	ND	0.2098	0.2098	1 / 8	0.2098
Cobalt	mg/kg		0.03458	0.03458	0.5918	8 / 8	0.1191
Copper	mg/kg		0.2959	0.2959	3.616	8 / 8	1.023
Iron	mg/kg		34.24	34.24	90.03	8 / 8	55.49
Lead	mg/kg		0.06187	0.06187	0.2244	8 / 8	0.1219
Magnesium	mg/kg		330.9	330.9	686.3	8 / 8	474.7
Manganese	mg/kg		6.537	6.537	13.76	8 / 8	8.905
Mercury	mg/kg		0.02964	0.02964	0.1634	8 / 8	0.06237
Molybdenum	mg/kg	0.03211 / 0.03668	ND	ND	ND	0 / 8	0
Nickel	mg/kg	0.08608 / 0.1001	ND	ND	ND	0 / 8	0
Potassium	mg/kg		1485	1485	2308	8 / 8	2046
Selenium	mg/kg		0.2895	0.2895	0.6026	8 / 8	0.4225
Silver	mg/kg	0.00272 / 0.00969	ND	0.00445	0.00445	1 / 8	0.004454
Sodium	mg/kg		960.3	960.3	1853	8 / 8	1398
Strontium	mg/kg		13.26	13.26	35.8	8 / 8	17.9
Thallium	mg/kg	0.0126 / 0.02882	ND	ND	ND	0 / 8	0
Vanadium	mg/kg	0.04035 / 0.04522	ND	0.04606	0.08122	7 / 8	0.06349
Zinc	mg/kg		23.42	23.42	40.76	8 / 8	32.84

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-27: TVA SAP Sampling, Spring 2010 - Channel Catfish Fillet at Emory River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.92	0.92	4.1	8 / 8	2.478
% Moisture	%		79.5	79.5	82.1	8 / 8	80.84
Aluminum	mg/kg	3.623 / 4.139	ND	ND	ND	0 / 8	0
Antimony	mg/kg	0.01307 / 0.01493	ND	ND	ND	0 / 8	0
Arsenic	mg/kg	0.0252 / 0.02985	ND	ND	ND	0 / 8	0
Barium	mg/kg	0.0414 / 0.04654	ND	0.0693	0.135	6 / 8	0.1055
Beryllium	mg/kg	0.02574 / 0.03043	ND	ND	ND	0 / 8	0
Boron	mg/kg	0.3762 / 0.4378	ND	ND	ND	0 / 8	0
Cadmium	mg/kg	0.00693 / 0.00796	ND	ND	ND	0 / 8	0
Calcium	mg/kg		153.9	153.9	1162	8 / 8	635.9
Chromium	mg/kg	0.1148 / 0.1313	ND	ND	ND	0 / 8	0
Cobalt	mg/kg	0.01267 / 0.01453	ND	ND	ND	0 / 8	0
Copper	mg/kg		0.1969	0.1969	0.4179	8 / 8	0.2865
Iron	mg/kg	10.89 / 12.46	ND	ND	ND	0 / 8	0
Lead	mg/kg	0.0252 / 0.02864	ND	ND	ND	0 / 8	0
Magnesium	mg/kg		232.2	232.2	274.6	8 / 8	248.5
Manganese	mg/kg		0.2327	0.2327	0.954	8 / 8	0.4428
Mercury	mg/kg		0.06534	0.06534	0.2509	8 / 8	0.1198
Molybdenum	mg/kg	0.03168 / 0.03582	ND	ND	ND	0 / 8	0
Nickel	mg/kg	0.0882 / 0.1015	ND	0.198	0.199	2 / 8	0.1985
Potassium	mg/kg		3744	3744	4338	8 / 8	4000
Selenium	mg/kg		0.1572	0.1572	0.398	8 / 8	0.2423
Silver	mg/kg	0.00257 / 0.00995	ND	ND	ND	0 / 8	0
Sodium	mg/kg		340.3	340.3	487.8	8 / 8	419.7
Strontium	mg/kg		0.1486	0.1486	1.075	8 / 8	0.5802
Thallium	mg/kg	0.01247 / 0.02786	ND	ND	ND	0 / 8	0
Vanadium	mg/kg	0.0414 / 0.04776	ND	ND	ND	0 / 8	0
Zinc	mg/kg		6.277	6.277	12.04	8 / 8	7.58

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-28: TVA SAP Sampling, Spring 2010 - Channel Catfish Carcass at Emory River Mile 4.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1.9	1.9	10.1	6 / 6	4.917
% Moisture	%		66.3	66.3	78.1	6 / 6	72.88
Aluminum	mg/kg	3.636 / 4.124	ND	4.853	4.853	1 / 6	4.853
Antimony	mg/kg	0.0131 / 0.01488	ND	ND	ND	0 / 6	0
Arsenic	mg/kg	0.0252 / 0.02871	ND	0.02771	0.1314	4 / 6	0.06676
Barium	mg/kg		1.117	1.117	4.098	6 / 6	2.473
Beryllium	mg/kg	0.02772 / 0.05394	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.378 / 0.4381	ND	ND	ND	0 / 6	0
Cadmium	mg/kg		0.00685	0.00685	0.02932	6 / 6	0.0145
Calcium	mg/kg		13688	13688	33376	6 / 6	21934
Chromium	mg/kg	0.1159 / 0.1314	ND	ND	ND	0 / 6	0
Cobalt	mg/kg		0.03024	0.03024	0.1449	6 / 6	0.0653
Copper	mg/kg		0.4032	0.4032	5.751	6 / 6	1.371
Iron	mg/kg		21.04	21.04	87.96	6 / 6	51.15
Lead	mg/kg		0.06552	0.06552	0.4768	6 / 6	0.1947
Magnesium	mg/kg		367.9	367.9	742	6 / 6	503
Manganese	mg/kg		5.234	5.234	21.55	6 / 6	11.06
Mercury	mg/kg		0.03707	0.03707	0.1144	6 / 6	0.06307
Molybdenum	mg/kg	0.03276 / 0.03707	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.0882 / 0.1018	ND	0.2116	0.2116	1 / 6	0.2116
Potassium	mg/kg		1940	1940	2554	6 / 6	2172
Selenium	mg/kg		0.3504	0.3504	0.5392	6 / 6	0.4368
Silver	mg/kg	0.00252 / 0.00864	ND	ND	ND	0 / 6	0
Sodium	mg/kg		1250	1250	1871	6 / 6	1456
Strontium	mg/kg		10.47	10.47	27.77	6 / 6	18.61
Thallium	mg/kg	0.0126 / 0.02444	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.0416 / 0.04698	ND	0.04536	0.155	5 / 6	0.1088
Zinc	mg/kg		23.87	23.87	45.89	6 / 6	32.33

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-29: TVA SAP Sampling, Spring 2010 - Channel Catfish Fillet at Emory River Mile 4.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1.2	1.2	6.1	6 / 6	3.033
% Moisture	%		76.2	76.2	81.1	6 / 6	79.32
Aluminum	mg/kg	3.553 / 4.068	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.01273 / 0.01471	ND	ND	ND	0 / 6	0
Arsenic	mg/kg	0.0247 / 0.05481	ND	0.07854	0.07854	1 / 6	0.07854
Barium	mg/kg	0.0399 / 0.04641	ND	0.04966	0.228	5 / 6	0.1359
Beryllium	mg/kg	0.0266 / 0.06048	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.361 / 0.4202	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.00684 / 0.0155	ND	ND	ND	0 / 6	0
Calcium	mg/kg		320.5	320.5	3439	6 / 6	1116
Chromium	mg/kg	0.1121 / 0.1299	ND	ND	ND	0 / 6	0
Cobalt	mg/kg	0.01254 / 0.01433	ND	0.02856	0.02856	1 / 6	0.02856
Copper	mg/kg		0.2079	0.2079	1.802	6 / 6	0.5149
Iron	mg/kg	10.68 / 12.28	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.0247 / 0.02873	ND	0.0304	0.06996	2 / 6	0.05018
Magnesium	mg/kg		223.5	223.5	275.5	6 / 6	252.2
Manganese	mg/kg		0.221	0.221	1.71	6 / 6	0.7801
Mercury	mg/kg		0.06188	0.06188	0.2101	6 / 6	0.1125
Molybdenum	mg/kg	0.0304 / 0.03629	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.0874 / 0.09932	ND	0.5512	0.5512	1 / 6	0.5512
Potassium	mg/kg		3572	3572	4219	6 / 6	3927
Selenium	mg/kg		0.1666	0.1666	0.3247	6 / 6	0.2541
Silver	mg/kg	0.00247 / 0.00964	ND	ND	ND	0 / 6	0
Sodium	mg/kg		418.9	418.9	565.4	6 / 6	499.7
Strontium	mg/kg		0.2873	0.2873	2.394	6 / 6	0.8794
Thallium	mg/kg	0.01216 / 0.02703	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.0399 / 0.04641	ND	ND	ND	0 / 6	0
Zinc	mg/kg		6.532	6.532	12.75	6 / 6	8.565

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-30: TVA SAP Sampling, Spring 2010 - Channel Catfish Carcass at Emory River Mile 2.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1.4	1.4	7.4	7 / 7	5
% Moisture	%		68.4	68.4	77.8	7 / 7	72.87
Aluminum	mg/kg	3.596 / 4.004	ND	7.237	11.76	3 / 7	9.057
Antimony	mg/kg	0.01288 / 0.01438	ND	ND	ND	0 / 7	0
Arsenic	mg/kg		0.04395	0.04395	0.2065	7 / 7	0.08747
Barium	mg/kg		0.6075	0.6075	6.099	7 / 7	2.498
Beryllium	mg/kg	0.0264 / 0.02939	ND	ND	ND	0 / 7	0
Boron	mg/kg	0.3645 / 0.423	ND	ND	ND	0 / 7	0
Cadmium	mg/kg		0.00753	0.00753	0.05301	7 / 7	0.02027
Calcium	mg/kg		9647	9647	32643	7 / 7	22009
Chromium	mg/kg	0.1132 / 0.1269	ND	ND	ND	0 / 7	0
Cobalt	mg/kg		0.02566	0.02566	0.158	7 / 7	0.07757
Copper	mg/kg		0.4395	0.4395	0.8748	7 / 7	0.5886
Iron	mg/kg		28.47	28.47	70.75	7 / 7	44.99
Lead	mg/kg		0.0486	0.0486	0.705	7 / 7	0.2468
Magnesium	mg/kg		298.9	298.9	638.9	7 / 7	488.3
Manganese	mg/kg		6.197	6.197	21.48	7 / 7	12.14
Mercury	mg/kg		0.0173	0.0173	0.09102	7 / 7	0.04283
Molybdenum	mg/kg	0.03108 / 0.03516	ND	ND	ND	0 / 7	0
Nickel	mg/kg	0.08748 / 0.09796	ND	0.1769	0.3948	3 / 7	0.2564
Potassium	mg/kg		1909	1909	2227	7 / 7	2103
Selenium	mg/kg		0.3476	0.3476	0.5832	7 / 7	0.4825
Silver	mg/kg	0.00264 / 0.0029	ND	ND	ND	0 / 7	0
Sodium	mg/kg		1319	1319	1883	7 / 7	1658
Strontium	mg/kg		8.335	8.335	30.97	7 / 7	18.35
Thallium	mg/kg	0.01239 / 0.01562	ND	ND	ND	0 / 7	0
Vanadium	mg/kg	0.04131 / 0.04218	ND	0.05922	0.6975	5 / 7	0.2371
Zinc	mg/kg		22.87	22.87	34.12	7 / 7	29.61

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-31: TVA SAP Sampling, Spring 2010 - Channel Catfish Fillet at Emory River Mile 2.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.96	0.96	5.2	7 / 7	2.58
% Moisture	%		78	78	81.4	7 / 7	79.7
Aluminum	mg/kg	3.744 / 4.02	ND	ND	ND	0 / 7	0
Antimony	mg/kg	0.01358 / 0.01447	ND	ND	ND	0 / 7	0
Arsenic	mg/kg	0.0264 / 0.02834	ND	0.03553	0.09894	2 / 7	0.06724
Barium	mg/kg	0.04268 / 0.04578	ND	0.04807	0.2211	6 / 7	0.09145
Beryllium	mg/kg	0.02716 / 0.03015	ND	ND	ND	0 / 7	0
Boron	mg/kg	0.388 / 0.4221	ND	ND	ND	0 / 7	0
Cadmium	mg/kg	0.00718 / 0.00764	ND	ND	ND	0 / 7	0
Calcium	mg/kg		428.5	428.5	1592	7 / 7	751.5
Chromium	mg/kg	0.1183 / 0.1266	ND	ND	ND	0 / 7	0
Cobalt	mg/kg	0.01319 / 0.01407	ND	0.01804	0.02522	2 / 7	0.02163
Copper	mg/kg		0.2412	0.2412	0.485	7 / 7	0.3144
Iron	mg/kg	11.27 / 12.1	ND	ND	ND	0 / 7	0
Lead	mg/kg	0.02522 / 0.02834	ND	ND	ND	0 / 7	0
Magnesium	mg/kg		221.5	221.5	250.9	7 / 7	237.3
Manganese	mg/kg		0.3344	0.3344	0.9648	7 / 7	0.5711
Mercury	mg/kg		0.02328	0.02328	0.1525	7 / 7	0.06761
Molybdenum	mg/kg	0.03298 / 0.03618	ND	ND	ND	0 / 7	0
Nickel	mg/kg	0.09118 / 0.09849	ND	ND	ND	0 / 7	0
Potassium	mg/kg		3578	3578	4048	7 / 7	3821
Selenium	mg/kg		0.242	0.242	0.4796	7 / 7	0.3587
Silver	mg/kg	0.00272 / 0.0029	ND	ND	ND	0 / 7	0
Sodium	mg/kg		363.8	363.8	473	7 / 7	412.1
Strontium	mg/kg		0.3344	0.3344	1.327	7 / 7	0.6162
Thallium	mg/kg	0.0128 / 0.01387	ND	ND	ND	0 / 7	0
Vanadium	mg/kg	0.04268 / 0.04632	ND	ND	ND	0 / 7	0
Zinc	mg/kg		5.501	5.501	7.216	7 / 7	6.369

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-32: TVA SAP Sampling, Spring 2010 - Channel Catfish Carcass at Emory River Mile 0.9

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		5	5	9.7	5 / 5	7.04
% Moisture	%		68.3	68.3	72.3	5 / 5	70.58
Aluminum	mg/kg	3.795 / 4.075	ND	9.641	13.51	2 / 5	11.58
Antimony	mg/kg	0.01385 / 0.01473	ND	ND	ND	0 / 5	0
Arsenic	mg/kg		0.07202	0.07202	0.2095	5 / 5	0.1473
Barium	mg/kg		1.363	1.363	2.919	5 / 5	2
Beryllium	mg/kg	0.0277 / 0.03058	ND	ND	ND	0 / 5	0
Boron	mg/kg	0.3804 / 0.4305	ND	ND	ND	0 / 5	0
Cadmium	mg/kg		0.00862	0.00862	0.02784	5 / 5	0.01528
Calcium	mg/kg		16675	16675	28673	5 / 5	22870
Chromium	mg/kg	0.1191 / 0.1292	ND	0.1334	0.1334	1 / 5	0.1334
Cobalt	mg/kg		0.04018	0.04018	0.09174	5 / 5	0.06307
Copper	mg/kg		0.3878	0.3878	0.5706	5 / 5	0.4958
Iron	mg/kg		23.07	23.07	38.67	5 / 5	32.14
Lead	mg/kg		0.09418	0.09418	0.1863	5 / 5	0.1358
Magnesium	mg/kg		390.6	390.6	611.6	5 / 5	515.1
Manganese	mg/kg		7.146	7.146	15.76	5 / 5	10.48
Mercury	mg/kg		0.02465	0.02465	0.04305	5 / 5	0.03491
Molybdenum	mg/kg	0.03324 / 0.03731	ND	ND	ND	0 / 5	0
Nickel	mg/kg	0.09141 / 0.1005	ND	0.09695	0.09695	1 / 5	0.09695
Potassium	mg/kg		1902	1902	2324	5 / 5	2092
Selenium	mg/kg		0.554	0.554	0.7291	5 / 5	0.6351
Silver	mg/kg	0.00274 / 0.00306	ND	ND	ND	0 / 5	0
Sodium	mg/kg		1432	1432	1639	5 / 5	1552
Strontium	mg/kg		12.85	12.85	20.94	5 / 5	16.97
Thallium	mg/kg	0.01302 / 0.02402	ND	ND	ND	0 / 5	0
Vanadium	mg/kg		0.07479	0.07479	0.1903	5 / 5	0.1273
Zinc	mg/kg		22.22	22.22	47.42	5 / 5	34.64

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-33: TVA SAP Sampling, Spring 2010 - Channel Catfish Fillet at Emory River Mile 0.9

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		3.2	3.2	5.6	5 / 5	4.28
% Moisture	%		76.3	76.3	78.1	5 / 5	77.56
Aluminum	mg/kg	3.555 / 4.008	ND	ND	ND	0 / 5	0
Antimony	mg/kg	0.0128 / 0.01445	ND	ND	ND	0 / 5	0
Arsenic	mg/kg	0.02607 / 0.02688	ND	0.04161	0.08058	4 / 5	0.05762
Barium	mg/kg	0.04029 / 0.04599	ND	0.06272	0.1724	2 / 5	0.1176
Beryllium	mg/kg	0.02607 / 0.03066	ND	ND	ND	0 / 5	0
Boron	mg/kg	0.3757 / 0.4199	ND	ND	ND	0 / 5	0
Cadmium	mg/kg	0.00687 / 0.00767	ND	ND	ND	0 / 5	0
Calcium	mg/kg		289.1	289.1	1757	5 / 5	719.8
Chromium	mg/kg	0.1138 / 0.127	ND	ND	ND	0 / 5	0
Cobalt	mg/kg	0.01256 / 0.01392	ND	0.01621	0.01621	1 / 5	0.01621
Copper	mg/kg		0.2652	0.2652	10.3	5 / 5	3.016
Iron	mg/kg	10.69 / 12.09	ND	ND	ND	0 / 5	0
Lead	mg/kg	0.0237 / 0.02652	ND	0.1862	0.448	2 / 5	0.3171
Magnesium	mg/kg		232.1	232.1	239.4	5 / 5	235.9
Manganese	mg/kg		0.2652	0.2652	1.039	5 / 5	0.5049
Mercury	mg/kg		0.04266	0.04266	0.09198	5 / 5	0.06958
Molybdenum	mg/kg	0.03081 / 0.03536	ND	ND	ND	0 / 5	0
Nickel	mg/kg	0.08769 / 0.09724	ND	0.2059	0.4928	2 / 5	0.3494
Potassium	mg/kg		3514	3514	4148	5 / 5	3847
Selenium	mg/kg		0.2873	0.2873	0.438	5 / 5	0.3675
Silver	mg/kg	0.00261 / 0.00291	ND	ND	ND	0 / 5	0
Sodium	mg/kg		287.3	287.3	431	5 / 5	396.8
Strontium	mg/kg		0.184	0.184	1.238	5 / 5	0.525
Thallium	mg/kg	0.01232 / 0.0138	ND	ND	ND	0 / 5	0
Vanadium	mg/kg	0.04029 / 0.04599	ND	ND	ND	0 / 5	0
Zinc	mg/kg		6.778	6.778	12.86	5 / 5	8.848

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-34: TVA SAP Sampling, Spring 2010 - Channel Catfish Carcass at Clinch River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1.3	1.3	8.9	7 / 7	5.429
% Moisture	%		68	68	75.4	7 / 7	72.06
Aluminum	mg/kg	3.576 / 4.112	ND	5.568	6.422	4 / 7	5.921
Antimony	mg/kg	0.01305 / 0.01495	ND	ND	ND	0 / 7	0
Arsenic	mg/kg		0.04182	0.04182	0.1383	7 / 7	0.07185
Barium	mg/kg		0.6358	0.6358	2.534	7 / 7	1.613
Beryllium	mg/kg	0.0261 / 0.02952	ND	ND	ND	0 / 7	0
Boron	mg/kg	0.3654 / 0.4335	ND	ND	ND	0 / 7	0
Cadmium	mg/kg		0.01504	0.01504	0.02679	7 / 7	0.02181
Calcium	mg/kg		13265	13265	40836	7 / 7	21197
Chromium	mg/kg	0.1148 / 0.1308	ND	ND	ND	0 / 7	0
Cobalt	mg/kg		0.05658	0.05658	0.1511	7 / 7	0.09763
Copper	mg/kg		0.5415	0.5415	14.48	7 / 7	3.037
Iron	mg/kg		23.74	23.74	75.28	7 / 7	34.64
Lead	mg/kg		0.1382	0.1382	0.6647	7 / 7	0.2742
Magnesium	mg/kg		338.1	338.1	789.7	7 / 7	485.9
Manganese	mg/kg		6.242	6.242	11.67	7 / 7	9.589
Mercury	mg/kg		0.02166	0.02166	0.1427	7 / 7	0.05832
Molybdenum	mg/kg	0.03132 / 0.03738	ND	ND	ND	0 / 7	0
Nickel	mg/kg	0.08874 / 0.1015	ND	0.1008	4.191	3 / 7	1.513
Potassium	mg/kg		1844	1844	2283	7 / 7	2021
Selenium	mg/kg		0.3135	0.3135	0.6048	7 / 7	0.4572
Silver	mg/kg	0.00258 / 0.00295	ND	ND	ND	0 / 7	0
Sodium	mg/kg		1212	1212	2241	7 / 7	1558
Strontium	mg/kg		8.757	8.757	33.46	7 / 7	16.35
Thallium	mg/kg	0.01227 / 0.01416	ND	ND	ND	0 / 7	0
Vanadium	mg/kg	0.04176 / 0.04624	ND	0.048	0.261	6 / 7	0.1175
Zinc	mg/kg		24.96	24.96	39.36	7 / 7	31.64

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-35: TVA SAP Sampling, Spring 2010 - Channel Catfish Fillet at Clinch River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1	1	5.1	7 / 7	3.2
% Moisture	%		76.5	76.5	81.2	7 / 7	78.79
Aluminum	mg/kg	3.737 / 4.099	ND	ND	ND	0 / 7	0
Antimony	mg/kg	0.01363 / 0.0149	ND	ND	ND	0 / 7	0
Arsenic	mg/kg	0.02585 / 0.02898	ND	0.03859	0.05264	4 / 7	0.04253
Barium	mg/kg	0.0423 / 0.0454	ND	0.04809	0.3525	5 / 7	0.1831
Beryllium	mg/kg	0.0282 / 0.03105	ND	ND	ND	0 / 7	0
Boron	mg/kg	0.376 / 0.4347	ND	ND	ND	0 / 7	0
Cadmium	mg/kg	0.00705 / 0.00787	ND	ND	ND	0 / 7	0
Calcium	mg/kg		148.9	148.9	7661	7 / 7	2138
Chromium	mg/kg	0.1175 / 0.1304	ND	ND	ND	0 / 7	0
Cobalt	mg/kg	0.01316 / 0.01449	ND	0.01316	0.03206	5 / 7	0.02115
Copper	mg/kg		0.282	0.282	3.737	7 / 7	0.8407
Iron	mg/kg	11.26 / 12.38	ND	ND	ND	0 / 7	0
Lead	mg/kg	0.02585 / 0.02898	ND	0.1786	0.1786	1 / 7	0.1786
Magnesium	mg/kg		210.2	210.2	347.8	7 / 7	252
Manganese	mg/kg		0.193	0.193	2.961	7 / 7	1.018
Mercury	mg/kg		0.04512	0.04512	0.2316	7 / 7	0.09601
Molybdenum	mg/kg	0.0329 / 0.03572	ND	ND	ND	0 / 7	0
Nickel	mg/kg	0.09165 / 0.09936	ND	0.1603	0.4053	3 / 7	0.259
Potassium	mg/kg		3049	3049	3685	7 / 7	3444
Selenium	mg/kg		0.1626	0.1626	0.376	7 / 7	0.2445
Silver	mg/kg	0.0027 / 0.00298	ND	ND	ND	0 / 7	0
Sodium	mg/kg		370.8	370.8	557.8	7 / 7	445
Strontium	mg/kg		0.1044	0.1044	4.536	7 / 7	1.551
Thallium	mg/kg	0.01293 / 0.01408	ND	ND	ND	0 / 7	0
Vanadium	mg/kg	0.0423 / 0.04761	ND	ND	ND	0 / 7	0
Zinc	mg/kg		5.493	5.493	13.35	7 / 7	8.094

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-36: TVA SAP Sampling, Spring 2010 - Channel Catfish Carcass at Clinch River Mile 3.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1.4	1.4	6.7	6 / 6	4.35
% Moisture	%		68.8	68.8	77.5	6 / 6	72.22
Aluminum	mg/kg	3.59 / 4.153	ND	3.775	4.726	2 / 6	4.251
Antimony	mg/kg	0.01305 / 0.01485	ND	ND	ND	0 / 6	0
Arsenic	mg/kg	0.02475 / 0.02475	ND	0.0544	0.1045	5 / 6	0.08526
Barium	mg/kg		0.9632	0.9632	1.692	6 / 6	1.274
Beryllium	mg/kg	0.02666 / 0.03102	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.3808 / 0.44	ND	ND	ND	0 / 6	0
Cadmium	mg/kg		0.00818	0.00818	0.04624	6 / 6	0.02731
Calcium	mg/kg		13244	13244	29610	6 / 6	19780
Chromium	mg/kg	0.1142 / 0.132	ND	0.1656	0.1656	1 / 6	0.1656
Cobalt	mg/kg		0.02925	0.02925	0.09632	6 / 6	0.07271
Copper	mg/kg		0.3384	0.3384	4.733	6 / 6	1.707
Iron	mg/kg		27.5	27.5	143.3	6 / 6	70.38
Lead	mg/kg		0.06204	0.06204	0.544	6 / 6	0.2018
Magnesium	mg/kg		373.5	373.5	595	6 / 6	450.8
Manganese	mg/kg		4.478	4.478	12.45	6 / 6	9.122
Mercury	mg/kg		0.02651	0.02651	0.2094	6 / 6	0.08158
Molybdenum	mg/kg	0.0315 / 0.03666	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.08704 / 0.1018	ND	0.2017	1.659	4 / 6	0.7293
Potassium	mg/kg		2065	2065	2269	6 / 6	2172
Selenium	mg/kg		0.405	0.405	0.7525	6 / 6	0.5657
Silver	mg/kg	0.00261 / 0.00303	ND	ND	ND	0 / 6	0
Sodium	mg/kg		1171	1171	1760	6 / 6	1558
Strontium	mg/kg		10.84	10.84	23.97	6 / 6	15.3
Thallium	mg/kg	0.01238 / 0.0143	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.0405 / 0.04675	ND	0.081	0.2808	5 / 6	0.1751
Zinc	mg/kg		24.3	24.3	36.72	6 / 6	31.68

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-37: TVA SAP Sampling, Spring 2010 - Channel Catfish Fillet at Clinch River Mile 3.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.57	0.57	3.3	6 / 6	1.925
% Moisture	%		79	79	83.3	6 / 6	80.93
Aluminum	mg/kg	3.507 / 4.03	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.01269 / 0.01452	ND	ND	ND	0 / 6	0
Arsenic	mg/kg	0.02505 / 0.02865	ND	0.0357	0.0399	2 / 6	0.0378
Barium	mg/kg	0.0399 / 0.04525	ND	0.04175	0.111	4 / 6	0.06363
Beryllium	mg/kg	0.02505 / 0.03056	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.3674 / 0.4202	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.00668 / 0.00764	ND	ND	ND	0 / 6	0
Calcium	mg/kg		101.9	101.9	2257	6 / 6	727.3
Chromium	mg/kg	0.1102 / 0.128	ND	ND	ND	0 / 6	0
Cobalt	mg/kg	0.01236 / 0.01413	ND	0.01365	0.01388	2 / 6	0.01377
Copper	mg/kg		0.2101	0.2101	2.898	6 / 6	0.7026
Iron	mg/kg	10.54 / 12.13	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.02505 / 0.02865	ND	0.02775	0.1239	2 / 6	0.07583
Magnesium	mg/kg		205.4	205.4	244.2	6 / 6	227.7
Manganese	mg/kg		0.1659	0.1659	1.147	6 / 6	0.5056
Mercury	mg/kg		0.04887	0.04887	0.3885	6 / 6	0.148
Molybdenum	mg/kg	0.03006 / 0.03629	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.08517 / 0.09741	ND	ND	ND	0 / 6	0
Potassium	mg/kg		3490	3490	4158	6 / 6	3807
Selenium	mg/kg		0.2505	0.2505	0.3801	6 / 6	0.3236
Silver	mg/kg	0.00251 / 0.0029	ND	ND	ND	0 / 6	0
Sodium	mg/kg		426.3	426.3	748.2	6 / 6	538.4
Strontium	mg/kg		0.0777	0.0777	1.425	6 / 6	0.5154
Thallium	mg/kg	0.01202 / 0.01394	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.0399 / 0.04584	ND	ND	ND	0 / 6	0
Zinc	mg/kg		5.376	5.376	9.898	6 / 6	7.263

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-38: TVA SAP Sampling, Spring 2010 - Channel Catfish Carcass at Clinch River Mile 1.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		2.5	2.5	8.7	6 / 6	5.783
% Moisture	%		68.8	68.8	73.9	6 / 6	71.2
Aluminum	mg/kg	3.901 / 4.124	ND	4.86	8.362	4 / 6	5.902
Antimony	mg/kg	0.01397 / 0.01505	ND	ND	ND	0 / 6	0
Arsenic	mg/kg		0.07826	0.07826	0.1775	6 / 6	0.1141
Barium	mg/kg		1.226	1.226	2.153	6 / 6	1.607
Beryllium	mg/kg	0.0285 / 0.03132	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.399 / 0.4368	ND	ND	ND	0 / 6	0
Cadmium	mg/kg		0.01294	0.01294	0.03132	6 / 6	0.02152
Calcium	mg/kg		15134	15134	34615	6 / 6	23865
Chromium	mg/kg	0.1226 / 0.132	ND	ND	ND	0 / 6	0
Cobalt	mg/kg		0.02537	0.02537	0.1076	6 / 6	0.04618
Copper	mg/kg		0.289	0.289	3.578	6 / 6	1.049
Iron	mg/kg		18.5	18.5	92	6 / 6	41.3
Lead	mg/kg		0.0855	0.0855	0.2959	6 / 6	0.1776
Magnesium	mg/kg		390.5	390.5	698.9	6 / 6	531.8
Manganese	mg/kg		5.159	5.159	15.97	6 / 6	10.2
Mercury	mg/kg		0.0286	0.0286	0.0513	6 / 6	0.03874
Molybdenum	mg/kg	0.0342 / 0.03744	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.09405 / 0.102	ND	0.4842	0.4842	1 / 6	0.4842
Potassium	mg/kg		1674	1674	2237	6 / 6	2005
Selenium	mg/kg		0.3612	0.3612	0.63	6 / 6	0.5373
Silver	mg/kg	0.00269 / 0.003	ND	ND	ND	0 / 6	0
Sodium	mg/kg		1283	1283	1841	6 / 6	1584
Strontium	mg/kg		10.6	10.6	23.18	6 / 6	17.55
Thallium	mg/kg	0.0134 / 0.01436	ND	ND	ND	0 / 6	0
Vanadium	mg/kg		0.0969	0.0969	0.3228	6 / 6	0.1782
Zinc	mg/kg		29.56	29.56	39.94	6 / 6	33.28

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-39: TVA SAP Sampling, Spring 2010 - Channel Catfish Fillet at Clinch River Mile 1.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1.5	1.5	3.1	6 / 6	2.467
% Moisture	%		77.6	77.6	80.7	6 / 6	78.93
Aluminum	mg/kg	3.786 / 4.121	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.01366 / 0.01487	ND	ND	ND	0 / 6	0
Arsenic	mg/kg	0.02628 / 0.02926	ND	0.02688	0.08492	4 / 6	0.05362
Barium	mg/kg	0.04256 / 0.04824	ND	0.05694	0.07334	3 / 6	0.06433
Beryllium	mg/kg	0.02688 / 0.03015	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.3808 / 0.4221	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.00717 / 0.00784	ND	ND	ND	0 / 6	0
Calcium	mg/kg		142.1	142.1	920.6	6 / 6	507.1
Chromium	mg/kg	0.1187 / 0.1307	ND	0.1994	0.1994	1 / 6	0.1994
Cobalt	mg/kg	0.01322 / 0.01447	ND	ND	ND	0 / 6	0
Copper	mg/kg		0.2508	0.2508	7.102	6 / 6	1.918
Iron	mg/kg	11.38 / 12.42	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.02616 / 0.02814	ND	0.1139	0.3088	2 / 6	0.2114
Magnesium	mg/kg		219.1	219.1	251.9	6 / 6	235.4
Manganese	mg/kg		0.201	0.201	0.6104	6 / 6	0.429
Mercury	mg/kg		0.0603	0.0603	0.0965	6 / 6	0.07482
Molybdenum	mg/kg	0.03285 / 0.03618	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.09184 / 0.1005	ND	0.166	0.4818	3 / 6	0.2727
Potassium	mg/kg		3357	3357	4222	6 / 6	3700
Selenium	mg/kg		0.2509	0.2509	0.4928	6 / 6	0.3817
Silver	mg/kg	0.00269 / 0.00302	ND	ND	ND	0 / 6	0
Sodium	mg/kg		349.4	349.4	443.9	6 / 6	409
Strontium	mg/kg		0.1199	0.1199	0.7334	6 / 6	0.3734
Thallium	mg/kg	0.01299 / 0.01427	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.04256 / 0.04623	ND	ND	ND	0 / 6	0
Zinc	mg/kg		5.385	5.385	12.08	6 / 6	7.501

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-40: TVA SAP Sampling, Spring 2010 - Gizzard Shad Gut and Gut Content at Little Emory River Mile 2.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		3.6	3.6	5.4	3 / 3	4.367
% Moisture	%		56.5	56.5	71.7	3 / 3	65.7
Aluminum	mg/kg		1104	1104	1953	3 / 3	1551
Antimony	mg/kg		0.02236	0.02236	0.05655	3 / 3	0.03429
Arsenic	mg/kg		0.7924	0.7924	1.566	3 / 3	1.17
Barium	mg/kg		9.764	9.764	22.53	3 / 3	15.01
Beryllium	mg/kg		0.0566	0.0566	0.1001	3 / 3	0.07608
Boron	mg/kg		0.4245	0.4245	1.044	3 / 3	0.6554
Cadmium	mg/kg		0.07075	0.07075	0.09952	3 / 3	0.08721
Calcium	mg/kg		357.7	357.7	1027	3 / 3	586.1
Chromium	mg/kg		1.443	1.443	2.523	3 / 3	1.923
Cobalt	mg/kg		0.933	0.933	1.436	3 / 3	1.11
Copper	mg/kg		3.396	3.396	4.568	3 / 3	4.065
Iron	mg/kg		1726	1726	3054	3 / 3	2365
Lead	mg/kg		1.274	1.274	2.871	3 / 3	1.879
Magnesium	mg/kg		322.6	322.6	482.9	3 / 3	390.8
Manganese	mg/kg		139	139	220.5	3 / 3	175.3
Mercury	mg/kg		0.02292	0.02292	0.04976	3 / 3	0.03496
Molybdenum	mg/kg	0.03089 / 0.2053	ND	0.435	0.435	1 / 3	0.435
Nickel	mg/kg		1.755	1.755	2.784	3 / 3	2.156
Potassium	mg/kg		2239	2239	2485	3 / 3	2390
Selenium	mg/kg		1.217	1.217	1.555	3 / 3	1.374
Silver	mg/kg		0.04528	0.04528	0.05655	3 / 3	0.05053
Sodium	mg/kg		970.1	970.1	1022	3 / 3	1004
Strontium	mg/kg		1.047	1.047	2.088	3 / 3	1.439
Thallium	mg/kg	0.0566 / 0.06531	ND	ND	ND	0 / 3	0
Vanadium	mg/kg		1.67	1.67	3.524	3 / 3	2.488
Zinc	mg/kg		30.28	30.28	38.02	3 / 3	33.44

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-41: TVA SAP Sampling, Spring 2010 - Gizzard Shad Whole Body at Little Emory River Mile 2.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1.1	1.1	2.4	3 / 3	1.933
% Moisture	%		77.2	77.2	78.5	3 / 3	77.97
Aluminum	mg/kg		161	161	423.6	3 / 3	285.7
Antimony	mg/kg	0.01414 / 0.01439	ND	ND	ND	0 / 3	0
Arsenic	mg/kg		0.2616	0.2616	0.301	3 / 3	0.2863
Barium	mg/kg		4.355	4.355	7.375	3 / 3	5.807
Beryllium	mg/kg	0.02795 / 0.02964	ND	ND	ND	0 / 3	0
Boron	mg/kg	1.892 / 1.918	ND	ND	ND	0 / 3	0
Cadmium	mg/kg	0.01505 / 0.02365	ND	ND	ND	0 / 3	0
Calcium	mg/kg		9530	9530	11205	3 / 3	10208
Chromium	mg/kg		0.5928	0.5928	1.419	3 / 3	0.8959
Cobalt	mg/kg	0.01376 / 0.2616	ND	0.4515	0.4515	1 / 3	0.4515
Copper	mg/kg		1.14	1.14	1.484	3 / 3	1.303
Iron	mg/kg		271.3	271.3	636.4	3 / 3	432.6
Lead	mg/kg	0.02795 / 0.2029	ND	0.3488	0.516	2 / 3	0.4324
Magnesium	mg/kg		364.8	364.8	389.2	3 / 3	380
Manganese	mg/kg		46.74	46.74	95.25	3 / 3	65.71
Mercury	mg/kg		0.01368	0.01368	0.01656	3 / 3	0.01473
Molybdenum	mg/kg	0.0342 / 0.04796	ND	ND	ND	0 / 3	0
Nickel	mg/kg		0.456	0.456	0.8815	3 / 3	0.642
Potassium	mg/kg		2817	2817	3124	3 / 3	2961
Selenium	mg/kg		0.4945	0.4945	0.5668	3 / 3	0.521
Silver	mg/kg	0.00775 / 0.01978	ND	ND	ND	0 / 3	0
Sodium	mg/kg		1176	1176	1310	3 / 3	1262
Strontium	mg/kg		5.268	5.268	6.224	3 / 3	5.858
Thallium	mg/kg	0.01345 / 0.01439	ND	ND	ND	0 / 3	0
Vanadium	mg/kg	0.04515 / 0.1961	ND	0.3924	0.645	2 / 3	0.5187
Zinc	mg/kg		15.24	15.24	16.55	3 / 3	16.05

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-42: TVA SAP Sampling, Spring 2010 - Gizzard Shad Whole Body (Minus Gut Content) at Little Emory River Mile 2.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		2.3	2.3	3.4	3 / 3	2.667
% Moisture	%		75.9	75.9	77.5	3 / 3	76.73
Aluminum	mg/kg		9.968	9.968	11.54	3 / 3	10.98
Antimony	mg/kg	0.0135 / 0.01463	ND	ND	ND	0 / 3	0
Arsenic	mg/kg		0.2138	0.2138	0.2892	3 / 3	0.2527
Barium	mg/kg		2.948	2.948	3.543	3 / 3	3.285
Beryllium	mg/kg	0.02651 / 0.03016	ND	ND	ND	0 / 3	0
Boron	mg/kg	1.808 / 1.958	ND	ND	ND	0 / 3	0
Cadmium	mg/kg	0.00723 / 0.00766	ND	ND	ND	0 / 3	0
Calcium	mg/kg		12749	12749	14291	3 / 3	13408
Chromium	mg/kg	0.1181 / 0.1283	ND	ND	ND	0 / 3	0
Cobalt	mg/kg	0.04275 / 0.0482	ND	ND	ND	0 / 3	0
Copper	mg/kg		0.6975	0.6975	0.9881	3 / 3	0.8016
Iron	mg/kg		24.3	24.3	27.96	3 / 3	26.24
Lead	mg/kg	0.0464 / 0.0482	ND	ND	ND	0 / 3	0
Magnesium	mg/kg		398.3	398.3	413	3 / 3	403.8
Manganese	mg/kg		29.93	29.93	34.7	3 / 3	32.76
Mercury	mg/kg	0.01085 / 0.0116	ND	0.01283	0.01283	1 / 3	0.01283
Molybdenum	mg/kg	0.03374 / 0.036	ND	ND	ND	0 / 3	0
Nickel	mg/kg		0.1253	0.1253	0.1665	3 / 3	0.1398
Potassium	mg/kg		3105	3105	3178	3 / 3	3147
Selenium	mg/kg		0.3944	0.3944	0.4338	3 / 3	0.4111
Silver	mg/kg	0.00265 / 0.00302	ND	ND	ND	0 / 3	0
Sodium	mg/kg		1147	1147	1179	3 / 3	1162
Strontium	mg/kg		7.448	7.448	9.419	3 / 3	8.522
Thallium	mg/kg	0.01392 / 0.01759	ND	ND	ND	0 / 3	0
Vanadium	mg/kg	0.04338 / 0.04725	ND	ND	ND	0 / 3	0
Zinc	mg/kg		15.38	15.38	17.18	3 / 3	16.23

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-43: TVA SAP Sampling, Spring 2010 - Gizzard Shad Gut and Gut Content at Emory River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1.9	1.9	2.4	3 / 3	2.2
% Moisture	%		55.4	55.4	66.5	3 / 3	60.8
Aluminum	mg/kg		1671	1671	2275	3 / 3	2069
Antimony	mg/kg		0.03167	0.03167	0.0402	3 / 3	0.03568
Arsenic	mg/kg		1.249	1.249	1.474	3 / 3	1.342
Barium	mg/kg		22.71	22.71	32.6	3 / 3	27.73
Beryllium	mg/kg		0.09875	0.09875	0.134	3 / 3	0.1192
Boron	mg/kg		0.948	0.948	1.115	3 / 3	1.056
Cadmium	mg/kg		0.0632	0.0632	0.07705	3 / 3	0.07054
Calcium	mg/kg		704.7	704.7	1015	3 / 3	860.3
Chromium	mg/kg		2.686	2.686	3.317	3 / 3	3.086
Cobalt	mg/kg		1.383	1.383	1.65	3 / 3	1.547
Copper	mg/kg		3.318	3.318	3.819	3 / 3	3.524
Iron	mg/kg		2662	2662	3384	3 / 3	3071
Lead	mg/kg		3.358	3.358	4.288	3 / 3	3.738
Magnesium	mg/kg		390.3	390.3	475.7	3 / 3	438.8
Manganese	mg/kg		120.9	120.9	151.4	3 / 3	132.2
Mercury	mg/kg		0.03523	0.03523	0.0402	3 / 3	0.03726
Molybdenum	mg/kg		0.1516	0.1516	0.1742	3 / 3	0.1626
Nickel	mg/kg		2.212	2.212	2.854	3 / 3	2.593
Potassium	mg/kg		2050	2050	2252	3 / 3	2154
Selenium	mg/kg		1.106	1.106	1.24	3 / 3	1.183
Silver	mg/kg		0.01185	0.01185	0.01608	3 / 3	0.01347
Sodium	mg/kg		1119	1119	1189	3 / 3	1165
Strontium	mg/kg		2.173	2.173	2.613	3 / 3	2.324
Thallium	mg/kg	0.03279 / 0.0536	ND	ND	ND	0 / 3	0
Vanadium	mg/kg		3.16	3.16	4.087	3 / 3	3.65
Zinc	mg/kg		29.31	29.31	32.07	3 / 3	31.1

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-44: TVA SAP Sampling, Spring 2010 - Gizzard Shad Whole Body at Emory River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1.2	1.2	2.9	3 / 3	2.3
% Moisture	%		74.9	74.9	76.7	3 / 3	75.53
Aluminum	mg/kg		326.2	326.2	429.2	3 / 3	371
Antimony	mg/kg	0.01445 / 0.01456	ND	ND	ND	0 / 3	0
Arsenic	mg/kg		0.3029	0.3029	0.3514	3 / 3	0.3264
Barium	mg/kg		7.083	7.083	10.64	3 / 3	9.158
Beryllium	mg/kg	0.06 / 0.06058	ND	ND	ND	0 / 3	0
Boron	mg/kg	0.4194 / 0.4267	ND	ND	ND	0 / 3	0
Cadmium	mg/kg		0.0165	0.0165	0.07279	3 / 3	0.03528
Calcium	mg/kg		8936	8936	13325	3 / 3	10977
Chromium	mg/kg		1.15	1.15	1.632	3 / 3	1.409
Cobalt	mg/kg		0.3029	0.3029	0.3765	3 / 3	0.3348
Copper	mg/kg		1.188	1.188	9.375	3 / 3	4.508
Iron	mg/kg		542.9	542.9	675.2	3 / 3	595.2
Lead	mg/kg		0.5825	0.5825	0.925	3 / 3	0.7535
Magnesium	mg/kg		356.4	356.4	410	3 / 3	378.2
Manganese	mg/kg		43.8	43.8	47.5	3 / 3	45.49
Mercury	mg/kg		0.01328	0.01328	0.01983	3 / 3	0.0157
Molybdenum	mg/kg	0.05359 / 0.06777	ND	ND	ND	0 / 3	0
Nickel	mg/kg		0.5359	0.5359	8	3 / 3	3.874
Potassium	mg/kg		2470	2470	2650	3 / 3	2577
Selenium	mg/kg		0.475	0.475	0.5126	3 / 3	0.4882
Silver	mg/kg		0.0028	0.0028	0.00377	3 / 3	0.003437
Sodium	mg/kg		980	980	1021	3 / 3	1001
Strontium	mg/kg		5.873	5.873	11.53	3 / 3	8.279
Thallium	mg/kg	0.01375 / 0.014	ND	ND	ND	0 / 3	0
Vanadium	mg/kg		0.775	0.775	0.9538	3 / 3	0.8403
Zinc	mg/kg		16.19	16.19	22.88	3 / 3	19.04

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-45: TVA SAP Sampling, Spring 2010 - Gizzard Shad Whole Body (Minus Gut Content) at Emory River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		2.8	2.8	4.2	3 / 3	3.7
% Moisture	%		75.9	75.9	77.1	3 / 3	76.3
Aluminum	mg/kg		34.22	34.22	127.1	3 / 3	84.3
Antimony	mg/kg	0.01397 / 0.01494	ND	ND	ND	0 / 3	0
Arsenic	mg/kg		0.1567	0.1567	0.1924	3 / 3	0.1774
Barium	mg/kg		3.037	3.037	5.153	3 / 3	4.152
Beryllium	mg/kg	0.05725 / 0.06266	ND	ND	ND	0 / 3	0
Boron	mg/kg	0.3893 / 0.4338	ND	ND	ND	0 / 3	0
Cadmium	mg/kg	0.00723 / 0.01591	ND	0.00844	0.00985	2 / 3	0.009141
Calcium	mg/kg		9616	9616	13305	3 / 3	11392
Chromium	mg/kg		0.1832	0.1832	0.4809	3 / 3	0.3097
Cobalt	mg/kg		0.06507	0.06507	0.126	3 / 3	0.09986
Copper	mg/kg		0.6266	0.6266	0.9399	3 / 3	0.7817
Iron	mg/kg		82.42	82.42	212.7	3 / 3	154.1
Lead	mg/kg		0.08676	0.08676	0.2244	3 / 3	0.1728
Magnesium	mg/kg		342.2	342.2	375.6	3 / 3	360.6
Manganese	mg/kg		24.82	24.82	37.1	3 / 3	30.28
Mercury	mg/kg		0.01205	0.01205	0.01695	3 / 3	0.01513
Molybdenum	mg/kg	0.03374 / 0.03893	ND	ND	ND	0 / 3	0
Nickel	mg/kg		0.1326	0.1326	0.2519	3 / 3	0.1956
Potassium	mg/kg		2679	2679	2868	3 / 3	2789
Selenium	mg/kg		0.4338	0.4338	0.4351	3 / 3	0.4342
Silver	mg/kg	0.00275 / 0.00289	ND	ND	ND	0 / 3	0
Sodium	mg/kg		865.2	865.2	1079	3 / 3	971.8
Strontium	mg/kg		6.796	6.796	9.504	3 / 3	7.908
Thallium	mg/kg	0.01326 / 0.01422	ND	ND	ND	0 / 3	0
Vanadium	mg/kg		0.1012	0.1012	0.2977	3 / 3	0.198
Zinc	mg/kg		13.47	13.47	18	3 / 3	15.13

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-46: TVA SAP Sampling, Spring 2010 - Gizzard Shad Gut and Gut Content at Emory River Mile 4.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		2.6	2.6	5.4	3 / 3	3.7
% Moisture	%		63	63	74.4	3 / 3	70.17
Aluminum	mg/kg		1574	1574	2631	3 / 3	2222
Antimony	mg/kg		0.03367	0.03367	0.0384	3 / 3	0.03568
Arsenic	mg/kg		1.434	1.434	1.749	3 / 3	1.579
Barium	mg/kg		12.88	12.88	22.08	3 / 3	18.61
Beryllium	mg/kg		0.09984	0.09984	0.148	3 / 3	0.1295
Boron	mg/kg	0.777 / 0.8192	ND	0.8339	0.925	2 / 3	0.8795
Cadmium	mg/kg		0.0925	0.0925	0.1075	3 / 3	0.1016
Calcium	mg/kg		521.7	521.7	874.3	3 / 3	660.7
Chromium	mg/kg		2.406	2.406	4.255	3 / 3	3.458
Cobalt	mg/kg		1.485	1.485	2.146	3 / 3	1.901
Copper	mg/kg		3.123	3.123	4.089	3 / 3	3.761
Iron	mg/kg		2115	2115	3552	3 / 3	3028
Lead	mg/kg		2.406	2.406	2.851	3 / 3	2.665
Magnesium	mg/kg		445.4	445.4	500.3	3 / 3	478
Manganese	mg/kg		148	148	224.6	3 / 3	190.8
Mercury	mg/kg		0.02816	0.02816	0.037	3 / 3	0.03248
Molybdenum	mg/kg		0.1665	0.1665	0.1775	3 / 3	0.1735
Nickel	mg/kg		2.33	2.33	3.515	3 / 3	3.051
Potassium	mg/kg		2638	2638	2825	3 / 3	2734
Selenium	mg/kg		1.075	1.075	1.237	3 / 3	1.165
Silver	mg/kg		0.01715	0.01715	0.02367	3 / 3	0.01953
Sodium	mg/kg		928.7	928.7	1167	3 / 3	1043
Strontium	mg/kg		1.741	1.741	2.717	3 / 3	2.238
Thallium	mg/kg	0.0925 / 0.09472	ND	ND	ND	0 / 3	0
Vanadium	mg/kg		2.739	2.739	4.033	3 / 3	3.549
Zinc	mg/kg		30.21	30.21	41.16	3 / 3	34.3

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-47: TVA SAP Sampling, Spring 2010 - Gizzard Shad Whole Body at Emory River Mile 4.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		2.1	2.1	3.3	3 / 3	2.833
% Moisture	%		76.2	76.2	77.8	3 / 3	77.03
Aluminum	mg/kg		88.62	88.62	127.2	3 / 3	112.8
Antimony	mg/kg	0.01237 / 0.0138	ND	ND	ND	0 / 3	0
Arsenic	mg/kg		0.2519	0.2519	0.357	3 / 3	0.2992
Barium	mg/kg		3.308	3.308	3.824	3 / 3	3.623
Beryllium	mg/kg	0.02442 / 0.05038	ND	ND	ND	0 / 3	0
Boron	mg/kg	0.3552 / 0.7099	ND	ND	ND	0 / 3	0
Cadmium	mg/kg		0.01021	0.01021	0.01404	3 / 3	0.0119
Calcium	mg/kg		9657	9657	11267	3 / 3	10719
Chromium	mg/kg		0.3435	0.3435	0.444	3 / 3	0.4053
Cobalt	mg/kg		0.1122	0.1122	0.1443	3 / 3	0.1307
Copper	mg/kg		0.9324	0.9324	0.9996	3 / 3	0.9722
Iron	mg/kg		110.6	110.6	160.2	3 / 3	143.1
Lead	mg/kg		0.1511	0.1511	0.169	3 / 3	0.1592
Magnesium	mg/kg		346.3	346.3	391.6	3 / 3	372.9
Manganese	mg/kg		33.3	33.3	35.04	3 / 3	34.44
Mercury	mg/kg		0.01282	0.01282	0.01404	3 / 3	0.01332
Molybdenum	mg/kg	0.02977 / 0.03332	ND	ND	ND	0 / 3	0
Nickel	mg/kg	0.08436 / 0.1695	ND	0.1999	0.222	2 / 3	0.211
Potassium	mg/kg		2819	2819	3114	3 / 3	2985
Selenium	mg/kg		0.3996	0.3996	0.476	3 / 3	0.4445
Silver	mg/kg	0.00244 / 0.00286	ND	0.00275	0.00275	1 / 3	0.002748
Sodium	mg/kg		899.1	899.1	1056	3 / 3	972.2
Strontium	mg/kg		6.771	6.771	7.649	3 / 3	7.258
Thallium	mg/kg	0.01177 / 0.02071	ND	ND	ND	0 / 3	0
Vanadium	mg/kg		0.158	0.158	0.238	3 / 3	0.206
Zinc	mg/kg		16.41	16.41	17.8	3 / 3	17.07

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-48: TVA SAP Sampling, Spring 2010 - Gizzard Shad Whole Body (Minus Gut Content) at Emory River Mile 4.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		2	2	3	3 / 3	2.533
% Moisture	%		76.1	76.1	76.7	3 / 3	76.5
Aluminum	mg/kg		15.52	15.52	38.45	3 / 3	25.24
Antimony	mg/kg	0.01258 / 0.01491	ND	ND	ND	0 / 3	0
Arsenic	mg/kg		0.1561	0.1561	0.2294	3 / 3	0.2015
Barium	mg/kg		2.796	2.796	3.896	3 / 3	3.403
Beryllium	mg/kg	0.03029 / 0.05736	ND	ND	ND	0 / 3	0
Boron	mg/kg	0.4194 / 0.7887	ND	ND	ND	0 / 3	0
Cadmium	mg/kg	0.00717 / 0.01351	ND	0.00813	0.00862	2 / 3	0.008374
Calcium	mg/kg		11487	11487	15511	3 / 3	13147
Chromium	mg/kg	0.1305 / 0.2214	ND	0.2563	0.2629	2 / 3	0.2596
Cobalt	mg/kg		0.04427	0.04427	0.07223	3 / 3	0.05636
Copper	mg/kg		0.7409	0.7409	0.9087	3 / 3	0.8295
Iron	mg/kg		33.09	33.09	56.85	3 / 3	43.13
Lead	mg/kg		0.05825	0.05825	0.09087	3 / 3	0.07281
Magnesium	mg/kg		384.5	384.5	432.6	3 / 3	405.2
Manganese	mg/kg		27.26	27.26	35.37	3 / 3	31.28
Mercury	mg/kg		0.01072	0.01072	0.01398	3 / 3	0.01277
Molybdenum	mg/kg	0.03029 / 0.03495	ND	ND	ND	0 / 3	0
Nickel	mg/kg	0.1002 / 0.1864	ND	0.219	0.219	1 / 3	0.219
Potassium	mg/kg		3035	3035	3122	3 / 3	3085
Selenium	mg/kg		0.3961	0.3961	0.4063	3 / 3	0.3995
Silver	mg/kg	0.00256 / 0.00303	ND	ND	ND	0 / 3	0
Sodium	mg/kg		967	967	1051	3 / 3	1021
Strontium	mg/kg		7.223	7.223	11.81	3 / 3	9.21
Thallium	mg/kg	0.01212 / 0.01421	ND	ND	ND	0 / 3	0
Vanadium	mg/kg	0.0466 / 0.1721	ND	0.1095	0.1095	1 / 3	0.1095
Zinc	mg/kg		14.56	14.56	16.73	3 / 3	15.87

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-49: TVA SAP Sampling, Spring 2010 - Gizzard Shad Gut and Gut Content at Emory River Mile 3.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1.9	1.9	3.3	3 / 3	2.567
% Moisture	%		66.8	66.8	74.6	3 / 3	70.37
Aluminum	mg/kg		1468	1468	3453	3 / 3	2476
Antimony	mg/kg		0.04572	0.04572	0.05757	3 / 3	0.05324
Arsenic	mg/kg		2.108	2.108	2.727	3 / 3	2.342
Barium	mg/kg		11.89	11.89	59.43	3 / 3	36.6
Beryllium	mg/kg	0.1303 / 0.3048	ND	0.2394	0.2689	2 / 3	0.2542
Boron	mg/kg	1.818 / 4.267	ND	ND	ND	0 / 3	0
Cadmium	mg/kg		0.06604	0.06604	0.1428	3 / 3	0.113
Calcium	mg/kg		287	287	883.1	3 / 3	623.3
Chromium	mg/kg		1.981	1.981	4.117	3 / 3	3.113
Cobalt	mg/kg		1.041	1.041	2.955	3 / 3	2.18
Copper	mg/kg		3.226	3.226	5.876	3 / 3	4.63
Iron	mg/kg		1090	1090	4183	3 / 3	2778
Lead	mg/kg		0.9652	0.9652	4.06	3 / 3	2.704
Magnesium	mg/kg		309.9	309.9	478.1	3 / 3	397
Manganese	mg/kg		63.75	63.75	250	3 / 3	166.6
Mercury	mg/kg		0.03302	0.03302	0.05312	3 / 3	0.04083
Molybdenum	mg/kg		0.1194	0.1194	0.2092	3 / 3	0.1681
Nickel	mg/kg		1.803	1.803	5.611	3 / 3	3.956
Potassium	mg/kg	3182 / 7442	ND	ND	ND	0 / 3	0
Selenium	mg/kg		1.527	1.527	1.727	3 / 3	1.61
Silver	mg/kg		0.01575	0.01575	0.0498	3 / 3	0.03296
Sodium	mg/kg		1189	1189	1242	3 / 3	1219
Strontium	mg/kg		3.912	3.912	5.606	3 / 3	4.866
Thallium	mg/kg	0.07366 / 0.1328	ND	ND	ND	0 / 3	0
Vanadium	mg/kg		3.226	3.226	6.009	3 / 3	4.694
Zinc	mg/kg		34.04	34.04	43.94	3 / 3	39.94

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-50: TVA SAP Sampling, Spring 2010 - Gizzard Shad Whole Body at Emory River Mile 3.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		2	2	2.4	3 / 3	2.133
% Moisture	%		77	77	77.9	3 / 3	77.53
Aluminum	mg/kg		200	200	595.7	3 / 3	390.5
Antimony	mg/kg	0.01265 / 0.01427	ND	0.02144	0.0276	2 / 3	0.02452
Arsenic	mg/kg		0.446	0.446	0.989	3 / 3	0.7362
Barium	mg/kg		6.244	6.244	9.982	3 / 3	8.208
Beryllium	mg/kg	0.0253 / 0.02899	ND	0.03536	0.0575	2 / 3	0.04643
Boron	mg/kg	0.368 / 0.4014	ND	0.4862	0.506	2 / 3	0.4961
Cadmium	mg/kg		0.01873	0.01873	0.0253	3 / 3	0.02278
Calcium	mg/kg		9430	9430	11956	3 / 3	10778
Chromium	mg/kg		0.669	0.669	0.92	3 / 3	0.8022
Cobalt	mg/kg		0.2096	0.2096	0.506	3 / 3	0.349
Copper	mg/kg		1.271	1.271	2.011	3 / 3	1.654
Iron	mg/kg		265.4	265.4	570.4	3 / 3	404.6
Lead	mg/kg		0.2899	0.2899	0.644	3 / 3	0.4586
Magnesium	mg/kg		330	330	435.4	3 / 3	374
Manganese	mg/kg		36.57	36.57	48.18	3 / 3	43.74
Mercury	mg/kg		0.01768	0.01768	0.0207	3 / 3	0.01963
Molybdenum	mg/kg		0.03568	0.03568	0.0598	3 / 3	0.05024
Nickel	mg/kg	0.0851 / 0.4683	ND	0.966	1.437	2 / 3	1.202
Potassium	mg/kg		2364	2364	3448	3 / 3	2865
Selenium	mg/kg		0.4906	0.4906	0.6188	3 / 3	0.5615
Silver	mg/kg		0.00424	0.00424	0.00508	3 / 3	0.004793
Sodium	mg/kg		1003	1003	1147	3 / 3	1081
Strontium	mg/kg		8.34	8.34	10.52	3 / 3	9.445
Thallium	mg/kg	0.02453 / 0.046	ND	ND	ND	0 / 3	0
Vanadium	mg/kg		0.5352	0.5352	1.449	3 / 3	0.9929
Zinc	mg/kg		17.18	17.18	30.72	3 / 3	22.06

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-51: TVA SAP Sampling, Spring 2010 - Gizzard Shad Whole Body (Minus Gut Content) at Emory River Mile 3.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		2.2	2.2	2.8	3 / 3	2.467
% Moisture	%		77.7	77.7	79.1	3 / 3	78.2
Aluminum	mg/kg		58.83	58.83	133.1	3 / 3	100.3
Antimony	mg/kg	0.01316 / 0.01487	ND	ND	ND	0 / 3	0
Arsenic	mg/kg		0.1887	0.1887	0.4237	3 / 3	0.2738
Barium	mg/kg		4.151	4.151	5.246	3 / 3	4.835
Beryllium	mg/kg	0.02676 / 0.03108	ND	ND	ND	0 / 3	0
Boron	mg/kg	0.3762 / 0.4218	ND	0.3971	0.3971	1 / 3	0.3971
Cadmium	mg/kg		0.00977	0.00977	0.01359	3 / 3	0.01173
Calcium	mg/kg		12624	12624	14075	3 / 3	13278
Chromium	mg/kg		0.2442	0.2442	0.3344	3 / 3	0.2895
Cobalt	mg/kg		0.0888	0.0888	0.1484	3 / 3	0.1207
Copper	mg/kg		0.6882	0.6882	1.129	3 / 3	0.9254
Iron	mg/kg		71.48	71.48	158.4	3 / 3	118.7
Lead	mg/kg		0.1021	0.1021	0.1806	3 / 3	0.1528
Magnesium	mg/kg		379.6	379.6	390.8	3 / 3	385.4
Manganese	mg/kg		31.75	31.75	37.69	3 / 3	34.08
Mercury	mg/kg		0.01516	0.01516	0.01931	3 / 3	0.01665
Molybdenum	mg/kg	0.03122 / 0.03552	ND	0.03344	0.03344	1 / 3	0.03344
Nickel	mg/kg	0.1332 / 0.2717	ND	ND	ND	0 / 3	0
Potassium	mg/kg		3122	3122	3177	3 / 3	3143
Selenium	mg/kg		0.4218	0.4218	0.5434	3 / 3	0.4778
Silver	mg/kg	0.00268 / 0.00289	ND	ND	ND	0 / 3	0
Sodium	mg/kg		1068	1068	1131	3 / 3	1104
Strontium	mg/kg		9.05	9.05	9.768	3 / 3	9.365
Thallium	mg/kg	0.01275 / 0.01421	ND	ND	ND	0 / 3	0
Vanadium	mg/kg		0.1332	0.1332	0.3791	3 / 3	0.2544
Zinc	mg/kg		15.45	15.45	16.81	3 / 3	16.23

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-52: TVA SAP Sampling, Spring 2010 - Gizzard Shad Gut and Gut Content at Emory River Mile 0.9

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		2.6	2.6	3.2	3 / 3	2.8
% Moisture	%		55.8	55.8	71.2	3 / 3	61.53
Aluminum	mg/kg		2995	2995	7293	3 / 3	4903
Antimony	mg/kg	0.06624 / 0.06624	ND	0.07072	0.09752	2 / 3	0.08412
Arsenic	mg/kg		2.592	2.592	4.664	3 / 3	3.421
Barium	mg/kg		26.78	26.78	58.94	3 / 3	41.14
Beryllium	mg/kg	0.1901 / 0.3222	ND	ND	ND	0 / 3	0
Boron	mg/kg		2.218	2.218	5.173	3 / 3	3.731
Cadmium	mg/kg	0.07776 / 0.1442	ND	ND	ND	0 / 3	0
Calcium	mg/kg		671	671	1098	3 / 3	879.9
Chromium	mg/kg		4.435	4.435	10.01	3 / 3	6.981
Cobalt	mg/kg		2.794	2.794	5.046	3 / 3	3.807
Copper	mg/kg		6.566	6.566	49.5	3 / 3	22.21
Iron	mg/kg		3600	3600	7505	3 / 3	5322
Lead	mg/kg		3.974	3.974	9.812	3 / 3	7.45
Magnesium	mg/kg		489.6	489.6	954	3 / 3	706.6
Manganese	mg/kg		237	237	521.5	3 / 3	359.9
Mercury	mg/kg	0.05304 / 0.05512	ND	ND	ND	0 / 3	0
Molybdenum	mg/kg	0.1642 / 0.168	ND	0.2205	0.2205	1 / 3	0.2205
Nickel	mg/kg		3.658	3.658	7.505	3 / 3	5.415
Potassium	mg/kg		2304	2304	3184	3 / 3	2693
Selenium	mg/kg		1.238	1.238	1.654	3 / 3	1.406
Silver	mg/kg	0.02822 / 0.04332	ND	ND	ND	0 / 3	0
Sodium	mg/kg		901.7	901.7	999.4	3 / 3	934.7
Strontium	mg/kg		3.83	3.83	7.886	3 / 3	5.379
Thallium	mg/kg	0.1037 / 0.2883	ND	ND	ND	0 / 3	0
Vanadium	mg/kg		5.299	5.299	11.58	3 / 3	7.998
Zinc	mg/kg		33.12	33.12	73.37	3 / 3	53.87

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-53: TVA SAP Sampling, Spring 2010 - Gizzard Shad Whole Body at Emory River Mile 0.9

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1.4	1.4	1.7	3 / 3	1.567
% Moisture	%		78.4	78.4	78.8	3 / 3	78.57
Aluminum	mg/kg		360.4	360.4	423.6	3 / 3	381.6
Antimony	mg/kg	0.01357 / 0.01419	ND	ND	ND	0 / 3	0
Arsenic	mg/kg		0.424	0.424	0.4515	3 / 3	0.4358
Barium	mg/kg		6.36	6.36	6.912	3 / 3	6.667
Beryllium	mg/kg	0.02756 / 0.0301	ND	ND	ND	0 / 3	0
Boron	mg/kg	0.4085 / 1.858	ND	0.4085	0.4085	1 / 3	0.4085
Cadmium	mg/kg	0.01505 / 0.01685	ND	ND	ND	0 / 3	0
Calcium	mg/kg		14341	14341	16459	3 / 3	15319
Chromium	mg/kg		0.742	0.742	1.269	3 / 3	0.9655
Cobalt	mg/kg		0.324	0.324	0.3655	3 / 3	0.3429
Copper	mg/kg		1.187	1.187	1.29	3 / 3	1.222
Iron	mg/kg		347.8	347.8	434.3	3 / 3	378
Lead	mg/kg		0.3604	0.3604	0.43	3 / 3	0.3859
Magnesium	mg/kg		385.8	385.8	423.4	3 / 3	405.9
Manganese	mg/kg		30.53	30.53	32.18	3 / 3	31.37
Mercury	mg/kg		0.01318	0.01318	0.02014	3 / 3	0.01612
Molybdenum	mg/kg	0.03392 / 0.03456	ND	ND	ND	0 / 3	0
Nickel	mg/kg		0.4452	0.4452	0.516	3 / 3	0.4716
Potassium	mg/kg		2714	2714	2938	3 / 3	2823
Selenium	mg/kg		0.4028	0.4028	0.5832	3 / 3	0.472
Silver	mg/kg	0.00276 / 0.00323	ND	ND	ND	0 / 3	0
Sodium	mg/kg		1303	1303	1372	3 / 3	1342
Strontium	mg/kg		10.09	10.09	11.36	3 / 3	10.68
Thallium	mg/kg	0.03392 / 0.04515	ND	ND	ND	0 / 3	0
Vanadium	mg/kg		0.5832	0.5832	0.6665	3 / 3	0.6144
Zinc	mg/kg		18.57	18.57	19.67	3 / 3	19

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-54: TVA SAP Sampling, Spring 2010 - Gizzard Shad Whole Body (Minus Gut Content) at Emory River Mile 0.9

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1.7	1.7	1.7	3 / 3	1.7
% Moisture	%		78	78	78.5	3 / 3	78.23
Aluminum	mg/kg		47.96	47.96	63.43	3 / 3	56.9
Antimony	mg/kg	0.01286 / 0.01484	ND	ND	ND	0 / 3	0
Arsenic	mg/kg		0.2795	0.2795	0.3052	3 / 3	0.2902
Barium	mg/kg		4.386	4.386	5.276	3 / 3	4.959
Beryllium	mg/kg	0.02616 / 0.0301	ND	ND	ND	0 / 3	0
Boron	mg/kg	1.7 / 1.978	ND	ND	ND	0 / 3	0
Cadmium	mg/kg	0.00902 / 0.00937	ND	ND	ND	0 / 3	0
Calcium	mg/kg		14900	14900	17160	3 / 3	16398
Chromium	mg/kg		0.1897	0.1897	0.2365	3 / 3	0.2088
Cobalt	mg/kg	0.0836 / 0.09675	ND	ND	ND	0 / 3	0
Copper	mg/kg		0.6976	0.6976	0.814	3 / 3	0.7619
Iron	mg/kg		55.44	55.44	71.38	3 / 3	64.65
Lead	mg/kg	0.1032 / 0.109	ND	ND	ND	0 / 3	0
Magnesium	mg/kg		363.4	363.4	401.1	3 / 3	387.6
Manganese	mg/kg		20.99	20.99	41.28	3 / 3	28.68
Mercury	mg/kg	0.01025 / 0.01144	ND	0.01134	0.01376	2 / 3	0.01255
Molybdenum	mg/kg	0.03052 / 0.03655	ND	ND	ND	0 / 3	0
Nickel	mg/kg		0.1373	0.1373	1.254	3 / 3	0.5218
Potassium	mg/kg		2537	2537	2769	3 / 3	2671
Selenium	mg/kg		0.3655	0.3655	0.44	3 / 3	0.3993
Silver	mg/kg	0.00262 / 0.00301	ND	ND	ND	0 / 3	0
Sodium	mg/kg		1266	1266	1341	3 / 3	1315
Strontium	mg/kg		11.78	11.78	13.52	3 / 3	12.9
Thallium	mg/kg	0.01914 / 0.0264	ND	ND	ND	0 / 3	0
Vanadium	mg/kg	0.044 / 0.05014	ND	ND	ND	0 / 3	0
Zinc	mg/kg		18.71	18.71	19.38	3 / 3	19.1

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-55: TVA SAP Sampling, Spring 2010 - Gizzard Shad Gut and Gut Content at Clinch River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		3.2	3.2	3.9	3 / 3	3.533
% Moisture	%		75.5	75.5	77.5	3 / 3	76.27
Aluminum	mg/kg		396	396	975.3	3 / 3	740.5
Antimony	mg/kg	0.01283 / 0.01463	ND	0.01617	0.01839	2 / 3	0.01728
Arsenic	mg/kg		1.373	1.373	2.372	3 / 3	1.934
Barium	mg/kg		3.24	3.24	7.187	3 / 3	5.517
Beryllium	mg/kg	0.02662 / 0.02925	ND	0.04655	0.0605	2 / 3	0.05353
Boron	mg/kg		0.4725	0.4725	0.9438	3 / 3	0.7253
Cadmium	mg/kg		0.0495	0.0495	0.0847	3 / 3	0.0676
Calcium	mg/kg		258.8	258.8	686	3 / 3	502.1
Chromium	mg/kg		0.63	0.63	1.549	3 / 3	1.159
Cobalt	mg/kg		0.3825	0.3825	0.7986	3 / 3	0.6142
Copper	mg/kg		2.205	2.205	3.528	3 / 3	2.984
Iron	mg/kg		459	459	1258	3 / 3	895.7
Lead	mg/kg		0.54	0.54	1.525	3 / 3	1.089
Magnesium	mg/kg		265.5	265.5	413.8	3 / 3	348.9
Manganese	mg/kg		51.3	51.3	99.95	3 / 3	80.96
Mercury	mg/kg		0.0315	0.0315	0.07744	3 / 3	0.05591
Molybdenum	mg/kg		0.0945	0.0945	0.1379	3 / 3	0.1199
Nickel	mg/kg		0.4725	0.4725	1.186	3 / 3	0.8795
Potassium	mg/kg		2360	2360	2588	3 / 3	2482
Selenium	mg/kg		2.295	2.295	3.001	3 / 3	2.68
Silver	mg/kg		0.01373	0.01373	0.02275	3 / 3	0.01722
Sodium	mg/kg		1159	1159	1348	3 / 3	1242
Strontium	mg/kg		0.7425	0.7425	1.428	3 / 3	1.197
Thallium	mg/kg	0.04725 / 0.08712	ND	ND	ND	0 / 3	0
Vanadium	mg/kg		0.945	0.945	2.154	3 / 3	1.646
Zinc	mg/kg		30.15	30.15	36.51	3 / 3	33.11

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-56: TVA SAP Sampling, Spring 2010 - Gizzard Shad Whole Body at Clinch River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1.8	1.8	2.3	3 / 3	2.033
% Moisture	%		78.5	78.5	78.9	3 / 3	78.73
Aluminum	mg/kg		78.07	78.07	138.7	3 / 3	103.4
Antimony	mg/kg	0.01372 / 0.01463	ND	ND	ND	0 / 3	0
Arsenic	mg/kg		0.387	0.387	0.4431	3 / 3	0.411
Barium	mg/kg		3.693	3.693	4.558	3 / 3	4.012
Beryllium	mg/kg	0.02743 / 0.02968	ND	ND	ND	0 / 3	0
Boron	mg/kg	0.4009 / 0.424	ND	ND	ND	0 / 3	0
Cadmium	mg/kg		0.01245	0.01245	0.01355	3 / 3	0.01298
Calcium	mg/kg		11352	11352	13886	3 / 3	12541
Chromium	mg/kg		0.1836	0.1836	0.43	3 / 3	0.2752
Cobalt	mg/kg		0.09495	0.09495	0.129	3 / 3	0.1107
Copper	mg/kg		0.844	0.844	2.099	3 / 3	1.318
Iron	mg/kg		91.57	91.57	153.1	3 / 3	115.3
Lead	mg/kg		0.1203	0.1203	0.2365	3 / 3	0.179
Magnesium	mg/kg		365	365	402.8	3 / 3	387.8
Manganese	mg/kg		37.56	37.56	43.04	3 / 3	39.84
Mercury	mg/kg		0.01393	0.01393	0.02332	3 / 3	0.01958
Molybdenum	mg/kg	0.03376 / 0.03604	ND	ND	ND	0 / 3	0
Nickel	mg/kg		0.1287	0.1287	0.9328	3 / 3	0.447
Potassium	mg/kg		2795	2795	2862	3 / 3	2828
Selenium	mg/kg		0.6235	0.6235	0.7385	3 / 3	0.6801
Silver	mg/kg	0.00274 / 0.00297	ND	ND	ND	0 / 3	0
Sodium	mg/kg		1187	1187	1236	3 / 3	1213
Strontium	mg/kg		8.461	8.461	11.64	3 / 3	9.66
Thallium	mg/kg	0.01308 / 0.01527	ND	ND	ND	0 / 3	0
Vanadium	mg/kg		0.211	0.211	0.3225	3 / 3	0.2626
Zinc	mg/kg		17.41	17.41	20.22	3 / 3	18.7

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-57: TVA SAP Sampling, Spring 2010 - Gizzard Shad Whole Body (Minus Gut Content) at Clinch River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		2.1	2.1	2.4	3 / 3	2.2
% Moisture	%		77.4	77.4	77.6	3 / 3	77.47
Aluminum	mg/kg	3.774 / 19.82	ND	ND	ND	0 / 3	0
Antimony	mg/kg	0.01299 / 0.01446	ND	ND	ND	0 / 3	0
Arsenic	mg/kg		0.2486	0.2486	0.3136	3 / 3	0.2778
Barium	mg/kg	0.04032 / 0.04294	ND	4.099	4.249	2 / 3	4.174
Beryllium	mg/kg	0.02688 / 0.02938	ND	ND	ND	0 / 3	0
Boron	mg/kg	0.3808 / 0.4068	ND	ND	ND	0 / 3	0
Cadmium	mg/kg	0.00672 / 0.00768	ND	ND	ND	0 / 3	0
Calcium	mg/kg		144.2	144.2	15949	3 / 3	10208
Chromium	mg/kg	0.1142 / 0.1266	ND	ND	ND	0 / 3	0
Cobalt	mg/kg	0.01254 / 0.01333	ND	0.0448	0.04746	2 / 3	0.04613
Copper	mg/kg		0.339	0.339	0.7232	3 / 3	0.593
Iron	mg/kg		16.05	16.05	33.9	3 / 3	23.79
Lead	mg/kg	0.02464 / 0.02712	ND	0.0678	0.06944	2 / 3	0.06862
Magnesium	mg/kg		293.8	293.8	421.1	3 / 3	375.4
Manganese	mg/kg		0.2486	0.2486	40.77	3 / 3	26.78
Mercury	mg/kg		0.01366	0.01366	0.04068	3 / 3	0.02346
Molybdenum	mg/kg	0.03136 / 0.03616	ND	ND	ND	0 / 3	0
Nickel	mg/kg	0.08736 / 0.09718	ND	ND	ND	0 / 3	0
Potassium	mg/kg		2667	2667	3932	3 / 3	3140
Selenium	mg/kg		0.448	0.448	0.5198	3 / 3	0.4733
Silver	mg/kg	0.00269 / 0.00294	ND	ND	ND	0 / 3	0
Sodium	mg/kg		320.9	320.9	1203	3 / 3	886.3
Strontium	mg/kg		0.08136	0.08136	10.91	3 / 3	7.21
Thallium	mg/kg	0.01232 / 0.01379	ND	ND	ND	0 / 3	0
Vanadium	mg/kg	0.04032 / 0.04294	ND	0.08064	0.08588	2 / 3	0.08326
Zinc	mg/kg		10.55	10.55	18.64	3 / 3	15.76

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-58: TVA SAP Sampling, Spring 2010 - Gizzard Shad Gut and Gut Content at Clinch River Mile 3.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		3.9	3.9	4.4	3 / 3	4.167
% Moisture	%		66.7	66.7	68.8	3 / 3	67.4
Aluminum	mg/kg		3124	3124	4063	3 / 3	3633
Antimony	mg/kg		0.09324	0.09324	0.1061	3 / 3	0.09864
Arsenic	mg/kg		3.963	3.963	5.395	3 / 3	4.617
Barium	mg/kg		33.63	33.63	50.86	3 / 3	41.82
Beryllium	mg/kg		0.2531	0.2531	0.3744	3 / 3	0.3202
Boron	mg/kg		2.065	2.065	2.995	3 / 3	2.541
Cadmium	mg/kg		0.1265	0.1265	0.1432	3 / 3	0.1367
Calcium	mg/kg		1275	1275	1735	3 / 3	1443
Chromium	mg/kg		4.962	4.962	7.226	3 / 3	5.893
Cobalt	mg/kg		2.331	2.331	3.097	3 / 3	2.662
Copper	mg/kg		9.657	9.657	12.95	3 / 3	11.16
Iron	mg/kg		3630	3630	5128	3 / 3	4292
Lead	mg/kg		4.555	4.555	6.061	3 / 3	5.148
Magnesium	mg/kg		658.3	658.3	842.5	3 / 3	740
Manganese	mg/kg		236.1	236.1	353	3 / 3	283.2
Mercury	mg/kg		0.1132	0.1132	0.2331	3 / 3	0.1872
Molybdenum	mg/kg		0.2298	0.2298	0.2531	3 / 3	0.2452
Nickel	mg/kg		4.129	4.129	5.128	3 / 3	4.718
Potassium	mg/kg		2877	2877	2990	3 / 3	2928
Selenium	mg/kg		1.765	1.765	2.184	3 / 3	1.982
Silver	mg/kg		0.02165	0.02165	0.0313	3 / 3	0.02628
Sodium	mg/kg		952.4	952.4	1049	3 / 3	999.9
Strontium	mg/kg		11.56	11.56	18.53	3 / 3	14.36
Thallium	mg/kg	0.01279 / 0.1698	ND	0.1934	0.1965	2 / 3	0.195
Vanadium	mg/kg		6.827	6.827	9.324	3 / 3	8.285
Zinc	mg/kg		37.75	37.75	46.95	3 / 3	42.66

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-59: TVA SAP Sampling, Spring 2010 - Gizzard Shad Whole Body at Clinch River Mile 3.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		5	5	6.8	3 / 3	6.067
% Moisture	%		73.1	73.1	75.7	3 / 3	74.27
Aluminum	mg/kg		227	227	405.6	3 / 3	331
Antimony	mg/kg	0.01291 / 0.01409	ND	0.01749	0.02184	2 / 3	0.01967
Arsenic	mg/kg		0.4617	0.4617	0.806	3 / 3	0.6467
Barium	mg/kg		5.272	5.272	6.682	3 / 3	5.767
Beryllium	mg/kg	0.02609 / 0.02916	ND	0.0269	0.0338	2 / 3	0.03035
Boron	mg/kg	0.3766 / 0.416	ND	ND	ND	0 / 3	0
Cadmium	mg/kg		0.01239	0.01239	0.02444	3 / 3	0.01757
Calcium	mg/kg		9724	9724	10437	3 / 3	10098
Chromium	mg/kg		0.5589	0.5589	1.103	3 / 3	0.918
Cobalt	mg/kg		0.192	0.192	0.416	3 / 3	0.3192
Copper	mg/kg		1.239	1.239	2.152	3 / 3	1.815
Iron	mg/kg		245.4	245.4	486.2	3 / 3	372.1
Lead	mg/kg		0.2916	0.2916	0.832	3 / 3	0.6346
Magnesium	mg/kg		364.5	364.5	413.4	3 / 3	390.2
Manganese	mg/kg		32.81	32.81	60.58	3 / 3	47.27
Mercury	mg/kg		0.02125	0.02125	0.0286	3 / 3	0.02374
Molybdenum	mg/kg	0.03228 / 0.03402	ND	0.04035	0.0494	2 / 3	0.04488
Nickel	mg/kg		0.3402	0.3402	1.533	3 / 3	0.8237
Potassium	mg/kg		2652	2652	2860	3 / 3	2736
Selenium	mg/kg		0.3888	0.3888	0.5649	3 / 3	0.4826
Silver	mg/kg	0.00256 / 0.00292	ND	0.00364	0.00364	1 / 3	0.00364
Sodium	mg/kg		750.9	750.9	819	3 / 3	794.1
Strontium	mg/kg		7.882	7.882	8.086	3 / 3	8.012
Thallium	mg/kg	0.02163 / 0.0416	ND	ND	ND	0 / 3	0
Vanadium	mg/kg		0.5346	0.5346	0.988	3 / 3	0.7676
Zinc	mg/kg		12.2	12.2	18.28	3 / 3	16.11

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-60: TVA SAP Sampling, Spring 2010 - Gizzard Shad Whole Body (Minus Gut Content) at Clinch River Mile 3.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		4.9	4.9	6.1	3 / 3	5.4
% Moisture	%		72.5	72.5	75	3 / 3	73.97
Aluminum	mg/kg		48.68	48.68	53.75	3 / 3	50.61
Antimony	mg/kg	0.01375 / 0.01485	ND	ND	ND	0 / 3	0
Arsenic	mg/kg		0.325	0.325	0.3584	3 / 3	0.347
Barium	mg/kg		3.25	3.25	4.345	3 / 3	3.914
Beryllium	mg/kg	0.055 / 0.05888	ND	ND	ND	0 / 3	0
Boron	mg/kg	0.8 / 0.8448	ND	ND	ND	0 / 3	0
Cadmium	mg/kg	0.01475 / 0.01562	ND	ND	ND	0 / 3	0
Calcium	mg/kg		13625	13625	19223	3 / 3	16308
Chromium	mg/kg	0.2425 / 0.256	ND	ND	ND	0 / 3	0
Cobalt	mg/kg		0.066	0.066	0.0768	3 / 3	0.07177
Copper	mg/kg		0.768	0.768	1.025	3 / 3	0.9277
Iron	mg/kg		65.02	65.02	89.25	3 / 3	74.8
Lead	mg/kg		0.125	0.125	0.1434	3 / 3	0.1335
Magnesium	mg/kg		392.5	392.5	463.4	3 / 3	437.5
Manganese	mg/kg		31	31	41.8	3 / 3	37.07
Mercury	mg/kg	0.011 / 0.01178	ND	0.01225	0.01485	2 / 3	0.01355
Molybdenum	mg/kg	0.0325 / 0.03584	ND	ND	ND	0 / 3	0
Nickel	mg/kg	0.185 / 0.1997	ND	ND	ND	0 / 3	0
Potassium	mg/kg		2643	2643	2867	3 / 3	2753
Selenium	mg/kg		0.384	0.384	0.44	3 / 3	0.408
Silver	mg/kg	0.00275 / 0.00307	ND	ND	ND	0 / 3	0
Sodium	mg/kg		895	895	998.3	3 / 3	940.9
Strontium	mg/kg		8.45	8.45	11.91	3 / 3	10.3
Thallium	mg/kg	0.01325 / 0.01408	ND	ND	ND	0 / 3	0
Vanadium	mg/kg		0.1331	0.1331	0.2008	3 / 3	0.1621
Zinc	mg/kg		16.97	16.97	17.6	3 / 3	17.32

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-61: TVA SAP Sampling, Spring 2010 - Gizzard Shad Gut and Gut Content at Clinch River Mile 25.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		2.4	2.4	3.1	3 / 3	2.667
% Moisture	%		65.9	65.9	69.1	3 / 3	67.97
Aluminum	mg/kg		2643	2643	2908	3 / 3	2756
Antimony	mg/kg		0.02796	0.02796	0.03732	3 / 3	0.03412
Arsenic	mg/kg		1.364	1.364	1.711	3 / 3	1.561
Barium	mg/kg		27.93	27.93	75.4	3 / 3	45.95
Beryllium	mg/kg		0.1603	0.1603	0.173	3 / 3	0.166
Boron	mg/kg		1.916	1.916	1.99	3 / 3	1.95
Cadmium	mg/kg		0.06138	0.06138	0.07416	3 / 3	0.06902
Calcium	mg/kg		1704	1704	1959	3 / 3	1830
Chromium	mg/kg		4.365	4.365	4.79	3 / 3	4.596
Cobalt	mg/kg		2.182	2.182	2.719	3 / 3	2.525
Copper	mg/kg		5.899	5.899	7.837	3 / 3	6.937
Iron	mg/kg		3819	3819	4541	3 / 3	4187
Lead	mg/kg		3.205	3.205	4.199	3 / 3	3.797
Magnesium	mg/kg		578.5	578.5	692.2	3 / 3	634.7
Manganese	mg/kg		252.7	252.7	339	3 / 3	304.4
Mercury	mg/kg		0.02558	0.02558	0.0309	3 / 3	0.02899
Molybdenum	mg/kg		0.133	0.133	0.1617	3 / 3	0.1456
Nickel	mg/kg		3.308	3.308	3.794	3 / 3	3.49
Potassium	mg/kg		2302	2302	2392	3 / 3	2339
Selenium	mg/kg		1.159	1.159	1.298	3 / 3	1.234
Silver	mg/kg	0.00546 / 0.00546	ND	0.00653	0.00834	2 / 3	0.007437
Sodium	mg/kg		1003	1003	1149	3 / 3	1058
Strontium	mg/kg		3.035	3.035	4.913	3 / 3	3.717
Thallium	mg/kg	0.05115 / 0.05871	ND	ND	ND	0 / 3	0
Vanadium	mg/kg		3.751	3.751	4.354	3 / 3	4.144
Zinc	mg/kg		27.48	27.48	33.06	3 / 3	31.07

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-62: TVA SAP Sampling, Spring 2010 - Gizzard Shad Whole Body at Clinch River Mile 25.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		3.9	3.9	4.9	3 / 3	4.433
% Moisture	%		73.4	73.4	76.8	3 / 3	75
Aluminum	mg/kg		23.11	23.11	627.8	3 / 3	239.6
Antimony	mg/kg	0.01277 / 0.01346	ND	ND	ND	0 / 3	0
Arsenic	mg/kg		0.1856	0.1856	0.399	3 / 3	0.273
Barium	mg/kg		2.318	2.318	8.166	3 / 3	4.539
Beryllium	mg/kg	0.0258 / 0.02784	ND	0.0399	0.0399	1 / 3	0.0399
Boron	mg/kg	0.3724 / 0.3944	ND	0.399	0.399	1 / 3	0.399
Cadmium	mg/kg		0.00882	0.00882	0.01968	3 / 3	0.01283
Calcium	mg/kg		6437	6437	14137	3 / 3	10462
Chromium	mg/kg		0.1285	0.1285	1.596	3 / 3	0.6676
Cobalt	mg/kg		0.04284	0.04284	0.5852	3 / 3	0.2349
Copper	mg/kg		0.882	0.882	2.101	3 / 3	1.335
Iron	mg/kg		103.8	103.8	941.6	3 / 3	386.9
Lead	mg/kg		0.05544	0.05544	0.8246	3 / 3	0.3235
Magnesium	mg/kg		375.1	375.1	418.3	3 / 3	392.8
Manganese	mg/kg		16.36	16.36	63.57	3 / 3	32.25
Mercury	mg/kg		0.01206	0.01206	0.02048	3 / 3	0.01513
Molybdenum	mg/kg	0.03192 / 0.03276	ND	0.04256	0.04256	1 / 3	0.04256
Nickel	mg/kg		0.1058	0.1058	0.8246	3 / 3	0.3712
Potassium	mg/kg		2615	2615	3225	3 / 3	2997
Selenium	mg/kg		0.7424	0.7424	1.064	3 / 3	0.8541
Silver	mg/kg	0.00253 / 0.00278	ND	ND	ND	0 / 3	0
Sodium	mg/kg		911.8	911.8	1074	3 / 3	982
Strontium	mg/kg		5.054	5.054	8.114	3 / 3	6.686
Thallium	mg/kg	0.01197 / 0.01285	ND	ND	ND	0 / 3	0
Vanadium	mg/kg		0.07308	0.07308	0.9576	3 / 3	0.3853
Zinc	mg/kg		14.04	14.04	17.85	3 / 3	16.07

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-63: TVA SAP Sampling, Spring 2010 - Gizzard Shad Whole Body (Minus Gut Content) at Clinch River Mile 25.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		3.7	3.7	5.8	3 / 3	4.767
% Moisture	%		73.8	73.8	75.3	3 / 3	74.73
Aluminum	mg/kg		94.35	94.35	198.5	3 / 3	143.7
Antimony	mg/kg	0.01383 / 0.01441	ND	0.01818	0.01818	1 / 3	0.01818
Arsenic	mg/kg		0.1976	0.1976	0.2739	3 / 3	0.234
Barium	mg/kg		4.372	4.372	6.498	3 / 3	5.217
Beryllium	mg/kg	0.02717 / 0.02988	ND	ND	ND	0 / 3	0
Boron	mg/kg	0.3952 / 0.4233	ND	ND	ND	0 / 3	0
Cadmium	mg/kg	0.00741 / 0.0076	ND	0.00963	0.00963	1 / 3	0.009633
Calcium	mg/kg		13122	13122	21222	3 / 3	17236
Chromium	mg/kg		0.3211	0.3211	0.498	3 / 3	0.4215
Cobalt	mg/kg		0.1161	0.1161	0.2166	3 / 3	0.1633
Copper	mg/kg		0.8892	0.8892	0.9432	3 / 3	0.9179
Iron	mg/kg		153.6	153.6	311.3	3 / 3	226.1
Lead	mg/kg		0.1482	0.1482	0.2739	3 / 3	0.2106
Magnesium	mg/kg		430.8	430.8	531.9	3 / 3	480.6
Manganese	mg/kg		25.44	25.44	49.3	3 / 3	37.14
Mercury	mg/kg		0.0122	0.0122	0.01284	3 / 3	0.01263
Molybdenum	mg/kg	0.03406 / 0.03486	ND	ND	ND	0 / 3	0
Nickel	mg/kg		0.1655	0.1655	0.4482	3 / 3	0.2919
Potassium	mg/kg		2803	2803	3038	3 / 3	2943
Selenium	mg/kg		0.5502	0.5502	0.7657	3 / 3	0.6461
Silver	mg/kg	0.00272 / 0.00299	ND	ND	ND	0 / 3	0
Sodium	mg/kg		981.1	981.1	1137	3 / 3	1065
Strontium	mg/kg		7.993	7.993	10.61	3 / 3	9.691
Thallium	mg/kg	0.01334 / 0.01389	ND	ND	ND	0 / 3	0
Vanadium	mg/kg		0.1976	0.1976	0.3486	3 / 3	0.2869
Zinc	mg/kg		15.73	15.73	19.05	3 / 3	17.47

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-64: TVA SAP Sampling, Spring 2010 - Gizzard Shad Gut and Gut Content at Clinch River Mile 1.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		2.7	2.7	4.4	3 / 3	3.6
% Moisture	%		68.5	68.5	74.5	3 / 3	70.93
Aluminum	mg/kg		1385	1385	2410	3 / 3	1943
Antimony	mg/kg	0.05865 / 0.09966	ND	ND	ND	0 / 3	0
Arsenic	mg/kg		2.066	2.066	4.047	3 / 3	3.182
Barium	mg/kg		13.77	13.77	29.38	3 / 3	22.26
Beryllium	mg/kg		0.1173	0.1173	0.2386	3 / 3	0.1827
Boron	mg/kg		0.9435	0.9435	2.023	3 / 3	1.525
Cadmium	mg/kg	0.03465 / 0.1057	ND	0.1166	0.1166	1 / 3	0.1166
Calcium	mg/kg		415.7	415.7	912	3 / 3	637.9
Chromium	mg/kg		1.658	1.658	3.08	3 / 3	2.398
Cobalt	mg/kg		0.867	0.867	1.54	3 / 3	1.243
Copper	mg/kg		4.284	4.284	7.55	3 / 3	6.097
Iron	mg/kg		1522	1522	2573	3 / 3	2083
Lead	mg/kg		1.04	1.04	3.262	3 / 3	2.165
Magnesium	mg/kg		329	329	492.3	3 / 3	412.4
Manganese	mg/kg		69.11	69.11	175.5	3 / 3	120.4
Mercury	mg/kg		0.0765	0.0765	0.1419	3 / 3	0.118
Molybdenum	mg/kg	0.1556 / 0.1556	ND	0.2476	0.2615	2 / 3	0.2546
Nickel	mg/kg		1.607	1.607	2.96	3 / 3	2.299
Potassium	mg/kg	3201 / 3698	ND	ND	ND	0 / 3	0
Selenium	mg/kg		1.148	1.148	1.764	3 / 3	1.524
Silver	mg/kg	0.01292 / 0.02476	ND	0.02804	0.02804	1 / 3	0.02804
Sodium	mg/kg		946.1	946.1	1205	3 / 3	1083
Strontium	mg/kg		4.641	4.641	12.8	3 / 3	8.806
Thallium	mg/kg	0.0693 / 0.1631	ND	ND	ND	0 / 3	0
Vanadium	mg/kg		3.111	3.111	5.798	3 / 3	4.597
Zinc	mg/kg		29.6	29.6	32.64	3 / 3	31.35

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-65: TVA SAP Sampling, Spring 2010 - Gizzard Shad Whole Body at Clinch River Mile 1.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		2.6	2.6	3.4	3 / 3	2.967
% Moisture	%		75.8	75.8	77.9	3 / 3	76.93
Aluminum	mg/kg		101	101	244.4	3 / 3	174.6
Antimony	mg/kg	0.01452 / 0.01489	ND	0.01549	0.01549	1 / 3	0.01549
Arsenic	mg/kg		0.3664	0.3664	0.5525	3 / 3	0.4676
Barium	mg/kg		4.145	4.145	6.147	3 / 3	5.007
Beryllium	mg/kg	0.06144 / 0.1239	ND	ND	ND	0 / 3	0
Boron	mg/kg	0.4199 / 0.8473	ND	ND	ND	0 / 3	0
Cadmium	mg/kg		0.01557	0.01557	0.02178	3 / 3	0.01886
Calcium	mg/kg		10343	10343	12343	3 / 3	11378
Chromium	mg/kg	0.1304 / 0.2519	ND	0.3757	0.3872	2 / 3	0.3815
Cobalt	mg/kg		0.1076	0.1076	0.1791	3 / 3	0.1464
Copper	mg/kg		1.237	1.237	1.549	3 / 3	1.341
Iron	mg/kg		102.6	102.6	224.8	3 / 3	172.7
Lead	mg/kg		0.1718	0.1718	0.3146	3 / 3	0.2505
Magnesium	mg/kg		373.3	373.3	401.7	3 / 3	382.8
Manganese	mg/kg		32.29	32.29	33.88	3 / 3	33.25
Mercury	mg/kg		0.01374	0.01374	0.02662	3 / 3	0.02045
Molybdenum	mg/kg	0.03536 / 0.03664	ND	ND	ND	0 / 3	0
Nickel	mg/kg		0.2748	0.2748	0.3388	3 / 3	0.3003
Potassium	mg/kg		2931	2931	3243	3 / 3	3082
Selenium	mg/kg		0.458	0.458	0.605	3 / 3	0.5385
Silver	mg/kg	0.00287 / 0.00287	ND	0.00339	0.00344	2 / 3	0.003412
Sodium	mg/kg		1120	1120	1193	3 / 3	1149
Strontium	mg/kg		8.265	8.265	9.728	3 / 3	8.845
Thallium	mg/kg	0.0229 / 0.03388	ND	ND	ND	0 / 3	0
Vanadium	mg/kg		0.2519	0.2519	0.6534	3 / 3	0.4638
Zinc	mg/kg		16.29	16.29	19.56	3 / 3	18.34

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-66: TVA SAP Sampling, Spring 2010 - Gizzard Shad Whole Body (Minus Gut Content) at Clinch River Mile 1.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		2.3	2.3	2.8	3 / 3	2.5
% Moisture	%		75.9	75.9	77.5	3 / 3	76.7
Aluminum	mg/kg		11.91	11.91	144.8	3 / 3	63.71
Antimony	mg/kg	0.0147 / 0.01491	ND	ND	ND	0 / 3	0
Arsenic	mg/kg		0.1957	0.1957	0.3856	3 / 3	0.2763
Barium	mg/kg		4.078	4.078	6.001	3 / 3	4.762
Beryllium	mg/kg	0.1207 / 0.1237	ND	ND	ND	0 / 3	0
Boron	mg/kg	0.8435 / 0.8621	ND	ND	ND	0 / 3	0
Cadmium	mg/kg		0.00862	0.00862	0.01856	3 / 3	0.01199
Calcium	mg/kg		12074	12074	13680	3 / 3	12647
Chromium	mg/kg	0.2563 / 0.27	ND	0.3615	0.3615	1 / 3	0.3615
Cobalt	mg/kg		0.03728	0.03728	0.1277	3 / 3	0.07299
Copper	mg/kg		0.699	0.699	1.542	3 / 3	1.047
Iron	mg/kg	24.34 / 24.93	ND	41.63	151.1	2 / 3	96.37
Lead	mg/kg		0.07456	0.07456	0.2193	3 / 3	0.134
Magnesium	mg/kg		361.2	361.2	407.3	3 / 3	386.7
Manganese	mg/kg		29.88	29.88	35.78	3 / 3	32.92
Mercury	mg/kg	0.01157 / 0.01188	ND	0.00458	0.01508	2 / 3	0.00983
Molybdenum	mg/kg	0.036 / 0.03728	ND	ND	ND	0 / 3	0
Nickel	mg/kg	0.1976 / 0.2027	ND	0.2892	0.2892	1 / 3	0.2892
Potassium	mg/kg		2819	2819	2925	3 / 3	2879
Selenium	mg/kg		0.3961	0.3961	0.7471	3 / 3	0.5161
Silver	mg/kg	0.00289 / 0.00303	ND	ND	ND	0 / 3	0
Sodium	mg/kg		1128	1128	1186	3 / 3	1164
Strontium	mg/kg		9.972	9.972	10.46	3 / 3	10.21
Thallium	mg/kg	0.01794 / 0.02651	ND	ND	ND	0 / 3	0
Vanadium	mg/kg	0.09158 / 0.09553	ND	0.4338	0.4338	1 / 3	0.4338
Zinc	mg/kg		17.89	17.89	19.04	3 / 3	18.43

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-67: TVA SAP Sampling, Spring 2010 - Largemouth Bass Carcass at Little Emory River Mile 2.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		3	3	5.3	3 / 3	4.5
% Moisture	%		69	69	72.6	3 / 3	70.53
Aluminum	mg/kg	7.05 / 20.31	ND	ND	ND	0 / 3	0
Antimony	mg/kg	0.0255 / 0.0744	ND	ND	ND	0 / 3	0
Arsenic	mg/kg	0.048 / 0.1343	ND	0.051	0.186	2 / 3	0.1185
Barium	mg/kg		0.78	0.78	1.302	3 / 3	0.9863
Beryllium	mg/kg	0.264 / 0.3069	ND	ND	ND	0 / 3	0
Boron	mg/kg	0.72 / 2.108	ND	ND	ND	0 / 3	0
Cadmium	mg/kg	0.069 / 0.0806	ND	ND	ND	0 / 3	0
Calcium	mg/kg		22980	22980	31310	3 / 3	27778
Chromium	mg/kg	0.222 / 0.651	ND	ND	ND	0 / 3	0
Cobalt	mg/kg	0.0249 / 0.0713	ND	0.051	0.051	1 / 3	0.051
Copper	mg/kg	0.255 / 0.744	ND	0.36	0.822	2 / 3	0.591
Iron	mg/kg	21.21 / 61.07	ND	ND	ND	0 / 3	0
Lead	mg/kg	0.0246 / 0.02658	ND	0.03007	0.03007	1 / 3	0.03007
Magnesium	mg/kg		528	528	697.5	3 / 3	617.7
Manganese	mg/kg		3.99	3.99	10.93	3 / 3	7.464
Mercury	mg/kg		0.045	0.045	0.1147	3 / 3	0.07241
Molybdenum	mg/kg	0.063 / 0.1798	ND	ND	ND	0 / 3	0
Nickel	mg/kg	0.171 / 0.496	ND	ND	ND	0 / 3	0
Potassium	mg/kg		1947	1947	2159	3 / 3	2043
Selenium	mg/kg		0.465	0.465	0.54	3 / 3	0.4994
Silver	mg/kg	0.0051 / 0.01457	ND	ND	ND	0 / 3	0
Sodium	mg/kg		1569	1569	1848	3 / 3	1751
Strontium	mg/kg		16.47	16.47	20.27	3 / 3	18.33
Thallium	mg/kg	0.012 / 0.01395	ND	ND	ND	0 / 3	0
Vanadium	mg/kg	0.159 / 0.465	ND	ND	ND	0 / 3	0
Zinc	mg/kg		16.83	16.83	22.72	3 / 3	19.66

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-68: TVA SAP Sampling, Spring 2010 - Largemouth Bass Fillet at Little Emory River Mile 2.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.29	0.29	1	6 / 6	0.5567
% Moisture	%		78.6	78.6	80.5	6 / 6	79.6
Aluminum	mg/kg	3.598 / 7.918	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.01307 / 0.01502	ND	ND	ND	0 / 6	0
Arsenic	mg/kg		0.02033	0.02033	0.1438	6 / 6	0.08553
Barium	mg/kg	0.04221 / 0.0468	ND	0.04623	0.04623	1 / 6	0.04623
Beryllium	mg/kg	0.02613 / 0.1177	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.3819 / 0.8132	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.00683 / 0.00792	ND	ND	ND	0 / 6	0
Calcium	mg/kg		107.8	107.8	830.1	6 / 6	371.7
Chromium	mg/kg	0.1146 / 0.2568	ND	ND	ND	0 / 6	0
Cobalt	mg/kg	0.01266 / 0.02782	ND	ND	ND	0 / 6	0
Copper	mg/kg		0.193	0.193	0.5319	6 / 6	0.3179
Iron	mg/kg	10.85 / 23.75	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.02412 / 0.02925	ND	0.02955	0.02955	1 / 6	0.02955
Magnesium	mg/kg		254.1	254.1	312.4	6 / 6	283.7
Manganese	mg/kg	0.1528 / 0.3424	ND	0.1709	0.1827	2 / 6	0.1768
Mercury	mg/kg		0.0804	0.0804	0.2354	6 / 6	0.1192
Molybdenum	mg/kg	0.03216 / 0.03705	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.08844 / 0.1926	ND	ND	ND	0 / 6	0
Potassium	mg/kg		3715	3715	4066	6 / 6	3884
Selenium	mg/kg		0.394	0.394	0.5481	6 / 6	0.4597
Silver	mg/kg	0.00261 / 0.00305	ND	ND	ND	0 / 6	0
Sodium	mg/kg		333.5	333.5	455.8	6 / 6	397.8
Strontium	mg/kg		0.04875	0.04875	0.5427	6 / 6	0.222
Thallium	mg/kg	0.01246 / 0.01424	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.0402 / 0.1776	ND	ND	ND	0 / 6	0
Zinc	mg/kg		4.101	4.101	8.171	6 / 6	6.152

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-69: TVA SAP Sampling, Spring 2010 - Largemouth Bass Carcass at Emory River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		6.3	6.3	6.3	1 / 1	6.3
% Moisture	%		66.9	66.9	66.9	1 / 1	66.9
Aluminum	mg/kg	8.11 / 20.72	ND	ND	ND	0 / 3	0
Antimony	mg/kg	0.014 / 0.0149	ND	ND	ND	0 / 3	0
Arsenic	mg/kg		0.235	0.235	0.2516	3 / 3	0.2428
Barium	mg/kg		1.562	1.562	3.2	3 / 3	2.205
Beryllium	mg/kg	0.1213 / 0.285	ND	ND	ND	0 / 3	0
Boron	mg/kg	0.8556 / 2.152	ND	ND	ND	0 / 3	0
Cadmium	mg/kg	0.0075 / 0.07944	ND	0.0125	0.02009	2 / 3	0.0163
Calcium	mg/kg		30618	30618	68000	3 / 3	44888
Chromium	mg/kg	0.2567 / 0.662	ND	ND	ND	0 / 3	0
Cobalt	mg/kg	0.02864 / 0.07282	ND	0.0558	0.0558	1 / 3	0.0558
Copper	mg/kg	0.2939 / 0.7613	ND	0.3683	0.3683	1 / 3	0.3683
Iron	mg/kg	24.44 / 62.56	ND	ND	ND	0 / 3	0
Lead	mg/kg	0.0265 / 0.0288	ND	0.027	0.027	1 / 3	0.027
Magnesium	mg/kg		655.4	655.4	1240	3 / 3	886
Manganese	mg/kg		4.7	4.7	10.05	3 / 3	7.149
Mercury	mg/kg		0.0405	0.0405	0.0744	3 / 3	0.05706
Molybdenum	mg/kg	0.0335 / 0.1821	ND	ND	ND	0 / 3	0
Nickel	mg/kg	0.1972 / 0.4965	ND	ND	ND	0 / 3	0
Potassium	mg/kg	1248 / 3450	ND	2267	2578	2 / 3	2423
Selenium	mg/kg		0.4303	0.4303	0.558	3 / 3	0.5128
Silver	mg/kg	0.00275 / 0.0149	ND	ND	ND	0 / 3	0
Sodium	mg/kg		1830	1830	2790	3 / 3	2203
Strontium	mg/kg		23.73	23.73	55	3 / 3	34.44
Thallium	mg/kg	0.013 / 0.01589	ND	ND	ND	0 / 3	0
Vanadium	mg/kg	0.093 / 0.4733	ND	ND	ND	0 / 3	0
Zinc	mg/kg		20.09	20.09	33.25	3 / 3	27.44

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-70: TVA SAP Sampling, Spring 2010 - Largemouth Bass Fillet at Emory River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.45	0.45	1.7	6 / 6	0.8567
% Moisture	%		78	78	80.7	6 / 6	79.03
Aluminum	mg/kg	3.614 / 4.161	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.01314 / 0.01496	ND	ND	ND	0 / 6	0
Arsenic	mg/kg		0.09417	0.09417	0.1848	6 / 6	0.1467
Barium	mg/kg	0.04161 / 0.0484	ND	ND	ND	0 / 6	0
Beryllium	mg/kg	0.02628 / 0.0621	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.3723 / 0.44	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.00679 / 0.00792	ND	ND	ND	0 / 6	0
Calcium	mg/kg		122	122	542.3	6 / 6	244.1
Chromium	mg/kg	0.1139 / 0.1325	ND	ND	ND	0 / 6	0
Cobalt	mg/kg	0.0127 / 0.0147	ND	ND	ND	0 / 6	0
Copper	mg/kg		0.246	0.246	0.579	6 / 6	0.3242
Iron	mg/kg	10.86 / 12.5	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.02409 / 0.02898	ND	ND	ND	0 / 6	0
Magnesium	mg/kg		254.8	254.8	292.6	6 / 6	275.9
Manganese	mg/kg	0.1533 / 0.176	ND	0.205	0.205	1 / 6	0.205
Mercury	mg/kg		0.1107	0.1107	0.2123	6 / 6	0.1436
Molybdenum	mg/kg	0.03066 / 0.0374	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.0876 / 0.1014	ND	ND	ND	0 / 6	0
Potassium	mg/kg		3920	3920	4334	6 / 6	4111
Selenium	mg/kg		0.3667	0.3667	0.4968	6 / 6	0.4508
Silver	mg/kg	0.00267 / 0.00984	ND	ND	ND	0 / 6	0
Sodium	mg/kg		357	357	445.1	6 / 6	398.7
Strontium	mg/kg		0.06003	0.06003	0.4053	6 / 6	0.1532
Thallium	mg/kg	0.01248 / 0.01606	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.04161 / 0.0484	ND	ND	ND	0 / 6	0
Zinc	mg/kg		6.253	6.253	10.1	6 / 6	8.703

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-71: TVA SAP Sampling, Spring 2010 - Largemouth Bass Carcass at Emory River Mile 4.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		11.9	11.9	11.9	1 / 1	11.9
% Moisture	%		63.1	63.1	69.9	5 / 5	67.12
Aluminum	mg/kg	8.186 / 40.22	ND	27.39	27.39	1 / 6	27.39
Antimony	mg/kg	0.0136 / 0.07568	ND	0.01475	0.01475	1 / 6	0.01475
Arsenic	mg/kg		0.2515	0.2515	0.369	6 / 6	0.2982
Barium	mg/kg		0.9288	0.9288	2.214	6 / 6	1.4
Beryllium	mg/kg	0.06099 / 0.3096	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.8346 / 4.17	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.00711 / 0.07912	ND	0.01638	0.07011	5 / 6	0.03575
Calcium	mg/kg		24011	24011	62730	6 / 6	34284
Chromium	mg/kg	0.26 / 1.292	ND	ND	ND	0 / 6	0
Cobalt	mg/kg	0.02889 / 0.1402	ND	0.03082	0.03082	1 / 6	0.03082
Copper	mg/kg	0.2953 / 1.439	ND	0.5136	2.017	4 / 6	1.106
Iron	mg/kg	24.62 / 121	ND	24.91	24.91	1 / 6	24.91
Lead	mg/kg	0.02472 / 0.02855	ND	0.02848	0.02848	1 / 6	0.02848
Magnesium	mg/kg		597.1	597.1	1273	6 / 6	771.7
Manganese	mg/kg		3.492	3.492	10.7	6 / 6	6.732
Mercury	mg/kg		0.03063	0.03063	0.06321	6 / 6	0.05136
Molybdenum	mg/kg	0.03311 / 0.1823	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.199 / 0.9963	ND	ND	ND	0 / 6	0
Potassium	mg/kg	1242 / 7269	ND	2077	2092	2 / 6	2085
Selenium	mg/kg		0.516	0.516	0.8025	6 / 6	0.6856
Silver	mg/kg	0.00275 / 0.01479	ND	ND	ND	0 / 6	0
Sodium	mg/kg		1706	1706	2458	6 / 6	1957
Strontium	mg/kg		20.35	20.35	49.45	6 / 6	27.03
Thallium	mg/kg	0.01333 / 0.0214	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.09309 / 0.4816	ND	ND	ND	0 / 6	0
Zinc	mg/kg		21.22	21.22	37.64	6 / 6	31.77

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-72: TVA SAP Sampling, Spring 2010 - Largemouth Bass Fillet at Emory River Mile 4.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.44	0.44	3.6	6 / 6	1.16
% Moisture	%		76.8	76.8	79.5	6 / 6	78.53
Aluminum	mg/kg	3.754 / 4.154	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.01367 / 0.01491	ND	ND	ND	0 / 6	0
Arsenic	mg/kg		0.1066	0.1066	0.2376	6 / 6	0.1658
Barium	mg/kg	0.0432 / 0.04686	ND	0.0492	0.0656	2 / 6	0.0574
Beryllium	mg/kg	0.02784 / 0.03075	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.3888 / 0.4305	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.00716 / 0.00788	ND	ND	ND	0 / 6	0
Calcium	mg/kg		151.5	151.5	1316	6 / 6	640.5
Chromium	mg/kg	0.1194 / 0.1321	ND	0.1432	0.1432	1 / 6	0.1432
Cobalt	mg/kg	0.01324 / 0.0147	ND	ND	ND	0 / 6	0
Copper	mg/kg		0.2018	0.2018	0.6177	6 / 6	0.3735
Iron	mg/kg	11.33 / 12.5	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.02592 / 0.02982	ND	ND	ND	0 / 6	0
Magnesium	mg/kg		264.5	264.5	319.8	6 / 6	299
Manganese	mg/kg	0.1606 / 0.1768	ND	0.175	0.246	3 / 6	0.2005
Mercury	mg/kg		0.06048	0.06048	0.1276	6 / 6	0.1011
Molybdenum	mg/kg	0.03255 / 0.0369	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.09114 / 0.1022	ND	0.1085	0.1085	1 / 6	0.1085
Potassium	mg/kg		3480	3480	3772	6 / 6	3621
Selenium	mg/kg		0.3712	0.3712	0.6944	6 / 6	0.5265
Silver	mg/kg	0.00278 / 0.00298	ND	ND	ND	0 / 6	0
Sodium	mg/kg		319.8	319.8	449.2	6 / 6	402
Strontium	mg/kg		0.07595	0.07595	0.984	6 / 6	0.4297
Thallium	mg/kg	0.01322 / 0.01598	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.04715 / 0.1606	ND	ND	ND	0 / 6	0
Zinc	mg/kg		5.777	5.777	12.91	6 / 6	9.563

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-73: TVA SAP Sampling, Spring 2010 - Largemouth Bass Carcass at Emory River Mile 3.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		4.4	4.4	7.4	3 / 3	5.6
% Moisture	%		66.7	66.7	69.3	3 / 3	67.6
Aluminum	mg/kg	7.726 / 18.72	ND	ND	ND	0 / 3	0
Antimony	mg/kg	0.01361 / 0.01474	ND	ND	ND	0 / 3	0
Arsenic	mg/kg		0.2731	0.2731	0.3377	3 / 3	0.2955
Barium	mg/kg		1.013	1.013	1.394	3 / 3	1.146
Beryllium	mg/kg	0.1166 / 0.1394	ND	ND	ND	0 / 3	0
Boron	mg/kg	0.7992 / 1.926	ND	ND	ND	0 / 3	0
Cadmium	mg/kg	0.00697 / 0.00697	ND	0.00899	0.03009	2 / 3	0.01954
Calcium	mg/kg		26773	26773	41500	3 / 3	31763
Chromium	mg/kg	0.2464 / 0.5976	ND	ND	ND	0 / 3	0
Cobalt	mg/kg	0.02731 / 0.0664	ND	0.03663	0.03663	1 / 3	0.03663
Copper	mg/kg	0.2797 / 0.664	ND	0.3263	0.4605	2 / 3	0.3934
Iron	mg/kg	23.28 / 56.44	ND	ND	ND	0 / 3	0
Lead	mg/kg	0.0259 / 0.02855	ND	0.02656	0.02764	2 / 3	0.0271
Magnesium	mg/kg		586.1	586.1	670.6	3 / 3	618.5
Manganese	mg/kg		4.82	4.82	6.64	3 / 3	5.962
Mercury	mg/kg		0.03991	0.03991	0.0498	3 / 3	0.04433
Molybdenum	mg/kg	0.03287 / 0.0333	ND	0.04298	0.04298	1 / 3	0.04298
Nickel	mg/kg	0.1898 / 0.4648	ND	ND	ND	0 / 3	0
Potassium	mg/kg		2208	2208	2367	3 / 3	2298
Selenium	mg/kg		0.5661	0.5661	0.921	3 / 3	0.6949
Silver	mg/kg	0.00269 / 0.00298	ND	ND	ND	0 / 3	0
Sodium	mg/kg		1618	1618	1922	3 / 3	1756
Strontium	mg/kg		20.88	20.88	35.52	3 / 3	26.6
Thallium	mg/kg	0.01632 / 0.03039	ND	ND	ND	0 / 3	0
Vanadium	mg/kg	0.08658 / 0.2125	ND	ND	ND	0 / 3	0
Zinc	mg/kg		17.92	17.92	21.21	3 / 3	19.79

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-74: TVA SAP Sampling, Spring 2010 - Largemouth Bass Fillet at Emory River Mile 3.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.56	0.56	2	6 / 6	1.203
% Moisture	%		78.1	78.1	79.3	6 / 6	78.67
Aluminum	mg/kg	3.65 / 4.158	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.01318 / 0.01491	ND	ND	ND	0 / 6	0
Arsenic	mg/kg		0.1283	0.1283	0.1965	6 / 6	0.1671
Barium	mg/kg	0.04104 / 0.0483	ND	ND	ND	0 / 6	0
Beryllium	mg/kg	0.02592 / 0.05957	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.3672 / 0.42	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.00691 / 0.00798	ND	ND	ND	0 / 6	0
Calcium	mg/kg		145.2	145.2	493.2	6 / 6	289.8
Chromium	mg/kg	0.1166 / 0.1323	ND	ND	ND	0 / 6	0
Cobalt	mg/kg	0.01274 / 0.01428	ND	0.01617	0.01617	1 / 6	0.01617
Copper	mg/kg		0.1925	0.1925	7.279	6 / 6	1.402
Iron	mg/kg	10.97 / 12.5	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.02592 / 0.0294	ND	0.2376	0.2376	1 / 6	0.2376
Magnesium	mg/kg		267.2	267.2	308.8	6 / 6	286.8
Manganese	mg/kg	0.1555 / 0.1764	ND	0.1685	0.2299	2 / 6	0.1992
Mercury	mg/kg		0.05913	0.05913	0.1862	6 / 6	0.1123
Molybdenum	mg/kg	0.0324 / 0.0357	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.08856 / 0.1008	ND	0.756	0.756	1 / 6	0.756
Potassium	mg/kg		3996	3996	4161	6 / 6	4083
Selenium	mg/kg		0.4536	0.4536	0.876	6 / 6	0.6575
Silver	mg/kg	0.00259 / 0.00964	ND	ND	ND	0 / 6	0
Sodium	mg/kg		394.8	394.8	466.5	6 / 6	431.3
Strontium	mg/kg		0.08103	0.08103	0.3762	6 / 6	0.1954
Thallium	mg/kg	0.01253 / 0.03971	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.04104 / 0.0483	ND	ND	ND	0 / 6	0
Zinc	mg/kg		4.968	4.968	10.58	6 / 6	7.323

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-75: TVA SAP Sampling, Spring 2010 - Largemouth Bass Carcass at Emory River Mile 0.9

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		7	7	7	1 / 1	7
% Moisture	%		68.1	68.1	68.1	1 / 1	68.1
Aluminum	mg/kg	4.039 / 7.624	ND	5.08	5.08	1 / 3	5.08
Antimony	mg/kg	0.01372 / 0.01469	ND	0.01372	0.01372	1 / 3	0.01372
Arsenic	mg/kg		0.3828	0.3828	0.5508	3 / 3	0.4894
Barium	mg/kg		0.8316	0.8316	0.9251	3 / 3	0.8916
Beryllium	mg/kg	0.0297 / 0.1139	ND	ND	ND	0 / 3	0
Boron	mg/kg	0.4158 / 0.7975	ND	ND	ND	0 / 3	0
Cadmium	mg/kg	0.00734 / 0.0104	ND	0.00861	0.00861	1 / 3	0.008613
Calcium	mg/kg		8108	8108	23989	3 / 3	16931
Chromium	mg/kg		0.1723	0.1723	0.5742	3 / 3	0.3182
Cobalt	mg/kg	0.01426 / 0.01744	ND	0.0638	0.0638	1 / 3	0.0638
Copper	mg/kg		0.3564	0.3564	1.818	3 / 3	0.8778
Iron	mg/kg	12.18 / 12.18	ND	14.72	676.3	2 / 3	345.5
Lead	mg/kg	0.02648 / 0.02792	ND	0.05742	0.05742	1 / 3	0.05742
Magnesium	mg/kg		466.3	466.3	893.5	3 / 3	645.7
Manganese	mg/kg		1.96	1.96	9.761	3 / 3	5.468
Mercury	mg/kg		0.03861	0.03861	0.04896	3 / 3	0.04514
Molybdenum	mg/kg	0.03509 / 0.03672	ND	0.1085	0.1085	1 / 3	0.1085
Nickel	mg/kg		0.1574	0.1574	0.4466	3 / 3	0.3003
Potassium	mg/kg	1378 / 3623	ND	2150	2150	1 / 3	2150
Selenium	mg/kg		0.638	0.638	0.7722	3 / 3	0.7149
Silver	mg/kg	0.00274 / 0.00297	ND	ND	ND	0 / 3	0
Sodium	mg/kg		1408	1408	1621	3 / 3	1549
Strontium	mg/kg		14.29	14.29	29.19	3 / 3	21.09
Thallium	mg/kg	0.01366 / 0.01867	ND	ND	ND	0 / 3	0
Vanadium	mg/kg	0.0459 / 0.08613	ND	ND	ND	0 / 3	0
Zinc	mg/kg		16.72	16.72	30.17	3 / 3	23.98

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-76: TVA SAP Sampling, Spring 2010 - Largemouth Bass Fillet at Emory River Mile 0.9

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.36	0.36	1.9	6 / 6	1.082
% Moisture	%		78.7	78.7	81.4	6 / 6	79.53
Aluminum	mg/kg	3.701 / 8.28	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.01339 / 0.02898	ND	ND	ND	0 / 6	0
Arsenic	mg/kg		0.0744	0.0744	0.3654	6 / 6	0.2763
Barium	mg/kg	0.04278 / 0.09522	ND	ND	ND	0 / 6	0
Beryllium	mg/kg	0.0279 / 0.06003	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.3906 / 0.8487	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.00707 / 0.01573	ND	ND	ND	0 / 6	0
Calcium	mg/kg		144.2	144.2	468.6	6 / 6	285.5
Chromium	mg/kg	0.1172 / 0.2691	ND	ND	ND	0 / 6	0
Cobalt	mg/kg	0.01302 / 0.02898	ND	ND	ND	0 / 6	0
Copper	mg/kg	0.1339 / 0.2898	ND	0.1841	0.2678	5 / 6	0.2245
Iron	mg/kg	11.14 / 24.84	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.02604 / 0.02898	ND	ND	ND	0 / 6	0
Magnesium	mg/kg		247.4	247.4	332.3	6 / 6	294.2
Manganese	mg/kg	0.1581 / 0.3519	ND	0.1726	0.1811	2 / 6	0.1769
Mercury	mg/kg		0.0639	0.0639	0.2976	6 / 6	0.1169
Molybdenum	mg/kg	0.03162 / 0.07245	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.09114 / 0.2029	ND	ND	ND	0 / 6	0
Potassium	mg/kg	669.6 / 3726	ND	3608	4162	3 / 6	3860
Selenium	mg/kg		0.4968	0.4968	0.7254	6 / 6	0.6174
Silver	mg/kg	0.0026 / 0.006	ND	ND	ND	0 / 6	0
Sodium	mg/kg		367.4	367.4	507.8	6 / 6	423.4
Strontium	mg/kg		0.07455	0.07455	0.3621	6 / 6	0.1926
Thallium	mg/kg	0.01283 / 0.03519	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.04278 / 0.09522	ND	ND	ND	0 / 6	0
Zinc	mg/kg		5.673	5.673	13.95	6 / 6	8.427

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-77: TVA SAP Sampling, Spring 2010 - Largemouth Bass Carcass at Clinch River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		4.5	4.5	4.6	2 / 2	4.55
% Moisture	%		65.7	65.7	69.3	2 / 2	67.5
Aluminum	mg/kg	4.104 / 17.6	ND	4.651	4.651	1 / 3	4.651
Antimony	mg/kg	0.01259 / 0.01471	ND	ND	ND	0 / 3	0
Arsenic	mg/kg		0.2675	0.2675	0.4104	3 / 3	0.3252
Barium	mg/kg		0.7061	0.7061	1.201	3 / 3	1.023
Beryllium	mg/kg	0.0301 / 0.1303	ND	ND	ND	0 / 3	0
Boron	mg/kg	0.4104 / 1.818	ND	ND	ND	0 / 3	0
Cadmium	mg/kg	0.00686 / 0.01351	ND	0.00787	0.00926	2 / 3	0.008564
Calcium	mg/kg		24621	24621	32894	3 / 3	28349
Chromium	mg/kg	0.13 / 0.5526	ND	0.2018	0.2018	1 / 3	0.2018
Cobalt	mg/kg	0.01436 / 0.06174	ND	ND	ND	0 / 3	0
Copper	mg/kg	0.1471 / 0.6447	ND	0.3146	2.675	2 / 3	1.495
Iron	mg/kg	12.31 / 52.82	ND	14.74	14.74	1 / 3	14.74
Lead	mg/kg	0.02435 / 0.02456	ND	0.02873	0.1029	2 / 3	0.06582
Magnesium	mg/kg		601.7	601.7	734	3 / 3	656.1
Manganese	mg/kg		3.899	3.899	6.14	3 / 3	5.193
Mercury	mg/kg		0.05145	0.05145	0.07866	3 / 3	0.06793
Molybdenum	mg/kg	0.0307 / 0.03762	ND	ND	ND	0 / 3	0
Nickel	mg/kg	0.09918 / 0.4459	ND	ND	ND	0 / 3	0
Potassium	mg/kg		2083	2083	2250	3 / 3	2193
Selenium	mg/kg		0.5145	0.5145	0.5526	3 / 3	0.5381
Silver	mg/kg	0.00254 / 0.00294	ND	ND	ND	0 / 3	0
Sodium	mg/kg		1553	1553	1938	3 / 3	1766
Strontium	mg/kg		15.47	15.47	23.56	3 / 3	20.04
Thallium	mg/kg	0.01197 / 0.01402	ND	ND	ND	0 / 3	0
Vanadium	mg/kg	0.04788 / 0.4116	ND	ND	ND	0 / 3	0
Zinc	mg/kg		15.1	15.1	22.78	3 / 3	19.32

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-78: TVA SAP Sampling, Spring 2010 - Largemouth Bass Fillet at Clinch River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1	1	1.6	6 / 6	1.283
% Moisture	%		78.4	78.4	79.1	6 / 6	78.8
Aluminum	mg/kg	3.813 / 4.117	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.01385 / 0.01484	ND	ND	ND	0 / 6	0
Arsenic	mg/kg		0.1308	0.1308	0.3135	6 / 6	0.2357
Barium	mg/kg	0.04473 / 0.04807	ND	ND	ND	0 / 6	0
Beryllium	mg/kg	0.02769 / 0.03135	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.4047 / 0.422	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.00724 / 0.00794	ND	ND	ND	0 / 6	0
Calcium	mg/kg		144.5	144.5	342.8	6 / 6	250.4
Chromium	mg/kg	0.1214 / 0.1317	ND	0.2508	0.2508	1 / 6	0.2508
Cobalt	mg/kg	0.01342 / 0.01442	ND	ND	ND	0 / 6	0
Copper	mg/kg		0.1498	0.1498	0.3344	6 / 6	0.2539
Iron	mg/kg	11.48 / 12.44	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.02556 / 0.02926	ND	ND	ND	0 / 6	0
Magnesium	mg/kg		269.6	269.6	311	6 / 6	289
Manganese	mg/kg	0.1619 / 0.1756	ND	0.1896	0.2376	3 / 6	0.219
Mercury	mg/kg		0.08569	0.08569	0.1685	6 / 6	0.1338
Molybdenum	mg/kg	0.03408 / 0.03587	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.09372 / 0.1003	ND	0.1233	0.1233	1 / 6	0.1233
Potassium	mg/kg		3724	3724	4494	6 / 6	4090
Selenium	mg/kg		0.422	0.422	0.5852	6 / 6	0.4977
Silver	mg/kg	0.00277 / 0.003	ND	ND	ND	0 / 6	0
Sodium	mg/kg		384.6	384.6	483.8	6 / 6	440.2
Strontium	mg/kg		0.06541	0.06541	0.2299	6 / 6	0.1413
Thallium	mg/kg	0.01321 / 0.01797	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.0426 / 0.04807	ND	0.08151	0.08151	1 / 6	0.08151
Zinc	mg/kg		4.136	4.136	8.694	6 / 6	7.422

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-79: TVA SAP Sampling, Spring 2010 - Largemouth Bass Carcass at Clinch River Mile 3.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1.5	1.5	6.3	6 / 6	3.733
% Moisture	%		69.5	69.5	77.5	6 / 6	72.38
Aluminum	mg/kg	3.73 / 4.118	ND	6.512	6.512	1 / 4	6.512
Antimony	mg/kg	0.01328 / 0.01495	ND	ND	ND	0 / 6	0
Arsenic	mg/kg		0.2228	0.2228	0.488	6 / 6	0.349
Barium	mg/kg		0.117	0.117	1.495	6 / 6	0.8361
Beryllium	mg/kg	0.027 / 0.06161	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.3825 / 0.427	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.00698 / 0.00748	ND	0.01525	0.01525	1 / 6	0.01525
Calcium	mg/kg		4658	4658	35685	6 / 6	25407
Chromium	mg/kg	0.117 / 0.1312	ND	0.1918	0.1918	1 / 6	0.1918
Cobalt	mg/kg	0.01302 / 0.01343	ND	0.01645	0.0296	4 / 6	0.01984
Copper	mg/kg		0.2925	0.2925	0.8514	6 / 6	0.5046
Iron	mg/kg		13.76	13.76	19.83	5 / 5	15.76
Lead	mg/kg	0.02475 / 0.02838	ND	0.03965	0.03965	1 / 6	0.03965
Magnesium	mg/kg		357.8	357.8	771.7	6 / 6	621
Manganese	mg/kg		0.5175	0.5175	4.963	6 / 6	3.043
Mercury	mg/kg		0.04485	0.04485	0.07625	6 / 6	0.06
Molybdenum	mg/kg	0.0315 / 0.0366	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.09 / 0.1007	ND	0.09867	0.09867	1 / 6	0.09867
Potassium	mg/kg		2335	2335	3780	6 / 6	2625
Selenium	mg/kg		0.4275	0.4275	0.74	6 / 6	0.62
Silver	mg/kg	0.00269 / 0.00299	ND	ND	ND	0 / 6	0
Sodium	mg/kg		616.5	616.5	2028	6 / 6	1607
Strontium	mg/kg		3.645	3.645	30.2	6 / 6	19.73
Thallium	mg/kg	0.0126 / 0.02427	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.04144 / 0.04575	ND	ND	ND	0 / 6	0
Zinc	mg/kg	2.013 / 10.01	ND	18.33	23.23	5 / 6	20.17

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-80: TVA SAP Sampling, Spring 2010 - Largemouth Bass Fillet at Clinch River Mile 3.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.27	0.27	6.9	6 / 6	2.128
% Moisture	%		69.1	69.1	80	6 / 6	77.15
Aluminum	mg/kg	3.876 / 4.038	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.01391 / 0.01463	ND	ND	ND	0 / 6	0
Arsenic	mg/kg		0.174	0.174	0.3059	6 / 6	0.249
Barium	mg/kg	0.04332 / 0.04598	ND	0.104	0.5871	3 / 6	0.2669
Beryllium	mg/kg	0.0578 / 0.06015	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.4 / 0.418	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.0073 / 0.00762	ND	ND	ND	0 / 6	0
Calcium	mg/kg		782	782	21414	6 / 6	5027
Chromium	mg/kg	0.122 / 0.1277	ND	ND	ND	0 / 6	0
Cobalt	mg/kg	0.0136 / 0.01421	ND	0.01761	0.01761	1 / 6	0.01761
Copper	mg/kg		0.196	0.196	0.5562	6 / 6	0.307
Iron	mg/kg	11.65 / 12.13	ND	17.58	17.58	1 / 6	17.58
Lead	mg/kg	0.026 / 0.02884	ND	ND	ND	0 / 6	0
Magnesium	mg/kg		291.8	291.8	550	6 / 6	347
Manganese	mg/kg		0.228	0.228	2.719	6 / 6	0.6891
Mercury	mg/kg		0.04017	0.04017	0.138	6 / 6	0.09534
Molybdenum	mg/kg	0.03399 / 0.03553	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.09348 / 0.09888	ND	ND	ND	0 / 6	0
Potassium	mg/kg		2426	2426	3635	6 / 6	3328
Selenium	mg/kg		0.48	0.48	0.6612	6 / 6	0.5626
Silver	mg/kg	0.00274 / 0.00293	ND	ND	ND	0 / 6	0
Sodium	mg/kg		492.5	492.5	1650	6 / 6	739.2
Strontium	mg/kg		0.5472	0.5472	15.82	6 / 6	3.843
Thallium	mg/kg	0.01358 / 0.015	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.04332 / 0.04635	ND	ND	ND	0 / 6	0
Zinc	mg/kg		6.351	6.351	16.22	6 / 6	9.712

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-81: TVA SAP Sampling, Spring 2010 - Largemouth Bass Carcass at Clinch River Mile 25.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		5.6	5.6	5.6	1 / 1	5.6
% Moisture	%		65.7	65.7	65.7	1 / 1	65.7
Aluminum	mg/kg	7.082 / 18.8	ND	ND	ND	0 / 3	0
Antimony	mg/kg	0.01277 / 0.0147	ND	0.03018	0.03018	1 / 3	0.03018
Arsenic	mg/kg		0.4704	0.4704	0.6192	3 / 3	0.5233
Barium	mg/kg		0.5418	0.5418	0.686	3 / 3	0.6151
Beryllium	mg/kg	0.05031 / 0.1372	ND	ND	ND	0 / 3	0
Boron	mg/kg	0.7353 / 1.955	ND	ND	ND	0 / 3	0
Cadmium	mg/kg		0.01471	0.01471	0.02264	3 / 3	0.01862
Calcium	mg/kg		24962	24962	43561	3 / 3	32053
Chromium	mg/kg	0.2245 / 0.2587	ND	0.2283	1.303	2 / 3	0.7657
Cobalt	mg/kg	0.02477 / 0.02852	ND	0.1029	0.1029	1 / 3	0.1029
Copper	mg/kg		0.4116	0.4116	3.19	3 / 3	1.342
Iron	mg/kg	21.29 / 24.49	ND	1444	1444	1 / 3	1444
Lead	mg/kg	0.02477 / 0.02822	ND	0.5831	0.5831	1 / 3	0.5831
Magnesium	mg/kg		596	596	768.3	3 / 3	663.5
Manganese	mg/kg		3.019	3.019	15.61	3 / 3	7.288
Mercury	mg/kg		0.02675	0.02675	0.04257	3 / 3	0.03389
Molybdenum	mg/kg	0.03096 / 0.03528	ND	0.2538	0.2538	1 / 3	0.2538
Nickel	mg/kg	0.1742 / 0.1999	ND	0.9261	0.9261	1 / 3	0.9261
Potassium	mg/kg		1911	1911	2287	3 / 3	2113
Selenium	mg/kg		0.588	0.588	0.9675	3 / 3	0.7586
Silver	mg/kg	0.00255 / 0.00294	ND	ND	ND	0 / 3	0
Sodium	mg/kg		1517	1517	2072	3 / 3	1723
Strontium	mg/kg		18	18	28.71	3 / 3	21.82
Thallium	mg/kg	0.012 / 0.01411	ND	ND	ND	0 / 3	0
Vanadium	mg/kg	0.08127 / 0.4116	ND	ND	ND	0 / 3	0
Zinc	mg/kg		20.31	20.31	27.01	3 / 3	22.95

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-82: TVA SAP Sampling, Spring 2010 - Largemouth Bass Fillet at Clinch River Mile 25.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.42	0.42	2.2	6 / 6	1.25
% Moisture	%		77.8	77.8	80.3	6 / 6	78.98
Aluminum	mg/kg	3.585 / 4.08	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.01298 / 0.01482	ND	ND	ND	0 / 6	0
Arsenic	mg/kg		0.197	0.197	0.4944	6 / 6	0.3417
Barium	mg/kg	0.04137 / 0.04686	ND	ND	ND	0 / 6	0
Beryllium	mg/kg	0.02561 / 0.03045	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.374 / 0.4263	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.00682 / 0.00771	ND	ND	ND	0 / 6	0
Calcium	mg/kg		89.04	89.04	874.9	6 / 6	297.1
Chromium	mg/kg	0.1143 / 0.1278	ND	0.1624	0.4334	2 / 6	0.2979
Cobalt	mg/kg	0.01254 / 0.01441	ND	ND	ND	0 / 6	0
Copper	mg/kg		0.1848	0.1848	0.3152	6 / 6	0.2174
Iron	mg/kg	10.8 / 12.28	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.0242 / 0.02842	ND	0.04326	0.04326	1 / 6	0.04326
Magnesium	mg/kg		244.3	244.3	306.4	6 / 6	283.3
Manganese	mg/kg	0.1518 / 0.1725	ND	0.1827	0.1827	1 / 6	0.1827
Mercury	mg/kg		0.02955	0.02955	0.08526	6 / 6	0.05477
Molybdenum	mg/kg	0.0308 / 0.03654	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.08668 / 0.2343	ND	0.1056	0.2758	2 / 6	0.1907
Potassium	mg/kg		3507	3507	4151	6 / 6	3946
Selenium	mg/kg		0.572	0.572	1.021	6 / 6	0.6953
Silver	mg/kg	0.00256 / 0.00305	ND	ND	ND	0 / 6	0
Sodium	mg/kg		336.9	336.9	417.4	6 / 6	384.2
Strontium	mg/kg		0.04334	0.04334	0.7917	6 / 6	0.2117
Thallium	mg/kg	0.01232 / 0.01401	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.04137 / 0.04686	ND	ND	ND	0 / 6	0
Zinc	mg/kg		7.37	7.37	20.29	6 / 6	11.05

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-83: TVA SAP Sampling, Spring 2010 - Largemouth Bass Carcass at Clinch River Mile 1.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
Aluminum	mg/kg	3.591 / 3.884	ND	ND	ND	0 / 3	0
Antimony	mg/kg	0.01303 / 0.01394	ND	ND	ND	0 / 3	0
Arsenic	mg/kg		0.3192	0.3192	0.4316	3 / 3	0.3656
Barium	mg/kg		0.8512	0.8512	0.996	3 / 3	0.9271
Beryllium	mg/kg	0.0266 / 0.1419	ND	ND	ND	0 / 3	0
Boron	mg/kg	0.3724 / 1.972	ND	ND	ND	0 / 3	0
Cadmium	mg/kg	0.00692 / 0.0073	ND	ND	ND	0 / 3	0
Calcium	mg/kg		31540	31540	43596	3 / 3	35685
Chromium	mg/kg		0.176	0.176	0.2387	3 / 3	0.2083
Cobalt	mg/kg		0.01702	0.01702	0.01892	3 / 3	0.01809
Copper	mg/kg		0.3114	0.3114	0.399	3 / 3	0.3585
Iron	mg/kg		12.02	12.02	21.23	3 / 3	15.56
Lead	mg/kg	0.025 / 0.02722	ND	0.0258	0.0258	1 / 3	0.0258
Magnesium	mg/kg		726.2	726.2	858.1	3 / 3	771.6
Manganese	mg/kg		2.855	2.855	7.577	3 / 3	5.676
Mercury	mg/kg		0.02041	0.02041	0.04256	3 / 3	0.03161
Molybdenum	mg/kg	0.03192 / 0.03391	ND	ND	ND	0 / 3	0
Nickel	mg/kg	0.08778 / 0.09628	ND	ND	ND	0 / 3	0
Potassium	mg/kg		2111	2111	2463	3 / 3	2262
Selenium	mg/kg		0.519	0.519	0.532	3 / 3	0.5274
Silver	mg/kg	0.00261 / 0.00282	ND	ND	ND	0 / 3	0
Sodium	mg/kg		1750	1750	1979	3 / 3	1886
Strontium	mg/kg		22	22	32.94	3 / 3	26.92
Thallium	mg/kg	0.0125 / 0.01522	ND	ND	ND	0 / 3	0
Vanadium	mg/kg	0.0399 / 0.04316	ND	0.06574	0.06574	1 / 3	0.06574
Zinc	mg/kg		22.25	22.25	28.2	3 / 3	25.19

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-84: TVA SAP Sampling, Spring 2010 - Largemouth Bass Fillet at Clinch River Mile 1.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.42	0.42	2.2	6 / 6	1.162
% Moisture	%		76.6	76.6	80.4	6 / 6	78.67
Aluminum	mg/kg	3.702 / 4.142	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.01338 / 0.01498	ND	ND	ND	0 / 6	0
Arsenic	mg/kg		0.0588	0.0588	0.3345	6 / 6	0.2089
Barium	mg/kg	0.04237 / 0.04738	ND	ND	ND	0 / 6	0
Beryllium	mg/kg	0.02676 / 0.0309	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.3791 / 0.4326	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.00714 / 0.00796	ND	ND	ND	0 / 6	0
Calcium	mg/kg		157.6	157.6	451.1	6 / 6	291.5
Chromium	mg/kg	0.1182 / 0.1318	ND	ND	ND	0 / 6	0
Cobalt	mg/kg	0.01293 / 0.01451	ND	ND	ND	0 / 6	0
Copper	mg/kg		0.194	0.194	0.5352	6 / 6	0.3674
Iron	mg/kg	11.13 / 12.47	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.02676 / 0.02884	ND	ND	ND	0 / 6	0
Magnesium	mg/kg		258.7	258.7	327.5	6 / 6	297.5
Manganese	mg/kg	0.1583 / 0.1705	ND	0.1695	0.2884	4 / 6	0.2058
Mercury	mg/kg		0.04212	0.04212	0.3952	6 / 6	0.1443
Molybdenum	mg/kg	0.03328 / 0.03744	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.0892 / 0.098	ND	0.103	0.1339	2 / 6	0.1185
Potassium	mg/kg		3680	3680	4182	6 / 6	3956
Selenium	mg/kg		0.3914	0.3914	0.5325	6 / 6	0.4363
Silver	mg/kg	0.00268 / 0.0096	ND	ND	ND	0 / 6	0
Sodium	mg/kg		339.3	339.3	554.7	6 / 6	448.1
Strontium	mg/kg		0.08624	0.08624	0.3345	6 / 6	0.191
Thallium	mg/kg	0.01271 / 0.01474	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.04237 / 0.04738	ND	ND	ND	0 / 6	0
Zinc	mg/kg		5.606	5.606	17.51	6 / 6	10.33

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-85: TVA SAP Sampling, Spring 2010 - Red Ear Sunfish Fillet at Little Emory River Mile 2.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.14	0.14	1.1	6 / 6	0.3583
% Moisture	%		81.3	81.3	83.8	2 / 2	82.55
Aluminum	mg/kg	3.78 / 4.124	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.01365 / 0.01487	ND	ND	ND	0 / 6	0
Arsenic	mg/kg	0.02625 / 0.02754	ND	0.04732	0.1152	5 / 6	0.0727
Barium	mg/kg	0.04375 / 0.3268	ND	ND	ND	0 / 6	0
Beryllium	mg/kg	0.028 / 0.03042	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.385 / 0.4225	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.00718 / 0.00777	ND	ND	ND	0 / 6	0
Calcium	mg/kg		110.4	110.4	1961	6 / 6	787
Chromium	mg/kg	0.1208 / 0.1301	ND	ND	ND	0 / 6	0
Cobalt	mg/kg	0.0133 / 0.01453	ND	ND	ND	0 / 6	0
Copper	mg/kg		0.2415	0.2415	0.3549	6 / 6	0.2785
Iron	mg/kg	11.41 / 12.4	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.02625 / 0.02873	ND	ND	ND	0 / 6	0
Magnesium	mg/kg		229.3	229.3	304.8	6 / 6	256.4
Manganese	mg/kg		0.168	0.168	1.216	6 / 6	0.5907
Mercury	mg/kg		0.043	0.043	0.06762	6 / 6	0.05066
Molybdenum	mg/kg	0.03325 / 0.03612	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.09275 / 0.1014	ND	ND	ND	0 / 6	0
Potassium	mg/kg		3395	3395	3927	6 / 6	3688
Selenium	mg/kg		0.5848	0.5848	0.6732	6 / 6	0.6229
Silver	mg/kg	0.00274 / 0.00304	ND	ND	ND	0 / 6	0
Sodium	mg/kg		278.5	278.5	395.5	6 / 6	332.8
Strontium	mg/kg		0.1442	0.1442	1.995	6 / 6	0.6765
Thallium	mg/kg	0.01313 / 0.0142	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.04347 / 0.04732	ND	ND	ND	0 / 6	0
Zinc	mg/kg		9.993	9.993	21	6 / 6	13.1

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-86: TVA SAP Sampling, Spring 2010 - Red Ear Sunfish Fillet at Emory River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.39	0.39	0.65	6 / 6	0.53
% Moisture	%		81	81	84.4	6 / 6	82.02
Aluminum	mg/kg	3.752 / 4.153	ND	5.819	5.819	1 / 6	5.819
Antimony	mg/kg	0.01354 / 0.01504	ND	ND	ND	0 / 6	0
Arsenic	mg/kg	0.02562 / 0.0285	ND	0.04575	0.093	5 / 6	0.06816
Barium	mg/kg	0.04278 / 0.1098	ND	ND	ND	0 / 6	0
Beryllium	mg/kg	0.02745 / 0.0312	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.3843 / 0.4368	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.00714 / 0.00796	ND	ND	ND	0 / 6	0
Calcium	mg/kg		85.37	85.37	723.2	6 / 6	497
Chromium	mg/kg	0.119 / 0.1325	ND	ND	ND	0 / 6	0
Cobalt	mg/kg	0.01318 / 0.01468	ND	ND	ND	0 / 6	0
Copper	mg/kg		0.1702	0.1702	0.3043	6 / 6	0.24
Iron	mg/kg	11.31 / 12.51	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.02562 / 0.02864	ND	ND	ND	0 / 6	0
Magnesium	mg/kg		252.7	252.7	277.5	6 / 6	265.1
Manganese	mg/kg	0.1592 / 0.1716	ND	0.2148	0.703	4 / 6	0.3922
Mercury	mg/kg		0.0323	0.0323	0.09486	6 / 6	0.05514
Molybdenum	mg/kg	0.03294 / 0.0361	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.0915 / 0.102	ND	0.09805	0.09805	1 / 6	0.09805
Potassium	mg/kg		3645	3645	3980	6 / 6	3799
Selenium	mg/kg		0.4992	0.4992	0.6444	6 / 6	0.5656
Silver	mg/kg	0.00275 / 0.00304	ND	ND	ND	0 / 6	0
Sodium	mg/kg		288.8	288.8	325.6	6 / 6	303.7
Strontium	mg/kg	0.04092 / 0.04092	ND	0.2028	0.494	5 / 6	0.3873
Thallium	mg/kg	0.01299 / 0.01435	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.04209 / 0.04833	ND	ND	ND	0 / 6	0
Zinc	mg/kg		8.198	8.198	15.43	6 / 6	11.82

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-87: TVA SAP Sampling, Spring 2010 - Red Ear Sunfish Fillet at Emory River Mile 3.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.12	0.12	0.97	6 / 6	0.41
% Moisture	%		79.7	79.7	82.6	6 / 6	81.78
Aluminum	mg/kg	3.593 / 3.996	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.01299 / 0.0144	ND	ND	ND	0 / 6	0
Arsenic	mg/kg		0.08055	0.08055	0.153	6 / 6	0.1082
Barium	mg/kg	0.0406 / 0.0455	ND	0.04833	0.1624	3 / 6	0.09484
Beryllium	mg/kg	0.0261 / 0.02975	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.3654 / 0.414	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.0069 / 0.00756	ND	ND	ND	0 / 6	0
Calcium	mg/kg		88.04	88.04	799.8	6 / 6	274.1
Chromium	mg/kg	0.1137 / 0.126	ND	0.1365	0.1365	1 / 6	0.1365
Cobalt	mg/kg	0.01259 / 0.01404	ND	ND	ND	0 / 6	0
Copper	mg/kg	0.1299 / 0.142	ND	0.1453	0.396	5 / 6	0.2653
Iron	mg/kg	10.84 / 12.04	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.02436 / 0.028	ND	ND	ND	0 / 6	0
Magnesium	mg/kg		225.8	225.8	282.2	6 / 6	243.2
Manganese	mg/kg	0.1523 / 0.1701	ND	0.216	0.4872	2 / 6	0.3516
Mercury	mg/kg		0.03654	0.03654	0.09918	6 / 6	0.06693
Molybdenum	mg/kg	0.03132 / 0.036	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.08729 / 0.0972	ND	0.1019	0.1019	1 / 6	0.1019
Potassium	mg/kg		3531	3531	3877	6 / 6	3671
Selenium	mg/kg		0.6981	0.6981	1.17	6 / 6	0.8941
Silver	mg/kg	0.00261 / 0.00291	ND	ND	ND	0 / 6	0
Sodium	mg/kg		286.2	286.2	401.9	6 / 6	327.2
Strontium	mg/kg		0.04732	0.04732	0.6902	6 / 6	0.222
Thallium	mg/kg	0.01253 / 0.01746	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.0406 / 0.0455	ND	ND	ND	0 / 6	0
Zinc	mg/kg		8.683	8.683	17.21	6 / 6	11.17

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-88: TVA SAP Sampling, Spring 2010 - Red Ear Sunfish Fillet at Emory River Mile 0.9

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.16	0.16	0.41	5 / 5	0.262
% Moisture	%		81.1	81.1	83.5	5 / 5	82.2
Aluminum	mg/kg	3.95 / 4.083	ND	ND	ND	0 / 5	0
Antimony	mg/kg	0.01436 / 0.01478	ND	ND	ND	0 / 5	0
Arsenic	mg/kg		0.1725	0.1725	0.2646	5 / 5	0.2306
Barium	mg/kg	0.04536 / 0.04752	ND	0.132	0.132	1 / 5	0.132
Beryllium	mg/kg	0.02835 / 0.02992	ND	ND	ND	0 / 5	0
Boron	mg/kg	0.4158 / 0.429	ND	ND	ND	0 / 5	0
Cadmium	mg/kg	0.00756 / 0.00776	ND	ND	ND	0 / 5	0
Calcium	mg/kg		110	110	861.3	5 / 5	307.4
Chromium	mg/kg	0.1247 / 0.1302	ND	ND	ND	0 / 5	0
Cobalt	mg/kg	0.01399 / 0.01443	ND	ND	ND	0 / 5	0
Copper	mg/kg		0.2464	0.2464	0.368	5 / 5	0.3103
Iron	mg/kg	11.91 / 12.3	ND	ND	ND	0 / 5	0
Lead	mg/kg	0.0276 / 0.02835	ND	ND	ND	0 / 5	0
Magnesium	mg/kg		245.9	245.9	267.5	5 / 5	261
Manganese	mg/kg	0.1682 / 0.1742	ND	0.2475	0.2475	1 / 5	0.2475
Mercury	mg/kg		0.04752	0.04752	0.08745	5 / 5	0.06937
Molybdenum	mg/kg	0.03402 / 0.0363	ND	ND	ND	0 / 5	0
Nickel	mg/kg	0.09639 / 0.1003	ND	ND	ND	0 / 5	0
Potassium	mg/kg		3383	3383	3662	5 / 5	3477
Selenium	mg/kg		0.8745	0.8745	1.285	5 / 5	1.047
Silver	mg/kg	0.00945 / 0.0099	ND	ND	ND	0 / 5	0
Sodium	mg/kg		309.8	309.8	461.2	5 / 5	367.8
Strontium	mg/kg		0.06864	0.06864	0.6765	5 / 5	0.2273
Thallium	mg/kg	0.01361 / 0.01408	ND	ND	ND	0 / 5	0
Vanadium	mg/kg	0.04536 / 0.0462	ND	ND	ND	0 / 5	0
Zinc	mg/kg		10.95	10.95	18.95	5 / 5	14.81

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-89: TVA SAP Sampling, Spring 2010 - Red Ear Sunfish Fillet at Clinch River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.17	0.17	0.6	6 / 6	0.3467
% Moisture	%		79	79	82.5	6 / 6	81
Aluminum	mg/kg	3.54 / 4.158	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.0128 / 0.01512	ND	ND	ND	0 / 6	0
Arsenic	mg/kg		0.126	0.126	0.3056	6 / 6	0.2063
Barium	mg/kg	0.04 / 0.0483	ND	0.05157	0.296	4 / 6	0.1265
Beryllium	mg/kg	0.026 / 0.0315	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.36 / 0.4255	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.0068 / 0.00798	ND	ND	ND	0 / 6	0
Calcium	mg/kg		95.13	95.13	3071	6 / 6	804.7
Chromium	mg/kg	0.112 / 0.1323	ND	ND	ND	0 / 6	0
Cobalt	mg/kg	0.0124 / 0.0147	ND	ND	ND	0 / 6	0
Copper	mg/kg		0.1698	0.1698	0.252	6 / 6	0.2063
Iron	mg/kg	10.66 / 12.52	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.024 / 0.0294	ND	ND	ND	0 / 6	0
Magnesium	mg/kg		248.3	248.3	281.2	6 / 6	264.8
Manganese	mg/kg	0.15 / 0.1764	ND	0.166	0.777	3 / 6	0.4456
Mercury	mg/kg		0.0336	0.0336	0.1146	6 / 6	0.06039
Molybdenum	mg/kg	0.032 / 0.0358	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.086 / 0.1008	ND	ND	ND	0 / 6	0
Potassium	mg/kg		3460	3460	3840	6 / 6	3612
Selenium	mg/kg		0.703	0.703	0.955	6 / 6	0.7894
Silver	mg/kg	0.0026 / 0.00296	ND	ND	ND	0 / 6	0
Sodium	mg/kg		275.7	275.7	479.2	6 / 6	350.9
Strontium	mg/kg	0.038 / 0.0462	ND	0.09625	1.943	5 / 6	0.5823
Thallium	mg/kg	0.0122 / 0.01428	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.04 / 0.0483	ND	ND	ND	0 / 6	0
Zinc	mg/kg		11.31	11.31	18.05	6 / 6	13.67

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-90: TVA SAP Sampling, Spring 2010 - Red Ear Sunfish Fillet at Clinch River Mile 25.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.36	0.36	0.37	3 / 3	0.3633
% Moisture	%		78.1	78.1	80.8	2 / 2	79.45
Aluminum	mg/kg	3.659 / 4.09	ND	ND	ND	0 / 3	0
Antimony	mg/kg	0.01327 / 0.01478	ND	ND	ND	0 / 3	0
Arsenic	mg/kg		0.2304	0.2304	0.2847	3 / 3	0.2502
Barium	mg/kg	0.0428 / 0.04608	ND	0.07665	0.07665	1 / 3	0.07665
Beryllium	mg/kg	0.02782 / 0.03072	ND	ND	ND	0 / 3	0
Boron	mg/kg	0.3852 / 0.4224	ND	ND	ND	0 / 3	0
Cadmium	mg/kg	0.00706 / 0.00768	ND	ND	ND	0 / 3	0
Calcium	mg/kg		113.2	113.2	481.8	3 / 3	258
Chromium	mg/kg	0.1156 / 0.1286	ND	ND	ND	0 / 3	0
Cobalt	mg/kg	0.01284 / 0.0144	ND	ND	ND	0 / 3	0
Copper	mg/kg		0.2354	0.2354	0.2688	3 / 3	0.2484
Iron	mg/kg	11.02 / 12.31	ND	ND	ND	0 / 3	0
Lead	mg/kg	0.02568 / 0.0288	ND	ND	ND	0 / 3	0
Magnesium	mg/kg		270.7	270.7	293.5	3 / 3	284.4
Manganese	mg/kg	0.1562 / 0.1747	ND	0.2847	0.2847	1 / 3	0.2847
Mercury	mg/kg		0.02996	0.02996	0.09408	3 / 3	0.05522
Molybdenum	mg/kg	0.0321 / 0.03648	ND	ND	ND	0 / 3	0
Nickel	mg/kg	0.08988 / 0.09417	ND	0.167	0.167	1 / 3	0.167
Potassium	mg/kg		3373	3373	3917	3 / 3	3671
Selenium	mg/kg		0.576	0.576	1.095	3 / 3	0.8281
Silver	mg/kg	0.00257 / 0.00288	ND	ND	ND	0 / 3	0
Sodium	mg/kg		351	351	435.8	3 / 3	397.3
Strontium	mg/kg		0.04922	0.04922	0.3285	3 / 3	0.1656
Thallium	mg/kg	0.01336 / 0.01605	ND	ND	ND	0 / 3	0
Vanadium	mg/kg	0.0428 / 0.04608	ND	ND	ND	0 / 3	0
Zinc	mg/kg		7.987	7.987	17.27	3 / 3	13.02

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-91: TVA SAP Sampling, Spring 2010 - Red Ear Sunfish Fillet at Clinch River Mile 1.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.19	0.19	0.61	6 / 6	0.285
% Moisture	%		80.8	80.8	83.4	6 / 6	82.5
Aluminum	mg/kg	3.635 / 4.152	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.01311 / 0.01505	ND	ND	ND	0 / 6	0
Arsenic	mg/kg		0.152	0.152	0.3154	6 / 6	0.2264
Barium	mg/kg	0.0415 / 0.04732	ND	0.05184	0.09231	2 / 6	0.07208
Beryllium	mg/kg	0.02656 / 0.03114	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.3818 / 0.4325	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.00697 / 0.00796	ND	ND	ND	0 / 6	0
Calcium	mg/kg		110.4	110.4	805.5	6 / 6	309.1
Chromium	mg/kg	0.1145 / 0.1315	ND	ND	ND	0 / 6	0
Cobalt	mg/kg	0.01278 / 0.01453	ND	ND	ND	0 / 6	0
Copper	mg/kg	0.1311 / 0.1488	ND	0.1606	0.2688	5 / 6	0.2002
Iron	mg/kg	10.94 / 12.49	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.0249 / 0.02941	ND	ND	ND	0 / 6	0
Magnesium	mg/kg		217.5	217.5	278.9	6 / 6	250.6
Manganese	mg/kg	0.1544 / 0.173	ND	0.4344	0.4344	1 / 6	0.4344
Mercury	mg/kg		0.03806	0.03806	0.1031	6 / 6	0.0611
Molybdenum	mg/kg	0.03154 / 0.03633	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.08798 / 0.1003	ND	ND	ND	0 / 6	0
Potassium	mg/kg		3386	3386	3763	6 / 6	3592
Selenium	mg/kg		0.4901	0.4901	1.286	6 / 6	1.029
Silver	mg/kg	0.00266 / 0.00294	ND	ND	ND	0 / 6	0
Sodium	mg/kg		282.2	282.2	621.9	6 / 6	412.3
Strontium	mg/kg		0.07093	0.07093	0.6516	6 / 6	0.2061
Thallium	mg/kg	0.01245 / 0.01517	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.0415 / 0.04732	ND	ND	ND	0 / 6	0
Zinc	mg/kg		8.687	8.687	18.53	6 / 6	12.67

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-92: TVA SAP Sampling, Spring 2010 - White Crappie Fillet at Little Emory River Mile 2.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.48	0.48	2.5	6 / 6	0.9017
% Moisture	%		77.7	77.7	80.9	6 / 6	79.8
Aluminum	mg/kg	3.568 / 4.118	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.01293 / 0.01485	ND	ND	ND	0 / 6	0
Arsenic	mg/kg		0.09702	0.09702	0.1762	6 / 6	0.1385
Barium	mg/kg	0.04014 / 0.04584	ND	0.05346	0.1168	2 / 6	0.08513
Beryllium	mg/kg	0.02676 / 0.03056	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.3791 / 0.4356	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.00691 / 0.00792	ND	ND	ND	0 / 6	0
Calcium	mg/kg		140.7	140.7	645.5	6 / 6	305.6
Chromium	mg/kg	0.1137 / 0.128	ND	0.1731	0.2376	2 / 6	0.2054
Cobalt	mg/kg	0.01249 / 0.01445	ND	ND	ND	0 / 6	0
Copper	mg/kg	0.1293 / 0.1452	ND	0.1604	0.1841	4 / 6	0.1732
Iron	mg/kg	10.77 / 12.41	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.02453 / 0.02865	ND	ND	ND	0 / 6	0
Magnesium	mg/kg		259.8	259.8	301.1	6 / 6	277.3
Manganese	mg/kg	0.1516 / 0.1762	ND	0.2101	0.2376	2 / 6	0.2239
Mercury	mg/kg		0.0396	0.0396	0.1089	6 / 6	0.05869
Molybdenum	mg/kg	0.03122 / 0.03629	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.08697 / 0.09741	ND	0.1294	0.1583	3 / 6	0.1454
Potassium	mg/kg		3591	3591	4103	6 / 6	3909
Selenium	mg/kg		0.4158	0.4158	0.4966	6 / 6	0.4427
Silver	mg/kg	0.00268 / 0.00297	ND	ND	ND	0 / 6	0
Sodium	mg/kg		250.7	250.7	294.1	6 / 6	270.3
Strontium	mg/kg		0.06567	0.06567	0.4356	6 / 6	0.2061
Thallium	mg/kg	0.01227 / 0.01834	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.04014 / 0.04752	ND	ND	ND	0 / 6	0
Zinc	mg/kg		4.263	4.263	7.662	6 / 6	6.385

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-93: TVA SAP Sampling, Spring 2010 - White Crappie Fillet at Emory River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.43	0.43	1.2	3 / 3	0.91
% Moisture	%		80.2	80.2	80.9	3 / 3	80.47
Aluminum	mg/kg	3.992 / 4.137	ND	ND	ND	0 / 3	0
Antimony	mg/kg	0.01452 / 0.01497	ND	ND	ND	0 / 3	0
Arsenic	mg/kg		0.1089	0.1089	0.1458	3 / 3	0.1276
Barium	mg/kg	0.04554 / 0.04584	ND	0.1182	0.1182	1 / 3	0.1182
Beryllium	mg/kg	0.02865 / 0.03152	ND	ND	ND	0 / 3	0
Boron	mg/kg	0.4158 / 0.4334	ND	ND	ND	0 / 3	0
Cadmium	mg/kg	0.00764 / 0.00788	ND	ND	ND	0 / 3	0
Calcium	mg/kg		160.6	160.6	2837	3 / 3	1079
Chromium	mg/kg	0.1261 / 0.132	ND	0.1452	0.1452	1 / 3	0.1452
Cobalt	mg/kg	0.01413 / 0.01458	ND	ND	ND	0 / 3	0
Copper	mg/kg		0.1547	0.1547	0.2376	3 / 3	0.1879
Iron	mg/kg	12.03 / 12.49	ND	ND	ND	0 / 3	0
Lead	mg/kg	0.02772 / 0.02955	ND	ND	ND	0 / 3	0
Magnesium	mg/kg		259.4	259.4	319.1	3 / 3	282.6
Manganese	mg/kg	0.17 / 0.1723	ND	0.4728	0.4728	1 / 3	0.4728
Mercury	mg/kg		0.05122	0.05122	0.06138	3 / 3	0.05791
Molybdenum	mg/kg	0.03438 / 0.03564	ND	ND	ND	0 / 3	0
Nickel	mg/kg	0.09741 / 0.1005	ND	ND	ND	0 / 3	0
Potassium	mg/kg		3762	3762	4030	3 / 3	3884
Selenium	mg/kg		0.3366	0.3366	0.3743	3 / 3	0.3516
Silver	mg/kg	0.00287 / 0.00297	ND	ND	ND	0 / 3	0
Sodium	mg/kg		200	200	295.5	3 / 3	250.5
Strontium	mg/kg		0.099	0.099	1.694	3 / 3	0.6397
Thallium	mg/kg	0.01386 / 0.01872	ND	ND	ND	0 / 3	0
Vanadium	mg/kg	0.04554 / 0.04728	ND	ND	ND	0 / 3	0
Zinc	mg/kg		6.322	6.322	20	3 / 3	11.11

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-94: TVA SAP Sampling, Spring 2010 - White Crappie Fillet at Emory River Mile 3.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.22	0.22	0.68	6 / 6	0.4367
% Moisture	%		78	78	81.9	6 / 6	80.68
Aluminum	mg/kg	3.892 / 4.155	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.01412 / 0.01504	ND	ND	ND	0 / 6	0
Arsenic	mg/kg		0.1195	0.1195	0.2256	6 / 6	0.1642
Barium	mg/kg	0.04525 / 0.047	ND	ND	ND	0 / 6	0
Beryllium	mg/kg	0.0288 / 0.0308	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.3982 / 0.4324	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.00742 / 0.0079	ND	ND	ND	0 / 6	0
Calcium	mg/kg		98.28	98.28	400.9	6 / 6	196.1
Chromium	mg/kg	0.1231 / 0.1316	ND	ND	ND	0 / 6	0
Cobalt	mg/kg	0.01376 / 0.01466	ND	ND	ND	0 / 6	0
Copper	mg/kg	0.1412 / 0.1504	ND	0.1558	2.745	5 / 6	0.8642
Iron	mg/kg	11.71 / 12.48	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.02688 / 0.0286	ND	0.04416	0.09776	2 / 6	0.07096
Magnesium	mg/kg		265	265	278.2	6 / 6	270.1
Manganese	mg/kg	0.1647 / 0.1767	ND	ND	ND	0 / 6	0
Mercury	mg/kg		0.0627	0.0627	0.1584	6 / 6	0.1075
Molybdenum	mg/kg	0.03439 / 0.0361	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.09412 / 0.1015	ND	0.192	0.5076	2 / 6	0.3498
Potassium	mg/kg		3629	3629	4004	6 / 6	3821
Selenium	mg/kg		0.528	0.528	0.6912	6 / 6	0.5856
Silver	mg/kg	0.00285 / 0.00996	ND	ND	ND	0 / 6	0
Sodium	mg/kg		264.3	264.3	389.8	6 / 6	316.5
Strontium	mg/kg		0.04887	0.04887	0.342	6 / 6	0.1441
Thallium	mg/kg	0.01339 / 0.02496	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.04512 / 0.047	ND	ND	ND	0 / 6	0
Zinc	mg/kg		6.156	6.156	9.504	6 / 6	8.175

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-95: TVA SAP Sampling, Spring 2010 - White Crappie Fillet at Emory River Mile 0.9

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.86	0.86	3.8	6 / 6	1.677
% Moisture	%		77.5	77.5	82.5	6 / 6	79.38
Aluminum	mg/kg	3.645 / 4.121	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.01328 / 0.01488	ND	ND	ND	0 / 6	0
Arsenic	mg/kg		0.2275	0.2275	0.3052	6 / 6	0.2747
Barium	mg/kg	0.04142 / 0.04725	ND	ND	ND	0 / 6	0
Beryllium	mg/kg	0.02616 / 0.03045	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.3706 / 0.4263	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.00698 / 0.00792	ND	ND	ND	0 / 6	0
Calcium	mg/kg		123.2	123.2	579.9	6 / 6	276.3
Chromium	mg/kg	0.1148 / 0.1313	ND	ND	ND	0 / 6	0
Cobalt	mg/kg	0.01283 / 0.01453	ND	ND	ND	0 / 6	0
Copper	mg/kg		0.1645	0.1645	0.2244	6 / 6	0.1944
Iron	mg/kg	10.98 / 12.38	ND	17.47	17.47	1 / 6	17.47
Lead	mg/kg	0.02475 / 0.02842	ND	ND	ND	0 / 6	0
Magnesium	mg/kg		246.8	246.8	337	6 / 6	289
Manganese	mg/kg	0.1553 / 0.175	ND	0.1675	0.218	2 / 6	0.1928
Mercury	mg/kg		0.028	0.028	0.132	6 / 6	0.06356
Molybdenum	mg/kg	0.0315 / 0.03675	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.08938 / 0.09975	ND	ND	ND	0 / 6	0
Potassium	mg/kg		3535	3535	4466	6 / 6	4009
Selenium	mg/kg		0.175	0.175	0.6293	6 / 6	0.4017
Silver	mg/kg	0.00262 / 0.00305	ND	ND	ND	0 / 6	0
Sodium	mg/kg		261.1	261.1	427.5	6 / 6	320.2
Strontium	mg/kg		0.05775	0.05775	0.4796	6 / 6	0.1965
Thallium	mg/kg	0.0126 / 0.03816	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.04142 / 0.04725	ND	ND	ND	0 / 6	0
Zinc	mg/kg		5.712	5.712	12.12	6 / 6	7.165

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-96: TVA SAP Sampling, Spring 2010 - White Crappie Fillet at Clinch River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.6	0.6	3.2	6 / 6	1.617
% Moisture	%		77.9	77.9	80.1	6 / 6	79.05
Aluminum	mg/kg	3.633 / 4.137	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.01323 / 0.01491	ND	ND	ND	0 / 6	0
Arsenic	mg/kg		0.2388	0.2388	0.357	6 / 6	0.3179
Barium	mg/kg	0.042 / 0.0483	ND	0.054	0.054	1 / 6	0.054
Beryllium	mg/kg	0.0273 / 0.0315	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.378 / 0.42	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.00693 / 0.00798	ND	ND	ND	0 / 6	0
Calcium	mg/kg		117.2	117.2	1337	6 / 6	396.7
Chromium	mg/kg	0.1155 / 0.1323	ND	ND	ND	0 / 6	0
Cobalt	mg/kg	0.01281 / 0.01449	ND	ND	ND	0 / 6	0
Copper	mg/kg		0.1706	0.1706	0.2144	6 / 6	0.1929
Iron	mg/kg	10.96 / 12.47	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.0252 / 0.0294	ND	ND	ND	0 / 6	0
Magnesium	mg/kg		252	252	313.2	6 / 6	279.6
Manganese	mg/kg	0.1554 / 0.1764	ND	0.432	0.432	1 / 6	0.432
Mercury	mg/kg		0.0336	0.0336	0.1771	6 / 6	0.1057
Molybdenum	mg/kg	0.0315 / 0.03582	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.0882 / 0.1008	ND	ND	ND	0 / 6	0
Potassium	mg/kg		3696	3696	4212	6 / 6	3964
Selenium	mg/kg		0.2985	0.2985	0.441	6 / 6	0.3564
Silver	mg/kg	0.00273 / 0.00299	ND	ND	ND	0 / 6	0
Sodium	mg/kg		265.2	265.2	325.6	6 / 6	303.9
Strontium	mg/kg		0.06432	0.06432	0.9072	6 / 6	0.2493
Thallium	mg/kg	0.01367 / 0.0294	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.042 / 0.0483	ND	ND	ND	0 / 6	0
Zinc	mg/kg		5.234	5.234	6.825	6 / 6	6.281

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table J-97: TVA SAP Sampling, Spring 2010 - White Crappie Fillet at Clinch River Mile 1.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1.2	1.2	2.4	6 / 6	1.933
% Moisture	%		77.5	77.5	79	6 / 6	78.38
Aluminum	mg/kg	3.507 / 4.114	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.0126 / 0.01474	ND	ND	ND	0 / 6	0
Arsenic	mg/kg		0.2354	0.2354	0.3052	6 / 6	0.2774
Barium	mg/kg	0.0399 / 0.0462	ND	ND	ND	0 / 6	0
Beryllium	mg/kg	0.0252 / 0.0308	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.357 / 0.418	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.00663 / 0.00792	ND	ND	ND	0 / 6	0
Calcium	mg/kg		126	126	286	6 / 6	176.3
Chromium	mg/kg	0.1113 / 0.1298	ND	0.1198	0.1198	1 / 6	0.1198
Cobalt	mg/kg	0.01239 / 0.01452	ND	ND	ND	0 / 6	0
Copper	mg/kg		0.21	0.21	0.441	6 / 6	0.2869
Iron	mg/kg	10.54 / 12.36	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.0252 / 0.0286	ND	ND	ND	0 / 6	0
Magnesium	mg/kg		258.9	258.9	313.9	6 / 6	283.2
Manganese	mg/kg	0.1491 / 0.1659	ND	0.2068	0.2068	1 / 6	0.2068
Mercury	mg/kg		0.00371	0.00371	0.0546	6 / 6	0.03252
Molybdenum	mg/kg	0.0315 / 0.0352	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.0856 / 0.1012	ND	0.1134	0.1134	1 / 6	0.1134
Potassium	mg/kg		3724	3724	4338	6 / 6	4056
Selenium	mg/kg		0.2354	0.2354	0.315	6 / 6	0.2771
Silver	mg/kg	0.00252 / 0.00286	ND	ND	ND	0 / 6	0
Sodium	mg/kg		298.2	298.2	401.1	6 / 6	338.2
Strontium	mg/kg		0.0495	0.0495	0.1716	6 / 6	0.09031
Thallium	mg/kg	0.01197 / 0.01408	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.0399 / 0.0462	ND	ND	ND	0 / 6	0
Zinc	mg/kg		5.65	5.65	8.883	6 / 6	7.027

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

APPENDIX K

Tennessee Aquarium / Appalachian State University (Splits), Fall 2010

Table K-1: Tennessee Aquarium / Appalachian State University (Splits), Fall 2010 - Largemouth Bass Fillet (Wet Weight) at Emory River Mile 3.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.32	0.32	0.6	3 / 3	0.4333
% Moisture	%		77.6	77.6	79.3	3 / 6	78.2
Aluminum (6010)	mg/kg	0.9 / 0.94	ND	1.2	4.5	2 / 3	2.85
Aluminum (6020)	mg/kg	3.8 / 4.1	ND	4.1	4.1	1 / 3	4.1
Antimony (6010)	mg/kg	0.22 / 0.24	ND	ND	ND	0 / 3	0
Antimony (6020)	mg/kg	0.014 / 0.015	ND	ND	ND	0 / 3	0
Arsenic (6010)	mg/kg		0.11	0.11	0.18	3 / 3	0.14
Arsenic (6020)	mg/kg		0.15	0.15	0.2	3 / 3	0.1733
Barium (6010)	mg/kg	0.041 / 0.044	ND	0.048	0.15	2 / 3	0.099
Barium (6020)	mg/kg	0.043 / 0.047	ND	0.13	0.13	1 / 3	0.13
Beryllium (6010)	mg/kg	0.015 / 0.016	ND	ND	ND	0 / 3	0
Beryllium (6020)	mg/kg	0.028 / 0.03	ND	ND	ND	0 / 3	0
Boron (6010)	mg/kg	0.038 / 0.041	ND	ND	ND	0 / 3	0
Boron (6020)	mg/kg	0.39 / 0.42	ND	ND	ND	0 / 3	0
Cadmium (6010)	mg/kg	0.024 / 0.026	ND	ND	ND	0 / 3	0
Cadmium (6020)	mg/kg	0.0072 / 0.0078	ND	ND	ND	0 / 3	0
Calcium (6010)	mg/kg		105	105	376	3 / 3	202
Calcium (6020)	mg/kg		111	111	359	3 / 3	199.7
Chromium (6010)	mg/kg		0.05	0.05	0.11	3 / 3	0.07933
Chromium (6020)	mg/kg	0.12 / 0.13	ND	0.13	0.13	1 / 3	0.13
Cobalt (6010)	mg/kg	0.032 / 0.035	ND	ND	ND	0 / 3	0
Cobalt (6020)	mg/kg	0.013 / 0.014	ND	0.018	0.018	1 / 3	0.018
Copper (6010)	mg/kg		0.29	0.29	0.33	3 / 3	0.3067
Copper (6020)	mg/kg		0.29	0.29	0.36	3 / 3	0.3233
Iron (6010)	mg/kg		3	3	9.3	3 / 3	5.3
Iron (6020)	mg/kg	11.4 / 12.4	ND	ND	ND	0 / 3	0
Lead (6010)	mg/kg	0.088 / 0.095	ND	ND	ND	0 / 3	0
Lead (6020)	mg/kg	0.026 / 0.029	ND	ND	ND	0 / 3	0
Magnesium (6010)	mg/kg		288	288	309	3 / 3	301.3
Magnesium (6020)	mg/kg		303	303	320	3 / 3	313.7
Manganese (6010)	mg/kg	0.13 / 0.21	ND	ND	ND	0 / 3	0
Manganese (6020)	mg/kg	0.16 / 0.17	ND	0.18	0.22	2 / 3	0.2
Mercury (6010)	mg/kg		0.18	0.18	0.32	3 / 3	0.26
Mercury (6020)	mg/kg		0.16	0.16	0.32	3 / 6	0.22
Molybdenum (6010)	mg/kg	0.16 / 0.18	ND	ND	ND	0 / 3	0
Molybdenum (6020)	mg/kg	0.033 / 0.036	ND	ND	ND	0 / 3	0

Table K-1: Tennessee Aquarium / Appalachian State University (Splits), Fall 2010 - Largemouth Bass Fillet (Wet Weight) at Emory River Mile 3.5 (Continued)

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
Nickel (6010)	mg/kg	0.026 / 0.028	ND	0.041	0.041	1 / 3	0.041
Nickel (6020)	mg/kg	0.092 / 0.1	ND	ND	ND	0 / 3	0
Potassium (6010)	mg/kg		3730	3730	4290	3 / 3	4013
Potassium (6020)	mg/kg		4150	4150	4660	3 / 3	4370
Selenium (6010)	mg/kg	0.15 / 0.94	ND	1.1	1.1	2 / 3	1.1
Selenium (6020)	mg/kg		0.6	0.6	0.76	3 / 3	0.6567
Silver (6010)	mg/kg	0.041 / 0.044	ND	ND	ND	0 / 3	0
Silver (6020)	mg/kg	0.0027 / 0.003	ND	ND	ND	0 / 3	0
Sodium (6010)	mg/kg		378	378	425	3 / 3	407.3
Sodium (6020)	mg/kg		335	335	429	3 / 3	382
Strontium (6010)	mg/kg		0.047	0.047	0.3	3 / 3	0.134
Strontium (6020)	mg/kg		0.054	0.054	0.32	3 / 3	0.1457
Thallium (6010)	mg/kg	0.14 / 0.15	ND	ND	ND	0 / 3	0
Thallium (6020)	mg/kg	0.013 / 0.014	ND	ND	ND	0 / 3	0
Vanadium (6010)	mg/kg	0.031 / 0.034	ND	ND	ND	0 / 3	0
Vanadium (6020)	mg/kg	0.043 / 0.047	ND	ND	ND	0 / 3	0
Zinc (6010)	mg/kg		4.7	4.7	9.2	3 / 3	6.533
Zinc (6020)	mg/kg		4.9	4.9	8.7	3 / 3	6.3

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table K-2: Tennessee Aquarium / Appalachian State University (Splits), Fall 2010 - Largemouth Bass Fillet (Wet Weight) at Emory River Mile 2.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.09	0.09	0.5	3 / 3	0.3533
% Moisture	%		77.8	77.8	79.2	3 / 6	78.43
Aluminum (6010)	mg/kg	0.87 / 0.96	ND	1.2	1.2	1 / 3	1.2
Aluminum (6020)	mg/kg	3.7 / 4	ND	ND	ND	0 / 3	0
Antimony (6010)	mg/kg	0.22 / 0.24	ND	ND	ND	0 / 3	0
Antimony (6020)	mg/kg	0.013 / 0.015	ND	ND	ND	0 / 3	0
Arsenic (6010)	mg/kg		0.12	0.12	0.15	3 / 3	0.13
Arsenic (6020)	mg/kg		0.16	0.16	0.27	3 / 3	0.2067
Barium (6010)	mg/kg	0.04 / 0.044	ND	ND	ND	0 / 3	0
Barium (6020)	mg/kg	0.042 / 0.046	ND	ND	ND	0 / 3	0
Beryllium (6010)	mg/kg	0.014 / 0.015	ND	ND	ND	0 / 3	0
Beryllium (6020)	mg/kg	0.027 / 0.03	ND	ND	ND	0 / 3	0
Boron (6010)	mg/kg	0.037 / 0.04	ND	ND	ND	0 / 3	0
Boron (6020)	mg/kg	0.38 / 0.42	ND	ND	ND	0 / 3	0
Cadmium (6010)	mg/kg	0.023 / 0.026	ND	ND	ND	0 / 3	0
Cadmium (6020)	mg/kg	0.007 / 0.0077	ND	ND	ND	0 / 3	0
Calcium (6010)	mg/kg		171	171	312	3 / 3	239.7
Calcium (6020)	mg/kg		178	178	327	3 / 3	251
Chromium (6010)	mg/kg	0.028 / 0.031	ND	0.05	0.092	2 / 3	0.071
Chromium (6020)	mg/kg	0.12 / 0.13	ND	ND	ND	0 / 3	0
Cobalt (6010)	mg/kg	0.031 / 0.034	ND	ND	ND	0 / 3	0
Cobalt (6020)	mg/kg	0.013 / 0.014	ND	0.018	0.018	1 / 3	0.018
Copper (6010)	mg/kg		0.29	0.29	0.32	3 / 3	0.3067
Copper (6020)	mg/kg		0.29	0.29	0.32	3 / 3	0.3067
Iron (6010)	mg/kg		2	2	2.9	3 / 3	2.367
Iron (6020)	mg/kg	11.1 / 12.2	ND	ND	ND	0 / 3	0
Lead (6010)	mg/kg	0.086 / 0.094	ND	ND	ND	0 / 3	0
Lead (6020)	mg/kg	0.026 / 0.028	ND	ND	ND	0 / 3	0
Magnesium (6010)	mg/kg		301	301	311	3 / 3	306.7
Magnesium (6020)	mg/kg		308	308	321	3 / 3	315
Manganese (6010)	mg/kg	0.15 / 0.19	ND	ND	ND	0 / 3	0
Manganese (6020)	mg/kg	0.16 / 0.17	ND	0.19	0.19	1 / 3	0.19
Mercury (6010)	mg/kg		0.086	0.086	0.23	3 / 3	0.152
Mercury (6020)	mg/kg		0.086	0.086	0.14	3 / 6	0.122
Molybdenum (6010)	mg/kg	0.16 / 0.18	ND	ND	ND	0 / 3	0
Molybdenum (6020)	mg/kg	0.032 / 0.036	ND	ND	ND	0 / 3	0

Table K-2: Tennessee Aquarium / Appalachian State University (Splits), Fall 2010 - Largemouth Bass Fillet (Wet Weight) at Emory River Mile 2.0 (Continued)

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
Nickel (6010)	mg/kg	0.025 / 0.028	ND	0.034	0.034	1 / 3	0.034
Nickel (6020)	mg/kg	0.09 / 0.099	ND	ND	ND	0 / 3	0
Potassium (6010)	mg/kg		3910	3910	4160	3 / 3	4037
Potassium (6020)	mg/kg		4250	4250	4410	3 / 3	4343
Selenium (6010)	mg/kg		1.3	1.3	1.6	3 / 3	1.467
Selenium (6020)	mg/kg		0.91	0.91	1.3	3 / 3	1.103
Silver (6010)	mg/kg	0.04 / 0.044	ND	ND	ND	0 / 3	0
Silver (6020)	mg/kg	0.0027 / 0.0029	ND	ND	ND	0 / 3	0
Sodium (6010)	mg/kg		448	448	569	3 / 3	526
Sodium (6020)	mg/kg		424	424	557	3 / 3	504.3
Strontium (6010)	mg/kg		0.088	0.088	0.27	3 / 3	0.1727
Strontium (6020)	mg/kg		0.085	0.085	0.28	3 / 3	0.175
Thallium (6010)	mg/kg	0.13 / 0.14	ND	ND	ND	0 / 3	0
Thallium (6020)	mg/kg		0.013	0.013	0.022	3 / 3	0.01767
Vanadium (6010)	mg/kg	0.03 / 0.033	ND	ND	ND	0 / 3	0
Vanadium (6020)	mg/kg	0.042 / 0.046	ND	ND	ND	0 / 3	0
Zinc (6010)	mg/kg		5.9	5.9	7.9	3 / 3	6.967
Zinc (6020)	mg/kg		6	6	7.6	3 / 3	6.9

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table K-3: Tennessee Aquarium / Appalachian State University (Splits), Fall 2010 - Largemouth Bass Fillet (Wet Weight) at Clinch River Mile 5.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.33	0.33	0.8	3 / 3	0.5367
% Moisture	%		77.3	77.3	80.7	3 / 6	78.63
Aluminum (6010)	mg/kg	0.84 / 0.96	ND	4.2	4.2	1 / 3	4.2
Aluminum (6020)	mg/kg	3.6 / 4	ND	3.9	3.9	1 / 3	3.9
Antimony (6010)	mg/kg	0.21 / 0.24	ND	ND	ND	0 / 3	0
Antimony (6020)	mg/kg	0.013 / 0.015	ND	ND	ND	0 / 3	0
Arsenic (6010)	mg/kg	0.082 / 0.082	ND	0.18	0.19	2 / 3	0.185
Arsenic (6020)	mg/kg		0.13	0.13	0.19	3 / 3	0.17
Barium (6010)	mg/kg	0.038 / 0.044	ND	0.047	0.047	1 / 3	0.047
Barium (6020)	mg/kg	0.041 / 0.046	ND	ND	ND	0 / 3	0
Beryllium (6010)	mg/kg	0.014 / 0.015	ND	ND	ND	0 / 3	0
Beryllium (6020)	mg/kg	0.026 / 0.03	ND	ND	ND	0 / 3	0
Boron (6010)	mg/kg	0.035 / 0.04	ND	ND	ND	0 / 3	0
Boron (6020)	mg/kg	0.37 / 0.42	ND	ND	ND	0 / 3	0
Cadmium (6010)	mg/kg	0.023 / 0.026	ND	ND	ND	0 / 3	0
Cadmium (6020)	mg/kg	0.0068 / 0.0077	ND	ND	ND	0 / 3	0
Calcium (6010)	mg/kg		110	110	1310	3 / 3	625.3
Calcium (6020)	mg/kg		118	118	1350	3 / 3	648
Chromium (6010)	mg/kg		0.046	0.046	0.06	3 / 3	0.05467
Chromium (6020)	mg/kg	0.11 / 0.13	ND	ND	ND	0 / 3	0
Cobalt (6010)	mg/kg	0.03 / 0.034	ND	ND	ND	0 / 3	0
Cobalt (6020)	mg/kg	0.012 / 0.014	ND	ND	ND	0 / 3	0
Copper (6010)	mg/kg		0.27	0.27	0.33	3 / 3	0.31
Copper (6020)	mg/kg		0.29	0.29	0.35	3 / 3	0.3233
Iron (6010)	mg/kg		2	2	3.1	3 / 3	2.733
Iron (6020)	mg/kg	10.7 / 12.2	ND	ND	ND	0 / 3	0
Lead (6010)	mg/kg	0.083 / 0.094	ND	ND	ND	0 / 3	0
Lead (6020)	mg/kg	0.025 / 0.028	ND	ND	ND	0 / 3	0
Magnesium (6010)	mg/kg		296	296	317	3 / 3	306
Magnesium (6020)	mg/kg		309	309	329	3 / 3	319
Manganese (6010)	mg/kg	0.16 / 0.34	ND	ND	ND	0 / 3	0
Manganese (6020)	mg/kg	0.15 / 0.17	ND	0.28	0.35	2 / 3	0.315
Mercury (6010)	mg/kg		0.21	0.21	0.38	3 / 3	0.3
Mercury (6020)	mg/kg		0.21	0.21	0.31	3 / 6	0.2467
Molybdenum (6010)	mg/kg	0.15 / 0.18	ND	ND	ND	0 / 3	0
Molybdenum (6020)	mg/kg	0.031 / 0.036	ND	ND	ND	0 / 3	0

Table K-3: Tennessee Aquarium / Appalachian State University (Splits), Fall 2010 - Largemouth Bass Fillet (Wet Weight) at Clinch River Mile 5.5 (Continued)

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
Nickel (6010)	mg/kg	0.024 / 0.028	ND	ND	ND	0 / 3	0
Nickel (6020)	mg/kg	0.087 / 0.099	ND	ND	ND	0 / 3	0
Potassium (6010)	mg/kg		3700	3700	4090	3 / 3	3837
Potassium (6020)	mg/kg		3940	3940	4520	3 / 3	4157
Selenium (6010)	mg/kg	0.14 / 0.92	ND	1.1	1.2	2 / 3	1.15
Selenium (6020)	mg/kg		0.69	0.69	0.73	3 / 3	0.7067
Silver (6010)	mg/kg	0.038 / 0.044	ND	ND	ND	0 / 3	0
Silver (6020)	mg/kg	0.0026 / 0.0029	ND	ND	ND	0 / 3	0
Sodium (6010)	mg/kg		456	456	573	3 / 3	495.7
Sodium (6020)	mg/kg		441	441	560	3 / 3	481.7
Strontium (6010)	mg/kg		0.063	0.063	0.97	3 / 3	0.4743
Strontium (6020)	mg/kg		0.058	0.058	1	3 / 3	0.476
Thallium (6010)	mg/kg	0.13 / 0.15	ND	ND	ND	0 / 3	0
Thallium (6020)	mg/kg	0.012 / 0.014	ND	0.016	0.016	1 / 3	0.016
Vanadium (6010)	mg/kg	0.029 / 0.033	ND	ND	ND	0 / 3	0
Vanadium (6020)	mg/kg	0.041 / 0.046	ND	ND	ND	0 / 3	0
Zinc (6010)	mg/kg		4.7	4.7	10	3 / 3	7.9
Zinc (6020)	mg/kg		4.6	4.6	10	3 / 3	7.867

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table K-4: Tennessee Aquarium / Appalachian State University (Splits), Fall 2010 - Red Ear Sunfish Fillet (Wet Weight) at Emory River Mile 3.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.12	0.12	1.2	3 / 3	0.6767
% Moisture	%		79	79	80.5	3 / 6	79.93
Aluminum (6010)	mg/kg		1.2	1.2	2.1	3 / 3	1.7
Aluminum (6020)	mg/kg	3.6 / 3.9	ND	ND	ND	0 / 3	0
Antimony (6010)	mg/kg	0.21 / 0.23	ND	ND	ND	0 / 3	0
Antimony (6020)	mg/kg	0.013 / 0.014	ND	ND	ND	0 / 3	0
Arsenic (6010)	mg/kg	0.083 / 0.085	ND	0.09	0.09	1 / 3	0.09
Arsenic (6020)	mg/kg		0.045	0.045	0.13	3 / 3	0.089
Barium (6010)	mg/kg	0.039 / 0.04	ND	0.081	0.086	2 / 3	0.0835
Barium (6020)	mg/kg	0.041 / 0.042	ND	0.059	0.066	2 / 3	0.0625
Beryllium (6010)	mg/kg	0.014 / 0.015	ND	ND	ND	0 / 3	0
Beryllium (6020)	mg/kg	0.027 / 0.028	ND	ND	ND	0 / 3	0
Boron (6010)	mg/kg	0.036 / 0.038	ND	ND	ND	0 / 3	0
Boron (6020)	mg/kg	0.37 / 0.4	ND	ND	ND	0 / 3	0
Cadmium (6010)	mg/kg	0.023 / 0.024	ND	ND	ND	0 / 3	0
Cadmium (6020)	mg/kg	0.0068 / 0.0074	ND	ND	ND	0 / 3	0
Calcium (6010)	mg/kg		110	110	201	3 / 3	160.3
Calcium (6020)	mg/kg		108	108	216	3 / 3	167.7
Chromium (6010)	mg/kg	0.028 / 0.028	ND	0.035	0.078	2 / 3	0.0565
Chromium (6020)	mg/kg	0.11 / 0.12	ND	ND	ND	0 / 3	0
Cobalt (6010)	mg/kg	0.031 / 0.033	ND	ND	ND	0 / 3	0
Cobalt (6020)	mg/kg	0.013 / 0.014	ND	ND	ND	0 / 3	0
Copper (6010)	mg/kg		0.24	0.24	0.33	3 / 3	0.29
Copper (6020)	mg/kg		0.25	0.25	0.35	3 / 3	0.3033
Iron (6010)	mg/kg		1.8	1.8	3.9	3 / 3	2.833
Iron (6020)	mg/kg	10.8 / 11.6	ND	ND	ND	0 / 3	0
Lead (6010)	mg/kg	0.084 / 0.086	ND	0.092	0.092	1 / 3	0.092
Lead (6020)	mg/kg	0.025 / 0.026	ND	0.027	0.043	2 / 3	0.035
Magnesium (6010)	mg/kg		285	285	304	3 / 3	291.7
Magnesium (6020)	mg/kg		295	295	312	3 / 3	303.3
Manganese (6010)	mg/kg	0.095 / 0.31	ND	ND	ND	0 / 3	0
Manganese (6020)	mg/kg	0.15 / 0.16	ND	0.25	0.32	2 / 3	0.285
Mercury (6010)	mg/kg		0.11	0.11	0.15	3 / 3	0.13
Mercury (6020)	mg/kg		0.059	0.059	0.15	3 / 6	0.113
Molybdenum (6010)	mg/kg	0.16 / 0.17	ND	ND	ND	0 / 3	0
Molybdenum (6020)	mg/kg	0.032 / 0.034	ND	ND	ND	0 / 3	0

Table K-4: Tennessee Aquarium / Appalachian State University (Splits), Fall 2010 - Red Ear Sunfish Fillet (Wet Weight) at Emory River Mile 3.5 (Continued)

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
Nickel (6010)	mg/kg	0.025 / 0.026	ND	ND	ND	0 / 3	0
Nickel (6020)	mg/kg	0.088 / 0.094	ND	ND	ND	0 / 3	0
Potassium (6010)	mg/kg		3860	3860	4160	3 / 3	3990
Potassium (6020)	mg/kg		4100	4100	4470	3 / 3	4253
Selenium (6010)	mg/kg		1.1	1.1	1.3	3 / 3	1.233
Selenium (6020)	mg/kg		0.77	0.77	0.92	3 / 3	0.8367
Silver (6010)	mg/kg	0.039 / 0.042	ND	ND	ND	0 / 3	0
Silver (6020)	mg/kg	0.0026 / 0.0028	ND	ND	ND	0 / 3	0
Sodium (6010)	mg/kg		484	484	591	3 / 3	548.3
Sodium (6020)	mg/kg		469	469	553	3 / 3	524.3
Strontium (6010)	mg/kg		0.061	0.061	0.15	3 / 3	0.1137
Strontium (6020)	mg/kg		0.066	0.066	0.16	3 / 3	0.1187
Thallium (6010)	mg/kg	0.13 / 0.14	ND	ND	ND	0 / 3	0
Thallium (6020)	mg/kg	0.012 / 0.013	ND	ND	ND	0 / 3	0
Vanadium (6010)	mg/kg	0.029 / 0.032	ND	ND	ND	0 / 3	0
Vanadium (6020)	mg/kg	0.041 / 0.044	ND	ND	ND	0 / 3	0
Zinc (6010)	mg/kg		6.2	6.2	10.1	3 / 3	7.733
Zinc (6020)	mg/kg		6.2	6.2	10.3	3 / 3	7.767

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table K-5: Tennessee Aquarium / Appalachian State University (Splits), Fall 2010 - Red Ear Sunfish Fillet (Wet Weight) at Clinch River Mile 5.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.35	0.35	0.35	1 / 1	0.35
% Moisture	%		75.2	75.2	75.2	1 / 2	75.2
Aluminum (6010)	mg/kg	0.92 / 0.92	ND	ND	ND	0 / 1	0
Aluminum (6020)	mg/kg	3.9 / 3.9	ND	ND	ND	0 / 1	0
Antimony (6010)	mg/kg	0.23 / 0.23	ND	ND	ND	0 / 1	0
Antimony (6020)	mg/kg	0.014 / 0.014	ND	ND	ND	0 / 1	0
Arsenic (6010)	mg/kg		0.29	0.29	0.29	1 / 1	0.29
Arsenic (6020)	mg/kg		0.31	0.31	0.31	1 / 1	0.31
Barium (6010)	mg/kg		0.061	0.061	0.061	1 / 1	0.061
Barium (6020)	mg/kg	0.045 / 0.045	ND	ND	ND	0 / 1	0
Beryllium (6010)	mg/kg	0.015 / 0.015	ND	ND	ND	0 / 1	0
Beryllium (6020)	mg/kg	0.029 / 0.029	ND	ND	ND	0 / 1	0
Boron (6010)	mg/kg	0.039 / 0.039	ND	ND	ND	0 / 1	0
Boron (6020)	mg/kg	0.4 / 0.4	ND	ND	ND	0 / 1	0
Cadmium (6010)	mg/kg	0.025 / 0.025	ND	ND	ND	0 / 1	0
Cadmium (6020)	mg/kg	0.0074 / 0.0074	ND	ND	ND	0 / 1	0
Calcium (6010)	mg/kg		195	195	195	1 / 1	195
Calcium (6020)	mg/kg		220	220	220	1 / 1	220
Chromium (6010)	mg/kg		0.05	0.05	0.05	1 / 1	0.05
Chromium (6020)	mg/kg	0.12 / 0.12	ND	ND	ND	0 / 1	0
Cobalt (6010)	mg/kg	0.033 / 0.033	ND	ND	ND	0 / 1	0
Cobalt (6020)	mg/kg	0.014 / 0.014	ND	ND	ND	0 / 1	0
Copper (6010)	mg/kg		0.15	0.15	0.15	1 / 1	0.15
Copper (6020)	mg/kg		0.18	0.18	0.18	1 / 1	0.18
Iron (6010)	mg/kg		3.4	3.4	3.4	1 / 1	3.4
Iron (6020)	mg/kg	11.8 / 11.8	ND	ND	ND	0 / 1	0
Lead (6010)	mg/kg	0.091 / 0.091	ND	ND	ND	0 / 1	0
Lead (6020)	mg/kg	0.027 / 0.027	ND	ND	ND	0 / 1	0
Magnesium (6010)	mg/kg		306	306	306	1 / 1	306
Magnesium (6020)	mg/kg		316	316	316	1 / 1	316
Manganese (6010)	mg/kg	0.19 / 0.19	ND	ND	ND	0 / 1	0
Manganese (6020)	mg/kg		0.21	0.21	0.21	1 / 1	0.21
Mercury (6010)	mg/kg		0.15	0.15	0.15	1 / 1	0.15
Mercury (6020)	mg/kg		0.09	0.09	0.09	1 / 2	0.09
Molybdenum (6010)	mg/kg	0.17 / 0.17	ND	ND	ND	0 / 1	0
Molybdenum (6020)	mg/kg	0.034 / 0.034	ND	ND	ND	0 / 1	0

Table K-5: Tennessee Aquarium / Appalachian State University (Splits), Fall 2010 - Red Ear Sunfish Fillet (Wet Weight) at Clinch River Mile 5.5 (Continued)

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
Nickel (6010)	mg/kg	0.027 / 0.027	ND	ND	ND	0 / 1	0
Nickel (6020)	mg/kg	0.095 / 0.095	ND	ND	ND	0 / 1	0
Potassium (6010)	mg/kg		3400	3400	3400	1 / 1	3400
Potassium (6020)	mg/kg		3720	3720	3720	1 / 1	3720
Selenium (6010)	mg/kg		1.2	1.2	1.2	1 / 1	1.2
Selenium (6020)	mg/kg		0.91	0.91	0.91	1 / 1	0.91
Silver (6010)	mg/kg	0.042 / 0.042	ND	ND	ND	0 / 1	0
Silver (6020)	mg/kg	0.0028 / 0.0028	ND	ND	ND	0 / 1	0
Sodium (6010)	mg/kg		697	697	697	1 / 1	697
Sodium (6020)	mg/kg		691	691	691	1 / 1	691
Strontium (6010)	mg/kg		0.11	0.11	0.11	1 / 1	0.11
Strontium (6020)	mg/kg		0.12	0.12	0.12	1 / 1	0.12
Thallium (6010)	mg/kg	0.14 / 0.14	ND	ND	ND	0 / 1	0
Thallium (6020)	mg/kg	0.013 / 0.013	ND	ND	ND	0 / 1	0
Vanadium (6010)	mg/kg	0.032 / 0.032	ND	ND	ND	0 / 1	0
Vanadium (6020)	mg/kg	0.045 / 0.045	ND	ND	ND	0 / 1	0
Zinc (6010)	mg/kg		8.2	8.2	8.2	1 / 1	8.2
Zinc (6020)	mg/kg		8.3	8.3	8.3	1 / 1	8.3

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table K-6: Tennessee Aquarium / Appalachian State University (Splits), Fall 2010 - Largemouth Bass Fillet (Freeze Dried) at Emory River Mile 3.5

Analyte	Units (freeze dried basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Moisture	%		6.9	6.9	7.7	3 / 6	7.167
Aluminum (6010)	mg/kg		2.4	2.4	8.5	3 / 3	4.533
Aluminum (6020)	mg/kg	3.5 / 3.8	ND	7.7	7.7	1 / 3	7.7
Antimony (6010)	mg/kg	0.21 / 0.23	ND	ND	ND	0 / 3	0
Antimony (6020)	mg/kg	0.013 / 0.014	ND	ND	ND	0 / 3	0
Arsenic (6010)	mg/kg		0.84	0.84	1	3 / 3	0.9433
Arsenic (6020)	mg/kg		0.73	0.73	0.95	3 / 3	0.8767
Barium (6010)	mg/kg		0.054	0.054	0.19	3 / 3	0.114
Barium (6020)	mg/kg	0.041 / 0.046	ND	0.079	0.15	2 / 3	0.1145
Beryllium (6010)	mg/kg	0.014 / 0.015	ND	ND	ND	0 / 3	0
Beryllium (6020)	mg/kg	0.026 / 0.03	ND	ND	ND	0 / 3	0
Boron (6010)	mg/kg	0.035 / 0.04	ND	ND	ND	0 / 3	0
Boron (6020)	mg/kg	0.37 / 0.41	ND	ND	ND	0 / 3	0
Cadmium (6010)	mg/kg	0.022 / 0.025	ND	ND	ND	0 / 3	0
Cadmium (6020)	mg/kg	0.0067 / 0.0076	ND	ND	ND	0 / 3	0
Calcium (6010)	mg/kg		650	650	3240	3 / 3	1923
Calcium (6020)	mg/kg		634	634	3360	3 / 3	1958
Chromium (6010)	mg/kg		0.29	0.29	0.32	3 / 3	0.3033
Chromium (6020)	mg/kg	0.11 / 0.13	ND	0.12	0.13	3 / 3	0.125
Cobalt (6010)	mg/kg	0.03 / 0.034	ND	ND	ND	0 / 3	0
Cobalt (6020)	mg/kg		0.033	0.033	0.047	3 / 3	0.04067
Copper (6010)	mg/kg		1.7	1.7	1.9	3 / 3	1.8
Copper (6020)	mg/kg		1.7	1.7	1.9	3 / 3	1.8
Iron (6010)	mg/kg		9.7	9.7	13.8	3 / 3	11.17
Iron (6020)	mg/kg	10.6 / 12.1	ND	13.3	13.3	1 / 3	13.3
Lead (6010)	mg/kg	0.082 / 0.093	ND	0.13	0.13	1 / 3	0.13
Lead (6020)	mg/kg	0.025 / 0.028	ND	ND	ND	0 / 3	0
Magnesium (6010)	mg/kg		1290	1290	1370	3 / 3	1337
Magnesium (6020)	mg/kg		1280	1280	1350	3 / 3	1323
Manganese (6010)	mg/kg		0.54	0.54	0.73	3 / 3	0.6533
Manganese (6020)	mg/kg		0.54	0.54	0.74	3 / 3	0.6567
Mercury (6010)	mg/kg		0.67	0.67	0.98	3 / 3	0.8267
Mercury (6020)	mg/kg		0.62	0.62	0.98	3 / 6	0.7567
Molybdenum (6010)	mg/kg	0.15 / 0.17	ND	ND	ND	0 / 3	0
Molybdenum (6020)	mg/kg	0.031 / 0.035	ND	ND	ND	0 / 3	0

Table K- 6: Tennessee Aquarium / Appalachian State University (Splits), Fall 2010 - Largemouth Bass Fillet (Freeze Dried) at Emory River Mile 3.5 (Continued)

Analyte	Units (freeze dried basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
Nickel (6010)	mg/kg	0.024 / 0.027	ND	0.027	0.027	1 / 3	0.027
Nickel (6020)	mg/kg	0.086 / 0.098	ND	ND	ND	0 / 3	0
Potassium (6010)	mg/kg		17500	17500	18200	3 / 3	17767
Potassium (6020)	mg/kg		19400	19400	20000	3 / 3	19667
Selenium (6010)	mg/kg		3.2	3.2	3.8	3 / 3	3.467
Selenium (6020)	mg/kg		2.8	2.8	3.3	3 / 3	3
Silver (6010)	mg/kg	0.038 / 0.043	ND	ND	ND	0 / 3	0
Silver (6020)	mg/kg	0.0026 / 0.0029	ND	ND	ND	0 / 3	0
Sodium (6010)	mg/kg		1940	1940	1980	3 / 3	1963
Sodium (6020)	mg/kg		1820	1820	1900	3 / 3	1867
Strontium (6010)	mg/kg		0.35	0.35	2.8	3 / 3	1.483
Strontium (6020)	mg/kg		0.36	0.36	2.9	3 / 3	1.553
Thallium (6010)	mg/kg	0.13 / 0.14	ND	ND	ND	0 / 3	0
Thallium (6020)	mg/kg		0.033	0.033	0.05	3 / 3	0.04067
Vanadium (6010)	mg/kg	0.029 / 0.033	ND	ND	ND	0 / 3	0
Vanadium (6020)	mg/kg	0.04 / 0.046	ND	ND	ND	0 / 3	0
Zinc (6010)	mg/kg		22	22	32.8	3 / 3	26.23
Zinc (6020)	mg/kg		22.5	22.5	34.8	3 / 3	27.27

Notes:

Grab sample results are freeze dried samples.

For definitions, see the Acronyms section.

Table K-7: Tennessee Aquarium / Appalachian State University (Splits), Fall 2010 - Largemouth Bass Fillet (Freeze Dried) at Emory River Mile 2.0

Analyte	Units (freeze dried basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Moisture	%		6.5	6.5	7.2	3 / 6	6.9
Aluminum (6010)	mg/kg	0.89 / 0.97	ND	2.4	2.5	2 / 3	2.45
Aluminum (6020)	mg/kg	3.8 / 4.1	ND	ND	ND	0 / 3	0
Antimony (6010)	mg/kg	0.22 / 0.24	ND	ND	ND	0 / 3	0
Antimony (6020)	mg/kg	0.014 / 0.015	ND	ND	ND	0 / 3	0
Arsenic (6010)	mg/kg		0.81	0.81	1.4	3 / 3	1.033
Arsenic (6020)	mg/kg		0.77	0.77	1.4	3 / 3	0.9967
Barium (6010)	mg/kg	0.041 / 0.044	ND	0.064	0.069	2 / 3	0.0665
Barium (6020)	mg/kg	0.043 / 0.047	ND	0.061	0.061	1 / 3	0.061
Beryllium (6010)	mg/kg	0.014 / 0.016	ND	ND	ND	0 / 3	0
Beryllium (6020)	mg/kg	0.028 / 0.03	ND	ND	ND	0 / 3	0
Boron (6010)	mg/kg	0.038 / 0.041	ND	0.077	0.077	1 / 3	0.077
Boron (6020)	mg/kg	0.39 / 0.43	ND	ND	ND	0 / 3	0
Cadmium (6010)	mg/kg	0.024 / 0.026	ND	ND	ND	0 / 3	0
Cadmium (6020)	mg/kg	0.0072 / 0.0079	ND	ND	ND	0 / 3	0
Calcium (6010)	mg/kg		911	911	1390	3 / 3	1098
Calcium (6020)	mg/kg		914	914	1400	3 / 3	1102
Chromium (6010)	mg/kg		0.22	0.22	0.26	3 / 3	0.24
Chromium (6020)	mg/kg	0.12 / 0.13	ND	ND	ND	0 / 3	0
Cobalt (6010)	mg/kg	0.032 / 0.035	ND	0.046	0.046	1 / 3	0.046
Cobalt (6020)	mg/kg		0.038	0.038	0.092	3 / 3	0.05933
Copper (6010)	mg/kg		1.3	1.3	2.3	3 / 3	1.667
Copper (6020)	mg/kg		1.2	1.2	2.3	3 / 3	1.633
Iron (6010)	mg/kg		7.1	7.1	8	3 / 3	7.633
Iron (6020)	mg/kg	11.4 / 12.4	ND	ND	ND	0 / 3	0
Lead (6010)	mg/kg	0.088 / 0.096	ND	ND	ND	0 / 3	0
Lead (6020)	mg/kg	0.026 / 0.029	ND	ND	ND	0 / 3	0
Magnesium (6010)	mg/kg		1210	1210	1390	3 / 3	1310
Magnesium (6020)	mg/kg		1240	1240	1360	3 / 3	1303
Manganese (6010)	mg/kg		0.57	0.57	0.95	3 / 3	0.7633
Manganese (6020)	mg/kg		0.57	0.57	0.96	3 / 3	0.7633
Mercury (6010)	mg/kg		0.3	0.3	0.85	3 / 3	0.5467
Mercury (6020)	mg/kg		0.3	0.3	0.57	3 / 6	0.4533
Molybdenum (6010)	mg/kg	0.16 / 0.18	ND	ND	ND	0 / 3	0
Molybdenum (6020)	mg/kg	0.033 / 0.036	ND	ND	ND	0 / 3	0

Table K-7: Tennessee Aquarium / Appalachian State University (Splits), Fall 2010 - Largemouth Bass Fillet (Freeze Dried) at Emory River Mile 2.0 (Continued)

Analyte	Units (freeze dried basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
Nickel (6010)	mg/kg	0.026 / 0.028	ND	0.034	0.034	1 / 3	0.034
Nickel (6020)	mg/kg	0.092 / 0.1	ND	ND	ND	0 / 3	0
Potassium (6010)	mg/kg		16500	16500	17600	3 / 3	17200
Potassium (6020)	mg/kg		18100	18100	19900	3 / 3	19167
Selenium (6010)	mg/kg		4.6	4.6	5.3	3 / 3	5
Selenium (6020)	mg/kg		4.2	4.2	5.1	3 / 3	4.767
Silver (6010)	mg/kg	0.041 / 0.045	ND	ND	ND	0 / 3	0
Silver (6020)	mg/kg	0.0027 / 0.003	ND	ND	ND	0 / 3	0
Sodium (6010)	mg/kg		1840	1840	2620	3 / 3	2350
Sodium (6020)	mg/kg		1790	1790	2590	3 / 3	2300
Strontium (6010)	mg/kg		0.61	0.61	0.96	3 / 3	0.7367
Strontium (6020)	mg/kg		0.62	0.62	1	3 / 3	0.7633
Thallium (6010)	mg/kg	0.14 / 0.15	ND	ND	ND	0 / 3	0
Thallium (6020)	mg/kg		0.078	0.078	0.095	3 / 3	0.087
Vanadium (6010)	mg/kg	0.031 / 0.034	ND	ND	ND	0 / 3	0
Vanadium (6020)	mg/kg	0.043 / 0.047	ND	ND	ND	0 / 3	0
Zinc (6010)	mg/kg		25.3	25.3	30.2	3 / 3	27.33
Zinc (6020)	mg/kg		25.7	25.7	31.2	3 / 3	28

Notes:

Grab sample results are freeze dried samples.

For definitions, see the Acronyms section.

Table K-8: Tennessee Aquarium / Appalachian State University (Splits), Fall 2010 - Largemouth Bass Fillet (Freeze Dried) at Clinch River Mile 5.5

Analyte	Units (freeze dried basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Moisture	%		6.9	6.9	7.9	3 / 6	7.3
Aluminum (6010)	mg/kg	0.97 / 0.98	ND	1.6	4.3	2 / 3	2.95
Aluminum (6020)	mg/kg	4.1 / 4.1	ND	ND	ND	0 / 3	0
Antimony (6010)	mg/kg	0.24 / 0.24	ND	ND	ND	0 / 3	0
Antimony (6020)	mg/kg	0.015 / 0.015	ND	ND	ND	0 / 3	0
Arsenic (6010)	mg/kg		0.89	0.89	1.1	3 / 3	0.9967
Arsenic (6020)	mg/kg		0.73	0.73	0.88	3 / 3	0.8167
Barium (6010)	mg/kg	0.044 / 0.045	ND	0.061	0.082	2 / 3	0.0715
Barium (6020)	mg/kg	0.047 / 0.047	ND	0.06	0.06	1 / 3	0.06
Beryllium (6010)	mg/kg	0.016 / 0.016	ND	ND	ND	0 / 3	0
Beryllium (6020)	mg/kg	0.03 / 0.03	ND	ND	ND	0 / 3	0
Boron (6010)	mg/kg	0.041 / 0.041	ND	0.076	0.076	1 / 3	0.076
Boron (6020)	mg/kg	0.42 / 0.43	ND	ND	ND	0 / 3	0
Cadmium (6010)	mg/kg	0.026 / 0.026	ND	ND	ND	0 / 3	0
Cadmium (6020)	mg/kg	0.0078 / 0.0079	ND	0.015	0.015	1 / 3	0.015
Calcium (6010)	mg/kg		479	479	3460	3 / 3	1760
Calcium (6020)	mg/kg		485	485	3550	3 / 3	1802
Chromium (6010)	mg/kg		0.25	0.25	0.32	3 / 3	0.2833
Chromium (6020)	mg/kg	0.13 / 0.13	ND	0.2	0.2	1 / 3	0.2
Cobalt (6010)	mg/kg	0.035 / 0.035	ND	ND	ND	0 / 3	0
Cobalt (6020)	mg/kg	0.014 / 0.015	ND	0.02	0.022	2 / 3	0.021
Copper (6010)	mg/kg		0.87	0.87	3.4	3 / 3	1.857
Copper (6020)	mg/kg		1	1	3.4	3 / 3	1.9
Iron (6010)	mg/kg		9.3	9.3	11.1	3 / 3	9.933
Iron (6020)	mg/kg	12.3 / 12.4	ND	ND	ND	0 / 3	0
Lead (6010)	mg/kg	0.095 / 0.096	ND	0.1	0.12	2 / 3	0.11
Lead (6020)	mg/kg	0.029 / 0.029	ND	0.041	0.041	1 / 3	0.041
Magnesium (6010)	mg/kg		1240	1240	1490	3 / 3	1367
Magnesium (6020)	mg/kg		1230	1230	1460	3 / 3	1343
Manganese (6010)	mg/kg		0.46	0.46	1	3 / 3	0.68
Manganese (6020)	mg/kg		0.45	0.45	1	3 / 3	0.6867
Mercury (6010)	mg/kg		0.64	0.64	1.3	3 / 3	0.98
Mercury (6020)	mg/kg		0.64	0.64	1	3 / 6	0.85
Molybdenum (6010)	mg/kg	0.18 / 0.18	ND	ND	ND	0 / 3	0
Molybdenum (6020)	mg/kg	0.036 / 0.036	ND	ND	ND	0 / 3	0

Table K-8: Tennessee Aquarium / Appalachian State University (Splits), Fall 2010 - Largemouth Bass Fillet (Freeze Dried) at Clinch River Mile 5.5 (Continued)

Analyte	Units (freeze dried basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
Nickel (6010)	mg/kg	0.028 / 0.028	ND	0.036	0.036	1 / 3	0.036
Nickel (6020)	mg/kg	0.1 / 0.1	ND	ND	ND	0 / 3	0
Potassium (6010)	mg/kg		17300	17300	18600	3 / 3	17900
Potassium (6020)	mg/kg		19300	19300	20300	3 / 3	19767
Selenium (6010)	mg/kg		3.5	3.5	4.2	3 / 3	3.833
Selenium (6020)	mg/kg		2.8	2.8	3.7	3 / 3	3.267
Silver (6010)	mg/kg	0.044 / 0.045	ND	ND	ND	0 / 3	0
Silver (6020)	mg/kg	0.003 / 0.003	ND	ND	ND	0 / 3	0
Sodium (6010)	mg/kg		1710	1710	2700	3 / 3	2217
Sodium (6020)	mg/kg		1730	1730	2690	3 / 3	2203
Strontium (6010)	mg/kg		0.26	0.26	2.4	3 / 3	1.197
Strontium (6020)	mg/kg		0.27	0.27	2.5	3 / 3	1.25
Thallium (6010)	mg/kg	0.15 / 0.15	ND	ND	ND	0 / 3	0
Thallium (6020)	mg/kg		0.035	0.035	0.094	3 / 3	0.05733
Vanadium (6010)	mg/kg	0.034 / 0.034	ND	ND	ND	0 / 3	0
Vanadium (6020)	mg/kg	0.047 / 0.047	ND	ND	ND	0 / 3	0
Zinc (6010)	mg/kg		18.7	18.7	43.7	3 / 3	31.43
Zinc (6020)	mg/kg		18.4	18.4	44.2	3 / 3	31.83

Notes:

Grab sample results are freeze dried samples.

For definitions, see the Acronyms section.

Table K-9: Tennessee Aquarium / Appalachian State University (Splits), Fall 2010 - Red Ear Sunfish Fillet (Freeze Dried) at Emory River Mile 3.5

Analyte	Units (freeze dried basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Moisture	%		6.8	6.8	8.9	3 / 6	7.8
Aluminum (6010)	mg/kg		6.3	6.3	11.3	3 / 3	8.767
Aluminum (6020)	mg/kg		4.3	4.3	7.5	3 / 3	6.267
Antimony (6010)	mg/kg	0.23 / 0.35	ND	ND	ND	0 / 3	0
Antimony (6020)	mg/kg	0.014 / 0.021	ND	ND	ND	0 / 3	0
Arsenic (6010)	mg/kg		0.5	0.5	0.97	3 / 3	0.7433
Arsenic (6020)	mg/kg		0.3	0.3	0.72	3 / 3	0.5267
Barium (6010)	mg/kg		0.44	0.44	0.97	3 / 3	0.69
Barium (6020)	mg/kg		0.4	0.4	0.91	3 / 3	0.6433
Beryllium (6010)	mg/kg	0.015 / 0.023	ND	ND	ND	0 / 3	0
Beryllium (6020)	mg/kg	0.028 / 0.043	ND	ND	ND	0 / 3	0
Boron (6010)	mg/kg	0.038 / 0.059	ND	ND	ND	0 / 3	0
Boron (6020)	mg/kg	0.4 / 0.61	ND	ND	ND	0 / 3	0
Cadmium (6010)	mg/kg	0.024 / 0.037	ND	ND	ND	0 / 3	0
Cadmium (6020)	mg/kg	0.0073 / 0.011	ND	ND	ND	0 / 3	0
Calcium (6010)	mg/kg		2720	2720	6110	3 / 3	3950
Calcium (6020)	mg/kg		2870	2870	6180	3 / 3	4030
Chromium (6010)	mg/kg		0.28	0.28	0.34	3 / 3	0.3067
Chromium (6020)	mg/kg	0.12 / 0.19	ND	0.16	0.16	1 / 3	0.16
Cobalt (6010)	mg/kg	0.033 / 0.05	ND	ND	ND	0 / 3	0
Cobalt (6020)	mg/kg		0.034	0.034	0.036	3 / 3	0.03467
Copper (6010)	mg/kg		1.9	1.9	4.4	3 / 3	2.733
Copper (6020)	mg/kg		1.8	1.8	4.2	3 / 3	2.633
Iron (6010)	mg/kg		12.9	12.9	22.1	3 / 3	17.03
Iron (6020)	mg/kg	11.6 / 17.8	ND	13.2	21.5	2 / 3	17.35
Lead (6010)	mg/kg	0.09 / 0.09	ND	0.14	0.16	2 / 3	0.15
Lead (6020)	mg/kg		0.087	0.087	0.11	3 / 3	0.099
Magnesium (6010)	mg/kg		1310	1310	1440	3 / 3	1363
Magnesium (6020)	mg/kg		1300	1300	1430	3 / 3	1353
Manganese (6010)	mg/kg		1.5	1.5	2.3	3 / 3	1.867
Manganese (6020)	mg/kg		1.5	1.5	2.4	3 / 3	1.9
Mercury (6010)	mg/kg	0.13 / 0.99	ND	0.46	0.47	2 / 3	0.465
Mercury (6020)	mg/kg	0.011 / 0.99	ND	0.26	0.47	2 / 6	0.365
Molybdenum (6010)	mg/kg	0.17 / 0.26	ND	ND	ND	0 / 3	0
Molybdenum (6020)	mg/kg	0.034 / 0.052	ND	ND	ND	0 / 3	0

Table K-9: Tennessee Aquarium / Appalachian State University (Splits), Fall 2010 - Red Ear Sunfish Fillet (Freeze Dried) at Emory River Mile 3.5 (Continued)

Analyte	Units (freeze dried basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
Nickel (6010)	mg/kg	0.026 / 0.04	ND	0.05	0.21	2 / 3	0.13
Nickel (6020)	mg/kg	0.094 / 0.14	ND	0.098	0.25	2 / 3	0.174
Potassium (6010)	mg/kg		17600	17600	18300	3 / 3	18067
Potassium (6020)	mg/kg		19900	19900	20400	3 / 3	20200
Selenium (6010)	mg/kg		4.1	4.1	4.9	3 / 3	4.467
Selenium (6020)	mg/kg		3.7	3.7	4.3	3 / 3	3.967
Silver (6010)	mg/kg	0.042 / 0.064	ND	ND	ND	0 / 3	0
Silver (6020)	mg/kg	0.0028 / 0.0043	ND	ND	ND	0 / 3	0
Sodium (6010)	mg/kg		2780	2780	2950	3 / 3	2857
Sodium (6020)	mg/kg		2610	2610	2820	3 / 3	2710
Strontium (6010)	mg/kg		2	2	5	3 / 3	3.167
Strontium (6020)	mg/kg		2.1	2.1	5.1	3 / 3	3.233
Thallium (6010)	mg/kg	0.14 / 0.21	ND	ND	ND	0 / 3	0
Thallium (6020)	mg/kg	0.013 / 0.02	ND	ND	ND	0 / 3	0
Vanadium (6010)	mg/kg	0.032 / 0.048	ND	ND	ND	0 / 3	0
Vanadium (6020)	mg/kg	0.044 / 0.067	ND	ND	ND	0 / 3	0
Zinc (6010)	mg/kg		34.8	34.8	63.2	3 / 3	45.77
Zinc (6020)	mg/kg		35.8	35.8	64.3	3 / 3	46.77

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table K-10: Tennessee Aquarium / Appalachian State University (Splits), Fall 2010 - Red Ear Sunfish Fillet (Freeze Dried) at Clinch River Mile 5.5

Analyte	Units (freeze dried basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Moisture	%		8.1	8.1	8.1	1 / 2	8.1
Aluminum (6010)	mg/kg		2.2	2.2	2.2	1 / 1	2.2
Aluminum (6020)	mg/kg	4 / 4	ND	ND	ND	0 / 1	0
Antimony (6010)	mg/kg	0.23 / 0.23	ND	ND	ND	0 / 1	0
Antimony (6020)	mg/kg	0.014 / 0.014	ND	ND	ND	0 / 1	0
Arsenic (6010)	mg/kg		1.6	1.6	1.6	1 / 1	1.6
Arsenic (6020)	mg/kg		1.5	1.5	1.5	1 / 1	1.5
Barium (6010)	mg/kg		0.046	0.046	0.046	1 / 1	0.046
Barium (6020)	mg/kg	0.045 / 0.045	ND	ND	ND	0 / 1	0
Beryllium (6010)	mg/kg	0.015 / 0.015	ND	ND	ND	0 / 1	0
Beryllium (6020)	mg/kg	0.029 / 0.029	ND	ND	ND	0 / 1	0
Boron (6010)	mg/kg	0.039 / 0.039	ND	ND	ND	0 / 1	0
Boron (6020)	mg/kg	0.41 / 0.41	ND	ND	ND	0 / 1	0
Cadmium (6010)	mg/kg	0.025 / 0.025	ND	ND	ND	0 / 1	0
Cadmium (6020)	mg/kg	0.0075 / 0.0075	ND	ND	ND	0 / 1	0
Calcium (6010)	mg/kg		642	642	642	1 / 1	642
Calcium (6020)	mg/kg		662	662	662	1 / 1	662
Chromium (6010)	mg/kg		0.23	0.23	0.23	1 / 1	0.23
Chromium (6020)	mg/kg	0.13 / 0.13	ND	ND	ND	0 / 1	0
Cobalt (6010)	mg/kg	0.034 / 0.034	ND	ND	ND	0 / 1	0
Cobalt (6020)	mg/kg		0.019	0.019	0.019	1 / 1	0.019
Copper (6010)	mg/kg		2.5	2.5	2.5	1 / 1	2.5
Copper (6020)	mg/kg		2.5	2.5	2.5	1 / 1	2.5
Iron (6010)	mg/kg		13.5	13.5	13.5	1 / 1	13.5
Iron (6020)	mg/kg		13.1	13.1	13.1	1 / 1	13.1
Lead (6010)	mg/kg	0.092 / 0.092	ND	ND	ND	0 / 1	0
Lead (6020)	mg/kg	0.028 / 0.028	ND	ND	ND	0 / 1	0
Magnesium (6010)	mg/kg		1370	1370	1370	1 / 1	1370
Magnesium (6020)	mg/kg		1360	1360	1360	1 / 1	1360
Manganese (6010)	mg/kg	0.39 / 0.39	ND	ND	ND	0 / 1	0
Manganese (6020)	mg/kg		0.37	0.37	0.37	1 / 1	0.37
Mercury (6010)	mg/kg		0.58	0.58	0.58	1 / 1	0.58
Mercury (6020)	mg/kg		0.35	0.35	0.35	1 / 2	0.35
Molybdenum (6010)	mg/kg	0.17 / 0.17	ND	ND	ND	0 / 1	0
Molybdenum (6020)	mg/kg		0.092	0.092	0.092	1 / 1	0.092

Table K-10: Tennessee Aquarium / Appalachian State University (Splits), Fall 2010 - Red Ear Sunfish Fillet (Freeze Dried) at Clinch River Mile 5.5 (Continued)

Analyte	Units (freeze dried basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
Nickel (6010)	mg/kg	0.027 / 0.027	ND	ND	ND	0 / 1	0
Nickel (6020)	mg/kg	0.097 / 0.097	ND	ND	ND	0 / 1	0
Potassium (6010)	mg/kg		16300	16300	16300	1 / 1	16300
Potassium (6020)	mg/kg		17700	17700	17700	1 / 1	17700
Selenium (6010)	mg/kg		4.4	4.4	4.4	1 / 1	4.4
Selenium (6020)	mg/kg		4.1	4.1	4.1	1 / 1	4.1
Silver (6010)	mg/kg	0.043 / 0.043	ND	ND	ND	0 / 1	0
Silver (6020)	mg/kg	0.0029 / 0.0029	ND	ND	ND	0 / 1	0
Sodium (6010)	mg/kg		3240	3240	3240	1 / 1	3240
Sodium (6020)	mg/kg		3140	3140	3140	1 / 1	3140
Strontium (6010)	mg/kg		0.28	0.28	0.28	1 / 1	0.28
Strontium (6020)	mg/kg		0.28	0.28	0.28	1 / 1	0.28
Thallium (6010)	mg/kg	0.14 / 0.14	ND	ND	ND	0 / 1	0
Thallium (6020)	mg/kg		0.051	0.051	0.051	1 / 1	0.051
Vanadium (6010)	mg/kg		0.034	0.034	0.034	1 / 1	0.034
Vanadium (6020)	mg/kg		0.054	0.054	0.054	1 / 1	0.054
Zinc (6010)	mg/kg		42.1	42.1	42.1	1 / 1	42.1
Zinc (6020)	mg/kg		43.6	43.6	43.6	1 / 1	43.6

Notes:

Grab sample results are freeze dried samples.

For definitions, see the Acronyms section.

APPENDIX L
TVA SAP Sampling, Fall 2010

Table L-1: TVA SAP Sampling, Fall 2010 - Bluegill Fillet at Little Emory River Mile 2.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.38	0.38	1.6	6 / 6	0.7833
% Moisture	%		76.4	76.4	81.8	6 / 6	80.37
Aluminum	mg/kg	3.705 / 4.081	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.01345 / 0.01464	ND	ND	ND	0 / 6	0
Arsenic	mg/kg	0.02596 / 0.02856	ND	0.00695	0.0276	3 / 6	0.01419
Barium	mg/kg	0.04248 / 0.04758	ND	0.01674	0.02392	3 / 6	0.02142
Beryllium	mg/kg	0.02832 / 0.02944	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.3776 / 0.4232	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.00708 / 0.00773	ND	ND	ND	0 / 6	0
Calcium	mg/kg		100.4	100.4	1039	6 / 6	463.3
Chromium	mg/kg	0.118 / 0.1299	ND	ND	ND	0 / 6	0
Cobalt	mg/kg	0.01298 / 0.01427	ND	ND	ND	0 / 6	0
Copper	mg/kg	0.1345 / 0.1464	ND	0.03822	0.059	5 / 6	0.0494
Iron	mg/kg	11.16 / 12.26	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.02596 / 0.02856	ND	ND	ND	0 / 6	0
Magnesium	mg/kg		264.6	264.6	306	6 / 6	288.6
Manganese	mg/kg		0.04536	0.04536	0.7316	6 / 6	0.2352
Mercury	mg/kg		0.00403	0.00403	0.00928	6 / 6	0.00687
Molybdenum	mg/kg	0.03304 / 0.0366	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.08968 / 0.09882	ND	ND	ND	0 / 6	0
Potassium	mg/kg		3146	3146	4136	6 / 6	3727
Selenium	mg/kg		0.06954	0.06954	0.1322	6 / 6	0.1036
Silver	mg/kg	0.0026 / 0.00294	ND	ND	ND	0 / 6	0
Sodium	mg/kg		351.3	351.3	524.4	6 / 6	414.5
Strontium	mg/kg		0.0138	0.0138	0.1674	6 / 6	0.09585
Thallium	mg/kg	0.01274 / 0.01409	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.04248 / 0.046	ND	ND	ND	0 / 6	0
Zinc	mg/kg		1.436	1.436	12.15	6 / 6	6.298

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table L-2: TVA SAP Sampling, Fall 2010 - Bluegill Fillet at Emory River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.43	0.43	2.4	6 / 6	1.437
% Moisture	%		80.7	80.7	81.5	6 / 6	80.87
Aluminum	mg/kg	3.6 / 4.2	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.013 / 0.015	ND	ND	ND	0 / 6	0
Arsenic	mg/kg	0.025 / 0.029	ND	0.04	0.04	1 / 6	0.04
Barium	mg/kg	0.042 / 0.048	ND	0.065	0.48	4 / 6	0.2438
Beryllium	mg/kg	0.027 / 0.031	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.38 / 0.43	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.0069 / 0.0079	ND	ND	ND	0 / 6	0
Calcium	mg/kg		156	156	3400	6 / 6	1458
Chromium	mg/kg	0.11 / 0.13	ND	0.13	0.67	2 / 6	0.4
Cobalt	mg/kg	0.013 / 0.015	ND	ND	ND	0 / 6	0
Copper	mg/kg		0.2	0.2	0.35	6 / 6	0.2633
Iron	mg/kg	10.9 / 12.5	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.025 / 0.029	ND	ND	ND	0 / 6	0
Magnesium	mg/kg		285	285	349	6 / 6	313.5
Manganese	mg/kg		0.21	0.21	7.1	6 / 6	2.105
Mercury	mg/kg		0.048	0.048	0.12	6 / 6	0.08133
Molybdenum	mg/kg	0.032 / 0.036	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.088 / 0.1	ND	0.35	0.35	1 / 6	0.35
Potassium	mg/kg		2610	2610	3460	6 / 6	3125
Selenium	mg/kg		0.38	0.38	0.49	6 / 6	0.4317
Silver	mg/kg	0.0026 / 0.003	ND	ND	ND	0 / 6	0
Sodium	mg/kg		335	335	823	6 / 6	531.8
Strontium	mg/kg		0.097	0.097	2.8	6 / 6	1.186
Thallium	mg/kg	0.012 / 0.014	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.041 / 0.047	ND	ND	ND	1 / 6	0
Zinc	mg/kg		11.9	11.9	19.2	6 / 6	15.33

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table L-3: TVA SAP Sampling, Fall 2010 - Bluegill Carcass at Emory River Mile 4.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.95	0.95	3.6	5 / 5	2.43
% Moisture	%		72	72	75.1	5 / 5	73.94
Aluminum	mg/kg	3.7 / 4.1	ND	ND	ND	0 / 5	0
Antimony	mg/kg	0.013 / 0.024	ND	ND	ND	0 / 5	0
Arsenic	mg/kg		0.045	0.045	0.071	5 / 5	0.0622
Barium	mg/kg		1.1	1.1	3.2	5 / 5	1.94
Beryllium	mg/kg	0.055 / 0.567	ND	ND	ND	0 / 5	0
Boron	mg/kg	0.38 / 0.43	ND	ND	ND	0 / 5	0
Cadmium	mg/kg	0.007 / 0.0076	ND	0.0088	0.0088	1 / 5	0.0088
Calcium	mg/kg		14600	14600	41100	5 / 5	25140
Chromium	mg/kg	0.12 / 0.13	ND	0.12	0.12	1 / 5	0.12
Cobalt	mg/kg		0.019	0.019	0.034	5 / 5	0.025
Copper	mg/kg		0.3	0.3	0.36	5 / 5	0.328
Iron	mg/kg	11 / 12.1	ND	12.5	15.8	4 / 5	14.2
Lead	mg/kg	0.025 / 0.026	ND	0.043	0.064	4 / 5	0.05325
Magnesium	mg/kg		458	458	852	5 / 5	597
Manganese	mg/kg		14.3	14.3	39.5	5 / 5	21.1
Mercury	mg/kg		0.017	0.017	0.053	5 / 5	0.0308
Molybdenum	mg/kg	0.032 / 0.036	ND	0.037	0.068	3 / 5	0.05667
Nickel	mg/kg	0.089 / 0.1	ND	ND	ND	0 / 5	0
Potassium	mg/kg		2450	2450	2630	5 / 5	2546
Selenium	mg/kg		0.48	0.48	0.71	5 / 5	0.604
Silver	mg/kg	0.0026 / 0.003	ND	ND	ND	0 / 5	0
Sodium	mg/kg		1160	1160	1400	5 / 5	1292
Strontium	mg/kg		13.6	13.6	38	5 / 5	23.48
Thallium	mg/kg	0.013 / 0.014	ND	ND	ND	0 / 5	0
Vanadium	mg/kg	0.042 / 0.046	ND	0.043	0.067	3 / 5	0.059
Zinc	mg/kg		30.6	30.6	43.7	5 / 5	36.48

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table L-4: TVA SAP Sampling, Fall 2010 - Bluegill Fillet at Emory River Mile 4.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.62	0.62	1.8	5 / 5	0.912
% Moisture	%		78.2	78.2	81	5 / 5	80.12
Aluminum	mg/kg	3.6 / 4.1	ND	ND	ND	0 / 5	0
Antimony	mg/kg	0.013 / 0.015	ND	ND	ND	0 / 5	0
Arsenic	mg/kg	0.025 / 0.027	ND	0.033	0.039	3 / 5	0.03667
Barium	mg/kg		0.082	0.082	0.3	5 / 5	0.1964
Beryllium	mg/kg	0.028 / 0.061	ND	ND	ND	0 / 5	0
Boron	mg/kg	0.38 / 0.42	ND	ND	ND	0 / 5	0
Cadmium	mg/kg	0.0069 / 0.0077	ND	ND	ND	0 / 5	0
Calcium	mg/kg		837	837	3620	5 / 5	2335
Chromium	mg/kg	0.12 / 0.13	ND	ND	ND	0 / 5	0
Cobalt	mg/kg	0.013 / 0.014	ND	ND	ND	0 / 5	0
Copper	mg/kg		0.18	0.18	0.34	5 / 5	0.258
Iron	mg/kg	10.9 / 12.2	ND	ND	ND	0 / 5	0
Lead	mg/kg	0.025 / 0.028	ND	ND	ND	0 / 5	0
Magnesium	mg/kg		275	275	334	5 / 5	307.8
Manganese	mg/kg		0.53	0.53	4.2	5 / 5	2.066
Mercury	mg/kg		0.029	0.029	0.066	5 / 5	0.0424
Molybdenum	mg/kg	0.032 / 0.036	ND	ND	ND	0 / 5	0
Nickel	mg/kg	0.089 / 0.099	ND	ND	ND	0 / 5	0
Potassium	mg/kg		3320	3320	3570	5 / 5	3474
Selenium	mg/kg		0.43	0.43	0.64	5 / 5	0.55
Silver	mg/kg	0.0026 / 0.0029	ND	ND	ND	0 / 5	0
Sodium	mg/kg		356	356	495	5 / 5	409
Strontium	mg/kg		0.74	0.74	3.3	5 / 5	2.108
Thallium	mg/kg	0.013 / 0.014	ND	ND	ND	0 / 5	0
Vanadium	mg/kg	0.042 / 0.046	ND	ND	ND	0 / 5	0
Zinc	mg/kg		9	9	15.7	5 / 5	12

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table L-5: TVA SAP Sampling, Fall 2010 - Bluegill Fillet at Emory River Mile 3.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.49	0.49	1.5	6 / 6	0.8683
% Moisture	%		74.5	74.5	81.3	6 / 6	79.85
Aluminum	mg/kg	3.6 / 4.1	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.013 / 0.015	ND	ND	ND	0 / 6	0
Arsenic	mg/kg		0.05	0.05	0.14	6 / 6	0.091
Barium	mg/kg		0.043	0.043	0.1	6 / 6	0.072
Beryllium	mg/kg	0.027 / 0.03	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.38 / 0.43	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.0069 / 0.0079	ND	ND	ND	0 / 6	0
Calcium	mg/kg		201	201	894	6 / 6	559.8
Chromium	mg/kg	0.12 / 0.13	ND	0.16	0.16	1 / 6	0.16
Cobalt	mg/kg	0.013 / 0.015	ND	ND	ND	0 / 6	0
Copper	mg/kg		0.22	0.22	0.41	6 / 6	0.275
Iron	mg/kg	11 / 12.5	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.025 / 0.029	ND	ND	ND	0 / 6	0
Magnesium	mg/kg		289	289	362	6 / 6	333.3
Manganese	mg/kg		0.3	0.3	0.85	6 / 6	0.5883
Mercury	mg/kg		0.03	0.03	0.066	6 / 6	0.05167
Molybdenum	mg/kg	0.032 / 0.036	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.089 / 0.1	ND	ND	ND	0 / 6	0
Potassium	mg/kg		3370	3370	4120	6 / 6	3713
Selenium	mg/kg		0.56	0.56	0.82	6 / 6	0.6883
Silver	mg/kg	0.0026 / 0.003	ND	ND	ND	0 / 6	0
Sodium	mg/kg		359	359	455	6 / 6	407.2
Strontium	mg/kg		0.15	0.15	0.88	6 / 6	0.55
Thallium	mg/kg	0.013 / 0.015	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.042 / 0.047	ND	ND	ND	0 / 6	0
Zinc	mg/kg		11.4	11.4	15.8	6 / 6	13.55

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table L-6: TVA SAP Sampling, Fall 2010 - Bluegill Fillet at Emory River Mile 0.9

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.72	0.72	1.7	5 / 5	1.14
% Moisture	%		76.6	76.6	80.8	6 / 6	79.12
Aluminum	mg/kg	3.6 / 4.1	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.013 / 0.015	ND	ND	ND	0 / 6	0
Arsenic	mg/kg		0.052	0.052	0.24	6 / 6	0.118
Barium	mg/kg		0.051	0.051	0.24	6 / 6	0.131
Beryllium	mg/kg	0.027 / 0.03	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.38 / 0.43	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.0069 / 0.0078	ND	ND	ND	0 / 6	0
Calcium	mg/kg		276	276	1750	6 / 6	1009
Chromium	mg/kg	0.12 / 0.13	ND	0.18	0.27	2 / 6	0.225
Cobalt	mg/kg	0.013 / 0.014	ND	ND	ND	0 / 6	0
Copper	mg/kg		0.31	0.31	0.94	6 / 6	0.505
Iron	mg/kg	11 / 12.4	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.025 / 0.029	ND	0.084	0.084	1 / 6	0.084
Magnesium	mg/kg		324	324	382	6 / 6	350
Manganese	mg/kg		0.24	0.24	1.1	6 / 6	0.545
Mercury	mg/kg		0.031	0.031	0.072	6 / 6	0.05083
Molybdenum	mg/kg	0.032 / 0.036	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.089 / 0.1	ND	0.16	0.16	1 / 6	0.16
Potassium	mg/kg		3360	3360	4000	6 / 6	3758
Selenium	mg/kg		0.72	0.72	1.1	6 / 6	0.88
Silver	mg/kg	0.0026 / 0.003	ND	0.011	0.025	5 / 6	0.017
Sodium	mg/kg		328	328	451	6 / 6	366.8
Strontium	mg/kg		0.24	0.24	2	6 / 6	0.9883
Thallium	mg/kg	0.013 / 0.014	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.042 / 0.047	ND	0.059	0.059	1 / 6	0.059
Zinc	mg/kg		12.7	12.7	15.3	6 / 6	14.15

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table L-7: TVA SAP Sampling, Fall 2010 - Bluegill Fillet at Clinch River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1.4	1.4	3.2	6 / 6	2.317
% Moisture	%		79.2	79.2	81.2	6 / 6	79.88
Aluminum	mg/kg	3.722 / 4.04	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.01354 / 0.01454	ND	ND	ND	0 / 6	0
Arsenic	mg/kg		0.03948	0.03948	0.1066	6 / 6	0.07877
Barium	mg/kg		0.0505	0.0505	0.1353	6 / 6	0.08316
Beryllium	mg/kg	0.0282 / 0.0303	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.3895 / 0.4242	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.00714 / 0.00776	ND	ND	ND	0 / 6	0
Calcium	mg/kg		260.6	260.6	1060	6 / 6	647.3
Chromium	mg/kg	0.1184 / 0.1274	ND	0.2424	0.2424	1 / 6	0.2424
Cobalt	mg/kg	0.01316 / 0.01433	ND	ND	ND	0 / 6	0
Copper	mg/kg		0.0846	0.0846	0.2626	6 / 6	0.2043
Iron	mg/kg	11.22 / 12.18	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.02632 / 0.02828	ND	0.04378	0.04378	1 / 6	0.04378
Magnesium	mg/kg		280.6	280.6	303.7	6 / 6	288.1
Manganese	mg/kg		0.303	0.303	0.9568	6 / 6	0.555
Mercury	mg/kg		0.04305	0.04305	0.06032	6 / 6	0.0503
Molybdenum	mg/kg	0.03196 / 0.03636	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.09024 / 0.0995	ND	ND	ND	0 / 6	0
Potassium	mg/kg		3260	3260	3711	6 / 6	3480
Selenium	mg/kg		0.492	0.492	0.7585	6 / 6	0.6291
Silver	mg/kg	0.00263 / 0.00299	ND	ND	ND	0 / 6	0
Sodium	mg/kg		299.5	299.5	426.8	6 / 6	378.8
Strontium	mg/kg		0.2222	0.2222	0.9635	6 / 6	0.5824
Thallium	mg/kg	0.01278 / 0.01394	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.04305 / 0.04646	ND	ND	ND	0 / 6	0
Zinc	mg/kg		11.07	11.07	18.61	6 / 6	14.18

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table L-8: TVA SAP Sampling, Fall 2010 - Bluegill Carcass at Clinch River Mile 3.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.8	0.8	3.1	4 / 4	2.075
% Moisture	%		67.5	67.5	72.9	4 / 4	70.38
Aluminum	mg/kg		6.8	6.8	584	4 / 4	266
Antimony	mg/kg	0.014 / 0.015	ND	0.014	0.021	2 / 4	0.0175
Arsenic	mg/kg		0.23	0.23	0.97	4 / 4	0.535
Barium	mg/kg		1.9	1.9	8.1	4 / 4	5.45
Beryllium	mg/kg	0.028 / 0.0607	ND	0.053	0.053	1 / 4	0.053
Boron	mg/kg	0.4 / 0.43	ND	0.58	0.58	1 / 4	0.58
Cadmium	mg/kg	0.0073 / 0.0156	ND	0.016	0.033	3 / 4	0.02333
Calcium	mg/kg		23400	23400	40100	4 / 4	32300
Chromium	mg/kg		0.28	0.28	1	4 / 4	0.7925
Cobalt	mg/kg		0.029	0.029	0.43	4 / 4	0.1943
Copper	mg/kg		0.67	0.67	4.2	4 / 4	2.018
Iron	mg/kg		20.2	20.2	576	4 / 4	266.7
Lead	mg/kg		0.086	0.086	0.65	4 / 4	0.349
Magnesium	mg/kg		585	585	830	4 / 4	718.8
Manganese	mg/kg		14.3	14.3	88.6	4 / 4	58.83
Mercury	mg/kg		0.031	0.031	0.041	4 / 4	0.0345
Molybdenum	mg/kg		0.094	0.094	0.61	4 / 4	0.2535
Nickel	mg/kg		0.1	0.1	0.8	4 / 4	0.4725
Potassium	mg/kg		2060	2060	2300	4 / 4	2170
Selenium	mg/kg		0.61	0.61	1.3	4 / 4	0.96
Silver	mg/kg	0.0028 / 0.003	ND	ND	ND	0 / 4	0
Sodium	mg/kg		1490	1490	1560	4 / 4	1513
Strontium	mg/kg		25	25	39	4 / 4	31.8
Thallium	mg/kg	0.014 / 0.035	ND	ND	ND	0 / 4	0
Vanadium	mg/kg		0.35	0.35	1.7	4 / 4	1.163
Zinc	mg/kg		34	34	43	4 / 4	38.4

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table L-9: TVA SAP Sampling, Fall 2010 - Bluegill Fillet at Clinch River Mile 3.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.37	0.37	0.59	7 / 7	0.4843
% Moisture	%		73.3	73.3	80.6	7 / 7	78.36
Aluminum	mg/kg	3.7 / 4.1	ND	ND	ND	0 / 7	0
Antimony	mg/kg	0.013 / 0.015	ND	ND	ND	0 / 7	0
Arsenic	mg/kg		0.086	0.086	0.29	7 / 7	0.1416
Barium	mg/kg	0.042 / 0.043	ND	0.061	0.68	6 / 7	0.2272
Beryllium	mg/kg	0.027 / 0.0617	ND	ND	ND	0 / 7	0
Boron	mg/kg	0.38 / 0.43	ND	ND	ND	0 / 7	0
Cadmium	mg/kg	0.007 / 0.0159	ND	ND	ND	0 / 7	0
Calcium	mg/kg		217	217	15100	7 / 7	3437
Chromium	mg/kg	0.12 / 0.13	ND	ND	ND	0 / 7	0
Cobalt	mg/kg	0.013 / 0.015	ND	ND	ND	0 / 7	0
Copper	mg/kg		0.17	0.17	0.31	7 / 7	0.2471
Iron	mg/kg	11.1 / 12.3	ND	ND	ND	0 / 7	0
Lead	mg/kg	0.026 / 0.029	ND	ND	ND	0 / 7	0
Magnesium	mg/kg		295	295	504	7 / 7	349.4
Manganese	mg/kg	0.16 / 0.16	ND	0.24	3.4	6 / 7	1.532
Mercury	mg/kg		0.044	0.044	0.065	7 / 7	0.054
Molybdenum	mg/kg	0.032 / 0.036	ND	0.045	0.047	2 / 7	0.046
Nickel	mg/kg	0.09 / 0.1	ND	ND	ND	0 / 7	0
Potassium	mg/kg		2950	2950	3710	7 / 7	3404
Selenium	mg/kg		0.51	0.51	1.3	7 / 7	1.06
Silver	mg/kg	0.0027 / 0.003	ND	ND	ND	0 / 7	0
Sodium	mg/kg		277	277	723	7 / 7	436
Strontium	mg/kg		0.13	0.13	14.3	7 / 7	3.137
Thallium	mg/kg	0.013 / 0.02	ND	ND	ND	0 / 7	0
Vanadium	mg/kg	0.042 / 0.0936	ND	0.066	0.074	2 / 7	0.07
Zinc	mg/kg		11.5	11.5	17.4	7 / 7	13.83

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table L-10: TVA SAP Sampling, Fall 2010 - Bluegill Fillet at Clinch River Mile 1.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.69	0.69	1.5	6 / 6	1.048
% Moisture	%		79	79	80.4	6 / 6	79.85
Aluminum	mg/kg	3.782 / 4.121	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.01374 / 0.01491	ND	ND	ND	0 / 6	0
Arsenic	mg/kg		0.03332	0.03332	0.1128	6 / 6	0.06953
Barium	mg/kg	0.04305 / 0.04669	ND	0.0504	0.246	3 / 6	0.116
Beryllium	mg/kg	0.05713 / 0.06138	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.3895 / 0.4263	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.00729 / 0.00792	ND	ND	ND	0 / 6	0
Calcium	mg/kg		165.9	165.9	2747	6 / 6	664
Chromium	mg/kg	0.1202 / 0.1302	ND	ND	ND	0 / 6	0
Cobalt	mg/kg	0.0134 / 0.01449	ND	ND	ND	0 / 6	0
Copper	mg/kg		0.203	0.203	0.3485	6 / 6	0.2686
Iron	mg/kg	11.41 / 12.4	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.02561 / 0.0294	ND	ND	ND	0 / 6	0
Magnesium	mg/kg		264	264	325.5	6 / 6	292.7
Manganese	mg/kg	0.1615 / 0.1686	ND	0.198	1.579	5 / 6	0.5315
Mercury	mg/kg		0.041	0.041	0.08036	6 / 6	0.05826
Molybdenum	mg/kg	0.0328 / 0.03654	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.09259 / 0.1015	ND	ND	ND	0 / 6	0
Potassium	mg/kg		3214	3214	3927	6 / 6	3427
Selenium	mg/kg		1.087	1.087	1.525	6 / 6	1.313
Silver	mg/kg	0.00267 / 0.00305	ND	0.00455	0.00455	1 / 6	0.004554
Sodium	mg/kg		356.7	356.7	437.3	6 / 6	399.1
Strontium	mg/kg		0.1543	0.1543	2.727	6 / 6	0.6417
Thallium	mg/kg	0.013 / 0.01421	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.04305 / 0.04669	ND	ND	ND	0 / 6	0
Zinc	mg/kg		16.13	16.13	23.99	6 / 6	18.77

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table L-11: TVA SAP Sampling, Fall 2010 - Channel Catfish Fillet at Little Emory River Mile 2.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.5	0.5	1.4	6 / 6	1.083
% Moisture	%		78.7	78.7	82.4	6 / 6	80.95
Aluminum	mg/kg	3.66 / 4.154	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.0132 / 0.01496	ND	ND	ND	0 / 6	0
Arsenic	mg/kg	0.02562 / 0.02992	ND	ND	ND	0 / 6	0
Barium	mg/kg	0.042 / 0.04752	ND	ND	ND	0 / 6	0
Beryllium	mg/kg	0.026 / 0.02992	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.38 / 0.4224	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.007 / 0.00792	ND	ND	ND	0 / 6	0
Calcium	mg/kg		77.96	77.96	103.5	6 / 6	87.25
Chromium	mg/kg	0.116 / 0.132	ND	ND	ND	0 / 6	0
Cobalt	mg/kg	0.0128 / 0.01461	ND	ND	ND	0 / 6	0
Copper	mg/kg		0.02562	0.02562	1.037	6 / 6	0.3959
Iron	mg/kg	11 / 12.5	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.02562 / 0.02816	ND	0.04224	0.04224	1 / 6	0.04224
Magnesium	mg/kg		247.1	247.1	306.7	6 / 6	270.3
Manganese	mg/kg	0.156 / 0.1665	ND	0.1728	0.2288	3 / 6	0.1932
Mercury	mg/kg		0.00877	0.00877	0.1549	6 / 6	0.05651
Molybdenum	mg/kg	0.032 / 0.03696	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.09 / 0.1021	ND	ND	ND	0 / 6	0
Potassium	mg/kg		4013	4013	4708	6 / 6	4419
Selenium	mg/kg		0.04654	0.04654	0.3264	6 / 6	0.2107
Silver	mg/kg	0.0026 / 0.00299	ND	ND	ND	0 / 6	0
Sodium	mg/kg		341.9	341.9	428	6 / 6	379.3
Strontium	mg/kg		0.01271	0.01271	0.06336	6 / 6	0.0427
Thallium	mg/kg	0.0126 / 0.01426	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.042 / 0.04752	ND	ND	ND	0 / 6	0
Zinc	mg/kg		0.8235	0.8235	7.98	6 / 6	4.535

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table L-12: TVA SAP Sampling, Fall 2010 - Channel Catfish Fillet at Emory River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.24	0.24	2.8	6 / 6	1.557
% Moisture	%		77.7	77.7	84.5	6 / 6	80.32
Aluminum	mg/kg	3.6 / 4	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.013 / 0.014	ND	ND	ND	0 / 6	0
Arsenic	mg/kg	0.025 / 0.028	ND	ND	ND	0 / 6	0
Barium	mg/kg	0.042 / 0.046	ND	ND	ND	0 / 6	0
Beryllium	mg/kg	0.027 / 0.029	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.38 / 0.41	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.0069 / 0.0076	ND	ND	ND	0 / 6	0
Calcium	mg/kg		65.6	65.6	93.7	6 / 6	84.68
Chromium	mg/kg	0.12 / 0.13	ND	ND	ND	0 / 6	0
Cobalt	mg/kg	0.013 / 0.014	ND	ND	ND	0 / 6	0
Copper	mg/kg		0.21	0.21	0.49	6 / 6	0.3467
Iron	mg/kg	10.9 / 12	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.025 / 0.028	ND	ND	ND	0 / 6	0
Magnesium	mg/kg		200	200	269	6 / 6	248.3
Manganese	mg/kg	0.15 / 0.17	ND	ND	ND	1 / 6	0
Mercury	mg/kg		0.042	0.042	0.24	6 / 6	0.1078
Molybdenum	mg/kg	0.032 / 0.035	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.089 / 0.097	ND	0.11	0.13	2 / 6	0.12
Potassium	mg/kg		3450	3450	4040	6 / 6	3810
Selenium	mg/kg		0.19	0.19	0.23	6 / 6	0.2067
Silver	mg/kg	0.0026 / 0.0029	ND	ND	ND	0 / 6	0
Sodium	mg/kg		359	359	591	6 / 6	443.8
Strontium	mg/kg		0.054	0.054	0.094	6 / 6	0.0715
Thallium	mg/kg	0.013 / 0.014	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.042 / 0.046	ND	ND	ND	0 / 6	0
Zinc	mg/kg		5	5	10	6 / 6	7.367

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table L-13: TVA SAP Sampling, Fall 2010 - Channel Catfish Carcass at Emory River Mile 4.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1.6	1.6	7.8	6 / 6	3.733
% Moisture	%		70.5	70.5	77.2	6 / 6	74.57
Aluminum	mg/kg	3.6 / 4.2	ND	6.3	6.3	1 / 6	6.3
Antimony	mg/kg	0.013 / 0.015	ND	ND	ND	0 / 6	0
Arsenic	mg/kg	0.025 / 0.028	ND	0.034	0.06	2 / 6	0.047
Barium	mg/kg		1.1	1.1	4.7	6 / 6	2.383
Beryllium	mg/kg	0.054 / 0.062	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.37 / 0.43	ND	ND	ND	0 / 6	0
Cadmium	mg/kg		0.016	0.016	0.034	6 / 6	0.02133
Calcium	mg/kg		15700	15700	25400	6 / 6	20050
Chromium	mg/kg	0.11 / 0.13	ND	0.13	0.13	1 / 6	0.13
Cobalt	mg/kg		0.036	0.036	0.2	6 / 6	0.081
Copper	mg/kg		0.36	0.36	3.2	6 / 6	0.9567
Iron	mg/kg		20.3	20.3	44	6 / 6	28.75
Lead	mg/kg		0.061	0.061	0.14	6 / 6	0.09917
Magnesium	mg/kg		357	357	490	6 / 6	419.2
Manganese	mg/kg		6.2	6.2	33.6	6 / 6	18.92
Mercury	mg/kg		0.021	0.021	0.13	6 / 6	0.05733
Molybdenum	mg/kg	0.032 / 0.036	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.087 / 0.1	ND	ND	ND	0 / 6	0
Potassium	mg/kg		2010	2010	2320	6 / 6	2140
Selenium	mg/kg		0.3	0.3	0.44	6 / 6	0.3833
Silver	mg/kg	0.0026 / 0.0029	ND	0.0039	0.0039	1 / 6	0.0039
Sodium	mg/kg		1420	1420	1730	6 / 6	1565
Strontium	mg/kg		10.1	10.1	28	6 / 6	18.3
Thallium	mg/kg	0.014 / 0.04	ND	ND	ND	0 / 6	0
Vanadium	mg/kg		0.052	0.052	0.2	6 / 6	0.09617
Zinc	mg/kg		23.7	23.7	36.8	6 / 6	31

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table L-14: TVA SAP Sampling, Fall 2010 - Channel Catfish Fillet at Emory River Mile 4.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.6	0.6	2.7	6 / 6	1.553
% Moisture	%		80.2	80.2	82.5	6 / 6	81.1
Aluminum	mg/kg	3.7 / 4.1	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.013 / 0.015	ND	ND	ND	0 / 6	0
Arsenic	mg/kg	0.026 / 0.028	ND	ND	ND	0 / 6	0
Barium	mg/kg	0.042 / 0.046	ND	ND	0.6	6 / 6	0.1602
Beryllium	mg/kg	0.055 / 0.061	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.38 / 0.42	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.007 / 0.0077	ND	ND	ND	0 / 6	0
Calcium	mg/kg		134	134	2950	6 / 6	704.7
Chromium	mg/kg	0.12 / 0.13	ND	ND	ND	0 / 6	0
Cobalt	mg/kg	0.013 / 0.014	ND	0.019	0.035	2 / 6	0.027
Copper	mg/kg		0.23	0.23	0.77	6 / 6	0.4267
Iron	mg/kg	11 / 12.2	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.025 / 0.028	ND	ND	ND	0 / 6	0
Magnesium	mg/kg		220	220	257	6 / 6	232.2
Manganese	mg/kg		0.19	0.19	4.5	6 / 6	0.9867
Mercury	mg/kg		0.03	0.03	0.26	6 / 6	0.1105
Molybdenum	mg/kg	0.032 / 0.036	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.089 / 0.094	ND	0.11	0.14	3 / 6	0.12
Potassium	mg/kg		3770	3770	3990	6 / 6	3852
Selenium	mg/kg		0.19	0.19	0.29	6 / 6	0.24
Silver	mg/kg	0.0026 / 0.0029	ND	ND	ND	0 / 6	0
Sodium	mg/kg		350	350	417	6 / 6	377.8
Strontium	mg/kg		0.13	0.13	3.1	6 / 6	0.7
Thallium	mg/kg	0.037 / 0.041	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.042 / 0.046	ND	ND	ND	0 / 6	0
Zinc	mg/kg		6.1	6.1	8.5	6 / 6	7.533

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table L-15: TVA SAP Sampling, Fall 2010 - Channel Catfish Fillet at Emory River Mile 3.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1.1	1.1	2.6	6 / 6	1.517
% Moisture	%		77.8	77.8	81.3	6 / 6	79.87
Aluminum	mg/kg	3.6 / 4	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.013 / 0.015	ND	ND	ND	0 / 6	0
Arsenic	mg/kg	0.026 / 0.028	ND	0.032	0.032	1 / 6	0.032
Barium	mg/kg	0.042 / 0.046	ND	ND	ND	0 / 6	0
Beryllium	mg/kg	0.027 / 0.03	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.38 / 0.42	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.0069 / 0.0076	ND	ND	ND	0 / 6	0
Calcium	mg/kg		64.5	64.5	80.3	6 / 6	73.33
Chromium	mg/kg	0.12 / 0.13	ND	ND	ND	0 / 6	0
Cobalt	mg/kg	0.013 / 0.014	ND	ND	ND	0 / 6	0
Copper	mg/kg		0.25	0.25	1.1	6 / 6	0.4317
Iron	mg/kg	11 / 12.1	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.025 / 0.028	ND	0.031	0.031	1 / 6	0.031
Magnesium	mg/kg		240	240	288	6 / 6	259.5
Manganese	mg/kg	0.16 / 0.17	ND	0.2	0.22	2 / 6	0.21
Mercury	mg/kg		0.05	0.05	0.098	6 / 6	0.074
Molybdenum	mg/kg	0.032 / 0.035	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.089 / 0.098	ND	0.1	0.1	1 / 6	0.1
Potassium	mg/kg		3570	3570	4580	6 / 6	4170
Selenium	mg/kg		0.25	0.25	0.44	6 / 6	0.3717
Silver	mg/kg	0.0026 / 0.0029	ND	ND	ND	0 / 6	0
Sodium	mg/kg		292	292	396	6 / 6	355.8
Strontium	mg/kg		0.05	0.05	0.11	6 / 6	0.0685
Thallium	mg/kg	0.013 / 0.014	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.042 / 0.046	ND	ND	ND	0 / 6	0
Zinc	mg/kg		5.4	5.4	7.9	6 / 6	6.617

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table L-16: TVA SAP Sampling, Fall 2010 - Channel Catfish Fillet at Emory River Mile 0.9

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1.1	1.1	5.5	6 / 6	2.067
% Moisture	%		77.9	77.9	81.8	6 / 6	80.32
Aluminum	mg/kg	3.6 / 4.2	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.013 / 0.015	ND	ND	ND	0 / 6	0
Arsenic	mg/kg	0.025 / 0.027	ND	0.07293	0.07293	2 / 6	0.07293
Barium	mg/kg	0.041 / 0.048	ND	ND	ND	0 / 6	0
Beryllium	mg/kg	0.026 / 0.031	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.37 / 0.43	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.0068 / 0.00751	ND	0.018	0.018	1 / 6	0.018
Calcium	mg/kg		57.24	57.24	113	6 / 6	78.15
Chromium	mg/kg	0.11 / 0.13	ND	ND	ND	0 / 6	0
Cobalt	mg/kg	0.013 / 0.015	ND	ND	ND	0 / 6	0
Copper	mg/kg		0.28	0.28	0.646	6 / 6	0.4236
Iron	mg/kg	10.8 / 12.5	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.025 / 0.029	ND	ND	ND	0 / 6	0
Magnesium	mg/kg		227.6	227.6	272	6 / 6	256.2
Manganese	mg/kg	0.15 / 0.18	ND	0.2	0.2	1 / 6	0.2
Mercury	mg/kg		0.044	0.044	0.11	6 / 6	0.0742
Molybdenum	mg/kg	0.032 / 0.036	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.088 / 0.1	ND	0.1102	0.1102	1 / 6	0.1102
Potassium	mg/kg		3890	3890	4320	6 / 6	4077
Selenium	mg/kg		0.29	0.29	0.53	6 / 6	0.3796
Silver	mg/kg	0.0026 / 0.0041	ND	ND	ND	0 / 6	0
Sodium	mg/kg		338.2	338.2	441	6 / 6	396.9
Strontium	mg/kg		0.054	0.054	0.11	6 / 6	0.07378
Thallium	mg/kg	0.012 / 0.014	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.041 / 0.047	ND	ND	ND	0 / 6	0
Zinc	mg/kg		4.8	4.8	8.3	6 / 6	6.468

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table L-17: TVA SAP Sampling, Fall 2010 - Channel Catfish Fillet at Clinch River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1	1	4.8	6 / 6	2.383
% Moisture	%		77.4	77.4	82.6	6 / 6	80.27
Aluminum	mg/kg	3.64 / 4.12	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.0131 / 0.0148	ND	ND	ND	0 / 6	0
Arsenic	mg/kg	0.02548 / 0.02886	ND	0.0339	0.0819	3 / 6	0.0554
Barium	mg/kg	0.04176 / 0.048	ND	ND	ND	0 / 6	0
Beryllium	mg/kg	0.0273 / 0.03	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.3822 / 0.42	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.00692 / 0.00756	ND	0.0196	0.0196	1 / 6	0.0196
Calcium	mg/kg		56.34	56.34	72.59	6 / 6	65.41
Chromium	mg/kg	0.1165 / 0.13	ND	ND	ND	0 / 6	0
Cobalt	mg/kg	0.01274 / 0.0144	ND	0.01399	0.01831	2 / 6	0.01615
Copper	mg/kg		0.261	0.261	0.4746	6 / 6	0.3561
Iron	mg/kg	10.97 / 12.38	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.02548 / 0.028	ND	0.02712	0.02712	1 / 6	0.02712
Magnesium	mg/kg		194.9	194.9	257.5	6 / 6	229.6
Manganese	mg/kg	0.1547 / 0.176	ND	0.273	0.273	1 / 6	0.273
Mercury	mg/kg		0.0455	0.0455	0.174	6 / 6	0.08588
Molybdenum	mg/kg	0.03276 / 0.036	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.08918 / 0.1	ND	0.2131	0.2131	1 / 6	0.2131
Potassium	mg/kg		3637	3637	3910	6 / 6	3828
Selenium	mg/kg		0.1494	0.1494	0.3774	6 / 6	0.2648
Silver	mg/kg	0.00255 / 0.003	ND	ND	ND	0 / 6	0
Sodium	mg/kg		296.7	296.7	448	6 / 6	380.7
Strontium	mg/kg		0.0612	0.0612	0.07684	6 / 6	0.07089
Thallium	mg/kg	0.01256 / 0.0142	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.04176 / 0.046	ND	ND	ND	0 / 6	0
Zinc	mg/kg		4.333	4.333	6.016	6 / 6	5.306

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table L-18: TVA SAP Sampling, Fall 2010 - Channel Catfish Carcass at Clinch River Mile 3.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1.3	1.3	7.7	5 / 5	3.22
% Moisture	%		70.6	70.6	77.5	5 / 5	75.38
Aluminum	mg/kg	3.6 / 4	ND	5.9	47.7	3 / 5	23.63
Antimony	mg/kg	0.013 / 0.015	ND	ND	ND	0 / 5	0
Arsenic	mg/kg	0.025 / 0.028	ND	ND	0.1	4 / 5	0.06233
Barium	mg/kg		0.9	0.9	10	5 / 5	3.32
Beryllium	mg/kg	0.029 / 0.0532	ND	ND	ND	0 / 5	0
Boron	mg/kg	0.37 / 0.42	ND	ND	ND	0 / 5	0
Cadmium	mg/kg		0.0083	0.0083	0.017	5 / 5	0.01406
Calcium	mg/kg		13200	13200	21200	5 / 5	16460
Chromium	mg/kg	0.11 / 0.13	ND	0.18	0.18	1 / 5	0.18
Cobalt	mg/kg		0.04	0.04	0.12	5 / 5	0.0794
Copper	mg/kg		0.55	0.55	1.1	5 / 5	0.7
Iron	mg/kg		21.8	21.8	87.1	5 / 5	43.6
Lead	mg/kg		0.095	0.095	0.21	5 / 5	0.123
Magnesium	mg/kg		349	349	490	5 / 5	407.6
Manganese	mg/kg		4.9	4.9	27.8	5 / 5	11.82
Mercury	mg/kg		0.022	0.022	0.13	5 / 5	0.0694
Molybdenum	mg/kg	0.031 / 0.035	ND	ND	ND	0 / 5	0
Nickel	mg/kg	0.087 / 0.095	ND	0.13	3.6	3 / 5	1.29
Potassium	mg/kg		2030	2030	2200	5 / 5	2072
Selenium	mg/kg		0.3	0.3	0.57	5 / 5	0.424
Silver	mg/kg	0.0026 / 0.0029	ND	ND	ND	0 / 5	0
Sodium	mg/kg		1270	1270	1500	5 / 5	1392
Strontium	mg/kg		10.4	10.4	20.4	5 / 5	14.38
Thallium	mg/kg	0.012 / 0.014	ND	ND	ND	0 / 5	0
Vanadium	mg/kg		0.049	0.049	0.21	5 / 5	0.1298
Zinc	mg/kg		22.4	22.4	31.8	5 / 5	27.12

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table L-19: TVA SAP Sampling, Fall 2010 - Channel Catfish Fillet at Clinch River Mile 3.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.62	0.62	5.6	5 / 5	2.284
% Moisture	%		76.8	76.8	82.1	5 / 5	78.94
Aluminum	mg/kg	3.6 / 4.1	ND	ND	ND	0 / 5	0
Antimony	mg/kg	0.013 / 0.015	ND	ND	ND	0 / 5	0
Arsenic	mg/kg	0.025 / 0.0573	ND	ND	ND	0 / 5	0
Barium	mg/kg	0.041 / 0.048	ND	ND	ND	0 / 5	0
Beryllium	mg/kg	0.027 / 0.0612	ND	ND	ND	0 / 5	0
Boron	mg/kg	0.37 / 0.43	ND	ND	ND	0 / 5	0
Cadmium	mg/kg	0.0069 / 0.0158	ND	ND	ND	0 / 5	0
Calcium	mg/kg		99.7	99.7	225	5 / 5	149.5
Chromium	mg/kg	0.11 / 0.13	ND	ND	ND	0 / 5	0
Cobalt	mg/kg	0.013 / 0.014	ND	0.015	0.027	2 / 5	0.021
Copper	mg/kg		0.34	0.34	1.1	5 / 5	0.658
Iron	mg/kg	10.9 / 12.5	ND	ND	ND	0 / 5	0
Lead	mg/kg	0.025 / 0.029	ND	ND	ND	0 / 5	0
Magnesium	mg/kg		222	222	268	5 / 5	249.2
Manganese	mg/kg		0.16	0.16	0.84	5 / 5	0.326
Mercury	mg/kg		0.036	0.036	0.21	5 / 5	0.1196
Molybdenum	mg/kg	0.032 / 0.036	ND	ND	ND	0 / 5	0
Nickel	mg/kg	0.088 / 0.1	ND	ND	ND	0 / 5	0
Potassium	mg/kg		3470	3470	4260	5 / 5	3800
Selenium	mg/kg		0.17	0.17	0.4	5 / 5	0.254
Silver	mg/kg	0.0026 / 0.003	ND	ND	ND	0 / 5	0
Sodium	mg/kg		341	341	427	5 / 5	382.2
Strontium	mg/kg		0.063	0.063	0.24	5 / 5	0.1268
Thallium	mg/kg	0.012 / 0.014	ND	ND	ND	0 / 5	0
Vanadium	mg/kg	0.041 / 0.0928	ND	ND	ND	0 / 5	0
Zinc	mg/kg		7.6	7.6	10.6	5 / 5	8.72

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table L-20: TVA SAP Sampling, Fall 2010 - Channel Catfish Fillet at Clinch River Mile 1.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.57	0.57	1.8	6 / 6	0.9417
% Moisture	%		78.9	78.9	81.4	6 / 6	80.17
Aluminum	mg/kg	3.627 / 4.138	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.01308 / 0.01505	ND	ND	ND	0 / 6	0
Arsenic	mg/kg	0.02626 / 0.05597	ND	0.02508	0.04646	2 / 6	0.03577
Barium	mg/kg	0.04092 / 0.04807	ND	0.00848	0.00848	1 / 6	0.008484
Beryllium	mg/kg	0.02626 / 0.05983	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.372 / 0.4389	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.00687 / 0.00794	ND	ND	ND	0 / 6	0
Calcium	mg/kg		66.86	66.86	86.46	6 / 6	76.19
Chromium	mg/kg	0.1151 / 0.1317	ND	ND	ND	0 / 6	0
Cobalt	mg/kg	0.01283 / 0.01463	ND	ND	ND	0 / 6	0
Copper	mg/kg		0.04725	0.04725	0.5597	6 / 6	0.221
Iron	mg/kg	10.94 / 12.5	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.02532 / 0.02926	ND	ND	ND	0 / 6	0
Magnesium	mg/kg		236.3	236.3	259.5	6 / 6	251.1
Manganese	mg/kg	0.1544 / 0.1756	ND	0.03232	0.2321	2 / 6	0.1322
Mercury	mg/kg		0.00878	0.00878	0.1372	6 / 6	0.07003
Molybdenum	mg/kg	0.03162 / 0.03591	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.08862 / 0.1003	ND	0.02828	0.02828	1 / 6	0.02828
Potassium	mg/kg		3840	3840	4516	6 / 6	4119
Selenium	mg/kg		0.0567	0.0567	0.4278	6 / 6	0.2305
Silver	mg/kg	0.00253 / 0.00293	ND	ND	ND	0 / 6	0
Sodium	mg/kg		338.5	338.5	463.2	6 / 6	381.9
Strontium	mg/kg		0.01285	0.01285	0.07676	6 / 6	0.04593
Thallium	mg/kg	0.01246 / 0.01421	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.04092 / 0.04807	ND	ND	ND	0 / 6	0
Zinc	mg/kg		1.191	1.191	8.338	6 / 6	3.923

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table L-21: TVA SAP Sampling, Fall 2010 - Gizzard Shad Gut and Gut Content at Emory River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1.8	1.8	2.1	3 / 3	1.967
% Moisture	%		84.5	84.5	84.7	3 / 3	84.6
Aluminum	mg/kg		54.8	54.8	90.2	3 / 3	69
Antimony	mg/kg	0.013 / 0.014	ND	ND	ND	0 / 3	0
Arsenic	mg/kg		0.47	0.47	0.51	3 / 3	0.4933
Barium	mg/kg		0.27	0.27	0.45	3 / 3	0.3467
Beryllium	mg/kg	0.054 / 0.057	ND	ND	ND	0 / 3	0
Boron	mg/kg	0.37 / 0.39	ND	ND	ND	0 / 3	0
Cadmium	mg/kg		0.023	0.023	0.03	3 / 3	0.02733
Calcium	mg/kg		152	152	286	3 / 3	214
Chromium	mg/kg		0.77	0.77	2.1	3 / 3	1.323
Cobalt	mg/kg		0.12	0.12	0.14	3 / 3	0.1267
Copper	mg/kg		1.9	1.9	2.1	3 / 3	2
Iron	mg/kg		132	132	166	3 / 3	144.7
Lead	mg/kg		0.045	0.045	0.076	3 / 3	0.059
Magnesium	mg/kg		160	160	164	3 / 3	161.7
Manganese	mg/kg		1.5	1.5	1.8	3 / 3	1.633
Mercury	mg/kg		0.024	0.024	0.025	3 / 3	0.02467
Molybdenum	mg/kg		0.11	0.11	0.14	3 / 3	0.12
Nickel	mg/kg		0.45	0.45	1.1	3 / 3	0.72
Potassium	mg/kg		2540	2540	2640	3 / 3	2593
Selenium	mg/kg		1	1	1.1	3 / 3	1.067
Silver	mg/kg	0.0094 / 0.011	ND	ND	ND	0 / 3	0
Sodium	mg/kg		1330	1330	1470	3 / 3	1390
Strontium	mg/kg		0.099	0.099	0.19	3 / 3	0.1363
Thallium	mg/kg	0.012 / 0.017	ND	ND	ND	0 / 3	0
Vanadium	mg/kg		0.15	0.15	0.23	3 / 3	0.1933
Zinc	mg/kg		22.6	22.6	26.1	3 / 3	24.23

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table L-22: TVA SAP Sampling, Fall 2010 - Gizzard Shad Whole Body (Minus Gut) at Emory River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		4.6	4.6	6.6	3 / 3	5.533
% Moisture	%		74.6	74.6	75.5	3 / 3	75.07
Aluminum	mg/kg	3.6 / 3.9	ND	ND	ND	0 / 3	0
Antimony	mg/kg	0.013 / 0.014	ND	ND	ND	0 / 3	0
Arsenic	mg/kg		0.2	0.2	0.25	3 / 3	0.2167
Barium	mg/kg		2.1	2.1	2.6	3 / 3	2.367
Beryllium	mg/kg	0.054 / 0.058	ND	ND	ND	0 / 3	0
Boron	mg/kg	0.37 / 0.4	ND	ND	ND	0 / 3	0
Cadmium	mg/kg	0.0069 / 0.0074	ND	ND	ND	0 / 3	0
Calcium	mg/kg		8820	8820	12800	3 / 3	10707
Chromium	mg/kg	0.11 / 0.12	ND	ND	ND	0 / 3	0
Cobalt	mg/kg		0.032	0.032	0.038	3 / 3	0.03567
Copper	mg/kg		0.51	0.51	6.3	3 / 3	2.603
Iron	mg/kg		11.9	11.9	14.8	3 / 3	13.3
Lead	mg/kg		0.039	0.039	0.045	3 / 3	0.04167
Magnesium	mg/kg		304	304	355	3 / 3	329.3
Manganese	mg/kg		19.5	19.5	25.3	3 / 3	21.63
Mercury	mg/kg		0.012	0.012	0.015	3 / 3	0.01333
Molybdenum	mg/kg	0.032 / 0.034	ND	ND	ND	0 / 3	0
Nickel	mg/kg	0.088 / 0.095	ND	0.25	0.25	1 / 3	0.25
Potassium	mg/kg		2640	2640	2800	3 / 3	2697
Selenium	mg/kg		0.38	0.38	0.46	3 / 3	0.4067
Silver	mg/kg	0.0026 / 0.0028	ND	ND	ND	0 / 3	0
Sodium	mg/kg		961	961	1070	3 / 3	1034
Strontium	mg/kg		5.3	5.3	8.2	3 / 3	6.7
Thallium	mg/kg	0.012 / 0.013	ND	ND	ND	0 / 3	0
Vanadium	mg/kg	0.041 / 0.045	ND	0.06	0.06	1 / 3	0.06
Zinc	mg/kg		14.8	14.8	16	3 / 3	15.57

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table L-23: TVA SAP Sampling, Fall 2010 - Gizzard Shad Gut and Gut Content at Emory River Mile 4.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1.2	1.2	3.6	5 / 5	2.46
% Moisture	%		79.5	79.5	83.7	5 / 5	81.32
Aluminum	mg/kg		17.8	17.8	1320	5 / 5	517.6
Antimony	mg/kg	0.013 / 0.1	ND	ND	ND	0 / 5	0
Arsenic	mg/kg		0.72	0.72	1.2	5 / 5	0.968
Barium	mg/kg		0.22	0.22	15	5 / 5	5.784
Beryllium	mg/kg	0.027 / 0.058	ND	0.063	0.069	2 / 5	0.066
Boron	mg/kg	0.38 / 0.4	ND	0.57	0.67	2 / 5	0.62
Cadmium	mg/kg		0.034	0.034	0.051	5 / 5	0.0448
Calcium	mg/kg		219	219	617	5 / 5	355.6
Chromium	mg/kg	0.12 / 0.12	ND	4.7	5.2	2 / 5	4.95
Cobalt	mg/kg		0.11	0.11	1.2	5 / 5	0.55
Copper	mg/kg		2.8	2.8	7	5 / 5	4.98
Iron	mg/kg		64.5	64.5	1700	5 / 5	696
Lead	mg/kg	0.026 / 0.027	ND	0.038	1.3	3 / 5	0.846
Magnesium	mg/kg		167	167	349	5 / 5	237.6
Manganese	mg/kg		1.5	1.5	88.3	5 / 5	34.46
Mercury	mg/kg		0.011	0.011	0.025	5 / 5	0.0196
Molybdenum	mg/kg		0.089	0.089	0.26	5 / 5	0.1458
Nickel	mg/kg	0.09 / 0.09	ND	0.12	3.3	4 / 5	1.66
Potassium	mg/kg		2360	2360	2530	5 / 5	2450
Selenium	mg/kg		1.1	1.1	1.8	5 / 5	1.5
Silver	mg/kg	0.0027 / 0.0082	ND	0.025	0.039	3 / 5	0.033
Sodium	mg/kg		1070	1070	1220	5 / 5	1140
Strontium	mg/kg		0.2	0.2	1.2	5 / 5	0.592
Thallium	mg/kg	0.038 / 0.083	ND	ND	ND	0 / 5	0
Vanadium	mg/kg	0.042 / 0.042	ND	0.056	2.2	4 / 5	1.108
Zinc	mg/kg		23.9	23.9	34.1	5 / 5	28.16

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table L-24: TVA SAP Sampling, Fall 2010 - Gizzard Shad Whole Body at Emory River Mile 4.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		5.3	5.3	6.2	3 / 3	5.767
% Moisture	%		77.4	77.4	78.2	3 / 3	77.83
Aluminum	mg/kg	3.6 / 4.1	ND	5.8	7.5	2 / 3	6.65
Antimony	mg/kg	0.013 / 0.015	ND	ND	ND	0 / 3	0
Arsenic	mg/kg		0.37	0.37	0.4	3 / 3	0.38
Barium	mg/kg		2.3	2.3	2.7	3 / 3	2.567
Beryllium	mg/kg	0.054 / 0.061	ND	ND	ND	0 / 3	0
Boron	mg/kg	0.37 / 0.42	ND	ND	ND	0 / 3	0
Cadmium	mg/kg	0.014 / 0.016	ND	ND	ND	0 / 3	0
Calcium	mg/kg		7260	7260	8440	3 / 3	7953
Chromium	mg/kg	0.11 / 0.13	ND	ND	ND	1 / 3	0
Cobalt	mg/kg		0.045	0.045	0.05	3 / 3	0.04767
Copper	mg/kg		1	1	1.7	3 / 3	1.3
Iron	mg/kg		17.3	17.3	20.6	3 / 3	19.3
Lead	mg/kg	0.025 / 0.028	ND	0.045	0.05	2 / 3	0.0475
Magnesium	mg/kg		279	279	287	3 / 3	283
Manganese	mg/kg		21.6	21.6	26.6	3 / 3	24.73
Mercury	mg/kg	0.01 / 0.012	ND	ND	ND	0 / 3	0
Molybdenum	mg/kg	0.032 / 0.036	ND	ND	ND	0 / 3	0
Nickel	mg/kg	0.088 / 0.1	ND	0.19	0.19	1 / 3	0.19
Potassium	mg/kg		2470	2470	2540	3 / 3	2510
Selenium	mg/kg		0.59	0.59	0.71	3 / 3	0.65
Silver	mg/kg	0.0026 / 0.0029	ND	ND	ND	0 / 3	0
Sodium	mg/kg		924	924	951	3 / 3	938
Strontium	mg/kg		6.3	6.3	7.5	3 / 3	6.967
Thallium	mg/kg	0.012 / 0.014	ND	ND	ND	0 / 3	0
Vanadium	mg/kg	0.041 / 0.047	ND	0.058	0.064	2 / 3	0.061
Zinc	mg/kg		20.9	20.9	21.5	3 / 3	21.2

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table L-25: TVA SAP Sampling, Fall 2010 - Gizzard Shad Whole Body (Minus Gut) at Emory River Mile 4.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		3.1	3.1	6.7	5 / 5	5.24
% Moisture	%		76.1	76.1	78.4	5 / 5	77.04
Aluminum	mg/kg	3.6 / 4.1	ND	8.1	9.2	2 / 5	8.65
Antimony	mg/kg	0.013 / 0.015	ND	ND	ND	0 / 5	0
Arsenic	mg/kg		0.13	0.13	0.38	5 / 5	0.288
Barium	mg/kg		2.8	2.8	4.4	5 / 5	3.3
Beryllium	mg/kg	0.053 / 0.061	ND	ND	ND	0 / 5	0
Boron	mg/kg	0.37 / 0.42	ND	ND	ND	0 / 5	0
Cadmium	mg/kg	0.0069 / 0.016	ND	ND	ND	0 / 5	0
Calcium	mg/kg		9030	9030	13900	5 / 5	10824
Chromium	mg/kg	0.11 / 0.13	ND	ND	ND	0 / 5	0
Cobalt	mg/kg		0.036	0.036	0.052	5 / 5	0.0414
Copper	mg/kg		0.54	0.54	2.1	5 / 5	1.01
Iron	mg/kg		12.4	12.4	21.2	5 / 5	15.94
Lead	mg/kg		0.038	0.038	0.059	5 / 5	0.0498
Magnesium	mg/kg		295	295	357	5 / 5	317.6
Manganese	mg/kg		27.4	27.4	29.3	5 / 5	28.22
Mercury	mg/kg	0.01 / 0.012	ND	0.012	0.013	2 / 5	0.0125
Molybdenum	mg/kg	0.031 / 0.036	ND	ND	ND	0 / 5	0
Nickel	mg/kg	0.087 / 0.099	ND	ND	ND	0 / 5	0
Potassium	mg/kg		2380	2380	2590	5 / 5	2476
Selenium	mg/kg		0.49	0.49	0.64	5 / 5	0.582
Silver	mg/kg	0.0026 / 0.0029	ND	ND	ND	0 / 5	0
Sodium	mg/kg		852	852	1110	5 / 5	949.2
Strontium	mg/kg		7.6	7.6	10.7	5 / 5	8.72
Thallium	mg/kg	0.012 / 0.014	ND	ND	ND	0 / 5	0
Vanadium	mg/kg		0.06	0.06	0.1	5 / 5	0.0708
Zinc	mg/kg		16.7	16.7	22.2	5 / 5	19.78

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table L-26: TVA SAP Sampling, Fall 2010 - Gizzard Shad Gut and Gut Content at Emory River Mile 2.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		3.7	3.7	5.7	3 / 3	4.467
% Moisture	%		80.4	80.4	82.3	3 / 3	81.13
Aluminum	mg/kg		97.5	97.5	159	3 / 3	132.5
Antimony	mg/kg	0.013 / 0.015	ND	ND	ND	0 / 3	0
Arsenic	mg/kg		0.78	0.78	1	3 / 3	0.9
Barium	mg/kg		1	1	1.3	3 / 3	1.167
Beryllium	mg/kg	0.03 / 0.055	ND	ND	ND	0 / 3	0
Boron	mg/kg	0.38 / 0.42	ND	ND	ND	0 / 3	0
Cadmium	mg/kg		0.038	0.038	0.043	3 / 3	0.04133
Calcium	mg/kg		357	357	425	3 / 3	381.3
Chromium	mg/kg		0.18	0.18	0.25	3 / 3	0.22
Cobalt	mg/kg		0.15	0.15	0.15	3 / 3	0.15
Copper	mg/kg		4.5	4.5	6.2	3 / 3	5.367
Iron	mg/kg		131	131	185	3 / 3	164.7
Lead	mg/kg		0.082	0.082	0.11	3 / 3	0.1007
Magnesium	mg/kg		175	175	188	3 / 3	183.3
Manganese	mg/kg		2.1	2.1	8.4	3 / 3	4.567
Mercury	mg/kg		0.012	0.012	0.017	3 / 3	0.01433
Molybdenum	mg/kg		0.093	0.093	0.11	3 / 3	0.101
Nickel	mg/kg		0.18	0.18	0.22	3 / 3	0.2
Potassium	mg/kg		2680	2680	2710	3 / 3	2700
Selenium	mg/kg		1.4	1.4	1.5	3 / 3	1.467
Silver	mg/kg		0.024	0.024	0.027	3 / 3	0.02533
Sodium	mg/kg		1120	1120	1270	3 / 3	1217
Strontium	mg/kg		0.33	0.33	0.43	3 / 3	0.3833
Thallium	mg/kg	0.042 / 0.074	ND	ND	ND	0 / 3	0
Vanadium	mg/kg		0.17	0.17	0.21	3 / 3	0.1967
Zinc	mg/kg		30.8	30.8	36.7	3 / 3	33.7

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table L-27: TVA SAP Sampling, Fall 2010 - Gizzard Shad Whole Body at Emory River Mile 2.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		5	5	5.7	3 / 3	5.467
% Moisture	%		78.4	78.4	79.5	3 / 3	78.87
Aluminum	mg/kg		9.5	9.5	75.6	3 / 3	31.6
Antimony	mg/kg	0.014 / 0.015	ND	ND	ND	0 / 3	0
Arsenic	mg/kg		0.43	0.43	0.48	3 / 3	0.4533
Barium	mg/kg		2.9	2.9	3.4	3 / 3	3.2
Beryllium	mg/kg	0.058 / 0.062	ND	ND	ND	0 / 3	0
Boron	mg/kg	0.4 / 0.43	ND	ND	ND	0 / 3	0
Cadmium	mg/kg	0.0079 / 0.015	ND	0.012	0.012	1 / 3	0.012
Calcium	mg/kg		8490	8490	10300	3 / 3	9213
Chromium	mg/kg	0.12 / 0.13	ND	ND	ND	0 / 3	0
Cobalt	mg/kg		0.046	0.046	0.073	3 / 3	0.059
Copper	mg/kg		1.4	1.4	1.7	3 / 3	1.567
Iron	mg/kg		21.9	21.9	87.2	3 / 3	43.87
Lead	mg/kg		0.032	0.032	0.092	3 / 3	0.05233
Magnesium	mg/kg		281	281	304	3 / 3	293.3
Manganese	mg/kg		25	25	32.4	3 / 3	28.43
Mercury	mg/kg	0.011 / 0.012	ND	ND	ND	0 / 3	0
Molybdenum	mg/kg	0.034 / 0.036	ND	ND	ND	0 / 3	0
Nickel	mg/kg	0.094 / 0.1	ND	ND	ND	0 / 3	0
Potassium	mg/kg		2410	2410	2450	3 / 3	2423
Selenium	mg/kg		0.68	0.68	0.81	3 / 3	0.74
Silver	mg/kg	0.0028 / 0.003	ND	ND	ND	0 / 3	0
Sodium	mg/kg		884	884	925	3 / 3	908.7
Strontium	mg/kg		8.4	8.4	9.8	3 / 3	9.167
Thallium	mg/kg	0.013 / 0.026	ND	ND	ND	0 / 3	0
Vanadium	mg/kg		0.069	0.069	0.16	3 / 3	0.1013
Zinc	mg/kg		22.7	22.7	24.5	3 / 3	23.77

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table L-28: TVA SAP Sampling, Fall 2010 - Gizzard Shad Whole Body (Minus Gut) at Emory River Mile 2.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		3.7	3.7	5.5	3 / 3	4.8
% Moisture	%		78.4	78.4	78.7	3 / 3	78.57
Aluminum	mg/kg	3.8 / 4.1	ND	ND	ND	0 / 3	0
Antimony	mg/kg	0.014 / 0.015	ND	ND	ND	0 / 3	0
Arsenic	mg/kg		0.34	0.34	0.37	3 / 3	0.3533
Barium	mg/kg		3	3	3.3	3 / 3	3.1
Beryllium	mg/kg	0.028 / 0.03	ND	ND	ND	0 / 3	0
Boron	mg/kg	0.4 / 0.42	ND	ND	ND	0 / 3	0
Cadmium	mg/kg	0.0073 / 0.0078	ND	ND	ND	0 / 3	0
Calcium	mg/kg		10300	10300	11400	3 / 3	10767
Chromium	mg/kg	0.12 / 0.13	ND	ND	ND	0 / 3	0
Cobalt	mg/kg		0.041	0.041	0.045	3 / 3	0.04333
Copper	mg/kg		0.79	0.79	1.3	3 / 3	1.013
Iron	mg/kg		12.5	12.5	13.7	3 / 3	13.27
Lead	mg/kg		0.033	0.033	0.061	3 / 3	0.043
Magnesium	mg/kg		308	308	323	3 / 3	315.7
Manganese	mg/kg		31.1	31.1	33.6	3 / 3	32.67
Mercury	mg/kg	0.011 / 0.012	ND	ND	ND	0 / 3	0
Molybdenum	mg/kg	0.034 / 0.036	ND	ND	ND	0 / 3	0
Nickel	mg/kg	0.093 / 0.1	ND	ND	ND	0 / 3	0
Potassium	mg/kg		2400	2400	2530	3 / 3	2480
Selenium	mg/kg		0.54	0.54	0.56	3 / 3	0.5533
Silver	mg/kg	0.0028 / 0.0029	ND	ND	ND	0 / 3	0
Sodium	mg/kg		902	902	972	3 / 3	929
Strontium	mg/kg		8.3	8.3	9.8	3 / 3	9.267
Thallium	mg/kg	0.013 / 0.014	ND	ND	ND	0 / 3	0
Vanadium	mg/kg		0.071	0.071	0.082	3 / 3	0.07667
Zinc	mg/kg		22.6	22.6	24.2	3 / 3	23.47

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table L-29: TVA SAP Sampling, Fall 2010 - Gizzard Shad Gut and Gut Content at Emory River Mile 0.9

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1.6	1.6	3.8	3 / 3	2.433
% Moisture	%		79.1	79.1	80.8	3 / 3	80.13
Aluminum	mg/kg		595	595	1100	3 / 3	820.7
Antimony	mg/kg	0.019 / 0.021	ND	ND	ND	0 / 3	0
Arsenic	mg/kg		1.1	1.1	1.4	3 / 3	1.267
Barium	mg/kg		4.6	4.6	7.1	3 / 3	6.2
Beryllium	mg/kg		0.046	0.046	0.059	3 / 3	0.05367
Boron	mg/kg		0.47	0.47	0.91	3 / 3	0.6667
Cadmium	mg/kg		0.082	0.082	0.086	3 / 3	0.08467
Calcium	mg/kg		200	200	464	3 / 3	335
Chromium	mg/kg		3.5	3.5	4.8	3 / 3	4.367
Cobalt	mg/kg		0.54	0.54	0.89	3 / 3	0.72
Copper	mg/kg		3.1	3.1	4.2	3 / 3	3.767
Iron	mg/kg		622	622	1120	3 / 3	856.7
Lead	mg/kg		0.49	0.49	0.91	3 / 3	0.7233
Magnesium	mg/kg		226	226	291	3 / 3	250
Manganese	mg/kg		30	30	61.3	3 / 3	48.67
Mercury	mg/kg		0.031	0.031	0.036	3 / 3	0.03333
Molybdenum	mg/kg		0.17	0.17	0.19	3 / 3	0.1833
Nickel	mg/kg		2.2	2.2	3.1	3 / 3	2.8
Potassium	mg/kg		2780	2780	2890	3 / 3	2823
Selenium	mg/kg		1.7	1.7	1.9	3 / 3	1.767
Silver	mg/kg		0.0091	0.0091	0.01	3 / 3	0.009467
Sodium	mg/kg		1120	1120	1230	3 / 3	1170
Strontium	mg/kg		1.7	1.7	1.9	3 / 3	1.8
Thallium	mg/kg	0.09 / 0.12	ND	ND	ND	0 / 3	0
Vanadium	mg/kg		1.4	1.4	2.2	3 / 3	1.8
Zinc	mg/kg		27.6	27.6	28	3 / 3	27.77

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table L-30: TVA SAP Sampling, Fall 2010 - Gizzard Shad Whole Body (Minus Gut) at Emory River Mile 0.9

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1.6	1.6	5.8	3 / 3	4.3
% Moisture	%		73.9	73.9	75.1	3 / 3	74.57
Aluminum	mg/kg	3.8 / 3.8	ND	4.8	6.1	2 / 3	5.45
Antimony	mg/kg	0.014 / 0.015	ND	ND	ND	0 / 3	0
Arsenic	mg/kg		0.28	0.28	0.35	3 / 3	0.3167
Barium	mg/kg		2.4	2.4	3.3	3 / 3	2.767
Beryllium	mg/kg	0.056 / 0.062	ND	ND	ND	0 / 3	0
Boron	mg/kg	0.39 / 0.43	ND	ND	ND	0 / 3	0
Cadmium	mg/kg	0.0071 / 0.0078	ND	0.023	0.023	1 / 3	0.023
Calcium	mg/kg		11000	11000	13500	3 / 3	12133
Chromium	mg/kg	0.12 / 0.13	ND	ND	ND	0 / 3	0
Cobalt	mg/kg		0.048	0.048	0.051	3 / 3	0.049
Copper	mg/kg		0.58	0.58	12.2	3 / 3	4.523
Iron	mg/kg		12.5	12.5	16.2	3 / 3	14.77
Lead	mg/kg		0.045	0.045	0.54	3 / 3	0.2103
Magnesium	mg/kg		342	342	364	3 / 3	351
Manganese	mg/kg		22.9	22.9	27	3 / 3	24.33
Mercury	mg/kg		0.013	0.013	0.016	3 / 3	0.01433
Molybdenum	mg/kg	0.033 / 0.036	ND	ND	ND	0 / 3	0
Nickel	mg/kg	0.092 / 0.1	ND	2.4	2.4	1 / 3	2.4
Potassium	mg/kg		2730	2730	2840	3 / 3	2793
Selenium	mg/kg		0.4	0.4	0.78	3 / 3	0.5433
Silver	mg/kg	0.0027 / 0.003	ND	0.0031	0.0031	1 / 3	0.0031
Sodium	mg/kg		946	946	976	3 / 3	958.7
Strontium	mg/kg		7.9	7.9	9.6	3 / 3	8.5
Thallium	mg/kg	0.014 / 0.017	ND	ND	ND	0 / 3	0
Vanadium	mg/kg		0.046	0.046	0.093	3 / 3	0.06667
Zinc	mg/kg		15.7	15.7	23.7	3 / 3	18.93

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table L-31: TVA SAP Sampling, Fall 2010 - Gizzard Shad Gut and Gut Content at Clinch River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1.1	1.1	3.8	6 / 6	2.483
% Moisture	%		72.9	72.9	79.2	6 / 6	76.35
Aluminum	mg/kg		447	447	2130	6 / 6	1295
Antimony	mg/kg	0.013 / 0.014	ND	0.029	0.033	4 / 6	0.03133
Arsenic	mg/kg		0.68	0.68	1.6	6 / 6	1.235
Barium	mg/kg		3.7	3.7	18.1	6 / 6	10.47
Beryllium	mg/kg	0.027 / 0.307	ND	0.03	0.033	2 / 6	0.0315
Boron	mg/kg	0.37 / 2.1	ND	ND	ND	0 / 6	0
Cadmium	mg/kg		0.055	0.055	0.1	6 / 6	0.07767
Calcium	mg/kg		597	597	931	6 / 6	794.5
Chromium	mg/kg		0.67	0.67	5.8	6 / 6	3.302
Cobalt	mg/kg		0.39	0.39	1.8	6 / 6	1.087
Copper	mg/kg		4	4	8.2	6 / 6	5.683
Iron	mg/kg		523	523	2840	6 / 6	1673
Lead	mg/kg		0.59	0.59	4.2	6 / 6	2.352
Magnesium	mg/kg		248	248	545	6 / 6	388.8
Manganese	mg/kg		23	23	240	6 / 6	119.2
Mercury	mg/kg		0.015	0.015	0.22	6 / 6	0.09817
Molybdenum	mg/kg	0.032 / 0.16	ND	ND	0.21	5 / 6	0.1308
Nickel	mg/kg		0.52	0.52	4.6	6 / 6	2.215
Potassium	mg/kg	650 / 3710	ND	2740	2800	3 / 6	2773
Selenium	mg/kg		1	1	1.5	6 / 6	1.317
Silver	mg/kg	0.0026 / 0.015	ND	ND	0.022	4 / 6	0.01967
Sodium	mg/kg		1120	1120	1470	6 / 6	1285
Strontium	mg/kg		0.67	0.67	2.2	6 / 6	1.392
Thallium	mg/kg	0.037 / 0.076	ND	ND	ND	0 / 6	0
Vanadium	mg/kg		0.74	0.74	3.7	6 / 6	2.2
Zinc	mg/kg		29.6	29.6	37.4	6 / 6	32.9

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table L-32: TVA SAP Sampling, Fall 2010 - Gizzard Shad Whole Body at Clinch River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		4.9	4.9	6.3	3 / 3	5.533
% Moisture	%		76.6	76.6	78	3 / 3	77.47
Aluminum	mg/kg		23.8	23.8	44.3	3 / 3	36.13
Antimony	mg/kg	0.014 / 0.015	ND	ND	ND	0 / 3	0
Arsenic	mg/kg		0.43	0.43	0.44	3 / 3	0.4367
Barium	mg/kg		2.5	2.5	3.4	3 / 3	2.9
Beryllium	mg/kg	0.028 / 0.03	ND	ND	ND	0 / 3	0
Boron	mg/kg	0.4 / 0.43	ND	ND	ND	0 / 3	0
Cadmium	mg/kg		0.009	0.009	0.011	3 / 3	0.01033
Calcium	mg/kg		8500	8500	14100	3 / 3	10690
Chromium	mg/kg	0.12 / 0.13	ND	ND	ND	0 / 3	0
Cobalt	mg/kg		0.073	0.073	0.083	3 / 3	0.078
Copper	mg/kg		1.3	1.3	2.2	3 / 3	1.7
Iron	mg/kg		39	39	57.3	3 / 3	49.63
Lead	mg/kg		0.06	0.06	0.1	3 / 3	0.083
Magnesium	mg/kg		296	296	311	3 / 3	302.3
Manganese	mg/kg		27.5	27.5	34.5	3 / 3	30.1
Mercury	mg/kg	0.011 / 0.012	ND	ND	ND	0 / 3	0
Molybdenum	mg/kg	0.034 / 0.036	ND	ND	ND	0 / 3	0
Nickel	mg/kg	0.093 / 0.1	ND	ND	ND	0 / 3	0
Potassium	mg/kg		2620	2620	2690	3 / 3	2657
Selenium	mg/kg		0.54	0.54	0.63	3 / 3	0.5933
Silver	mg/kg	0.0028 / 0.003	ND	0.0032	0.0032	1 / 3	0.0032
Sodium	mg/kg		1040	1040	1100	3 / 3	1070
Strontium	mg/kg		7.7	7.7	13	3 / 3	9.533
Thallium	mg/kg	0.013 / 0.014	ND	ND	ND	0 / 3	0
Vanadium	mg/kg		0.087	0.087	0.13	3 / 3	0.1123
Zinc	mg/kg		23.8	23.8	25.5	3 / 3	24.37

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table L-33: TVA SAP Sampling, Fall 2010 - Gizzard Shad Whole Body (Minus Gut) at Clinch River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		3.9	3.9	7.5	6 / 6	5.683
% Moisture	%		75.3	75.3	77.9	6 / 6	76.75
Aluminum	mg/kg		5.2	5.2	14.1	6 / 6	8.4
Antimony	mg/kg	0.014 / 0.015	ND	ND	ND	0 / 6	0
Arsenic	mg/kg		0.24	0.24	0.38	6 / 6	0.3133
Barium	mg/kg		2.8	2.8	3.8	6 / 6	3.233
Beryllium	mg/kg	0.028 / 0.031	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.39 / 0.43	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.0072 / 0.0077	ND	0.011	0.011	1 / 6	0.011
Calcium	mg/kg		9940	9940	18200	6 / 6	13690
Chromium	mg/kg	0.12 / 0.13	ND	ND	ND	0 / 6	0
Cobalt	mg/kg		0.045	0.045	0.06	6 / 6	0.051
Copper	mg/kg		0.63	0.63	0.98	6 / 6	0.8217
Iron	mg/kg		16.2	16.2	29.4	6 / 6	21.67
Lead	mg/kg		0.049	0.049	0.089	6 / 6	0.06367
Magnesium	mg/kg		310	310	383	6 / 6	345.3
Manganese	mg/kg		28	28	36.1	6 / 6	33.12
Mercury	mg/kg	0.011 / 0.012	ND	0.011	0.018	3 / 6	0.014
Molybdenum	mg/kg	0.033 / 0.036	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.092 / 0.1	ND	ND	ND	0 / 6	0
Potassium	mg/kg		2390	2390	2890	6 / 6	2633
Selenium	mg/kg		0.47	0.47	0.65	6 / 6	0.5267
Silver	mg/kg	0.0027 / 0.003	ND	ND	ND	0 / 6	0
Sodium	mg/kg		893	893	1200	6 / 6	1044
Strontium	mg/kg		7.9	7.9	12.5	6 / 6	9.9
Thallium	mg/kg	0.013 / 0.014	ND	ND	ND	0 / 6	0
Vanadium	mg/kg		0.063	0.063	0.09	6 / 6	0.07633
Zinc	mg/kg		16.2	16.2	23	6 / 6	20.15

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table L-34: TVA SAP Sampling, Fall 2010 - Gizzard Shad Gut and Gut Content at Clinch River Mile 3.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1.6	1.6	2.8	6 / 6	2.267
% Moisture	%		71.7	71.7	81.4	6 / 6	77.53
Aluminum	mg/kg		721	721	3780	6 / 6	1684
Antimony	mg/kg		0.03	0.03	0.14	6 / 6	0.06933
Arsenic	mg/kg		1.1	1.1	5.2	6 / 6	2.633
Barium	mg/kg		8.6	8.6	48.4	6 / 6	21.3
Beryllium	mg/kg		0.07	0.07	0.5	6 / 6	0.205
Boron	mg/kg		0.55	0.55	3.3	6 / 6	1.445
Cadmium	mg/kg		0.07	0.07	0.099	6 / 6	0.09
Calcium	mg/kg		371	371	1000	6 / 6	543
Chromium	mg/kg		1.3	1.3	4.9	6 / 6	2.4
Cobalt	mg/kg		0.64	0.64	2.7	6 / 6	1.368
Copper	mg/kg		6.2	6.2	11.8	6 / 6	7.983
Iron	mg/kg		778	778	3810	6 / 6	1742
Lead	mg/kg		0.79	0.79	3.9	6 / 6	1.777
Magnesium	mg/kg		250	250	523	6 / 6	324.3
Manganese	mg/kg		54	54	140	6 / 6	93.43
Mercury	mg/kg		0.032	0.032	0.078	6 / 6	0.06417
Molybdenum	mg/kg		0.1	0.1	0.25	6 / 6	0.155
Nickel	mg/kg		1.1	1.1	5.4	6 / 6	2.667
Potassium	mg/kg	647 / 3360	ND	2430	2670	4 / 6	2568
Selenium	mg/kg		1.5	1.5	2.2	6 / 6	1.767
Silver	mg/kg		0.0056	0.0056	0.036	6 / 6	0.01758
Sodium	mg/kg		1100	1100	1260	6 / 6	1180
Strontium	mg/kg		3.5	3.5	26.6	6 / 6	10.87
Thallium	mg/kg	0.012 / 0.097	ND	0.15	0.21	2 / 6	0.18
Vanadium	mg/kg		1.7	1.7	9.7	6 / 6	4.4
Zinc	mg/kg		24.3	24.3	44.6	6 / 6	30.92

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table L-35: TVA SAP Sampling, Fall 2010 - Gizzard Shad Whole Body at Clinch River Mile 3.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		5.1	5.1	6.7	3 / 3	5.967
% Moisture	%		78	78	78.5	3 / 3	78.2
Aluminum	mg/kg		132	132	147	3 / 3	139.7
Antimony	mg/kg	0.013 / 0.014	ND	ND	ND	0 / 3	0
Arsenic	mg/kg		0.59	0.59	0.63	3 / 3	0.6067
Barium	mg/kg		3.7	3.7	4.2	3 / 3	3.967
Beryllium	mg/kg	0.027 / 0.029	ND	ND	ND	0 / 3	0
Boron	mg/kg	0.37 / 0.41	ND	ND	ND	0 / 3	0
Cadmium	mg/kg		0.011	0.011	0.013	3 / 3	0.012
Calcium	mg/kg		8500	8500	9500	3 / 3	8897
Chromium	mg/kg		0.25	0.25	0.28	3 / 3	0.2667
Cobalt	mg/kg		0.15	0.15	0.17	3 / 3	0.1567
Copper	mg/kg		1.6	1.6	2.1	3 / 3	1.8
Iron	mg/kg		135	135	151	3 / 3	144
Lead	mg/kg		0.15	0.15	0.19	3 / 3	0.17
Magnesium	mg/kg		283	283	297	3 / 3	290.7
Manganese	mg/kg		29.3	29.3	33.8	3 / 3	31.13
Mercury	mg/kg	0.01 / 0.011	ND	0.012	0.012	1 / 3	0.012
Molybdenum	mg/kg	0.032 / 0.035	ND	ND	ND	0 / 3	0
Nickel	mg/kg		0.23	0.23	0.32	3 / 3	0.2667
Potassium	mg/kg		2470	2470	2520	3 / 3	2500
Selenium	mg/kg		0.7	0.7	0.72	3 / 3	0.71
Silver	mg/kg		0.0031	0.0031	0.0035	3 / 3	0.0033
Sodium	mg/kg		953	953	1020	3 / 3	985.3
Strontium	mg/kg		7.9	7.9	9.2	3 / 3	8.6
Thallium	mg/kg	0.0243 / 0.0267	ND	ND	ND	0 / 3	0
Vanadium	mg/kg		0.4	0.4	0.44	3 / 3	0.4233
Zinc	mg/kg		23.6	23.6	23.9	3 / 3	23.77

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table L-36: TVA SAP Sampling, Fall 2010 - Gizzard Shad Whole Body (Minus Gut) at Clinch River Mile 3.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		3.8	3.8	6.2	6 / 6	4.983
% Moisture	%		75.7	75.7	78	6 / 6	76.55
Aluminum	mg/kg		7.3	7.3	48.3	6 / 6	16.75
Antimony	mg/kg	0.013 / 0.015	ND	ND	ND	0 / 6	0
Arsenic	mg/kg		0.17	0.17	0.42	6 / 6	0.2517
Barium	mg/kg		2.1	2.1	3.4	6 / 6	2.933
Beryllium	mg/kg	0.027 / 0.0589	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.39 / 0.42	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.0071 / 0.0152	ND	ND	ND	0 / 6	0
Calcium	mg/kg		9830	9830	14800	6 / 6	12305
Chromium	mg/kg	0.12 / 0.13	ND	ND	ND	0 / 6	0
Cobalt	mg/kg		0.036	0.036	0.058	6 / 6	0.04717
Copper	mg/kg		0.69	0.69	2.1	6 / 6	1.053
Iron	mg/kg		20.6	20.6	57	6 / 6	33.63
Lead	mg/kg		0.051	0.051	0.15	6 / 6	0.07733
Magnesium	mg/kg		310	310	360	6 / 6	343.2
Manganese	mg/kg		17.2	17.2	32.6	6 / 6	23.27
Mercury	mg/kg	0.011 / 0.012	ND	0.012	0.014	5 / 6	0.01325
Molybdenum	mg/kg	0.033 / 0.036	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.091 / 0.099	ND	0.17	0.17	1 / 6	0.17
Potassium	mg/kg		2290	2290	2840	6 / 6	2508
Selenium	mg/kg		0.4	0.4	0.59	6 / 6	0.4983
Silver	mg/kg	0.0027 / 0.003	ND	ND	ND	0 / 6	0
Sodium	mg/kg		844	844	1010	6 / 6	902
Strontium	mg/kg		6.1	6.1	11.2	6 / 6	8.167
Thallium	mg/kg	0.013 / 0.0276	ND	ND	ND	0 / 6	0
Vanadium	mg/kg		0.054	0.054	0.16	6 / 6	0.09433
Zinc	mg/kg		14.5	14.5	24	6 / 6	17.58

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table L-37: TVA SAP Sampling, Fall 2010 - Gizzard Shad Gut and Gut Content at Clinch River Mile 1.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		1	1	3.5	6 / 6	1.783
% Moisture	%		70.7	70.7	75.4	6 / 6	73.85
Aluminum	mg/kg		2720	2720	3230	6 / 6	2917
Antimony	mg/kg		0.095	0.095	0.1	6 / 6	0.099
Arsenic	mg/kg		4.5	4.5	4.9	6 / 6	4.683
Barium	mg/kg		34.5	34.5	37.5	6 / 6	36.33
Beryllium	mg/kg		0.27	0.27	0.32	6 / 6	0.2917
Boron	mg/kg		2.2	2.2	2.5	6 / 6	2.333
Cadmium	mg/kg		0.095	0.095	0.16	6 / 6	0.1265
Calcium	mg/kg		743	743	908	6 / 6	810.7
Chromium	mg/kg		4.1	4.1	4.7	6 / 6	4.4
Cobalt	mg/kg		2	2	2.3	6 / 6	2.183
Copper	mg/kg		9	9	11.9	6 / 6	10.53
Iron	mg/kg		2260	2260	3610	6 / 6	2927
Lead	mg/kg		3.3	3.3	3.6	6 / 6	3.433
Magnesium	mg/kg		431	431	471	6 / 6	449.2
Manganese	mg/kg		177	177	270	6 / 6	223
Mercury	mg/kg		0.12	0.12	0.2	6 / 6	0.1617
Molybdenum	mg/kg		0.2	0.2	0.28	6 / 6	0.2167
Nickel	mg/kg		4.2	4.2	4.4	6 / 6	4.3
Potassium	mg/kg		2100	2100	2430	6 / 6	2252
Selenium	mg/kg		1.6	1.6	2	6 / 6	1.833
Silver	mg/kg		0.024	0.024	0.046	6 / 6	0.03217
Sodium	mg/kg		865	865	1290	6 / 6	1085
Strontium	mg/kg		14.4	14.4	18.2	6 / 6	16.67
Thallium	mg/kg	0.14 / 0.18	ND	ND	ND	0 / 6	0
Vanadium	mg/kg		6.4	6.4	7.3	6 / 6	6.85
Zinc	mg/kg		27.6	27.6	36.7	6 / 6	32.18

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table L-38: TVA SAP Sampling, Fall 2010 - Gizzard Shad Whole Body at Clinch River Mile 1.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		3.4	3.4	3.5	3 / 3	3.467
% Moisture	%		78.3	78.3	78.5	3 / 3	78.4
Aluminum	mg/kg		359	359	661	3 / 3	515.7
Antimony	mg/kg		0.014	0.014	0.023	3 / 3	0.019
Arsenic	mg/kg		0.79	0.79	1.1	3 / 3	0.9633
Barium	mg/kg		6.8	6.8	9.3	3 / 3	8.4
Beryllium	mg/kg		0.035	0.035	0.058	3 / 3	0.04767
Boron	mg/kg	0.38 / 0.39	ND	0.43	0.51	2 / 3	0.47
Cadmium	mg/kg		0.01	0.01	0.016	3 / 3	0.01333
Calcium	mg/kg		6990	6990	10300	3 / 3	8683
Chromium	mg/kg		0.6	0.6	1	3 / 3	0.8233
Cobalt	mg/kg		0.28	0.28	0.44	3 / 3	0.3767
Copper	mg/kg		2.3	2.3	3.2	3 / 3	2.8
Iron	mg/kg		251	251	300	3 / 3	281.7
Lead	mg/kg		0.39	0.39	0.69	3 / 3	0.5733
Magnesium	mg/kg		322	322	344	3 / 3	333
Manganese	mg/kg		52.1	52.1	70.9	3 / 3	61.57
Mercury	mg/kg		0.019	0.019	0.032	3 / 3	0.027
Molybdenum	mg/kg	0.032 / 0.033	ND	0.035	0.039	2 / 3	0.037
Nickel	mg/kg		0.5	0.5	2.7	3 / 3	1.363
Potassium	mg/kg		2290	2290	2410	3 / 3	2370
Selenium	mg/kg		0.69	0.69	0.74	3 / 3	0.7233
Silver	mg/kg		0.0033	0.0033	0.0083	3 / 3	0.005233
Sodium	mg/kg		937	937	968	3 / 3	955.3
Strontium	mg/kg		8.8	8.8	10.1	3 / 3	9.6
Thallium	mg/kg	0.028 / 0.034	ND	ND	ND	0 / 3	0
Vanadium	mg/kg		0.85	0.85	1.5	3 / 3	1.217
Zinc	mg/kg		25.3	25.3	28.4	3 / 3	26.73

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table L-39: TVA SAP Sampling, Fall 2010 - Gizzard Shad Whole Body (Minus Gut) at Clinch River Mile 1.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		3.7	3.7	5.8	6 / 6	4.567
% Moisture	%		76.2	76.2	79.3	6 / 6	77.6
Aluminum	mg/kg		5.9	5.9	29.7	6 / 6	14.62
Antimony	mg/kg	0.014 / 0.015	ND	ND	ND	0 / 6	0
Arsenic	mg/kg		0.24	0.24	0.41	6 / 6	0.3283
Barium	mg/kg		2.8	2.8	3.7	6 / 6	3.117
Beryllium	mg/kg	0.0571 / 0.062	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.4 / 0.43	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.0079 / 0.0158	ND	0.011	0.011	1 / 6	0.011
Calcium	mg/kg		8690	8690	11600	6 / 6	9640
Chromium	mg/kg	0.12 / 0.13	ND	ND	ND	0 / 6	0
Cobalt	mg/kg		0.04	0.04	0.059	6 / 6	0.04833
Copper	mg/kg		0.61	0.61	1.9	6 / 6	1.215
Iron	mg/kg		16.7	16.7	27.3	6 / 6	21.67
Lead	mg/kg		0.043	0.043	0.088	6 / 6	0.05767
Magnesium	mg/kg		279	279	331	6 / 6	301.3
Manganese	mg/kg		22.4	22.4	41.1	6 / 6	31.6
Mercury	mg/kg	0.011 / 0.012	ND	0.012	0.012	2 / 6	0.012
Molybdenum	mg/kg	0.034 / 0.036	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.093 / 0.1	ND	0.12	0.17	4 / 6	0.1467
Potassium	mg/kg		1990	1990	2590	6 / 6	2238
Selenium	mg/kg		0.45	0.45	0.63	6 / 6	0.5467
Silver	mg/kg	0.0028 / 0.003	ND	ND	ND	0 / 6	0
Sodium	mg/kg		828	828	982	6 / 6	879
Strontium	mg/kg		6.8	6.8	10.1	6 / 6	8.233
Thallium	mg/kg	0.013 / 0.02	ND	ND	ND	0 / 6	0
Vanadium	mg/kg		0.061	0.061	0.11	6 / 6	0.07783
Zinc	mg/kg		17	17	30.2	6 / 6	23.2

Notes:

Composite sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table L-40: TVA SAP Sampling, Fall 2010 - Largemouth Bass Fillet at Little Emory River Mile 2.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.29	0.29	2.1	6 / 6	0.7517
% Moisture	%		77.9	77.9	80.6	6 / 6	79.13
Aluminum	mg/kg	3.689 / 4.037	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.01324 / 0.0147	ND	ND	ND	0 / 6	0
Arsenic	mg/kg		0.01497	0.01497	0.03536	6 / 6	0.02594
Barium	mg/kg	0.04123 / 0.04488	ND	0.0118	0.04598	2 / 6	0.02889
Beryllium	mg/kg	0.02821 / 0.02926	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.388 / 0.418	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.00694 / 0.00766	ND	ND	ND	0 / 6	0
Calcium	mg/kg		93.7	93.7	879.8	6 / 6	329.9
Chromium	mg/kg	0.1172 / 0.1283	ND	ND	ND	0 / 6	0
Cobalt	mg/kg	0.01302 / 0.01428	ND	ND	ND	0 / 6	0
Copper	mg/kg		0.0388	0.0388	0.3762	6 / 6	0.188
Iron	mg/kg	11.11 / 12.19	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.02604 / 0.02898	ND	0.01944	0.01944	1 / 6	0.01944
Magnesium	mg/kg		263.8	263.8	306	6 / 6	285
Manganese	mg/kg	0.1562 / 0.163	ND	0.03876	0.08987	3 / 6	0.05944
Mercury	mg/kg		0.01842	0.01842	0.07161	6 / 6	0.03681
Molybdenum	mg/kg	0.03255 / 0.03553	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.08897 / 0.09384	ND	0.04554	0.5852	2 / 6	0.3154
Potassium	mg/kg		4113	4113	4410	6 / 6	4219
Selenium	mg/kg		0.09945	0.09945	0.4462	6 / 6	0.1676
Silver	mg/kg	0.0026 / 0.00293	ND	ND	ND	0 / 6	0
Sodium	mg/kg		345	345	362.4	6 / 6	350.7
Strontium	mg/kg	0.04123 / 0.04199	ND	0.00955	0.1387	5 / 6	0.05291
Thallium	mg/kg	0.0128 / 0.01387	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.04123 / 0.04598	ND	ND	ND	0 / 6	0
Zinc	mg/kg		1.68	1.68	11.14	6 / 6	4.432

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table L-41: TVA SAP Sampling, Fall 2010 - Largemouth Bass Fillet at Emory River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.35	0.35	0.72	6 / 6	0.51
% Moisture	%		78.1	78.1	80.3	6 / 6	78.88
Aluminum	mg/kg	3.5 / 4.1	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.013 / 0.015	ND	ND	ND	0 / 6	0
Arsenic	mg/kg		0.072	0.072	0.21	6 / 6	0.1473
Barium	mg/kg	0.04 / 0.047	ND	ND	ND	0 / 6	0
Beryllium	mg/kg	0.026 / 0.03	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.36 / 0.42	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.0066 / 0.0078	ND	ND	ND	0 / 6	0
Calcium	mg/kg		110	110	665	6 / 6	267.3
Chromium	mg/kg	0.11 / 0.13	ND	ND	ND	0 / 6	0
Cobalt	mg/kg	0.012 / 0.014	ND	ND	ND	0 / 6	0
Copper	mg/kg		0.18	0.18	0.36	6 / 6	0.2717
Iron	mg/kg	10.5 / 12.3	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.024 / 0.028	ND	ND	ND	0 / 6	0
Magnesium	mg/kg		302	302	322	6 / 6	311.2
Manganese	mg/kg	0.15 / 0.17	ND	ND	ND	0 / 6	0
Mercury	mg/kg		0.12	0.12	0.19	6 / 6	0.1467
Molybdenum	mg/kg	0.031 / 0.036	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.085 / 0.1	ND	ND	ND	0 / 6	0
Potassium	mg/kg		3590	3590	3980	6 / 6	3777
Selenium	mg/kg		0.35	0.35	0.66	6 / 6	0.45
Silver	mg/kg	0.0025 / 0.0029	ND	ND	ND	0 / 6	0
Sodium	mg/kg		306	306	365	6 / 6	338.8
Strontium	mg/kg		0.042	0.042	0.46	6 / 6	0.163
Thallium	mg/kg	0.012 / 0.014	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.04 / 0.047	ND	ND	ND	0 / 6	0
Zinc	mg/kg		7.3	7.3	14.9	6 / 6	11.03

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table L-42: TVA SAP Sampling, Fall 2010 - Largemouth Bass Carcass at Emory River Mile 4.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.32	0.32	9.8	6 / 6	6.737
% Moisture	%		66.4	66.4	67.8	6 / 6	66.98
Aluminum	mg/kg	3.6 / 4.2	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.013 / 0.015	ND	ND	ND	0 / 6	0
Arsenic	mg/kg		0.3	0.3	0.55	6 / 6	0.415
Barium	mg/kg		0.56	0.56	1.4	6 / 6	0.9267
Beryllium	mg/kg	0.053 / 0.062	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.37 / 0.43	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.0068 / 0.0078	ND	0.018	0.018	1 / 6	0.018
Calcium	mg/kg		14000	14000	35600	6 / 6	23017
Chromium	mg/kg	0.11 / 0.13	ND	ND	ND	0 / 6	0
Cobalt	mg/kg		0.014	0.014	0.027	6 / 6	0.01717
Copper	mg/kg		0.35	0.35	14.6	6 / 6	3.763
Iron	mg/kg	10.7 / 12.5	ND	11.1	14.5	4 / 6	12.35
Lead	mg/kg	0.025 / 0.029	ND	0.04	0.042	2 / 6	0.041
Magnesium	mg/kg		395	395	733	6 / 6	557.7
Manganese	mg/kg		1.9	1.9	8.1	6 / 6	3.617
Mercury	mg/kg		0.024	0.024	0.15	6 / 6	0.0615
Molybdenum	mg/kg	0.031 / 0.036	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.087 / 0.1	ND	0.15	0.35	3 / 6	0.2567
Potassium	mg/kg		2240	2240	2520	6 / 6	2380
Selenium	mg/kg		0.6	0.6	0.78	6 / 6	0.6933
Silver	mg/kg	0.0026 / 0.003	ND	ND	ND	0 / 6	0
Sodium	mg/kg		1270	1270	1580	6 / 6	1428
Strontium	mg/kg		10.8	10.8	30	6 / 6	19.23
Thallium	mg/kg	0.012 / 0.02	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.041 / 0.047	ND	ND	ND	0 / 6	0
Zinc	mg/kg		17.8	17.8	23.1	6 / 6	20.8

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table L-43: TVA SAP Sampling, Fall 2010 - Largemouth Bass Fillet at Emory River Mile 4.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		2.1	2.1	3.9	6 / 6	2.95
% Moisture	%		76.7	76.7	77.9	6 / 6	77.35
Aluminum	mg/kg	3.6 / 4.1	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.013 / 0.015	ND	ND	ND	0 / 6	0
Arsenic	mg/kg		0.21	0.21	0.41	6 / 6	0.2983
Barium	mg/kg	0.042 / 0.047	ND	0.055	0.26	4 / 6	0.1213
Beryllium	mg/kg	0.054 / 0.061	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.38 / 0.42	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.0069 / 0.0078	ND	ND	ND	0 / 6	0
Calcium	mg/kg		654	654	6660	6 / 6	2064
Chromium	mg/kg	0.12 / 0.13	ND	ND	ND	0 / 6	0
Cobalt	mg/kg	0.013 / 0.014	ND	ND	ND	0 / 6	0
Copper	mg/kg		0.28	0.28	4.2	6 / 6	1.688
Iron	mg/kg	10.9 / 12.3	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.025 / 0.028	ND	0.039	0.041	2 / 6	0.04
Magnesium	mg/kg		273	273	393	6 / 6	311
Manganese	mg/kg	0.15 / 0.17	ND	0.18	0.95	5 / 6	0.414
Mercury	mg/kg		0.041	0.041	0.28	6 / 6	0.1075
Molybdenum	mg/kg	0.032 / 0.036	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.089 / 0.1	ND	0.32	0.32	1 / 6	0.32
Potassium	mg/kg		3720	3720	3920	6 / 6	3827
Selenium	mg/kg		0.46	0.46	0.76	6 / 6	0.62
Silver	mg/kg	0.0026 / 0.003	ND	ND	ND	0 / 6	0
Sodium	mg/kg		385	385	461	6 / 6	421.7
Strontium	mg/kg		0.51	0.51	5.1	6 / 6	1.633
Thallium	mg/kg	0.013 / 0.016	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.042 / 0.047	ND	ND	ND	0 / 6	0
Zinc	mg/kg		7.9	7.9	15.4	6 / 6	11

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table L-44: TVA SAP Sampling, Fall 2010 - Largemouth Bass Fillet at Emory River Mile 3.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.42	0.42	1.6	7 / 7	0.9371
% Moisture	%		77.9	77.9	79.8	7 / 7	78.61
Aluminum	mg/kg	3.6 / 4	ND	ND	ND	0 / 7	0
Antimony	mg/kg	0.013 / 0.015	ND	ND	ND	0 / 7	0
Arsenic	mg/kg		0.16	0.16	0.3	7 / 7	0.2086
Barium	mg/kg	0.042 / 0.046	ND	ND	ND	0 / 7	0
Beryllium	mg/kg	0.027 / 0.03	ND	ND	ND	0 / 7	0
Boron	mg/kg	0.38 / 0.42	ND	ND	ND	0 / 7	0
Cadmium	mg/kg	0.0069 / 0.0077	ND	ND	ND	0 / 7	0
Calcium	mg/kg		149	149	396	7 / 7	242
Chromium	mg/kg	0.11 / 0.13	ND	ND	ND	0 / 7	0
Cobalt	mg/kg	0.013 / 0.014	ND	0.016	0.016	1 / 7	0.016
Copper	mg/kg		0.27	0.27	0.71	7 / 7	0.4143
Iron	mg/kg	10.9 / 12.2	ND	ND	ND	0 / 7	0
Lead	mg/kg	0.025 / 0.028	ND	0.03	0.03	1 / 7	0.03
Magnesium	mg/kg		291	291	322	7 / 7	310.4
Manganese	mg/kg	0.15 / 0.16	ND	ND	0.21	5 / 7	0.1825
Mercury	mg/kg		0.047	0.047	0.14	7 / 7	0.09843
Molybdenum	mg/kg	0.032 / 0.036	ND	ND	ND	0 / 7	0
Nickel	mg/kg	0.088 / 0.099	ND	0.13	0.13	1 / 7	0.13
Potassium	mg/kg		3730	3730	4420	7 / 7	4179
Selenium	mg/kg		0.7	0.7	0.85	7 / 7	0.7614
Silver	mg/kg	0.0026 / 0.0029	ND	ND	ND	0 / 7	0
Sodium	mg/kg		378	378	458	7 / 7	403.9
Strontium	mg/kg		0.066	0.066	0.3	7 / 7	0.1523
Thallium	mg/kg	0.012 / 0.019	ND	ND	ND	0 / 7	0
Vanadium	mg/kg	0.041 / 0.046	ND	ND	ND	0 / 7	0
Zinc	mg/kg		7.7	7.7	15.6	7 / 7	11.39

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table L-45: TVA SAP Sampling, Fall 2010 - Largemouth Bass Fillet at Emory River Mile 0.9

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.2	0.2	2.5	6 / 6	1.4
% Moisture	%		76.3	76.3	83.1	6 / 6	78.72
Aluminum	mg/kg	3.5 / 4.1	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.013 / 0.015	ND	ND	ND	0 / 6	0
Arsenic	mg/kg		0.14	0.14	0.38	6 / 6	0.3017
Barium	mg/kg	0.04 / 0.047	ND	ND	0.056	2 / 6	0.056
Beryllium	mg/kg	0.026 / 0.03	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.36 / 0.43	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.0067 / 0.0078	ND	ND	ND	0 / 6	0
Calcium	mg/kg		193	193	941	6 / 6	416.8
Chromium	mg/kg	0.11 / 0.13	ND	ND	ND	0 / 6	0
Cobalt	mg/kg	0.012 / 0.014	ND	ND	ND	0 / 6	0
Copper	mg/kg		0.3	0.3	0.44	6 / 6	0.3633
Iron	mg/kg	10.6 / 12.4	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.024 / 0.029	ND	ND	ND	0 / 6	0
Magnesium	mg/kg		256	256	353	6 / 6	322
Manganese	mg/kg	0.15 / 0.17	ND	0.18	0.29	4 / 6	0.2125
Mercury	mg/kg		0.069	0.069	0.28	6 / 6	0.1092
Molybdenum	mg/kg	0.031 / 0.036	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.086 / 0.1	ND	ND	ND	0 / 6	0
Potassium	mg/kg		3120	3120	4290	6 / 6	3887
Selenium	mg/kg		0.66	0.66	0.81	6 / 6	0.7483
Silver	mg/kg	0.0025 / 0.003	ND	ND	ND	0 / 6	0
Sodium	mg/kg		385	385	628	6 / 6	451.7
Strontium	mg/kg		0.12	0.12	0.75	6 / 6	0.3
Thallium	mg/kg	0.013 / 0.016	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.04 / 0.047	ND	ND	ND	0 / 6	0
Zinc	mg/kg		9.1	9.1	20.3	6 / 6	12.75

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table L-46: TVA SAP Sampling, Fall 2010 - Largemouth Bass Fillet at Clinch River Mile 8.0

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.4	0.4	1.7	6 / 6	1.1
% Moisture	%		77.5	77.5	79.4	6 / 6	78.42
Aluminum	mg/kg	3.659 / 3.924	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.01327 / 0.01418	ND	ND	ND	0 / 6	0
Arsenic	mg/kg		0.1742	0.1742	0.3375	6 / 6	0.265
Barium	mg/kg	0.0428 / 0.04578	ND	ND	ND	0 / 6	0
Beryllium	mg/kg	0.02782 / 0.02925	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.3852 / 0.4142	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.00706 / 0.00743	ND	ND	ND	0 / 6	0
Calcium	mg/kg		167.1	167.1	841	6 / 6	466
Chromium	mg/kg	0.1156 / 0.1243	ND	ND	ND	0 / 6	0
Cobalt	mg/kg	0.01284 / 0.01373	ND	0.01355	0.01355	1 / 6	0.01355
Copper	mg/kg		0.2365	0.2365	0.6104	6 / 6	0.3639
Iron	mg/kg	11.04 / 11.82	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.02568 / 0.02834	ND	ND	ND	0 / 6	0
Magnesium	mg/kg		275.2	275.2	330.8	6 / 6	301.8
Manganese	mg/kg	0.1562 / 0.1679	ND	0.171	0.2354	3 / 6	0.1962
Mercury	mg/kg		0.05886	0.05886	0.1462	6 / 6	0.1001
Molybdenum	mg/kg	0.0321 / 0.03488	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.08988 / 0.09675	ND	ND	ND	0 / 6	0
Potassium	mg/kg		3548	3548	4140	6 / 6	3905
Selenium	mg/kg		0.412	0.412	0.7704	6 / 6	0.5474
Silver	mg/kg	0.00257 / 0.00293	ND	ND	ND	0 / 6	0
Sodium	mg/kg		398.9	398.9	500.8	6 / 6	456
Strontium	mg/kg		0.07595	0.07595	0.5992	6 / 6	0.316
Thallium	mg/kg	0.01263 / 0.01352	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.0428 / 0.04578	ND	ND	ND	0 / 6	0
Zinc	mg/kg		8.686	8.686	19.13	6 / 6	12.39

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table L-47: TVA SAP Sampling, Fall 2010 - Largemouth Bass Fillet at Clinch River Mile 3.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.44	0.44	3.6	6 / 6	1.56
% Moisture	%		75.6	75.6	78.8	6 / 6	77.38
Aluminum	mg/kg	3.6 / 4.2	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.013 / 0.015	ND	ND	ND	0 / 6	0
Arsenic	mg/kg		0.17	0.17	0.33	6 / 6	0.27
Barium	mg/kg	0.042 / 0.048	ND	ND	ND	0 / 6	0
Beryllium	mg/kg	0.027 / 0.031	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.38 / 0.43	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.0069 / 0.0079	ND	ND	ND	0 / 6	0
Calcium	mg/kg		234	234	742	6 / 6	400.5
Chromium	mg/kg	0.12 / 0.13	ND	ND	ND	0 / 6	0
Cobalt	mg/kg	0.013 / 0.015	ND	ND	ND	0 / 6	0
Copper	mg/kg		0.27	0.27	9.7	6 / 6	1.895
Iron	mg/kg	10.9 / 12.5	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.025 / 0.029	ND	0.21	0.21	1 / 6	0.21
Magnesium	mg/kg		288	288	328	6 / 6	307.2
Manganese	mg/kg	0.15 / 0.18	ND	0.19	0.19	1 / 6	0.19
Mercury	mg/kg		0.039	0.039	0.14	6 / 6	0.08233
Molybdenum	mg/kg	0.032 / 0.036	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.089 / 0.099	ND	0.16	0.51	2 / 6	0.335
Potassium	mg/kg		3390	3390	3680	6 / 6	3580
Selenium	mg/kg		0.62	0.62	0.91	6 / 6	0.73
Silver	mg/kg	0.0026 / 0.003	ND	ND	ND	0 / 6	0
Sodium	mg/kg		351	351	427	6 / 6	394.8
Strontium	mg/kg		0.12	0.12	0.57	6 / 6	0.2767
Thallium	mg/kg	0.013 / 0.017	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.042 / 0.047	ND	ND	ND	0 / 6	0
Zinc	mg/kg		6.5	6.5	17.8	6 / 6	10.77

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.

Table L-48: TVA SAP Sampling, Fall 2010 - Largemouth Bass Fillet at Clinch River Mile 1.5

Analyte	Units (wet wt. basis)	Detection Limit Range	Minimum	Minimum Detected Result	Maximum Detected Result	Number of Detections / Samples	Mean of Detections
% Lipids	%		0.49	0.49	1.2	6 / 6	0.76
% Moisture	%		78.6	78.6	80.8	6 / 6	79.6
Aluminum	mg/kg	3.532 / 4.066	ND	ND	ND	0 / 6	0
Antimony	mg/kg	0.01274 / 0.01477	ND	ND	ND	0 / 6	0
Arsenic	mg/kg		0.1023	0.1023	0.2782	6 / 6	0.1862
Barium	mg/kg	0.04053 / 0.04708	ND	ND	ND	0 / 6	0
Beryllium	mg/kg	0.05211 / 0.06206	ND	ND	ND	0 / 6	0
Boron	mg/kg	0.3667 / 0.428	ND	ND	ND	0 / 6	0
Cadmium	mg/kg	0.00676 / 0.0077	ND	ND	ND	0 / 6	0
Calcium	mg/kg		203.7	203.7	754.6	6 / 6	442.3
Chromium	mg/kg	0.1119 / 0.1284	ND	ND	ND	0 / 6	0
Cobalt	mg/kg	0.01235 / 0.01434	ND	ND	ND	0 / 6	0
Copper	mg/kg		0.2496	0.2496	0.5778	6 / 6	0.3785
Iron	mg/kg	10.65 / 12.28	ND	ND	ND	0 / 6	0
Lead	mg/kg	0.02472 / 0.02782	ND	ND	ND	0 / 6	0
Magnesium	mg/kg		261.1	261.1	324.2	6 / 6	299.2
Manganese	mg/kg	0.1505 / 0.1733	ND	0.1751	0.2702	5 / 6	0.2037
Mercury	mg/kg		0.06177	0.06177	0.1776	6 / 6	0.09404
Molybdenum	mg/kg	0.03088 / 0.03638	ND	ND	ND	0 / 6	0
Nickel	mg/kg	0.08652 / 0.09844	ND	0.1094	0.1094	1 / 6	0.1094
Potassium	mg/kg		3493	3493	3959	6 / 6	3788
Selenium	mg/kg		0.5184	0.5184	1.004	6 / 6	0.773
Silver	mg/kg	0.00251 / 0.003	ND	ND	ND	0 / 6	0
Sodium	mg/kg		360.5	360.5	484.4	6 / 6	420.3
Strontium	mg/kg		0.1391	0.1391	0.5983	6 / 6	0.3214
Thallium	mg/kg	0.01216 / 0.01412	ND	ND	ND	0 / 6	0
Vanadium	mg/kg	0.04053 / 0.04708	ND	ND	ND	0 / 6	0
Zinc	mg/kg		9.581	9.581	16.17	6 / 6	12.31

Notes:

Grab sample results are presented in wet weight.

For definitions, see the Acronyms section.